



Standard Form of Agreement Between Owner and Design-Builder - Lump Sum

*This document has important legal consequences. Consultation with
an attorney is recommended with respect to its completion or modification.*

This **AGREEMENT** is made as of the 1ST day of April in
the year of 20 20, by and between the following parties, for services in connection with the Project
identified below.

OWNER:

(Name and address)

Albert P. Childress
City Manager
City of Doral
8401 NW 53rd Terrace
Doral, Florida 33166

DESIGN-BUILDER:

(Name and address)

Karmil Construction
8935 NW 35th Lane
Suite 200
Doral, Florida 33172

PROJECT:

(Include Project name and location as it will appear in the Contract Documents)

Doral Meadow Park Improvement Project

In consideration of the mutual covenants and obligations contained herein, Owner and Design-Builder agree
as set forth herein.

Article 1

Scope of Work

1.1 Design-Builder shall perform all design and construction services, and provide all material, equipment, tools and labor, necessary to complete the Work described in and reasonably inferable from the Contract Documents.

Article 2

Contract Documents

2.1 The Contract Documents are comprised of the following:

2.1.1 All written modifications, amendments, minor changes and Change Orders to this Agreement issued in accordance with DBIA Document No. 535, *Standard Form of General Conditions of Contract Between Owner and Design-Builder* (2010 Edition) ("General Conditions of Contract");

2.1.2 The Basis of Design Documents, including the Owner's Project Criteria, Design-Builder's Proposal and the Deviation List, if any, contained in the Design-Builder's Proposal, which shall specifically identify any and all deviations from Owner's Project Criteria;

2.1.3 This Agreement, including all exhibits and attachments, executed by Owner and Design-Builder (List for example, performance standard requirements, performance incentive requirements, markup exhibits, allowances, or unit prices);

2.1.4 The General Conditions of Contract; and

2.1.5 Construction Documents prepared and approved in accordance with Section 2.4 of the General Conditions of Contract.

Article 3

Interpretation and Intent

3.1 Design-Builder and Owner, prior to execution of the Agreement, shall carefully review all the Contract Documents, including the various documents comprising the Basis of Design Documents, for any conflicts or ambiguities. Design-Builder and Owner will discuss and resolve any identified conflicts or ambiguities prior to execution of the Agreement.

3.2 The Contract Documents are intended to permit the parties to complete the Work and all obligations required by the Contract Documents within the Contract Time(s) for the Contract Price. The Contract Documents are intended to be complementary and interpreted in harmony so as to avoid conflict, with words and phrases interpreted in a manner consistent with construction and design industry standards. In the event inconsistencies, conflicts, or ambiguities between or among the Contract Documents are discovered after execution of the Agreement, Design-Builder and Owner shall attempt to resolve any ambiguity, conflict or inconsistency informally, recognizing that the Contract Documents shall take precedence in the order in which they are listed in Section 2.1 hereof. Conflicts existing within Section 2.1.2 shall be resolved by giving precedence first to the Deviation List, if any, then the Owner's Project Criteria, and then the Design-Builder's Proposal.

Article 1

Scope of Work

1.1 Design-Builder shall perform all design and construction services, and provide all material, equipment, tools and labor, necessary to complete the Work described in and reasonably inferable from the Contract Documents.

Article 2

Contract Documents

2.1 The Contract Documents are comprised of the following:

2.1.1 All written modifications, amendments, minor changes and Change Orders to this Agreement issued in accordance with DBIA Document No. 535, *Standard Form of General Conditions of Contract Between Owner and Design-Builder* (2010 Edition) ("General Conditions of Contract");

2.1.2 The Basis of Design Documents, including the Owner's Project Criteria, Design-Builder's Proposal and the Deviation List, if any, contained in the Design-Builder's Proposal, which shall specifically identify any and all deviations from Owner's Project Criteria;

2.1.3 This Agreement, including all exhibits and attachments, executed by Owner and Design-Builder (List for example, performance standard requirements, performance incentive requirements, markup exhibits, allowances, or unit prices);

2.1.4 The General Conditions of Contract; and

2.1.5 Construction Documents prepared and approved in accordance with Section 2.4 of the General Conditions of Contract.

Article 3

Interpretation and Intent

3.1 Design-Builder and Owner, prior to execution of the Agreement, shall carefully review all the Contract Documents, including the various documents comprising the Basis of Design Documents, for any conflicts or ambiguities. Design-Builder and Owner will discuss and resolve any identified conflicts or ambiguities prior to execution of the Agreement.

3.2 The Contract Documents are intended to permit the parties to complete the Work and all obligations required by the Contract Documents within the Contract Time(s) for the Contract Price. The Contract Documents are intended to be complementary and interpreted in harmony so as to avoid conflict, with words and phrases interpreted in a manner consistent with construction and design industry standards. In the event inconsistencies, conflicts, or ambiguities between or among the Contract Documents are discovered after execution of the Agreement, Design-Builder and Owner shall attempt to resolve any ambiguity, conflict or inconsistency informally, recognizing that the Contract Documents shall take precedence in the order in which they are listed in Section 2.1 hereof. Conflicts existing within Section 2.1.2 shall be resolved by giving precedence first to the Deviation List, if any, then the Owner's Project Criteria, and then the Design-Builder's Proposal.

3.3 Terms, words and phrases used in the Contract Documents, including this Agreement, shall have the meanings given them in the General Conditions of Contract.

3.4 If Owner's Project Criteria contain design specifications: (a) Design-Builder shall be entitled to reasonably rely on the accuracy of the information represented in such design specifications and their compatibility with other information set forth in Owner's Project Criteria, including any performance specifications; and (b) Design-Builder shall be entitled to an adjustment in the Contract Price and/or Contract Time(s) to the extent Design-Builder's cost and/or time of performance have been adversely impacted by such inaccurate design specification.

3.5 The Contract Documents form the entire agreement between Owner and Design-Builder and by incorporation herein are as fully binding on the parties as if repeated herein. No oral representations or other agreements have been made by the parties except as specifically stated in the Contract Documents.

Article 4

Ownership of Work Product

4.1 **Work Product.** All drawings, specifications and other documents and electronic data, including such documents identified in the General Conditions of Contract, furnished by Design-Builder to Owner under this Agreement ("Work Product") are deemed to be instruments of service and Design-Builder shall retain the ownership and property interests therein, including but not limited to any intellectual property rights, copyrights and/or patents, subject to the provisions set forth in Sections 4.2 through 4.5 below.

4.2 **Owner's Limited License Upon Project Completion and Payment in Full to Design-Builder.**

Upon Owner's payment in full for all Work performed under the Contract Documents, Design-Builder transfers to Owner all ownership and property interests, including but not limited to any intellectual property rights, copyrights and/or patents, in the Work Product. Such transfer is conditioned on Owner's express understanding that its alteration of the Work Product without the involvement of Design-Builder is at Owner's sole risk and without liability or legal exposure to Design-Builder or anyone working by or through Design-Builder, including Design Consultants of any tier (collectively the "Indemnified Parties"), and on the Owner's obligations to provide the indemnity set forth in Section 4.5 below.

4.3 **Owner's Limited License upon Owner's Termination for Convenience or Design-Builder's Election to Terminate.** If Owner terminates this Agreement for its convenience as set forth in Article 8 hereof, or if Design-Builder elects to terminate this Agreement in accordance with Section 11.4 of the General Conditions of Contract, Design-Builder shall, upon Owner's payment in full of the amounts due Design-Builder under the Contract Documents, grant Owner a limited license to use the Work Product to complete the Project and subsequently occupy the Project, and Owner shall thereafter have the same rights as set forth in Section 4.2 above, conditioned on the following:

4.3.1 Use of the Work Product is at Owner's sole risk without liability or legal exposure to any Indemnified Party and on the Owner's obligation to provide the indemnity set forth in Section 4.5 below; and

4.4 **Owner's Limited License upon Design-Builder's Default.** If this Agreement is terminated due to Design-Builder's default pursuant to Section 11.2 of the General Conditions of Contract, then Design-Builder grants Owner a limited license to use the Work Product to complete the Project and subsequently occupy the Project, and Owner shall thereafter have the same rights and obligations as set forth in Section 4.2 above. Notwithstanding the preceding sentence, if it is ultimately determined that Design-Builder was not in default, Owner shall be deemed to have terminated the Agreement for convenience, and Design-Builder shall be entitled to the rights and remedies set forth in Section 4.3 above.

4.5 Owner's Indemnification for Use of Work Product. If Owner is required to indemnify any Indemnified Parties based on the use or alteration of the Work Product under any of the circumstances identified in this Article 4, Owner shall defend, indemnify and hold harmless such Indemnified Parties from and against any and all claims, damages, liabilities, losses and expenses, including attorneys' fees, arising out of or resulting from the use or alteration of the Work Product.

Article 5

Contract Time

5.1 Date of Commencement. The Work shall commence within five (5) days of Design-Builder's receipt of Owner's Notice to Proceed ("Date of Commencement") unless the parties mutually agree otherwise in writing.

5.2 Substantial Completion and Final Completion.

5.2.1 Substantial Completion of the entire Work shall be achieved no later than October 26, 2020 (208) calendar days after the Date of Commencement ("Scheduled Substantial Completion Date").

"*Substantial Completion* is the date on which the Work, or an agreed upon portion of the Work, is sufficiently complete in accordance with the Contract Documents so that Owner can occupy and use the Project or a portion thereof for its intended purposes, provided, however, that Substantial Completion shall be deemed to have been achieved no later than the date of issuance of a Temporary Certificate of Occupancy issued by the local building official."

5.2.2 Interim milestones and/or Substantial Completion of identified portions of the Work ("Scheduled Interim Milestone Dates") shall be achieved as follows: *(Insert any interim milestones for portions of the Work with different scheduled dates for Substantial Completion)*

100% Construction Documents – May 13, 2020

Mobilization – June 25, 2020

Substantial Completion – October 26, 2020

Final Completion – November 18, 2020

5.2.3 Final Completion of the Work or identified portions of the Work shall be achieved as expeditiously as reasonably practicable. Final Completion is the date when all Work is complete pursuant to the definition of Final Completion set forth in Section 1.2.7 of the General Conditions of Contract.

5.2.4 All of the dates set forth in this Article 5 (collectively the "Contract Time(s)") shall be subject to adjustment in accordance with the General Conditions of Contract.

5.3 Time is of the Essence. Owner and Design-Builder mutually agree that time is of the essence with respect to the dates and times set forth in the Contract Documents.

5.4 Liquidated Damages. Design-Builder understands that if Substantial Completion is not attained by the Scheduled Substantial Completion Date, Owner will suffer damages which are difficult to determine and accurately specify. Design-Builder agrees that if Substantial Completion is not attained by October 26, 2020 (0) days after the Scheduled Substantial Completion Date (the "LD Date"), Designer-Builder shall pay Owner **ONE THOUSAND FIVE HUNDRED AND EIGHTY FOUR DOLLARS AND NO CENTS (\$ 1,584.00)** as liquidated damages for each day that Substantial Completion extends beyond the LD Date.

5.5 Any liquidated damages assessed pursuant to this Agreement shall be in lieu of all liability for any and all extra costs, losses, expenses, claims, penalties and any other damages, whether special or

consequential, and of whatsoever nature incurred by Owner which are occasioned by any delay in achieving the Contract Time(s).

Article 6

Contract Price

6.1 Contract Price. Owner shall pay Design-Builder in accordance with Article 6 of the General Conditions of Contract the sum of **ONE MILLION ONE HUNDRED AND NINETY-SIX THOUSAND TWO HUNDRED AND SEVENTY ONE DOLLARS AND FORTY CENTS Dollars (\$ 1,196,271.40)** ("Contract Price"), subject to adjustments made in accordance with the General Conditions of Contract. Unless otherwise provided in the Contract Documents, the Contract Price is deemed to include all sales, use, consumer and other taxes mandated by applicable Legal Requirements.

6.2 Markups for Changes. If the Contract Price requires an adjustment due to changes in the Work, and the cost of such changes is determined under Sections 9.4.1.3 or 9.4.1.4 of the General Conditions of Contract, the following markups shall be allowed on such changes:

6.2.1 For additive Change Orders, including additive Change Orders arising from both additive and deductive items, it is agreed that Design-Builder shall receive a Fee of Three percent (3%) of the additional costs incurred for that Change Order, plus any other markups set forth.

6.2.2 For deductive Change Orders, including deductive Change Orders arising from both additive and deductive items, the deductive amounts shall include:

No additional reduction to account for Design-Builder's Fee or any other markup.

6.3 Allowance Items and Allowance Values.

6.3.1 Any and all Allowance Items, as well as their corresponding Allowance Values, are set forth in an Exhibit hereto.

6.3.2 Design-Builder and Owner have worked together to review the Allowance Items and Allowance Values based on design information then available to determine that the Allowance Values constitute reasonable estimates for the Allowance Items. Design-Builder and Owner will continue working closely together during the preparation of the design to develop Construction Documents consistent with the Allowance Values. Nothing herein is intended in any way to constitute a guarantee by Design-Builder that the Allowance Item in question can be performed for the Allowance Value.

6.3.3 No work shall be performed on any Allowance Item without Design-Builder first obtaining in writing advanced authorization to proceed from Owner. Owner agrees that if Design-Builder is not provided written authorization to proceed on an Allowance Item by the date set forth in the Project schedule, due to no fault of Design-Builder, Design-Builder may be entitled to an adjustment of the Contract Time(s) and Contract Price.

6.3.4 The Allowance Value for an Allowance Item includes the direct cost of labor, materials, equipment, transportation, taxes and insurance associated with the applicable Allowance Item. All other costs, including design fees, Design-Builder's overall project management and general conditions costs, overhead and fee, are deemed to be included in the original Contract Price, and are not subject to adjustment, regardless of the actual amount of the Allowance Item.

6.3.5 Whenever the actual costs for an Allowance Item is more than or less than the stated

Allowance Value, the Contract Price shall be adjusted accordingly by Change Order, subject to Section 6.3.4. The amount of the Change Order shall reflect the difference between actual costs incurred by Design-Builder for the particular Allowance Item and the Allowance Value.

Article 7

Procedure for Payment

7.1 Progress Payments.

7.1.1 Design-Builder shall submit to Owner on the First (1st) day of each month, beginning with the first month after the Date of Commencement, Design-Builder's Application for Payment in accordance with Article 6 of the General Conditions of Contract.

7.1.2 Owner shall make payment within ten (10) days after Owner's receipt of each properly submitted and accurate Application for Payment in accordance with Article 6 of the General Conditions of Contract, but in each case less the total of payments previously made, and less amounts properly withheld under Section 6.3 of the General Conditions of Contract.

7.2 Retainage on Progress Payments.

7.2.1 Owner will retain ~~ten~~ percent (10%) of each Application for Payment provided, however, that when fifty percent (50%) of the Work has been satisfactorily completed by Design-Builder and Design-Builder is otherwise in compliance with its contractual obligations, Owner will not retain any additional retention amounts from Design-Builder's subsequent Applications for Payment. Owner will also reasonably consider reducing retainage for Subcontractors completing their work early in the Project.

7.2.2 Within fifteen (15) days after Substantial Completion of the entire Work or, if applicable, any portion of the Work, pursuant to Section 6.6 of the General Conditions of Contract, Owner shall release to Design-Builder all retained amounts relating, as applicable, to the entire Work or completed portion of the Work, less an amount equal to (a) the reasonable value of all remaining or incomplete items of Work as noted in the Certificate of Substantial Completion and (b) all other amounts Owner is entitled to withhold pursuant to Section 6.3 of the General Conditions of Contract.

7.3 Final Payment. Design-Builder shall submit its Final Application for Payment to Owner in accordance with Section 6.7 of the General Conditions of Contract. Owner shall make payment on Design-Builder's properly submitted and accurate Final Application for Payment within thirty (30) days after Owner's receipt of the Final Application for Payment, provided that Design-Builder has satisfied the requirements for final payment set forth in Section 6.7.2 of the General Conditions of Contract.

7.4 Interest. Payments due and unpaid by Owner to Design-Builder, whether progress payments or final payment, shall bear interest commencing five (5) days after payment is due at the rate of Zero percent (0%) per month until paid.

7.5 Record Keeping and Finance Controls. With respect to changes in the Work performed on a cost basis by Design-Builder pursuant to the Contract Documents, Design-Builder shall keep full and detailed accounts and exercise such controls as may be necessary for proper financial management, using accounting and control systems in accordance with generally accepted accounting principles and as may be provided in the Contract Documents. During the performance of the Work and for a period of three (3) years after Final Payment, Owner and Owner's accountants shall be afforded access to, and the right to audit from time-to-time, upon reasonable notice, Design-Builder's records, books, correspondence, receipts, subcontracts, purchase orders, vouchers, memoranda and other data relating to changes in the Work performed on a cost basis in accordance with the Contract Documents, all of which Design-Builder shall preserve for a period of

three (3) years after Final Payment. Such inspection shall take place at Design-Builder's offices during normal business hours unless another location and time is agreed to by the parties. Any multipliers or markups agreed to by the Owner and Design-Builder as part of this Agreement are only subject to audit to confirm that such multiplier or markup has been charged in accordance with this Agreement, with the composition of such multiplier or markup not being subject to audit.

Article 8

Termination for Convenience

8.1 Upon ten (10) days' written notice to Design-Builder, Owner may, for its convenience and without cause, elect to terminate this Agreement. In such event, Owner shall pay Design-Builder for the following:

8.1.1 All Work executed and for proven loss, cost or expense in connection with the Work;

8.1.2 The reasonable costs and expenses attributable to such termination, including demobilization costs and amounts due in settlement of terminated contracts with Subcontractors and Design Consultants; and

8.1.3

The fair and reasonable sums for overhead and profit on the sum of items 8.1.1 and 8.1.2 above.

8.2 If Owner terminates this Agreement pursuant to Section 8.1 above and proceeds to design and construct the Project through its employees, agents or third parties, Owner's rights to use the Work Product shall be as set forth in Section 4.3 hereof. Such rights may not be transferred or assigned to others without Design-Builder's express written consent and such third parties' agreement to the terms of Article 4.

Article 9

Representatives of the Parties

9.1 **Owner's Representatives.**

9.1.1 Owner designates the individual listed below as its Senior Representative ("Owner's Senior Representative"), which individual has the authority and responsibility for avoiding and resolving disputes under Section 10.2.3 of the General Conditions of Contract: *(Identify individual's name, title, address and telephone numbers)*

Albert P. Childress
City Manager
8401 NW 53rd Terrace
Doral, FL 33166
305-593-6690

9.1.2 Owner designates the individual listed below as its Owner's Representative, which individual has the authority and responsibility set forth in Section 3.4 of the General Conditions of Contract: *(Identify individual's name, title, address and telephone numbers)*

Eugene Collings-Bonfill, P.E., P.S.M.
Public Works Assistant Director/Chief of Engineering
Project Executive – Doral Parks Bond Program
8401 NW 53rd Terrace
Doral, FL 33166
305-593-6740

Salome Montoya
Project Manager, Program Management Team
8401 NW 53rd Terrace
Doral, FL 33166
305-593-6740

9.2 Design-Builder's Representatives.

9.2.1 Design-Builder designates the individual listed below as its Senior Representative ("Design-Builder's Senior Representative"), which individual has the authority and responsibility for avoiding and resolving disputes under Section 10.2.3 of the General Conditions of Contract: *(Identify individual's name, title, address and telephone numbers)*

Antonio G. Acosta
Principal
8935 NW 35th Lane, Suite 200
Doral, FL 33172
305-592-7283

9.2.2 Design-Builder designates the individual listed below as its Design-Builder's Representative, which individual has the authority and responsibility set forth in Section 2.1.1 of the General Conditions of Contract: *(Identify individual's name, title, address and telephone numbers)*

Paola Rabanal
Project Manager
8935 NW 35th Lane, Suite 200
Doral, FL 33172
305-592-7283

Article 10

Bonds and Insurance

10.1 Insurance. Design-Builder and Owner shall procure the insurance coverages set forth in the Insurance Exhibit attached hereto and in accordance with Article 5 of the General Conditions of Contract.

10.2 Bonds and Other Performance Security. Design-Builder shall provide the following performance bond and labor and material payment bond or other performance security:

Performance Bond.

[Check one box only. If no box is checked, then no bond is required.]

Required Not Required

Payment Bond.

[Check one box only. If no box is checked, then no bond is required.]

Required Not Required

Other Performance Security.

In executing this Agreement, Owner and Design-Builder each individually represents that it has the necessary financial resources to fulfill its obligations under this Agreement, and each has the necessary corporate approvals to execute this Agreement, and perform the services described herein.

OWNER:

City of Doral
(Name of Owner)


(Signature)

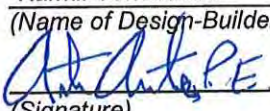
Albert P. Childress
(Printed Name)

City Manager
(Title)

Date: March 31, 2020

DESIGN-BUILDER:

Karmil Construction
(Name of Design-Builder)

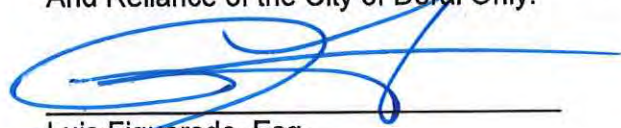

(Signature)

Antonio G. Acosta, P.E., C.G.C.
(Printed Name)

Principal
(Title)

Date: 3/27/2020

Approved As To Form and Legal Sufficiency for the Use
And Reliance of the City of Doral Only:


Luis Figueredo, Esq.
City Attorney

Attest:


Connie Diaz, City Clerk

Note: The original template has been modified to accommodate this project.

Required

Not Required

Article 11

Other Provisions

11.1 Other provisions, if any, are as follows: *(Insert any additional provisions)*

Design-Builder shall adhere to attached exhibits:
Basis of Design Documents
RFQ 2019-42 Design-Build Doral Meadow Park
Renovations Doral Meadow Park – Cost Submittal Package

[Section 2.3.1 of the General Conditions of Contract sets forth a traditional negligence standard as it relates to the Design-Builder's performance of design professional services. If the Basis of Design Documents identify specific performance standards that can be objectively measured, the parties, by including the following language, agree that the Design-Builder is obligated to achieve such standards.]

Notwithstanding Section 2.3.1 of the General Conditions of Contract, if the parties agree upon specific performance standards in the Basis of Design Documents, the design professional services shall be performed to achieve such standards.

Standard Form of
General Conditions of
Contract Between Owner
and Design-Builder

Document No. 535

Second Edition, 2010

© Design-Build Institute of America
Washington, D.C.





Design-Build Institute of America - Contract Documents

LICENSE AGREEMENT

By using the DBIA Contract Documents, you agree to and are bound by the terms of this License Agreement.

- 1. License.** The Design-Build Institute of America ("DBIA") provides DBIA Contract Documents and licenses their use worldwide. You acknowledge that DBIA Contract Documents are protected by the copyright laws of the United States. You have a limited nonexclusive license to: (a) Use DBIA Contract Documents on any number of machines owned, leased or rented by your company or organization; (b) Use DBIA Contract Documents in printed form for bona fide contract purposes; and (c) Copy DBIA Contract Documents into any machine-readable or printed form for backup or modification purposes in support of your permitted use.
- 2. User Responsibility.** You assume sole responsibility for the selection of specific documents or portions thereof to achieve your intended results, and for the installation, use, and results obtained from the DBIA Contract Documents. You acknowledge that you understand that the text of the DBIA Contract Documents has important legal consequences and that consultation with an attorney is recommended with respect to use or modification of the text. You will not represent that any of the contract documents you generate from DBIA Contract Documents are DBIA documents unless (a) the document text is used without alteration or (b) all additions and changes to, and deletions from, the text are clearly shown.
- 3. Copies.** You may not use, copy, modify, or transfer DBIA Contract Documents, or any copy, modification or merged portion, in whole or in part, except as expressly provided for in this license. Reproduction of DBIA Contract Documents in printed or machine-readable format for resale or educational purposes is expressly prohibited. You will reproduce and include DBIA's copyright notice on any printed or machine-readable copy, modification, or portion merged into another document or program.
- 4. Transfers.** You may not transfer possession of any copy, modification or merged portion of DBIA Contract Documents to another party, except that a party with whom you are contracting may receive and use such transferred material solely for purposes of its contract with you. You may not sublicense, assign, or transfer this license except as expressly provided in this Agreement, and any attempt to do so is void.
- 5. Term.** The license is effective for one year from the date of purchase. DBIA may elect to terminate it earlier, by written notice to you, if you fail to comply with any term or condition of this Agreement.
- 6. Limited Warranty.** DBIA warrants the electronic files or other media by which DBIA Contract Documents are furnished to be free from defects in materials and workmanship under normal use during the Term. There is no other warranty of any kind, expressed or implied, including, but not limited to the implied warranties of merchantability and fitness for a particular purpose. Some states do not allow the exclusion of implied warranties, so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. DBIA does not warrant that the DBIA Contract Documents will meet your requirements or that the operation of DBIA Contract Documents will be uninterrupted or error free.
- 7. Limitations of Remedies.** DBIA's entire liability and your exclusive remedy shall be: the replacement of any document not meeting DBIA's "Limited Warranty" which is returned to DBIA with a copy of your receipt, or at DBIA's election, your money will be refunded. In no event will DBIA be liable to you for any damages, including any lost profits, lost savings or other incidental or consequential damages arising out of the use or inability to use DBIA Contract Documents even if DBIA has been advised of the possibility of such damages, or for any claim by any other party. Some states do not allow the limitation or exclusion of liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- 8. Acknowledgement.** You acknowledge that you have read this agreement, understand it and agree to be bound by its terms and conditions and that it will be governed by the laws of the District of Columbia. You further agree that it is the complete and exclusive statement of your agreement with DBIA which supersedes any proposal or prior agreement, oral or written, and any other communications between the parties relating to the subject matter of this agreement.

INSTRUCTIONS

For DBIA Document No. 535 Standard Form of General Conditions of Contract Between Owner and Design-Builder (2010 Edition)

General Instructions

No.	Subject	Instruction
1.	Standard Forms	Standard form contracts have long served an important function in the United States and international construction markets. The common purpose of these forms is to provide an economical and convenient way for parties to contract for design and construction services. As standard forms gain acceptance and are used with increased frequency, parties are able to enter into contracts with greater certainty as to their rights and responsibilities.
2.	DBIA Standard Form Contract Documents	Since its formation in 1993, the Design-Build Institute of America (DBIA) has regularly evaluated the needs of owners, design-builders, and other parties to the design-build process in preparation for developing its own contract forms. Consistent with DBIA's mission of promulgating best design-build practices, DBIA believes that the design-build contract should reflect a balanced approach to risk that considers the legitimate interests of all parties to the design-build process. DBIA's Standard Form Contract Documents reflect a modern risk allocation approach, allocating each risk to the party best equipped to manage and minimize that risk, with the goal of promoting best design-build practices.
3.	Use of Non-DBIA Documents	To avoid inconsistencies among documents used for the same project, DBIA's Standard Form Contract Documents should not be used in conjunction with non-DBIA documents unless the non-DBIA documents are appropriately modified on the advice of legal counsel. Moreover, care should also be taken when using different editions of the DBIA Standard Form Document on the same project to ensure consistency.
4.	Legal Consequences	DBIA Standard Form Contract Documents are legally binding contracts with important legal consequences. Contracting parties are advised and encouraged to seek legal counsel in completing or modifying these Documents.
5.	Reproduction	DBIA hereby grants to purchasers a limited license to reproduce its Documents consistent with the License Agreement accompanying these Documents. At least two original versions of the Agreement should be signed by the parties. Any other reproduction of DBIA Documents is strictly prohibited.
6.	Modifications	<p>Effective contracting is accomplished when the parties give specific thought to their contracting goals and then tailor the contract to meet the unique needs of the project and the design-build team. For that reason, these Documents may require modification for various purposes including, for example, to comply with local codes and laws, or to add special terms. DBIA's latest revisions to its Documents provide the parties an opportunity to customize their contractual relationship by selecting various optional contract clauses that may better reflect the unique needs and risks associated with the project.</p> <p>Any modifications to these Documents should be initialed by the parties. At no time should a document be re-typed in its entirety. Re-creating the document violates copyright laws and destroys one of the advantages of standard forms-familiarity with the terms.</p>
7.	Execution	It is good practice to execute two original copies of the Agreement. Only persons authorized to sign for the contracting parties may execute the Agreement.

Specific Instructions

Section	Title	Instruction
General	Purpose of This Document	<p>The General Conditions of Contract provide the terms and conditions under which the Work of the Project will be performed.</p> <p>This document accompanies DBIA Document No. 525 and DBIA Document No. 530 (each referred to herein generally as "Agreement"). It may also be incorporated by reference into other related agreements, as between the Design-Builder and the Design Consultant, and the Design-Builder and the Subcontractor.</p>
General	Checklist	<p>The following Sections reference documents that are to be attached to the Agreement:</p> <p>Section 3.5.1 Owner's Permit List Article 5 Insurance and Bonds Section 9.4.2 Unit Prices</p>
2.1.3	Schedule	<p>The parties are encouraged, if possible, to agree to a schedule for the execution of the Work upon execution of the Agreement or upon establishing the GMP.</p>
2.2.1	Design Professional Services	<p>The parties should be aware that in addition to requiring compliance with state licensing laws for design professionals, some states also require that the design professional have a corporate professional license.</p>
2.3.1	Standard of Care for Design Professional's Services	<p>Design-Builder's obligation is to deliver a design that meets prevailing industry standards. However, DBIA has provided the parties at Article 11 of the Agreement an optional provision whereby if Owner can identify specific performance standards that can be objectively measured, Design-Builder is obligated to design the Project to satisfy these standards if this optional provision is selected. To avoid any confusion and to ensure that the parties fully understand what their obligations are, the specific performance standards should be clearly identified and should be able to be objectively measured. The Design-Builder should recognize that this is a heightened standard of care that has insurance ramifications that should be discussed with the Design-Builder's insurance advisor.</p>
3.5.1	Government Approvals and Permits	<p>Design-Builder is responsible for obtaining all necessary permits, approvals and licenses, except to the extent specific permits, approvals, and licenses are set forth in an Owner's Permit List, which must be attached as an exhibit to the Agreement. The parties, prior to execution of the Agreement, should discuss which permits, approvals and licenses need to be obtained for the Project and which party is in the best position to do so.</p>
5.1.1	Design-Builder's Insurance Requirements	<p>Design-Builder is obligated to provide insurance coverage from insurance carriers that meet the criteria set forth in the Insurance Exhibit attached to Section 10.1 of the Agreement.</p>
5.1.2	Exclusions to Design-Build	<p>Parties are advised that their standard insurance policies may contain exclusions for the design-build delivery method. This Section 5.1.2 requires that any such exclusions be deleted from the policy.</p>
5.2	Owner's Insurance Requirements	<p>Owner, in addition to providing the insurance set forth in this Section and Section 5.3, is also obligated to procure the insurance coverages for the amounts and consistent with the terms set forth in the Insurance Exhibit made part of the Agreement.</p>
5.4	Bonds and Other Performance Security	<p>Design-Builder is only obligated to provide bonds or other forms of performance security to the extent called for in Section 10.2 of the Agreement.</p>

Section	Title	Instruction
8.2.2	Compensability for Force Majeure Events	The parties are provided the option in the Agreement of negotiating whether the Design-Builder is entitled to compensation for Force Majeure Events.
9.4.1	Contract Price Adjustments	Unit prices, if established, shall be attached pursuant to Article 2 of the Agreement.
9.4.3	Payment/ Performance of Disputed Services	When Owner disputes Design-Builder's entitlement to a change order or disagrees with Design-Builder regarding the scope of Work, and nevertheless expects Design-Builder to perform the services, Design-Builder's cash flow and ability to complete the Work will be hampered if Owner fails to pay Design-Builder for the disputed services. This Section provides a balanced approach whereby Design-Builder is required to perform the services, but Owner is required to pay fifty percent (50%) of Design-Builder's reasonable estimated direct costs of performing such services until the dispute is settled. By so doing, Owner does not forfeit its right to deny total responsibility for payment, and Design-Builder does not give up its right to demand full payment. The dispute shall be resolved according to Article 10.
Article 10	Contract Adjustments and Disputes	DBIA endorses the use of partnering, negotiation, mediation and arbitration for the prevention and resolution of disputes. The General Conditions of Contract provides for the parties' Representatives and Senior Representatives to attempt to negotiate the dispute or disagreement. If this attempt fails, the dispute shall be submitted to mandatory, non-binding mediation. Any dispute that cannot be resolved by mediation shall then be submitted to binding arbitration, unless the parties elect in the Agreement to submit their dispute to a court of competent jurisdiction.
10.3.4	Arbitration	The prevailing party in any arbitration shall receive reasonable attorneys' fees from the other party. DBIA supports this "loser pays" provision to encourage parties to negotiate or mediate their differences and to minimize the number of frivolous disputes.
10.4	Duty to Continue Performance	Pending the resolution of any dispute or disagreement, both Owner and Design-Builder shall continue to perform their respective duties under the Contract Documents, unless the parties provide otherwise in the Contract Documents.
10.5	Consequential Damages	DBIA believes that it is inappropriate for either Owner or Design-Builder to be responsible to the other for consequential damages arising from the Project. This limitation on consequential damages in no way restricts, however, the payment of liquidated damages, if any, under Article 5 of the Agreement.
11.4	Design-Builder's Right to Terminate for Cause	If Design-Builder properly terminates the Agreement for cause, it shall recover from Owner in the same way as if Owner had terminated the Agreement for convenience under Article 8 of the Agreement. Owner shall pay to Design-Builder its costs, reasonable overhead and profit on the costs, and an additional payment based on a percentage of the remaining balance of the Contract Price, all as more fully set forth in Article 8 of the Agreement.
Article 12	Electronic Data	Design-Builder and Owner shall agree on the software and format for the transmission of Electronic Data. Ownership of Work Product in electronic form is governed by Article 4 of the Agreement. The transmitting party disclaims all warranties with respect to the media transmitting the Electronic Data, but nothing in this Article is intended to negate duties with respect to the standard of care in creating the Electronic Data.

TABLE OF CONTENTS

Article	Name	Page
Article 1	General	1
Article 2	Design-Builder's Services and Responsibilities	2
Article 3	Owner's Services and Responsibilities	6
Article 4	Hazardous Conditions and Differing Site Conditions	8
Article 5	Insurance and Bonds	9
Article 6	Payment.....	11
Article 7	Indemnification.....	13
Article 8	Time.....	15
Article 9	Changes to the Contract Price and Time	15
Article 10	Contract Adjustments and Disputes.....	17
Article 11	Stop Work and Termination for Cause.....	19
Article 12	Electronic Data.....	21
Article 13	Miscellaneous	22

Article 1

General

1.1 Mutual Obligations

1.1.1 *Owner and Design-Builder* commit at all times to cooperate fully with each other, and proceed on the basis of trust and good faith, to permit each party to realize the benefits afforded under the Contract Documents.

1.2 Basic Definitions

1.2.1 *Agreement* refers to the executed contract between Owner and Design-Builder under either DBIA Document No. 525, *Standard Form of Agreement Between Owner and Design-Builder - Lump Sum* (2010 Edition) or DBIA Document No. 530, *Standard Form of Agreement Between Owner and Design-Builder - Cost Plus Fee with an Option for a Guaranteed Maximum Price* (2010 Edition).

1.2.2 *Basis of Design Documents* are as follows: For DBIA Document No. 530, *Standard Form of Agreement Between Owner and Design-Builder - Cost Plus Fee With an Option for a Guaranteed Maximum Price*, the Basis of Design Documents are those documents specifically listed in, as applicable, the GMP Exhibit or GMP Proposal as being the "Basis of Design Documents." For DBIA Document No. 525, *Standard Form of Agreement Between Owner and Design-Builder - Lump Sum*, the Basis of Design Documents are the Owner's Project Criteria, Design-Builder's Proposal and the Deviation List, if any.

1.2.3 *Construction Documents* are the documents, consisting of Drawings and Specifications, to be prepared or assembled by the Design-Builder consistent with the Basis of Design Documents unless a deviation from the Basis of Design Documents is specifically set forth in a Change Order executed by both the Owner and Design-Builder, as part of the design review process contemplated by Section 2.4 of these General Conditions of Contract.

1.2.4 *Day or Days* shall mean calendar days unless otherwise specifically noted in the Contract Documents.

1.2.5 *Design-Build Team* is comprised of the Design-Builder, the Design Consultant, and key Subcontractors identified by the Design-Builder.

1.2.6 *Design Consultant* is a qualified, licensed design professional who is not an employee of Design-Builder, but is retained by Design-Builder, or employed or retained by anyone under contract with Design-Builder, to furnish design services required under the Contract Documents. A Design Sub-Consultant is a qualified, licensed design professional who is not an employee of the Design Consultant, but is retained by the Design Consultant or employed or retained by anyone under contract to Design Consultant, to furnish design services required under the Contract Documents.

1.2.7 *Final Completion* is the date on which all Work is complete in accordance with the Contract Documents, including but not limited to, any items identified in the punch list prepared under Section 6.6.1 and the submission of all documents set forth in Section 6.7.2.

1.2.8 *Force Majeure Events* are those events that are beyond the control of both Design-Builder and Owner, including the events of war, floods, labor disputes, earthquakes, epidemics, adverse weather conditions not reasonably anticipated, and other acts of God.

1.2.9 *General Conditions of Contract* refer to this DBIA Document No. 535, *Standard Form of General Conditions of Contract Between Owner and Design-Builder* (2010 Edition).

1.2.10 *GMP Exhibit* means that exhibit attached to DBIA Document No. 530, *Standard Form of*

Agreement Between Owner and Design-Builder - Cost Plus Fee With an Option for a Guaranteed Maximum Price, which exhibit will have been agreed upon by Owner and Design-Builder prior to the execution of the Agreement.

1.2.11 *GMP Proposal* means that proposal developed by Design-Builder in accordance with Section 6.6 of DBIA Document No. 530, *Standard Form of Agreement Between Owner and Design-Builder - Cost Plus Fee With an Option for a Guaranteed Maximum Price*.

1.2.12 *Hazardous Conditions* are any materials, wastes, substances and chemicals deemed to be hazardous under applicable Legal Requirements, or the handling, storage, remediation, or disposal of which are regulated by applicable Legal Requirements.

1.2.13 *Legal Requirements* are all applicable federal, state and local laws, codes, ordinances, rules, regulations, orders and decrees of any government or quasi-government entity having jurisdiction over the Project or Site, the practices involved in the Project or Site, or any Work.

1.2.14 *Owner's Project Criteria* are developed by or for Owner to describe Owner's program requirements and objectives for the Project, including use, space, price, time, site and expandability requirements, as well as submittal requirements and other requirements governing Design-Builder's performance of the Work. Owner's Project Criteria may include conceptual documents, design criteria, design performance specifications, design specifications, and LEED® or other sustainable design criteria and other Project-specific technical materials and requirements.

1.2.15 *Site* is the land or premises on which the Project is located.

1.2.16 *Subcontractor* is any person or entity retained by Design-Builder as an independent contractor to perform a portion of the Work and shall include materialmen and suppliers.

1.2.17 *Sub-Subcontractor* is any person or entity retained by a Subcontractor as an independent contractor to perform any portion of a Subcontractor's Work and shall include materialmen and suppliers.

1.2.18 *Substantial Completion* or *Substantially Complete* means the date on which the Work, or an agreed upon portion of the Work, is sufficiently complete in accordance with the Contract Documents so that Owner can occupy and use the Project or a portion thereof for its intended purposes.

1.2.19 *Work* is comprised of all Design-Builder's design, construction and other services required by the Contract Documents, including procuring and furnishing all materials, equipment, services and labor reasonably inferable from the Contract Documents.

Article 2

Design-Builder's Services and Responsibilities

2.1 General Services.

2.1.1 Design-Builder's Representative shall be reasonably available to Owner and shall have the necessary expertise and experience required to supervise the Work. Design-Builder's Representative shall communicate regularly with Owner and shall be vested with the authority to act on behalf of Design-Builder. Design-Builder's Representative may be replaced only with the mutual agreement of Owner and Design-Builder.

2.1.2 Design-Builder shall provide Owner with a monthly status report detailing the progress of

the Work, including (i) whether the Work is proceeding according to schedule, (ii) whether discrepancies, conflicts, or ambiguities exist in the Contract Documents that require resolution, (iii) whether health and safety issues exist in connection with the Work; (iv) status of the contingency account to the extent provided for in the Standard Form of Agreement Between Owner and Design-Builder - Cost Plus Fee with an Option for a Guaranteed Maximum Price; and (v) other items that require resolution so as not to jeopardize Design-Builder's ability to complete the Work for the Contract Price and within the Contract Time(s).

2.1.3 Unless a schedule for the execution of the Work has been attached to the Agreement as an exhibit at the time the Agreement is executed, Design-Builder shall prepare and submit, at least three (3) days prior to the meeting contemplated by Section 2.1.4 hereof, a schedule for the execution of the Work for Owner's review and response. The schedule shall indicate the dates for the start and completion of the various stages of Work, including the dates when Owner information and approvals are required to enable Design-Builder to achieve the Contract Time(s). The schedule shall be revised as required by conditions and progress of the Work, but such revisions shall not relieve Design-Builder of its obligations to complete the Work within the Contract Time(s), as such dates may be adjusted in accordance with the Contract Documents. Owner's review of, and response to, the schedule shall not be construed as relieving Design-Builder of its complete and exclusive control over the means, methods, sequences and techniques for executing the Work.

2.1.4 The parties will meet within seven (7) days after execution of the Agreement to discuss issues affecting the administration of the Work and to implement the necessary procedures, including those relating to submittals and payment, to facilitate the ability of the parties to perform their obligations under the Contract Documents.

2.2 Design Professional Services.

2.2.1 Design-Builder shall, consistent with applicable state licensing laws, provide through qualified, licensed design professionals employed by Design-Builder, or procured from qualified, independent licensed Design Consultants, the necessary design services, including architectural, engineering and other design professional services, for the preparation of the required drawings, specifications and other design submittals to permit Design-Builder to complete the Work consistent with the Contract Documents. Nothing in the Contract Documents is intended or deemed to create any legal or contractual relationship between Owner and any Design Consultant.

2.3 Standard of Care for Design Professional Services.

2.3.1 The standard of care for all design professional services performed to execute the Work shall be the care and skill ordinarily used by members of the design profession practicing under similar conditions at the same time and locality of the Project.

2.4 Design Development Services.

2.4.1 Design-Builder and Owner shall, consistent with any applicable provision of the Contract Documents, agree upon any interim design submissions that Owner may wish to review, which interim design submissions may include design criteria, drawings, diagrams and specifications setting forth the Project requirements. Interim design submissions shall be consistent with the Basis of Design Documents, as the Basis of Design Documents may have been changed through the design process set forth in this Section 2.4.1. On or about the time of the scheduled submissions, Design-Builder and Owner shall meet and confer about the submissions, with Design-Builder identifying during such meetings, among other things, the evolution of the design and any changes to the Basis of Design Documents, or, if applicable, previously submitted design submissions. Changes to the Basis of Design Documents, including those that are deemed minor changes under Section 9.3.1, shall be processed in accordance with Article 9. Minutes of the meetings, including a full listing of all changes, will be maintained by Design-Builder and provided

to all attendees for review. Following the design review meeting, Owner shall review and approve the interim design submissions and meeting minutes in a time that is consistent with the turnaround times set forth in Design-Builder's schedule.

2.4.2 Design-Builder shall submit to Owner Construction Documents setting forth in detail drawings and specifications describing the requirements for construction of the Work. The Construction Documents shall be consistent with the latest set of Interim design submissions, as such submissions may have been modified in a design review meeting and recorded in the meetings minutes. The parties shall have a design review meeting to discuss, and Owner shall review and approve, the Construction Documents in accordance with the procedures set forth in Section 2.4.1 above. Design-Builder shall proceed with construction in accordance with the approved Construction Documents and shall submit one set of approved Construction Documents to Owner prior to commencement of construction.

2.4.3 Owner's review and approval of interim design submissions, meeting minutes, and the Construction Documents is for the purpose of mutually establishing a conformed set of Contract Documents compatible with the requirements of the Work. Neither Owner's review nor approval of any interim design submissions, meeting minutes, and Construction Documents shall be deemed to transfer any design liability from Design-Builder to Owner.

2.4.4 To the extent not prohibited by the Contract Documents or Legal Requirements, Design-Builder may prepare interim design submissions and Construction Documents for a portion of the Work to permit construction to proceed on that portion of the Work prior to completion of the Construction Documents for the entire Work.

2.5 Legal Requirements.

2.5.1 Design-Builder shall perform the Work in accordance with all Legal Requirements and shall provide all notices applicable to the Work as required by the Legal Requirements.

2.5.2 The Contract Price and/or Contract Time(s) shall be adjusted to compensate Design-Builder for the effects of any changes in the Legal Requirements enacted after the date of the Agreement affecting the performance of the Work, or if a Guaranteed Maximum Price is established after the date of the Agreement, the date the parties agree upon the Guaranteed Maximum Price. Such effects may include, without limitation, revisions Design-Builder is required to make to the Construction Documents because of changes in Legal Requirements.

2.6 Government Approvals and Permits.

2.6.1 Except as identified in an Owner's Permit List attached as an exhibit to the Agreement, Design-Builder shall obtain and pay for all necessary permits, approvals, licenses, government charges and inspection fees required for the prosecution of the Work by any government or quasi-government entity having jurisdiction over the Project.

2.6.2 Design-Builder shall provide reasonable assistance to Owner in obtaining those permits, approvals and licenses that are Owner's responsibility.

2.7 Design-Builder's Construction Phase Services.

2.7.1 Unless otherwise provided in the Contract Documents to be the responsibility of Owner or a separate contractor, Design-Builder shall provide through itself or Subcontractors the necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities and other temporary facilities to permit Design-Builder to complete construction of the Project consistent with the Contract Documents.

2.7.2 Design-Builder shall perform all construction activities efficiently and with the requisite expertise, skill and competence to satisfy the requirements of the Contract Documents. Design-

Builder shall at all times exercise complete and exclusive control over the means, methods, sequences and techniques of construction.

2.7.3 Design-Builder shall employ only Subcontractors who are duly licensed and qualified to perform the Work consistent with the Contract Documents. Owner may reasonably object to Design-Builder's selection of any Subcontractor, provided that the Contract Price and/or Contract Time(s) shall be adjusted to the extent that Owner's decision impacts Design-Builder's cost and/or time of performance.

2.7.4 Design-Builder assumes responsibility to Owner for the proper performance of the Work of Subcontractors and any acts and omissions in connection with such performance. Nothing in the Contract Documents is intended or deemed to create any legal or contractual relationship between Owner and any Subcontractor or Sub-Subcontractor, including but not limited to any third-party beneficiary rights.

2.7.5 Design-Builder shall coordinate the activities of all Subcontractors. If Owner performs other work on the Project or at the Site with separate contractors under Owner's control, Design-Builder agrees to reasonably cooperate and coordinate its activities with those of such separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.

2.7.6 Design-Builder shall keep the Site reasonably free from debris, trash and construction wastes to permit Design-Builder to perform its construction services efficiently, safely and without interfering with the use of adjacent land areas. Upon Substantial Completion of the Work, or a portion of the Work, Design-Builder shall remove all debris, trash, construction wastes, materials, equipment, machinery and tools arising from the Work or applicable portions thereof to permit Owner to occupy the Project or a portion of the Project for its intended use.

2.8 Design-Builder's Responsibility for Project Safety.

2.8.1 Design-Builder recognizes the importance of performing the Work in a safe manner so as to prevent damage, injury or loss to (i) all individuals at the Site, whether working or visiting, (ii) the Work, including materials and equipment incorporated into the Work or stored on-Site or off-Site, and (iii) all other property at the Site or adjacent thereto. Design-Builder assumes responsibility for implementing and monitoring all safety precautions and programs related to the performance of the Work. Design-Builder shall, prior to commencing construction, designate a Safety Representative with the necessary qualifications and experience to supervise the implementation and monitoring of all safety precautions and programs related to the Work. Unless otherwise required by the Contract Documents, Design-Builder's Safety Representative shall be an individual stationed at the Site who may have responsibilities on the Project in addition to safety. The Safety Representative shall make routine daily inspections of the Site and shall hold weekly safety meetings with Design-Builder's personnel, Subcontractors and others as applicable.

2.8.2 Design-Builder and Subcontractors shall comply with all Legal Requirements relating to safety, as well as any Owner-specific safety requirements set forth in the Contract Documents, provided that such Owner-specific requirements do not violate any applicable Legal Requirement. Design-Builder will immediately report in writing any safety-related injury, loss, damage or accident arising from the Work to Owner's Representative and, to the extent mandated by Legal Requirements, to all government or quasi-government authorities having jurisdiction over safety-related matters involving the Project or the Work.

2.8.3 Design-Builder's responsibility for safety under this Section 2.8 is not intended in any way to relieve Subcontractors and Sub-Subcontractors of their own contractual and legal obligations and responsibility for (i) complying with all Legal Requirements, including those related to health and safety matters, and (ii) taking all necessary measures to implement and monitor all safety precautions and programs to guard against injuries, losses, damages or accidents resulting from

their performance of the Work.

2.9 Design-Builder's Warranty.

2.9.1 Design-Builder warrants to Owner that the construction, including all materials and equipment furnished as part of the construction, shall be new unless otherwise specified in the Contract Documents, of good quality, in conformance with the Contract Documents and free of defects in materials and workmanship. Design-Builder's warranty obligation excludes defects caused by abuse, alterations, or failure to maintain the Work in a commercially reasonable manner. Nothing in this warranty is intended to limit any manufacturer's warranty which provides Owner with greater warranty rights than set forth in this Section 2.9 or the Contract Documents. Design-Builder will provide Owner with all manufacturers' warranties upon Substantial Completion.

2.10 Correction of Defective Work.

2.10.1 Design-Builder agrees to correct any Work that is found to not be in conformance with the Contract Documents, including that part of the Work subject to Section 2.9 hereof, within a period of one year from the date of Substantial Completion of the Work or any portion of the Work, or within such longer period to the extent required by any specific warranty included in the Contract Documents.

2.10.2 Design-Builder shall, within seven (7) days of receipt of written notice from Owner that the Work is not in conformance with the Contract Documents, take meaningful steps to commence correction of such nonconforming Work, including the correction, removal or replacement of the nonconforming Work and any damage caused to other parts of the Work affected by the nonconforming Work. If Design-Builder fails to commence the necessary steps within such seven (7) day period, Owner, in addition to any other remedies provided under the Contract Documents, may provide Design-Builder with written notice that Owner will commence correction of such nonconforming Work with its own forces. If Owner does perform such corrective Work, Design-Builder shall be responsible for all reasonable costs incurred by Owner in performing such correction. If the nonconforming Work creates an emergency requiring an immediate response, the seven (7) day period identified herein shall be deemed inapplicable.

2.10.3 The one-year period referenced in Section 2.10.1 above applies only to Design-Builder's obligation to correct nonconforming Work and is not intended to constitute a period of limitations for any other rights or remedies Owner may have regarding Design-Builder's other obligations under the Contract Documents.

Article 3

Owner's Services and Responsibilities

3.1 Duty to Cooperate.

3.1.1 Owner shall, throughout the performance of the Work, cooperate with Design-Builder and perform its responsibilities, obligations and services in a timely manner to facilitate Design-Builder's timely and efficient performance of the Work and so as not to delay or interfere with Design-Builder's performance of its obligations under the Contract Documents.

3.1.2 Owner shall provide timely reviews and approvals of interim design submissions and Construction Documents consistent with the turnaround times set forth in Design-Builder's schedule.

3.1.3 Owner shall give Design-Builder timely notice of any Work that Owner notices to be

defective or not in compliance with the Contract Documents.

3.2 Furnishing of Services and Information.

3.2.1 Unless expressly stated to the contrary in the Contract Documents, Owner shall provide, at its own cost and expense, for Design-Builder's information and use the following, all of which Design-Builder is entitled to rely upon in performing the Work:

3.2.1.1 Surveys describing the property, boundaries, topography and reference points for use during construction, including existing service and utility lines;

3.2.1.2 Geotechnical studies describing subsurface conditions, and other surveys describing other latent or concealed physical conditions at the Site;

3.2.1.3 Temporary and permanent easements, zoning and other requirements and encumbrances affecting land use, or necessary to permit the proper design and construction of the Project and enable Design-Builder to perform the Work;

3.2.1.4 A legal description of the Site;

3.2.1.5 To the extent available, record drawings of any existing structures at the Site; and

3.2.1.6 To the extent available, environmental studies, reports and impact statements describing the environmental conditions, including Hazardous Conditions, in existence at the Site.

3.2.2 Owner is responsible for securing and executing all necessary agreements with adjacent land or property owners that are necessary to enable Design-Builder to perform the Work. Owner is further responsible for all costs, including attorneys' fees, incurred in securing these necessary agreements.

3.3 Financial Information.

3.3.1 At Design-Builder's request, Owner shall promptly furnish reasonable evidence satisfactory to Design-Builder that Owner has adequate funds available and committed to fulfill all of Owner's contractual obligations under the Contract Documents. If Owner fails to furnish such financial information in a timely manner, Design-Builder may stop Work under Section 11.3 hereof or exercise any other right permitted under the Contract Documents.

3.3.2 Design-Builder shall cooperate with the reasonable requirements of Owner's lenders or other financial sources. Notwithstanding the preceding sentence, after execution of the Agreement Design-Builder shall have no obligation to execute for Owner or Owner's lenders or other financial sources any documents or agreements that require Design-Builder to assume obligations or responsibilities greater than those existing obligations Design-Builder has under the Contract Documents.

3.4 Owner's Representative.

3.4.1 Owner's Representative shall be responsible for providing Owner-supplied information and approvals in a timely manner to permit Design-Builder to fulfill its obligations under the Contract Documents. Owner's Representative shall also provide Design-Builder with prompt notice if it observes any failure on the part of Design-Builder to fulfill its contractual obligations, including any errors, omissions or defects in the performance of the Work. Owner's Representative shall communicate regularly with Design-Builder and shall be vested with the authority to act on behalf of Owner.

3.5 Government Approvals and Permits.

3.5.1 Owner shall obtain and pay for all necessary permits, approvals, licenses, government charges and inspection fees set forth in the Owner's Permit List attached as an exhibit to the Agreement.

3.5.2 Owner shall provide reasonable assistance to Design-Builder in obtaining those permits, approvals and licenses that are Design-Builder's responsibility.

3.6 Owner's Separate Contractors.

3.6.1 Owner is responsible for all work performed on the Project or at the Site by separate contractors under Owner's control. Owner shall contractually require its separate contractors to cooperate with, and coordinate their activities so as not to interfere with, Design-Builder in order to enable Design-Builder to timely complete the Work consistent with the Contract Documents.

Article 4

Hazardous Conditions and Differing Site Conditions

4.1 Hazardous Conditions.

4.1.1 Unless otherwise expressly provided in the Contract Documents to be part of the Work, Design-Builder is not responsible for any Hazardous Conditions encountered at the Site. Upon encountering any Hazardous Conditions, Design-Builder will stop Work immediately in the affected area and duly notify Owner and, if required by Legal Requirements, all government or quasi-government entities with jurisdiction over the Project or Site.

4.1.2 Upon receiving notice of the presence of suspected Hazardous Conditions, Owner shall take the necessary measures required to ensure that the Hazardous Conditions are remediated or rendered harmless. Such necessary measures shall include Owner retaining qualified independent experts to (i) ascertain whether Hazardous Conditions have actually been encountered, and, if they have been encountered, (ii) prescribe the remedial measures that Owner must take either to remove the Hazardous Conditions or render the Hazardous Conditions harmless.

4.1.3 Design-Builder shall be obligated to resume Work at the affected area of the Project only after Owner's expert provides it with written certification that (i) the Hazardous Conditions have been removed or rendered harmless and (ii) all necessary approvals have been obtained from all government and quasi-government entities having jurisdiction over the Project or Site.

4.1.4 Design-Builder will be entitled, in accordance with these General Conditions of Contract, to an adjustment in its Contract Price and/or Contract Time(s) to the extent Design-Builder's cost and/or time of performance have been adversely impacted by the presence of Hazardous Conditions.

4.1.5 To the fullest extent permitted by law, Owner shall indemnify, defend and hold harmless Design-Builder, Design Consultants, Subcontractors, anyone employed directly or indirectly by any of them, and their officers, directors, employees and agents, from and against any and all claims, losses, damages, liabilities and expenses, including attorneys' fees and expenses, arising out of or resulting from the presence, removal or remediation of Hazardous Conditions at the Site.

4.1.6 Notwithstanding the preceding provisions of this Section 4.1, Owner is not responsible for Hazardous Conditions introduced to the Site by Design-Builder, Subcontractors or anyone for

whose acts they may be liable. To the fullest extent permitted by law, Design-Builder shall indemnify, defend and hold harmless Owner and Owner's officers, directors, employees and agents from and against all claims, losses, damages, liabilities and expenses, including attorneys' fees and expenses, arising out of or resulting from those Hazardous Conditions introduced to the Site by Design-Builder, Subcontractors or anyone for whose acts they may be liable.

4.2 Differing Site Conditions.

4.2.1 Concealed or latent physical conditions or subsurface conditions at the Site that (i) materially differ from the conditions indicated in the Contract Documents or (ii) are of an unusual nature, differing materially from the conditions ordinarily encountered and generally recognized as inherent in the Work are collectively referred to herein as "Differing Site Conditions." If Design-Builder encounters a Differing Site Condition, Design-Builder will be entitled to an adjustment in the Contract Price and/or Contract Time(s) to the extent Design-Builder's cost and/or time of performance are adversely impacted by the Differing Site Condition.

4.2.2 Upon encountering a Differing Site Condition, Design-Builder shall provide prompt written notice to Owner of such condition, which notice shall not be later than fourteen (14) days after such condition has been encountered. Design-Builder shall, to the extent reasonably possible, provide such notice before the Differing Site Condition has been substantially disturbed or altered.

Article 5

Insurance and Bonds

5.1 Design-Builder's Insurance Requirements.

5.1.1 Design-Builder is responsible for procuring and maintaining the insurance for the coverage amounts all as set forth in the Insurance Exhibit to the Agreement. Coverage shall be secured from insurance companies authorized to do business in the state in which the Project is located, and with a minimum rating set forth in the Agreement.

5.1.2 Design-Builder's insurance shall specifically delete any design-build or similar exclusions that could compromise coverages because of the design-build delivery of the Project.

5.1.3 Prior to commencing any construction services hereunder, Design-Builder shall provide Owner with certificates evidencing that (i) all insurance obligations required by the Contract Documents are in full force and in effect and will remain in effect for the duration required by the Contract Documents and (ii) no insurance coverage will be canceled, renewal refused, or materially changed unless at least thirty (30) days prior written notice is given to Owner. If any of the foregoing insurance coverages are required to remain in force after final payment are reasonably available, an additional certificate evidencing continuation of such coverage shall be submitted with the Final Application for Payment. If any information concerning reduction of coverage is not furnished by the insurer, it shall be furnished by the Design-Builder with reasonable promptness according to the Design-Builder's information and belief.

5.2 Owner's Liability Insurance.

5.2.1 Owner shall procure and maintain from insurance companies authorized to do business in the state in which the Project is located such liability insurance as set forth in the Insurance Exhibit to the Agreement to protect Owner from claims which may arise from the performance of Owner's obligations under the Contract Documents or Owner's conduct during the course of the Project.

5.3 Owner's Property Insurance.

5.3.1 Unless otherwise provided in the Contract Documents, Owner shall procure and maintain from insurance companies authorized to do business in the state in which the Project is located property insurance upon the entire Project to the full insurable value of the Project, including professional fees, overtime premiums and all other expenses incurred to replace or repair the insured property. The property insurance obtained by Owner shall be the broadest coverage commercially available, and shall include as additional insureds the interests of Owner, Design-Builder, Design Consultants and Subcontractors of any tier. Such insurance shall include but not be limited to the perils of fire and extended coverage, theft, vandalism, malicious mischief, collapse, flood, earthquake, debris removal and other perils or causes of loss as called for in the Contract Documents. The property insurance shall include physical loss or damage to the Work, including materials and equipment in transit, at the Site or at another location as may be indicated in Design-Builder's Application for Payment and approved by Owner. The Owner is responsible for the payment of any deductibles under the insurance required by this Section 5.3.1.

5.3.2 Unless the Contract Documents provide otherwise, Owner shall procure and maintain boiler and machinery insurance that will include the interests of Owner, Design-Builder, Design Consultants, and Subcontractors of any tier. The Owner is responsible for the payment of any deductibles under the insurance required by this Section 5.3.2.

5.3.3 Prior to Design-Builder commencing any Work, Owner shall provide Design-Builder with certificates evidencing that (i) all Owner's insurance obligations required by the Contract Documents are in full force and in effect and will remain in effect until Design-Builder has completed all of the Work and has received final payment from Owner and (ii) no insurance coverage will be canceled, renewal refused, or materially changed unless at least thirty (30) days prior written notice is given to Design-Builder. Owner's property insurance shall not lapse or be canceled if Owner occupies a portion of the Work pursuant to Section 6.6.3 hereof. Owner shall provide Design-Builder with the necessary endorsements from the insurance company prior to occupying a portion of the Work.

5.3.4 Any loss covered under Owner's property insurance shall be adjusted with Owner and Design-Builder and made payable to both of them as trustees for the insureds as their interests may appear, subject to any applicable mortgage clause. All insurance proceeds received as a result of any loss will be placed in a separate account and distributed in accordance with such agreement as the interested parties may reach. Any disagreement concerning the distribution of any proceeds will be resolved in accordance with Article 10 hereof.

5.3.5 Owner and Design-Builder waive against each other and Owner's separate contractors, Design Consultants, Subcontractors, agents and employees of each and all of them, all damages covered by property insurance provided herein, except such rights as they may have to the proceeds of such insurance. Design-Builder and Owner shall, where appropriate, require similar waivers of subrogation from Owner's separate contractors, Design Consultants and Subcontractors and shall require each of them to include similar waivers in their contracts. These waivers of subrogation shall not contain any restriction or limitation that will impair the full and complete extent of its applicability to any person or entity unless agreed to in writing prior to the execution of this Agreement.

5.4 Bonds and Other Performance Security.

5.4.1 If Owner requires Design-Builder to obtain performance and labor and material payment bonds, or other forms of performance security, the amount, form and other conditions of such security shall be as set forth in the Agreement.

5.4.2 All bonds furnished by Design-Builder shall be in a form satisfactory to Owner. The surety shall be a company qualified and registered to conduct business in the state in which the Project is located.

Article 6

Payment

6.1 Schedule of Values.

6.1.1 Unless required by the Owner upon execution of this Agreement, within ten (10) days of execution of the Agreement, Design-Builder shall submit for Owner's review and approval a schedule of values for all of the Work. The Schedule of Values will (i) subdivide the Work into its respective parts, (ii) include values for all items comprising the Work and (iii) serve as the basis for monthly progress payments made to Design-Builder throughout the Work.

6.1.2 The Owner will timely review and approve the schedule of values so as not to delay the submission of the Design-Builder's first application for payment. The Owner and Design-Builder shall timely resolve any differences so as not to delay the Design-Builder's submission of its first application for payment.

6.2 Monthly Progress Payments.

6.2.1 On or before the date established in the Agreement, Design-Builder shall submit for Owner's review and approval its Application for Payment requesting payment for all Work performed as of the date of the Application for Payment. The Application for Payment shall be accompanied by all supporting documentation required by the Contract Documents and/or established at the meeting required by Section 2.1.4 hereof.

6.2.2 The Application for Payment may request payment for equipment and materials not yet incorporated into the Project, provided that (i) Owner is satisfied that the equipment and materials are suitably stored at either the Site or another acceptable location, (ii) the equipment and materials are protected by suitable insurance and (iii) upon payment, Owner will receive the equipment and materials free and clear of all liens and encumbrances.

6.2.3 All discounts offered by Subcontractor, Sub-Subcontractors and suppliers to Design-Builder for early payment shall accrue one hundred percent to Design-Builder to the extent Design-Builder advances payment. Unless Owner advances payment to Design-Builder specifically to receive the discount, Design-Builder may include in its Application for Payment the full undiscounted cost of the item for which payment is sought.

6.2.4 The Application for Payment shall constitute Design-Builder's representation that the Work described herein has been performed consistent with the Contract Documents, has progressed to the point indicated in the Application for Payment, and that title to all Work will pass to Owner free and clear of all claims, liens, encumbrances, and security interests upon the incorporation of the Work into the Project, or upon Design-Builder's receipt of payment, whichever occurs earlier.

6.3 Withholding of Payments.

6.3.1 On or before the date established in the Agreement, Owner shall pay Design-Builder all amounts properly due. If Owner determines that Design-Builder is not entitled to all or part of an Application for Payment as a result of Design-Builder's failure to meet its obligations hereunder, it will notify Design-Builder in writing at least five (5) days prior to the date payment is due. The notice shall indicate the specific amounts Owner intends to withhold, the reasons and contractual basis for the withholding, and the specific measures Design-Builder must take to rectify Owner's concerns. Design-Builder and Owner will attempt to resolve Owner's concerns prior to the date payment is due. If the parties cannot resolve such concerns, Design-Builder may pursue its rights under the Contract Documents, including those under Article 10 hereof.

6.3.2 Notwithstanding anything to the contrary in the Contract Documents, Owner shall pay

Design-Builder all undisputed amounts in an Application for Payment within the times required by the Agreement.

6.4 Right to Stop Work and Interest.

6.4.1 If Owner fails to pay timely Design-Builder any amount that becomes due, Design-Builder, in addition to all other remedies provided in the Contract Documents, may stop Work pursuant to Section 11.3 hereof. All payments due and unpaid shall bear interest at the rate set forth in the Agreement.

6.5 Design-Builder's Payment Obligations.

6.5.1 Design-Builder will pay Design Consultants and Subcontractors, in accordance with its contractual obligations to such parties, all the amounts Design-Builder has received from Owner on account of their work. Design-Builder will impose similar requirements on Design Consultants and Subcontractors to pay those parties with whom they have contracted. Design-Builder will indemnify and defend Owner against any claims for payment and mechanic's liens as set forth in Section 7.3 hereof.

6.6 Substantial Completion.

6.6.1 Design-Builder shall notify Owner when it believes the Work, or to the extent permitted in the Contract Documents, a portion of the Work, is Substantially Complete. Within five (5) days of Owner's receipt of Design-Builder's notice, Owner and Design-Builder will jointly inspect such Work to verify that it is Substantially Complete in accordance with the requirements of the Contract Documents. If such Work is Substantially Complete, Owner shall prepare and issue a Certificate of Substantial Completion that will set forth (i) the date of Substantial Completion of the Work or portion thereof, (ii) the remaining items of Work that have to be completed before final payment, (iii) provisions (to the extent not already provided in the Contract Documents) establishing Owner's and Design-Builder's responsibility for the Project's security, maintenance, utilities and insurance pending final payment, and (iv) an acknowledgment that warranties commence to run on the date of Substantial Completion, except as may otherwise be noted in the Certificate of Substantial Completion.

6.6.2 Upon Substantial Completion of the entire Work or, if applicable, any portion of the Work, Owner shall release to Design-Builder all retained amounts relating, as applicable, to the entire Work or completed portion of the Work, less an amount equal to the reasonable value of all remaining or incomplete items of Work as noted in the Certificate of Substantial Completion.

6.6.3 Owner, at its option, may use a portion of the Work which has been determined to be Substantially Complete, provided, however, that (i) a Certificate of Substantial Completion has been issued for the portion of Work addressing the items set forth in Section 6.6.1 above, (ii) Design-Builder and Owner have obtained the consent of their sureties and insurers, and to the extent applicable, the appropriate government authorities having jurisdiction over the Project, and (iii) Owner and Design-Builder agree that Owner's use or occupancy will not interfere with Design-Builder's completion of the remaining Work.

6.7 Final Payment.

6.7.1 After receipt of a Final Application for Payment from Design-Builder, Owner shall make final payment by the time required in the Agreement, provided that Design-Builder has achieved Final Completion.

6.7.2 At the time of submission of its Final Application for Payment, Design-Builder shall provide the following information:

6.7.2.1 An affidavit that there are no claims, obligations or liens outstanding or

unsatisfied for labor, services, material, equipment, taxes or other items performed, furnished or incurred for or in connection with the Work which will in any way affect Owner's interests;

6.7.2.2 A general release executed by Design-Builder waiving, upon receipt of final payment by Design-Builder, all claims, except those claims previously made in writing to Owner and remaining unsettled at the time of final payment;

6.7.2.3 Consent of Design-Builder's surety, if any, to final payment;

6.7.2.4 All operating manuals, warranties and other deliverables required by the Contract Documents; and

6.7.2.5 Certificates of insurance confirming that required coverages will remain in effect consistent with the requirements of the Contract Documents.

6.7.3 Upon making final payment, Owner waives all claims against Design-Builder except claims relating to (i) Design-Builder's failure to satisfy its payment obligations, if such failure affects Owner's interests, (ii) Design-Builder's failure to complete the Work consistent with the Contract Documents, including defects appearing after Substantial Completion and (iii) the terms of any special warranties required by the Contract Documents.

6.7.4 Deficiencies in the Work discovered after Substantial Completion, whether or not such deficiencies would have been included on the Punch List if discovered earlier, shall be deemed warranty Work. Such deficiencies shall be corrected by Design-Builder under Sections 2.9 and 2.10 herein, and shall not be a reason to withhold final payment from Design-Builder, provided, however, that Owner shall be entitled to withhold from the Final Payment the reasonable value of completion of such deficient work until such work is completed.

Article 7

Indemnification

7.1 Patent and Copyright Infringement.

7.1.1 Design-Builder shall defend any action or proceeding brought against Owner based on any claim that the Work, or any part thereof, or the operation or use of the Work or any part thereof, constitutes infringement of any United States patent or copyright, now or hereafter issued. Owner shall give prompt written notice to Design-Builder of any such action or proceeding and will reasonably provide authority, information and assistance in the defense of same. Design-Builder shall indemnify and hold harmless Owner from and against all damages and costs, including but not limited to attorneys' fees and expenses awarded against Owner or Design-Builder in any such action or proceeding. Design-Builder agrees to keep Owner informed of all developments in the defense of such actions.

7.1.2 If Owner is enjoined from the operation or use of the Work, or any part thereof, as the result of any patent or copyright suit, claim, or proceeding, Design-Builder shall at its sole expense take reasonable steps to procure the right to operate or use the Work. If Design-Builder cannot so procure such right within a reasonable time, Design-Builder shall promptly, at Design-Builder's option and at Design-Builder's expense, (i) modify the Work so as to avoid infringement of any such patent or copyright or (ii) replace said Work with Work that does not infringe or violate any such patent or copyright.

7.1.3 Sections 7.1.1 and 7.1.2 above shall not be applicable to any suit, claim or proceeding based on infringement or violation of a patent or copyright (i) relating solely to a particular process

or product of a particular manufacturer specified by Owner and not offered or recommended by Design-Builder to Owner or (ii) arising from modifications to the Work by Owner or its agents after acceptance of the Work. If the suit, claim or proceeding is based upon events set forth in the preceding sentence, Owner shall defend, indemnify and hold harmless Design-Builder to the same extent Design-Builder is obligated to defend, indemnify and hold harmless Owner in Section 7.1.1 above.

7.1.4 The obligations set forth in this Section 7.1 shall constitute the sole agreement between the parties relating to liability for infringement of violation of any patent or copyright.

7.2 Tax Claim Indemnification.

7.2.1 If, in accordance with Owner's direction, an exemption for all or part of the Work is claimed for taxes, Owner shall indemnify, defend and hold harmless Design-Builder from and against any liability, penalty, interest, fine, tax assessment, attorneys' fees or other expenses or costs incurred by Design-Builder as a result of any action taken by Design-Builder in accordance with Owner's directive. Owner shall furnish Design-Builder with any applicable tax exemption certificates necessary to obtain such exemption, upon which Design-Builder may rely.

7.3 Payment Claim Indemnification.

7.3.1 Provided that Owner is not in breach of its contractual obligation to make payments to Design-Builder for the Work, Design-Builder shall indemnify, defend and hold harmless Owner from any claims or mechanic's liens brought against Owner or against the Project as a result of the failure of Design-Builder, or those for whose acts it is responsible, to pay for any services, materials, labor, equipment, taxes or other items or obligations furnished or incurred for or in connection with the Work. Within three (3) days of receiving written notice from Owner that such a claim or mechanic's lien has been filed, Design-Builder shall commence to take the steps necessary to discharge said claim or lien, including, if necessary, the furnishing of a mechanic's lien bond. If Design-Builder fails to do so, Owner will have the right to discharge the claim or lien and hold Design-Builder liable for costs and expenses incurred, including attorneys' fees.

7.4 Design-Builder's General Indemnification.

7.4.1 Design-Builder, to the fullest extent permitted by law, shall indemnify, hold harmless and defend Owner, its officers, directors, and employees from and against claims, losses, damages, liabilities, including attorneys' fees and expenses, for bodily injury, sickness or death, and property damage or destruction (other than to the Work itself) to the extent resulting from the negligent acts or omissions of Design-Builder, Design Consultants, Subcontractors, anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable.

7.4.2 If an employee of Design-Builder, Design Consultants, Subcontractors, anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable has a claim against Owner, its officers, directors, employees, or agents, Design-Builder's indemnity obligation set forth in Section 7.4.1 above shall not be limited by any limitation on the amount of damages, compensation or benefits payable by or for Design-Builder, Design Consultants, Subcontractors, or other entity under any employee benefit acts, including workers' compensation or disability acts.

7.5 Owner's General Indemnification.

7.5.1 Owner, to the fullest extent permitted by law, shall indemnify, hold harmless and defend Design-Builder and any of Design-Builder's officers, directors, and employees, from and against claims, losses, damages, liabilities, including attorneys' fees and expenses, for bodily injury, sickness or death, and property damage or destruction (other than to the Work itself) to the extent resulting from the negligent acts or omissions of Owner's separate contractors or anyone for

whose acts any of them may be liable.

Article 8

Time

8.1 Obligation to Achieve the Contract Times.

8.1.1 Design-Builder agrees that it will commence performance of the Work and achieve the Contract Time(s) in accordance with Article 5 of the Agreement.

8.2 Delays to the Work.

8.2.1 If Design-Builder is delayed in the performance of the Work due to acts, omissions, conditions, events, or circumstances beyond its control and due to no fault of its own or those for whom Design-Builder is responsible, the Contract Time(s) for performance shall be reasonably extended by Change Order. By way of example, events that will entitle Design-Builder to an extension of the Contract Time(s) include acts or omissions of Owner or anyone under Owner's control (including separate contractors), changes in the Work, Differing Site Conditions, Hazardous Conditions, and Force Majeure Events.

8.2.2 In addition to Design-Builder's right to a time extension for those events set forth in Section 8.2.1 above, Design-Builder shall also be entitled to an appropriate adjustment of the Contract Price provided, however, that the Contract Price shall not be adjusted for Force Majeure Events unless otherwise provided in the Agreement.

Article 9

Changes to the Contract Price and Time

9.1 Change Orders.

9.1.1 A Change Order is a written instrument issued after execution of the Agreement signed by Owner and Design-Builder, stating their agreement upon all of the following:

9.1.1.1 The scope of the change in the Work;

9.1.1.2 The amount of the adjustment to the Contract Price; and

9.1.1.3 The extent of the adjustment to the Contract Time(s).

9.1.2 All changes in the Work authorized by applicable Change Order shall be performed under the applicable conditions of the Contract Documents. Owner and Design-Builder shall negotiate in good faith and as expeditiously as possible the appropriate adjustments for such changes.

9.1.3 If Owner requests a proposal for a change in the Work from Design-Builder and subsequently elects not to proceed with the change, a Change Order shall be issued to reimburse Design-Builder for reasonable costs incurred for estimating services, design services and services involved in the preparation of proposed revisions to the Contract Documents.

9.2 Work Change Directives.

9.2.1 A Work Change Directive is a written order prepared and signed by Owner directing a change in the Work prior to agreement on an adjustment in the Contract Price and/or the Contract Time(s).

9.2.2 Owner and Design-Builder shall negotiate in good faith and as expeditiously as possible the appropriate adjustments for the Work Change Directive. Upon reaching an agreement, the parties shall prepare and execute an appropriate Change Order reflecting the terms of the agreement.

9.3 Minor Changes in the Work.

9.3.1 Minor changes in the Work do not involve an adjustment in the Contract Price and/or Contract Time(s) and do not materially and adversely affect the Work, including the design, quality, performance and workmanship required by the Contract Documents. Design-Builder may make minor changes in the Work consistent with the intent of the Contract Documents, provided, however, that Design-Builder shall promptly inform Owner, in writing, of any such changes and record such changes on the documents maintained by Design-Builder.

9.4 Contract Price Adjustments.

9.4.1 The increase or decrease in Contract Price resulting from a change in the Work shall be determined by one or more of the following methods:

9.4.1.1 Unit prices set forth in the Agreement or as subsequently agreed to between the parties;

9.4.1.2 A mutually accepted lump sum, properly itemized and supported by sufficient substantiating data to permit evaluation by Owner;

9.4.1.3 Costs, fees and any other markups set forth in the Agreement; or

9.4.1.4 If an increase or decrease cannot be agreed to as set forth in items 9.4.1.1 through 9.4.1.3 above and Owner issues a Work Change Directive, the cost of the change of the Work shall be determined by the reasonable expense and savings in the performance of the Work resulting from the change, including a reasonable overhead and profit, as may be set forth in the Agreement.

9.4.2 If unit prices are set forth in the Contract Documents or are subsequently agreed to by the parties, but application of such unit prices will cause substantial inequity to Owner or Design-Builder because of differences in the character or quantity of such unit items as originally contemplated, such unit prices shall be equitably adjusted.

9.4.3 If Owner and Design-Builder disagree upon whether Design-Builder is entitled to be paid for any services required by Owner, or if there are any other disagreements over the scope of Work or proposed changes to the Work, Owner and Design-Builder shall resolve the disagreement pursuant to Article 10 hereof. As part of the negotiation process, Design-Builder shall furnish Owner with a good faith estimate of the costs to perform the disputed services in accordance with Owner's interpretations. If the parties are unable to agree and Owner expects Design-Builder to perform the services in accordance with Owner's interpretations, Design-Builder shall proceed to perform the disputed services, conditioned upon Owner issuing a written order to Design-Builder (i) directing Design-Builder to proceed and (ii) specifying Owner's interpretation of the services that are to be performed. If this occurs, Design-Builder shall be entitled to submit in its Applications for Payment an amount equal to fifty percent (50%) of its reasonable estimated direct cost to perform the services, and Owner agrees to pay such amounts, with the express understanding that (i) such payment by Owner does not prejudice

Owner's right to argue that it has no responsibility to pay for such services and (ii) receipt of such payment by Design-Builder does not prejudice Design-Builder's right to seek full payment of the disputed services if Owner's order is deemed to be a change to the Work.

9.5 Emergencies.

9.5.1 In any emergency affecting the safety of persons and/or property, Design-Builder shall act, at its discretion, to prevent threatened damage, injury or loss. Any change in the Contract Price and/or Contract Time(s) on account of emergency work shall be determined as provided in this Article 9.

Article 10

Contract Adjustments and Disputes

10.1 Requests for Contract Adjustments and Relief.

10.1.1 If either Design-Builder or Owner believes that it is entitled to relief against the other for any event arising out of or related to the Work or Project, such party shall provide written notice to the other party of the basis for its claim for relief. Such notice shall, if possible, be made prior to incurring any cost or expense and in accordance with any specific notice requirements contained in applicable sections of these General Conditions of Contract. In the absence of any specific notice requirement, written notice shall be given within a reasonable time, not to exceed twenty-one (21) days, after the occurrence giving rise to the claim for relief or after the claiming party reasonably should have recognized the event or condition giving rise to the request, whichever is later. Such notice shall include sufficient information to advise the other party of the circumstances giving rise to the claim for relief, the specific contractual adjustment or relief requested and the basis of such request.

10.2 Dispute Avoidance and Resolution.

10.2.1 The parties are fully committed to working with each other throughout the Project and agree to communicate regularly with each other at all times so as to avoid or minimize disputes or disagreements. If disputes or disagreements do arise, Design-Builder and Owner each commit to resolving such disputes or disagreements in an amicable, professional and expeditious manner so as to avoid unnecessary losses, delays and disruptions to the Work.

10.2.2 Design-Builder and Owner will first attempt to resolve disputes or disagreements at the field level through discussions between Design-Builder's Representative and Owner's Representative which shall conclude within fourteen (14) days of the written notice provided for in Section 10.1.1 unless the Owner and Design-Builder mutually agree otherwise.

10.2.3 If a dispute or disagreement cannot be resolved through Design-Builder's Representative and Owner's Representative, Design-Builder's Senior Representative and Owner's Senior Representative, upon the request of either party, shall meet as soon as conveniently possible, but in no case later than thirty (30) days after such a request is made, to attempt to resolve such dispute or disagreement. Five (5) days prior to any meetings between the Senior Representatives, the parties will exchange relevant information that will assist the parties in resolving their dispute or disagreement.

10.2.4 If after meeting the Senior Representatives determine that the dispute or disagreement cannot be resolved on terms satisfactory to both parties, the parties shall submit within thirty (30) days of the conclusion of the meeting of Senior Representatives the dispute or disagreement to non-binding mediation. The mediation shall be conducted by a mutually agreeable impartial mediator, or if the parties cannot so agree, a mediator designated by the American Arbitration

Association ("AAA") pursuant to its Construction Industry Mediation Rules. The mediation will be governed by and conducted pursuant to a mediation agreement negotiated by the parties or, if the parties cannot so agree, by procedures established by the mediator. Unless otherwise mutually agreed by the Owner and Design-Builder and consistent with the mediator's schedule, the mediation shall commence within ninety (90) days of the submission of the dispute to mediation.

10.3 Arbitration.

10.3.1 Any claims, disputes or controversies between the parties arising out of or relating to the Agreement, or the breach thereof, which have not been resolved in accordance with the procedures set forth in Section 10.2 above, shall be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the AAA then in effect, unless the parties mutually agree otherwise.

10.3.2 The award of the arbitrator(s) shall be final and binding upon the parties without the right of appeal to the courts. Judgment may be entered upon it in accordance with applicable law by any court having jurisdiction thereof.

10.3.3 Design-Builder and Owner expressly agree that any arbitration pursuant to this Section 10.3 may be joined or consolidated with any arbitration involving any other person or entity (i) necessary to resolve the claim, dispute or controversy, or (ii) substantially involved in or affected by such claim, dispute or controversy. Both Design-Builder and Owner will include appropriate provisions in all contracts they execute with other parties in connection with the Project to require such joinder or consolidation.

10.3.4 The prevailing party in any arbitration, or any other final, binding dispute proceeding upon which the parties may agree, shall be entitled to recover from the other party reasonable attorneys' fees and expenses incurred by the prevailing party.

10.4 Duty to Continue Performance.

10.4.1 Unless provided to the contrary in the Contract Documents, Design-Builder shall continue to perform the Work and Owner shall continue to satisfy its payment obligations to Design-Builder, pending the final resolution of any dispute or disagreement between Design-Builder and Owner.

10.5 CONSEQUENTIAL DAMAGES.

10.5.1 NOTWITHSTANDING ANYTHING HEREIN TO THE CONTRARY (EXCEPT AS SET FORTH IN SECTION 10.5.2 BELOW), NEITHER DESIGN-BUILDER NOR OWNER SHALL BE LIABLE TO THE OTHER FOR ANY CONSEQUENTIAL LOSSES OR DAMAGES, WHETHER ARISING IN CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO LOSSES OF USE, PROFITS, BUSINESS, REPUTATION OR FINANCING.

10.5.2 The consequential damages limitation set forth in Section 10.5.1 above is not intended to affect the payment of liquidated damages or lost early completion bonus, if any, set forth in Article 5 of the Agreement, which both parties recognize has been established, in part, to reimburse Owner or reward Design-Builder for some damages that might otherwise be deemed to be consequential.

Article 11

Stop Work and Termination for Cause

11.1 Owner's Right to Stop Work.

11.1.1 Owner may, without cause and for its convenience, order Design-Builder in writing to stop and suspend the Work. Such suspension shall not exceed sixty (60) consecutive days or aggregate more than ninety (90) days during the duration of the Project.

11.1.2 Design-Builder is entitled to seek an adjustment of the Contract Price and/or Contract Time(s) if its cost or time to perform the Work has been adversely impacted by any suspension of stoppage of the Work by Owner.

11.2 Owner's Right to Perform and Terminate for Cause.

11.2.1 If Design-Builder persistently fails to (i) provide a sufficient number of skilled workers, (ii) supply the materials required by the Contract Documents, (iii) comply with applicable Legal Requirements, (iv) timely pay, without cause, Design Consultants or Subcontractors, (v) prosecute the Work with promptness and diligence to ensure that the Work is completed by the Contract Time(s), as such times may be adjusted, or (vi) perform material obligations under the Contract Documents, then Owner, in addition to any other rights and remedies provided in the Contract Documents or by law, shall have the rights set forth in Sections 11.2.2 and 11.2.3 below.

11.2.2 Upon the occurrence of an event set forth in Section 11.2.1 above, Owner may provide written notice to Design-Builder that it intends to terminate the Agreement unless the problem cited is cured, or commenced to be cured, within seven (7) days of Design-Builder's receipt of such notice. If Design-Builder fails to cure, or reasonably commence to cure, such problem, then Owner may give a second written notice to Design-Builder of its intent to terminate within an additional seven (7) day period. If Design-Builder, within such second seven (7) day period, fails to cure, or reasonably commence to cure, such problem, then Owner may declare the Agreement terminated for default by providing written notice to Design-Builder of such declaration.

11.2.3 Upon declaring the Agreement terminated pursuant to Section 11.2.2 above, Owner may enter upon the premises and take possession, for the purpose of completing the Work, of all materials, equipment, scaffolds, tools, appliances and other items thereon, which have been purchased or provided for the performance of the Work, all of which Design-Builder hereby transfers, assigns and sets over to Owner for such purpose, and to employ any person or persons to complete the Work and provide all of the required labor, services, materials, equipment and other items. In the event of such termination, Design-Builder shall not be entitled to receive any further payments under the Contract Documents until the Work shall be finally completed in accordance with the Contract Documents. At such time, if the unpaid balance of the Contract Price exceeds the cost and expense incurred by Owner in completing the Work, such excess shall be paid by Owner to Design-Builder. Notwithstanding the preceding sentence, if the Agreement establishes a Guaranteed Maximum Price, Design-Builder will only be entitled to be paid for Work performed prior to its default. If Owner's cost and expense of completing the Work exceeds the unpaid balance of the Contract Price, then Design-Builder shall be obligated to pay the difference to Owner. Such costs and expense shall include not only the cost of completing the Work, but also losses, damages, costs and expense, including attorneys' fees and expenses, incurred by Owner in connection with the procurement and defense of claims arising from Design-Builder's default, subject to the waiver of consequential damages set forth in Section 10.5 hereof.

11.2.4 If Owner improperly terminates the Agreement for cause, the termination for cause will be converted to a termination for convenience in accordance with the provisions of Article 8 of the Agreement.

11.3 Design-Builder's Right to Stop Work.

11.3.1 Design-Builder may, in addition to any other rights afforded under the Contract Documents or at law, stop the Work for the following reasons:

11.3.1.1 Owner's failure to provide financial assurances as required under Section 3.3 hereof; or

11.3.1.2 Owner's failure to pay amounts properly due under Design-Builder's Application for Payment.

11.3.2 Should any of the events set forth in Section 11.3.1 above occur, Design-Builder has the right to provide Owner with written notice that Design-Builder will stop the Work unless said event is cured within seven (7) days from Owner's receipt of Design-Builder's notice. If Owner does not cure the problem within such seven (7) day period, Design-Builder may stop the Work. In such case, Design-Builder shall be entitled to make a claim for adjustment to the Contract Price and Contract Time(s) to the extent it has been adversely impacted by such stoppage.

11.4 Design-Builder's Right to Terminate for Cause.

11.4.1 Design-Builder, in addition to any other rights and remedies provided in the Contract Documents or by law, may terminate the Agreement for cause for the following reasons:

11.4.1.1 The Work has been stopped for sixty (60) consecutive days, or more than ninety (90) days during the duration of the Project, because of court order, any government authority having jurisdiction over the Work, or orders by Owner under Section 11.1.1 hereof, provided that such stoppages are not due to the acts or omissions of Design-Builder or anyone for whose acts Design-Builder may be responsible.

11.4.1.2 Owner's failure to provide Design-Builder with any information, permits or approvals that are Owner's responsibility under the Contract Documents which result in the Work being stopped for sixty (60) consecutive days, or more than ninety (90) days during the duration of the Project, even though Owner has not ordered Design-Builder in writing to stop and suspend the Work pursuant to Section 11.1.1 hereof.

11.4.1.3 Owner's failure to cure the problems set forth in Section 11.3.1 above after Design-Builder has stopped the Work.

11.4.2 Upon the occurrence of an event set forth in Section 11.4.1 above, Design-Builder may provide written notice to Owner that it intends to terminate the Agreement unless the problem cited is cured, or commenced to be cured, within seven (7) days of Owner's receipt of such notice. If Owner fails to cure, or reasonably commence to cure, such problem, then Design-Builder may give a second written notice to Owner of its intent to terminate within an additional seven (7) day period. If Owner, within such second seven (7) day period, fails to cure, or reasonably commence to cure, such problem, then Design-Builder may declare the Agreement terminated for default by providing written notice to Owner of such declaration. In such case, Design-Builder shall be entitled to recover in the same manner as if Owner had terminated the Agreement for its convenience under Article 8 of the Agreement.

11.5 Bankruptcy of Owner or Design-Builder.

11.5.1 If either Owner or Design-Builder institutes or has instituted against it a case under the United States Bankruptcy Code (such party being referred to as the "Bankrupt Party"), such event may impair or frustrate the Bankrupt Party's ability to perform its obligations under the Contract Documents. Accordingly, should such event occur:

11.5.1.1 The Bankrupt Party, its trustee or other successor, shall furnish, upon request

of the non-Bankrupt Party, adequate assurance of the ability of the Bankrupt Party to perform all future material obligations under the Contract Documents, which assurances shall be provided within ten (10) days after receiving notice of the request; and

11.5.1.2 The Bankrupt Party shall file an appropriate action within the bankruptcy court to seek assumption or rejection of the Agreement within sixty (60) days of the institution of the bankruptcy filing and shall diligently prosecute such action.

If the Bankrupt Party fails to comply with its foregoing obligations, the non-Bankrupt Party shall be entitled to request the bankruptcy court to reject the Agreement, declare the Agreement terminated and pursue any other recourse available to the non-Bankrupt Party under this Article 11.

11.5.2 The rights and remedies under Section 11.5.1 above shall not be deemed to limit the ability of the non-Bankrupt Party to seek any other rights and remedies provided by the Contract Documents or by law, including its ability to seek relief from any automatic stays under the United States Bankruptcy Code or the right of Design-Builder to stop Work under any applicable provision of these General Conditions of Contract.

Article 12

Electronic Data

12.1 Electronic Data.

12.1.1 The parties recognize that Contract Documents, including drawings, specifications and three-dimensional modeling (such as Building Information Models) and other Work Product may be transmitted among Owner, Design-Builder and others in electronic media as an alternative to paper hard copies (collectively "Electronic Data").

12.2 Transmission of Electronic Data.

12.2.1 Owner and Design-Builder shall agree upon the software and the format for the transmission of Electronic Data. Each party shall be responsible for securing the legal rights to access the agreed-upon format, including, if necessary, obtaining appropriately licensed copies of the applicable software or electronic program to display, interpret and/or generate the Electronic Data.

12.2.2 Neither party makes any representations or warranties to the other with respect to the functionality of the software or computer program associated with the electronic transmission of Work Product. Unless specifically set forth in the Agreement, ownership of the Electronic Data does not include ownership of the software or computer program with which it is associated, transmitted, generated or interpreted.

12.2.3 By transmitting Work Product in electronic form, the transmitting party does not transfer or assign its rights in the Work Product. The rights in the Electronic Data shall be as set forth in Article 4 of the Agreement. Under no circumstances shall the transfer of ownership of Electronic Data be deemed to be a sale by the transmitting party of tangible goods.

12.3 Electronic Data Protocol.

12.3.1 The parties acknowledge that Electronic Data may be altered or corrupted, intentionally or otherwise, due to occurrences beyond their reasonable control or knowledge, including but not limited to compatibility issues with user software, manipulation by the recipient, errors in transcription or transmission, machine error, environmental factors, and operator error.

Consequently, the parties understand that there is some level of increased risk in the use of Electronic Data for the communication of design and construction information and, in consideration of this, agree, and shall require their independent contractors, Subcontractors and Design Consultants to agree, to the following protocols, terms and conditions set forth in this Section 12.3.

12.3.2 Electronic Data will be transmitted in the format agreed upon in Section 12.2.1 above, including file conventions and document properties, unless prior arrangements are made in advance in writing.

12.3.3 The Electronic Data represents the information at a particular point in time and is subject to change. Therefore, the parties shall agree upon protocols for notification by the author to the recipient of any changes which may thereafter be made to the Electronic Data, which protocol shall also address the duty, if any, to update such information, data or other information contained in the electronic media if such information changes prior to Final Completion of the Project.

12.3.4 The transmitting party specifically disclaims all warranties, expressed or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, with respect to the media transmitting the Electronic Data. However, transmission of the Electronic Data via electronic means shall not invalidate or negate any duties pursuant to the applicable standard of care with respect to the creation of the Electronic Data, unless such data is materially changed or altered after it is transmitted to the receiving party, and the transmitting party did not participate in such change or alteration.

Article 13

Miscellaneous

13.1 Confidential Information.

13.1.1 Confidential Information is defined as information which is determined by the transmitting party to be of a confidential or proprietary nature and: (i) the transmitting party identifies as either confidential or proprietary; (ii) the transmitting party takes steps to maintain the confidential or proprietary nature of the information; and (iii) the document is not otherwise available in or considered to be in the public domain. The receiving party agrees to maintain the confidentiality of the Confidential Information and agrees to use the Confidential Information solely in connection with the Project.

13.2 Assignment.

13.2.1 Neither Design-Builder nor Owner shall, without the written consent of the other assign, transfer or sublet any portion or part of the Work or the obligations required by the Contract Documents.

13.3 Successorship.

13.3.1 Design-Builder and Owner intend that the provisions of the Contract Documents are binding upon the parties, their employees, agents, heirs, successors and assigns.

13.4 Governing Law.

13.4.1 The Agreement and all Contract Documents shall be governed by the laws of the place of the Project, without giving effect to its conflict of law principles.

13.5 Severability.

13.5.1 If any provision or any part of a provision of the Contract Documents shall be finally determined to be superseded, invalid, illegal, or otherwise unenforceable pursuant to any applicable Legal Requirements, such determination shall not impair or otherwise affect the validity, legality, or enforceability of the remaining provision or parts of the provision of the Contract Documents, which shall remain in full force and effect as if the unenforceable provision or part were deleted.

13.6 No Waiver.

13.6.1 The failure of either Design-Builder or Owner to insist, in any one or more instances, on the performance of any of the obligations required by the other under the Contract Documents shall not be construed as a waiver or relinquishment of such obligation or right with respect to future performance.

13.7 Headings.

13.7.1 The headings used in these General Conditions of Contract, or any other Contract Document, are for ease of reference only and shall not in any way be construed to limit or alter the meaning of any provision.

13.8 Notice.

13.8.1 Whenever the Contract Documents require that notice be provided to the other party, notice will be deemed to have been validly given (i) if delivered in person to the individual intended to receive such notice, (ii) four (4) days after being sent by registered or certified mail, postage prepaid to the address indicated in the Agreement, or (iii) if transmitted by facsimile, by the time stated in a machine generated confirmation that notice was received at the facsimile number of the intended recipient.

13.9 Amendments.

13.9.1 The Contract Documents may not be changed, altered, or amended in any way except in writing signed by a duly authorized representative of each party.

The license for use of this document expires 1 year from the date of purchase.
To renew your license, visit store.dbia.org.

Questions? We're here to help.

Contact us



Design-Build Institute of America
1331 Pennsylvania Ave. NW, 4th Floor
Washington, DC 20004

(202) 682-0110
dbia@dbia.org

BASIS OF DESIGN DOCUMENTS

Basis of Design Documents

Project Name: Doral Meadow Park

Project Address: 11555 NW 58th Street, Doral, Florida

The purpose of this document is to provide an agreed upon project description on a room per room basis.

General:

- Fire alarm for the entire building shall be updated and integrated to the new multipurpose room.
- Add a door to isolate the multi-purpose room & trophy case from the kitchenette and conference room.
- A fresh coat of paint shall be applied to the building exterior. Other façade treatments include two (2) decorative artificial green walls on the west side of the building.
- Karmil shall provide temporary facilities for restrooms, and a temporary office trailer sized to house the park operations personnel with a small break area. Both facilities shall include utility connections, consumption cost and meet ADA requirements.
- Karmil shall provide and install ten (10) new 12 feet high concrete poles for the installation of surveillance cameras (camera equipment to be installed by the City – not included in the project scope). Karmil shall including approximately 2,500 LF of conduits, 13 pull boxes, and pull strings.
- Karmil shall design and construct a security system raceway system complete with conduit, boxes, door, power transformers and coordinated door hardware for a security system that monitors the exterior of the building.
- Karmil to provide a 4'x8' job site board at the entrance of the park (Owner will coordinate final location)
- The Owner will provide all cabling, terminations, head-end equipment/ gear, access control panels, devices and security cameras.

Conference room:

- The existing conference room space is to become a high-tech conference room by adding speakers, and a tv screen. City's IT will be purchase and install all equipment.
- All conference room furniture specifications are to be submitted for City's review and approval.
- The conference room finish will include LVT floor tiles (3mm thick/ 30mil wear layer) and a fresh coat of paint. LVT floor tiles are to be submitted for City's review and approval.
- The conference room area and the adjacent office space will continue to be air-conditioned.
- The conference room south wall shall include:
 - 1 duplex data jack with pull string mounted at 60" AFF
 - 1 empty box mounted at 60" AFF
 - 110V/15A Duplex receptacle mounted at 60" AFF
- Barn door shall be installed between the hallway and the conference room.

Kitchenette:

- The existing cabinetry is to be removed and replaced, including the kitchenette backsplash. Use ¾" thick plywood for all cabinets (Type II water resistant glue), all wood cabinets to receive plastic laminate on all visible sides (Nevamar, Formica, Pionite, or Wilson Art), hinges (US26D, satin chrome plated steel, 5 knuckle, wrap around type allowing 270 degree swing at end of cabinet work unit), mounted with 4 plated no. 8 self-tapping screws per hinge leaf; provide 2 hinges for doors up to and including 48 inches high; (manufacturers: Stanley HT1592 or RPC 21-232) with commercial grade drawer slides (zinc plated cold rolled steel, Grant or KV 1300 rated for 75 pound capacity), provide cabinets with adjustable shelving, new solid City of Doral Procurement 14 surface counter top and backsplash, and pulls (5/16" c/c wire pull, 4" long, satin chrome; Stanley, Epco MC, Colonial). Provide locks for 50% of doors (satin chrome plated steel 6 tumbler lock with grooved key; Manufacturer: KV 987, Yale 9660, or Corbin 0764L, with strike). Cabinet doors at sink shall have integral toe-kick for ADA accessibility. Cabinets shop drawings, color and texture, hardware, and materials shall be submitted for City approval prior to fabrication.
- Contractor shall furnish and install a new refrigerator, and a single-bowl sink (ELKAY Model #LRAD221955 or approved equivalent) and faucets (American Standard model Monterrey #6409.180).
- The existing Ice machine is to be incorporated into the kitchenette space.
- The room finish will include LVT floor tiles (3mm thick/ 30mil wear layer) and a fresh coat of paint. LVT floor tiles are to be submitted for City's review and approval.
- The kitchenette area and the corridor connecting to the new multi-purpose recreation space are also to be air-conditioned along with the multi-purpose recreation space.

Trophy case:

- A new indoor trophy case area is to be created next to the kitchenette, scope includes new LED lighting for this area, and a lockable glass enclosure.

Multipurpose room:

- The existing covered area is to be enclosed with storefront windows and two (2) glass double doors facing the baseball field.
- Provide a 6" curb to install the glass store front to provide a barrier against driving and water getting in under the glass.
- The resulting interior area is to be air-conditioned, and the room is to be completed with LVT floor tiles (3mm thick/ 30mil wear layer), and a fresh coat of paint. LVT floor tiles are to be submitted for City's review and approval.
- Roller shades are to be manually operated and have black out shades in addition to 5% openness fabric shades with fascia.
- All storefront windows and doors must be tinted.
- The existing building north wall shall be modified, the existing roll-up door removed, and a door provided to connect this new recreation space to trophy case area.
- Network (data) drop outlets shall be provided for the new Multipurpose Room. Karmil is to provide conduits, pull strings, and backboxes.
- The multipurpose room shall include:
 - 4 duplex data jacks with pull string (one in each wall)
 - 4 - 110V/15A Duplex receptacle (one in each wall)

Restrooms:

- The men's and women's restrooms are to be completely renovated and brought to the latest applicable codes; including new stall partitions, ADA bathroom fixtures, mirrors, and handiebars as needed.
- Restroom doors shall be solid metal and be able to be locked from the outside.
- The restroom finishes will include epoxy (slip resistant) floor coating and a fresh coat of paint.
- Both restrooms are to be air-conditioned. Epoxy floor colors/patterns (if any) to be submitted for City's review and approval.

Office Space:

- The existing office space is to be modified and the existing IT equipment will be taken out of the office and placed in a new separate room next to the office.
- The office finish will include LVT floor tiles (3mm thick/ 30mil wear layer) and a fresh coat of paint.
- Network (data) drop outlets shall be provided for the office space. Karmil is to provide conduits, pull strings, backboxes and faceplates.

Flex area:

- A new hardscaped area will be constructed off the northwest building quadrant wrapped around to the northeast corner of the building. It should slope away from the building. The existing concrete slab shall be grinded and sloped away from the new enclosure when Karmil is working on the texture as proposed.
- The area shall include a new shade system and site furniture. All products shop drawings and specifications are to be submitted to the City for review and approval.
- Static covered roof shade structure to be included as an allowance line item.

IT room:

- The new IT room shall include a lockable door with card reader.
- IT room will continue to be air-conditioned.
- IT room server and connections to stay in place.
- IT room door shall open outward.
- The IT room finish will include LVT floor tiles (3mm thick/ 30mil wear layer) and a fresh coat of paint.
- Network (data) drop outlets shall be provided for the IT room. Karmil is to provide conduits, pull strings, backboxes and face plates.
- All conduits need to land back to the IT room. Label pull strings to tie to a specific location.

Construction Fence:

- Construction area to be fenced in at all times. Fence shall be self-supported, any gates provided must be locked after construction hours.
- Karmil to provide exhibit on the fence height and type to the City.
- If Karmil plans to hang any poster in the construction fence, they will need to get the poster approved by the City prior to hanging it.

All new doors that lead to the staffed areas of the building will need card reader access for security.

**RFQ 2019-42 DESIGN-BUILD DORAL
MEADOW PARK RENOVATIONS**



City of Doral
Request for Qualifications
DESIGN-BUILD DORAL MEADOW PARK
RENOVATIONS
11555 NW 58th St.,
DORAL, FL

RFQ No. 2019-42





City of Doral

Request for Qualifications

Design-Build Doral Meadow Park Renovations

RFQ No. 2019-42

NOTICE: Pursuant to its Procurement Ordinance, the City of Doral (the "City") hereby gives notice of its intent to seek sealed qualifications from interested parties in response to this Request for Qualification for "**RFQ No. 2019-42 - Design-Build Doral Meadow Park Renovations**" (the "RFQ") to provide the services described herein. Qualifications must be received by Albert Childress, City Manager, City of Doral, 8401 NW 53rd Terrace, Doral, Florida 33166 by **11:00 am on December 6th, 2019**. Qualifications shall be submitted in a sealed envelope clearly marked on the exterior "**RFQ No. 2019-42 - Design-Build Doral Meadow Park Renovations**".

All qualifications shall be publicly opened and recorded on Friday, December 6, 2019 at 11:00 am. Late submittals shall **not** be accepted or considered.

Respondents are to deliver **One (1) original and Four (4) hard copies** of the response for consideration. The original and all four copies shall be marked accordingly as "original" or "copy," and shall be submitted in **three-ring binders**. In addition, respondents are to deliver **two (2) CDs containing a PDF copy of all materials submitted in the response**. Emailed or faxed submittals will not be accepted.

The City of Doral reserves the right to accept any response deemed to be in the best interest of the City or to waive any technicality or irregularity in any response. The City may reject any or all qualifications and re-advertise.



PROJECT OVERVIEW

By way of this RFQ, the City of Doral is soliciting competitive sealed qualifications from parties capable of providing full architectural, engineering and construction related services (the "Services") for the Doral Meadow Park Renovations, as described herein.

Through the process described herein, persons and/or firms interested in assisting the City with the provision of the Services must prepare and submit a Statement of Qualification in accordance with the procedure and schedule in this RFQ. The City will review submittals only from those persons and/or firms that submit a response that includes all the information required by this RFQ, the determination of which shall be in the sole discretion of the City.

The DESIGN/BUILD CONTRACTOR shall be responsible for furnishing all labor, materials, supplies, services, travel, shop drawing review, supervision, equipment, expertise and supervision to develop plans and specifications, and construct all required components for such a facility. The DESIGN/BUILD CONTRACTOR shall at its expense obtain any required permits, inspections, and testing as well as pay any fees for the purpose of a Design-Build renovation of a facility located at 11555 NW 58th Street, Doral, Florida. Refer to Section 3 – Technical Specifications for fees reimbursed by the City to the DESIGN/BUILD CONTRACTOR. City of Doral shall waive Project impact fees. The City does not, however, waive any other regulatory matters regarding the design and construction of the facility.

It is the City's intent to select one firm to conduct the construction remodeling services at Doral Meadow Park in accordance with the scope of this solicitation. The City reserves the right to remove any portion of this project should it deem it to be in the best interest of the City.

All questions or comments should be directed to procurement@cityofdoral.com. All inquiries must reference "RFQ No. 2019-42 - Design-Build Doral Meadow Park Renovations" in the subject line. No phone calls will be accepted in reference to this RFQ. Any communications regarding matters of clarification must be made in writing to the email address listed above. Only direct RFQ questions will be accepted at this designated email. All public record requests are to be directed to the City Clerk's office and not to the Procurement email address.

In the event that it becomes necessary to provide additional clarifying data or information that revises any part of this RFQ, supplements or revisions will be made available via written addendum.

A copy of this complete RFQ may be obtained from the City of Doral website, www.cityofdoral.com, via <https://vendorregistry.com/> or via Onvia Demandstar <https://network.demandstar.com/> by clicking on the Procurement Division link under City Departments. Select the "Bid Solicitation" link. For Omnia DemandStar, it is important that you click on the "Register and Download" hyperlink to access the entire document. Please note that a brief registration process is required prior to download. Once registered, you will receive an activation code that will grant you access to the documents and, if applicable, notification of subsequent updates. Onvia offers vendors the option to register for notification from a



single agency at no cost. Access includes full functionality of the Onvia Demandstar platform – you can view the agency’s bids, quotes and download documents at no cost. To obtain the solicitation interested parties must follow the link and register to be able to download the document.



TABLE OF CONTENTS

RFQ No. 2019-42

Schedule of Events

- 1.0 General Conditions**
- 2.0 Special Conditions**
- 3.0 Technical Specifications**
- 4.0 Required Forms**

ATTACHMENTS PROVIDED TO THE DESIGN/BUILD CONTRACTOR

- Exhibit A - Minimum Insurance Requirements**
- Exhibit B - Record Drawings**
- Exhibit C - Conceptual Drawing**
- Exhibit D - Security Camera Post Locations**



Schedule of Events

The City's tentative schedule for this invitation for Design Build is as follows:

Mandatory Pre-Proposal Conference:

10:00 am, November 15th, 2019

Doral Meadow Park
11555 NW 58th Street,
Doral, FL 33166

Cut-off Date for Written Questions:

12:00 noon, November 22nd, 2019

procurement@cityofdoral.com

Deadline for Submittal & Proposal Opening:

11:00 am, December 6th, 2019

City of Doral Government Center
City Clerk's Office – 1st Floor
8401 NW 53 Terrace
Doral, FL 33166

The City reserves the right to delay or modify scheduled dates and will notify Bidders of all changes in scheduled dates.

END OF SECTION



SECTION 1

GENERAL CONDITIONS

1.1

DEFINITIONS

(i)

We/Us/Our/City

These terms refer to the City of Doral, Florida, a Florida municipal corporation. They may also be used as pronouns for various subsets of the City organization as content will indicate.

Procurement Division

The Division responsible for handling procurement-related issues within the City.

Departments

The City Department(s) and offices for which this solicitation is prepared, which will be the end user of the goods and/or services sought, including, without limitation.

Authorized Representative

The user Department's contacts for interaction regarding contract administration.

(ii)

You/Your

The term refers to the person(s) or entity(ies) submitting a proposal in response to this RFP, inclusive of corresponding subsidiaries, affiliates offices, employees, volunteers, representatives, agents or subcontractors. The term may apply differently to different classes of entities, as the context will indicate. For instance, "you" as a Proposer will have different obligations than "you" as a Successful Proposer will have upon awarding of this contract.

Proposer/Contractor/Submitter

Any person(s) and/or business entity(ies) submitting a response to this solicitation

Successful Proposer/ Contractor/ Design-Build Contractor

The Responsive and Responsible Proposer whose response to this solicitation is deemed to be the most advantageous to the City. A Proposer will be approved for award by the City Council, and a contract will be executed for the provisions of the goods and/or services specified in the RFQ and a Notice of Commencement will be issued. Upon execution of a contract the Successful Proposer will become the Vendor or the Design-Build contractor.

(iii)

Proposals/ Submittals

The written, sealed document submitted by the Proposer in response to this RFP. Any verbal interactions with the City apart from submittal of a formal written submittal shall not be considered a part of any submittal.

Proposal

The written, sealed document submitted by the Proposer according to the RFQ instructions. A response to this RFQ shall not include any verbal interactions with the City apart from submittal of a formal written proposal.

Work, Services, Program or Project

Shall refer to all matters and things that will be required to be done by the Successful Proposer in accordance with the Scope of Work and the Terms and Conditions of this Solicitation.

Shall/ Must

Indicates a mandatory requirement. Failure to meet a mandatory requirement will, if material, may result in the rejection of a proposal as non-responsive.

1.2 CLARIFICATION/ QUESTIONS

The City reserves the right to request clarification on information submitted by any Proposer after the deadline for receipt of submittals. Questions from potential and/or actual Proposers regarding this RFQ shall be directed in writing by email, to the Procurement Contact email address specified on the title page. Answers, citing the question but not identifying the questioner, will be publicly noticed and distributed simultaneously to all known prospective Proposers.

(i)

Written Addenda

If it becomes evident that this RFQ must be amended, we will issue a formal written addendum to all registered prospective Proposers via email notification. Addendum will be uploaded to the City's Procurement Webpage. If necessary, a new RFQ opening date may be established by addendum.

1.3 COST OF PREPARATION

The City will not be responsible for any expenses incurred by Proposers for the preparation of a proposal related to this procurement, or for any negotiations related to potential award of the Contract.



1.4 EXAMINATION OF DOCUMENTS

The Proposer must thoroughly examine each section of this RFP. If there is any doubt or obscurity as to the meaning of any part of these conditions, the Proposer may request clarification by written request to the Procurement Division. Interpretations or clarification in response to such questions will be issued in the form of a written addendum, emailed to all parties recorded by the City's Procurement Division as having received the RFQ documents. No person is authorized to give oral interpretations of, or make oral changes to the RFP. The issuance of a written addendum shall be the only official method whereby such an interpretation or clarification is made.

1.5 PUBLIC RECORDS

Upon award recommendation or thirty (30) days after the RFQ opening, whichever is earlier, any material submitted in response to this RFQ will become a "Public Record" and shall be subject to public disclosure pursuant to Chapter 119, Florida Statutes (Public Records Law). Proposers must claim the applicable statutory exemptions to protect submittals, stating the reasons why exclusion from public disclosure is necessary and legal. The City reserves the right to make any final determination on the applicability of the Public Records Law.

1.6 WITHDRAWAL OF PROPOSAL

A Proposer may, without prejudice, withdraw, modify, or correct the proposal after it has been deposited with the City, provided the request and any subsequent modifications and/or corrections are filed with the City in writing before the time for opening the submittals. No oral modifications will be considered.

1.7 RIGHT TO REJECT ANY AND/OR ALL PROPOSALS

The City reserves the right to reject any and/or all submittals or sections thereof, and/or waive any irregularities, informalities, and/or technical deficiencies. The City shall not be required to accept the minimum specifications stated herein or provided but reserves the right to accept any submittal that, in the judgment of the City, will best serve the needs and interests of the City. The offering of this RFQ does not, itself, in any way constitute a contractual agreement between the City of Doral and any Proposer. However, the contents of the offered document, as well as the proposed documents may be used for details of the actual agreement between the Proposer and the City of Doral. Furthermore, the City reserves the right to award without further discussion.

1.8 GOVERNMENTAL RESTRICTIONS

In the event that any governmental restrictions are imposed which would necessitate alteration of the performance to the services offered in this proposal prior to delivery, it shall be the responsibility of the proposer to notify the City at once. The City reserves the right to accept the alteration or cancel the Contract at no expense to the City.

1.9 SUBMISSION OF PROPOSAL

(i) **Incurred Expenses**

The City is not responsible for any expenses which Proposers may incur for preparing and submitting statements of qualifications called for in this RFP.

(ii) **Interviews**

The City reserves the right to conduct personal interviews or require presentations prior to selection. The City will not be liable for any costs whatsoever incurred by the Proposer in connection with such interviews/presentations, including, but not limited to travel and accommodations.

(iii) **Request for Modifications**

The City reserves the right to request that the Proposers(s) modify a submittal to more fully meet the needs of the City.

(iv) **Bid Acknowledgment**

By submitting a proposal, the Proposer/Proposer certifies that he/she/it has fully read and understood the solicitation method and has full knowledge of the scope, nature, and quality of work to be performed.

(v) **Acceptance/Rejection/Modification to Submittals**

The City reserves the right to negotiate modifications to this RFQ that it deems acceptable, reject any and all proposals for any reason whatsoever, and waive minor irregularities in any submittal.

(vi) **Submittals Binding**

All proposals submitted shall be binding for three hundred sixty-five (365) calendar days following opening.

(vii) **Alternate Proposals/ Statement/ Proposals**

Alternate proposals, statements, and/or statements of qualifications will not be considered or accepted by the City.

(viii) **Economy of Preparation**



Proposals should be prepared simply and economically, providing a straightforward, concise description of the Proposers' ability to fulfill the requirements of the proposal.

(ix)

Proprietary Information

In accordance with Chapter 119 of the Florida Statutes (Public Records Law) and except as may be provided by other applicable State and Federal Law, all Proposers should be aware that RFQ and the corresponding responses are in the public domain and subject to disclosure. However, the Proposers are required to identify with specificity any information contained in their statement of qualification which are considered confidential and/or proprietary and which are believed to be exempt from disclosure, citing the applicable exempting law.

All statements of qualifications received from Proposers in response to this RFQ shall become the property of the City of Doral and shall not be returned to the Proposer. In the event of contract award, all documentation produced as part of the contract will become the exclusive property of the City.

1.10 COMPLIANCE WITH ORDERS AND LAWS

Successful Proposers shall comply with all local, state, and federal directives, ordinances, rules, orders, and laws as applicable to this RFQ and subsequent contracting including, but not limited to:

Executive Order 11246 (which prohibits discrimination against any employee, applicant, or client because of race, creed, color, national origin, sex, or age with regard to, but not limited to, employment practices, rate of pay or other compensation methods, and training.)

Occupational, Safety and Health Act (OSHA)

The State of Florida Statutes Section 287.133(3)(A) on Public Entity Crimes

Environment Protection Agency (EPA)

Uniform Commercial Code (Florida Statutes, Chapter 672)

American with Disabilities Act of 1990, as amended

National Institute of Occupational Safety Hazards (NIOSH)

National Forest Products Association (NFPA)

State of Florida Department of Transportation- Rule 14-90, Florida Admin. Code

U.S. Department of Transportation

City of Doral, City Ordinance No. 2004-03

Cone of Silence, Miami-Dade County Code of Ordinances

The State of Florida Statutes Sections 218.73 and 218.74 on Prompt Payment

Proposer hereby recognizes and certifies that no elected official, board member, or employee of the City shall have a financial interest directly or indirectly in this transaction or any compensation to be paid under or through this transaction, and further, that no City employee, nor any elected or appointed officer, including, but not limited to, City Advisory Board members, of the City, nor any spouse, parent or child of such employee or elected or appointed officer of the City, may be a partner, officer, director or proprietor of Proposer or Proposer, and further, that no such City employee or elected or appointed officer, or the spouse, parent or child of any of them, alone or in combination, may have a material interest in the Vendor or Proposer. Material interest means direct or indirect ownership of more than 5% of the total assets or capital stock of the Proposer. Any exception to these above described restrictions must be expressly provided by applicable law or ordinance and be confirmed in writing by City. Further, Proposer recognizes that with respect to this transaction, if any Proposer violates or is a party to a violation of the ethics ordinances or rules of the City, the provisions of Miami- Dade County Code Section 2-11.1, as applicable to City, or the provisions of Chapter 112, part III, Fla. Stat., the Code of Ethics for Public Officers and Employees, such Proposer may be disqualified from furnishing the goods or services for which the proposal is submitted and may be further disqualified from submitting any future proposals or statements for goods or services to City. Proposer must complete and execute the Business Entity Affidavit form. The term "Proposer," as used in this section specifically includes any person or entity making and submitting a statement to the City for the provision of goods and/or services to City.

Lack of knowledge by the Proposer will in no way be a cause for relief from responsibility. Non-compliance with all local, state, and federal directives, orders, and laws may be considered grounds for termination of contract(s).

1.11 CONE OF SILENCE

Notwithstanding any other provision in the specifications, the provisions of Section 2-11.1 Conflict of Interest and Code of Ethics Ordinance, as set forth in subsection (t)



"Cone of Silence," of the Miami-Dade County Code are applicable to this transaction.

The Cone of Silence shall be imposed on this RFQ upon its advertisement. The Cone of Silence prohibits the following activities:

- (1) Any communication regarding this RFQ between a potential vendor, service provider, Proposer, lobbyist or consultant and the City's professional staff;
- (2) Any communication regarding this RFQ between the Mayor, Council members and any member of the Mayor and Council's professional staff;
- (3) Any communication regarding this RFQ between potential vendor, service provider, Proposer, lobbyist or consultant and any member of a selection committee;
- (4) Any communication regarding this RFQ between the Mayor, Council members and any member of the selection committee therefore;
- (5) Any communication regarding this RFQ between any member of the City's professional staff and any member of the selection committee; and
- (6) Any communication regarding this RFQ between a potential vendor, service provider, Proposer, lobbyist or consultant and the Mayor or Council Pursuant to Section 2-11.1(t)(1)(a)(ii), the Cone of Silence shall terminate at the time the Manager makes his/her written recommendation to the City Council. However, if the City Council refers the Manager's recommendation back to the Manager or staff for further review, the Cone of Silence shall be re-imposed until such time as the Manager makes a subsequent written recommendation.

The Cone of Silence shall not apply to:

- (1) oral communications at pre-proposal conferences;
- (2) oral presentations before selection of evaluation committees;
- (3) public presentations made to the City Council during any duly noticed public meeting;
- (4) written communications regarding a particular RFP, RFQ, or proposal between a potential vendor, service provider, Proposer, proposer, lobbyist or consultant and the City's Purchasing Agent or City employee designated responsible for administering the procurement process of such RFP, RFQ, or proposal, provided the communication is limited strictly to matters of process or procedure already contained in the corresponding solicitation document;
- (5) communications with the City Attorney and his or her staff;
- (6) duly noticed site visits to determine the competency of Proposers/Proposers regarding a particular proposal/proposal during the time period between the opening of proposals and the time the City Manager makes his or her written recommendation;

- (7) any emergency procurement of goods or services pursuant to City Code;
- (8) responses to the City's request for clarification or additional information pursuant to section 1.10 of this RFP;
- (9) contract negotiations during any duly noticed public meeting;
- (10) communications to enable City staff to seek and obtain industry comment or perform market research, provided all communications related thereto between a potential vendor, service provider, proposer, lobbyist, or consultant and any member of the City's professional staff including, but not limited to, the City Manager and his or her staff are in writing or are made at a duly noticed public meeting.

Violation of the Cone of Silence by a particular proposer shall render the RFQ award or proposal award to said proposer voidable by the City Council and/or City Manager. Please contact the City Attorney for any questions regarding Cone of Silence compliance.

1.12 Florida Government in the SUNSHINE LAW

As a Florida municipal corporation, the City is subject to the Florida Sunshine Act and Public Records Law. By submitting a Proposal, Proposer acknowledges that the materials submitted with the Proposal and the results of the City of Doral evaluations are open to public inspection upon proper request. Proposer should take special note of this as it relates to proprietary information that might be included in its Proposal.

1.13 CANCELLATION

In the event any of the provisions of this RFQ are violated by the Awarded Proposer, the City Manager shall give written notice to the Awarded Proposer stating the deficiencies and, unless deficiencies are corrected within ten (10) days, recommendation will be made to the City Council for immediate cancellation. The City reserves the right to terminate any contract resulting from this invitation at any time and for any reason, upon giving thirty (30) days prior written notice to the other party. No consideration will be given for anticipated loss of revenue on the canceled portion of the Contract.

1.14 ASSIGNMENT

The Awarded Proposer shall not assign, transfer, convey, sublet or otherwise dispose of this contract, including any or all of its right, title or interest therein, or his or its power to execute such contract to any person, company or corporation without prior written consent of the City of Doral.



1.15 PROPERTY

Property owned by the City of Doral is the responsibility of the City of Doral. Such property furnished for repair, modification, study, etc., shall remain the property of the City of Doral. Damages to such property occurring while in the possession of the Awarded Proposer shall be the responsibility of the Awarded Proposer.

1.16 TERMINATION FOR DEFAULT

If the Awarded Proposer defaults in its performance under this Contract and does not cure the default within thirty (30) days after written notice of default, the City may terminate this Contract, in whole or in part, upon written notice without penalty to the City. In such event, the Awarded Proposer shall be liable for damages, including, but not limited to, the excess cost of procuring similar supplies or services: provided that if, (1) it is determined for any reason that the Awarded Proposer was not in default or (2) the Awarded Proposer's failure to perform is without his control, fault or negligence, the termination will be deemed to be a termination for the convenience of the City.

1.17 TERMINATION FOR CONVENIENCE

The City Manager may terminate the Contract that may result from this RFP, in whole or in part, upon thirty (30) days prior written notice when it is in the best interests of the City. If so terminated, the City shall be liable only for payment in accordance with the payment provisions of the Contract for those services rendered prior to termination.

1.18 ANTI-TRUST PROVISION

At such times, as may serve its best interest, the City reserves the right to advertise for, receive, and award additional contracts for these herein items, and to make use of other competitively proposal (government) contracts for the purchase of these goods and/ or services as may be available.

1.19 PUBLIC RECORDS, AUDIT RIGHTS AND RECORDS RETENTION

The Upon award recommendation or thirty (30) days after the opening of RFQ responses, whichever is earlier, any material submitted in response to this Request for Qualifications will become a "Public Record" and shall be subject to public disclosure consistent with Chapter 119, Florida Statutes (Public Record Law). Proposers must claim the applicable exemptions to disclosure provided by law in their response to the Request for Qualifications by identifying materials to be protected and must state the reasons why exclusions from public disclosure is necessary

and legal. The City reserves the right to make any final determination on the applicability of the Public Records Law. The Awarded Proposer agrees to provide access to the City, or any of their duly authorized representatives, to any books, documents, papers, and records of the Awarded Proposer which are directly pertinent to the contract, for the purposes of audit, examination, excerpts, and transcriptions. The Awarded Proposer shall maintain and retain any and all of the aforementioned records after the expiration and/or termination of the agreement, as provided by Chapter 119, Florida Statutes.

1.20 CAPITAL EXPENDITURES

Awarded Proposer understands that any capital expenditures that the Awarded Proposer makes, or prepares to make, in order to perform the services required by the City of Doral, is a business risk which the Awarded Proposer must assume. The City of Doral will not be obligated to reimburse amortized or unamortized capital expenditures, any other expenses, or to maintain the approved status of the Awarded Proposer. If Awarded Proposer has been unable to recoup its capital expenditures during the time it is rendering such services, it shall not have any claim upon the City of Doral.

1.21 GOVERNING LAW AND VENUE

The validity and effect of the Contract shall be governed by the laws of the State of Florida. The parties agree that any administrative or legal action, mediation, or arbitration arising out of this Contract shall take place in Miami-Dade County, Florida.

1.22 ATTORNEY FEES

In connection with any litigation, mediation, or arbitration arising out of this Contract, each party will pay its' attorney's fees.

1.23 NO PARTNERSHIP OR JOINT VENTURE

Nothing contained in this Contract will be deemed or construed to create a partnership or joint venture between the City of Doral and Awarded Proposer/Proposer, or to create any other similar relationship between the parties.

1.24 TERMS AND CONDITIONS OF AGREEMENT

The Agreement to be entered into with the Awarded Proposer, in substantially the form attached hereto as Exhibit "A", shall include, but not be limited to, the following terms and conditions:



A. The Awarded Proposer agrees to indemnify, defend and hold harmless the City, its officers, elected officials, agents, volunteers and employees, from and against any and all liability, claims, demands, damages, fines, fees, expenses, penalties, suits, proceedings, actions and cost of action, including attorney's fees for trial and on appeal, and of any kind and nature arising or growing out of or in any way connected with the performance of the Agreement whether by act or omission of the Awarded Proposer, its agents, servants, employees or others, or because of or due to the mere existence of the Agreement between the parties; unless said claim for liability is caused solely by the negligence of the City or its agents or employees.

The Awarded Proposer shall further indemnify, defend and hold harmless the City, its elected officials, its Officers, employees, agents and volunteers (collectively referred as "Indemnitees") against all loss, costs, penalties, fines, damages, claims, expenses, including attorney's fees, or liabilities ("collectively referred to as "liabilities") by reason of any injury to, or death of any person, or damage to, or destruction, or loss of any property arising out of, resulting from, or in connection with the performance, or non- performance of the services contemplated by this agreement which is, or is alleged to be directly, or indirectly caused, in whole, or in part by any act of omission, default, or negligence of the Awarded Proposer, its employees, agents, or sub-contractors.

B. The Awarded Proposer shall pay all royalties and assume all costs arising from the use of any invention, design, process materials, equipment, product or device which is the subject of patent rights or copyrights. Awarded Proposer shall, at its own expense, hold harmless and defend the City against any claim, suit or proceeding brought against the City which is based upon a claim, whether rightful or otherwise, that the goods or services, or any part thereof, furnished under the contract, constitute an infringement of any patent or copyright of the United States. The Awarded Proposer shall pay all damages and costs awarded against the City.

C. An understanding and agreement, by and between the Awarded Proposer and the City, that the completion time as specified in Awarded Proposer's submission will be met and that all work shall be executed regularly, diligently, and uninterrupted at such rate of progress as will ensure full completion thereof within the time specified.

1.25 HIRING PREFERENCE FOR PROCURED PROJECTS
Awarded Proposer will be required to comply with Ordinance No. 2018-24 – Procedure to Provide Preference for Doral Businesses and Residents in Public Works and Improvements Contracts.

END OF SECTION



SECTION 2

Special Conditions

2.1 BACKGROUND

City of Doral, OWNER, invites respondents to submit Qualifications for the main purpose of the Design-Build for the Doral Meadow Park Renovations and supporting infrastructure including utilities located at 11555 NW 58th Street, Doral, Florida.

The DESIGN/BUILD CONTRACTOR shall be responsible for furnishing all labor, materials, supplies, travel, shop drawing review, supervision, equipment, expertise and supervision to develop plans and specifications and construct all required components to renovate such a facility. The DESIGN/BUILD CONTRACTOR shall at their expense obtain any required permits, inspections, and pay any fees for the purpose of a Design-Build Renovation of the facility located at 11555 NW 58th Street, Doral, Florida. City of Doral shall waive its own impact fees. The City does not, however, waive any other regulatory matters regarding the design and construction of the facility. The DESIGN/BUILD CONTRACTOR shall be responsible to prepare and provide a topographic survey of the project site.

The project referenced as part of this Request for Qualifications (“RFQ”) principally consists of the design, engineering, and construction efforts to enclose the existing covered outdoor patio space to provide 800 square feet of multi-purpose indoor recreation space. The existing covered area is to be enclosed with storefront windows and glass double doors, the resulting interior area is to be air-conditioned, and the room is to be completed with LVT floor tiles, and a fresh coat of paint, see Conceptual Drawing (Exhibit C). This conceptual drawing is not to be used for permitting or estimating purposes, is provided for informational purposes only, in an effort for the interested firms to get familiarized with the project scope.

Manually operated roller shades (5% openness fabric with fascia) shall be provided on all multi-purpose indoor space openings to keep the room cool, block the sun’s glare as needed, and help the air conditioner system work more efficiently. The existing building north wall shall be modified, the existing roll-up door removed, and a door provided to connect this new recreation space to the adjacent kitchenette area.

In addition, the existing kitchenette area is to be reduced to about 60 square feet, see Conceptual Drawing (Exhibit C). The existing cabinetry is to be removed and replaced, including the kitchenette backsplash. Use ¾” thick plywood for all cabinets (Type II water resistant glue), all wood cabinets to receive plastic laminate on all visible sides (Nevamar, Formica, Pionite, or Wilson Art), hinges (US26D, satin chrome plated steel, 5 knuckle, wrap around type allowing 270 degree swing at end of cabinet work unit), mounted with 4 plated no. 8 self-tapping screws per hinge leaf; provide 2 hinges for doors up to and including 48 inches high; (manufacturers: Stanley HT1592 or RPC 21-232) with commercial grade drawer slides (zinc plated cold rolled steel, Grant or KV 1300 rated for 75 pound capacity), provide cabinets with adjustable shelving, new solid



surface counter top and backsplash, and pulls (5/16" c/c wire pull, 4" long, satin chrome; Stanley, Epco MC, Colonial). Provide locks for 50% of doors (satin chrome plated steel 6 tumbler lock with grooved key; Manufacturer: KV 987, Yale 9660, or Corbin 0764L, with strike). Cabinet doors at sink shall have integral toe kick for ADA accessibility. Cabinets shop drawings, color and texture, hardware, and materials shall be submitted for City approval prior to fabrication. Contractor shall furnish and install a new refrigerator, and a single-bowl sink (ELKAY Model #LRAD221955 or approved equivalent) and faucets (American Standard model Monterrey #6409.180). The room finish will include LVT floor tiles and a fresh coat of paint. The kitchenette area and the corridor connecting to the new multi-purpose recreation space are also to be air-conditioned along with the multi-purpose recreation space.

A new indoor trophy case area is to be created next to the kitchenette, scope includes new lighting for this area, and a lockable glass enclosure. Please refer to Exhibit "C" Conceptual Drawing.

The existing conference room space is to become a high-tech conference room by adding speakers, and a tv screen. All conference room furniture and video-conferencing products specifications are to be submitted for City's review and approval. The conference room finish will include LVT floor tiles and a fresh coat of paint. The conference room area and the adjacent office space will continue to be air-conditioned.

The men's and women's restrooms are to be completely renovated and brought to the latest applicable codes; including new stall partitions, ADA bathroom fixtures, mirrors, and handlebars as needed. The restrooms finish will include epoxy (slip resistant) floor coating and a fresh coat of paint. Both restrooms are to be air-conditioned.

The existing office space is to be modified and the existing IT equipment will be taken out of the office and placed in a new separate room next to the office. The new IT room shall include a lockable door. Both the office and the new IT room will continue to be air-conditioned. Both the office and IT room finish will include LVT floor tiles and a fresh coat of paint. A network data drop and two (2) 240/30A. outlets shall be provided for the IT room, the new Multipurpose Room, and office space. DESIGN/BUILD CONTRACTOR is to provide conduits, pull strings, and backboxes.

A fresh coat of paint shall be applied to the building exterior. Other façade treatments include two (2) decorative artificial green walls on the west side of the building.

A new hardscaped area of approximately 700 square feet will be constructed off the northwest building quadrant, this area is to be used as a plaza (see Exhibit C). The area shall include a new shade system and site furniture. All products shop drawings and specifications are to be submitted to the City for review and approval.

The DESIGN/BUILD CONTRACTOR shall provide temporary facilities for restrooms, and a temporary office trailer to house the park operations personnel and the existing IT equipment.



The DESIGN/BUILD CONTRACTOR shall provide and install two (2) new 16 feet concrete poles for the installation of surveillance cameras (camera equipment to be installed by the City – not included in the project scope). Camera poles approximate location shall be coordinated with the City. The DESIGN/BUILD CONTRACTOR shall install three (3) conduit runs for low voltage cabling (approximately 1,370 linear feet); including conduits, all necessary pull boxes, and pull strings (see Exhibit D).

The City anticipates that the project outlined in this solicitation will be delivered through a Design/Build delivery method.

The total estimated design/ build cost for this project is projected to be approximately **\$1,200,000.00**. Contractor shall supply proof of their bonding capacity in said amount by means of a Letter of Eligibility from their bonding company.

2.2 A/E TECHNICAL CERTIFICATION REQUIREMENTS:

- **14.00** **Architecture (PRIME)**
- 3.01 Site Development and Parking Lot Design
- 8.00 Telecommunications Systems
- 9.06 Asbestos
- 11.00 General Structural Engineering
- 12.00 General Mechanical Engineering
- 13.00 General Electrical Engineering
- 16.00 General Civil Engineering

To satisfy Miami-Dade County technical certification requirements for the requested services, valid technical certification in all of the above-specified area(s) of work must be held by a firm responding as a sole respondent, or a team of firms. Teams of firms must designate one of its members as the “prime design consultant”. The Prime Design Consultant will be held responsible for the coordination of all the work and must hold technical certification in category 14.00 – Architecture. Furthermore, if an individual is providing services that require technical certification by Miami-Dade County, then said individual is required to have the relevant certification(s). Individuals who are not technically certified will not be allowed to perform work for those scopes of work requiring technical certification. Additionally, firms that list other areas of work as supplements to the required technical certifications must also be certified for those supplemental areas.

Proposers (prime and/or sub-consultants) failure to be technically certified at the time of proposal submittal, as applicable, shall cause the proposal to be deemed non-compliant.

2.3 PRECLUSION

Firms that provided or assisted in the programming, space planning and/or design of the conceptual plan for the City of Doral Meadow Park are excluded from submitting a proposal for



performing those same services. Subconsultants that performed ancillary support services (i.e site survey, cost estimating, Geotech) to the prime firm are allowed to be subconsultants to other firms submitting a proposal. Additionally, the PMT (Project Management Team), its subconsultants and/or any of its affiliate companies are excluded from submitting a proposal for work associated with the Parks Bond Program.

The following Companies excluded are:

- AECOM
- BCC Engineering
- Brown Day Mullins Diedorf

2.4 **LICENSING AND PERMIT(S)**

- A. Proposer shall be required to obtain and furnish a certified copy of all licenses, certificates of competency or other licensure requirements necessary to perform services hereunder as required by Florida State Statute, Florida Building Code, Miami-Dade County or City Code, if any. These documents shall be furnished to the City along with the proposal response. Failure to furnish these documents or to have required licensure may be grounds for rejecting the proposal.
- B. The DESIGN/BUILD CONTRACTOR shall be licensed and certified by all appropriate State and Local agencies. The DESIGN/BUILD CONTRACTOR shall procure; at its own expense, all necessary licenses and permits. The DESIGN/BUILD CONTRACTOR shall conform to all applicable laws, regulations, or ordinances of the State, County and City.

Successful Proposer must provide a copy of their occupational/business license and State registration at time of award. Florida state registration can be downloaded and printed via www.sunbiz.org. Proposers must have the proper license(s) and/or certification(s) to perform what is being requested in this project. Failure to possess the proper license(s) and/or certification(s) may result in disqualification of proposal submittal. Copies of the Proposer's license(s) and/or certification(s) which are applicable to this project shall be submitted as part of their proposal submittal.

2.5 **MANDATORY PRE-PROPOSAL CONFERENCE**

A Mandatory Pre-Bid Conference will be held on **Friday, November 15th, 2019** at 10:00 a.m. EST at the **Doral Meadow Park, 11555 NW 58th St, Doral, FL 33178**. **Late arrivals will not be permitted to join the conference and therefore forfeits all opportunities to bid on this project.** During this conference all work will be discussed. The Procurement Division will respond to all questions submitted during the pre-bid conference by issuance of a written addendum to the RFQ.



2.6 TERM OF CONTRACT AND EXTENSION

The Agreement to be entered into with the successful proposer will include, but not be limited to, the following terms and conditions.

It is hereby understood and agreed, by and between the proposers and the City, that the completion time as specified in proposer's submission will be met and that all work shall be executed regularly, diligently, and uninterrupted at such rate of progress as will ensure full completion thereof within the time specified.

The proposers shall pay all royalties and assume all costs arising from the use of any invention, design, process materials, equipment, product or device which is the subject of patent rights or copyrights. Proposers shall, at its own expense, hold harmless and defend the City against any claim, suit or proceeding brought against the City which is based upon a claim, whether rightful or otherwise, that the goods or services, or any part thereof, furnished under the contract, constitute an infringement of any patent or copyright of the United States. The proposer shall pay all damages and costs awarded against the City.

Prior to extending any contract and in exercising its discretion in its option rights, the City shall review the Proposer's past performance, record of complaints, and compliance with the contract terms.

The City and the Awarded Proposer shall execute a contract ("Agreement") within thirty (30) days after Notification of Award based upon the requirements set forth in the RFQ through action taken by the City Council at a fully authorized meeting. If the Proposer awarded the Contract fails to enter into a contract as herein provided, the award may be declared null and void, and the Contract may be awarded to the next most responsible and responsive Proposer, or re-advertised, as determined by the City. The Contract duration shall be for the length of the construction.

This prerogative may be exercised only when such continuation is clearly in the best interest of the City.

2.7 PRICING

If the Proposer is awarded a contract under this RFQ solicitation, the prices quoted by the Proposer shall remain fixed and firm. However, the Proposer may offer incentives and discounts from this fixed price to the City at any time during the contractual term.

The City reserves the right to negotiate lower pricing for the additional term(s) based on market research information or other factors that influence price. The City reserves the right to apply any reduction in pricing for the additional term(s) based on the downward movement of the applicable index.

2.8 METHOD OF AWARD



The City will open all submittals received prior to the stated deadline in a public forum and will announce the name of the Proposers. In order to be deemed responsive the qualifications must meet or exceed the minimum requirements established in this solicitation and contain all required forms listed. The City of Doral shall be the sole judge in determining Proposer's qualifications.

The City reserves the right to reject all statements of qualifications and/or proposals, to waive non-material, technical variances or infirmities in the proposal, to abandon the project or to solicit and re-advertise for other proposals. The City may in its discretion waive any informalities and irregularities contained in a proposal or in the manner of its submittal and award a contract thereafter. Contracts will be awarded in accordance with Florida Statutes 287.055 (CCNA Act).

The City shall be the sole judge of its own best interests, the proposals, and the resulting negotiated agreement. The City's decisions will be final.

The City's selection committee will evaluate proposals and will select the Proposer which meets the best interests of the City. The purpose of the Evaluation Process is to evaluate the Proposals submitted in response to this Request for Proposals and to establish the most advantageous firm/individual, further identified as the #1 or highest ranked firm/individual. Each Proposal will be evaluated by each Selection Committee member using the procedures outlined herein.

All responsive DESIGN/BUILD CONTRACTORS may be required to make an oral presentation of their qualifications to the City's Evaluation Committee. The Key Personnel (or some group thereof) as identified in the Proponent's proposal must be active participants in the oral presentation. The City will notify responsive proponents of the date, time and location for the presentation. The City will negotiate with the top ranked firm for a design and construction. Upon approval of the City Council, a contract shall be awarded to the one Proposer selected as the most responsive meeting all selection criteria. Any award made shall be subject to execution of contract in a form and substance, which is approved by the City Attorney. The City of Doral reserves the right not to award or to reject qualification proposals from vendors that are currently in litigation with the City of Doral or as a result of any prior lawsuit with the City of Doral.

Phase I - An Evaluation Committee, appointed by the City Manager or designee, will meet to evaluate all responsive submittals received in accordance with the requirements set forth in the solicitation. The City may request additional information of a clarifying nature if deemed necessary for this evaluation. Additional information may be requested via written submissions or oral presentations to the Evaluation Committee.

Based on the number of RFQ submissions received, the Selection Committee may elect that all Proposers participate in the Phase II evaluation process and not utilize the Phase I evaluation scores. The City may also decide that the Phase II portion of the process is not necessary and recommend for award based upon Phase I only.



PHASE II — The City may conduct interview presentations and re-evaluate and score “shortlisted” firms/individuals to establish a ranking of the “shortlisted” firms/individuals.

PHASE II — EVALUATION

All finalists are in equal standing at the beginning of Phase II Evaluation. For further clarification, the City may require each finalist to provide discussions, interviews, phone conferences, oral presentations, and clarification of the Proposal submitted. This information will allow each firm/individual an opportunity to provide the Selection Committee additional insight regarding their proposal and that of the qualifications of the firm/individual. Each Selection Committee member shall evaluate and award points in accordance with the Scoring Criteria specified for each of the Categories. The points awarded for each Category will be totaled, ranked and tabulated as described in Section 5.1 to determine the top ranked firm/individual.

2.9 EVALUATION PROCESS

A Selection Committee, herein referred to as the “Committee”, will be established to review and evaluate each proposal submitted in response to this Request for Proposal (RFQ). The Committee will be comprised of at least three persons with background, experience, and / or professional credentials in relative service areas.

City of Doral will distribute to each member of the Committee a copy of each technical proposal. The committee members will evaluate the qualifications on the criteria established in the section below entitled “Criteria for Evaluation” in order to assure that qualifications are uniformly rated. The Committee will assign points, utilizing the technical evaluation criteria identified herein and complete a summary.

During the process of evaluation, City of Doral will conduct examinations of qualifications for responsiveness to requirements of the RFQ. Those determined to be non-responsive will be automatically rejected.



Proposal Evaluation Form

Design/Build Contractor: _____

Evaluation Criteria for Final Selection		Possible Points		Assigned Score
I.	Experience and Past Performance	<i>0-30 Points</i>		
II.	Time of Performance/Schedule	<i>0-30 Points</i>		
		<i>Contract time</i>	<i>Pts.</i>	
III.	Quality/Project Approach	<i>0-30 Points</i>		
IV.	References	<i>0-5 Points</i>		
V.	Location	<i>0-5 Points</i>		
			<i>Pts.</i>	
	Firm's location within Miami-Dade, Broward, or Palm Beach counties.			
Total Score				



2.10 DUE DATE

All Bids are due no later than Friday, December 6th, 2019 at 11:00 AM, EST or any time prior thereto at the City Clerk’s Office, City Hall, 8401 NW 53 Terrace, Doral, FL 33166. All proposals received will be publicly opened on the date and the time specified. All proposals received after that time shall be returned unopened.

Original Submittal and four (4) copies must be presented in three ring binders. CD copies of entire submittal must be located in the front pocket of the binder containing the original submittal. CD copies must be properly labeled with the Proposer’s name and “**RFQ No. 2019-42 – Design-Build Doral Meadow Park**”.

Original submittal (1) and four (4) copies must be submitted in a sealed envelope or box/container clearly marked with the RFQ title. EMAILED OR FAXED bids will not be accepted. The Solicitation Response Form shall be attached to the exterior of the packet.

Proposals received after the closing time and date, for any reason whatsoever, will not be considered. Any disputes regarding timely receipt of proposals shall be decided in the favor of the City of Doral. Proposer shall assume full responsibility for timely delivery at the location designated for receipt of Proposal. The City of Doral cannot be responsible for proposals received after opening time and encourages early submittal. Proposals received by the City after the time specified for receipt will not be considered.

All information required by the Request for Proposal must be supplied to constitute a regular submittal.

SOLICITATION RESPONSE FORM SHALL BE ATTACHED TO THE OUTSIDE OF THE SEALED SUBMITTAL.

2.11 INSURANCE REQUIREMENTS

Successful Proposer shall maintain, at their sole expense and during the term of this agreement insurance requirements in accordance to “**Exhibit A**”.

Please Note: The Certificate shall contain a provision that coverage afforded under the policy will not be cancelled, or materially changed until at least thirty (30) days prior written notice has been given to the City. Certificates of insurance, reflecting evidence of the required insurance, shall be provided to the City, or in accordance to policy provisions. In the event the Certificate of Insurance provided indicates that the insurance shall terminate and lapse during the period of this Agreement, the vendor shall furnish, at least thirty (30) days prior to the expiration of the date of such insurance, a renewed Certificate of Insurance as proof that equal and like coverage for the balance of the period of the Agreement or extension hereunder is in effect.

The City reserves the right to require additional insurance in order to meet the full value of the scope of services.



At award time, the successful bidder must furnish a Certificate of Insurance and Declaration of Coverage Page showing the City of Doral as additional named insured on each of the policies referenced above.

2.12 EXCEPTIONS TO SPECIFICATIONS

Exceptions to the specifications shall be listed on the Proposal Form and shall reference the section. Any exceptions to these Sections may be cause the proposal to be considered non-responsive.

2.13 COMPLETE PROJECT REQUIRED

The Work to be performed under any Contract resulting from this Request for Qualifications shall consist of furnishing all tools, equipment, materials, supplies, and manufactured articles and for furnishing all transportation and services, including fuel, power, water, and essential communications, and for the performance of all labor, work, or other operations required for the fulfillment of the Contract in strict accordance with the Contract Documents. The Work shall be complete, and all work, materials, and services not expressly shown or as called for in the Contract Documents which may be necessary for the complete and proper completion of the Work in good faith shall be performed, furnished, and installed by the Awarded Proposer as though originally so specified or shown, at no increase in cost to the City.

2.14 INQUIRIES

Any questions regarding this Bid shall be directed in writing to the Procurement Division via email at procurement@cityofdoral.com. All inquiries must have in the subject line the following: "RFQ No. 2019-42 –Design-Build Doral Meadow Park". If your request is seeking a public record, such as a bidder list or award list, it must be submitted to the City Clerk and not to the e-mail stated above.

Proposers requiring clarification or interpretation of the RFQ must submit them via email on or before **5:00 pm November 22nd, 2019**. The person or firm submitting the request shall be responsible for its timely delivery. Written responses will be compiled and shall be issued only in addendum format and distributed to all potential Proposers. In addition, inquiries and responses may also be posted on the City of Doral website.

2.15 ATTACHED FORMS AND CERTIFICATIONS

2.12.1 Non-Collusion Affidavit

Each Contractor shall complete the Non-Collusion Affidavit and shall submit the executed form with the bid. City considers the failure of the Contractor to submit this document to be a major irregularity and shall be cause of rejection of the Bid.

By offering a submission pursuant to this Invitation to Participate, the Contractor certifies that it has not divulged, discussed or compared his/her Bid with other Contractors and has not colluded with any other Contractors or parties to this bid whatsoever. Also, the Contractor certifies, and



in the case of a joint bid, each party thereto certifies, as to his/her own organization, that in connection with this Bid.

No attempt has been made or will be made by the Contractor to induce any other person or dealership to submit or not to submit a Bid for the purpose of restricting competition.

The only person or persons interested in this Bid, principal or principals is/are named therein and that no person other than therein mentioned has any interest in this bid or in the contract to be entered into.

No person or agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee excepting bona fide employees or established commercial agencies maintained by the Contractor for the purpose of doing business.

2.12.2 Prohibition on Contingent Fees

As part of any Bid, the Contractor shall warrant, by way of the attached Contingent Fees Affidavit, that that he/she/it has not employed or retained any company or person, other than a bona fide employee working solely for the contractor to solicit or secure the agreement that may result from this RFQ and that he or she has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the Respondent any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this agreement. For the breach or violation of this provision, the City shall have the right to terminate the agreement without liability and, at its discretion, to deduct from the contract price, or otherwise recover, the full amount of such fee, commission, percentage, gift, or consideration.

2.12.3 Americans with Disabilities

As part of any bid, each vendor must submit an executed American with Disabilities Act Non-Discrimination Statement, in accordance with attesting to compliance with 42 U.S.C. Section 12101 et, seq.

2.12.4 Compliance with Equal Employment Opportunity

The Contractor shall comply with Title VII of the Civil Rights Act of 1964 42 U.S.C Section 2000e et seq., Section 504 of the Rehabilitation Act of 1973 29 U.S.C Section 701 et seq., and Title I of the Americans with Disabilities Act, 42 U.S.C Section 12101 as of 1990 in that: No person in the United States shall on the grounds of race, creed, color, national origin, sex, age, political affiliation, beliefs or disability be subject to discrimination under any program or activity which the Contractor has agreed to undertake by and through the covenants, and provisions set forth in this RFQ.

2.12.5 Public Entity Crimes



A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a Bid to provide any goods or services to a public entity, may not submit a Bid with a public entity for the construction or repair of a public building or public work, may not submit Bids on lease of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in F.S. 287.017 for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendors list.

2.12.6 Truth in Negotiating Certificate

As part of any bid, the Contractor shall certify, covenant, and warrant, by way of the attached Truth in Negotiating Certificate form, that wage rates and other factual unit costs supporting the compensation for projects and services that may be offered pursuant to this RFQ and the Agreement related thereto will be accurate, complete, and current at the time of contracting. The Contractor further agrees that the price provided under separate, project specific agreements and any additions thereto shall be adjusted to exclude any significant sums by which the City determines the agreement price was increased due to inaccurate, incomplete, or non-current wage rates and other factual unit costs. All such agreement adjustments shall be made within one (1) year following the end of each corresponding agreement. For purpose of this certificate, the end of the agreement shall be deemed to be the date of the final billing or acceptance of the work by the City, whichever is later. The undersigned firm is furnishing this Truth in Negotiating Certificate pursuant to Section 287.055(5)(a) of the Florida Statutes for the undersigned firm to receive a continuing agreement for professional architecture and engineering services with the City of Doral, Florida.

2.12.7 Tie Bid Forms

Whenever two or more bids are equal with respect to price, quality, and service are received by the City, the selection committee will review the time-stamp of the submittal of the RFQ to determine the earliest received RFQ proposal. The selection committee shall award the earliest submitted proposal the highest ranking in a tie scenario.

2.12.8 Additional Forms

The attached Sworn Statement regarding Public Entities Crimes (PEC), Americans with Disabilities Act Non-Discrimination Statement (ADA), Business Entity Affidavit, W-9 form, Proposer's Certification Form, Non-Collusion Statement, Qualifications Packet, Signature Sheet and all other forms included in this package shall be completed and submitted with proposal.

The above referenced forms are included in 'Forms / Deliverable' at Section 5 of this solicitation. Please ensure that you read these forms, and all others contained within Section 5 thoroughly, and return them signed and notarized where required. Bids received with incomplete forms may be deemed unresponsive.

2.16 GUARANTEE



Vendor shall warrant all products and materials to be free of defects for a period of one year from the date of final delivery. Upon completion of the one-year period, the vendor must ensure that the City is capable of utilizing the manufacturer's warranty if any issues with the equipment should arise.

2.17 GOODS/ SERVICES MAY BE ADDED OR DELETED

It is hereby agreed and understood that goods or additional services may be added to this Contract at the City's option. It is also agreed and understood that the City may add or delete goods/services on this Contract at the City's option. The Awarded Bidder shall be invited to submit price quotes for these additional goods/services. If these quotes are determined to be fair and reasonable, then the additional goods/services will be awarded to the Awarded Bidder.

2.18 PROPOSAL FORMAT AND SIGNATURES

To receive consideration, proposal must be submitted on the proposal forms as provided by the City. Proposal must be typed or printed in black or blue ink only. All corrections must be initialed. Copies may be obtained from the City Clerk, 8401 NW 53 Terrace, Doral, FL, 33166. Qualifications by corporations must be executed in the corporate name by the President or other corporate officer accompanied by evidence of authority to sign. If Proposer is a corporation, the corporate address and state of incorporation must be shown below the signature. Qualifications by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.

Sealed qualifications, containing One (1) original and Four (4) copies, in three-ring binders and Two (2) CDs duplicate to the original, must be presented to the City Manager's Office, 8401 NW 53 Terrace, Doral, FL 33166 at or prior to the time noted on the proposal opening date. It will be the sole responsibility of the Proposer to deliver their proposal to the City Manager's Office on or before the closing hour and date indicated. Qualifications shall be submitted in a sealed container/envelope clearly marked on the exterior "**RFQ No. 2019-42 - Design-Build Doral Meadow Building Renovation**".

ANY PROPOSAL RECEIVED AFTER THE STATED OPENING DATE AND TIME SHALL BE REJECTED AND WILL BE RETURNED UNOPENED.

2.19 BONDS

2.18.1 Performance Bond and Payment Bond

Performance and Payment Bonds shall be provided by the DESIGN/BUILD CONTRACTOR as specified in the RFQ resulting from this solicitation. The tentative terms and conditions in this regard are: Within ten (10) business days after award of the Contract by the City, the DESIGN/ BUILD CONTRACTOR shall provide the City with Performance and Payment Bonds in the amount of 100% of the total sum of the Negotiated Contract Price, the costs of which and all associated costs including recording fees are to be paid by the DESIGN/ BUILD CONTRACTOR and are to be part of the Contract Price.



Each Bond shall be in the amount of one hundred percent (100%) of the Contract value guaranteeing to City the completion and performance of the Work covered in the Contract Documents as well as full payment of all suppliers, laborers, or Subcontractor, and subconsultant employed pursuant to this Project(s). Each Bond shall be with a Surety, which is qualified pursuant to Qualification of Surety language to be included in Contract Documents.

Each Bond shall continue in effect for one year after Final Completion and acceptance of the Work with liability equal to one hundred percent (100%) of the Contract value, or an additional bond shall be conditioned that DESIGN/BUILD CONTRACTOR will, upon notification by City, correct any defective or faulty work or materials which appear within one year after Final Completion of the Project(s).

2.18.2 Alternate Form of Security:

In lieu of a Performance/Payment Bond, DESIGN/BUILD CONTRACTOR may furnish alternate forms of security, which may be in the form of cash, money order, certified check, cashier's check or unconditional letter of credit in the form attached. Such alternate forms of security shall be subject to the prior approval of City and for same purpose and shall be subject to the same conditions as those applicable above and shall be held by City for one year after completion and acceptance of the Work.

2.20 PAYMENTS

Payment will be made after commodities/services have been received, accepted, and properly invoiced as indicated in the contract and/or purchase order. Invoices must bear the purchase order number.

2.21 DISCREPANCIES

If there is a discrepancy in the unit and extended prices, the unit price(s) will prevail, and the extensions adjusted to coincide. Proposers are responsible for checking their calculations. Failure to do so will be at the Proposer's risk and errors will not release the proposer from his responsibility as noted herein.

2.22 LIQUIDATED DAMAGES

A charge of **One Thousand Five Hundred Eighty-Four Dollars per day (\$1,584.00)** will be applied to the DESIGN/BUILD CONTRACTOR for everyday beyond the project's completion date that Substantial Completion of the Project has not been achieved.

END OF SECTION



SECTION 3

Technical Specifications

Any and all Special Conditions that may vary from these General Conditions shall have precedence.

3.1 PURPOSE

The DESIGN/BUILD CONTRACTOR shall be responsible for providing full professional engineering/architectural, permitting and construction phase services, including; the furnishing all labor, materials, supplies, travel, shop drawing review, supervision, equipment and expertise to develop plans finalize construction drawings and specifications and construct such a facility. The DESIGN/BUILD CONTRACTOR shall obtain any and all required permits, inspections, and pay any fees for the purpose of this Design-Build Facility. The City shall reimburse the DESIGN/BUILD CONTRACTOR, at direct cost, the cost of permits, including fees levied by Miami-Dade Fire Department, Miami-Dade Water and Sewer, City Building Department Master Permit and review fees, and Department of Environmental Resources and Management (DERM). All secondary or trade permits shall be the responsibility of the DESIGN/BUILD CONTRACTOR. City of Doral shall waive its own impact fees. The City does not, however, waive any other regulatory matters regarding the design and construction of the facility.

All Construction Engineering Inspections (CEI) to be provided by OWNER but shall be coordinated and scheduled by the DESIGN/BUILD CONTRACTOR.

3.2 MINIMUM REQUIREMENTS

1. The DESIGN/BUILD CONTRACTOR will adhere to all applicable federal, state, and local codes and ordinances in the design and construction of the Doral Meadow Park Renovations. The DESIGN/BUILD CONTRACTOR will submit plans and specifications to the City for review and approval prior to submittal for local and state permits.
2. The DESIGN/BUILD CONTRACTOR will ensure that the latest building code, life-safety, fire protection, electrical, plumbing, mechanical, HVAC, communication infrastructure, landscaping, ADA (American with Disabilities Act), and energy efficiency codes be incorporated in all functions. Additionally, the DESIGN/BUILD CONTRACTOR shall comply with all requirements established by Miami-Dade Water and Sewer, and other agencies having jurisdiction over the project.
3. Lighting levels for all areas shall be in accordance with the recommendations of the Illuminating Engineering Society of North America, Manual of Recommended Practices and Miami Dade County Ordinances.
4. The DESIGN/BUILD CONTRACTOR will furnish to the CITY signed and sealed Plans and Specifications for the project. The Plans and Specifications must be sealed by a Registered



Architect and Professional Engineers, as appropriate for the various disciplines, licensed to practice in Florida per the requirements of Chapter 481 or Chapter 471, Florida Statutes.

5. Plans and specifications will stipulate that no Asbestos Containing Materials (ACM) will be used.
6. The DESIGN/BUILD CONTRACTOR to coordinate all necessary utility and hook-ups with the utility companies and/or municipality.
7. The DESIGN/BUILD CONTRACTOR shall furnish plans and specifications that comply with the Florida Building Code, Current Edition.
8. The DESIGN/BUILD CONTRACTOR shall design and construct a security system raceway system complete with conduit, boxes, door, power transformers and coordinated door hardware for a security system that monitors the exterior of the building. The DESIGN/BUILD CONTRACTOR shall coordinate with the CITY's security firm to ensure that all required security raceways and door/ frame preparation have been provided. The actual security devices shall be provided and installed by the CITY's Security Contractor; however, the DESIGN/BUILD CONTRACTOR shall provide all required conduit, pull strings, door and frame preparations and door hardware, including power transformers, electric strikes or electrified door locks.
9. DESIGN/BUILD CONTRACTOR shall create a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the NPDES standards. The plan will consist of notes to outline the procedures and Best Management Practices (BMP's) necessary for this construction as well as drawings showing the specific implementation of SWPPP elements. The DESIGN/BUILD CONTRACTOR team will be required to file a Notice of Intent (NOI) to use the FDEP State Generic Permit under Rule 62-621.300(4), F.A.C. The approved SWPPP shall be implemented and maintained on the site throughout the duration of construction.
10. DESIGN/BUILD CONTRACTOR to provide an electronic copy of the final approved Construction Documents in both CADD and PDF formats and the specifications in Word format to the CITY. DESIGN/BUILD CONTRACTOR shall also provide an electronic copy and hard copy of the final as-built documents in both CADD and PDF formats and the specifications in Word Format to the CITY. DESIGN/BUILD CONTRACTOR shall also provide photo documentation of construction progressions including but limited to aerials, sitework and Mechanical, Electrical and Plumbing (MEP).

3.3 PROJECT SPECIFICS

1. All building structures or parts thereof shall be designed for live loads specified in the latest editions of the current Florida Building Code and ASCE 7 with commentary.
2. Manually operated roller shades (5% openness fabric with fascia) to be provided at all glazed openings by the DESIGN / BUILD CONTRACTOR.



3. Drawings provided with the Record Drawings package (**Exhibit B**) are for reference. It is the responsibility of the DESIGN / BUILD CONTRACTOR to provide calculations and design for the permitting and construction of the project. DESIGN/BUILD CONTRACTOR or its Sub-Contractor will become the Architect / Engineer of Record.
4. The DESIGN/BUILD CONTRACTOR is required to train City staff in operations of the building for continued successful operational efficiency and provide a detailed manual for operation of all building systems including the new air conditioning system.
5. DESIGN/BUILD CONTRACTOR shall be responsible for providing and securing a fully functional construction trailer and a restroom trailer, including utility connections and consumption.

3.4 GENERAL MECHANICAL REQUIREMENTS

Construction documents shall conform to requirements of the latest adopted edition, but not limited, to the following:

1. Florida Building Code (FBC) - Building
2. Florida Building Code (FBC) - Energy Conservation
3. Florida Building Code (FBC) – Mechanical
4. Florida Building Code (FBC) – Existing Building
5. Florida Building Code (FBC) – Accessibility
6. National Fire Protection Association (NFPA).
7. American with Disabilities Act Accessible Guidelines (ADAAG).
8. Florida Department of Environmental Protection (DEP).
9. Florida Department of Environmental Resources Management (DERM).
10. United States Environmental Protection Agency (EPA).

A. SITE

1. The DESIGN/BUILD CONTRACTOR shall be responsible to provide a building site survey for this project. It is the DESIGN/BUILD CONTRACTOR'S responsibility to confirm all existing conditions.
2. DESIGN/BUILD CONTRACTOR shall be responsible for visiting the site, becoming familiar with the site, and be responsible for all costs of modifications to the existing site conditions in the construction of this project.
3. DESIGN/BUILD CONTRACTOR shall pay for all permit fees and will be reimbursed for such fees by the CITY.



B. BUILDING

The configuration (plan) and interior distribution of the building shall be as generally depicted in **Exhibit C – Conceptual Drawing**.

The DESIGN/BUILD CONTRACTOR assumes full responsibility for compliance with all codes, laws, acceptable good design practices and means and methods of construction. The DESIGN/BUILD CONTRACTOR shall adhere to the procedures, submittals and all other requirements for all aspects of the project.

C. HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)

1. General:

The design of the HVAC systems shall incorporate energy conservation and sustainability elements using the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) program. The following information provides a general description of the materials and design concepts that shall comprise the mechanical systems and shall form the basis from which the design shall progress.

2. Test and Balance:

- a. The services of an independent agency, not involved in the installation of system, and that regularly performs air system testing and balancing shall be retained by the DESIGN/BUILD CONTRACTOR. Minimum qualifications for acceptance shall be general membership standards of AABC or NEEB. Three years minimum experience in testing and balancing work is required. Submittal shall include, a complete description of the proposed firm's qualifications; listing of projects of similar size and complexity for which the proposed firms has performed similar services during the past five (5) years, along with a description of each project. Certification of individual qualifications of all persons responsible for supervision and performing actual balancing, and name of Florida Registered Professional Engineer certifying the report.

3. Air handling Units:

- a. The air handling units serving the new Multipurpose Room shall be a split system, with high efficiency motors, supply and return smoke detectors, fire dampers, condensate overflow switch, CO₂ sensor wiring, modulating outside air motor operated damper, and Merv 13 filters.

4. Air Distribution:

- a. Select air distribution devices using accepted design practices to provide adequate air distribution for a multipurpose room environment. Coordinate location of all mounted air distribution devices with the light fixtures, smoke detectors, speakers, and/or any other ceiling mounted device.



- b. Air distribution devices shall be selected not to exceed 25 NC and/or RC 35 noise criteria. Supply air shall be distributed through sheet metal ductwork, with external insulation. A ceiling plenum may be utilized for return air circulation, products of combustion shall not be permitted above the ceilings.
 - c. All ductwork shall be G90 galvanized sheet metal, installed in accordance with the requirements of the Sheet Metal and Air Conditioning Contractors' National Association (SMACNA). Where required concealed supply ducts shall be insulated with minimum R-6 fiberglass duct wrap with a foil scrim kraft (FSK) vapor retarder.
 - d. All exposed ductwork, if any, shall be double wall construction with sandwiched insulation.
 - e. Large open spaces with an expected population of 25 persons or more shall be provided with CO₂ sensors.
 - f. Supply diffusers shall be of the louvered face or plaque type with control grid and opposed blade damper at the neck of the diffuser.
 - g. Return grilles shall be of the egg-crate type and have the same rated performance, face and border construction as the supply models, for a harmonious appearance in the room.
 - h. Exhaust fan shall be of the centrifugal type. Fans shall be provided with a motor operated damper to close 100% when the fan is off and shall be controlled and/or interlocked with the air conditioning system.
5. IT Room:
The IT room shall be provided with air conditioning. IT room finish will include LVT floor tiles and a fresh coat of paint. A network (data) drop outlet shall be provided for the IT room. DESIGN/BUILD CONTRACTOR to provide conduits, pull strings, and backboxes.

D. ELECTRICAL

1. Codes for Electrical Work

The electrical systems DESIGN/BUILD CONTRACTOR shall develop a complete electrical construction layout to meet the latest and current edition of the following codes and standards:

- a. National Electrical Code – NFPA 70
- b. National Fire Alarm Code – NFPA 72
- c. ANSI/ASHRAE Standards – Energy Standards for Buildings
- d. Florida Building Code



- e. Life Safety Code – NFPA 101
- f. Standards for Emergency Power Systems – NFPA 110
- g. National Electrical Manufacturers Association Standards – NEMA
- h. Underwriters Laboratories – UL
- i. Institute of Electrical and Electronics Engineers – IEEE

2. Grounding

Grounding of any new required power distribution system shall be done according to the latest applicable edition of the NEC. Branching and equipment connection wiring shall include a green ground copper equipment conductor in all circuits. Size all ground conductors according to NEC. Neutral wires shall be 100% rated minimum.

3. Wiring Methods

Conductors shall be copper and installed in conduit. Use EMT for interior runs and PVC Schedule 40 for underground or inside poured concrete installations. RSG conduit shall be used at exposed exterior locations or when subject to physical damage. Conduits shall be routed concealed inside walls, concrete floors, or above false ceiling. Exposed conduits are only permitted inside the electrical, mechanical and generator rooms.

The conduit connection to vibrating equipment shall be flexible steel conduit at interior locations and watertight flexible metallic conduit at exterior.

Receptacles shall be grounding type, 20A, 1-pole, 120V commercial grade with stainless steel plate covers.

3.5 PROJECT DELIVERY AND REVIEW SUBMITTALS

1. Project review will require the submittal of five (5) printed sets of the Design Phase documents, unless otherwise directed by the CITY, including:
 - a. Project Development Schedule.
 - b. Opinion of Probable Construction Cost
 - c. Schematic Design Plans
 - d. Design Development Drawings
 - e. CADD files
 - f. 100% Construction Drawings
 - g. Technical Specifications
2. At the completion of Design Phase the DESIGN/BUILD CONTRACTOR shall provide to the CITY two (2) complete sets of Design Documents as well as an electronic copy of specifications in Word format, with drawings in both CADD and PDF formats; at the completion of the Project and prior to final payment the DESIGN/BUILD CONTRACTOR shall provide to the OWNER two (2) complete sets of As-Built Documents as well as an electronic copy with drawings in both CADD and PDF formats. The CITY will also require all documentation for all equipment and at



OWNER's request arrange for manufacturer's representative to meet with CITY. DESIGN/BUILD CONTRACTOR will prepare a manual for CITY to include maintenance and operation of the facility. At the completion of construction, the DESIGN/BUILD CONTRACTOR will provide training in proper operations, and maintenance schedules. The DESIGN/BUILD CONTRACTOR will be required to obtain "The Certificate of Occupancy" at the completion of Construction.

3.6 WARRANTY AND INSPECTION OF DEFECTS

1. The DESIGN/BUILD CONTRACTOR will warranty all items for a minimum period of one (1) year from the date of CITY's beneficial occupancy (T.C.O).
2. Manufacturer's standard warranties on materials and equipment which exceed the minimum one (1) year warranty period will be assigned by the DESIGN/BUILD CONTRACTOR to the CITY for its benefit prior to final payment.
3. The DESIGN/BUILD CONTRACTOR warrants the material and equipment with respect to performance as specified in the specifications. If the DESIGN/BUILD CONTRACTOR fails to meet performance warranties, it shall be liable and shall have the obligation, at its sole expense, to make adjustment or replacement to meet guarantees. All transportation, supervision, labor, and other costs incidental to the adjustment or replacement shall be borne by the DESIGN/BUILD CONTRACTOR.
4. The DESIGN/BUILD CONTRACTOR guarantees that sound engineering, construction principles and practices in the performance of the work shall be used.
5. The DESIGN/BUILD CONTRACTOR guarantees that it shall provide CITY with the degree of skill, care, judgment, and supervision necessary to assure that the work shall be of the highest quality, with workmanship proper, fit, suitable, and sufficient for the purpose contemplated and in accordance with the best trade practices.
6. All parts of the work shall, throughout the time of performance of the contract, be subject to inspection and test by the CITY or such of its agents, employees, or representatives as it may designate, the Design Criteria Professional's staff, and the authorized representatives of any public authority having jurisdiction. The DESIGN/BUILD CONTRACTOR shall provide all such persons with safe and proper facilities for access to and inspection of the Work both at the construction site and any Subcontractor's plant or other source of supply where any equipment, material, or other part of it may be located. The DESIGN/BUILD CONTRACTOR shall give the CITY written notice of readiness of the Work or any part of the Work for any special inspection or test which may be required by the specifications or other contract documents or by any applicable law or public regulation. No part of the Work as to which any specific inspection is required shall be covered up until such inspection has been completed. If such work is covered, then it shall be uncovered and replaced at the DESIGN/BUILD CONTRACTOR's expense.



7. All parts of work shall, during time of the contract, be subject to inspection and test by the CITY or its representatives. Approval for all work will be by CITY or its representatives. When poor workmanship or improperly specified materials are reason for rejection, correction will be at the DESIGN/BUILD CONTRACTOR's expense.

3.7 SITE INVESTIGATION

1. The DESIGN/BUILD CONTRACTOR shall be required to visit the project site and to acquaint themselves with existing conditions, measurements, etc.
2. No inspection, or failure to inspect, or waiver of inspection on the part of the Department shall relieve the DESIGN/BUILD CONTRACTOR of their duty to complete the Work as described herein in full.

3.8 SPECIFICATIONS, PLAN AND DRAWINGS

1. The work shall be performed in strict accordance with the approved specifications, plans, and drawings. The specifications, plans, and drawings and all other similar documents which are a part of the contract are supplementary and complementary to each other and intended to provide for all labor, materials, equipment, services, and other things necessary for the satisfactory completion of the work. Anything called for by any one of such documents shall be required to the same extent as if called for by all of them, and the work shall be complete in every detail whether or not every item is particularly mentioned.
2. All drawings (including sketches and shop drawings) and specifications, including all copies thereof, furnished by the DESIGN/BUILD CONTRACTOR for the work to be performed shall be reviewed and approved by CITY prior to commencement of work and shall be delivered to CITY at the completion of the work.
3. CITY shall review and approve all plans, specifications and supplemental information prior to commencement of that portion of the work.

3.9 ARCHITECTURAL AND ENGINEERING SERVICES

1. Notwithstanding the other items stated under Section 5.0 Specifications, the DESIGN/BUILD CONTRACTOR shall be responsible for developing the plans, specifications and drawings and obtaining approval from all permitting and regulatory agencies having jurisdiction on this project. Additionally, the DESIGN/BUILD CONTRACTOR shall be responsible for:
 - A) Shop drawing reviews and approval.
 - B) Responding to Request for Information from Subcontractors.
 - C) Requesting and obtaining all inspections from agencies having jurisdiction over the project.



2. All services required to complete the Project as specified in these contract documents shall be provided by the DESIGN/BUILD CONTRACTOR.
3. Review and/or approval by the CITY or its representative of such drawings or schedules shall not be construed as a complete and thorough review but will indicate only that the general method of construction and detailing is satisfactory. Approval of such drawings or schedules will not relieve the DESIGN/BUILD CONTRACTOR of the responsibility for any error which may exist. DESIGN/BUILD CONTRACTOR shall be responsible for the dimensions and design of adequate connection, detail, and satisfactory performance of the Work. DESIGN/BUILD CONTRACTOR shall deliver to CITY all necessary building components for a complete facility as designed and approved.
4. All drawings, specifications, and other documents furnished by the CITY to perform work shall remain the property of CITY.
5. The DESIGN/BUILD CONTRACTOR shall submit to CITY the design notes and calculations to document the design conclusions reached during the development of all the construction plans. The design notes and calculations shall be recorded in eight and one-half inches by eleven inches (8.5 x 11") sheets, fully titled, numbered, dated, indexed and signed by the designer and checker.
6. After CITY accepts the final plans, the original set of plans plus one record set shall be furnished to CITY. The DESIGN/BUILD CONTRACTOR shall signify, by affixing an endorsement (seal/signature appropriate) on every sheet of the record set, that the record set, that the work shown on the endorsed sheets was produced by the DESIGN/BUILD CONTRACTOR or its Sub-Contractor serving as the Engineer/Architect of Record. The original set of plans shall have the title block placed on each sheet, where approval may be a facsimile signature for each sheet within the plans, with an original signature placed in the key map.

3.10 CONSTRUCTION SCHEDULE

After notification of award and prior to the start of any work, the DESIGN/BUILD CONTRACTOR shall submit their detailed construction schedule to CITY for approval. The schedule shall be written in sufficient detail to show the chronological relationship of all major aspects of the project, including estimated starting and completion dates of various activities (including design and permitting), procurement of materials, and scheduling of equipment and shall include the scope of work specifically associated with the milestone for the foundation. The schedule is subject to approval by the CITY.

END OF SECTION



SECTION 4

Instructions to Proposers

THE FOLLOWING INFORMATION IS CONSIDERED ESSENTIAL AND NON-WAIVABLE FOR ANY RESPONSE TO AN INVITATION TO REQUEST FOR PROPOSAL. PROPOSER SHALL SUBMIT ALL INFORMATION SET FORTH IN THIS SECTION ORGANIZED IN THE APPROPRIATE ORDER.

4.1 PROPOSAL REQUIREMENTS

Submissions shall be typed on 8 ½" x 11" plain white paper and placed in three-ring binders. The two (2) CD copies must be exact duplicates of the original submission. Failure to provide exact copies shall result in submittal being nonresponsive.

Unnecessarily elaborate special brochures, artwork, expensive paper and expensive visual and other presentation aids are neither necessary nor desired.

It is recognized that existing financial reports, documents, or brochures, such as those that delineate the Proposer's general capabilities and experience, may not comply with the prescribed format. It is not the intent to have these documents reformatted and they will be acceptable in their existing form.

4.2 PROPOSAL FORMAT

Qualifications shall be prepared using the following in chronological order:

- 4.2.1 Statement acknowledging receipt of each addendum issued by the City (if applicable).
- 4.2.2 All Required Forms provided by the City beginning on Page 64
- 4.2.3 Statement of Qualifications and experience of the submitting person(s)/firm(s) that will provide the services.

THIS SECTION MUST INCLUDE:

Title Page

Show the name of proposer's agency/firm, address, telephone number, and name of contact person, email address, date, and the subject: "Design-Build Doral Meadow Park Building Facility RFQ No. 2019-42"

1. STATEMENT OF INTEREST AND INTRODUCTION (Cover Letter)

The responding firm (or the lead firm if sub-consultants are proposed) will provide a letter on letterhead, not exceeding two pages, which serves as a statement of interest, and summary of the proposal.



2. EXPERIENCE AND QUALIFICATIONS OF PROPOSING FIRM AND THE PERSONNEL ASSIGNED TO THIS PROJECT

i. Administration and Management [not exceeding 4 (four) pages]

a) The DESIGN/BUILD CONTRACTOR shall provide the description, location and availability of the Proposer's facilities staff and equipment as they currently exist and as they will be employed for the purpose of this contract.

b) The DESIGN/BUILD CONTRACTOR shall include a description of the organizational structure and management style established and the methodology to be used to control costs, services reliability, and to maintain schedules; as well as the means of coordination and communication between the organization and City of Doral. If applicable, the DESIGN/BUILD CONTRACTOR shall include a description of its corporate organization and affiliates and explain if and how the affiliates will contribute to this contract.

c) The DESIGN/BUILD CONTRACTOR should show where significant difficulties might be anticipated and resolved.

d) The DESIGN/BUILD CONTRACTOR shall prepare an effective communication plan to keep City of Doral's Project Management Team (PMT) informed of all services rendered in the contract. This shall include the preparation of schedules and reports requested and any additional reports the Proposer feels might be needed.

e) The DESIGN/BUILD CONTRACTOR shall address issues of safety with regards to employees and property.

ii. Identification of Key Personnel (Limited to ten (10) pages)

Per Section 2.23, Technical Certifications, the DESIGN/BUILD CONTRACTOR shall demonstrate that the Project Manager, Designers, Superintendent and personnel assigned to this contract possess the required experience to perform the Scope of Services. This shall include, but not be limited to the following:

a) The DESIGN/BUILD CONTRACTOR shall explain the roles, functions and responsibilities of the management and administrative staff in terms of how they apply to the activities in the Scope of Services. Resumes for all superiors and other key personnel shall be included.

b) Names of key personnel as well as those of Sub-Contractor/Sub-Consultant on the Proposer's team, and the task which each will be assigned on the Proposer's team, as well as a resume for each supervisor proposed. The DESIGN/BUILD CONTRACTOR shall also identify the Architect of Record.



c) The DESIGN/BUILD CONTRACTOR shall identify any employees and equipment that are being provided by the Sub-Contractor/Sub-Consultant.

d) The DESIGN/BUILD CONTRACTOR is to identify the Project Manager who will remain involved throughout the Contract term.

e) The DESIGN/BUILD CONTRACTOR shall include references with the name, addressed and phone numbers for both the Project Manager and all supervisors and key personnel for previous three (3) years contract or their last three (3) jobs whichever is greater.

f) The key personnel identified in this Proposal package shall be the personnel who actually perform the work. Any subsequent changes to the personnel submitted with this package must be approved by City of Doral.

g) Provide a narrative to describe the sequencing of key activities so as to ensure the success of the project, including the milestone associated.

h) The DESIGN/BUILD CONTRACTOR shall include an organizational chart that identifies the team structure and each member's areas of responsibility and time (percentage of hours dedicated to this project). As a minimum, the Proposal package shall contain the following information for the above specified disciplines:

- Complete name and number of years in business under current name.
- Addresses of home office and principal office for this project.
- Type of organization – corporation, partnership, etc.
- A report of any Sub-Contractor(s) / Sub-Consultant(s) that will be used.

3. TIME OF PERFORMANCE/ PROJECT SCHEDULE

The DESIGN/BUILD CONTRACTOR shall provide an overall CPM-type schedule of project work tasks and durations with a Project start date of February 2020 (the actual start date will be adjusted to reflect the date of Notice to Proceed). A Gantt chart shall illustrate key project milestones and impact of project permitting activities. The schedule shall include interim design milestone activities for 50% construction documents and complete design, including necessary structural calculations and analysis to obtain a permit, technical specifications, and final construction documents by May 2020, "Substantial Completion" by September 2020 and "Final Completion" by October 2020, as well as any other submittals that differ from the stated design milestones. This schedule shall become contractual with the start date being adjusted to reflect the actual notice to proceed, and the number of calendar days and sequence of activities being used to reflect the Construction schedule adjusted for the actual OWNER's Construction Notice to Proceed. A narrative not to exceed ten (10) pages shall discuss the approach to critical project activities affecting schedule compliance, including but not limited to: Permitting, critical decision making, long-lead system selection and procurement, project tracking activities,



project controls and means of correction. A detailed project schedule is to be included with the response, identifying total contract time.

4. QUALITY

The included Conceptual Drawing and other project specific specifications have been approved by the City. It is the desire of the City adhere to this design as much as possible and to encourage Proposers not to materially or substantively deviate from the design and technical specifications. The DESIGN/BUILD CONTRACTOR may incorporate revisions necessary for code compliance, constructability, availability of equipment and general recommendations for enhancements to be considered by the City.

Include a descriptive statement including illustrative graphics, not exceeding four (4) pages describing the Proposer's understanding of the Conceptual Drawing (**Exhibit C**) and a description of any proposed modifications by the Proposer with a brief explanation as to the reason(s) for the modification. Discuss Value Management Techniques to be utilized in maintaining the quality of materials and systems and also address product/systems substitutions and value-added to the project. The City may choose to make these commitments contractual.

END OF SECTION



SECTION 5 REQUIRED FORMS

THE FOLLOWING MATERIALS ARE CONSIDERED ESSENTIAL AND NON-WAIVABLE FOR RESPONSES TO THIS RFQ.

PROPOSERS SHALL SUBMIT THE SUBSEQUENT FORMS COMPLETED IN THE EXACT SEQUENCE PROVIDED, INCLUDING INSERTION OF DOCUMENTS WHERE SPECIFIED.

LIST OF ATTACHED FORMS:

- ✓ Bid Submittal Form
- ✓ Statement of No Response
- ✓ Solicitation Response Form
- ✓ Contact Information Worksheet
- ✓ Business Entity Affidavit
- ✓ Americans with Disabilities Act (ADA) Disability Non-Discrimination Statement
- ✓ Non-Collusion Affidavit
- ✓ Sworn Statement Pursuant to Section 287.133(3)(a) Florida Statutes, on Public Entity Crimes
- ✓ Non-Contingency Affidavit
- ✓ Drug-Free Workplace Program
- ✓ Copeland Act Anti-Kickback Affidavit
- ✓ Equal Employment Opportunity Certification
- ✓ Cone of Silence Certification
- ✓ Tie Bids Certification
- ✓ Proposer's Certification
- ✓ RFQ Signature Page for Sole Proprietor or Partnership
- ✓ RFQ Signature Page for Corporation



BID SUBMITTAL FORM

RFQ No. 2019-42

(Adjust and simplify as required by commodity being purchased)

THIS PROPOSAL IS SUBMITTED TO:

City of Doral
8401 NW 53rd Terrace
Doral, Florida 33166

1. The undersigned Bidder proposes and agrees, if this Proposal is accepted, to enter into an agreement with The City of Doral to perform and furnish all goods and/or services as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this RFQ and in accordance with the other terms and conditions of the Contract Documents.
2. Proposer accepts all of the terms and conditions of the Advertisement or Request for Proposal and Instructions to Bidders, including without limitation those dealing with the disposition of Bid Security. This Proposal will remain subject to acceptance for 90 days after the day of Proposal opening. Proposer agrees to sign and submit the Agreement with the Bonds and other documents required by the Bidding Requirements within ten days after the date of City's Notice of Award. (If applicable)
3. In submitting this Proposal, Proposer represents, as more fully set forth in the Agreement, that:

- (a) Proposer has examined copies of all the Proposal Documents and of the following Addenda (receipt of all which is hereby acknowledged.)

Addendum No. _____ Dated: _____

Addendum No. _____ Dated: _____

Addendum No. _____ Dated: _____

Addendum No. _____ Dated: _____

- (b) Proposer has familiarized themselves with the nature and extent of the Contract Documents, required goods and/or services, site, locality, and all local conditions and Law and Regulations that in any manner may affect cost, progress, performance, or furnishing of the Work.
- (c) Proposer has studied carefully all reports and drawings of subsurface conditions and drawings of physical conditions.
- (d) Proposer has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests and studies (in addition to or to supplement those referred to in (c) above) which pertain to the subsurface or physical conditions at the site or otherwise may affect the cost, progress, performance, or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other



terms and conditions of the Contract Documents, and no additional examinations, investigations, explorations, tests, reports or similar information or data are or will be required by Bidder for such purposes.

- (e) Proposer has correlated the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Contract Documents.
- (f) Proposer has given the City written notice of all conflicts, errors, discrepancies that it has discovered in the Contract Documents and the written resolution thereof by the City is acceptable to Proposer.
- (g) This Proposal is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; Proposer has not directly or indirectly induced or solicited any other Proposer to submit a false or sham Proposal; Proposer has not solicited or induced any person, firm or corporation to refrain from submitting; and Proposer has not sought by collusion to obtain for itself any advantage over any other Proposer or over the City.

- 4. Proposer understands that the quantities provided are only provided for proposal evaluation only. The actual quantities may be higher or lower than those in the proposal form.
- 5. Proposer understands and agrees that the Contract Price is Unit Rate Contract to furnish and deliver all of the Work complete in place as such the Proposer shall furnish all labor, materials, equipment, tools superintendence, and services necessary to provide a complete Project.
- 6. Proposer agrees that the work will be completed as scheduled from the date stipulated in the Notice to Proceed.
- 7. Communications concerning this Proposal shall be addressed to:

Bidder: _____

Address: _____

Telephone _____

Facsimile Number _____

Attention: _____



8. The terms used in this Proposal which are defined in the General Conditions of the Contract included as part of the Contract documents have the meanings assigned to them in the General Conditions.



STATEMENT

I understand that a "person" as defined in Para. 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding Contract and which Bids or applies to Bid on Contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "persons" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of any entity.

SUBMITTED THIS DAY _____, 20____.

Person Authorized to sign Proposal: _____
(Signature)

(Print Name)

(Title)

Company Name: _____

Company Address: _____

Phone: _____

Fax: _____

Email: _____



STATEMENT OF NO RESPONSE
RFQ No. 2019-42

If you are not proposing on this service/commodity, please complete and return this form to: City of Doral – City Manager’s Office 8401 NW 53rd Terrace, Suite 100 Doral, FL 33166. Failure to respond may result in deletion of your firm’s name from the qualified vendor list for the City of Doral.

COMPANY NAME: _____

ADDRESS: _____

TELEPHONE: _____

SIGNATURE: _____

DATE: _____

We, the undersigned have declined to submit a proposal on the above because of the following reasons:

- _____ Specifications/Scope of Work too “tight”, i.e., geared toward brand or manufacturer only (explain below)
- _____ Insufficient time to respond
- _____ We do not offer this product, service or an equivalent
- _____ Our schedule would not permit us to perform
- _____ Unable to meet bond requirements
- _____ Specifications unclear (explain below)
- _____ Other (specify below)

REMARKS: _____

For bidders submitting qualifications for this opportunity, you may write “N/A” on this form.



Solicitation Response Form

BIDDERS MUST ATTACH THIS FORM TO THE EXTERIOR OF THE SEALED PACKET.

Name: RFQ No. 2019-42 - Design-Build Doral Meadow Park Renovations

Due Date: December 6th, 2019

Delivery Location: City of Doral
Office of the City Clerk
8401 NW 53rd Terrace
Doral, FL 33166

Submitted by: _____

(name of company and address)

PLEASE DO NOT TAPE BELOW THIS LINE

For Office Use Only:

Date and Time Received:

Received by: _____



BIDDER INFORMATION WORKSHEET
RFQ No. 2019-42

COMPANY/AGENCY/FIRM NAME: _____

ADDRESS: _____

BUSINESS HOURS: _____

BUSINESS EMAIL ADDRESS: _____ **PHONE No.:** _____

CONTACT PERSON & TITLE: _____

CONTACT EMAIL ADDRESS: _____ **PHONE No.:** _____

BUSINESS LEGAL STATUS: (circle one) CORPORATION / PARTNERSHIP / JOINT VENTURE

BUSINESS IS A: (circle one) PARENT / SUBSIDIARY / OTHER _____

DATE BUSINESS WAS ORGANIZED/INCORPORATED: _____

ADDRESS OF OFFICE WHERE WORK IS TO BE DONE FOR THIS PROJECT (if different from address provided above):

INDIVIDUALS(S) AUTHORIZED TO MAKE REPRESENTATIONS FOR THE CONTRACTOR:

(First, Last Name) (Title) (Contact Phone Number)

(First, Last Name) (Title) (Contact Phone Number)

(First, Last Name) (Title) (Contact Phone Number)

(Resumes of individuals named on this sheet must be included in submittal)

CONTACT'S SIGNATURE: _____ **DATE:** _____



BIDDER QUALIFICATION STATEMENT

RFQ No. 2019-42

The Bidder's response to this questionnaire will be utilized as part of the City's overall Bid Evaluation to ensure that the Bidder meets, to the satisfaction of the City of Doral, the minimum requirements for participating in this solicitation.

The following minimum experience is required for this project:

ON THE FORM BELOW, BIDDER MUST PROVIDE DETAILS FULFILLING ABOVE MINIMUM EXPERIENCE REQUIREMENTS. IT IS MANDATORY THAT BIDDERS USE THIS FORM IN ORDER TO INDICATE THAT THE MINIMUM EXPERIENCE REQUIREMENT IS MET. NO EXCEPTIONS WILL BE MADE.

1.	Project Name/Location	_____
	Owner Name	_____
	Contact Person	_____
	Contact Telephone No.	_____
	Email Address:	_____
	Yearly Budget/Cost	_____
	Exact Dates of Contract	From: _____ To: _____
	Project Description	_____ _____ _____
2.	Project Name/Location	_____
	Owner Name	_____
	Contact Person	_____
	Contact Telephone No.	_____
	Email Address:	_____



Yearly Budget/Cost _____

Exact Dates of Contract From: _____ To: _____

Project Description

3. Project Name/Location _____

Owner Name _____

Contact Person _____

Contact Telephone No. _____

Email Address: _____

Yearly Budget/Cost _____

Exact Dates of Contract From: _____ To: _____

Project Description

4. Project Name/Location _____

Owner Name _____

Contact Person _____

Contact Telephone No. _____

Email Address: _____

Yearly Budget/Cost _____

Exact Dates of Contract From: _____ To: _____

Project Description



**BUSINESS ENTITY AFFIDAVIT
(VENDOR / BIDDER DISCLOSURE)
RFQ No. 2019-42**

I, _____, being first duly sworn state:

The full legal name and business address of the person(s) or entity contracting or transacting business with the City of Doral ("City") are (Post Office addresses are not acceptable), as follows:

FEDERAL EMPLOYER IDENTIFICATION NUMBER (IF NONE, SOCIAL SECURITY NUMBER)

Name of Entity, Individual, Partners, or Corporation

Doing business as, if same as above, leave blank

STREET ADDRESS SUITE CITY STATE ZIP CODE

OWNERSHIP DISCLOSURE AFFIDAVIT

1. If the contact or business transaction is with a corporation, the full legal name and business address shall be provided for each officer and director and each stockholder who holds directly or indirectly five percent (5%) or more of the corporation's stock. If the contract or business transaction is with a trust, the full legal name and address shall be provided for each trustee and each beneficiary. All such names and addresses are (Post Office addresses are not acceptable), as follows:

<u>Full Legal Name</u>	<u>Address</u>	<u>Ownership</u>
_____	_____	%
_____	_____	%
_____	_____	%

2. The full legal names and business address of any other individual (other than subcontractors, material men, suppliers, laborers, or lenders) who have, or will have, any interest (legal, equitable, beneficial or otherwise) in the contract or business transaction with the City are (Post Office addresses are not acceptable), as follows:



Signature of Affiant _____

_____ Date

Printed Name of Affiant _____

Sworn to and subscribed before me this ____ day of _____, 20 ____.

Personally known _____

OR

Produced identification _____

Notary Public-State of _____

_____ Type of Identification

My commission expires: _____

Printed, typed, or stamped commissioned name of Notary Public



AMERICANS WITH DISABILITIES ACT (ADA)
DISABILITY NONDISCRIMINATION STATEMENT

RFQ No. 2019-42

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

This sworn statement is submitted to the City Of Doral, Florida

by: _____
(print individual's name and title)

for: _____
(print name of entity submitting sworn statement)

whose business address is: _____

and (if applicable) its Federal Employer Number (FEIN) is: _____
(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: _____ - _____ - _____.)

I, being duly first sworn state:

That the above named firm, corporation or organization is in compliance with and agreed to continue to comply with, and assure that any subcontractor, or third party proposer under this project complies with all applicable requirements of the laws listed below including, but not limited to, those provisions pertaining to employment, provision of programs and services, transportation, communications, access to facilities, renovations, and new construction.

The American with Disabilities Act of 1990 (ADA), Pub. L. 101-336, 104 Stat 327, 42 USC 1210112213 and 47 USC Sections 225 and 661 including Title I, Employment; Title II, Public Services; Title III, Public Accommodations and Services Operated by Private entities; Title IV, Telecommunications; and Title V, Miscellaneous Provisions.

The Florida Americans with Disabilities Accessibility Implementation Act of 1993, Section 553.501 553.513, Florida Statutes:

The Rehabilitation Act of 1973, 229 USC Section 794;
The Federal Transit Act, as amended 49 USC Section 1612;
The Fair Housing Act as amended 42 USC Section 3601-3631.

SIGNATURE

Sworn to and subscribed before me this ____ day of _____, 20____.



Personally known _____

OR

Produced Identification _____

Notary Public- State of _____

My commission expires: _____

Printed, typed, or stamped commissioned name of Notary Public



NON-COLLUSION AFFIDAVIT

RFQ No. 2019-42

State of _____)

) SS

County of _____)

_____ being first duly sworn, deposes and says that:

(1) He/She/They is/are the _____

(Owner, Partner, Officer, Representative or Agent) of _____ the BIDDER that has submitted the attached Bid;

(2) He/She/They is/are fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

(3) Such Bid is genuine and is not a collusive or sham Bid;

(4) Neither the said BIDDER nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other BIDDER, firm, or person to submit a collusive or sham Bid in connection with the Work for which the attached Bid has been submitted; or to refrain from bidding in connection with such Work; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any BIDDER, firm, or person to fix any overhead, profit, or cost elements of the Bid or of any other BIDDER, or to fix any overhead, profit, or cost elements of the Bid Price or the Bid Price of any other BIDDER, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Work;

(5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the BIDDER or any other of its agents, representatives, owners, employees or parties in interest, including this affiant.

Signed, sealed and delivered

in the presence of:

By: _____

(Printed Name)

(Title)

ACKNOWLEDGMENT

State of Florida



County of _____

On this _____ day of _____, 20____, before me, the undersigned Notary

Public of The State of Florida, personally appeared

_____ and

(Name(s) of individual(s) who appeared before notary) whose name(s) is/are Subscribed to the within instrument, and he/she/they acknowledge that he/she/they executed it.

WITNESS my hand and official seal.

NOTARY PUBLIC, STATE OF FLORIDA

NOTARY PUBLIC:

SEAL OF OFFICE:

(Name of Notary Public: Print, Stamp, or Type as Commissioned.)

Personally known to me, or

Personally identification:

(Type of Identification Produced)

DID take an oath,

or

DID NOT take an oath.

OPTIONAL INFORMATION:

Type Of Document: Number of Pages: Number of Signatures Notarized:



SWORN STATEMENT PURSUANT TO SECTION 287.133(3)(a)
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES
RFQ No. 2019-42

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted to _____
by _____
for _____ whose business
address _____ is _____ and (if applicable)
its Federal Employer Identification number (FEIN) is _____ (IF the entity had no FEIN,
include the Social Security Number of the individual signing this sworn
statement: _____.

2. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any Bid or Contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

3. I understand that "convicted" or "conviction" as defined in Para. 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, non-jury trial, or entry of a plea of guilty or nolo contendere.

4. I understand that an "affiliate" as defined in Para. 287.133(1)(a), Florida Statutes, means:

1. A predecessor or successor of a person convicted of a public entity crime; or

2. Any entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executors, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prime facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5. I understand that a "person" as defined in Para. 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding Contract and which Bids or applies to Bid on Contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "persons" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of any entity.



6. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Indicate which statement applies.)

_____ Neither the entity submitting this sworn statement, nor any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (Attach a copy of the final order.)

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES, FOR CATEGORY TWO OF ANY, CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

By: _____

(Printed Name) _____

(Title) _____

Sworn to and subscribed before me this _____ day of _____, 20_____

Personally known _____

Or Produced Identification _____

Notary Public - State of _____

My Commission Expires _____

(Type of Identification)

(Printed, typed, or stamped commission name of notary public)



**NO CONTINGENCY AFFIDAVIT
RFQ No. 2019-42**

State of _____
)
)
SS
County of _____)

BEFORE ME, the undersigned authority, personally appeared _____, who, after being duly sworn, deposes and states that all of the facts herein are true:

- (1) He/She/They is/are _____ (Owner, Partner, Officer, Representative or Agent) of _____, the BIDDER that has submitted the attached Bid;

- (2) Bidder warrants that neither it, nor any principal, employee, agent, representative or family member has promised to pay, and Firm has not, and will not; pay a fee the amount of which is contingent upon the City of Doral awarding this contract. Firm warrants that neither it, nor any principal, employee, agent, representative has procured, or attempted to procure, this contract in violation of any of the provisions of the Miami-Dade County conflict of interest and code of ethics ordinances; and

- (3) Further, Firm acknowledges that a violation of this warranty may result in the termination of the contract and forfeiture of funds paid, or to be paid, to the Firm, if the Firm is chosen for performance of the contract.

FURTHER AFFIANT SAYETH NOT

By: _____
Print Name: _____

SWORN TO AND SUBSCRIBED before me this ____ day of _____, 2019 by _____, who is personally known to me or has produced _____ as identification.

Notary Public
State of Florida at Large

My Commission Expires:
My Commission Number:



DRUG-FREE WORKPLACE PROGRAM

RFQ No. 2019-42

The undersigned firm in accordance with Florida statute 287.087 hereby certifies that

_____ does:
(Name of Firm)

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform Employees about the dangers of drug abuse in the workplace, the business' policy of maintaining drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a conditions of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
6. Make good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

VENDOR'S SIGNATURE

NAME OF COMPANY

VENDOR PRINT NAME



COPELAND ACT ANTI-KICKBACK AFFIDAVIT

RFQ No. 2019-42

STATE OF _____ }

} SS:

COUNTY OF _____ }

I, the undersigned, hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employees of the City of Doral, its elected officials, and _____ or its design consultants, as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

By: _____

Title: _____

Sworn and subscribed before this

_____ day of _____, 20____

Notary Public

(Printed Name)

My commission expires: _____



EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

RFQ No. 2019-42

I, _____, _____
(Individual's Name) (Title)

of the _____, do hereby certify that
(Name of Company)

I have read and understand the Compliance with Equal Employment Opportunity requirements set forth under sub-section 2.12.4 of this document.

Attachment of this executed form, as such, is required to complete a valid bid proposal.

Individual's Signature

Date



CONE OF SILENCE CERTIFICATION

RFQ No. 2019-42

I, _____, _____
(Individual's Name) (Title)

of the _____, do hereby certify that
(Name of Company)

I have read and understand the terms set forth under section 1.11 of this document titled Cone of Silence.

Attachment of this executed form, as such, is required to complete a valid bid proposal.

Individual's Signature

Date



TIE BIDS CERTIFICATION

RFQ NO. 2019-42

I, _____, _____
(Individual's Name) (Title)

of the _____, do hereby certify that
(Name of Company)

I have read and understand the requirements/procedures for Tie Bids set forth under sub-section 2.12.7 of this document.

Attachment of this executed form, as such, is required to complete a valid bid proposal.

Individual's Signature

Date



PROPOSER'S CERTIFICATION

RFQ No. 2019-42

I have carefully examined the Request for Proposal, Instructions to Bidders, General and/or Special Conditions, Vendor's Notes, Specifications, proposed agreement and any other documents accompanying or made a part of this Request for Proposal.

I hereby propose to furnish the goods or services specified in the Request for Proposal. I agree that my proposal will remain firm for a period of 365 days in order to allow the City adequate time to evaluate the qualifications.

I certify that all information contained in this proposal is truthful to the best of my knowledge and belief. I further certify that I am duly authorized to submit this proposal on behalf of the firm as its act and deed and that the firm is ready, willing and able to perform if awarded the contract.

I further certify, under oath, that this proposal is made without prior understanding, agreement, connection, discussion, or collusion with any other person, firm or corporation submitting a proposal for the same product or service; no officer, employee or agent of the City of Doral or any other proposer is interested in said proposal; and that the undersigned executed this Proposer's Certification with full knowledge and understanding of the matters therein contained and was duly authorized to do so.

A person or affiliate who has been placed on the convicted vendor list following a conviction for public entity crimes may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to public entity, may not be awarded or perform work as a proposer, supplier, sub-proposer, or consultant under a contract with a public entity, and may not transact business with any public entity in excess of the threshold amount provided in Sec. 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

Name of Business

By:

Sworn to and subscribed before me
this ____ day of _____, 20__

Signature

Name and Title, Typed or Printed

Mailing Address

City, State and Zip Code

Telephone Number

Notary Public

STATE OF _____

My Commission Expires

Acknowledgement of Addendums: Issued Addendums must be signed and submitted with proposal.



RFQ SIGNATURE PAGE FOR SOLE PROPRIETOR OR PARTNERSHIP

RFQ No. 2019-42

The full names and residences of persons, partners or firms interested in the foregoing RFQ, as principals are as follows:

Witness:
(seal)

Bidder:

Firm Name

Signature

Print Name

Title (Sole Proprietor or Partner)

Post Office Address:

County in which fictitious name is registered.

Telephone #



RFQ SIGNATURE PAGE FOR CORPORATION

RFQ No. 2019-42

The officers of the Corporation are as follows:

	<u>Name</u>	<u>Address</u>
President	_____	_____
Vice-President	_____	_____
Secretary	_____	_____
Treasurer	_____	_____
Registered Agent	_____	_____

The full names and residences of stockholders, persons, or firms interested in the foregoing RFQ, as principals, are as follows:

Post Office Address

Bidder

Corporate Name

President's Signature

Is this corporation incorporated in the State of Florida? ___ Yes ___ No

Attest: _____

Secretary

If no, give address of principle place of business:



EXHIBIT "A"

Minimum Insurance Requirements

EXHIBIT A
MINIMUM INSURANCE REQUIREMENTS

Without limiting any of the other obligations or liabilities of DESIGN/BUILD CONTRACTOR, DESIGN/BUILD CONTRACTOR shall provide, pay for, and maintain in force until all of its Work to be performed under this Contract has been completed and accepted by City (or for such duration as is otherwise specified hereinafter), the insurance coverages set forth as follows:

Workers' Compensation insurance to apply for all employees in compliance with the Statutory "Workers' Compensation Law" of the State of Florida and all applicable federal laws. In addition, the policy(ies) must include:

- Waiver of subrogation
- Statutory Limits of Liability per State of Florida

Employers' Liability with a limit of **One Million Dollars (\$1,000,000.00) Dollars** each bodily injury caused by an accident, each accident. **One Million Dollars (\$1,000,000.00) Dollars** each bodily injury caused by disease, each employee. **One Million Dollars (\$1,000,000.00) Dollars** each bodily injury caused by disease, policy limit.

Workers Compensation insurance is required for all persons fulfilling this contract, whether employed, contracted, temporary or subcontracted.

Commercial General Liability (CGL) with minimum limits of **Five Million Dollars (\$5,000,000.00)** per occurrence, combined single limit for Bodily Injury Liability and Property Damage Liability. General Aggregate Limit of **Five Million Dollars (\$5,000,000.00)**. Coverage must be afforded on a form no more restrictive than the latest edition of the Comprehensive General Liability policy, without restrictive endorsements, as filed by the Insurance Services Office, and must include:

- Products and/or Completed Operations for contracts with an Aggregate Limit of One Million Dollars (\$3,000,000.00) per project. DESIGN/BUILD CONTRACTOR shall maintain in force until at least three years after completion of all Work required under the Contract, coverage for Products and Completed Operations, including Broad Form Property Damage.
- Personal and Advertising Injury with an aggregate limit of **One Million Dollars (\$1,000,000)**.
- CGL Required Coverages
 - Employees included as insured
 - Independent DESIGN/BUILD CONTRACTORs Coverage
 - Contractual Liability
 - Waver of Subrogation in favor of City



- Premises and/or Operations
- Explosion, Collapse and Underground Hazards
- Loading and Unloading
- Mobile Equipment (DESIGN/BUILD CONTRACTOR's Equipment) whether owned, leased, borrowed or rented by DESIGN/BUILD CONTRACTOR or employees of the DESIGN/BUILD CONTRACTOR.

City is to be included as an **Additional Insured** with respect to liability arising out of operations performed for City by or on behalf of DESIGN/BUILD CONTRACTOR or acts or omissions of DESIGN/BUILD CONTRACTOR in connection with general supervision of such operation.

Business Automobile Liability with minimum limits of **One Million Dollars (\$2,000,000.00)** per occurrence combined single limit for Bodily Injury Liability and Property Damage Liability. Coverage must be afforded on a form no more restrictive than the latest edition of the Business Automobile Liability policy, without restrictive endorsements, as filed by the Insurance Services Office, and must include:

- Owned Vehicles
- Hired and Non-Owned Vehicles
- Employers' Non-Ownership
- Employees included as insured
- City of Doral as Additional Insured

Umbrella/Excess Liability (Excess Follow Form) can be utilized to provide the required limits. Coverage shall be "following form" and shall not be more restrictive than the underlying insurance policy coverages, including all special endorsements and City as Additional Insured status.

Professional Liability/Errors & Omissions

Licensed design professional work such as that provided by architects and engineers shall maintain professional liability or malpractice or errors or omissions insurance with limits of \$2,000,000 per occurrence.

If claims made, retro date applies prior to contract inception.

Coverage is to be maintained and applicable for a minimum of 3 years following contract completion.

Contractors Pollution Liability Insurance

The DESIGN/BUILD CONTRACTOR shall maintain Pollution Liability Insurance for bodily injury, property damage, defense, and cleanup as a result of pollution conditions arising from



contractors' operations on City premises, with limits of liability of \$1,000,000. This insurance shall be maintained for at least one year after completion of the construction and acceptance of any project covered by this Agreement. If claims made coverage is provided, retro date must apply prior to contract inception.

Builders' Risk Insurance

Builders' Risk covering the full value of property and installation materials during the course of construction is required. Special Form perils shall be covered, including Windstorm and Flood. Contractor is responsible for deductibles.

Subcontractors' Compliance: It is the responsibility of the contractor to ensure that all subcontractors comply with all insurance requirements.

All above coverage must remain in force and Certificate of Insurance on file with City without interruption for the duration of this agreement. Policies shall provide the City of Doral with 10 days' written notice of cancellation or material change from the insurer. If the policies do not contain such a provision, it is the responsibility of the Contractor to provide such notice within 10 days of the change or cancellation.

Certificate Holder: City of Doral, Florida
8401 NW 53rd Terrace
Doral, FL 33166

DESIGN/BUILD CONTRACTOR shall furnish the City the Certificates of Insurance or endorsements evidencing the insurance coverage specified above within fifteen (15) calendar days after notification of award of the Contract. The required Certificates of Insurance shall name the types of policies provided, refer specifically to this Contract, and state that such insurance is as required by this Contract.

The official title of the Owner is the City of Doral, Florida. This official title shall be used in all insurance documentation.

Companies authorized to do business in the State of Florida with the following qualifications shall issue all insurance policies required above:

The company must be rated no less than "A-" as to management, and no less than "Class V" as to Financial Strength, by the latest edition of Best's Insurance Guide, published by A.M. Best Company, or its equivalent.

Coverage and Certificates of Insurance are subject to review and verification by City of Doral Risk Management. City reserves the right but not the obligation to reject any insurer providing coverage due to poor or deteriorating financial condition. The City reserves the right to amend insurance requirements in order to sufficiently address the scope of services. These insurance



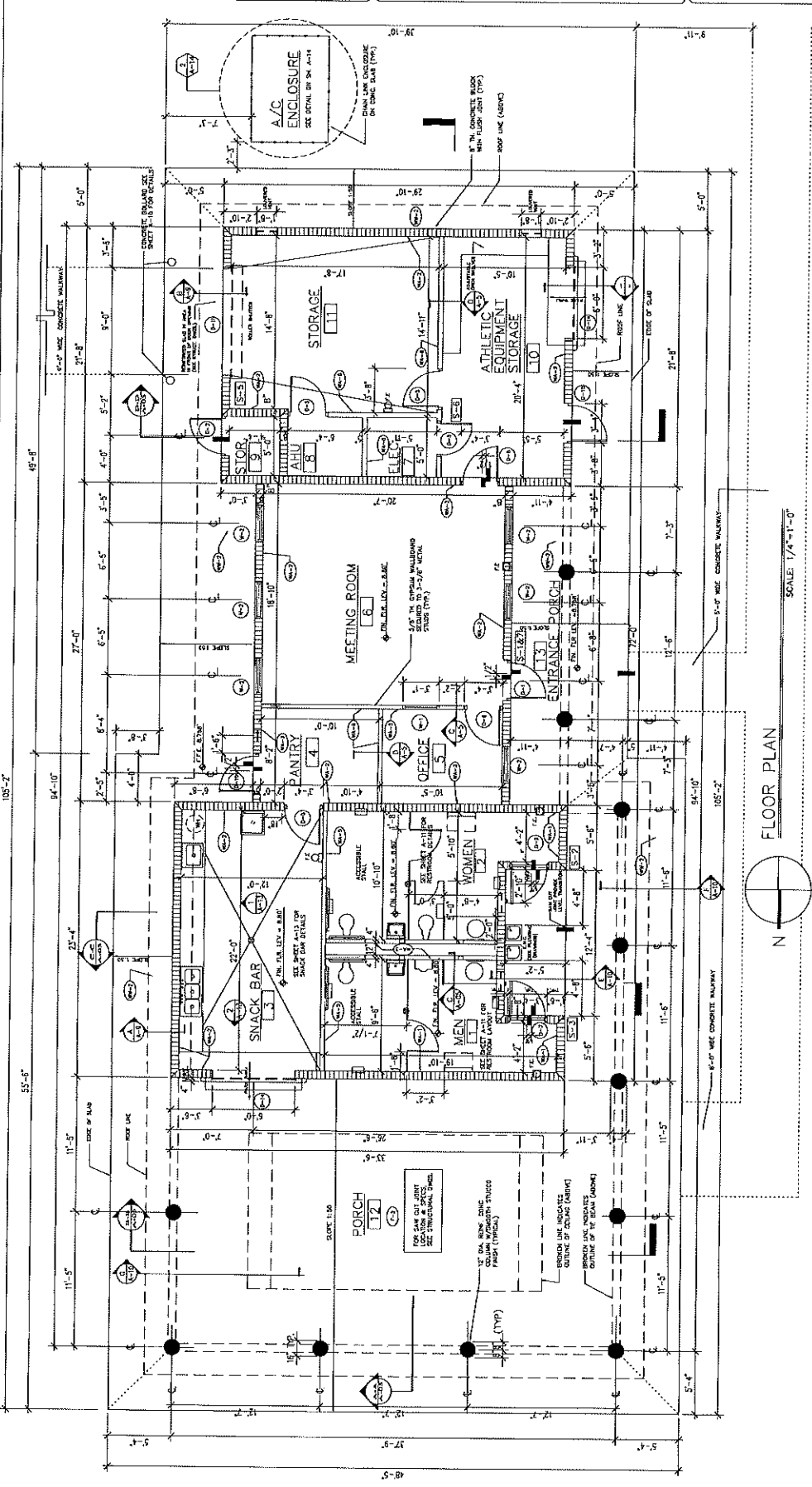
requirements shall not limit the liability of the Contractor/Vendor. The City does not represent these types or amounts of insurance to be sufficient or adequate to protect the Contractor/Vendor's interests or liabilities but are merely minimums.

END OF SECTION



EXHIBIT "B"

Record
Drawings



RECORD DRAWINGS
 THESE DRAWINGS HAVE BEEN REVISED AS OF THE INDICATED DATE TO REFLECT THOSE CHANGES MADE DURING CONSTRUCTION ONLY TO THE EXTENT THAT WAS NOTICED IN LETTER COMMUNIQUE SUBMITTED BY THE CONTRACTORS.
 DATE: MARCH 28, 2006
 ARCHITECT OF RECORD: Jimmie Allen, RA

ENCLOSED AREA	1,952 S.F.
OPEN AREA	1,202 S.F.
TOTAL AREA	3,154 S.F.

- NOTES:**
1. TYPES OF MATERIAL TO BE STORED IN STORAGE ROOMS (ATHLETIC STORAGE #10 AND STORAGE #11) ARE NON-COMBUSTIBLE/CHEMICAL MATERIALS SUCH AS OFFICE SUPPLIES, CHAIRS, TABLE GAMES, BATS & BALLS.
 2. TYPE OF MATERIAL TO BE STORED IN STORAGE #9 IS GASOLINE CLASS 1, DIVISION 2.
 3. CONCESSION SPACE (SNACK BAR) PROVIDED WILL BE OCCUPIED ONLY BY A STATE LICENSED VENDOR ON AN INDIVIDUAL BASIS. NO FOOD PREPARATION WILL OCCUR IN THIS SPACE.
 4. SEE SHEET A-13 FOR SNACK BAR CABINET DETAILS.
 5. SEE SHEET A-15 & A-16 FOR WINDOW AND DOOR SCHEDULE.
 6. SEE SHEET A-18 FOR SIGN SCHEDULE.
 7. SEE SHEET A-19 FOR FINISHES SCHEDULE.

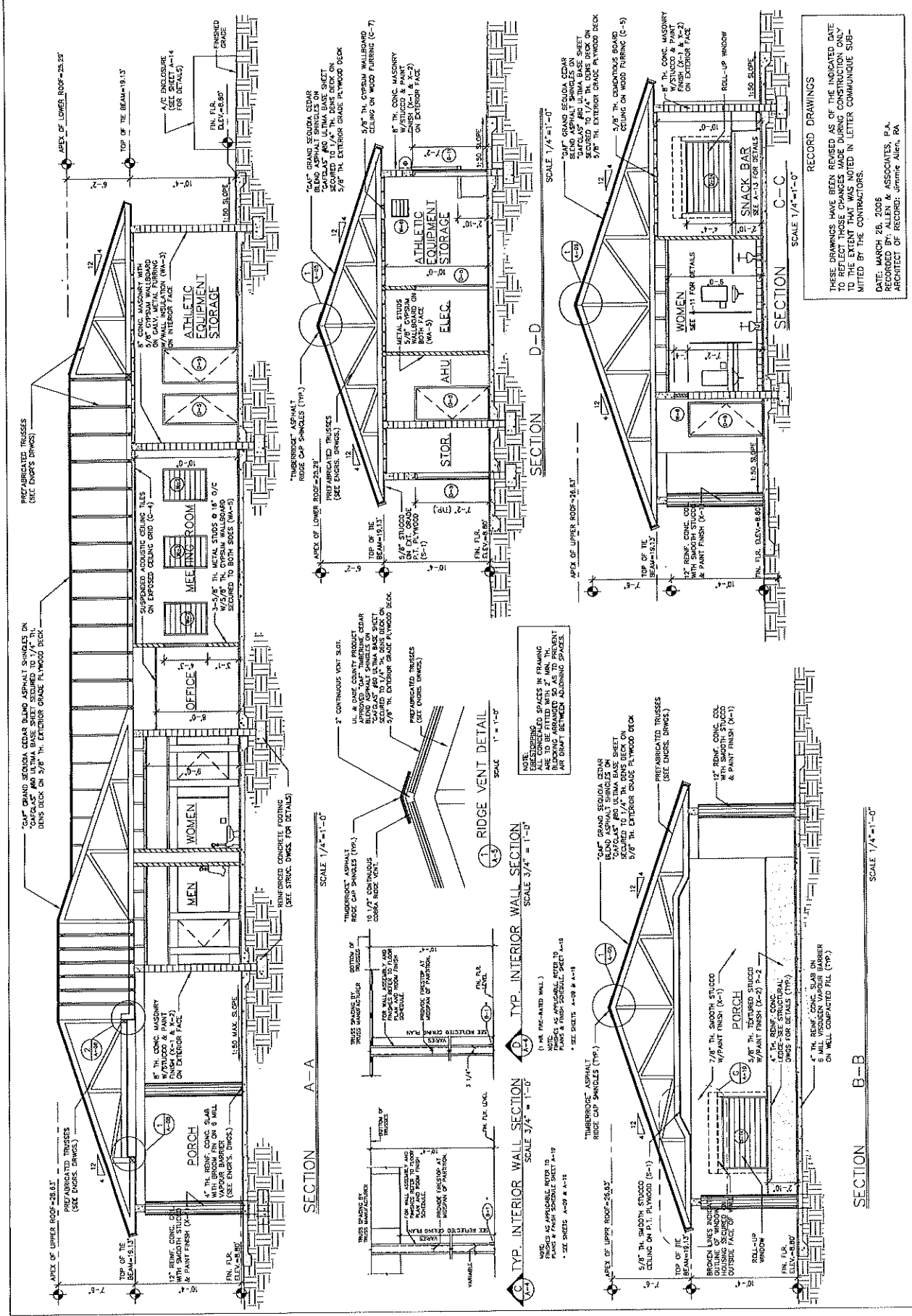
RESTROOM CALCULATIONS (BASED ON PROPOSED FIELD CENTER)

ROOM	AREA/SQFT PER PERSON	PERSON COUNT
MEETING ROOM	304/73	28
OFFICE	82/700	1
TOTAL OCCUPANT LOAD		29


PUBLIC ASSEMBLY FOR "B" OCCUPANCY, TABLE 46 M-2

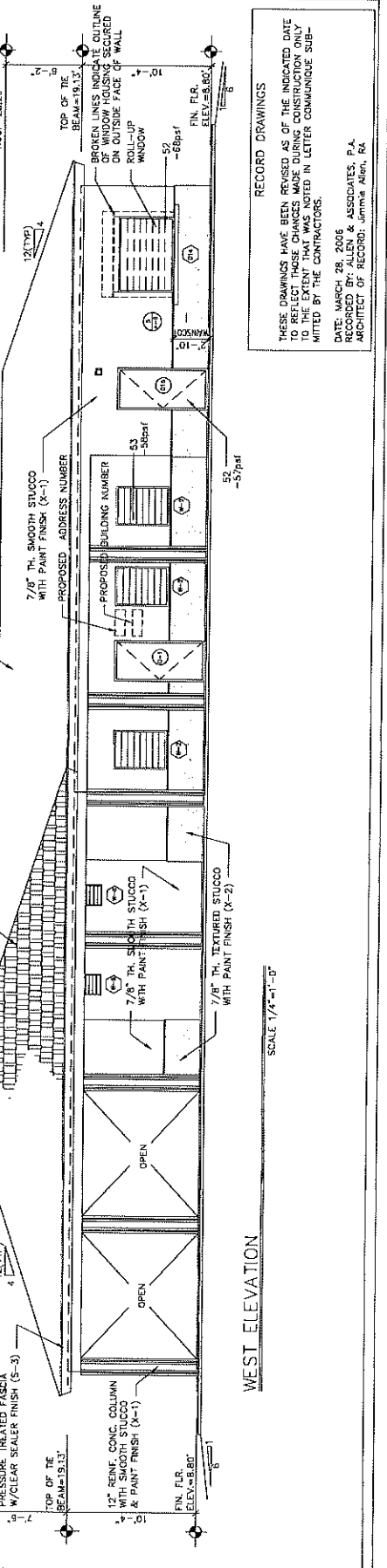
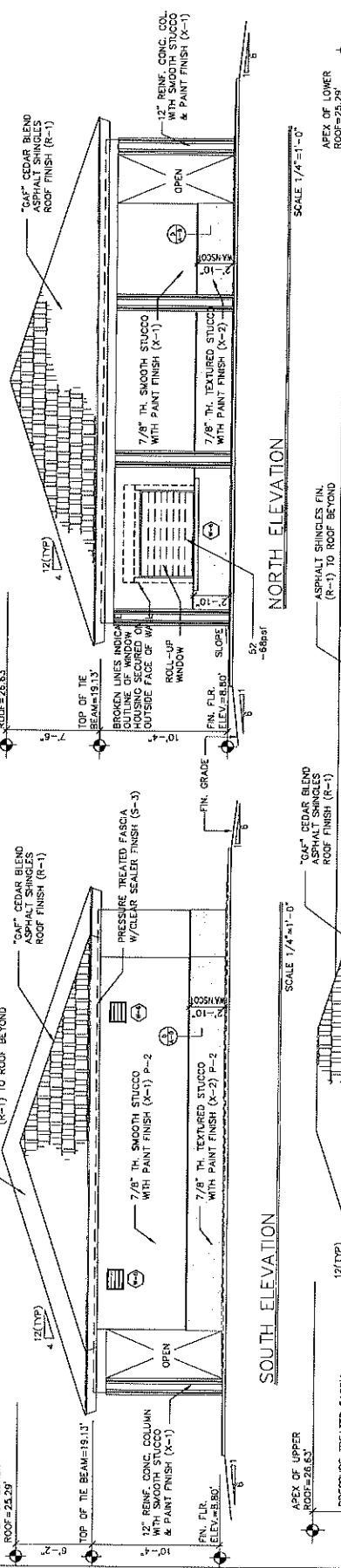
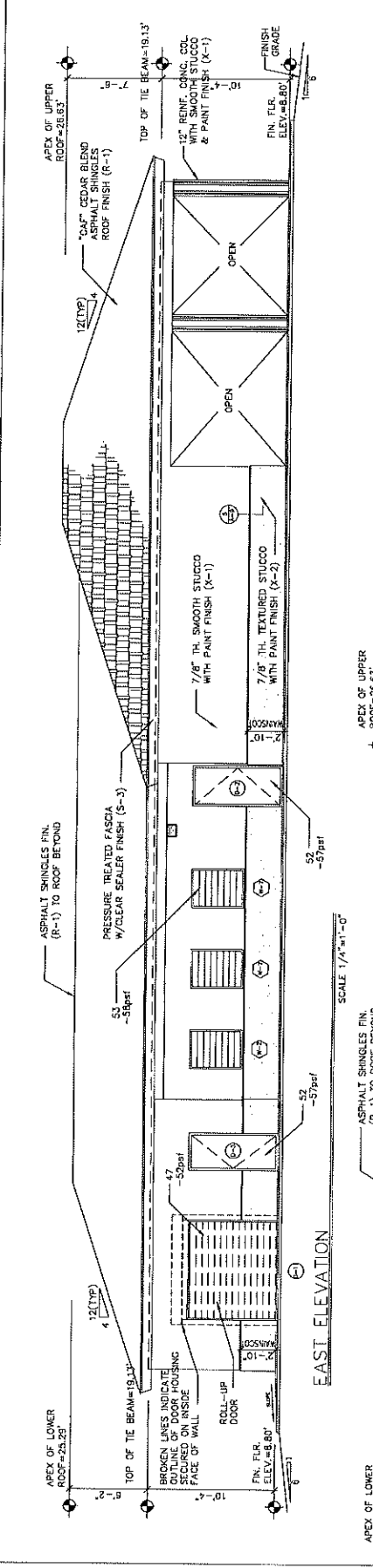
PERSON COUNT	REQUIRED	PROVIDED
MALES FROM 1-100	1 WATER CLOSET	3 WATER CLOSETS
FEMALES FROM 1-100	3 WATER CLOSETS	2 WATER CLOSETS
OCCUPANT LOAD: 29	15 MALES & 15 FEMALES	

FIFTY PERCENT (50%) OF TOILETS ARE PROVIDED FOR MEN, TWENTY (20%) TOILETS MUST BE PROVIDED FOR WOMEN.
 MINIMUM TOILET SCHEDULE: 4613.19 (C) 1 FEMALE, 200 PERSONS = 1



RECORD DRAWINGS
 THESE DRAWINGS HAVE BEEN REVISED AS OF THE INDICATED DATE TO REFLECT THOSE CHANGES MADE DURING CONSTRUCTION ONLY TO THE EXTENT THAT WAS NOTED IN LETTER COMMUNIQUE SUBMITTED BY THE CONTRACTORS.
 DATE: MARCH 26, 2006
 RECORDED BY: ALLEN & ASSOCIATES, P.A.
 ARCHITECT OF RECORD: Jammie Allen, RA

Project Title: ELEVATIONS FIELD CENTER DORAL MEADOW PARK 116 AVENUE NW AT HW 56 STREET 275 NW 2nd STREET, 4th FLOOR, MIAMI, FL 33128		 Miami-Dade County Park and Recreation Department	
Project No: 09112	Date: JULY 2001 (AS NOTED)	Revision No: 15	Scale: 1/4" = 1'-0"
Prepared by: JAS	Checked by: JAS	Approved by: JAS	Drawn by: JAS



RECORD DRAWINGS

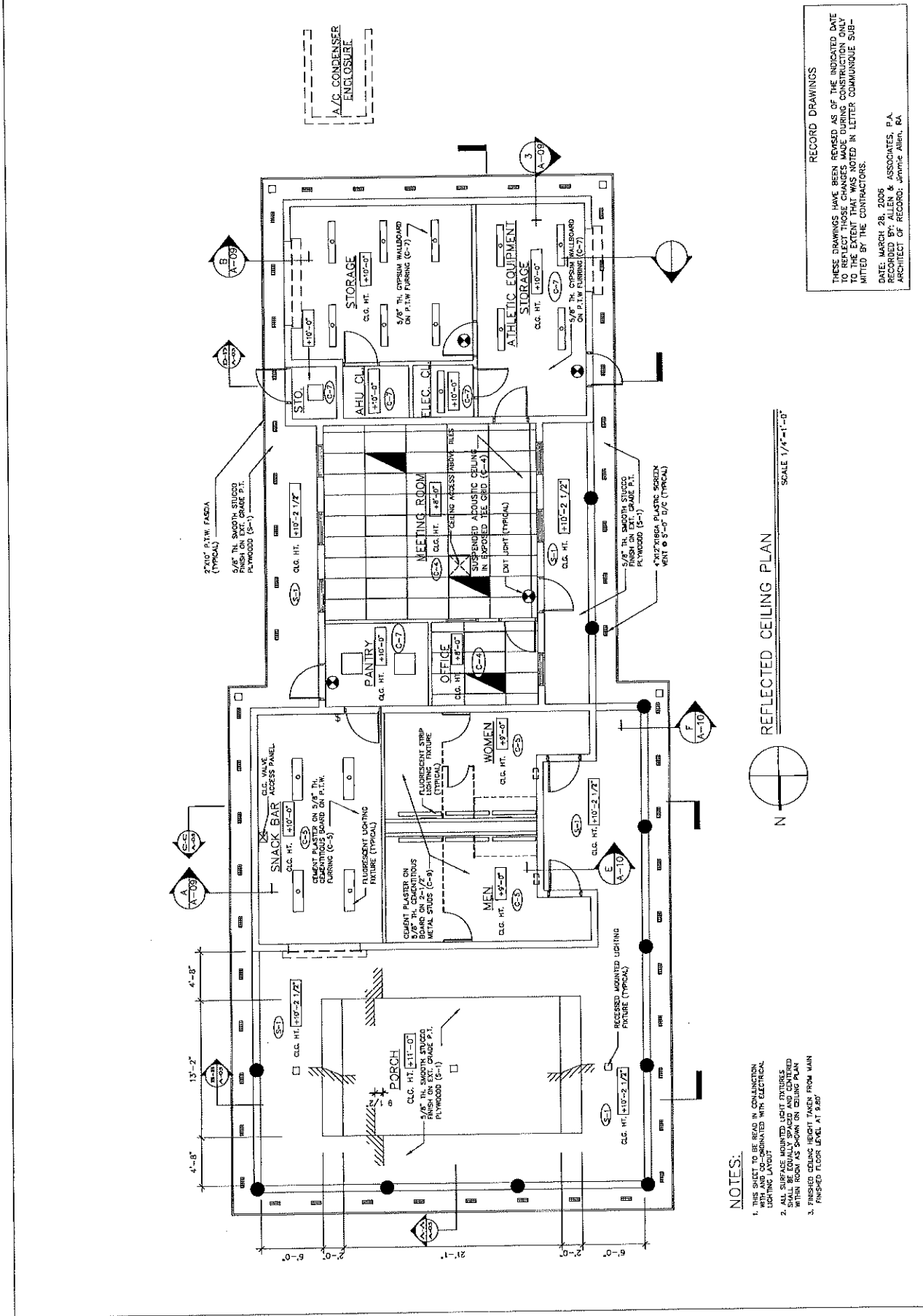
THESE DRAWINGS HAVE BEEN REVISED AS OF THE INDICATED DATE TO REFLECT THOSE CHANGES MADE DURING CONSTRUCTION ONLY. ANY CHANGES NOT INDICATED IN LETTER COMMUNIQUE SUBMITTED BY THE CONTRACTORS.

DATE: MARCH 28, 2006
 PREPARED BY: JAS
 ARCHITECT OF RECORD: ALLEN & ASSOCIATES, P.A.
 ARCHITECT OF RECORD: JIMMIE ALLEN, JR.

Project Title	DORAL MEADOW PARK FIELD CENTER 116 AVENUE NW AT NW 58 STREET
Project No.	99112
Client	Miami-Dade County Park and Recreation Department
Address	275 NW 2nd STREET, 4TH FLOOR, MIAMI, FL 33128
Scale	1/4" = 1'-0"
Author	JAC
Checker	LM
Designer	AA
Revision	

Revision	Description
1	ISSUE FOR PERMIT
2	ISSUE FOR CONSTRUCTION
3	ISSUE FOR RECORD
4	ISSUE FOR AS-BUILT
5	ISSUE FOR ARCHIVE

Project Title	DORAL MEADOW PARK FIELD CENTER 116 AVENUE NW AT NW 58 STREET
Project No.	99112
Client	Miami-Dade County Park and Recreation Department
Address	275 NW 2nd STREET, 4TH FLOOR, MIAMI, FL 33128
Scale	1/4" = 1'-0"
Author	JAC
Checker	LM
Designer	AA
Revision	



RECORD DRAWINGS

THESE DRAWINGS HAVE BEEN REVISED AS OF THE INDICATED DATE TO REFLECT THOSE CHANGES MADE DURING CONSTRUCTION ONLY TO THE EXTENT THAT WAS NOTED IN LETTER COMMUNIQUE SUBMITTED BY THE CONTRACTORS.

DATE: MARCH 28, 2005
 RECORDED BY: ALLEN & ASSOCIATES, P.A.
 ARCHITECT OF RECORD: Jeanne Allen, RA

- NOTES:
1. THIS SHEET TO BE READ IN CONJUNCTION WITH AND CO-ORDINATED WITH ELECTRICAL LIGHTING LAYOUT.
 2. ALL SURFACE MOUNTED LIGHT FIXTURES WITHIN ROOM AS SHOWN ON CEILING PLAN.
 3. FINISHED CEILING HEIGHT TAKEN FROM MAIN FINISHED FLOOR LEVEL AT 5.87'

REFLECTED CEILING PLAN

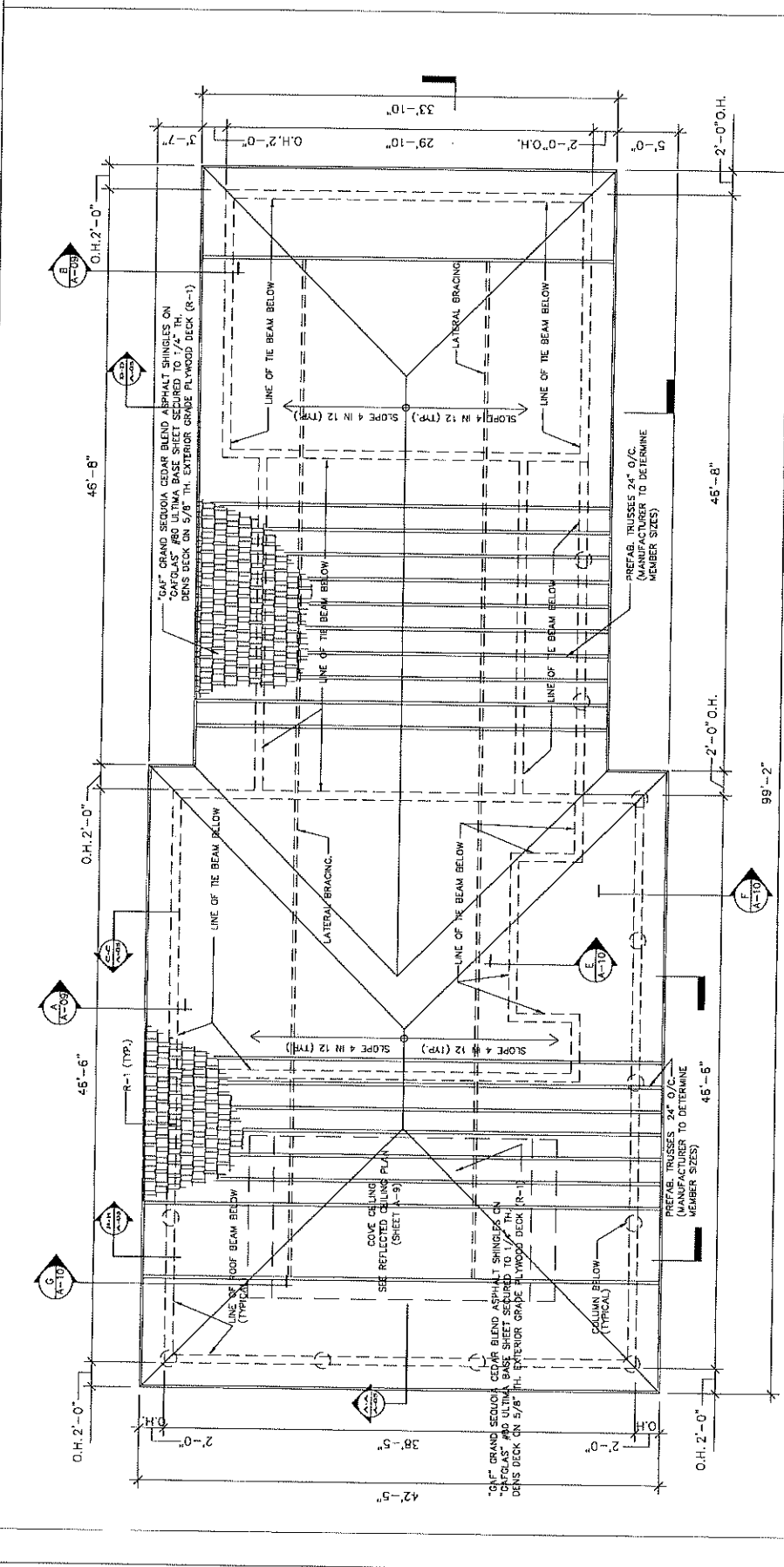
SCALE 1/4" = 1'-0"

Project No.	2549
Sheet No.	1
Scale	1/4" = 1'-0"
Date	JULY 2001 (AS BUILT)
Drawn by	ALLEN & ASSOCIATES, P.A.
Checked by	ALLEN & ASSOCIATES, P.A.
Design	ALLEN & ASSOCIATES, P.A.
Project	ROOF PLAN

Project Title	DORAL MEADOW PARK
Address	116 AVENUE NW AT NW 58 STREET
City	MIAAMI
State	FL
Zip	33128
Client	Park and Recreation Department
Contract No.	
Design No.	
Drawn By	ALLEN & ASSOCIATES, P.A.
Checked By	ALLEN & ASSOCIATES, P.A.
Design	ALLEN & ASSOCIATES, P.A.

255 NW 2nd STREET, 4TH FLOOR, MIAMI, FL 33128
 Miami-Dade County
 Park and Recreation Department

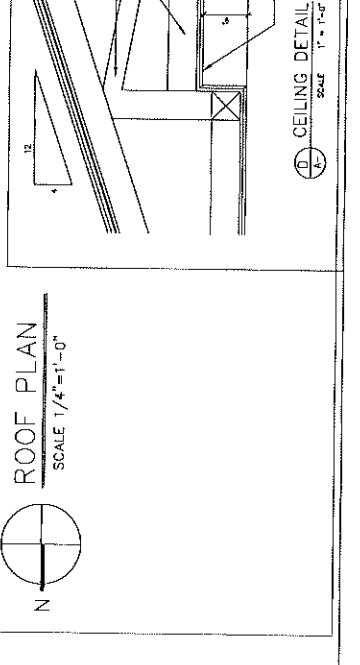
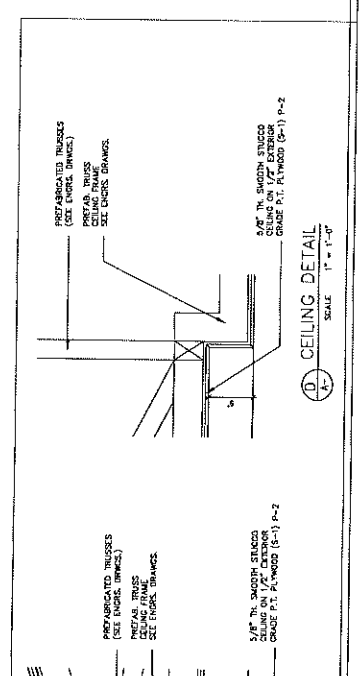
Project Title	DORAL MEADOW PARK
Address	116 AVENUE NW AT NW 58 STREET
City	MIAAMI
State	FL
Zip	33128
Client	Park and Recreation Department
Contract No.	
Design No.	
Drawn By	ALLEN & ASSOCIATES, P.A.
Checked By	ALLEN & ASSOCIATES, P.A.
Design	ALLEN & ASSOCIATES, P.A.



RECORD DRAWINGS

THESE DRAWINGS HAVE BEEN REVISED AS OF THE INDICATED DATE TO REFLECT THOSE CHANGES MADE DURING CONSTRUCTION ONLY. ANY CHANGES MADE TO THIS DRAWING WAS NOTED IN LETTER COMMUNIQUE SUBMITTED BY THE CONTRACTORS.

DATE: MARCH 28, 2006
 RECORDED BY: ALLEN & ASSOCIATES, P.A.
 ARCHITECT OF RECORD: Jimmie Allen, Inc.

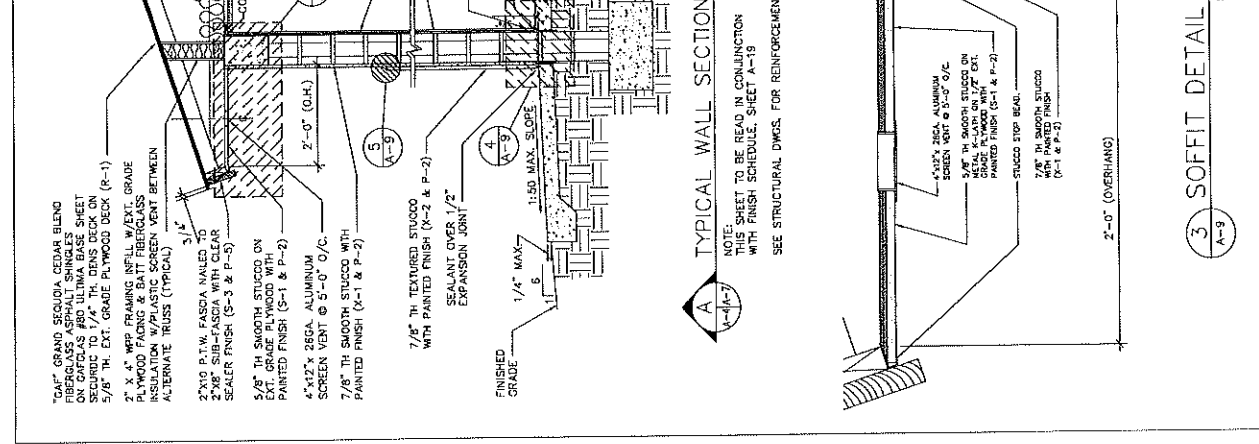
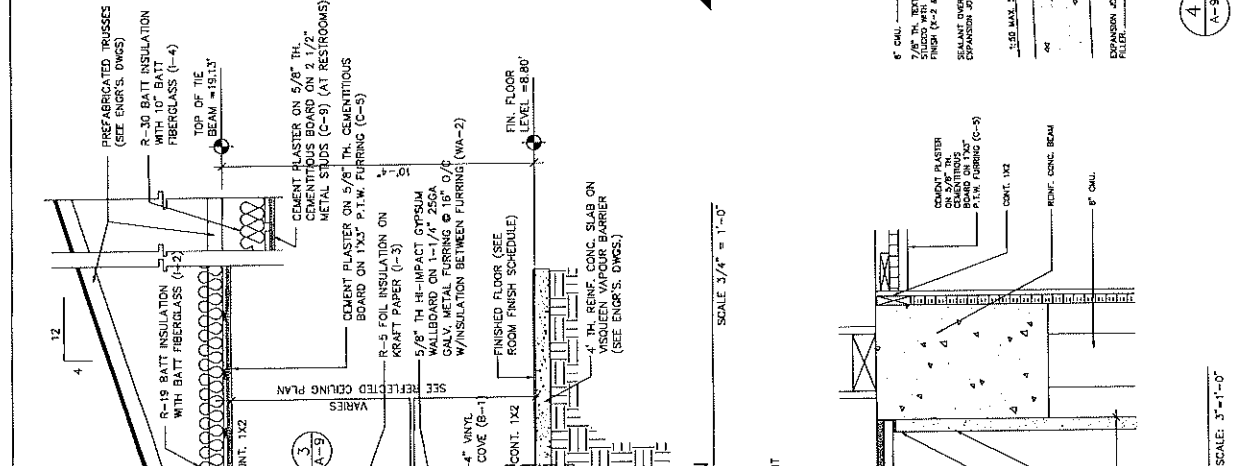
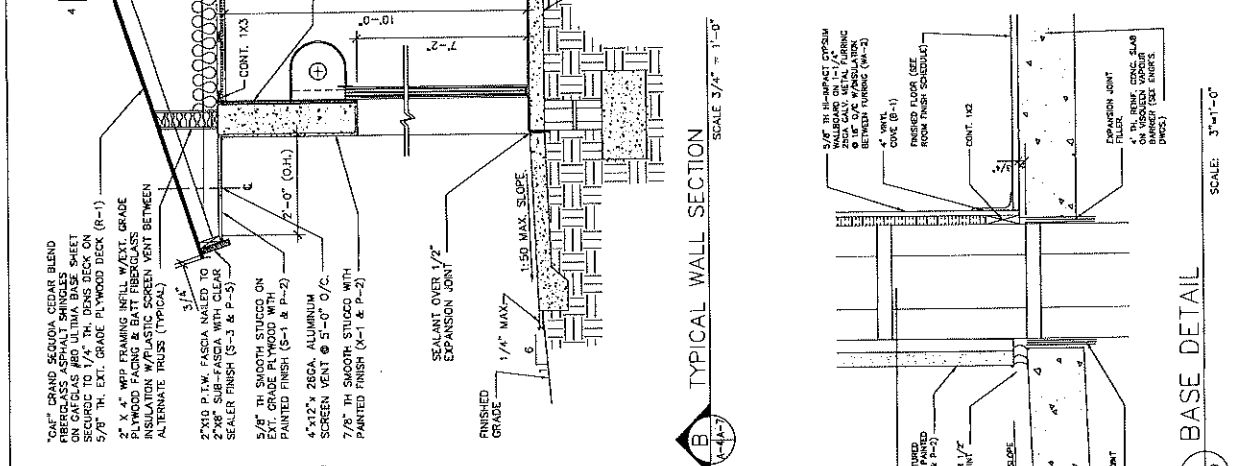
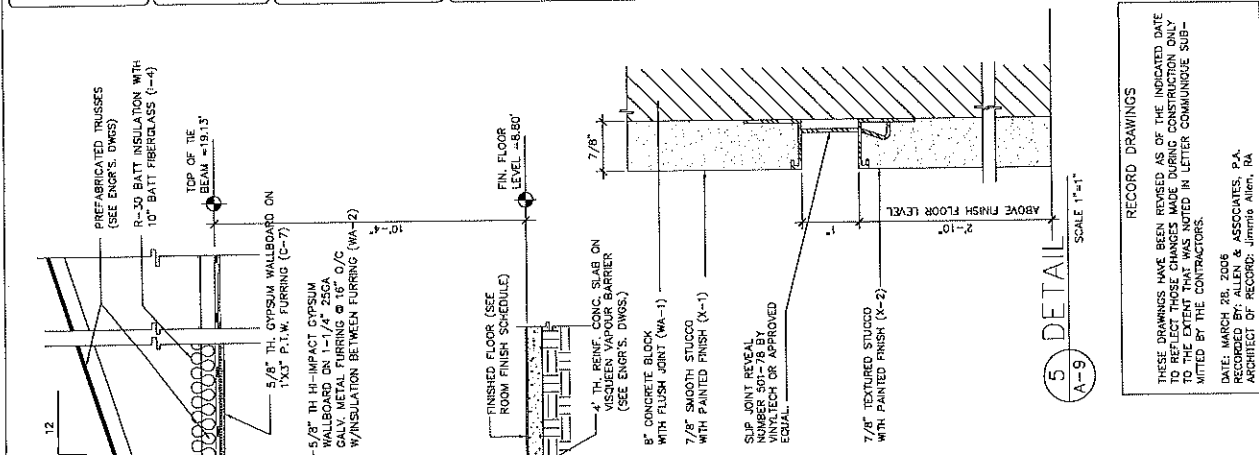


Project Title	DORAL MEADOW PARK FIELD CENTER
Location	116 AVENUE NW AT NW 58 STREET
Client	Park and Recreation Department
Address	275 NW 2nd STREET, 4th FLOOR, MIAMI, FL 33128

Project No.	2843
Sheet No.	AS NOTED
Date	MAY 2001
Drawn By	A-COS
Checked By	ALLEN
Approved By	ALLEN

Architect: ALLEN & ASSOCIATES, P.A.
 116 AVENUE NW AT NW 58 STREET
 MIAMI, FL 33128
 Project Title: DORAL MEADOW PARK
 FIELD CENTER
 116 AVENUE NW AT NW 58 STREET
 Park and Recreation Department
 275 NW 2nd STREET, 4th FLOOR, MIAMI, FL 33128

Project Title	DORAL MEADOW PARK FIELD CENTER
Location	116 AVENUE NW AT NW 58 STREET
Client	Park and Recreation Department
Address	275 NW 2nd STREET, 4th FLOOR, MIAMI, FL 33128



RECORD DRAWINGS
 THESE DRAWINGS HAVE BEEN REVISED AS OF THE INDICATED DATE TO REFLECT THOSE CHANGES MADE DURING CONSTRUCTION ONLY TO THE EXTENT THAT WAS NOTED IN LETTER COMMUNIQUE SUBMITTED BY THE CONTRACTORS.
 DATE: MARCH 28, 2008
 RECORDED BY: ALLEN & ASSOCIATES, P.A.
 ARCHITECT OF RECORD: Jimmie Allen, P.A.

SCALE: 3/4" = 1'-0"
 4 BASE DETAIL

SCALE: 3/4" = 1'-0"
 3 SOFFIT DETAIL

SCALE: 3/4" = 1'-0"
 5 DETAIL

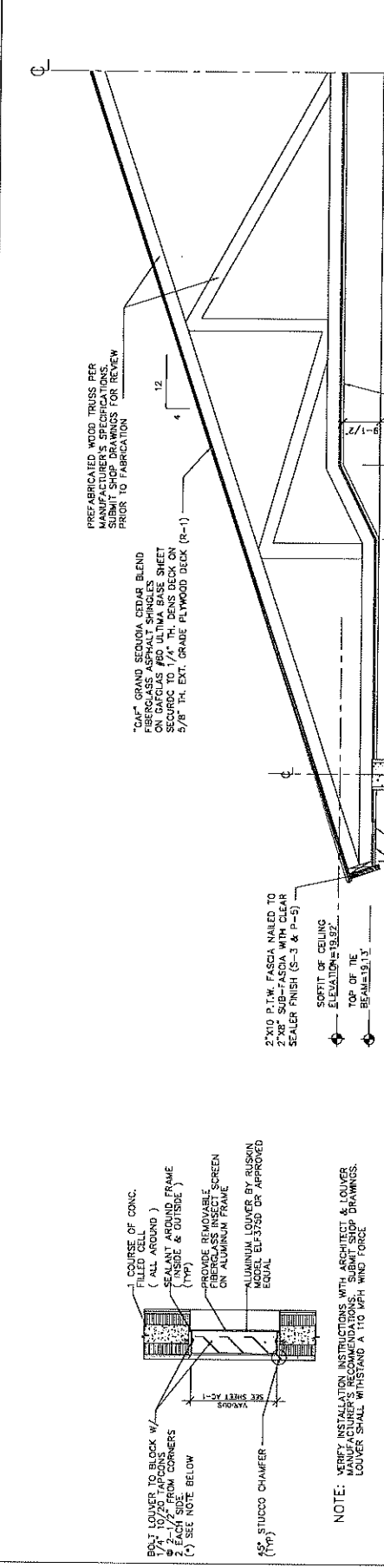
NOTE: THIS SHEET TO BE READ IN CONJUNCTION WITH FINISH SCHEDULE, SHEET A-19
 SEE STRUCTURAL DWGS. FOR REINFORCEMENT

Project No. 2012	Scale	Sheet
Date	Revision	No.
Rev. 1	0	A-10
Rev. 2	1	11
Rev. 3	2	12
Rev. 4	3	13
Rev. 5	4	14
Rev. 6	5	15
Rev. 7	6	16
Rev. 8	7	17
Rev. 9	8	18
Rev. 10	9	19
Rev. 11	10	20
Rev. 12	11	21
Rev. 13	12	22
Rev. 14	13	23
Rev. 15	14	24
Rev. 16	15	25
Rev. 17	16	26
Rev. 18	17	27
Rev. 19	18	28
Rev. 20	19	29
Rev. 21	20	30

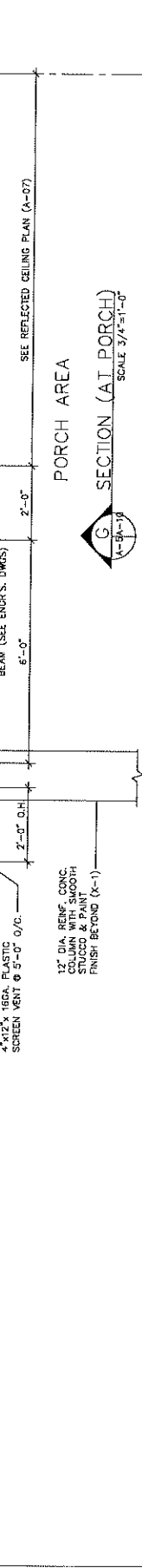
275 NW 2nd Street, 4th Floor, Miami, FL 33136
 Park and Recreation Department
 Miami-Dade County

Drawing Title: CONSTRUCTION DETAILS
 115 AVENUE NW AT NW 58 STREET
 FIELD CENTER
 DORAL MEADOW PARK

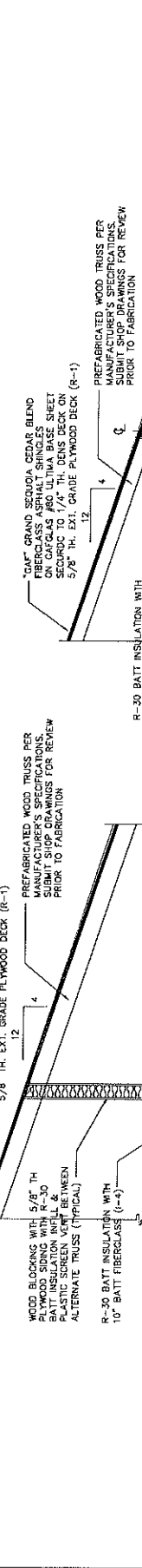
Project No. 2012
 Date: March 28, 2008
 Record No. 2870
 Architect: Allen & Associates, P.A.
 Architect of Record: Jimmie Allen, RA



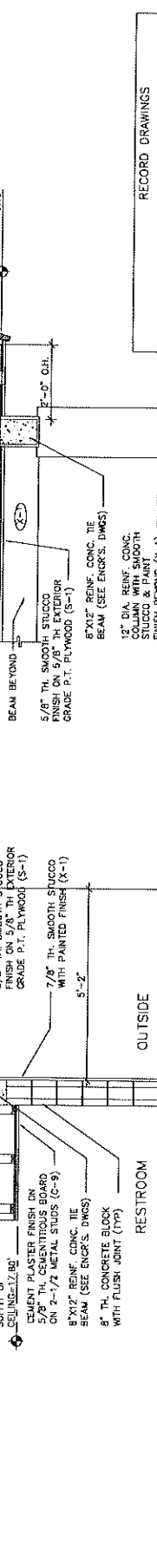
(W-6) TYPICAL LOUVER INSTALLATION
 1-1/2" x 1'-0"



PORCH AREA
 G SECTION (AT PORCH)
 SCALE 3/4"=1'-0"

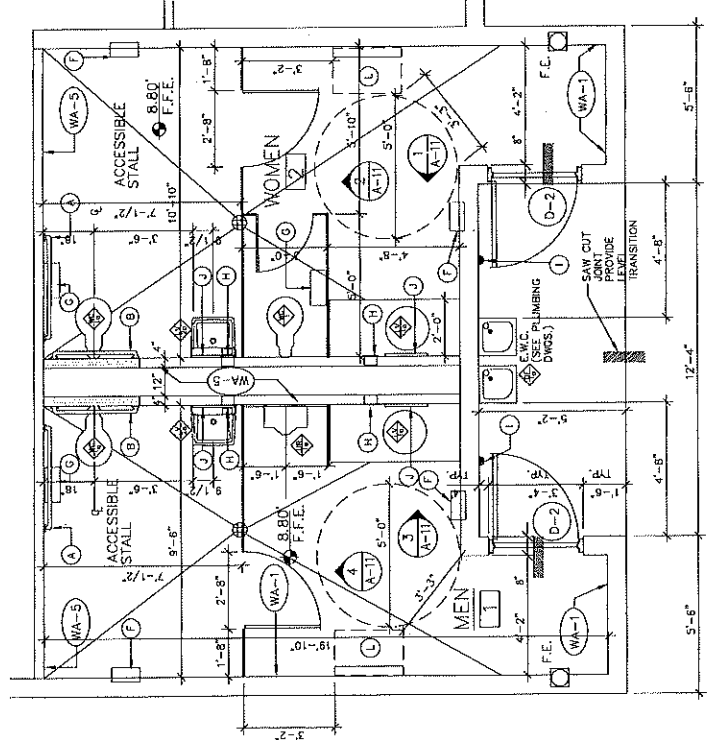
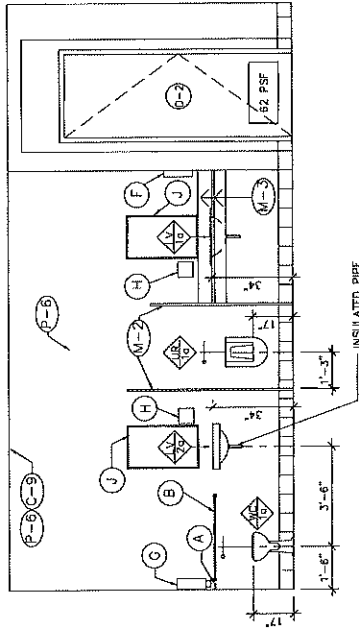
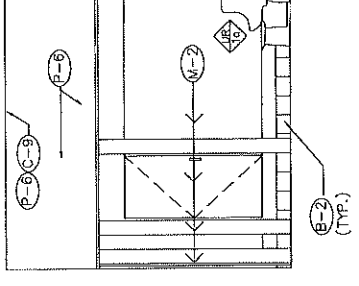
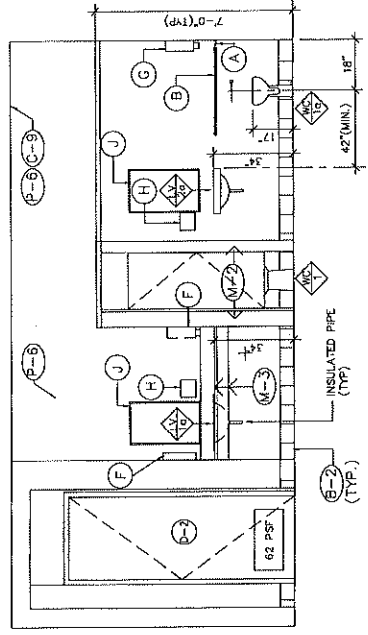
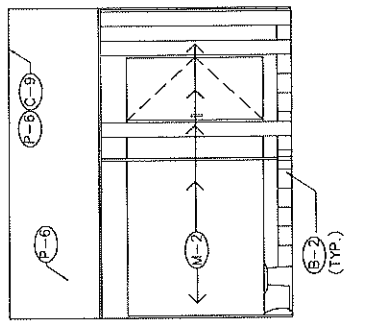


F SECTION
 SCALE 3/4"=1'-0"



E SECTION
 SCALE 3/4"=1'-0"

RECORD DRAWINGS
 THESE DRAWINGS HAVE BEEN REVISED AS OF THE INDICATED DATE TO REFLECT THOSE CHANGES MADE DURING CONSTRUCTION ONLY. NOT TO THE EXTENT THAT WAS NOTED IN LETTER COMMUNIQUE SUBMITTED BY THE CONTRACTORS.
 DATE: MARCH 28, 2008
 RECORDED BY: ALLEN & ASSOCIATES, P.A.
 ARCHITECT OF RECORD: Jimmie Allen, RA



NOTE:
FOR ADDITIONAL INFORMATION SEE SHEET P-3, PLUMBING FIXTURE SCHEDULE

RECORD DRAWINGS

THESE DRAWINGS HAVE BEEN REVISED AS OF THE INDICATED DATE TO REFLECT THOSE CHANGES MADE DURING CONSTRUCTION ONLY. ANY REVISIONS MADE WILL BE INDICATED IN LETTER COMMUNIQUE SUBMITTED BY THE CONTRACTORS.

DATE: MARCH 20, 2006
 RECORDED BY: ALLEN & ASSOCIATES, P.A.
 ARCHITECT OF RECORD, JIMMIE ALLEN, P.A.

Project Title: DORAL MEADOW PARK
 FIELD CENTER
 116 AVENUE NW AT NW 56 STREET
 TOILET ACCESSORIES SCHEDULE &
 ADA REQUIREMENTS

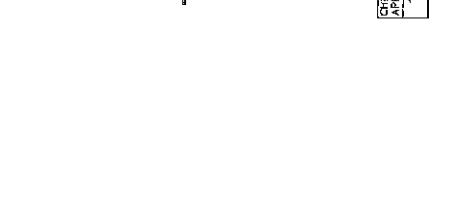
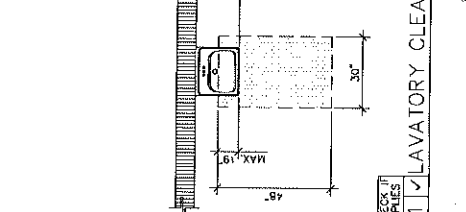
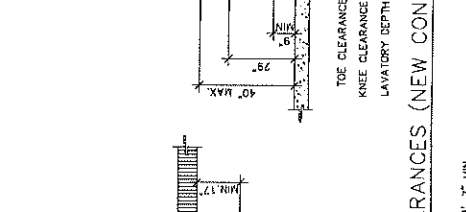
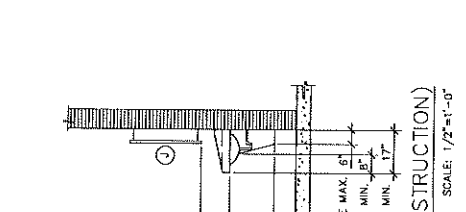
275 N.W. 2nd STREET, 4TH FLOOR, MIAMI, FL 33108
 Miami-Dade County
 Park and Recreation Department

Project # 99112
 Date: JULY 2005
 Drawn: JCS
 Checked: JCS
 Date: JULY 2005
 Pinned: JCS
 Date: JULY 2005
 Pinned: JCS

Project # 99112
 Date: JULY 2005
 Drawn: JCS
 Checked: JCS
 Date: JULY 2005
 Pinned: JCS

TOILET ACCESSORIES SCHEDULE

ITEM	DESCRIPTION	MANUFACTURER AND MODEL NO. OF APPROVED EQUAL	QTY.	INSTALLING HEIGHT FROM FINISHED FLOOR	REMARKS
42	STAINLESS STEEL CRAB BAR WITH CONCEALED B-SHAPED WALL ANCHORS (SATIN FINISH FLANGE)	BOBROCK® B-5000-42 B-5000-42 B-5000-42		33"-36" TO CENTER LINE 12" FROM CORNER (MAX.)	
43	STAINLESS STEEL CRAB BAR WITH CONCEALED B-SHAPED WALL ANCHORS (SATIN FINISH FLANGE)	BOBROCK® B-0208-36 B-0208-36 B-0208-36		33"-36" TO CENTER LINE 9" FROM CORNER (MAX.)	
44	STAINLESS STEEL CRAB BAR WITH CONCEALED B-SHAPED WALL ANCHORS (SATIN FINISH FLANGE)	BOBROCK® B-6681 B-6681 B-6681		33"-36" TO CENTER LINE 1" SHAPE ACCESSIBLE SHOWER BAR	
45	PAPER TOWEL DISPENSER	TORTI HOWARD® 585-33 SURFACE MOUNTED		48" TO HIGHEST OPERATING DEVICE	TO BE REPLACED IN EXIST. BUILDING WHEN EXIST. IS NOT AVAILABLE.
46	PAPER TOWEL DISPENSER/WASTE RECEPTACLE	TORTI HOWARD® 585-33 SURFACE MOUNTED		48" TO HIGHEST OPERATING DEVICE	TO BE REPLACED IN EXIST. BUILDING WHEN EXIST. IS NOT AVAILABLE.
47	HAND DRYER CLOTHING WITH SENSOR	BOBROCK® B-700 115V AC, 20 AMP, 2.50 WATS 60 HZ COLOR WHITE		38" TO BOTTOM OF UNIT	APPLY FOR EXIST. BUILDING WITH 120V AC, 20 AMP, 2.50 WATS 60 HZ COLOR WHITE
48	TOILET ISSUE DISPENSER	TORTI HOWARD® No. 592-50 JAMMED ROLL		42" TO BOTTOM OF UNIT	35" FROM BACK WALL TO DISPENSING EDGE OF UNIT
49	SOAP DISPENSER	BOBROCK® B-WALL (RECESSED)		42" TO CENTER OF UNIT	NEXT TO LAVATORY- EITHER SIDE
50	DOOR BUMPER	"QUALITY" WD7Y-S		42" TO BOTTOM OF REFLECTANT SURFACE	32" FROM DOOR HINGE
51	POLISHED STAINLESS STEEL MIRROR	BOBROCK® B-2505-150H B-2505-150H B-2505-150H		40" TO BOTTOM OF REFLECTANT SURFACE	CENTERED WITH LAVATORY
52	FOLDING SHOWER SEAT	BOBROCK® B-517 (RIGHT)		18" MOUNTING HEIGHT TO BOTTOM OF DECK IN THE OPEN POSITION	REINFORCED WHITE FABRIC W/T OAK TO BE SUPPORTED ON 2x4WOOD.
53	BABY CHANGING STATION	"BROOKS" MODEL 100 C			TO BE INSTALLED IN MEN AND WOMEN'S RESTROOMS

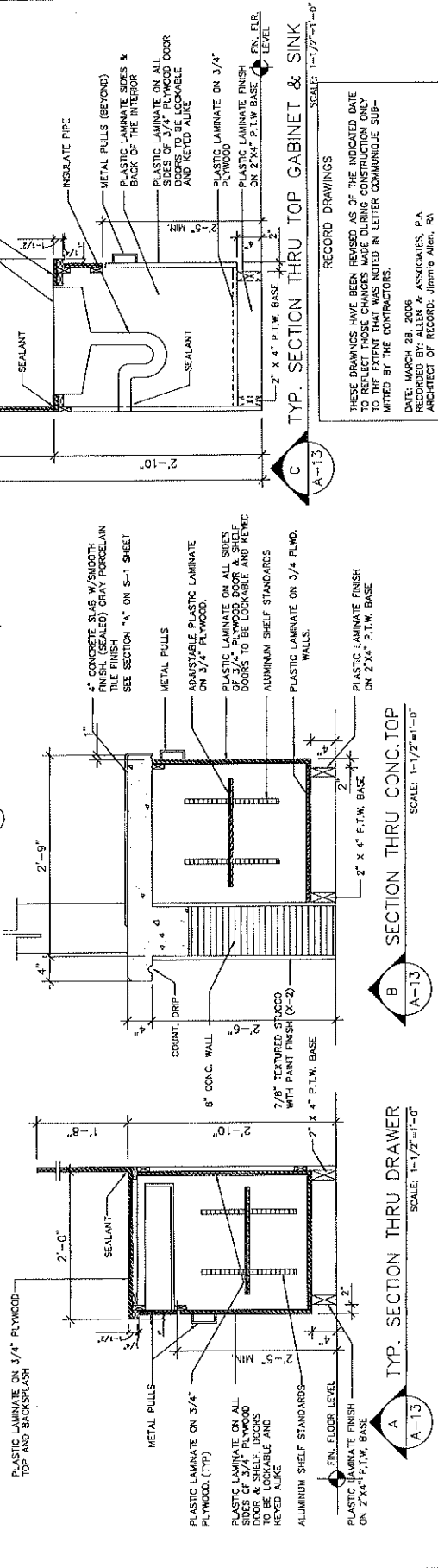
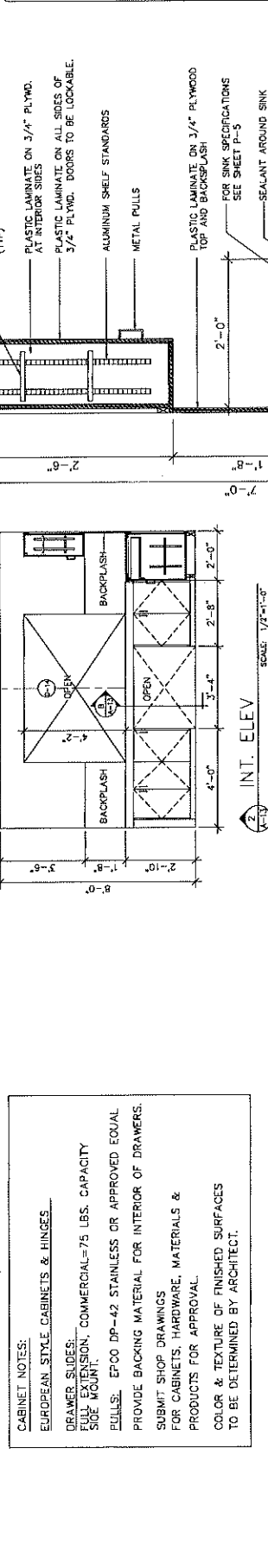
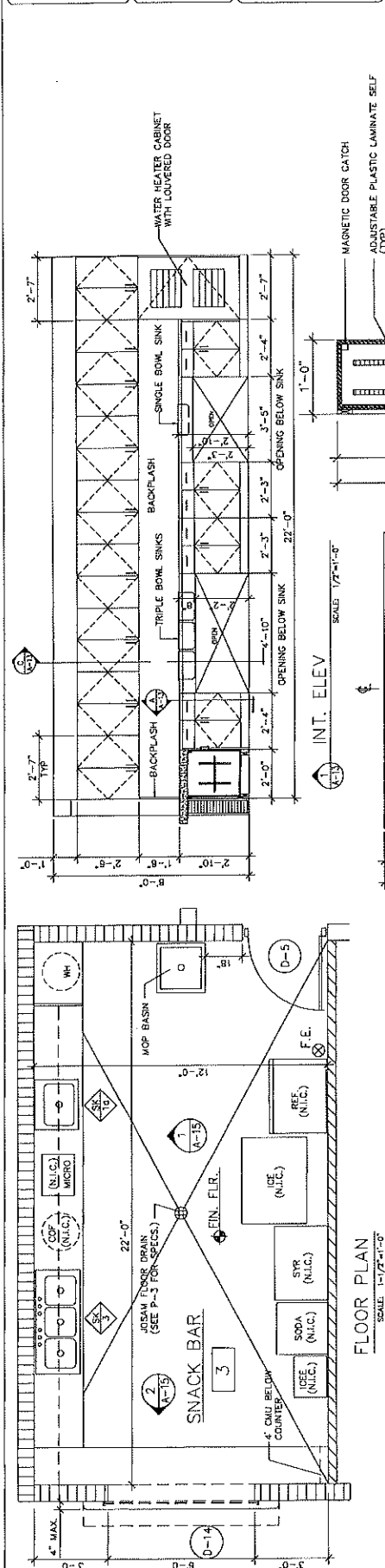


RECORD DRAWINGS
 THESE DRAWINGS HAVE BEEN REVISED AS OF THE INDICATED DATE TO REFLECT THOSE CHANGES MADE DURING CONSTRUCTION ONLY. ALL CHANGES MUST BE INDICATED IN LETTER COMMUNIQUE SUBMITTED BY THE CONTRACTORS.
 DATE: MARCH 28, 2005
 ARCHITECT: JAMES A. ALLEN & ASSOCIATES, P.A.
 ARCHITECT OF RECORD: JIMMIE ALLEN, III, AIA

Project No.	2541
Sheet	A-13
Date	03/28/2006
Drawn	J. Allen
Checked	J. Allen
Approved	J. Allen

Project Title: DORAL MEADOW PARK FIELD CENTER
 116 AVENUE NW AT NW 58 STREET
 275 N.W. 2nd STREET, 4th FLOOR, MIAMI, FL 33128

Miami-Dade County Park and Recreation Department
 Drawing Title: SNACK BAR PLAN & CABINET DETAILS



CABINET NOTES:
 EUROPEAN STYLE CABINETS & HINGES
 DRAWER SLIDES: FULL EXTENSION, COMMERCIAL=75 LBS. CAPACITY SIDE MOUNT.
 PULLS: EPOO DP-42 STAINLESS OR APPROVED EQUAL
 PROVIDE BACKING MATERIAL FOR INTERIOR OF DRAWERS.
 SUBMIT SHOP DRAWINGS FOR CABINETS, HARDWARE, MATERIALS & PRODUCTS FOR APPROVAL.
 COLOR & TEXTURE OF FINISHED SURFACES TO BE DETERMINED BY ARCHITECT.

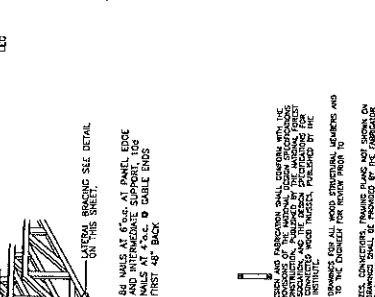
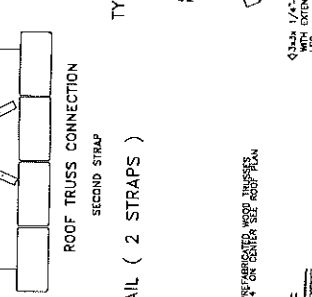
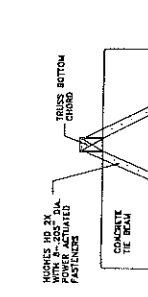
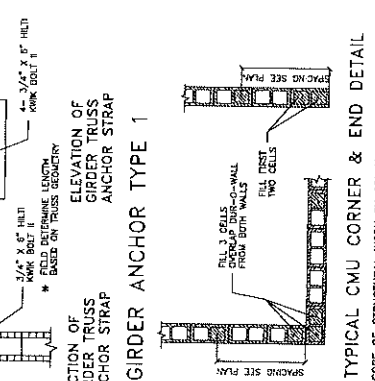
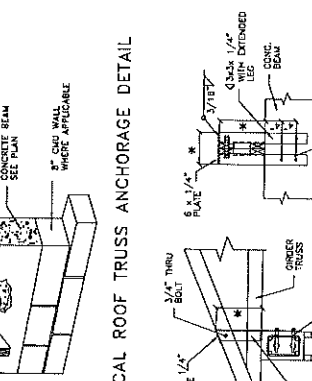
RECORD DRAWINGS
 THESE DRAWINGS HAVE BEEN REVISED AS OF THE INDICATED DATE TO REFLECT THOSE CHANGES MADE DURING CONSTRUCTION ONLY TO THE EXTENT THAT WAS NOTED IN LETTER COMMUNIQUE SUBMITTED BY THE CONTRACTORS.
 DATE: MARCH 28, 2006
 RECORDED BY: ALLEN & ASSOCIATES, P.A.
 ARCHITECT OF RECORD: Jimmie Allen, P.A.

Project Title: DORAL MEADOW PARK
 FIELD CENTER
 116 AVENUE NW AT NM 58 STREET
 Drawing Title: GENERAL NOTES & DETAILS

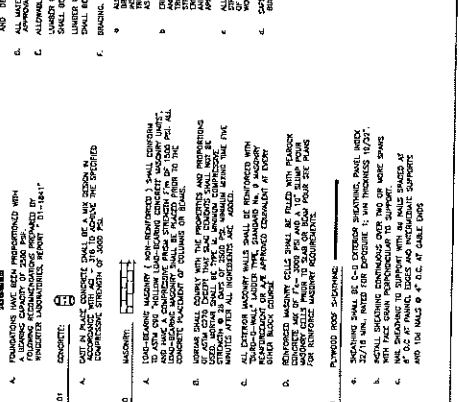
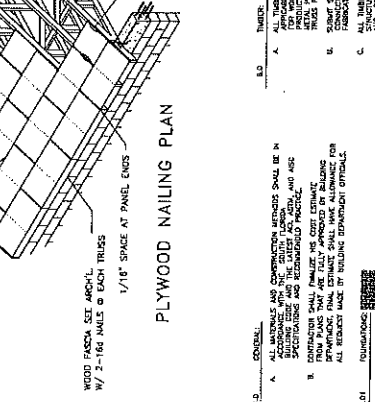
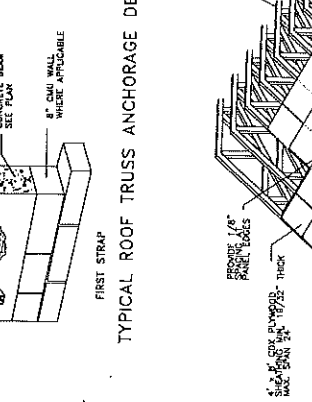
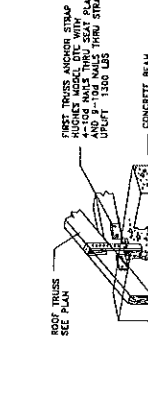
Client: Miami-Dade County
 Department: Park and Recreation Department
 Address: 275 NW 24th STREET, 4th FLOOR, MIAMI, FL 33128

Project No: 99112
 Date: APRIL 2001
 Scale: AS NOTED
 Drawing No: S1 OF 3
 File: Drawn: [Blank] Dwg: [Blank]

CONCRETE REINFORCING SCIENCES
 1214 SW 12 ST.
 MIAMI, FL 33135
 (305) 858-9345



RECORD DRAWINGS:
 THESE DRAWINGS HAVE BEEN REVISED AS OF THE INDICATED DATE TO REFLECT THOSE CHANGES MADE BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE RECORD DRAWINGS.
 DATE: MARCH 26, 2006
 BY: [Signature]
 ARCHITECT OF RECORD: [Signature]



NOTES:
 1. SEE PLAN FOR WALL REINFORCING SAME AS WALL
 2. SEE PLAN FOR GEOMETRY OF WALL
 3. SEE PLAN FOR GEOMETRY OF WALL CONCRETE BEAMS

WOOD FASCIA SEE ARCH'L W/ 2-1/8" SPACES @ EACH TRUSS

1/8" SPACE AT PANEL ENDS

1/4" PANEL SHEATHING

EXTRN BRACING SEE DETAIL

86 WAILS AT 6" O.C. AT PANEL EDGE

86 WAILS AT 6" O.C. AT PANEL EDGE

86 WAILS AT 6" O.C. AT PANEL EDGE

86 WAILS AT 6" O.C. AT PANEL EDGE

3.0 CONCRETE

A. ALL MASONRY AND CONSTRUCTION MATERIALS SHALL BE AS APPROVED BY THE ARCHITECT AND SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT.

B. ALL MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE INTERNATIONAL CONCRETE CODE (ICC).

C. ALL MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE INTERNATIONAL CONCRETE CODE (ICC).

D. ALL MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE INTERNATIONAL CONCRETE CODE (ICC).

3.0 CONCRETE

A. ALL MASONRY AND CONSTRUCTION MATERIALS SHALL BE AS APPROVED BY THE ARCHITECT AND SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT.

B. ALL MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE INTERNATIONAL CONCRETE CODE (ICC).

C. ALL MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE INTERNATIONAL CONCRETE CODE (ICC).

D. ALL MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE INTERNATIONAL CONCRETE CODE (ICC).

HOOK COLUMN BARS AT TERMINATION

SEE COLUMN SCHEDULE FOR REINFORCING SIZE & QUANTITY

2x4 CONT. BOT. CHORD WITH 2-108 WAILS

CEILING HIGH H/AS

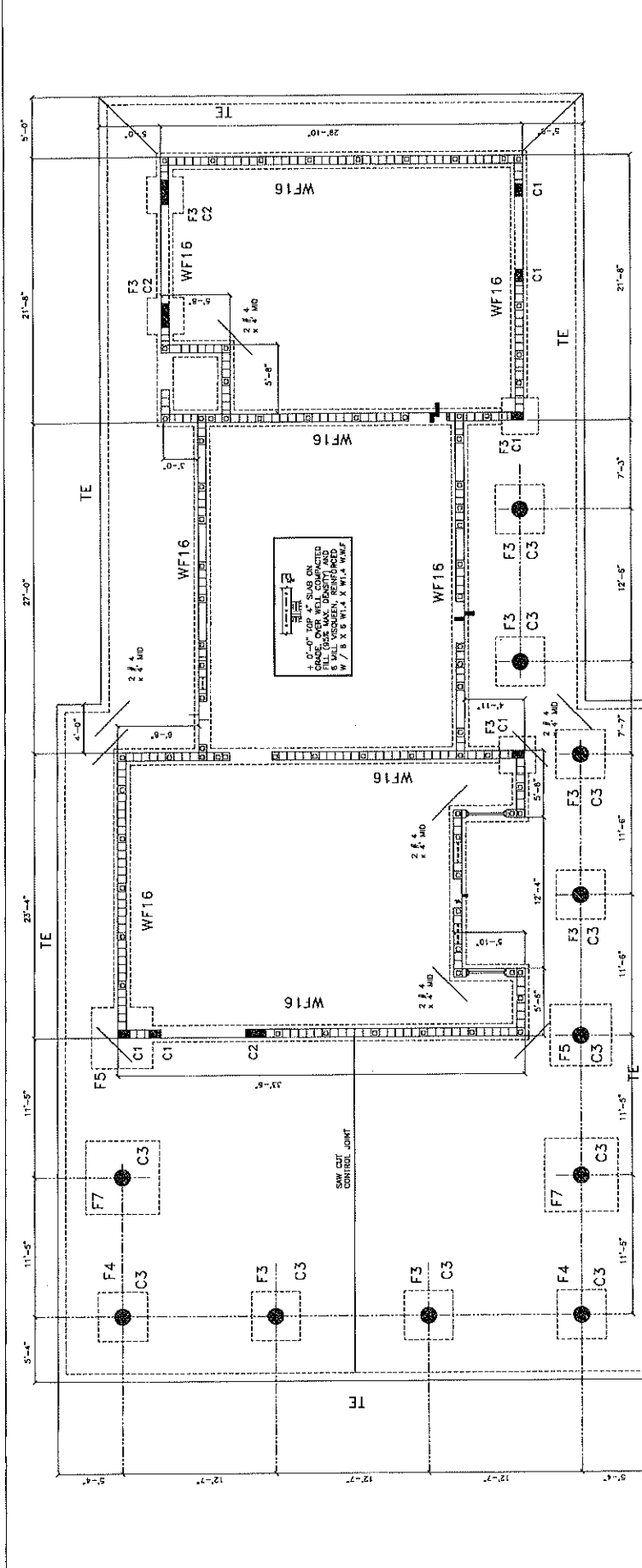
DIAGONAL BRACING ALONG BUILDING DEPTH

NOTES:
 1. SPACE DIAGONAL BRACING AT MAX. 20' O.C.
 2. SEE PLAN FOR BRACE LOCATION

PRECAST LINTEL OPTION

COORDINATE LOCATION AND GEOMETRY OF OPENINGS WITH ARCHITECTURAL DRAWINGS.

WALL FRAMING AT DOOR AND WINDOW OPENINGS



FOUNDATION & FIRST FLOOR PLAN
 1/4" = 1'-0"

SOILS STATEMENT
 BASED UPON SOIL INVESTIGATION REPORT PREPARED BY WINGERTER LABORATORIES, REPORT # 51-1941. FOUNDATION ARE DESIGNED WITH A BEARING CAPACITY OF 2.5 TONS PER SQ. FT. WITH ALL RECOMMENDATIONS OBTAINED ON SOIL REPORT.

CONCRETE MASONRY WALL NOTES
 ALL MASONRY WALLS CONSIST OF 8" CMU WITH 1" FILL. ALL WALLS AT 48" & 11' 6" HIGH. PROVIDE # 8 (9 GAUGE) LADDER TYPE HORIZ. REINF. AT 16" O.C. TYP. FILL REINFORCED CELLS WITH GRID HAVING WITH MIN. 10' SLUMP. STRENGTH F'c = 2500 PSI. COMPLYING WITH ASTM C476. MAXIMUM LIFT UNBRACED 4'. POUR MASONRY CELLS PRIOR TO THE TIE BEAM CONCRETE POUR.

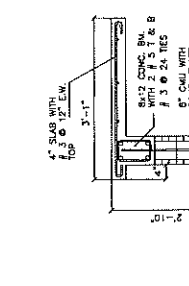
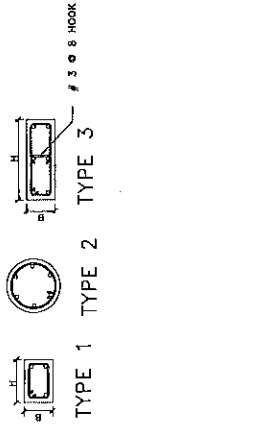
RECORD DRAWINGS
 THESE DRAWINGS HAVE BEEN REVISED AS OF THE INDICATED DATE TO REFLECT THOSE CHANGES MADE DURING CONSTRUCTION ONLY TO THE EXTENT THAT WAS NOTED IN LETTER COMMUNIQUE SUBMITTED BY THE CONTRACTORS.
 DATE: MARCH 28, 2002
 RECORDED BY: ALLEN & ASSOCIATES, P.A.
 ARCHITECT OF RECORD: Jimmie Allen, RA

CONCRETE COLUMN SCHEDULE

MARK	SIZE	REINFORCING	TYPE
C1	8" X 12"	4 # 5	TYPE 1
C2	8" X 24"	6 # 6	TYPE 3
C3	12" DIA.	6 # 6	TYPE 2
	FILLED CELL & 1 # 5		

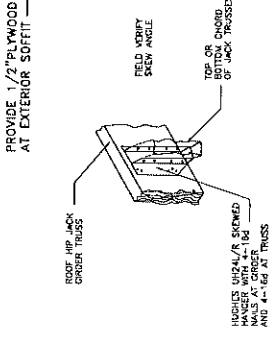
FOOTING SCHEDULE

MARK	SIZE	LONGITUDINAL REINF.	TOP
TE	8" X 8" CONT.	1 # 5 CONT.	
WF16	16" X 12" CONT.	2 # 5 CONT.	
F3	3'-0" X 3'-0" X 48"	4 # 5 E.W.	4 # 5 E.W.
F4	4'-0" X 4'-0" X 48"	5 # 5 E.W.	5 # 5 E.W.
F5	6'-0" X 6'-0" X 48"	6 # 6 E.W.	6 # 6 E.W.
F7	7'-0" X 7'-0" X 48"	8 # 7 E.W.	8 # 6 E.W.

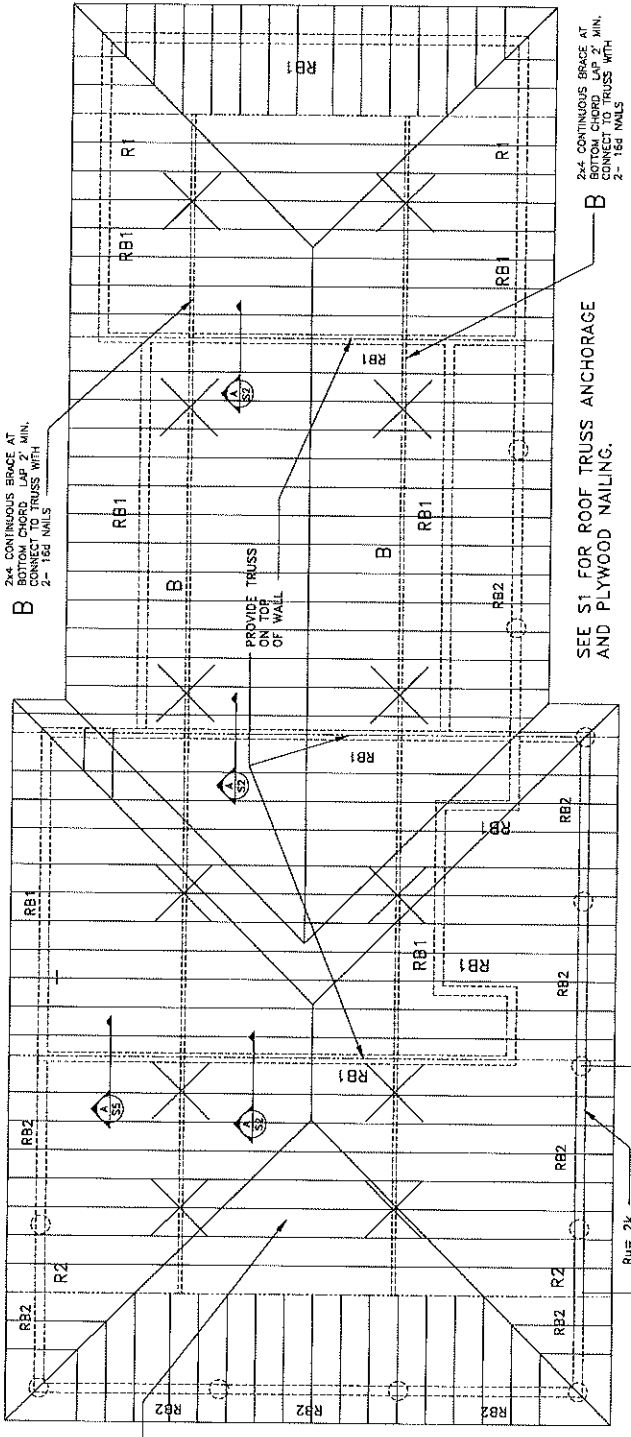


NOTES:
 PLACE FOOTING F4,F5,F7, MIN. 12" BELOW GRADE
 PLACE WALL FOOTINGS 8" BELOW GRADE

NOTE: ALL SOFFITS AT THE EXTERIOR ENTRY AREAS SHALL HAVE 1/2" PLYWOOD NAILED TO THE TRUSS WITH 8d NAILS @ 6"



CONNECTION ROOF JACK TRUSSES TO HIP JACK GIRDER



ROOF FRAMING PLAN
1/4" = 1'-0"

CONCRETE BEAM SCHEDULE

MARK	SIZE	ELEV.	REINFORCING	STIRRUPS
B" X H"	BOT	TOP		
RB1	8 X 12	10'-4"	2 # 3	2 # 3 # 3 @ 4@
RB2	9 X 12	10'-4"	2 # 6	2 # 5 # 3 @ 5

BUILDING ROOF WIND PRESSURES

ZONE	PRESSURE	NET UPLIFT
ZONE 1	35 PSF	30 PSF
ZONE 2	51 PSF	53 PSF
OPEN AREA	55 PSF	50 PSF

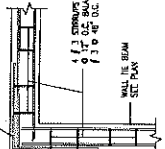
ROOF D.L. 25 PSF
ROOF L.L. 30 PSF

NOTES:
1. FIELD VERIFY BEAM DEPTH WITH DOOR & WINDOW GEOMETRY
2. VERIFY ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS

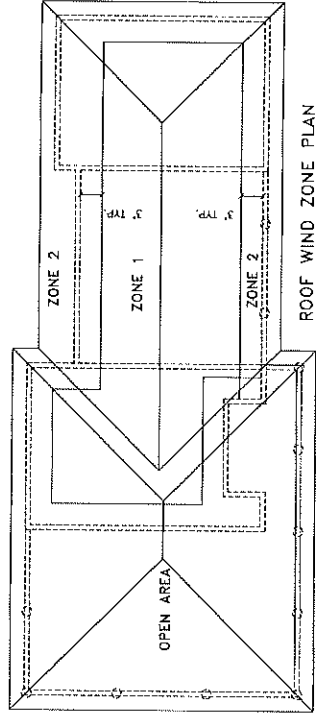
GIRDER TRUSS REACTIONS

MARK	GRAVITY LOAD	WIND UPLIFT	CONNECTION DEVICE
R1	4.1 k	3.5 k	TYPE 1
R2	4.9 k	5.3 k	TYPE 1

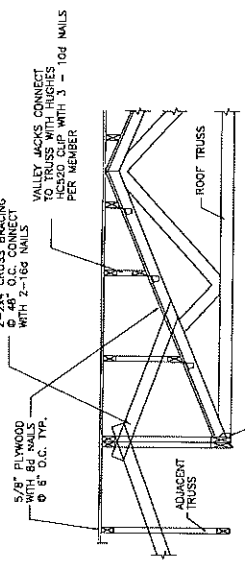
CORNER REINFORCING
DETAIL FOR ALL TIE BEAMS



A SECTION
SCALE: 3/4" = 1'-0"



ROOF WIND ZONE PLAN



GIRDER TRUSS TO TRUSS CONNECTION

NOTE: FABRICATOR OF ROOF TRUSSES SHALL BE RESPONSIBLE FOR INSURING THAT THE TRUSS LAYOUT IS IN ACCORDANCE WITH THE ARCHITECT'S INTENT. SEE ARCHITECT'S DRAWINGS FOR TRUSS MFR. SHALL SUBMIT FINAL TRUSS LAYOUT PLAN TO ENGINEER PRIOR TO FABRICATION OF TRUSSES. IF REQUIRED ENGINEER WILL SUBMIT REVISIONS TO TRUSS MFR. TRUSS LAYOUT SET BY TRUSS MFR.

COLONIED ENGINEERING SCIENCES
CARLOS CASARAT, PE 23265
MIAMI, FL 33125
(305) 806-8345

RECORD DRAWINGS: THESE DRAWINGS HAVE BEEN REVISED AS OF THE INDICATED DATE. ANY REVISIONS TO THESE DRAWINGS DURING CONSTRUCTION ONLY TO THE EXTENT THAT WAS NOTED IN LETTER COMMUNIQUE SUBMITTED BY THE CONTRACTORS.

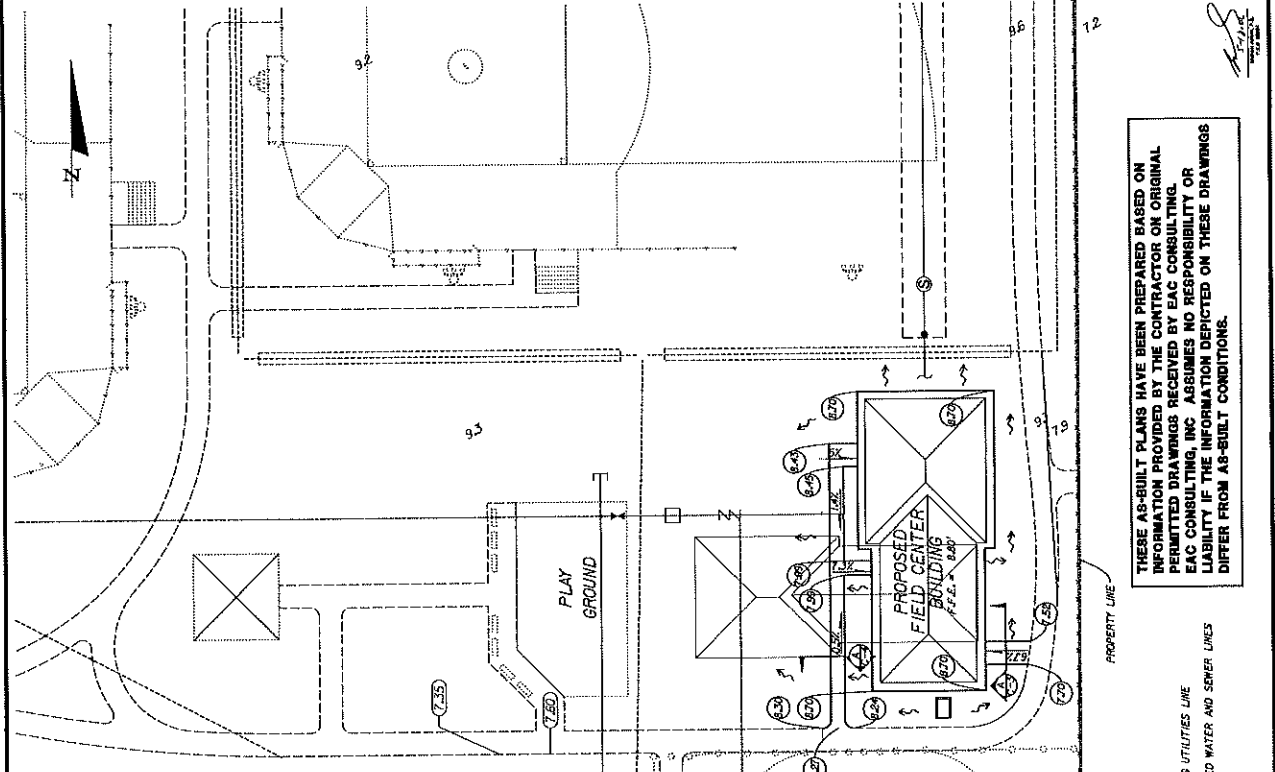
DATE: MARCH 28, 2006
RECORDED BY: ALLEN & ASSOCIATES, P.A.
ARCHITECT OF RECORD: Jimmie Allen, RA

Rev/No	Description	Date	Revised by
1	As Shown	03/27/06	Carlos Casarat

Miami-Dade County
Park and Recreation Department
275 N.W. 2nd STREET, 4th FLOOR, MIAMI, FL 33128

Project Title:
DORAL MEADOW PARK
FIELD CENTER
116 AVENUE NW AT NW 58 STREET
DORAL, FL 33125

Project #	9912
Issue	01
Date	03/28/06
Drawn by	CC
Checked by	CC
Scale	AS NOTED
Sheet #	33
Total Sheets	34



THESE AS-BUILT PLANS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY THE CONTRACTOR OR ORIGINAL PERMITTED DRAWINGS RECEIVED BY EAC CONSULTING. EAC CONSULTING, INC. ASSUMES NO RESPONSIBILITY OR LIABILITY IF THE INFORMATION DEPICTED ON THESE DRAWINGS DIFFER FROM AS-BUILT CONDITIONS.

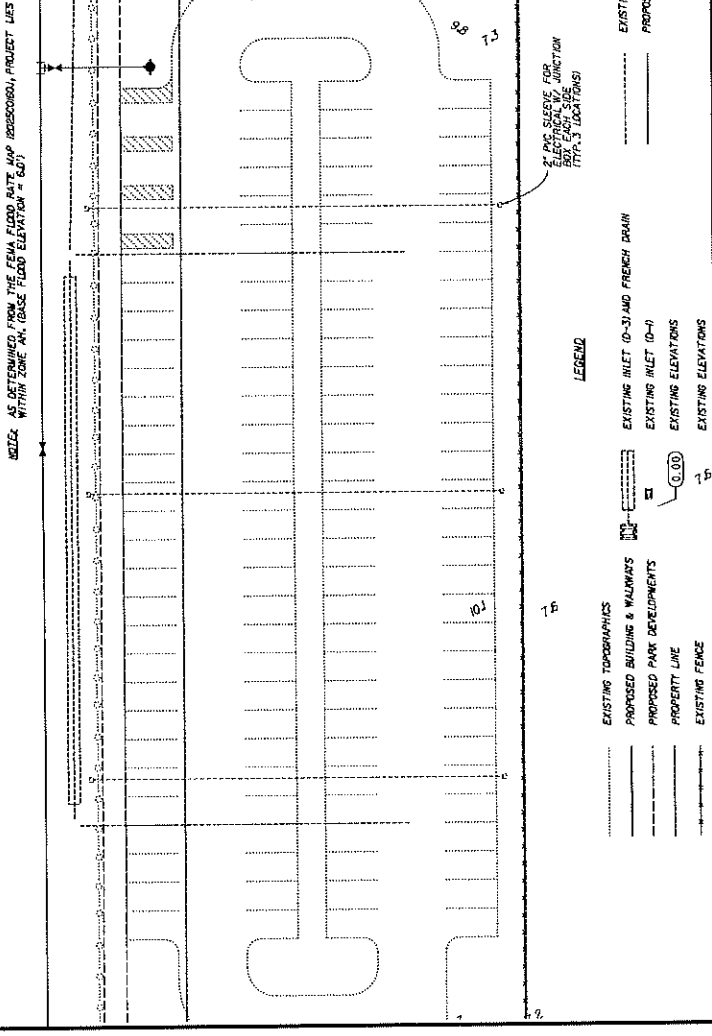
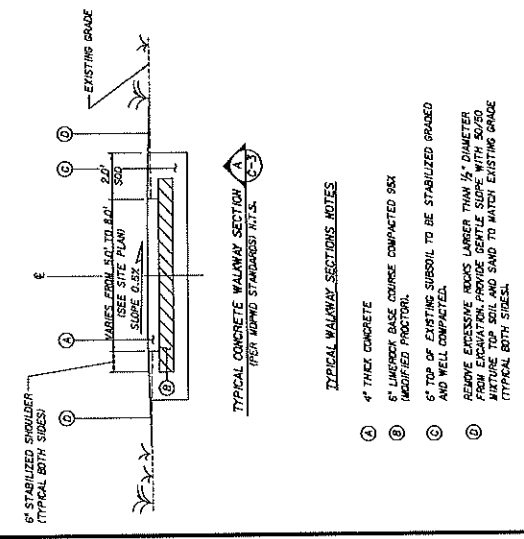
FLOOD LEGEND
 Commercial, Industrial
 FLOOD: 30-301B-64-561D ADDRESS: NW 15TH AVENUE AT NW 56TH STREET
 LOT: BLOCK: SUBDIVISION:
 PLAT BOOK: 153 PAGE: 83 MEETS & BOUND:

CROWN OF ROAD ELEV.: 6.45 FINISH. CROWN OF ROAD ELEVATION WAS TAKEN FROM A CERTIFIED SURVEY PREPARED BY: [Signature] PLS. U.C.P. # 3858.
 DRAINAGE BASIN SHALL BE ATTACHED: [Signature] PLS. U.C.P. # 3858.
 DESM/WC - SURFACE WATER MANAGEMENT STORMWATER PERMIT (COPY ATTACHED)
 SPINAD - ENVIRONMENTAL RESOURCES PERMIT
 TOTAL IMPERVIOUS AREA: 5383 SF. UNDERGROUND BANKING: YES / (X) NO
 * IF THIS INFORMATION PLANS AND CONTRACTS SHALL BE ATTACHED
 BASEMENT: YES / (X) NO (CHECK ONE)

HAVE THIS SITE OR OTHER PORTIONS OF THIS PROPERTY BEEN GRANTED A GLENER OR EASE, LICENSE (lease and) YES / (X) NO

PROPOSED	FT. NOVD	Adjacent Grade Elevation (taken to the top of the structure)	Drain Basin Elevation	FT. NOVD	N/A
FIELD CENTER BUILDING	6.80	6.70			


G = 0' = 0' = 0' NOVD
 INDEX AS DETERMINED FROM THE FEMA FLOOD HAZARD MAP (RECORDED), PROJECT LIES WITHIN ZONE "A". (BASE FLOOD ELEVATION = 6.07)



2" PVC SLEEVES FOR JUNCTION BOX (EACH SIDE) (171A.3 LOCATIONS)

LEGEND

- EXISTING TOPOGRAPHICS
- PROPOSED BUILDING & WALKWAYS
- PROPOSED PARK DEVELOPMENTS
- PROPERTY LINE
- EXISTING FENCE
- EXISTING INLET (10-3) AND FRENCH DRAIN
- EXISTING INLET (10-4)
- EXISTING ELEVATIONS
- EXISTING ELEVATIONS
- EXISTING UTILITIES LINE
- PROPOSED WATER AND SEWER LINES



275 N.W. 2nd St., Miami, Florida 33128
Park and Recreation Department
Miami-Dade County

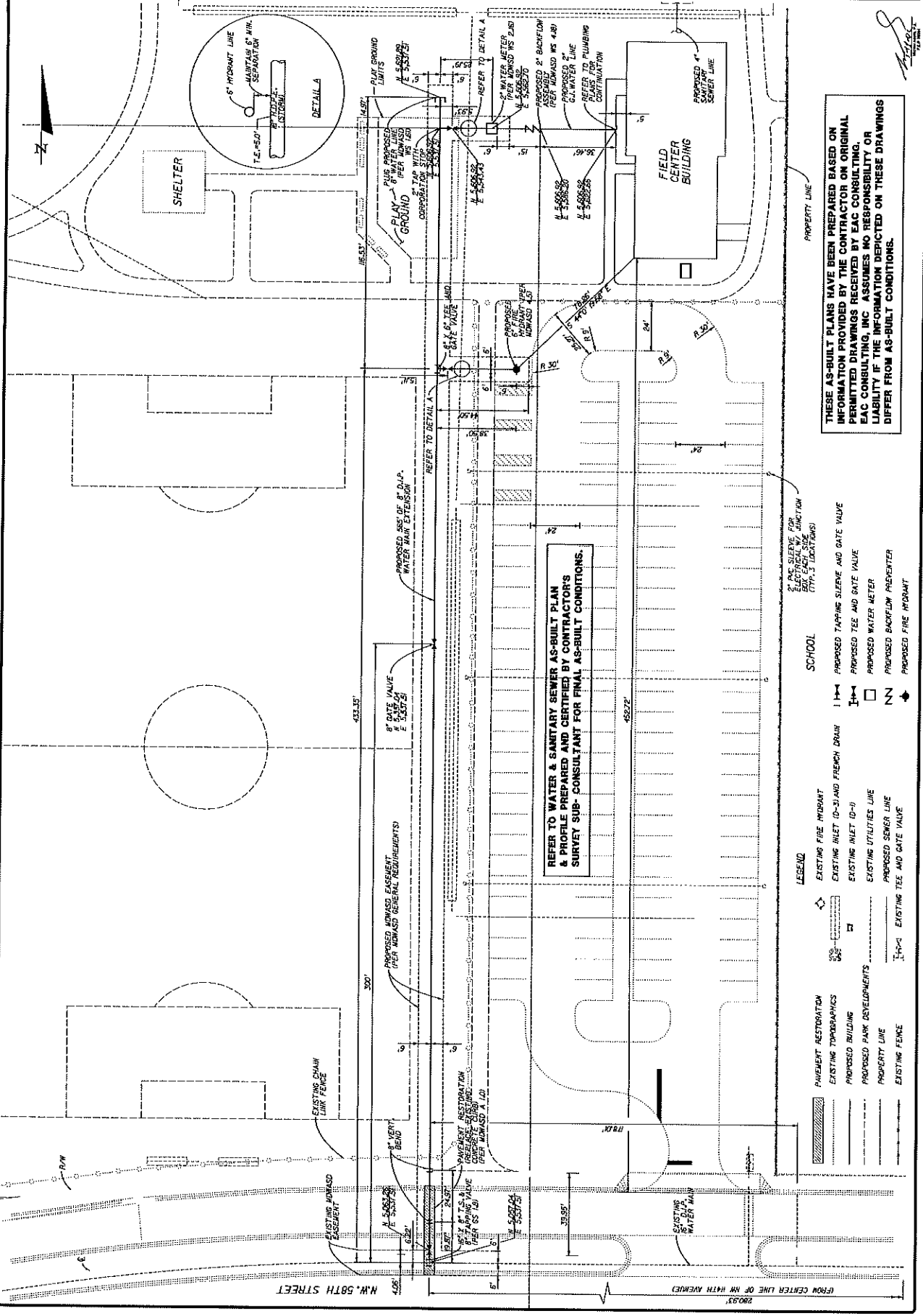
DORAL MEADOW PARK
FIELD CENTER
AS-BUILT PACKAGE
WATER PLAN

Project Title: DORAL MEADOW PARK
AS-BUILT PACKAGE
WATER PLAN

Sheet: 01

Scale: 1" = 1'-0"

Design: C-G
Date: 11-20-20



N.M. 58TH STREET
290.93'
(FROM CENTER LINE OF N.W. 14TH AVENUE)

SCHOOL
SCHOOL
SCHOOL

LEGEND:
 ▒ PAVEMENT RESTORATION
 - - - - - EXISTING TOPOGRAPHICS
 ▭ PROPOSED BUILDING
 ▭ PROPOSED PARK DEVELOPMENTS
 --- PROPERTY LINE
 - - - - - EXISTING FENCE
 ○ EXISTING FIRE HYDRANT
 ○ EXISTING INLET (D-3) AND FRENCH DRAIN
 ○ EXISTING INLET (D-1)
 ○ EXISTING UTILITIES LINE
 ○ PROPOSED SILENCE SLEEVE AND GATE VALVE
 ○ PROPOSED TAPPING SLEEVE AND GATE VALVE
 ○ PROPOSED WATER METER
 ○ PROPOSED BACKFLOW PREVENTER
 ○ PROPOSED FIRE HYDRANT

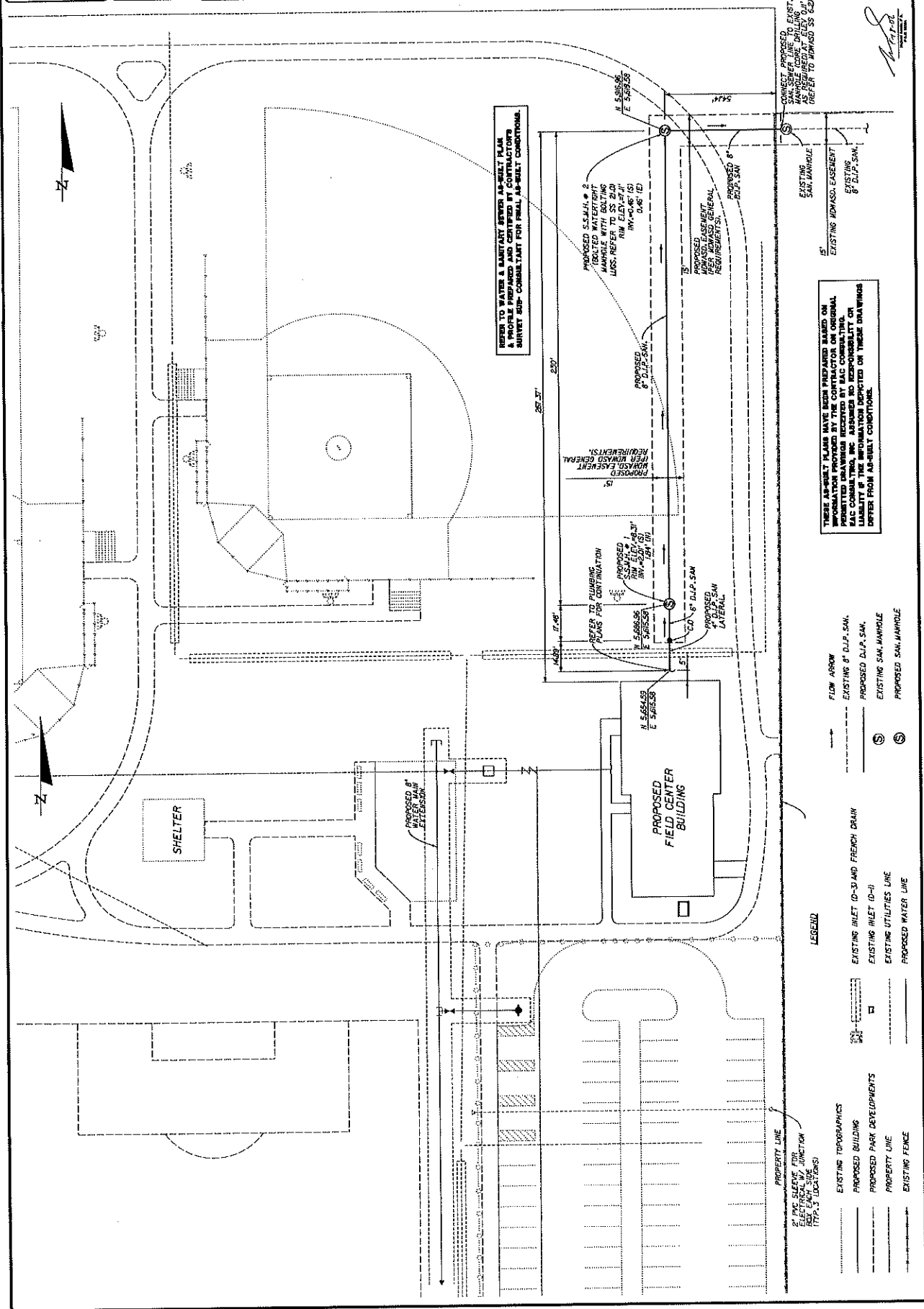
EAC CONSULTING, INC.
 115 WEST PALM BLVD., SUITE 300
 WEST PALM BEACH, FL 33411
 (561) 833-7811

Date	By	Description

Miami-Dade County
 Park and Recreation Department
 215 N.W. 2nd St., Miami, Florida 33128

DORAL MEADOW PARK
FIELD CENTER
AS-BUILT PACKAGE
SANITARY SEWER PLAN

Project No. _____
 Date _____
 Scale _____
 Drawing No. **C-7**
 Designer _____
 Checker _____



REFER TO WATER & SANITARY SEWER AS-BUILT PLAN & PROFILE PREPARED AND CENTERED BY CONTRACTORS SURVEY SHOP CONSULTANT FOR FINAL AS-BUILT CONDITIONS.

REFER TO PLUMBING PLANS FOR CONTINUATION

THESE AS-BUILT PLANS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY THE CONTRACTOR ON ORIGINAL PERMITTED DRAWINGS RECEIVED BY EAC CONSULTING, INC. LIABILITY OF THE INFORMATION DEPICTED ON THESE DRAWINGS DERIVE FROM AS-BUILT CONDITIONS.

- LEGEND**
- EXISTING TIPOGRAPHICS
 - EXISTING BUILDING
 - PROPOSED BUILDING
 - PROPOSED PARK DEVELOPMENTS
 - PROPERTY LINE
 - EXISTING FENCE
 - EXISTING INLET (D-3) AND FRENCH DRAIN
 - EXISTING INLET (D-1)
 - EXISTING UTILITIES LINE
 - PROPOSED WATER LINE
 - FLOW ARROW
 - EXISTING 8" D.I.P. SAN.
 - PROPOSED D.I.P. SAN.
 - ⊙ EXISTING SAN. MANHOLE
 - ⊙ PROPOSED SAN. MANHOLE

[Signature]
 DATE: _____

Project Title:	DORAL MEADOW PARK FIELD CENTER 116 AVENUE NW AT NW 58 STREET
Project No.:	88112
Scale:	1/4" = 1'-0"
Date:	JULY 2001
Drawn By:	AC-1
Checked By:	
Project Manager:	

Revisions	Description	Date
1	ISSUED FOR PERMITS	7-23-01
2	REVISION NO. 1	
3	CHANGES FOR	
4	REVISIONS	

275 NW 2nd STREET, 4TH FLOOR, MIAMI, FL 33128
Miami-Dade County
Park and Recreation Department

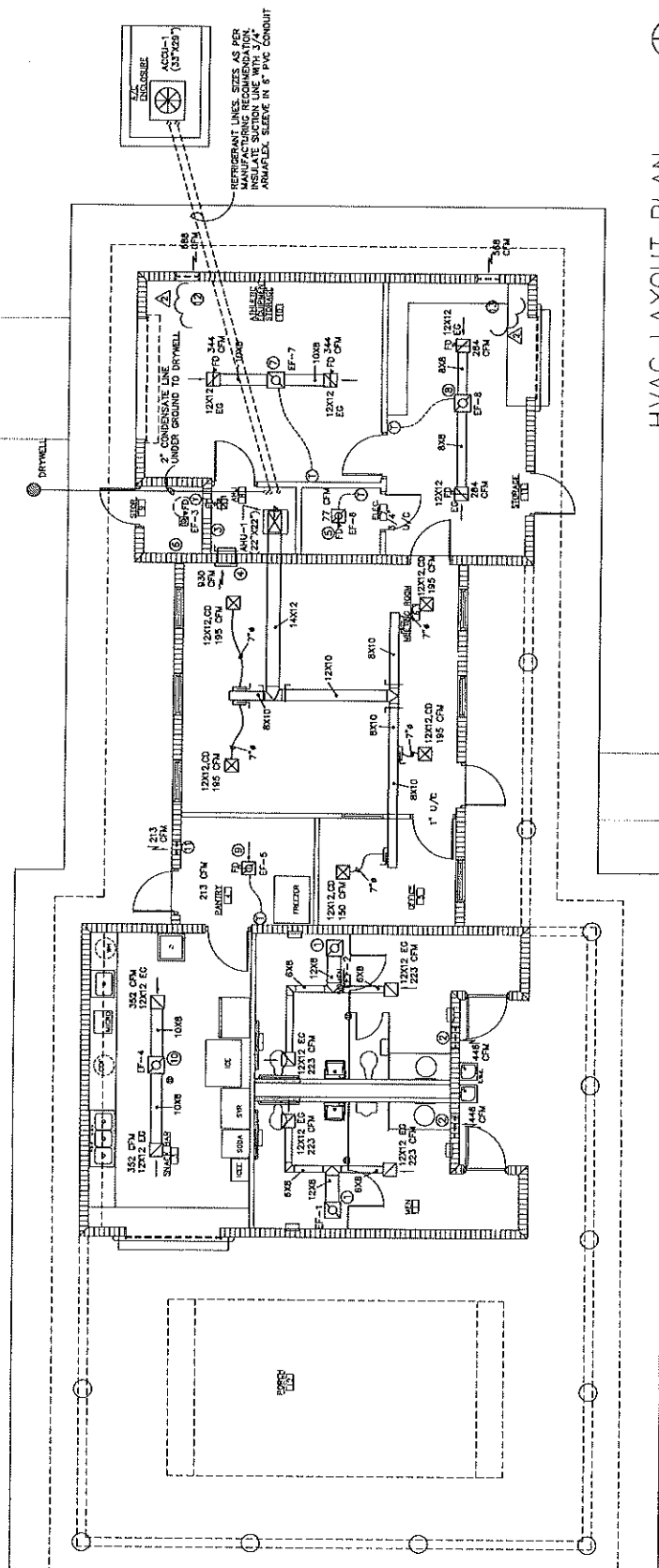
DORAL MEADOW PARK
FIELD CENTER
116 AVENUE NW AT NW 58 STREET

Project Title: DORAL MEADOW PARK
FIELD CENTER
116 AVENUE NW AT NW 58 STREET

Project No.: 88112
Scale: 1/4" = 1'-0"
Date: JULY 2001

Drawn By: AC-1
Checked By:
Project Manager:

Project Title:	DORAL MEADOW PARK FIELD CENTER 116 AVENUE NW AT NW 58 STREET
Project No.:	88112
Scale:	1/4" = 1'-0"
Date:	JULY 2001
Drawn By:	AC-1
Checked By:	
Project Manager:	



HVAC LAYOUT PLAN
SCALE 1/4" = 1'-0"

- OUTSIDE AIR CALCULATIONS**
- MEETING ROOM - 25 PEOPLE
 - CFM/PERSON - 20 CFM
 - TOTAL OA - 500 CFM
 - USING VARIABLE OCCUPANCY - 50% OA
 - TOTAL OA - 250 CFM
- CEILING**
- 1 PERSON - 20 CFM
 - CFM/PERSON - 20 CFM
 - TOTAL OA - 270 CFM
- VENTILATION CALCULATIONS**
- MEN'S WASHROOM, WOMEN'S WASHROOM
 - AREA = 10' x 12' = 120 SQ. FT.
 - VOLUME = 8' x 12' x 7' = 672 CU. FT.
 - 1 AIR CHANGE IN 3 MINS = 224 CFM
 - TOTAL OA = 446 CFM
- SET NOTES**
- 1. INSTALL CEILING FAN (446 CFM) WITH 12x12 DUCT UP THROUGH ROOF TO GOOSE NECK. PROVIDE BIRD SCREEN ON GOOSE NECK.
 - 2. LOUVER (BY ARCHITECT) FOR MAKE UP AIR (446 CFM)
 - 3. 8x8 OA DUCT UP TO ROOF WITH ROOF CAP WITH BIRD SCREEN. (270 CFM)
 - 4. 14x12 RETURN AIR GRILLE (680 CFM)
 - 5. INLINE CEILING FAN (77 CFM) WITH 8x8 DUCT UP THROUGH ROOF TO GOOSE NECK WITH BIRD SCREEN. ATTACH CEILING FIRE DAMPER.
 - 6. INLINE CEILING FAN (67 CFM) WITH 6x6 DUCT UP TO THROUGH ROOF TO GOOSE NECK WITH BIRD SCREEN. FIT CEILING FIRE DAMPER AT GRILL.
 - 7. INLINE CEILING FAN (688 CFM) WITH 12x12 DUCT UP THRU ROOF TO ROOF-CAP WITH BIRD SCREEN (688 CFM). FIT CEILING FIRE DAMPER AT GRILL.
 - 8. INLINE CEILING FAN (568 CFM) WITH 10x10 DUCT UP THRU ROOF TO ROOF-CAP WITH BIRD SCREEN.
 - 9. CABINET CEILING FAN (213 CFM) WITH 8x8 DUCT UP THRU ROOF TO ROOF-CAP WITH BIRD SCREEN. ATTACH CEILING RADIATION DAMPER AT GRILL.
 - 10. INLINE CEILING FAN (704 CFM) WITH 12x12 DUCT UP THRU ROOF TO ROOF-CAP WITH BIRD SCREEN.
 - 11. LOUVER (BY ARCHITECT) FOR MAKE UP AIR (213 CFM)

HAMMOND & ASSOCIATES, INC.
CONSULTING ENGINEERS
MIAMI GARDENS OFFICE CENTER
98 N.W. 14th STREET, SUITE 102
MIAMI, FL 33137
TEL: (305) 651-8322 FAX: (305) 251-2378
MECHANICAL ENGINEER
P.E. #30486

Project Title:	DORAL MEADOW PARK
Field Center:	110 AVENUE NW AT NW 58 STREET
Drawing Title:	ELECTRICAL SITE PLAN

Project No.:	88112
Date:	08/20/01
Scale:	AS SHOWN
Drawing No.:	E-2

Client:	Miami-Dade County
Department:	Park and Recreation Department
Address:	275 N.W. 2nd Street, 4th Floor, Miami, FL 33128

Revision	Description
1	ISSUED FOR PERMITS
2	ISSUED FOR PERMITS
3	ISSUED FOR PERMITS

Prepared by:	[Signature]
Checked by:	[Signature]
Approved by:	[Signature]

Project Title: DORAL MEADOW PARK
 Field Center: 110 AVENUE NW AT NW 58 STREET
 Drawing Title: ELECTRICAL SITE PLAN

Project No.:	88112
Date:	08/20/01
Scale:	AS SHOWN
Drawing No.:	E-2

Client:	Miami-Dade County
Department:	Park and Recreation Department
Address:	275 N.W. 2nd Street, 4th Floor, Miami, FL 33128

Revision	Description
1	ISSUED FOR PERMITS
2	ISSUED FOR PERMITS
3	ISSUED FOR PERMITS

Prepared by:	[Signature]
Checked by:	[Signature]
Approved by:	[Signature]

Project Title: DORAL MEADOW PARK
 Field Center: 110 AVENUE NW AT NW 58 STREET
 Drawing Title: ELECTRICAL SITE PLAN

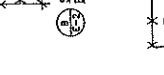
Project No. 88112
 Date: 08/20/01
 Scale: AS SHOWN
 Drawing No. E-2

Site Legend:
 ○ SPUR LIGHT POLE
 ○ FUTURE SPORTS LIGHT POLE
 ■ FUTURE ADA POLE

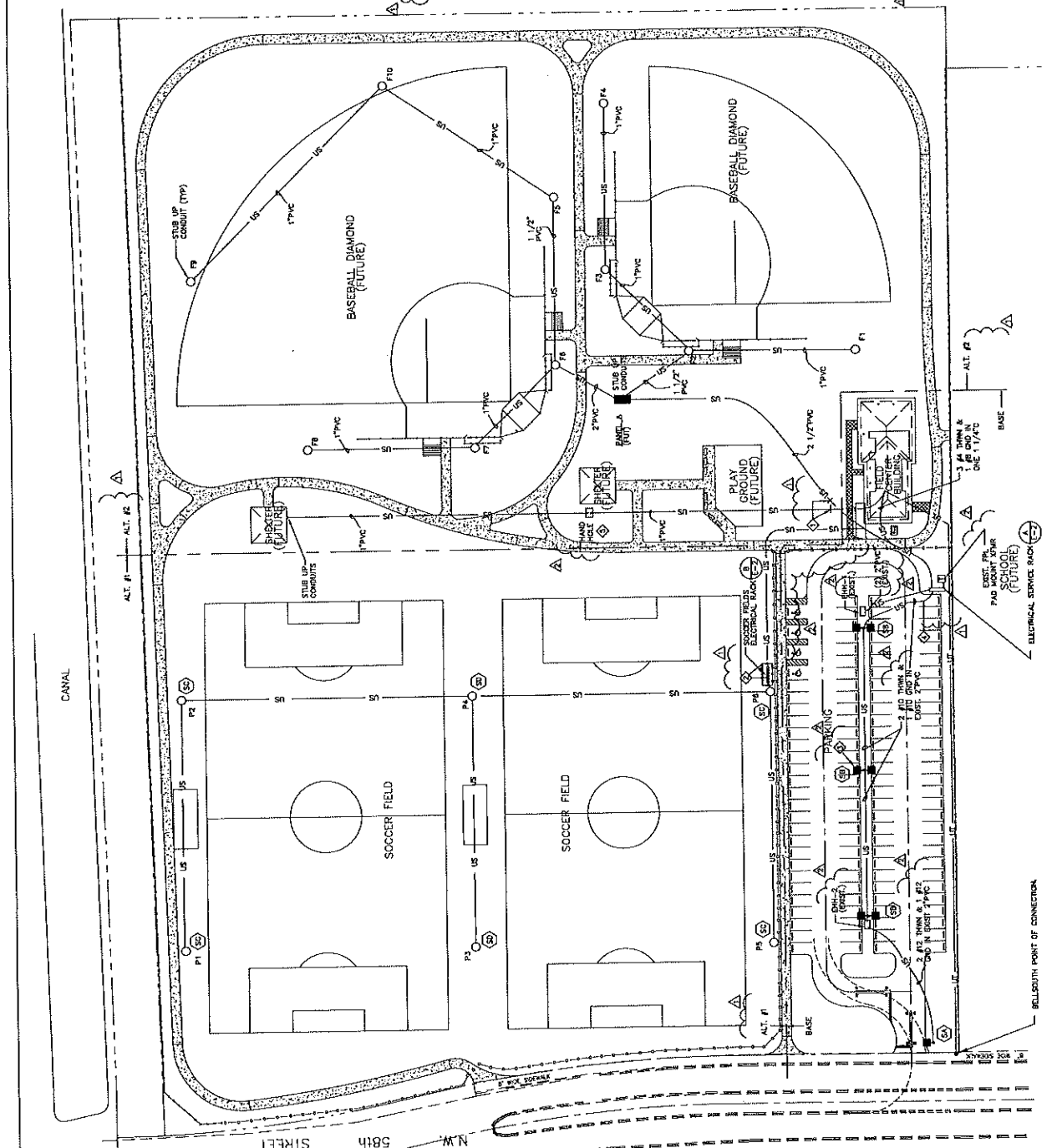
UTILITIES COORDINATION NOTES:
 FPL CONTACT: LEONARD ROBERTS
 CUSTOMER PRODUCT MANAGER
 PH: 305-499-4029
 BELL SOUTH CONTACT: RAY LAMAR
 BRIDGE CONSULTANT
 PH: 305-424-4325

NOTES:
 1. SEE LIGHT POLE DETAIL FOR SHEET E-1
 2. EXTEND 3' WEST FROM STUB-OUT CONDUIT TO SERVICE BACKS TO LIGHT SERVICE
 3. BROOKS PAC SERVICE SHALL PROVIDE ALL NECESSARY PERMITS FOR UNDERGROUND CABLES
 4. INTERFERE EXIST. 2" PVC UNDER 3' POLES

DORAL ISLES
 CITRAUS



HAMMOND & ASSOCIATES, INC.
 8000 W. BAYVIEW AVENUE, SUITE 100
 MIAMI, FL 33149
 TEL: (305) 881-8822 FAX: (305) 881-8378
 WWW.HAMMONDINC.COM



ALT. #1
 ALT. #2
 BASE
 BELLSOUTH POINT OF CONNECTION

Project Title:
 DORAL MEADOW PARK
 FIELD CENTER
 116 AVENUE NW AT NW 58 STREET
 Broward River: ELECTRICAL LIGHTING PLAN

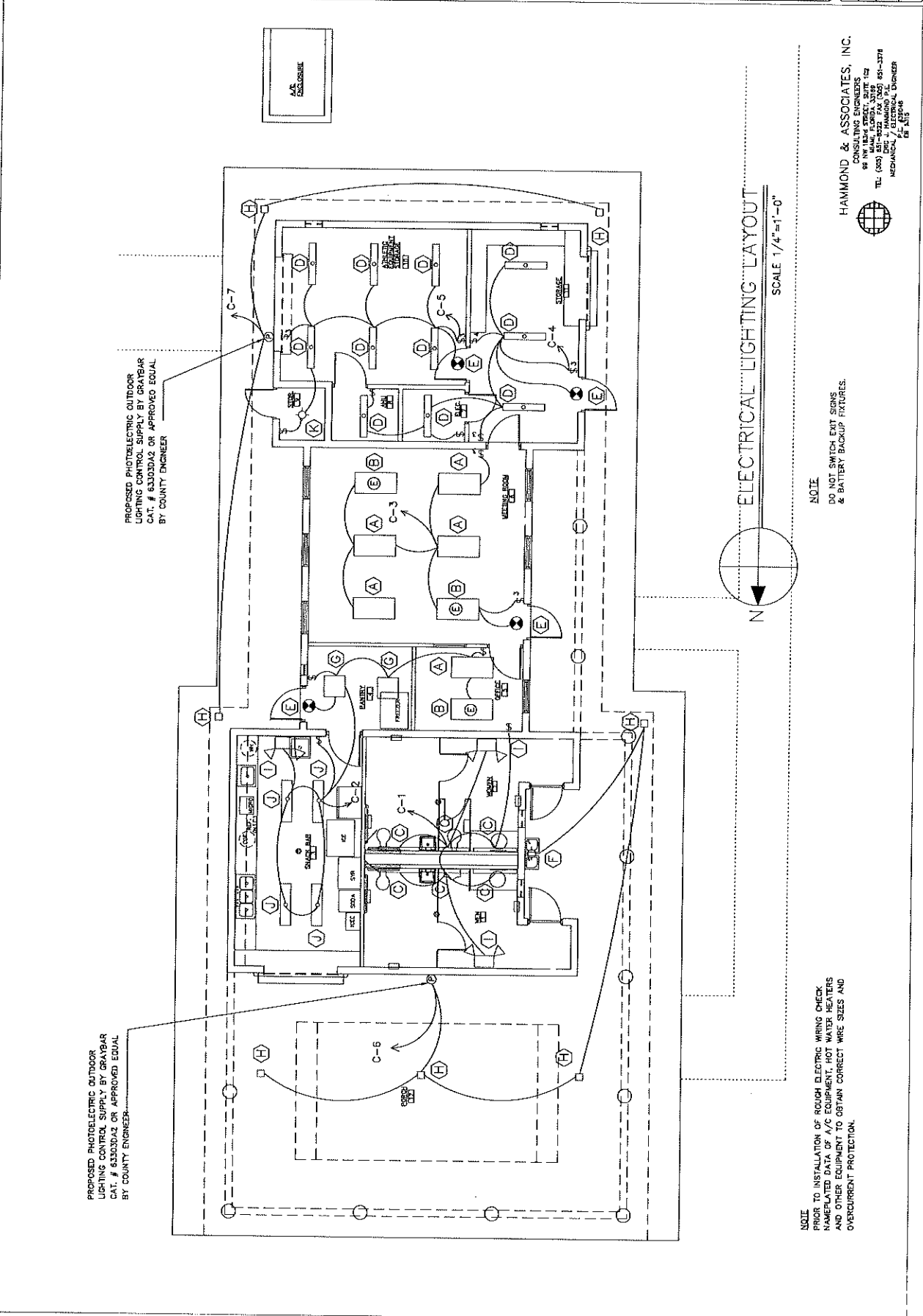
Client:
 Miami-Dade County
 Park and Recreation Department
 275 NW 2nd STREET, 4th FLOOR, MIAMI, FL 33128

Rev.	Date	Description

Prepared by: [Name]
 Checked by: [Name]
 Drawn by: [Name]

Project No: 89112
 Date: JUL 2001
 Drawing No: [Number]
 Scale: E-1-3
 File: [Name].dwg

Hammond & Associates, Inc.
 CONSULTING ENGINEERS
 8500 WINDY HILL ROAD
 MIAMI, FLORIDA 33155
 TEL: (305) 441-1111
 MECHANICAL / ELECTRICAL ENGINEER



PROPOSED PHOTOELECTRIC OUTDOOR LIGHTING CONTROL SUPPLY BY GRAYBAR CAT. # 63303DA3 OR APPROVED EQUAL BY COUNTY ENGINEER

PROPOSED PHOTOELECTRIC OUTDOOR LIGHTING CONTROL SUPPLY BY GRAYBAR CAT. # 63303DA3 OR APPROVED EQUAL BY COUNTY ENGINEER

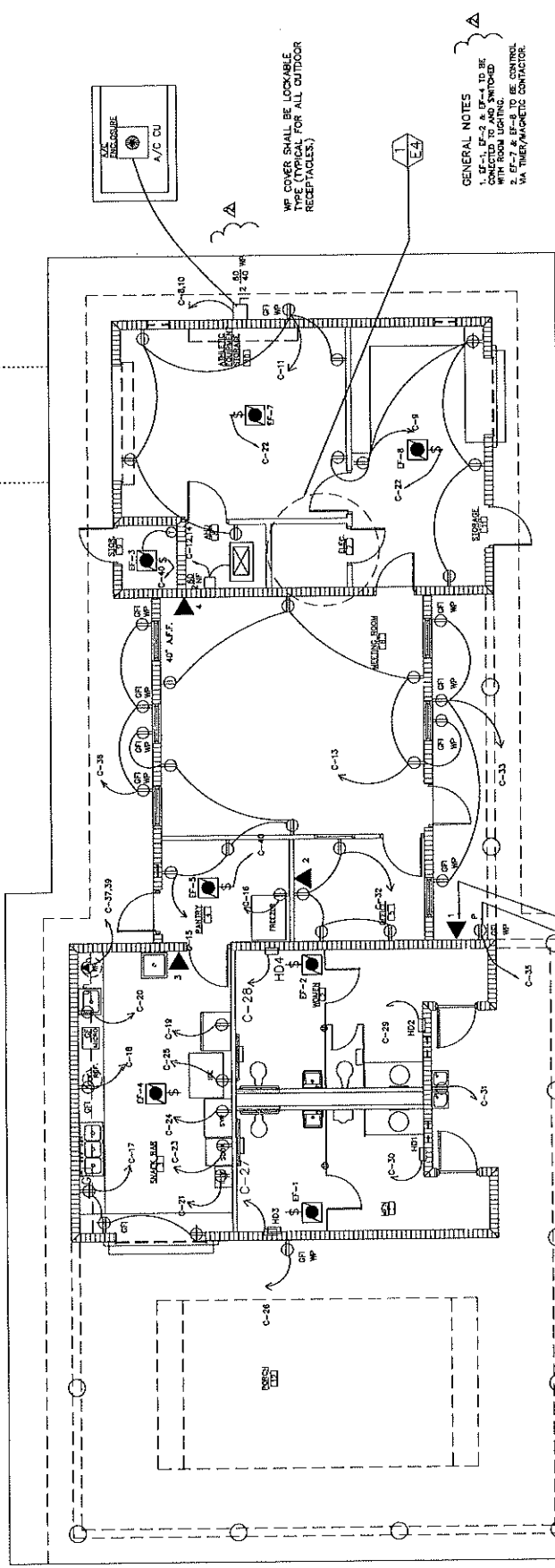
ELECTRICAL LIGHTING LAYOUT
 SCALE 1/4" = 1'-0"

NOTE
 PRIOR TO INSTALLATION OF ROUGH ELECTRIC WIRING CHECK NAMEPLATED DATA OF A/C EQUIPMENT, HOT WATER HEATERS AND OTHER EQUIPMENT TO OBTAIN CORRECT WIRE SIZES AND OVERCURRENT PROTECTION.

NOTE
 DO NOT SWITCH LEAD SIGNS & BATTERY BACKUP FIGURES.

HAMMOND & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 8500 WINDY HILL ROAD
 MIAMI, FLORIDA 33155
 TEL: (305) 441-1111
 MECHANICAL / ELECTRICAL ENGINEER

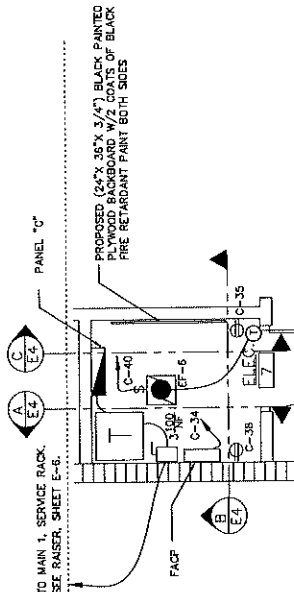
Project Title: DORAL MEADOW PARK FIELD CENTER 116 AVENUE NW AT NW 58 STREET Doral, FL 33126 Drawing No.: E-4 Date: 03/20/00 Project No.: 00-000000-0000		Drawing Title: ELECTRICAL POWER PLAN													
Client: MIAMI-DADE COUNTY Park and Recreation Department 275 NW 2nd STREET, 4th FLOOR, MIAMI, FL 33128		Revision: <table border="1"> <tr> <th>Rev.</th> <th>Date</th> <th>Description</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		Rev.	Date	Description									
Rev.	Date	Description													
Designer: Drawn By: Checked By: In Charge: Date:		Notes: 1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE (NEC) AND THE NATIONAL FIRE ALARM AND SIGNALING CODE (NFPA 72).													



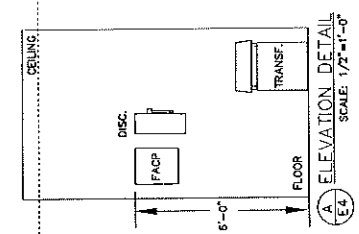
ELECTRICAL POWER PLAN
SCALE: 1/4"=1'-0"

WP COVER SHALL BE LOCKABLE TYPE (CALL FOR ALL OUTDOOR RECEPTACLES).

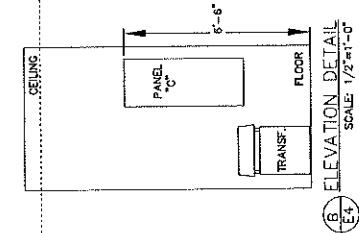
GENERAL NOTES
 1. EF-1, EF-2 & EF-4 TO BE CONNECTED TO AND SWITCHED WITH ROOM LIGHTING. THE CONTROL VA TRAY SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR.



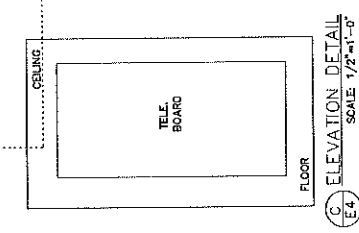
E4/ ENLARGED PLAN
ELECTRICAL CLOSET DETAIL
SCALE: 1/2"=1'-0"



A ELEVATION DETAIL
SCALE: 1/2"=1'-0"



B ELEVATION DETAIL
SCALE: 1/2"=1'-0"



C ELEVATION DETAIL
SCALE: 1/2"=1'-0"

HAMMOND & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 89 NW 13th STREET, SUITE 102
 MIAMI, FLORIDA 33136
 TEL: (305) 358-5555 FAX: (305) 358-3276
 ERIC J. HAMMOND, P.E. ENGINEER
 MICHAEL J. HARRIS, P.E. ENGINEER
 MIAMI, FL 33135

Project Title: FIRE ALARM RISER DIAGRAM
 116 MENKIE NW AT NW 58 STREET
 FIELD CENTER
 DORAL MEADOW PARK

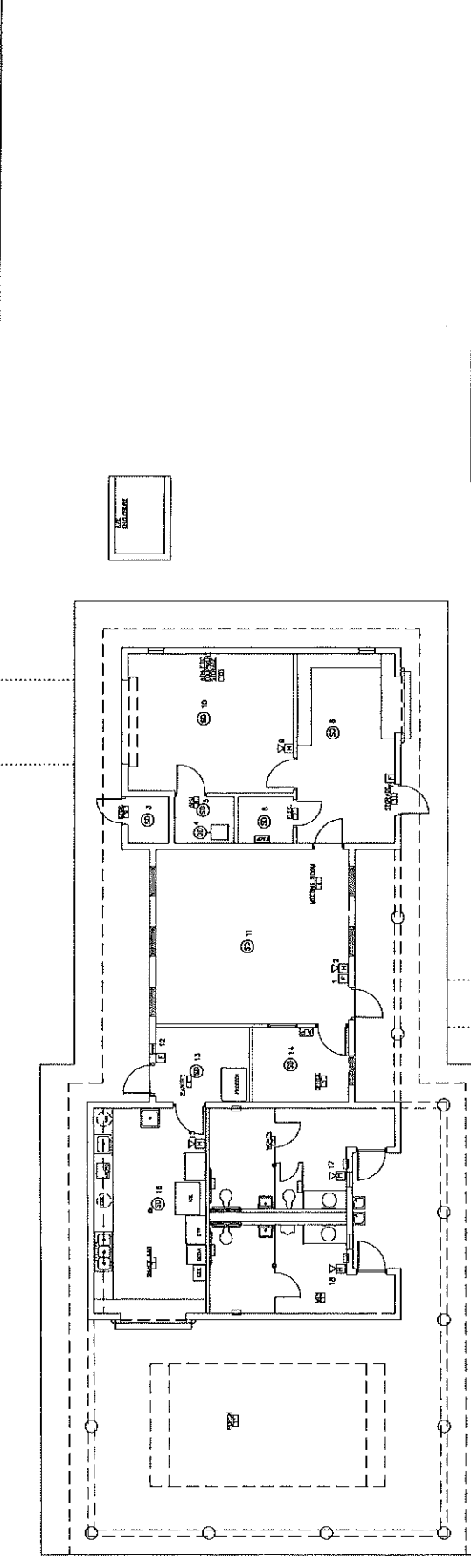
No.	Date	Description

Design: PWT
 Drawn: JDM
 Checked: EJM
 Project: 03/03/2017

Miami-Dade County
 Park and Recreation Department
 275 NW 2nd STREET, 4th FLOOR, MIAMI, FL 33128

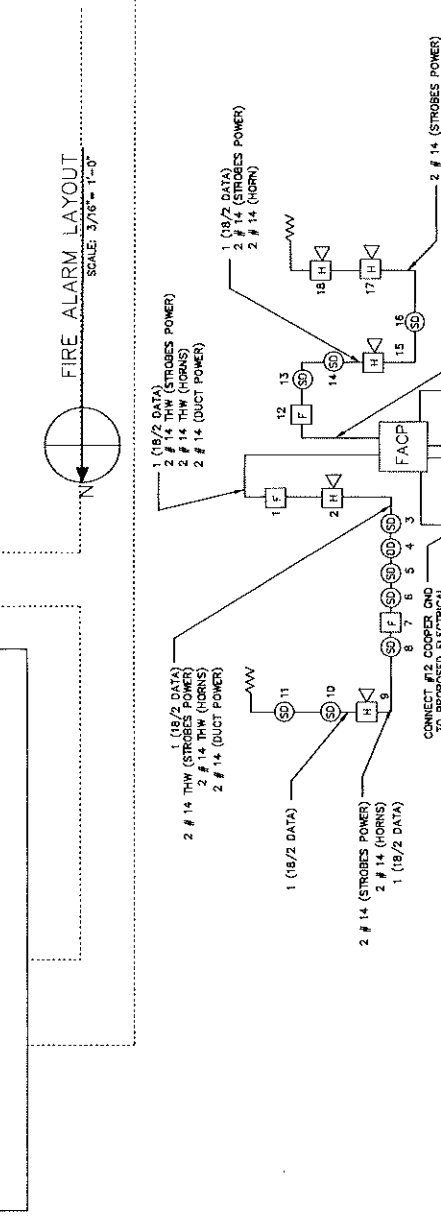
Project Title: FIRE ALARM RISER DIAGRAM
 116 MENKIE NW AT NW 58 STREET
 FIELD CENTER
 DORAL MEADOW PARK

Project No: 03/03/2017
 Date: JUL 2017
 Drawing: E-5
 Scale: AS SHOWN



- NOTES:**
- SYSTEM DESCRIPTION: POWER LIMITED, NON-CODED ELECTRICALLY SUPERVISED WITH 24 HOUR BATTERY STAND-BY W/3 MIN. OF ALARM BACK-UP AND CHARGER WITH INTERCONNECTION CONTACTS TO NOTIFY CENTRAL STATION. SYSTEM SHALL BE ZONED AS SHOWN.
 - THE FIRE ALARM SYSTEM SHALL BE ZONED AS SHOWN.
 - ALL ALARMS AND FLASH SIGNALS SHALL BE AT A FLASHING LIGHT TO BE DISPLAYED IN CONTROL PANEL AND NOTIFY CENTRAL STATION.
 - PHOTOELECTRIC SMOKE DETECTORS SHALL HAVE A FLASHING LIGHT STATUS INDICATING LIGHT FOR VISUAL SUPERVISION WHICH SHALL LATCH AND GO ON FULL BRILLIANCE WHEN DETECTOR IS ACTIVATED.
 - ALL WORK SHALL BE DONE IN FULL ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, NATIONAL BOARD OF FIRE UNDERWRITERS STANDARD NO. 72 AND ALL APPLICABLE STATE REGULATIONS.
 - INITIATING CIRCUIT WIRE SHALL BE COLOR CODED RED AND BLACK.
 - AUDIBLE/VISUAL WIRE SHALL BE COLOR CODED ORANGE AND YELLOW.
 - PROVIDE CUT SHEETS OF THE FIRE ALARM PANEL SMOKE DETECTOR, PULL STATIONS, COMBINATION AUDIBLE/VISUAL ALARMS AND HEAT DETECTORS FOR APPROVAL.
 - THE CONTRACTOR SHALL PROVIDE FOR THE OWNER RETENTION, A SET OF "AS BUILT" DRAWINGS AT THE END OF CONSTRUCTION.
 - FOR ALL PHOTOELECTRIC SMOKE DETECTORS, THE CONTRACTOR SHALL VERIFY ALL EXISTING SET POINTS ARE CORRECT AND AS DESIGNATED BY THE ELECTRICAL ENGINEER. MUST BE NOTIFIED IN WRITING BEFORE PROCEEDING WITH THE WORK.
 - PERMITS ARE REQUIRED BY THE BUILDING DEPARTMENT.
 - ALL MATERIALS, EQUIPMENT AND DEVICES SHALL BEAR THE INSPECTION LABEL OF AN INDEPENDENT TESTING LAB, SUCH AS UL.
 - CONDUCTORS INSULATION FOR WIRES SHALL BE #18 UTP FOR INITIATION CIRCUITS AS PER NEC 760-27 EXCEPT AS OTHER & #18 MIN THIN FOR NOTIFICATION CIRCUITS.
 - CONDUCTORS SHALL NOT EXCEED 150 FT. PER CIRCUIT AS PER NFPA 72.
 - THE SYSTEM SHALL NOT EXCEED 150 FT. PER CIRCUIT AS PER NFPA 72.
 - ALL AUDIBLE/VISUAL ALARMS PER ANS I117.1 AND SOUTH FLORIDA BUILDING CODE CHAPTER 618 SHALL BE FULLY COMPLIANT AND ULL APPROVED.
 - ALL COMPONENTS SHALL BE FULLY COMPLIANT AND ULL APPROVED.
 - FIRE ALARM CONTRACTORS, WORKING PLANS AS PER F.S.S. 633.70 (4) SHALL BE SUBMITTED TO METRO DADE FIRE DEPARTMENT BEFORE A FIRE ALARM SYSTEM IS INSTALLED OR REWORKED.
 - BATTERY CALCULATIONS SHALL BE PROVIDED BY INSTALLING CONTRACTOR PRIOR TO FINAL INSPECTION.

HAMMOND & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 99 NW 18th STREET, SUITE 102
 MIAMI, FL 33135
 TEL: (305) 661-1111 FAX: (305) 661-3776
 LIC # 35112 ENGINEER
 LIC # 35113 ELECTRICAL ENGINEER
 LIC # 35114 ENGINEER



- ◻ FARADAY CAT. NO. 5608-D-14-240C
- ◻ FARADAY CAT. NO. 9158
- ◻ FARADAY CAT. NO. 9107
- ◻ FARADAY CAT. NO. 9176
- ◻ FARADAY PREWATCH 4-2 (4 ZONES)
- *** END OF THE RESISTOR POWER LIMITED.

FIRE ALARM RISER DIAGRAM
 N.T.S.

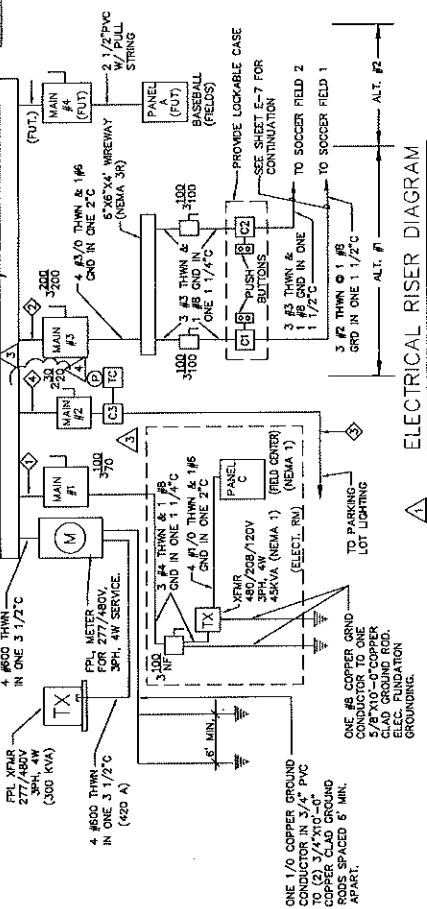
PANEL SCHEDULE

TYPE	SFD-1000	120/208 V. 3PH. 4W	MAIN BUS	224 A.			
SERVICE MOUNTING SURFACE	42		NEUTRAL MAINS	DUIL			
POLES			A.I.C.	150A MFR.			
				10000.			
K.V.A.	TRIP	WIRE	REMARKS	WIRE COND. TRIP	K.V.A.		
POLE	DUIT	POLE		DUIT	POLE		
0.9	20-1	3/4"	12 LIGHTS	12	3/4"	20-1	1.2
0.8	20-1	3/4"	12 LIGHTS	12	3/4"	20-1	0.3
0.8	20-1	3/4"	12 LIGHTS	12	3/4"	20-1	0.8
0.4	20-1	3/4"	12 LIGHTS	12	3/4"	20-1	0.8
1.0	20-1	3/4"	12 RECEPTACLES	12	3/4"	20-2	3.3
1.0	20-1	3/4"	12 RECEPTACLES	12	3/4"	40-2	6.2
1.0	20-1	3/4"	12 RECEPTACLES	12	3/4"	20-1	1.2
0.8	20-1	3/4"	12 RECEPTACLES	12	3/4"	20-1	1.2
1.2	20-1	3/4"	12 REFRIG.	12	3/4"	20-1	0.8
0.8	20-1	3/4"	12 KEF	12	3/4"	20-1	0.7
0.8	20-1	3/4"	12 SODA	12	3/4"	20-1	0.8
1.0	20-1	3/4"	12 ICE	12	3/4"	20-1	0.2
1.5	20-1	3/4"	12 HAND DRIVER	12	3/4"	20-1	1.5
1.5	20-1	3/4"	12 HAND DRIVER	12	3/4"	20-1	1.5
0.6	20-1	3/4"	12 EXT. RECEPT.	12	3/4"	20-1	0.8
1.4	20-1	3/4"	12 TEL. OUTLETS	12	3/4"	20-1	0.8
4.5	30-2	3/4"	10 EM.	12	3/4"	20-1	0.2
			SPARE	41			

TOTAL LOAD: (128 X 40) 5120 = 40.8 KVA
 (48 X 408 X 1.73) = 1532 A

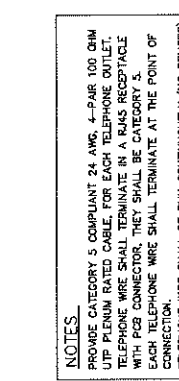
- NOTES**
- EVERYTHING TO BE WEATHER PROOF AND NEMA 3R UNLESS OTHERWISE NOTED
 - PROVIDE LIGHTING CONTACTOR RATED 100A, 3POLES : C1 & C2
 - PROVIDE A LIGHTING CONTACTOR RATED 30A, 2POLES : C3
 - PHOTOCELL FOR PARKING LOT LIGHTING, SHALL BE MOUNTED IN SERVICE RACK FACING EAST.
 - USE R1K LOW - PEAK FUSES.

- KEYED NOTES**
- 3 #2 THIN IN ONE 1 1/4" C.
 - 4 #3/0 THIN IN ONE 2" C.
 - SEE KEYED NOTES #6 & #7 ON DWG. E-2
 - 3/4" C. 2#12 & 1/2" C.



ELECTRICAL RISER DIAGRAM

- NOTES**
- PROVIDE CATEGORY 5 COMPLIANT 24 AWG, 4-PAIR 100 OHM UTP FLENUM RATED CABLE, FOR EACH TELEPHONE OUTLET. TELEPHONE WIRE SHALL TERMINATE IN A RJ45 RECEPTACLE WITH PCB CONNECTOR. THEY SHALL BE CATEGORY 5. EACH TELEPHONE WIRE SHALL TERMINATE AT THE POINT OF CONNECTION.
- TELEPHONE WIRE SHALL BE RUN CONTINUOUSLY (NO SPLICES). TELEPHONE INSTALLATION SHALL COMPLY WITH NEC ART. 800.



TELEPHONE RISER DIAGRAM

SHORT CIRCUIT CALCULATIONS

(1) AT SERVICE RACK:

$$I_{SC} = \frac{V_{LINE}}{Z_{SC}} = \frac{208}{0.023} = 9043.48 \text{ AMPS}$$

$$M_{FACTOR} = \frac{I_{SC}}{I_{L}} = \frac{9043.48}{389.3} = 23.23$$

(2) AT PANEL C:

$$I_{SC} = \frac{V_{LINE}}{Z_{SC}} = \frac{208}{0.023} = 9043.48 \text{ AMPS}$$

$$M_{FACTOR} = \frac{I_{SC}}{I_{L}} = \frac{9043.48}{389.3} = 23.23$$

LOAD	KVA	DEMAND	KVA DEMAND
FIELD LIGHTING	45.0	100%	45.0
SOCCER FIELDS	115.2	125%	144.0
PARKING LOT LIGHTING	4.9	125%	6.1
BASEBALL FIELDS	99.2	125%	124.0
TOTAL	264.3		323.1

$I_L = 389.3 \text{ AMPS}$

WIRE SIZES

WEBC ISCA - SHORT CIRCUIT CURRENT AVAILABLE AT PFL TRANSFORMER

DISTANCE = DISTANCE FROM PFL TO SERVICE RACK

C = A CONSTANT FOR CABLE TO BE INSTALLED

V LINE - LINE TO LINE VOLTAGE

I SC - FAULT CURRENT AT SERVICE RACK

SHORT CIRCUIT CALCULATIONS

(1) AT SERVICE RACK:

$$I_{SC} = \frac{V_{LINE}}{Z_{SC}} = \frac{208}{0.023} = 9043.48 \text{ AMPS}$$

$$M_{FACTOR} = \frac{I_{SC}}{I_{L}} = \frac{9043.48}{389.3} = 23.23$$

(2) AT PANEL C:

$$I_{SC} = \frac{V_{LINE}}{Z_{SC}} = \frac{208}{0.023} = 9043.48 \text{ AMPS}$$

$$M_{FACTOR} = \frac{I_{SC}}{I_{L}} = \frac{9043.48}{389.3} = 23.23$$

PROJECT INFORMATION

Project No: 99112
 Date: JUL 2001 (AS NOTED)
 Drawing Title: DORAL MEADOW PARK FIELD CENTER 116 AVENUE NW AT NW 98 STERS

DESIGNER
 HAMMOND & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 MIAMI GARDENS OFFICE CENTER
 10000 W. BIRDAWAY BLVD., SUITE 300
 MIAMI GARDENS, FLORIDA 33189
 TEL: (305) 833-1100 FAX: (305) 833-1076
 HOMEMAN, ELECTRICAL ENGINEER P.E. #10046

REVISIONS

NO.	DATE	DESCRIPTION
1	7/20/01	ISSUED FOR PERMIT
2	7/20/01	ISSUED FOR CONSTRUCTION

APPROVALS

 PROJECT ENGINEER

 ELECTRICAL ENGINEER

DATE

 DATE

SCALE

 SCALE

PROJECT NO.

 PROJECT NO.

DRAWING TITLE

 DRAWING TITLE

DESIGNER

 DESIGNER

DATE

 DATE

SCALE

 SCALE

Project Title:	DORAL MEADOW PARK
Field Office:	FIELD CENTER
Address:	115 AVENUE NW AT NW 58 STREET
Project Title:	DRINKING FOUNTAIN PLUMBING PLAN

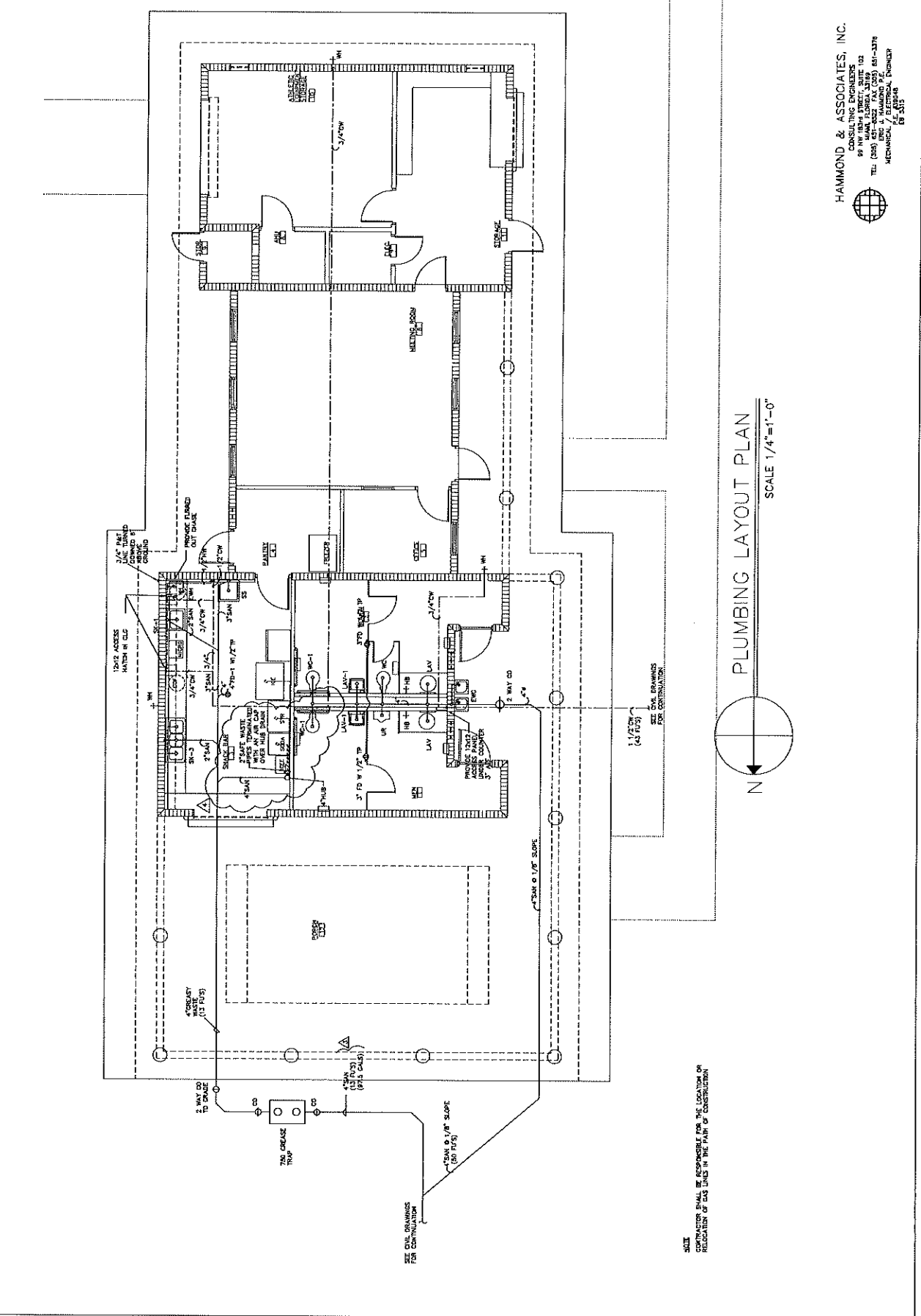
Project No:	09112
Date:	JULY 2001
Scale:	AS NOTED
Sheet No.:	P-1
Drawn By:	
Checked By:	
Designated:	

Rev.	Description
1	ISSUED FOR PERMITS
2	ISSUED FOR CONSTRUCTION
3	ISSUED FOR CONSTRUCTION
4	ISSUED FOR CONSTRUCTION
5	ISSUED FOR CONSTRUCTION

Miami-Dade County
 Park and Recreation Department
 275 NW 2nd Street, 4th Floor, Miami, FL 33128

Project Title:	DORAL MEADOW PARK
Field Office:	FIELD CENTER
Address:	115 AVENUE NW AT NW 58 STREET
Project Title:	DRINKING FOUNTAIN PLUMBING PLAN

HAMMOND & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 9111 SW 15th Street, Suite 101
 Miami, Florida 33156
 TEL: (305) 851-3377 FAX: (305) 851-3376
 MECHANICAL / ELECTRICAL ENGINEER
 REG. NO. 10000

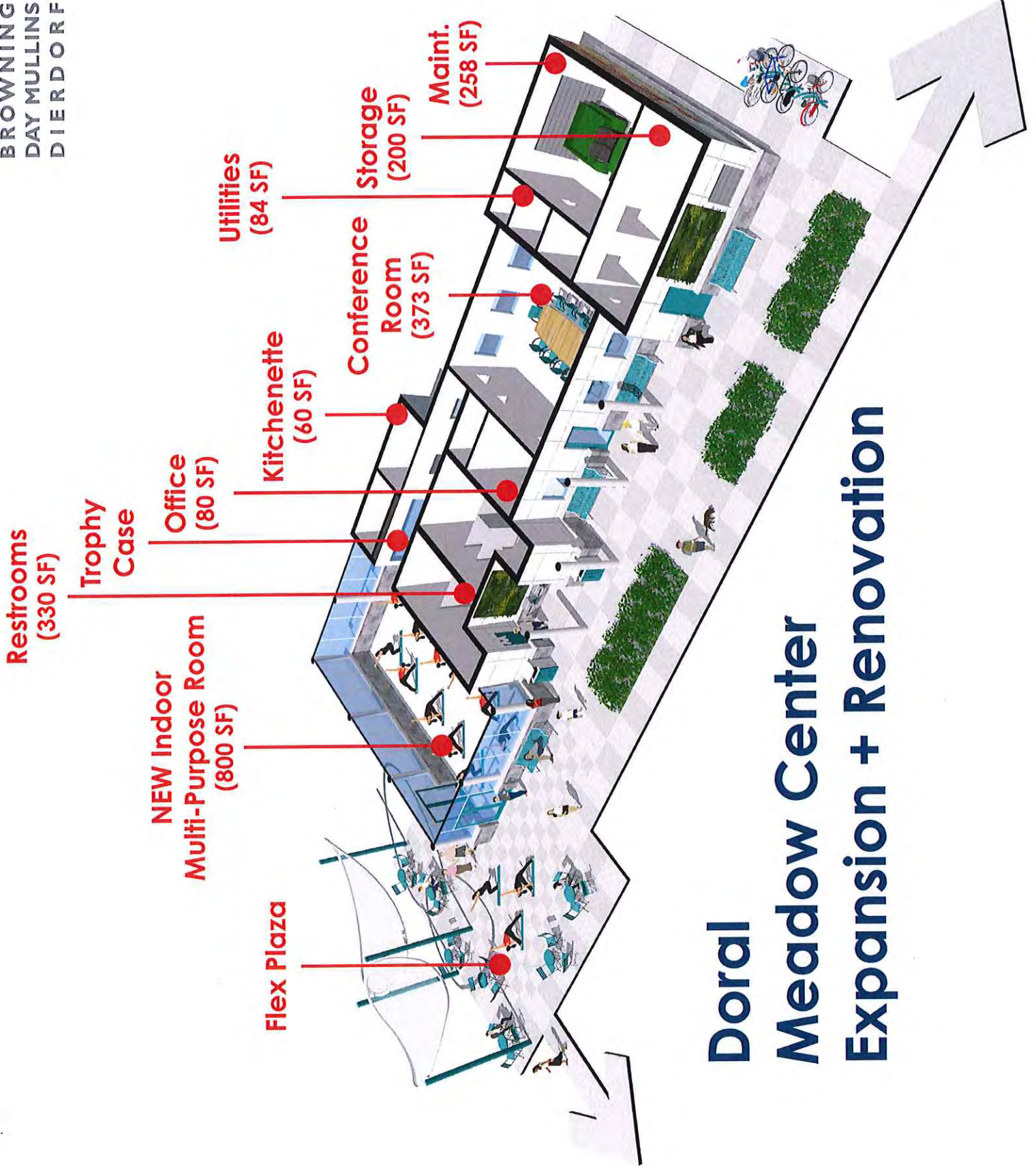


PLUMBING LAYOUT PLAN
 SCALE 1/4"=1'-0"

NOTE: CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES IN THE FIELD OF CONSTRUCTION.

EXHIBIT "C"

Conceptual
Drawings



Doral Meadow Center Expansion + Renovation

EXHIBIT "D"

Security Camera Post Locations

Project Title: DORAL MEADOW PARK
FIELD CENTER
116 AVENUE NW AT NW 58 STREET

Brawing Title: ELECTRICAL SITE PLAN

Miami-Dade County
Park and Recreation Department
275 N.W. 2nd Street, 4th Floor, MDM, FL 33128

Revision	Date	Description
1	12/11/03	ISSUED FOR BIDDING
2	1/14/04	OWNER CHANGES
3	1/14/04	ADDITIONAL NO. 1

Prepared By: Mike Rodriguez
Checked By: [Blank]
Drawn By: [Blank]

Project No: 89112
Date: JUL 2001 1:00
Drawing No: [Blank]
Scale: [Blank]

Hammond & Associates, Inc.
CONSULTING ENGINEERS
MIAMI GARDENS OFFICE CENTER
188 N.W. 183RD STREET, SUITE 102
MIAMI GARDENS, FL 33169
TEL: (305) 581-8522 FAX: (305) 581-3376
ELECTRICAL ENGINEER
P.E. #39948

SITE LEGEND

- SPORTLIGHT POLE
- FUTURE SPORTLIGHT POLE
- PARKING AREA POLE

UTILITIES COORDINATION NOTES

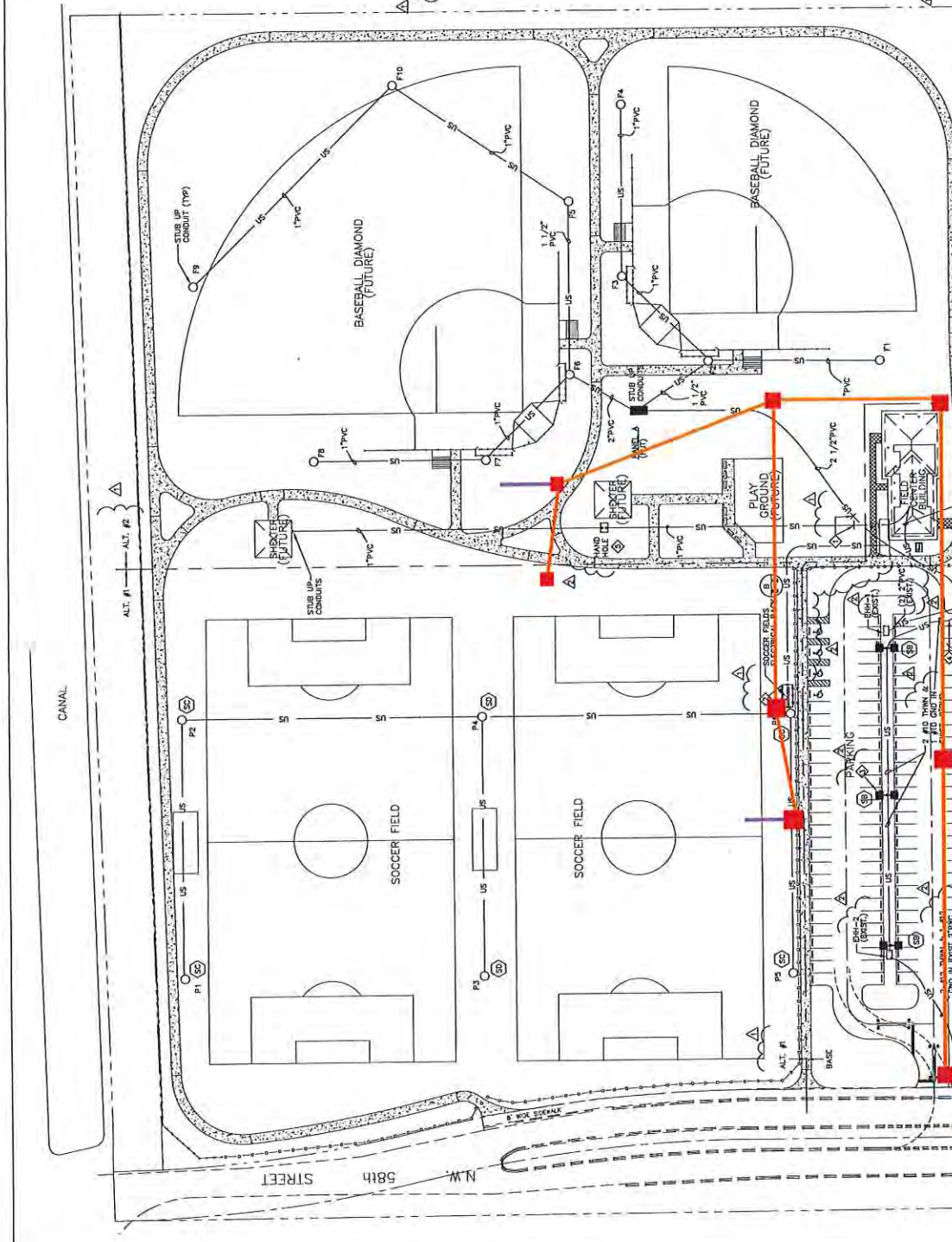
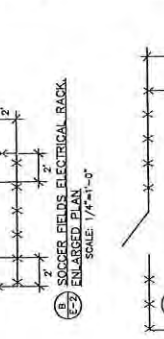
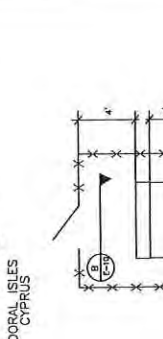
F.P.A. CONTACT: LEONARD ROBERTS
CUSTOMER PROJECT MANAGER
PH: (305) 593-4029

BELL SOUTH CONTACT: REY LAND
MANAGER
PH: (305) 260-8235

KEYED NOTES:

- 1. STUB-OUT CONDUIT 5' FROM CONDUITS TO ELECT. SERVICE RACK.
- 2. BRINGS A/C SERIES POLYMER CONC. COVER.
- 3. INTERCEPT EXIST. 2" PVC UNDER ALI. #1.
- 4. TYPE OF 3 POLES.

DORAL ISLES CYPRUS



12 x 12 x 6 Underground Pull Box

BELLSOUTH POINT OF CONNECTION.

**DORAL MEADOW PARK – COST SUBMITTAL
PACKAGE**



DESIGN-BUILD DORAL MEADOW PARK RENOVATIONS

COST ESTIMATE

RFQ NO. 2019-42



CITY OF DORAL, FLORIDA





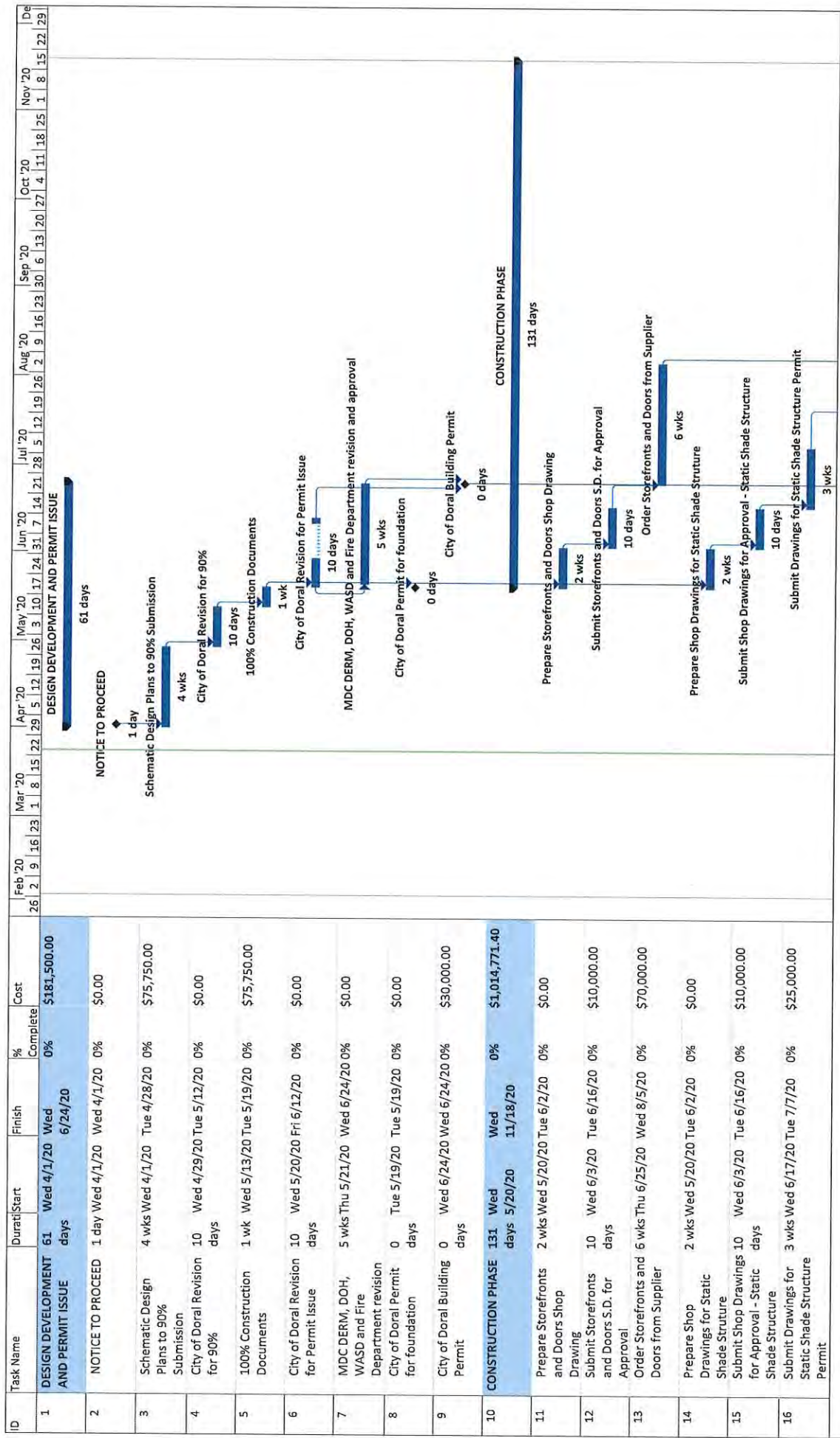
8935 NW 35th Lane, Suite 200. Doral, FL 33172
 Phone: (305) 592-7283 | Fax: (305) 593-1594

Construction Estimate

DORAL MEADOW PARK		11555 NW 58TH ST			
Item #	Description	Unit	Qty.	Unit Price	Total
1	ENGINEERING				
1.1	ARCHITECTURAL SERVICES	LS	1.00	99,800.00	\$ 99,800.00
1.2	M.E.P. & FA. SERVICES	LS	1.00	30,000.00	\$ 30,000.00
1.3	SURVEY	LS	1.00	20,000.00	\$ 20,000.00
1.4	ASBESTOS SURVEY	LS	1.00	1,700.00	\$ 1,700.00
1.5	PERMIT FEES (ALLOWANCE)	LS	1.00	30,000.00	\$ 30,000.00
	Total		1	181,500.00	\$ 181,500.00
2	GENERAL PROJECT				
2.1	MOBILIZATION	LS	1.00	10,000.00	\$ 10,000.00
2.2	TEMPORARY SERVICES / CONSTRUCTION DEBRIS REMOVAL	LS	1.00	20,000.00	\$ 20,000.00
2.3	BATHROOM TRAILER	MO	4.00	5,000.00	\$ 20,000.00
2.4	OFFICE TRAILER	MO	4.00	1,250.00	\$ 5,000.00
	Total		1	55,000.00	\$ 55,000.00
3	DEMOLITION				
3.1	INTERIOR DEMOLITION	LS	1.00	17,500.00	\$ 17,500.00
3.2	MECHANICAL DEMOLITION	LS	1.00	4,800.00	\$ 4,800.00
	Total		1	22,300.00	\$ 22,300.00
4	STRUCTURAL				
4.1	STRUCTURAL WORK / FOUNDATIONS	SF	1,648.00	25.00	\$ 41,200.00
4.2	6" CONCRETE CURB WALL- MULTIPURPOSE ROOM	LF	75.00	30.00	\$ 2,250.00
4.3	STUCCO FINISH	LS	1.00	7,300.00	\$ 7,300.00
	Total		1	50,750.00	\$ 50,750.00
5	DRYWALL & FINISH				
5.1	DRYWALL PARTITIONS	LS	1.00	41,700.00	\$ 41,700.00
5.2	ACOUSTICAL CEILING	LS	1.00	9,400.00	\$ 9,400.00
5.3	INSULATION	LS	1.00	5,500.00	\$ 5,500.00
	Total		1	56,600.00	\$ 56,600.00
6	FLOORING & INTERIOR FINISHES				
6.1	LVT FLOOR & INSTALLATION	LS	1.00	13,900.00	\$ 13,900.00
6.2	ANTI SLIP EPOXY FINISH FLOOR	LS	1.00	5,600.00	\$ 5,600.00
6.3	EXTERIOR CONCRETE RESTORATION AND REFINISH	LS	1.00	24,000.00	\$ 24,000.00
6.4	BASEBOARDS	LS	1.00	3,600.00	\$ 3,600.00
6.5	SHADERS FOR MULTI P. ROOM	LS	1.00	17,800.00	\$ 17,800.00
	Total		1	64,900.00	\$ 64,900.00
7	FURNITURE				
7.1	KITCHENETTE	LS	1.00	25,000.00	\$ 25,000.00
7.2	TROPHY CHASE	EA	1.00	6,700.00	\$ 6,700.00
7.3	CONF. ROOM & OFFICE FURNITURE	LS	1.00	9,200.00	\$ 9,200.00
	Total		1	40,900.00	\$ 40,900.00
8	WINDOWS & DOORS				
8.1	EXTERIOR WINDOWS AND DOORS	LS	1.00	98,500.00	\$ 98,500.00
8.3	INTERIOR DOORS	LS	1.00	15,000.00	\$ 15,000.00
	Total		1	113,500.00	\$ 113,500.00
9	ELECTRICAL				
9.1	ELECTRICAL	LS	1.00	48,500.00	\$ 48,500.00
9.2	EXISTING FIRE ALARM REPLACEMENT	LS	1.00	15,900.00	\$ 15,900.00

9.3	FIRE ALARM SYSTEM - ADDITIONS FOR NEW AREAS	LS	1.00	9,400.00	\$	9,400.00
9.4	EXTERIOR CAMERA POLES	EA	10.00	1,860.00	\$	18,600.00
9.5	DIRECTIONAL BORE FOR CAMERA POLES (2" CONDUIT)	LF	2,500.00	19.20	\$	48,000.00
9.6	PULLBOXES FOR CAMERA POLES	EA	13.00	1,020.00	\$	13,260.00
9.7	OPEN TRENCH (1" CONDUIT)	LF	120.00	16.80	\$	2,016.00
9.8	IT ENCLOSURE HOOK UP	EA	2.00	300.00	\$	600.00
Total			1	156,276.00	\$	156,276.00
10	PLUMBING					
10.1	PLUMBING	LS	1.00	26,700.00	\$	26,700.00
10.2	RESTROOMS FIXTURES	LS	1.00	11,200.00	\$	11,200.00
10.3	BATH STALL PARTITIONS	LS	1.00	9,800.00	\$	9,800.00
Total			1	47,700.00	\$	47,700.00
11	MECHANICAL					
11.1	MECHANICAL	LS	1.00	38,800.00	\$	38,800.00
Total			1	38,800.00	\$	38,800.00
12	IT & MEDIA					
12.1	DATA & A/V NETWORK	LS	1.00	8,500.00	\$	8,500.00
12.2	AUDIO / VIDEO EQUIPMENT	LS	1.00	0.00	\$	-
Total			1	8,500.00	\$	8,500.00
13	SITE ELEMENTS					
13.1	BENCHES	EA	4.00	2,000.00	\$	8,000.00
13.2	PICNIC TABLES	EA	4.00	2,100.00	\$	8,400.00
13.3	BICYCLE RACK	EA	1.00	1,000.00	\$	1,000.00
13.4	TRASH RECEPTABLES	EA	4.00	1,500.00	\$	6,000.00
13.5	REGRADING/RESODDING	SY	156.00	22.50	\$	3,510.00
13.6	STATIC SHADE STRUCTURE- PERGOLA (ALLOWANCE)	SF	1,000.00	82.00	\$	82,000.00
Total			1	108,910.00	\$	108,910.00
14	PAINT					
14.1	INTERIOR PAINT	LS	1.00	24,500.00	\$	24,500.00
14.2	EXTERIOR PAINT	LS	1.00	10,100.00	\$	10,100.00
Total			1	34,600.00	\$	34,600.00
14	SUPERVISION					
14.1	TECHNICAL SUPERVISION AND MANAGEMENT	LS	1.00	60,000.00	\$	60,000.00
Total			1	60,000.00	\$	60,000.00
TOTAL PRICE					\$	1,040,236.00
OVERHEAD & PROFIT			15%		\$	156,035.40
GRAND TOTAL					\$	1,196,271.40

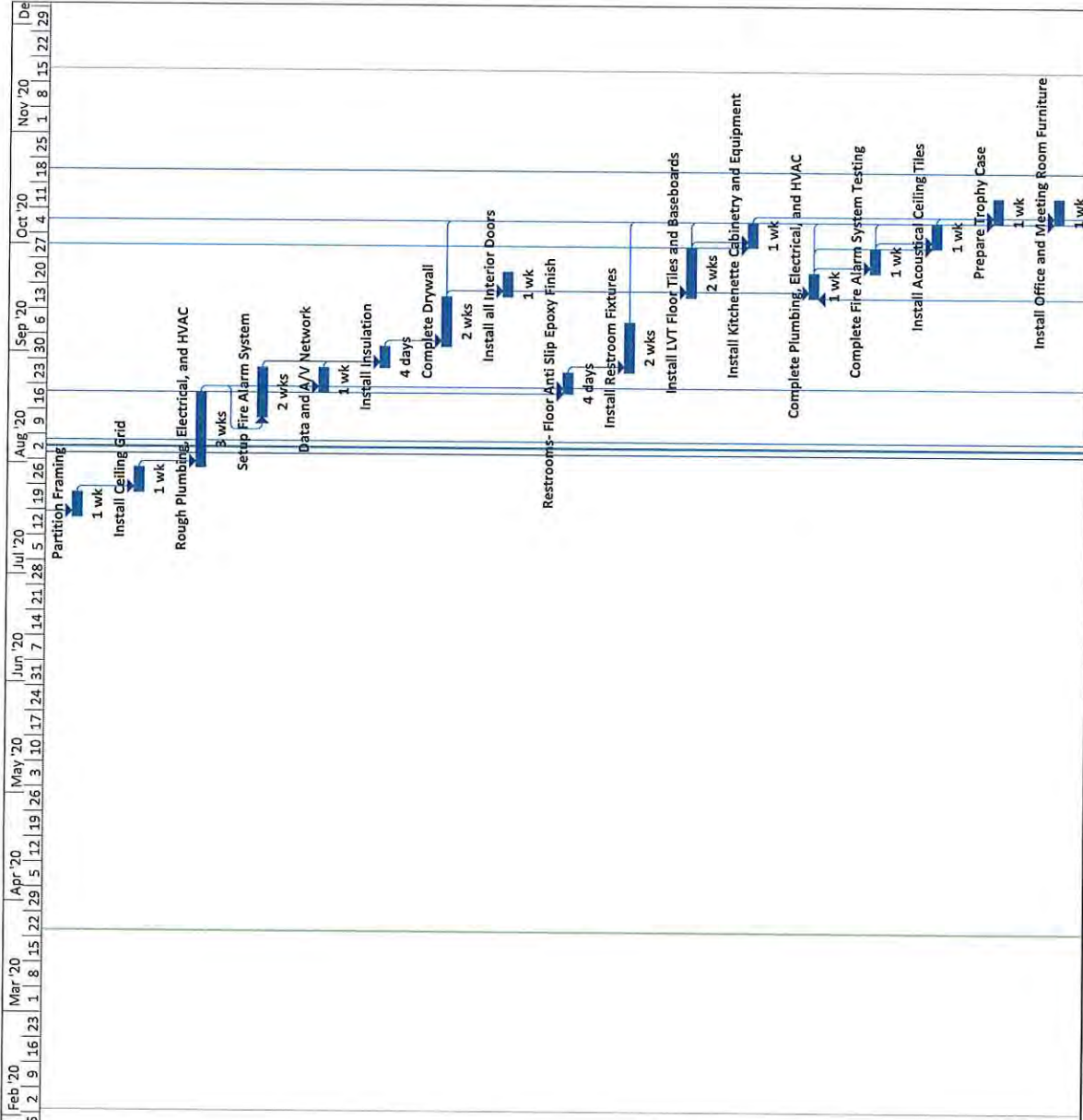
PROJECT SCHEDULE



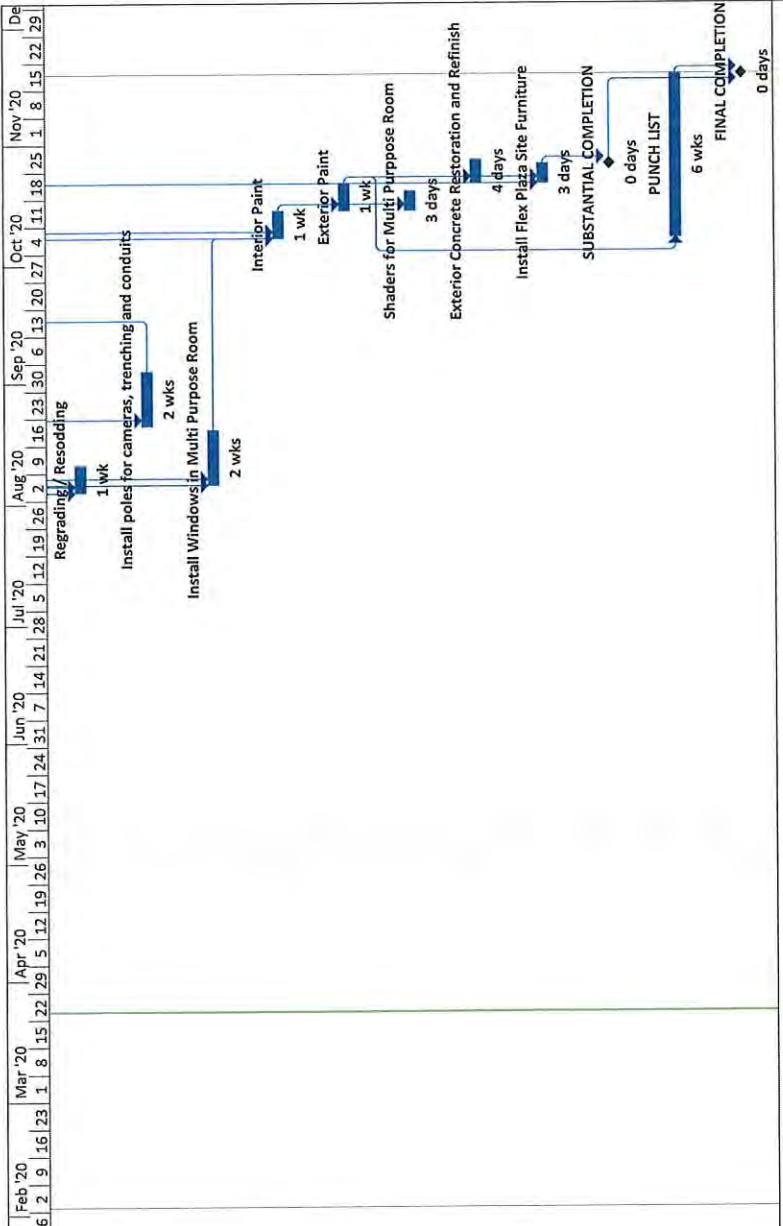
ID	Task Name	Duration	Start	Finish	% Complete	Cost
1	DESIGN DEVELOPMENT AND PERMIT ISSUE	61 days	Wed 4/1/20	Wed 6/24/20	0%	\$181,500.00
2	NOTICE TO PROCEED	1 day	Wed 4/1/20	Wed 4/1/20	0%	\$0.00
3	Schematic Design Plans to 90% Submission	4 wks	Wed 4/1/20	Tue 4/28/20	0%	\$75,750.00
4	City of Doral Revision for 90%	10 days	Wed 4/29/20	Tue 5/12/20	0%	\$0.00
5	100% Construction Documents	1 wk	Wed 5/13/20	Tue 5/19/20	0%	\$75,750.00
6	City of Doral Revision for Permit Issue	10 days	Wed 5/20/20	Fri 6/12/20	0%	\$0.00
7	MDC DERM, DOH, WASD and Fire Department revision	5 wks	Thu 5/21/20	Wed 6/24/20	0%	\$0.00
8	City of Doral Permit for foundation	0 days	Tue 5/19/20	Tue 5/19/20	0%	\$0.00
9	City of Doral Building Permit	0 days	Wed 6/24/20	Wed 6/24/20	0%	\$30,000.00
10	CONSTRUCTION PHASE	131 days	Wed 5/20/20	Wed 11/18/20	0%	\$1,014,771.40
11	Prepare Storefronts and Doors Shop Drawing	2 wks	Wed 5/20/20	Tue 6/2/20	0%	\$0.00
12	Submit Storefronts and Doors S.D. for Approval	10 days	Wed 6/3/20	Tue 6/16/20	0%	\$10,000.00
13	Order Storefronts and Doors from Supplier	6 wks	Thu 6/25/20	Wed 8/5/20	0%	\$70,000.00
14	Prepare Shop Drawings for Static Shade Structure	2 wks	Wed 5/20/20	Tue 6/2/20	0%	\$0.00
15	Submit Shop Drawings for Approval - Static Shade Structure	10 days	Wed 6/3/20	Tue 6/16/20	0%	\$10,000.00
16	Submit Drawings for Static Shade Structure Permit	3 wks	Wed 6/17/20	Tue 7/7/20	0%	\$25,000.00

ID	Task Name	Duration	Start	Finish	% Complete	Cost
17	Prepare Shop Drawings for Trophy Case	1 wk	Thu 6/25/20	Wed 7/1/20	0%	\$0.00
18	Submit Shop Drawings for Approval - Trophy Case	1 wk	Thu 7/2/20	Wed 7/8/20	0%	\$1,000.00
19	Trophy Case Fabrication	3 wks	Thu 7/9/20	Wed 7/29/20	0%	\$5,000.00
20	Prepare Shop Drawings for Kitchenette Custom Cabinetry	2 wks	Thu 6/25/20	Wed 7/8/20	0%	\$0.00
21	Submit Shop Drawings for Approval - Kitchenette Cabinetry	10 days	Thu 7/9/20	Wed 7/22/20	0%	\$5,000.00
22	Kitchenette Cabinetry Fabrication	4 wks	Thu 7/23/20	Wed 8/19/20	0%	\$10,000.00
23	Mobilize	3 days	Thu 6/25/20	Mon 6/29/20	0%	\$60,000.00
24	Order all Restroom Materials	3 wks	Thu 6/25/20	Wed 7/15/20	0%	\$10,500.00
25	Order Flex plaza Site Furniture	4 wks	Thu 6/25/20	Wed 7/22/20	0%	\$20,000.00
26	Temporary Services - Setup/Maintenance	3 days	Tue 6/30/20	Thu 7/2/20	0%	\$65,000.00
27	Accommodate all Park Crew in New Temp Office	1 wk	Fri 7/3/20	Thu 7/9/20	0%	\$2,000.00
28	Flex Plaza Slab on grade and foundation works	3 wks	Tue 6/30/20	Mon 7/20/20	0%	\$41,200.00
29	Install Static Shade Structure	2 wks	Tue 7/21/20	Mon 8/3/20	0%	\$47,000.00
30	Construct 6" Curb Wall for Multi Purpose Room	1 wk	Tue 7/21/20	Mon 7/27/20	0%	\$4,385.40
31	Stucco Finish	1 wk	Tue 7/28/20	Mon 8/3/20	0%	\$7,300.00
32	Interior/ Mechanical Demolition	1 wk	Fri 7/10/20	Thu 7/16/20	0%	\$25,000.00

ID	Task Name	Duration	Start	Finish	% Complete	Cost
33	Partition Framing	1 wk	Fri 7/17/20	Thu 7/23/20	0%	\$30,000.00
34	Install Ceiling Grid	1 wk	Fri 7/24/20	Thu 7/30/20	0%	\$10,000.00
35	Rough Plumbing, Electrical, and HVAC	3 wks	Fri 7/31/20	Thu 8/20/20	0%	\$105,000.00
36	Setup Fire Alarm System	2 wks	Fri 8/14/20	Thu 8/27/20	0%	\$15,000.00
37	Data and A/V Network	1 wk	Fri 8/21/20	Thu 8/27/20	0%	\$10,000.00
38	Install Insulation	4 days	Fri 8/28/20	Wed 9/2/20	0%	\$5,500.00
39	Complete Drywall	2 wks	Thu 9/3/20	Wed 9/16/20	0%	\$30,000.00
40	Install all Interior Doors	1 wk	Thu 9/17/20	Wed 9/23/20	0%	\$10,000.00
41	Restrooms- Floor Anti Slip Epoxy Finish	4 days	Fri 8/21/20	Wed 8/26/20	0%	\$5,600.00
42	Install Restroom Fixtures	2 wks	Thu 8/27/20	Wed 9/9/20	0%	\$10,500.00
43	Install LVT Floor Tiles and Baseboards	2 wks	Thu 9/17/20	Wed 9/30/20	0%	\$25,000.00
44	Install Kitchenette Cabinetry and Equipment	1 wk	Thu 10/1/20	Wed 10/7/20	0%	\$20,000.00
45	Complete Plumbing, Electrical, and HVAC	1 wk	Thu 9/17/20	Wed 9/23/20	0%	\$70,000.00
46	Complete Fire Alarm System Testing	1 wk	Thu 9/24/20	Wed 9/30/20	0%	\$15,000.00
47	Install Acoustical Ceiling Tiles	1 wk	Thu 10/1/20	Wed 10/7/20	0%	\$10,000.00
48	Prepare Trophy Case	1 wk	Thu 10/8/20	Wed 10/14/20	0%	\$4,000.00
49	Install Office and Meeting Room Furniture	1 wk	Thu 10/8/20	Wed 10/14/20	0%	\$20,000.00



ID	Task Name	Duration	Start	Finish	% Complete	Cost
50	Regrading / Resodding	1 wk	Tue 8/4/20	Mon 8/10/20	0%	\$3,510.00
51	Install poles for cameras, trenching and conduits	2 wks	Fri 8/21/20	Thu 9/3/20	0%	\$82,476.00
52	Install Windows in Multi Purpose Room	2 wks	Thu 8/6/20	Wed 8/19/20	0%	\$35,000.00
53	Interior Paint	1 wk	Thu 10/8/20	Wed 10/14/20	0%	\$24,500.00
54	Exterior Paint	1 wk	Thu 10/15/20	Wed 10/21/20	0%	\$10,100.00
55	Shaders for Multi Purpose Room	3 days	Thu 10/15/20	Mon 10/19/20	0%	\$17,800.00
56	Exterior Concrete Restoration and Refinish	4 days	Thu 10/22/20	Tue 10/27/20	0%	\$24,000.00
57	Install Flex Plaza Site Furniture	3 days	Thu 10/22/20	Mon 10/26/20	0%	\$3,400.00
58	SUBSTANTIAL COMPLETION	0 days	Mon 10/26/20	Mon 10/26/20	0%	\$0.00
59	PUNCH LIST	6 wks	Thu 10/8/20	Wed 11/18/20	0%	\$0.00
60	FINAL COMPLETION	0 days	Wed 11/18/20	Wed 11/18/20	0%	\$0.00



TEMPORARY FACILITIES

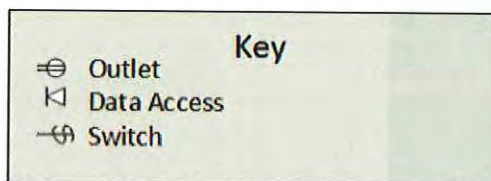
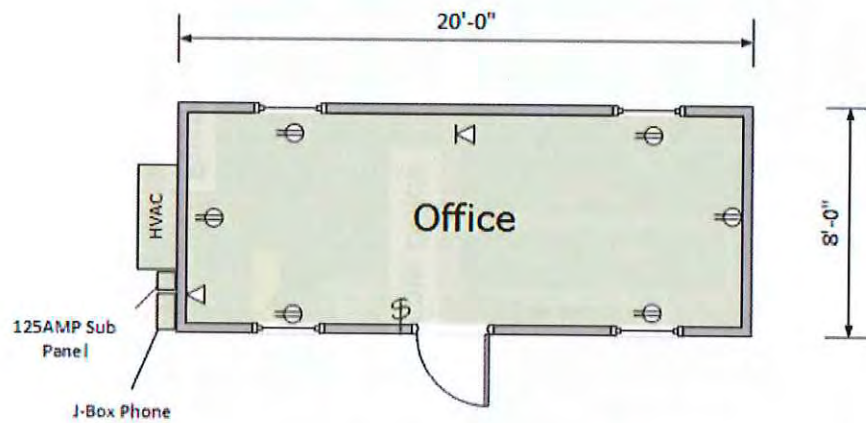
Proposed Locations for Temp Facilities



Temp Office

Restroom Trailer

TEMPORARY OFFICE TRAILER



Size

Ground Mounted
8' ceiling height
8' wide
20' box size
20' long

Exterior Finish

All steel structural components
1 ½" plywood sub floor
Standard drip rail gutters
10-16 gauge floor; joist 12
16 gauge steel siding

Interior Finish

Vinyl tile floors
Drywall textured ceilings & walls

Door Options

Windows and doors
Exterior Security
Horizontal slider windows with screens
Mini blinds
Hydraulic Door Closures
MMI High Security Door System with three-part interior locking system

Heating and Cooling

Vertical HVAC

Electric

Exterior phone / data jack access
120/240 Volt, single-phase
125 amp breaker panel
Fluorescent ceiling lights
Requires a 30kW Generator (Not Included) or Connection to a Power Line

PORTABLE RESTROOM TRAILER (ADA SERIES)



Sample ADA Restroom Trailer Features:

- Anti-slip wheelchair ramp system to access ADA compliant restroom trailer
- Wide steps, with deep landings and handrails for non-ADA bathroom rentals
- ADA compliant entry door (36" Wide)
- Flat floor design allows wheelchairs, walkers and canes to easily move in and out
- 360-degree maneuverability allows wheelchair and disabled guests full accessibility
- 1 ½" handrails positioned throughout handicapped bathroom for ease of mobility
- Climate control with air conditioning & heat
- Flushing porcelain toilets
- Running water sinks
- Stereo system
- Large vanities with mirror
- Soap and hand towels

Specifications:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Length: 20' | <input checked="" type="checkbox"/> Women's: 2 Toilets, 1 Sink |
| <input checked="" type="checkbox"/> Width: 8' 5" | <input checked="" type="checkbox"/> Men's: 1 Toilet, 2 Urinals, 1 Sink |
| <input checked="" type="checkbox"/> Height: 11' 6" | <input checked="" type="checkbox"/> Waste Tank: 490 gal. |
| <input checked="" type="checkbox"/> Uses: 1,400 | <input checked="" type="checkbox"/> Water Tank: 200 gal. |

Site Requirements:



Water Source
3/4" Spigot (30-50 psi)
within 100'



Power Source
(4) 20amp/110v dedicated
circuits (three required for
basic operation; four
required to operate heat)



Temporary Fence Panels

Temporary Fence

FEATURES SPECIFICATIONS RELATED PRODUCTS

- Height: 6' or 8' available
- Length: 12' or 10' available
- Weight: Approximately 75 lbs.*specifications may vary based on region and branch location.



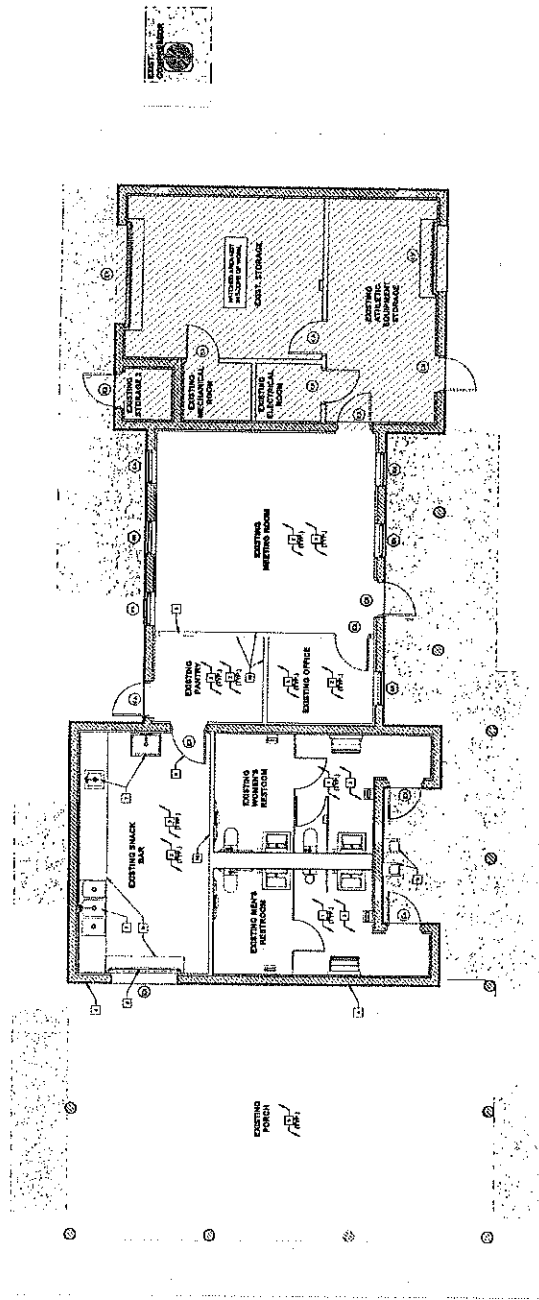
- Durable steel panels available in 6' x 12' and 8' x 10' options.
- All required hardware included.
- Prompt Delivery – our skilled fence technicians can be on site for next day delivery (some restrictions apply).
- Multiple fence panel delivery or pickup options – all inclusive, drop off only and customer pickup available.
- Delivery, set up and pick up performed by experienced, background checked fence technicians with the finest equipment in the industry from local branch locations near your neighborhood.

Temporary Fence Panel Optional Upgrades:

- Sandbags
- Privacy/Wind Screen
- Equipment Gates
- Personnel Gates

DEMOLITION

Demolition of existing partitions and doors, ceiling (inclusive of light fixtures, HVAC grilles, and existing duct work), as well as the existing floors in all areas detailed per plans. Additionally, full interior demolition of both existing bathrooms and kitchenette area. Our scope of work includes all labor, materials, and equipment needed to perform the above activities, including the offsite hauling of demolition debris.



1 DEMOLITION PLAN
 SCALE: 1/4" = 1'-0"

NOTES:
 1. REFER TO GENERAL NOTES FOR ADDITIONAL DEMOLITION NOTES.
 2. EXISTING WALLS TO BE DEMOLISHED SHALL BE INDICATED BY HATCHING AND DIMENSIONS SHALL BE SHOWN TO THE CENTERLINE OF THE WALL.
 3. EXISTING WALLS TO REMAIN SHALL BE INDICATED BY A DOTTED LINE.
 4. EXISTING WALLS TO BE DEMOLISHED SHALL BE INDICATED BY A DOTTED LINE WITH HATCHING.

NOTES:
 1. ALL EXISTING WALLS TO BE DEMOLISHED SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.
 2. ALL EXISTING WALLS TO REMAIN SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.
 3. ALL EXISTING WALLS TO BE DEMOLISHED SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.
 4. ALL EXISTING WALLS TO REMAIN SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.

WALL LEGEND:
 HATCHING: EXISTING WALL TO BE DEMOLISHED
 DOTTED LINE: EXISTING WALL TO REMAIN
 DOTTED LINE WITH HATCHING: EXISTING WALL TO BE DEMOLISHED TO FINISH SURFACE

KEY NOTES:
 1. ALL EXISTING WALLS TO BE DEMOLISHED SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.
 2. ALL EXISTING WALLS TO REMAIN SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.
 3. ALL EXISTING WALLS TO BE DEMOLISHED SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.
 4. ALL EXISTING WALLS TO REMAIN SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.

NOTES:
 1. REFER TO GENERAL NOTES FOR ADDITIONAL DEMOLITION NOTES.
 2. EXISTING WALLS TO BE DEMOLISHED SHALL BE INDICATED BY HATCHING AND DIMENSIONS SHALL BE SHOWN TO THE CENTERLINE OF THE WALL.
 3. EXISTING WALLS TO REMAIN SHALL BE INDICATED BY A DOTTED LINE.
 4. EXISTING WALLS TO BE DEMOLISHED SHALL BE INDICATED BY A DOTTED LINE WITH HATCHING.

NOTES:
 1. ALL EXISTING WALLS TO BE DEMOLISHED SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.
 2. ALL EXISTING WALLS TO REMAIN SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.
 3. ALL EXISTING WALLS TO BE DEMOLISHED SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.
 4. ALL EXISTING WALLS TO REMAIN SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.

NOTES:
 1. REFER TO GENERAL NOTES FOR ADDITIONAL DEMOLITION NOTES.
 2. EXISTING WALLS TO BE DEMOLISHED SHALL BE INDICATED BY HATCHING AND DIMENSIONS SHALL BE SHOWN TO THE CENTERLINE OF THE WALL.
 3. EXISTING WALLS TO REMAIN SHALL BE INDICATED BY A DOTTED LINE.
 4. EXISTING WALLS TO BE DEMOLISHED SHALL BE INDICATED BY A DOTTED LINE WITH HATCHING.

NOTES:
 1. ALL EXISTING WALLS TO BE DEMOLISHED SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.
 2. ALL EXISTING WALLS TO REMAIN SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.
 3. ALL EXISTING WALLS TO BE DEMOLISHED SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.
 4. ALL EXISTING WALLS TO REMAIN SHALL BE DEMOLISHED TO THE FINISH SURFACE OF THE WALL.

STRUCTURAL

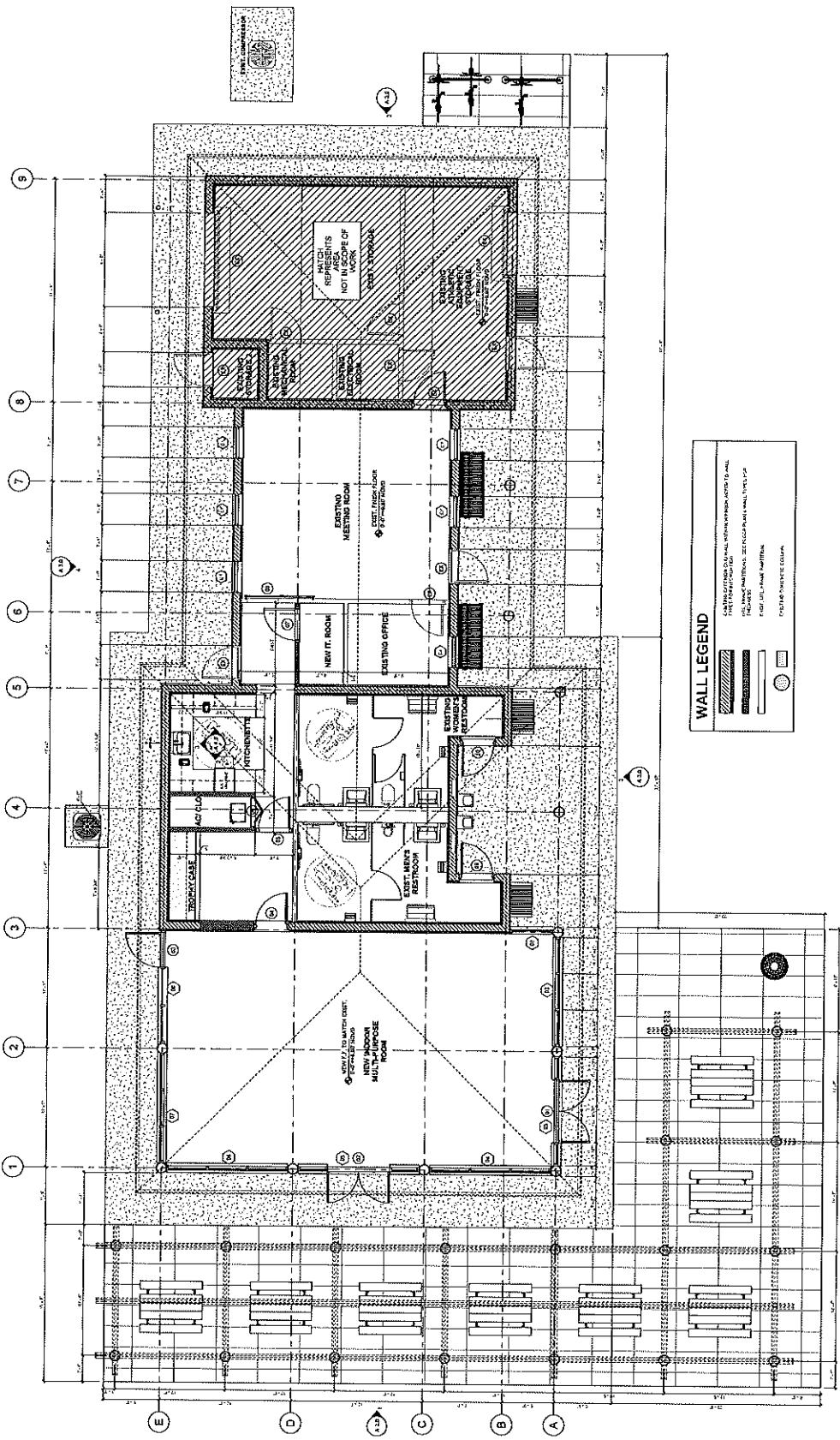
Karmil as the general contractor proposes to furnish all the labor, materials, and equipment necessary to perform all the structural work on the Doral Meadow Park Remodeling Project. All materials and labor are guaranteed to be performed in accordance with the drawings and specifications. A breakdown of all activities are as follows:

Construction of New Concrete Slab on Grade for Flex Plaza, Construction of Concrete Footers for Shade Sails, and Required Structural and Stucco Repairs on Existing Building

DORAL MEADOW PARK CENTER
 116 AVE. NW AT NW 58 ST. MIAMI
 FLORIDA, 33128

DATE: 02.20.19
 DRAWN BY: [REDACTED]
 DESIGNED BY: [REDACTED]
 PROJECT NO.: [REDACTED]
 REVISIONS:

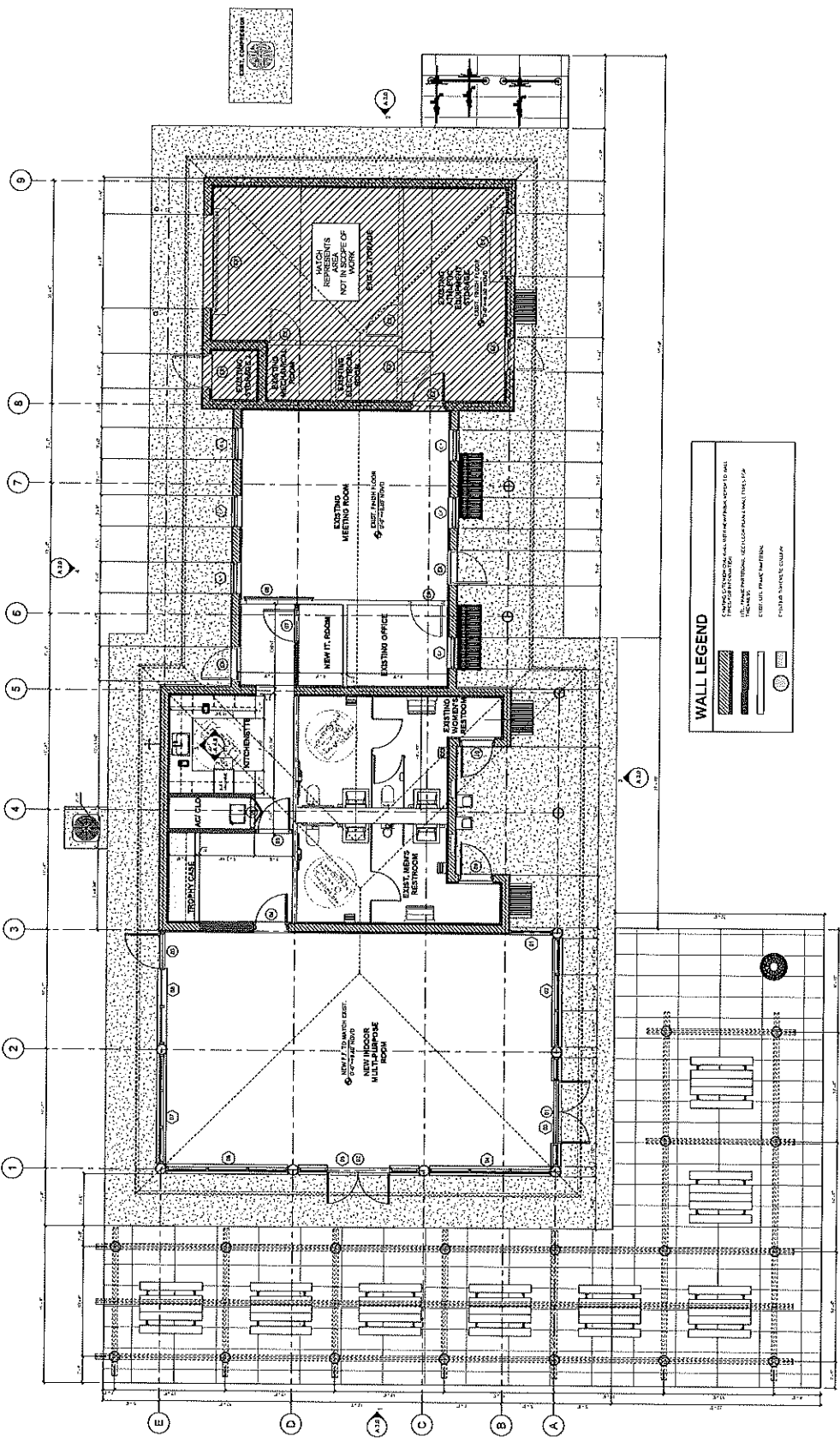
PROPOSED FLOOR PLAN
 SCALE: 1/8" = 1'-0"
 PROJECT NO.: [REDACTED]
 DATE: 02.20.19
 DRAWN BY: [REDACTED]
 DESIGNED BY: [REDACTED]
 PROJECT NO.: [REDACTED]
 REVISIONS:



1 01 PROPOSED FLOOR PLAN +8.80' NGVD
 SCALE: 1/8" = 1'-0"

DRYWALL AND FINISH

Karmil as the general contractor proposes to furnish all labor, materials, and equipment for the construction of new partition walls, acoustical ceiling, and insulation. Contractor will provide and install metal partitions with required insulation, framing, drywall and finish work in accordance with the drawings and specifications submitted. Our scope includes the replacement of the existing acoustical ceiling and the construction of new 2x2 grid acoustical ceiling for the new multi-purpose room.



WALL LEGEND

- THICK CONCRETE WALL WITH REINFORCING BARS TO WALL
- THIN CONCRETE WALL
- GLASS WALL
- EXIST. G.L. PLANK PARTITION
- EXIST. PARTITION
- EXIST. PARTITION
- EXIST. PARTITION
- EXIST. PARTITION

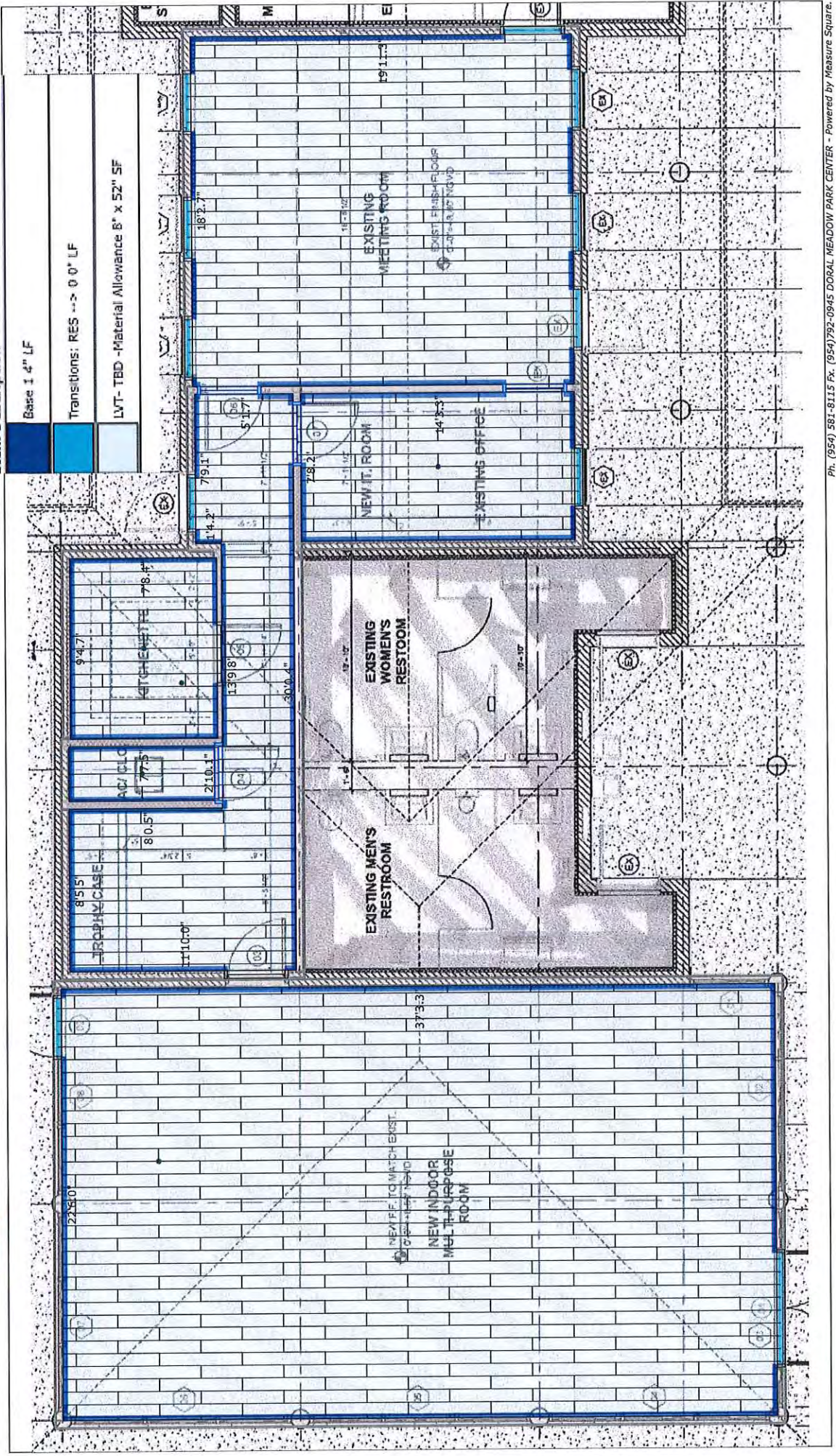
1 01 PROPOSED FLOOR PLAN +8.80' NGVD
 SCALE: 1/8" = 1'-0"

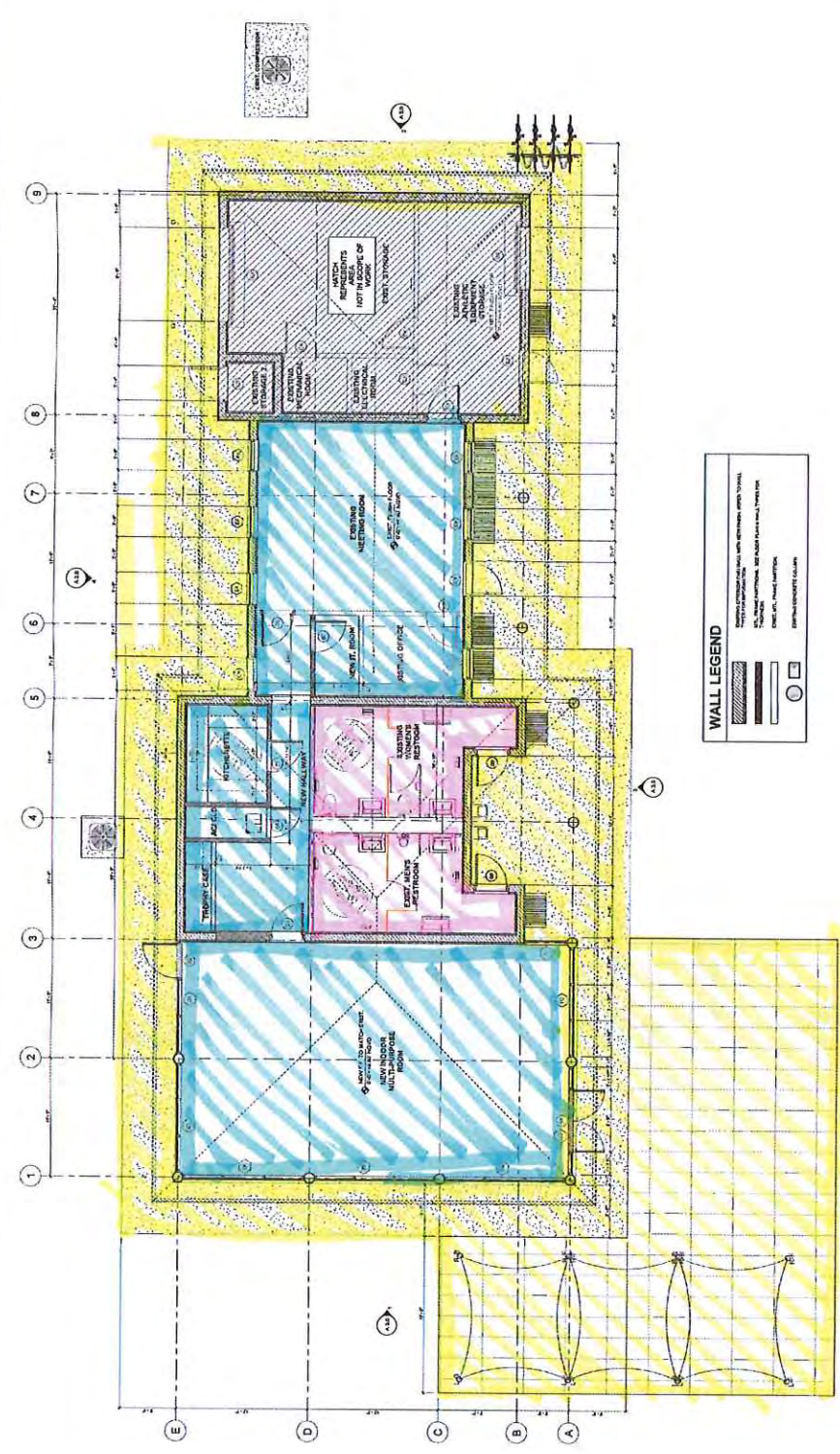
FLOORING AND INTERIOR FINISHES

We hereby propose to replace the existing interior floor and finish on the building with new LVT Floor Tiles and Baseboards per area detailed on our plans. The floor on both bathrooms will be revamped with an anti-slip epoxy finish and the exterior concrete floor slab will be restored and sealed. Under this scope, we will also provide manually operated roller shades for the new multipurpose room.

Item Description

Base 1.4" LF
Transitions: RES --> 0'0" LF
LVT- TBD -Material Allowance 8' x 52" 5F





WALL LEGEND

[Blue diagonal hatching]	EXISTING METAL WALL WITH INTERIOR FINISH
[Pink diagonal hatching]	EXISTING METAL WALL WITH INTERIOR FINISH
[Blue diagonal hatching]	EXISTING METAL WALL WITH INTERIOR FINISH
[Yellow hatching]	CONCRETE RESTORATION & FINISH
[Blue diagonal hatching]	ANTI SLIP EPOXY FINISH
[Blue diagonal hatching]	LVT FLOOR

1 01 PROPOSED FLOOR PLAN +8.80' NGVD

CONCRETE RESTORATION & FINISH
 ANTI SLIP EPOXY FINISH
 LVT FLOOR

Trenta™ Stone Collection



Trenta's colorways and textures emulate a wealth of natural stone looks, from boldly striated travertine to subtle, weathered sandstone. More unique visuals include crosshatched linens and metallics. Three sizes of tile—12" x 24", 18" x 18" and 18" x 36" (style dependent)—ensure the right fit for a range of spaces, for total design flexibility within a single collection.

Style Name / Number	12"x24" (C0053); 18"x18" (C0054); 18"x36" (C0055)
Brand	Mohawk Group—Hard Surface
Product Type	Enhanced Resilient Tile

DESIGN

Overall Gauge	.12" (3mm)
Wear Layer	30 mil (0.7mm)
Finish	Commercial Grade Urethane
Colors Available / Size	Each color only available in size shown: 12"x24" - 5 colors 18"x18" - 13 colors 18"x36" - 5 colors
Packaging	12"x24" - 36 sq ft per carton; 18 pcs per carton 18"x18" - 36 sq ft per carton; 16 pcs per carton 18"x36" - 36 sq ft per carton; 8 pcs per carton
Installation	Glue Down
Recommended Adhesive	M95.0 Resilient Floor Adhesive, MS160 Spray Adhesive or M700 Pressure Sensitive Adhesive

Selling Features

- 30 mil wear layer for heavy commercial loads and traffic
- Colorways and textures emulate a variety of wood species for distinctive and dramatic applications
- Polish-optional maintenance makes Trenta easy to care for over the life of the installation
- FloorScore® Certified

PERFORMANCE

Construction	Heavy Commercial Grade Enhanced Resilient Tile
Classification	ASTM F1700 - Class III, Type A - Smooth, Type B - Embossed
Squareness	ASTM F2421 - Passes - 0.010 in. max
Size and Tolerance	ASTM F2421 - Passes - ±0.016 in. per linear foot
Thickness	ASTM F388 - Passes - Nominal ±0.005 in.
Flexibility	ASTM F137 - Passes - 1" mandrel, no cracks or breaks
Dimensional Stability	ASTM F2199 - Passes - ≤ 0.020 in. per linear foot
Static Load Limit	ASTM F970 - Passes, ≤0.005 modified at 2500 psi
Residual Indentation	ASTM F1914 - Passes - Residual ≤ 8%
Slip Resistance	ASTM D2047 - Passes - > 0.6 Dry
Resistance to Chemicals	ASTM F925 - Passes - No Change
Resistance to Light	ASTM F1515 - Passes - ΔE ≤ 8
Resistance to Heat	ASTM F1514 - Passes - ΔE ≤ 8
Critical Radiant Flux	ASTM E648 - Passes - Class 1, > 0.45 watts/cm²
Smoke Density	ASTM E662 - Passes - ≤ 450
Impact Insulation Class	ASTM E989 / E492 - 59 IIC

SUSTAINABILITY

Certification	FloorScore® Certified - SCS FS 01495
---------------	--------------------------------------

SERVICE

Warranty	Limited 20-Year Commercial Warranty
----------	-------------------------------------

Trenta™ Stone Collection

Beautifully Strong With a name that means "thirty," Trenta's substantial 30 mil wear layer exceeds industry standards, bringing modern elegance to spaces that require heavy commercial loads and traffic. A commercial grade urethane finish protects the surface for sustained dramatic impact, while polish-optional maintenance makes Trenta easy to care for over the life of the installation.

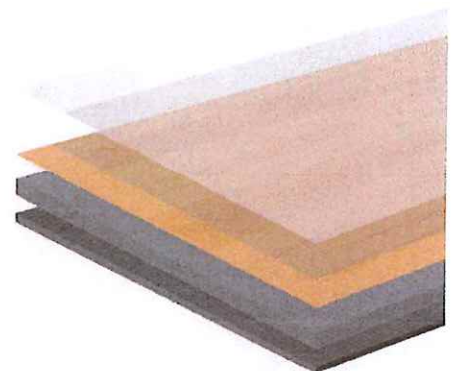
Trenta Tile 18" x 18" (C0054)



High Performance Resilient Tile

Construction: Trenta features a 30 mil commercial wear layer and commercial grade urethane, which is polish-optional for versatile, cost-effective maintenance. Trenta is backed by a 20 year commercial warranty.

Commercial Grade Urethane
 Heavy Commercial Wear Layer
 Decorative Print Film
 Commercial Base
 Stabilizing Back Layer



Trenta Tile 12" x 24" (C0053)



Fabric Fusion
138 Sheer Linen



Fabric Fusion
945 Silver Screen



Luxe Travertine
837 Oyster



Luxe Travertine
958 Windsor



Luxe Travertine
358 Hearth

Trenta Tile 18" x 36" (C0055)



Weathered Sandstone
251 Sand



Weathered Sandstone
927 Nickel



Weathered Sandstone
969 Meteor



Metallic
373 Rust



Metallic
987 Stallion

Trenta Stone 18" x 18" - C0054

 Mohawk Group

MasterFormat Number: 09 65 19 Resilient Tile



CERTIFICATIONS/LABELS/DECLARATIONS

CDPH v1.1-2010 Compliant: Yes

FloorScore Certified: [SCS-FS-01495](#)

LEED CREDIT POTENTIAL

LEED 2009

LEED v4

Product disclosure & optimization - sourcing of raw materials Options 2

Product disclosure & optimization - material ingredients Option 1



LEED 2009 Guidelines

MATERIALS AND RESOURCES

MR Credit 4: Recycled Content

Post-Consumer Recycled Content: Cost of material x recycled content %

Pre-Consumer Recycled Content: Cost of material x half of recycled content %

MR Credit 5: Regional Materials

Carpet and components harvested, extracted, processed AND manufactured within 500 miles from project site contributes to MRc5 credit.

MR Credit 6: Rapidly Renewable Materials

Mohawk's wool products and SmartStrand® with DuPont™ Sorona® can contribute to this credit.

INDOOR ENVIRONMENTAL QUALITY

IEQ Credit 4.1: Low-Emitting Materials: Adhesives & Sealants

All of Mohawk's adhesives meet testing and product requirements of the Carpet and Rug Institute's Green Label Plus certified which meet the South Coast Air Quality Management District (SCAQMD) Rule #1168 VOC Limit of 50g/L.

IEQ Credit 4.3: Low-Emitting Materials: Flooring Systems

All Mohawk's carpet products meet testing and product requirements of the Carpet and Rug Institute's Green Label Plus program which complies with the SCAQMD Rule #1168 VOC Limit of 50g/L.

IEQ Credit 5: Indoor Chemical and Pollutant Source Control

Mohawk's Walk Off products qualify for IEQc5 credit when permanent entryway walk-off system is at least 10 feet long at all regularly used exterior entrances.

INNOVATION IN DESIGN

ID Credit 1.2 Innovation in Design (ANSI/NSF-140)

Carpet certified NSF-140 silver, gold or platinum qualify for IDc1.2 credit

FUTURE IMPACT

MR Credit 2: Construction Waste Management

Carpet is 100% recyclable and may contribute for a future project.

Please call 1-877-3RE-CYCL or email reclaim@mohawkind.com

Disclaimer: The product information represented in this document has been provided by Mohawk Group. Final ruling of credits is determined by USGBC.

MasterFormat Number: 09 65 19 Resilient Tile

LEED v4 Guidelines

MATERIALS AND RESOURCES

MR Credit 2: Building Product Disclosure and Optimization - Environmental Product Declarations

Products with EcoFlex ICT, EcoFlex NXT, Weldlok, Weldlok Unitary, and Unibond Plus backings have EPDs that will contribute towards this credit

MR Credit 3: Building Product Disclosure and Optimization - Sourcing of Raw Materials

Option 1: Mohawk provides sourcing location of each component upon request. Please visit www.mohawksustainability.com to view Mohawk's Global Reporting Initiative (GRI) Sustainability Report.

Option 2: Mohawk's products containing recycle content, wool and bio-based fiber (SmartStrand® with DuPont™ Sorona®) can contribute to this credit

In addition to Option 1 and 2, products that have been manufactured, extracted and harvested within 100 miles radius of project location may contribute towards this credit as a multiplier.

MR Credit 4: Building Product Disclosure and Optimization - Material Ingredients

Mohawk provides Health Product Declaration (HPD) and Declare Labels to disclose all product ingredients.

MR Credit 5: Construction and Demolition Waste Management

Carpet is 100% recyclable and may contribute to this credit. Please call 1-877-3RE-CYCL or email reclaim@mohawkind.com. Reclamation certificate provided.

INDOOR ENVIRONMENTAL QUALITY

EQ Credit 1: Enhanced Indoor Air Quality Strategies

Mohawk's Walk Off products qualify for this credit when permanent entryway walk-off system is at least 10 feet long at all regularly used exterior entrances.

EQ Credit 2: Low-Emitting Materials: Adhesives & Sealants

All of Mohawk adhesives meet testing and product requirements of the Carpet and Rug Institute's Green Label Plus certified which meet the South Coast Air Quality Management District (SCAQMD) Rule #1168 VOC Limit of 50g/L.

EQ Credit 2: Low-Emitting Materials: Flooring Systems

All Mohawk's carpet products meet testing and product requirements of the Carpet and Rug Institute's Green Label Plus program which complies with the SCAQMD Rule #1168 VOC Limit of 50g/L.

INNOVATION IN DESIGN

ID Credit 1.2 Innovation in Design (ANSI/NSF-140)

Carpet certified NSF-140 silver, gold or platinum quality for IDc 1.2 credit.

Disclaimer: The product information represented in this document has been provided by Mohawk Group. Final ruling of credits is determined by USGBC.

Living Building Challenge Guidelines

Mohawk products would qualify to the following imperatives of the Living Building Challenge

HEALTH AND HAPPINESS PETAL

Imperative 08: Healthy Interior Environment

Mohawk offers products that are compliant with the CDPH v1.1 -- 2010 requirements and can provide supporting documentation contributing towards this imperative.

MATERIALS PETAL

Imperative 10: RED LIST

Mohawk has 16 Declare labels and offers approximately 500 red list free products that will contribute towards this imperative. In addition, Mohawk has 7 HPDs associated with 350+ products that have full disclosure of ingredients.

Imperative 13: Living Economy Sourcing

Mohawk products can contribute to this imperative based on your project location. Please refer to Page 1, where the manufacturing location for the product is listed. Harvest locations will be available upon request.

Disclaimer: The product information in this document is provided by Mohawk Group. Final ruling of the Imperatives is determined by the International Living Future Institute

WELL Building Standard Guidelines

Below are a list of features of the WELL Building program that Mohawk products would qualify towards.

AIR

Feature 04: VOC Reduction (PART 2 and PART 3)

Can contribute towards: PART 2: Interior Adhesives and Sealants and PART 3: FLOORING

All of Mohawk carpet products and adhesives meet testing and product requirements of the Carpet and Rug Institute's Green Label Plus certified which meet the South Coast Air Quality Management District (SCAQMD) Rule #1168 VOC Limit of 50g/L. Mohawk has a wide range of products and styles that meet the CDPH Standard Method v1.1-2010.1.

Feature 25: Toxic Material Reduction (PART 3)

Can contribute towards: PART 3: PHTHALATE (PLASTICIZERS) LIMITATION

Mohawk has vast range of Phthalate free products that can contribute towards this feature

Feature 26: Enhanced Material Safety

Mohawk has a vast range of products that meet imperatives of LBC materials petal contributing towards achieving this feature.

Feature 28: Cleanable Environment PART 2: CLEANABILITY

Can be achieved if following requirements are met:

- 1. No permanent wall-to-wall carpeting is used; only **removable rugs, removable carpet tiles or hard surfaces are allowed***

Mohawk has a vast range of products in rugs, carpet tiles, and hard surface. In addition, Mohawk also has an adhesive free installation system - Flex Lok which makes installation and removal of carpet extremely easy.

MIND

Feature 97: Material Transparency

PART 1: MATERIAL INFORMATION

At least 50% of materials, by cost, must have one of the following:

- 1. Declare Label*
- 2. HPD*
- 3. Any method accepted in the LEEDv4 BPDO, Material Ingredients Option1: Material Ingredient Reporting*

PART 2: ACCESSIBLE INFORMATION

The following condition is met:

All declaration information is compiled and made readily available to occupants either digitally or as part of a printed manual.

Mohawk has a vast range of products with Declare Label, HPD, and meets the LEEDv4 BPDO thus contributing towards this feature.

Disclaimer: The product information in this document is provided by Mohawk Group. Final ruling of the Features is determined by the International Well Building Institute.

WELL Building Standard Guidelines

Below are a list of features of the WELL Building program that Mohawk products would qualify towards.

AIR

Feature 04: VOC Reduction (PART 2 and PART 3)

Can contribute towards: PART 2: Interior Adhesives and Sealants and PART 3: FLOORING

All of Mohawk carpet products and adhesives meet testing and product requirements of the Carpet and Rug Institute's Green Label Plus certified which meet the South Coast Air Quality Management District (SCAQMD) Rule #1168 VOC Limit of 50g/L. Mohawk has a wide range of products and styles that meet the CDPH Standard Method v1.1-2010.1.

Feature 25: Toxic Material Reduction (PART 3)

Can contribute towards: PART 3: PHTHALATE (PLASTICIZERS) LIMITATION

Mohawk has vast range of Phthalate free products that can contribute towards this feature

Feature 26: Enhanced Material Safety

Mohawk has a vast range of products that meet imperatives of LBC materials petal contributing towards achieving this feature.

Feature 28: Cleanable Environment PART 2: CLEANABILITY

Can be achieved if following requirements are met:

- 1. No permanent wall-to-wall carpeting is used; only removable rugs, removable carpet tiles or hard surfaces are allowed*

Mohawk has a vast range of products in rugs, carpet tiles, and hard surface. In addition, Mohawk also has an adhesive free installation system - Flex Lok which makes installation and removal of carpet extremely easy.

MIND

Feature 97: Material Transparency

PART 1: MATERIAL INFORMATION

At least 50% of materials, by cost, must have one of the following:

- 1. Declare Label*
- 2. HPD*
- 3. Any method accepted in the LEEDv4 BPDO, Material Ingredients Option1: Material Ingredient Reporting*

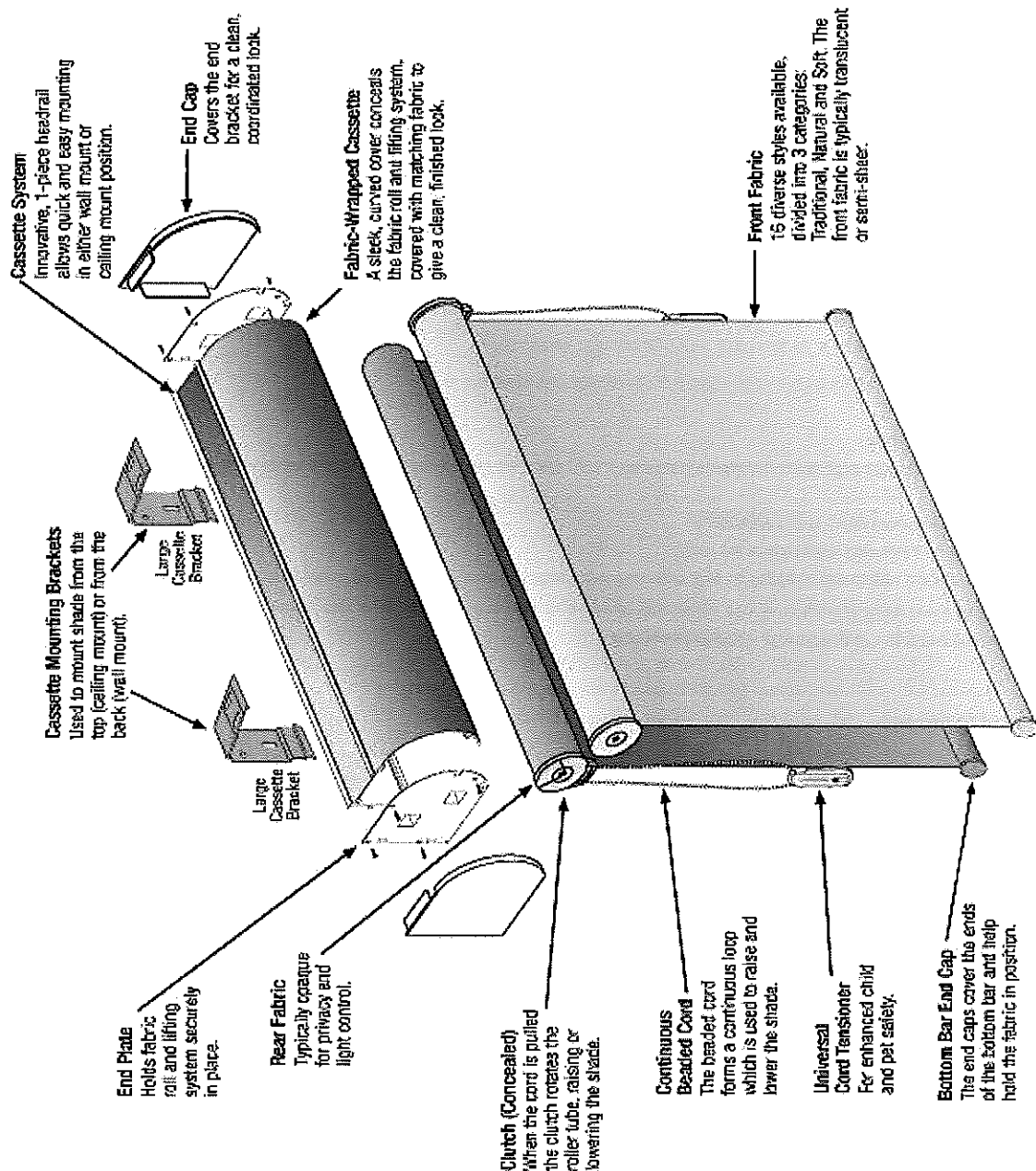
PART 2: ACCESSIBLE INFORMATION

The following condition is met:

All declaration information is compiled and made readily available to occupants either digitally or as part of a printed manual.

Mohawk has a vast range of products with Declare Label, HPD, and meets the LEEDv4 BPDO thus contributing towards this feature.

Disclaimer: The product information in this document is provided by Mohawk Group. Final ruling of the Features is determined by the International Well Building Institute.



Cassette System
 Innovative, 1-piece headrail allows quick and easy mounting in either wall mount or ceiling mount position.

End Cap
 Covers the end bracket for a clean, coordinated look.

Fabric-Wrapped Cassette
 A sleek, curved cover conceals the fabric roll and lifting system, covered with matching fabric to give a clean, finished look.

Cassette Mounting Brackets
 Used to mount shade from the top (ceiling mount) or from the back (wall mount).

Large Cassette Bracket

Large Cassette Bracket

End Plate
 Holds fabric roll and lifting system securely in place.

Rear Fabric
 Typically coaque for privacy and light control.

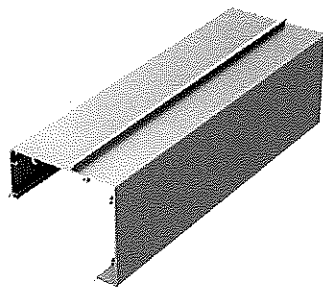
Clutch (Concealed)
 When the cord is pulled the clutch rotates the roller tube, raising or lowering the shade.

Continuous Beaded Cord
 The beaded cord forms a continuous loop which is used to raise and lower the shade.

Universal Cord Tensioner
 For enhanced child and pet safety.

Bottom Bar End Cap
 The end caps cover the ends of the bottom bar and help hold the fabric in position.

Front Fabric
 15 diverse styles available, divided into 3 categories: Traditional, Natural and Soft. The front fabric is typically translucent or semi-sheer.



Roller Shades



SCREEN 40 SERIES Openness 5%

Technical Data

Recommended use : Roller Shades, Roman Shades, Panel & Awnings

Composition : 75% PVC & 25% Polyester

Fabric Width : 98.40" (250 cm.) 118" (300 cm.)

Openness Factor : Average 5%

Fabric Count : Warp 36" / Welf 36" (inches)

Fabric Weight : 540g. (+-5%/Sqm)

Fabric Thickness : 0.75mm. (+-5%)

Light Fastness : Grade 7

Flamability : NFPA 701-2004 Method 1

Warranty : 5 Years

Packing : 33 Yd./ 30 m/ roll



**Color may be vary slightly from samples. All variations are within industry standards.
Cleaning instructions : Dust with a dry cloth or wipe with damp cloth.
The blind maybe vacuum cleaned.*

NIGHTFALL PINPOINTE BLACKOUT FR



TECHNICAL PROPERTIES

Composition	75% PVC + 25% Fiberglass
Weight	406 g/m ² ± 5% 11.97 oz/yd ² ± 5%
Thickness	0.38 mm ± 5% 0.015 in ± 5%
Roll Width	1.83 m 72 in
Adhesion	Inseparable PVC Films
UV Blockage	100%
Flame Retardant	NFPA 701

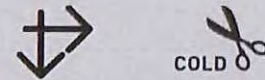
*Performance evaluations conducted by independent laboratories.

CARE & MAINTENANCE



1. Hand wash with cold water and a mild 5% detergent solution.
2. Wipe gently with a wet sponge.
3. Vacuum clean for regular maintenance.
4. Do not wring dry.
5. Do not bleach.
6. Do not dry clean nor use steam cleaning.

MANUFACTURING



Can be
Railroaded

Ultrasonic Cut
NOT Required

INTERNATIONAL CERTIFICATIONS



The Vertilux Collection has all of the most important certificates in the industry. However, different certificates apply for different fabrics in our collection. Please ask our Customer Service Department about the certificates available for specific fabric patterns.

APPLICATIONS



Roller
Shades

Sliding
Panels

Indoor Use
Only

IMPORTANT: The values and recommendations in this card are not contractual and can not be used as claim for order cancellations or returns. This technical data may vary at any time without previous notice. Color samples may not necessarily be an exact match of the material to be used to produce your order. Returns will not be accepted due to minor variations of color or texture.



vertilux.com

© 2018. Vertilux, Ltd. All Rights Reserved. 4th Edition.

FURNITURE

As per the RFQ requirements, Karmil Construction, will provide brand new cabinetry, solid surface countertop, and backsplash for the remodeled kitchenette area, a new indoor trophy case as a lockable glass enclosure, and modern furniture for the renovated office and meeting room space.

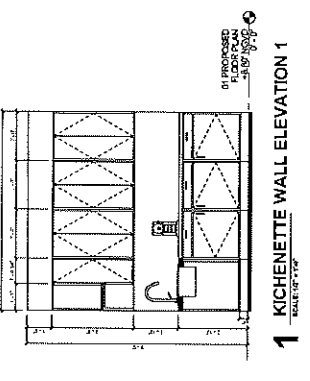
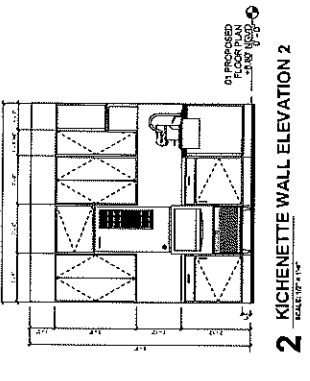
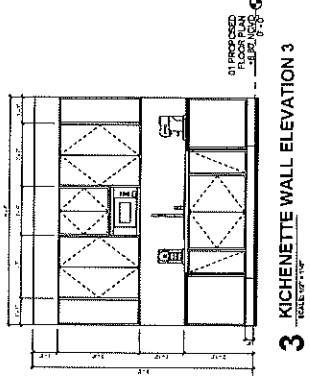
DATE:	02/20/14
DRAWN BY:	W. W. W.
CHECKED BY:	W. W. W.
PROJECT NO.:	14-0000
S.E. I.D. NO.:	

SCALE: _____

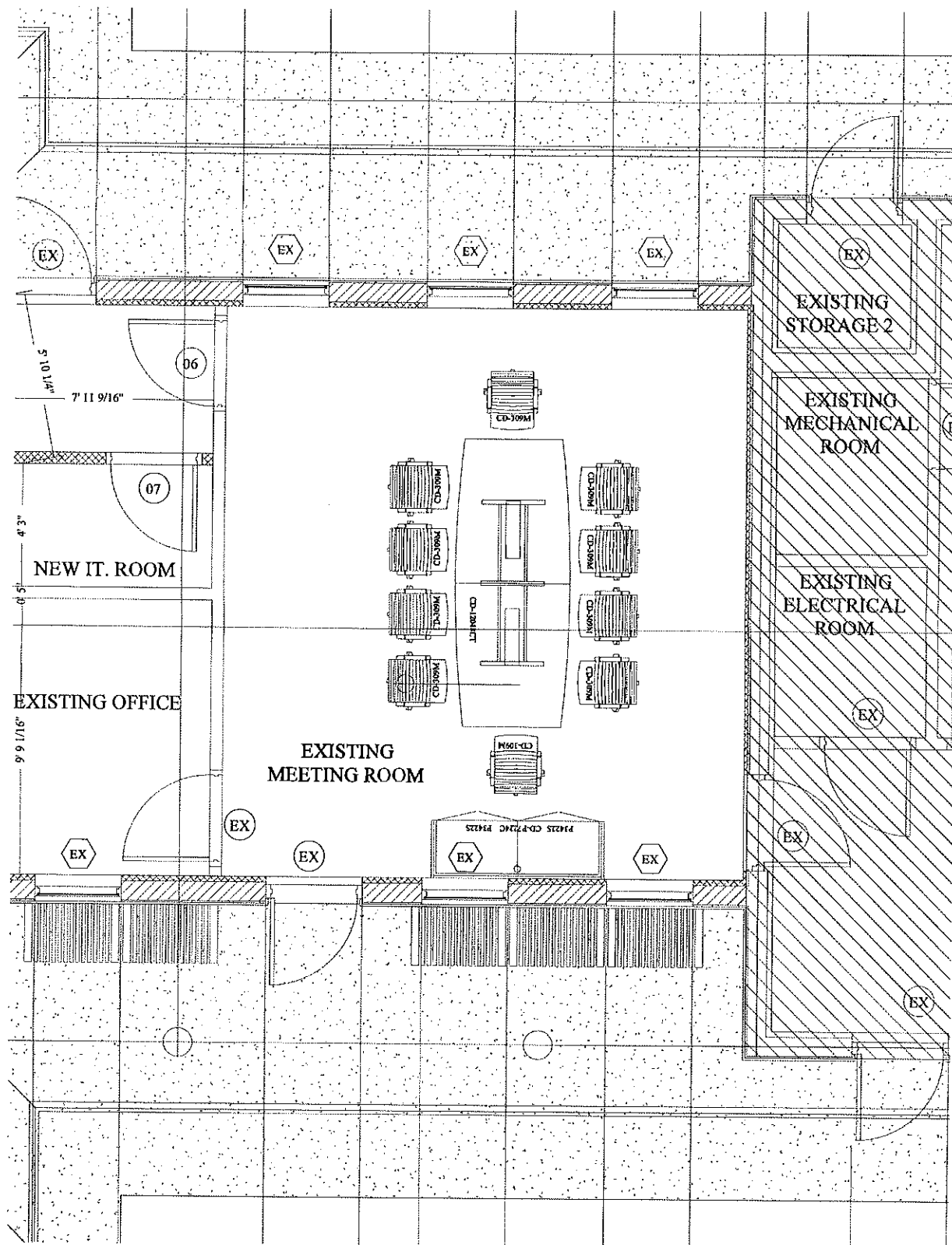
INTERIOR ELEVATIONS

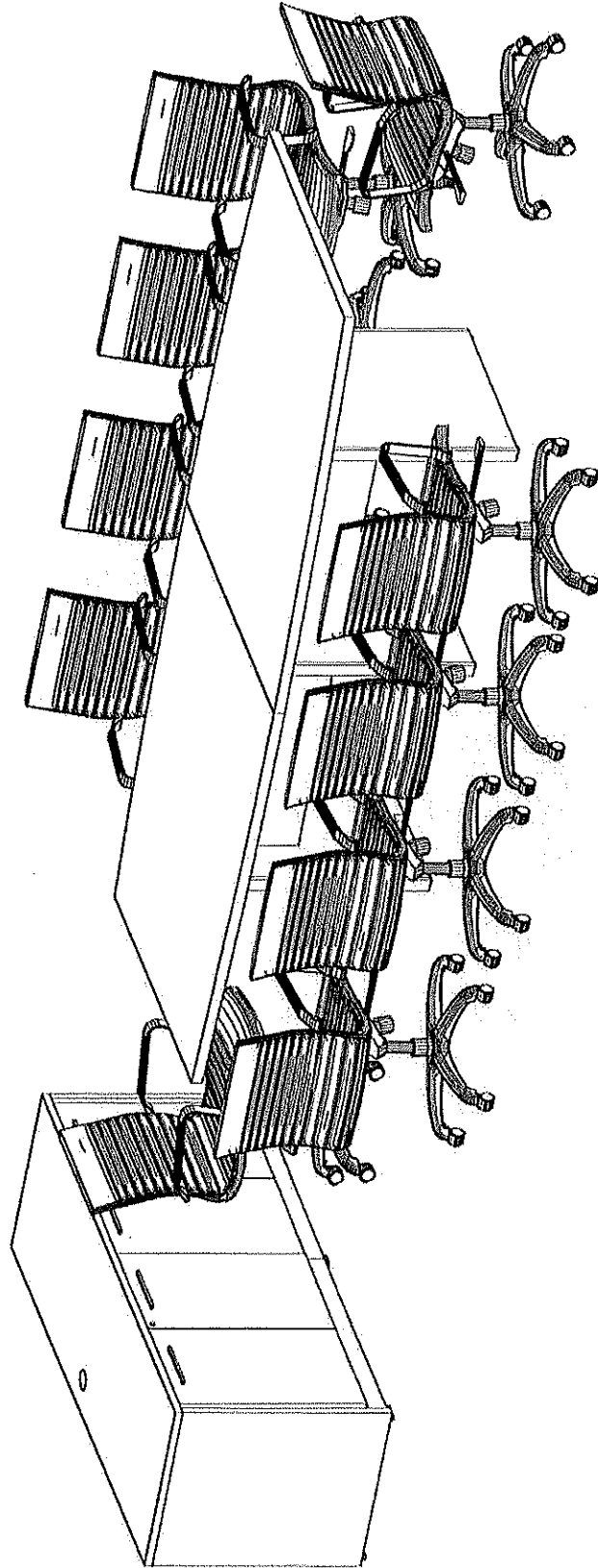
A 4.6

CONSTRUCTION DOCUMENT







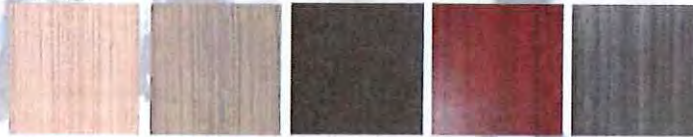






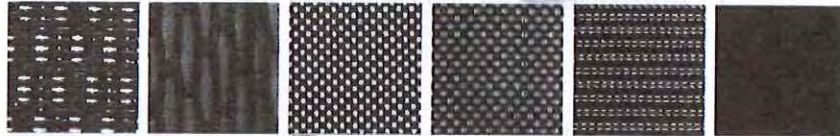
CORP DESIGN
UPHOLSTERY
AND
LAMINATE
CARD

Laminate



Miele (MI) Noce (N) Espresso (E) Moderna Cherry (MC) Grigio (G) Blanco (B)
On Optional Components only

Mesh



M2 M3 M4 M5 M6 M7

Fabric



SM-2338 Blue (BL) SM-2339 Green (GR) SM-2340 Sand (SD) Black Fabric (B1)
SM-2327 Black (B) SM-2312 Red (RD) SM-2315 Grey (GY) Linear Black (LB)

Leather

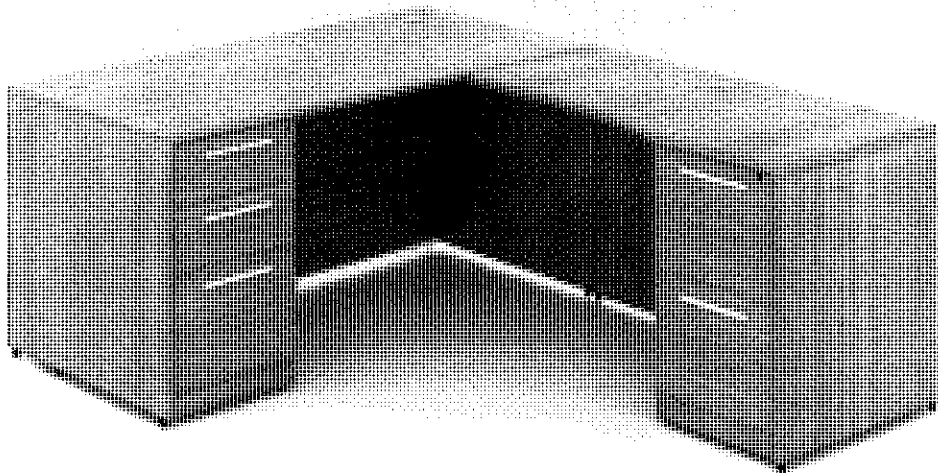


Black (B) White (W)
Grey (G) Sand (S)



* Custom finishes and fabrics are now available on a per order basis with volume orders and special lead times. Contact your sales representative for details.

Fabric and finish colors may vary in catalog reproduction and dye lot.





Windows and Doors

Karmil as the general contractor proposes to furnish and install exterior storefront system ES-8000 Series and impact doors ES-9000 Series by ES-Windows, for the new Multi-Purpose Room as per plans and specifications. All exterior doors installed will be provided with Notice of Acceptance (N.O.A) by Miami Dade County. We will also furnish and install new interior doors and hardware as detailed per drawings.

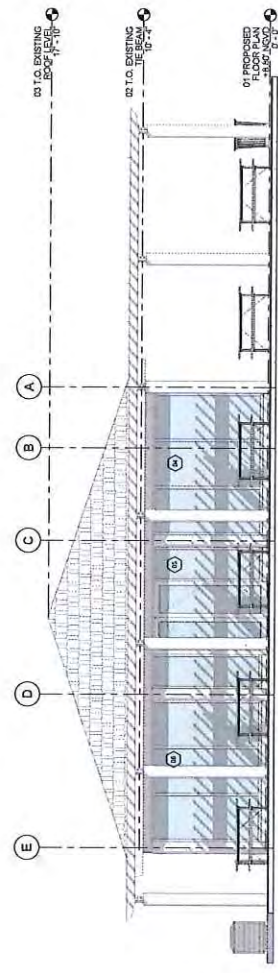
DORAL MEADOW PARK CENTER
1 16 AVE., NW AT NW 58 ST., MIAMI
FLORIDA, 33128

DATE: 08.20.12
 DRAWN BY: [REDACTED]
 PROJECT NO.: 1200005
 REVIEWED BY: [REDACTED]

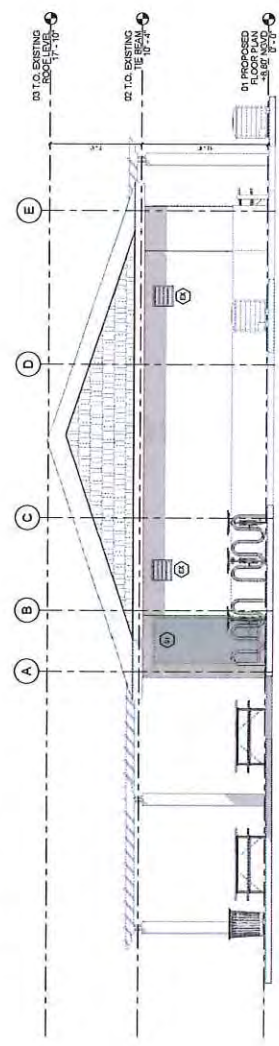
SCALE: [REDACTED]

NEW ELEVATIONS

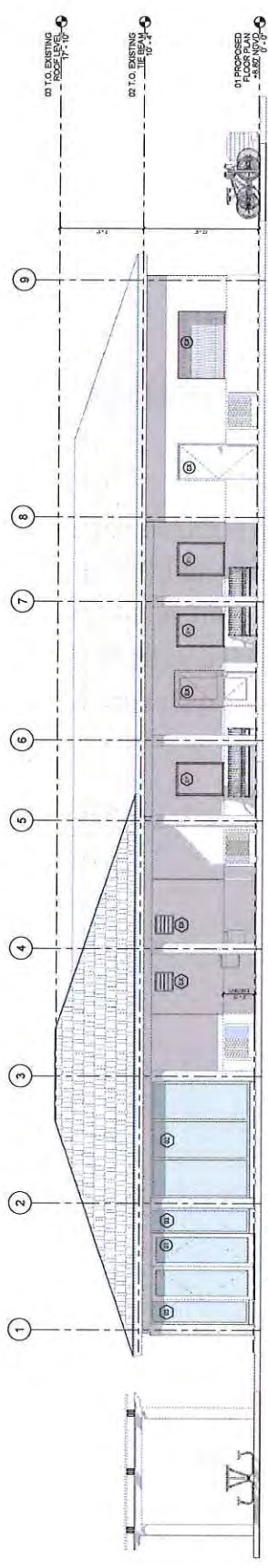
A 30
 DOCUMENTATION
 DOCUMENTS



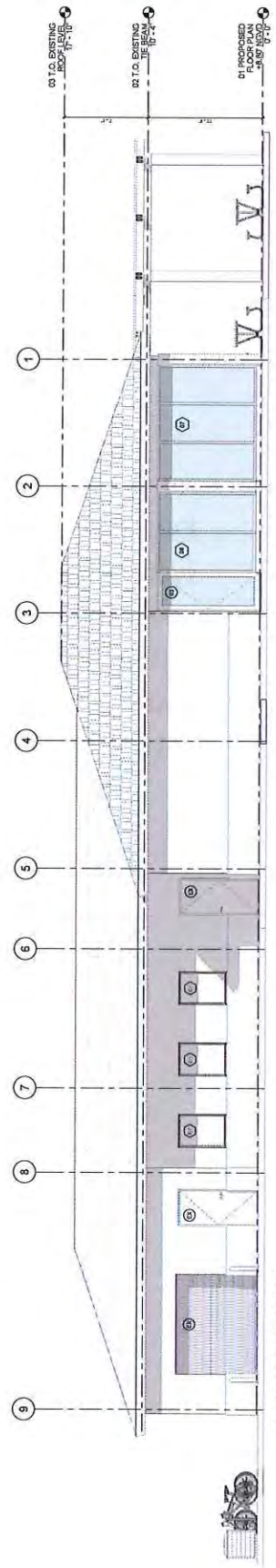
1 NORTH ELEVATION
 SCALE: 1/4" = 1'-0"



2 SOUTH ELEVATION
 SCALE: 1/4" = 1'-0"



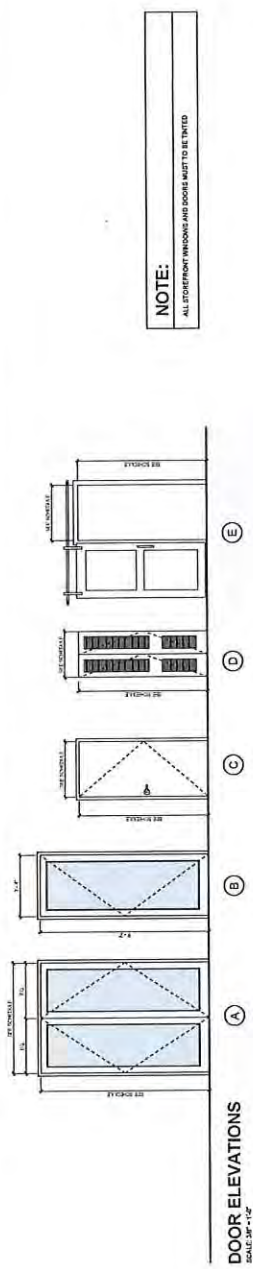
3 WEST ELEVATION
 SCALE: 1/4" = 1'-0"



4 EAST ELEVATION
 SCALE: 1/4" = 1'-0"

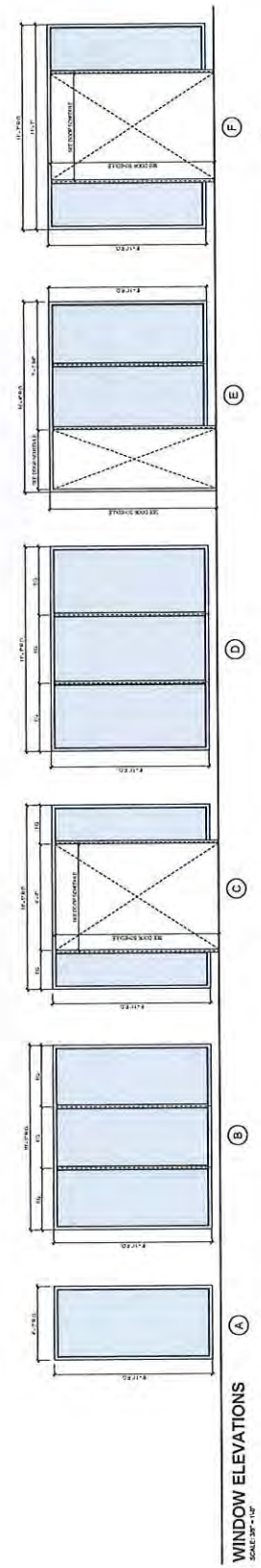
DOOR SCHEDULE - 1ST FLOOR

NO	LOCATION	WIDTH	HEIGHT	THICK	TYPE*	DOOR SCHED. MATERIAL	MANUFACTURER**	FINISH	GLAZING U-FAC	SHADING COEFFICIENT	REMARKS	HARDWARE
01	WEST ELEVATION	6'-0"	8'-2"	1 3/4"	DOUBLE SWING	GL/ALUM.	E.S. WINDOWS, LLC	TINTED	0.92	0.39	ESSENTIAL SAFETY GLAZING	PANIC HARDWARE
02	NORTH ELEVATION	8'-0"	8'-2"	1 3/4"	DOUBLE SWING	GL/ALUM.	E.S. WINDOWS, LLC	TINTED	0.92	0.39	ESSENTIAL SAFETY GLAZING	PANIC HARDWARE
03	EAST ELEVATION	3'-4"	8'-2"	1'-0"	SWING	GL/ALUM.	E.S. WINDOWS, LLC	TINTED	0.92	0.39	ESSENTIAL SAFETY GLAZING	PANIC HARDWARE
04	NEVINCOURT MILITARY ROOM/NEVINCOURT	3'-0"	7'-0"	1 3/4"	SWING	SOLID WOOD	-	PAINT	-	-	-	-
05	NEVINCOURT MILITARY ROOM/NEVINCOURT	3'-0"	7'-0"	1 3/4"	SWING	SOLID WOOD	-	PAINT	-	-	-	-
06	INDIVIDUAL HALLWAY	3'-0"	7'-0"	1 3/4"	SWING	SOLID WOOD	-	PAINT	-	-	-	-
07	ACT CLOSET	2'-8"	7'-0"	1 3/4"	BIFOLD	SOLID WOOD	-	PAINT	-	-	-	-
08	T. ROOM	3'-0"	7'-0"	1 3/4"	SWING	SOLID WOOD	-	PAINT	-	-	-	-
09	EXIST. MEETING ROOM	3'-0"	7'-0"	1 3/4"	BARN DOOR	SOLID WOOD	-	PAINT	-	-	-	-
10	EXIST. MEN'S RESTROOM	3'-0"	7'-0"	1 3/4"	SWING	GLASS	E.S. WINDOWS, LLC	TINTED	0.92	0.39	ESSENTIAL SAFETY GLAZING	PANIC HARDWARE



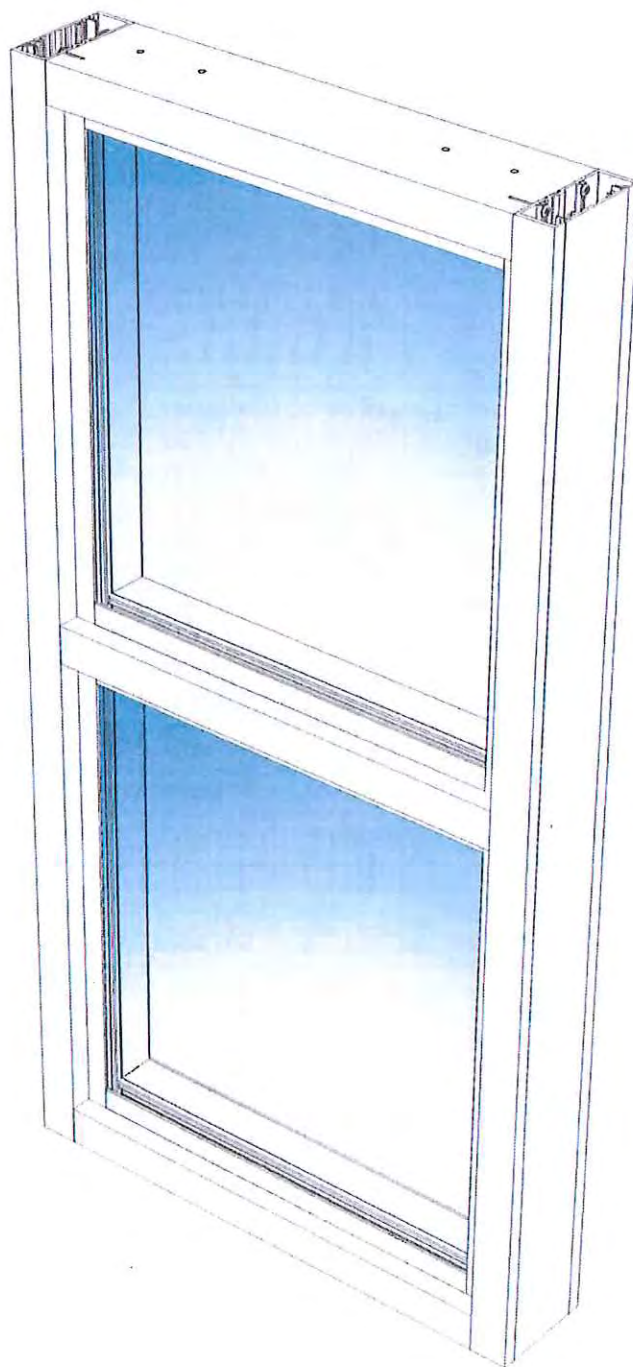
WINDOW SCHEDULE - 1ST FLOOR

NO	LOCATION	WIDTH	HEIGHT	TYPE*	WINDOW SCHED. MATERIAL	MANUF.	FINISH	GLAZING U-FAC	SHADING COEFFICIENT
01	SOUTH ELEVATION	4'-2"	8'-11"	STOREFRONT	ALUM. GLASS	E.S. WINDOWS, LLC	TINTED	0.92	0.39
02	WEST ELEVATION	10'-5"	8'-11"	STOREFRONT	ALUM. GLASS	E.S. WINDOWS, LLC	TINTED	0.92	0.39
03	WEST ELEVATION	10'-5"	8'-11"	STOREFRONT	ALUM. GLASS	E.S. WINDOWS, LLC	TINTED	0.92	0.39
04	NORTH ELEVATION	11'-7"	8'-11"	STOREFRONT	ALUM. GLASS	E.S. WINDOWS, LLC	TINTED	0.92	0.39
05	NORTH ELEVATION	11'-7"	8'-11"	STOREFRONT	ALUM. GLASS	E.S. WINDOWS, LLC	TINTED	0.92	0.39
06	NORTH ELEVATION	11'-7"	8'-11"	STOREFRONT	ALUM. GLASS	E.S. WINDOWS, LLC	TINTED	0.92	0.39
07	EAST ELEVATION	10'-5"	8'-11"	STOREFRONT	ALUM. GLASS	E.S. WINDOWS, LLC	TINTED	0.92	0.39
08	EAST ELEVATION	10'-5"	8'-11"	STOREFRONT	ALUM. GLASS	E.S. WINDOWS, LLC	TINTED	0.92	0.39



ES-8000

STOREFRONT



ENERGÍA SOLAR
ESWINDOWS



MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/building

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

E.S. Windows, LLC
3550 NW 49th Street
Miami, FL 33142

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/ or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "ES-8000" Aluminum Window Wall System – L.M.I.

APPROVAL DOCUMENT: Drawing No. W07-60, titled "Series 8000 Alum. Window Wall System (L.M.I.)", sheets 1, 1.1, 2, 3, 4, 5, 5.1, 5.2, 6, 6.1, 6.2, 7, 7.1 and 8 through 12 of 12, dated 08/03/07, with revision F dated 09/28/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, **Barranquilla, Colombia**, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/ or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA No. 18-0129.05 and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**



Carlos M. Utrera
01/16/2020

NOA No. 19-1029.08
Expiration Date: April 03, 2023
Approval Date: January 16, 2020
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

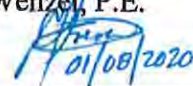
1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under NOA No. 08-0204.06)
2. Drawing No. W07-60, titled "Series 8000 Alum. Window Wall System (L.M.I.)", sheets 1, 1.1, 2, 3, 4, 5, 5.1, 5.2, 6, 6.1 and 7 through 12 of 12, dated 08/03/07, with revision E dated 10/20/17, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No. 18-0129.05)

B. TESTS

1. Test reports on:
 - 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Drop Load Test, per ANSI Z97.1 (400 foot-pound impact)along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Report No. FTL-9605, dated 08/16/17, signed and sealed by Idalmis Ortega, P.E.
(Submitted under NOA No. 18-0129.05)
2. Test reports on:
 - 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Report No. FTL-8372, dated 03/24/16, signed and sealed by Idalmis Ortega, P.E.
(Submitted under NOA No. 17-0227.08)
3. Test reports on:
 - 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Drop Load Test, per CPSC 16 CFR 1201 (400 foot-pound impact)along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc., Test Report No. FTL-5447, dated 12/19/07, signed and sealed by Michael R. Wenzel, P.E.
(Submitted under NOA No. 08-0204.06)



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 19-1029.08
Expiration Date: April 03, 2023
Approval Date: January 16, 2020

E.S. Windows, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 6th Edition (2017)**, dated 08/30/17, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No. 18-0129.05)
2. Glazing complies with **ASTM E1300-09**

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **17-1114.14** issued to **Kuraray America, Inc.** for their "Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers" dated 01/18/18, expiring on 07/08/19.
2. Notice of Acceptance No. **17-0808.02** issued to **Kuraray America, Inc.** for their "SentryGlas® (Clear and White) Glass Interlayers" dated 12/28/17, expiring on 07/04/23.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 6th Edition (2017)**, and of no financial interest, dated January 12, 2018, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No. 18-0129.05)
2. Distributor Agreement between, E.S. Windows - Energia Solar S.A., Barranquilla, Colombia and E.S. Windows, LLC, Miami, Florida, U.S.A., dated 10/20/10, signed by Carla Garcia Torrente and by Andres Chamorro, respectively.
(Submitted under NOA No. 12-0308.36)
3. Private Labeling Agreement document in conformance to Product Control guidelines dated 04/09/09 signed by Jose Nuñez.
(Submitted under NOA No. 12-0308.36)
4. Laboratory compliance letter for Test Report No. **FTL-5447**, issued by Fenestration Testing Laboratory, Inc., dated 12/19/07, signed and sealed by Michael R. Wenzel, P.E.
(Submitted under NOA No. 08-0204.06)
5. Testing Proposal issued by the Product Control Section, dated 10/16/14, signed by Jaime Gascon, P.E.
(Submitted under NOA No. 17-0227.08)

G. OTHERS

1. Notice of Acceptance No. **17-0227.08**, issued to ES Windows, LLC for their Series "8000" Aluminum Window Wall System - L.M.I., approved on 05/11/17 and expiring on 04/03/18.


Carlos M. Utrera, P.E.

Product Control Examiner

NOA No. 19-1029.08

Expiration Date: April 03, 2023

Approval Date: January 16, 2020

E.S. Windows, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **W07-60**, titled "Series 8000 Alum. Window Wall System (L.M.I.)", sheets 1, 1.1, 2, 3, 4, 5, 5.1, 5.2, 6, 6.1, 6.2, 7, 7.1 and 8 through 12 of 12, dated 08/03/07, with revision **F** dated 09/28/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS

1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Forced Entry Test, per FBC 2411.3.2.1 and AAMA 1304-02
5) Large Missile Impact Test per FBC, TAS 201-94
6) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of a Series ES-9000 aluminum outswing door, prepared by Blackwater Testing, Inc., Test Report No. **BT-ESW-18-004**, dated 05/17/18, signed and sealed by Constantin Bortes, P.E.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 6th Edition (2017)**, dated 09/12/18, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

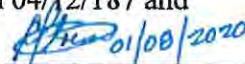
1. Notice of Acceptance No. **17-0808.02** issued to **Kuraray America, Inc.** for their "**SentryGlas® (Clear and White) Glass Interlayers**" dated 12/28/17, expiring on 07/04/23.
2. Notice of Acceptance No. **19-0305.02** issued to **Kuraray America, Inc.** for their "**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**" dated 05/09/19, expiring on 07/08/24.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 6th Edition (2017)**, and of no financial interest, dated September 12, 2018, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

G. OTHERS

1. Notice of Acceptance No. **18-0129.05**, issued to E.S. Windows, LLC for their Series "ES-8000" Aluminum Window Wall System - L.M.I., approved on 04/12/187 and expiring on 04/03/23.



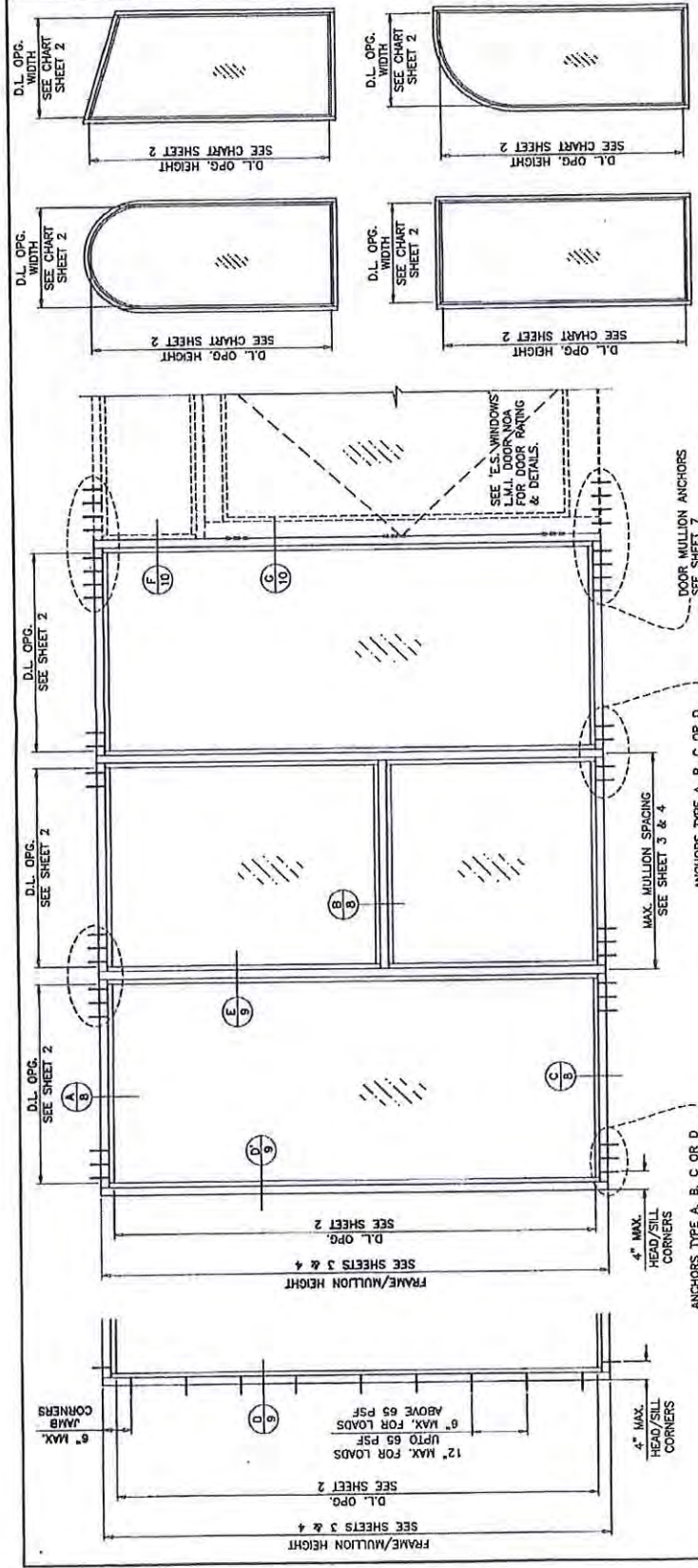
Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 19-1029.08
Expiration Date: April 03, 2023
Approval Date: January 16, 2020

AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9880 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33178 (C.A.N. 3588)
 TEL. (305) 264-8100 FAX. (305) 262-9718
 STORE W07-60E3

SERIES 8000 ALUM WINDOW WALL SYSTEM (L.M.I.)
 E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL. (305) 638-5161 FAX. (305) 638-5158

NO	DATE	DESCRIPTION
1	12/01/14	UPONED TO 2014 FBC
2	10/21/16	HEIGHTS ADDED
3	10/20/17	UPONED TO 2017 FBC
4	09/28/18	NO CHANGE THIS SHEET

drawing no. **W07-60**
 sheet 1 of 12



2. 3. 4 OR 5 AT EACH JAMB-- SEE SHEETS 5, 5.1 & 5.2
 ANCHORS TYPE A, B, C OR D

2. 3. 4 OR 5 AT EACH SIDE OF MULLION-- SEE SHEETS 5, 5.1 & 5.2
 ANCHORS TYPE A, B, C OR D

ALLOWABLE LOADS FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE DETERMINED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM THOSE SHAPES. SINGLE LITES MAY BE INSTALLED VERTICALLY AS SHOWN ABOVE OR HORIZONTALLY.

PRODUCT COMPLIES WITH REQUIREMENTS OF ANSI Z97.1.

LAMINATED GLASS
 LARGE MISSILE IMPACT



PRODUCT REVISED
 as complying with the Florida Building Code
 MDA-etc. 19-1029.0B
 Expiration Date 04/03/2023
 By: [Signature]
 Miami-Dade Product Control

INSTRUCTIONS:

- USE CHARTS AS FOLLOWS.
- STEP 1** DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON APPLICABLE ASCE 7 STANDARD. HEIGHT WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2** SEE CHARTS ON SHEET 2 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE.
- STEP 3** CHECK MULLION CAPACITY FOR A GIVEN SPACING AND HEIGHT USING CHARTS ON SHEETS 3 & 4 FOR WINDOW WALL MULLION AND SHEETS 6 & 7 FOR DOOR MULLION. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4** CHECK ANCHOR CAPACITY FOR WINDOW WALL SYSTEM USING CHARTS ON SHEETS 5, 5.1 & 5.2 FOR DOOR MULLION ANCHOR CAPACITY SEE CHART ON SHEET 7. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 5** THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

SERIES 8000 ALUMINUM WINDOW WALL SYSTEM

THIS SYSTEM IS RATED FOR LARGE MISSILE IMPACT SHUTTERS ARE NOT REQUIRED.

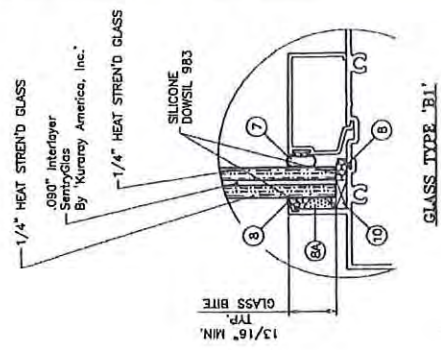
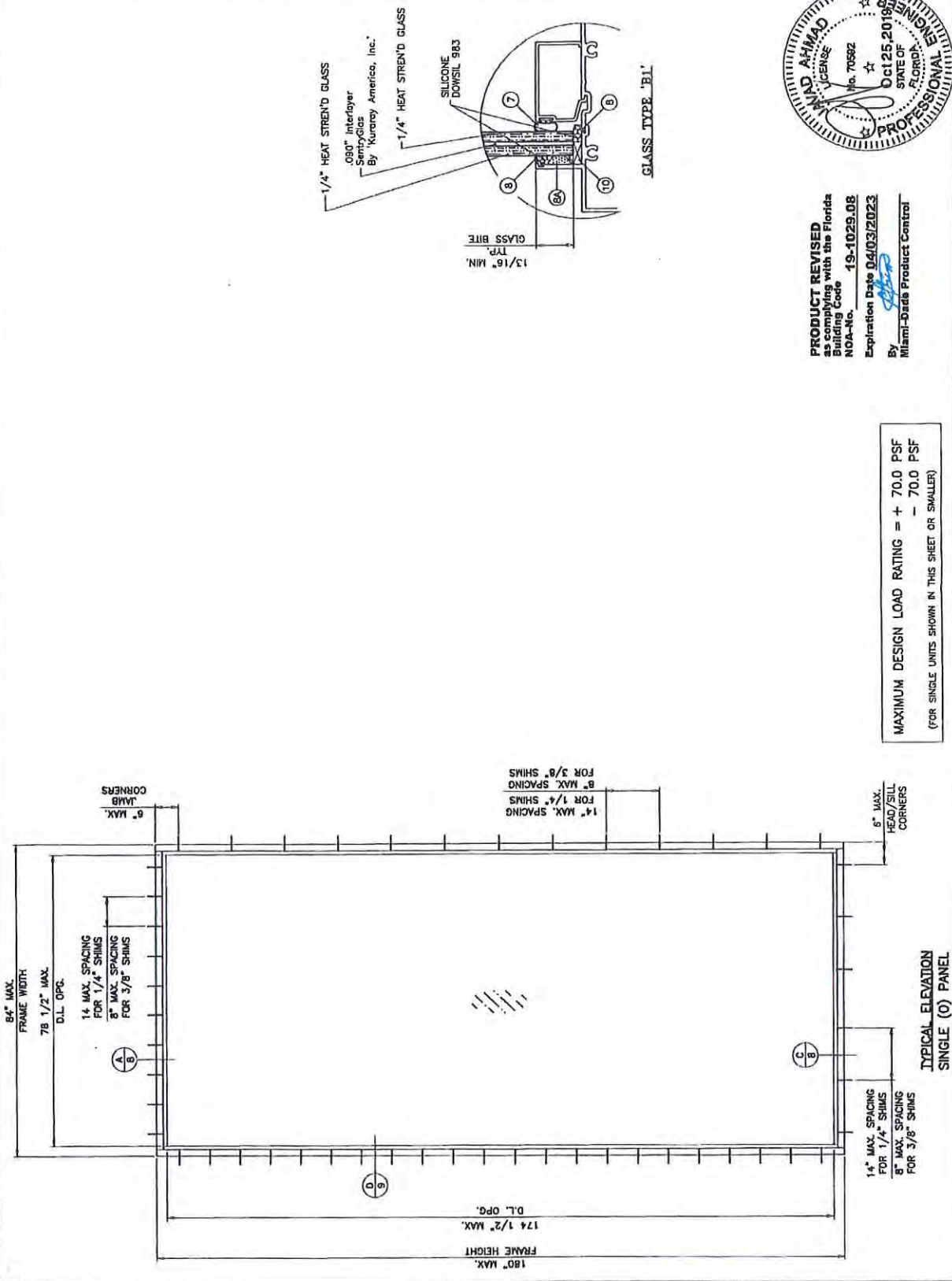
THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2017 (6TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
 1" BY OR 2" BY WOOD BLOCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.
 ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
 A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.
 ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE. MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREENS, THAT COME INTO CONTACT WITH OTHER BUILDING MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2017 FLORIDA BLDG. CODE & ADOPTED STANDARDS.
 THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC.
 CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173 (C.A.N. 9698)
 TEL. (305) 264-8100 FAX. (305) 262-6978
 STORE W07-60E5

E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL 33142
 TEL. (305) 638-5151 FAX. (305) 638-5158

NO.	DATE	BY	DESCRIPTION
F	09.28.18		NO CHANGE THIS SHEET
E	10.20.17		UPDATED TO 2017 FBC

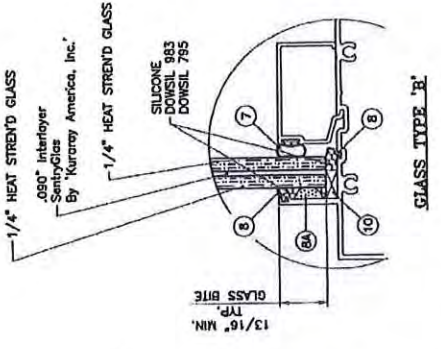
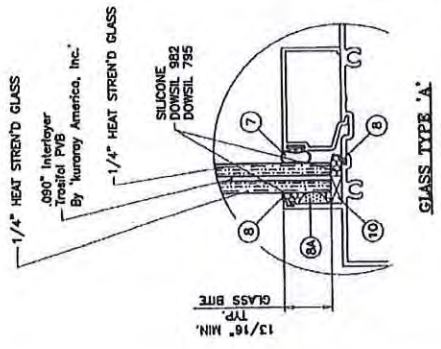
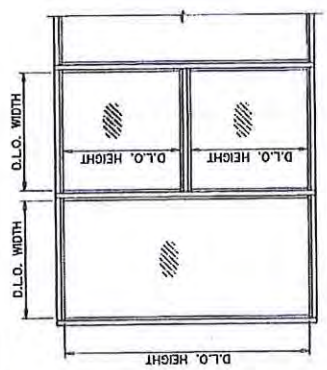
date: 08-03-07
 scale: 1/2"=1'-0"
 drawing no. **W07-60**
 sheet 1 of 12



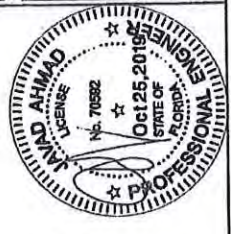
PRODUCT REVISED
 as complying with the Florida
 Building Code
 NDA-No. 19-1029.08
 Expiration Date 04/03/2023
 By: [Signature]
 Miami-Dade Product Control

MAXIMUM DESIGN LOAD RATING = + 70.0 PSF
 - 70.0 PSF
 (FOR SINGLE UNITS SHOWN IN THIS SHEET OR SMALLER)

GLASS LOAD CAPACITY - PSF			
NOMINAL DIMS.	GLASS TYPE 'A'		GLASS TYPE 'B'
	D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)/INT.(-)
28"			80.0
32"			80.0
36"			80.0
40"			80.0
44-1/4"			80.0
48"			80.0
52"			80.0
56-1/4"			80.0
28"			80.0
32"			80.0
36"			80.0
40"			80.0
44-1/4"			80.0
48"			80.0
52"			80.0
56-1/4"			80.0
28"			80.0
32"			80.0
36"			80.0
40"			80.0
44-1/4"			80.0
48"			80.0
52"			80.0
56-1/4"			80.0
28"			80.0
32"			80.0
36"			80.0
40"			80.0
44-1/4"			80.0
48"			80.0
52"			80.0
56-1/4"			80.0
28"			80.0
32"			80.0
36"			80.0
40"			80.0
44-1/4"			80.0
48"			80.0
52"			80.0
56-1/4"			80.0
28"			80.0
32"			80.0
36"			80.0
40"			80.0
44-1/4"			80.0
48"			80.0
52"			80.0
56-1/4"			80.0



GLAZING OPTIONS



PRODUCT REVISED
 As complying with the Florida
 Building Code
 NCA-No. 19-1029.09
 Expiration Date 04/03/2023
 By [Signature]
 Miami-Base Product Control

NOTE: GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS).

GLASS

NOTE: INTERPOLATION BETWEEN WIDTHS ALLOWED.

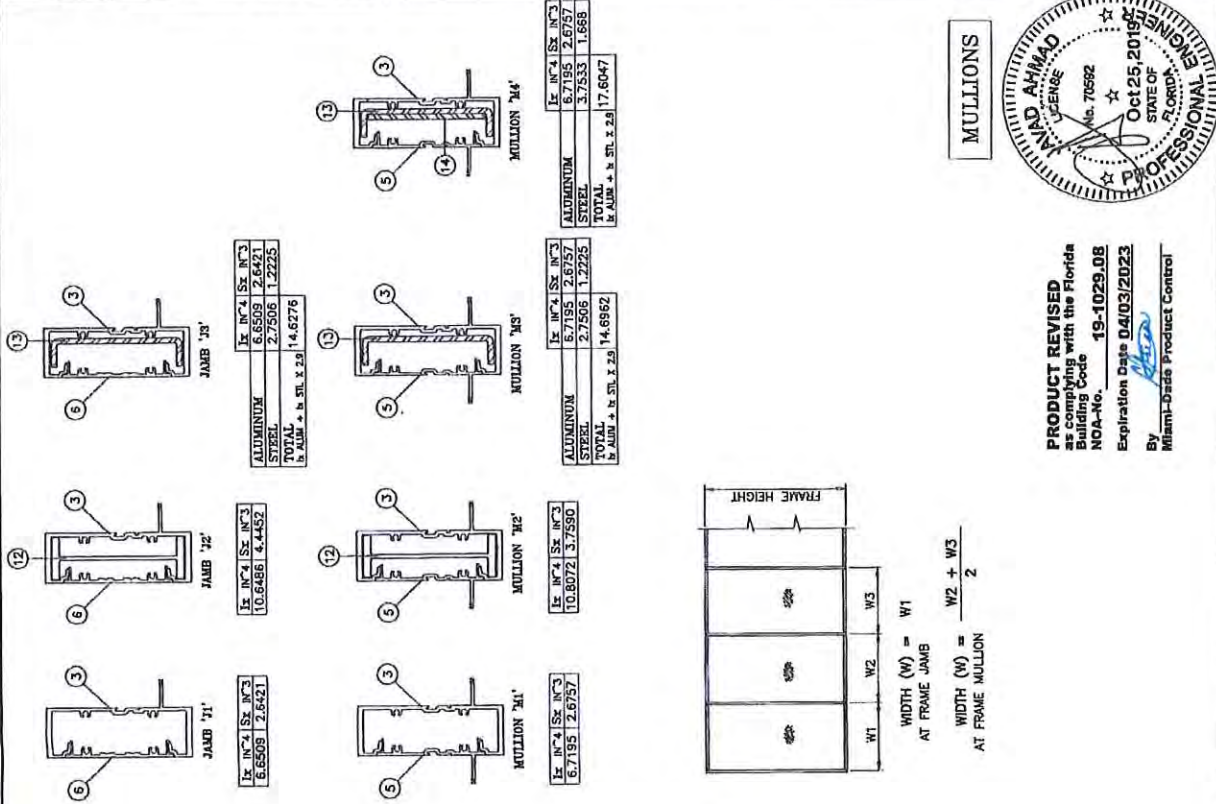
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9960 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173
 (C.A.N. 3539)
 FAX: (305) 292-9976
 TEL: (305) 264-6100

E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL 33142
 FAX: (305) 638-5158
 TEL: (305) 638-5151

Revisions:
 A 10/21/16 HEIGHTS ADDED
 B 10/21/17 NO CHANGE THIS SHEET
 C 09/26/18 NO CHANGE THIS SHEET
 D 10/21/19 UPDATED TO 2014 FBC

DATE: 08-03-07
 DRAWING NO: **W07-60**
 SHEET 2 OF 12

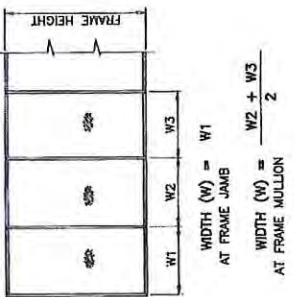
REV	DATE	DESCRIPTION
10	02.14.16	UPDATES TO 2014 FBC
9	10.20.17	UPDATES TO 2017 FBC
8	09.28.18	NO CHANGE THIS SHEET



MULLIONS

Professional Engineer Seal: **MAHMOUD AHMAD**, License No. 70592, State of Florida, expires Oct 25, 2019.

PRODUCT REVISED
complying with the Florida Building Code
NCA-No. 19-1029.08
Expiration Date 04/03/2023
By: *[Signature]*
Miami-Dade Product Control



MULLION LOAD CAPACITY - PSF

MULLIONS WITHOUT INTERMEDIATE HORIZONTALS

NOMINAL DIMS.	JAMB 'J1'		JAMB 'J2'		JAMB 'J3'		JAMB 'J3'		JAMB 'J3'		UNANCHORED JAMB OPTIONS	
	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	MULL 'M4'	MULL OPTIONS
30"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
60"	127.3	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
30"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54"	121.1	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
60"	108.6	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
30"	96.4	130.0	125.6	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"	92.4	130.0	116.3	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"	127.6	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54"	111.6	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
60"	100.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
30"	91.4	130.0	118.6	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"	86.8	130.0	112.4	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"	114.5	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54"	100.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
60"	89.5	130.0	120.9	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
30"	81.6	130.0	109.8	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"	78.4	127.7	106.7	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"	113.5	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"	95.9	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54"	83.6	130.0	120.3	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
60"	74.6	120.0	107.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
30"	68.8	110.7	98.4	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"	105.9	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"	89.4	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"	77.8	125.2	114.7	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54"	69.4	111.6	101.9	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
60"	54.9	104.5	98.1	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
30"	98.2	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"	81.2	130.0	123.8	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"	70.6	113.6	107.4	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"	62.9	101.1	96.3	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54"	60.8	97.7	92.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
60"	62.3	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
30"	62.3	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"	69.3	111.5	111.4	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"	60.2	96.9	96.5	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"	53.5	86.1	85.5	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0

MULLION LOAD CAPACITY - PSF

MULLIONS w/9 INTERMEDIATE HORIZONTALS

NOMINAL DIMS.	JAMB 'J2'		JAMB 'J3'		MULL 'M4'		MULL OPTIONS	
	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
54"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
57"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
60"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
66"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
72"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
84"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
96"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
108"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
120"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
144"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
168"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
192"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0

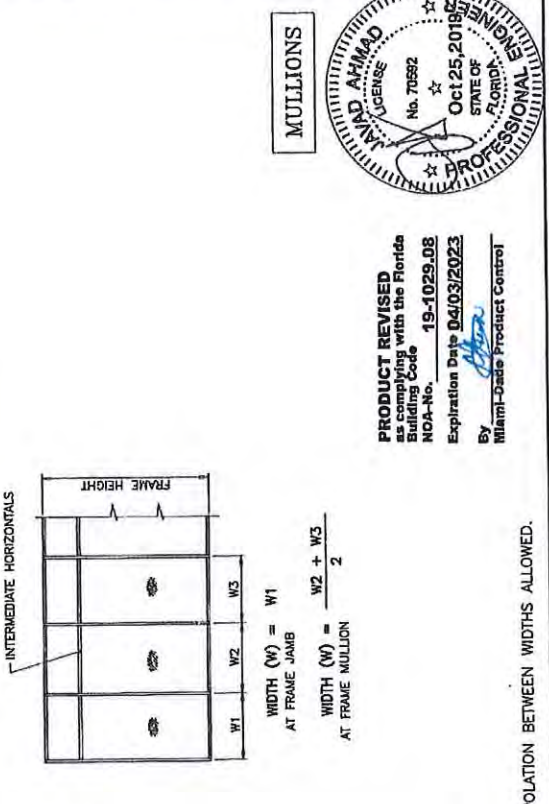
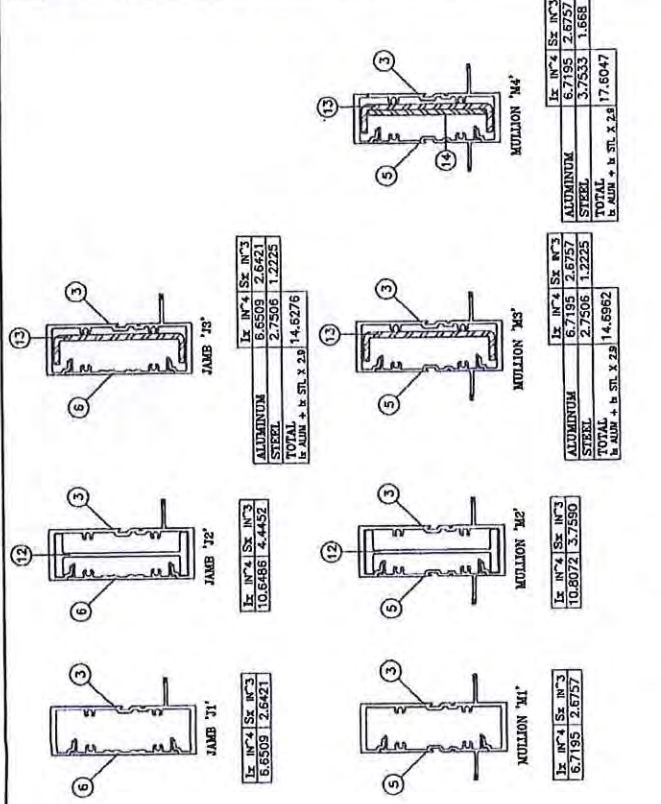
NOTE: INTERPOLATION BETWEEN WIDTHS ALLOWED.

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9800 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
(C.A.N. 8688)
TEL (305) 264-8300 FAX (305) 262-6978
STORE W07-60ES

ES. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL 33142
TEL (305) 638-9151 FAX (305) 638-5158
SERIES 8000 ALUM WINDOW WALL SYSTEM (L.M.I.)

NO DATE	BY DESCRIPTION
12.01.14	UPDATES TO 2014 FBC
10.21.16	HEADERS ADDED
10.20.17	UPDATED TO 2017 FBC
09.28.18	NO CHANGE THIS SHEET

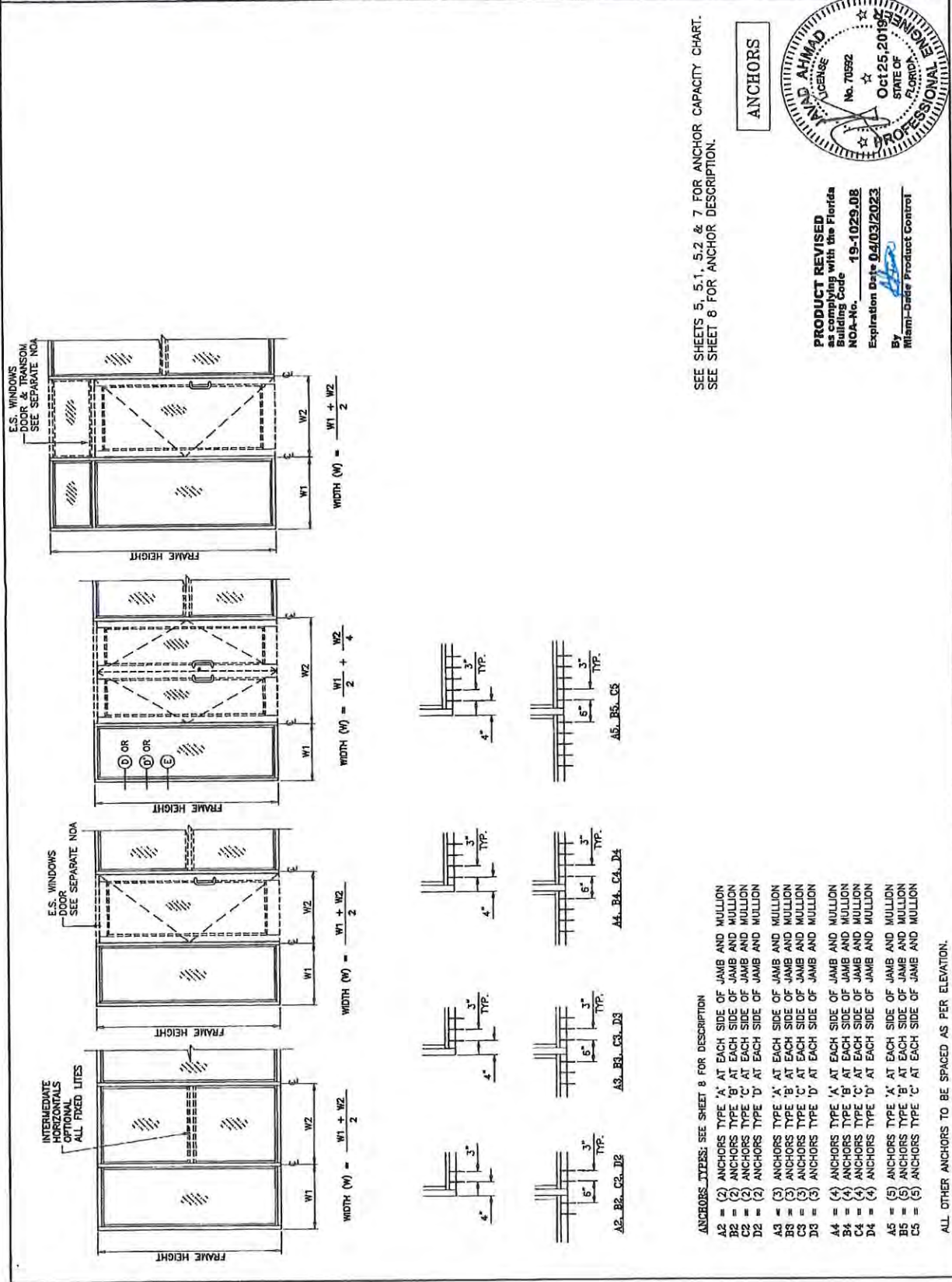
chk. by: TARG
drawing no. W07-60
sheet 4 of 12



PRODUCT REVISED
in accordance with the Florida
Building Code
NOA-No. 19-1029.D8
Expiration Date 04/03/2023
By: [Signature]
Miami-Grade Product Control

MULLION LOAD CAPACITY - PSF											
MULLIONS WITH INTERMEDIATE HORIZONTALS											
NOMINAL DIMS.	JAMB 'J1'		JAMB 'J2'		JAMB 'J3'		JAMB 'J4'		JAMB 'J5'		EXT. INT. (-)
	MULL. W1	MULL. W2	MULL. W1	MULL. W2	MULL. W1	MULL. W2	MULL. W1	MULL. W2	MULL. W1	MULL. W2	
30"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
36"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
42"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
48"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
54"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
60"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
86-1/2"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
90"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
96"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
98-1/2"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
102"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
108"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
110-1/2"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
114"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0
120"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	90.0

NOTE: INTERPOLATION BETWEEN WIDTHS ALLOWED.



ANCHORS

SEE SHEETS 5, 5.1, 5.2 & 7 FOR ANCHOR CAPACITY CHART.
 SEE SHEET 8 FOR ANCHOR DESCRIPTION.



PRODUCT REVISED
 Revising with the Florida Building Code
 NOA-No. 19-1029.08
 Expiration Date 04/03/2023
 By: [Signature]
 Miami-Dade Product Control

- ANCHORS TYPES: SEE SHEET 8 FOR DESCRIPTION
- A2 = (2) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
 - B2 = (2) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION
 - C2 = (2) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
 - D2 = (2) ANCHORS TYPE 'D' AT EACH SIDE OF JAMB AND MULLION
 - A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
 - B3 = (3) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION
 - C3 = (3) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
 - D3 = (3) ANCHORS TYPE 'D' AT EACH SIDE OF JAMB AND MULLION
 - A4 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
 - B4 = (4) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION
 - C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
 - D4 = (4) ANCHORS TYPE 'D' AT EACH SIDE OF JAMB AND MULLION
 - A5 = (5) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
 - B5 = (5) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION
 - C5 = (5) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
- ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.

ANCHOR LOAD CAPACITY - PSF
 EX(+) & INT(-)

SEE SHEETS 5 AND 8
 FOR ANCHOR DESCRIPTION.

PRODUCT REVISED
 as complying with the Florida
 Building Code
 R04-NO. 19-1029.08
 Expiration Date 04/03/2023
 By: *[Signature]*
 Miami-Dade Product Control



NOMINAL DIMS. WIDTH (W) FRAME HEIGHT	ANCHORS TYPE 'A'								ANCHORS TYPE 'E'								ANCHORS TYPE 'C'								ANCHORS TYPE 'D'			
	3/8" SEM SPACE	1/2" SEM SPACE	A2	A3	A4	A5	B2	B3	B4	B5	B6	B7	B8	B9	C2	C3	C4	C5	C6	C7	C8	C9	C10	D2	D3	D4		
30"	61.3	91.9	122.2	130.0	47.9	71.9	95.9	119.9	67.9	101.9	130.0	53.3	79.9	106.5	130.0	115.9	130.0	130.0	91.4	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	
36"	51.1	76.6	101.8	127.6	40.0	59.9	89.9	119.9	56.6	84.9	113.2	130.0	44.4	66.6	88.8	111.1	96.6	130.0	130.0	76.2	114.3	130.0	130.0	130.0	130.0	130.0	130.0	
42"	43.8	65.6	87.3	109.4	34.2	51.4	68.5	85.5	48.5	72.8	97.0	121.3	38.1	57.1	76.1	95.1	82.8	123.7	130.0	65.3	98.0	130.0	124.0	130.0	130.0	130.0	130.0	
48"	38.3	57.4	76.4	95.7	30.0	44.9	59.9	74.9	42.5	63.7	84.9	106.1	33.3	49.9	66.6	83.2	72.4	108.2	130.0	57.2	85.7	114.3	130.0	106.5	130.0	130.0	130.0	
54"	34.0	51.1	67.9	85.1	26.6	40.0	53.3	66.6	37.7	56.6	75.5	94.3	29.6	44.4	59.2	74.0	64.4	96.2	128.7	130.0	50.8	76.2	101.6	127.0	96.4	130.0	130.0	
60"	30.5	45.9	61.1	76.6	24.0	35.0	47.9	59.9	34.0	50.9	67.9	84.9	26.6	40.0	53.3	66.6	57.9	86.6	115.9	130.0	45.7	68.6	91.4	114.3	86.8	130.0	130.0	
30"	58.5	88.3	117.4	130.0	46.1	69.1	92.2	115.2	65.3	97.9	130.0	51.2	76.8	102.4	128.0	111.4	130.0	130.0	130.0	73.2	109.9	130.0	130.0	130.0	130.0	130.0	130.0	
36"	49.1	73.5	97.9	122.7	38.4	57.6	76.8	96.0	54.4	81.6	108.8	130.0	42.7	64.0	85.3	106.7	92.8	130.0	130.0	62.8	94.2	125.6	130.0	118.2	130.0	130.0	130.0	
42"	42.1	63.1	83.9	105.1	32.9	48.4	63.8	82.3	46.6	69.3	93.3	116.6	36.6	54.9	73.1	91.4	79.5	118.9	130.0	54.8	82.4	109.9	130.0	104.3	130.0	130.0	130.0	
48"	36.8	55.2	73.4	92.0	28.8	43.2	57.8	72.0	40.8	61.2	81.6	102.0	32.0	48.0	64.0	80.0	69.6	104.0	130.0	48.8	73.2	97.7	122.1	92.7	130.0	130.0	130.0	
54"	32.7	49.1	65.2	81.8	25.6	38.4	51.2	64.0	36.3	54.4	72.5	90.7	28.4	42.7	56.9	71.1	61.9	92.4	123.7	130.0	48.8	73.2	97.7	122.1	92.7	130.0	130.0	
60"	29.4	44.2	58.7	73.6	23.0	34.6	46.1	57.6	32.6	49.0	65.3	81.6	25.6	38.4	51.2	64.0	55.7	85.2	111.4	130.0	45.8	69.9	87.9	109.8	83.4	125.1	130.0	
30"	55.2	82.8	110.1	130.0	43.2	64.8	86.4	108.0	61.2	91.8	122.4	130.0	48.0	72.0	96.0	120.0	104.4	130.0	130.0	68.7	103.0	130.0	130.0	130.0	130.0	130.0	130.0	
36"	46.0	69.0	91.8	115.0	36.0	54.0	72.0	90.0	51.0	76.5	102.0	127.5	40.0	60.0	80.0	100.0	87.0	130.0	130.0	80.3	120.5	130.0	130.0	130.0	130.0	130.0	130.0	
42"	39.4	59.1	78.6	98.6	30.9	46.3	61.7	77.1	43.7	65.6	97.4	109.3	34.3	51.4	68.6	85.7	74.6	111.4	130.0	58.9	89.3	117.7	130.0	111.7	130.0	130.0	130.0	
48"	34.5	51.8	68.8	86.3	27.0	40.5	54.0	67.5	39.3	57.4	76.5	95.6	30.0	45.0	60.0	75.0	65.3	97.5	130.0	51.5	77.3	103.0	128.8	96.9	130.0	130.0	130.0	
54"	30.7	46.0	61.2	76.7	24.0	36.0	48.0	60.0	34.0	51.0	68.0	85.0	26.7	40.0	53.3	66.7	58.0	86.7	116.0	130.0	45.8	69.7	91.6	114.4	87.8	130.0	130.0	
60"	27.6	41.4	55.1	69.0	21.6	32.4	43.2	54.0	30.6	45.9	61.2	76.5	24.0	36.0	48.0	60.0	52.2	78.0	104.4	130.0	41.2	61.8	82.4	103.0	78.2	117.3	130.0	
30"	53.8	80.7	107.3	130.0	42.1	63.2	84.2	105.3	60.6	91.2	122.8	130.0	46.8	70.2	93.6	117.0	101.8	130.0	130.0	80.3	120.5	130.0	130.0	130.0	130.0	130.0	130.0	
36"	44.8	67.6	91.1	115.1	35.1	52.6	70.2	87.7	49.7	74.6	99.4	124.3	39.0	58.5	78.0	97.5	84.8	126.7	130.0	66.9	100.4	130.0	130.0	130.0	130.0	130.0	130.0	
42"	38.4	57.6	76.6	96.1	30.1	45.1	60.1	75.2	42.6	63.9	85.2	108.5	33.4	50.1	66.8	83.5	72.7	108.6	130.0	57.4	86.0	114.7	130.0	108.9	130.0	130.0	130.0	
48"	33.6	50.4	67.1	84.1	26.3	39.5	52.6	65.8	37.3	55.9	74.6	93.2	29.0	43.9	59.5	73.1	63.6	95.0	122.2	130.0	50.2	75.3	100.4	125.5	95.3	130.0	130.0	
54"	29.9	44.8	59.8	74.7	23.4	35.1	46.8	58.5	33.1	49.7	68.3	82.8	26.0	39.0	52.0	65.0	56.5	84.5	113.1	130.0	44.8	68.9	89.2	111.5	84.7	127.0	130.0	
60"	26.9	40.3	53.7	67.2	21.1	31.6	42.1	52.6	29.8	44.7	59.8	74.6	23.4	35.1	46.8	58.5	50.9	76.0	101.8	127.2	40.2	60.3	80.0	104.4	76.2	114.3	130.0	
30"	52.0	77.9	103.6	129.9	40.7	61.0	81.3	101.6	57.6	86.4	115.2	130.0	45.2	67.8	90.4	112.9	89.3	130.0	130.0	77.6	116.3	130.0	130.0	130.0	130.0	130.0	130.0	
36"	43.3	64.9	86.4	108.2	33.9	50.8	67.8	84.7	47.0	72.0	96.0	120.0	37.6	56.5	75.3	94.1	81.9	122.4	130.0	64.9	96.9	129.3	130.0	122.7	130.0	130.0	130.0	
42"	37.1	55.7	74.0	92.8	29.0	43.6	58.1	72.6	41.1	61.7	82.3	102.9	30.3	48.4	64.5	80.7	70.2	104.9	130.0	55.4	83.1	110.8	130.0	105.1	130.0	130.0	130.0	
48"	32.5	48.7	64.8	81.2	25.4	38.1	50.8	63.5	36.0	54.0	72.0	90.0	28.2	42.4	56.5	70.6	61.4	91.8	122.8	130.0	48.5	72.7	96.9	121.2	92.0	130.0	130.0	
54"	28.9	43.3	57.6	72.2	22.5	33.9	45.2	56.5	32.0	48.0	64.0	80.0	25.1	37.6	50.2	62.7	54.6	81.6	108.2	130.0	43.1	64.6	86.2	107.7	81.8	122.7	130.0	
60"	26.0	39.0	51.8	64.9	20.3	30.5	40.7	50.8	28.8	43.2	57.6	72.0	22.6	33.9	45.2	56.5	45.2	68.3	96.3	122.8	38.8	58.2	77.6	98.9	73.6	110.4	130.0	
30"	49.1	73.8	97.9	122.7	38.4	57.6	76.8	96.0	54.4	81.6	108.8	130.0	42.7	64.0	85.3	106.7	92.8	130.0	130.0	80.3	120.5	130.0	130.0	130.0	130.0	130.0	130.0	
36"	40.9	61.3	81.6	102.2	32.0	48.0	64.0	80.0	45.3	68.0	90.7	113.3	35.6	53.3	71.1	88.9	77.3	115.6	130.0	61.0	91.6	122.1	130.0	115.9	130.0	130.0	130.0	
42"	35.0	52.6	69.9	87.6	27.4	41.1	54.9	68.5	39.9	58.3	77.7	97.1	30.5	45.7	61.0	76.2	66.3	99.0	130.0	52.3	78.5	104.5	130.0	98.3	130.0	130.0		
48"	30.7	46.0	61.2	76.7	24.0	36.0	48.0	60.0	34.0	51.0	68.0	85.0	26.7	40.0	53.3	66.7	58.0	86.7	116.0	130.0	45.8	68.7	91.6	114.4	86.9	130.0	130.0	
54"	27.3	40.9	54.4	68.1	21.3	32.0	42.7	53.3	30.2	45.3	60.4	75.6	23.7	35.6	47.4	59.3	51.6	77.0	103.1	128.9	40.7	61.0	81.4	101.7	77.2	115.9	130.0	
60"	24.5	36.8	48.9	61.3	18.9	28.8	39.4	50.0	27.2	40.8	54.4	68.0	21.3	32.0	42.7	53.3	46.4	69.3	92.8	118.0	36.5	54.9	73.2	91.6	69.5	104.3	130.0	
30"	48.0	71.9	95.7	119.9	37.5	56.3	75.1	93.8	53.2	79.8	105.3	130.0	41.7	62.6	83.4	104.3	90.7	130.0	130.0	71.6	107.4	130.0	130.0	130.0	130.0	130.0	130.0	
36"	40.0	59.9	79.7	99.9	31.3	46.9	62.6	78.2	44.3	66.5	88.6	110.8	34.8	52.1	69.5	86.9	75.6	112.9	130.0	59.7	89.5	119.3	130.0	113.2	130.0	130.0	130.0	
42"	34.3	51.4	68.3	85.6	26.8	40.2	53.6</																					

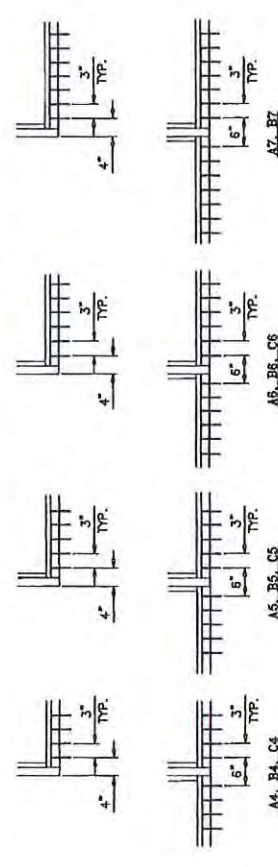
AL-FAROQ CORPORATION ENGINEERS & PRODUCT DEVELOPMENT 9360 SUNSET DRIVE, SUITE 220 MIAMI, FLORIDA 33178 (C.A.N. 8538) TEL (305) 264-8100 FAX (305) 262-6978	E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL 33142 TEL (305) 638-9191 FAX (305) 638-5158	Revisions: NO DATE BY DESCRIPTION 10 18 2016 HEIGHTS ADDED 11 10 2017 NO CHANGE THIS SHEET 07 28 2018 NO CHANGE THIS SHEET
---	--	--

date: 08-03-07 sheet: W07-60 drawing no. W07-60 sheet 5.2 of 12	
--	--

ANCHOR LOAD CAPACITY - PSF
EXH(+) & INT(-)

NOMINAL DIMS. WIDTH (W) FRAME HEIGHT	ANCHORS TYPE 'A'												ANCHORS TYPE 'B'												ANCHORS TYPE 'C'												1/4" MAX. SRIM									
	3/8" SRIM SPACE				1/2" SRIM SPACE				3/8" SRIM SPACE				1/2" SRIM SPACE				3/8" SRIM SPACE				1/2" SRIM SPACE				3/8" SRIM SPACE				1/2" SRIM SPACE				D1		D2		D3		D4							
	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36										
30"	44.2	66.2	88.1	110.4	34.6	51.8	69.1	86.4	48.0	73.4	97.9	122.4	38.4	57.6	76.8	96.0	83.5	124.8	130.0	130.0	85.9	98.9	130.0	130.0	85.9	98.9	130.0	130.0	104.3	104.3	104.3	104.3	104.3	104.3	104.3	104.3	130.0	130.0	130.0	130.0	130.0	130.0				
36"	36.8	55.2	73.4	92.0	28.8	43.2	57.6	72.0	40.8	61.2	81.6	102.0	32.0	48.0	64.0	80.0	69.6	104.0	130.0	130.0	71.6	82.4	104.0	104.0	71.6	82.4	104.0	104.0	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	130.0	130.0	130.0	130.0	130.0	130.0
42"	31.5	47.3	62.9	78.9	24.7	37.0	49.4	61.7	35.0	52.5	69.9	87.4	27.4	41.1	54.9	68.6	59.7	89.1	119.3	130.0	61.7	70.6	94.2	94.2	61.7	70.6	94.2	94.2	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	130.0	130.0	130.0	130.0	130.0	130.0
48"	27.6	41.4	55.1	69.0	21.6	32.4	43.2	54.0	30.6	45.9	61.2	76.5	24.0	36.0	48.0	60.0	52.2	78.0	104.4	130.0	61.2	61.8	82.4	82.4	61.2	61.8	82.4	82.4	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	130.0	130.0	130.0	130.0	130.0	130.0
54"	24.5	36.8	48.9	61.3	-	26.8	38.4	48.0	27.2	40.8	54.4	68.0	21.3	32.0	42.7	53.3	46.4	69.3	90.0	90.0	36.6	54.9	73.2	90.0	36.6	54.9	73.2	90.0	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	90.0	90.0	90.0	90.0	90.0	90.0
30"	42.1	63.1	83.9	104.0	32.9	49.4	65.8	82.3	46.6	69.9	90.0	109.0	30.5	45.7	61.0	76.2	79.5	124.8	130.0	130.0	85.9	98.9	130.0	130.0	85.9	98.9	130.0	130.0	104.3	104.3	104.3	104.3	104.3	104.3	104.3	104.3	130.0	130.0	130.0	130.0	130.0	130.0				
36"	35.0	52.6	69.9	87.6	27.4	41.1	54.9	68.6	38.9	58.3	77.7	90.0	30.5	45.7	61.0	76.2	66.3	90.0	90.0	90.0	52.3	78.5	90.0	90.0	52.3	78.5	90.0	90.0	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	90.0	90.0	90.0	90.0	90.0	90.0				
42"	30.0	45.1	59.9	75.1	23.5	35.3	47.0	58.8	33.3	50.0	66.6	83.3	26.1	39.2	52.2	65.2	56.8	84.9	90.0	90.0	44.8	67.3	87.0	87.0	44.8	67.3	87.0	87.0	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	90.0	90.0	90.0	90.0	90.0	90.0				
48"	26.3	39.4	52.4	65.7	20.6	30.9	41.1	51.4	29.1	43.7	58.3	72.9	22.9	34.3	45.7	57.1	48.7	74.3	90.0	90.0	39.2	58.9	78.5	78.5	39.2	58.9	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	90.0	90.0	90.0	90.0	90.0	90.0				
54"	23.4	35.0	46.6	58.4	-	27.4	38.5	49.7	25.9	38.9	51.8	64.8	20.3	30.5	40.6	50.8	44.2	66.0	88.4	90.0	34.9	52.3	69.9	69.9	34.9	52.3	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	90.0	90.0	90.0	90.0	90.0	90.0				
30"	40.1	60.2	80.1	100.0	31.4	47.1	62.8	78.5	44.5	66.8	89.0	109.0	34.9	52.4	69.8	87.3	75.9	124.8	130.0	130.0	85.9	98.9	130.0	130.0	85.9	98.9	130.0	130.0	104.3	104.3	104.3	104.3	104.3	104.3	104.3	104.3	130.0	130.0	130.0	130.0	130.0	130.0				
36"	33.5	50.2	66.7	83.6	26.2	39.3	52.4	65.5	37.1	55.6	74.2	90.0	29.1	43.6	58.2	72.7	63.3	90.0	90.0	90.0	49.9	74.9	90.0	90.0	49.9	74.9	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0				
42"	28.7	43.0	57.2	71.7	22.4	33.7	44.9	56.1	31.8	47.7	63.6	79.5	24.9	37.4	48.9	62.3	54.2	81.0	90.0	90.0	42.8	64.2	85.6	85.6	42.8	64.2	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	90.0	90.0	90.0	90.0	90.0	90.0				
48"	25.1	37.6	50.0	62.7	-	29.5	39.3	49.1	27.8	41.7	55.6	69.5	21.8	32.7	43.5	54.5	47.5	70.9	90.0	90.0	37.5	58.2	74.9	74.9	37.5	58.2	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	90.0	90.0	90.0	90.0	90.0	90.0				
30"	38.4	57.6	76.8	96.0	30.1	45.1	60.1	75.1	42.6	63.9	85.1	100.0	33.4	50.1	66.8	83.5	72.6	104.4	130.0	130.0	85.9	98.9	130.0	130.0	85.9	98.9	130.0	130.0	104.3	104.3	104.3	104.3	104.3	104.3	104.3	104.3	130.0	130.0	130.0	130.0	130.0	130.0				
36"	32.0	48.0	63.8	80.0	25.0	37.6	50.1	62.6	35.5	53.2	71.0	88.7	27.8	41.7	55.7	69.6	60.5	90.0	90.0	90.0	47.8	71.7	90.0	90.0	47.8	71.7	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0				
42"	27.4	41.1	54.7	68.6	21.5	32.2	42.9	53.7	30.4	45.6	60.8	76.0	23.9	35.8	47.7	59.6	51.9	77.5	90.0	90.0	40.9	61.4	81.9	81.9	40.9	61.4	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	90.0	90.0	90.0	90.0	90.0	90.0				
48"	24.0	36.0	47.9	60.0	-	28.2	37.8	47.0	28.6	39.9	53.2	66.5	20.9	31.3	41.7	52.2	45.4	67.8	90.0	90.0	35.8	53.7	71.7	71.7	35.8	53.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	90.0	90.0	90.0	90.0	90.0	90.0				
30"	36.8	55.2	73.4	90.0	28.8	43.2	57.6	72.0	40.8	61.2	81.6	101.0	32.0	48.0	64.0	80.0	69.6	104.0	130.0	130.0	82.4	90.0	104.0	104.0	82.4	90.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	130.0	130.0	130.0	130.0	130.0	130.0				
36"	30.7	46.0	61.2	76.7	24.0	36.0	48.0	60.0	34.0	51.0	68.0	85.0	28.7	40.0	53.3	66.7	58.0	86.7	90.0	90.0	45.8	68.7	90.0	90.0	45.8	68.7	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0				
42"	26.3	39.4	52.4	65.7	20.6	30.9	41.1	51.4	29.1	43.7	58.3	72.9	22.9	34.3	45.7	57.1	49.7	74.3	90.0	90.0	39.2	58.9	78.5	78.5	39.2	58.9	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	90.0	90.0	90.0	90.0	90.0	90.0				
48"	23.0	34.5	45.9	57.5	-	27.0	36.0	45.0	25.5	38.3	51.0	63.8	20.0	30.0	40.0	50.0	43.5	65.0	87.0	90.0	34.3	51.5	68.7	68.7	34.3	51.5	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	90.0	90.0	90.0	90.0	90.0	90.0				

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



PRODUCT REVISED
 as complying with the Florida Building Code
 NOA-No. 19-1029.08
 Expiration Date 04/03/2023
 By Miami-Dade Product Control

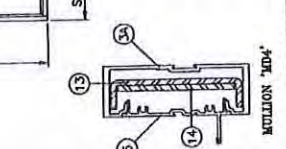
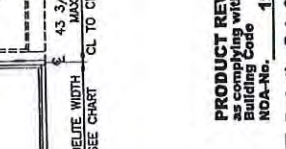
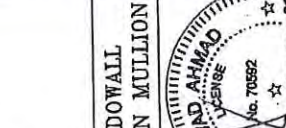
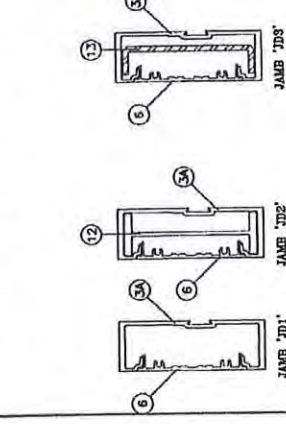
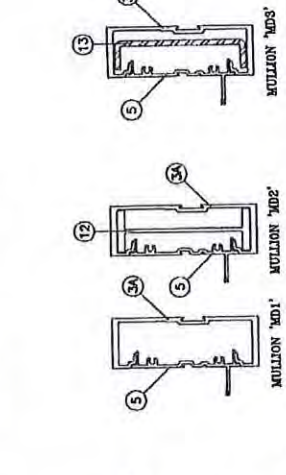
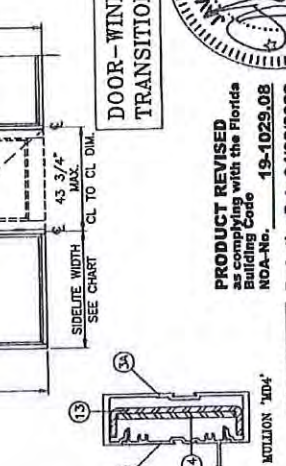
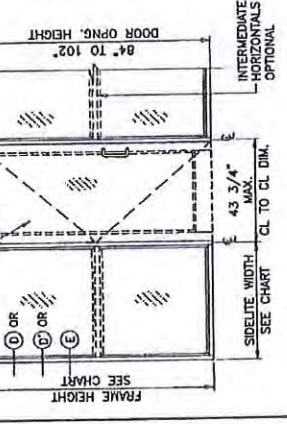
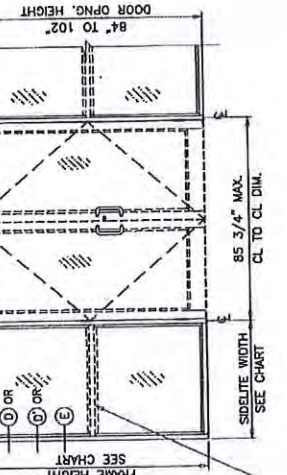
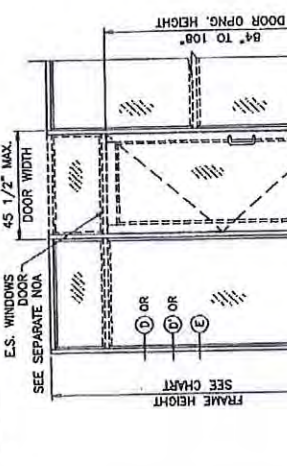
ANCHORS TYPES: SEE SHEET B FOR DESCRIPTION
 A1 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
 B1 = (4) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION
 C1 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
 D1 = (4) ANCHORS TYPE 'D' AT EACH SIDE OF JAMB AND MULLION
 A5 = (5) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
 B5 = (5) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION
 C5 = (5) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
 A6 = (6) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
 B6 = (6) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION
 C6 = (6) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
 A7 = (7) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
 B7 = (7) ANCHORS TYPE 'B' AT EACH SIDE OF JAMB AND MULLION
 ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.

DOOR MULLION LOAD CAPACITY-PSF

SIDELITE WIDTH INCHES	FRAME HEIGHT INCHES	JAMB 'JD1'		JAMB 'JD1'		JAMB 'JD2'		JAMB 'JD3'		JAMB 'JD3'	
		EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
32	96-1/2	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
36	96-1/2	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
42	96-1/2	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
48	96-1/2	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
54	96-1/2	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
60	96-1/2	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
32	110-1/2	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
36	110-1/2	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
42	110-1/2	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
48	110-1/2	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
32	144	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
36	144	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
42	144	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
48	144	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0

DOOR MULLION LOAD CAPACITY-PSF

SIDELITE WIDTH INCHES	FRAME HEIGHT INCHES	JAMB 'JD1'		JAMB 'JD2'		JAMB 'JD3'		JAMB 'JD3'	
		EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
32	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
36	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
42	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
48	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
54	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
60	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
32	112.6	107.1	120.0	120.0	120.0	120.0	120.0	120.0	120.0
36	112.6	99.7	120.0	120.0	120.0	120.0	120.0	120.0	120.0
42	112.6	95.3	120.0	120.0	120.0	120.0	120.0	120.0	120.0
48	112.6	87.7	120.0	120.0	120.0	120.0	120.0	120.0	120.0
54	112.6	79.8	120.0	120.0	120.0	120.0	120.0	120.0	120.0
32	110-1/2	75.8	120.0	112.6	120.0	120.0	120.0	120.0	120.0
36	110-1/2	70.6	112.6	104.9	120.0	120.0	120.0	120.0	120.0
42	110-1/2	66.1	106.3	98.2	120.0	120.0	120.0	120.0	120.0



Material Schedule for Mullions:

MULLION	EX. IN" x SE. IN"	ALUMINUM	STEEL	TOTAL
MULLION 'MD1'	6.7195 x 2.6757	2.7506	1.2224	3.9730
MULLION 'MD2'	10.8072 x 4.4788	2.7506	1.2224	3.9730
MULLION 'MD3'	6.7195 x 2.6757	2.7506	1.2224	3.9730
MULLION 'MD4'	6.7195 x 2.6757	2.7506	1.2224	3.9730

Material Schedule for Jamb 'JD1':

JAMB	EX. IN" x SE. IN"	ALUMINUM	STEEL	TOTAL
JAMB 'JD1'	6.570 x 2.7226	2.7506	1.2224	3.9730
JAMB 'JD2'	10.8577 x 3.8057	2.7506	1.2224	3.9730
JAMB 'JD3'	6.570 x 2.7226	2.7506	1.2224	3.9730
JAMB 'JD3'	6.570 x 2.7226	2.7506	1.2224	3.9730

Material Schedule for Jamb 'JD3':

JAMB	EX. IN" x SE. IN"	ALUMINUM	STEEL	TOTAL
JAMB 'JD3'	6.570 x 2.7226	2.7506	1.2224	3.9730
JAMB 'JD3'	6.570 x 2.7226	2.7506	1.2224	3.9730

Material Schedule for Jamb 'JD2':

JAMB	EX. IN" x SE. IN"	ALUMINUM	STEEL	TOTAL
JAMB 'JD2'	10.8577 x 3.8057	2.7506	1.2224	3.9730
JAMB 'JD2'	10.8577 x 3.8057	2.7506	1.2224	3.9730

DOOR MULLION LOAD CAPACITY - PSP

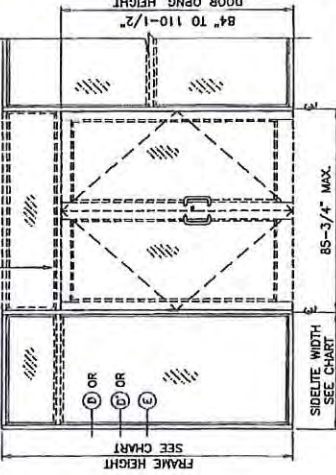
NOMINAL DIMS.	JAMB 'JD1' MULL 'MD1' MULL 'MD2' MULL 'MD3' MULL 'MD4'		JAMB 'JD2'	
	WIDTH (WT) INCHES	HEIGHT (HT) INCHES	EX. (L) INCHES	EX. (R) INCHES
30	30	30	84.6	90.0
36	36	36	76.6	90.0
42	42	42	73.4	90.0
48	48	48	68.8	90.0
54	30	30	66.2	90.0
60	36	36	63.5	90.0
66	42	42	59.5	90.0
72	48	48	56.0	90.0
78	30	30	55.5	88.3
84	36	36	51.9	83.5
90	42	42	48.8	78.5
96	48	48	46.0	74.0
102	30	30	72.4	90.0
108	36	36	67.2	90.0
114	42	42	62.7	90.0
120	48	48	58.8	90.0
126	30	30	50.0	90.0
132	36	36	50.0	82.6
138	42	42	51.5	82.8
144	48	48	48.4	77.8
150	30	30	63.7	90.0
156	36	36	59.0	90.0
162	42	42	55.0	85.4
168	48	48	51.5	82.8

DOOR MULLION LOAD CAPACITY - PSP

NOMINAL DIMS.	JAMB 'JD1' MULL 'MD1' MULL 'MD2' MULL 'MD3' MULL 'MD4'		JAMB 'JD2'	
	WIDTH (WT) INCHES	HEIGHT (HT) INCHES	EX. (L) INCHES	EX. (R) INCHES
30	30	30	84.6	90.0
36	36	36	76.6	90.0
42	42	42	73.4	90.0
48	48	48	68.8	90.0
54	30	30	66.2	90.0
60	36	36	63.5	90.0
66	42	42	59.5	90.0
72	48	48	56.0	90.0
78	30	30	55.5	88.3
84	36	36	51.9	83.5
90	42	42	48.8	78.5
96	48	48	46.0	74.0
102	30	30	72.4	90.0
108	36	36	67.2	90.0
114	42	42	62.7	90.0
120	48	48	58.8	90.0
126	30	30	50.0	90.0
132	36	36	50.0	82.6
138	42	42	51.5	82.8
144	48	48	48.4	77.8
150	30	30	63.7	90.0
156	36	36	59.0	90.0
162	42	42	55.0	85.4
168	48	48	51.5	82.8

DOOR MULLION LOAD CAPACITY - PSP

NOMINAL DIMS.	JAMB 'JD1' MULL 'MD1' MULL 'MD2' MULL 'MD3' MULL 'MD4'		JAMB 'JD2'	
	WIDTH (WT) INCHES	HEIGHT (HT) INCHES	EX. (L) INCHES	EX. (R) INCHES
30	30	30	84.6	90.0
36	36	36	76.6	90.0
42	42	42	73.4	90.0
48	48	48	68.8	90.0
54	30	30	66.2	90.0
60	36	36	63.5	90.0
66	42	42	59.5	90.0
72	48	48	56.0	90.0
78	30	30	55.5	88.3
84	36	36	51.9	83.5
90	42	42	48.8	78.5
96	48	48	46.0	74.0
102	30	30	72.4	90.0
108	36	36	67.2	90.0
114	42	42	62.7	90.0
120	48	48	58.8	90.0
126	30	30	50.0	90.0
132	36	36	50.0	82.6
138	42	42	51.5	82.8
144	48	48	48.4	77.8
150	30	30	63.7	90.0
156	36	36	59.0	90.0
162	42	42	55.0	85.4
168	48	48	51.5	82.8



DOOR - WINDOW WALL TRANSITION MULLION

85-3/4" Max. DOOR WIDTH (WT)

DOOR OPNG. HEIGHT

DOOR - WINDOW WALL TRANSITION MULLION

PROFESSIONAL ENGINEER
KAWD AHMAD
No. 70592
STATE OF FLORIDA
Oct 25, 2019

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 19-1029-08
Expiration Date 04/03/2023
By Miami-Deade Product Control

MULLION 'MD1'

MULLION 'MD2'

MULLION 'MD3'

MULLION 'MD4'

MULLION 'JD2'

EX. (L) INCHES	EX. (R) INCHES	ALUMINUM	STEEL	TOTAL
6.570	2.7226	10.6577	3.8057	14.5467
6.570	2.7226	6.570	2.7226	9.2926
6.7195	2.6757	10.8072	4.4788	15.2860
6.7195	2.6757	6.7195	2.6757	9.3952
5.15	82.8	51.5	82.8	134.3
5.15	82.8	51.5	82.8	134.3
5.15	82.8	51.5	82.8	134.3
5.15	82.8	51.5	82.8	134.3
5.15	82.8	51.5	82.8	134.3

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
(C.A.N. 3538)
FAX: (305) 264-8100
TEL: (305) 264-8100

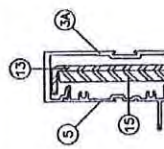
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL 33142
FAX: (305) 638-5151
TEL: (305) 638-5158

REVISIONS:
no. date by description

drawing no. **W07-60**
sheet 6 of 12
date: 08-01-07
dr. by: TARIO
chk. by:

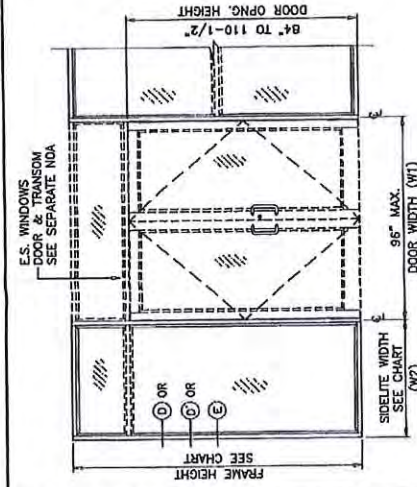
DOOR MULLION LOAD CAPACITY - PSF

NOMINAL DIMS.		JAMB 'JD3' MULL 'MD3'	
WIDTH (W1) INCHES	HEIGHT (H1) INCHES	WIDTH (W2) INCHES	HEIGHT (H2) INCHES
30	36	30	73.8
42	42	42	89.7
48	48	48	96.1
60	36	36	85.5
30	42	42	82.3
36	48	48	86.3
42	42	42	83.0
48	42	42	80.0
48	48	48	87.3



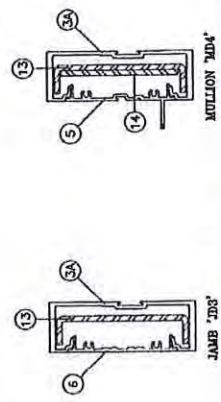
MULLION 'MD3'

ITEM	QTY	UNIT	PRICE	TOTAL
ALUMINUM	6.7195	LBS	2.6757	18.18
STEEL	4.7506	LBS	2.1174	10.06
TOTAL				28.24



DOOR MULLION LOAD CAPACITY - PSF

NOMINAL DIMS.		JAMB 'JD3' MULL 'MD4'	
WIDTH (W1) INCHES	HEIGHT (H1) INCHES	WIDTH (W2) INCHES	HEIGHT (H2) INCHES
30	36	30	90.0
42	42	42	108.0
48	48	48	114.0
60	36	36	99.8
30	42	42	88.3
36	48	48	91.8
42	42	42	87.5
48	42	42	84.0
48	48	48	91.0
60	36	36	102.0
30	42	42	90.0
36	48	48	95.1
42	42	42	88.7
48	42	42	85.1
48	48	48	94.2
60	36	36	108.0
30	42	42	90.0
36	48	48	96.1
42	42	42	89.7
48	42	42	86.3
48	48	48	93.0



MULLION 'MD4'

ITEM	QTY	UNIT	PRICE	TOTAL
ALUMINUM	6.7195	LBS	2.6757	18.18
STEEL	3.7533	LBS	1.888	7.08
TOTAL				25.26

JAMB 'JD3'

ITEM	QTY	UNIT	PRICE	TOTAL
ALUMINUM	6.570	LBS	2.7228	17.89
STEEL	2.7506	LBS	1.2224	10.67
TOTAL				28.56



PRODUCT REVISED
in compliance with the Florida
Building Code
NDA-No. 19-1029.08
Expiration Date 04/03/2023
By: [Signature]
Miami-Dade Product Control

DOOR-WINDOW WALL
TRANSITION MULLION

DOOR MULLION LOAD CAPACITY - PSF

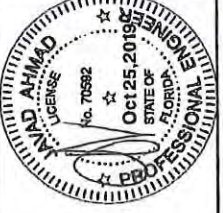
NOMINAL DIMS.		JAMB 'JD3' MULL 'MD4'	
WIDTH (W1) INCHES	HEIGHT (H1) INCHES	WIDTH (W2) INCHES	HEIGHT (H2) INCHES
30	36	30	90.0
42	42	42	108.0
48	48	48	114.0
60	36	36	99.8
30	42	42	88.3
36	48	48	91.8
42	42	42	87.5
48	42	42	84.0
48	48	48	91.0
60	36	36	102.0
30	42	42	90.0
36	48	48	95.1
42	42	42	88.7
48	42	42	85.1
48	48	48	94.2
60	36	36	108.0
30	42	42	90.0
36	48	48	96.1
42	42	42	89.7
48	42	42	86.3
48	48	48	93.0

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. #6398)
TEL (305) 264-8100 FAX (305) 262-6978
STORE W07-60ES

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL 33142
TEL (305) 638-5151 FAX (305) 638-6158
SERIES 8000 ALUM WINDOW WALL SYSTEM (L.M.I.)

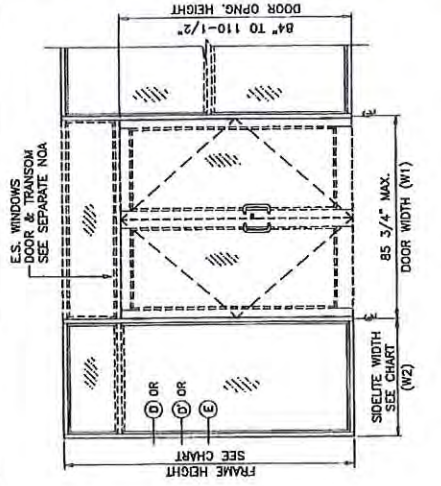
Revisions:	no. date	by description
1	10.20.17	UPDATED TO 2017 FBC
2	09.28.16	NO CHANGE THIS SHEET

chk. by: TRIO
dr. by: TRIO
scale: -
notes: 08-03-07
drawing no. W07-60
Sheet 7 of 12



PRODUCT REVISED
as complying with the Florida
Building Code
NDA-No. 19-1029.08
Expiration Date 04/03/2023
By Miami-Dade Product Control

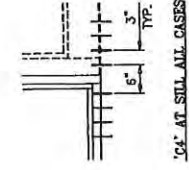
TRANSITION MULLION ANCHORS



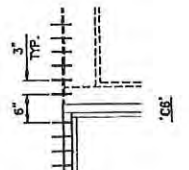
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

DOOR MULLION HEAD ANCHOR LOAD CAPACITY - PSF			
WIDTH (W1) INCHES	NOMINAL DIMS. WIDTH (W2) INCHES	DOOR HEIGHT INCHES	DOOR HEIGHT INCHES
30	36	86	86
36	42	86	86
42	48	86	86
48	54	86	86
54	60	86	86
60	66	86	86
66	72	86	86
72	78	86	86
78	84	86	86
84	90	86	86
90	96	86	86
96	102	86	86
102	108	86	86
108	114	86	86
114	120	86	86
120	126	86	86
126	132	86	86
132	138	86	86
138	144	86	86
144	150	86	86
150	156	86	86
156	162	86	86
162	168	86	86
168	174	86	86
174	180	86	86
180	186	86	86
186	192	86	86
192	198	86	86
198	204	86	86
204	210	86	86
210	216	86	86
216	222	86	86
222	228	86	86
228	234	86	86
234	240	86	86
240	246	86	86
246	252	86	86
252	258	86	86
258	264	86	86
264	270	86	86
270	276	86	86
276	282	86	86
282	288	86	86
288	294	86	86
294	300	86	86

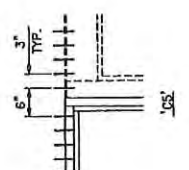
DOOR MULLION HEAD ANCHOR LOAD CAPACITY - PSF			
WIDTH (W1) INCHES	NOMINAL DIMS. WIDTH (W2) INCHES	DOOR HEIGHT INCHES	DOOR HEIGHT INCHES
30	36	86	86
36	42	86	86
42	48	86	86
48	54	86	86
54	60	86	86
60	66	86	86
66	72	86	86
72	78	86	86
78	84	86	86
84	90	86	86
90	96	86	86
96	102	86	86
102	108	86	86
108	114	86	86
114	120	86	86
120	126	86	86
126	132	86	86
132	138	86	86
138	144	86	86
144	150	86	86
150	156	86	86
156	162	86	86
162	168	86	86
168	174	86	86
174	180	86	86
180	186	86	86
186	192	86	86
192	198	86	86
198	204	86	86
204	210	86	86
210	216	86	86
216	222	86	86
222	228	86	86
228	234	86	86
234	240	86	86
240	246	86	86
246	252	86	86
252	258	86	86
258	264	86	86
264	270	86	86
270	276	86	86
276	282	86	86
282	288	86	86
288	294	86	86
294	300	86	86



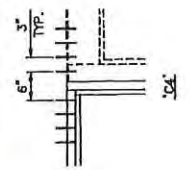
'C4' AT SILL AND CASES



'C5'

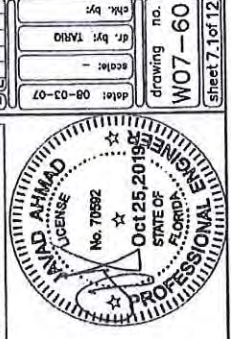


'C6'



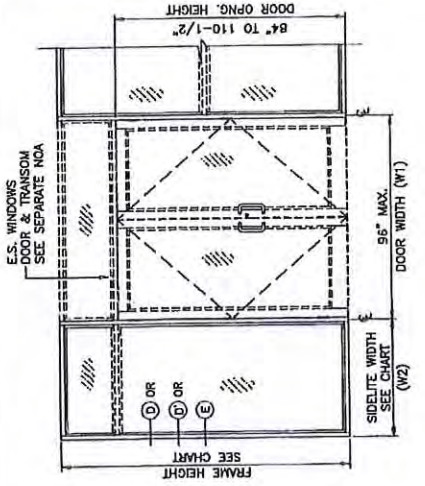
'C7'

ANCHORS TYPES: SEE SHEET 8 FOR DESCRIPTION
C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION
C5 = (5) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION
C6 = (6) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION
ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.



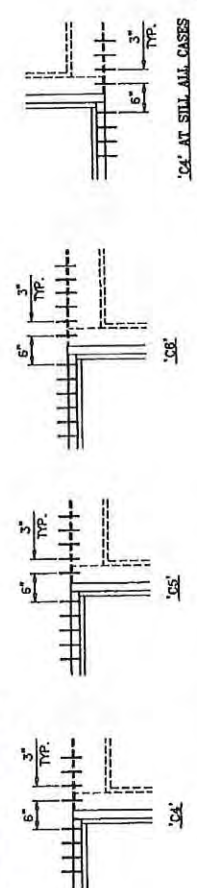
TRANSITION MULLION ANCHORS

PRODUCT REVISED
As complying with the Florida Building Code
NDA-NO. 19-1029-08
Expiration Date 04/03/2023
By Miami-Dade Product Control



INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

DOOR MULLION HEAD ANCHOR LOAD CAPACITY - F5F					DOOR MULLION HEAD ANCHOR LOAD CAPACITY - F5F				
W1	W2	FH	NOMINAL DIMS.		DOOR HEIGHT	C4'		C5'	
			W	H		EXT. INT.	EXT. INT.		
30	36	108	82.4	90.0	90.0	90.0	72.8	80.0	80.0
36	42	108	78.5	90.0	90.0	90.0	69.4	86.7	90.0
42	48	108	74.9	90.0	90.0	90.0	66.3	82.8	90.0
48	54	114	71.7	89.6	90.0	90.0	63.4	79.2	90.0
54	60	114	68.7	85.8	90.0	90.0	70.3	87.9	90.0
60	66	114	65.9	82.4	90.0	90.0	68.9	83.7	90.0
66	72	114	63.2	80.0	90.0	90.0	63.8	78.6	90.0
72	78	120	60.6	80.0	90.0	90.0	61.0	76.3	90.0
78	84	120	58.7	85.8	90.0	90.0	64.6	80.8	90.0
84	90	120	57.2	82.2	90.0	90.0	61.5	77.0	90.0
90	96	120	55.8	80.0	90.0	90.0	58.9	73.6	88.3
96	102	120	54.4	80.0	90.0	90.0	56.8	70.1	86.4
102	108	120	53.1	80.0	90.0	90.0	55.8	68.1	84.6
108	114	120	51.9	86.3	90.0	90.0	52.6	65.4	82.4
114	120	120	50.8	82.4	90.0	90.0	50.5	62.4	79.5
120	126	120	49.8	80.0	90.0	90.0	48.9	60.0	76.5
126	132	120	48.9	80.0	90.0	90.0	47.1	57.6	73.3
132	138	120	47.3	80.0	90.0	90.0	45.5	55.2	70.1
138	144	120	45.8	86.3	90.0	90.0	44.0	52.8	66.9
144	150	120	44.4	82.4	90.0	90.0	42.6	50.4	63.7
150	156	120	43.1	80.0	90.0	90.0	41.3	48.0	60.5
156	162	120	41.9	80.0	90.0	90.0	40.1	45.6	57.3
162	168	120	40.8	80.0	90.0	90.0	39.0	43.2	54.1
168	174	120	39.8	86.3	90.0	90.0	38.0	40.8	51.0
174	180	120	38.9	82.4	90.0	90.0	37.1	38.4	47.9
180	186	120	38.1	80.0	90.0	90.0	36.3	36.0	44.8
186	192	120	37.4	80.0	90.0	90.0	35.6	33.6	41.7
192	198	120	36.8	80.0	90.0	90.0	35.0	31.2	38.6
198	204	120	36.3	80.0	90.0	90.0	34.5	28.8	35.5
204	210	120	35.9	86.3	90.0	90.0	34.1	26.4	32.4
210	216	120	35.6	82.4	90.0	90.0	33.8	24.0	29.3
216	222	120	35.4	80.0	90.0	90.0	33.6	21.6	26.2
222	228	120	35.3	80.0	90.0	90.0	33.5	19.2	23.1
228	234	120	35.3	80.0	90.0	90.0	33.5	16.8	20.0
234	240	120	35.4	80.0	90.0	90.0	33.6	14.4	16.9
240	246	120	35.6	80.0	90.0	90.0	33.8	12.0	13.8
246	252	120	36.0	80.0	90.0	90.0	34.2	9.6	10.7
252	258	120	36.5	80.0	90.0	90.0	34.7	7.2	7.6
258	264	120	37.1	80.0	90.0	90.0	35.3	4.8	4.5
264	270	120	37.8	80.0	90.0	90.0	36.0	2.4	2.2
270	276	120	38.6	80.0	90.0	90.0	36.8	0.0	0.0
276	282	120	39.5	80.0	90.0	90.0	37.7	0.0	0.0
282	288	120	40.5	86.3	90.0	90.0	38.7	0.0	0.0
288	294	120	41.6	82.4	90.0	90.0	39.8	0.0	0.0
294	300	120	42.8	80.0	90.0	90.0	41.0	0.0	0.0



ANCHORS TYPES: SEE SHEET B FOR DESCRIPTION
 C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION
 C5 = (5) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION
 C6 = (6) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION
 ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.

AL-FAROQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173
 TEL (305) 264-8100 FAX (305) 262-8978
 STORE\W07-60E3

E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL 33142
 TEL (305) 538-9151 FAX (305) 638-5188

NO	DATE	DESCRIPTION
01	10/21/14	BY: UPDATED TO 2014 FBC
02	10/21/16	BY: UPDATED TO 2017 FBC
03	10/20/17	BY: UPDATED TO 2017 FBC
04	09/28/18	NO CHANGE THIS SHEET

date: 08-03-07
 scale: 1/2" = 1"
 dr. by: YAHNG
 chk. by:
 drawing no. **W07-60**
 sheet 8 of 12

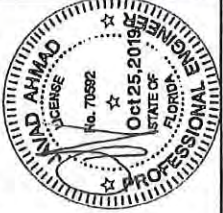
TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A' - 1/2" DIA ULTRACON BY 'ELCO' (F_u=177 KSI, F_y=155 KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES WITH 1-1/2" MIN. PENETRATION INTO WOOD THRU 1BY WOOD BUCKS INTO CONCRETE WITH 1-1/4" MIN. EMBED INTO CONCRETE DIRECTLY INTO CONCRETE WITH 1-1/4" MIN. EMBED INTO CONC.
ANCHOR EDGE DISTANCES
 INTO CONCRETE AND MASONRY = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1" MIN.

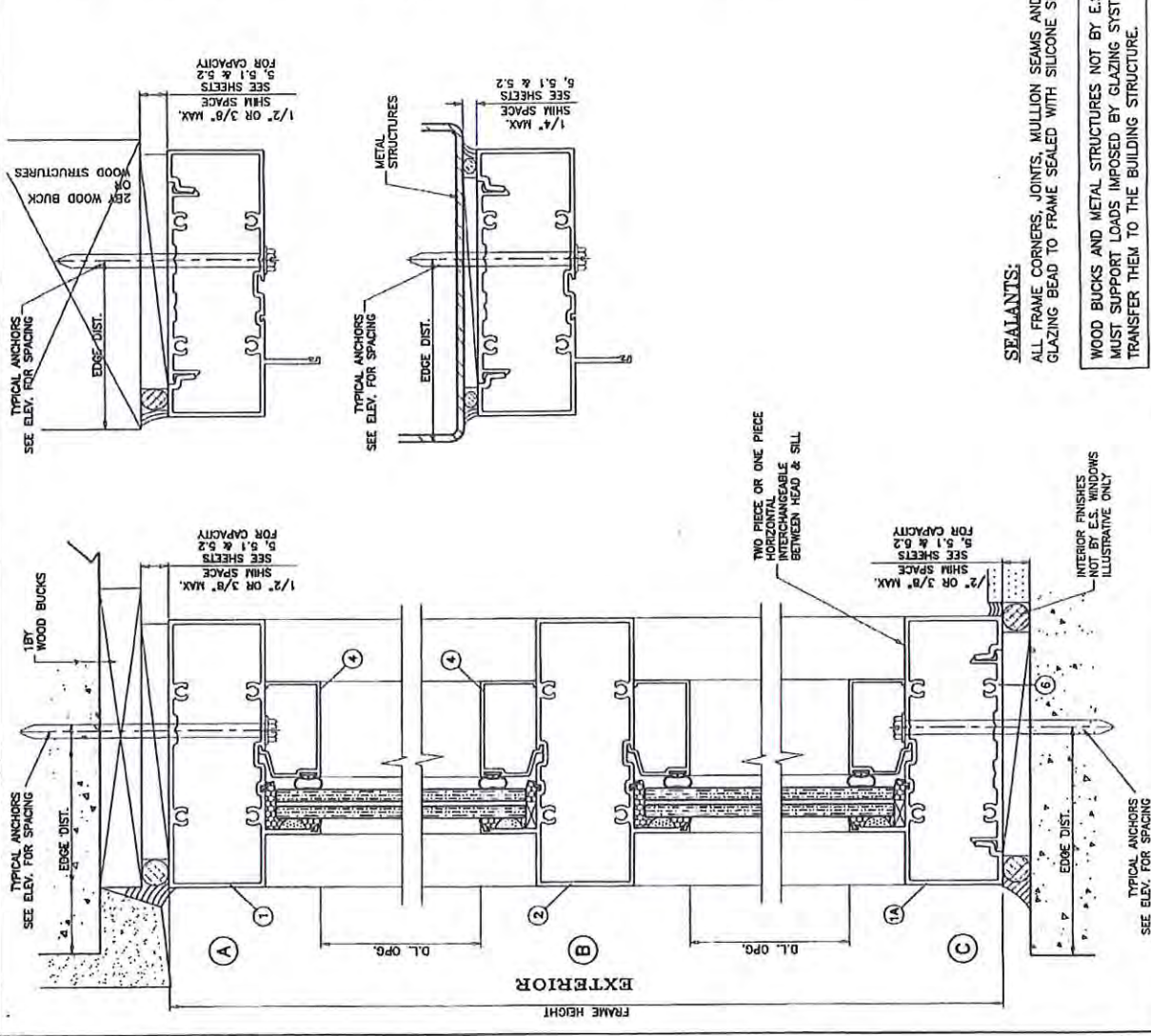
TYPE 'B' - 3/16" DIA KWIK-CON II BY 'HILLI' (F_u=183 KSI, F_y=157 KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES WITH 1-1/2" MIN. PENETRATION INTO WOOD THRU 1BY WOOD BUCKS INTO CONCRETE WITH 1-1/4" MIN. EMBED INTO CONCRETE DIRECTLY INTO CONCRETE WITH 1-1/4" MIN. EMBED INTO CONC.
ANCHOR EDGE DISTANCES
 INTO CONCRETE AND MASONRY = 3" MIN.
 INTO WOOD STRUCTURE = 1" MIN.

TYPE 'C' - 3/16" DIA ULTRACON BY 'ELCO' (F_u=177 KSI, F_y=155 KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES WITH 1-1/2" MIN. PENETRATION INTO WOOD THRU 1BY WOOD BUCKS INTO CONCRETE WITH 1-1/4" MIN. EMBED INTO CONCRETE DIRECTLY INTO CONCRETE WITH 1-1/4" MIN. EMBED INTO CONC.
ANCHOR EDGE DISTANCES
 INTO CONCRETE AND MASONRY = 3" MIN.
 INTO WOOD STRUCTURE = 1-1/4" MIN.

TYPE 'D' - 1/4" DIA TEKS OR SELF-DRILLING SCREWS ST/ST (GRADE 5 CRS)
 INTO METAL STRUCTURES (C) THREADS MIN. PENETRATION BEYOND SUBSTRATE ALUMINUM: 1/8" THK. MIN. (S063-T5 MIN.) STEEL: 1/8" THK. MIN. (F_y = 36 KSI MIN.) (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)
ANCHOR EDGE DISTANCES
 INTO METAL STRUCTURE = 1/2" MIN.
 WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.
 CONCRETE AT HEAD, SILL OR JAMBS F_c = 3000 PSI MIN.
 C-90 HOLLOW/FILLED BLOCK AT JAMBS F_m = 2000 PSI MIN.



PRODUCT REVISED
 as complying with the Florida Building Code
 NDA-No. 19-1029.08
 Expiration Date 04/03/2023
 By Miami-Grade Product Control

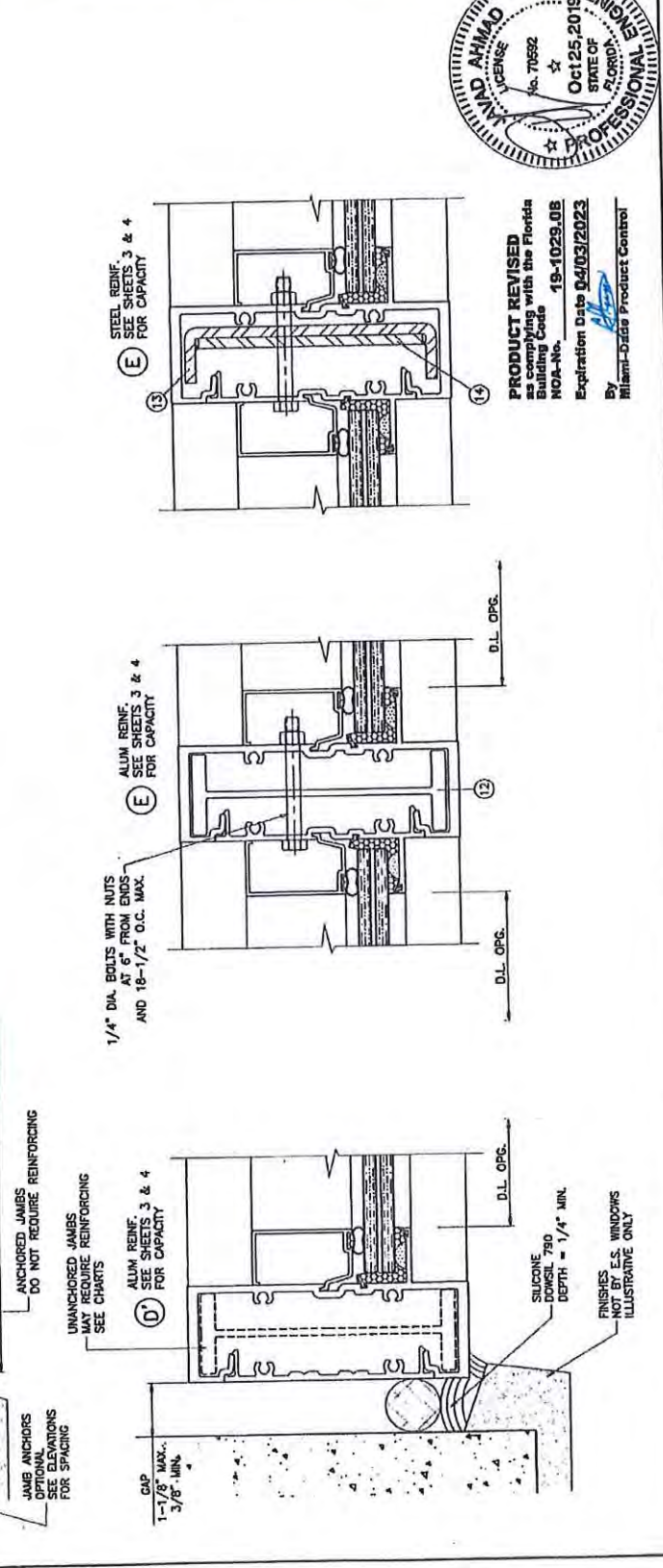
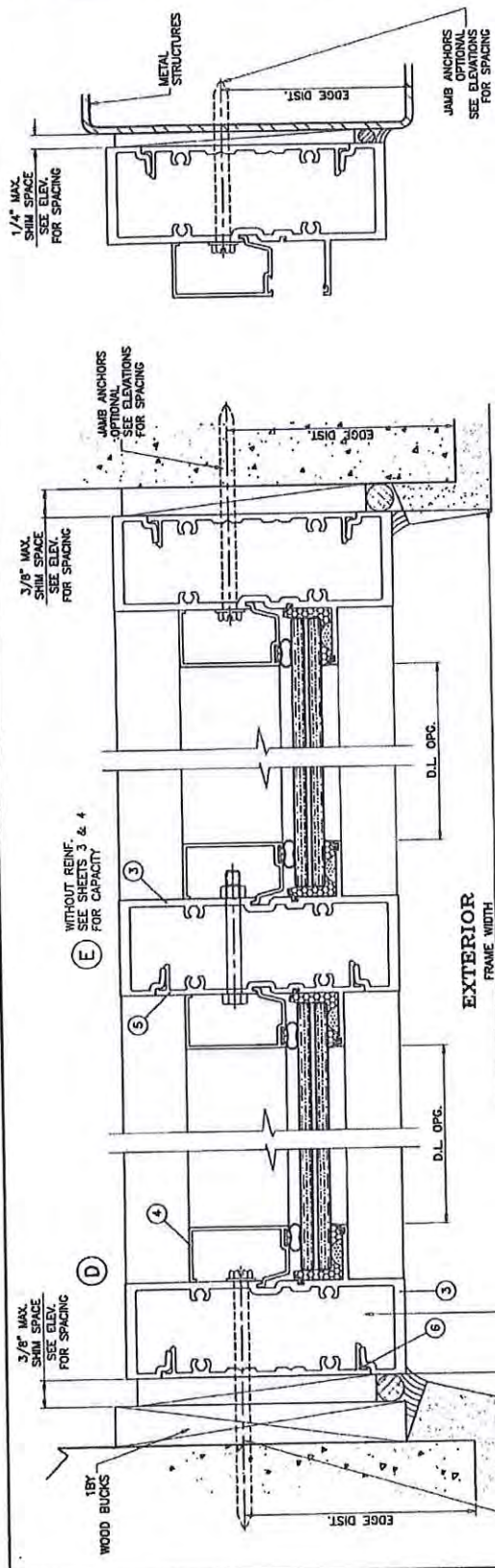
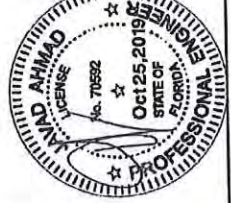


AL-FAROQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173 (C.A.N. 858)
 TEL (305) 204-8100 FAX (305) 202-0978
 STORE W07-6023

ES. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL. (305) 638-9151 FAX. (305) 638-5158

REV.	DATE	DESCRIPTION
1	08/28/16	SUPPONE REV.
2	10/20/17	NO CHANGE THIS SHEET
3	10/21/16	NO CHANGE THIS SHEET
4	12/01/14	UPDATED TO 2014 FBC
5	01/16	

date: 08-03-07
 drawing no. W07-60
 sheet 9 of 12



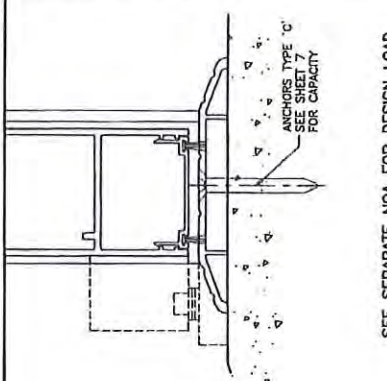
PRODUCT REVISED
 as complying with the Florida
 Building Code
 NOA-No. 19-1029_JOB
 Expiration Date 04/03/2023
 By Miami-Dade Product Control

AL-FAROQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL (305) 284-8100 FAX (305) 284-8178
STORE W07-60ES

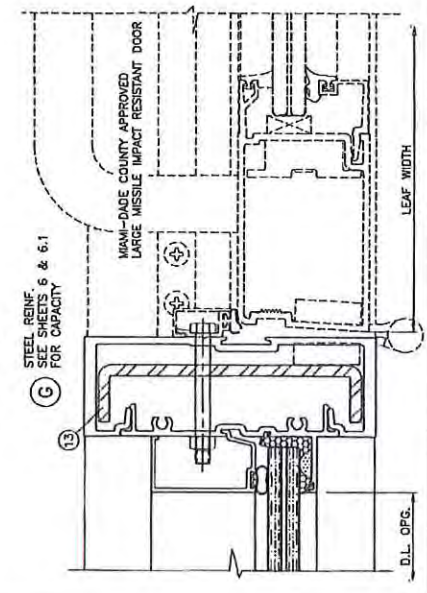
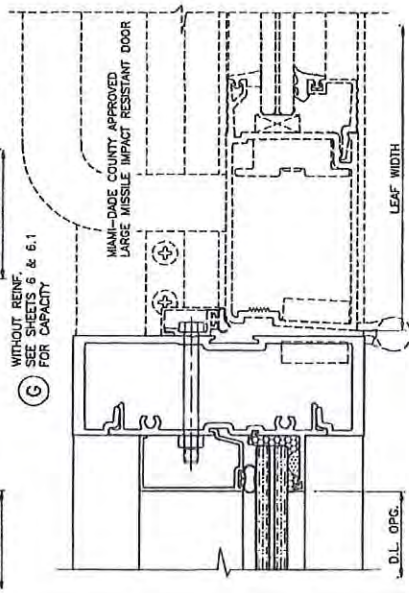
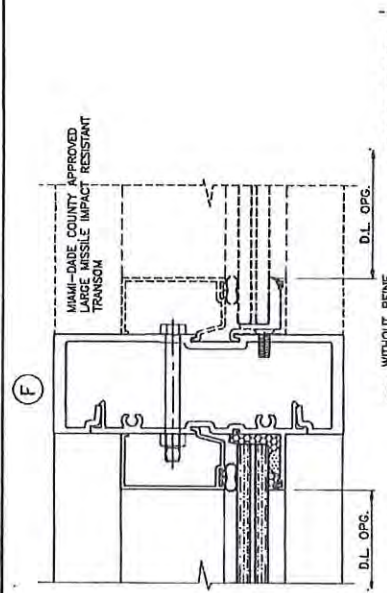
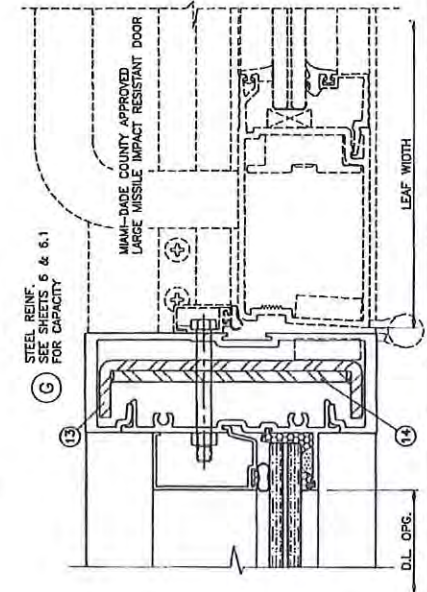
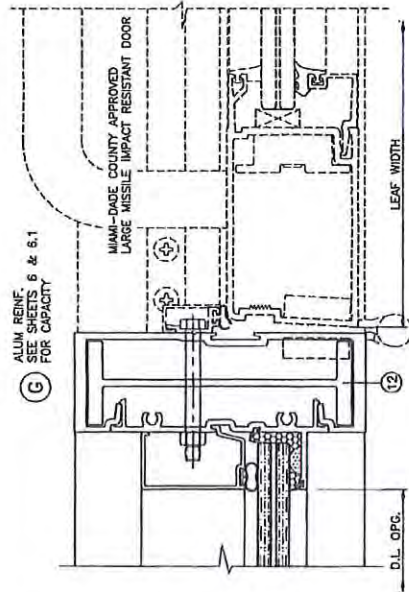
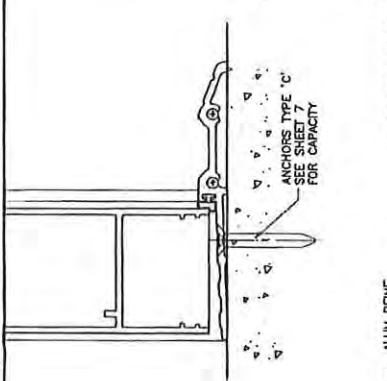
SERIES 8000 ALUM WINDOW WALL SYSTEM (L.M.I.)
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL 33142
TEL (305) 638-5151 FAX (305) 638-5158

NO	DATE	BY	DESCRIPTION
C	12/01/14		REVISED TO 2014 FBC
D	10/21/16		NO CHANGE THIS SHEET
E	10/20/17		NO CHANGE THIS SHEET
F	09/28/18		NO CHANGE THIS SHEET

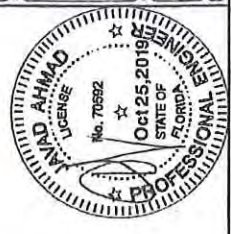
DATE: 08-03-07
DRAWING NO. W07-60
SHEET 10 OF 12



SEE SEPARATE NOA FOR DESIGN LOAD CAPACITY OF DOORS AND DOOR ANCHORS. LOWER VALUES FROM DOORS NOA OR STOREFRONT SYSTEM CAPACITY CHARTS WILL APPLY TO ENTIRE SYSTEM.



PRODUCT REVISED
in accordance with the Florida Building Code
NOA-No. 19-1029.08
Expiration Date 04/03/2023
By
Miami-Dade Product Control



AL-FARROQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9960 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33178
 (C.A.N. 3638)
 FAX: (305) 262-6978
 TEL: (305) 264-8100

STORE W07-60ES

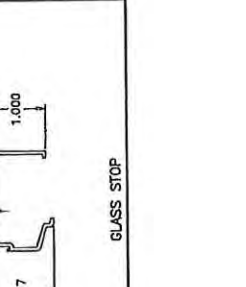
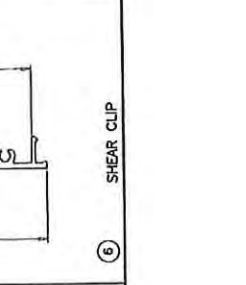
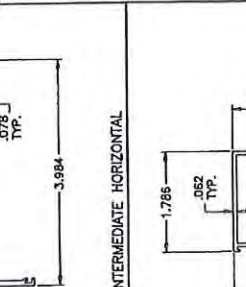
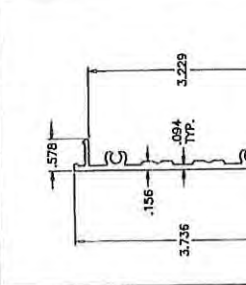
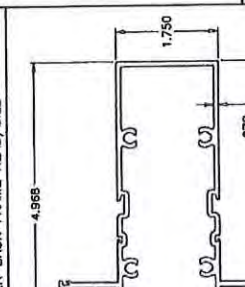
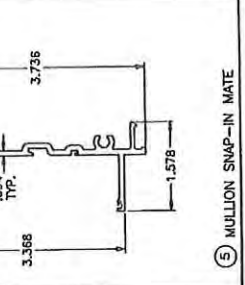
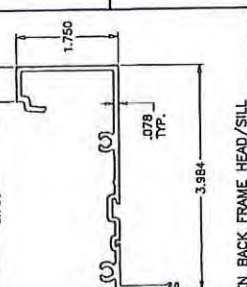
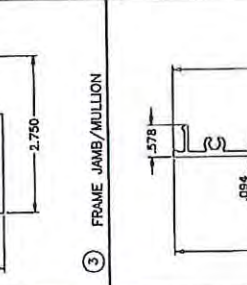
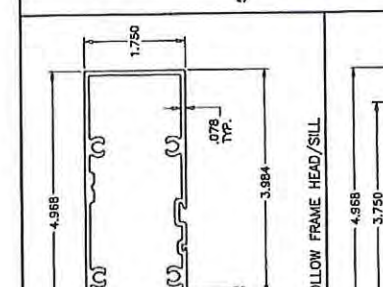
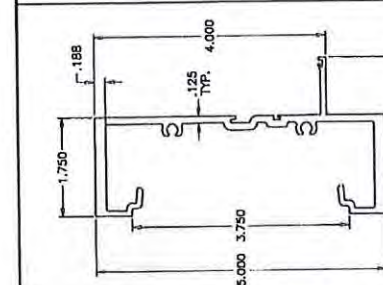
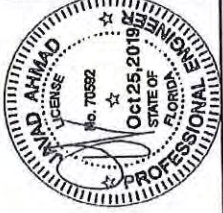
SERIES 8000 ALUM WINDOW WALL SYSTEM (L.M.I.)
 E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL: (305) 638-5151 FAX: (305) 638-9158

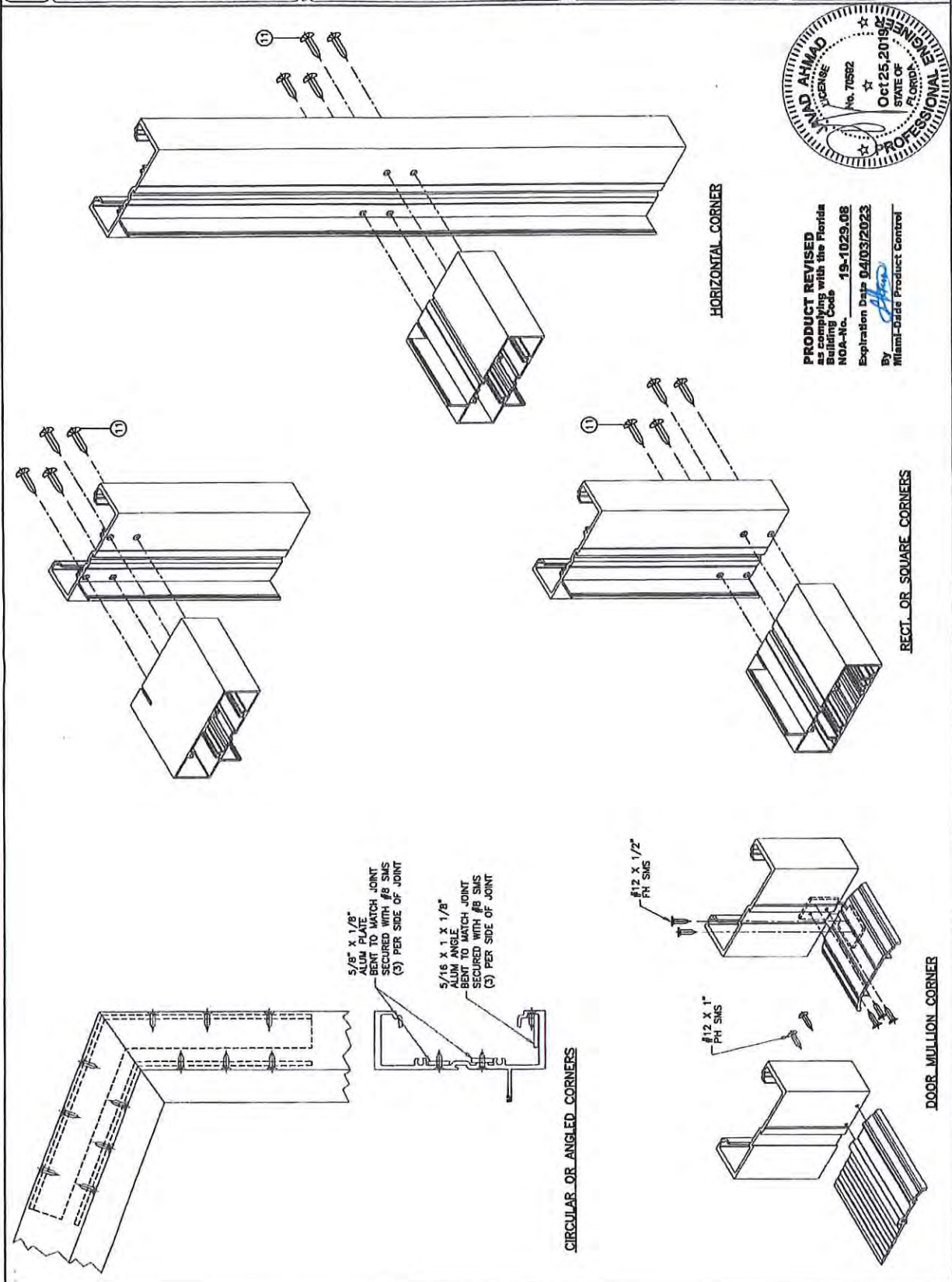
revisions:
 no. date by description
 1 12/01/14 UPDATED TO 2014 FIG
 2 10/21/16 NO CHANGE THIS SHEET
 3 10/20/17 NO CHANGE THIS SHEET
 4 09/28/18 MULLION BAR ADDED

chk. by: YARID
 drawing no. W07-60
 sheet 11 of 12

ITEM NO.	PAKET NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	ES8005	AS RECD.	HOLLOW FRAME HEAD/SILL	6005-T5	
1A	ES9007	AS RECD.	OPEN BACK FRAME HEAD/SILL	6003-T6	
2	ES9004	AS RECD.	INTERMEDIATE HORIZONTAL	6005-T5	
3	ES9001	AS RECD.	FRAME JAMB/MULLION	6006-T6	
3A	ES8012	AS RECD.	DOOR MULLION	6005-T5	
4	ES8006	AS RECD.	GLASS STOP	6003-T5	
5	ES8002	AS RECD.	MULLION SNAP-IN MATE	6005-T5	
6	ES8003	AS RECD.	SHEAR CLIP	6005-T5	
7	ES8009	AS RECD.	INTERIOR BULB GASKET	VINYL	
8	ES-8011A	AS RECD.	1/4" BUTION BUMPER SPACER	SILICONE	DURUMETER 65±5 SHORE A
9	ES-8011A	AS RECD.	1/4" BUTION BUMPER SPACER	SILICONE	DURUMETER 65±5 SHORE A
10	ES-8011A	AS RECD.	3/16" X 1/2" X 2" LONG SETTING BLOCK, AT 1/4" POINTS	EPDM	DURUMETER 65±5 SHORE A
11	ES-8011A	AS RECD.	4/ CORNER ASSEMBLY SCREWS PHISMS	STEEL	
12	ES-8011A	AS RECD.	MULLION STIFFENER	6005-T5	
13	ES-8011A	AS RECD.	MULLION REINFORCING CHANNEL	STEEL	
14	ES-8011A	AS RECD.	MULLION REINFORCING BAR (3/16" X 4")	STEEL	
15	ES-8011A	AS RECD.	MULLION REINFORCING BAR (3/8" X 4")	STEEL	

PRODUCT REVISED
 as complying with the Florida
 Building Code
 R04-No. 19-1029.08
 Expiration Date 04/03/2023
 By: [Signature]
 Miami-Dade Product Control







MIAMI-DADE COUNTY
 PRODUCT CONTROL SECTION
 11805 SW 26 Street, Room 208
 Miami, Florida 33175-2474
 T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
 BOARD AND CODE ADMINISTRATION DIVISION
NOTICE OF ACCEPTANCE (NOA)

E.S. Windows, LLC
 10653 NE Quaybridge Ct.
 Miami, FL 33138

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA -Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ). This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series 9000 Aluminum Outswing French Door w/ wo Transom-L.M.I.

APPROVAL DOCUMENT: Drawing No. W08-66 Rev L, titled "Series- 9000 Alum Outswing French Door (L.M.I.)", sheets 1 through 18 of 18, dated 07-14-08 and last revised on JUL 27, 2018, prepared by AL-Farooq Corporation, signed and sealed by Javad Ahmad, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large Missile Impact Resistant

Limitations:

1. See sheets 2 thru 6 for Design Pressure charts for Single and/or Double door w/wo transom, glass, threshold type, lock type, hinges type and head, sill and jambs anchors. Lower Design Pressure shall apply to the entire assembly.
2. The Single Door w/ Transom is limited to Max. Design Pressure DP = ± 90 PSF & Saddle threshold = ± 80 PSF.
3. Only Single Door w/ High Threshold option item E-2B (part # ES-9026) is rated for external Positive +120 PSF, Water Resistant Rating, all other thresholds are not rated for water Resistant Ratings (See sheets 8 & 9).
4. When doors are mulled to ES 8000 or 9500 series separate Storefront System NOA(s), lower design pressure of doors w/wo transom or storefront shall control for entire system, AHJ to review tributary end load and installations.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and series and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises & renews NOA # 15-0602.09 and consists of this page 1 and evidence pages E-1, E-2 & E-3, as well as approval document mentioned above.

The submitted documentation was reviewed by Ishaq I. Chanda, P.E.



NOA No. 18-0319.09
 Expiration Date: December 24, 2023
 Approval Date: August 09, 2018
 Page 1

8/21/18

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted in previous files

A. DRAWINGS

1. Manufacturer's die drawings and sections (Submitted under files # below)
2. Drawing No. **W08-66 Rev G**, titled "Series- 9000 Alum Outswing French Door (L.M.I.)", sheets 1 through 10.1 of 10.1, dated 07-14-08 and last revised on FEB 27, 2012, prepared by AL-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS (Submitted under file #12-0306.07 / #10-0301.03)

1. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94(Not performed)
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

Along with marked-up drawings and installation diagram of an Alum. Outswing Entrance Door, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-5554**, dated 05/10/08, signed and sealed by Carlos S. Rionda, P.E.

2. Test reports on: 1) Uniform Static Air Pressure Test,
 - 2) Large Missile Impact Test per FBC, TAS 201-94
 - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94

Along with marked-up drawings of an Alum. Outswing Entrance Door, prepared by FTL, Inc., Test Report No. **FTL-5556**, dtd 04/27/08, signed and sealed by Carlos S. Rionda, P.E.

3. Additional Test reports along with marked-up Dwg. of a single (X) aluminum outswing door per TAS 201, 202 (Full) and 203-94, issued by Fenestration Testing lab, Inc., Test Report No. **FTL-5992**, dtd 09/09/09, reissued on 2/2/11 signed & sealed by Marlin D. Brinson, P. E.

C. CALCULATIONS

1. Anchor verification calculations & structural analysis, complying with FBC-2014, prepared by Al-Farooq Corp., dated 05/29/15 and last revised on 03/14/16, signed & sealed by Javad Ahmad, P.E.
2. Glazing complies w/ ASTME-1300-02 -04 & -09.

D. QUALITY ASSURANCE

1. Miami Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **14-0916.11**, issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont Sentry Glass @ interlayer", expiring on 01/14/17.
2. Notice of Acceptance No. **14-0916.10**, issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont Butacite PVB, Interlayer", expiring on 12/11/16.

F. STATEMENTS

1. Statement letter of conformance to FBC 2014 (5th edition) and letter of no financial interest, prepared by Al Farooq Corporation, dated 03/06/16, signed and sealed by Javad Ahmad, P.E.
2. Lab compliance as part of the above referenced test report. Ishaq I. Chanda

Ishaq I. Chanda, P.E.

Product Control Examiner

NOA No. 18-0319.09

Expiration Date: December 24, 2023

Approval Date: August 09, 2018

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

G. OTHER

1. This NOA revises NOA # 13-0617.29, expiring 12/24/18.
2. Distribution agreement ES Windows-Energia Solar, S.A. and ES Windows, LLC, dated 10/20/10, signed by Ms. Carla G. Torrente and Andres Chamorro respectively.
3. Test proposals # 07-4070 & 09-0165, approved by BCCO.

2. New Evidence submitted.

A. DRAWINGS

1. Drawing No. W08-66 Rev L, titled "Series- 9000 Alum Outswing French Door (L.M.I.)", sheets 1 through 18 of 18, dated 07-14-08 and last revised on JUL 27, 2018, prepared by AL-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS (Revised)

1. Test reports on
 - 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94(Not performed)
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

Along with marked-up drawings and installation diagram of X & XX Alum. Outswing Entrance Door, prepared by Fenestration Testing Laboratory, Inc., Test Report No. FTL-7242, dated 05/03/13, signed and sealed by Idalmis Ortega, P.E.

(This test report revised and issued by Fenestration testing on 05/21/18, signed and sealed by Idalmis Ortega, P.E.)

2. Test reports on:
 - 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94(Not performed)
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

Along with marked-up drawings of X and XX Alum. Outswing Entrance Door, prepared by Blackwater Testing Inc., Test Report No. BT-ESW-17-020, dated 06/14/178, signed and sealed by Constantin Bortes, P.E.

C. CALCULATIONS

1. Anchor verification calculations & structural analysis, complying with FBC 2017 (6th edition), prepared by Al-Farooq Corp., dated 03/16/18 and last revised on 07/27/18, signed & sealed by Javad Ahmad, P.E.

D. QUALITY ASSURANCE

1. Miami Dade Department of Regulatory and Economic Resources (RER).



Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No. 18-0319.09

Expiration Date: December 24, 2023
Approval Date: August 09, 2018

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

E. MATERIAL CERTIFICATIONS

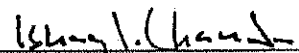
1. Notice of Acceptance No. **17-0808.02** issued to Kuraray America, Inc. (former E.I. DuPont DeNemours & Co., Inc.) for the “Sentry Glass @ Interlayer”, expiring on 07/4/23.
2. Notice of Acceptance No. **16-117.01** issued to Kuraray America, Inc. (Former E.I. DuPont DeNemours & Co., Inc. for the “Kuraray Trofosil Ultra clear and color PVB Interlayer (Former Kuraray Butacite @ PVB interlayer)”, expiring on 07/08/19.

F. STATEMENTS

1. Statement letter of conformance to FBC 2017 (6th Edition) and letter of no financial interest, prepared by Al Farooq Corporation, dated 02/21/18, signed and sealed by Javad Ahmad, P.E.
2. Distribution agreement between ES Windows, LLC (distributor) and Energia Solar, S.A, (manufacturer, dated 08/01/18, signed by MS. Carla Garcia (MGR) and Ms. Evelyn Deas (MGR) respectively.

G. OTHER

1. This NOA revises & renews NOA # **15-0602.09**, expiring 12/24/23.
2. Test proposal dated 12/20/12 approved by Jaime D. Gascon, P.E.
3. Reference PLA files # 18-0314.07 (Mr. Glass Doors & windows) and #18-0412.05 (Sunshine Windows)



Ishaq I. Chanda, P.E.

Product Control Examiner

NOA No. 18-0319.09

Expiration Date: December 24, 2023

Approval Date: August 09, 2018

AL-FAROQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9880 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL (305) 264-4100 FAX (305) 262-6978
COMP-ANL W08-6653W

AL-FAROQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9880 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL (305) 264-4100 FAX (305) 262-6978
COMP-ANL W08-6653W

REV. PER MER COMMENTS	1	02/22/16
GENERAL REVISION	1	02/22/16
REV. PER MER COMMENTS	2	02/09/16
REV. PER MER COMMENTS	3	01/13/16
REV. PER MER COMMENTS	4	05/05/15
REV. PER MER COMMENTS	5	05/05/15
REV. PER MER COMMENTS	6	05/05/15
REV. PER MER COMMENTS	7	05/05/15
REV. PER MER COMMENTS	8	05/05/15
REV. PER MER COMMENTS	9	05/05/15
REV. PER MER COMMENTS	10	05/05/15

DATE: 07-14-08
DRAWING NO: W08-66
SHEET 1 OF 18

AL-FAROQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9880 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL (305) 264-4100 FAX (305) 262-6978
COMP-ANL W08-6653W

AL-FAROQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9880 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL (305) 264-4100 FAX (305) 262-6978
COMP-ANL W08-6653W

AL-FAROQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9880 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL (305) 264-4100 FAX (305) 262-6978
COMP-ANL W08-6653W

**SERIES 9000
ALUMINUM OUTSWING ENTRANCE DOOR**

SEE SHEET 2 FOR DESIGN LOAD CAPACITY OF SINGLE DOORS WITH OR WITHOUT TRANSOMS.
SEE SHEETS 3 & 4 FOR DESIGN LOAD CAPACITY OF DOUBLE DOORS WITH OR WITHOUT TRANSOMS.
SEE SHEET 5 FOR DESIGN LOAD CAPACITY OF SINGLE AND DOUBLE DOORS WITHOUT TRANSOMS WITH ADDITIONAL OPTIONS.
SEE SHEET 6 FOR DESIGN LOAD CAPACITY OF SINGLE DOORS WITHOUT TRANSOMS WITH HIGHER LOAD CAPACITY.

DOORS CAN ALSO BE USED WITH E.S. WINDOWS SERIES 8000 OR SERIES 9500 STOREFRONT SYSTEMS UNDER SEPARATE NCA DOOR MILLION ATTACHMENT. END LOAD AND CAPACITY TO BE REVIEWED BY BUILDING OFFICIAL.

DOUBLE DOORS WITH STANDARD, SADDLE AND HIGH THRESHOLD AND SINGLE DOORS WITH STANDARD AND SADDLE THRESHOLD ARE NOT APPROVED FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED. SINGLE DOORS USING ES-2024 (HIGH THRESHOLD OPTION) ARE APPROVED FOR WATER INFILTRATION RESISTANCE.
SEE SHEETS 6 & 18 FOR DETAILS.

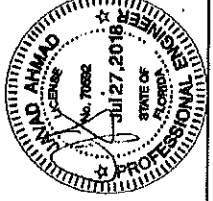
THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2017 (6TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

1BY OR 2BY WOOD BLOCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.
ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

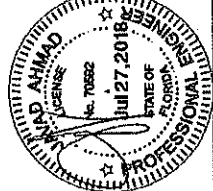
A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.
ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2017 FLORIDA BLDG. CODE & ADOPTED STANDARDS.
THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, I.E. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC.
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

- GLASS, D.L.O., DIMS.
- D.L.O. HEIGHT (DOOR) = FRAME HEIGHT - 15.250" (STD. THRESHOLD)
- D.L.O. HEIGHT (DOOR) = FRAME HEIGHT - 15.625" (SADDLE THRESHOLD)
- D.L.O. HEIGHT (DOOR) = FRAME HEIGHT - 15.750" (HIGH THRESHOLD)
- D.L.O. WIDTH (DOOR) = FRAME WIDTH - 14.0625"
- D.L.O. HEIGHT (TRANSOM) = FRAME HEIGHT - 5.125"
- D.L.O. WIDTH (TRANSOM) = FRAME WIDTH - 7"
- LEAF HEIGHT = FRAME HEIGHT - 2.938" (STD. THRESHOLD)
- LEAF HEIGHT = FRAME HEIGHT - 2.563" (SADDLE THRESHOLD)
- LEAF HEIGHT = FRAME HEIGHT - 2.438" (HIGH THRESHOLD)
- LEAF WIDTH = FRAME WIDTH - 5.188"

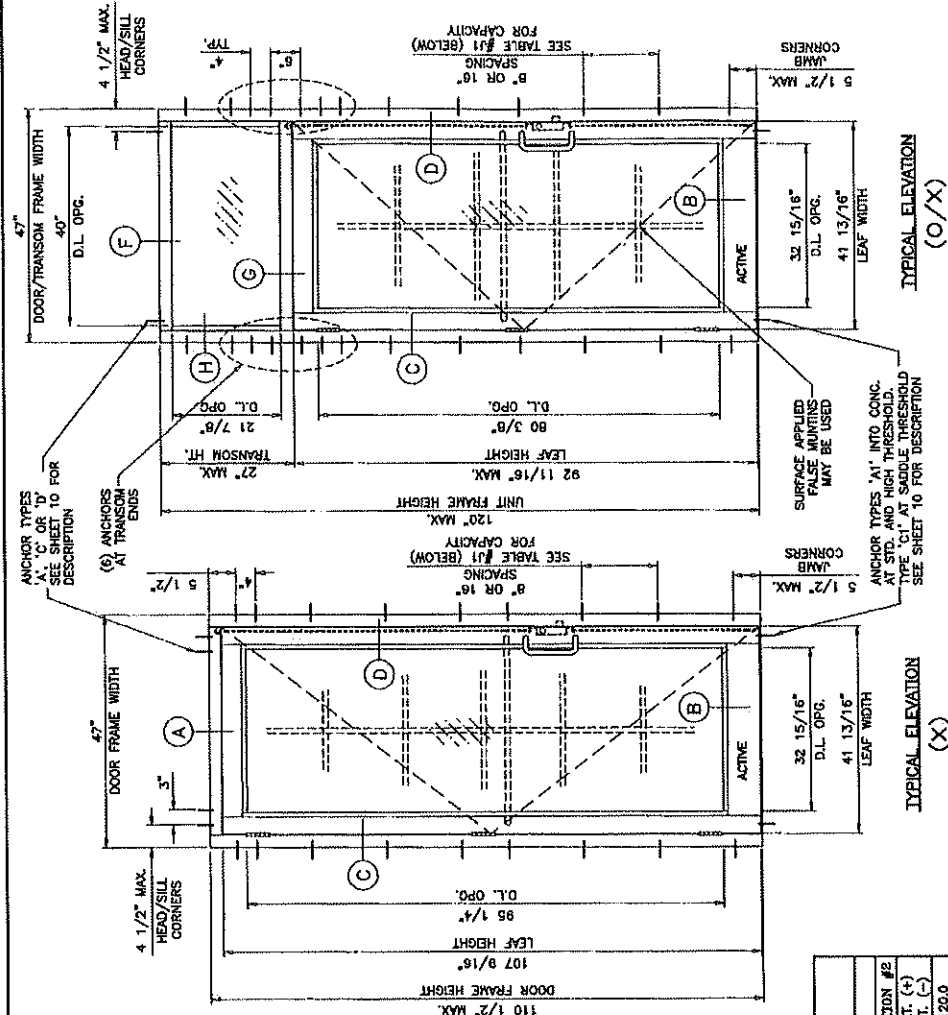
THESE DOORS ARE RATED FOR LARGE & SMALL MISSILE IMPACT.
SHUTTERS ARE NOT REQUIRED.



PRODUCT REVIEWED
in Compliance with the Florida
Building Code
Approved Date: 12-03/19-09
Approved By: DEKEY ROSS
E. Isham
Product Control



RESIDUAL REVIEWING
 in compliance with the Florida
 Building Code
 Acceptance No. 18-0242-07
 Registration Date: 12/27/2018
 Signature: *Ahmad Al-Farooq*
 State Seal Product Control



ANCHOR TYPES
 A, C OR 'D' TO BE USED FOR ANCHORS AT TRANSOM ENDS
 SEE SHEET 10 FOR DESCRIPTION

ANCHOR TYPES 'A' INTO CONC.
 AT STD. AND HIGH THRESHOLD.
 TYPE 'C' AT SADDLE THRESHOLD
 SEE SHEET 10 FOR DESCRIPTION

SURFACE APPLIED
 FALSE MOUNTING
 MAY BE USED

JAMB CORNERS
 5 1/2" MAX.

HEAD/SILL CORNERS
 4 1/2" MAX.

DOOR FRAME WIDTH
 47"

DOOR FRAME HEIGHT
 110 1/2" MAX.

TRANSOM HT.
 27" MAX.

LEAF HEIGHT
 92 11/16" MAX.

UNIT FRAME HEIGHT
 120" MAX.

LEAF WIDTH
 41 13/16"

D.L. OPG.
 32 15/16"

DOOR/TRANSOM FRAME WIDTH
 47"

D.L. OPG.
 40"

SEE TABLE #1 (BELOW)
 SEE TABLE #1 (BELOW)
 SEE TABLE #1 (BELOW)

SEE TABLE #1 (BELOW)

NOTE:
 GLASS CAPACITIES ON THIS SHEET ARE
 BASED ON ASTM E1300-09 (3 SEC. CLUSTS)
 AND FLORIDA BUILDING COMMISSION
 DECLARATORY STATEMENT DCAOS-DEC-219

DOORS LOAD CAPACITY - PSF WITH TRANSOM (O/X)

DOOR DIMS.	GLASS				LOCKS				HINGES			
	TYPE 'A'	TYPE 'B/C'	OPTION #1	OPTION #2	OPTION #3	OPTION #1	OPTION #2	OPTION #3	OPTION #1	OPTION #2	OPTION #3	OPTION #4
FRAME HEIGHT	EXT. (+)	EXT. (+)	INT. (-)	EXT. (+)	EXT. (+)	INT. (-)	INT. (-)	EXT. (+)	EXT. (+)	INT. (-)	INT. (-)	EXT. (+)
47"	98-1/2"	80.0	120.0	80.0	90.0	120.0	80.0	120.0	80.0	120.0	80.0	120.0
47"	110-1/2"	80.0	120.0	80.0	90.0	120.0	80.0	120.0	80.0	120.0	80.0	120.0

SINGLE DOORS WITH SADDLE THRESHOLD LIMITED TO +80.0, -60.0 PSF

SEE SHEET 7 FOR GLASS TYPES DESCRIPTION
 SEE SHEET 16 FOR LOCKS AND HINGES DESCRIPTION

JAMB ANCHORS LOAD CAPACITY - PSF (NOT APPLICABLE AT TRANSOM ENDS SEE NOTE 4)

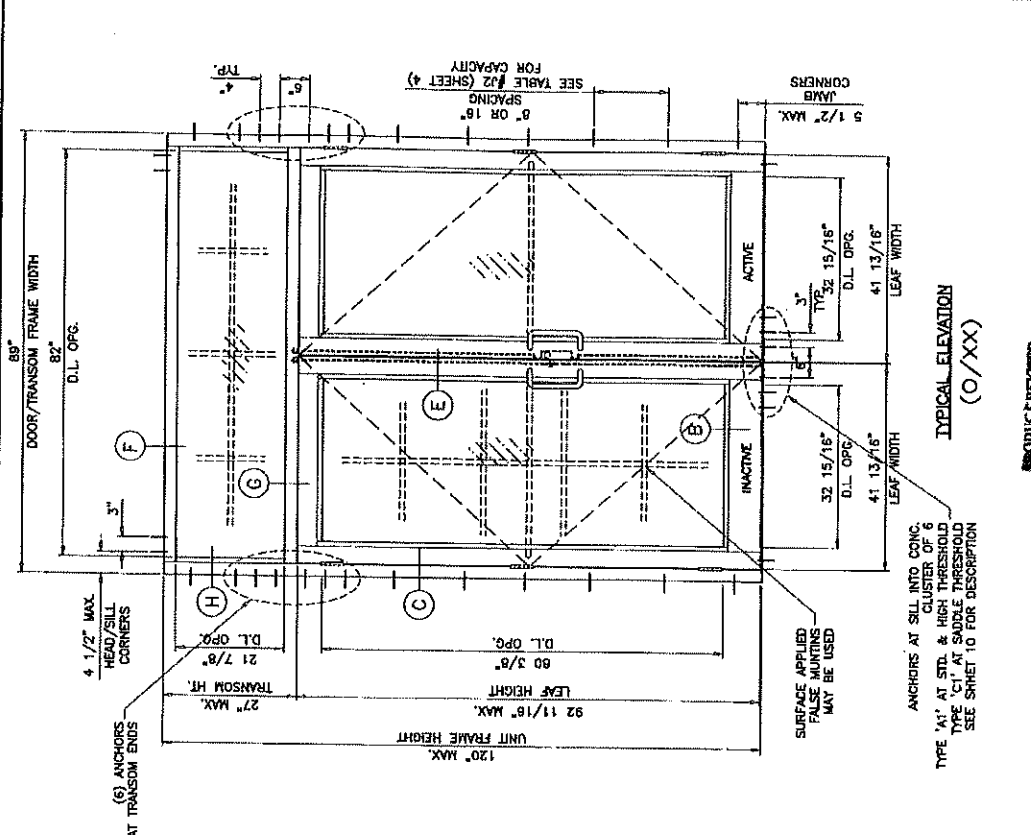
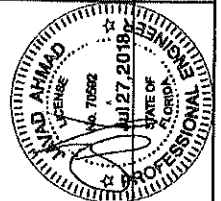
DOOR DIMS.	1/4" SEISM SPACE				3/8" SEISM SPACE				1/2" SEISM SPACE			
	SPACING AT 18" O.C.	SPACING AT 8" O.C.	AT 16" O.C.	AT 8" O.C.	AT 16" O.C.	AT 8" O.C.	AT 16" O.C.	AT 8" O.C.	AT 16" O.C.	AT 8" O.C.	AT 16" O.C.	AT 8" O.C.
FRAME HEIGHT	EXT. (+)	EXT. (+)	INT. (-)	EXT. (+)	EXT. (+)	INT. (-)	INT. (-)	EXT. (+)	EXT. (+)	INT. (-)	INT. (-)	EXT. (+)
40"	110-1/2"	112.5	120.0	120.0	120.0	120.0	120.0	90.5	117.4	120.0	120.0	70.2
47"	110-1/2"	95.7	111.0	120.0	120.0	120.0	120.0	71.0	100.0	120.0	120.0	56.7

SEE SHEET 10 FOR ANCHOR DESCRIPTION

AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173
 (C.A.N. 3588)
 TEL (305) 264-6100 FAX (305) 262-9878
 COMP-ANL\WOB-66ESW

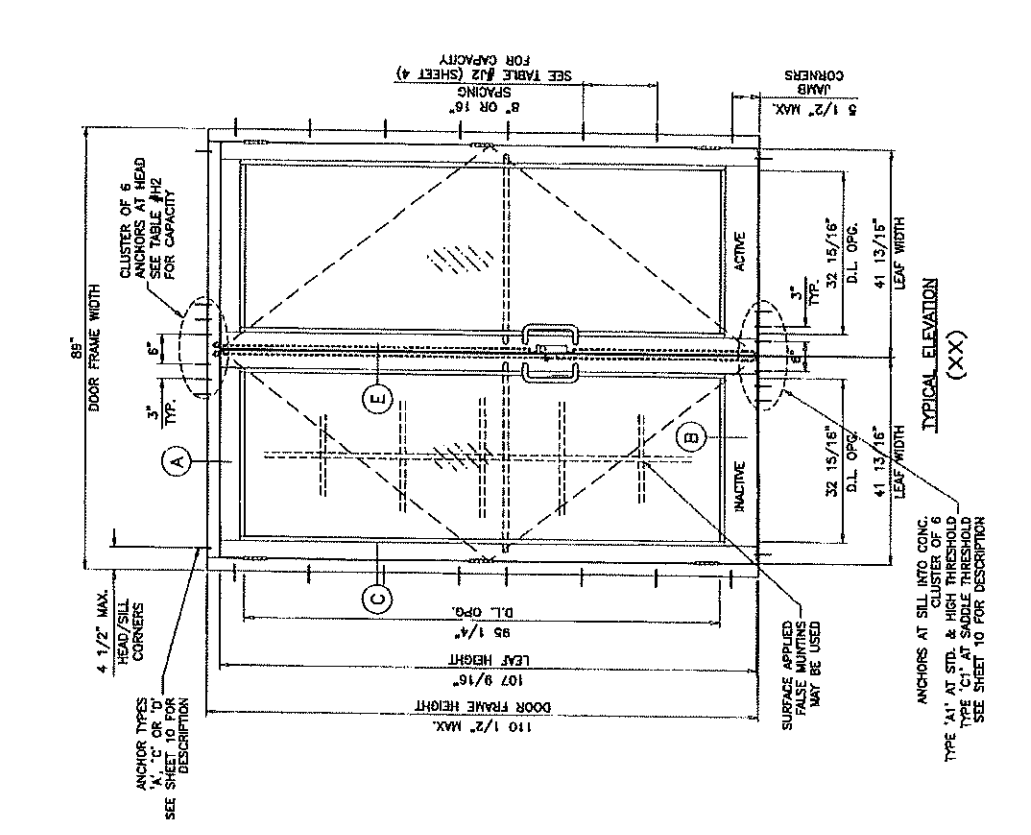
SERIES-9000 ALUM OUTSWING FRENCH DOOR (L.M.I.)
E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL 33142
 TEL (305) 638-9151 FAX (305) 638-9158

NO. 0018	BY DESCRIPTION
REV. 03.05.15	UPDATED TO 2014 IBC
REV. 01.13.15	REV. PER MR COMMENTS
REV. 02.08.15	NO CHANGE THIS SHEET
REV. 02.22.15	REV. PER MR COMMENTS
DATE 07-14-08	
SCALE 1/2"=1'-0"	
DR. BY YANO	
CHK BY	



PRODUCT REVISIONS
 to comply with the Florida Building Code
 Acceptance No. 15-0-319-07
 Registration Date: 12/22/22
 Ahmad Ahmad, P.E.
 State Seal Product Control

SEE CHARTS ON SHEET 4 FOR DOUBLE DOOR AND TRANSOM LOAD CAPACITY



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9366 S. HUNTERS DRIVE, SUITE 220
MIAMI, FLORIDA 33178 (C.A.M. 3538)
FAX: (305) 282-9378
TEL: (305) 284-4100

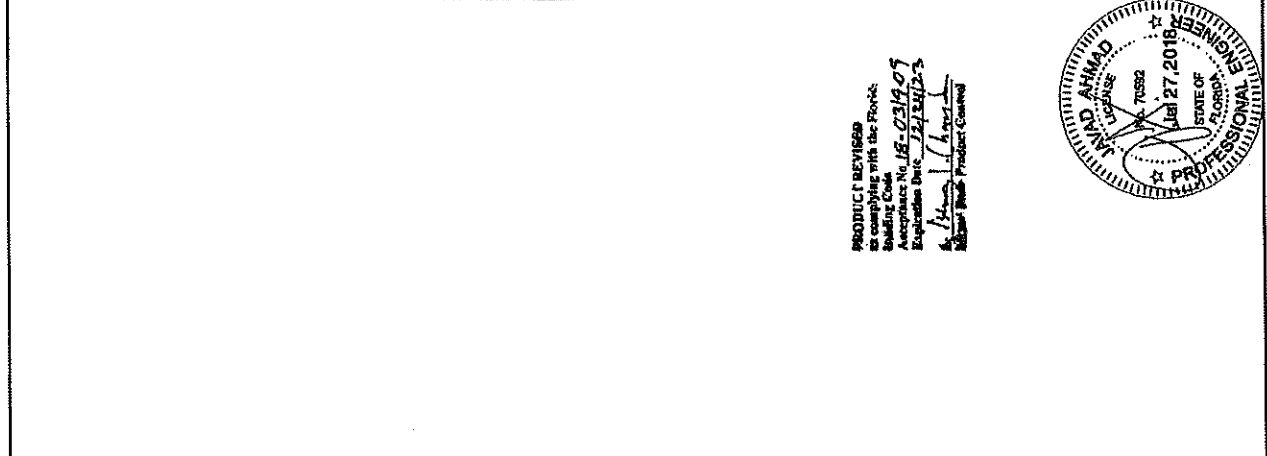
COMP-ANL\W08-66ESW

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL 33142
TEL: (305) 638-5151 FAX: (305) 638-5158

SERIES-9000 ALUM OUTSWING FRENCH DOOR (L.M.)

BY description
REVISED TO 2014 FBC
REV. PER REV COMMENTS
NO CHANGE THIS SHEET
GENERAL REVISION
REV. PER REV COMMENTS

date: 07-14-08
scale: 1/2"=1'-0"
dr. by: TARD
chk. by:
drawing no.
W08-66
sheet 4 of 18



PRODUCT REVISED
in compliance with the Florida
Building Code.
Manufacture Date: 12/12/12-5
By: [Signature] Product Control

DOUBLE DOORS WITH OR WITHOUT TRANSOMS
USE CHARTS AS FOLLOWS
FOR THE CORRESPONDING DOOR SIZE

- FOR GLASS TYPE, LOCK AND HINGE OPTIONS
OBTAIN LOAD CAPACITIES FROM TABLE #02.
- SELECT THRESHOLD TYPE TO BE USED.
STANDARD, SADDLE OR HIGH THRESHOLD.
- FOR JAMB ANCHORS TYPE/SINUSPACE OBTAIN
LOAD CAPACITIES FROM TABLE #03.
SEE ELEVATION SHEET 3 FOR TRANSOM END ANCHORS.
(MIN. 6 ANCHORS REQD. IN ALL CASES)
- FOR HEAD ANCHORS, TYPE/SINUSPACE OBTAIN
LOAD CAPACITIES FROM TABLE #04.
THE LOWEST VALUES FROM STEPS 1, 2, 3
AND 4 WILL COVER.

TABLE #02 DOORS LOAD CAPACITY - PSF
DOUBLE DOOR WITHOUT TRANSOM (XX) OR WITH TRANSOM (O/XX)

DOOR DIMS.	GLASS				LOCKS				HINGES			
	TYPE 'A'	TYPE 'B'	TYPE 'C'	TYPE 'D'	OPTION #1	OPTION #2	OPTION #3	OPTION #4	OPTION #1	OPTION #2	OPTION #3	OPTION #4
FRAME WIDTH	EXT. (+)	EXT. (+)	INT. (-)	INT. (-)	EXT. (+)	EXT. (+)	INT. (-)	INT. (-)	EXT. (+)	EXT. (+)	INT. (-)	INT. (-)
89"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
110-1/2"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0

DOUBLE DOORS WITH SADDLE THRESHOLD LIMITED TO +80.0, -80.0 PSF
SEE SHEET 7 FOR GLASS TYPES DESCRIPTION
SEE SHEET 16 FOR LOCKS AND HINGES DESCRIPTION

TABLE #03 JAMB ANCHORS LOAD CAPACITY - PSF
DOUBLE DOORS WITHOUT TRANSOM (XX) OR WITH TRANSOM (O/XX)

DOOR DIMS.	1/4" SHIM SPACE				3/8" SHIM SPACE				1/2" SHIM SPACE			
	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR
FRAME WIDTH	EXT. (+)	EXT. (+)	INT. (-)	INT. (-)	EXT. (+)	EXT. (+)	INT. (-)	INT. (-)	EXT. (+)	EXT. (+)	INT. (-)	INT. (-)
75"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	74.9	90.0	90.0	90.0
89"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	63.1	83.3	90.0	90.0

SEE SHEET 10 FOR ANCHOR DESCRIPTION

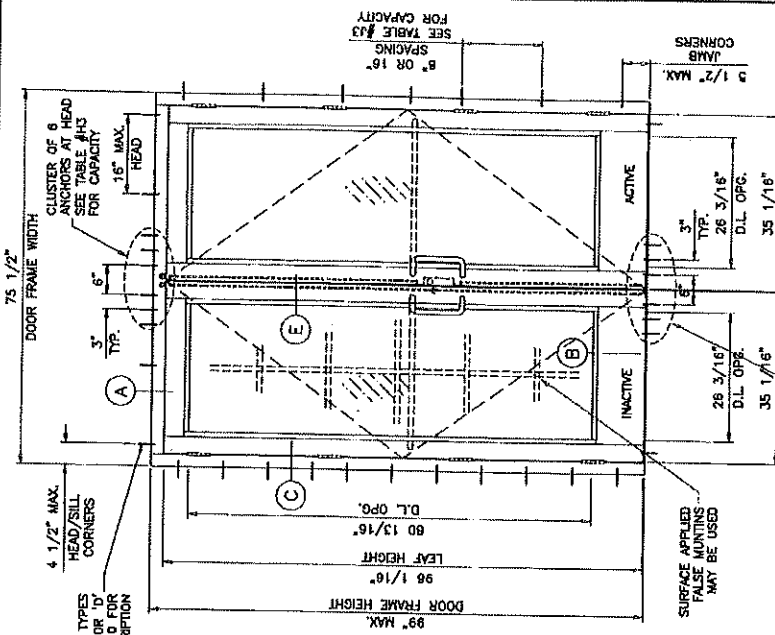
TABLE #04 HEAD ANCHORS LOAD CAPACITY - PSF
DOUBLE DOOR WITHOUT TRANSOM (XX) OR WITH TRANSOM (O/XX)

DOOR DIMS.	1/4" SHIM SPACE				3/8" SHIM SPACE				1/2" SHIM SPACE			
	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR
FRAME WIDTH	EXT. (+)	EXT. (+)	INT. (-)	INT. (-)	EXT. (+)	EXT. (+)	INT. (-)	INT. (-)	EXT. (+)	EXT. (+)	INT. (-)	INT. (-)
75"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	73.0	90.0	90.0	90.0
89"	90.0	90.0	90.0	90.0	79.2	90.0	90.0	90.0	61.5	81.2	90.0	90.0
110-1/2"	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	65.1	85.9	90.0	90.0

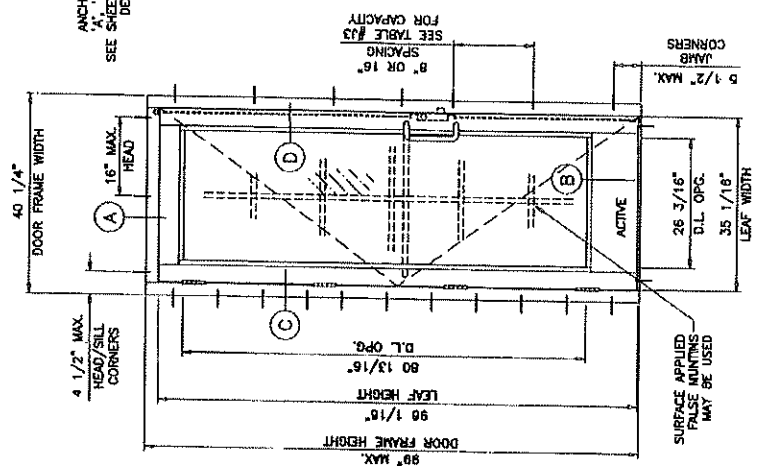
SEE SHEET 10 FOR ANCHOR DESCRIPTION

SILL ANCHORS DESIGN LOAD CAPACITY ALL SIZES = ± 90.0 PSF (STD. & HIGH THRESHOLDS)
± 80.0 PSF (SADDLE THRESHOLD)

NOTE: GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-08 (3 SEC. GUSTS)
AND FLORIDA BUILDING COMMISSION
DECLARATORY STATEMENT DC0405-DEC-219

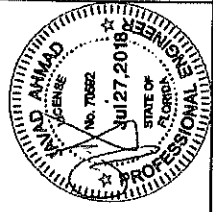


TYPICAL ELEVATION (XX)
ANCHORS AT SILL INTO CONG. CLUSTER OF 6 TYPE 'A' AT STD. THRESHOLD SEE SHEET 10 FOR DESCRIPTION



TYPICAL ELEVATION (X)
HEAD/SILL CORNERS 4 1/2" MAX.

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-09 (3 SEC. GUSTS)
AND FLORIDA BUILDING COMMISSION
DECLARATORY STATEMENT DCA05-DEC-219



PRODUCT REVIEWER
In compliance with the Florida
Building Code,
Registration No. 12-0-31509
Expiration Date: 12/24/23
By: [Signature]
Title: Product Control

- SINGLE OR DOUBLE DOORS WITHOUT TRANSOMS
USE CHARTS AS FOLLOWS
FOR THE CORRESPONDING DOOR SIZE
- 1- FOR GLASS TYPE, LOCK AND HINGE OPTIONS OBTAIN LOAD CAPACITIES FROM TABLE #43.
 - 2- THESE DOORS APPROVED WITH STD. THRESHOLD ONLY.
 - 3- FOR JAMB ANCHORS TYPE/SHIMS/SPACE OBTAIN LOAD CAPACITIES FROM TABLE #43.
 - 4- FOR HEAD ANCHORS, TYPE/SHIMS/SPACE OBTAIN LOAD CAPACITIES FROM TABLE #43.
- THE LOWEST VALUES FROM STEPS 1, 3 AND 4 WILL GOVERN.

DOORS LOAD CAPACITY - PSF

TABLE #D3 SINGLE DOOR(X) DIMS. FRAME WIDTH FRAME HEIGHT	SINGLE(X) OR DOUBLE(X) DOORS WITHOUT TRANSOM		GLASS LOCKS HINGES		TYPE 'A,1' OPTION #3	
	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
40-1/4" 99"	75-1/2"	99"	105.3	105.3	105.3	105.3

SEE SHEET 7 FOR GLASS TYPES DESCRIPTION
SEE SHEET 16 FOR LOCKS AND HINGES DESCRIPTION

JAMB ANCHORS LOAD CAPACITY - PSF

TABLE #J3 SINGLE DOOR(X) DIMS. FRAME WIDTH FRAME HEIGHT	SINGLE(X) DOUBLE(X) DOORS WITHOUT TRANSOM		1/4" SEIM SPACE		3/8" SEIM SPACE		1/2" SEIM SPACE	
	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
40-1/4" 99"	105.3	105.3	89.9	105.3	105.3	105.3	85.8	92.1

SEE SHEET 10 FOR ANCHOR DESCRIPTION

TABLE #E3
EAD ANCHORS LOAD CAPACITY - PSF

TABLE #E3 DOUBLE DOOR WITHOUT TRANSOM(X)	1/4" SEIM SPACE		3/8" SEIM SPACE		1/2" SEIM SPACE	
	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
75-1/2" 99"	105.3	105.3	105.3	105.3	84.1	106.3

SEE SHEET 10 FOR ANCHOR DESCRIPTION

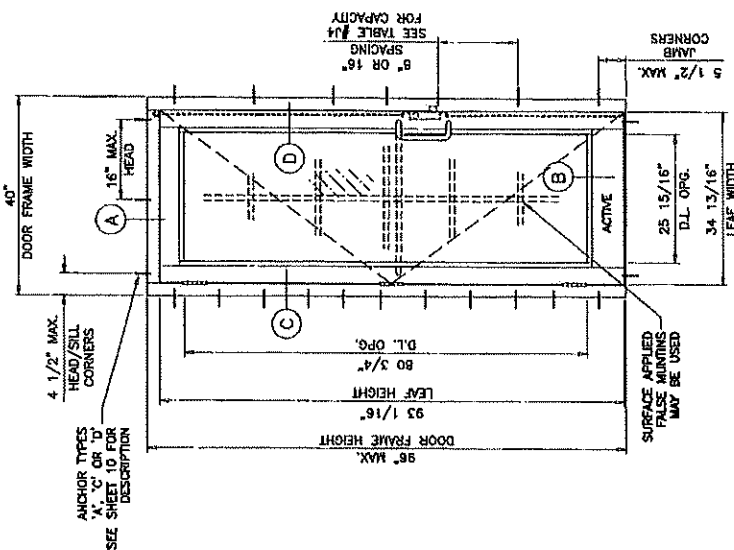
SILL ANCHORS DESIGN LOAD CAPACITY ALL SIZES = ± 105.3 PSF (STD. THRESHOLD)

AL-FAROQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173 (C.A.N. 8698)
 TEL. (305) 264-8100 FAX. (305) 262-6976
 COMP-ML/W08-665W

SERIES-9000 ALUM. OUTSWING FRECH DOOR (L.M.I.)
 E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL 33142
 TEL. (305) 638-5181 FAX. (305) 638-5158

REV. NO. DATE BY DESCRIPTION
 1 02/22/18 GENERAL REVISION
 2 05/22/18 REV. PER PER COMMENTS

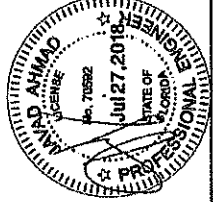
date: 07-14-08
 scale: 1/2"=1'-0"
 dr. by: TARIQ
 chk. by:
 drawing no. W08-66
 sheet 6 of 18



TYPICAL ELEVATION (X)

DOORS WITH SERIES-9500 FRAMES ONLY.

NOTE:
 GLASS CAPACITIES ON THIS SHEET ARE
 BASED ON ASTM E1300-09 (3 SEC. GUSTS)
 AND FLORIDA BUILDING COMMISSION
 DECLARATORY STATEMENT DC045-DEC-219



PRODUCT REVIEWS
 in compliance with the Florida
 Building Code No. 16-0319-09
 Specification Date 12/12/2015
 S. Al-Farouq
 Senior Product Control

- SINGLE DOORS WITHOUT TRANSOMS
 USE CHARTS AS FOLLOWS
 FOR THE CORRESPONDING DOOR SIZE
- FOR GLASS TYPE, LOCK AND HINGE OPTIONS
 OBTAIN LOAD CAPACITIES FROM TABLE #0A.
 - THESE DOORS APPROVED WITH STD. THRESHOLD ONLY.
 - FOR JAMB ANCHORS TYPE/SHIMS/OBTAIN
 LOAD CAPACITIES FROM TABLE #04.
- THE LOWEST VALUES FROM STEPS 1 AND 3
 WILL GOVERN.

TABLE #D4	DOORS LOAD CAPACITY - PSF			
	SINGLE(X) DOORS WITHOUT TRANSOM		HINGES	
SINGLE DOOR(X) DIMS.	GLASS	LOCKS	OPTION #3	OPTION #2
FRAME WIDTH	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
40"	120.0	130.0	120.0	130.0

SEE SHEET 7 FOR GLASS TYPES DESCRIPTION
 SEE SHEET 10 FOR LOCKS AND HINGES DESCRIPTION

TABLE #J4	JAMB ANCHORS LOAD CAPACITY - PSF					
	SINGLE(X) DOORS WITHOUT TRANSOM		3/8" SHIM SPACE		1/2" SHIM SPACE	
SINGLE DOOR(X) DIMS.	SPACING AT 8" O.C.		ANCHOR		ANCHOR/ANCHOR/ANCHOR	
	FRAME WIDTH	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)
40"	117.5	130.0	130.0	70.2	92.7	130.0

SEE SHEET 10 FOR ANCHOR DESCRIPTION

SILL ANCHORS DESIGN LOAD CAPACITY = ± 130.0 PSF (STD. THRESHOLD)

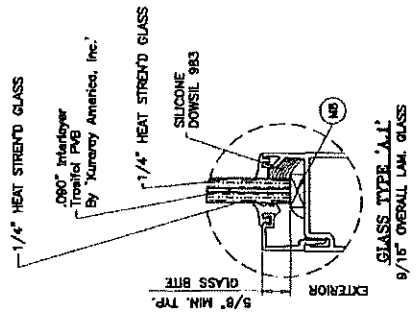
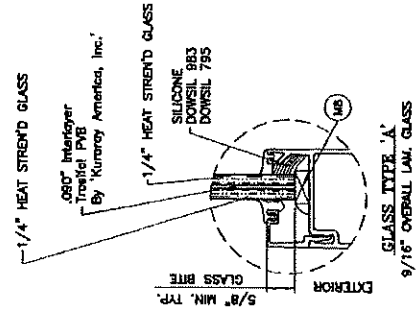
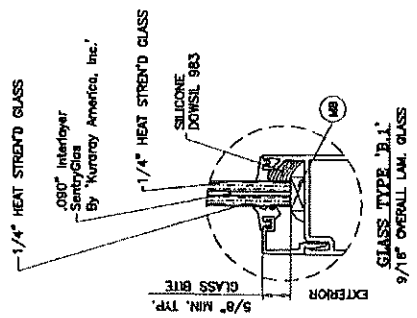
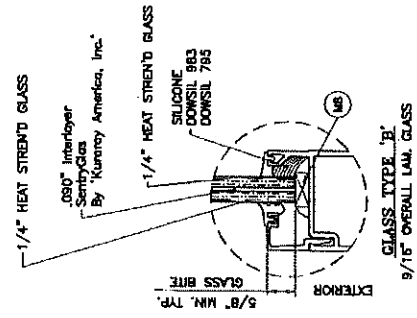
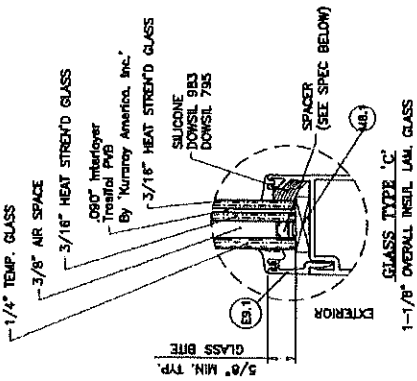
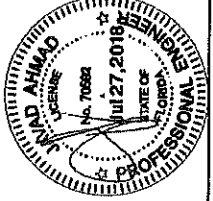
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 2200
 MIAMI, FLORIDA 33173 (C.A.N. 5538)
 TEL (305) 364-8100 FAX (305) 364-8100
 COMP-ANL W08-66E5W

SERIES-8000 ALUM OUTSWING FRENCH DOOR (L.M.I.)
 E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL 33142
 TEL (305) 838-6191 FAX (305) 838-5158

REV.	DATE	BY	DESCRIPTION
1	05/21/18		
K	02/23/18		GENERAL REVISION
J	03/06/18		REV. PER PER COMMENTS
I	01/13/18		REV. PER PER COMMENTS
H	08/03/15		REVISED TO 2014 IBC
NO DATE			BY DESCRIPTION

drawing no. **W08-66**
 sheet 7 of 18
 date: 07-14-08
 scale: 3/8" = 1"
 dr. by: TARD
 chkr. by:

PRODUCT REVIEWED
 in compliance with the Florida
 Building Code
 Acceptance No. 18-219-07
 Application No. 1722603
 E.S. Windows
 3550 NW 49 Street
 Miami, FL 33142



GLAZING OPTIONS

3/8" AIR SPACE CONSISTING OF:
 SPACER:
 'HELIMA' LOW PROFILE ALUMINUM SPACER
 BY 'LINGERMANN GMBH'
 AROUND THE PERIMETER OF THE GLASS.
 PERIMETER SEALANT:
 SILICONE
 DOWSIL 791
 GE 2000

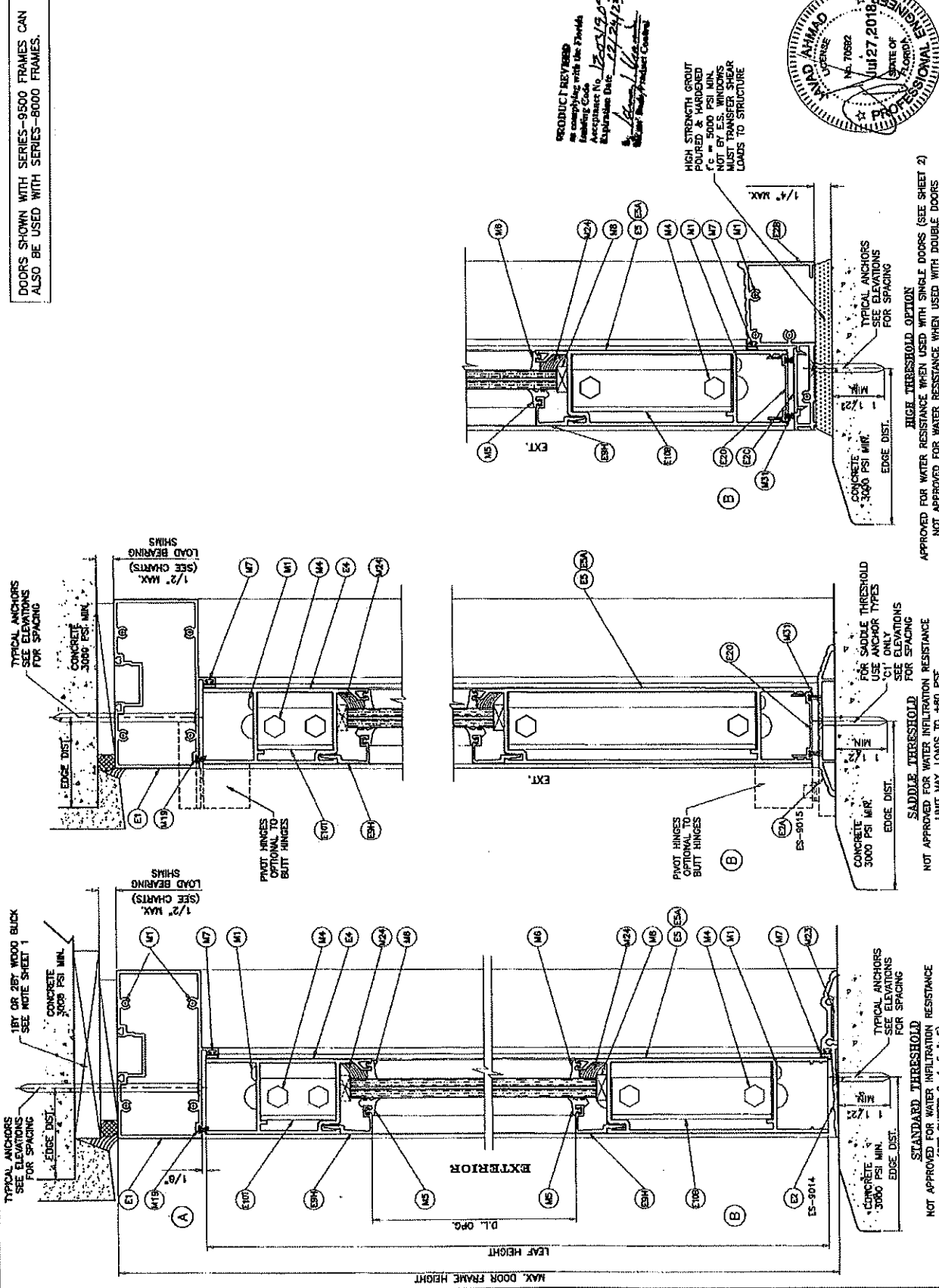
AL-FAROQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173 (C.A.N. 3538)
 TEL (305) 264-8100 FAX (305) 262-9976
 COMP-ANL W08-68ESW

SERIES-9000 ALUM. OUTSWING FRENCH DOOR (L.M.I.)
E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL (305) 636-9151 FAX (305) 636-5158

NO. DATE	BY	DESCRIPTION
H 02.03.15		UPGRADED TO 2014 FRC
L 01.11.15		REV. PER PER COMMENTS
J 03.08.16		REV. PER PER COMMENTS
K 02.22.18		GENERAL REVISION
L 05.22.18		REV. PER PER COMMENTS

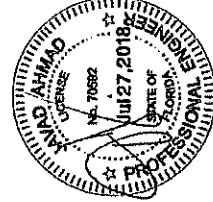
date: 07-14-08
 scale: 3/8" = 1"
 dr. by: T.M.D.
 chg. by:
 drawing no. **W08-66**
 sheet 8 of 18

DOORS SHOWN WITH SERIES-9500 FRAMES CAN ALSO BE USED WITH SERIES-8000 FRAMES.



PRODUCT REVIEWED
 Inspecting with Mr. Frank
 Accession No. 1221907
 Expiration Date: 12/24/23
 By: [Signature]

HIGH STRENGTH GROUT
 POURED & HARDENED
 f'c = 5000 PSI MIN.
 NOT BY E.S. WINDOWS
 MUST FOLLOW MANUFACTURER'S
 LOADS TO STRUCTURE

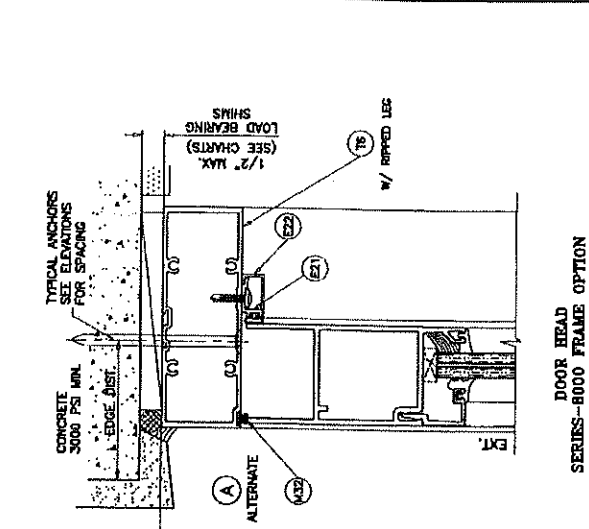


RISER THRESHOLD OPTION
 APPROVED FOR WATER RESISTANCE WHEN USED WITH SINGLE DOORS (SEE SHEET 2)
 NOT APPROVED FOR WATER RESISTANCE WHEN USED WITH DOUBLE DOORS

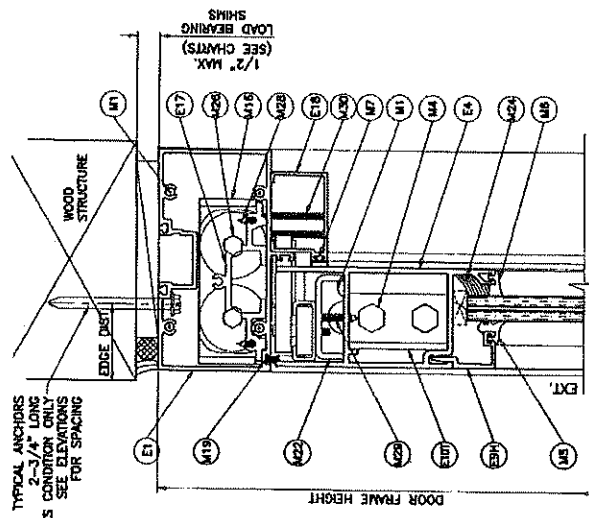
SADDLE THRESHOLD
 NOT APPROVED FOR WATER INFILTRATION RESISTANCE
 LIMIT MAX. LOADS TO #60 PSF

STANDARD THRESHOLD
 NOT APPROVED FOR WATER INFILTRATION RESISTANCE
 (SEE SHEETS 2, 4, 5 & 6)

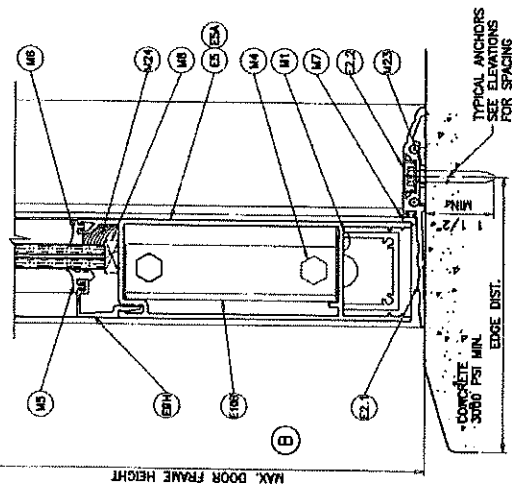
DOORS SHOWN WITH SERIES-8500 FRAMES CAN ALSO BE USED WITH SERIES-8000 FRAMES.



DOOR HEAD SERIES-8000 FRAME OPTION



DOOR CLOSERS OPTIONAL



ALL STANDARD THRESHOLD NOT APPROVED FOR WATER INFILTRATION RESISTANCE

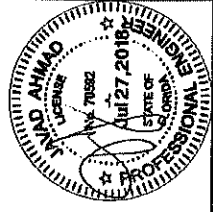
AL-FAROQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 8880 BUNNET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173
 (C.A.N. 8888)
 TEL (305) 264-4100 FAX (305) 262-8978
 COMP-AM\W08-66ESW

SERIES-8000 ALUM. OUTSWING FRENCH DOOR (L.M.)
E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL (305) 638-5151 FAX (305) 638-5158

REV. DATE	DESCRIPTION
H 05.05.15	UPDATED TO 2014 FSC
I 01.12.16	REV. PER REV. COMMENTS
J 03.08.16	REV. PER REV. COMMENTS
K 02.23.16	GENERAL REVISION
L 08.22.16	REV. PER REV. COMMENTS

drawing no. **W08-66**
 sheet 9 of 18
 date 07-14-08
 scale 3/8" = 1"
 dr. by TARIO
 ch. by

PRODUCT REVISED
 in compliance with the Florida
 Building Code
 Acceptance No. **03-05-09**
 Registration Date **12/24/12**
 by **[Signature]**
 Licensed Professional Engineer

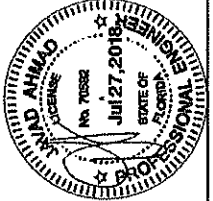


AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9260 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173 (C.A.M. 3530)
 TEL (305) 264-4700 FAX (305) 262-9778
 COMP-ANL\WOB-6655W

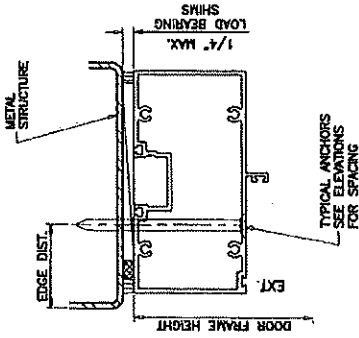
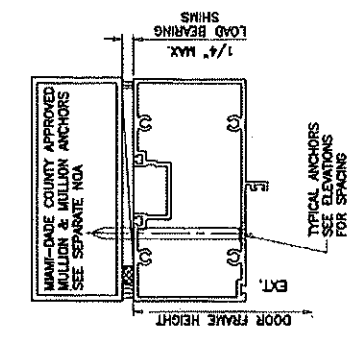
ES. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL 33142
 TEL (305) 638-9151 FAX (305) 638-9168
 SERIES-9000 ALUM OUTSWING FRENCH DOOR (L.M.T.)

NO. 0318	BY: DESCRIPTION	REV. PER REVISION
NO. 0319	UPON TO 2014 REV.	REV. PER REVISION
NO. 0320	NO CHANGE THIS SHEET	REV. PER REVISION
NO. 0321	NO CHANGE THIS SHEET	REV. PER REVISION
NO. 0322	NO CHANGE THIS SHEET	REV. PER REVISION

date: 07-14-08
 drawing no. **W08-66**
 sheet 10 of 18



PRODUCT REVIEWED
 in compliance with the Florida
 Building Code
 Acceptance No. 15-0319 of
 Supervisor Date: 12/20/13
 David Ahmad
 State Agency Practices Council



1X OR 2X WOOD BUCKS AND METAL STRUCTURES NOT BY E.S. WDW, MUST SUPPORT LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

- TYPICAL ANCHORS: SEE ELEV. FOR SPACING**
- TYPE "A" - 1/4" ULTRACON BY "ELCO"** (F_u=177 KSI, F_y=155 KSI)
 THRU 1BY OR 2BY WOOD BUCKS INTO CONCRETE OR BLOCKS
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/JAMBS)
 1-1/4" MIN. EMBED INTO GROUT FILLED BLOCKS (JAMBS)
 DIRECTLY INTO CONCRETE OR BLOCKS
 2" MIN. EMBED INTO CONCRETE (HEAD/JAMBS)
 2" MIN. EMBED INTO GROUT FILLED BLOCKS (JAMBS)
ANCHOR EDGE DISTANCES
 INTO CONCRETE AND BLOCKS = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1" MIN.
- TYPE "C" - 5/16" ULTRACON BY "ELCO"** (F_u=177 KSI, F_y=156 KSI)
 THRU 1BY OR 2BY WOOD BUCKS INTO CONCRETE OR BLOCKS
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/JAMBS)
 1-1/4" MIN. EMBED INTO GROUT FILLED BLOCKS (JAMBS)
 DIRECTLY INTO CONCRETE OR BLOCKS
 2" MIN. EMBED INTO CONCRETE (HEAD/JAMBS)
 2" MIN. EMBED INTO GROUT FILLED BLOCKS (JAMBS)
ANCHOR EDGE DISTANCES
 INTO CONCRETE AND BLOCKS = 3-1/8" MIN.
 INTO WOOD STRUCTURE = 1-1/4" MIN.
- TYPE "D" - 1/4" TIEKS OR SELF DRILLING SCREWS (GRADE 5 CRS)**
 INTO MIAMI-DADE COUNTY APPROVED MULLIONS
 OR
 INTO METAL STRUCTURES (HEAD/JAMBS)
 (3) THREADS MIN. PENETRATION BEYOND SUBSTRATE
 ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
 STEEL: 1/8" THK. MIN. (F_y = 36 KSI MIN.)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PAINTED OR ANODIZED)
ANCHOR EDGE DISTANCES
 INTO METAL STRUCTURE = 1/2" MIN.
- TYPE "A1" - 1/4" X 1-3/4" ULTRACON BY "ELCO"** (F_u=177 KSI, F_y=155 KSI)
 DIRECTLY INTO CONCRETE (FOR STD. AND HIGH THRESHOLD)
 WITH 1-1/2" MIN. EMBED INTO CONCRETE
ANCHOR EDGE DISTANCES
 INTO CONCRETE = 2-1/2" MIN.
- TYPE "C1" - 5/16" X 2" ULTRACON BY "ELCO"** (F_u=177 KSI, F_y=155 KSI)
 DIRECTLY INTO CONCRETE (FOR SADDLE THRESHOLD)
 WITH 1-1/2" MIN. EMBED INTO CONCRETE
ANCHOR EDGE DISTANCES
 INTO CONCRETE = 3-1/8" MIN.
- WOOD AT HEAD OR JAMBS S_G = 0.55 MIN.
 CONCRETE AT HEAD, SILL OR JAMBS f_c = 3000 PSI MIN.
 C-90 GROUT FILLED BLOCK AT JAMBS f_m = 2000 PSI MIN.

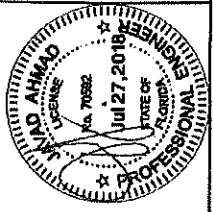
AL-FAROO CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9300 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173 (C.A.N. 353)
 TEL (305) 264-8100 FAX (305) 262-8978
 COMP-ANL WOB-6653W

E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL 33142
 TEL (305) 638-6151 FAX (305) 638-5158

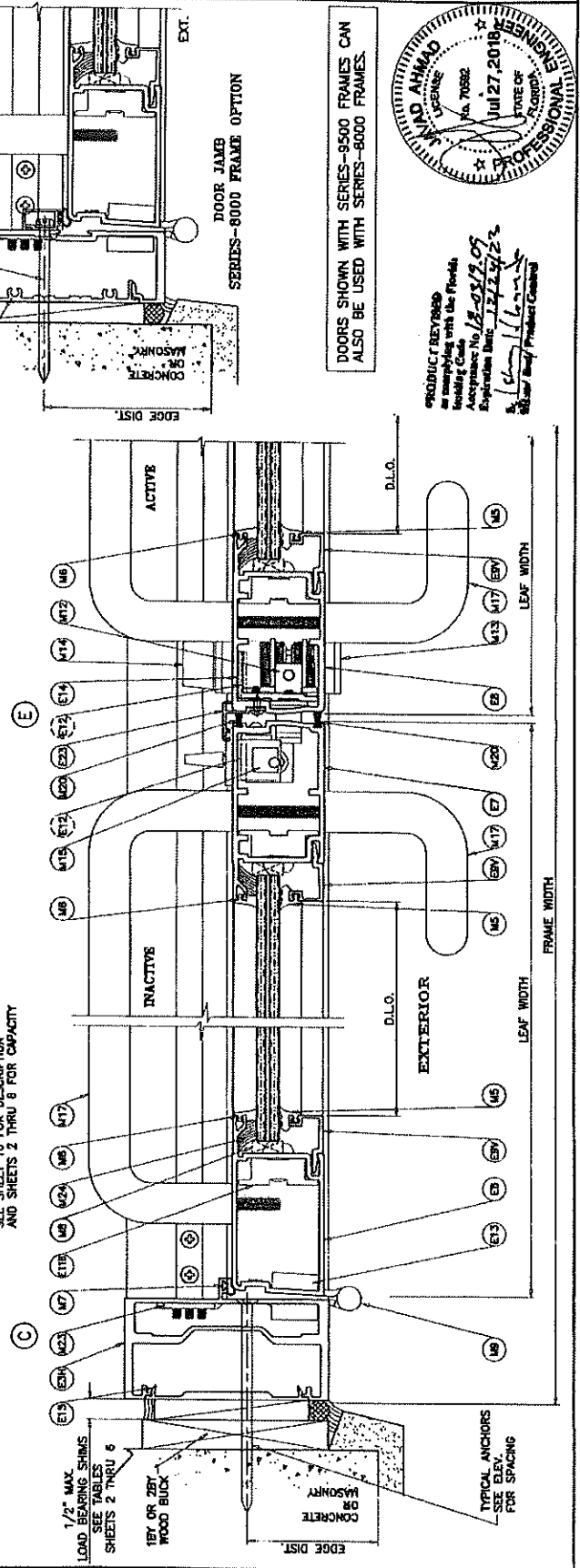
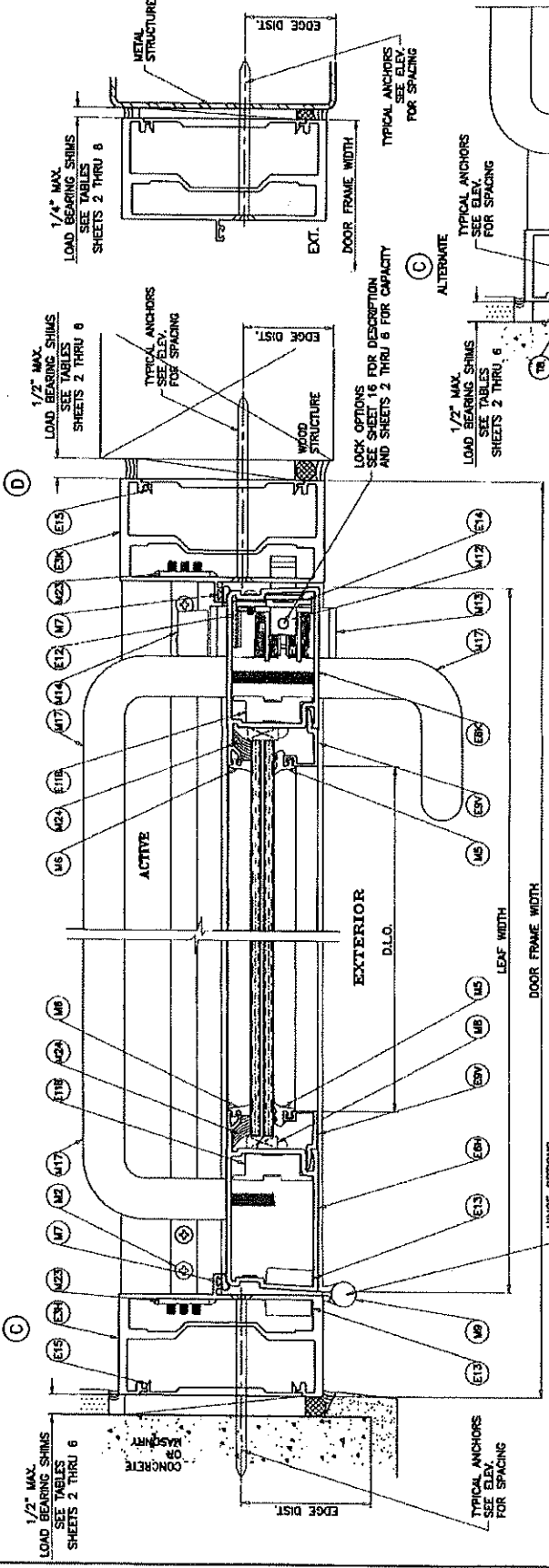
REVISIONS:

1	05/22/16	NO CHANGE THIS SHEET
2	02/22/16	GENERAL REVISION
3	02/05/16	NO CHANGE THIS SHEET
4	01/11/16	REV. PER MARK COMMENTS
5	05/05/15	UPDATED TO 2014 FBC

DATE: 07-14-08
 DRAWING NO: **WOB-66**
 SHEET 11 OF 18



PRODUCT REVISIONS
 conforming with the Florida
 Building Code
 Amendment No. 12-03/19 of
 Florida Statute 626.403
 by David Ahmad, Professional Engineer



DOORS SHOWN WITH SERIES-9500 FRAMES CAN ALSO BE USED WITH SERIES-8000 FRAMES.

AL-FAROQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9380 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173
 (C.A.M. 3630)
 FAX (305) 282-6978
 TEL (305) 281-8100

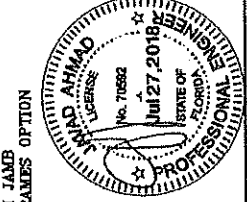
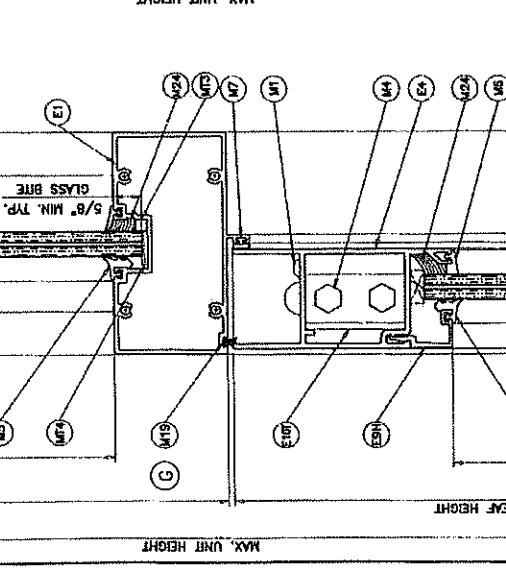
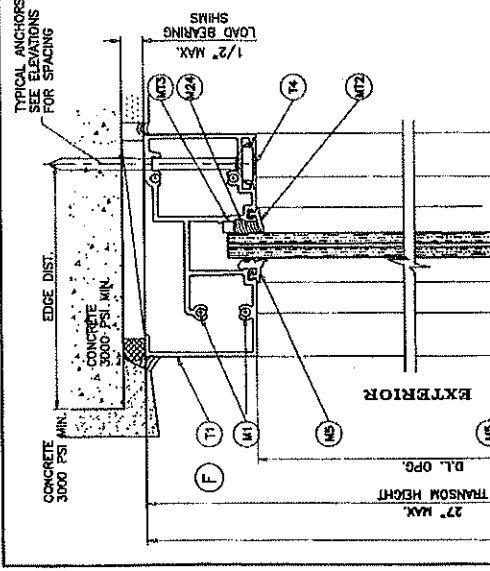
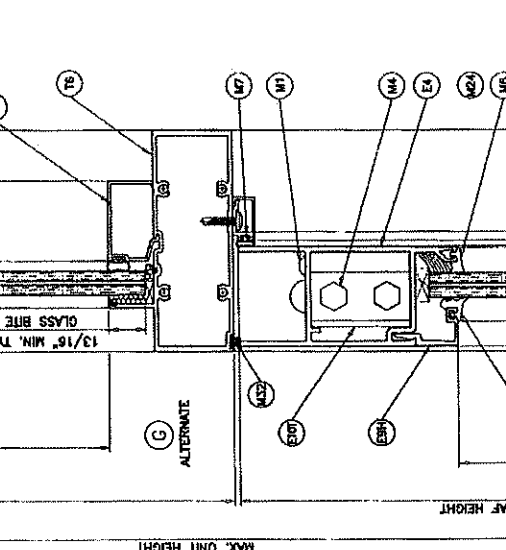
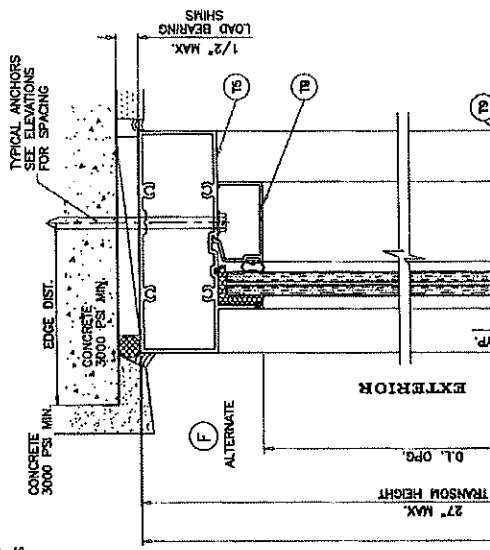
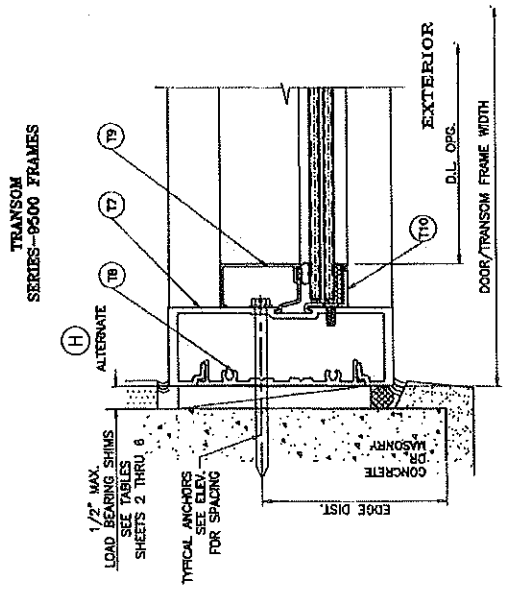
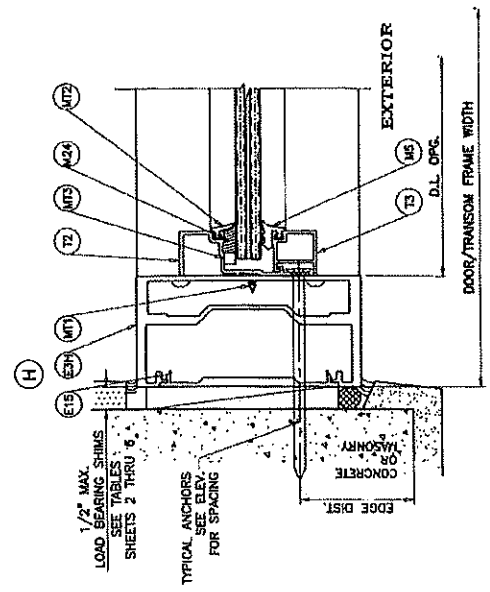
E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL 33142
 FAX (305) 638-5151
 TEL (305) 638-5158

REVISIONS:

NO	DESCRIPTION	DATE
10	BY DESCRIPTION	07-14-08
9	UPDATED TO 2014 FBC	05-05-13
8	REV. PER RFR COMMENTS	01-13-16
7	REV. PER RFR COMMENTS	03-08-18
6	GENERAL REVISION	02-22-18
5	NO CHANGE THIS SHEET	05-22-18

date: 07-14-08
 scale: 3/8" = 1"
 dr. by: TARD
 chg. by:

drawing no. **W08-66**
 sheet: 12 of 18



PRODUCT REVISIONS
 In compliance with the Florida
 Building Code No. 15-0319.09
 Registration Date: 11/22/23
 E. S. Windows, LLC
 (Manufacturer/Product Owner)

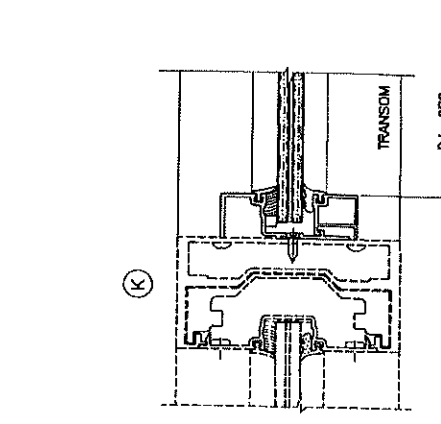
DOORS SHOWN WITH SERIES-9500 FRAMES CAN ALSO BE USED WITH SERIES-8000 FRAMES.

AL-FAROQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9380 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173 (C.A.N. 8598)
 TEL: (305) 264-8100 FAX: (305) 282-8978
 COMP-ANL\W08-66E5W

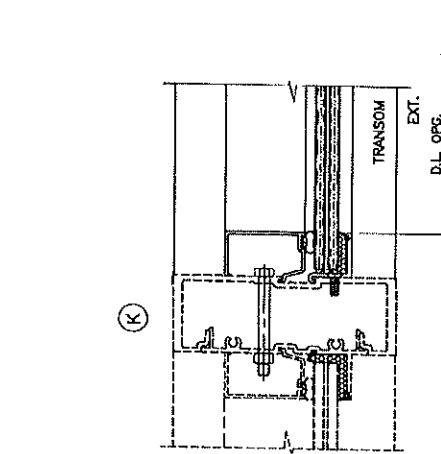
E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL 33142
 TEL: (305) 638-9151 FAX: (305) 638-9158
 SERIES-9000 ALUM OUTSING FRENCH DOOR (L.M.I.)

NO	DATE	BY	DESCRIPTION
1	02.22.18	J	REV. PER PER COMMENTS
2	02.22.18	X	GENERAL REVISION
3	02.04.18	J	REV. PER PER COMMENTS
4	02.04.18	J	REV. PER PER COMMENTS

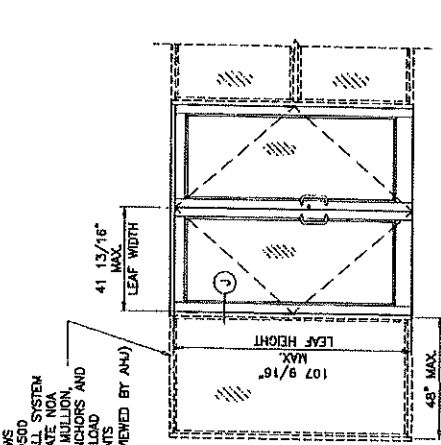
date: 07-14-08
 drawing no. **W08-66**
 sheet 13 of 18



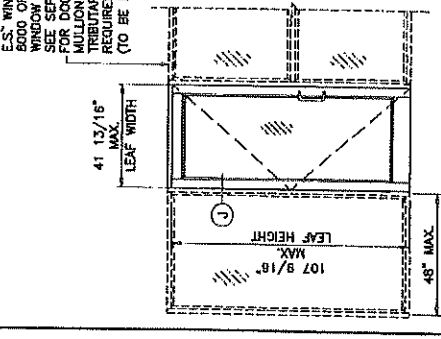
MIAMI-DADE COUNTY APPROVED
 SERIES 9500 WINDOW WALL SYSTEM BY 'E.S. WINDOWS'
 UNDER SEPARATE APPROVAL
 LOWER VALUES FROM DOOR CAPACITY CHARTS OR
 WINDOW WALL APPROVAL WILL APPLY TO ENTIRE SYSTEM.



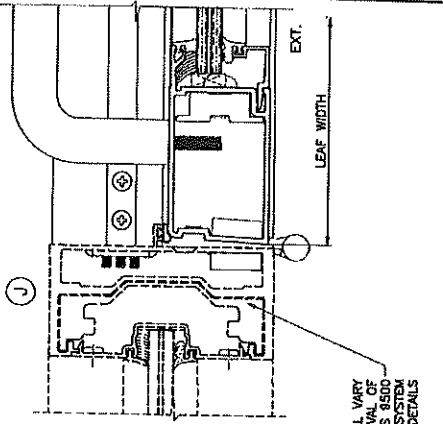
MIAMI-DADE COUNTY APPROVED
 SERIES 8000 WINDOW WALL SYSTEM BY 'E.S. WINDOWS'
 UNDER SEPARATE APPROVAL
 LOWER VALUES FROM DOOR CAPACITY CHARTS OR
 WINDOW WALL APPROVAL WILL APPLY TO ENTIRE SYSTEM.



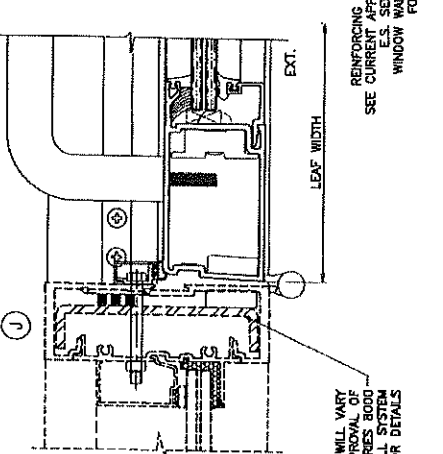
MIAMI-DADE COUNTY APPROVED
 SERIES 9500 WINDOW WALL SYSTEM BY 'E.S. WINDOWS'
 UNDER SEPARATE APPROVAL
 LOWER VALUES FROM DOOR CAPACITY CHARTS OR
 WINDOW WALL APPROVAL WILL APPLY TO ENTIRE SYSTEM.



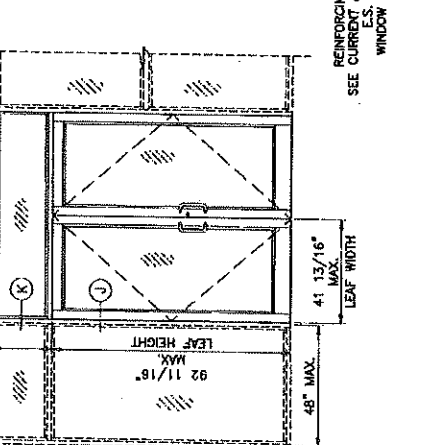
MIAMI-DADE COUNTY APPROVED
 SERIES 8000 WINDOW WALL SYSTEM BY 'E.S. WINDOWS'
 UNDER SEPARATE APPROVAL
 LOWER VALUES FROM DOOR CAPACITY CHARTS OR
 WINDOW WALL APPROVAL WILL APPLY TO ENTIRE SYSTEM.



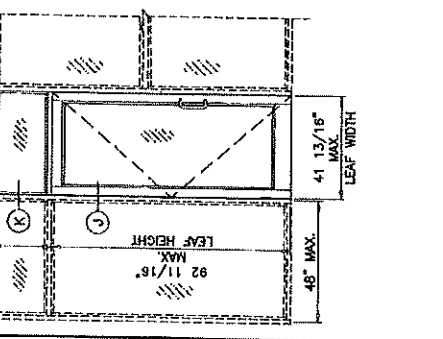
REINFORCING WILL VARY
 SEE CURRENT APPROVAL OF
 E.S. SERIES 8000
 WINDOW WALL SYSTEM
 FOR DETAILS



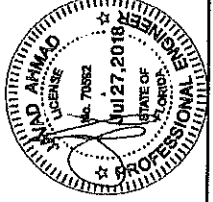
REINFORCING WILL VARY
 SEE CURRENT APPROVAL OF
 E.S. SERIES 9500
 WINDOW WALL SYSTEM
 FOR DETAILS



REINFORCING WILL VARY
 SEE CURRENT APPROVAL OF
 E.S. SERIES 8000
 WINDOW WALL SYSTEM
 FOR DETAILS



REINFORCING WILL VARY
 SEE CURRENT APPROVAL OF
 E.S. SERIES 9500
 WINDOW WALL SYSTEM
 FOR DETAILS



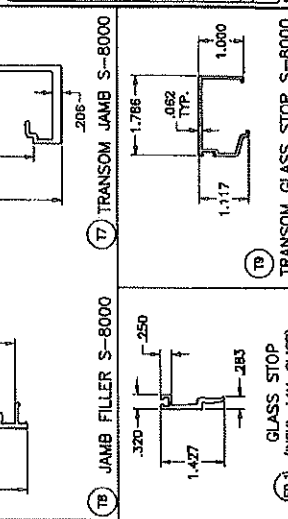
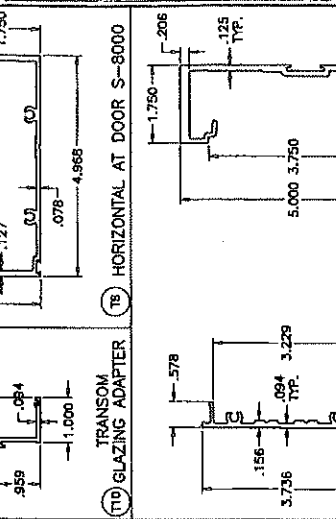
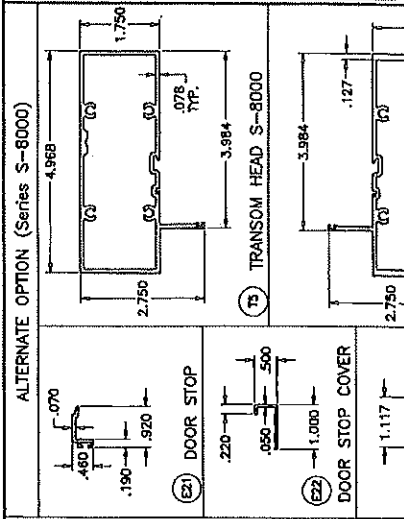
RECORDING REVIEWED BY
 as complying with the Florida
 Building Code
 Acceptance No. 18-0319.09
 Expiration Date 12/24/23
 [Signature]

AL-FAROQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 2360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173 (C.A.N. 8538)
 TEL (305) 264-9100 FAX (305) 262-6918
 COMP-INT W08-66SW

E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL 33142
 TEL (305) 638-5151 FAX (305) 638-5158
 SERIES-9000 ALUM OUTSWING FRENCH DOOR (L.M.)

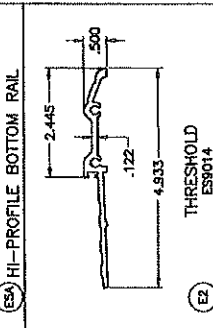
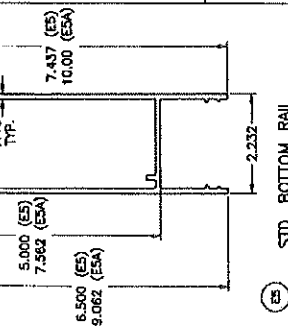
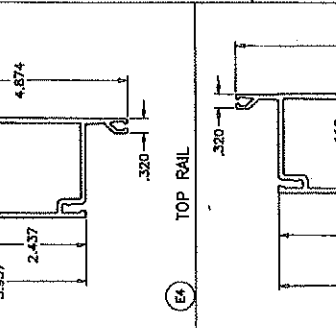
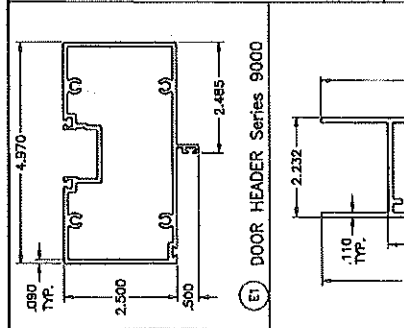
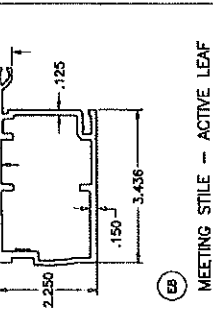
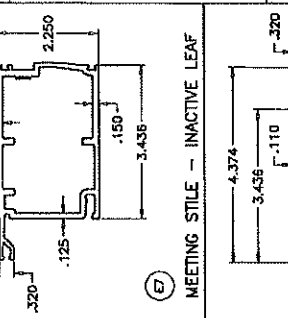
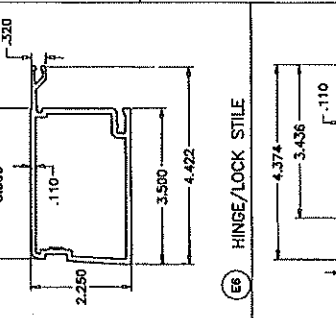
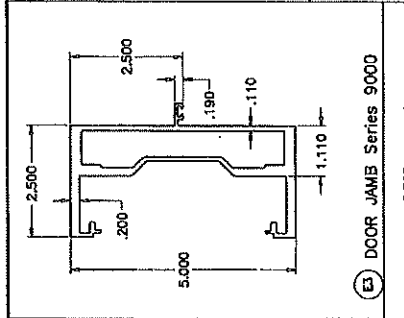
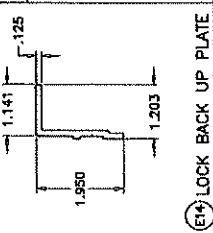
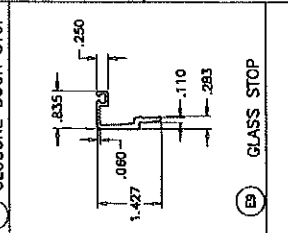
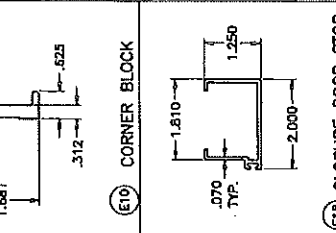
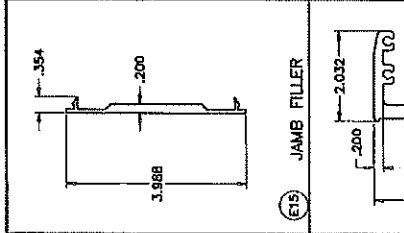
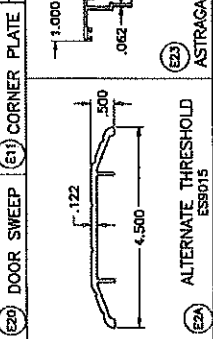
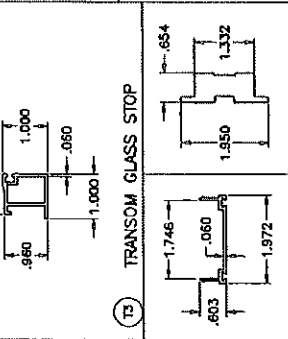
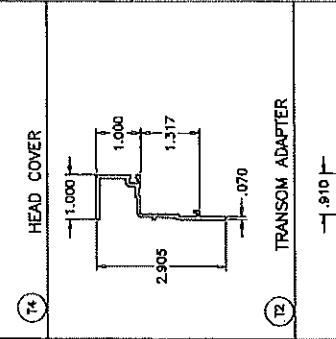
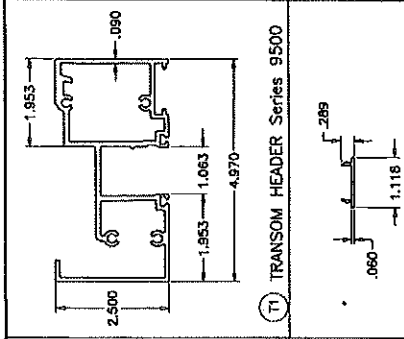
REV	DATE	DESCRIPTION
01	03/09/18	NO CHANGE THIS SHEET
02	01/13/18	REV PER HRC COMMENTS
03	03/09/18	NO CHANGE THIS SHEET
04	03/09/18	UPDATED TO 2014 PRC
05	03/22/18	NO CHANGE THIS SHEET

date: 07-14-08
 drawing no. **W08-66**
 sheet 14 of 18



PROFESSIONAL ENGINEER
AL-FAROQ CORPORATION
 LICENSE NO. 70682
 EXPIRES JULY 27, 2018
 STATE OF FLORIDA

PRODUCT REVIEWED
 in compliance with the Florida
 Building Code
 Acceptance No. **LE-031629**
 Registration Date: **5/1/2014**
 Reviewer: **J. J. [Signature]**
 Reviewer Title: **Senior Product Control**



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9800 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
(C.A.N. 388)
FAX: (305) 264-8100
TEL: (305) 264-8100

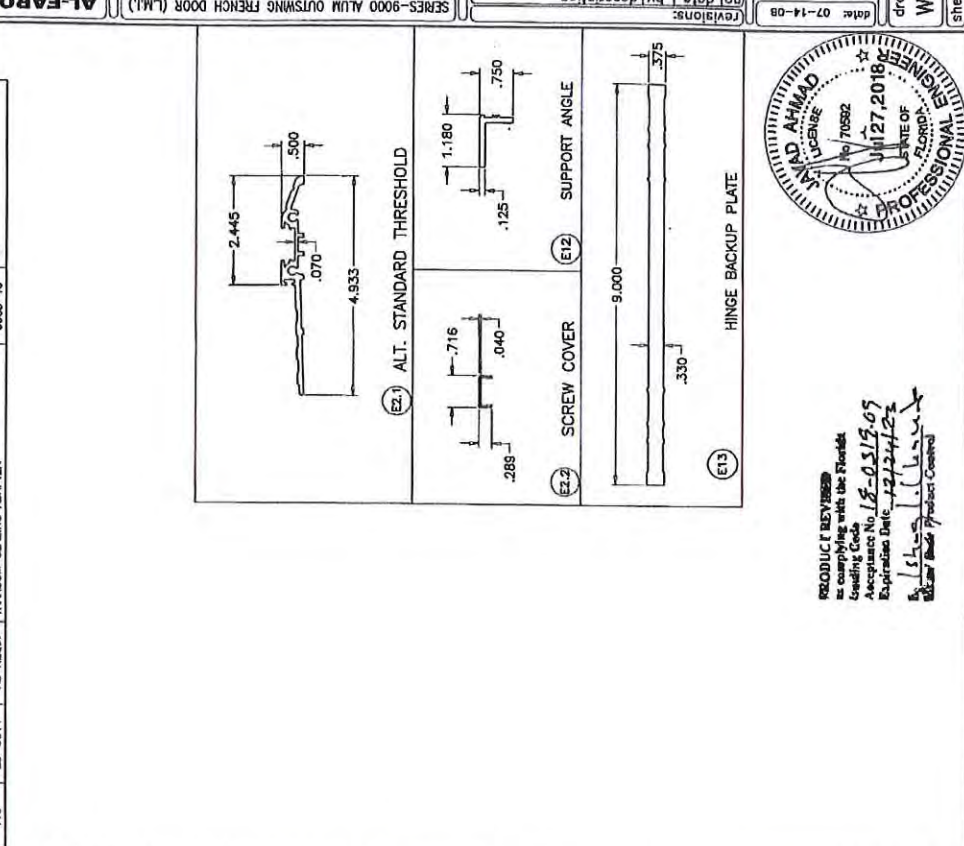
COMP-ANL-W08-66ESW

SERFS-9000 ALUM OUTSWING FRENCH DOOR (L.M.I.)
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL 33142
TEL: (305) 638-5151 FAX: (305) 638-5158

REVISED TO 2014 FBC
REV. PER PER COMMENTS
REV. PER PER COMMENTS
REV. PER PER COMMENTS
REV. PER PER COMMENTS
REV. PER PER COMMENTS
REV. PER PER COMMENTS

date: 07-14-08
drawing no. W08-66
sheet 15 of 18

ITEM #	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
T1	ES-8506	-	TRANSOM HEADER Series 9500	6063-T6	-
T2	ES-9019	-	TRANSOM ADAPTER	6063-T6	-
T3	ES-9018	-	TRANSOM GLASS STOP	6063-T6	-
T4	ES-9502	-	HEAD COVER	6063-T6	-
M1	-	-	#10 x 1/2" F.H. ST/ST SMS	-	-
M2	-	-	TRIM GASKET	SILICONE	-
M3	-	-	INTERIOR SPACER 1/4" x 1/4"	FOAM	-
M4	-	-	SETTING BLOCKS (1/16" x 3/4") AT 1/4 POINTS	EPDM	DIURMETER 8045 SHORE A
T5	ES-8005	AS ROD.	TRANSOM HEAD S-8000	6063-T6	-
T6	ES-8013	AS ROD.	HORIZONTAL AT DOOR S-8000	6063-T6	-
T7	ES-8012	AS ROD.	TRANSOM JAMB S-8000	6063-T6	-
T8	ES-8003	AS ROD.	JAMB FILLER S-8000	6063-T6	-
T9	ES-8006	AS ROD.	TRANSOM GLASS STOP S-8000	6063-T6	-
T10	ES-8014	AS ROD.	TRANSOM GLAZING ADAPTER	6063-T6	-



PRODUCT REVIEWER
is complying with the Florida
Building Code, the Florida
Accreditation No. 18-0319-07
Registration No. 11/13/12
E.S. Al-Farooq
Senior Product Control

ITEM #	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
E1	ES-9012	1	DOOR HEADER	6063-T6	-
E2	ES-9014	1	STANDARD THRESHOLD	6063-T6	-
E2.1	ES-9000-30	1	ALT. STANDARD THRESHOLD	6063-T6	-
E2.2	ES-6011	1	SCREW COVER	6063-T6	-
E2A	ES-8015	1	SADDLE THRESHOLD	6063-T6	-
E2B	ES-9026	1	HIGH THRESHOLD	6063-T6	-
E2C	ES-9027	1	THRESHOLD COVER	6063-T6	-
E2M	ES-9013	2	DOOR JAMB - HINGE	6063-T6	-
E4	ES-9001	2	TOP RAIL	6063-T6	-
E5	ES-9002	2	STD. BOTTOM RAIL	6063-T6	-
EA	ES-9000-031	2	HI-PROFILE BOTTOM RAIL	6063-T6	-
EB	ES-9003	2	HINGE/LOCK STILE	6063-T6	-
E7	ES-9007	1	MEETING STILE - INACTIVE LEAF	6063-T6	-
E8	ES-9007	1	MEETING STILE - ACTIVE LEAF	6063-T6	-
EBH	ES-9004	4	HORIZONTAL GLASS STOP	6063-T6	-
EBV	ES-9004	4	VERTICAL GLASS STOP	6063-T6	-
EB.1	ES-9029	4	GLASS STOP (INSUL. LAM. GLASS)	6063-T6	-
E10T	ES-9008	4	CORNER BLOCK - TOP	6063-T6	-
E10B	ES-9008	4	CORNER BLOCK - BOTTOM	6063-T6	-
E11T	ES-9009	4	CORNER PLATE - TOP	6063-T6	-
E11B	ES-9009	4	CORNER PLATE - BOTTOM	6063-T6	-
E12	ES-9010	4	SUPPORT ANGLE	6063-T6	-
E13	ES-9011	AS ROD.	HINGE BACKUP PLATE REINFORCEMENT	6063-T6	3/4" x 1" x 1/8" x 9" LONG
E13A	12-24 x 1/2"	4/ PLATE	HINGE BACKUP PLATE FASTENERS	ST. STEEL	1-1/2" x 9" x 3/8" THK. PH MACHINE SCREWS
E14	ES-9020	1	LOCK BUCKLER PLATE REINFORCEMENT	6063-T6	10" LONG
E14A	9-32 x 1/2"	3/ PLATE	LOCK PLATE FASTENERS	ST. STEEL	PH MACHINE SCREWS
E15	ES-9016	AS ROD.	JAMB FILLER	6063-T6	-
E16	ES-9017	AS ROD.	REINFORCEMENT	6063-T6	-
E17	ES-9021	1/ CLOSER	CLOSER SUPPORT CLIPS (PAIR)	6063-T6	-
E18	ES-9022	1	CLOSER DOOR STOP	6063-T6	-
E19	ES-9023	1/ CLOSER	CLOSER COVER PLATE	6063-T6	-
E20	ES-9005	-	DOOR SWEEP	-	-
E21	ES-9051	-	DOOR STOP	-	-
E22	ES-9052	-	DOOR STOP COVER	-	-
E23	ES-9090	-	ASTRAGAL STILE	6063-T6	SECURED WITH #8 X 1/2" SMS AT 12" O.C.
M1	-	2B	#12 x 1" P.H. ST/ST SMS	-	-
M2	-	AS ROD.	#12 - 24 x 1" F.H. ST/ST MS	-	-
M3	-	18	#8 - 32 x 1/2" F.H. ST/ST MS	-	-
M4	-	18	3/8" - 18 x 1" HEX. BOLT	-	-
M5	ES-9000-001	AS ROD.	WEDGE GASKET	EPDM	DIURMETER 7045 SHORE A
M6	ES-9000-002	AS ROD.	SPACER GASKET	EPDM	DIURMETER 7045 SHORE A
M7	ES-9000-003	AS ROD.	BULB VINYL BASE-POLYPROPYLENE, BULB-TYPE	EPDM	ULTRAFAB, DIURMETER 7045 SHORE A
M8.1	ES-9000-001	AS RECD.	SETTING BLOCKS (LAM. GLASS) AT 1/4 POINTS	EPDM	DIURMETER BOLLS SHORE A
M8.2	ES-9000-002A	AS RECD.	SETTING BLOCKS (INSUL. LAM. GLASS) AT 1/4 POINTS	EPDM	DIURMETER BOLLS SHORE A
M9	-	AS ROD.	HINGE 4 1/2" x 4"	-	-
M9A	-	AS ROD.	OFFSET PIVOT HINGE	ALUMINIUM	-
M12	-	1	3 POINT LOCK	-	-
M13	-	1	KEY CLINGER	-	-
M14	-	1	THUMBTURN	-	-
M15	-	2	POINT LOCK	-	-
M16	-	1/ LEAF	DOOR CLOSURE	-	-
M17	-	2	PUSH - PULL	-	-
M19	W13275NK	AS ROD.	PILE W/STIRRING - HEADER	WOOL	-
M20	W23451NK	AS ROD.	PILE - MID STILES	WOOL	-
M22	-	1/ CLOSER	CHANNEL SPACER 5/8" X 1-7/8"	-	-
M23	-	2	THRESHOLD CLIP	-	-
M24	-	AS ROD.	STRUCTURAL SILICONE	-	-
M25	-	AS ROD.	SILICONE	-	-
M26	-	2/ CLOSER	1/4 - 20 x 2" HEX. BOLT	-	-
M27	-	3/ CLOSER	#10 x 1" P.H. ST/ST SMS	-	-
M28	-	6/ CLOSER	#10 x 1" F.H. ST/ST SMS	-	-
M29	-	3/ CLOSER	#10 x 1" F.H. ST/ST SMS	-	-
M30	-	AS ROD.	#10 x 1 1/2" F.H. ST/ST SMS, AT 23" O.C.	ST. STEEL	-
M31	W13351NK	AS ROD.	PILE - DOOR SWEEP	WOOL	-
M32	W13275NK	AS ROD.	PILE - HEADER	WOOL	-

LOCKS: (See Tables On Sheets 2 Thru 6 For Load Capacities)

OPTION #1: LIMIT MAX. LOADS TO ±80.0 PSF

ACTIVE & INACTIVE LEAF:

CONCEALED VERTICAL ROD PANIC EXIT DEVICE BY 'JACKSON PANIC SYSTEM' #1285 LOCATED AT 41" FROM SILL AT EACH LEAF.

- (1) #14 X 1" HH SELF DRILLING SCREW AT ONE END AND (2) #12-24 X 1/2" OH MACHINE SCREWS AT OTHER END

OR

CONCEALED VERTICAL ROD PANIC EXIT DEVICE BY 'ADAMS RITE' LOCATED AT 40" FROM SILL AT EACH LEAF.

- (1) #10-32 X 3/4" FH MACHINE SCREWS AT ONE END AND (2) #10-24 X 1/2" FH MACHINE SCREWS AT OTHER END

OPTION #2: LIMIT MAX. LOADS TO +80.0, -90.0 PSF

ACTIVE & INACTIVE LEAF:

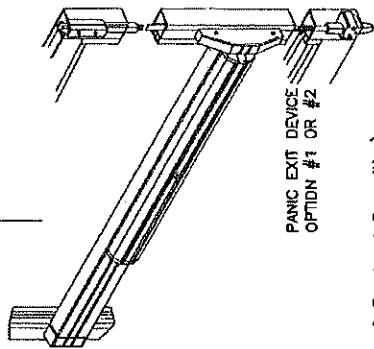
CONCEALED VERTICAL ROD PANIC EXIT DEVICE BY 'JACKSON PANIC SYSTEM' #2086 LOCATED AT 41" FROM SILL AT EACH LEAF.

- (1) #14 X 1" HH SELF DRILLING SCREW AT ONE END AND (2) #12-24 X 1/2" OH MACHINE SCREWS AT OTHER END

OR

CONCEALED VERTICAL ROD PANIC EXIT DEVICE BY 'DOR-O-MATIC' LOCATED AT 40" FROM SILL AT EACH LEAF.

- (2) #12-24 X 1/2" FH MACHINE SCREWS AT ONE END



OPTION #3:

ACTIVE LEAF:

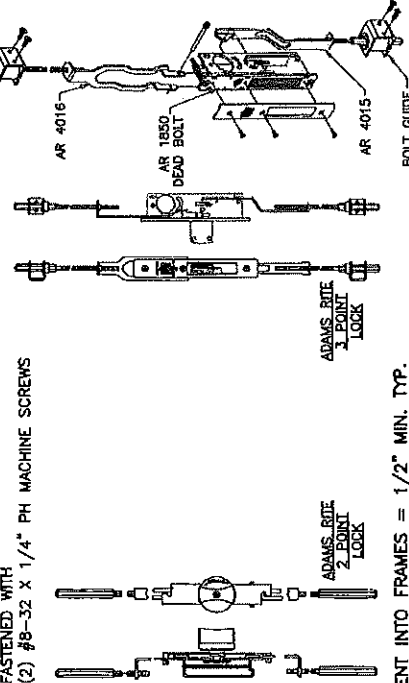
KEY OPERATED THREE POINT LOCK SYSTEM 4015/4016 BY 'ADAMS RITE' WITH CONCEALED FLUSH BOLTS AT TOP & BOTTOM OF LOCK STILE AND A THUMB TURN ON THE INTERIOR, LOCATED AT 40" FROM BOTTOM OF PANEL FASTENED WITH

- (2) #12-24 X 1/2" FH MACHINE SCREWS

INACTIVE LEAF:

MANUALLY OPERATED TWO POINT LOCK SYSTEM 1880/81 BY 'ADAMS RITE' WITH CONCEALED FLUSH BOLTS AT TOP & BOTTOM OF LOCK STILE AND A THUMB TURN ON THE INTERIOR, LOCATED AT 40" FROM BOTTOM OF PANEL FASTENED WITH

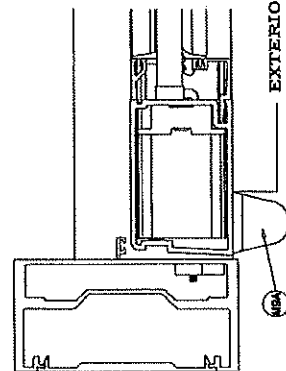
- (2) #8-32 X 1/4" PH MACHINE SCREWS



HINGES: (See Tables On Sheets 2 Thru 6 For Load Capacities)

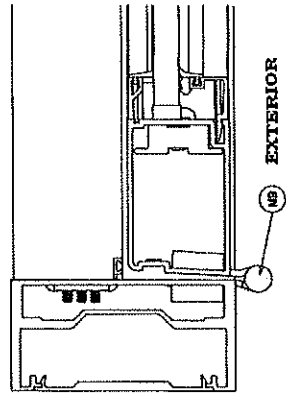
OPTION #1:

OFFSET PIVOT HINGES ALUMINUM AT TOP AND BOTTOM FASTENED TO FRAME AND THRESHOLD WITH #10-24 X 1/2" FH THREAD CUTTING SCREWS (2) AT THRESHOLD, (2) AT JAMB BOTTOM (3) AT FRAME HEAD HEAVY DUTY BRASS FASTENED TO FRAME AND LEAF WITH (4) 1/4"-20 X 5/8" MS



OPTION #2:

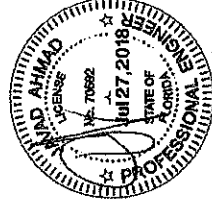
4 X 4-3/4" ST. STEEL BALL BEARING BUTT HINGES LOCATED AT 11" FROM TOP & BOTTOM AND AT MIDSPAN FASTENED TO DOOR FRAME AND LEAF STILE WITH (4) #12-24 X 1/2" FH MACHINE SCREWS PER HASP



OPTION #2.1:

4 X 4-3/4" ST. STEEL BALL BEARING BUTT HINGES (4) PER LEAF (1) AT 9-5/8" FROM TOP TO CL OF HINGE (1) AT 10-5/16" FROM BOTTOM TO CL OF HINGE (2) INTERMEDIATE HINGES EQUALLY SPACED FROM TOP AND BOTTOM HINGE FASTENED TO DOOR FRAME AND LEAF STILE WITH (4) #12-24 X 1/2" FH MACHINE SCREWS PER HASP

PRODUCT REVISIONS
 In compliance with the Florida Building Code
 Acceptance No. 18-2519-07
 Expiration Date: 12/24/23
 8/12/2019
 License No. 70882
 State of Florida
 Professional Engineer
 MAD AHMAD



AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9300 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173
 (C.A.N. 6538)
 FAX (305) 264-8100
 TEL (305) 264-8100

SEKES-9009 ALUM OUTSWING FRENCH DOOR (L.M.I.)
E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL 33142
 TEL (305) 938-5151 FAX (305) 938-5158

NO DATE	BY DESCRIPTION
13 05.05.19	UPDATED TO 2014 FBC
11 01.12.18	NO CHANGE THIS SHEET
11 03.08.18	NO CHANGE THIS SHEET
11 02.22.18	GENERAL REVISION
11 05.22.18	REV. PER PER COMMENTS

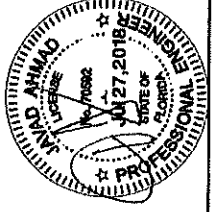
date:	07-14-09
drawing no.:	WOB-66
sheet 16 of 18	

AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 210
 MIAMI, FLORIDA 33173 (C.A.K. 3689)
 TEL. (305) 284-8100 FAX. (305) 282-8878
 COMP-ANL-W08-6655W

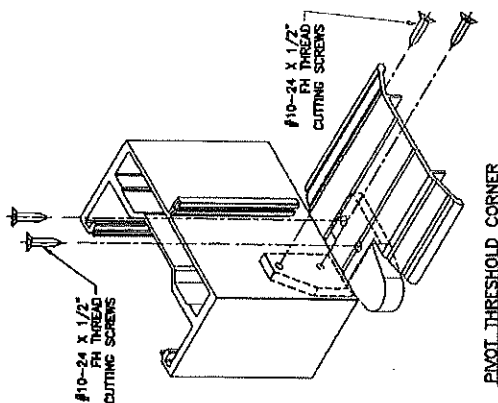
E.S. WINDOWS, LLC
 SERIES-9000 ALUM OUTSWING FRENCH DOOR (L.M.)
 MAMI, FL. 33142
 TEL. (305) 638-5151 FAX. (305) 638-5198

NO. DATE	BY DESCRIPTION
11 05.05.15	UPDATED TO 2014 FBC
1 01.13.16	NO CHANGE THIS SHEET
3 03.08.16	NO CHANGE THIS SHEET
K 02.22.16	GENERAL REVISION
L 05.22.16	NO CHANGE THIS SHEET

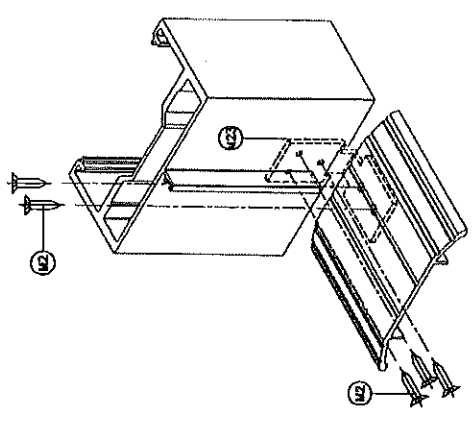
date: 07-14-08
 drawing no. **W08-66**
 sheet 3/8" = 1"



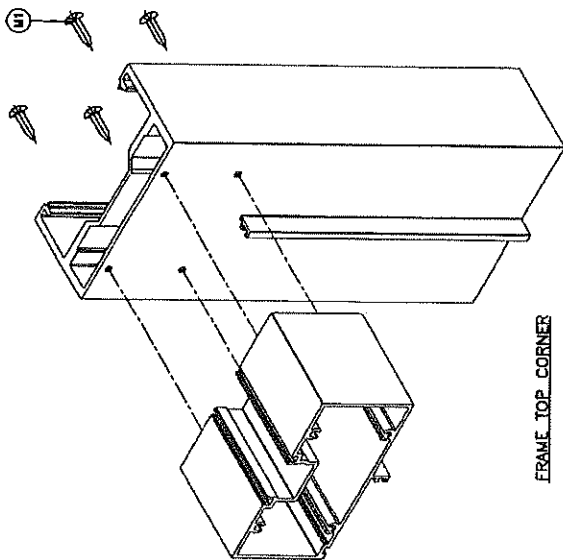
REVISIONS REVIEWED
 In compliance with the Florida
 Building Code
 Accreditation No. 18-0319-09
 Registration Date: 12/11/12
 By: [Signature]
 Al-Farooq Product Control



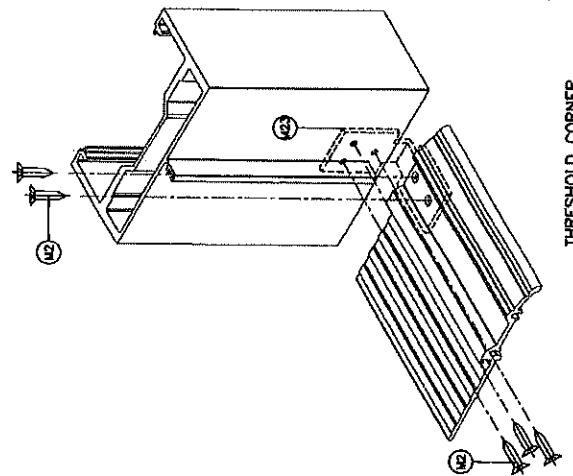
PIVOT THRESHOLD CORNER



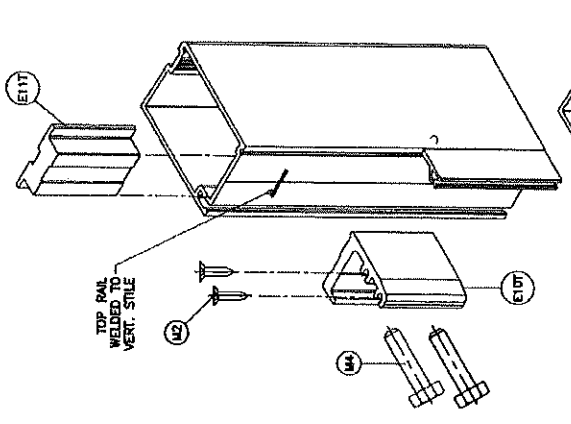
THRESHOLD CORNER



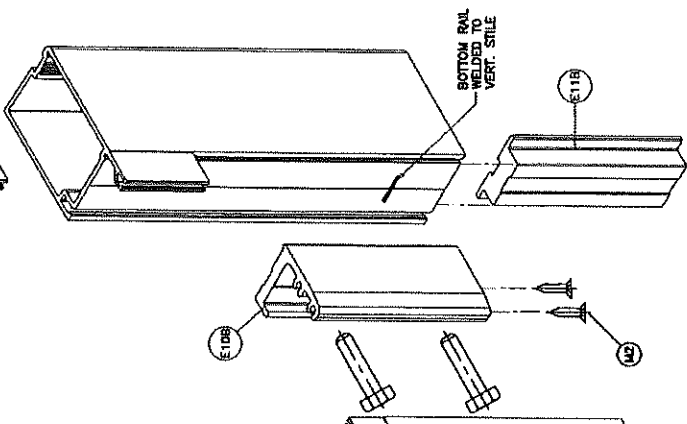
FRAME TOP CORNER



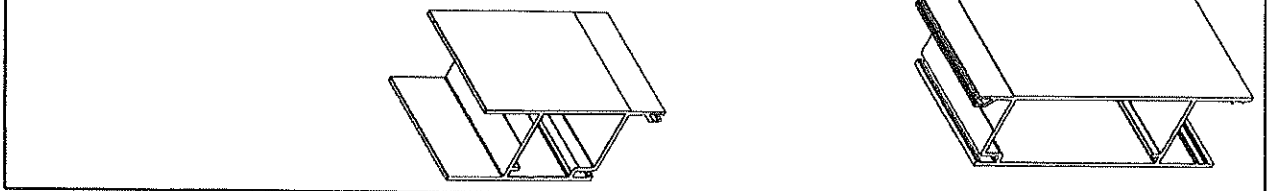
THRESHOLD CORNER



TOP RAIL WELDED TO VENT. STYLE



BOTTOM RAIL WELDED TO VENT. STYLE



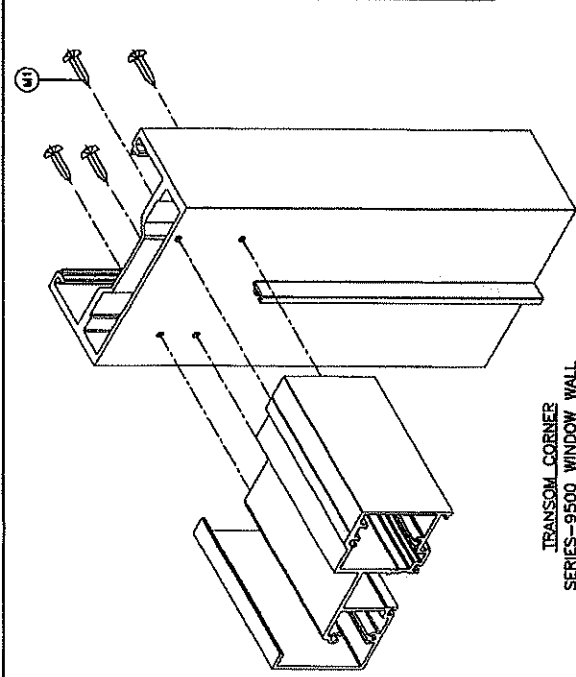
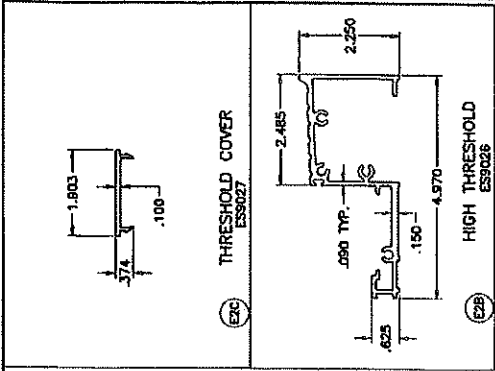
THRESHOLD CORNER

AL-FAROQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 (C.A.N. 6538)
 MIAMI, FLORIDA 33173
 FAX: (305) 252-8978
 TEL: (305) 254-8100

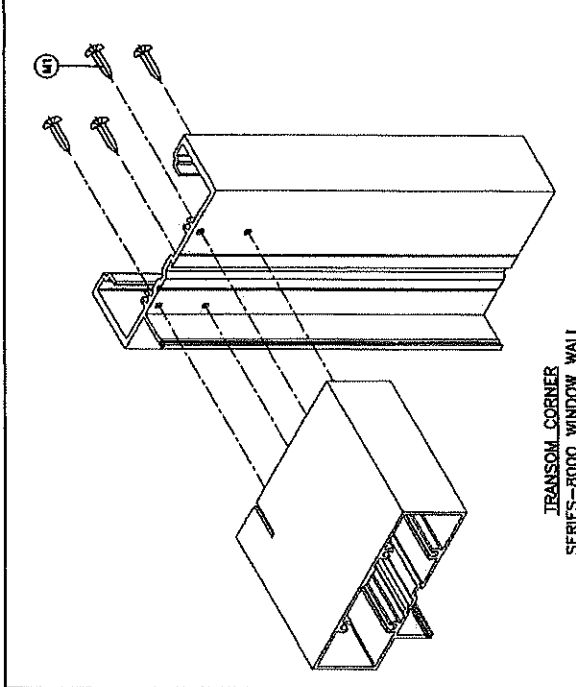
SERIES-9000 ALUM. OUTSWING FRENCH DOOR (L.A.I.)
 E.S. WINDOWS, LLC
 3550 N.W. 49 STREET
 MIAMI, FL. 33142
 TEL: (305) 838-5151 FAX: (305) 838-5158

NO. 0018	REV. PER COMMENTS
1	01.13.16
2	03.08.16
3	02.22.16
4	09.22.16

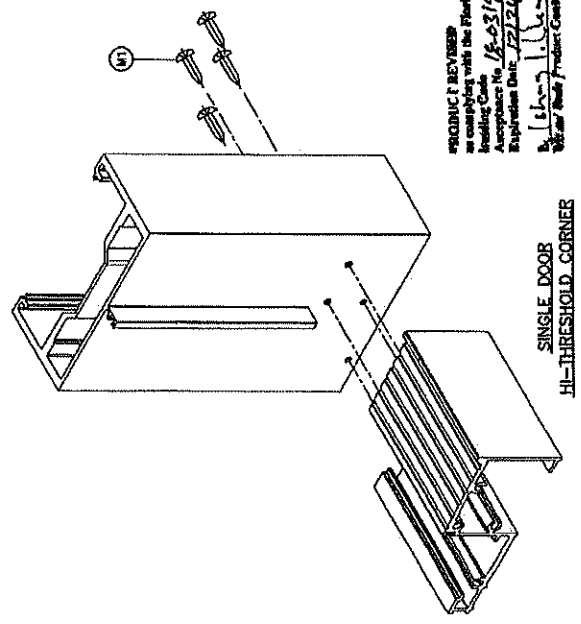
date: 07-14-08
 drawing no. W08-66
 sheet: 3/8" x 1"



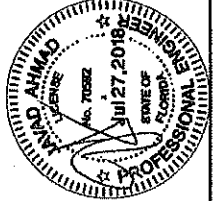
TRANSOM CORNER
 SERIES-9500 WINDOW_WALL



TRANSOM CORNER
 SERIES-8000 WINDOW_WALL



SINGLE DOOR
 HI-THRESHOLD CORNER



PROJ. REVISES
 in compliance with the Florida
 Building Code
 Acceptance No. 18-0319-09
 Inspector Date: 7/27/18
 Al-Farouq Ahmad
 Al-Farouq Product Control

ELECTRICAL

In accordance with the RFQ requirements intended for the electrical scope of this project, Karmil Construction proposes to furnish and install new light fixtures, install new wall and floor outlets, reconfigure electrical gear and service conductors to include renovated area, and replace existing fire alarm system. We will also prepare site infrastructure for future surveillance systems, including installation of (2) concrete poles, conduit runs by directional drilling to minimize disruption and new pull boxes.

DORAL MEADOW PARK

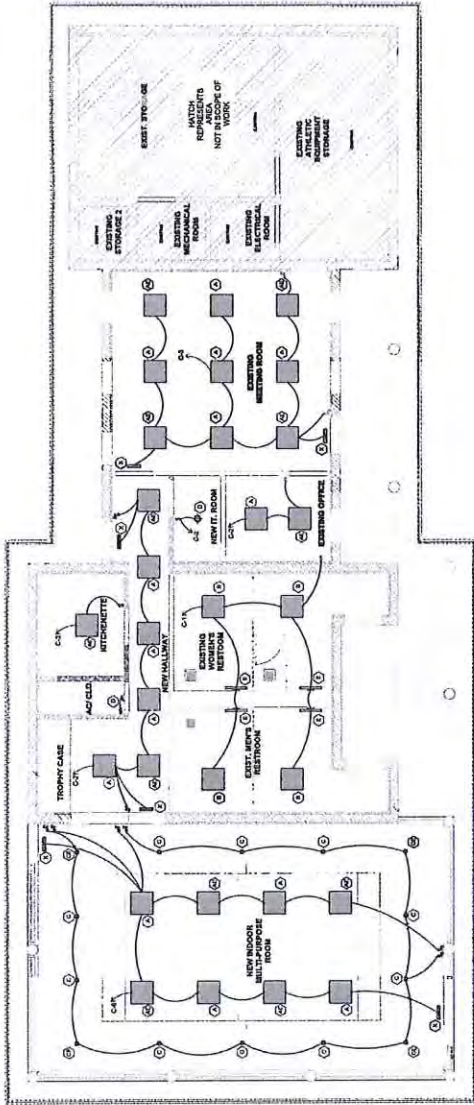
116 AVE NW AT NW 58 ST., MIAMI
 FLORIDA, 33128

DATE: 02/28/12
 DRAWN BY: JAV
 CHECKED BY: JAV
 APPROVED BY: JAV
 PROJECT NO: 120002

CONTRACT NO:
 SHEET NO:
 TOTAL SHEETS:

DATE: 02/28/12
 DRAWN BY: JAV
 CHECKED BY: JAV
 APPROVED BY: JAV
 PROJECT NO: 120002

PROPOSED LIGHTING PLAN
 E2.0
 CONSTRUCTION DOCUMENTS



PROPOSED LIGHTING PLAN
 SCALE: 1/8" = 1'-0"

R.C.P LEGEND

- RECESSED LED FIXTURE
- RECESSED 2'x2' LED LIGHT FIXTURE (INCLUDES EMERGENCY CIRCUIT OR EMERGENCY BATTERY PACK)
- RECESSED 2'x4' LED LIGHT FIXTURE (INCLUDES EMERGENCY CIRCUIT OR EMERGENCY BATTERY PACK)
- WALL MOUNTED RECESSED LIGHT
- EXIT LIGHT FIXTURE (SEEN TO THE PROTECTION DOWNLINE)
- WALL MOUNTED LED FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- CONCEALED (AC)

DORAL MEADOW PARKING LIGHTING FIXTURE SCHEDULE

TYPE	PROVIDER	DESCRIPTION	FINISH	WALL MOUNT	HEIGHT	WATTAGE	WATTAGE	WATTAGE	WATTAGE	NOTES
A		300 SQUARE LED TROPHY CASE	METALLIC		120-127	4000K	32.4	WHITE	6-1/4"	RECESSED
AE		300 SQUARE LED TROPHY CASE WITH EMERGENCY	METALLIC		120-127	4000K	32.4	WHITE	6-1/4"	RECESSED
B		7-1/2" SQUARE SURFACE DOWNLIGHT	HALO		120-127	4000K	18.7	WHITE	6-1/4"	SURFACE
C		4" LED SQUARE RECESSED LED DOWNLIGHT	HALO CONCAVE		120-127	4000K	15.42H	HAZE	6-1/4"	RECESSED
CE		4" LED SQUARE RECESSED LED DOWNLIGHT WITH EMERGENCY	HALO CONCAVE		120-127	4000K	15.42H	HAZE	6-1/4"	RECESSED
D		1" ROUND PUCK LIGHT	LITELUX		120-127	3000K	5.2	ALUMINUM	N/A	RECESSED ON SURFACE
E		2" BUBBLE DOWN	METALLIC		120-127	4000K	14	WHITE	6-1/4"	SURFACE
K		EDGE OF EXIT SIGN	VISIBLE		120-127	4000K	3	ALUMINUM	6-1/4"	SURFACE

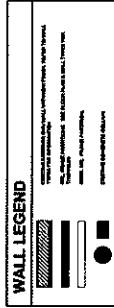
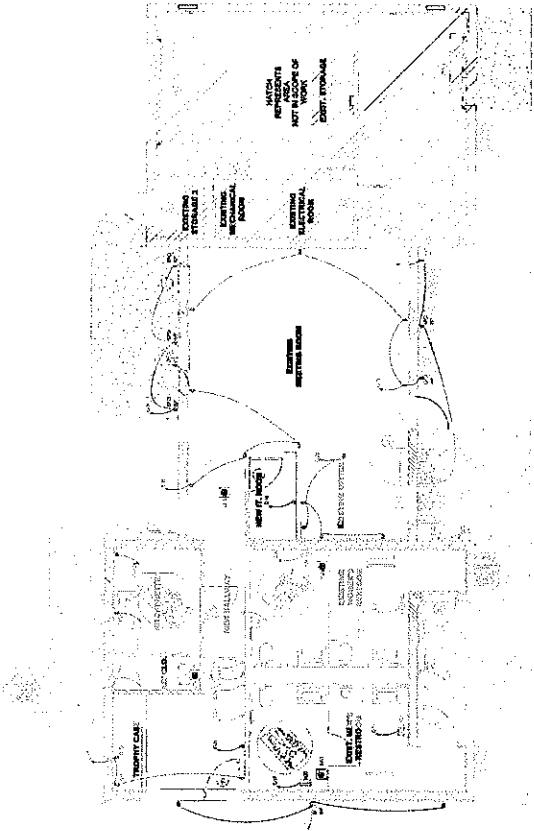
DORAL MEADOW PARK
116 AVE NW AT NW 58 ST., MIAMI
FLORIDA, 33128

DATE: 02-18-10
DRAWN BY: JAV
CHECKED BY: JAV
REVIEWED BY: JAV
PROJECT NO.: 10000000
REVISED:

PROJECT: DORAL MEADOW PARK
SHEET: 116 AVE NW AT NW 58 ST.
SCALE: 1/8" = 1'-0"

PROPOSED RECEPTACLE PLAN

E 3.0
CONSTRUCTION DOCUMENT



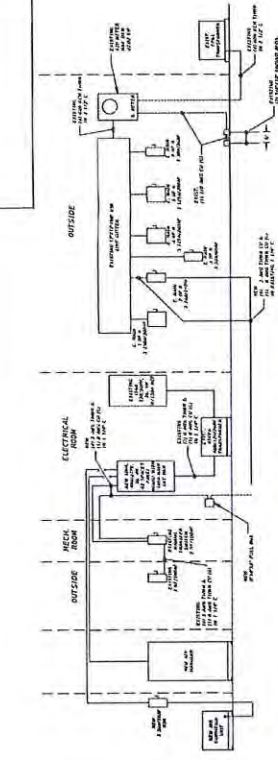
PROPOSED RECEPTACLE PLAN
116 AVE NW AT NW 58 ST.

DORAL MEADOW PARK
 116 AVE NW AT NW 58 ST., MIAMI
 FLORIDA, 33128

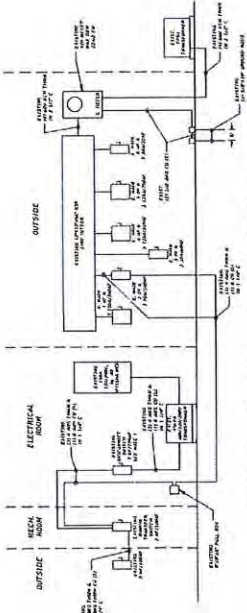
PROPOSED ELECTRICAL LAYOUT
 SCALE: 1/4" = 1'-0"

DATE: 03.22.20
 DRAWN BY: JLV
 CHECKED BY: JLV
 PROJECT NO.: 15-0008
 SHEET NO.: E-1008

NOTES:
 1. EXISTING 3 PHASE W/ GROUNDING SYSTEM SHALL BE MAINTAINED.
 2. ALL NEW ELECTRICAL SHALL BE INSTALLED IN ACCORDANCE WITH THE 2017 NEC.
 3. ALL NEW ELECTRICAL SHALL BE INSTALLED IN ACCORDANCE WITH THE 2017 IBC.



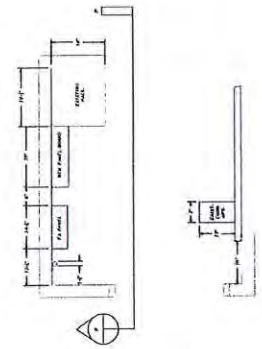
NEW ELECTRICAL RISER DIAGRAM
 SCALE N1:3



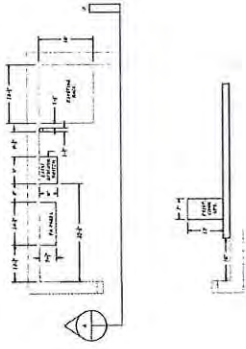
EXISTING ELECTRICAL RISER DIAGRAM
 SCALE E1:3

EXISTING BUILDING		NEW BUILDING		TOTAL	
TYPE	AMPS	TYPE	AMPS	TYPE	AMPS
VOLTA	100	VOLTA	100	VOLTA	200
RECEPT	200	RECEPT	200	RECEPT	400
FIXTURE	100	FIXTURE	100	FIXTURE	200
EV	0	EV	0	EV	0
TOTAL	300	TOTAL	300	TOTAL	600

EXISTING PANEL SCHEDULE

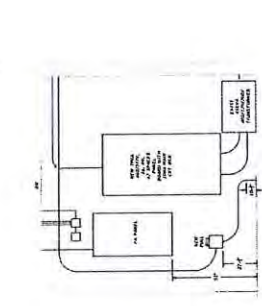


NEW ELECTRICAL ROOM LAYOUT
 SCALE N1:3

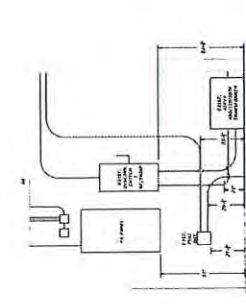


EXISTING ELECTRICAL ROOM LAYOUT
 SCALE E1:3

SERVICE LOAD CALCULATION:
 AMP = 277A
 MAXIMUM DEMAND FACTOR = 24 KWVA
 NO OVERLOAD
 NEW LOAD
 TOTAL LOAD = 277 KWVA



NEW ELECTRICAL ROOM ELEVATION BE'
 SCALE N1:3



EXISTING ELECTRICAL ROOM ELEVATION AA'
 SCALE E1:3

TYPE	AMPS	TYPE	AMPS	TOTAL
VOLTA	100	VOLTA	100	200
RECEPT	200	RECEPT	200	400
FIXTURE	100	FIXTURE	100	200
EV	0	EV	0	0
TOTAL	300	TOTAL	300	600

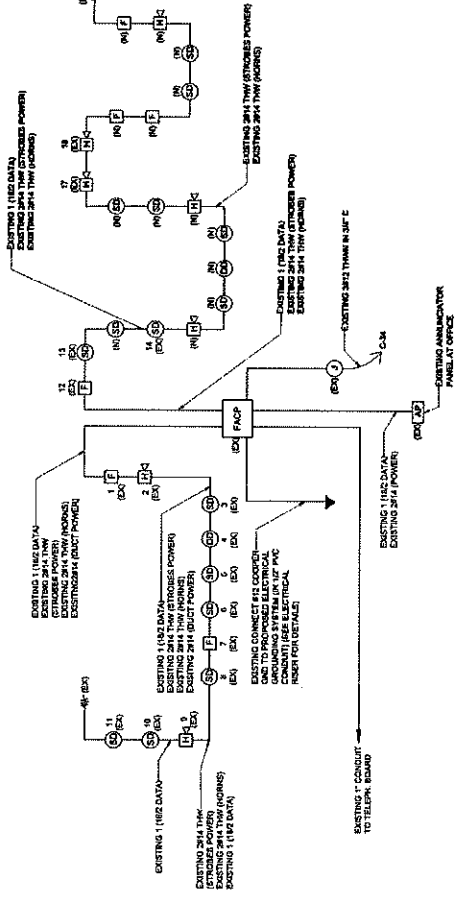
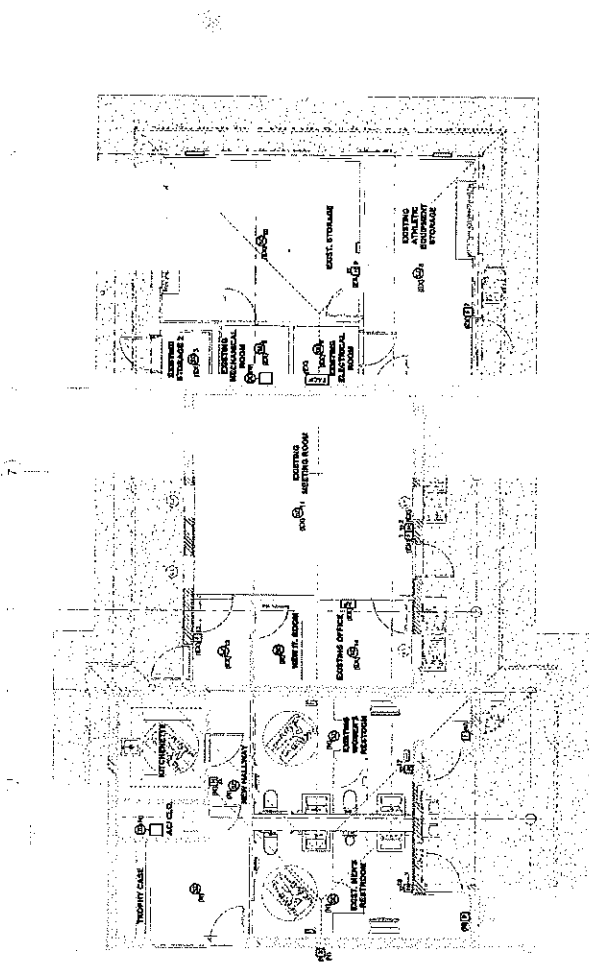
NEW PANEL SCHEDULE

DORAL MEADOW PARK

116 AVE NW AT NW 58 ST., MIAMI

F.2.0

NO.	DATE	DESCRIPTION
1	12/15/18	ISSUED FOR PERMIT
2	01/20/19	REVISIONS
3	02/15/19	REVISIONS
4	03/10/19	REVISIONS
5	04/05/19	REVISIONS
6	05/01/19	REVISIONS
7	06/01/19	REVISIONS
8	07/01/19	REVISIONS
9	08/01/19	REVISIONS
10	09/01/19	REVISIONS
11	10/01/19	REVISIONS
12	11/01/19	REVISIONS
13	12/01/19	REVISIONS
14	01/01/20	REVISIONS
15	02/01/20	REVISIONS
16	03/01/20	REVISIONS
17	04/01/20	REVISIONS
18	05/01/20	REVISIONS
19	06/01/20	REVISIONS
20	07/01/20	REVISIONS
21	08/01/20	REVISIONS
22	09/01/20	REVISIONS
23	10/01/20	REVISIONS
24	11/01/20	REVISIONS
25	12/01/20	REVISIONS
26	01/01/21	REVISIONS
27	02/01/21	REVISIONS
28	03/01/21	REVISIONS
29	04/01/21	REVISIONS
30	05/01/21	REVISIONS
31	06/01/21	REVISIONS
32	07/01/21	REVISIONS
33	08/01/21	REVISIONS
34	09/01/21	REVISIONS
35	10/01/21	REVISIONS
36	11/01/21	REVISIONS
37	12/01/21	REVISIONS
38	01/01/22	REVISIONS
39	02/01/22	REVISIONS
40	03/01/22	REVISIONS
41	04/01/22	REVISIONS
42	05/01/22	REVISIONS
43	06/01/22	REVISIONS
44	07/01/22	REVISIONS
45	08/01/22	REVISIONS
46	09/01/22	REVISIONS
47	10/01/22	REVISIONS
48	11/01/22	REVISIONS
49	12/01/22	REVISIONS
50	01/01/23	REVISIONS



EXISTING FIRE ALARM RISER DIAGRAM

2

7

7

7

7

PROPOSED FIRE ALARM PLAN

- SYSTEM DESCRIPTION: POWER LIMITED, NON-CODED ELECTRICALLY SUPPLEMENTED WITH 24 HOUR BATTERY STANDBY WITH MAIN OF ALARM BACK-UP AND CHARGER WITH REDUCED CONNECTION.
- THE SYSTEM UPON ACTIVATION SHALL ENGAGE ALL ALARM SERVICES, SOUND ALL PANEL AND NOTIFY CENTRAL STATION.
- PHOTOELECTRIC SMOKE DETECTORS SHALL HAVE A FLUORESCENT LIGHT INDICATING LIGHT ACTIVATED.
- INSTALLATION OF PULL STATIONS SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE LOCAL CODES.
- ANNUNCIATOR PANEL SHALL BE COLOR CODED ORANGE AND YELLOW.
- COMBINE THE SHEETS OF THE FIRE ALARM PANEL SMOKE DETECTOR, PULL STATIONS.
- THE CONTRACTOR SHALL PROVIDE FOR THE OWNER REVISOR, A SET OF "AS BUILT" DRAWINGS.
- THE CONTRACTOR SHALL CAREFULLY EXAMINE THE DRAWINGS AND VERIFY ALL EXISTING SITE CONDITIONS BEFORE COMMENCING WORK, IN CASE OF DISCREPANCY, THE ELECTRICAL PLUMBING ARE REQUIRED BY THE BUILDING DEPARTMENT.
- INDEPENDENT TESTING LAB, SHALL CALL.
- CONTRACTOR SHALL HAVE A VALID STATE COUNTY LICENSE AS A FIRE ALARM CONTRACTOR.
- ALL COMPONENTS SHALL BE FULLY COMPATIBLE AND I.L. APPROVED.
- METHODS OF INSTALLATION SHALL BE APPROVED BY THE BUILDING DEPARTMENT BEFORE A FIRE ALARM SYSTEM IS INSTALLED OR REMOVED.
- BATTERY CALCULATIONS SHALL BE PROVIDED BY INSTALLING CONTRACTOR PRIOR TO FINAL SUBMITTAL.

LEGEND:
 [DL] IN-RUSH/HOLD LIGHT
 [SD] SMOKE DETECTOR
 [P] PULL STATION
 [J] JUNCTION BOX
 [S] SMOKE SHUT DETECTOR
 [AP] ANNUNCIATOR PANEL
 [FACP] FIRE ALARM PANEL
 -#- END OF LINE RESISTOR
 [C-X] DEVOTES EXISTING TO REMAIN

PLUMBING

Under this scope, Karmil will perform plumbing works including underground, rough sanitary piping, water piping installation and fixture installation. This includes the replacement of all existing plumbing fixtures in the building, and the installation of new plumbing fixtures for new areas as well as the A/C condensing line.

REVIEW YOUR LAYOUTS

Job #213801.1 Date: 02/28/20

ROOM #1 - Men bathroom

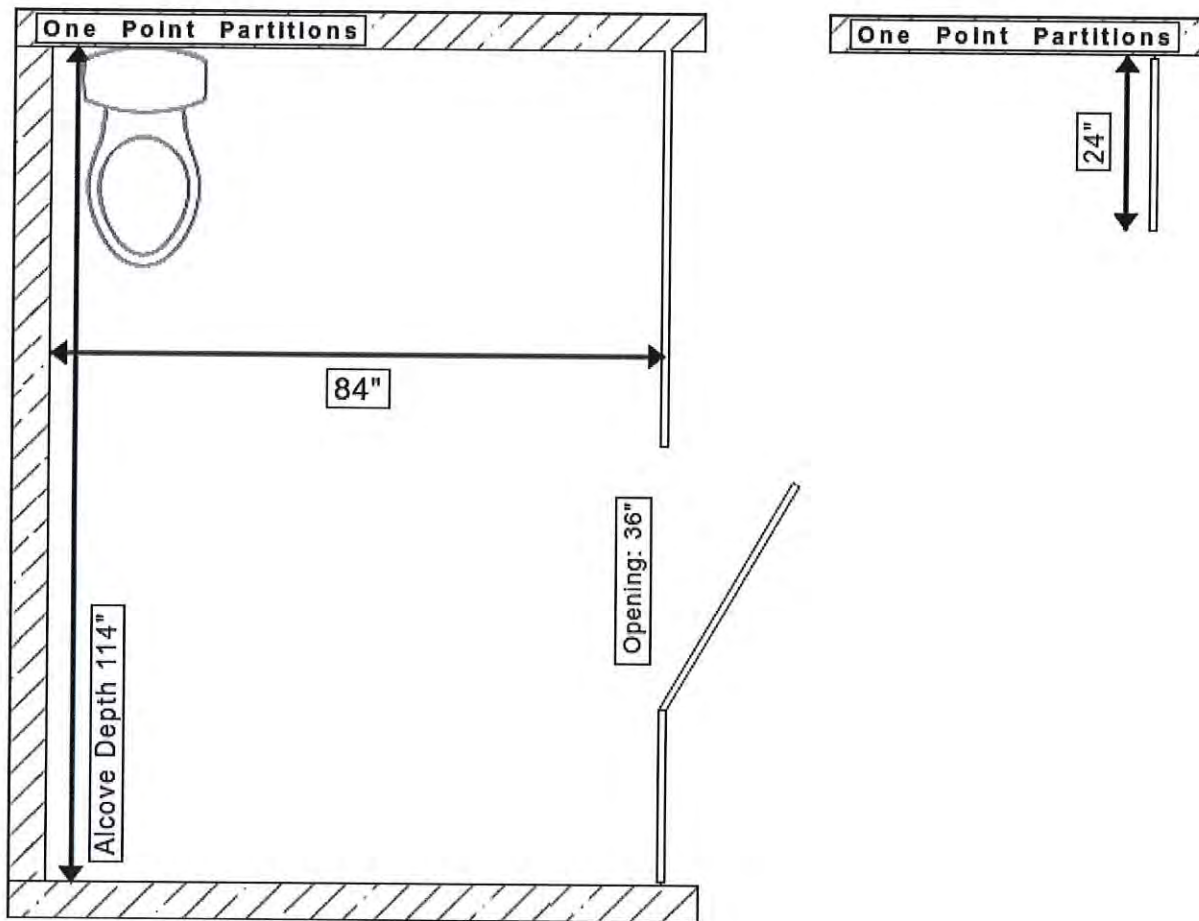
1 Stall, 1 Urinal Screen

Layout: Alcove Open, ADA, Left

Partition Depth: 0"

Stall 1 - Alcove Depth: 114"; Width: 84"; Door: 36", Left Out.

Urinal Screen Depths: 24"



Stall widths are to the centerline. Stall depths are to the face. Alcove depths are wall to wall.

Need this layout bigger or smaller? No problem! Our Partition Experts will design it to fit your restroom.

This layout is included in the price.

ROOM #2 - Women Batroom

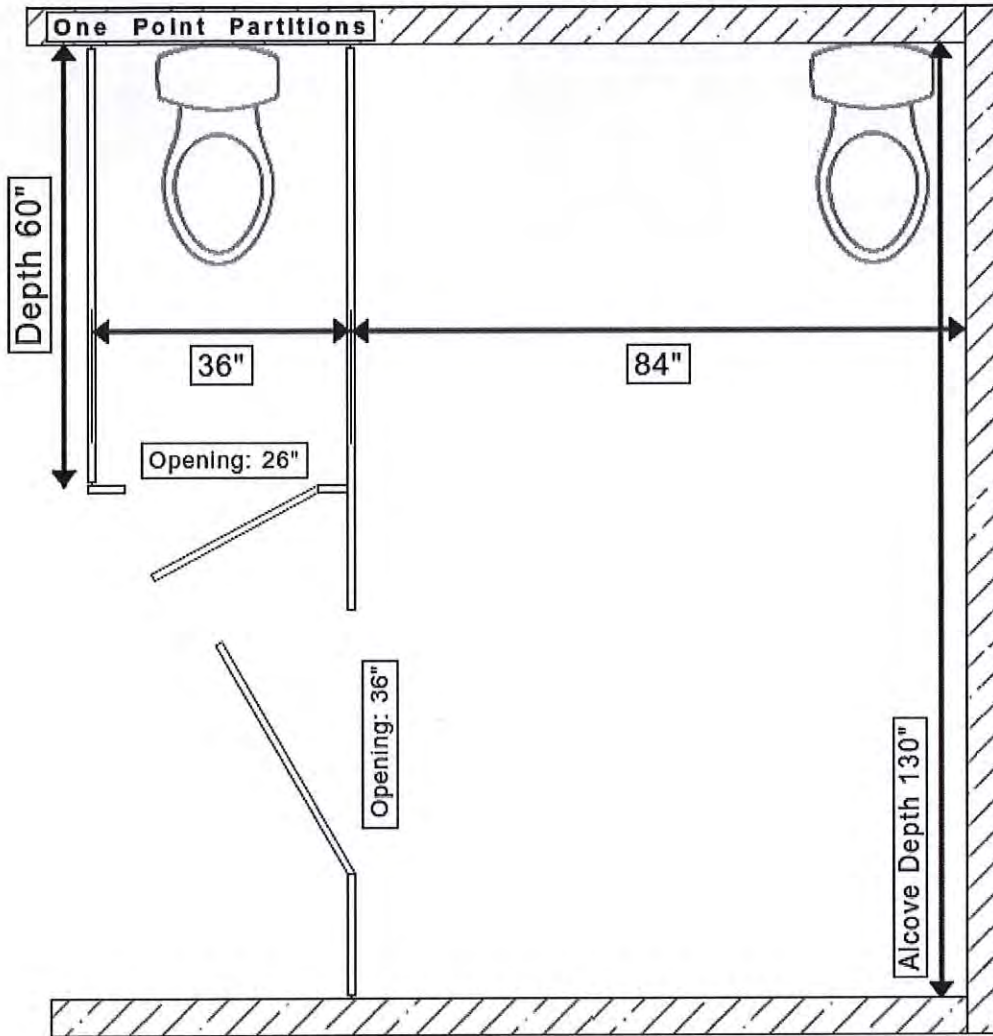
2 Stalls, 0 Urinal Screens

Layout: Alcove Open, ADA, Right

Partition Depth: 60"

Stall 1 - Width: 36"; Door: 26", Right Out.

Stall 2 - Alcove Depth: 130"; Width: 84"; Door: 36", Right Out.



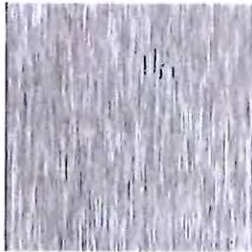
Stall widths are to the centerline. Stall depths are to the face. Alcove depths are wall to wall.

Need this layout bigger or smaller? No problem! Our Partition Experts will design it to fit your restroom.

This layout is included in the price.

STAINLESS STEEL COLOR CHART

Varying textures and styles



SS #4 Satin Finish



SS Diamond Finish
25% Upcharge From Satin



SS Leather Finish
25% Upcharge From Satin



dime shown for scale



CADET® PRO™ RIGHT HEIGHT® ELONGATED TOILET

VITREOUS CHINA

BARRIER FREE

CADET® PRO™ RIGHT HEIGHT® ELONGATED TOILET

215AA.104

- Features the **Cadet® Flushing System**
- Vitreous china
- High Efficiency Toilet (HET), ultra-low consumption (4.8 Lpf/1.28 gpf), utilizes 20% less water
- Meets EPA WaterSense® criteria
- Trade exclusive tank
- PowerWash® rim scrubs bowl with each flush
- Robust metal trip lever & metal shank fill valve
- Includes EZ-Install Tools w/color match bowl caps
- EverClean® surface included
- 3" flush valve
- Fully-glazed 2-1/8" trapway
- 16-1/2" rim height for accessible applications
- 12" (305mm) rough-in
- Generous 9" x 8" water surface area
- Chrome finish trip lever is supplied
- 1,000g MaP Score** at 1.28 gpf
- 5 year warranty



- 215AA.105 Same as above except with trip lever on right side
- 3517A.101 Right Height® Elongated Bowl
- 4188A.104 Tank

Nominal Dimensions:

767 x 441 x 771mm (30-1/8" x 17-3/8" x 30-3/8")

Fixture only, seat and supply sold separately

Alternative Tank Configurations Available:

- 4188A.154 Tank complete with Aquaguard Liner
- 4188A.155 Tank complete with Aquaguard Liner and trip lever located on right side
- 4188A.164 Tank complete with tank cover locking device
- 4188A.174 Tank complete with Aquaguard Liner and tank cover locking device
- 4188A.105 Tank complete with trip lever located on right side
- 4188A.165 Tank complete with tank cover locking device and trip lever located on right side

Compliance Certifications -

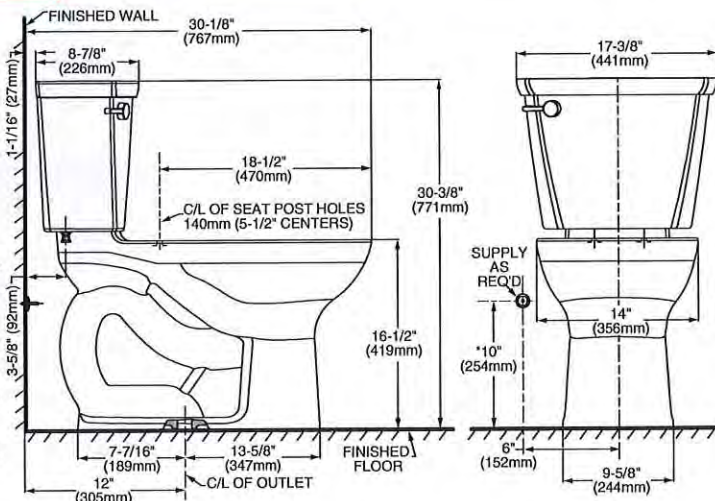
Meets or Exceeds the Following Specifications:

- ASME A112.19.2-2008/CSA B45.1-08 for Vitreous China Fixtures
- US EPA WaterSense® Specification for HETs

** Maximum Performance (MaP) testing performed by IAPMO R&T Lab. MaP Report conducted by Veritec Consulting, Inc. and Koeller and Company.

To Be Specified:

- Color: White Bone Linen Black
- Seat: #5321.110 EverClean® Elongated Seat with Slow Close Snap-Off Hinges
- Supply with stop:



NOTES:

THIS TOILET IS DESIGNED TO ROUGH-IN AT A MINIMUM DIMENSION OF 305MM (12") FROM FINISHED WALL TO C/L OF OUTLET. SUPPLY NOT INCLUDED WITH FIXTURE AND MUST BE ORDERED SEPARATELY. * DIMENSION SHOWN FOR LOCATION OF SUPPLY IS SUGGESTED.

IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.



MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 REQUIREMENTS FOR ACCESSIBLE AND USABLE BUILDING FACILITIES-CHECK LOCAL CODES.



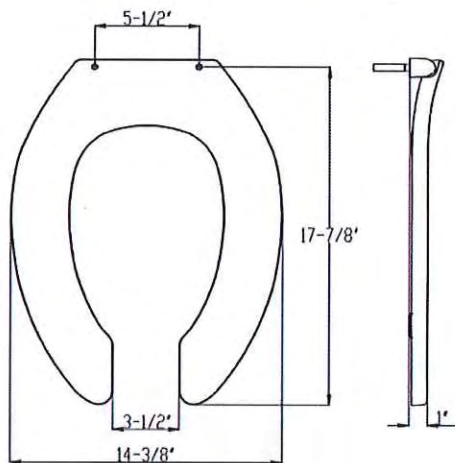
Cadet® PRO™



Solid Plastic Seats Elongated

Institutional • Commercial • Heavy-Duty

550STSCC



DETAILS

550STSCC

Heavy-duty, open front, less cover for elongated bowl. Stainless steel check-hinge with gasket, metal flat washers, lock washers and stainless steel nuts.

Standard Features:

- Corrosion-free stainless steel hinge posts
- Check-hinge posts
- Extended back with concealed hinge
- Integrally-molded, permanent & sanitary color keyed bumpers
- Corrosion-free hardware
- Withstands cleansers, strong chemicals

Color	Code #	550STSCC
White	001	● □

Canada ● U.S. □

**ALLBROOK® FloWise®
UNIVERSAL URINAL**

- Vitreous china
- High Efficiency operates in the range of 0.5 gpf to 1.0 gpf (1.9 Lpf/3.8 Lpf)
- Flushing rim
- Siphon jet flush action
- 3/4" inlet spud
- Outlet connection threaded 2" inside (NPTF)
- Wall hanger
- Fixture only
- Meets ANSI flush requirements at 0.5 gpf and 1.0 gpf

6550.001 Top spud

Nominal Dimensions:

363 x 363 x 546mm
(14-5/16" x 14-5/16" x 21-1/2")

Recommended working pressure – between 20 psi at valve when flushing and 80 psi static

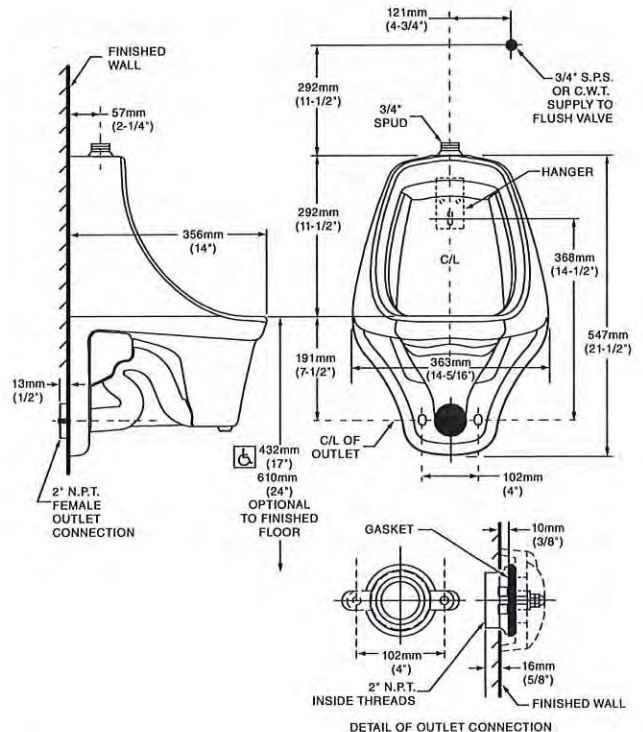
Compliance Certifications -

Meets or Exceeds the Following Specifications:

- ASME A112.19.2-2008/CSA B45.1-08 for Vitreous China Fixtures

To Be Specified:

- Color White
- Flush Valve:
 - American Standard Selectronic® #6063.051.002 DC Power (Top Spud)
 - Manual American Standard #6045.051.002 (Top Spud)



When used with 0.5 gpf urinal flush valves



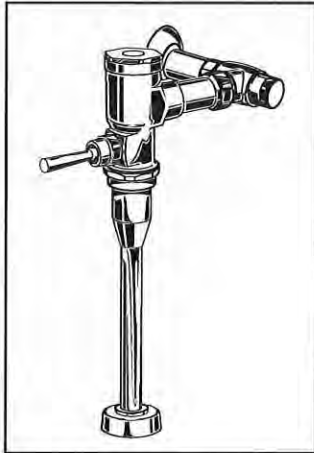
MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES - CHECK LOCAL CODES.

- When installed so top of rim is 432mm (17") from finished floor.

NOTES:

FLUSH VALVE NOT INCLUDED WITH FIXTURE AND MUST BE ORDERED SEPARATELY. PROVIDE SUITABLE REINFORCEMENT FOR ALL WALL SUPPORTS.

IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.



GENERAL DESCRIPTION:

Manual Piston-Type Urinal Flush Valve for 3/4" top spud urinals.

INCLUDES:

- 3/4" I.P.S. angle stop with back-flow prevention and vandal-resistant cap
- Sweat solder kit including cover tube and wall flange
- High back pressure vacuum breaker with down tube
- Spud coupling & flange for 3/4" top spud

PRODUCT FEATURES:

- Self-cleaning brass piston with integral wiper spring prevents clogging and reduces maintenance
- Piston operation delivers superior flush accuracy and repeatability
- Piston valve remains closed and does not need to be reset after loss of water pressure
- Non-hold open handle
- Positive seal ensures leak-free performance
- No external volume adjustment
- Durable chrome-plated cast brass construction is ideal for commercial applications
- Chloramine-resistant EPDM seals
- Adjustable tailpiece for rough-in flexibility
- Can be installed left or right handed
- ADA compliant

MODEL NUMBER:

- 6045.051.002** Flush Valve for 3/4" top spud urinal, 0.5 gpf
- 6045.505.002** Retrofit for existing flush valves, 0.5 gpf. Replaces industry standard manual & electronic flush valves. Does not include vacuum breaker assembly, angle stop & sweat solder kit.

OPERATING PRESSURE:

20 psi (flowing)-80 psi (static)

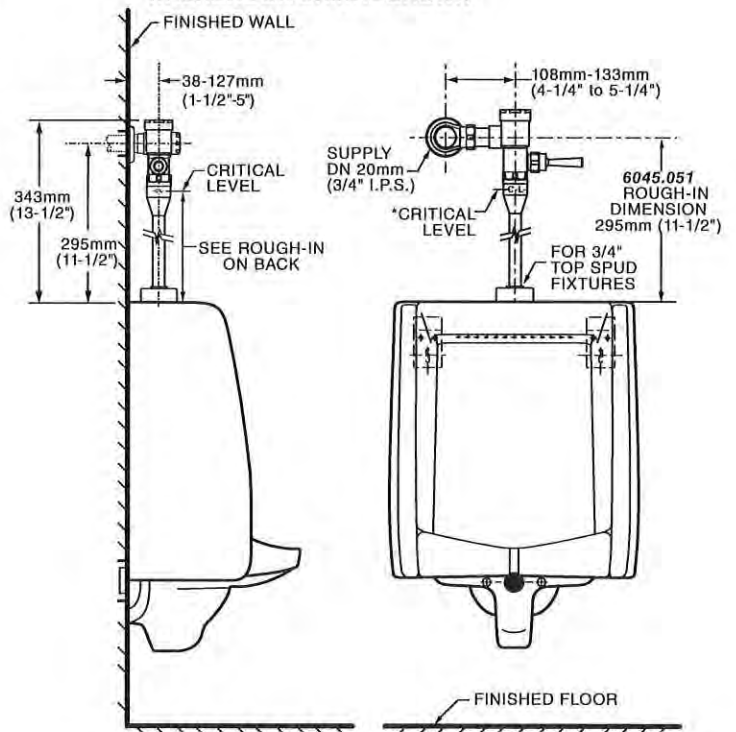
FLOW REQUIREMENT:

10gpm (37.9 L/min.)

ACCESSORIES:

- Cast wall flanges (3/4")

**TYPICAL URINAL INSTALLATION:
WASHBROOK URINAL SHOWN**



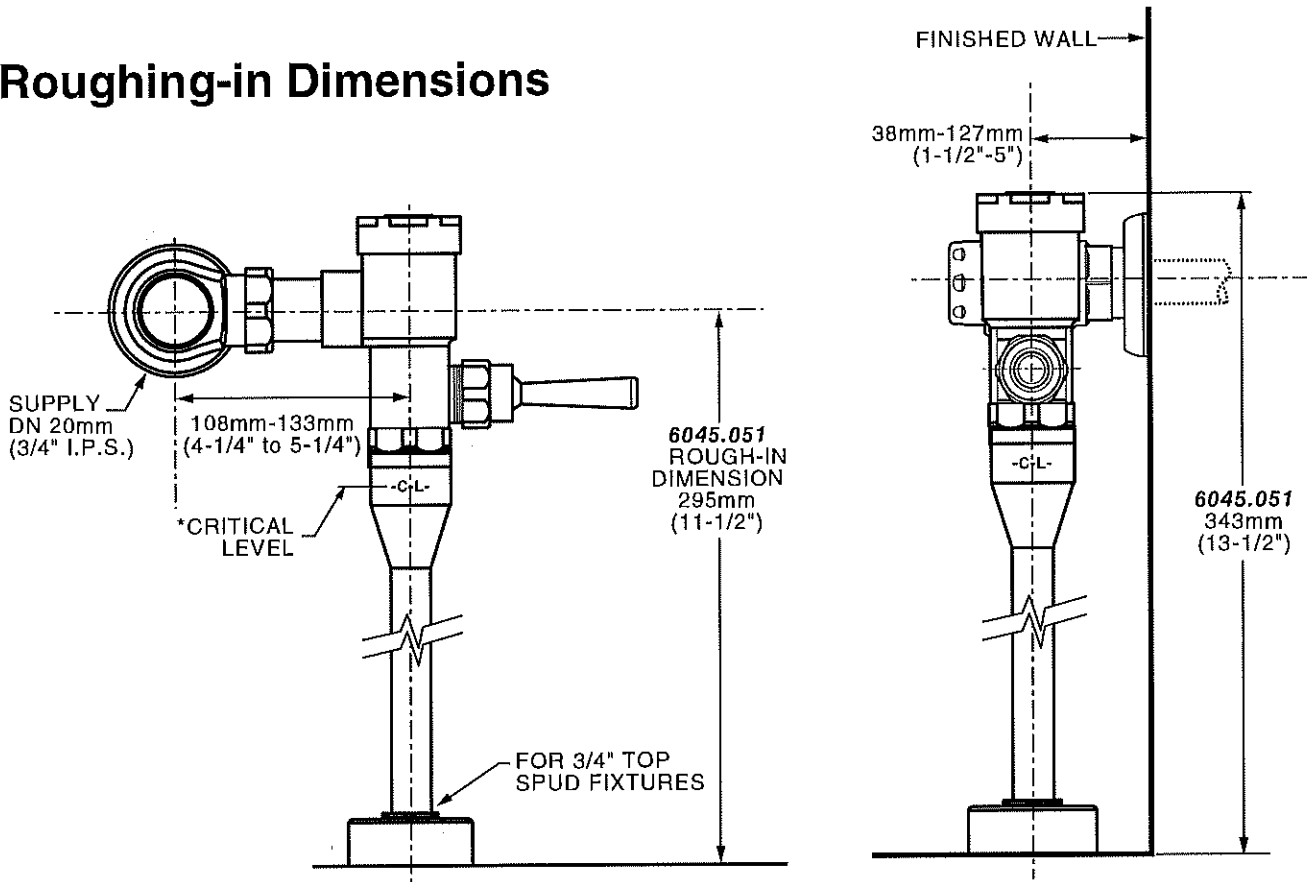
RECOMMENDED SPECIFICATION:

Manual urinal flush valve shall feature self-cleaning brass piston valve with integral wiper spring in bypass orifice to prevent clogging. Valve remains closed and does not need to be reset after loss of water pressure. Includes cast brass valve body and cover with chrome finish and vandal resistant stop cap. Includes sweat solder kit with wall flange and cover tube. Angle stop with back-flow protection and vacuum breaker included. 0.5 gpf / 1.9 Lpf Flush valve shall be American Standard Model # 6045.051.002.

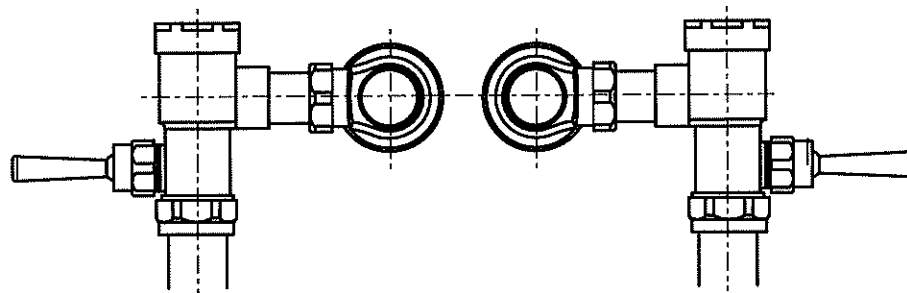
LISTINGS:

- ASSE 1037
- ANSI/ASME A112.19.2
- ADA Compliant

Roughing-in Dimensions



*Note: The Critical Line (-C-L-) on Vacuum Breaker must typically be a minimum of 6" (152mm) above fixture. Consult Codes for details.



Left or Right Hand Installation

 MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 REQUIREMENTS FOR ACCESSIBLE AND USABLE BUILDING FACILITIES-CHECK LOCAL CODES

PART OF **LIXIL**

LUCERNE™ WALL-HUNG LAVATORY

- Wall-hung sink
- Vitreous china
- Front overflow
- D-shaped bowl
- Self-draining deck area with contoured back and side splash shields
- Faucet ledge
- Compliant with Texas accessibility standard (TAS) for children age group 13 and up

Faucet holes on 203mm (8") centers (Illus.):

- 0356.028** For exposed bracket support
Shown with 4801.862 Amaris Heritage faucet with Triune Cross handles (not included)
- 0356.015** For wall hanger (included) or concealed arms support
- 0356.915** For wall hanger (included) or concealed arms support
 - Less overflow

Faucet holes on 102mm (4") centers:

- 0355.027** For exposed bracket support
- 0355.012** For wall hanger (included) or concealed arms support
- 0355.912** For wall hanger (included) or concealed arms support
 - Less overflow

Single center faucet hole (Illus.):

- 0356.041** For exposed bracket support
Shown with 1340.000 metering faucet (not included)
- 0356.421** For wall hanger (included) or concealed arms support
- 0356.921** For wall hanger (included) or concealed arms support
 - Less overflow
- 0356.439** For wall hanger (included) or concealed arms support
 - Single faucet hole on right
- 0356.066** For exposed bracket support
 - Single faucet hole on right

Nominal Dimensions:

521 x 464mm
 (20-1/2" x 18-1/4")

Bowl sizes:

381mm (15") wide
 254mm (10") front to back
 165mm (6-1/2") deep

Compliance Certifications -

Meets or Exceeds the Following Specifications:

- ASME A112.19.2 / CSA B45.1 for Vitreous China Fixtures



0356.028



0356.041

SEE FOLLOWING PAGES FOR ROUGHING-IN DIMENSIONS

To Be Specified:

- Color: White
- Faucet*:
- Faucet Finish:
- Supplies:
- 1-1/4" Trap:
- Nipple:
- Bracket Support (by others):
- Concealed Arms Support (by others):

* See faucet section for additional models available

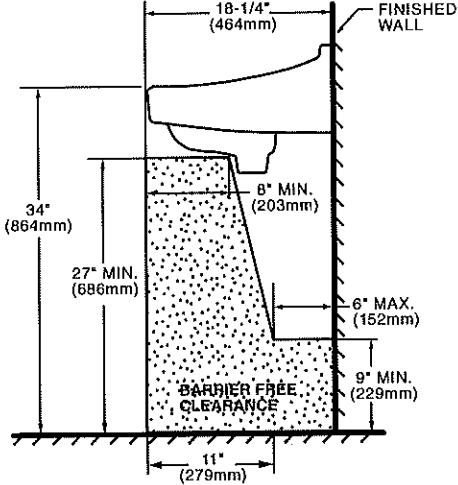
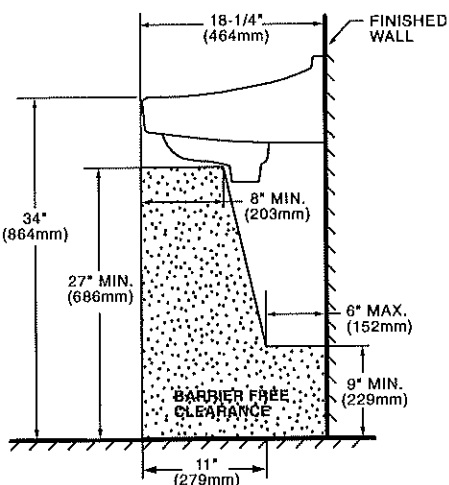
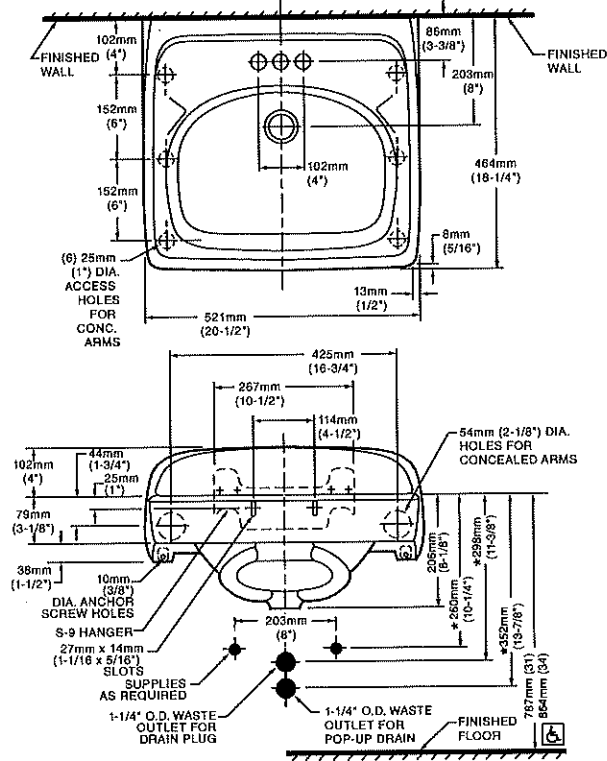
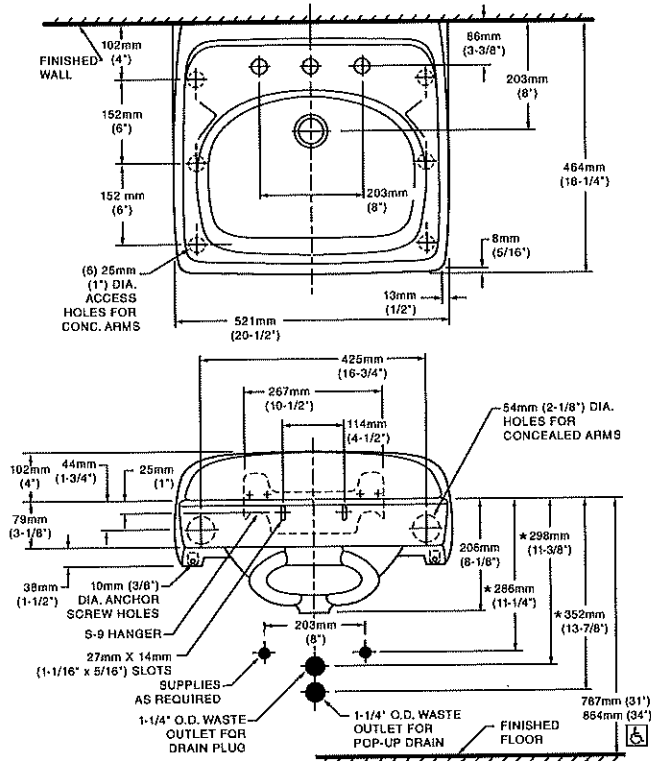


MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES - CHECK LOCAL CODES.
 Top of front rim mounted 864mm (34") from finished floor.



- 0356.028** 8" CTRS FOR EXPOSED BRACKET SUPPORT
- 0356.015** 8" CTRS FOR WALL HANGER OR CONCEALED ARMS
- 0356.915** LESS OVERFLOW

- 0355.027** 4" CTRS FOR EXPOSED BRACKET SUPPORT
- 0355.012** 4" CTRS FOR WALL HANGER OR CONCEALED ARMS
- 0355.912** LESS OVERFLOW



NOTES:
* DIMENSIONS SHOWN FOR LOCATION OF SUPPLIES AND "P" TRAP ARE SUGGESTED.
PROVIDE SUITABLE REINFORCEMENT FOR ALL WALL SUPPORTS.
FITTINGS NOT INCLUDED AND MUST BE ORDERED SEPARATELY.
CONCEALED ARM SUPPORT AS REQUIRED TO BE FURNISHED BY OTHERS.

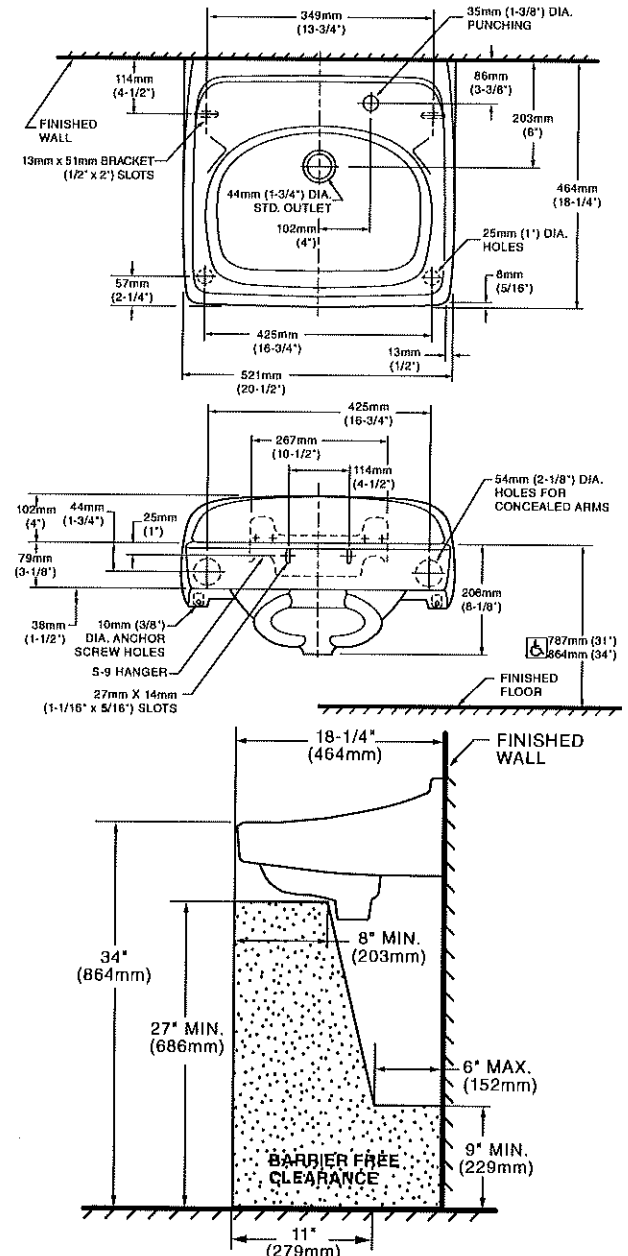
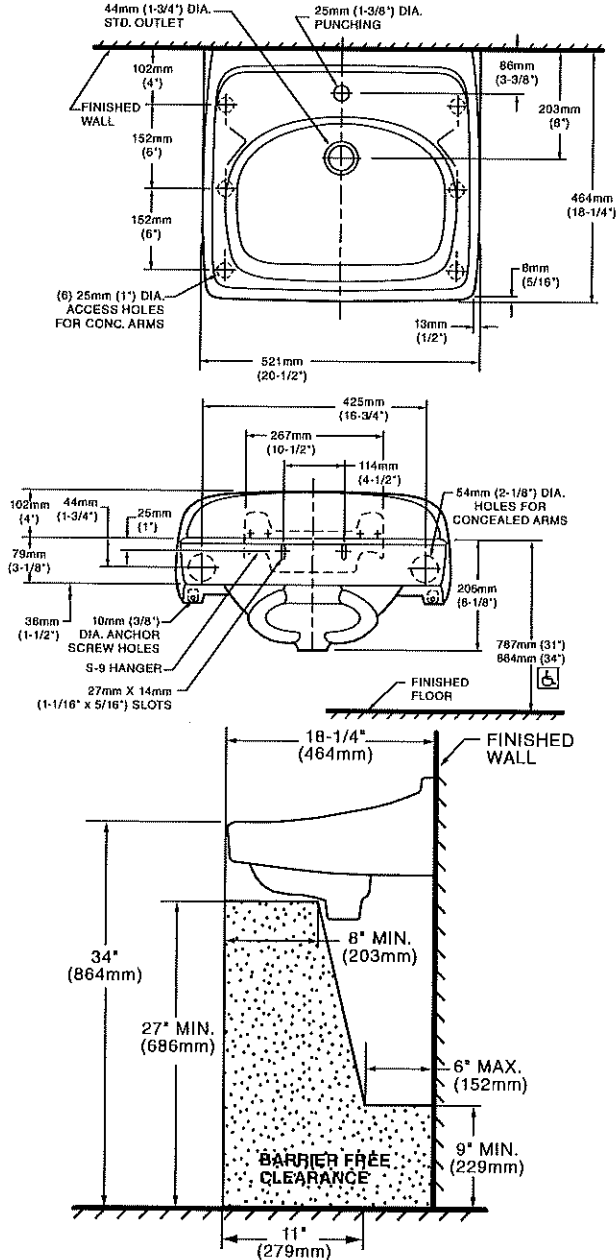
IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.

LAVATORY DESIGNED TO MEET ADA HANDICAPPED GUIDELINES WITH MOUNTING HEIGHT SET AT 864MM (34") ABOVE FINISHED FLOOR.



- 0356.041** SINGLE CENTER HOLE FOR EXPOSED BRACKET SUPPORT
- 0356.421** SINGLE CENTER HOLE FOR WALL HANGER OR CONCEALED ARMS
- 0356.921** LESS OVERFLOW

- 0356.439** SINGLE CENTER HOLE ON RIGHT FOR WALL HANGER OR CONCEALED ARMS
- 0356.066** SINGLE CENTER HOLE ON RIGHT FOR EXPOSED BRACKET SUPPORT



NOTES:
 * DIMENSIONS SHOWN FOR LOCATION OF SUPPLIES AND "P" TRAP ARE SUGGESTED.
 PROVIDE SUITABLE REINFORCEMENT FOR ALL WALL SUPPORTS.
 FITTINGS NOT INCLUDED AND MUST BE ORDERED SEPARATELY.
 CONCEALED ARM SUPPORT AS REQUIRED TO BE FURNISHED BY OTHERS.

IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.

LAVATORY DESIGNED TO MEET ADA HANDICAPPED GUIDELINES WITH MOUNTING HEIGHT SET AT 864MM (34") ABOVE FINISHED FLOOR.



MODEL NUMBER:

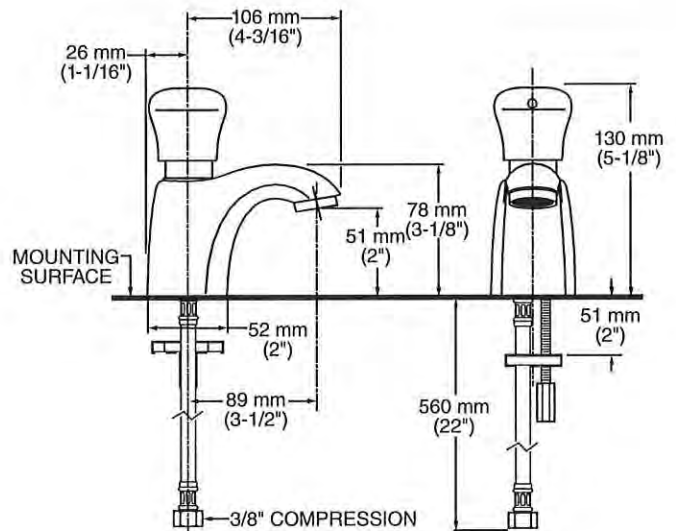
- ❑ **1340.107** Cast spout, 0.5 GPM pressure compensating vandal-resistant non-aerated spray.
- ❑ **1340M.107** Same as above with mechanical mixing valve
- ❑ **OPTIONAL 4" or 8" Deck plates**
 - 605P.400 4" brass deck plate with 1/4" fixation studs and quick spin nuts. (6-1/8" x 2-1/8" x 1/2")
 - 605P.800 8" brass deck plate with 1/4" fixation studs and quick spin nuts. (10-1/8" x 2-3/8" x 1/2")

GENERAL DESCRIPTION:

Metering pillar tap faucet. Vandal resistant solid brass construction. Easy-push handle. Water conserving pressure compensating 0.5 GPM vandal-resistant non-aerated spray. Factory set for a maximum of 0.083 gallon flow per activation. Replaceable cartridge. Adjustable flow cycle.

PRODUCT FEATURES:

- **Meets CALGreen:** Delivers 0.083 gallons per cycle which is a 59% water savings from CALGreen baseline. water flow of 0.5 gpm throughout the pressure range.
- **Pressure Compensating Aerator:** Provides a constant water flow of 0.5 gpm throughout the pressure range.
- **Vandal-Resistant Brass Construction and Spray:** Durable - Excellent in high use applications.
- **Automatic Shut-off:** Stops water and energy waste. Ideal for public restrooms where uncontrolled water usage is costly.
- **Meets ADA Standard:** Requires less than 5 lbs. of operating force to initiate flow per ANSI A117.1.
- **Single Supply:** For cold or tempered water.
- **Adjustable Flow Cycle**
- **Replaceable Valve Cartridge:** Facilitates simple replacement.
- **Optional Mixing Valves:** (sold separately)
 - Mechanical (Model # 021943-0070A)
 - Thermostatic (Model # 605XTMV1070)
- **Flexible Supply Hose:** With 3/8" Compression Connection
- **Optional 4" or 8" Deck Plate**
- **Lead Free:** Faucet contains ≤ 0.25% total lead content by weighted average.
- **Minimum Operating Pressure:** 20 psi



SUGGESTED SPECIFICATION

Metering faucet shall feature a single handle vandal-resistant brass construction with a replaceable valve cartridge and an adjustable flow cycle. Shall also feature a water-conserving, pressure compensating 0.5 gpm/1.9L/min vandal-resistant non-aerated spray. Factory set to deliver 0.083 gallons per cycle to meet CALGreen. Push button activator shall meet ANSI A117.1 Standard. Fitting shall be American Standard Model # 1340.107.002.



METERING FAUCETS

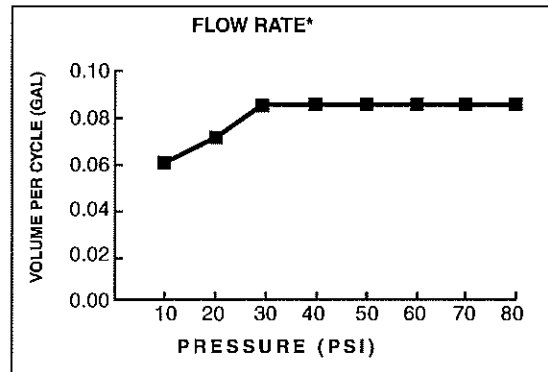
PILLAR TAP FAUCET


0.5 GPM NON-AERATED SPRAY

CODES AND STANDARDS

These products meet or exceed the following codes and standards:

- ANSI A117.1
- ASME A112.18.1
- CSA B 125
- NSF 61/Section 9 and Annex G
- CALGreen



 Meets the American Disabilities Act Guidelines
ANSI A117.1 Requirements for the accessible
and usable building facilities - check local codes.

PRODUCT SPECIFICATIONS

Elkay ezH2O® Bottle Filling Station & Versatile Bi-Level ADA Cooler, High Efficiency Non-Filtered 8 GPH Light Gray. Chilling Capacity of 8.0 GPH (gallons per hour) of 50° F drinking water, based on 80° F inlet water and 90° F ambient, per ASHRAE 18 testing. Features shall include Hands Free, High Efficiency, Green Ticker™, Laminar Flow, Antimicrobial, Real Drain. Furnished with Flexi-Guard® StreamSaver™ bubbler. Electronic Bottle Filler Sensor With Electronic Front And Side Bubbler Pushbar activation. Product shall be Wall Mount (On Wall), for Indoor applications, serving 2 station(s). Unit shall be certified to UL 399 and CAN/CSA C22.2 No. 120. Unit shall be lead-free design which is certified to NSF/ANSI 61 & 372 (lead free) and meets Federal and State low-lead requirements.



Special Features:	Hands Free, High Efficiency, Green Ticker™, Laminar Flow, Antimicrobial, Real Drain
Finish:	Light Gray Granite
Power:	115V/60Hz
Bubbler Style:	Flexi-Guard® StreamSaver™
Activation by:	Electronic Bottle Filler Sensor With Electronic Front And Side Bubbler Pushbar
Mounting Type:	Wall Mount (On Wall)
Chilling Option*:	8.0 GPH
Full Load Amps	7
Rated Watts:	360
Dimensions (L x W x H):	36-3/4" x 19" x 39-1/16"
Approx. Shipping Weight:	101 lbs.
Installation Location:	Indoor
No. of Stations Served:	2
*Based on 80° F inlet water & 90° F ambient air temp for 50° F chilled drinking water.	

Special Note: *Coming soon: The Elkay ezH2O you know and love is getting a fresh look, as shown here. In stock models may have prior logo design.

- High-performance compressor and insulation greatly reduce energy consumption.
- Green Ticker: Informs user of number of 20 oz. plastic water bottles saved from waste.
- Laminar flow provides clean fill with minimal splash.
- Silver Ion Antimicrobial protection on key plastic components to inhibit the growth of mold and mildew.
- Real Drain System eliminates standing water.

COOLING SYSTEM

- Compressor: Hermetically-sealed, reciprocating type, single phase. Sealed-in lifetime lubrication.

PART: _____ QTY: _____
 PROJECT: _____
 CONTACT: _____
 DATE: _____
 NOTES: _____
 APPROVAL: _____

AMERICAN PRIDE. A LIFETIME TRADITION. Like your family, the Elkay family has values and traditions that endure. For almost a century, Elkay has been a family-owned and operated company, providing thousands of jobs that support our families and communities.



Included with Product: Water Cooler (EZSTLG8WSLC), Bottle Filler (EZWSR)

▼ Ships in multiple boxes.

PRODUCT COMPLIANCE

- ADA & ICC A117.1
- ASME A112.19.3/CSA B45.4
- Buy American Act
- CAN/CSA C22.2 No. 120
- GreenSpec®
- NSF/ANSI 61 & 372 (lead free)
- UL 399



Complies with ADA & ICC A117.1 accessibility requirements when installed according to the requirements outlined in these standards. Installation may require additional components and/or construction features to be fully compliant. Consult the local Authority Having Jurisdiction if necessary.

[Installation Instructions \(PDF\)](#)

5 Year Limited Warranty on the refrigeration system of the unit. Electrical components and water system are warranted for 12 months from date of installation. **Warranty pertains to drinking water applications only. Non-drinking water applications are not covered under warranty.**

[Warranty \(PDF\)](#)

OPTIONAL ACCESSORIES

EW3000 - WaterSentry Plus Filter System Kit (Bottle Fillers)
LKAPREZL - Elkay Cane Apron for EZ Gray
MLP200 - Accessory - In Wall Carrier (Bi-Level) for bi-level EZ, LZ, EMABF, LMABF, VRC, LVRC models
36292C - Accessory - Power Block for Multistation Bottle Filling Stations

In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkay.com for the most current version of Elkay product specification sheets. This specification describes an Elkay product with design, quality, and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

- Condenser: Fan cooled, copper tube with aluminum fins. Fan motor is permanently lubricated.
- Cooling Unit: Combination tube-tank type. Continuous copper tubing with is fully insulated with EPS foam that meets UL requirements for self-extinguishing material.
- Refrigerant Control: Refrigerant HFC-134a is controlled by accurately calibrated capillary tube for positively trouble-free operation.
- Temperature Control: Easily accessible enclosed adjustable thermostat is factory preset. Requires no adjustment other than for altitude requirements.

In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkay.com for the most current version of Elkay product specification sheets. This specification describes an Elkay product with design, quality, and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

IMPORTANT! INSTALLER PLEASE NOTE :

This water cooler has been designed and built to provide water to the user which has not been altered by materials in the cooler waterways. The grounding of electrical equipment such as telephone, computer, etc. to water lines is a common procedure. The grounding may be in the building but may also occur away from the building. This grounding can cause electrical feedback into a water cooler creating an electrolysis which creates a metallic taste or causes an increase in the metal content of the water. This condition is avoidable by installing the cooler using the proper materials as shown below.

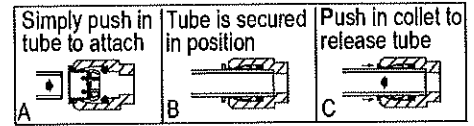
NOTICE

This water cooler must be connected to the water supply using a dielectric coupling. The cooler is furnished with a non-metallic strainer which meets this requirement. The drain trap which is provided by the installer should also be plastic to completely isolate the cooler from the building plumbing system.

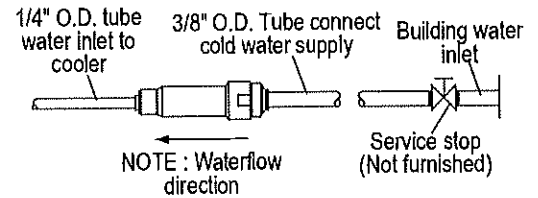
Bottle filler unit on bracket attached to wall by 6 holes (as shown). Water and electrical will connect through pre-punched hole in basin.

These products are designed to operate on 20 psi to 105 psi supply line pressure. Simultaneous operation of both bubblers on a bi-level unit may not be possible depending on water supply pressure. If simultaneous operation is desired, please ensure a minimum of 50 psi supply.

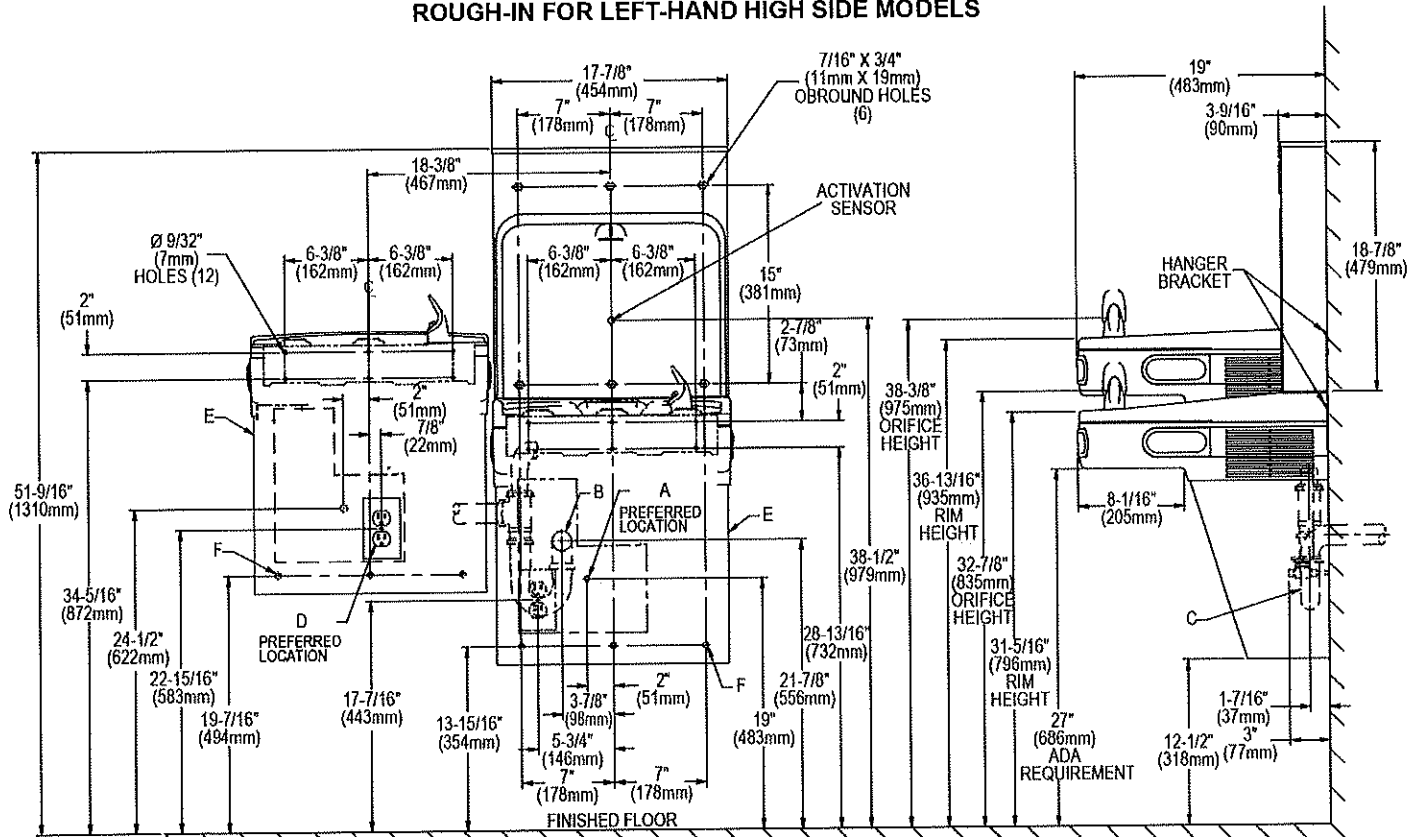
OPERATION OF QUICK CONNECT FITTINGS



Pushing tube in before pulling it out helps to release tube



ROUGH-IN FOR LEFT-HAND HIGH SIDE MODELS



LEGEND:

REDUCE HEIGHT BY 3 INCHES FOR INSTALLATION OF CHILDREN'S ADA COOLER

- A = Recommended Water Supply location. Shut-off Valve (not furnished) to accept 3/8" O.D. unplated copper tube. Up to 3" (76mm) maximum out from wall.
 - B = Recommended Waste Outlet location. To accommodate 1-1/2" nominal drain. Drain stub 2" (51mm) out from wall.
 - C = 1-1/2" Trap (not furnished).
 - D = Electrical Supply (3) Wire Recessed Box Duplex Outlet.
 - E = Insure proper ventilation by maintaining 6" (152mm) minimum clearance from cabinet louvers to wall.
 - F = 7/16" (11mm) Bolt Holes for fastening to wall.
- Note: New Installations Must Use Ground Fault Circuit Interrupter (GFCI). It is highly recommended that the circuit be dedicated and the load protection be sized for 20 amps.

In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkay.com for the most current version of Elkay product specification sheets. This specification describes an Elkay product with design, quality, and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

IMPORTANT! INSTALLER PLEASE NOTE :

This water cooler has been designed and built to provide water to the user which has not been altered by materials in the cooler waterways. The grounding of electrical equipment such as telephone, computer, etc. to water lines is a common procedure. The grounding may be in the building but may also occur away from the building. This grounding can cause electrical feedback into a water cooler creating an electrolysis which creates a metallic taste or causes an increase in the metal content of the water. This condition is avoidable by installing the cooler using the proper materials as shown below.

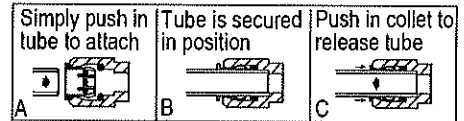
NOTICE

This water cooler must be connected to the water supply using a dielectric coupling. The cooler is furnished with a non-metallic strainer which meets this requirement. The drain trap which is provided by the installer should also be plastic to completely isolate the cooler from the building plumbing system.

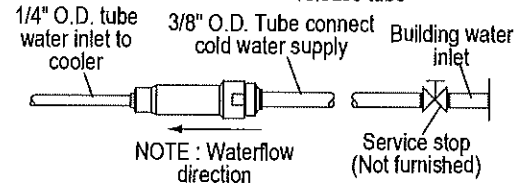
Bottle filler unit on bracket attached to wall by 6 holes (as shown). Water and electrical will connect through pre-punched hole in basin.

These products are designed to operate on 20 psi to 105 psi supply line pressure. Simultaneous operation of both bubblers on a bi-level unit may not be possible depending on water supply pressure. If simultaneous operation is desired, please ensure a minimum of 50 psi supply.

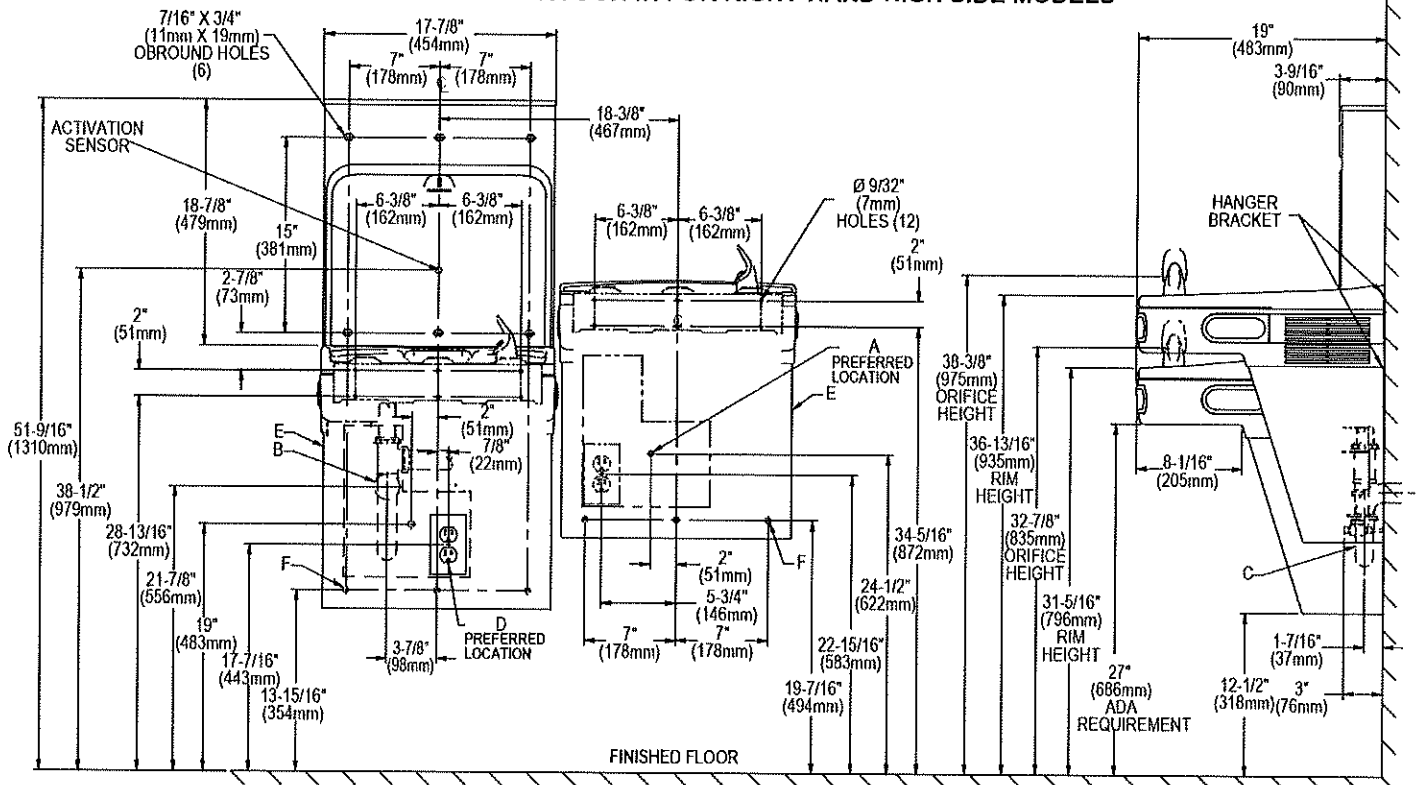
OPERATION OF QUICK CONNECT FITTINGS



Pushing tube in before pulling it out helps to release tube



ROUGH-IN FOR RIGHT-HAND HIGH SIDE MODELS



REDUCE HEIGHT BY 3 INCHES FOR INSTALLATION OF CHILDREN'S ADA COOLER

LEGEND:

- A = Recommended Water Supply location. Shut-off Valve (not furnished) to accept 3/8" O.D. unplated copper tube. Up to 3" (76mm) maximum out from wall.
- B = Recommended Waste Outlet location. To accommodate 1-1/2" nominal drain. Drain stub 2" (51mm) out from wall.
- C = 1-1/2" Trap (not furnished).
- D = Electrical Supply (3) Wire Recessed Box Duplex Outlet.
- E = Insure proper ventilation by maintaining 6" (152mm) minimum clearance from cabinet louvers to wall.
- F = 7/16" (11mm) Bolt Holes for fastening to wall.

Note : New Installations Must Use Ground Fault Circuit Interrupter (GFCI). It is highly recommended that the circuit be dedicated and the load protection be sized for 20 amps.

In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkay.com for the most current version of Elkay product specification sheets. This specification describes an Elkay product with design, quality, and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

PRODUCT SPECIFICATIONS

Elkay Lustertone™ Classic Stainless Steel 22" x 19-1/2" x 5-1/2", Single Bowl Drop-in ADA Sink. Sink is manufactured from 18 gauge 304 Stainless Steel with a Lustrous Satin finish, Rear Center drain placement, and Bottom only pads.

Installation Type:	Drop-in
Material:	304 Stainless Steel
Finish:	Lustrous Satin
Gauge:	18
Sound Deadening:	Bottom only pads
Number of Bowls:	1
Sink Dimensions:	22" x 19-1/2" x 5-1/2"
Bowl 1 Dimensions:	18" x 14" x 5-3/8"
Drain Size:	3-1/2" (89mm)
Drain Location:	Rear Center
Minimum Cabinet Size:	27"
Mounting Hardware:	Part # 64090012 included for countertops up to 3/4" (19mm) thick
Cutout Template #:	1000001255

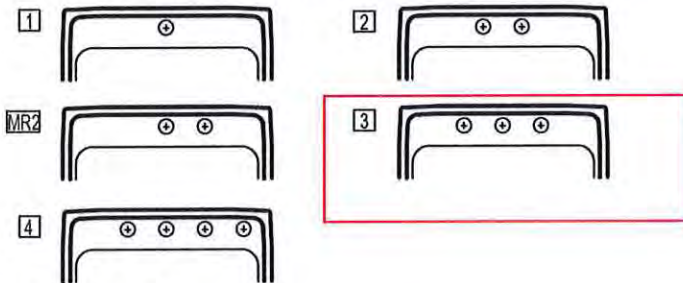
Template is available for download at elkay.com

Cutout Dimensions for Top Mount Installation:

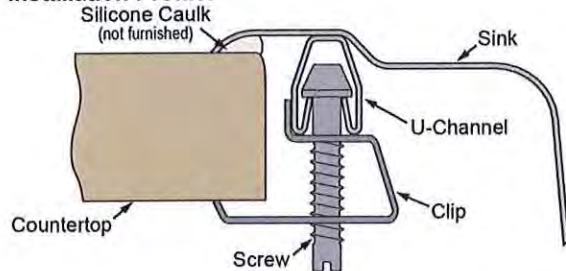
21-3/8" x 18-7/8" (543mm x 479mm) with 1-1/2" (38mm) corner radius

Hole Drilling Configurations:

1-1/2" (38mm) Diameter Faucet Holes on 4" (102mm) Centers



Installation Profile:



PART: _____ QTY: _____
 PROJECT: _____
 CONTACT: _____
 DATE: _____
 NOTES: _____
 APPROVAL: _____



AMERICAN PRIDE. A LIFETIME TRADITION.

Like your family, the Elkay family has values and traditions that endure. For almost a century, Elkay has been a family-owned and operated company, providing thousands of jobs that support our families and communities.



Product Compliance:

ADA & ICC A117.1
 ASME A112.19.3/CSA B45.4
 BUY AMERICAN ACT



Sinks are listed by IAPMO® as meeting the applicable requirements of the Uniform Plumbing Code®, International Plumbing Code®, and National Plumbing Code of Canada.



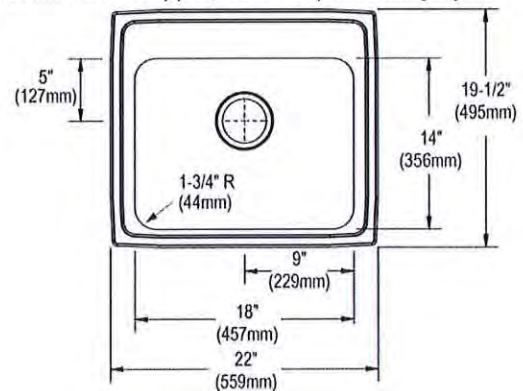
Complies with ADA & ICC A117.1 accessibility requirements when installed according to the requirements outlined in these standards.

[Clean and Care Manual \(PDF\)](#)

[Installation Instructions \(PDF\)](#)

[Limited Lifetime Warranty \(PDF\)](#)

Similar models are available with: 4", 5", 6" and 6-1/2" depths, CuVerro antimicrobial copper, Quick-Clip Mounting System



In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkay.com for the most current version of Elkay product specification sheets. This specification describes an Elkay product with design, quality, and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

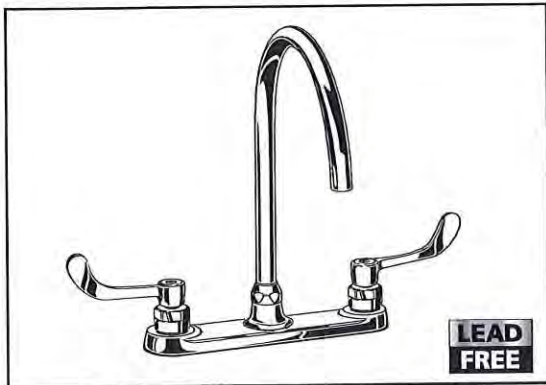
OPTIONAL ACCESSORIES

Cutting Board:	CBS1418
Drain:	LK99, LKAD35
Faucet:	LKGT1041, LKGT2041
Hardware:	LK364, LK463
Rinsing Basket:	LKWRB1418SS
Sinkmate:	LKSMHSL
Soap Dispenser:	LKGT1054

In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkay.com for the most current version of Elkay product specification sheets. This specification describes an Elkay product with design, quality, and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.



MONTERREY® TWO-HANDLE TOP-MOUNT KITCHEN FAUCET WITH LAMINAR FLOW IN BASE OF SPOUT RIGID/SWIVEL GOOSENECK SPOUT WITH 8" REACH

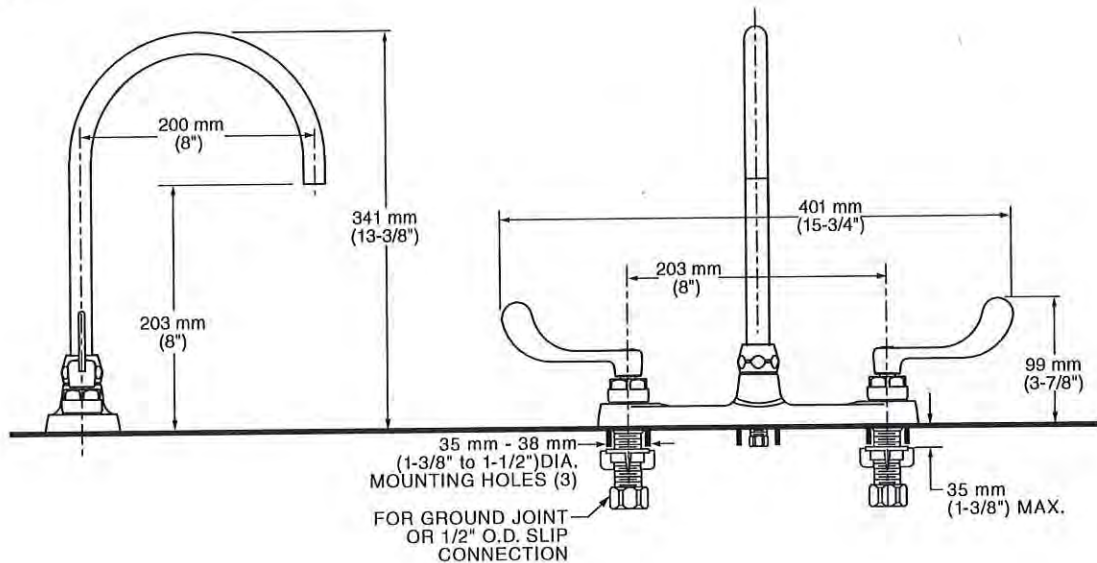


6409.180 Shown

MODEL NUMBER:

6409.180 Top Mount Faucet with 8" Gooseneck Spout & Laminar Flow in Spout Base

Field-convertible rigid / swivel gooseneck spout. Vandal-resistant metal wrist blade handles with red/blue indexes. 1.5 gpm pressure compensating laminar flow device in the base of the spout. Plain spout end.



GENERAL DESCRIPTION:

Durable cast brass construction. Field-convertible rigid-swivel gooseneck spout with 8" reach. Plain spout end. 1/4 turn ceramic disc valve cartridges. 1/2" male threaded inlet shanks with shank nuts and brass coupling nuts. Vandal-resistant wrist blade handles with blue & red color indexes. 1.5 gpm/5.7 L/min. maximum flow rate.

PRODUCT FEATURES:

Laminar Flow in Spout Base: Ideal for hospital applications. Eliminates the mix of air & water.

Plain Spout End: Nothing on the end of the spout to collect lime & debris.

Ceramic Disc Valve Cartridges: Assure a lifetime of drip-free performance.

Field-Convertible Rigid / Swivel Gooseneck Spout

Solid Brass Construction: Durable. Excellent in high use applications. Ideal for prolonged contact with water.

Lead Free: Faucet contains $\leq 0.25\%$ total lead content by weighted average.

SUGGESTED SPECIFICATION:

Two handle top-mount kitchen faucet shall feature cast brass construction with all brass coupling nuts. Shall feature water-conserving 1.5gpm/5.7 L/min. pressure compensating laminar flow device in base of spout. Shall also feature brass, field-convertible gooseneck spout with 8" reach and plain spout end. Shall also feature 1/4 turn washerless ceramic disc valve cartridges. Fitting shall be American Standard Model #6409.180.002.

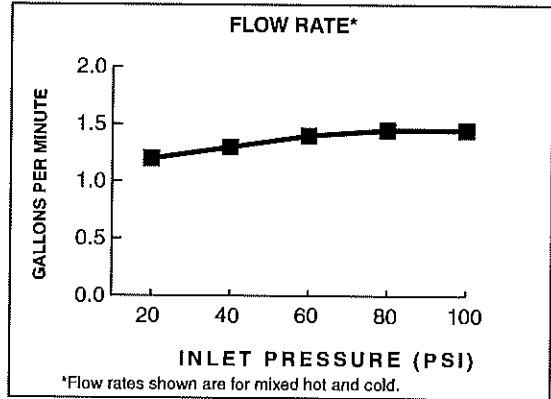


**MONTERREY® TWO-HANDLE TOP-MOUNT KITCHEN FAUCET
WITH LAMINAR FLOW IN BASE OF SPOUT
RIGID/SWIVEL GOOSENECK SPOUT WITH 8" REACH**

CODES AND STANDARDS

These products meet or exceed the following codes and standards:

- ASME A112.18.1
- CSA B125.1
- NSF 61/Section 9, Annex G
- CALGreen



Product Number	Description	Finish
		Polished Chrome
		002
6409.180	Top mount faucet with field-convertible 8" rigid / swivel spout. VR wrist blade handles. 1.5 gpm pressure compensating laminar flow device in the base of the spout. Plain spout end.	X

MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 REQUIREMENTS FOR ACCESSIBLE AND USABLE BUILDING FACILITIES-CHECK LOCAL CODES

Other Aerators Available:

Part Suffix	Description
L10	1.0 gpm (3.8 Lpm) PCA Non-Aerated Laminar Flow Outlet

LEAD FREE

MULTI-TRN SUPPLY STOPS

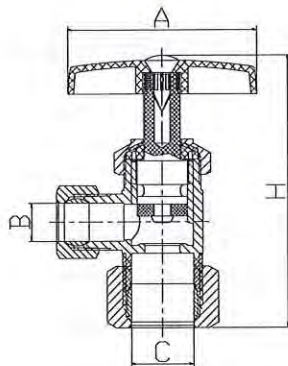
Features:

- Forged & polished chrome plated body
- MULTI Turn operation
- Self lubricating Teflon seals
- Double "O"ring for safety
- Available for Copper, Iron, CPVC, PEX tube
- Max working pressure 125PSI



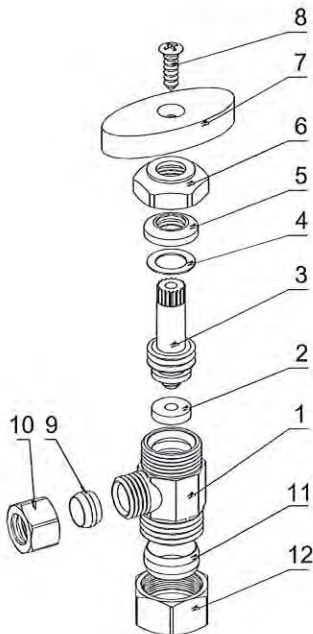
Part No.
192-032HC
5/8 OD X 3/8 OD
Angle valves

- cUPC and NSF61 approved
- AB1953 certificated



Material Specifications

No.	Description	Material
1	Body	NL Brass
2	Seal	EPDM
3	Stem	POM
4	Spacer	SS304
5	Seal	Ring
6	Cap	Brass
7	Handle	ABS
8	Lock	Nut
9	Clip	H62
10	Nut	Brass
11	Clip	H62
12	Nut	Brass



Dimensions are in inches

Part No.	A	B	C	H	Wt(lbs)
192-032HC	1.929	0.382	0.632	2.451	0.205

Working Pressure

Working Pressure(PSI)
125

NSF / ANSI 61



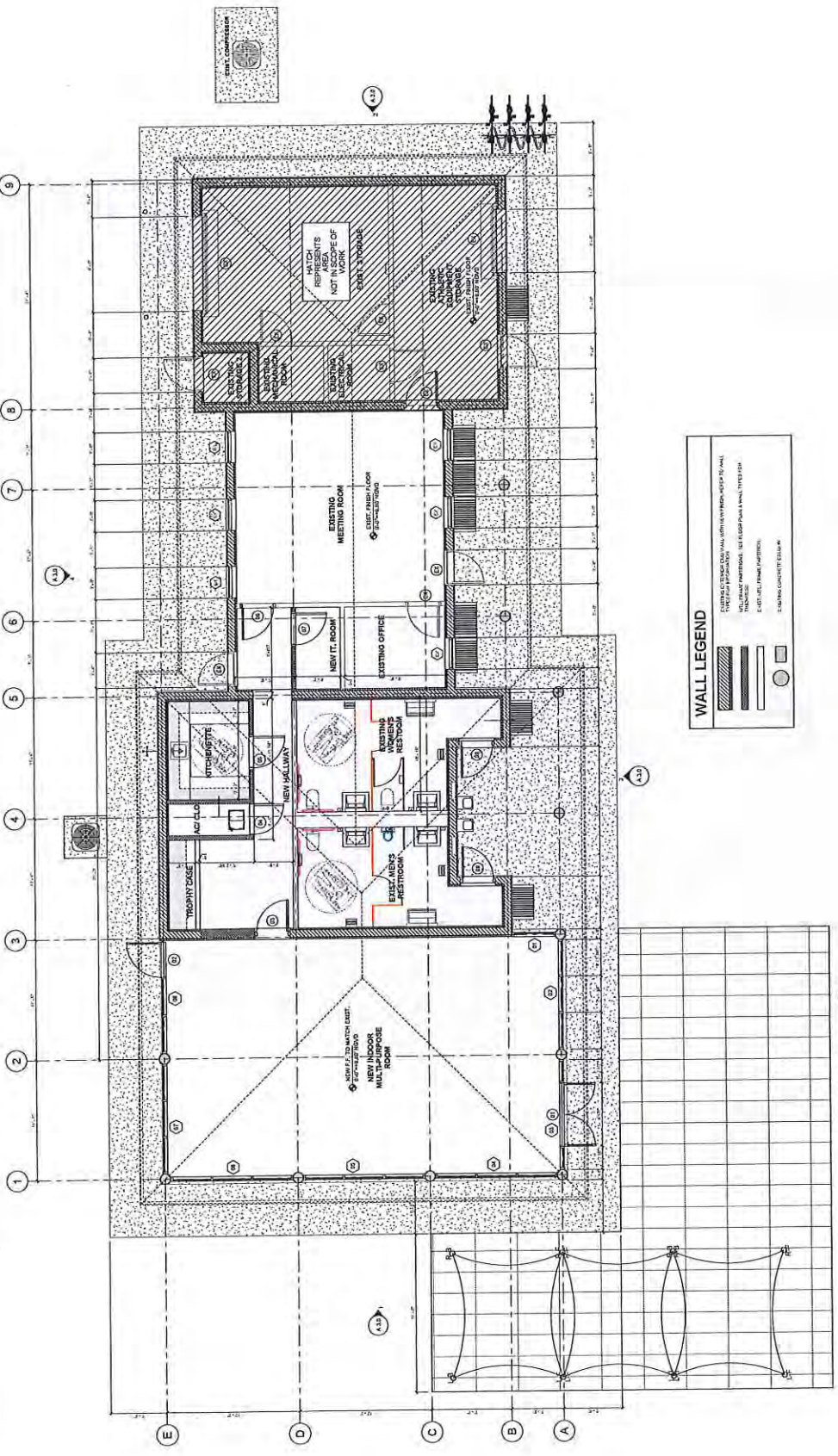
MECHANICAL

Furnish and install a 7.5 Ton Carrier A/C Split Unit System including, 15 KW duct heater, thermostat, fresh air ducts (louver), refrigerant lines, metal duct with insulation wrap, exposed spiral duct for open space, flexes, collars, panel style plaque type supply grills, return grills, exhaust fans for restrooms, and ventilation duct.

DATE:	08/20/15
DRAWN BY:	WJL
CHECKED BY:	WJL
DESIGNED BY:	WJL
PROJECT NO.:	200005
REVISED:	

PROPOSED FLOOR PLAN
JOSE A. VIAL, ARCHITECT
49 2283
116 AVE. NW AT NW 58 ST.
MIAMI, FLORIDA 33128

SCALE: 1/4" = 1'-0"
DATE: 08/20/15
PROJECT: DORAL MEADOW PARK CENTER
ROOM: 01
DATE: 08/20/15
SCALE: 1/4" = 1'-0"
DATE: 08/20/15



WALL LEGEND

- EXISTING CONCRETE WALL (HATCHED)
- NEW CONCRETE WALL (DOTTED)
- EXISTING PARTITION WALL (DASHED)
- NEW PARTITION WALL (SOLID)
- EXISTING GLASS PARTITION (DOTTED)
- NEW GLASS PARTITION (DOTTED)

- NEW A/C COVERED AREA
- EXISTING A/C AREA: Karmil will Replace Supply/Return Grills

1 01 PROPOSED FLOOR PLAN +8.80' NGVD
 SCALE: 1/4" = 1'-0"



Product Data

Commercial Split Systems Air Conditioning Condensing Units 6 to 20 Tons



38AUZ07,08,12,14 Shown

Features/Benefits



Carrier's air-cooled air conditioning split systems:

- Provide a logical solution for commercial needs
- Have rugged, dependable construction
- Available with single or dual refrigerant circuits.
- Have cooling capability up to 125°F (52°C) ambient and down to 35°F (2°C) ambient standard

These dependable outdoor air cooled condensing units match Carrier's indoor-air handlers to meet a wide selection of cooling solutions.

Constructed for long life

The 38AUZ single circuit and 38AUD dual circuit, air cooled condensing units are designed and built to last. The high efficient designed outdoor coil construction allows for a more efficient design in a smaller cabinet size that utilizes an overall reduction in refrigerant charge. Where conditions require, special coil coating coil protection option is available. Cabinets are constructed of prepainted galvanized steel, delivering unparalleled protection from the environment. Inside and outside surfaces are protected to ensure long life, good looks, and reliable operation. Safety controls are used for enhanced system protection and reliability. Each unit utilizes the Comfort Alert™ diagnostic and troubleshoot control system. This protects the units operation and provides valuable diagnostic information when required.

Factory-installed options (FIOPs)

Certified and pre-engineered factory-installed options (FIOPs) allow units to be installed in less time, thereby reducing installed cost.

FIOPs include:

- low ambient controls which provide cooling operation down to -20°F (-29°C) ambient temperatures
- non-fused disconnect
- special coil coating coil protection
- louvered hail guard

Efficient operation

These air cooled condensing units will provide EERs up to 12.6 (tested in accordance with AHRI standard 340/360).

This high efficiency operation will help reduce overall operating cost and energy consumption.

Controls for performance dependability

The 38AU condensing units offer operating controls and components designed for performance dependability. The high efficiency hermetic scroll compressor is engineered for long life and durability. The compressors include vibration isolation for quiet operation. The high-pressure switch protects the entire refrigeration system from abnormally high operating pressures. A low-pressure switch protects the system from loss of charge. These units also include anti-short-cycling protection, which helps to protect the units against compressor failure.

All units include a crankcase heater to eliminate liquid slugging at start-up. Each unit comes standard with the Comfort Alert control system. This provides:

- System Go LED indicator
- Fault LED indicator
- Compressor fault LED indicator
- Phase loss protection
- Phase reversal protection
- Safety pressure indicator
- Anti-short cycle protection

Innovative Carrier 40RUA packaged air handlers are custom matched to 38AUZ/D condensing units

Information on matching 40RUA DX packaged air handler follows for convenience. See separate product data for more details. The 40RUA Series has excellent fan performance, efficient direct-expansion (DX) coils, a unique combination of indoor-air quality features, and is easy to install. Its versatility and state-of-the-art features help to ensure economical performance of the split system both now and in the future.

Indoor-air quality (IAQ) features

The unique combination of IAQ features in the 40RUA Series air handlers help to ensure that only clean, fresh, conditioned air is delivered to the occupied space.

Direct-expansion 4 row cooling coils prevent the build-up of humidity in the room, even during part-load conditions.

Standard 2-in. (51mm) disposable filters remove dust and airborne particles from the occupied space for cleaner air.

The pitched, non-corroding drain pan can be adjusted for a right-hand or left-hand connection to suit many applications and provide positive drainage and prevent standing condensate.

The accessory economizer can provide ventilation air to improve indoor-air quality by using demand control ventilation. When used in conjunction with Carrier Comfort System and CO₂ sensors, the economizer admits fresh outdoor air to replace stale, recirculated indoor air.

Economy

The 40RUA Series packaged air handlers provide reduced installation expense and energy-efficient performance.

Quick installation is ensured by the multipoise design. Units can be installed in either the horizontal or vertical configuration without modifications. Fan motors and contactors are pre-wired and thermostatic expansion valves (TXVs) are factory-installed on all 40RUA models.

High efficiency, precision-balanced fans minimize air turbulence, surging, and unbalanced operation, cutting operation expenses.

Table of contents

Features/Benefits	2
Model Number Nomenclature	4
AHRI Capacity Ratings	5
Physical Data	6
Base Unit Dimensions	10
Options and Accessories	17
Typical Piping and Wiring Diagrams	20
Performance Data	27
Electrical Data	52
Application Data	55
Guide Specifications	56

The economizer accessory precisely controls the blend of outdoor air and room air to achieve comfort levels. When the outside air enthalpy is suitable, outside air dampers can fully open to provide “free” cooling without energizing mechanical cooling.

Rugged dependability

The 40RUA series units are made to last. The die-formed galvanized steel panels ensure structural integrity under all operating conditions. Galvanized steel fan housings are securely mounted to a die-formed galvanized steel fan deck. Rugged pillow-block bearings

(40RUA14) are securely fastened to the solid steel fan shaft with split collets and clamp locking devices. Smaller unit sizes have spider-type bearings.

Coil flexibility

Model 40RUA direct-expansion coils have galvanized steel casings; inlet and outlet connections are on the same end. The coils are designed for use with Puron (R-410A) refrigerant and have $\frac{3}{8}$ -in. diameter copper tubes mechanically bonded to aluminum sine-wave fins. The coils include matched, factory-installed thermostatic expansion valves (TXVs) with matching distributor nozzles and

offer a removable power element and extended connections.

Easier installation and service

The multipoise design and component layout ensures quick unit installation and operation. Units can be converted from horizontal to vertical operation by simply repositioning the unit. Drain pan connections are duplicated on both sides of the unit. The filters, motor, drive, TXVs, and coil connections are all easily accessed by removing a single side panel.

AHRI capacity ratings



AHRI CAPACITY RATINGS

UNIT	COOLING STAGES	NOMINAL CAPACITY (tons)	NET COOLING CAPACITY (MBH)	TOTAL POWER (kW)	EER	IEER	IEER WITH 2-SPEED VFD
38AUZ(A,B)07	1	6.0	70.0	6.1	11.5	12.2	12.9
38AUZ(A,B)08	1	7.5	92.0	8.2	11.2	11.8	12.9
38AUZ12	1	10.0	117.0	10.4	10.3	12.0	12.9
38AUZ14	1	12.5	148.0	13.5	11.0	12.0	12.4
38AUZ16	2	15.0	184.0	16.4	11.2	13.2	14.3
38AUZ25	2	20.0	240.0	21.8	11.0	12.5	13.6
38AUZ(D,E)07	2	6.0	70.0	5.8	12.0	12.9	14.0
38AUZ(D,E)08	2	7.5	92.0	8.2	11.2	13.0	14.0
38AUD12	2	10.0	117.0	10.4	10.3	11.6	13.0
38AUD14	2	12.5	148.0	13.5	11.0	12.0	12.5
38AUD16	2	15.0	184.0	16.4	11.2	11.8	14.3
38AUD25	2	20.0	240.0	21.8	11.0	11.2	13.6

LEGEND

- AHRI** — Air Conditioning, Heating, and Refrigeration
ASHRAE — American Society of Heating, Refrigeration, and Air-Conditioning, Inc.
EER — Energy Efficiency Ratio
IEER — Integrated Energy Efficiency Ratio

NOTES:

1. Rated in accordance with AHRI Standard 340/360, as appropriate.
2. Ratings are based on:
Cooling Standard: 80°F (27°C) db, 67°F (19°C) wb indoor air temp and 95°F (35°C) db outdoor air temp.

SOUND POWER LEVELS, dB

UNIT	COOLING STAGES	A-WEIGHT OCTAVE OUTDOOR SOUND (DB)								
		TOTAL	63	125	250	500	1000	2000	4000	8000
38AUZ07	1&2	84.6	63.1	68.9	73.4	79.5	80.2	76.4	72.0	64.9
38AUZ08	1&2	84.6	63.1	68.9	73.4	79.5	80.2	76.4	72.0	64.9
38AUZ12	1	83.2	60.4	65.8	77.1	76.8	77.1	75.8	70.2	64.7
38AUD12	2	83.8	62.9	69.6	74.4	77.9	79.3	76.1	70.7	61.1
38AUZ14	1	82.6	60.5	65.1	70.3	77.2	78.0	75.4	71.2	63.9
38AUD14	2	85.2	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
38AUZ16	2	84.2	60.1	69.7	72.8	78.7	79.5	76.3	72.9	67.8
38AUD16	2	82.8	55.5	64.8	73.6	77.2	78.2	74.8	70.7	64.3
38AUZ25	2	82.6	60.5	65.1	70.3	77.2	78.0	75.4	71.2	63.9
38AUD25	2	85.2	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.8

LEGEND

dB — Decibel

NOTE: Outdoor sound data is measured in accordance with AHRI standard 270-2008.

Physical data



38AU**07-14 PHYSICAL DATA

UNIT	SINGLE CIRCUIT MODELS WITH RTPF — ROUND TUBE/PLATE FIN COIL DESIGN					
	38AUZ(A,B)07	38AUZ(D,E)07	38AUZ(A,B)08	38AUZ(D,E)08	38AUZ12	38AUZ14
Refrigeration System						
# Circuits / # Comp. / Type	1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / Scroll
Refrigerant Type	Puron® R-410A					
R-410A shipping charge A/B (lbs, 60 Hz)	9.0	9.0	9.0	9.0	9.0	9.0
System charge w/ fan coil* (60 Hz)	14.0	14.0	17.0	19.0	20.0	43.0
Metering device	TXV	TXV	TXV	TXV	TXV	TXV
High-press. Trip / Reset (psig)	630 / 505	630 / 505	630 / 505	630 / 505	630 / 505	630 / 505
Low-press. Trip / Reset (psig)	54 / 117	54 / 117	54 / 117	54 / 117	54 / 117	54 / 117
Compressor						
Model	ZP61	ZPS60	ZP83	ZPS83	ZP104	ZP137
Oil Charge A/B (oz)	56	56	60	58	110	110
Speed (rpm, 60 Hz)	3500 / 2900	3500 / 2900	3500 / 2900	3500	3500	3500
Condenser Coil						
Material	Al/Cu	Al/Cu	Al/Cu	Al/Cu	Al/Cu	Al/Cu
Coil type	RTPF	RTPF	RTPF	RTPF	RTPF	RTPF
Rows / FPI	2 / 17	2 / 17	2 / 17	2 / 17	2 / 17	3 / 17
total face area (ft ²)	17.5	17.5	17.5	23.0	25.1	31.8
Condenser Fan / Motor						
Qty / Motor drive type	2 / direct	2 / direct	2 / direct	2 / direct	2 / direct	2 / direct
Motor HP / RPM	1/4 / 1100	1/4 / 1100	1/4 / 1100	1/4 / 1100	1/4 / 1100	1/4 / 1100
Fan diameter (in.)	22	22	22	22	22	22
Nominal Airflow (cfm)	6,000	6,000	6,000	6,000	6,000	6,000
Watts (total)	610	610	610	610	610	610
Piping Connections						
Qty / Suction (in. ODS)	1 / 1 1/8	1 / 1 1/8	1 / 1 1/8	1 / 1 1/8	1 / 1 3/8	1 / 1 3/8
Qty / Liquid (in. ODS)	1 / 3/8	1 / 3/8	1 / 1/2	1 / 1/2	1 / 1/2	1 / 5/8

LEGEND

FPI — Feet per inch

* Approximate system charge with about 25 ft piping of sizes indicated with matched 40RUA.



38AU**12-25 PHYSICAL DATA

UNIT	MODELS WITH RTPF — ROUND TUBE/PLATE FIN COIL DESIGN					
	38AUD12	38AUD14	38AUZ16	38AUD16	38AUZ25	38AUD25
Refrigeration System						
# Circuits / # Comp. / Type	2 / 2 / Scroll	2 / 2 / Scroll	1 / 2 / Scroll	2 / 2 / Scroll	1 / 2 / Scroll	2 / 2 / Scroll
Refrigerant Type	Puron® R-410A					
R-410A shipping charge A/B (lbs, 60 Hz)	9.0 / 9.0	9.0 / 9.0	9.0	9.0 / 9.0	9.0	9.0 / 9.0
System charge w/ fan coil* (60 Hz)	11.0 / 11.0	22.0 / 22.0	43.0	22.0 / 22.0	38.0	19.0 / 19.0
Metering device	TXV	TXV	TXV	TXV	TXV	TXV
High-press. Trip / Reset (psig)	630 / 505	630 / 505	630 / 505	630 / 505	630 / 505	630 / 505
Low-press. Trip / Reset (psig)	54 / 117	54 / 117	54 / 117	54 / 117	54 / 117	54 / 117
Compressor						
Model	ZP51 (2)	ZP67 (2)	ZP83 (2)	ZP83 (2)	ZP104 (2)	ZP104 (2)
Oil Charge A/B (oz)	42 / 42	56 / 56	60 / 60	60 / 60	110 / 110	110 / 110
Speed (rpm, 60 Hz)	3500 / 2900	3500 / 2900	3500	3500 / 2900	3500	3500 / 2900
Condenser Coil						
Material	Al/Cu	Al/Cu	Al/Cu	Al/Cu	Al/Cu	Al/Cu
Coil type	RTPF	RTPF	RTPF	RTPF	RTPF	RTPF
Rows / FPI	2 / 17	3 / 17	2 / 17	2 / 17	2 / 17	2 / 17
total face area (ft2)	25.1	31.8	23.5 x 2	23.5 x 2	25.0 x 2	25.0 x 2
Condenser fan / motor						
Qty / Motor drive type	2 / direct	2 / direct	3 / direct	3 / direct	4 / direct	4 / direct
Motor HP / RPM	1/4 / 1100	1/4 / 1100	1/4 / 1100	1/4 / 1100	1/4 / 1100	1/4 / 1100
Fan diameter (In.)	22	22	22	22	22	22
Nominal Airflow (cfm)	6,000	6,000	9,000	9,000	12,000	12,000
Watts (total)	610	610	970	970	1150	1150
Piping Connections						
Qty / Suction (In. ODS)	2 / 1 1/8	2 / 1 3/8	1 / 1 3/8	2 / 1 3/8	1 / 1 5/8	2 / 1 3/8
Qty / Liquid (In. ODS)	2 / 3/8	2 / 1/2	1 / 5/8	2 / 1/2	1 / 5/8	2 / 1/2

40RUA PHYSICAL DATA

SIZE	07	08	12	14	16	25	28	30
NOMINAL TONNAGE	6	7.5	10	12.5	15	20	25	30
Refrigerant								
Refrigerant Type	Puron® R-410A							
Shipping Charge (lbs)	Nitrogen purge							
Metering Device	TXV							
Operating Charge (lb)	3.0	3.0	1.5/1.5	2.0/2.0	2.5/2.5	3.5/3.5	4.5/4.5	5.0/5.0
Direct-Expansion Coil								
Max Working Pressure (psig)	650							
Material	Al/Cu							
Coil Type	RTPF							
Face Area (sq ft)	6.67	8.33	10.01	13.25	17.67	19.88	24.86	29.83
No. of Circuits per Split	12	15	9	12	16	18	20	24
Row/Fins per in.	4/15	4/15	4/15	4/15	4/15	4/15	4/15	4/15

Physical data (cont)



38AUZ PIPING RECOMMENDATIONS (SINGLE-CIRCUIT)

MODEL & NOMINAL CAPACITY	LINEAR LINE (FT)	0 - 25		25 - 50		50 - 75		75 - 100		100 - 125		125 - 150		150 - 175		175 - 200		
	EQUIV. LINE (FT)	0 - 38		38 - 75		75 - 113		113 - 150		150 - 188		188 - 225		225 - 263		263 - 300		
38AUZ*07 TC = 68.5 SC = 5.57F	Liquid Line size	3/8"	3/8"	1/2"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"
	Liquid PD (F)	2.0	4.0	0.7	1.1	0.3	1.4	0.4	1.8	0.5	2.1	0.6	2.5	0.7	2.8	0.8		
	Max Lift	18	7	34	31	39	44	57	41	57	35	54	31	53	27	52		
	Max Lift PD (F)	3.5	4.6	3.5	3.5	3.5	5.0	5.0	5.0	5.0	4.9	5.0	5.0	5.0	5.0	5.0		
	Suction Line size	7/8"	7/8"	1 1/8"	7/8"	1 1/8"	7/8"	1 1/8"	7/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	
Suction Ln PD(F)	0.9	1.8	0.5	2.7	0.8	3.6	1.0	4.5	1.3	1.6		1.8		2.1				
Charge	10.8	11.8	13.7	15.2	18.5	16.9	21.3	18.7	24.2	21.4	27.1	23.4	30.0	25.3	32.8			
#/TR	1.90	2.07	2.41	2.67	3.25	2.97	3.74	3.28	4.25	3.8	4.75	4.1	5.26	4.4	5.75			
38AUZ(A,B)08 TC = 91.1 SC = 11.8F	Liquid Line size	1/2"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"
	Liquid PD (F)	0.6	1.3	0.3	1.9	0.5	2.5	0.7	3.2	0.9	3.8	1.0	4.4	1.2	5.1	1.4		
	Max Lift	25	50	50	75	75	100	100	97	97	90	90	82	121	74	119		
	Max Lift PD (F)	2.7	5.4	4.5	8.1	6.7	10.8	9.0	11.2	8.9	11.2	8.5	11.2	11.2	11.2	11.2		
	Suction Line Size	7/8"	7/8"	1 1/8"	7/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"
Suction Ln PD(F)	1.5	3.1	0.8	4.6	1.2	1.6		2.1	0.7	2.5	0.8	2.9	1.0	3.3	1.1			
Charge	13.6	15.4	16.1	17.2	20.5	19.5	23.3	21.5	27.1	23.4	30.2	25.4	33.2	27.3	36.3			
#/TR	1.78	2.02	2.11	2.25	2.68	2.55	3.05	2.81	3.54	3.06	3.95	3.32	4.34	3.57	4.75			
38AUZ(D,E)08 TC = 92.0 SC = 11.3F	Liquid Line size	1/2"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"
	Liquid PD (F)	0.6	1.3	0.3	1.9	0.5	2.5	0.7	3.2	0.9	3.8	1.0	4.4	1.2	5.1	1.4		
	Max Lift	25	50	50	75	75	100	100	97	97	90	90	82	121	74	119		
	Max Lift PD (F)	2.7	5.4	4.5	8.1	6.7	10.8	9.0	11.2	8.9	11.2	8.5	11.2	11.2	11.2	11.2		
	Suction Line Size	7/8"	7/8"	1 1/8"	7/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"
Suction Ln PD(F)	1.5	3.1	0.8	4.6	1.2	1.6		2.1	0.7	2.5	0.8	2.9	1.0	3.3	1.1			
Charge	15.6	19.0	19.7	20.8	24.1	23.1	26.9	25.1	30.7	26.0	32.8	27.0	34.8	27.9	37.1			
#/TR	2.08	2.53	2.63	2.77	3.21	3.08	3.59	3.35	4.09	3.47	4.37	3.60	4.64	3.73	4.95			
38AUZ*12 TC 113.1 SC 7.1F	Liquid Line size	1/2"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"		
	Liquid PD (F)	0.9	1.9	0.5	2.8	0.8	3.8	1.0	4.7	1.3	5.7	1.6	1.8		2.1			
	Max Lift	25	40	50	28	54	34	68	22	65	11	63	59		55			
	Max Lift PD (F)	2.9	5.0	4.5	5.0	5.0	6.5	6.4	6.5	6.4	6.5	6.5	6.4		6.4			
	Suction Line size	7/8"	7/8"	1 1/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"
Suction Ln PD(F)	2.4	4.8	1.2	1.8	0.6	2.4	0.9	3.1	1.1	3.7	1.3	4.3	1.5	4.9	1.7			
Charge	15.7	17.5	19.7	19.8	23.1	21.6	26.1	23.6	29.2	25.5	32.3	34.1	35.3	36.9	38.4			
#/TR	1.67	1.86	2.09	2.10	2.45	2.29	2.77	2.50	3.10	2.71	3.43	3.62	3.75	3.92	4.08			
38AUZ*14 TC 146.1 SC 3.9F	Liquid Line size	5/8"	5/8"	3/4"	5/8"	3/4"	5/8"	3/4"	5/8"	3/4"	5/8"	3/4"	5/8"	3/4"	5/8"	3/4"	7/8"	
	Liquid PD (F)	0.4	0.8	0.4	1.2	0.6	1.6	0.8	2.0	1.1	2.4	1.1	2.8	1.5	1.7	0.6		
	Max Lift	23	16	23	10	18	28	38	21	36	14	35	9	30	25	43		
	Max Lift PD (F)	1.8	1.84	1.84	1.8	1.8	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3		
	Suction Line size	1 1/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"
Suction Ln PD(F) (Cap Red)	1.1	2.2	0.8	3.3 (-2.3%)	1.2	1.6		2.0	0.8	2.4 (-0.7%)	1.0	2.8 (-1.4%)	1.2	3.2 (-2.1%)	1.3			
Charge	31.8	34.7	37.6	37.6	41.8	41.1	46.1	44.2	51.6	47.3	56.1	50.3	60.6	63.4	76.9			
#/TR	2.62	2.86	3.09	3.09	3.44	3.38	3.79	3.64	4.24	3.89	4.61	4.14	4.98	5.21	6.32			
38AUZ*16 TC 185.7 SC 18.4F	Liquid Line size	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	3/4"	5/8"	3/4"		
	Liquid PD (F)	0.7	1.3	2.0	2.7	3.4	4.0	4.7	5.7	6.4	7.1	7.8	8.5	9.2	9.9	10.6		
	Max Lift	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375		
	Max Lift PD (F)	2.8	5.65	8.5	11.3	14.1	16.9	19.7	22.5	25.3	28.1	30.9	33.7	36.5	39.3	42.1		
	Suction Line size	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"
Suction Ln PD(F) (Cap Red)	1.4	1.0	1.5	2.0	2.5 (-0.9%)	3.0 (-1.8%)	3.5 (-2.7%)	4.0 (-3.6%)	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0		
Charge	35.1	38.1	41.2	44.2	47.3	50.4	53.4	56.4	59.4	62.4	65.4	68.4	71.4	74.4	77.4			
#/TR	2.9	3.11	3.36	3.61	3.86	4.11	4.36	4.61	4.86	5.11	5.36	5.61	5.86	6.11	6.36			
38AUZ*25 TC 233.3 SC 13.0F	Liquid Line size	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	3/4"	5/8"	3/4"		
	Liquid PD (F)	1.1	2.1	3.2	4.3	5.4	6.4	7.5	8.5	9.5	10.5	11.5	12.5	13.5	14.5	15.5		
	Max Lift	25	50	93	98	116	116	134	134	152	152	170	170	188	188	206		
	Max Lift PD (F)	3.2	6.4	9.6	12.5	15.4	18.3	21.2	24.1	27.0	29.9	32.8	35.7	38.6	41.5	44.4		
	Suction Line size	1 3/8"	1 3/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"	1 3/8"	1 5/8"	1 3/8"
Suction Ln PD(F) (Cap Red)	0.8	1.6	2.4 (-0.8%)	3.2 (-2.2%)	4.0 (-3.6%)	4.8	5.6	6.4	7.2	8.0	8.8	9.6	10.4	11.2	12.0	12.8		
Charge	31.1	34.1	37.2	37.9	40.2	41.1	43.3	43.3	45.6	45.6	47.9	47.9	50.2	50.2	52.5			
#/TR	2.52	2.77	3.02	3.07	3.26	3.34	3.51	3.51	3.69	3.69	3.87	3.87	4.05	4.05	4.23			

See Legend on page 9.



38AUD PIPING RECOMMENDATIONS (DUAL-CIRCUIT)

MODEL & NOMINAL CAPACITY	Linear Line (ft)	0 - 25	25 - 50		50 - 75		75 - 100		100 - 125		125 - 150		150 - 175		175 - 200	
	Equiv. Line (ft)	0 - 38	38 - 75		75 - 113		113 - 150		150 - 188		188 - 225		225 - 263		263 - 300	
38AUD12	Liquid Line Size	3/8"	3/8"		3/8"		3/8"	1/2"	3/8"	1/2"	3/8"	1/2"	1/2"	5/8"	1/2"	5/8"
	Liquid PD (F)	1.4	2.7		5.5		5.5	0.9	6.9	1.1	8.2	1.4	1.6	0.5	1.8	0.5
	Max Lift	25	50		75		82	100	66	125	49	133	130	144	128	144
	Max Lift PD (F)	3.4	6.8		10.2		12.1	9.0	12.1	11.2	12.1	12.1	12.1	12.1	12.1	12.1
	Suction Line size	3/4"	7/8"		7/8"		7/8"	1 1/8"	7/8"	1 1/8"	1 1/8"		1 1/8"		1 1/8"	
	Suction Ln PD (F) (Cap Red)	1.4	1.2		1.8		2.5 (-0.8%)	0.8	3.1 (-1.9%)	0.9	1.1		1.3		1.5	
	Charge #/TR	9.0 0.73	10.0 0.81		11.0 0.89		12.1 0.97	15.7 1.27	13.1 1.05	17.7 1.42	14.9 1.20	19.6 1.58	21.5 1.74	28.2 2.27	23.5 1.89	31.0 2.50
38AUD14	Liquid Line Size	3/8"	3/8"		3/8"		3/8"	1/2"	3/8"	1/2"	1/2"		1/2"	5/8"	1/2"	5/8"
	Liquid PD (F)	2.1	4.1		6.2		8.2	1.5	10.3	1.8	2.2		2.6	0.7	2.9	0.8
	Max Lift	128	50		75		69	155	42	125	145		140	163	135	162
	Max Lift PD (F)	4.0	8.1		12.1		13.6	9.4	13.6	11.7	13.6		13.6	13.6	13.6	13.6
	Suction Line Size	7/8"	7/8"		7/8"	1 1/8"	1 1/8"		1 1/8"		1 1/8"		1 1/8"		1 1/8"	
	Suction Ln PD (F) (Cap Red)	1.0	1.9		2.9 (-1.5%)	0.8	1.1		1.4		1.6		1.9		2.2 (-0.3%)	0.7
	Charge #/TR	17.0 1.36	18.0 1.44		19.0 1.52	19.5 1.56	20.6 1.65	23.7 1.90	21.8 1.74	25.7 2.05	27.6 2.21		29.5 2.36	36.2 2.89	31.5 2.52	39.0 3.12
38AUD16	Liquid Line Size	3/8"	3/8"		3/8"	1/2"	1/2"		1/2"		1/2"	5/8"	1/2"	5/8"	1/2"	5/8"
	Liquid PD (F)	3.4	6.9		10.3	1.9	2.6		3.2		3.9	1.0	4.5	1.2	5.1	1.4
	Max Lift	25	50		32	75	144		125		127	150	121	159	112	157
	Max Lift PD (F)	5.5	11.1		13.0	8.2	10.9		13.7		14.5	13.6	14.5	14.5	14.5	14.5
	Suction Line Size	7/8"	7/8"	1 1/8"	1 1/8"		1 1/8"		1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	
	Suction Ln PD (F) (Cap Red)	1.5	3.1 (-1.9%)	0.8	1.2		1.6		2 (-0.1%)	0.7	2.5 (-0.8%)	0.8	2.9 (-1.5%)	1.0	3.3 (-2.2%)	1.1
	Charge #/TR	17.0 1.35	18.0 1.43	18.3 1.46	19.5 1.55	21.8 1.73	23.7 1.89		25.7 2.04	26.6 2.11	27.6 2.19	34.4 2.73	29.5 2.35	37.4 2.97	31.5 2.50	40.5 3.22
38AUD25	Liquid Line Size	3/8"	1/2"		1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	1/2"	5/8"	5/8"		5/8"	3/4"
	Liquid PD (F)	5.6	2.2		3.3	0.9	4.3	1.2	5.4	1.5	6.5	1.8	2.1		2.4	1.3
	Max Lift	25	50		64	75	70	108	55	104	42	100	97		92	107
	Max Lift PD (F)	7.7	6.3		8.5	7.1	10.0	9.4	9.9	10.0	10.0	10.0	10.0		9.9	10.0
	Suction Line Size	1 1/8"	1 1/8"		1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 3/8"		1 3/8"		1 3/8"	
	Suction Ln PD (F) (Cap Red)	0.7	1.3		2.0	0.7	2.7 (-1.2%)	1.0	3.4 (-2.4%)	1.2	1.4		1.7		1.9	
	Charge #/TR	15.2 1.20	17.9 1.41		19.8 1.56	23.2 1.83	21.7 1.72	26.2 2.07	23.7 1.87	29.3 2.31	26.7 2.11	32.4 2.56	35.4 2.80		38.5 3.04	48.5 3.83

LEGEND

- #/TR — Charge to unit capacity ratio, lbs per ton (at 45°F SST, 95°F ODA)
- Cap Red — Capacity reduction caused by suction line pressure drop GT 2°F
- Liquid PD (F) — Liquid line pressure drop, saturated temperature, °F
- Max Lift — Maximum liquid lift (Indoor unit ABOVE outdoor unit only), at maximum permitted pressure drop.
- Max Lift PD (F) — Pressure drop including Maximum liquid lift value
- SC — Sub-cooling, °F (at liquid line valve)
- Suction Line PD (F) — Suction Line Pressure Drop, Saturated Temperature, °F
- TC — Total Capacity, MBH (at 45°F Saturated Suction, 95°F Outdoor Air Temp)

38AUZ07-14, 38AUD12-14 CONDENSING UNIT WEIGHTS AND CLEARANCES

UNITED FILTER LOGISTICS
 P.O. BOX 4009
 11015 SPENCER RD.
 CHARLOTTE, NC 28217
 (704) 544-1234
 WWW.CARRIER.COM

THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS LOANED TO YOU FOR YOUR USE ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. PERMISSION TO REPRODUCE THIS DOCUMENT IS GRANTED BY CARRIER CORPORATION ON THE CONDITION THAT THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND CLEARANCES FROM THE APPROPRIATE AGENCIES.

UNIT	ELECTRICAL CHARACTERISTICS	STD. UNIT WT.		CORNER A		CORNER B		CORNER C		CORNER D		CENTER OF GRAVITY			UNIT HEIGHT			
		LSB.	KG.	LSB.	KG.	LSB.	KG.	LSB.	KG.	LSB.	KG.	X	Y	Z	H	H		
38AUZ-07 (MCRX)	208/230-3-60,460-3-60,575-3-60	328	148	128	58	68	31	62	28	70	32	21	1533.41	19	1482.61	13	1330.21	42-3/8 (1076.0)
38AUZ-08 (MCRX)	208/230-3-60,460-3-60,575-3-60	353	160	138	63	72	33	65	29	78	35	19	1482.61	23	1584.21	13	1330.21	42-3/8 (1076.0)
38AUZ-12 (MCRX)	208/230-3-60,460-3-60,575-3-60	418	190	165	75	85	39	78	35	90	41	23	1584.21	20	1508.01	15	1381.01	50-3/8 (1279.2)
38AUZ-14 (MCRX)	208/230-3-60,460-3-60,575-3-60	437	196	162	73	82	37	92	42	95	43	19	1482.61	23	1584.21	15	1381.01	50-3/8 (1279.2)
38AUD-12 (MCRX)	208/230-3-60,460-3-60,575-3-60	499	226	193	88	111	50	72	38	123	56	20	1584.21	23	1584.21	15	1381.01	50-3/8 (1279.2)
38AUD-14 (MCRX)	208/230-3-60,460-3-60,575-3-60	505	229	190	86	88	40	76	34	151	88	20	1584.21	24	1609.61	15	1381.01	50-3/8 (1279.2)
38AUZ-07 (RTPF)	208/230-3-60,460-3-60,575-3-60	389	176	141	64	96	44	62	28	91	41	18	1457.21	24	1609.61	21	1533.41	42-3/8 (1076.0)
38AUD(A,B)08 (RTPF)	208/230-3-60,460-3-60,575-3-60	391	177	142	64	96	44	62	28	91	41	18	1457.21	24	1609.61	21	1533.41	42-3/8 (1076.0)
38AUZ-12 (RTPF)	208/230-3-60,460-3-60,575-3-60	430	195	142	64	96	44	76	34	111	50	18	1457.21	24	1609.61	21	1533.41	42-3/8 (1076.0)
38AUZ-14 (RTPF)	208/230-3-60,460-3-60,575-3-60	499	222	177	80	120	54	76	35	114	52	18	1457.21	24	1609.61	21	1533.41	42-3/8 (1076.0)
38AUD-12 (RTPF)	208/230-3-60,460-3-60,575-3-60	598	271	195	88	142	64	110	50	151	68	20	1508.01	25	1635.01	24	1609.61	50-3/8 (1279.2)
38AUD-14 (RTPF)	208/230-3-60,460-3-60,575-3-60	516	234	185	84	117	53	83	38	131	59	19	1482.61	23	1584.21	24	1609.61	50-3/8 (1279.2)
38AUD-07 (RTPF)	208/230-3-60,460-3-60,575-3-60	654	297	214	97	155	70	120	54	165	75	20	1508.01	25	1635.01	24	1609.61	50-3/8 (1279.2)
38AUD(A,B)08 (RTPF)	208/230-3-60,460-3-60,575-3-60	444	201	134	61	97	44	90	41	123	56	22	1558.81	25	1635.01	13	1330.21	42-3/8 (1076.0)
38AUD(A,B)08 (RTPF)	208/230-3-60,460-3-60,575-3-60	483	219	162	74	110	50	85	39	135	57	20	1508.01	24	1609.61	21	1533.41	42-3/8 (1076.0)
38AUD(A,B)08 (RTPF)	208/230-3-60,460-3-60,575-3-60	523	237	174	79	118	54	96	44	135	61	21	1533.41	24	1609.61	23	1584.21	50-3/8 (1279.2)
38AUD-12 (RTPF)	208/230-3-60,460-3-60,575-3-60	575	261	186	84	126	57	106	48	157	71	21	1533.41	24	1609.61	23	1584.21	50-3/8 (1279.2)

- NOTES:**
- MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY PREVAIL):
 - BOTTOM TO COMBUSTIBLE SURFACES: 0 INCHES.
 - OUTDOOR COIL FOR PROPER AIR FLOW: 36 INCHES.
 - ONE SIDE, 12 INCHES THE OTHER. THE SIDE GETTING THE GREATER CLEARANCE IS OPTIONAL. STANDARD CLEARANCES ON REMAINING TWO SIDES.
 - OVERHEAD: 60 INCHES. TO ASSURE PROPER OUTDOOR FAN OPERATION.
 - BETWEEN UNITS: CONTROL BOX SIDE, 42 INCHES PER NEC.
 - BETWEEN UNIT AND UNGROUNDED SURFACES: CONTROL BOX SIDE 36 INCHES PER NEC.
 - BETWEEN UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES: CONTROL BOX SIDE, 42 INCHES PER NEC.
 - WITH EXCEPTION OF THE CLEARANCE FOR THE OUTDOOR COIL AS STATED IN NOTE 1B, A REMOVABLE FENCE OR BARRICADE REQUIRES NO CLEARANCE.
 - UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM WOOD OR CLASS A, B OR C ROOF COVERING MATERIAL.

DATE	11/10/14	DATE	10/20/11	DATE	38AUZ / 38AUD / 38AUD - 07/08/12/14	REV	H
DRAWN BY				38AU500349			

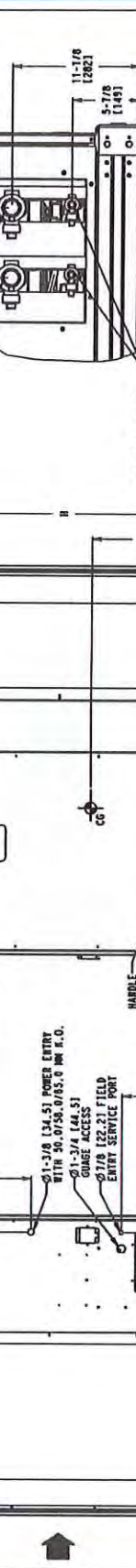
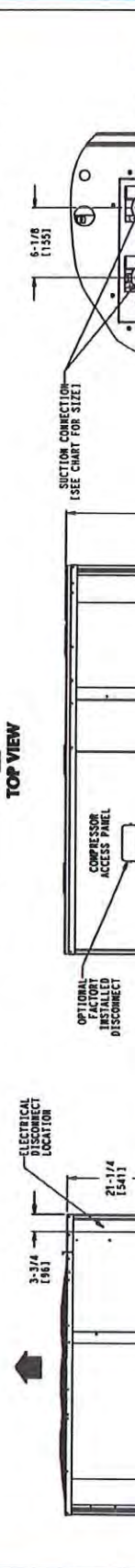
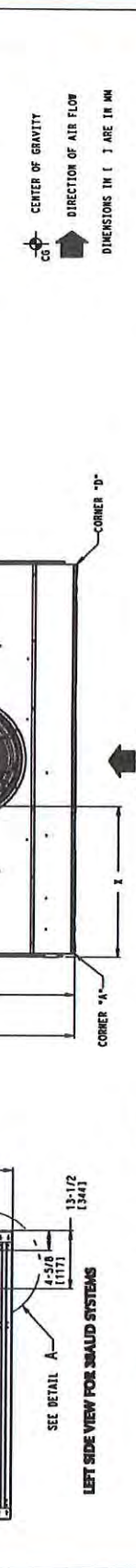
38AUZ25, 38AUD25 CONDENSING UNIT

UNIT	ELECTRICAL CHARACTERISTICS		STD. UNIT WT.		CORNER A		CORNER B		CORNER C		CORNER D		CENTER OF GRAVITY		UNIT HEIGHT					
	LEB.	KEB.	LEB.	KEB.	LEB.	KEB.	LEB.	KEB.	LEB.	KEB.	LEB.	KEB.	Y	Z	H	N				
38AUZ25 (RTFF)	208/230-3-60	480-3-60	375-3-60	978	444	380	163	180	85	147	67	283	128	23	184.2	21	17	1431.81	58-3/8	11279.21
38AUD25 (RTFF)	208/230-3-60	480-3-60	375-3-60	978	444	380	163	180	85	147	67	283	128	23	184.2	21	17	1431.81	58-3/8	11279.21

THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS LOANED TO YOU FOR YOUR INFORMATION ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN CONSENT OF CARRIER CORPORATION.

NOTES:
 1. MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY PREVAIL):
 A. BOTTOM TO COMBUSTIBLE SURFACES: 0 INCHES.
 B. ONE SIDE TO COMBUSTIBLE SURFACES: 12 INCHES.
 C. OVERHEAD: 60 INCHES. TO ASSURE PROPER OUTDOOR FAN OPERATION.
 D. BETWEEN UNITS: CONTROL BOX SIDE, 42 INCHES PER REC. SIDE; 36 INCHES PER REC. CONCRETE WALLS AND OTHER GROUNDED SURFACES; CONTROL BOX SIDE, 42 INCHES PER REC. WITH EXCEPTION OF THE CLEARANCE FOR THE OUTDOOR COIL AS STATED IN NOTE 1B. A REMOVABLE FENCE UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM WOOD OR CLASS A, B OR C ROOF COVERING MATERIAL.

UNIT	SUCTION	LIQUID	OTT
38AUZ25	1-5/8 (41.3)	5/8 (15.9)	1 EA
38AUD25	1-3/8 (34.9)	1/2 (12.7)	2 EA



DIMENSIONS IN () ARE IN MM

DATE	11/17/10	DIFFERENCE	08/04/10	38AUZ - 38AUD CONDENSING UNIT	38AU500370	REV	E
------	----------	------------	----------	-------------------------------	------------	-----	---

Base unit dimensions (cont)



40RUA07-12, 40RUQ07-12, 40RUS08-12 FAN COIL UNIT

UNIT WEIGHT (6/175)

40RUA-07	395 lbs (181 kg)
40RUA-09	404 lbs (183 kg)
40RUA-12	425 lbs (193 kg)
40RUQ-07	384 lbs (173 kg)
40RUQ-09	395 lbs (175 kg)
40RUQ-12	427 lbs (194 kg)
40RUS-09	390 lbs (177 kg)
40RUS-10	391 lbs (177 kg)
40RUS-12	391 lbs (177 kg)

UNITED TECHNOLOGIES STRONG BY CARRIER

P.O. BOX 488
15221

THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION. DISSEMINATION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE A COMMITMENT OF PERFORMANCE OR ACCEPTANCE OF CONTRACT.

THIS DOCUMENT WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT.

NOTES:

1. DIMENSIONS IN () ARE IN MILLIMETERS.
2. DIRECTIONS OF AIRFLOW.
3. RECOMMENDED CLEARANCE:
FRONT: 2' 1 6/8" (533.5 mm)
RIGHT SIDE: 2' 1 6/8" (533.5 mm)
LEFT SIDE: 2' 1 6/8" (533.5 mm)
LOCAL CODES OR JURISDICTION MAY PREVAIL.
4. LIQUID PIPING NOT SUPPLIED BY CARRIER.
5. DUCT FLANGE IS FACTORY SUPPLIED AND FIELD INSTALLED.

ACCESSORY SEE DRAWING

DISCHARGE PLENUM	40RMS0956
ECONOMIZER	40RMS0959
STEAM COIL	40RMS0959
HOT WATER COIL	40RMS0959
RETURN AIR GRILLE	40RMS0956
DYEDRAG SUSPENSION	40RMS0956
SUBBASE	40RMS0956
ELECTRIC HEAT	40RMS1002

UNRELEASED DATA

TOP

ALTERNATE RETURN AIR INTAKE

ACCESS FOR CONTROLS MOTOR AND BELT

1'-5 1/4" (392.2)

3 11/16" (299.4)

3'-6 3/4" (1085.9)

1'-6 3/8" (406.4)

1'-11/16" (306.6)

1/2" (12.7) TYP

ACCESS FOR CONTROLS MOTOR AND BELT

1'-6 3/8" (406.4)

DUCT FLANGE (SEE NOTE 5)

1'-11/16" (306.6)

3'-6 3/4" (1085.9)

4'-11" (1244.1)

3'-6 3/4" (1085.9)

3 1/8" (79.4)

6 3/4" (171.3)

1'-6 1/2" (406.5)

RETURN AIR INTAKE

ALTERNATE DRAIN LOCATION

1'-4 1/16" (407.3)

1 5/8" (41.4)

DUCT FLANGE (SEE NOTE 5)

ALTERNATE ENTRANCE FOR POWER WIRING

ALTERNATE ENTRANCE FOR COIL CONNECTIONS

CONDENSATE DRAIN ACCEPTS 1" NOMINAL BRASS OR PPG FEMALE FITTING

2'-4 3/16" (593.0)

FRONT

RETURN AIR

2'-5 1/16" (638.1)

1'-6 3/4" (406.5)

1'-11/16" (306.6)

1'-4 1/16" (407.3)

1'-7 1/16" (432.7)

1'-9 3/16" (484.1)

1'-4 1/16" (407.3)

1'-3 1/16" (330.1)

11 1/16" (280.5)

1'-11/16" (306.6)

1'-3/4" DIA. FOR SUCTION CONNECTION (44.5)

1 1/8" (28.6)

1'-6 1/16" (403.3)

7/8" DIA (POWER ENTRY) (22.2)

1 1/8" DIA FOR LIQUID CONNECTION (28.6)

3/4" DIA FOR SUCTION CONNECTION (44.5)

7/8" DIA FOR TVY BULB CONNECTION (22.2)

3'-8 7/16" (1128.7)

3'-6 15/16" (1090.6)

4'-6 1/16" (1423.5)

ALTERNATE RETURN AIR

1 1/8" DIA. FOR LIQUID CONNECTION (44.5)

RIGHT SIDE

DATE

01/23/12

SUPERCESS

04/21/10

REV

F

40RUA / Q / S - 07 / 08 / 10 / 12

40RU500024

40RUA14-25, 40RUQ16-25, 40RUS14-25 FAN COIL UNIT

UNITED TECHNOLOGIES CARRIER
P.O. BOX 4899
13221

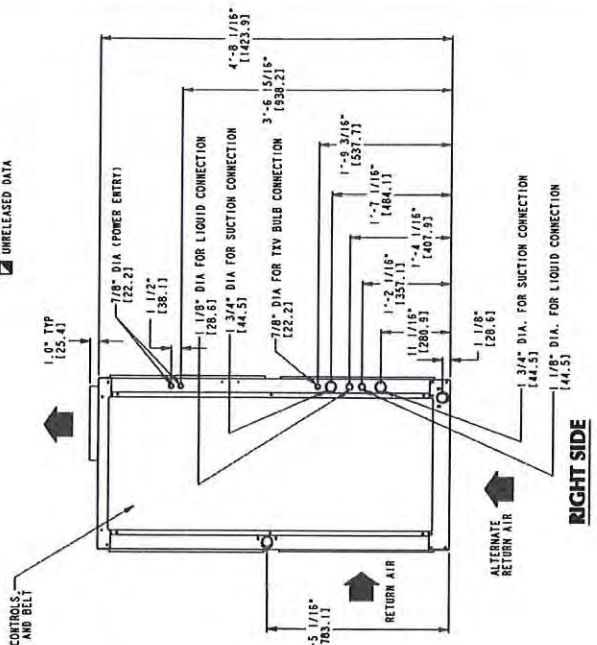
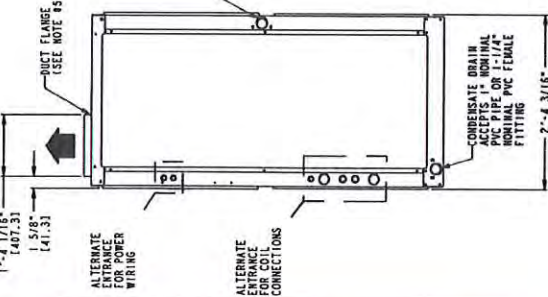
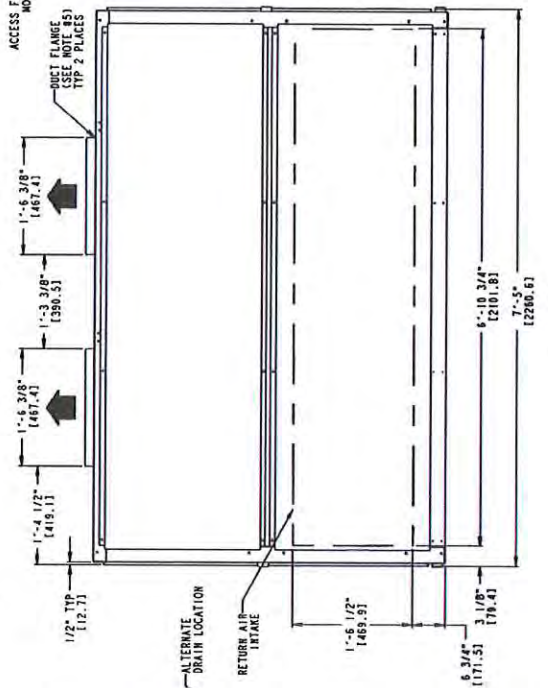
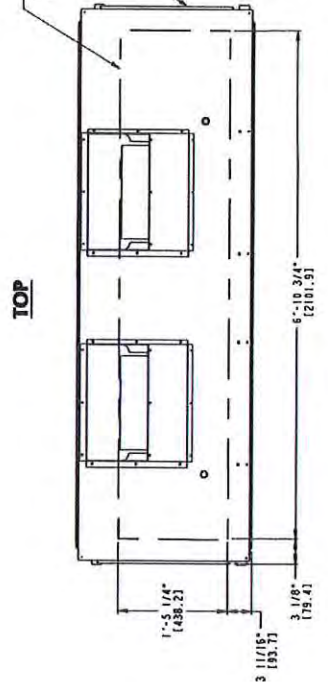
THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS BELIEVED FROM THE EXPRESS CONDITION THAT THE USER SHALL NOT REPRODUCE OR TRANSMIT IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF CARRIER CORPORATION.

UNIT	UNIT WEIGHT (WT/TP)
40RUA-14	685 lbs. (315 kg)
40RUA-16	713 lbs. (323 kg)
40RUA-25	730 lbs. (331 kg)
40RUQ-16	713 lbs. (323 kg)
40RUQ-25	720 lbs. (327 kg)
40RUS-14	661 lbs. (300 kg)
40RUS-16	677 lbs. (307 kg)
40RUS-25	683 lbs. (310 kg)

- NOTES:
1. DIMENSIONS IN () ARE IN MILLIMETERS.
 2. DIRECTIONS OF AIRFLOW.
 3. RECOMMENDED CLEARANCE:
FRONT: 2 (1 6 in. / 152 mm)
REAR: 2 (1 6 in. / 152 mm)
LEFT: 2 (1 6 in. / 152 mm)
RIGHT: 2 (1 6 in. / 152 mm)
 4. LOCAL CODES OR JURISDICTION MAY PREVAIL.
 5. LIQUID PIPING NOT SUPPLIED BY CARRIER.
 6. DUCT FLANGE IS FACTORY SUPPLIED AND FIELD INSTALLED.

ACCESSORY	SEE DRAWING
DISCHARGE PLENUM	40RMS00997
ECONOMIZER	40RMS1000
STEAM COIL	40RMS1000
HOT WATER COIL	40RMS1000
RETURN AIR GRILLE	40RMS00997
OVERHEAD SUSPENSION	40RMS00997
SWIBLAST	40RMS00997
ELECTRIC HEAT	40RMS1002

UNRELEASED DATA



DATE	01/23/12	SUPPERS	40RU A / O / S - 14 / 16 / 25	REV	F
	04/21/10			40RUS00028	

Base unit dimensions (cont)



40RUA28-30, 40RUS28-30 FAN COIL UNIT

UNITED TECHNOLOGIES CORPORATION
 P.O. BOX 400
 YORK, PA 17403-0400
 1-800-451-7271



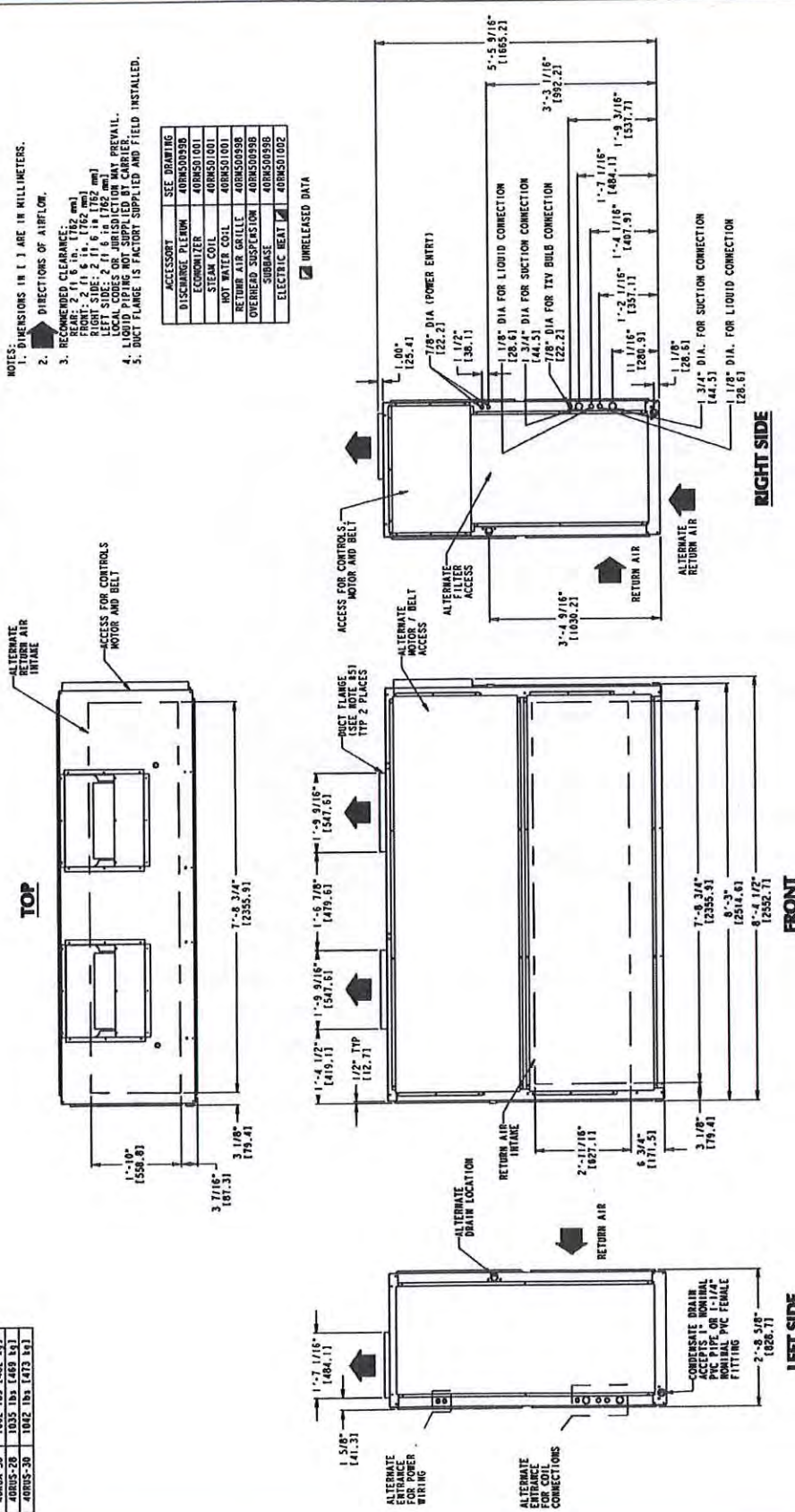
THIS DRAWING IS THE PROPERTY OF CARRIER CORPORATION AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF CARRIER CORPORATION.

UNIT	UNIT WEIGHT (W/TYP)
40RUA-28	1050 lbs (477 kg)
40RUA-30	1062 lbs (482 kg)
40RUS-28	1035 lbs (469 kg)
40RUS-30	1042 lbs (473 kg)

- NOTES:
- DIMENSIONS IN () ARE IN MILLIMETERS.
 - DIRECTIONS OF AIRFLOW.
 - RECOMMENDED CLEARANCE:
 REAR: 2 (1.6 in. / 40.6 mm)
 RIGHT SIDE: 2 (1.6 in. / 40.6 mm)
 LEFT SIDE: 2 (1.6 in. / 40.6 mm)
 ALL CLEARANCES ARE MINIMUMS. ALL CLEARANCES SHOULD BE MAINTAINED THROUGHOUT THE LIFE OF THE UNIT.
 LIQUID PIPING NOT SUPPLIED BY CARRIER. PREWALL.
 DUCT FLANGE IS FACTORY SUPPLIED AND FIELD INSTALLED.

ACCESSORY	SEE DRAWING
DISCHARGE PLENUM	40RHS0030B
ECONOMIZER	40RHS01001
STEAM COIL	40RHS01001
HOT WATER COIL	40RHS01001
RETURN AIR GRILLE	40RHS0030B
OVERHEAD SUSPENSION	40RHS0030B
SUBBASE	40RHS0030B
ELECTRIC HEAT	40RHS01002

UNRELEASED DATA



DATE	SYNOPSIS	SPECIFICATIONS	REV
01/23/12	04/21/10	40RU A / S - 28 / 30	40RUS00068
			E

Options and accessories



38AU/40RUA OPTIONS AND ACCESSORIES

38AUZ/38AUD Factory-Installed Options

E-coated Aluminum-Fin Coils

Have a flexible and durable epoxy coating uniformly applied to all coil surfaces. Unlike brittle phenolic dip and bake coatings, E-coating provides superior protection with unmatched flexibility, edge coverage, metal adhesion, thermal performance, and most importantly, corrosion resistance.

Pre-coated Coils

Provides protection in mild coastal environments.

Staged Air Volume (SAV™) System

Saves energy and installation time by utilizing a Variable Frequency Drive (VFD) to automatically adjust the indoor fan motor speed in sequence with the unit's cooling operation. Per ASHRAE 90.1 2010 standard section 6.4.3.10.b, during the first stage of cooling operation the VFD will adjust the fan motor to provide two-thirds of the total cfm established for the unit. When a call for the second stage of cooling is required, the VFD will allow the total cfm (100%) established for the unit. During the heating mode the VFD will allow total design cfm (100%) operation and during the ventilation mode the VFD will allow operation to two-thirds of total cfm.

Low-Ambient Temperature Kit (MotorMaster® I) (-20°F [-29°C])

Controls outdoor-fan motor operation to maintain the correct head pressure at low outdoor ambient temperatures.

Louvered Hail Guard

Protects coils against damage from flying debris and hail.

Non-Fused Disconnect Switch

Used to remove power locally at the condensing unit. This switch also includes a power lockout capability to protect the service person. This lockout switch saves the service person time and effort because there is no need to access a distant disconnect switch while servicing the unit.

NOTE: Non-fused disconnect switch cannot be used when unit MOCP electrical rating exceeds 80 amps.

38AUZ/D Field-Installed Accessories

Low-Ambient Temperature Kit (MotorMaster I) (-20°F [-29°C])

Controls outdoor-fan motor operation to maintain the correct head pressure at low outdoor ambient temperatures.

Louvered Hail Guard

Protects coils against damage from flying debris and hail.

Condenser Coil Grille

Protects condensing unit coil from impact by large objects and vandalism.

Thermostats

Provide both programmable and non-programmable capability with the new Carrier line of commercial programmable thermostats. The Commercial Electronic thermostats provide 7-day programmable capability for economical applications.

40RUA Factory-Installed Options

ITEM	OPTION*	ACCESSORY†
Alternate Fan Motors	X	
Alternate Drives	X	
CO ₂ Sensors		X
Condensate Drain Trap		X
Discharge Plenum		X
Economizer		X
Electric Heat		X
Hot Water Heating Coils		X
Overhead Suspension Package		X
Prepainted Units	X	
Return Air Grille		X
Steam Heating Coil		X
Subbase		X
Staged Air Volume (SAV)	X	
SAV VFD Display Kit		X

* Factory-Installed option

† Field-Installed accessory

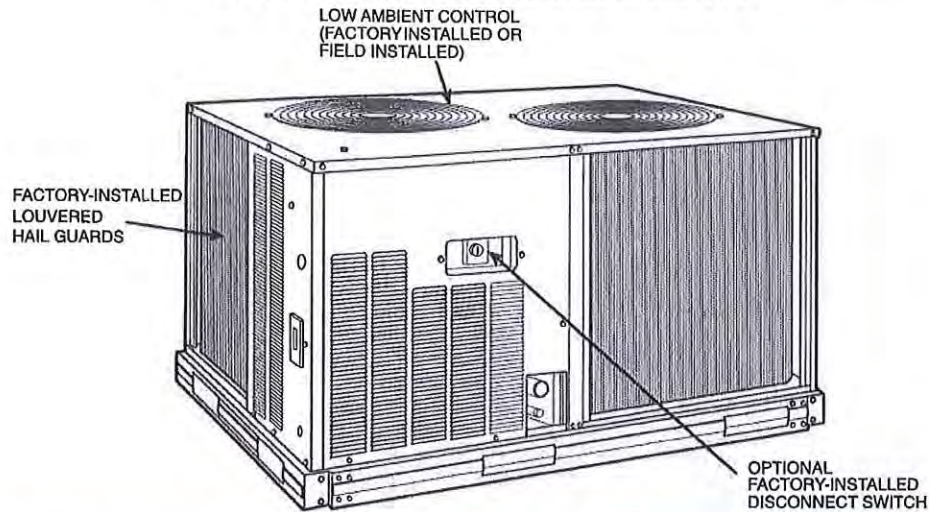
Alternate Fan Motors and Drives

Provide the widest possible range of performance.

Pre-painted Steel Constructed Units

Available from the factory for applications that require painted units. Unit color is American Sterling Gray.

38AUZ/38AUD FACTORY-INSTALLED OPTIONS



40RUA Field-Installed Accessories

Two-Row Hot Water Coils

The $\frac{5}{8}$ -in. diameter copper tubes are mechanically bonded to aluminum plate fins. Coils have non-ferrous headers.

One-Row Steam Coil

1-in. OD copper tube and aluminum fins. The Inner Distributing Tube (IDT) design provides uniform temperatures across the coil face. The IDT steam coils are especially suited to applications where sub-freezing air enters the unit.

Electric resistance heat coils

An open-wire design and are mounted in a rigid frame. Safety cutouts for high temperature conditions are standard.

Economizer

Provides ventilation air and provides “free” cooling if the outside ambient temperature and humidity are suitable. The economizer can also be used in conjunction with Carrier Comfort System thermostats and CO₂ sensors to help meet indoor air quality requirements. The economizer can be used in both vertical and horizontal positions.

Discharge Plenum

Directs the air discharge into the occupied space; integral horizontal and vertical louvers enable redirection of airflow. This accessory is available unpainted or painted.

Return-Air Grille

Provides a protective barrier over the return-air opening and gives a finished appearance to units installed in the occupied space. This accessory is available unpainted or painted.

Subbase

A stable, raised platform and room for condensate drain connection for floor-mounted units. This accessory is available unpainted or painted. Overhead suspension package includes necessary brackets to support units in horizontal installations.

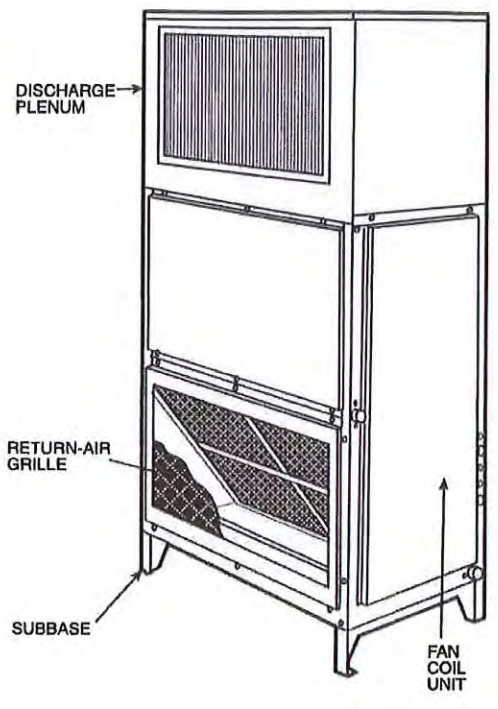
CO₂ Sensors

Used in conjunction with the economizer accessory to help meet indoor air quality requirements. The sensor signals the economizer to open when the CO₂ level in the space exceeds the setpoint. A Carrier Comfort System programmable thermostat can also be used to override the sensor if the outside-air temperature is too high or too low.

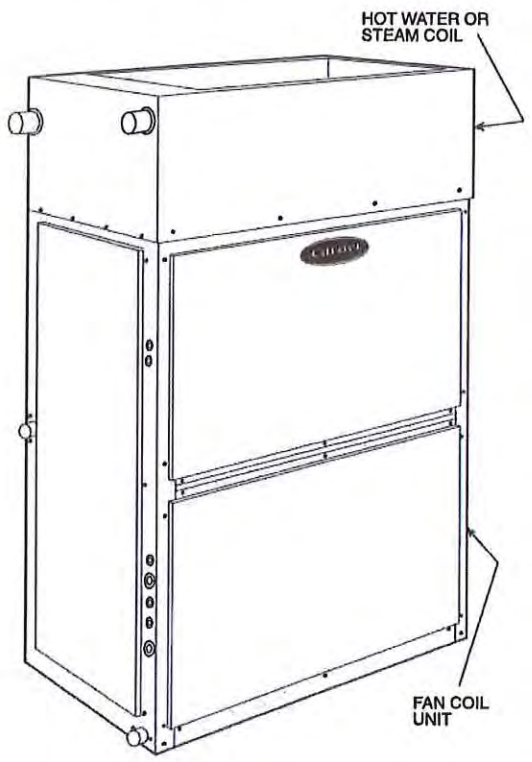
Condensate Drain Trap

Includes an overflow shutoff switch that can be wired to turn off the unit if the trap becomes plugged. The kit also includes a wire harness that can be connected to an alarm if desired. The transparent trap is designed for easy service and maintenance.

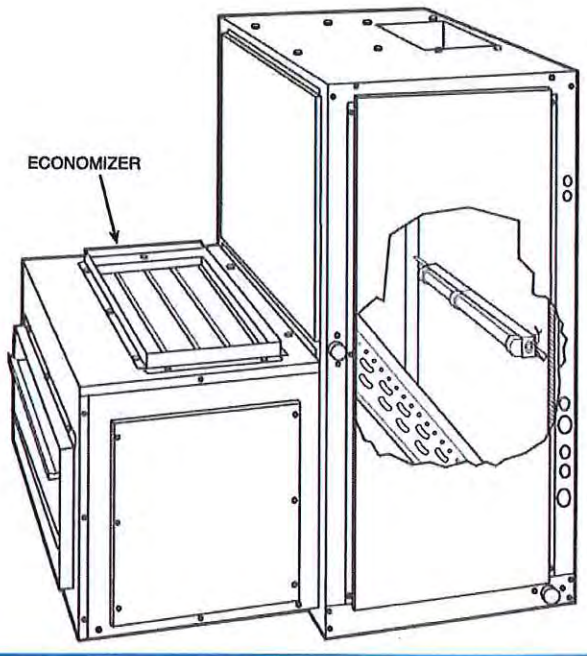
**40RUA WITH DISCHARGE PLENUM
RETURN-AIR GRILLE AND SUBBASE**



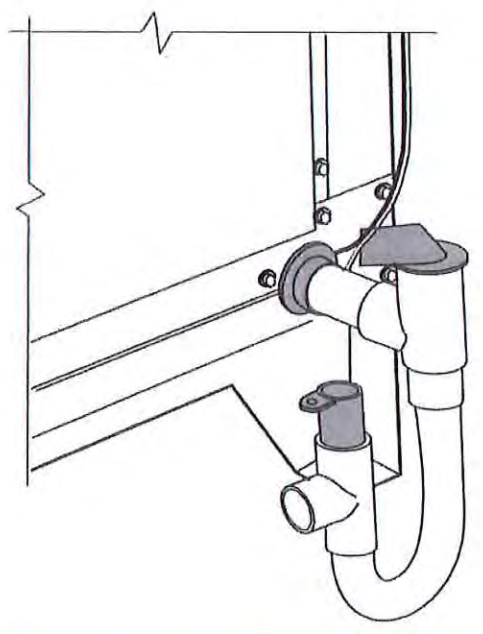
40RUA WITH HOT WATER OR STEAM COIL



40RUA WITH ECONOMIZER



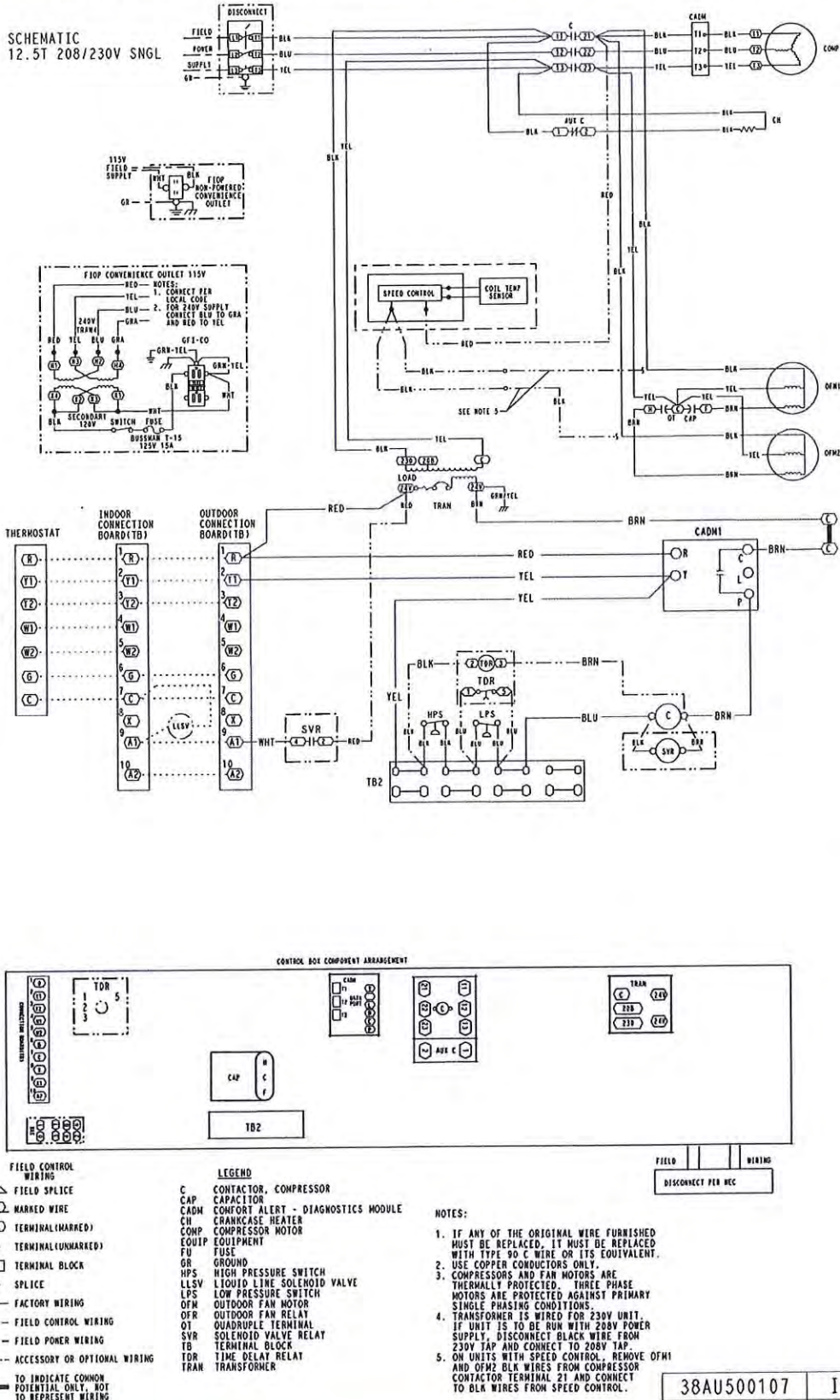
40RUA WITH CONDENSATE TRAP



Typical piping and wiring

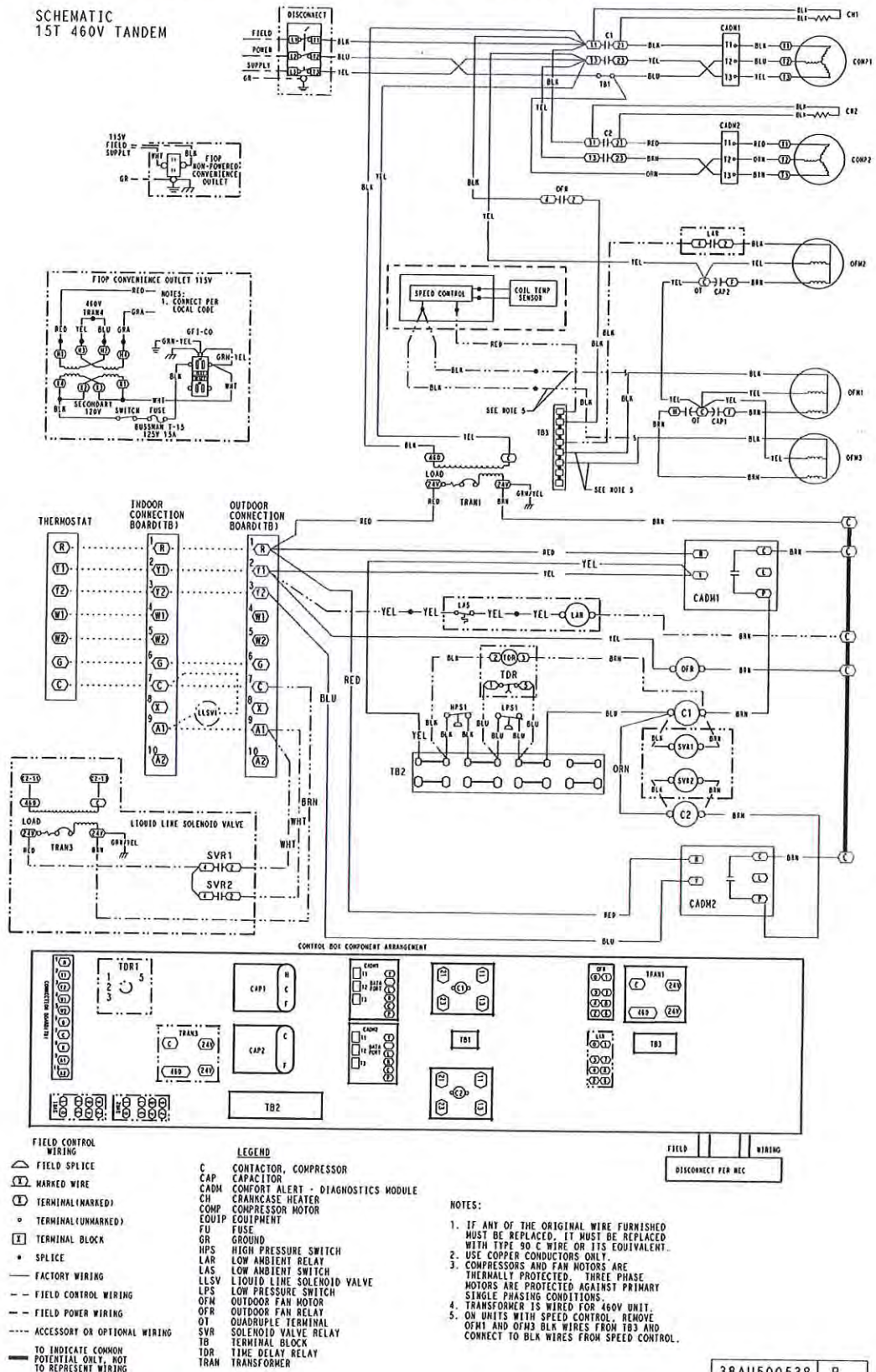


TYPICAL 38AUZ*14 WIRING DIAGRAM (SINGLE CIRCUIT, 208/230-3-60)



TYPICAL 38AUZ*16 WIRING DIAGRAM (SINGLE CIRCUIT, TANDEM COMPRESSOR, 460-3-60)

SCHEMATIC
15T 460V TANDEM



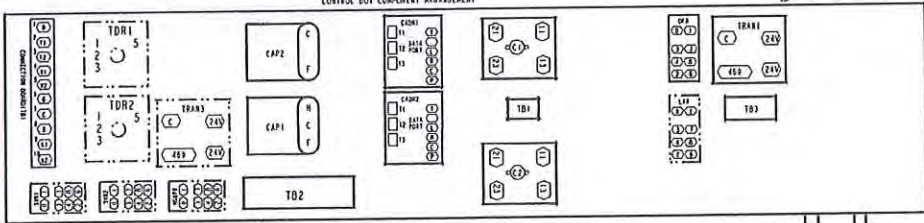
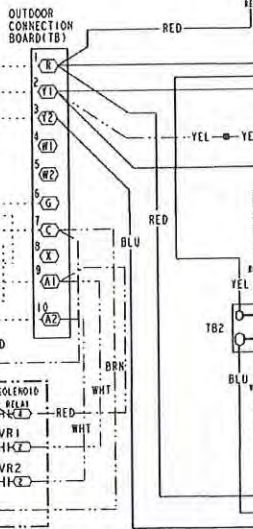
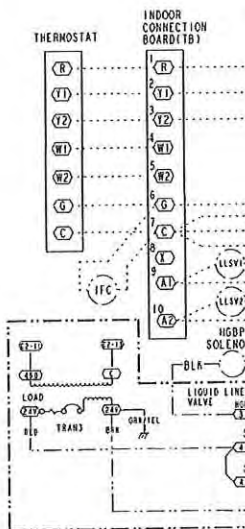
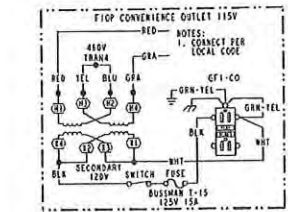
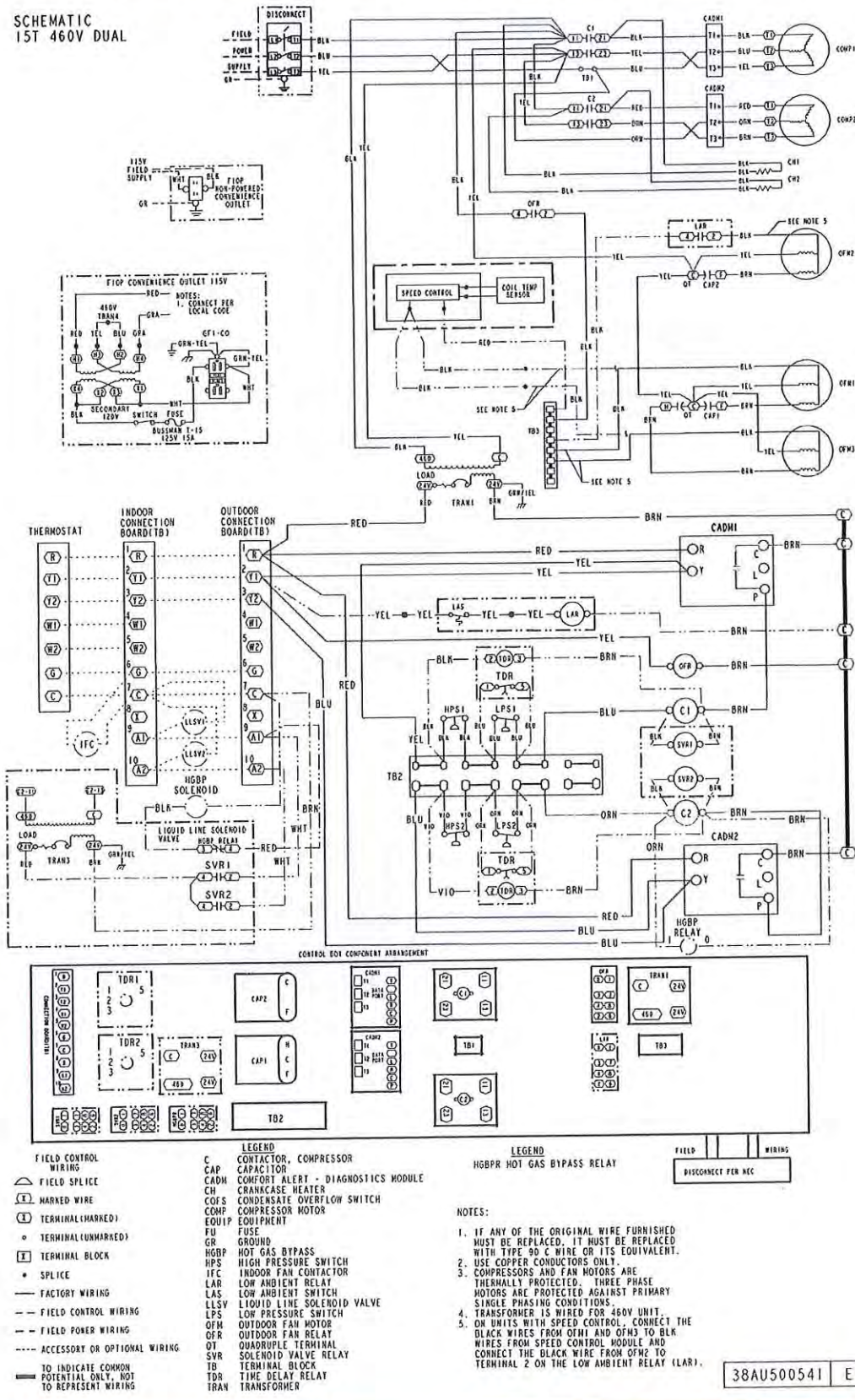
38AU500538 B

Typical piping and wiring (cont)



TYPICAL 38AUD*16 WIRING DIAGRAM (DUAL CIRCUIT, 460-3-60)

SCHEMATIC
15T 460V DUAL

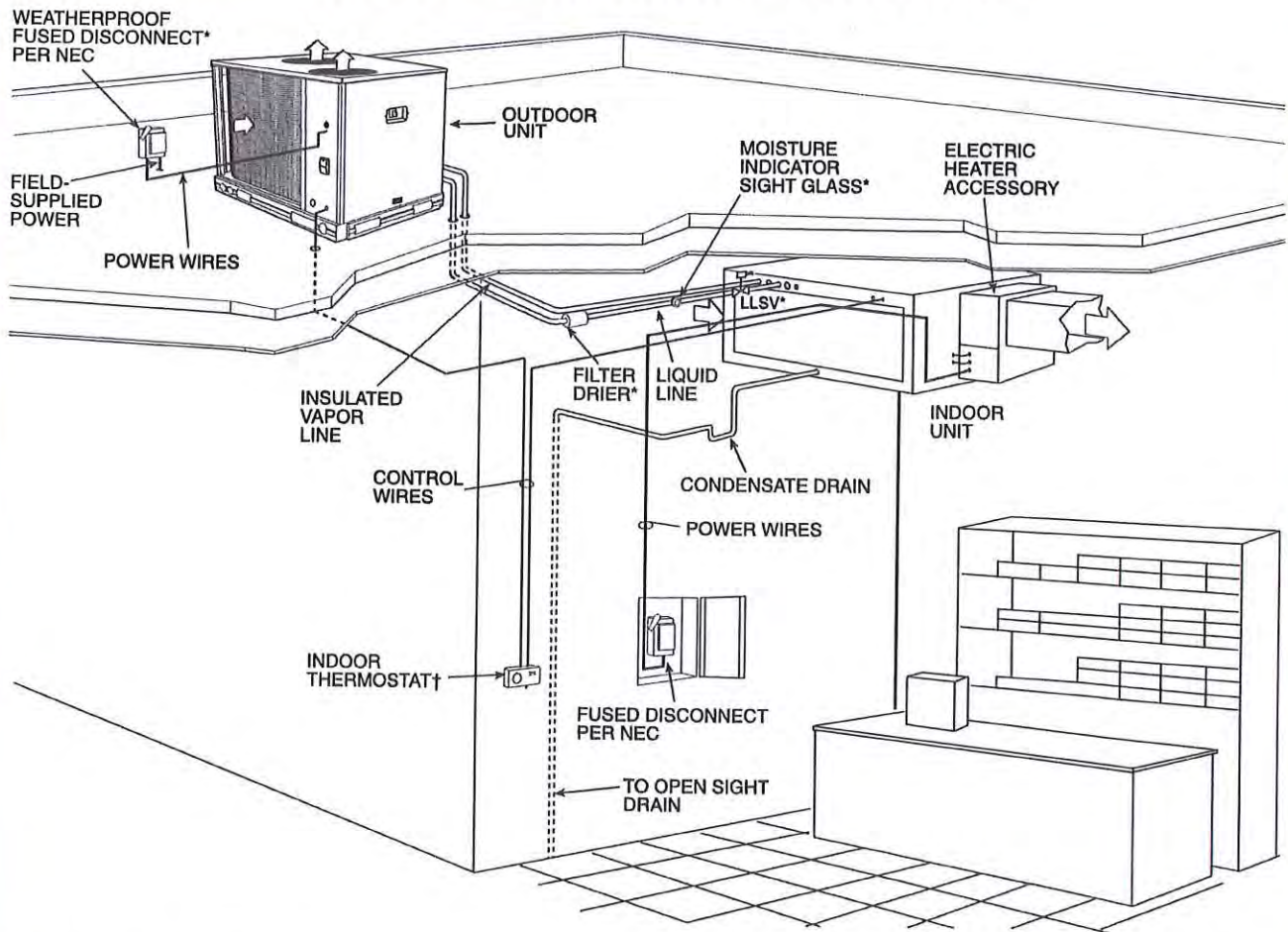


- | | |
|---|--|
| <p>FIELD CONTROL WIRING</p> <p>△ FIELD SPICE</p> <p>⊠ MARKED WIRE</p> <p>⊠ TERMINAL (MARKED)</p> <p>○ TERMINAL (UNMARKED)</p> <p>□ TERMINAL BLOCK</p> <p>• SPLICE</p> <p>— FACTORY WIRING</p> <p>- - - FIELD CONTROL WIRING</p> <p>- - - FIELD POWER WIRING</p> <p>- - - ACCESSORY OR OPTIONAL WIRING</p> <p>— TO INDICATE COMMON POTENTIAL ONLY, NOT TO REPRESENT WIRING</p> | <p>LEGEND</p> <p>C CONTACTOR, COMPRESSOR</p> <p>CAP CAPACITOR</p> <p>CADM COMFORT ALERT - DIAGNOSTICS MODULE</p> <p>CH CRANKCASE HEATER</p> <p>COFS CONDENSATE OVERFLOW SWITCH</p> <p>COMP COMPRESSOR MOTOR</p> <p>EQUIP EQUIPMENT</p> <p>FU FUSE</p> <p>GR GROUND</p> <p>HGBR HOT GAS BYPASS</p> <p>HPS HIGH PRESSURE SWITCH</p> <p>IFC INDOOR FAN CONTACTOR</p> <p>LAR LOW AMBIENT RELAY</p> <p>LAS LOW AMBIENT SWITCH</p> <p>LLSV LIQUID LINE SOLENOID VALVE</p> <p>LPS LOW PRESSURE SWITCH</p> <p>OFM OUTDOOR FAN MOTOR</p> <p>OFM2 QUADRUPLE TERMINAL</p> <p>SVR SOLENOID VALVE RELAY</p> <p>TB TERMINAL BLOCK</p> <p>TDR TIME DELAY RELAY</p> <p>TRAN TRANSFORMER</p> |
|---|--|

- LEGEND**
- HGBR HOT GAS BYPASS RELAY
- NOTES:**
1. IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE 90 C WIRE OR ITS EQUIVALENT.
 2. USE COPPER CONDUCTORS ONLY.
 3. COMPRESSORS AND FAN MOTORS ARE THERMALLY PROTECTED. THREE PHASE MOTORS ARE PROTECTED AGAINST PRIMARY SINGLE PHASING CONDITIONS.
 4. TRANSFORMER IS WIRED FOR 460V UNIT.
 5. DR UNITS WITH SPEED CONTROL, CONNECT THE BLACK WIRES FROM OFM1 AND OFM3 TO BLK WIRES FROM SPEED CONTROL MODULE AND CONNECT THE BLACK WIRE FROM OFM2 TO TERMINAL 2 ON THE LOW AMBIENT RELAY (LAR).

38AU500541 E

ROOF INSTALLATION AND A CEILING-MOUNTED FAN COIL



LLSV — Liquid Line Solenoid Valve
NEC — National Electrical Code
TXV — Thermostatic Expansion Valve

* Field-supplied

† Double riser may be required. Consult condensing unit product data catalog for details.

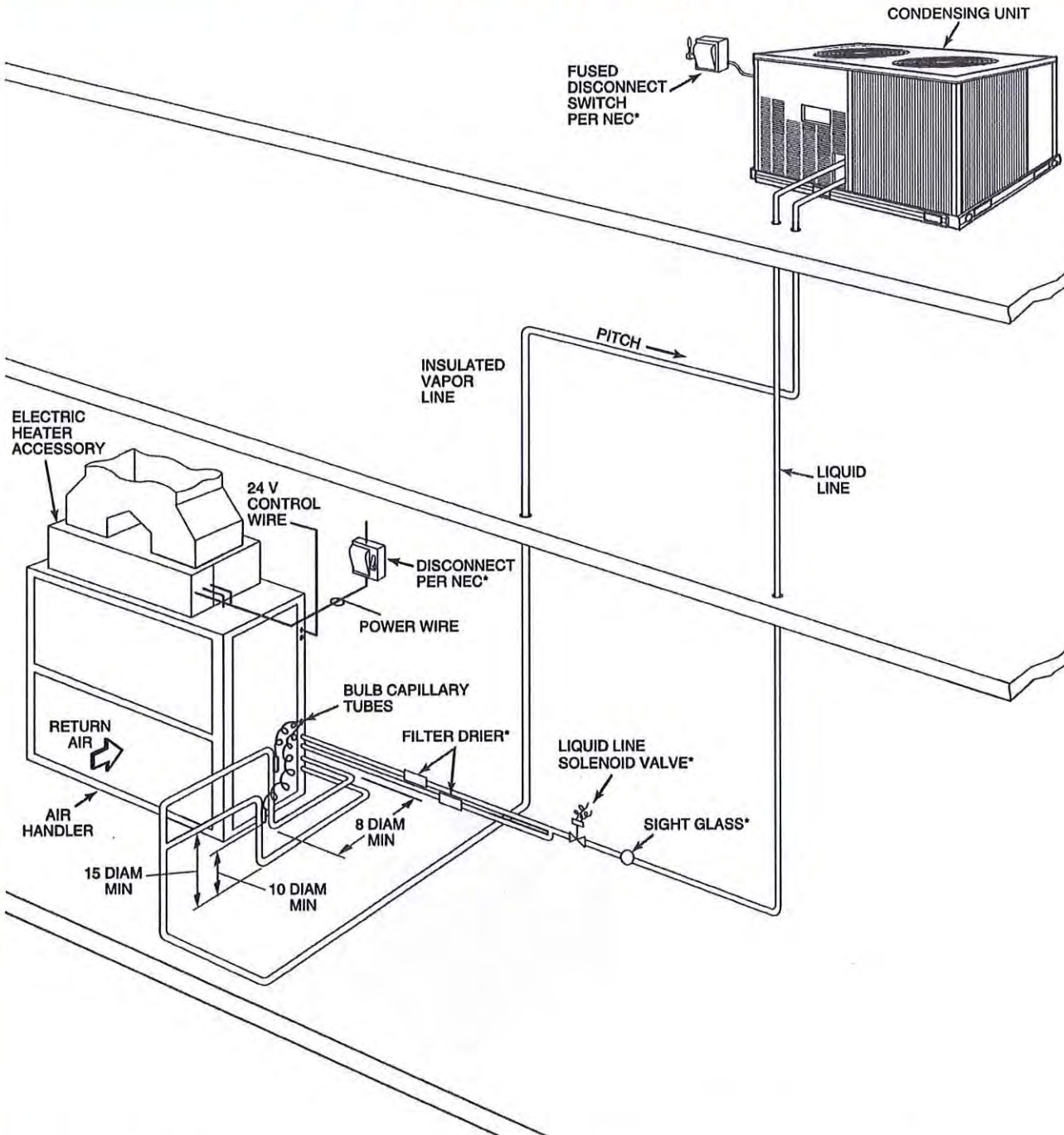
NOTES:

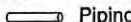
1. All piping must follow standard refrigerant piping techniques. Refer to Carrier System Design Manual for details.
2. All wiring must comply with the applicable local and national codes.
3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
4. Liquid line solenoid valve (solenoid drop control) is recommended to prevent refrigerant migration to the compressor.
5. Internal factory-supplied TXVs not shown.

Typical piping and wiring (cont)



ROOF INSTALLATION AND A VERTICAL DISCHARGE FAN COIL

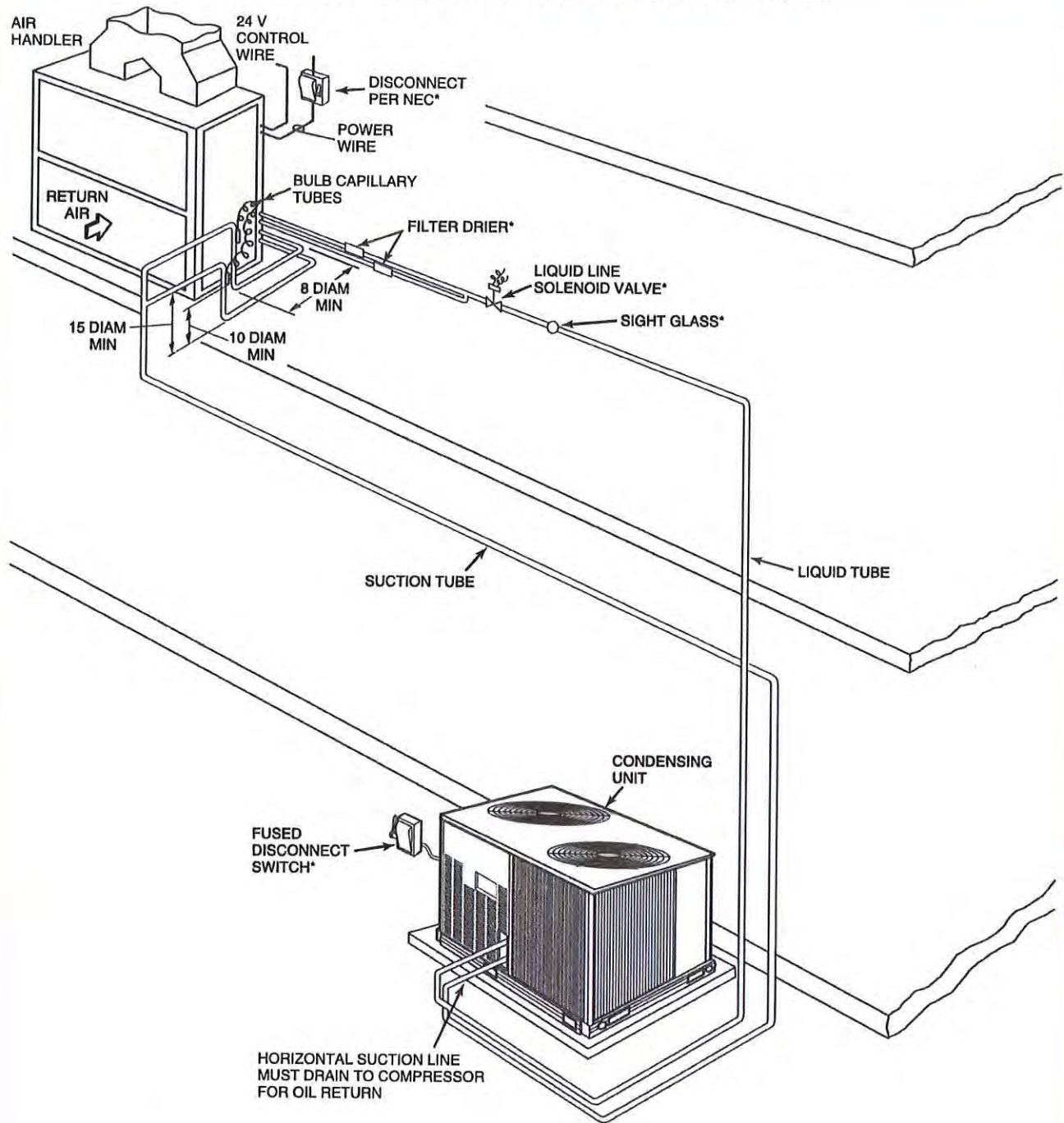



LEGEND
 DIAM — Diameter
 NEC — National Electrical Code
 TXV — Thermostatic Expansion Valve
 Piping
 *Field supplied

NOTES:

1. All piping must follow standard refrigerant piping techniques. Refer to System Design Manual for details.
2. All wiring must comply with applicable local and national codes.
3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
4. Liquid line solenoid valve (solenoid drop control) is recommended to prevent refrigerant migration to the compressor on line links above 75 feet.
5. Internal factory-supplied TXVs and check valves not shown.

GROUND INSTALLATION AND VERTICAL DISCHARGE FAN COIL



LEGEND
DIAM — Diameter
NEC — National Electrical Code
TXV — Thermostatic Expansion Valve
 Piping

*Field supplied

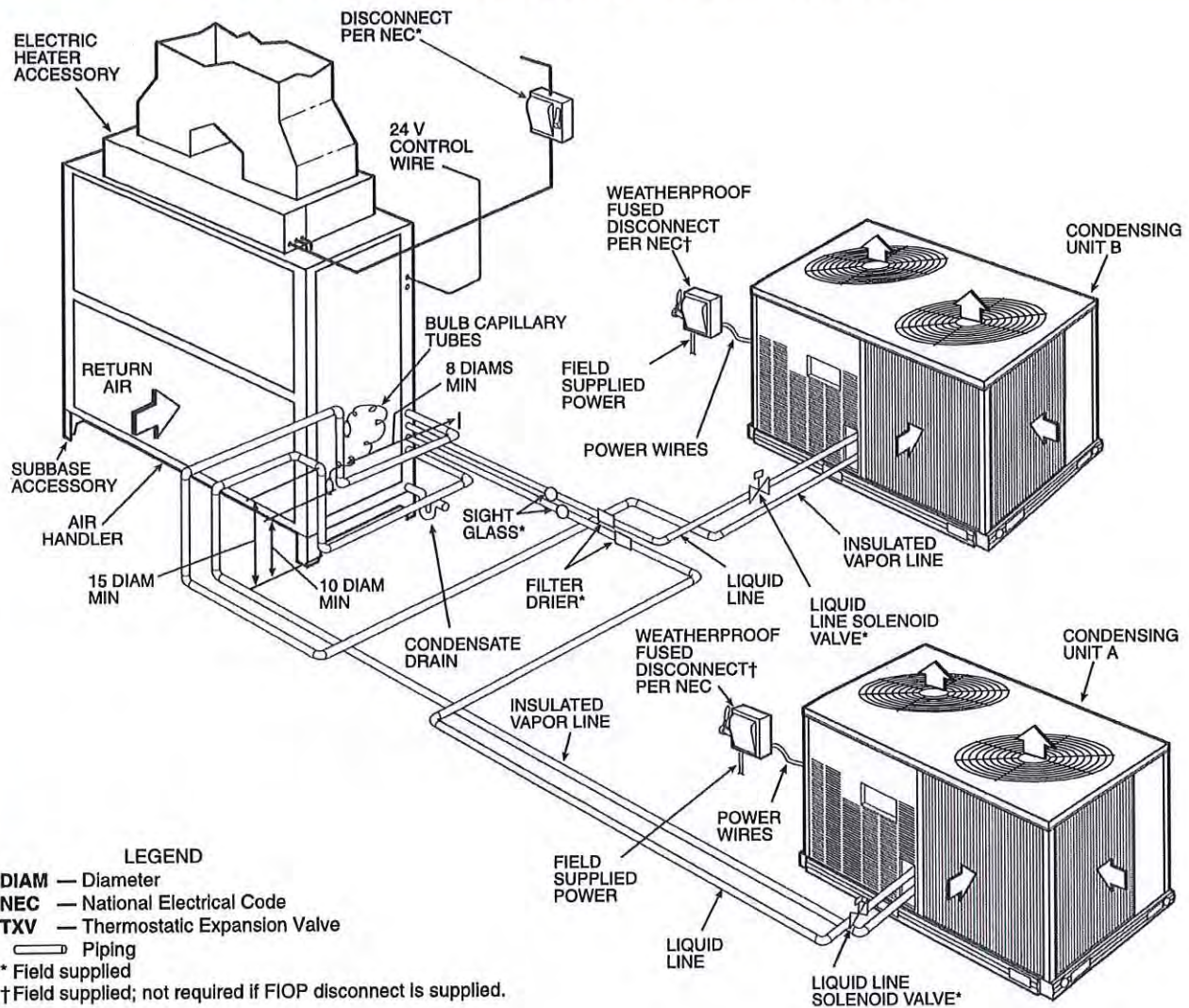
NOTES:

1. All piping must follow standard refrigerant piping techniques. Refer to System Design Manual for details.
2. All wiring must comply with applicable local and national codes.
3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
4. Liquid line solenoid valve (solenoid drop control) is recommended to prevent refrigerant migration to the compressor on line links above 75 feet.
5. Internal factory-supplied TXVs and check valves not shown.

Typical piping and wiring (cont)



DUAL CONDENSING UNITS AND A DUAL CIRCUIT FAN COIL



NOTES:

1. All piping must follow standard refrigerant piping techniques. Refer to System Design Manual for details.
2. All wiring must comply with applicable local and national codes.
3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
4. Liquid line solenoid valve (solenoid drop control) is recommended to prevent refrigerant migration to the compressor on line links above 75 feet.
5. Condensing Unit A should be the first on, last off and be connected to the lower half of the coil.
6. Internal factory-supplied TXVs and check valves not shown.

Performance data



38AUZ07 TOTAL UNIT — CONDENSER ONLY RATINGS — 60 Hz

SST (F)		38AUZ07					
		Air Temperature Entering Condenser (F)					
		80	85	95	100	105	115
20	TC	46.70	45.10	41.70	39.80	37.90	33.90
	kW	4.04	4.27	4.77	5.04	5.32	5.93
	SDT	91.60	96.40	105.90	110.60	115.30	124.70
25	TC	51.70	50.00	46.40	44.50	42.50	38.30
	kW	4.06	4.29	4.79	5.05	5.33	5.95
	SDT	92.70	97.50	106.90	111.60	116.30	125.60
30	TC	57.00	55.20	51.40	49.40	47.30	42.90
	kW	4.07	4.30	4.80	5.07	5.35	5.96
	SDT	93.90	98.60	108.10	112.70	117.40	126.70
35	TC	62.70	60.80	56.80	54.60	52.40	47.80
	kW	4.09	4.32	4.81	5.08	5.36	5.98
	SDT	95.10	99.80	109.20	113.90	118.60	127.80
40	TC	68.70	66.70	62.50	60.20	57.90	53.00
	kW	4.11	4.34	4.83	5.10	5.38	5.99
	SDT	96.50	101.10	110.50	115.10	119.70	128.80
45	TC	75.20	73.10	68.50	66.20	63.70	58.60
	kW	4.13	4.36	4.84	5.10	5.38	5.99
	SDT	97.90	102.50	111.80	116.30	120.90	129.90
50	TC	82.20	79.90	75.10	72.50	69.90	64.40
	kW	4.15	4.37	4.85	5.12	5.39	6.00
	SDT	99.40	104.00	113.10	117.60	122.20	131.10

38AUZ08 TOTAL UNIT — CONDENSER ONLY RATINGS — 60 Hz

SST (F)		38AUZ08					
		Air Temperature Entering Condenser (F)					
		80	85	95	100	105	115
20	TC	65.20	63.20	59.10	57.00	54.80	50.50
	kW	5.04	5.33	5.98	6.34	6.73	7.60
	SDT	95.30	100.20	109.80	114.70	119.50	129.20
25	TC	71.30	69.20	64.80	62.60	60.30	55.70
	kW	5.12	5.42	6.07	6.42	6.81	7.66
	SDT	96.40	101.20	110.80	115.60	120.40	129.90
30	TC	77.80	75.50	70.90	68.50	66.20	61.30
	kW	5.22	5.51	6.16	6.51	6.89	7.74
	SDT	97.60	102.40	111.90	116.60	121.30	130.70
35	TC	84.80	82.40	77.50	75.00	72.40	67.20
	kW	5.32	5.61	6.26	6.61	6.99	7.83
	SDT	98.80	103.50	112.90	117.60	122.30	131.60
40	TC	92.30	89.70	84.50	81.80	79.00	73.50
	kW	5.44	5.73	6.37	6.72	7.10	7.94
	SDT	100.10	104.80	114.20	118.80	123.50	132.70
45	TC	100.30	97.50	91.90	89.00	86.10	80.10
	kW	5.57	5.86	6.50	6.85	7.23	8.07
	SDT	101.60	106.20	115.50	120.20	124.80	133.90
50	TC	108.70	105.80	99.80	96.70	93.60	87.30
	kW	5.71	6.00	6.64	7.00	7.38	8.21
	SDT	103.10	107.80	117.00	121.60	126.20	135.30

LEGEND

- kW — Compressor Motor Power Input
- SDT — Saturated Discharge Temperature (F)
- SST — Saturated Suction Temperature
- TC — Total Capacity (1000 Btuh) gross

Performance data (cont)



38AUZ12 TOTAL UNIT — CONDENSER ONLY RATINGS — 60 Hz

SST (F)		38AUZ12 Air Temperature Entering Condenser (F)					
		80	85	95	100	105	115
20	TC	78.00	75.40	70.10	67.30	64.60	58.90
	kW	6.03	6.44	7.31	7.76	8.23	9.21
	SDT	94.00	98.70	108.20	113.00	117.70	127.20
25	TC	86.10	83.30	77.60	74.70	71.70	65.70
	kW	6.11	6.53	7.41	7.87	8.36	9.36
	SDT	95.20	100.00	109.40	114.20	118.90	128.20
30	TC	94.70	91.80	85.60	82.50	79.40	73.00
	kW	6.20	6.62	7.51	7.98	8.47	9.49
	SDT	96.60	101.30	110.70	115.40	120.00	129.20
35	TC	104.00	100.80	94.30	90.90	87.60	80.70
	kW	6.30	6.71	7.61	8.09	8.58	9.62
	SDT	98.10	102.70	112.00	116.60	121.20	130.40
40	TC	113.90	110.40	103.40	99.90	96.20	88.90
	kW	6.39	6.81	7.71	8.20	8.70	9.75
	SDT	99.50	104.20	113.40	117.90	122.50	131.60
45	TC	124.30	120.60	113.10	109.20	105.40	97.50
	kW	6.49	6.92	7.83	8.32	8.82	9.89
	SDT	101.10	105.70	114.80	119.40	123.90	132.90
50	TC	135.40	131.40	123.30	119.20	115.00	106.50
	kW	6.61	7.04	7.96	8.45	8.96	10.03
	SDT	102.80	107.30	116.40	120.90	125.40	134.30

38AUD12 CIRCUIT A AND B UNIT — CONDENSER ONLY RATINGS — 60 Hz

SST (F)		38AUD12 Circuit A plus B Air Temperature Entering Condenser (F)					
		85	95	100	105	115	120
20	TC	75.29	69.95	67.18	64.32	58.42	55.21
	kW	6.88	7.89	8.43	8.96	10.04	10.53
	SDT	102.30	111.40	116.10	120.50	129.60	133.70
25	TC	83.12	77.31	74.32	71.28	64.99	61.76
	kW	6.97	7.98	8.53	9.07	10.18	10.73
	SDT	103.60	112.60	117.30	121.80	130.70	135.10
30	TC	91.41	85.21	81.99	78.76	72.08	68.58
	kW	7.06	8.08	8.63	9.18	10.31	10.87
	SDT	104.90	114.00	118.50	122.90	131.80	136.10
35	TC	100.35	93.69	90.26	86.76	85.11	75.65
	kW	7.15	8.18	8.73	9.29	10.42	10.99
	SDT	106.30	115.20	119.80	124.20	132.90	137.10
40	TC	109.90	102.58	98.84	95.06	87.13	83.07
	kW	7.25	8.29	8.83	9.39	10.54	11.12
	SDT	107.60	116.60	121.00	125.40	134.00	138.20
45	TC	119.86	111.84	107.74	103.56	95.02	90.54
	kW	7.36	8.39	8.93	9.49	10.64	11.22
	SDT	109.00	117.90	122.30	126.60	135.10	139.20
50	TC	130.20	121.39	116.90	112.33	103.07	98.17
	kW	7.48	8.51	9.04	9.60	10.75	11.33
	SDT	110.50	119.20	123.50	127.80	136.20	140.20

LEGEND

- kW — Compressor Motor Power Input
- SDT — Saturated Discharge Temperature (F)
- SST — Saturated Suction Temperature
- TC — Total Capacity (1000 Btu/h) gross



38AUZ14 TOTAL UNIT — CONDENSER ONLY RATINGS — 60 Hz

SST (F)		38AUZ14					
		Air Temperature Entering Condenser (F)					
		80	85	95	100	105	115
20	TC	100.80	97.40	90.30	86.60	83.00	75.50
	kW	8.48	8.97	10.00	10.53	11.07	12.19
	SDT	98.00	102.60	111.80	116.40	120.90	130.00
25	TC	111.50	107.80	100.20	96.30	92.40	84.40
	kW	8.66	9.15	10.20	10.75	11.31	12.47
	SDT	99.60	104.10	113.20	117.70	122.30	131.30
30	TC	122.90	118.90	110.70	106.60	102.40	93.90
	kW	8.84	9.35	10.41	10.97	11.55	12.75
	SDT	101.30	105.80	114.80	119.30	123.80	132.70
35	TC	134.90	130.60	121.90	117.40	113.00	103.80
	kW	9.05	9.55	10.64	11.21	11.80	13.03
	SDT	103.10	107.60	116.50	120.90	125.40	134.20
40	TC	147.70	143.00	133.70	128.90	124.10	114.30
	kW	9.27	9.78	10.88	11.47	12.07	13.32
	SDT	105.10	109.50	118.30	122.80	127.10	135.80
45	TC	161.10	156.20	146.10	141.00	135.80	125.40
	kW	9.51	10.03	11.15	11.73	12.34	13.61
	SDT	107.20	111.60	120.30	124.70	129.00	137.50
50	TC	175.40	170.10	159.30	153.80	148.30	137.10
	kW	9.78	10.30	11.42	12.02	12.63	13.92
	SDT	109.50	113.80	122.40	126.70	130.90	139.40

38AUD14 CIRCUIT A AND B — CONDENSER ONLY RATINGS — 60 Hz

SST (F)		38AUD14 Circuit A plus B					
		Air Temperature Entering Condenser (F)					
		85	95	100	105	115	120
20	TC	93.24	86.18	82.60	78.94	71.54	67.78
	kW	9.22	10.36	10.96	11.56	12.76	13.37
	SDT	104.40	113.30	117.80	122.20	130.90	135.20
25	TC	103.39	95.91	92.05	88.15	80.16	76.08
	kW	9.42	10.60	11.21	11.83	13.10	13.73
	SDT	106.10	114.90	119.30	123.70	132.30	136.60
30	TC	114.29	106.19	102.04	97.79	89.15	84.74
	kW	9.63	10.84	11.46	12.10	13.41	14.07
	SDT	107.80	116.60	120.90	125.30	133.80	138.00
35	TC	125.69	116.93	112.44	107.84	105.72	93.69
	kW	9.84	11.07	11.71	12.36	13.70	14.38
	SDT	109.50	118.20	122.60	126.80	135.20	139.40
40	TC	137.57	128.07	123.21	118.21	108.08	102.90
	kW	10.05	11.30	11.95	12.61	13.98	14.68
	SDT	111.30	119.90	124.20	128.40	136.70	140.80
45	TC	149.86	139.53	134.26	128.83	117.83	112.22
	kW	10.27	11.53	12.18	12.85	14.24	14.95
	SDT	113.10	121.60	125.80	130.00	138.10	142.10
50	TC	162.51	151.29	145.56	139.64	127.71	121.55
	kW	10.50	11.76	12.42	13.09	14.48	15.20
	SDT	114.90	123.30	127.50	131.60	139.60	143.50

LEGEND

- kW** — Compressor Motor Power Input
- SDT** — Saturated Discharge Temperature (F)
- SST** — Saturated Suction Temperature
- TC** — Total Capacity (1000 Btuh) gross

Performance data (cont)



38AUD16 TOTAL UNIT — CONDENSER ONLY RATINGS — 60 Hz

SST (F)		38AUD16 Total Unit					
		Air Temperature Entering Condenser (F)					
		80	85	95	105	115	125
20	TC	127.6	123.7	116.0	108.1	99.7	90.2
	kW	10.0	10.6	11.9	13.4	14.9	16.6
	SDT	96.0	100.5	109.8	119.2	128.3	137.0
25	TC	140.9	136.7	128.3	119.5	110.4	101.2
	kW	10.0	10.6	11.9	13.4	14.9	16.6
	SDT	96.0	100.5	109.8	119.2	128.3	137.0
30	TC	155.0	150.5	141.3	132.0	122.3	111.4
	kW	10.4	11.0	12.3	13.7	15.3	17.0
	SDT	98.7	103.3	112.4	121.5	130.6	139.1
35	TC	170.1	165.3	155.4	145.2	134.4	123.3
	kW	10.6	11.2	12.5	14.0	15.5	17.2
	SDT	100.1	104.7	113.8	122.8	131.7	140.4
40	TC	186.3	181.0	170.3	159.0	147.3	134.9
	kW	10.8	11.4	12.8	14.2	15.8	17.4
	SDT	101.6	106.1	115.1	124.0	132.8	141.4
45	TC	203.4	197.6	185.7	173.5	160.6	147.2
	kW	11.1	11.7	13.0	14.4	16.0	17.6
	SDT	103.2	107.6	116.5	125.4	134.0	142.5
50	TC	221.4	214.9	202.0	188.6	174.5	159.7
	kW	11.4	12.0	13.3	14.7	16.2	17.9
	SDT	104.8	109.2	118.0	126.7	135.2	143.5

38AUZ16 TOTAL UNIT — CONDENSER ONLY RATINGS — 60 Hz

SST (F)		38AUZ16					
		Air Temperature Entering Condenser (F)					
		80	85	95	105	115	125
20	TC	125.5	121.8	114.2	106.6	99.7	79.7
	kW	10.5	11.2	12.6	14.2	16.0	17.5
	SDT	98.6	103.4	113.0	122.7	134.9	136.0
25	TC	138.7	134.7	126.5	118.1	109.3	98.5
	kW	10.7	11.4	12.8	14.3	16.0	17.9
	SDT	100.0	104.7	114.2	123.6	132.9	140.5
30	TC	152.9	148.6	139.8	130.7	120.9	104.9
	kW	10.9	11.6	13.0	14.6	16.2	17.8
	SDT	101.4	106.2	115.5	125.0	133.6	139.4
35	TC	168.2	163.5	154.1	144.2	133.6	121.2
	kW	11.2	11.8	13.2	14.8	16.5	18.1
	SDT	102.9	107.5	117.0	126.2	134.8	142.1
40	TC	184.9	179.4	169.3	158.7	147.6	135.1
	kW	11.5	12.0	13.5	15.1	16.8	18.5
	SDT	105.2	108.9	118.5	127.7	136.7	144.5
45	TC	202.1	196.7	185.7	174.3	162.5	150.4
	kW	11.7	12.4	13.9	15.6	17.5	19.6
	SDT	106.4	111.2	120.9	130.7	140.4	150.2
50	TC	220.6	214.7	202.1	190.0	174.6	159.6
	kW	11.9	12.6	13.9	15.4	16.9	18.5
	SDT	107.2	111.7	120.4	129.4	136.9	144.9

LEGEND

- kW — Compressor Motor Power Input
- SDT — Saturated Discharge Temperature (F)
- SST — Saturated Suction Temperature
- TC — Total Capacity (1000 Btuh) gross



38AUD25 TOTAL UNIT — CONDENSER ONLY RATINGS — 60 Hz

SST (F)		38AUD25 Total Unit					
		Air Temperature Entering Condenser (F)					
		80	85	95	105	115	125
20	TC	160.3	155.5	145.3	134.3	122.5	109.6
	kW	12.7	13.4	15.0	16.8	18.8	21.1
	SDT	97.0	101.5	110.3	119.1	127.7	136.3
25	TC	177.2	171.9	160.8	149.0	136.3	122.3
	kW	12.7	13.4	15.0	16.8	18.8	21.1
	SDT	97.0	101.5	110.3	119.1	127.7	136.3
30	TC	195.1	189.4	177.4	164.5	150.7	135.6
	kW	13.2	13.9	15.5	17.3	19.3	21.5
	SDT	100.3	104.6	113.3	121.8	130.3	138.6
35	TC	214.3	208.0	194.9	180.9	165.9	149.5
	kW	13.5	14.3	15.8	17.6	19.6	21.8
	SDT	102.1	106.3	114.9	123.3	131.7	139.8
40	TC	234.6	227.7	213.4	198.2	181.7	163.9
	kW	13.9	14.6	16.2	17.9	19.9	22.1
	SDT	104.0	108.2	116.6	124.9	133.1	141.1
45	TC	256.3	258.7	242.3	224.9	206.2	186.1
	kW	14.3	15.2	16.7	18.5	20.4	22.5
	SDT	106.0	111.1	119.2	127.4	135.4	143.1
50	TC	279.1	272.0	254.7	236.3	216.6	195.4
	kW	14.7	15.5	17.0	18.7	20.6	22.7
	SDT	108.1	112.3	120.4	128.4	136.4	143.9

38AUZ25 TOTAL UNIT — CONDENSER ONLY RATINGS — 60 Hz

SST (F)		38AUZ25					
		Air Temperature Entering Condenser (F)					
		80	85	95	105	115	125
20	TC	159.2	154.5	144.5	133.9	122.5	110.2
	kW	13.0	13.7	15.3	17.1	19.2	21.5
	SDT	97.3	101.8	110.6	119.3	127.9	136.5
25	TC	176.1	171.0	160.2	148.8	136.5	123.2
	kW	13.2	14.0	15.6	17.4	19.5	21.8
	SDT	98.9	103.3	112.0	120.7	129.2	137.6
30	TC	194.2	188.6	176.9	164.5	151.3	136.9
	kW	13.5	14.3	15.9	17.7	19.7	22.0
	SDT	100.6	104.9	113.6	122.1	130.5	138.8
35	TC	213.5	207.4	194.7	181.2	166.8	151.2
	kW	13.8	14.6	16.2	18.0	20.0	22.3
	SDT	102.4	106.7	115.2	123.6	131.9	140.1
40	TC	234.1	227.4	213.5	198.8	183.1	166.1
	kW	14.2	14.9	16.5	18.3	20.3	22.6
	SDT	104.3	108.5	116.9	125.2	133.3	141.4
45	TC	255.9	248.6	233.3	217.3	200.1	181.7
	kW	14.6	15.3	16.9	18.7	20.7	22.9
	SDT	106.3	110.5	118.7	126.8	134.9	142.7
50	TC	279.0	270.9	254.2	236.7	218.1	197.8
	kW	15.1	15.8	17.3	19.1	21.1	23.2
	SDT	108.5	112.5	120.6	128.6	136.5	144.1

LEGEND

- kW** — Compressor Motor Power Input
- SDT** — Saturated Discharge Temperature (F)
- SST** — Saturated Suction Temperature
- TC** — Total Capacity (1000 Btuh) gross

Performance data (cont)



38AUZ07/40RUA07 COMBINATION RATINGS — 60 Hz

				Ambient Temperature (F)															
				85			95			105			115			125			
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)			
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
1800 Cfm	EA (wb)	58	THC	65.8	65.8	74.1	63.4	63.4	71.4	60.7	60.7	68.3	58.3	58.3	65.7	54.7	54.7	61.6	
			SHC	57.4	65.8	74.1	55.3	63.4	71.4	53.0	60.7	68.3	50.9	58.3	65.7	47.8	54.7	61.6	
		62	THC	68.1	68.1	70.7	65.2	65.2	69.2	62.0	62.0	67.6	58.1	58.1	65.7	54.6	54.6	55.4	
			SHC	51.9	61.3	70.7	50.4	59.8	69.2	48.9	58.3	67.6	47.1	56.4	65.7	36.3	45.9	55.4	
		67	THC	74.0	74.0	74.0	70.9	70.9	70.9	67.3	67.3	67.3	63.4	63.4	63.4	56.7	56.7	56.7	
			SHC	42.3	51.8	61.3	41.0	50.5	59.9	39.5	49.0	58.4	37.9	47.3	56.8	35.3	44.9	54.4	
		72	THC	80.7	80.7	80.7	77.3	77.3	77.3	73.6	73.6	73.6	69.4	69.4	69.4	63.2	63.2	63.2	
	SHC		32.7	42.2	51.8	31.4	40.9	50.4	30.0	39.5	49.0	28.4	37.9	47.4	26.2	35.7	45.3		
	76	THC	—	86.2	86.2	—	82.6	82.6	—	78.6	78.6	—	74.3	74.3	—	70.7	70.7		
		SHC	—	34.5	44.3	—	33.2	43.0	—	31.8	41.6	—	30.3	40.0	—	29.0	38.7		
	2100 Cfm	EA (wb)	58	THC	69.0	69.0	77.8	66.5	66.5	74.9	63.7	63.7	71.8	61.2	61.2	69.0	48.5	52.3	55.2
				SHC	60.3	69.0	77.8	58.0	66.5	74.9	55.6	63.7	71.8	53.5	61.2	69.0	46.0	52.3	55.2
			62	THC	70.2	70.2	77.1	67.2	67.2	75.5	64.0	64.0	73.6	60.4	60.4	70.7	48.5	52.9	56.3
				SHC	55.7	66.4	77.1	54.2	64.8	75.5	52.5	63.0	73.6	50.2	60.4	70.7	43.3	51.3	56.3
67			THC	75.9	75.9	75.9	72.6	72.6	72.6	68.9	68.9	68.9	64.8	64.8	64.8	59.1	59.1	59.9	
			SHC	44.8	55.7	66.5	43.4	54.3	65.1	41.9	52.8	63.6	40.3	51.1	62.0	38.1	49.0	59.9	
72			THC	82.5	82.5	82.5	79.0	79.0	79.0	75.2	75.2	75.2	70.9	70.9	70.9	63.9	63.9	63.9	
		SHC	33.7	44.6	55.5	32.4	43.3	54.2	31.0	41.8	52.7	29.4	40.3	51.1	26.9	37.9	48.8		
76		THC	—	88.1	88.1	—	84.3	84.3	—	80.2	80.2	—	75.5	75.5	—	71.8	71.8		
		SHC	—	35.8	47.0	—	34.5	45.6	—	33.0	44.2	—	31.4	42.5	—	30.2	41.2		
2400 Cfm		EA (wb)	58	THC	71.7	71.7	80.8	69.0	69.0	77.8	66.1	66.1	74.5	62.6	62.6	70.6	58.9	58.9	66.3
				SHC	62.6	71.7	80.8	60.3	69.0	77.8	57.7	66.1	74.5	54.7	62.6	70.6	51.4	58.9	66.3
			62	THC	72.0	72.0	82.7	69.1	69.1	80.8	66.2	66.2	77.4	63.0	63.0	73.6	51.9	54.3	58.5
				SHC	59.0	70.9	82.7	57.4	69.1	80.8	55.0	66.2	77.4	52.3	63.0	73.6	46.4	54.3	58.5
	67		THC	77.3	77.3	77.3	74.0	74.0	74.0	70.2	70.2	70.2	66.1	66.1	66.9	62.5	62.5	65.0	
			SHC	47.1	59.3	71.5	45.7	57.9	70.1	44.2	56.4	68.6	42.6	54.7	66.9	41.0	53.0	65.0	
	72		THC	84.0	84.0	84.0	80.4	80.4	80.4	76.4	76.4	76.4	71.8	71.8	71.8	67.5	67.5	67.5	
		SHC	34.6	46.9	59.1	33.3	45.5	57.8	31.9	44.1	56.3	30.2	42.4	54.6	28.7	40.8	52.9		
	76	THC	—	89.5	89.5	—	85.7	85.7	—	81.4	81.4	—	76.7	76.7	—	—	—		
		SHC	—	36.9	49.4	—	35.6	48.1	—	34.2	46.6	—	32.6	45.0	—	—	—		
	2700 Cfm	EA (wb)	58	THC	73.9	73.9	83.3	71.2	71.2	80.2	68.1	68.1	76.7	64.8	64.8	73.0	58.6	58.6	66.0
				SHC	64.6	73.9	83.3	62.2	71.2	80.2	59.5	68.1	76.7	56.5	64.8	73.0	51.2	58.6	66.0
			62	THC	74.0	74.0	86.5	71.3	71.3	83.3	68.2	68.2	79.7	64.8	64.8	75.8	52.5	55.9	60.2
				SHC	61.5	74.0	86.5	59.2	71.3	83.3	56.6	68.2	79.7	53.8	64.8	75.8	48.7	55.9	60.2
67			THC	78.5	78.5	78.5	75.1	75.1	75.1	71.2	71.2	73.2	67.0	67.0	71.5	63.2	63.2	69.4	
			SHC	49.3	62.7	76.2	47.9	61.3	74.8	46.4	59.8	73.2	44.7	58.1	71.5	43.0	56.2	69.4	
72			THC	85.1	85.1	85.1	81.4	81.4	81.4	77.3	77.3	77.3	72.6	72.6	72.6	65.3	65.3	65.3	
		SHC	35.5	49.0	62.5	34.2	47.6	61.1	32.7	46.1	59.6	31.1	44.5	57.9	28.6	42.2	55.7		
76		THC	—	90.7	90.7	—	86.7	86.7	—	82.3	82.3	—	—	—	—	—	—		
		SHC	—	38.1	51.8	—	36.7	50.4	—	35.3	48.9	—	—	—	—	—	—		
3000 Cfm		EA (wb)	58	THC	75.9	75.9	85.5	73.0	73.0	82.3	69.8	69.8	78.7	66.3	66.3	74.7	62.4	62.4	70.4
				SHC	66.3	75.9	85.5	63.8	73.0	82.3	61.0	69.8	78.7	57.9	66.3	74.7	54.5	62.4	70.4
			62	THC	75.9	75.9	88.8	73.1	73.1	85.4	69.9	69.9	81.7	66.4	66.4	77.6	60.2	60.2	70.4
				SHC	63.1	75.9	88.8	60.7	73.1	85.4	58.0	69.9	81.7	55.1	66.4	77.6	50.0	60.2	70.4
	67		THC	79.5	79.5	80.7	76.0	76.0	79.3	72.1	72.1	77.6	67.9	67.9	75.7	63.7	63.7	73.5	
			SHC	51.4	66.0	80.7	49.9	64.6	79.3	48.4	63.0	77.6	46.7	61.2	75.7	44.8	59.2	73.5	
	72		THC	86.1	86.1	86.1	82.3	82.3	82.3	78.0	78.0	78.0	73.3	73.3	73.3	69.6	69.6	69.6	
		SHC	36.3	51.0	65.8	35.0	49.7	64.4	33.5	48.1	62.8	31.9	46.5	61.1	30.5	44.9	59.3		
	76	THC	—	91.6	91.6	—	87.6	87.6	—	—	—	—	—	—	—	—	—		
		SHC	—	39.1	54.0	—	37.8	52.7	—	—	—	—	—	—	—	—	—		

LEGEND

- jb — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb



38AUZ07/40RUA08 COMBINATION RATINGS — 60 Hz

		Ambient Temperature (F)																	
		85			95			105			115			125					
		EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
		75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
2250 Cfm	EA (wb)	58	THC	71.6	71.6	80.7	69.1	69.1	77.9	66.2	66.2	74.6	63.2	63.2	72.2	—	—	—	
			SHC	62.5	71.6	80.7	60.3	69.1	77.9	57.8	66.2	74.6	55.0	63.2	72.2	—	—	—	
		62	THC	72.5	72.5	81.5	69.6	69.6	79.6	66.6	66.6	76.6	63.2	63.2	73.2	—	—	—	
			SHC	58.5	70.0	81.5	56.9	68.2	79.6	54.6	65.6	76.6	52.1	62.7	73.2	—	—	—	
		67	THC	78.1	78.1	78.1	74.8	74.8	74.8	71.2	71.2	71.2	67.0	67.0	67.7	60.9	60.9	64.5	
			SHC	46.9	58.7	70.5	45.6	57.4	69.1	44.1	55.9	67.6	42.4	54.2	66.0	40.1	52.0	63.8	
	72	THC	84.9	84.9	84.9	81.4	81.4	81.4	77.4	77.4	77.4	73.1	73.1	73.1	68.9	68.9	68.9		
		SHC	34.9	46.7	58.6	33.6	45.4	57.3	32.1	43.9	55.8	30.5	42.3	54.1	29.0	40.7	52.5		
	76	THC	—	90.6	90.6	—	86.9	86.9	—	82.5	82.5	—	77.1	77.1	—	—	—		
		SHC	—	37.1	49.1	—	35.9	47.9	—	33.5	43.4	—	31.9	41.8	—	—	—		
	2600 Cfm	EA (wb)	58	THC	74.8	74.8	84.2	72.1	72.1	81.3	69.0	69.0	77.8	65.7	65.7	74.0	62.2	62.2	70.0
				SHC	65.3	74.8	84.2	62.9	72.1	81.3	60.3	69.0	77.8	57.3	65.7	74.0	54.3	62.2	70.0
62			THC	74.9	74.9	87.2	72.1	72.1	84.3	69.1	69.1	80.8	65.7	65.7	76.8	61.7	61.7	72.1	
			SHC	62.0	74.6	87.2	60.0	72.1	84.3	57.4	69.1	80.8	54.6	65.7	76.8	51.2	61.7	72.1	
67			THC	79.8	79.8	79.8	76.3	76.3	76.4	72.6	72.6	74.2	68.4	68.4	71.9	63.9	63.9	69.8	
			SHC	49.7	63.1	76.5	48.3	61.8	75.1	46.8	60.2	73.6	45.1	58.5	71.9	43.3	56.5	69.8	
72		THC	86.5	86.5	86.5	82.9	82.9	82.9	78.8	78.8	78.8	74.3	74.3	74.3	69.5	69.5	69.5		
		SHC	36.0	49.4	62.9	34.7	48.1	61.6	33.2	46.6	60.1	31.6	45.0	58.4	29.9	43.3	56.7		
76		THC	—	92.3	92.3	—	87.7	87.7	—	—	—	—	—	—	—	—	—		
		SHC	—	38.5	52.2	—	36.5	49.2	—	—	—	—	—	—	—	—	—		
3000 Cfm		EA (wb)	58	THC	77.6	77.6	87.4	74.8	74.8	84.2	71.5	71.5	80.6	67.9	67.9	76.5	64.9	64.9	73.1
				SHC	67.7	77.6	87.4	65.3	74.8	84.2	62.5	71.5	80.6	59.3	67.9	76.5	56.7	64.9	73.1
	62		THC	77.7	77.7	90.8	74.8	74.8	87.5	71.6	71.6	83.7	67.9	67.9	79.4	64.9	64.9	75.9	
			SHC	64.5	77.7	90.8	62.1	74.8	87.5	59.5	71.6	83.7	56.4	67.9	79.4	53.9	64.9	75.9	
	67		THC	81.2	81.2	83.0	77.7	77.7	81.6	73.9	73.9	80.0	69.6	69.6	78.0	65.3	65.3	74.4	
			SHC	52.7	67.8	83.0	51.3	66.4	81.6	49.8	64.9	80.0	48.0	63.0	78.0	44.5	59.4	74.4	
	72	THC	87.9	87.9	87.9	84.2	84.2	84.2	80.0	80.0	80.0	75.3	75.3	75.3	70.2	70.2	70.2		
		SHC	37.1	52.3	67.6	35.8	51.0	66.2	34.3	49.5	64.7	32.7	47.9	63.0	31.0	46.1	61.2		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	3400 Cfm	EA (wb)	58	THC	79.7	79.7	89.8	76.8	76.8	86.4	73.4	73.4	82.7	69.6	69.6	78.4	64.8	64.8	73.0
				SHC	69.6	79.7	89.8	67.0	76.8	86.4	64.1	73.4	82.7	60.8	69.6	78.4	56.6	64.8	73.0
62			THC	79.8	79.8	93.3	76.8	76.8	89.8	73.5	73.5	85.9	69.7	69.7	81.4	65.6	65.6	76.8	
			SHC	66.3	79.8	93.3	63.8	76.8	89.8	61.0	73.5	85.9	57.8	69.7	81.4	54.5	65.6	76.8	
67			THC	82.3	82.3	88.8	78.8	78.8	87.3	74.9	74.9	85.5	70.6	70.6	83.2	—	—	—	
			SHC	55.4	72.1	88.8	53.9	70.6	87.3	52.4	68.9	85.5	50.5	66.8	83.2	—	—	—	
72		THC	88.9	88.9	88.9	85.1	85.1	85.1	80.8	80.8	80.8	76.1	76.1	76.1	—	—	—		
		SHC	38.2	55.0	71.9	36.9	53.7	70.5	35.4	52.2	69.0	33.8	50.5	67.3	—	—	—		
76		THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
3750 Cfm		EA (wb)	58	THC	81.5	81.5	91.9	78.5	78.5	88.4	75.0	75.0	84.5	71.1	71.1	80.1	64.7	64.7	72.9
				SHC	71.2	81.5	91.9	68.5	78.5	88.4	65.5	75.0	84.5	62.1	71.1	80.1	56.5	64.7	72.9
	62		THC	81.6	81.6	95.4	78.5	78.5	91.8	75.1	75.1	87.8	71.2	71.2	83.2	66.3	66.3	77.5	
			SHC	67.8	81.6	95.4	65.2	78.5	91.8	62.4	75.1	87.8	59.1	71.2	83.2	55.1	66.3	77.5	
	67		THC	83.2	83.2	93.9	79.7	79.7	92.2	75.8	75.8	90.3	71.5	71.5	87.7	—	—	—	
			SHC	57.7	75.8	93.9	56.2	74.2	92.2	54.6	72.4	90.3	52.6	70.2	87.7	—	—	—	
	72	THC	89.7	89.7	89.7	85.8	85.8	85.8	81.5	81.5	81.5	76.8	76.8	76.8	—	—	—		
		SHC	39.1	57.4	75.7	37.8	56.0	74.3	36.3	54.5	72.7	34.7	52.8	71.0	—	—	—		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb

Performance data (cont)



38AUZ08/40RUA08 COMBINATION RATINGS — 60 Hz

		Ambient Temperature (F)																	
		85			95			105			115			125					
		EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
		75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
2250 Cfm	EA (wb)	58	THC	84.6	84.6	95.4	81.7	81.7	92.1	78.5	78.5	88.5	75.5	75.5	85.1	70.7	70.7	79.7	
			SHC	73.9	84.6	95.4	71.3	81.7	92.1	68.5	78.5	88.5	65.9	75.5	85.1	61.7	70.7	79.7	
		62	THC	88.2	88.2	89.4	84.6	84.6	87.6	80.7	80.7	85.6	76.9	76.9	83.6	73.2	73.2	81.3	
			SHC	66.1	77.7	89.4	64.3	75.9	87.6	62.4	74.0	85.6	60.5	72.0	83.6	58.5	69.9	81.3	
		67	THC	95.5	95.5	95.5	91.5	91.5	91.5	87.3	87.3	87.3	82.7	82.7	82.7	76.1	76.1	76.1	
			SHC	54.1	65.8	77.5	52.3	64.1	75.8	50.5	62.2	74.0	48.6	60.3	72.0	46.0	57.8	69.5	
	72	THC	103.4	103.4	103.4	99.2	99.2	99.2	94.6	94.6	94.6	89.6	89.6	89.6	82.3	82.3	82.3		
		SHC	41.8	53.7	65.5	40.2	52.0	63.8	38.4	50.2	62.0	36.6	48.3	60.1	33.8	45.6	57.4		
	76	THC	—	109.9	109.9	—	105.4	105.4	—	100.6	100.6	—	95.3	95.3	—	87.8	87.8		
		SHC	—	43.9	56.2	—	42.3	54.7	—	40.6	52.8	—	38.7	50.9	—	36.1	48.3		
	2625 Cfm	EA (wb)	58	THC	88.7	88.7	99.9	85.6	85.6	96.4	82.1	82.1	92.5	78.7	78.7	88.7	75.4	75.4	85.0
				SHC	77.4	88.7	99.9	74.7	85.6	96.4	71.7	82.1	92.5	68.8	78.7	88.7	65.8	75.4	85.0
62			THC	90.7	90.7	97.2	87.0	87.0	95.3	83.0	83.0	93.1	78.9	78.9	90.6	75.3	75.3	86.4	
			SHC	70.7	84.0	97.2	68.8	82.1	95.3	66.9	80.0	93.1	64.7	77.6	90.6	61.7	74.0	86.4	
67			THC	97.8	97.8	97.8	93.7	93.7	93.7	89.2	89.2	89.2	84.4	84.4	84.4	76.7	76.7	76.7	
			SHC	57.0	70.4	83.8	55.3	68.7	82.1	53.4	66.8	80.2	51.5	64.8	78.2	48.6	62.0	75.5	
72		THC	105.7	105.7	105.7	101.3	101.3	101.3	96.5	96.5	96.5	91.5	91.5	91.5	86.2	86.2	86.2		
		SHC	43.0	56.5	70.0	41.4	54.9	68.3	39.6	53.0	66.5	37.8	51.2	64.5	35.8	49.2	62.5		
76		THC	—	112.2	112.2	—	107.6	107.6	—	102.5	102.5	—	97.0	97.0	—	—	—		
		SHC	—	45.4	59.5	—	43.8	57.8	—	42.0	55.9	—	40.2	54.0	—	—	—		
3000 Cfm		EA (wb)	58	THC	92.0	92.0	103.7	88.7	88.7	99.9	85.1	85.1	95.9	81.2	81.2	91.5	76.0	76.0	85.7
				SHC	80.3	92.0	103.7	77.4	88.7	99.9	74.3	85.1	95.9	70.9	81.2	91.5	66.4	76.0	85.7
	62		THC	92.9	92.9	104.3	89.2	89.2	102.0	85.1	85.1	99.5	81.4	81.4	95.1	76.6	77.5	81.1	
			SHC	74.9	89.6	104.3	72.9	87.4	102.0	70.7	85.1	99.5	67.6	81.4	95.1	66.6	77.5	81.1	
	67		THC	99.6	99.6	99.6	95.3	95.3	95.3	90.8	90.8	90.8	86.0	86.0	86.0	79.1	79.1	81.7	
			SHC	59.7	74.7	89.8	58.0	73.0	88.0	56.1	71.1	86.1	54.2	69.1	84.1	51.7	66.7	81.7	
	72	THC	107.5	107.5	107.5	103.0	103.0	103.0	98.0	98.0	98.0	92.9	92.9	92.9	88.0	88.0	88.0		
		SHC	44.1	59.2	74.3	42.5	57.5	72.6	40.7	55.7	70.7	38.8	53.8	68.7	37.0	51.8	66.7		
	76	THC	—	114.0	114.0	—	109.1	109.1	—	103.9	103.9	—	98.3	98.3	—	—	—		
		SHC	—	46.9	62.4	—	45.2	60.7	—	43.4	58.8	—	41.5	56.8	—	—	—		
	3375 Cfm	EA (wb)	58	THC	94.8	94.8	106.8	91.3	91.3	102.9	87.5	87.5	98.6	83.4	83.4	94.0	77.9	77.9	87.8
				SHC	82.8	94.8	106.8	79.7	91.3	102.9	76.4	87.5	98.6	72.9	83.4	94.0	68.0	77.9	87.8
62			THC	94.8	94.8	110.9	91.4	91.4	106.8	87.6	87.6	102.4	83.5	83.5	97.6	79.3	79.3	92.7	
			SHC	78.8	94.8	110.9	75.9	91.4	106.8	72.8	87.6	102.4	69.3	83.5	97.6	65.9	79.3	92.7	
67			THC	101.0	101.0	101.0	96.6	96.6	96.6	92.0	92.0	92.0	87.0	87.0	87.0	89.6	82.8	87.3	
			SHC	62.3	78.9	95.4	60.6	77.1	93.7	58.7	75.2	91.7	56.7	73.2	89.6	54.8	71.0	87.3	
72		THC	108.9	108.9	108.9	104.3	104.3	104.3	99.2	99.2	99.2	93.8	93.8	93.8	86.1	86.1	86.1		
		SHC	45.2	61.7	78.3	43.5	60.0	76.6	41.7	58.2	74.7	39.7	56.2	72.6	37.1	53.6	70.0		
76		THC	—	115.4	115.4	—	110.4	110.4	—	105.1	105.1	—	99.3	99.3	—	92.2	92.2		
		SHC	—	48.2	65.2	—	46.5	63.4	—	44.7	61.6	—	42.7	59.5	—	40.4	57.1		
3750 Cfm		EA (wb)	58	THC	97.1	97.1	109.5	93.5	93.5	105.4	89.6	89.6	101.0	85.3	85.3	96.1	76.9	80.7	84.7
				SHC	84.8	97.1	109.5	81.7	93.5	105.4	78.2	89.6	101.0	74.5	85.3	96.1	70.9	80.7	84.7
	62		THC	97.2	97.2	113.7	93.6	93.6	109.5	89.7	89.7	104.8	85.5	85.5	100.0	78.2	78.2	91.4	
			SHC	80.8	97.2	113.7	77.8	93.6	109.5	74.5	89.7	104.8	71.1	85.5	100.0	64.9	78.2	91.4	
	67		THC	102.2	102.2	102.2	97.7	97.7	99.0	93.1	93.1	97.0	88.1	88.1	94.8	84.0	83.8	85.6	
			SHC	64.8	82.8	100.8	63.0	81.0	99.0	61.1	79.1	97.0	59.1	77.0	94.8	79.8	73.1	81.4	
	72	THC	110.1	110.1	110.1	105.3	105.3	105.3	100.2	100.2	100.2	94.7	94.7	94.7	90.0	90.0	90.0		
		SHC	46.1	64.2	82.2	44.4	62.4	80.4	42.6	60.5	78.4	40.7	58.5	76.4	38.9	56.6	74.2		
	76	THC	—	116.5	116.5	—	111.5	111.5	—	106.0	106.0	—	100.1	100.1	—	90.8	90.8		
		SHC	—	49.4	67.8	—	47.7	66.0	—	45.9	64.1	—	43.9	62.0	—	40.8	58.8		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb



38AUZ08/40RUA12 COMBINATION RATINGS — 60 Hz

		Ambient Temperature (F)																	
		85			95			105			115			125					
		EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
		75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
3000 Cfm	EA (wb)	58	THC	93.7	93.7	105.5	90.3	90.3	101.8	86.7	86.7	97.7	82.7	82.7	93.2	—	—	—	
			SHC	81.8	93.7	105.5	78.9	90.3	101.8	75.7	86.7	97.7	72.2	82.7	93.2	—	—	—	
		62	THC	94.5	94.5	106.5	90.8	90.8	104.2	86.8	86.8	101.5	83.0	83.0	97.0	78.0	78.0	91.2	
			SHC	76.4	91.4	106.5	74.4	89.3	104.2	72.1	86.8	101.5	68.9	83.0	97.0	64.8	78.0	91.2	
		67	THC	101.3	101.3	101.3	97.0	97.0	97.0	92.4	92.4	92.4	87.7	87.7	87.7	80.4	80.4	83.5	
			SHC	60.9	76.3	91.7	59.2	74.5	89.9	57.3	72.7	88.0	55.4	70.7	86.0	52.7	68.1	83.5	
	72	THC	109.4	109.4	109.4	104.9	104.9	104.9	100.0	100.0	100.0	94.7	94.7	94.7	87.1	87.1	87.1		
		SHC	44.9	60.4	75.8	43.3	58.7	74.1	41.5	56.9	72.2	39.6	54.9	70.2	36.9	52.2	67.6		
	76	THC	—	116.1	116.1	—	111.3	111.3	—	106.1	106.1	—	100.4	100.4	—	—	—		
		SHC	—	47.7	63.5	—	46.0	61.8	—	44.3	60.0	—	42.3	57.9	—	—	—		
	3500 Cfm	EA (wb)	58	THC	97.4	97.4	109.7	93.9	93.9	105.8	90.0	90.0	101.4	85.9	85.9	96.8	79.7	79.7	89.8
				SHC	85.0	97.4	109.7	82.0	93.9	105.8	78.6	90.0	101.4	75.0	85.9	96.8	69.6	79.7	89.8
62			THC	97.5	97.5	114.0	93.9	93.9	109.9	90.1	90.1	105.4	86.0	86.0	100.5	82.6	82.6	96.6	
			SHC	81.0	97.5	114.0	78.0	93.9	109.9	74.8	90.1	105.4	71.4	86.0	100.5	68.6	82.6	96.6	
67			THC	103.2	103.2	103.2	98.8	98.8	98.8	94.2	94.2	95.8	89.1	89.1	93.7	82.7	82.7	91.4	
			SHC	64.5	82.1	99.6	62.8	80.3	97.8	60.9	78.4	95.8	58.9	76.3	93.7	56.5	73.9	91.4	
72		THC	111.2	111.2	111.2	106.6	106.6	106.6	101.6	101.6	101.6	96.2	96.2	96.2	88.8	88.8	88.8		
		SHC	46.3	63.9	81.4	44.7	62.2	79.7	42.9	60.3	77.8	40.9	58.3	75.8	38.4	55.8	73.2		
76		THC	—	117.9	117.9	—	113.0	113.0	—	107.6	107.6	—	101.8	101.8	—	—	—		
		SHC	—	49.5	67.4	—	47.8	65.6	—	46.0	63.7	—	44.0	61.6	—	—	—		
4000 Cfm		EA (wb)	58	THC	100.4	100.4	113.1	96.7	96.7	109.0	92.7	92.7	104.5	88.4	88.4	99.6	82.0	82.0	92.4
				SHC	87.7	100.4	113.1	84.4	96.7	109.0	80.9	92.7	104.5	77.2	88.4	99.6	71.6	82.0	92.4
	62		THC	100.4	100.4	117.4	96.8	96.8	113.2	92.8	92.8	108.5	88.4	88.4	103.4	81.7	81.7	95.5	
			SHC	83.4	100.4	117.4	80.4	96.8	113.2	77.1	92.8	108.5	73.5	88.4	103.4	67.8	81.7	95.5	
	67		THC	104.7	104.7	107.0	100.3	100.3	105.1	95.5	95.5	103.1	90.4	90.4	100.8	82.8	82.8	94.5	
			SHC	67.9	87.5	107.0	66.1	85.6	105.1	64.2	83.6	103.1	62.2	81.5	100.8	54.7	74.6	94.5	
	72	THC	112.7	112.7	112.7	108.0	108.0	108.0	102.8	102.8	102.8	97.3	97.3	97.3	89.9	89.9	89.9		
		SHC	47.7	67.2	86.7	46.0	65.5	84.9	44.1	63.6	83.0	42.2	61.6	80.9	39.7	59.0	78.4		
	76	THC	—	119.4	119.4	—	114.3	114.3	—	108.7	108.7	—	103.0	103.0	—	94.3	94.3		
		SHC	—	51.2	71.0	—	49.5	69.2	—	47.6	67.2	—	45.6	65.1	—	42.8	62.0		
	4500 Cfm	EA (wb)	58	THC	102.7	102.7	115.7	98.9	98.9	111.5	94.8	94.8	106.8	90.3	90.3	101.7	85.1	85.1	95.9
				SHC	89.7	102.7	115.7	86.3	98.9	111.5	82.7	94.8	106.8	78.9	90.3	101.7	74.3	85.1	95.9
62			THC	102.8	102.8	120.2	99.0	99.0	115.7	94.8	94.8	110.9	90.3	90.3	105.6	83.6	83.6	97.8	
			SHC	85.4	102.8	120.2	82.2	99.0	115.7	78.8	94.8	110.9	75.1	90.3	105.6	69.5	83.6	97.8	
67			THC	105.9	105.9	113.8	101.5	101.5	111.7	96.7	96.7	109.5	91.6	91.6	106.8	84.0	84.0	100.0	
			SHC	71.0	92.4	113.8	69.2	90.5	111.7	67.2	88.3	109.5	65.0	85.9	106.8	57.0	76.0	100.0	
72		THC	113.8	113.8	113.8	109.0	109.0	109.0	103.7	103.7	103.7	98.1	98.1	98.1	89.5	89.5	89.5		
		SHC	48.9	70.3	91.7	47.2	68.6	89.9	45.3	66.6	87.9	43.4	64.6	85.7	40.6	61.8	83.1		
76		THC	—	120.4	120.4	—	115.3	115.3	—	109.6	109.6	—	103.9	103.9	—	—	—		
		SHC	—	52.7	74.3	—	51.0	72.4	—	49.1	70.3	—	47.1	68.1	—	—	—		
5000 Cfm		EA (wb)	58	THC	105.0	105.0	118.3	101.0	101.0	113.9	96.8	96.8	109.0	92.1	92.1	103.8	88.1	88.1	99.3
				SHC	91.7	105.0	118.3	88.2	101.0	113.9	84.5	96.8	109.0	80.5	92.1	103.8	76.9	88.1	99.3
	62		THC	105.1	105.1	122.9	101.1	101.1	118.2	96.8	96.8	113.2	92.2	92.2	107.8	85.5	85.5	100.0	
			SHC	87.3	105.1	122.9	84.0	101.1	118.2	80.4	96.8	113.2	76.6	92.2	107.8	71.1	85.5	100.0	
	67		THC	107.1	107.1	120.5	102.6	102.6	118.3	97.8	97.8	115.8	92.7	92.7	112.8	—	—	—	
			SHC	74.1	97.3	120.5	72.2	95.3	118.3	70.1	93.0	115.8	67.8	90.3	112.8	—	—	—	
	72	THC	114.9	114.9	114.9	109.9	109.9	109.9	104.6	104.6	104.6	98.9	98.9	98.9	—	—	—		
		SHC	50.1	73.4	96.7	48.4	71.6	94.8	46.5	69.6	92.7	44.6	67.5	90.5	—	—	—		
	76	THC	—	121.4	121.4	—	116.2	116.2	—	110.4	110.4	—	104.7	104.7	—	—	—		
		SHC	—	54.2	77.5	—	52.4	75.6	—	50.5	73.4	—	48.5	71.1	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb

Performance data (cont)



38AUZ12/40RUA12 COMBINATION RATINGS — 60 Hz

				Ambient Temperature (F)															
				85			95			105			115			125			
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)			
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
3000 Cfm	EA (wb)	58	THC	110.5	110.5	121.5	106.2	106.2	117.1	101.6	101.6	112.4	96.9	96.9	107.5	92.5	92.5	102.9	
			SHC	99.4	110.5	121.5	95.3	106.2	117.1	90.9	101.6	112.4	86.3	96.9	107.5	82.0	92.5	102.9	
		62	THC	114.0	114.0	114.0	108.8	108.8	111.4	103.3	103.3	108.7	97.6	97.6	105.6	91.2	91.2	101.6	
			SHC	92.3	103.2	114.0	89.9	100.6	111.4	87.3	98.0	108.7	84.5	95.1	105.6	80.8	91.2	101.6	
		67	THC	123.2	123.2	123.2	117.4	117.4	117.4	111.5	111.5	111.5	105.1	105.1	105.1	96.0	96.2	96.5	
			SHC	76.4	86.8	97.2	74.1	84.4	94.7	71.7	81.9	92.1	69.1	79.3	89.4	56.7	71.5	86.9	
	72	THC	133.0	133.0	133.0	126.8	126.8	126.8	120.4	120.4	120.4	113.5	113.5	113.5	106.0	106.0	106.0		
		SHC	60.2	70.1	79.9	57.9	67.7	77.5	55.6	65.3	74.9	53.2	62.7	72.3	50.5	60.0	69.4		
	76	THC	—	140.7	140.7	—	134.2	134.2	—	127.6	127.6	—	120.2	120.2	—	112.3	112.3		
		SHC	—	56.4	65.8	—	54.1	63.4	—	51.8	61.0	—	49.3	58.4	—	46.6	55.6		
	3500 Cfm	EA (wb)	58	THC	115.8	115.8	128.4	111.2	111.2	123.6	106.3	106.3	118.6	101.1	101.1	113.2	94.3	94.3	106.2
				SHC	103.3	115.8	128.4	98.8	111.2	123.6	94.1	106.3	118.6	89.0	101.1	113.2	82.5	94.3	106.2
62			THC	117.4	117.4	124.5	112.0	112.0	121.6	106.6	106.6	118.3	101.1	101.1	113.2	93.0	93.0	104.8	
			SHC	99.5	112.0	124.5	96.9	109.2	121.6	93.8	106.0	118.3	89.0	101.1	113.2	81.2	93.0	104.8	
67			THC	126.1	126.1	126.1	120.0	120.0	120.0	113.8	113.8	113.8	107.2	107.2	107.2	101.0	101.0	101.0	
			SHC	81.5	93.4	105.4	79.1	91.0	102.8	76.7	88.4	100.2	74.1	85.8	97.4	71.6	83.2	94.7	
72		THC	135.6	135.6	135.6	129.2	129.2	129.2	122.6	122.6	122.6	115.5	115.5	115.5	108.0	108.0	108.0		
		SHC	62.8	74.1	85.4	60.5	71.7	82.9	58.2	69.3	80.4	55.7	66.7	77.7	53.2	64.0	74.9		
76		THC	—	143.2	143.2	—	136.5	136.5	—	129.7	129.7	—	122.1	122.1	—	—	—		
		SHC	—	58.4	69.2	—	56.1	66.8	—	53.8	64.4	—	51.3	61.8	—	—	—		
4000 Cfm		EA (wb)	58	THC	120.2	120.2	134.3	115.3	115.3	129.2	110.1	110.1	123.8	104.5	104.5	118.0	97.1	97.1	110.4
				SHC	106.1	120.2	134.3	101.4	115.3	129.2	96.4	110.1	123.8	91.0	104.5	118.0	83.9	97.1	110.4
	62		THC	120.5	120.5	133.7	115.3	115.3	129.2	110.2	110.2	123.9	104.6	104.6	118.1	97.0	97.0	110.3	
			SHC	105.6	119.7	133.7	101.4	115.3	129.2	96.5	110.2	123.9	91.1	104.6	118.1	83.8	97.0	110.3	
	67		THC	128.2	128.2	128.2	122.0	122.0	122.0	115.6	115.6	115.6	108.8	108.8	108.8	101.3	101.3	102.0	
			SHC	86.2	99.7	113.2	83.9	97.2	110.6	81.4	94.7	108.0	78.8	92.0	105.1	76.0	89.0	102.0	
	72	THC	137.6	137.6	137.6	131.0	131.0	131.0	124.2	124.2	124.2	116.9	116.9	116.9	109.3	109.3	109.3		
		SHC	65.2	78.0	90.7	62.9	75.6	88.2	60.6	73.1	85.7	58.1	70.6	83.0	55.6	67.8	80.1		
	76	THC	—	145.0	145.0	—	138.2	138.2	—	131.2	131.2	—	—	—	—	—	—		
		SHC	—	60.3	72.5	—	58.1	70.1	—	55.8	67.7	—	—	—	—	—	—		
	4500 Cfm	EA (wb)	58	THC	123.8	123.8	139.3	118.6	118.6	134.0	113.2	113.2	128.4	107.3	107.3	122.2	102.3	102.3	117.1
				SHC	108.2	123.8	139.3	103.2	118.6	134.0	98.0	113.2	128.4	92.4	107.3	122.2	87.6	102.3	117.1
62			THC	123.9	123.9	139.4	118.7	118.7	134.1	113.3	113.3	128.4	107.4	107.4	122.3	101.8	101.8	116.5	
			SHC	108.3	123.9	139.4	103.3	118.7	134.1	98.1	113.3	128.4	92.5	107.4	122.3	87.1	101.8	116.5	
67			THC	130.0	130.0	130.0	123.6	123.6	123.6	117.1	117.1	117.1	110.2	110.2	112.5	102.8	102.8	109.3	
			SHC	90.8	105.8	120.9	88.3	103.2	118.2	85.8	100.6	115.4	83.2	97.8	112.5	80.3	94.8	109.3	
72		THC	139.1	139.1	139.1	132.4	132.4	132.4	125.5	125.5	125.5	118.1	118.1	118.1	110.3	110.3	110.3		
		SHC	67.4	81.7	95.9	65.2	79.3	93.3	62.9	76.8	90.8	60.4	74.2	88.1	57.8	71.5	85.2		
76		THC	—	146.4	146.4	—	139.6	139.6	—	—	—	—	—	—	—	—	—		
		SHC	—	62.2	75.7	—	59.9	73.3	—	—	—	—	—	—	—	—	—		
5000 Cfm		EA (wb)	58	THC	126.8	126.8	143.8	121.4	121.4	138.2	115.8	115.8	132.3	109.8	109.8	126.1	103.0	103.0	119.1
				SHC	109.8	126.8	143.8	104.5	121.4	138.2	99.2	115.8	132.3	93.4	109.8	126.1	86.9	103.0	119.1
	62		THC	126.9	126.9	143.9	121.4	121.4	138.2	115.9	115.9	132.4	109.8	109.8	126.2	103.1	103.1	119.2	
			SHC	109.8	126.9	143.9	104.6	121.4	138.2	99.3	115.9	132.4	93.5	109.8	126.2	87.0	103.1	119.2	
	67		THC	131.4	131.4	131.4	125.0	125.0	125.5	118.4	118.4	122.7	111.5	111.5	119.6	104.1	104.1	116.1	
			SHC	95.1	111.7	128.2	92.6	109.1	125.5	90.1	106.4	122.7	87.3	103.4	119.6	84.2	100.1	116.1	
	72	THC	140.3	140.3	140.3	133.5	133.5	133.5	126.6	126.6	126.6	119.0	119.0	119.0	111.1	111.1	111.1		
		SHC	69.6	85.3	100.9	67.4	82.9	98.4	65.1	80.5	95.9	62.6	77.9	93.2	60.0	75.1	90.3		
	76	THC	—	147.6	147.6	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	64.0	78.8	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb



38AUZ12/40RUA14 COMBINATION RATINGS — 60 Hz

				Ambient Temperature (F)															
				85			95			105			115			125			
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)			
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
3750 Cfm	EA (wb)	58	THC	119.7	119.7	132.9	115.2	115.2	128.3	110.5	110.5	123.4	105.3	105.3	118.0	97.9	97.9	110.4	
			SHC	106.5	119.7	132.9	102.2	115.2	128.3	97.6	110.5	123.4	92.6	105.3	118.0	85.5	97.9	110.4	
		62	THC	121.2	121.2	130.3	116.0	116.0	127.0	110.8	110.8	122.9	105.4	105.4	118.1	98.7	98.7	111.1	
			SHC	104.0	117.2	130.3	101.0	114.0	127.0	97.2	110.1	122.9	92.7	105.4	118.1	86.2	98.7	111.1	
		67	THC	130.0	130.0	130.0	124.4	124.4	124.4	118.5	118.5	118.5	112.0	112.0	112.0	104.9	104.9	104.9	
			SHC	85.3	97.8	110.3	83.1	95.5	108.0	80.8	93.1	105.5	78.3	90.5	102.7	75.6	87.7	99.8	
	72	THC	139.4	139.4	139.4	133.7	133.7	133.7	127.7	127.7	127.7	120.9	120.9	120.9	113.5	113.5	113.5		
		SHC	65.3	77.1	88.8	63.3	75.0	86.7	61.2	72.8	84.4	58.9	70.4	81.8	56.3	67.7	79.0		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	4300 Cfm	EA (wb)	58	THC	124.1	124.1	138.8	119.4	119.4	134.1	114.5	114.5	128.9	109.0	109.0	123.2	100.5	100.5	114.4
				SHC	109.2	124.1	138.8	104.8	119.4	134.1	100.0	114.5	128.9	94.8	109.0	123.2	86.6	100.5	114.4
62			THC	124.5	124.5	138.3	119.5	119.5	134.1	114.5	114.5	128.9	109.1	109.1	123.3	101.0	101.0	114.9	
			SHC	108.7	123.5	138.3	104.9	119.5	134.1	100.1	114.5	128.9	94.9	109.1	123.3	87.1	101.0	114.9	
67			THC	132.1	132.1	132.1	126.4	126.4	126.4	120.4	120.4	121.1	113.8	113.8	115.6	106.5	106.5	109.5	
			SHC	90.7	104.9	119.0	88.5	102.5	116.6	86.1	100.1	114.1	83.6	97.4	111.2	80.7	94.5	108.1	
72		THC	141.3	141.3	141.3	135.5	135.5	135.5	129.5	129.5	129.5	122.6	122.6	122.6	114.3	114.3	114.3		
		SHC	68.1	81.4	94.7	66.1	79.3	92.6	64.0	77.1	90.3	61.7	74.7	87.7	57.6	69.7	81.7		
76		THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
5000 Cfm		EA (wb)	58	THC	128.9	128.9	145.7	124.1	124.1	140.7	118.9	118.9	135.3	113.2	113.2	129.3	106.8	106.8	122.7
				SHC	112.1	128.9	145.7	107.5	124.1	140.7	102.5	118.9	135.3	97.0	113.2	129.3	90.9	106.8	122.7
	62		THC	129.0	129.0	145.8	124.2	124.2	140.7	119.0	119.0	135.3	113.3	113.3	129.4	106.8	106.8	122.7	
			SHC	112.2	129.0	145.8	107.6	124.2	140.7	102.6	119.0	135.3	97.1	113.3	129.4	91.0	106.8	122.7	
	67		THC	134.4	134.4	134.4	128.6	128.6	128.6	122.5	122.5	124.7	115.8	115.8	121.8	108.4	108.4	118.5	
			SHC	97.3	113.6	129.8	95.1	111.2	127.4	92.7	108.7	124.7	90.1	105.9	121.8	87.0	102.8	118.5	
	72	THC	143.4	143.4	143.4	137.5	137.5	137.5	131.3	131.3	131.3	124.3	124.3	124.3	—	—	—		
		SHC	71.6	86.8	102.0	69.6	84.7	99.9	67.5	82.6	97.6	65.2	80.1	95.0	—	—	—		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	5700 Cfm	EA (wb)	58	THC	132.3	132.3	151.0	127.3	127.3	145.8	122.0	122.0	140.3	116.1	116.1	134.1	109.5	109.5	127.2
				SHC	113.6	132.3	151.0	108.8	127.3	145.8	103.7	122.0	140.3	98.1	116.1	134.1	91.8	109.5	127.2
62			THC	132.4	132.4	151.1	127.4	127.4	145.9	122.1	122.1	140.3	116.2	116.2	134.2	109.5	109.5	127.3	
			SHC	113.7	132.4	151.1	108.9	127.4	145.9	103.8	122.1	140.3	98.1	116.2	134.2	91.8	109.5	127.3	
67			THC	136.0	136.0	141.8	130.2	130.2	137.7	124.1	124.1	134.2	117.4	117.4	130.6	110.3	110.3	125.5	
			SHC	103.2	121.5	139.8	100.8	119.0	137.2	98.1	116.1	134.2	94.9	112.7	130.6	90.2	107.8	125.5	
72		THC	144.7	144.7	144.7	138.8	138.8	138.8	132.0	132.0	140.6	126.0	126.0	133.0	—	—	—		
		SHC	74.8	92.0	109.1	72.8	89.9	107.0	71.4	88.0	81.8	68.7	85.2	101.8	—	—	—		
76		THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
6250 Cfm		EA (wb)	58	THC	134.9	134.9	155.1	129.8	129.8	149.8	124.4	124.4	144.2	118.3	118.3	137.8	111.6	111.6	130.8
				SHC	114.7	134.9	155.1	109.9	129.8	149.8	104.7	124.4	144.2	98.9	118.3	137.8	92.5	111.6	130.8
	62		THC	135.0	135.0	155.2	129.9	129.9	149.9	124.5	124.5	144.2	118.4	118.4	137.9	111.7	111.7	130.9	
			SHC	114.8	135.0	155.2	109.9	129.9	149.9	104.7	124.5	144.2	98.9	118.4	137.9	92.5	111.7	130.9	
	67		THC	137.2	137.2	147.6	131.4	131.4	144.9	125.3	125.3	141.6	118.7	118.7	137.5	111.8	111.8	131.0	
			SHC	107.8	127.7	147.6	105.3	125.1	144.9	102.4	122.0	141.6	98.6	118.1	137.5	92.7	111.8	131.0	
	72	THC	145.7	145.7	145.7	139.9	139.9	139.9	—	—	—	—	—	—	—	—	—		
		SHC	77.3	96.0	114.7	75.4	94.0	112.6	—	—	—	—	—	—	—	—	—		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb

Performance data (cont)



38AUD12/40RUA12 COMBINATION RATINGS — 60 Hz

			Ambient Temperature (F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
3000 Cfm	EA (wb)	58	THC	111.6	111.6	125.3	107.3	107.3	120.5	102.6	102.6	115.2	97.3	97.3	109.4	91.7	91.7	103.0	
			SHC	97.9	111.6	125.3	94.1	107.3	120.5	89.9	102.6	115.2	85.3	97.3	109.4	80.3	91.7	103.0	
		62	THC	115.9	115.9	119.8	110.5	110.5	117.1	104.8	104.8	114.2	98.3	98.3	110.7	92.4	92.4	106.2	
			SHC	88.6	104.2	119.8	86.0	101.5	117.1	83.2	98.7	114.2	79.9	95.3	110.7	76.2	91.2	106.2	
		67	THC	125.6	125.6	125.6	119.9	119.9	119.9	113.7	113.7	113.7	107.1	107.1	107.1	99.6	99.6	99.6	
			SHC	71.9	87.6	103.3	69.4	85.1	100.8	66.8	82.5	98.1	63.9	79.6	95.3	60.8	76.5	92.2	
	72	THC	135.6	135.6	135.6	129.6	129.6	129.6	123.1	123.1	123.1	116.1	116.1	116.1	108.4	108.4	108.4		
		SHC	55.0	70.8	86.6	52.6	68.4	84.2	50.1	65.9	81.7	47.4	63.2	79.0	44.5	60.3	76.1		
	76	THC	—	143.6	143.6	—	137.4	137.4	—	130.7	130.7	—	123.3	123.3	—	115.2	115.2		
		SHC	—	57.3	73.6	—	55.1	71.4	—	52.7	68.9	—	50.1	66.2	—	47.4	63.4		
	3500 Cfm	EA (wb)	58	THC	117.1	117.1	131.6	112.5	112.5	126.4	107.5	107.5	120.8	102.0	102.0	114.7	95.7	95.7	107.7
				SHC	102.6	117.1	131.6	98.6	112.5	126.4	94.2	107.5	120.8	89.4	102.0	114.7	83.8	95.7	107.7
62			THC	119.3	119.3	130.8	113.8	113.8	127.8	108.1	108.1	123.7	102.1	102.1	119.1	95.7	95.7	111.7	
			SHC	95.1	112.9	130.8	92.3	110.0	127.8	88.9	106.3	123.7	85.1	102.1	119.1	79.7	95.7	111.7	
67			THC	128.8	128.8	128.8	122.8	122.8	122.8	116.4	116.4	116.4	109.5	109.5	109.5	101.9	101.9	101.9	
			SHC	76.0	94.1	112.2	73.5	91.6	109.7	70.8	88.9	107.0	68.0	86.1	104.2	64.9	82.9	101.0	
72		THC	138.6	138.6	138.6	132.5	132.5	132.5	125.8	125.8	125.8	118.4	118.4	118.4	110.5	110.5	110.5		
		SHC	56.5	74.8	93.0	54.2	72.4	90.6	51.7	69.9	88.1	48.9	67.1	85.3	46.0	64.2	82.4		
76		THC	—	146.6	146.6	—	140.2	140.2	—	133.2	133.2	—	125.6	125.6	—	—	—		
		SHC	—	59.4	78.0	—	57.1	75.7	—	54.7	73.3	—	52.2	70.6	—	—	—		
4000 Cfm		EA (wb)	58	THC	121.6	121.6	136.6	116.7	116.7	131.2	111.4	111.4	125.3	105.7	105.7	118.9	99.2	99.2	111.7
				SHC	106.5	121.6	136.6	102.2	116.7	131.2	97.6	111.4	125.3	92.5	105.7	118.9	86.8	99.2	111.7
	62		THC	122.2	122.2	140.3	117.0	117.0	135.6	111.4	111.4	130.0	105.7	105.7	123.4	99.2	99.2	115.9	
			SHC	100.7	120.5	140.3	97.0	116.3	135.6	92.8	111.4	130.0	88.0	105.7	123.4	82.6	99.2	115.9	
	67		THC	131.1	131.1	131.1	125.0	125.0	125.0	118.5	118.5	118.5	111.4	111.4	112.6	103.7	103.7	109.4	
			SHC	79.9	100.4	120.8	77.4	97.8	118.3	74.7	95.1	115.6	71.8	92.2	112.6	68.7	89.0	109.4	
	72	THC	140.9	140.9	140.9	134.6	134.6	134.6	127.7	127.7	127.7	120.3	120.3	120.3	112.1	112.1	112.1		
		SHC	57.9	78.6	99.2	55.6	76.2	96.8	53.1	73.7	94.2	50.4	70.9	91.5	47.5	68.0	88.5		
	76	THC	—	148.8	148.8	—	142.3	142.3	—	135.2	135.2	—	—	—	—	—	—		
		SHC	—	61.3	82.2	—	59.1	80.0	—	56.7	77.5	—	—	—	—	—	—		
	4500 Cfm	EA (wb)	58	THC	125.3	125.3	140.9	120.2	120.2	135.3	114.8	114.8	129.1	108.8	108.8	122.4	102.4	102.4	115.2
				SHC	109.7	125.3	140.9	105.2	120.2	135.3	100.4	114.8	129.1	95.2	108.8	122.4	89.5	102.4	115.2
62			THC	125.3	125.3	146.2	120.2	120.2	140.3	114.7	114.7	134.0	108.8	108.8	127.1	102.4	102.4	119.6	
			SHC	104.4	125.3	146.2	100.1	120.2	140.3	95.5	114.7	134.0	90.5	108.8	127.1	85.1	102.4	119.6	
67			THC	133.0	133.0	133.0	126.8	126.8	126.8	120.1	120.1	123.8	112.9	112.9	120.7	105.1	105.1	117.3	
			SHC	83.6	106.4	129.2	81.1	103.8	126.6	78.3	101.0	123.8	75.4	98.0	120.7	72.2	94.8	117.3	
72		THC	142.8	142.8	142.8	136.3	136.3	136.3	129.3	129.3	129.3	121.7	121.7	121.7	113.3	113.3	113.3		
		SHC	59.3	82.2	105.1	57.0	79.9	102.8	54.4	77.3	100.2	51.7	74.6	97.5	48.8	71.6	94.5		
76		THC	—	150.5	150.5	—	143.9	143.9	—	—	—	—	—	—	—	—	—		
		SHC	—	63.1	86.4	—	60.9	84.1	—	—	—	—	—	—	—	—	—		
5000 Cfm		EA (wb)	58	THC	128.4	128.4	144.5	123.2	123.2	138.7	117.6	117.6	132.3	111.4	111.4	125.4	104.7	104.7	117.9
				SHC	112.4	128.4	144.5	107.8	123.2	138.7	102.8	117.6	132.3	97.4	111.4	125.4	91.5	104.7	117.9
	62		THC	128.4	128.4	149.9	123.2	123.2	143.9	117.5	117.5	137.3	111.4	111.4	130.2	104.7	104.7	122.4	
			SHC	106.9	128.4	149.9	102.5	123.2	143.9	97.8	117.5	137.3	92.6	111.4	130.2	87.0	104.7	122.4	
	67		THC	134.6	134.6	137.2	128.3	128.3	134.5	121.5	121.5	131.6	114.2	114.2	128.3	106.3	106.3	124.6	
			SHC	87.1	112.2	137.2	84.6	109.5	134.5	81.8	106.7	131.6	78.8	103.6	128.3	75.5	100.1	124.6	
	72	THC	144.2	144.2	144.2	137.7	137.7	137.7	130.6	130.6	130.6	122.8	122.8	122.8	114.4	114.4	114.4		
		SHC	60.6	85.8	111.0	58.3	83.5	108.6	55.8	80.9	106.1	53.0	78.2	103.3	50.1	75.2	100.3		
	76	THC	—	151.9	151.9	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	64.9	90.4	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb



38AUD12/40RUA14 COMBINATION RATINGS — 60 Hz

			Ambient Temperature (F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
3750 Cfm	EA (wb)	58	THC	118.1	118.1	133.1	113.8	113.8	128.3	109.1	109.1	123.0	103.9	103.9	117.1	98.2	98.2	110.7	
			SHC	103.1	118.1	133.1	99.4	113.8	128.3	95.3	109.1	123.0	90.7	103.9	117.1	85.8	98.2	110.7	
		62	THC	120.1	120.1	133.8	115.0	115.0	130.9	109.5	109.5	127.1	104.1	104.1	121.7	98.3	98.3	115.0	
			SHC	96.2	115.0	133.8	93.6	112.3	130.9	90.5	108.8	127.1	86.4	104.1	121.7	81.7	98.3	115.0	
		67	THC	130.2	130.2	130.2	124.8	124.8	124.8	118.7	118.7	118.7	112.0	112.0	112.0	104.6	104.6	105.5	
			SHC	77.7	96.9	116.0	75.5	94.6	113.8	73.0	92.2	111.3	70.4	89.5	108.6	67.4	86.4	105.5	
	72	THC	140.9	140.9	140.9	135.4	135.4	135.4	129.2	129.2	129.2	122.3	122.3	122.3	114.6	114.6	114.6		
		SHC	58.0	77.3	96.6	56.0	75.3	94.5	53.7	73.0	92.2	51.2	70.4	89.7	48.4	67.6	86.8		
	76	THC	—	149.8	149.8	—	144.2	144.2	—	137.8	137.8	—	130.6	130.6	—	122.6	122.6		
		SHC	—	61.4	81.1	—	59.4	79.1	—	57.3	76.9	—	54.9	74.5	—	52.2	71.7		
	4300 Cfm	EA (wb)	58	THC	122.7	122.7	138.2	118.2	118.2	133.2	113.3	113.3	127.7	107.9	107.9	121.5	101.8	101.8	114.7
				SHC	107.1	122.7	138.2	103.9	118.2	133.2	98.9	113.3	127.7	94.1	107.9	121.5	88.9	101.8	114.7
62			THC	123.2	123.2	142.6	118.4	118.4	138.1	113.4	113.4	132.5	108.0	108.0	126.2	101.9	101.9	119.1	
			SHC	101.5	122.0	142.6	98.2	118.1	138.1	94.1	113.3	132.5	89.7	108.0	126.2	84.6	101.9	119.1	
67			THC	132.3	132.3	132.3	126.8	126.8	126.8	120.6	120.6	121.3	113.8	113.8	118.1	106.3	106.3	114.4	
			SHC	81.8	103.6	125.2	79.6	101.3	123.0	77.1	98.8	120.5	74.4	96.0	117.7	71.4	92.9	114.4	
72		THC	143.1	143.1	143.1	137.4	137.4	137.4	131.0	131.0	131.0	124.0	124.0	124.0	116.1	116.1	116.1		
		SHC	59.7	81.4	103.3	57.7	79.4	101.2	55.4	77.1	98.9	52.9	74.6	96.3	50.1	71.8	93.5		
76		THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
5000 Cfm		EA (wb)	58	THC	127.4	127.4	143.6	122.8	122.8	138.4	117.7	117.7	132.6	111.9	111.9	126.1	105.5	105.5	118.9
				SHC	111.3	127.4	143.6	107.2	122.8	138.4	102.7	117.7	132.6	97.7	111.9	126.1	92.1	105.5	118.9
	62		THC	127.5	127.5	149.1	122.9	122.9	143.7	117.7	117.7	137.7	112.0	112.0	131.0	105.6	105.6	123.5	
			SHC	105.9	127.5	149.1	102.1	122.9	143.7	97.8	117.7	137.7	93.0	112.0	131.0	87.7	105.6	123.5	
	67		THC	134.4	134.4	136.4	128.9	128.9	134.1	122.6	122.6	131.4	115.7	115.7	128.4	108.0	108.0	124.8	
			SHC	86.9	111.7	136.4	84.7	109.4	134.1	82.2	106.8	131.4	79.3	103.8	128.4	76.2	100.5	124.8	
	72	THC	145.1	145.1	145.1	139.4	139.4	139.4	132.9	132.9	132.9	125.7	125.7	125.7	117.6	117.6	117.6		
		SHC	61.7	86.6	111.5	59.6	84.6	109.5	57.4	82.3	107.2	54.8	79.7	104.6	52.1	76.9	101.7		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	5700 Cfm	EA (wb)	58	THC	131.2	131.2	147.9	126.4	126.4	142.4	121.1	121.1	136.4	115.1	115.1	129.8	108.5	108.5	122.4
				SHC	114.5	131.2	147.9	110.3	126.4	142.4	105.7	121.1	136.4	100.5	115.1	129.8	94.8	108.5	122.4
62			THC	131.3	131.3	153.5	126.5	126.5	148.0	121.2	121.2	141.7	115.2	115.2	134.7	108.6	108.6	127.1	
			SHC	109.0	131.3	153.5	105.1	126.5	148.0	100.6	121.2	141.7	95.7	115.2	134.7	90.3	108.6	127.1	
67			THC	136.1	136.1	146.9	130.5	130.5	144.4	124.2	124.2	141.6	117.2	117.2	138.0	109.6	109.6	133.8	
			SHC	91.6	119.3	146.9	89.3	116.9	144.4	86.7	114.2	141.6	83.8	111.0	138.0	80.2	107.0	133.8	
72		THC	146.6	146.6	146.6	140.9	140.9	140.9	134.2	134.2	134.2	126.9	126.9	126.9	118.7	118.7	118.7		
		SHC	63.5	91.5	119.6	61.5	89.5	117.5	59.3	87.2	115.2	56.7	84.6	112.6	54.0	81.8	109.7		
76		THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
6250 Cfm		EA (wb)	58	THC	133.5	133.5	150.5	128.7	128.7	145.0	123.3	123.3	138.9	117.2	117.2	132.1	110.5	110.5	124.5
				SHC	116.6	133.5	150.5	112.4	128.7	145.0	107.6	123.3	138.9	102.3	117.2	132.1	96.4	110.5	124.5
	62		THC	133.6	133.6	156.3	128.8	128.8	150.6	123.3	123.3	144.2	117.3	117.3	137.1	110.5	110.5	129.2	
			SHC	111.0	133.6	156.3	107.0	128.8	150.6	102.5	123.3	144.2	97.4	117.3	137.1	91.8	110.5	129.2	
	67		THC	137.1	137.1	154.6	131.5	131.5	151.9	125.1	125.1	148.6	118.2	118.2	144.5	110.8	110.8	138.2	
			SHC	95.1	124.8	154.6	92.7	122.3	151.9	89.9	119.3	148.6	86.7	115.6	144.5	82.4	110.8	138.2	
	72	THC	147.5	147.5	147.5	141.7	141.7	141.7	135.0	135.0	135.0	127.6	127.6	127.6	119.4	119.4	119.4		
		SHC	65.0	95.3	125.6	63.0	93.3	123.6	60.7	91.0	121.2	58.2	88.4	118.6	55.4	85.6	115.8		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- THC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb

Performance data (cont)



38AUZ14/40RU14 COMBINATION RATINGS — 60 Hz

			Ambient Temperature (F)																	
			85			95			105			115			125					
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
3750 Cfm	EA (wb)	58	THC	138.4	138.4	152.4	133.2	133.2	147.0	127.6	127.6	141.2	121.6	121.6	135.0	113.3	113.3	126.5		
			SHC	124.5	138.4	152.4	119.4	133.2	147.0	114.0	127.6	141.2	108.2	121.6	135.0	100.2	113.3	126.5		
		62	THC	144.5	144.5	144.5	137.9	137.9	138.9	131.0	131.0	135.4	123.7	123.7	131.6	114.0	114.0	120.6		
			SHC	114.9	128.6	142.3	111.8	125.4	138.9	108.6	122.0	135.4	105.0	118.3	131.6	91.0	108.3	120.6		
		67	THC	156.4	156.4	156.4	149.4	149.4	149.4	141.9	141.9	141.9	134.0	134.0	134.0	125.3	125.3	125.3		
			SHC	95.6	108.7	121.7	92.7	105.7	118.6	89.7	102.5	115.3	86.5	99.2	111.9	83.1	95.7	108.2		
	72	72	THC	168.6	168.6	168.6	161.2	161.2	161.2	153.4	153.4	153.4	144.8	144.8	144.8	135.6	135.6	135.6		
			SHC	75.7	88.1	100.4	73.0	85.2	97.5	70.1	82.2	94.3	67.0	79.0	91.0	63.8	75.6	87.4		
		76	THC	—	178.5	178.5	—	170.8	170.8	—	162.6	162.6	—	153.6	153.6	—	143.9	143.9		
			SHC	—	71.4	83.2	—	68.7	80.3	—	65.8	77.3	—	62.7	74.0	—	59.4	70.6		
		4375 Cfm	EA (wb)	58	THC	145.4	145.4	161.2	139.7	139.7	155.4	133.7	133.7	149.2	127.3	127.3	142.6	121.3	121.3	136.3
					SHC	129.5	145.4	161.2	124.0	139.7	155.4	118.3	133.7	149.2	112.1	127.3	142.6	106.3	121.3	136.3
62	THC			148.6	148.6	155.2	141.9	141.9	151.6	134.8	134.8	147.6	127.5	127.5	142.8	121.2	121.2	136.1		
	SHC			123.8	139.5	155.2	120.5	136.0	151.6	116.8	132.2	147.6	112.3	127.5	142.8	106.1	121.1	136.1		
67	THC			160.2	160.2	160.2	152.9	152.9	152.9	145.2	145.2	145.2	136.9	136.9	136.9	127.9	127.9	127.9		
	SHC			101.9	116.9	131.8	99.0	113.8	128.7	96.0	110.7	125.4	92.8	107.3	121.9	89.3	103.7	118.1		
72	72		THC	172.3	172.3	172.3	164.7	164.7	164.7	156.5	156.5	156.5	147.7	147.7	147.7	138.1	138.1	138.1		
			SHC	79.0	93.2	107.3	76.3	90.3	104.3	73.4	87.3	101.1	70.3	84.0	97.8	67.0	80.6	94.2		
	76		THC	—	182.1	182.1	—	174.2	174.2	—	165.6	165.6	—	156.4	156.4	—	146.3	146.3		
			SHC	—	74.0	87.5	—	71.3	84.6	—	68.4	81.5	—	65.3	78.3	—	61.9	74.8		
	5000 Cfm		EA (wb)	58	THC	151.0	151.0	168.8	145.0	145.0	162.6	138.7	138.7	156.0	131.9	131.9	149.0	124.6	124.6	141.4
					SHC	133.2	151.0	168.8	127.5	145.0	162.6	121.4	138.7	156.0	114.9	131.9	149.0	107.9	124.6	141.4
62		THC		152.2	152.2	166.8	145.3	145.3	162.8	138.9	138.9	156.2	132.0	132.0	149.1	124.7	124.7	141.5		
		SHC		131.5	149.1	166.8	127.8	145.3	162.8	121.5	138.9	156.2	115.0	132.0	149.1	107.9	124.7	141.5		
67		THC		163.1	163.1	163.1	155.6	155.6	155.6	147.6	147.6	147.6	139.1	139.1	139.1	130.1	130.1	130.1		
		SHC		107.9	124.8	141.6	105.0	121.7	138.5	101.9	118.5	135.1	98.6	115.1	131.5	95.1	111.4	127.7		
72		72	THC	175.0	175.0	175.0	167.3	167.3	167.3	158.8	158.8	158.8	149.8	149.8	149.8	140.0	140.0	140.0		
			SHC	82.1	98.0	113.9	79.4	95.2	111.0	76.5	92.1	107.8	73.4	88.9	104.4	70.1	85.4	100.7		
		76	THC	—	184.8	184.8	—	176.6	176.6	—	167.9	167.9	—	158.4	158.4	—	—	—		
			SHC	—	76.5	91.6	—	73.8	88.8	—	70.8	85.7	—	67.7	82.4	—	—	—		
		5625 Cfm	EA (wb)	58	THC	155.6	155.6	175.2	149.4	149.4	168.8	142.8	142.8	161.9	135.7	135.7	154.5	127.9	127.9	146.4
					SHC	136.0	155.6	175.2	130.0	149.4	168.8	123.7	142.8	161.9	116.8	135.7	154.5	109.4	127.9	146.4
62	THC			155.7	155.7	175.3	149.5	149.5	168.8	142.9	142.9	162.0	135.8	135.8	154.6	128.0	128.0	146.5		
	SHC			136.1	155.7	175.3	130.1	149.5	168.8	123.8	142.9	162.0	117.0	135.8	154.6	109.5	128.0	146.5		
67	THC			165.3	165.3	165.3	157.8	157.8	157.8	149.6	149.6	149.6	140.9	140.9	140.9	131.7	131.7	136.8		
	SHC			113.6	132.4	151.2	110.7	129.3	148.0	107.5	126.0	144.5	104.1	122.5	140.8	100.5	118.6	136.8		
72	72		THC	177.3	177.3	177.3	169.3	169.3	169.3	160.7	160.7	160.7	151.5	151.5	151.5	141.6	141.6	141.6		
			SHC	85.0	102.7	120.5	82.3	99.9	117.4	79.4	96.8	114.2	76.3	93.6	110.8	73.0	90.1	107.2		
	76		THC	—	187.0	187.0	—	178.7	178.7	—	169.7	169.7	—	—	—	—	—	—		
			SHC	—	78.9	95.7	—	76.2	92.8	—	73.2	89.8	—	—	—	—	—	—		
	6250 Cfm		EA (wb)	58	THC	159.5	159.5	180.9	153.1	153.1	174.3	146.2	146.2	167.1	138.9	138.9	159.5	131.0	131.0	151.2
					SHC	138.0	159.5	180.9	131.9	153.1	174.3	125.3	146.2	167.1	118.3	138.9	159.5	110.7	131.0	151.2
62		THC		159.6	159.6	181.0	153.2	153.2	174.4	146.3	146.3	167.2	139.0	139.0	159.5	131.0	131.0	151.2		
		SHC		138.2	159.6	181.0	132.0	153.2	174.4	125.5	146.3	167.2	118.4	139.0	159.5	110.7	131.0	151.2		
67		THC		167.2	167.2	167.2	159.5	159.5	159.5	151.2	151.2	153.5	142.5	142.5	149.6	133.1	133.1	145.3		
		SHC		119.0	139.7	160.4	116.0	136.6	157.1	112.8	133.1	153.5	109.2	129.4	149.6	105.3	125.3	145.3		
72		72	THC	179.0	179.0	179.0	170.9	170.9	170.9	162.2	162.2	162.2	152.8	152.8	152.8	142.6	142.6	142.6		
			SHC	87.9	107.4	126.8	85.1	104.5	123.8	82.2	101.4	120.6	79.1	98.2	117.2	75.9	94.7	113.5		
		76	THC	—	188.7	188.7	—	180.2	180.2	—	—	—	—	—	—	—	—	—		
			SHC	—	81.3	99.8	—	78.5	96.9	—	—	—	—	—	—	—	—	—		

LEGEND

- tb — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb

38AUZ14/40RUA16 COMBINATION RATINGS — 60 Hz

		Ambient Temperature (F)																	
		85			95			105			115			125					
		EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
		75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
4500 Cfm	EA (wb)	58	THC	149.9	149.9	166.0	144.0	144.0	160.0	137.7	137.7	153.4	130.8	130.8	146.3	122.9	122.9	138.1	
			SHC	133.8	149.9	166.0	128.1	144.0	160.0	122.0	137.7	153.4	115.3	130.8	146.3	107.8	122.9	138.1	
		62	THC	152.8	152.8	160.5	145.8	145.8	156.7	138.6	138.6	152.1	131.1	131.1	146.5	122.0	122.0	137.1	
			SHC	128.7	144.6	160.5	125.2	141.0	156.7	120.8	136.5	152.1	115.6	131.1	146.5	106.8	122.0	137.1	
		67	THC	164.6	164.6	164.6	157.1	157.1	157.1	149.0	149.0	149.0	140.3	140.3	140.3	—	—	—	
			SHC	105.8	120.9	136.1	102.8	117.8	132.9	99.7	114.5	129.5	96.2	111.0	125.8	—	—	—	
	72	THC	176.9	176.9	176.9	169.1	169.1	169.1	160.6	160.6	160.6	151.4	151.4	151.4	—	—	—		
		SHC	81.9	96.2	110.5	79.1	93.3	107.5	76.1	90.1	104.2	72.9	86.7	100.7	—	—	—		
	76	THC	—	187.1	187.1	—	179.0	179.0	—	169.7	169.7	—	—	—	—	—	—		
		SHC	—	76.2	89.7	—	73.4	86.9	—	69.9	82.9	—	—	—	—	—	—		
	5300 Cfm	EA (wb)	58	THC	156.6	156.6	175.0	150.4	150.4	168.6	143.7	143.7	161.7	136.4	136.4	154.1	124.7	124.7	141.2
				SHC	138.2	156.6	175.0	132.2	150.4	168.6	125.8	143.7	161.7	118.8	136.4	154.1	108.2	124.7	141.2
62			THC	157.6	157.6	173.5	150.7	150.7	168.8	143.8	143.8	161.7	136.5	136.5	154.2	125.1	125.1	141.6	
			SHC	136.9	155.2	173.5	132.5	150.7	168.8	125.9	143.8	161.7	118.9	136.5	154.2	108.6	125.1	141.6	
67			THC	167.9	167.9	167.9	160.2	160.2	160.2	151.8	151.8	152.2	142.9	142.9	144.4	—	—	—	
			SHC	113.4	131.0	148.5	110.5	127.9	145.3	107.3	124.5	141.7	103.8	120.9	138.0	—	—	—	
72		THC	180.2	180.2	180.2	172.1	172.1	172.1	163.4	163.4	163.4	153.9	153.9	153.9	—	—	—		
		SHC	85.9	102.4	118.8	83.1	99.5	115.8	80.1	96.3	112.5	76.9	92.9	109.0	—	—	—		
76		THC	—	189.4	189.4	—	181.2	181.2	—	—	—	—	—	—	—	—	—		
		SHC	—	78.2	93.1	—	75.5	90.3	—	—	—	—	—	—	—	—	—		
6000 Cfm		EA (wb)	58	THC	161.3	161.3	181.5	154.9	154.9	174.9	147.8	147.8	167.6	140.3	140.3	159.7	—	—	—
				SHC	141.1	161.3	181.5	134.9	154.9	174.9	128.1	147.8	167.6	120.9	140.3	159.7	—	—	—
	62		THC	161.7	161.7	181.1	155.0	155.0	175.0	148.0	148.0	167.7	140.4	140.4	159.8	—	—	—	
			SHC	140.7	160.9	181.1	135.0	155.0	175.0	128.2	148.0	167.7	121.0	140.4	159.8	—	—	—	
	67		THC	170.1	170.1	170.1	162.3	162.3	162.3	153.8	153.8	155.1	144.7	144.7	149.9	—	—	—	
			SHC	119.6	139.1	158.6	116.6	136.0	155.3	113.3	132.5	151.6	109.7	128.7	147.7	—	—	—	
	72	THC	182.3	182.3	182.3	174.1	174.1	174.1	165.2	165.2	165.2	155.4	155.4	155.4	—	—	—		
		SHC	89.1	107.4	125.7	86.3	104.5	122.7	83.3	101.3	119.4	80.1	97.9	115.8	—	—	—		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	6800 Cfm	EA (wb)	58	THC	166.2	166.2	188.7	159.5	159.5	181.8	152.2	152.2	174.2	144.3	144.3	165.9	—	—	—
				SHC	143.6	166.2	188.7	137.2	159.5	181.8	130.2	152.2	174.2	122.6	144.3	165.9	—	—	—
62			THC	166.3	166.3	188.8	159.6	159.6	181.9	152.3	152.3	174.3	144.4	144.4	166.0	—	—	—	
			SHC	143.8	166.3	188.8	137.4	159.6	181.9	130.3	152.3	174.3	122.7	144.4	166.0	—	—	—	
67			THC	172.4	172.4	175.3	164.5	164.5	169.2	155.9	155.9	163.4	146.7	146.7	159.1	—	—	—	
			SHC	126.9	148.8	170.7	123.8	145.5	167.3	120.3	141.9	163.4	116.3	137.6	159.1	—	—	—	
72		THC	184.4	184.4	184.4	176.1	176.1	176.1	167.0	167.0	167.0	157.1	157.1	157.1	—	—	—		
		SHC	93.0	113.5	134.1	90.2	110.6	131.1	87.2	107.5	127.8	84.0	104.1	124.2	—	—	—		
76		THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
7500 Cfm		EA (wb)	58	THC	170.1	170.1	194.7	163.2	163.2	187.6	155.7	155.7	179.7	147.5	147.5	171.2	—	—	—
				SHC	145.4	170.1	194.7	138.8	163.2	187.6	131.6	155.7	179.7	123.8	147.5	171.2	—	—	—
	62		THC	170.2	170.2	194.8	163.3	163.3	187.7	155.8	155.8	179.8	147.6	147.6	171.3	—	—	—	
			SHC	145.6	170.2	194.8	139.0	163.3	187.7	131.7	155.8	179.8	123.9	147.6	171.3	—	—	—	
	67		THC	174.3	174.3	181.8	166.3	166.3	178.1	157.7	157.7	174.0	148.4	148.4	169.1	—	—	—	
			SHC	133.4	157.6	181.8	130.1	154.1	178.1	126.4	150.2	174.0	122.0	145.5	169.1	—	—	—	
	72	THC	186.0	186.0	186.0	177.6	177.6	177.6	168.4	168.4	168.4	158.4	158.4	158.4	—	—	—		
		SHC	96.5	119.2	141.9	93.8	116.3	138.9	90.8	113.2	135.6	87.6	109.8	132.0	—	—	—		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb

Performance data (cont)



38AUD14/40RUA14 COMBINATION RATINGS — 60 Hz

			Ambient Temperature (F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
3750 Cfm	EA (wb)	58	THC	137.2	137.2	152.7	132.4	132.4	147.9	127.1	127.1	142.6	121.2	121.2	136.7	114.7	114.7	130.2	
			SHC	121.7	137.2	152.7	117.0	132.4	147.9	111.6	127.1	142.6	105.8	121.2	136.7	99.3	114.7	130.2	
		62	THC	143.2	143.2	143.2	137.3	137.3	140.1	130.6	130.6	136.8	123.3	123.3	133.1	115.5	115.5	128.8	
			SHC	112.0	127.5	142.9	109.1	124.6	140.1	105.9	121.3	136.8	102.2	117.7	133.1	97.9	113.3	128.8	
		67	THC	154.9	154.9	154.9	148.6	148.6	148.6	141.6	141.6	141.6	133.9	133.9	133.9	125.4	125.4	125.4	
			SHC	91.1	106.5	122.0	88.4	103.9	119.4	85.5	101.0	116.5	82.3	97.8	113.3	78.9	94.3	109.8	
	72	THC	166.4	166.4	166.4	160.0	160.0	160.0	152.9	152.9	152.9	144.8	144.8	144.8	135.8	135.8	135.8		
		SHC	69.8	85.3	100.7	67.4	82.9	98.4	64.8	80.3	95.7	61.8	77.3	92.8	58.6	74.0	89.5		
	76	THC	—	175.4	175.4	—	169.0	169.0	—	161.5	161.5	—	153.2	153.2	—	—	—		
		SHC	—	67.2	82.7	—	65.5	81.0	—	63.3	78.8	—	60.7	76.2	—	—	—		
	4375 Cfm	EA (wb)	58	THC	143.6	143.6	161.7	138.6	138.6	156.7	133.0	133.0	151.0	126.7	126.7	144.8	119.9	119.9	137.9
				SHC	125.6	143.6	161.7	120.6	138.6	156.7	114.9	133.0	151.0	108.7	126.7	144.8	101.8	119.9	137.9
62			THC	147.0	147.0	155.9	140.8	140.8	152.8	134.1	134.1	149.0	127.7	127.7	141.1	120.7	120.7	134.7	
			SHC	119.8	137.9	155.9	116.7	134.7	152.8	112.9	130.9	149.0	105.0	123.1	141.1	98.6	116.6	134.7	
67			THC	158.8	158.8	158.8	152.3	152.3	152.3	145.0	145.0	145.0	137.0	137.0	137.0	128.1	128.1	128.1	
			SHC	96.4	114.4	132.5	93.7	111.8	129.8	90.8	108.9	126.9	87.6	105.6	123.7	84.1	102.1	120.2	
72		THC	170.6	170.6	170.6	163.9	163.9	163.9	156.3	156.3	156.3	147.8	147.8	147.8	138.6	138.6	138.6		
		SHC	72.3	90.3	108.4	69.8	87.9	105.9	67.1	85.1	103.2	64.1	82.1	100.2	60.8	78.8	96.9		
76		THC	—	179.7	179.7	—	172.7	172.7	—	165.0	165.0	—	—	—	—	—	—		
		SHC	—	70.7	88.7	—	68.5	86.6	—	66.1	84.1	—	—	—	—	—	—		
5000 Cfm		EA (wb)	58	THC	148.9	148.9	169.6	143.7	143.7	164.3	137.8	137.8	158.4	131.3	131.3	151.9	124.0	124.0	144.7
				SHC	128.3	148.9	169.6	123.1	143.7	164.3	117.2	137.8	158.4	110.6	131.3	151.9	103.4	124.0	144.7
	62		THC	149.9	149.9	167.0	144.2	144.2	160.8	138.6	138.6	154.4	131.8	131.8	149.5	124.0	124.0	144.7	
			SHC	125.8	146.4	167.0	119.6	140.2	160.8	113.1	133.8	154.4	108.3	128.9	149.5	103.4	124.0	144.7	
	67		THC	161.8	161.8	161.8	155.1	155.1	155.1	147.6	147.6	147.6	139.3	139.3	139.3	130.2	130.2	130.2	
			SHC	101.4	122.0	142.6	98.7	119.3	139.9	95.7	116.3	137.0	92.4	113.0	133.7	88.8	109.5	130.1	
	72	THC	173.7	173.7	173.7	166.7	166.7	166.7	158.9	158.9	158.9	150.2	150.2	150.2	140.7	140.7	140.7		
		SHC	74.4	95.0	115.7	71.9	92.5	113.2	69.2	89.8	110.4	66.1	86.7	107.4	62.8	83.4	104.1		
	76	THC	—	183.0	183.0	—	175.8	175.8	—	—	—	—	—	—	—	—	—		
		SHC	—	73.4	94.1	—	71.2	91.8	—	—	—	—	—	—	—	—	—		
	5625 Cfm	EA (wb)	58	THC	153.5	153.5	176.7	148.0	148.0	171.2	141.9	141.9	165.1	135.1	135.1	158.3	127.5	127.5	150.8
				SHC	130.2	153.5	176.7	124.8	148.0	171.2	118.7	141.9	165.1	111.9	135.1	158.3	104.3	127.5	150.8
62			THC	153.9	153.9	171.9	148.3	148.3	168.2	141.9	141.9	165.0	135.1	135.1	158.3	127.5	127.5	150.7	
			SHC	125.5	148.7	171.9	121.8	145.0	168.2	118.6	141.8	165.0	111.9	135.1	158.3	104.3	127.5	150.7	
67			THC	164.1	164.1	164.1	157.3	157.3	157.3	149.7	149.7	149.7	141.2	141.2	143.4	131.9	131.9	139.7	
			SHC	106.0	129.2	152.4	103.3	126.5	149.7	100.3	123.5	146.7	97.0	120.2	143.4	93.3	116.5	139.7	
72		THC	176.2	176.2	176.2	169.0	169.0	169.0	161.0	161.0	161.0	152.1	152.1	152.1	142.4	142.4	142.4		
		SHC	76.4	99.6	122.8	73.8	97.1	120.3	71.1	94.3	117.5	68.0	91.2	114.4	64.7	87.9	111.1		
76		THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
6250 Cfm		EA (wb)	58	THC	157.3	157.3	183.1	151.7	151.7	177.5	145.4	145.4	171.2	138.3	138.3	164.1	130.5	130.5	156.3
				SHC	131.6	157.3	183.1	125.9	151.7	177.5	119.6	145.4	171.2	112.5	138.3	164.1	104.7	130.5	156.3
	62		THC	157.3	157.3	183.1	151.7	151.7	177.5	145.4	145.4	171.1	138.3	138.3	164.1	130.5	130.5	156.3	
			SHC	131.6	157.3	183.1	125.9	151.7	177.5	119.6	145.4	171.1	112.5	138.3	164.1	104.7	130.5	156.3	
	67		THC	166.1	166.1	166.1	159.2	159.2	159.3	151.3	151.3	156.2	142.7	142.7	152.8	133.2	133.2	149.0	
			SHC	110.5	136.3	162.0	107.8	133.5	159.3	104.7	130.5	156.2	101.3	127.0	152.8	97.4	123.2	149.0	
	72	THC	178.3	178.3	178.3	170.9	170.9	170.9	162.7	162.7	162.7	153.7	153.7	153.7	143.8	143.8	143.8		
		SHC	78.1	103.9	129.7	75.6	101.4	127.2	72.8	98.6	124.4	69.8	95.5	121.3	66.4	92.2	118.0		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb



38AUD14/40RUA16 COMBINATION RATINGS — 60 Hz

		Ambient Temperature (F)																	
		85			95			105			115			125					
		EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
		75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
4500 Cfm	EA (wb)	58	THC	145.6	145.6	164.1	140.4	140.4	158.2	134.6	134.6	151.7	128.4	128.4	144.6	121.6	121.6	137.0	
			SHC	127.1	145.6	164.1	122.5	140.4	158.2	117.5	134.6	151.7	112.1	128.4	144.6	106.2	121.6	137.0	
		62	THC	149.1	149.1	162.7	142.7	142.7	159.2	135.8	135.8	155.2	128.8	128.8	149.6	121.7	121.7	142.3	
			SHC	117.6	140.1	162.7	114.5	136.8	159.2	110.9	133.1	155.2	106.4	128.0	149.6	101.1	121.7	142.3	
		67	THC	161.2	161.2	161.2	154.4	154.4	154.4	147.0	147.0	147.0	138.8	138.8	138.8	130.1	130.1	130.1	
			SHC	94.6	117.4	140.3	91.8	114.6	137.5	88.8	111.6	134.5	85.6	108.4	131.2	82.1	104.9	127.7	
		72	THC	174.0	174.0	174.0	167.0	167.0	167.0	159.1	159.1	159.1	150.6	150.6	150.6	141.2	141.2	141.2	
		SHC	70.0	93.0	116.1	67.4	90.4	113.4	64.6	87.6	110.6	61.6	84.5	107.5	58.3	81.2	104.1		
		76	THC	—	184.6	184.6	—	177.3	177.3	—	169.1	169.1	—	160.1	160.1	—	150.3	150.3	
		SHC	—	72.9	96.6	—	70.5	94.0	—	67.7	91.2	—	64.8	88.2	—	61.6	85.0		
	5300 Cfm	EA (wb)	58	THC	152.7	152.7	172.0	147.0	147.0	165.7	140.9	140.9	158.8	134.3	134.3	151.3	127.0	127.0	143.1
				SHC	133.2	152.7	172.0	128.4	147.0	165.7	123.1	140.9	158.8	117.3	134.3	151.3	110.8	127.0	143.1
62			THC	153.6	153.6	176.8	147.4	147.4	171.5	141.0	141.0	165.0	134.4	134.4	157.2	127.1	127.1	148.6	
			SHC	126.2	151.5	176.8	122.0	146.8	171.5	117.2	141.0	165.0	111.6	134.4	157.2	105.6	127.1	148.6	
67			THC	164.9	164.9	164.9	157.8	157.8	157.9	150.2	150.2	150.6	141.7	141.7	144.5	132.6	132.6	140.7	
			SHC	100.8	127.3	153.7	98.0	124.5	150.9	95.0	121.4	147.8	91.7	118.1	144.5	88.1	114.4	140.7	
		72	THC	177.6	177.6	177.6	170.3	170.3	170.3	162.2	162.2	162.2	153.3	153.3	153.3	143.7	143.7	143.7	
		SHC	72.4	99.1	125.7	69.9	96.5	123.1	67.0	93.7	120.2	64.0	90.6	117.1	60.6	87.2	113.7		
		76	THC	—	188.2	188.2	—	180.6	180.6	—	172.1	172.1	—	162.9	162.9	—	152.8	152.8	
		SHC	—	76.0	103.2	—	73.5	100.6	—	70.8	97.9	—	67.9	94.9	—	64.7	91.6		
6000 Cfm		EA (wb)	58	THC	157.7	157.7	177.7	151.8	151.8	171.1	145.5	145.5	163.9	138.5	138.5	156.1	130.9	130.9	147.5
				SHC	137.6	157.7	177.7	132.6	151.8	171.1	127.0	145.5	163.9	120.9	138.5	156.1	114.3	130.9	147.5
	62		THC	157.8	157.8	184.5	152.0	152.0	177.7	145.6	145.6	170.2	138.6	138.6	162.1	131.0	131.0	153.2	
			SHC	131.1	157.8	184.5	126.2	152.0	177.7	120.9	145.6	170.2	115.1	138.6	162.1	108.8	131.0	153.2	
	67		THC	167.2	167.2	167.2	160.1	160.1	162.1	152.3	152.3	158.9	143.7	143.7	155.3	134.6	134.6	151.3	
			SHC	105.9	135.5	165.0	103.1	132.6	162.1	100.0	129.5	158.9	96.7	126.0	155.3	93.0	122.1	151.3	
		72	THC	180.0	180.0	180.0	172.6	172.6	172.6	164.3	164.3	164.3	155.3	155.3	155.3	145.4	145.4	145.4	
		SHC	74.5	104.3	134.0	72.0	101.6	131.3	69.1	98.8	128.4	66.1	95.7	125.3	62.7	92.3	121.9		
		76	THC	—	190.6	190.6	—	182.8	182.8	—	174.2	174.2	—	164.8	164.8	—	154.6	154.6	
		SHC	—	78.6	108.9	—	76.1	106.3	—	73.4	103.5	—	70.5	100.5	—	67.3	97.3		
	6800 Cfm	EA (wb)	58	THC	162.2	162.2	182.9	156.2	156.2	176.1	149.6	149.6	168.6	142.4	142.4	160.4	134.5	134.5	151.5
				SHC	141.7	162.2	182.9	136.4	156.2	176.1	130.7	149.6	168.6	124.3	142.4	160.4	117.4	134.5	151.5
62			THC	162.4	162.4	190.0	156.3	156.3	182.9	149.7	149.7	175.1	142.5	142.5	166.6	134.6	134.6	157.3	
			SHC	134.9	162.4	190.0	129.9	156.3	182.9	124.4	149.7	175.1	118.4	142.5	166.6	111.8	134.6	157.3	
67			THC	169.5	169.5	177.2	162.2	162.2	174.2	154.3	154.3	170.7	145.7	145.7	166.7	136.4	136.4	162.1	
			SHC	111.5	144.4	177.2	108.6	141.4	174.2	105.5	138.1	170.7	101.9	134.4	166.7	98.1	130.0	162.1	
		72	THC	182.2	182.2	182.2	174.6	174.6	174.6	166.2	166.2	166.2	157.0	157.0	157.0	146.9	146.9	146.9	
		SHC	76.8	109.9	143.1	74.2	107.3	140.5	71.4	104.4	137.6	68.3	101.3	134.5	65.0	97.9	131.0		
		76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
7500 Cfm		EA (wb)	58	THC	165.7	165.7	186.8	159.6	159.6	179.8	152.7	152.7	172.1	145.2	145.2	163.7	137.1	137.1	154.5
				SHC	144.7	165.7	186.8	139.3	159.6	179.8	133.4	152.7	172.1	126.8	145.2	163.7	119.7	137.1	154.5
	62		THC	165.9	165.9	193.9	159.6	159.6	186.7	152.8	152.8	178.7	145.3	145.3	169.9	137.2	137.2	160.4	
			SHC	137.8	165.9	193.9	132.6	159.6	186.7	126.9	152.8	178.7	120.7	145.3	169.9	113.9	137.2	160.4	
	67		THC	171.2	171.2	187.4	163.9	163.9	184.1	155.9	155.9	180.3	147.2	147.2	175.8	137.9	137.9	170.1	
			SHC	116.2	151.8	187.4	113.2	148.7	184.1	109.9	145.1	180.3	106.2	141.0	175.8	101.8	135.9	170.1	
		72	THC	183.8	183.8	183.8	176.0	176.0	176.0	167.5	167.5	167.5	158.2	158.2	158.2	148.0	148.0	148.0	
		SHC	78.7	114.8	150.9	76.1	112.2	148.3	73.3	109.3	145.4	70.2	106.2	142.2	66.9	102.8	138.7		
		76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- THC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb

Performance data (cont)



38AUZ16/40RUA16 COMBINATION RATINGS — 60 Hz

			Ambient Temperature (F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
4500 cfm	EA (wb)	58	THC	169.9	169.9	190.5	164.1	164.1	184.2	157.5	157.5	176.8	151.4	151.4	170.0	—	—	—	
			SHC	148.9	169.7	190.5	143.9	164.1	184.2	138.1	157.5	176.8	132.7	151.4	170.0	—	—	—	
		62	THC	178.8	178.8	178.8	171.5	171.5	174.3	163.3	163.3	170.5	155.3	155.3	166.3	146.7	146.7	161.9	
			SHC	133.1	155.4	177.8	129.5	151.9	174.3	125.7	148.1	170.5	121.7	144.0	166.3	117.4	139.7	161.9	
		67	THC	193.8	193.8	193.8	186.0	186.0	186.0	177.5	177.5	177.5	168.6	168.6	168.6	—	—	—	
			SHC	108.6	130.7	152.8	105.2	127.4	149.5	101.6	123.8	146.0	97.8	120.1	142.4	—	—	—	
	72	THC	210.1	210.1	210.1	201.7	201.7	201.7	192.6	192.6	192.6	182.7	182.7	182.7	—	—	—		
		SHC	85.0	106.1	127.1	81.6	103.0	124.3	77.9	99.5	121.1	74.0	95.9	117.7	—	—	—		
	76	THC	—	223.4	223.4	—	215	215.0	—	205.5	205.5	—	194.8	194.8	—	—	—		
		SHC	—	86.6	111.3	—	82.8	107.5	—	79.6	104.3	—	76.5	101.3	—	—	—		
	5250 cfm	EA (wb)	58	THC	178.2	178.2	200.2	172.0	172.0	193.3	164.8	164.8	185.2	158.4	158.4	178.0	150.6	150.6	169.3
				SHC	156.3	178.2	200.2	150.8	172.0	193.3	144.4	164.8	185.2	138.7	158.4	178.0	131.9	150.6	169.3
62			THC	184.0	184.0	193.8	176.0	176.0	189.8	167.6	167.6	185.5	159.7	159.7	180.7	151.0	151.0	174.3	
			SHC	142.4	168.1	193.8	138.5	164.1	189.8	134.4	160.0	185.5	130.1	155.4	180.7	124.8	149.6	174.3	
67			THC	199.0	199.0	199.0	190.8	190.8	190.8	181.6	181.6	181.6	172.6	172.6	172.6	—	—	—	
			SHC	114.5	140.0	165.6	111.0	136.6	162.2	107.2	132.9	158.6	103.5	129.2	154.9	—	—	—	
72		THC	215.3	215.3	215.3	206.5	206.5	206.5	196.9	196.9	196.9	186.7	186.7	186.7	—	—	—		
		SHC	87.1	111.9	136.7	83.7	108.7	133.7	80.0	105.2	130.3	76.2	101.4	126.7	—	—	—		
76		THC	—	229.0	229.0	—	219.8	219.8	—	209.6	209.6	—	198.7	198.7	—	—	—		
		SHC	—	89.0	117.8	—	86.3	115.2	—	83.2	105.2	—	79.7	103.1	—	—	—		
6000 cfm		EA (wb)	58	THC	185.2	185.2	208.1	178.7	178.7	200.8	170.9	170.9	192.2	164.2	164.2	184.6	156.1	156.1	175.6
				SHC	162.2	185.2	208.1	156.5	178.7	200.8	149.6	170.9	192.2	143.7	164.2	184.6	136.6	156.1	175.6
	62		THC	188.1	188.1	208.1	180.3	180.3	203.5	172.4	172.4	196.5	164.5	164.5	189.5	156.3	156.3	181.6	
			SHC	150.7	179.4	208.1	146.6	175.1	203.5	141.1	168.8	196.5	135.6	162.5	189.5	129.7	155.6	181.6	
	67		THC	203.1	203.1	203.1	194.6	194.6	194.6	185.6	185.6	185.6	175.8	175.8	175.8	—	—	—	
			SHC	120.0	148.9	177.8	116.6	145.5	174.4	112.8	141.8	170.8	108.9	137.9	166.9	—	—	—	
	72	THC	219.3	219.3	219.3	210.2	210.2	210.2	200.2	200.2	200.2	189.8	189.8	189.8	—	—	—		
		SHC	89.2	117.4	145.7	85.8	114.2	142.6	82.0	110.6	139.1	78.2	106.8	135.5	—	—	—		
	76	THC	—	232.9	232.9	—	223.4	223.4	—	213.1	213.1	—	201.9	201.9	—	—	—		
		SHC	—	92.4	116.9	—	89.4	115.2	—	86.2	112.9	—	82.6	110.0	—	—	—		
	6750 cfm	EA (wb)	58	THC	191.0	191.0	214.8	184.2	184.2	207.2	176.6	176.6	198.6	169.0	169.0	190.1	160.6	160.6	180.7
				SHC	167.3	191.0	214.8	161.2	184.2	207.2	154.5	176.6	198.6	147.8	169.0	190.1	140.5	160.6	180.7
62			THC	192.1	192.1	219.7	184.5	184.5	212.5	177.8	177.8	202.9	168.9	168.9	197.3	160.6	160.6	187.6	
			SHC	157.7	188.7	219.7	152.1	182.3	212.5	145.5	174.2	202.9	140.6	168.9	197.3	133.6	160.6	187.6	
67			THC	206.4	206.4	206.4	197.7	197.7	197.7	188.2	188.2	188.2	178.4	178.4	178.5	—	—	—	
			SHC	125.4	157.5	189.7	121.8	154.0	186.2	118.0	150.2	182.5	114.1	146.3	178.5	—	—	—	
72		THC	222.5	222.5	222.5	213.1	213.1	213.1	203.1	203.1	203.1	192.4	192.4	192.4	—	—	—		
		SHC	91.1	122.7	154.3	87.7	119.4	151.1	84.0	115.8	147.5	80.2	112.1	144.0	—	—	—		
76		THC	—	236.1	236.1	—	226.5	226.5	—	215.9	215.9	—	204.4	204.4	—	—	—		
		SHC	—	95.3	124.6	—	92.3	122.2	—	89.0	119.5	—	85.4	116.3	—	—	—		
7500 cfm		EA (wb)	58	THC	196.0	196.0	220.5	189.0	189.0	212.6	181.2	181.2	204.0	173.1	173.1	194.8	—	—	—
				SHC	171.5	196.0	220.5	165.3	189.0	212.6	158.5	181.2	204.0	151.4	173.1	194.8	—	—	—
	62		THC	196.1	196.1	228.2	189.0	189.0	220.6	182.3	182.3	207.2	173.1	173.1	202.2	—	—	—	
			SHC	162.9	195.5	228.2	157.3	189.0	220.6	148.6	177.9	207.2	144.0	173.1	202.2	—	—	—	
	67		THC	209.1	209.1	209.1	200.2	200.2	200.2	190.5	190.5	193.8	180.5	180.5	189.7	—	—	—	
			SHC	130.5	165.8	201.1	126.9	162.2	197.6	123.1	158.4	193.8	119.1	154.4	189.7	—	—	—	
	72	THC	225.2	225.2	225.2	215.6	215.6	215.6	205.4	205.4	205.4	194.4	194.4	194.4	—	—	—		
		SHC	93.0	127.9	162.7	89.6	124.5	159.4	85.9	120.9	155.9	82.0	117.1	152.2	—	—	—		
	76	THC	—	238.9	238.9	—	229.0	229.0	—	218.1	218.1	—	206.4	206.4	—	—	—		
		SHC	—	98.1	131.2	—	95.0	128.6	—	91.6	125.6	—	88.0	122.3	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb



38AUZ16/40RUA25 COMBINATION RATINGS — 60 Hz

		Ambient Temperature (F)																	
		85			95			105			115			125					
		EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
		75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
6000 Cfm	EA (wb)	58	THC	188.1	188.1	211.9	181.9	181.9	205.0	175.2	175.2	197.4	167.8	167.8	189.1	159.7	159.7	180.0	
		58	SHC	164.2	188.1	211.9	158.8	181.9	205.0	153.0	175.2	197.4	146.5	167.8	189.1	139.4	159.7	180.0	
		62	THC	189.5	189.5	216.5	182.5	182.5	212.0	175.4	175.4	205.1	168.0	168.0	196.4	159.8	159.8	186.9	
		62	SHC	154.7	185.6	216.5	150.8	181.4	212.0	145.7	175.4	205.1	139.5	168.0	196.4	132.7	159.8	186.9	
		67	THC	203.3	203.3	203.3	195.6	195.6	195.6	187.2	187.2	187.2	177.9	177.9	177.9	167.8	167.8	172.0	
		67	SHC	123.2	154.9	186.5	120.1	151.7	183.3	116.7	148.3	179.9	113.0	144.6	176.1	109.0	140.5	172.0	
	72	THC	218.9	218.9	218.9	210.9	210.9	210.9	202.0	202.0	202.0	192.1	192.1	192.1	181.3	181.3	181.3		
	72	SHC	90.2	122.0	153.8	87.2	119.0	150.8	84.0	115.8	147.5	80.5	112.2	143.9	76.7	108.3	140.0		
	76	THC	—	232.4	232.4	—	224.0	224.0	—	214.7	214.7	—	—	—	—	—	—		
	76	SHC	—	95.8	128.2	—	92.9	125.2	—	89.8	122.0	—	—	—	—	—	—		
	7000 Cfm	EA (wb)	58	THC	195.8	195.8	220.6	189.4	189.4	213.4	182.3	182.3	205.4	174.5	174.5	196.6	165.8	165.8	186.9
			58	SHC	171.0	195.8	220.6	165.3	189.4	213.4	159.1	182.3	205.4	152.4	174.5	196.6	144.8	165.8	186.9
62			THC	196.0	196.0	229.2	189.5	189.5	221.6	182.4	182.4	213.3	174.6	174.6	204.2	166.0	166.0	194.1	
62			SHC	162.8	196.0	229.2	157.4	189.5	221.6	151.5	182.4	213.3	145.1	174.6	204.2	137.9	166.0	194.1	
67			THC	207.2	207.2	207.2	199.2	199.2	201.0	190.5	190.5	197.4	181.1	181.1	193.5	170.7	170.7	189.2	
67			SHC	131.3	167.8	204.3	128.1	164.6	201.0	124.6	161.0	197.4	120.9	157.2	193.5	116.8	153.0	189.2	
72		THC	222.7	222.7	222.7	214.4	214.4	214.4	205.4	205.4	205.4	195.2	195.2	195.2	184.1	184.1	184.1		
72		SHC	93.3	130.0	166.6	90.3	127.0	163.6	87.1	123.7	160.3	83.6	120.1	156.7	79.7	116.2	152.7		
76		THC	—	236.5	236.5	—	—	—	—	—	—	—	—	—	—	—	—		
76		SHC	—	100.0	137.1	—	—	—	—	—	—	—	—	—	—	—	—		
8000 Cfm		EA (wb)	58	THC	202.0	202.0	227.6	195.3	195.3	220.1	187.9	187.9	211.8	179.8	179.8	202.6	170.7	170.7	192.4
			58	SHC	176.4	202.0	227.6	170.5	195.3	220.1	164.1	187.9	211.8	157.0	179.8	202.6	149.1	170.7	192.4
	62		THC	202.1	202.1	236.4	195.4	195.4	228.5	188.0	188.0	219.9	179.9	179.9	210.4	170.8	170.8	199.8	
	62		SHC	167.9	202.1	236.4	162.3	195.4	228.5	156.2	188.0	219.9	149.4	179.9	210.4	141.9	170.8	199.8	
	67		THC	210.1	210.1	221.2	202.1	202.1	217.8	193.3	193.3	214.0	183.7	183.7	209.7	173.2	173.2	204.8	
	67		SHC	138.9	180.0	221.2	135.7	176.7	217.8	132.2	173.1	214.0	128.3	169.0	209.7	124.0	164.4	204.8	
	72	THC	225.7	225.7	225.7	217.3	217.3	217.3	207.9	207.9	207.9	197.6	197.6	197.6	186.2	186.2	186.2		
	72	SHC	96.3	137.7	179.1	93.4	134.7	176.1	90.1	131.4	172.8	86.6	127.8	169.1	82.7	123.9	165.1		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	76	SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	9000 Cfm	EA (wb)	58	THC	207.1	207.1	233.4	200.2	200.2	225.6	192.6	192.6	217.0	184.1	184.1	207.4	174.8	174.8	196.9
			58	SHC	180.8	207.1	233.4	174.8	200.2	225.6	168.2	192.6	217.0	160.7	184.1	207.4	152.6	174.8	196.9
62			THC	207.2	207.2	242.3	200.3	200.3	234.2	192.7	192.7	225.3	184.2	184.2	215.4	174.9	174.9	204.5	
62			SHC	172.1	207.2	242.3	166.4	200.3	234.2	160.1	192.7	225.3	153.0	184.2	215.4	145.3	174.9	204.5	
67			THC	212.6	212.6	237.2	204.5	204.5	233.5	195.6	195.6	229.3	186.0	186.0	224.4	175.5	175.5	217.9	
67			SHC	146.2	191.7	237.2	142.9	188.2	233.5	139.2	184.3	229.3	135.1	179.7	224.4	130.1	174.0	217.9	
72		THC	228.0	228.0	228.0	219.4	219.4	219.4	209.9	209.9	209.9	199.5	199.5	199.5	187.9	187.9	187.9		
72		SHC	99.2	145.3	191.4	96.3	142.3	188.3	93.0	139.0	184.9	89.5	135.4	181.2	85.6	131.4	177.2		
76		THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
76		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
10000 Cfm		EA (wb)	58	THC	211.4	211.4	238.2	204.3	204.3	230.2	196.4	196.4	221.4	187.8	187.8	211.6	178.1	178.1	200.7
			58	SHC	184.6	211.4	238.2	178.4	204.3	230.2	171.5	196.4	221.4	164.0	187.8	211.6	155.5	178.1	200.7
	62		THC	211.5	211.5	247.3	204.4	204.4	239.0	196.6	196.6	229.8	187.9	187.9	219.7	178.2	178.2	208.3	
	62		SHC	175.7	211.5	247.3	169.8	204.4	239.0	163.3	196.6	229.8	156.1	187.9	219.7	148.0	178.2	208.3	
	67		THC	214.6	214.6	251.9	206.6	206.6	247.8	197.8	197.8	242.7	188.2	188.2	235.9	178.3	178.3	223.5	
	67		SHC	152.9	202.4	251.9	149.4	198.6	247.8	145.4	194.0	242.7	140.5	188.2	235.9	133.1	178.3	223.5	
	72	THC	229.9	229.9	229.9	221.2	221.2	221.2	211.6	211.6	211.6	201.0	201.0	201.0	—	—	—		
	72	SHC	102.1	152.7	203.3	99.1	149.7	200.2	95.9	146.4	196.9	92.3	142.7	193.1	—	—	—		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	76	SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb

Performance data (cont)



38AUD16/40RUA16 COMBINATION RATINGS — 60 Hz

			Ambient Temperature (F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
4500 cfm	EA (wb)	58	THC	168.2	168.2	185.7	161.9	161.9	181.8	156.0	156.0	175.2	149.4	149.4	167.8	143.0	143.0	160.7	
			SHC	145.7	165.7	185.7	142.0	161.9	181.8	136.7	156.0	175.2	130.9	149.4	167.8	125.3	143.0	160.7	
		62	THC	176.6	176.6	176.6	169.7	169.7	172.9	162.2	162.2	169.3	153.7	153.7	165.1	145.0	145.0	160.6	
			SHC	131.8	154.0	176.2	128.4	150.7	172.9	124.8	147.0	169.3	120.7	142.9	165.1	116.4	138.5	160.6	
		67	THC	192.7	192.7	192.7	185.3	185.3	185.3	177.2	177.2	177.2	168.0	168.0	168.0	158.8	158.8	158.8	
			SHC	108.2	130.1	151.9	104.9	126.9	148.9	101.5	123.5	145.5	97.6	119.7	141.8	93.7	115.9	138.1	
	72	THC	210.4	210.4	210.4	202.4	202.4	202.4	193.7	193.7	193.7	184.1	184.1	184.1	173.7	173.7	173.7		
		SHC	85.4	106.0	126.6	82.1	103.1	124.0	78.6	99.8	121.1	74.9	96.3	117.8	70.9	92.5	114.2		
	76	THC	—	224.8	224.8	—	216.8	216.8	—	207.7	207.7	—	197.7	197.7	—	186.5	186.5		
		SHC	—	86.9	111.7	—	83.2	107.9	—	80.0	104.8	—	77.2	102.0	—	73.8	96.1		
	5350 cfm	EA (wb)	58	THC	175.7	175.7	197.4	169.9	169.9	190.9	163.6	163.6	183.9	157.0	157.0	176.5	148.9	148.9	167.4
				SHC	154.0	175.7	197.4	148.9	169.9	190.9	143.3	163.6	183.9	137.5	157.0	176.5	130.3	148.9	167.4
62			THC	181.7	181.7	192.0	174.2	174.2	188.1	166.6	166.6	184.0	157.8	157.8	179.0	149.9	149.9	172.2	
			SHC	141.0	166.5	192.0	137.2	162.7	188.1	133.4	158.7	184.0	128.8	153.9	179.0	123.4	147.8	172.2	
67			THC	198.0	198.0	198.0	190.1	190.1	190.1	181.6	181.6	181.6	172.0	172.0	172.0	162.6	162.6	162.6	
			SHC	114.1	139.4	164.7	110.7	136.1	161.5	107.2	132.6	158.1	103.3	128.8	154.3	99.4	124.9	150.4	
72		THC	215.8	215.8	215.8	207.4	207.4	207.4	198.2	198.2	198.2	188.3	188.3	188.3	177.5	177.5	177.5		
		SHC	87.6	112.0	136.4	84.4	108.9	133.5	80.8	105.6	130.4	77.1	102.0	127.0	73.1	98.2	123.3		
76		THC	—	230.9	230.9	—	222.1	222.1	—	212.5	212.5	—	202.0	202.0	—	190.4	190.4		
		SHC	—	89.4	118.3	—	86.8	115.7	—	83.9	109.4	—	80.7	103.0	—	77.0	100.5		
6000 cfm		EA (wb)	58	THC	182.7	182.7	205.3	176.5	176.5	198.5	169.9	169.9	191.0	162.2	162.2	182.4	154.7	154.7	174.0
				SHC	160.0	182.7	205.3	154.6	176.5	198.5	148.7	169.9	191.0	142.0	162.2	182.4	135.3	154.7	174.0
	62		THC	185.8	185.8	205.9	178.6	178.6	200.2	170.8	170.8	195.6	163.3	163.3	186.9	155.9	155.9	177.2	
			SHC	149.1	177.5	205.9	144.4	172.3	200.2	140.3	167.9	195.6	134.0	160.5	186.9	127.2	152.2	177.2	
	67		THC	202.0	202.0	202.0	193.9	193.9	193.9	185.0	185.0	185.0	175.4	175.4	175.4	165.2	165.2	165.2	
			SHC	119.6	148.2	176.9	116.3	144.9	173.6	112.6	141.3	170.1	108.7	137.5	166.3	104.6	133.4	162.2	
	72	THC	219.9	219.9	219.9	211.2	211.2	211.2	201.7	201.7	201.7	191.8	191.8	191.8	180.4	180.4	180.4		
		SHC	89.8	117.6	145.4	86.5	114.5	142.5	82.9	111.1	139.2	79.2	107.3	135.4	75.1	103.6	132.0		
	76	THC	—	235.1	235.1	—	226.2	226.2	—	216.2	216.2	—	205.2	205.2	—	193.3	193.3		
		SHC	—	92.9	121.7	—	90.2	114.7	—	87.1	112.8	—	83.7	110.2	—	79.9	107.2		
	6750 cfm	EA (wb)	58	THC	188.5	188.5	212.0	182.1	182.1	204.8	175.1	175.1	197.0	167.0	167.0	187.9	159.2	159.2	179.2
				SHC	165.0	188.5	212.0	159.4	182.1	204.8	153.2	175.1	197.0	146.1	167.0	187.9	139.2	159.2	179.2
62			THC	189.7	189.7	216.7	183.3	183.3	208.6	176.4	176.4	200.6	168.7	168.7	191.6	159.2	159.2	185.9	
			SHC	155.5	186.1	216.7	149.8	179.2	208.6	144.0	172.3	200.6	137.5	164.6	191.6	132.4	159.2	185.9	
67			THC	205.3	205.3	205.3	196.8	196.8	196.8	187.8	187.8	187.8	178.1	178.1	178.1	167.5	167.5	173.4	
			SHC	124.9	156.7	188.6	121.5	153.3	185.2	117.8	149.7	181.6	113.9	145.7	177.6	109.6	141.5	173.4	
72		THC	223.3	223.3	223.3	214.3	214.3	214.3	204.6	204.6	204.6	194.2	194.2	194.2	182.6	182.6	182.6		
		SHC	91.8	122.9	154.0	88.5	119.7	151.0	84.9	116.3	147.7	81.2	112.7	144.2	77.1	108.7	140.3		
76		THC	—	238.8	238.8	—	229.4	229.4	—	219.1	219.1	—	207.9	207.9	—	195.4	195.4		
		SHC	—	96.1	124.2	—	93.2	122.1	—	90.0	119.6	—	86.5	116.7	—	82.6	113.3		
7500 cfm		EA (wb)	58	THC	193.5	193.5	217.7	186.9	186.9	210.2	179.6	179.6	202.1	171.5	171.5	193.1	163.1	163.1	183.6
				SHC	169.3	193.5	217.7	163.5	186.9	210.2	157.1	179.6	202.1	150.0	171.5	193.1	142.6	163.1	183.6
	62		THC	194.9	194.9	221.2	188.2	188.2	213.2	180.1	180.1	207.5	171.5	171.5	200.4	163.1	163.1	190.6	
			SHC	158.8	190.0	221.2	153.1	183.2	213.2	148.3	177.9	207.5	142.6	171.5	200.4	135.6	163.1	190.6	
	67		THC	207.9	207.9	207.9	199.3	199.3	199.3	190.0	190.0	192.6	180.1	180.1	188.7	169.2	169.2	184.2	
			SHC	129.9	164.9	199.8	126.4	161.4	196.4	122.7	157.7	192.6	118.7	153.7	188.7	114.4	149.3	184.2	
	72	THC	226.0	226.0	226.0	216.9	216.9	216.9	207.0	207.0	207.0	196.3	196.3	196.3	184.4	184.4	184.4		
		SHC	93.7	128.1	162.4	90.4	124.9	159.3	86.9	121.5	156.0	83.1	117.7	152.4	78.9	113.6	148.4		
	76	THC	—	241.7	241.7	—	232.1	232.1	—	221.6	221.6	—	210.1	210.1	—	197.2	197.2		
		SHC	—	98.9	131.0	—	96.0	128.6	—	92.7	125.9	—	89.2	122.7	—	85.2	119.2		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb



38AUD16/40RUA25 COMBINATION RATINGS — 60 Hz

		Ambient Temperature (F)																	
		85			95			105			115			125					
		EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
		75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
6000 Cfm	EA (wb)	58	THC	189.5	189.5	213.0	182.9	182.9	205.6	175.8	175.8	197.7	168.1	168.1	189.0	159.8	159.8	179.8	
		58	SHC	166.0	189.5	213.0	160.2	182.9	205.6	154.0	175.8	197.7	147.1	168.1	189.0	139.9	159.8	179.8	
		62	THC	191.7	191.7	215.9	184.0	184.0	211.1	176.3	176.3	203.9	168.3	168.3	196.3	159.8	159.8	186.5	
		62	SHC	155.8	185.8	215.9	151.6	181.3	211.1	146.0	174.9	203.9	140.1	168.2	196.3	133.1	159.8	186.5	
		67	THC	207.6	207.6	207.6	199.1	199.1	199.1	189.8	189.8	189.8	180.1	180.1	180.1	169.2	169.2	170.3	
		67	SHC	124.8	155.7	186.5	121.3	152.1	182.9	117.4	148.2	179.0	113.5	144.3	175.1	108.9	139.6	170.3	
	72	THC	225.6	225.6	225.6	216.6	216.6	216.6	206.8	206.8	206.8	196.1	196.1	196.1	184.7	184.7	184.7		
	72	SHC	92.7	123.8	154.8	89.3	120.4	151.4	85.7	116.7	147.7	81.8	112.7	143.7	77.6	108.5	139.5		
	76	THC	—	240.7	240.7	—	231.2	231.2	—	220.8	220.8	—	209.6	209.6	—	—	—		
	76	SHC	—	98.4	130.4	—	95.2	127.1	—	91.6	123.4	—	87.8	119.4	—	—	—		
	7000 Cfm	EA (wb)	58	THC	197.6	197.6	222.2	190.6	190.6	214.3	183.0	183.0	205.9	174.8	174.8	196.7	165.9	165.9	186.6
			58	SHC	173.0	197.6	222.2	166.8	190.6	214.3	160.1	183.0	205.9	152.9	174.8	196.7	145.2	165.9	186.6
62			THC	197.6	197.6	230.6	190.6	190.6	222.5	183.0	183.0	213.6	174.8	174.8	204.1	165.8	165.8	193.7	
62			SHC	164.6	197.6	230.6	158.8	190.6	222.5	152.3	183.0	213.6	145.5	174.8	204.1	138.0	165.8	193.7	
67			THC	211.7	211.7	211.7	202.9	202.9	202.9	193.4	193.4	195.5	183.1	183.1	191.2	172.1	172.1	186.3	
67			SHC	132.4	167.8	203.3	128.7	164.1	199.6	124.8	160.2	195.5	120.6	155.9	191.2	116.0	151.2	186.3	
72		THC	229.8	229.8	229.8	220.5	220.5	220.5	210.3	210.3	210.3	199.3	199.3	199.3	187.6	187.6	187.6		
72		SHC	95.6	131.3	167.0	92.2	127.9	163.6	88.5	124.2	159.8	84.6	120.1	155.7	80.4	115.8	151.3		
76		THC	—	245.1	245.1	—	235.3	235.3	—	224.5	224.5	—	—	—	—	—	—		
76		SHC	—	102.4	138.9	—	99.1	135.5	—	95.5	131.8	—	—	—	—	—	—		
8000 Cfm		EA (wb)	58	THC	204.0	204.0	229.5	196.7	196.7	221.4	188.8	188.8	212.5	180.1	180.1	202.8	170.9	170.9	192.3
			58	SHC	178.5	204.0	229.5	172.1	196.7	221.4	165.1	188.8	212.5	157.5	180.1	202.8	149.4	170.9	192.3
	62		THC	204.0	204.0	238.2	196.6	196.6	229.7	188.7	188.7	220.5	180.2	180.2	210.5	170.8	170.8	199.6	
	62		SHC	169.8	204.0	238.2	163.6	196.6	229.7	157.0	188.7	220.5	149.8	180.2	210.5	142.0	170.8	199.6	
	67		THC	214.7	214.7	219.1	205.8	205.8	215.2	196.1	196.1	211.0	185.7	185.7	206.3	174.5	174.5	201.0	
	67		SHC	139.4	179.2	219.1	135.7	175.5	215.2	131.7	171.3	211.0	127.3	166.8	206.3	122.6	161.8	201.0	
	72	THC	232.9	232.9	232.9	223.4	223.4	223.4	213.0	213.0	213.0	201.7	201.7	201.7	189.2	189.2	189.2		
	72	SHC	98.4	138.6	178.8	94.9	135.1	175.3	91.2	131.3	171.4	87.2	127.2	167.3	82.8	122.8	162.7		
	76	THC	—	248.6	248.6	—	—	—	—	—	—	—	—	—	—	—	—		
	76	SHC	—	106.2	147.2	—	—	—	—	—	—	—	—	—	—	—	—		
	9000 Cfm	EA (wb)	58	THC	209.3	209.3	235.6	201.8	201.8	227.2	193.6	193.6	217.9	184.6	184.6	207.9	174.9	174.9	197.0
			58	SHC	183.0	209.3	235.6	176.5	201.8	227.2	169.2	193.6	217.9	161.3	184.6	207.9	152.8	174.9	197.0
62			THC	209.3	209.3	244.5	201.7	201.7	235.7	193.5	193.5	226.2	184.6	184.6	215.8	174.9	174.9	204.5	
62			SHC	174.1	209.3	244.5	167.8	201.7	235.7	160.9	193.5	226.2	153.4	184.6	215.8	145.3	174.9	204.5	
67			THC	217.2	217.2	234.0	208.2	208.2	230.1	198.2	198.2	225.4	187.7	187.7	220.1	176.6	176.6	213.6	
67			SHC	145.9	190.0	234.0	142.2	186.1	230.1	138.0	181.7	225.4	133.4	176.7	220.1	128.2	170.9	213.6	
72		THC	235.4	235.4	235.4	225.7	225.7	225.7	215.1	215.1	215.1	203.7	203.7	203.7	191.4	191.4	191.4		
72		SHC	100.9	145.5	190.0	97.5	142.0	186.5	93.7	138.1	182.6	89.7	134.0	178.3	85.4	129.6	173.7		
76		THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
76		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
10000 Cfm		EA (wb)	58	THC	213.8	213.8	240.8	206.1	206.1	232.1	197.6	197.6	222.6	188.3	188.3	212.1	178.4	178.4	201.0
			58	SHC	186.9	213.8	240.8	180.1	206.1	232.1	172.7	197.6	222.6	164.5	188.3	212.1	155.8	178.4	201.0
	62		THC	213.8	213.8	249.9	206.0	206.0	240.8	197.6	197.6	231.0	188.3	188.3	220.3	178.3	178.3	208.6	
	62		SHC	177.8	213.8	249.9	171.2	206.0	240.8	164.1	197.6	231.0	156.4	188.3	220.3	148.0	178.3	208.6	
	67		THC	219.3	219.3	248.2	210.1	210.1	243.6	200.2	200.2	238.3	189.7	189.7	232.2	178.9	178.9	222.0	
	67		SHC	152.2	200.2	248.2	148.2	195.9	243.6	143.7	191.0	238.3	138.8	185.5	232.2	132.0	177.0	222.0	
	72	THC	237.4	237.4	237.4	227.6	227.6	227.6	216.8	216.8	216.8	205.2	205.2	205.2	192.7	192.7	192.7		
	72	SHC	103.4	152.2	201.1	99.9	148.7	197.5	96.1	144.8	193.5	92.1	140.7	189.2	87.7	136.1	184.5		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	76	SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb

Performance data (cont)



38AUZ25/40RUA25 COMBINATION RATINGS — 60 Hz

				Ambient Temperature (F)															
				85			95			105			115			125			
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)			
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
6000 cfm	EA (wb)	58	THC	221.5	221.5	248.3	213.5	213.5	239.8	204.9	204.9	230.0	195.3	195.3	219.4	184.5	184.5	207.4	
			SHC	194.2	221.2	248.3	187.3	213.5	239.8	179.7	204.9	230.0	171.2	195.3	219.4	161.7	184.5	207.4	
		62	THC	232.4	232.4	232.9	222.4	222.4	228.1	211.4	211.4	222.6	199.4	199.4	216.7	186.5	186.5	209.6	
			SHC	173.9	203.4	232.9	169.1	198.6	228.1	163.7	193.2	222.6	157.9	187.3	216.7	151.3	180.5	209.6	
		67	THC	251.7	251.7	251.7	240.8	240.8	240.8	228.9	228.9	228.9	215.9	215.9	215.9	201.6	201.6	201.6	
			SHC	141.6	170.7	199.8	136.8	166.0	195.3	131.7	161.1	190.4	126.2	155.6	185.0	120.3	149.7	179.2	
	72	THC	272.8	272.8	272.8	260.8	260.8	260.8	247.6	247.6	247.6	233.4	233.4	217.8	217.8	217.8	217.8		
		SHC	110.4	138.3	166.1	105.5	133.8	162.0	100.3	128.9	157.5	94.8	123.6	152.4	88.9	117.9	147.0		
	76	THC	—	290.9	290.9	—	278.1	278.1	—	263.7	263.7	—	248.5	248.5	—	231.6	231.6		
		SHC	—	111.5	144.5	—	106.8	139.8	—	103.0	136.0	—	98.3	123.1	—	92.9	120.2		
	7000 cfm	EA (wb)	58	THC	232.1	232.1	260.6	223.5	223.5	251.1	214.2	214.2	240.7	203.9	203.9	229.2	192.4	192.4	216.4
				SHC	203.5	232.1	260.6	195.9	223.5	251.1	187.7	214.2	240.7	178.6	203.9	229.2	168.5	192.4	216.4
62			THC	238.9	238.9	253.7	228.3	228.3	248.2	217.1	217.1	242.1	205.0	205.0	234.5	192.8	192.8	222.1	
			SHC	186.0	219.8	253.7	180.8	214.5	248.2	175.1	208.6	242.1	168.4	201.5	234.5	159.1	190.6	222.1	
67			THC	258.3	258.3	258.3	246.8	246.8	246.8	234.4	234.4	234.4	220.8	220.8	220.8	205.9	205.9	205.9	
			SHC	149.2	182.8	216.5	144.4	178.1	211.8	139.2	173.0	206.7	133.6	167.4	201.2	127.5	161.4	195.3	
72		THC	279.3	279.3	279.3	266.7	266.7	266.7	253.0	253.0	253.0	238.3	238.3	238.3	222.0	222.0	222.0		
		SHC	113.2	145.9	178.5	108.3	141.2	174.1	103.1	136.3	169.4	97.6	130.9	164.2	91.5	125.1	158.6		
76		THC	—	297.5	297.5	—	283.8	283.8	—	269.2	269.2	—	253.2	253.2	—	235.5	235.5		
		SHC	—	116.1	154.6	—	112.0	138.2	—	107.4	137.4	—	102.4	133.9	—	96.7	129.1		
8000 cfm		EA (wb)	58	THC	240.8	240.8	270.6	231.8	231.8	260.5	221.8	221.8	249.4	210.9	210.9	237.2	198.8	198.8	223.6
				SHC	211.0	240.8	270.6	203.0	231.8	260.5	194.2	221.8	249.4	184.6	210.9	237.2	173.9	198.8	223.6
	62		THC	244.2	244.2	271.9	233.5	233.5	265.4	222.6	222.6	255.7	211.0	211.0	245.3	198.8	198.8	232.0	
			SHC	196.6	234.3	271.9	190.9	228.2	265.4	183.3	219.5	255.7	175.2	210.2	245.3	165.5	198.8	232.0	
	67		THC	263.5	263.5	263.5	251.6	251.6	251.6	238.7	238.7	238.7	224.6	224.6	224.6	209.2	209.2	210.8	
			SHC	156.4	194.4	232.4	151.5	189.6	227.6	146.3	184.4	222.4	140.6	178.7	216.9	134.5	172.6	210.8	
	72	THC	284.4	284.4	284.4	271.3	271.3	271.3	257.3	257.3	257.3	242.0	242.0	242.0	225.4	225.4	225.4		
		SHC	115.9	153.0	190.2	110.9	148.3	185.7	105.8	143.3	180.9	100.2	137.9	175.6	94.2	132.0	169.9		
	76	THC	—	302.5	302.5	—	288.4	288.4	—	273.4	273.4	—	256.8	256.8	—	—	—		
		SHC	—	120.4	153.1	—	116.0	150.4	—	111.3	146.9	—	106.0	142.5	—	—	—		
	9000 cfm	EA (wb)	58	THC	248.2	248.2	279.1	238.7	238.7	268.5	228.3	228.3	256.8	216.8	216.8	244.0	204.1	204.1	229.7
				SHC	217.4	248.2	279.1	209.0	238.7	268.5	199.8	228.3	256.8	189.7	216.8	244.0	178.5	204.1	229.7
62			THC	249.3	249.3	285.8	238.9	238.9	277.7	228.3	228.3	266.5	216.8	216.8	253.2	204.1	204.1	238.4	
			SHC	204.9	245.4	285.8	198.4	238.0	277.7	190.1	228.3	266.5	180.4	216.8	253.2	169.8	204.1	238.4	
67			THC	267.7	267.7	267.7	255.5	255.5	255.5	242.2	242.2	242.2	227.7	227.7	232.0	212.0	212.0	225.6	
			SHC	163.4	205.6	247.7	158.4	200.6	242.9	153.1	195.3	237.6	147.3	189.7	232.0	141.1	183.4	225.6	
72		THC	288.5	288.5	288.5	275.2	275.2	275.2	260.8	260.8	260.8	245.1	245.1	245.1	228.1	228.1	228.1		
		SHC	118.4	159.9	201.4	113.5	155.2	196.8	108.3	150.1	191.9	102.7	144.6	186.5	96.6	138.7	180.7		
76		THC	—	306.6	306.6	—	292.3	292.3	—	276.7	276.7	—	—	—	—	—	—		
		SHC	—	124.2	162.9	—	119.7	159.4	—	114.8	155.2	—	—	—	—	—	—		
10,000 cfm		EA (wb)	58	THC	254.7	254.7	286.5	244.7	244.7	275.3	233.9	233.9	263.2	221.9	221.9	249.8	208.7	208.7	234.9
				SHC	222.9	254.7	286.5	214.1	244.7	275.3	204.6	233.9	263.2	194.0	221.9	249.8	182.5	208.7	234.9
	62		THC	254.6	254.6	297.3	244.8	244.8	285.3	233.9	233.9	273.1	221.9	221.9	259.2	208.6	208.6	243.8	
			SHC	212.0	254.6	297.3	203.4	244.4	285.3	194.6	233.9	273.1	184.5	221.9	259.2	173.4	208.6	243.8	
	67		THC	271.3	271.3	271.3	258.7	258.7	258.7	245.1	245.1	252.3	230.3	230.3	246.7	214.0	214.0	239.7	
			SHC	170.0	216.4	262.7	165.0	211.4	257.7	159.6	206.0	252.3	153.9	200.3	246.7	147.3	193.5	239.7	
	72	THC	292.0	292.0	292.0	278.4	278.4	278.4	263.7	263.7	263.7	247.4	247.4	247.4	230.0	230.0	230.0		
		SHC	120.9	166.6	212.3	116.0	161.8	207.6	110.7	156.7	202.6	105.0	151.0	197.1	98.9	145.1	191.2		
	76	THC	—	310.1	310.1	—	295.3	295.3	—	—	—	—	—	—	—	—	—		
		SHC	—	127.8	171.4	—	123.2	167.5	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb

38AUZ25/40RUA28 COMBINATION RATINGS — 60 Hz

		Ambient Temperature (F)																	
		85			95			105			115			125					
		EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
		75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
7500 Cfm	EA (wb)	58	THC	236.2	236.2	266.2	228.0	228.0	256.9	219.0	219.0	246.7	209.0	209.0	235.5	198.1	198.1	223.2	
			SHC	206.3	236.2	266.2	199.0	228.0	256.9	191.2	219.0	246.7	182.5	209.0	235.5	172.9	198.1	223.2	
		62	THC	241.6	241.6	264.9	231.6	231.6	259.3	220.9	220.9	252.9	209.4	209.4	244.9	198.2	198.2	231.8	
			SHC	191.3	228.1	264.9	186.2	222.8	259.3	180.6	216.7	252.9	173.9	209.4	244.9	164.7	198.2	231.8	
		67	THC	262.3	262.3	262.3	251.0	251.0	251.0	238.9	238.9	238.9	225.7	225.7	225.7	211.4	211.4	211.4	
			SHC	154.6	192.0	229.4	149.9	187.3	224.6	145.0	182.3	219.6	139.6	176.9	214.2	133.9	171.1	208.4	
	72	THC	284.6	284.6	284.6	272.4	272.4	272.4	259.2	259.2	259.2	244.7	244.7	244.7	229.2	229.2	229.2		
		SHC	116.2	153.9	191.6	111.6	149.3	186.9	106.8	144.3	181.9	101.5	139.0	176.4	95.9	133.3	170.7		
	76	THC	—	303.1	303.1	—	289.9	289.9	—	275.8	275.8	—	260.4	260.4	—	—	—		
		SHC	—	123.4	162.7	—	118.8	157.9	—	114.0	152.8	—	108.7	147.3	—	—	—		
	8750 Cfm	EA (wb)	58	THC	247.1	247.1	278.5	238.2	238.2	268.4	228.5	228.5	257.5	217.8	217.8	245.4	206.1	206.1	232.2
				SHC	215.7	247.1	278.5	208.0	238.2	268.4	199.5	228.5	257.5	190.2	217.8	245.4	179.9	206.1	232.2
62			THC	248.7	248.7	286.9	238.6	238.6	279.1	228.7	228.7	267.4	218.0	218.0	254.9	206.2	206.2	241.2	
			SHC	204.5	245.7	286.9	198.2	238.6	279.1	189.9	228.7	267.4	181.1	218.0	254.9	171.3	206.2	241.2	
67			THC	268.2	268.2	268.2	256.5	256.5	256.5	243.9	243.9	243.9	230.1	230.1	234.0	215.3	215.3	227.8	
			SHC	164.0	206.9	249.7	159.3	202.1	244.9	154.2	197.0	239.7	148.7	191.4	234.0	142.8	185.3	227.8	
72		THC	290.8	290.8	290.8	277.9	277.9	277.9	264.2	264.2	264.2	249.2	249.2	249.2	233.1	233.1	233.1		
		SHC	120.1	163.2	206.3	115.4	158.5	201.5	110.5	153.4	196.4	105.1	148.0	190.9	99.4	142.2	184.9		
76		THC	—	309.2	309.2	—	295.5	295.5	—	280.8	280.8	—	—	—	—	—	—		
		SHC	—	128.3	172.8	—	123.7	168.0	—	118.7	162.8	—	—	—	—	—	—		
10000 Cfm		EA (wb)	58	THC	255.9	255.9	288.4	246.5	246.5	277.8	236.2	236.2	266.1	224.9	224.9	253.4	212.5	212.5	239.4
				SHC	223.5	255.9	288.4	215.2	246.5	277.8	206.2	236.2	266.1	196.3	224.9	253.4	185.5	212.5	239.4
	62		THC	256.1	256.1	299.5	246.7	246.7	288.4	236.3	236.3	276.4	225.0	225.0	263.1	212.6	212.6	248.6	
			SHC	212.7	256.1	299.5	204.9	246.7	288.4	196.3	236.3	276.4	186.9	225.0	263.1	176.6	212.6	248.6	
	67		THC	272.9	272.9	272.9	260.7	260.7	264.2	247.7	247.7	258.7	233.6	233.6	252.6	218.5	218.5	245.9	
			SHC	173.0	221.1	269.2	168.1	216.1	264.2	162.9	210.8	258.7	157.2	204.9	252.6	151.1	198.5	245.9	
	72	THC	295.5	295.5	295.5	282.2	282.2	282.2	268.1	268.1	268.1	252.7	252.7	252.7	236.1	236.1	236.1		
		SHC	123.7	172.1	220.4	119.0	167.3	215.5	114.0	162.2	210.3	108.6	156.6	204.7	102.8	150.7	198.6		
	76	THC	—	314.0	314.0	—	299.8	299.8	—	—	—	—	—	—	—	—	—		
		SHC	—	133.0	182.6	—	128.2	177.7	—	—	—	—	—	—	—	—	—		
	11250 Cfm	EA (wb)	58	THC	263.3	263.3	296.8	253.4	253.4	285.5	242.6	242.6	273.4	230.7	230.7	260.0	217.7	217.7	245.4
				SHC	229.9	263.3	296.8	221.2	253.4	285.5	211.8	242.6	273.4	201.5	230.7	260.0	190.1	217.7	245.4
62			THC	263.5	263.5	308.1	253.6	253.6	296.5	242.8	242.8	283.9	230.9	230.9	270.0	217.9	217.9	254.8	
			SHC	218.9	263.5	308.1	210.6	253.6	296.5	201.7	242.8	283.9	191.8	230.9	270.0	181.0	217.9	254.8	
67			THC	276.6	276.6	287.7	264.2	264.2	282.3	250.9	250.9	276.5	236.5	236.5	269.8	221.3	221.3	262.1	
			SHC	181.4	234.6	287.7	176.4	229.4	282.3	171.1	223.8	276.5	165.2	217.5	269.8	158.6	210.3	262.1	
72		THC	299.3	299.3	299.3	285.7	285.7	285.7	271.2	271.2	271.2	255.4	255.4	255.4	238.5	238.5	238.5		
		SHC	127.2	180.6	234.1	122.4	175.7	229.1	117.3	170.6	223.8	111.9	165.0	218.0	106.1	159.0	211.9		
76		THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
12500 Cfm		EA (wb)	58	THC	269.7	269.7	303.9	259.3	259.3	292.2	248.1	248.1	279.5	235.7	235.7	265.6	222.2	222.2	250.4
				SHC	235.5	269.7	303.9	226.4	259.3	292.2	216.6	248.1	279.5	205.8	235.7	265.6	194.1	222.2	250.4
	62		THC	269.8	269.8	315.5	259.4	259.4	303.4	248.2	248.2	290.2	235.8	235.8	275.7	222.4	222.4	260.0	
			SHC	224.2	269.8	315.5	215.5	259.4	303.4	206.2	248.2	290.2	195.9	235.8	275.7	184.7	222.4	260.0	
	67		THC	279.8	279.8	305.1	267.1	267.1	299.3	253.7	253.7	292.8	239.2	239.2	285.1	223.8	223.8	275.5	
			SHC	189.4	247.2	305.1	184.3	241.8	299.3	178.6	235.7	292.8	172.3	228.7	285.1	164.9	220.2	275.5	
	72	THC	302.4	302.4	302.4	288.5	288.5	288.5	273.7	273.7	273.7	257.7	257.7	257.7	240.4	240.4	240.4		
		SHC	130.5	188.9	247.3	125.7	184.0	242.3	120.6	178.7	236.9	115.1	173.1	231.0	109.2	167.0	224.7		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb

Performance data (cont)



38AUD25/40RUA25 COMBINATION RATINGS — 60 Hz

				Ambient Temperature (F)															
				85			95			105			115			125			
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)			
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
6000 cfm	EA (wb)	58	THC	220.0	220.0	247.0	212.1	212.1	238.2	203.4	203.4	228.5	193.7	193.7	217.7	182.8	182.8	205.5	
			SHC	193.0	220.0	247.0	186.0	212.1	238.2	178.3	203.4	228.5	169.8	193.7	217.7	160.1	182.8	205.5	
		62	THC	230.1	230.1	234.9	220.0	220.0	230.0	209.0	209.0	224.6	197.0	197.0	218.3	183.9	183.9	210.5	
			SHC	174.4	204.7	234.9	169.6	199.8	230.0	164.2	194.4	224.6	158.2	188.3	218.3	151.2	180.8	210.5	
		67	THC	251.0	251.0	251.0	239.9	239.9	239.9	227.9	227.9	227.9	214.6	214.6	214.6	199.9	199.9	199.9	
			SHC	142.4	172.3	202.2	137.6	167.6	197.6	132.5	162.6	192.7	126.9	157.1	187.3	120.9	151.1	181.3	
	72	THC	274.2	274.2	274.2	262.0	262.0	262.0	248.7	248.7	248.7	234.1	234.1	234.1	217.9	217.9	217.9		
		SHC	111.3	140.1	168.9	106.4	135.5	164.6	101.2	130.6	160.0	95.6	125.2	154.8	89.5	119.3	149.1		
	76	THC	—	294.4	294.4	—	281	281.0	—	266.4	266.4	—	250.7	250.7	—	233.4	233.4		
		SHC	—	113.0	146.0	—	108.7	141.7	—	104.6	133.3	—	99.7	126.2	—	94.1	122.4		
	7000 cfm	EA (wb)	58	THC	230.8	230.8	259.3	222.2	222.2	249.7	212.8	212.8	239.2	202.3	202.3	227.5	190.6	190.6	214.4
				SHC	202.3	230.8	259.3	194.7	222.2	249.7	186.4	212.8	239.2	177.2	202.3	227.5	166.9	190.6	214.4
62			THC	236.4	236.4	255.9	225.9	225.9	250.3	215.3	215.3	241.3	203.8	203.8	231.2	191.3	191.3	220.8	
			SHC	186.6	221.3	255.9	181.4	215.8	250.3	174.2	207.7	241.3	166.3	198.7	231.2	158.0	189.4	220.8	
67			THC	257.6	257.6	257.6	245.9	245.9	245.9	233.2	233.2	233.2	219.3	219.3	219.3	204.0	204.0	204.0	
			SHC	150.4	185.0	219.6	145.5	180.2	214.9	140.3	175.0	209.8	134.6	169.4	204.2	128.4	163.2	198.1	
72		THC	281.0	281.0	281.0	268.1	268.1	268.1	254.2	254.2	254.2	238.8	238.8	238.8	222.0	222.0	222.0		
		SHC	114.4	148.1	181.8	109.5	143.4	177.3	104.2	138.4	172.5	98.5	132.8	167.2	92.3	126.8	161.3		
76		THC	—	301.1	301.1	—	287.2	287.2	—	272.2	272.2	—	255.7	255.7	—	—	—		
		SHC	—	118.2	151.3	—	113.9	143.1	—	109.2	140.7	—	104.0	136.6	—	—	—		
8,000 cfm		EA (wb)	58	THC	239.6	239.6	269.4	230.5	230.5	259.2	220.5	220.5	248.0	209.4	209.4	235.6	197	197.0	221.7
				SHC	209.9	239.6	269.4	201.8	230.5	259.2	193.0	220.5	248.0	183.3	209.4	235.6	172.3	197.0	221.7
	62		THC	241.9	241.9	274.0	232.2	232.2	263.9	222.0	222.0	253.2	210.1	210.1	242.3	197.0	197.0	230.1	
			SHC	197.3	235.6	274.0	189.6	226.8	263.9	181.7	217.5	253.2	173.3	207.8	242.3	163.9	197.0	230.1	
	67		THC	262.7	262.7	262.7	250.5	250.5	250.5	237.3	237.3	237.3	222.9	222.9	222.9	207.1	207.1	214.0	
			SHC	158.0	197.1	236.3	153.0	192.2	231.4	147.6	186.9	226.1	141.8	181.1	220.3	135.5	174.7	214.0	
	72	THC	286.3	286.3	286.3	272.8	272.8	272.8	258.4	258.4	258.4	242.5	242.5	242.5	225.1	225.1	225.1		
		SHC	117.4	155.7	194.1	112.4	150.9	189.5	107.1	145.8	184.5	101.3	140.1	179.0	95.1	134.0	173.0		
	76	THC	—	306.6	306.6	—	292.0	292.0	—	276.5	276.5	—	—	—	—	—	—		
		SHC	—	122.8	157.5	—	118.2	154.2	—	113.3	150.2	—	—	—	—	—	—		
	9,000 cfm	EA (wb)	58	THC	247.2	247.2	278.0	237.6	237.6	267.3	227.1	227.1	255.5	215.4	215.4	242.4	202.4	202.4	227.8
				SHC	216.4	247.2	278.0	207.9	237.6	267.3	198.7	227.1	255.5	188.4	215.4	242.4	176.9	202.4	227.8
62			THC	249.4	249.4	281.3	239.3	239.3	272.2	227.9	227.9	262.4	215.4	215.4	251.6	202.3	202.3	236.4	
			SHC	202.5	241.9	281.3	195.4	239.8	272.2	187.7	225.1	262.4	179.2	215.4	251.6	168.3	202.3	236.4	
67			THC	266.8	266.8	266.8	254.2	254.2	254.2	240.6	240.6	241.9	225.9	225.9	235.9	209.5	209.5	229.3	
			SHC	165.2	208.8	252.4	160.1	203.8	247.4	154.7	198.3	241.9	148.7	192.3	235.9	142.2	185.7	229.3	
72		THC	290.4	290.4	290.4	276.6	276.6	276.6	261.8	261.8	261.8	245.4	245.4	245.4	227.6	227.6	227.6		
		SHC	120.1	163.0	205.9	115.1	158.2	201.2	109.8	152.9	196.1	103.9	147.2	190.5	97.6	141.0	184.4		
76		THC	—	310.7	310.7	—	295.9	295.9	—	—	—	—	—	—	—	—	—		
		SHC	—	126.7	167.1	—	122.1	163.2	—	—	—	—	—	—	—	—	—		
10,000 cfm		EA (wb)	58	THC	253.7	253.7	285.4	243.7	243.7	274.2	232.7	232.7	261.9	220.5	220.5	248.2	206.9	206.9	233.0
				SHC	221.9	253.7	285.4	213.1	243.7	274.2	203.5	232.7	261.9	192.7	220.5	248.2	180.8	206.9	233.0
	62		THC	255.5	255.5	290.4	244.0	244.0	282.1	232.6	232.6	271.8	220.5	220.5	257.6	206.9	206.9	241.9	
			SHC	208.4	249.4	290.4	201.5	241.8	282.1	193.5	232.6	271.8	183.3	220.5	257.6	171.9	206.9	241.9	
	67		THC	270.1	270.1	270.1	257.2	257.2	262.7	243.3	243.3	257.0	228.0	228.0	250.8	211.4	211.4	243.3	
			SHC	172.1	220.0	267.8	166.9	214.8	262.7	161.4	209.2	257.0	155.2	203.0	250.8	148.3	195.8	243.3	
	72	THC	293.9	293.9	293.9	279.7	279.7	279.7	264.4	264.4	264.4	247.8	247.8	247.8	229.6	229.6	229.6		
		SHC	122.8	170.1	217.4	117.7	165.1	212.5	112.3	159.8	207.3	106.4	154.0	201.6	100.1	147.8	195.4		
	76	THC	—	314.3	314.3	—	299.1	299.1	—	—	—	—	—	—	—	—	—		
		SHC	—	130.6	175.9	—	125.8	171.7	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb



38AUD25/40RUA28 COMBINATION RATINGS — 60 Hz

			Ambient Temperature (F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
7500 Cfm	EA (wb)	58	THC	237.5	237.5	261.6	228.5	228.5	251.7	218.7	218.7	240.9	207.7	207.7	228.8	195.9	195.9	215.8	
			SHC	213.4	237.5	261.6	205.3	228.5	251.7	196.5	218.7	240.9	186.6	207.7	228.8	176.0	195.9	215.8	
		62	THC	241.6	241.6	261.6	230.8	230.8	255.7	220.1	220.1	246.2	207.9	207.9	236.1	196.1	196.1	222.6	
			SHC	201.2	231.4	261.6	195.7	225.7	255.7	188.0	217.1	246.2	179.8	207.9	236.1	169.5	196.1	222.6	
		67	THC	262.2	262.2	262.2	250.1	250.1	250.1	237.0	237.0	237.0	222.5	222.5	222.5	207.4	207.4	207.4	
			SHC	163.9	194.6	225.3	158.9	189.6	220.3	153.6	184.2	214.9	147.7	178.3	208.9	141.6	172.2	202.7	
	72	THC	285.5	285.5	285.5	272.2	272.2	272.2	257.9	257.9	257.9	242.1	242.1	242.1	225.6	225.6	225.6		
		SHC	125.1	156.0	186.9	120.2	151.0	181.9	114.9	145.7	176.5	109.2	139.9	170.6	103.2	133.8	164.5		
	76	THC	—	305.5	305.5	—	291.1	291.1	—	—	—	—	—	—	—	—	—		
		SHC	—	124.9	156.9	—	120.0	151.8	—	—	—	—	—	—	—	—	—		
	8750 Cfm	EA (wb)	58	THC	248.0	248.0	273.2	238.3	238.3	262.5	227.7	227.7	250.8	215.9	215.9	237.8	203.3	203.3	223.9
				SHC	222.8	248.0	273.2	214.1	238.3	262.5	204.6	227.7	250.8	194.0	215.9	237.8	182.6	203.3	223.9
62			THC	249.2	249.2	280.0	238.6	238.6	270.9	227.9	227.9	258.8	216.1	216.1	245.4	203.4	203.4	231.0	
			SHC	213.6	246.8	280.0	206.3	238.6	270.9	197.0	227.9	258.8	186.8	216.1	245.4	175.8	203.4	231.0	
67			THC	267.7	267.7	267.7	254.9	254.9	254.9	241.2	241.2	241.2	226.3	226.3	228.3	210.6	210.6	221.6	
			SHC	174.8	210.1	245.4	169.7	204.9	240.2	164.2	199.3	234.5	158.2	193.2	228.3	151.8	186.7	221.6	
72		THC	291.3	291.3	291.3	277.3	277.3	277.3	262.4	262.4	262.4	246.1	246.1	246.1	228.9	228.9	228.9		
		SHC	130.3	165.7	201.2	125.2	160.6	196.0	119.9	155.2	190.5	114.0	149.2	184.4	108.0	143.1	178.1		
76		THC	—	311.4	311.4	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	130.1	166.5	—	—	—	—	—	—	—	—	—	—	—	—		
10000 Cfm		EA (wb)	58	THC	256.5	256.5	282.5	246.1	246.1	271.1	234.9	234.9	258.8	222.4	222.4	245.0	209.1	209.1	230.4
				SHC	230.4	256.5	282.5	221.2	246.1	271.1	211.1	234.9	258.8	199.9	222.4	245.0	187.9	209.1	230.4
	62		THC	256.7	256.7	291.5	246.3	246.3	279.7	235.1	235.1	267.0	222.6	222.6	252.8	209.3	209.3	237.6	
			SHC	221.9	256.7	291.5	213.0	246.3	279.7	203.2	235.1	267.0	192.4	222.6	252.8	180.9	209.3	237.6	
	67		THC	271.7	271.7	271.7	258.6	258.6	259.0	244.6	244.6	253.0	229.2	229.2	246.3	213.3	213.3	238.9	
			SHC	185.1	224.9	264.6	179.8	219.4	259.0	174.1	213.6	253.0	167.8	207.1	246.3	161.1	200.0	238.9	
	72	THC	295.6	295.6	295.6	281.2	281.2	281.2	265.8	265.8	265.8	249.0	249.0	249.0	—	—	—		
		SHC	135.2	175.0	214.9	130.0	169.8	209.6	124.6	164.2	203.9	118.6	158.2	197.7	—	—	—		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	11250 Cfm	EA (wb)	58	THC	263.5	263.5	290.3	252.7	252.7	278.3	240.9	240.9	265.3	227.9	227.9	251.0	214.0	214.0	235.7
				SHC	236.8	263.5	290.3	227.0	252.7	278.3	216.4	240.9	265.3	204.7	227.9	251.0	192.2	214.0	235.7
62			THC	263.7	263.7	299.5	252.9	252.9	287.1	241.1	241.1	273.7	228.0	228.0	258.9	214.1	214.1	243.1	
			SHC	228.0	263.7	299.5	218.6	252.9	287.1	208.4	241.1	273.7	197.1	228.0	258.9	185.1	214.1	243.1	
67			THC	275.0	275.0	282.7	261.6	261.6	276.8	247.2	247.2	270.3	231.8	231.8	262.6	216.0	216.0	251.8	
			SHC	194.9	238.8	282.7	189.4	233.1	276.8	183.4	226.8	270.3	176.6	219.6	262.6	168.2	210.0	251.8	
72		THC	299.0	299.0	299.0	284.2	284.2	284.2	268.4	268.4	268.4	251.3	251.3	251.3	—	—	—		
		SHC	139.8	184.0	228.1	134.6	178.7	222.7	129.0	173.0	216.9	123.1	166.8	210.6	—	—	—		
76		THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
12500 Cfm		EA (wb)	58	THC	269.5	269.5	296.9	258.2	258.2	284.4	245.9	245.9	270.9	232.4	232.4	256.0	218.0	218.0	240.1
				SHC	242.2	269.5	296.9	232.0	258.2	284.4	221.0	245.9	270.9	208.8	232.4	256.0	195.9	218.0	240.1
	62		THC	269.7	269.7	306.3	258.4	258.4	293.4	246.1	246.1	279.4	232.5	232.5	264.0	218.1	218.1	247.6	
			SHC	233.2	269.7	306.3	223.4	258.4	293.4	212.8	246.1	279.4	201.0	232.5	264.0	188.6	218.1	247.6	
	67		THC	277.8	277.8	299.7	264.1	264.1	293.2	249.7	249.7	285.6	234.5	234.5	274.3	218.8	218.8	261.2	
			SHC	204.0	251.8	299.7	198.2	245.7	293.2	191.6	238.6	285.6	183.1	228.7	274.3	173.4	217.3	261.2	
	72	THC	301.7	301.7	301.7	286.6	286.6	286.6	270.5	270.5	270.5	—	—	—	—	—	—		
		SHC	144.3	192.6	241.0	139.0	187.2	235.5	133.4	181.5	229.6	—	—	—	—	—	—		
	76	THC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air (F)
- SHC — Sensible Heat Capacity (1000 Btuh) gross
- THC — Total Capacity (1000 Btuh) gross
- wb — wet bulb

38AUZ 07-14 COOLING WITHOUT POWERED CONVENIENCE OUTLET

UNIT SIZE	TWO STAGE COOLING	V-Ph-Hz	VOLTAGE RANGE		COMPRESSOR NO. 1		OFM		POWER SUPPLY		DISCONNECT SIZE	
			Min	Max	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Breaker	FLA	LRA
07	YES	575-3-60	518	633	6.3	55	2	0.7	10	15	9	59
		208/230-3-60	187	253	17.5	136	2	1.5	25/25	30/30	24/24	142/142
		460-3-60	414	506	8.4	66	2	0.8	13	20	12	70
	NO	575-3-60	518	633	6.6	55	2	0.7	10	15	9	59
		208/230-3-60	187	253	19.6	136	2	1.5	28/28	45/45	26/26	142/142
		460-3-60	414	506	8.2	66	2	0.8	12	20	11	70
08	YES	575-3-60	518	633	9.9	78	2	0.7	14	20	13	82
		208/230-3-60	187	253	26.8	164	2	1.5	37/37	60/60	34/34	170/170
		460-3-60	414	506	12.6	100	2	0.8	18	25	16	104
	NO	575-3-60	518	633	9.0	78	2	0.7	13	20	12	82
		208/230-3-60	187	253	25.0	164	2	1.5	35/35	50/50	32/32	170/170
		460-3-60	414	506	12.2	100	2	0.8	17	25	16	104
12	NO	575-3-60	518	633	11.3	94	2	0.7	16	25	15	98
		208/230-3-60	187	253	28.2	239	2	1.5	39/39	60/60	36/36	245/245
		460-3-60	414	506	14.7	130	2	0.8	20	30	19	134
14	NO	575-3-60	518	633	14.7	100	2	0.7	20	30	19	104
		208/230-3-60	187	253	48.1	245	2	1.5	64/64	80/80	59/59	251/251
		460-3-60	414	506	18.6	125	2	0.8	25	30	23	129

38AUZ 07-14 WITH POWERED CONVENIENCE OUTLET

UNIT SIZE	TWO STAGE COOLING	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR NO. 1		OFM		POWER SUPPLY		DISCONNECT SIZE	
			Volts	Min	Max	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Breaker	FLA
07	YES	575-3-60	518	633	6.3	55	2	0.7	11	15	11	61
		208/230-3-60	187	253	17.5	136	2	1.5	30/30	45/45	29/29	147/147
		460-3-60	414	506	8.4	66	2	0.8	15	20	14	72
	NO	575-3-60	518	633	6.6	55	2	0.7	12	15	11	61
		208/230-3-60	187	253	19.6	136	2	1.5	33/33	50/50	32/32	147/147
		460-3-60	414	506	8.2	66	2	0.8	15	20	14	72
08	YES	575-3-60	518	633	9.9	78	2	0.7	16	25	15	84
		208/230-3-60	187	253	26.8	164	2	1.5	42/42	60/60	40/40	175/175
		460-3-60	414	506	12.6	100	2	0.8	20	30	19	106
	NO	575-3-60	518	633	9.0	78	2	0.7	15	20	14	84
		208/230-3-60	187	253	25.0	164	2	1.5	40/40	60/60	38/38	175/175
		460-3-60	414	506	12.2	100	2	0.8	20	30	18	106
12	NO	575-3-60	518	633	11.3	94	2	0.7	18	25	17	100
		208/230-3-60	187	253	28.2	239	2	1.5	44/44	60/60	41/41	250/250
		460-3-60	414	506	14.7	130	2	0.8	23	30	21	136
14	NO	575-3-60	518	633	14.7	100	2	0.7	22	30	20	106
		208/230-3-60	187	253	48.1	245	2	1.5	68/68	80/80	64/64	256/256
		460-3-60	414	506	18.6	125	2	0.8	28	45	26	131

LEGEND

FLA — Full Load Amps
LRA — Locked Rotor Amps
OFM — Outdoor Fan Motor

38AUZ 16, 25 WITHOUT POWERED CONVENIENCE OUTLET

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR No. 1		COMPRESSOR No. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
	Volts	Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Brkr	FLA	LRA
16	208/230-3-60	187	253	25.0	164	25.0	164	3	1.5	60.8/60.8	80/80	63/63	337/337
	460-3-60	414	506	12.2	100	12.2	100	3	0.8	29.9	40	31	206
	575-3-60	518	633	9.0	78	9.0	78	3	0.7	22.4	30	23	162
25	208/230-3-60	187	253	30.1	225	30.1	225	4	1.5	73.7/73.7	100/100	76/76	462/462
	460-3-60	414	506	16.7	114	16.7	114	4	0.8	40.8	50	42	236
	575-3-60	518	633	12.2	80	12.2	80	4	0.7	30.3	40	31	168

38AUZ 16, 25 WITH POWERED CONVENIENCE OUTLET

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR No. 1		COMPRESSOR No. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
	Volts	Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Brkr	FLA	LRA
16	208/230-3-60	187	253	25.0	164	25.0	164	3	1.5	65.6/65.6	90/90	68/68	342/342
	460-3-60	414	506	12.2	100	12.2	100	3	0.8	32.1	40	33	208
	575-3-60	518	633	9.0	78	9.0	78	3	0.7	24.1	30	25	164
25	208/230-3-60	187	253	30.1	225	30.1	225	4	1.5	78.5/78.5	100/100	82/82	467/467
	460-3-60	414	506	16.7	114	16.7	114	4	0.8	43	50	45	238
	575-3-60	518	633	12.2	80	12.2	80	4	0.7	32	40	33	170

38AUD 12, 14, COOLING WITHOUT POWERED CONVENIENCE OUTLET

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR No. 1		COMPRESSOR No. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
	Volts	Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Brkr	FLA	LRA
12	575	518	633	5.7	39	5.7	39	2	0.7	15	20	15	82
	208/230-3-60	187	253	15.9	110	15.9	110	2	1.5	39/39	50/50	40/40	226/226
	460-3-60	414	506	7.7	52	7.7	52	2	0.8	19	25	20	108
14	575-3-60	518	633	7.7	54	7.7	54	2	0.7	19	25	19	112
	208/230-3-60	187	253	22.4	149	22.4	149	2	1.5	54/54	60/60	55/55	304/304
	460-3-60	414	506	10.6	75	10.6	75	2	0.8	26	30	26	154

38AUD 12, 14, COOLING WITH POWERED CONVENIENCE OUTLET

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR No. 1		COMPRESSOR No. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
	Volts	Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Brkr	FLA	LRA
12	575-3-60	518	633	5.7	39	5.7	39	2	0.7	16	20	17	84
	208/230-3-60	187	253	15.9	110	15.9	110	2	1.5	44/44	50/50	46/46	231/231
	460-3-60	414	506	7.7	52	7.7	52	2	0.8	22	25	22	110
14	575-3-60	518	633	7.7	54	7.7	54	2	0.7	21	25	21	114
	208/230-3-60	187	253	22.4	149	22.4	149	2	1.5	59/59	80/80	60/60	309/309
	460-3-60	414	506	10.6	75	10.6	75	2	0.8	28	35	29	156

LEGEND

- HACR — Heating, Air Conditioning and Refrigeration
- FLA — Full Load Amps
- LRA — Locked Rotor Amps
- MCA — Minimum Circuit Amps
- OFM — Outdoor Fan Motor
- RLA — Rated Load Amps

Electrical data (cont)



38AUD 16, 25, COOLING WITHOUT POWERED CONVENIENCE OUTLET

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR No. 1		COMPRESSOR No. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
	V-Ph-Hz	Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Brkr	FLA	LRA
16	208/230-3-60	187	253	25.0	164	25.0	164	3	1.5	60.8/60.8	80/80	63/63	337/337
	460-3-60	414	506	12.2	100	12.2	100	3	0.8	29.9	40	31	206
	575-3-60	518	633	9.0	78	9.0	78	3	0.7	22.4	30	23	162
25	208/230-3-60	187	253	30.1	225	30.1	225	4	1.5	73.7/73.7	100/100	76/76	462/462
	460-3-60	414	506	16.7	114	16.7	114	4	0.8	40.8	50	42	236
	575-3-60	518	633	12.2	80	12.2	80	4	0.7	30.3	40	31	168

38AUD 16, 25 COOLING WITH POWERED CONVENIENCE OUTLET

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR No. 1		COMPRESSOR No. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
	V-Ph-Hz	Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Brkr	FLA	LRA
16	208/230-3-60	187	253	25.0	164	25.0	164	3	1.5	65.6/65.6	90/90	68/68	342/342
	460-3-60	414	506	12.2	100	12.2	100	3	0.8	32.1	40	33	208
	575-3-60	518	633	9.0	78	9.0	78	3	0.7	24.1	30	25	164
25	208/230-3-60	187	253	30.1	225	30.1	225	4	1.5	78.5/78.5	100/100	82/82	467/467
	460-3-60	414	506	16.7	114	16.7	114	4	0.8	43	50	45	238
	575-3-60	518	633	12.2	80	12.2	80	4	0.7	32	40	33	170

LEGEND

- HACR — Heating, Air Conditioning and Refrigeration
- FLA — Full Load Amps
- LRA — Locked Rotor Amps
- MCA — Minimum Circuit Amps
- OFM — Outdoor Fan Motor
- RLA — Rated Load Amps

Application data



Operating Limits

- Maximum outdoor temperature..... 125°F
- Minimum return-air temperature (40RUA)..... 55°F
- Maximum return-air temperature (40RUA)..... 95°F
- Range of acceptable saturation suction temperature..... 20 to 50°F
- Maximum discharge temperature..... 275°F
- Minimum discharge superheat..... 60°F

1. Select air handler at no less than 300 cfm/ton (nominal condensing unit capacity).
2. Total combined draw of the field-supplied liquid line solenoid valve and air handler fan contactor must not exceed 22 va. If the specified va must be exceeded, use a remote relay to control the load.

MINIMUM OUTDOOR-AIR OPERATING TEMPERATURE

UNIT 38AU	MAXIMUM OUTDOOR TEMP (°F)	
	Std	With MotorMaster® I Control*
Z07	35	-20
Z08	35	
D12	35	
D14	35	
D16	35	
D25	35	

* Wind baffles (field-supplied and field-installed) are recommended for all units with MotorMaster I control. Refer to Low Ambient Temperature Control Installation Instructions for additional information.

Refrigerant Piping

IMPORTANT: Do not bury refrigerant piping underground.

It is recommended that the refrigerant piping for all commercial split systems include a liquid line solenoid valve, a liquid line filter drier and a sight glass.

For refrigerant lines longer than 75 lineal ft, a liquid line solenoid valve installed at the indoor unit and a suction accumulator are required. Refer to the Refrigerant Specialties Part Numbers table.

REFRIGERANT SPECIALTIES PART NUMBERS

LIQUID LINE SIZE (in.)	LIQUID LINE SOLENOID VALVE (LLSV)	LLSV COIL	SIGHT GLASS
3/8	EF680033	EF680037	KM680008
1/2	EF680035	EF680037	KM680004
5/8	EF680036	EF680037	KM680005

Guide specifications



Commercial Air-Cooled Condensing Units HVAC Guide Specifications

Size Range: **6 to 20 Tons**

Carrier Model Numbers: **38AUZ, Single Circuit (07 - 25 Models) 38AUD, Dual Circuit (12, 14, 16, 25 Models)**

Part 1 — GENERAL

1.01 SYSTEM DESCRIPTION

Outdoor-mounted, air-cooled condensing unit suitable for on-the-ground or rooftop installation. Unit shall consist of a hermetic scroll air-conditioning compressor(s) assembly, an air-cooled coil, propeller-type condenser fans, and a control box. Unit shall discharge supply air upward as shown on contract drawings. Unit shall be used in a refrigeration circuit matched with a packaged air-handling unit.

1.02 QUALITY ASSURANCE

- A. Unit shall be rated in accordance with AHRI Standard 340/360.
- B. Unit construction shall comply with ANSI/ASHRAE 15 safety code latest revision and comply with NEC.
- C. Unit shall be constructed in accordance with UL 1995 standard and shall carry the UL and UL, Canada label.
- D. Unit cabinet shall be capable of withstanding 500-hour salt spray exposure per ASTM B117 (scribed specimen).
- E. Air-cooled condenser coils for hermetic scroll compressor units 38AUZ and 38AUD shall be leak tested at 150 psig, and pressure tested at 650 psig.
- F. Unit shall be manufactured in a facility registered to ISO 9001:2008 manufacturing quality standard.

1.03 DELIVERY, STORAGE, AND HANDLING

Unit shall be shipped as single package only, and shall be stored and handled according to unit manufacturer's recommendations.

1.04 WARRANTY (FOR INCLUSION BY SPECIFYING ENGINEER.)

Part 2 — Products

2.01 EQUIPMENT

A. General:

Factory-assembled, single piece, air-cooled condensing unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, compressor, holding charge, and special features required prior to field start-up.

B. Unit Cabinet:

1. Unit cabinet shall be constructed of galvanized steel, bonderized and coated with a prepainted baked enamel finish.
2. A heavy-gauge roll-formed perimeter base rail with forklift slots and lifting holes shall be provided to facilitate rigging.

C. Condenser Fans:

1. Condenser fans shall be direct driven, propeller type, discharging air vertically upward.
2. Fan blades shall be balanced.
3. Condenser fan discharge openings shall be equipped with PVC-coated steel wire safety guards.
4. Condenser fan and motor shaft shall be corrosion resistant.

D. Compressor:

1. Compressor shall be of the hermetic scroll type.
2. Compressor shall be mounted on rubber grommets.
3. Compressors shall include overload protection.
4. Compressors shall be equipped with a crankcase heater.
5. Compressor shall be equipped with internal high pressure and high temperature protection.

E. Condenser Coils:

1. Standard Aluminum fin - Copper Tube Coils:
 - a. Standard evaporator and condenser coils shall have aluminum lanced plate fins mechanically bonded to seamless internally grooved copper tubes with all joints brazed.
 - b. Evaporator coils shall be leak tested to 150 psig, pressure tested to 450 psig, and qualified to UL 1995 burst test at 1775 psig.
 - c. Condenser coils shall be leak tested to 150 psig, pressure tested to 650 psig, and qualified to UL 1995 burst test at 1980 psig.
2. Optional Copper-fin evaporator and condenser coils:
 - a. Shall be constructed of copper fins mechanically bonded to copper tubes and copper tube sheets.
 - b. Galvanized steel tube sheets shall not be acceptable.
 - c. A polymer strip shall prevent coil assembly from contacting the sheet metal coil pan to minimize potential for galvanic corrosion between coil and pan.
3. Optional E-coated aluminum-fin evaporator and condenser coils:
 - a. Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins.
 - b. Coating process shall ensure complete coil encapsulation of tubes, fins and headers.
 - c. Color shall be high gloss black with gloss per ASTM D523-89.
 - d. Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges.
 - e. Superior hardness characteristics of 2H per ASTM D3363-92A and cross-hatch adhesion of 4B-5B per ASTM D3359-93.

- f. Impact resistance shall be up to 160 in.-lb (ASTM D2794-93).
 - g. Humidity and water immersion resistance shall be up to minimum 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92).
 - h. Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117-90.
4. Optional E-coated aluminum-fin, aluminum tube condenser coils:
- a. Shall have a flexible epoxy polymer coating uniformly applied to all coil external surface areas without material bridging between fins or louvers.
 - b. Coating process shall ensure complete coil encapsulation, including all exposed fin edges.
 - c. E-coat thickness of 0.8 to 1.2 mil with top coat having a uniform dry film thickness from 1.0 to 2.0 mil on all external coil surface areas, including fin edges, shall be provided.
 - d. Shall have superior hardness characteristics of 2H per ASTM D3363-00 and cross-hatch adhesion of 4B-5B per ASTM D3359-02.
 - e. Shall have superior impact resistance with no cracking, chipping or peeling per NSF/ANSI 51-2002 Method 10.2.
- F. Refrigeration Components:
Refrigeration circuit components shall include liquid line service valve, suction line service valve, a full charge of compressor oil, and a partial holding charge of refrigerant.
- G. Controls and Safeties:
1. Minimum control functions shall include:
 - a. Control wire terminal blocks.
 - b. Compressor lockout on auto-reset safety until reset from thermostat.
 - c. Each unit shall utilize the Comfort Alert™ Diagnostic Board that provides:
 - 1) System Pressure Trip fault code indication
 - 2) Short Cycling fault code indication
 - 3) Locked Rotor fault code indication
 - 4) Open Circuit fault code indication
 - 5) Reverse Phase 3 fault code indication
 - 6) Welded Contactor fault code indication
 - 7) Low Voltage fault code indication
 - 8) Anti-short cycle protection
 - 9) Phase reversal protection
 - d. Minimum safety devices which are equipped with automatic reset (after resetting first at thermostat), shall include:
 - 1) High discharge pressure cutout.
 - 2) Low pressure cutout.
- H. Operating Characteristics:
1. The capacity of the condensing unit shall meet or exceed _____ Btuh at a suction temperature of _____ °F/C. The power consumption at full load shall not exceed _____ kW.
 2. The combination of the condensing unit and the evaporator or fan coil unit shall have a total net cooling capacity of _____ Btuh or greater at conditions of _____ cfm entering-air temperature at the evaporator at _____ °F/C wet bulb and _____ °F/C dry bulb, and air entering the condensing unit at _____ °F/C.
 3. The system shall have an EER of _____ Btuh/Watt or greater at standard AHRI conditions.
 4. Standard unit shall be capable to operate up to 125°F (52°C) and down to 40°F (4°C)
- I. Electrical Requirements:
1. Nominal unit electrical characteristics shall be _____ v, 3-ph, 50 Hz. The unit shall be capable of satisfactory operation within voltage limits of _____ v to _____ v.
 2. Unit electrical power shall be single-point connection.
 3. Unit control circuit shall contain a 24-v transformer for unit control.
- J. Special Features:
1. Low-Ambient Temperature Control:
A low-ambient temperature control shall be available as a factory-installed option or as a field-installed accessory. This low-ambient control shall regulate speed of the condenser-fan motors in response to the saturated condensing temperature of the unit. The control shall maintain correct condensing pressure at outdoor temperatures down to -20°F (-29°C).
 2. Unit-Mounted, Non-Fused Disconnect Switch:
Switch shall be factory-installed and internally mounted. NEC and UL-approved non-fused switch shall provide unit power shutoff. Switch shall be accessible from outside the unit and shall provide power off lockout capability. Non-fused disconnect cannot be used when unit MOCP electrical rating exceeds 80 amps.
 3. Thermostat Controls:
 - a. Programmable multi-stage thermostat shall have 7-day clock, holiday scheduling, large backlit display, remote sensor capability, and Title 24 compliance.
 - b. Commercial Electronic Thermostat shall have 7-day time clock, auto-changeover, multi-stage capability, and large LCD (liquid crystal display) temperature display.
 4. Louvered Hail Guard Package:
 5. Louvered hail guard package shall protect coils against damage from hail and other flying debris.
 6. Condenser Coil Grille:
Grille shall add decorative appearance to unit and protect condenser coil from large objects and vandalism.

IT & MEDIA

Under this scope, IT equipment will be removed from the office and placed in new designated room per plans. Karmil will run the wiring required for the equipment migration. Also, the existing conference room space will be remodeled by adding new speakers, tv screen (4K 82" LCD High Definition Smart TV), and conference phone (Polycom RealPresence Trio 8800) to be purchased and installed by Karmil Construction, inclusive of necessary cabling/wiring.

SITE ELEMENTS

Under this scope of work, Karmil Construction proposes to provide new benches, picnic tables, bicycle rack, trash receptables, and sail shaders for the new flex plaza with the purpose of modernizing the exterior of the building.



Published on *DuMor Site Furnishings* (<https://www.dumor.com>)

BENCH 493



Bench
493

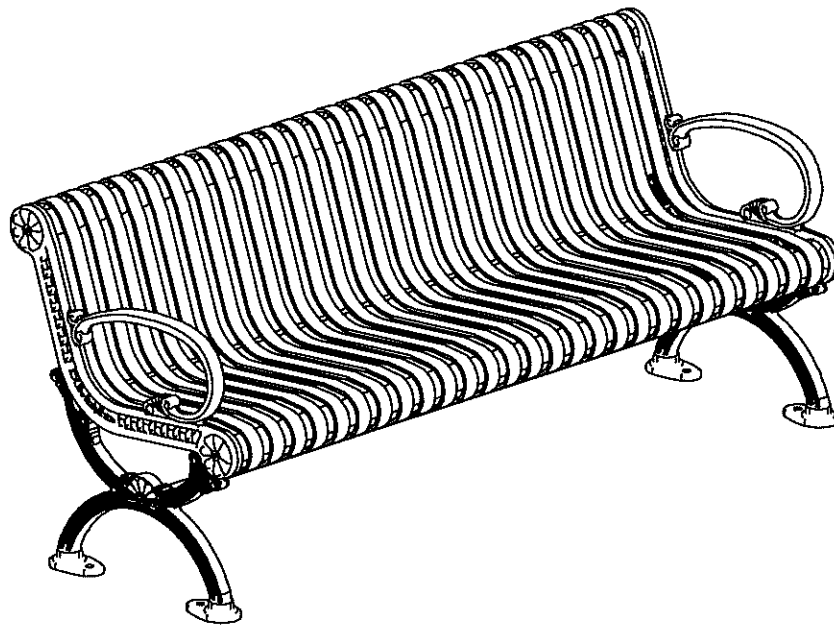
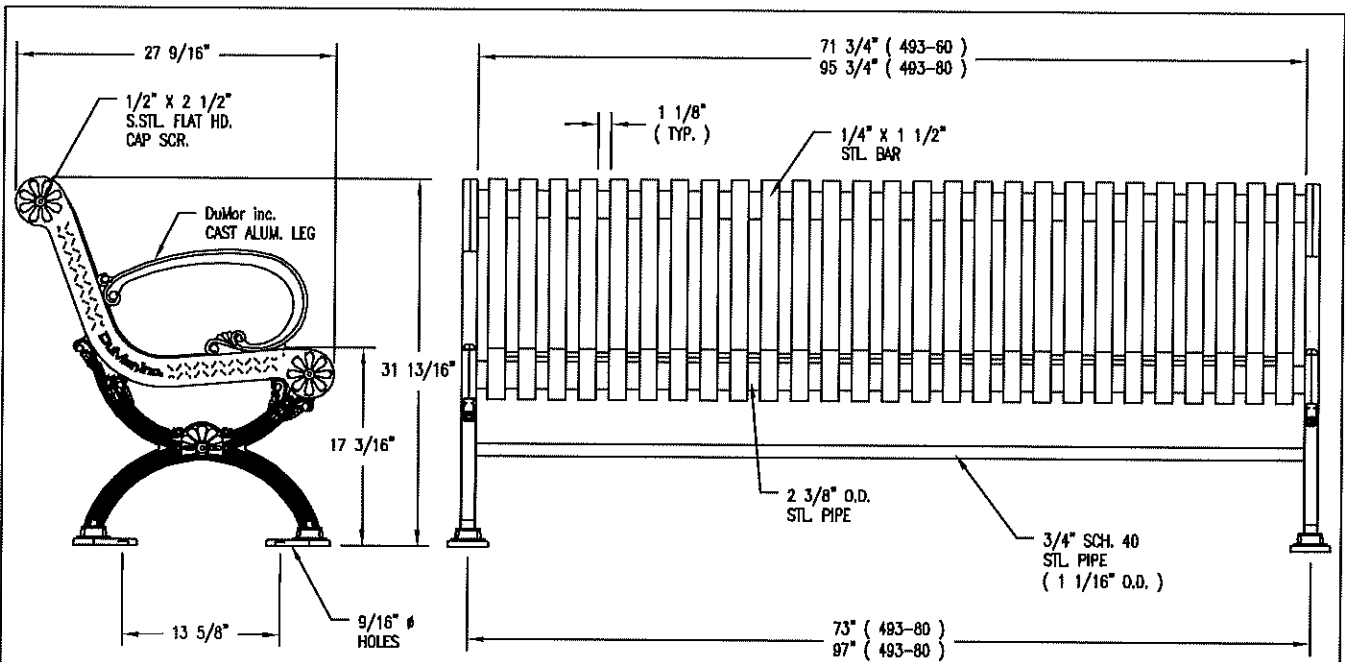


WEIGHTS:

493-60 6' long, 2 supports, 238 lbs.

493-80 8' long, 2 supports, 299 lbs.

Source URL: <https://www.dumor.com/products/benches/bench-493>



NOTES

- 1.) ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
- 2.) $\frac{1}{2}'' \times 3 \frac{3}{4}''$ EXPANSION ANCHOR BOLTS PROVIDED.

LENGTH OPTIONS

- 6' BENCH
- 8' BENCH



BENCH

DATE DRAWN : 10/08/15
 DRAWN BY : RDH
 DATE REV. :
 REV. BY :

REV.
 A

DRAWING
 NUMBER

493 SERIES

SHEET
 1 OF 2

NOTES:

- 1.) DURING ASSEMBLY PROCEDURE;
DO NOT COMPLETELY TIGHTEN HARDWARE.
- 2.) THE ACTUAL PARTS WILL NOT BE NUMBERED.
NUMBERS ONLY APPLY TO DRAWING.
- 3.) UPON COMPLETION OF ASSEMBLY SQUARE
ALL COMPONENTS THEN TIGHTEN ALL HARDWARE.
- 4.) MOUNT AND ANCHOR AS SPECIFIED.

TOOLS REQ'D

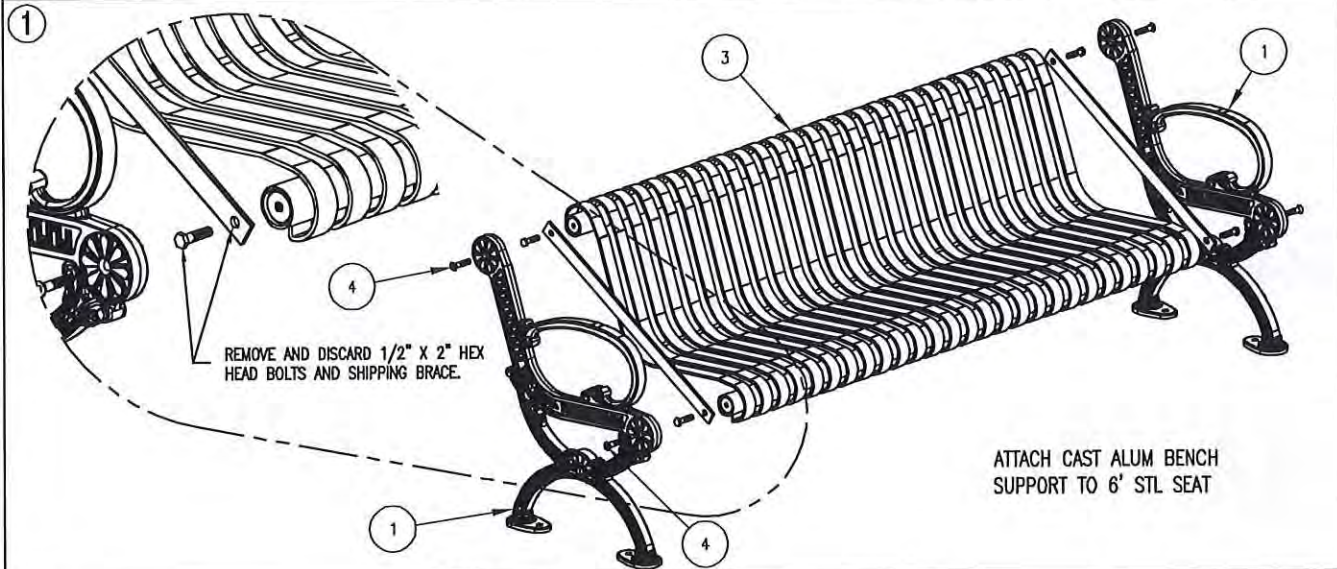
- 3/4" WRENCH
- 5/16" ALLEN WRENCH
- 1/2" MASONRY DRILL BIT
- DRILL
- RATCHET STRAP (PROVIDED)

PARTS LIST

ITEM	QTY	PART NO	DESCRIPTION
1	2	0-490-00-01	CAST ALUM BENCH SUPPORT W/ BACK
2	1	0-57-60-04	71 3/4" PIPE BRACE
3	1	0-58-60-01	6' STL SEAT
4	6	1-12-065	1/2" X 2 1/2" FLT SKT HD CAP SCR

KITS PROVIDED

ITEM	QTY	PART NO	DESCRIPTION
5	1	K-ANC0860-4	1/2" X 3 3/4" SS ANCHOR KIT (4PC)
6	1	K-FC0840-6	1/2" CAP HARDWARE KIT (6PC)



ATTACH CAST ALUM BENCH SUPPORT TO 6' STL SEAT



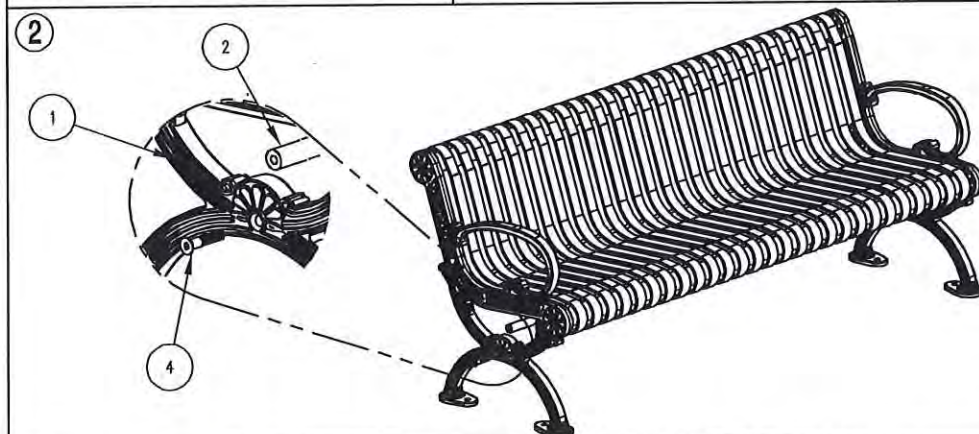
PLACE SEAT ASSEMBLY ON WORK SURFACE ALLOWING ACCESS TO ENDS. PLACE RATCHET STRAP AROUND SEAT ASSEMBLY AS SHOWN ABOVE.



TIGHTEN STRAP UNTIL SHIPPING BRACKET BECOMES LOOSE. THEN REMOVE AND DISCARD BOLTS & SHIPPING BRACKET.

1C ATTACH CAST SUPPORT TO SEAT ASSEMBLY. IF HOLES IN CASTING DO NOT ALIGN WITH THE SEAT ASSEMBLY, ADJUST BY USING THE RATCHET STRAP.

1D TIGHTEN HARDWARE THEN REMOVE RATCHET STRAP AND REPEAT THIS PROCEDURE ON THE OTHER END OF BENCH.



ATTACH 71 3/4" PIPE BRACE TO STEP 1 ASSEMBLY



Published on *DuMor Site Furnishings* (<https://www.dumor.com>)

TABLE 156



Table
156



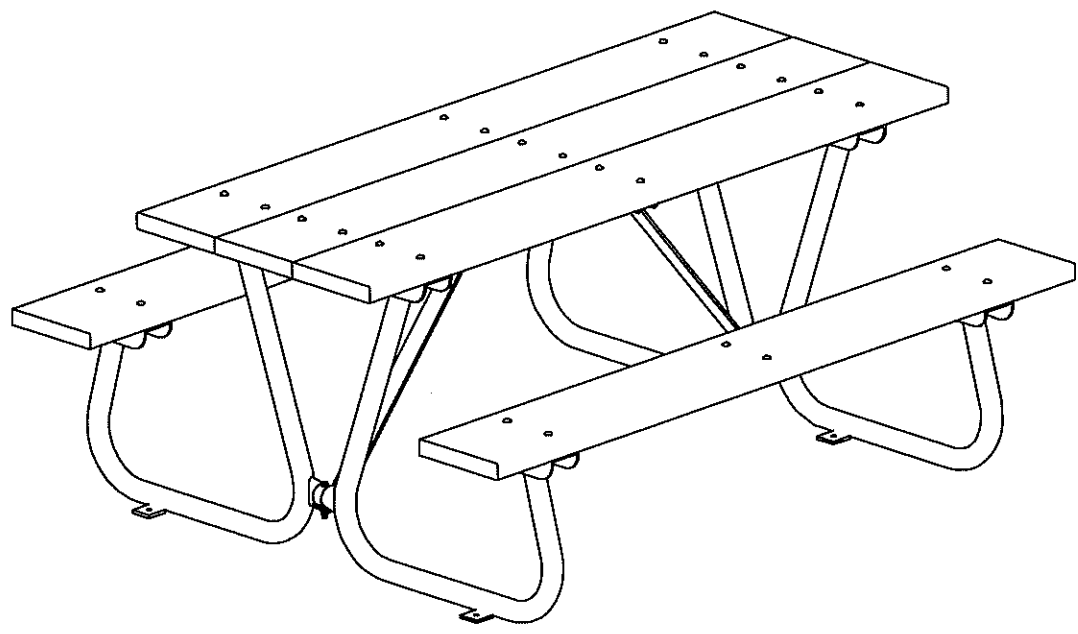
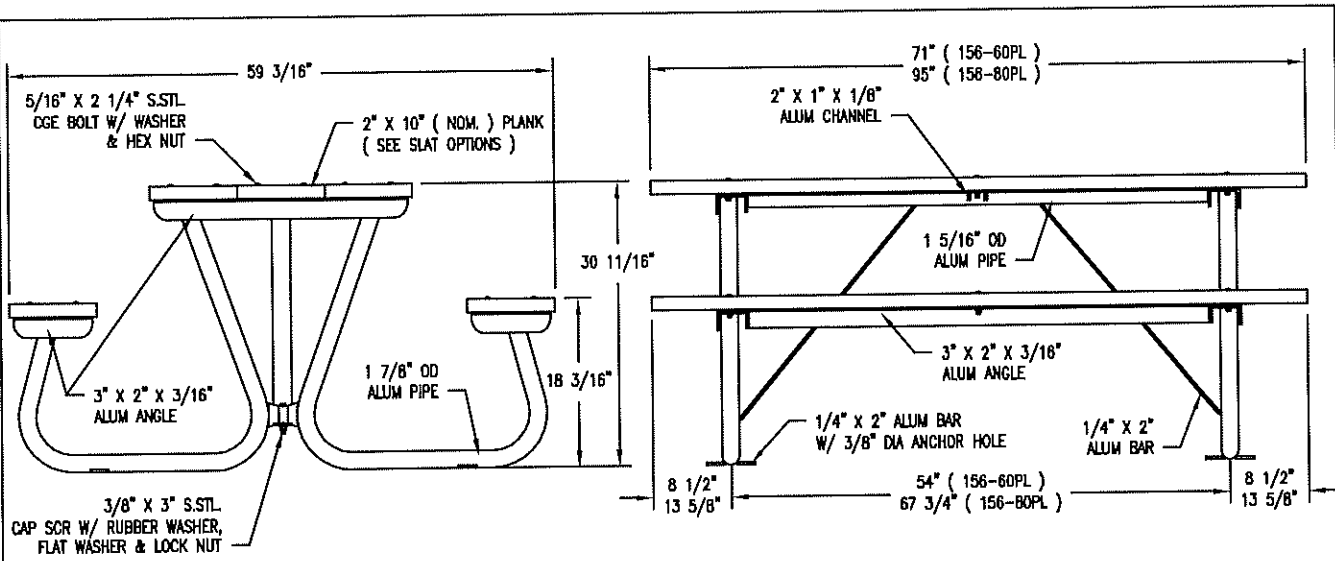
WEIGHTS:

156-60PL 6' Picnic Table, 187 lbs.

156-80PL 8' Picnic Table, 234 lbs.

156-68-1PL Accessible Picnic Table, 214 lbs.

Source URL: <https://www.dumor.com/products/tables/table-156>



SLAT OPTIONS

- "CEDAR" RECYCLED PLASTIC
- "GREY" RECYCLED PLASTIC
- "REDWOOD" RECYCLED PLASTIC
- "WALNUT" RECYCLED PLASTIC
- OTHER _____

LENGTH OPTIONS


- 6' TABLE
- 8' TABLE

FINISH OPTIONS

- MILL FINISH (STANDARD)
- COATED (OPTIONAL - UPCHARGE APPLIES PLEASE CONSULT YOUR LOCAL REPRESENTATIVE)

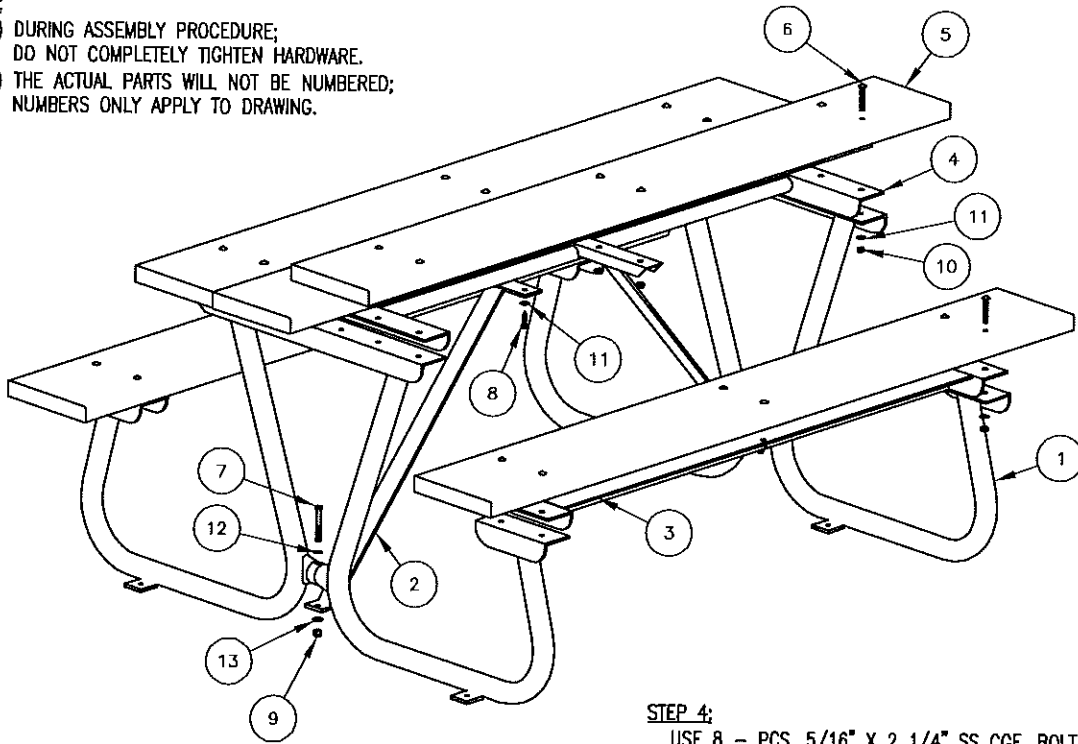
NOTES:

- 1.) 1/4" X 1 1/2" HAMMER SET ANCHORS PROVIDED.

 DuMor, inc. P.O. Box 142 Mifflintown, PA 17059-0142	SCALE :	NONE	TITLE :		PICNIC TABLE	
	DATE DRAWN :	11/22/02	REV.	DRAWING NUMBER	156 SERIES PL	
	DRAWN BY :	JSB	E	156 SERIES PL	SHEET	
	DATE REV. :	10/27/11			1 OF 2	
REV. BY :	RDH					

NOTE:

- 1.) DURING ASSEMBLY PROCEDURE;
DO NOT COMPLETELY TIGHTEN HARDWARE.
- 2.) THE ACTUAL PARTS WILL NOT BE NUMBERED;
NUMBERS ONLY APPLY TO DRAWING.



STEP 1:

- USE 3 - PCS. 2" X 10" X 71" PLASTIC SLATS (5)
 1 - PC. 6' ALUM TABLE TOP BRACE (4)
 6 - PCS. 5/16" X 2 1/4" SS CGE. BOLT (6)
 6 - PCS. 5/16" SS HEX NUT (10)
 6 - PCS. 5/16" SS FLAT WASHER (11)
- ATTACH 2" X 10" X 71" PLASTIC SLATS (5) TO CENTER OF 6' TABLE TOP BRACE (4) USING HARDWARE (6, 10, & 11). TIGHTEN TO SNUG FIT. REPEAT UNTIL ALL SLATS ARE ATTACHEO.

STEP 2:

- USE 2 - PCS. ALUM END SUPPORT FRAME (1)
 12 - PCS. 5/16" X 2 1/4" SS CGE. BOLT (6)
 12 - PCS. 5/16" SS HEX NUT (10)
 12 - PCS. 5/16" SS FLAT WASHER (11)
- ATTACH STEP 1 ASSEMBLY TO END SUPPORT FRAME (1) USING HARDWARE (6, 10, & 11). TIGHTEN TO SNUG FIT.

STEP 3:

- USE 2 - PCS. 2" X 10" X 71" PLASTIC SLATS (5)
 2 - PCS. 6' ALUM SEAT BRACE (3)
 4 - PCS. 5/16" X 2 1/4" SS CGE. BOLT (6)
 4 - PCS. 5/16" SS HEX NUT (10)
 4 - PCS. 5/16" SS FLAT WASHER (11)
- ATTACH 2" X 10" X 71" PLASTIC SLATS (5) TO CENTER OF 6' ALUM SEAT BRACE (3) USING HARDWARE (6, 10, & 11). TIGHTEN TO SNUG FIT.

STEP 4:

- USE 8 - PCS. 5/16" X 2 1/4" SS CGE. BOLT (6)
 8 - PCS. 5/16" SS HEX NUT (10)
 8 - PCS. 5/16" SS FLAT WASHER (11)
- ATTACH STEP 3 ASSEMBLY TO STEP 2 ASSEMBLY USING HARDWARE (6, 10, & 11). TIGHTEN TO SNUG FIT.

STEP 5:

- USE 2 - PCS. ALUM T" BRACE (2)
 2 - PCS. 3/8" X 3" SS HEX HD CAP SCR. (7)
 4 - PCS. 5/16" X 1 1/4" SS HEX HD LAG SCR. (8)
 2 - PCS. 3/8" SS NYLON LOCK NUT (9)
 4 - PCS. 5/16" SS FLAT WASHER (11)
 2 - PCS. 3/8" ID X 5/8" OD RUBBER WASHER (12)
 2 - PCS. 3/8" SS FLAT WASHER (13)
- SQUARE STEP 4 ASSEMBLY THEN ATTACH ALUM T" BRACE (2) USING HARDWARE (7, 8, 9, 11, 12, & 13). NO PILOT HOLES FOR 5/16" X 1 1/4" SS HEX HD LAG SCR. (8).

STEP 6:

UPON COMPLETION OF TABLE ASSEMBLY TIGHTEN ALL HARDWARE.

ITEM	QTY	PART NO	DESCRIPTION
1	2	0-156-00-01	ALUM END SUPPORT FRAME
2	2	0-156-00-02	ALUM T" BRACE
3	2	0-156-60-14	6' ALUM SEAT BRACE
4	1	0-156-60-15	6' ALUM TABLE TOP BRACE
5	5	0-71-60PL-01	2" X 10" X 71" PLASTIC SLAT
6	30	1-11-062	5/16" X 2 1/4" SS CGE BOLT
7	2	1-12-002	3/8" X 3" SS HEX HD CAP SCR
8	4	1-13-001	5/16" X 1 1/4" SS HEX HD LAG SCR
9	2	1-20-007	3/8" SS NYLON LOCKNUT
10	30	1-21-015	5/16" SS HEX NUT
11	34	1-22-017	5/16" SS FLAT WASHER
12	2	1-22-018	3/8" ID X 5/8" OD RUBBER WASHER
13	2	1-22-024	3/8" SS FLAT WASHER

DuMor, inc.
 P.O. Box 142 Mifflintown, PA 17059-0142

SCALE : NONE
 DATE DRAWN : 11/22/02
 DRAWN BY : JSB
 DATE REV. : 10/27/11
 REV. BY : RDH

TITLE : PICNIC TABLE ASSEMBLY

REV. E DRAWING NUMBER 156 SERIES PL

SHEET 2 OF 2



Published on *DuMor Site Furnishings* (<https://www.dumor.com>)

BIKE RACK 125 AND 130



DuMor Bike Rack 125-30



WEIGHTS:

125 Series 2.875" OD Pipe, Loop Radius-6.25"

125-20 No. of Bikes - 5, 97 lbs.

125-30 No. of Bikes - 7, 134 lbs.

125-40 No. of Bikes - 9, 170 lbs.

130 Series 2.375" OD Pipe, Loop Radius-5"

130-20 No. of Bikes - 5, 62 lbs.

130-30 No. of Bikes - 7, 84 lbs.

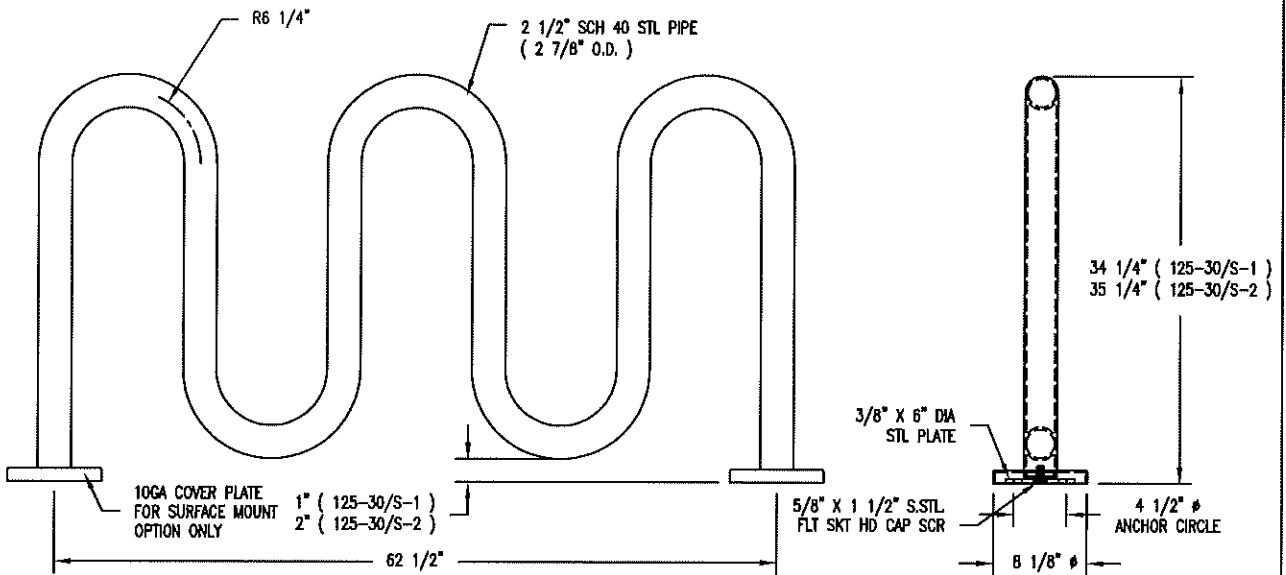
130-40 No. of Bikes - 9, 107 lbs.

SUPPORT OPTIONS:

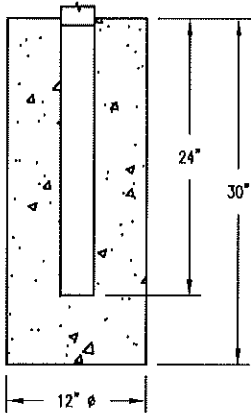
S-1 Embedment

S-2 Surface Plate

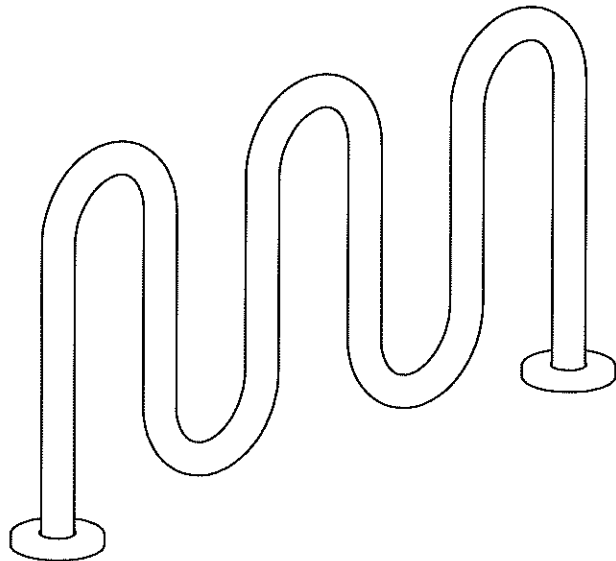
Source URL: <https://www.dumor.com/products/bike-racks/bike-rack-125-and-130>



* S-2 SURFACE MOUNT *
(SEE NOTES)



S-1 EMBEDMENT



FINISH OPTIONS

- HOT DIPPED GALVANIZED (VISIBLE VENT HOLES)
- COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.

NOTES:

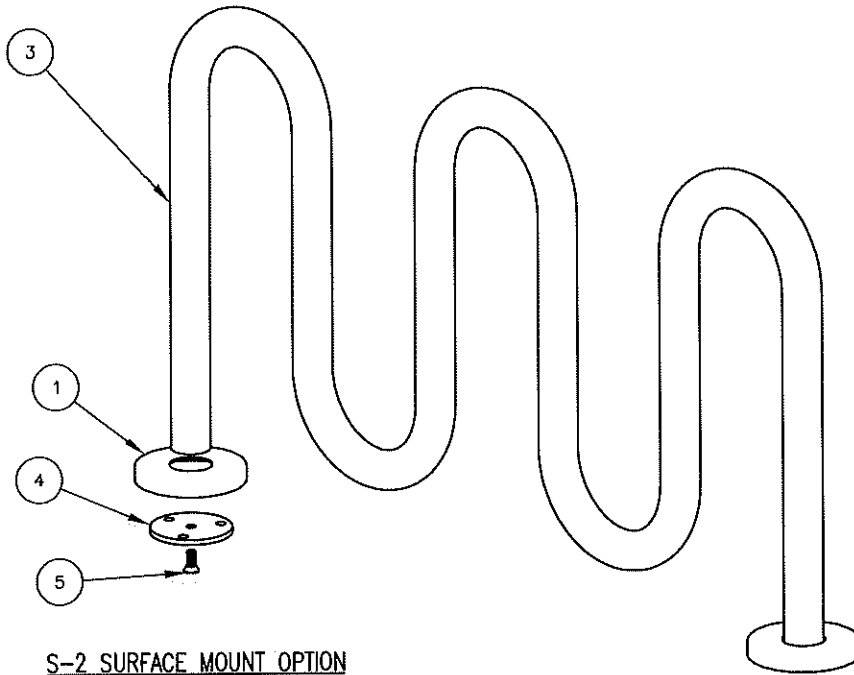
- 1.) 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS PROVIDED FOR OPTION S-2.
 - 2.) PLUGS PROVIDED FOR VISIBLE VENT HOLES. (HOT DIPPED GALV. ONLY)
- * UPCHARGE APPLIES TO SUPPORT OPTION - CONSULT YOUR LOCAL REPRESENTATIVE.

DuMor, inc.
P.O. Box 142 Mifflintown, PA 17059-0142

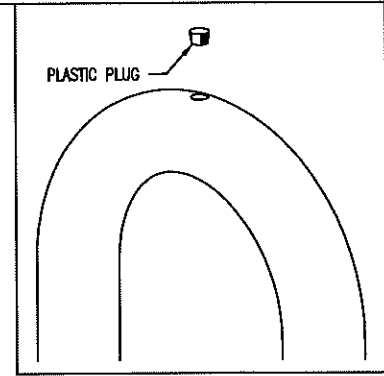
SCALE : NONE
DATE DRAWN : 2/12/99
DRAWN BY : CDC
DATE REV. : 02/24/12
REV. BY : ESS

TITLE : BIKE RACK
REV. F
DRAWING NUMBER 125-30

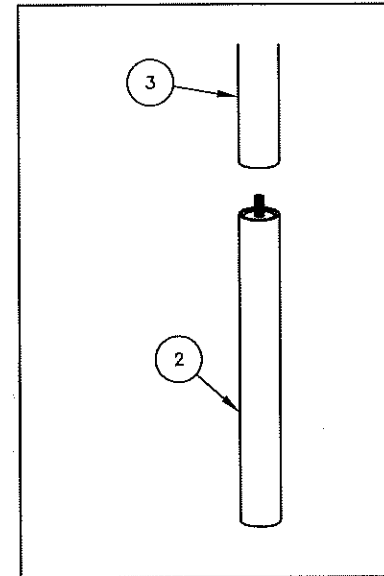
SHEET 1 OF 2



S-2 SURFACE MOUNT OPTION



HOT-DIPPED GALV. BIKE RACK ONLY



S-1 EMBEDMENT OPTION

INSTALLATION FOR SURFACE MOUNT

STEP 1:

- USE 1 - PC. BIKE LOOP, SURFACE MOUNT (3)
 - 2 - PCS. 3/8" THK SURFACE MOUNT PLATE (4)
 - 2 - PCS. 10 GA X 8" DIA ANCHOR PLATE COVER (1)
 - 2 - PCS. 5/8" X 1 1/2" SS FLT SKT HD CAP SCREW (5)
- SLIDE 10 GA X 8" DIA ANCHOR COVER (1) OVER BIKE LOOP, SURFACE MOUNT (3) LEGS. ATTACH 3/8" THK. SURFACE MOUNT PLATE (4) TO BIKE LOOP, SURFACE MOUNT (3) USING HARDWARE (5).

STEP 2:

ANCHOR ACCORDINGLY.

INSTALLATION FOR PLASTIC PLUG HOT-DIPPED GALV ONLY

INSERT PLASTIC PLUG INTO HOLE ON TOP OF EACH LOOP

(S-2 OPTION)

(S-1 OPTION)

(S-2 OPTION)

(S-2 OPTION)

ITEM	QTY	PART NO	DESCRIPTION
1	2	0-125-04	10 GA X 8" DIA STL COVER W/ 3 1/8" DIA HOLE
2	2	0-125-09/S-1	EMBEDMENT EXTENSION
3	1	0-125-30/S-2	3-PEAK LOOP BIKE RACK
4	2	0-83-00-03	3/8" THK SURFACE MOUNT PLATE
5	2	1-12-102	5/8" X 1 1/2" SS FLT SKT HD CAP SCR



DuMor, inc.

P.O. Box 142 Mifflintown, PA 17059-0142

SCALE : NONE

DATE DRAWN : 2/12/99

DRAWN BY : CDC

DATE REV. : 02/24/12

REV. BY : ESS

TITLE :

BIKE RACK ASSEMBLY

REV.
E

DRAWING
NUMBER

125-30

SHEET
2 OF 2



Published on *DuMor Site Furnishings* (<https://www.dumor.com>)

RECEPTACLE 84



Receptacle
84



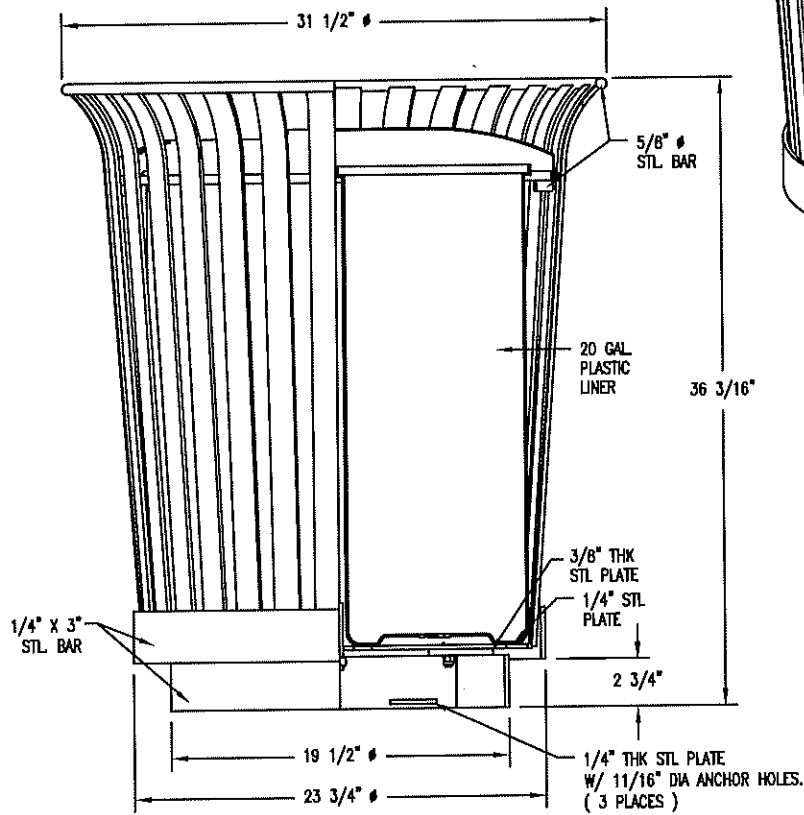
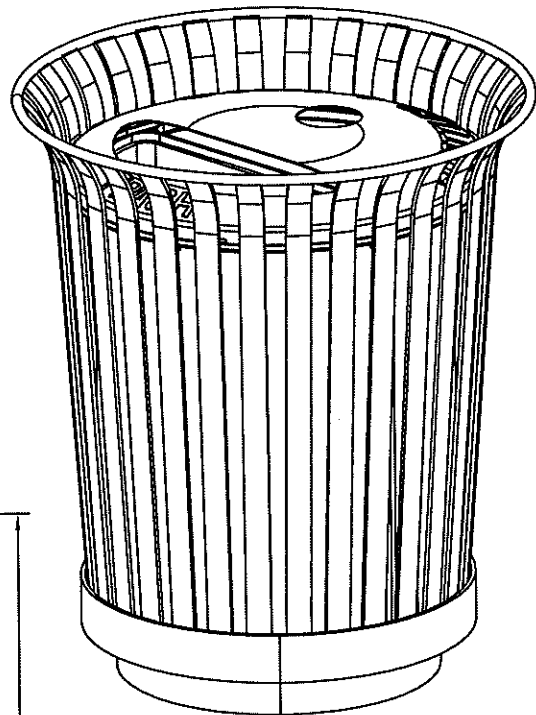
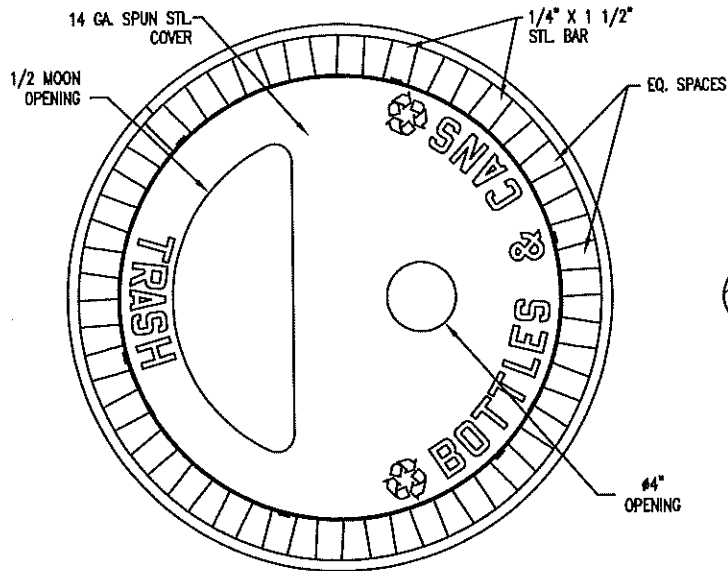
WEIGHTS:

84-22 22-gallon all-steel Receptacle, 150 lbs. (shown in Bronze)

84-32 32-gallon all-steel Receptacle, 175 lbs. (shown in Green)

84-40 Two 20-gallon half liners(40 gallons), Recycle Receptacle, 195 lbs.

Source URL: <https://www.dumor.com/products/receptacles/receptacle-84>



NOTES:

- 1.) ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
- 2.) 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS PROVIDED.
- 3.) RECEPTACLE FULLY ASSEMBLED AT FACTORY.

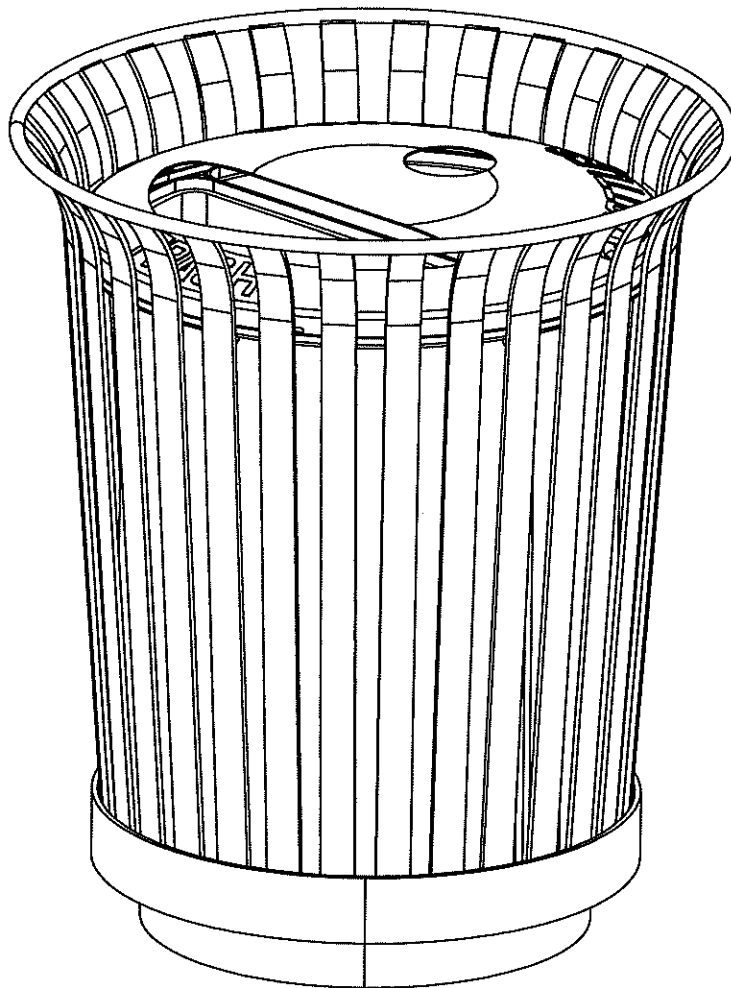

DuMor, inc.
 P.O. Box 142 Mifflintown, PA 17059-0142

SCALE :	NONE
DATE DRAWN :	12/20/12
DRAWN BY :	JSB
DATE REV. :	
REV. BY :	

TITLE : RECEPTACLE

REV.	DRAWING NUMBER
A	84-40-RC-0009

SHEET
1 OF 2



NOTE:

- 1.) RECEPTACLE SHIPPED FULLY ASSEMBLED.
- 2.) COVER ATTACHED W/ 1/8" VINYL COATED CABLE.
- 3.) MOUNT AND ANCHOR AS SPECIFIED.



DuMor, inc.
 P.O. Box 142 Mifflintown, PA 17059-0142

SCALE :	NONE
DATE DRAWN :	12/20/12
DRAWN BY :	JSB
DATE REV. :	
REV. BY :	

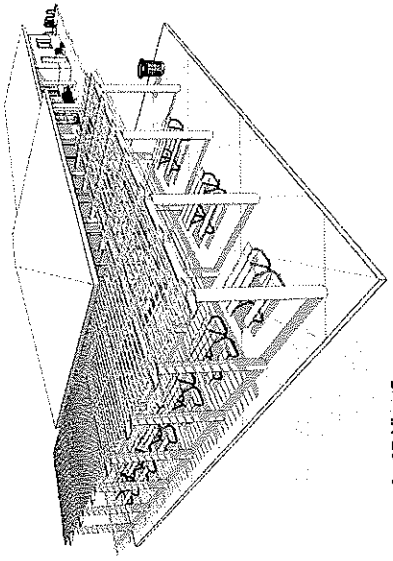
TITLE :	RECEPTACLE ASSEMBLY	
REV.	DRAWING NUMBER	
A	84-40-RC-0009	
		SHEET 2 OF 2

DORAL MEADOW PARK CENTER
 1 16 AVE. NW AT NW 58 ST. MIAMI
 FLORIDA, 33128

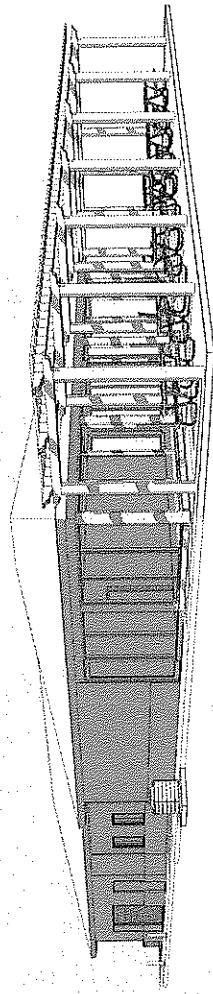
DATE: 08/20/17
 DRAWN BY: W.A.V.
 DESIGNED BY: L.A.V.
 CHECKED BY: J.D.C.
 APPROVED BY: J.D.C.
 REVISIONS

NO.	DESCRIPTION	DATE
1	ISSUE FOR PERMIT	08/20/17
2	ISSUE FOR PERMIT	08/20/17
3	ISSUE FOR PERMIT	08/20/17
4	ISSUE FOR PERMIT	08/20/17
5	ISSUE FOR PERMIT	08/20/17
6	ISSUE FOR PERMIT	08/20/17
7	ISSUE FOR PERMIT	08/20/17
8	ISSUE FOR PERMIT	08/20/17
9	ISSUE FOR PERMIT	08/20/17
10	ISSUE FOR PERMIT	08/20/17

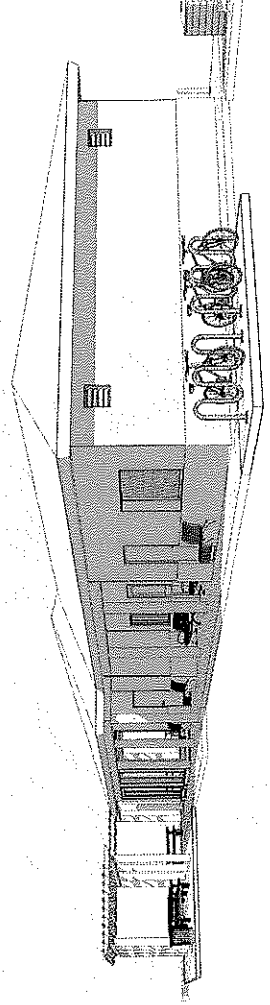
3D VIEWS
 A7.0
 CONSTRUCTION DOCUMENT



1 3D View 5
SCALE

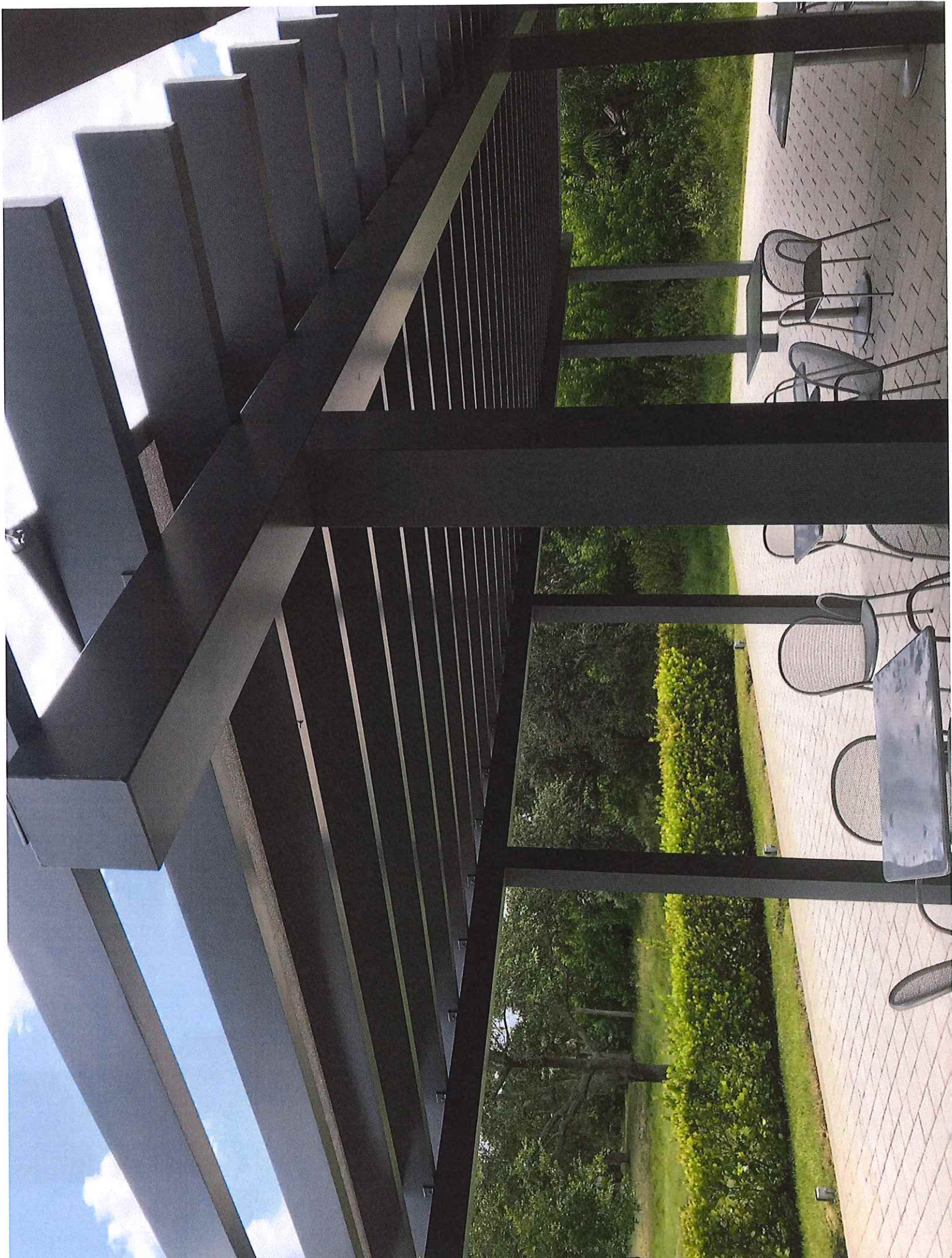


2 3D View 6
SCALE



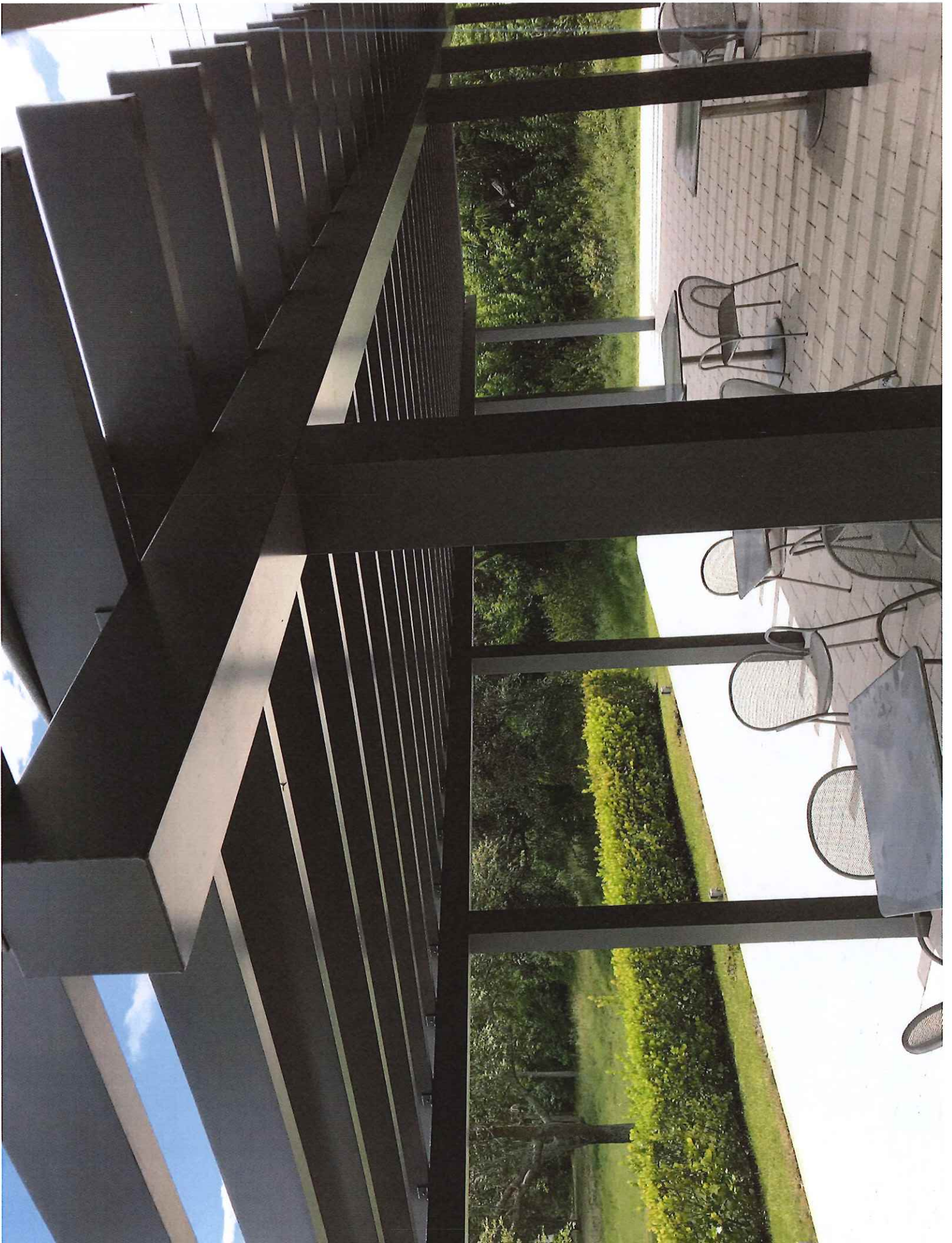
3 3D View 7
SCALE

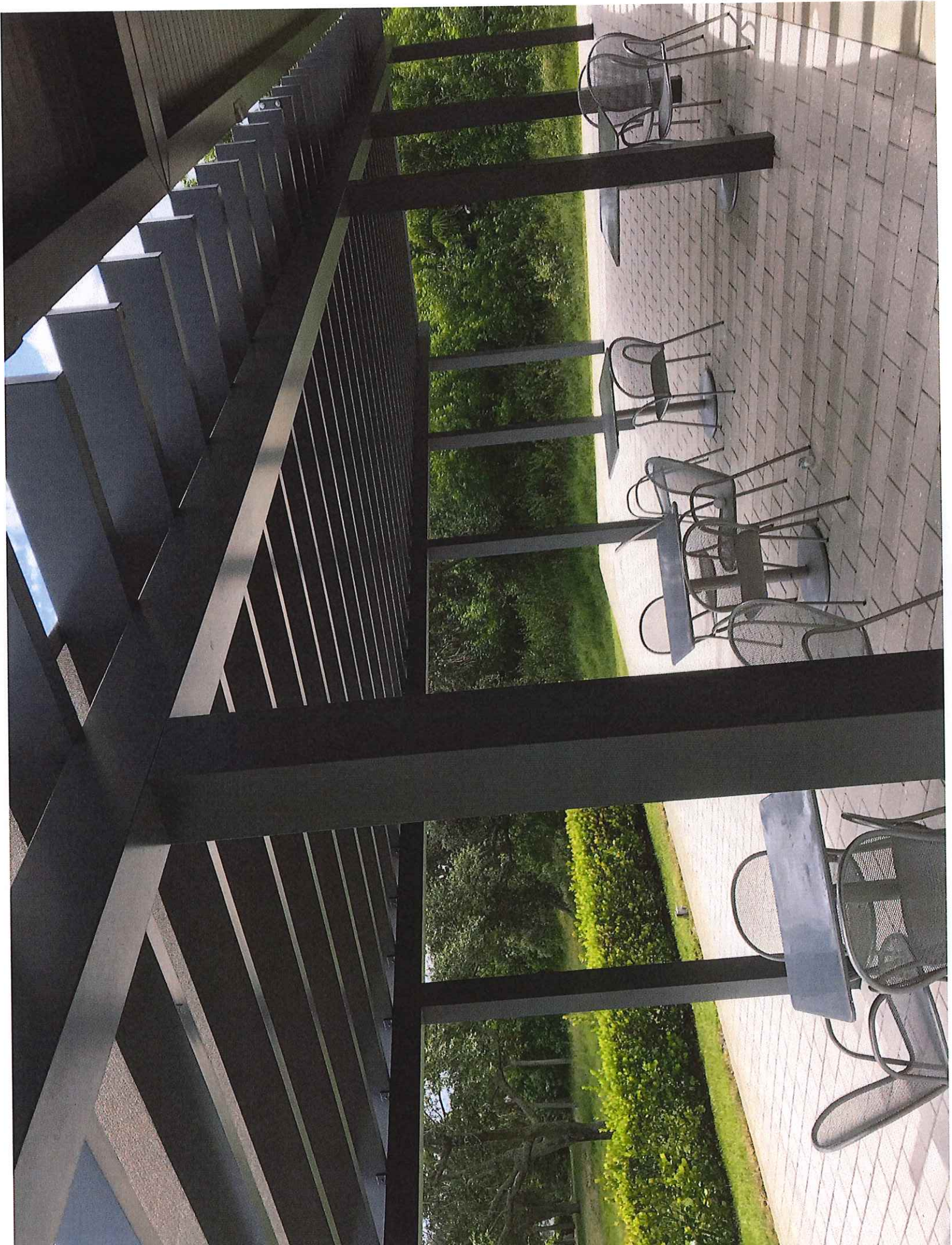






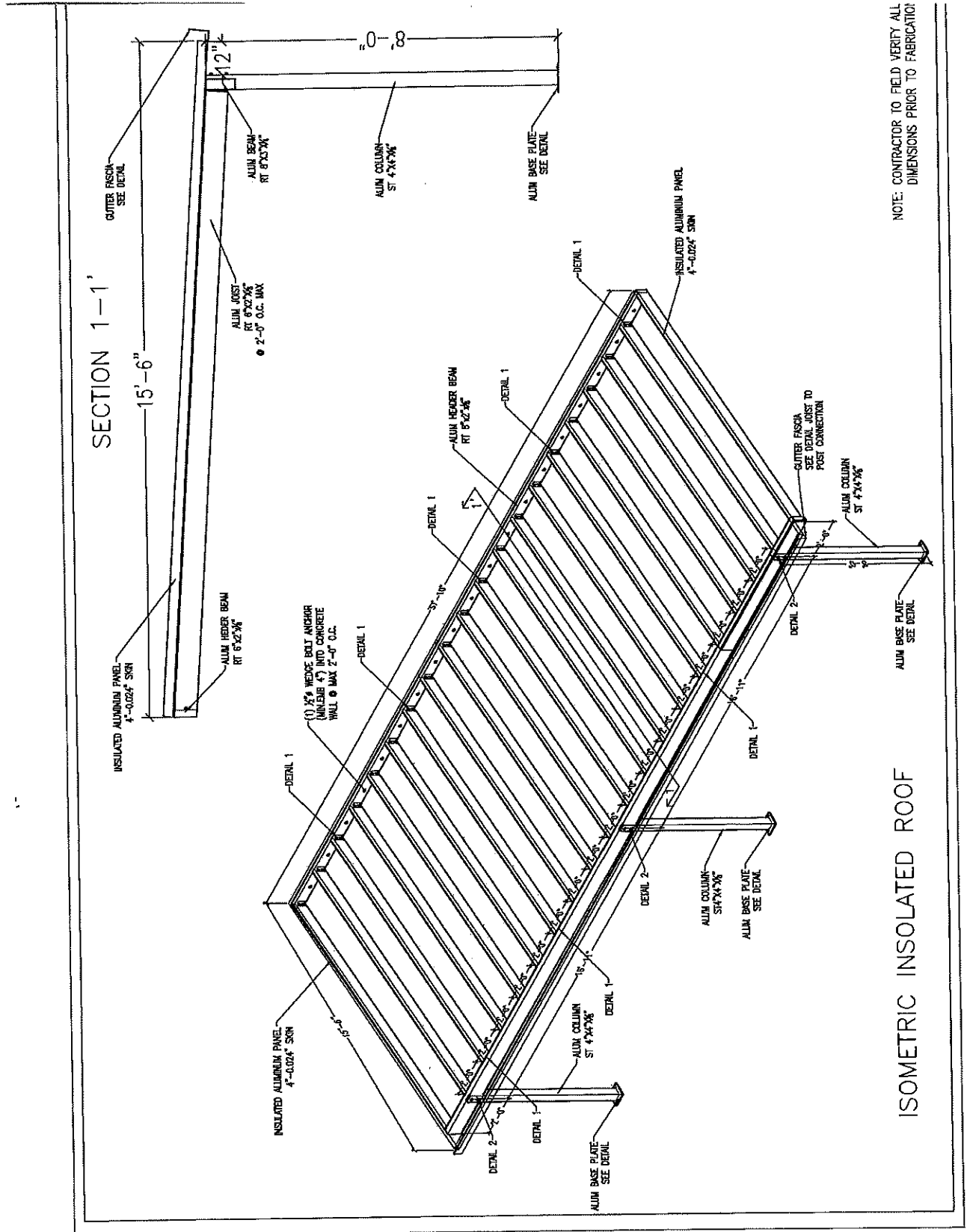








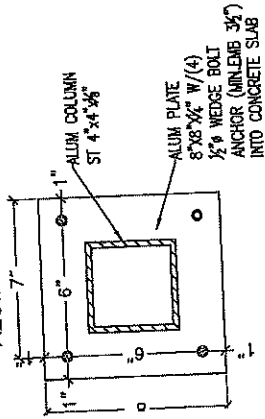




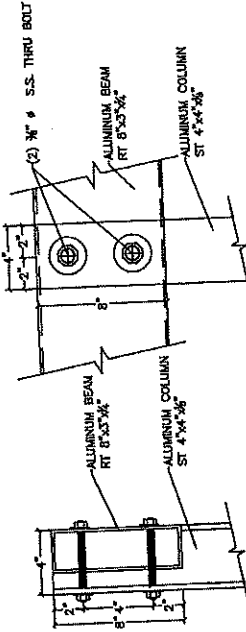
NOTE: CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION!

ISOMETRIC INSULATED ROOF

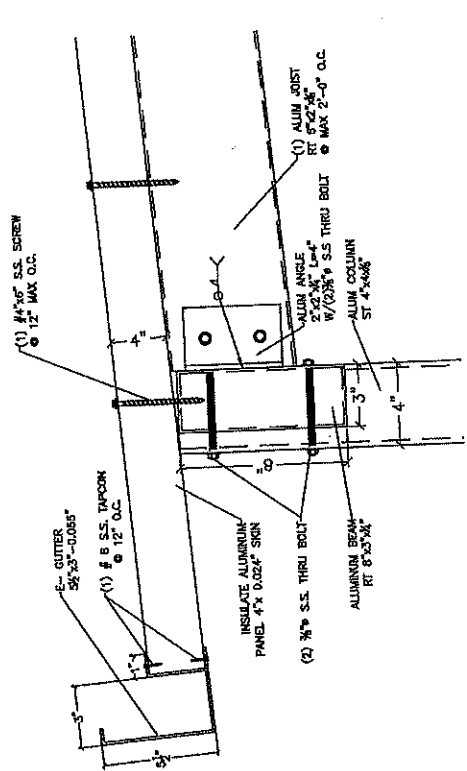
ALUM BASE PLATE DETAIL



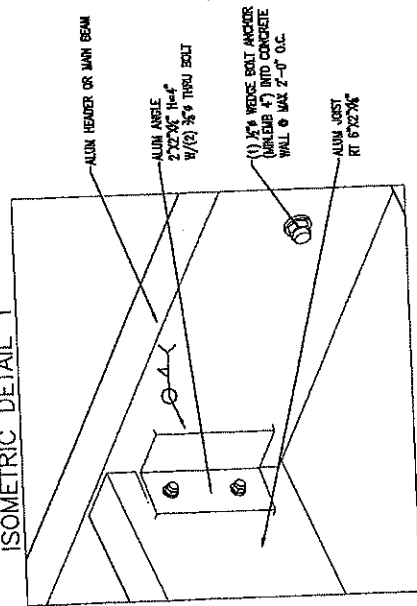
DETAIL 2



JOIST TO POST CONNECTION



ISOMETRIC DETAIL 1



GENERAL NOTES:

- ALL STRUCTURAL ELEMENTS TO BE ALUMINUM 6061-T6.
- ALL CONNECTIONS TO BE FULLY WELDED $\frac{1}{8}$ "-ERS356
- ALL STRUCTURES DESIGNED IN ACCORDANCE WITH:
 - A.S.C.E 7-10, EXPOSURE "C", V=175MPH
 - F.B.C 2014
- NOTIFY ENGINEER OF ANY ERRORS / OMISSIONS FOUND OR IF ANY PART OF THE DRAWINGS IS NOT UNDERSTOOD BEFORE PROCEEDING WITH THE WORK.
- ALUMINUM SURFACES IN CONTACT WITH CONCRETE OR MASONRY MATERIALS SHALL BE PROTECTED WITH HEAVY-BODIED BITUMINOUS PAINT.
- SOIL CONDITIONS AT THE SITE ARE SAND AND ROCK WITH MINIMUM SOIL BEARING CAPACITY 2000 psf.
- CRITICAL GRAVITY BEARING LOAD < 2000 PS
- CONTRACTOR MUST VERIFY DIMENSIONS ON JOB SITE BEFORE MANUFACTURE.

PAINT

Under this scope of work, Karmil proposes a new fresh coat of paint on the full interior and exterior of the building. Interior paint for walls, doors, baseboards and molding using primer and two coats of Sherwin-Williams products. Exterior paint for walls, including pressure cleaning of all surface, primer and two coats of Sherwin-Williams products.

RESOLUTION No. 20-17

A RESOLUTION OF THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, AWARING REQUEST FOR PROPOSALS #2019-42 "DESIGN-BUILD DORAL MEADOW PARK RENOVATIONS" TO KARMIL CONSTRUCTION, THE HIGHEST RANKED, MOST QUALIFIED, MOST RESPONSIVE AND RESPONSIBLE BIDDER; APPROVING AN AGREEMENT BETWEEN THE CITY AND KARMIL CONSTRUCTION IN AN AMOUNT NOT TO EXCEED FUNDING ALLOCATED WITHIN THE GENERAL OBLIGATION PARKS BOND, ESTIMATED AT \$1,600,000.00 FOR THE DESIGN AND CONSTRUCTION OF THE RENOVATIONS TO DORAL MEADOW PARK; AUTHORIZING THE CITY MANAGER TO NEGOTIATE AND ENTER INTO AN AGREEMENT WITH THE NEXT HIGHEST QUALIFIED FIRM SUCCESSIVELY IF AN AGREEMENT CAN NOT BE NEGOTIATED WITH THE TOP RANKED FIRM; AUTHORIZING THE CITY MANAGER TO EXECUTE THE AGREEMENT AND EXPEND ALLOCATED FUNDING FROM WITHIN THE GENERAL OBLIGATION PARKS BOND ON BEHALF OF THE CITY IN FURTHERANCE HEREOF; PROVIDING FOR IMPLEMENTATION; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, in response to Request for Proposal #2019-42 for "Design-Build Doral Meadow Park Renovations" (the "Project"), the City received five (5) bids by the December 6, 2019 deadline with only two (2) teams meeting the required criteria; and

WHEREAS, the established evaluation committee met on January 15, 2020 to review and score the responsive and responsible proposers where the committee scored Karmil Construction as the highest ranked and most qualified firm from the responsive and responsible bidders (the "Design-Builder"); and

WHEREAS, a copy of the Proposer's Submittal, RFQ #2019-43 Inventory, and Scoring Tabulation are all attached as Exhibit A; and

WHEREAS, the City Council finds that accepting the evaluation committee's recommendation and entering into a contract for the Project with the Design-Builder in

an amount not to exceed funding allocated within the General Obligation Parks Bond, is in the best interest of the City.

WHEREAS, funds for these services will be allocated from the Park Bond Fund estimated at \$1,600,000 in Fiscal Year 2019-20 in account number 303.9000572.500650.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DORAL AS FOLLOWS:

Section 1. Recitals. The above recitals are confirmed, adopted, and incorporated herein and made part hereof by this reference.

Section 2. Approval. The contract between the City and Karmil Construction for the Project in an amount not to exceed funding allocated within the General Obligation Parks Bond, together with such non-material changes as may be acceptable to the City Manager and approved as to form and legality by the City Attorney, is hereby approved.

Section 3. Authorization. The City Manager is authorized to execute the design-build contract and expend budgeted funds on behalf of the City.

Section 4. Implementation. The City Manager and the City Attorney are hereby authorized to take such further action as may be necessary to implement the purpose and the provisions of this Resolution.

Section 5. Effective Date. This Resolution shall take effect immediately upon adoption.

The foregoing Resolution was offered by Councilmember Mariaca who moved its adoption.

The motion was seconded by Councilmember Cabral and upon being put to a vote, the

vote was as follows:

Mayor Juan Carlos Bermudez	Yes
Vice Mayor Christi Fraga	Not Present at Time of Vote
Councilwoman Digna Cabral	Yes
Councilman Pete Cabrera	Absent / Excused
Councilwoman Claudia Mariaca	Yes

PASSED AND ADOPTED this 12 day of February, 2020.



JUAN CARLOS BERMUDEZ, MAYOR

ATTEST:



CONNIE DIAZ, MMC
CITY CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY
FOR THE USE AND RELIANCE OF THE CITY OF DORAL ONLY:



LUIS FIGUEREDO, ESQ.
CITY ATTORNEY