



BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

www.buildingcodeonline.com

Hurricane Manufacturing Corp.
11850 Miramar Parkway
Miramar, FL 33025

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division 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 "HMC 1000" Aluminum Storefront System – L. M. I.

APPROVAL DOCUMENT: Drawing No. **05-187**, titled "HMC 1000LM Series Large Missile Aluminum Storefront", sheets 1 through 5 of 5, dated 06/14/05, prepared by EngCo, Inc., signed and sealed by Pedro De Figueiredo, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state 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 consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Herminio F. Gonzalez, P.E., Director, BCCO**



NOA No 05-0810.03
Expiration Date: October 20, 2010
Approval Date: October 20, 2005
Page 1

Hurricane Protection Industries, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **05-187**, Sheets 1 through 5 of 5, titled "HMC 1000LM Series Large Missile Aluminum Storefront", dated 06/14/05, prepared by EngCo, Inc., signed and sealed by Pedro De Figueiredo, P.E.

B. TESTS

1. Test reports on:
 - 1) Air Infiltration Test, per TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per TAS 202-94
 - 3) Water Resistance Test, per TAS 202-94
 - 4) Large Missile Impact Test per, 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94along with marked-up drawings and installation diagram of a aluminum fixed window, prepared by Hurricane Test Laboratory, LLC, Test Report No. **HTL-0314-1112.04**, dated 11/22/04-03/02/05, signed and sealed by Vinu J. Abraham, P.E.
2. Test reports on:
 - 1) Air Infiltration Test, per TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per TAS 202-94
 - 3) Water Resistance Test, per TAS 202-94
 - 4) Large Missile Impact Test per, 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94along with marked-up drawings and installation diagram of a aluminum fixed window, prepared by Hurricane Test Laboratory, LLC, Test Report No. **HTL-0314-0405.05**, dated 04/15-21/05, signed and sealed by Vinu J. Abraham, P.E.

C. CALCULATIONS

1. Anchor Calculations, ASTM-E1300-98, and Structural Analysis, prepared by EngCo, Inc., dated 06/14/05, signed and sealed by Pedro De Figueiredo, P.E.
Complies with ASTM E1300-02
No 1/3 stress increase used in anchors into masonry or steel substrate.

D. QUALITY ASSURANCE

1. Miami Dade Building Code Compliance Office (BCCO).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **03-0421.02** issued to Solutia, Inc. for "Saflex III G Interlayer for Laminated Glass", dated 01/08/04, expiring on 05/21/06.
2. Notice of Acceptance No. **04-0115.01** issued to Viracon, Inc. for "HRG-2 Laminated Glass" dated 02/12/04, expiring on 02/12/09.



Herminio F. Gonzalez, P.E.
Director, Building Code Compliance Office
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F. STATEMENTS

1. Statement letter of conformance and no financial interest, dated 07/22/05, signed and sealed by Pedro De Figueiredo, P.E.

G. OTHER

1. Letter from the consultant, dated September 12, 2005, stating that the product is in compliance with the Florida Building Code (FBC).

for M. F. Gonzalez

Herminio F. Gonzalez, P.E.
Director, Building Code Compliance Office
NOA No 05-0810.03

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INDEX:

SHEET	DESCRIPTION
1	GENERAL NOTES, INDICES, WINDOW COMBINATIONS
2	TYPICAL EXTERIOR ELEVATION & ANCHOR SCHEDULE
3	SECTION DETAILS & FRAMING COMPONENTS
4	GLAZING DETAILS AND SELECTION
5	FRAME ASSEMBLY

GENERAL NOTES:

1- CODE: THIS PRODUCT HAS BEEN TESTED AND DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2004 EDITION - (HIGH VELOCITY SECTION) TAS 201 (LARGE MISSILE), 202, 203 AND ASTM E1300, ASTM E 1886, ASTM E1996 (MISSILE LEVEL D & E).

2- DEFINITION: THIS PRODUCT IS AN ALUMINUM FIXED TYPE WINDOW WITH LARGE MISSILE IMPACT RESISTANT LAMINATED GLASS.

3- POSTING:
 'HMC - 1000LM SERIES - LARGE MISSILE IMPACT HURRICANE MANUFACTURING CORPORATION INC. MIRAMAR - BROWARD COUNTY - FLORIDA DADE COUNTY PRODUCT CONTROL APPROVED'

4- DESIGN LOADS: LOADS MUST BE CALCULATED BY A PROFESSIONAL ARCHITECT OR ENGINEER FOR EACH SPECIFIC PROJECT. THE CALCULATED DESIGNED PRESSURE MUST NOT EXCEED THE ALLOWABLE APPROVED PRESSURE TABLES ON SHEET 4.

5- MATERIAL: ALL ALUMINUM PARTS TO BE 6063-T6 OR 6005-T5 ALLOYS AS INDICATED AND GLAZING TO BE LAMINATED IMPACT RESISTANT GLASS AS SPECIFIED ON THIS APPROVAL.

6- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED IN THIS CURRENT SET OF DRAWINGS.

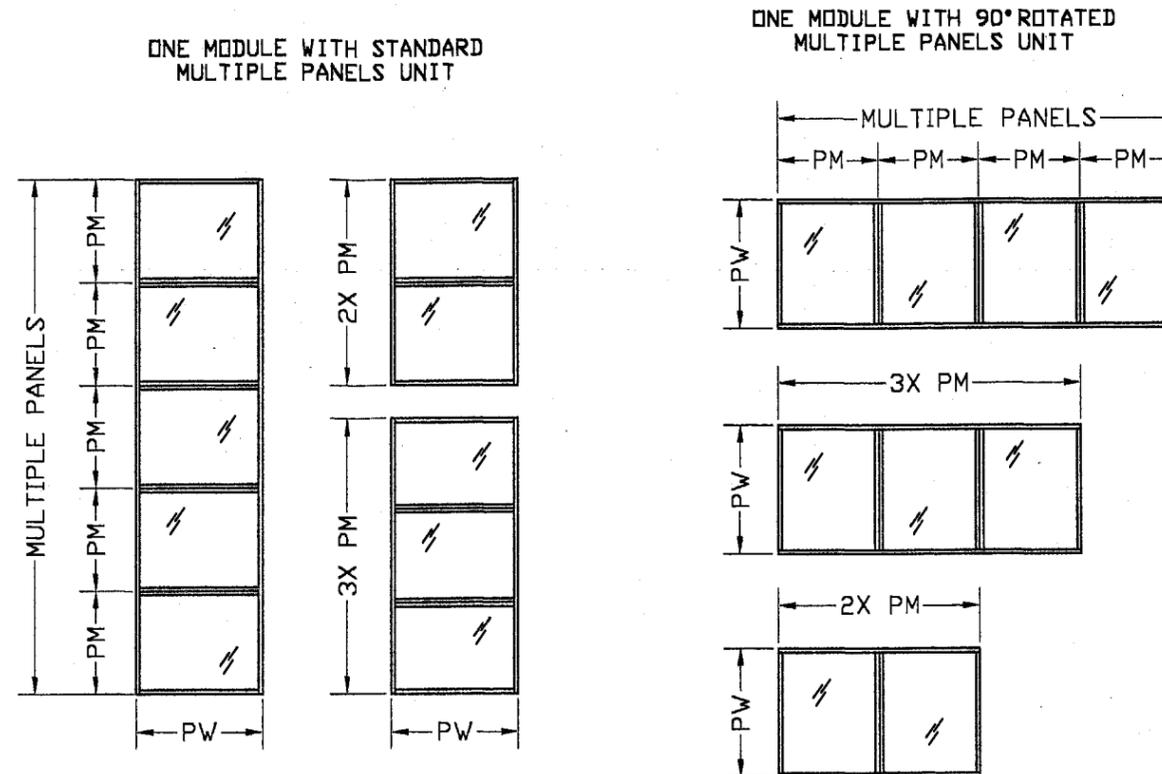
7- USE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ARCHITECT OR ENGINEER OF RECORD TO VERIFY THE FOLLOWING:
 7.1- THE STABILITY OF THE STRUCTURE WHERE THE UNIT IS TO BE ATTACHED INSURING PROPER ANCHORAGE.
 7.2- THE SITE SPECIFIC PROJECT CRITERIA, SUCH AS BUT NOT LIMITED TO, LOCAL CODE REQUIREMENTS, DESIGNED PRESSURES ETC.
 7.3- THAT THIS APPROVAL IS ADEQUATE TO THE SPECIFIC PROJECT.

8- 33 1/3% INCREASE IN ALLOWABLE LOADS HAVE NOT BEEN USED IN THE DESIGN OF THE ANCHORS FOR THIS PRODUCT APPROVAL, HOWEVER, WOOD ANCHORS WITH 1.33 INCREASE FOR WIND LOAD DURATION HAVE BEEN USED.

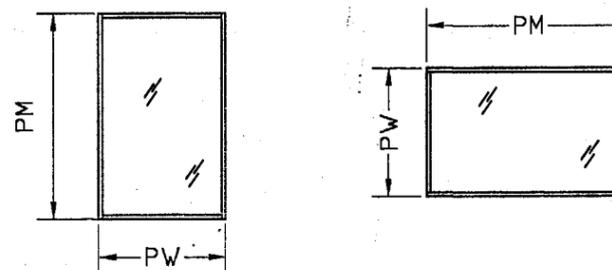
USER INSTRUCTIONS:

- 1- DETERMINE DESIGN WIND LOAD PRESSURES AS PER ITEM 4 OF GENERAL NOTES ABOVE.
- 2- CHECK GLASS CAPACITY FOR A GIVEN DLO HEIGHT AND WIDTH BY USING TABLES 3, 3a, 4 AND/OR 5 ON SHEET 4. GLASS CAPACITY MUST BE GREATER THAN THE CALCULATED PRESSURE.
- 3- CHECK ANCHOR SPACING TO BE USED FOR A GIVEN TYPE OF ANCHOR FROM TABLE 2, SHEET 2.
- 4- FOR MULTIPLE MODULES VERIFY MULLION ADEQUACY BY USING TABLE 1 ON SHEET 1. ALLOWABLE MODULE PRESSURE RATING MUST BE GREATER THAN THE CALCULATED PRESSURE.

WINDOW COMBINATIONS



ONE MODULE WITH 90° ROTATED SINGLE PANEL UNIT ONE MODULE WITH STANDARD SINGLE PANEL UNIT



SHAPE MODULE UNITS

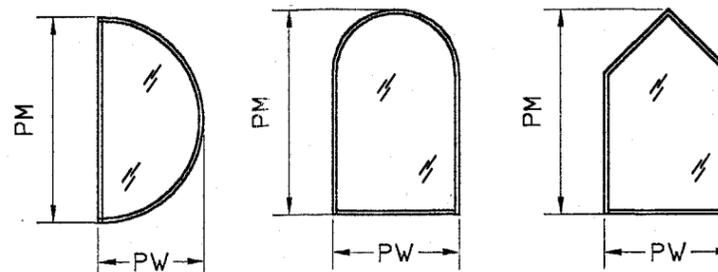


TABLE 1
 ALLOWABLE MODULE PRESSURE FOR MULTIPLE PANELS

MAX. PW	MAX. PM	DESIGN RATING
24	120	± 130
36	120	± 130
48	120	± 130
60	120	± 130
66	108	± 98
72	96	± 75
84	84	± 47

NOTES:
 1- PANEL WIDTH (PW) IN INCHES
 2- PANEL MODULE (PM) IN INCHES
 3- DESIGN RATING IN PSF.

MANUFACTURER:
Hurricane Manufacturing Corporation
 11850 MIRAMAR PARKWAY
 MIRAMAR - FL - 33025
 TEL: (954) 392-7933
 FAX: (954) 392-7356

PRODUCT:
HMC 1000LM Series
 LARGE MISSILE ALUMINUM STOREFRONT

Engineering:
EngCo Inc.
 CA 8116
 6971 W. Sunrise Blvd. 104
 Plantation, Fl. 33313
 Tel.: (954) 585-0304
 Fax: (954) 585-0305


AUG 03 2005
 Engineer Seal
 Pedro De Figueiredo
 PE 52609

Date: 06/14/05
 Scale: NA
 Design by: PPMF

PRODUCT CONTROL DIVISION:

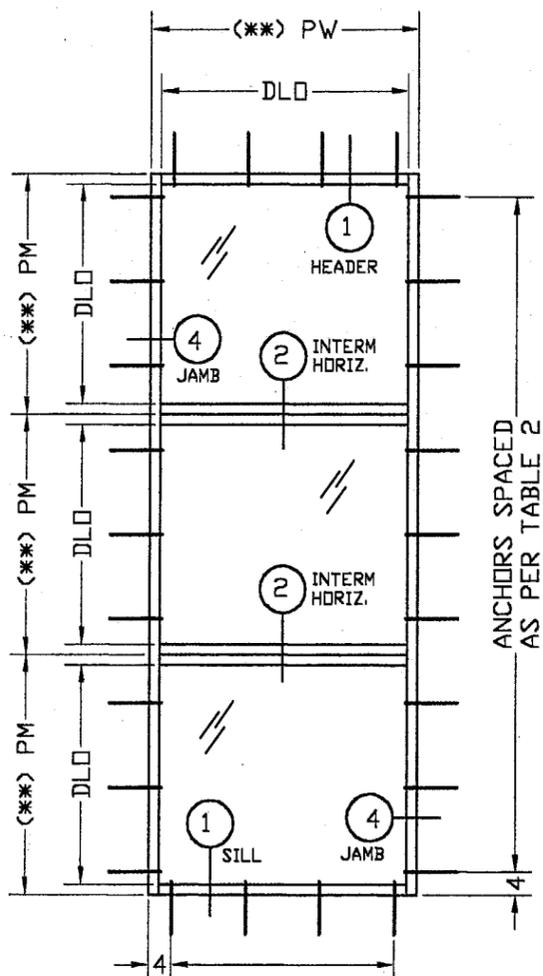
Approved as complying with the Florida Building Code
 Date: 10/20/05
 NOAR: 05-0910.03
 Miami Dade Product Control Division
 By: 

Drawing Number
05-187

Sheet
 1 of 5

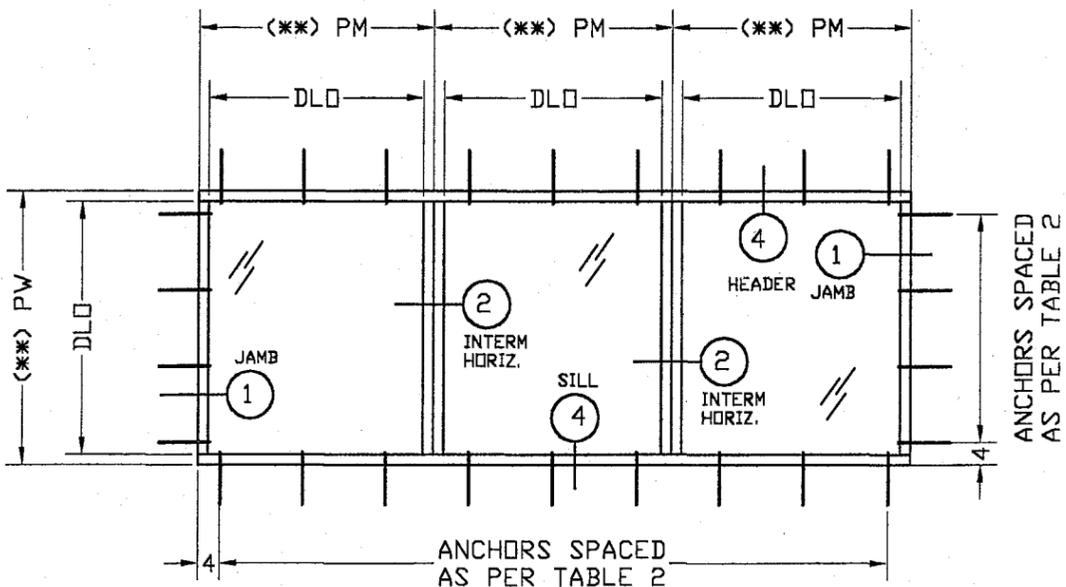
**TYPICAL EXTERIOR ELEVATION
& ANCHOR SCHEDULE**

ONE MODULE WITH STANDARD
MULTIPLE PANELS UNIT



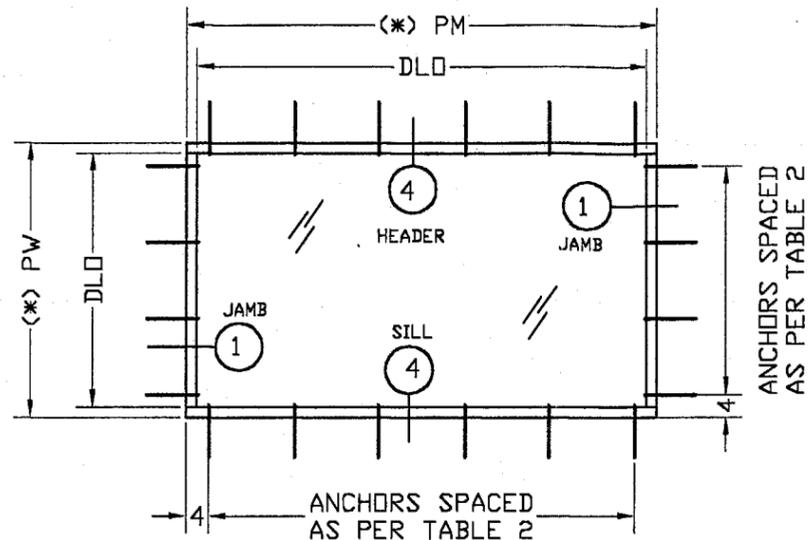
ANCHORS SPACED
AS PER TABLE 2

()NOTE:** FOR MAXIMUM MULTIPLE MODULAR PANELS
REFER TO TABLE 1 ON SHEET 1 TO SELECT MAXIMUM PW
AND PM BASED ON DESIGN PRESSURE.
FOR DLO WIDTH AND HEIGHT SEE TABLES 3, 3a, 5 OR 5
ON SHEET 4.



ANCHORS SPACED
AS PER TABLE 2

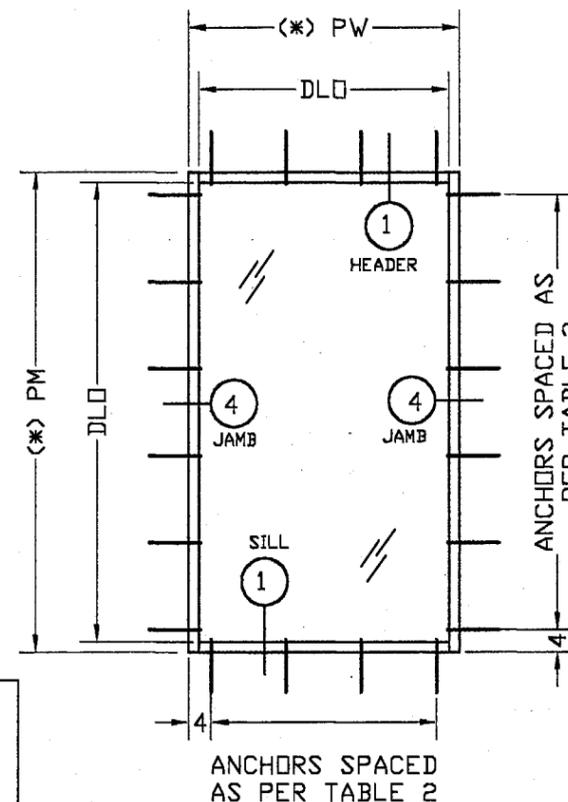
ONE MODULE WITH 90°
ROTATED SINGLE PANEL UNIT



ANCHORS SPACED
AS PER TABLE 2

(*)NOTE: FOR MAXIMUM SINGLE MODULAR PANEL ADD
3 3/8" TO MAXIMUM ALLOWABLE DLO AS PER TABLES 3 OR 4 ON SHEET 4.
PW= DLO WIDTH + 3 5/8"
PM= DLO HEIGHT + 3 5/8"

ONE MODULE WITH STANDARD
SINGLE PANEL UNIT



ANCHORS SPACED
AS PER TABLE 2

ANCHOR TYPE	ANCHOR SPACING
A	4" OC
B	11" OC
C	9" OC
D	14" OC
E	14" OC

TABLE 2
ANCHOR SPACING

ANCHOR SCHEDULE: (MIN 2 1/2" EDGE DISTANCE)

TYPE	DESCRIPTION	EMBEDMENT	SUBSTRATE
A	#14 SMS OR 1/4" TAPCONS	1 1/2"	PT WOOD (SG) ≥ .55)
B	1/4" TAPCONS	1 3/4"	3320 PSI CONCRETE
C	1/4"-20 DRIL-FLEX SCREWS	1/8"	6063-T5 ALUMINUM
D	1/4"-20 DRIL-FLEX SCREWS	1/8"	ASTM-A36 STEEL
E	1/4" WEDGE BOLT	1 1/2"	3000 PSI CONCRETE

MANUFACTURER:
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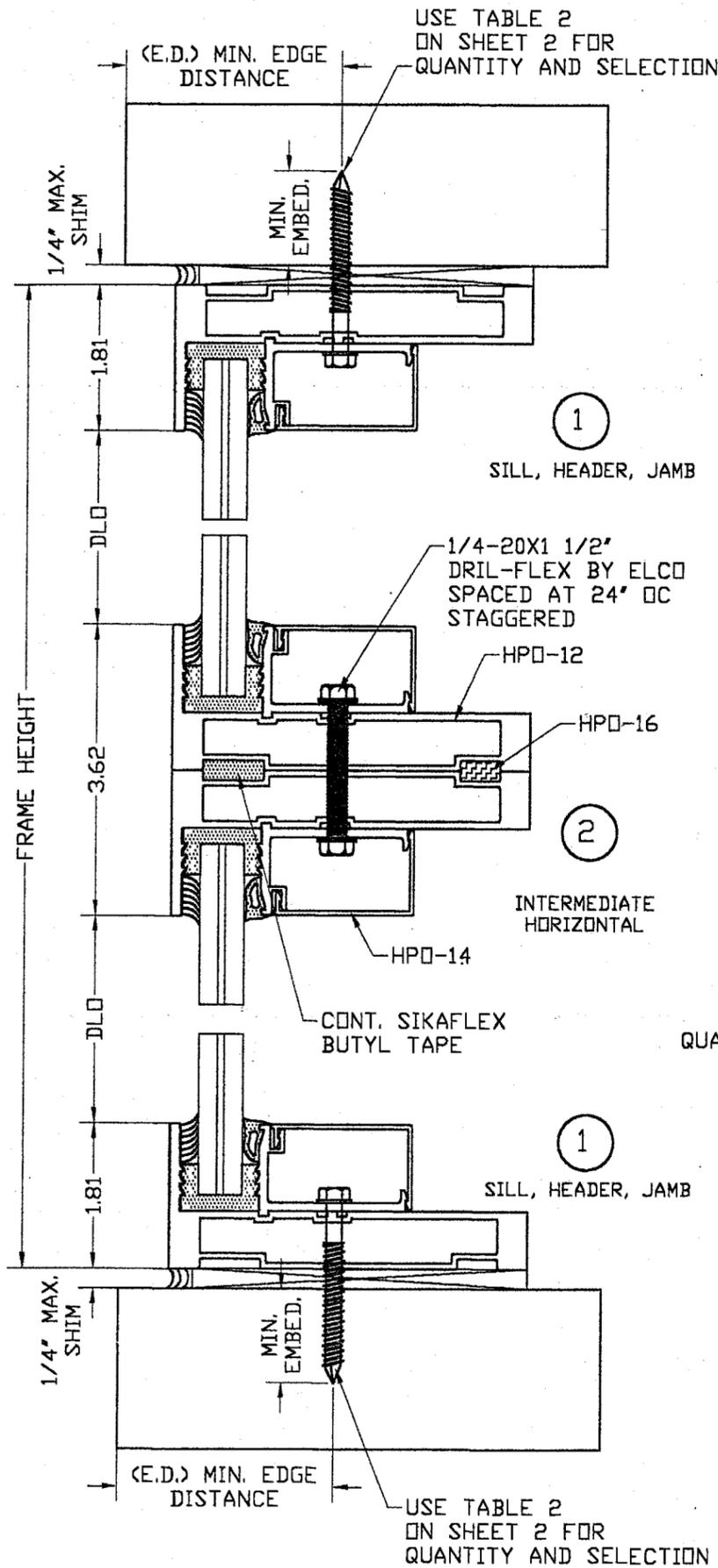
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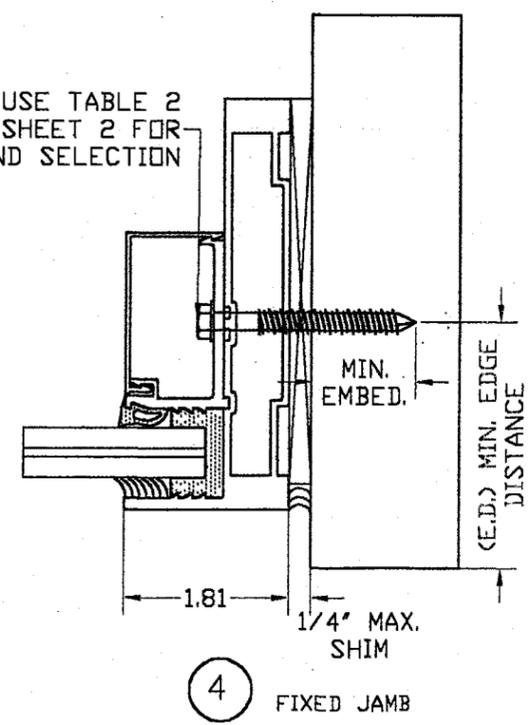
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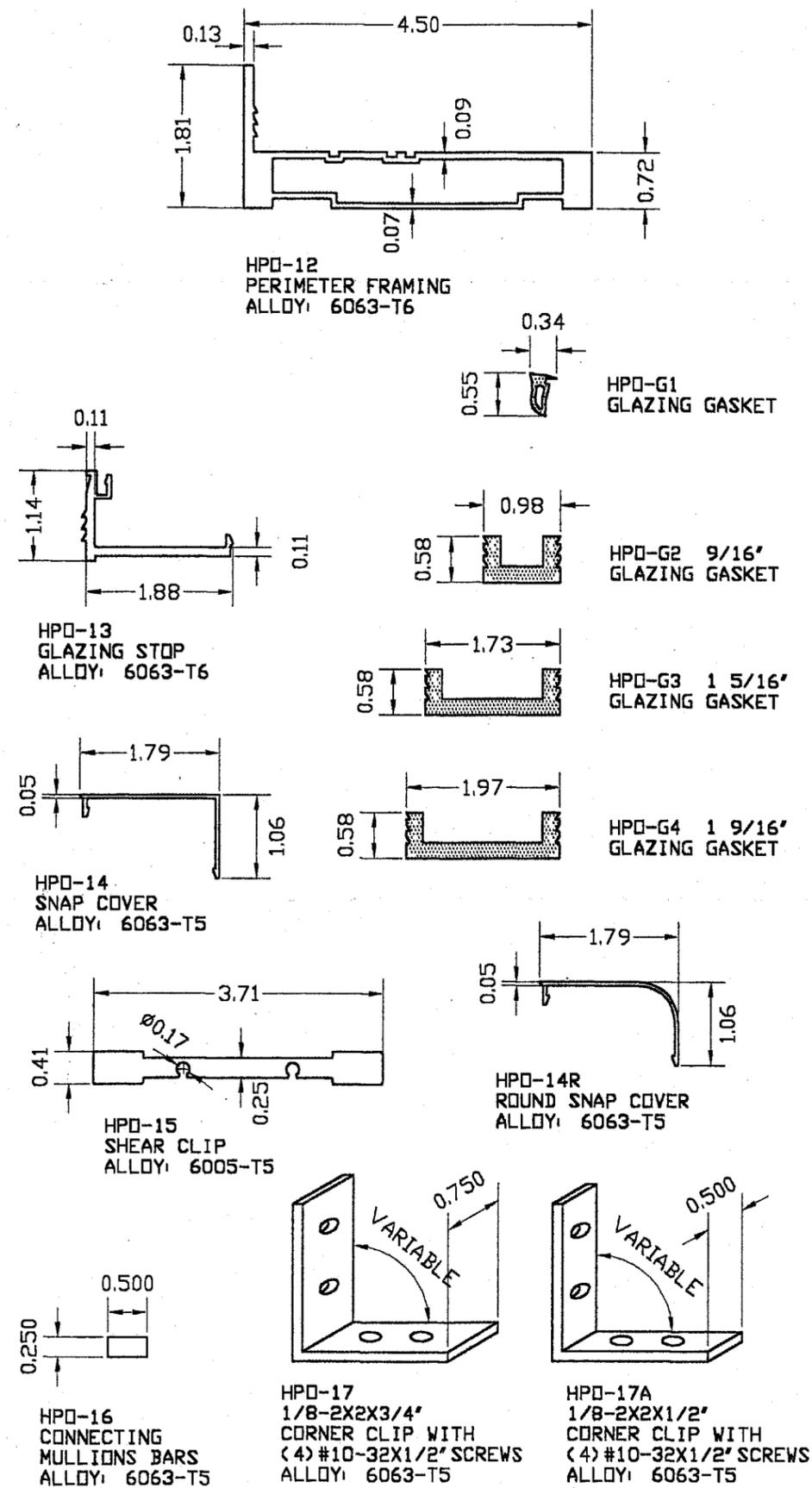
SECTION DETAILS



USE TABLE 2 ON SHEET 2 FOR QUANTITY AND SELECTION



FRAMING COMPONENTS



MANUFACTURER:
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Engineer Seal
Pedro De Figueiredo
PE 52609

Date: 06/14/05
Scale: NA
Design by: PPMF

PRODUCT CONTROL DIVISION:

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By: *[Signature]*

Drawing Number
05-187

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GLAZING CONFIGURATIONS AND GLAZING ALLOWABLE LOADS

TYPE A - 9/16" LAMINATED IMPACT GLASS			
TYPE	MANUFACTURER	INTERLAYER	ASTM CLASSIFICATION
A2	SOLUTIA	.09" PVB	LEVEL D

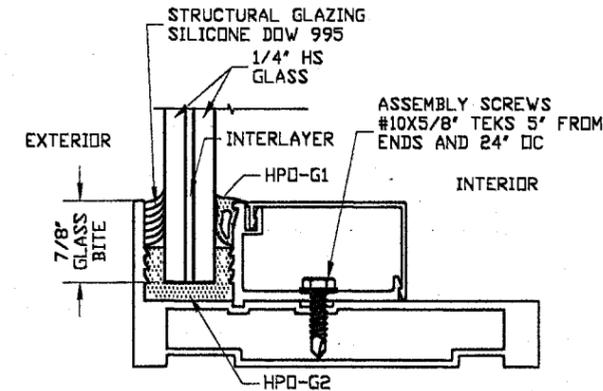
TABLE 3 - TYPE A2 GLASS
DESIGN LOAD CAPACITY IN PSF (EXT./INT.)

DLO WIDTH	DLO HEIGHT				
	68 3/8	80 3/8	92 3/8	104 3/8	116 3/8
20 3/8	+60, -60	+60, -60	+60, -60	+60, -60	+60, -60
32 3/8	+60, -60	+60, -60	+60, -60	+60, -60	+60, -60
44 3/8	+60, -60	+60, -60	+60, -60	+60, -60	+60, -60
56 3/8	+60, -60	+60, -60	+60, -60	+60, -60	+60, -60
62 3/8	+60, -60	+60, -60	+60, -60	+60, -60	na
68 3/8	+60, -60	+60, -60	+60, -60	na	na
80 3/8	+60, -60	+60, -60	na	na	na

TYPE A - 9/16" LAMINATED IMPACT GLASS			
TYPE	MANUFACTURER	INTERLAYER	ASTM CLASSIFICATION
A3	VIRACON	.075 VANCIVA	LEVEL D
A5	VIRACON	HRG II	LEVEL E

TABLE 3a - TYPE A3 OR A5 GLASS
DESIGN LOAD CAPACITY IN PSF (EXT./INT.)

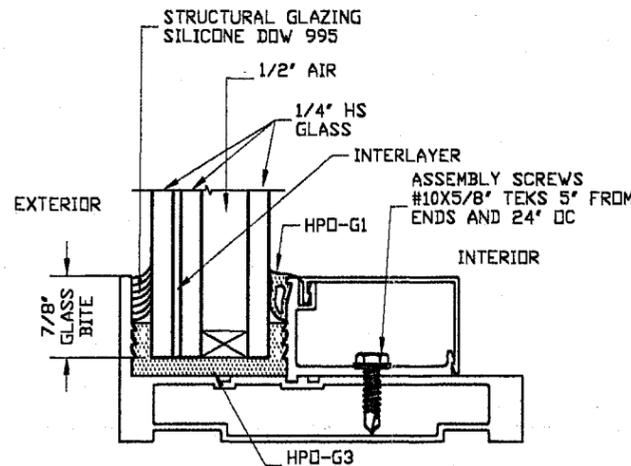
DLO WIDTH	DLO HEIGHT				
	68 3/8	80 3/8	92 3/8	104 3/8	116 3/8
20 3/8	130	130	130	130	130
32 3/8	130	130	130	130	130
44 3/8	130	130	130	130	129
56 3/8	130	130	129	114	102
62 3/8	130	130	120	105	na
68 3/8	130	129	112	na	na
80 3/8	129	118	na	na	na



TYPE B - 1 5/16" LAM. INSULATED IMPACT GLASS			
TYPE	MANUFACTURER	INTERLAYER	ASTM CLASSIFICATION
B3	VIRACON	.075" VANCIVA	LEVEL D

TABLE 4 - TYPE B3 GLASS
DESIGN LOAD CAPACITY IN PSF (EXT./INT.)

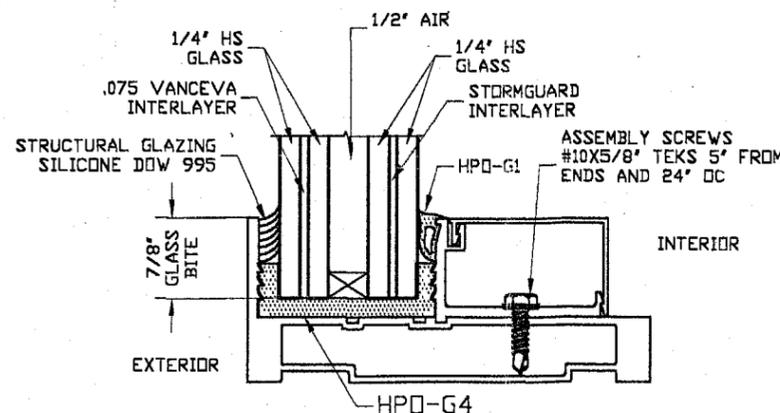
DLO WIDTH	DLO HEIGHT				
	68 3/8	80 3/8	92 3/8	104 3/8	116 3/8
20 3/8	130	130	130	130	130
32 3/8	130	130	130	130	130
44 3/8	130	130	130	130	128
56 3/8	128	111	128	113	101
62 3/8	130	130	119	104	na
68 3/8	130	128	111	na	na
80 3/8	128	117	na	na	na



TYPE C - 1 5/8" LAM. DOUBLE INSULATED IMPACT GLASS			
TYPE	MANUFACTURER	INTERLAYERS	ASTM CLASSIFICATION
C1	VIRACON	.075" VANCIVA .10 STORMGUARD	LEVEL E

TABLE 5 - TYPE C1 GLASS
DESIGN LOAD CAPACITY IN PSF (EXT./INT.)

DLO WIDTH	DLO HEIGHT				
	68 3/8	80 3/8	92 3/8	104 3/8	116 3/8
20 3/8	130	130	130	130	130
32 3/8	130	130	130	130	130
44 3/8	130	130	130	130	130
56 3/8	130	130	130	130	130
62 3/8	130	130	130	130	na
68 3/8	130	130	130	na	na
80 3/8	130	130	na	na	na



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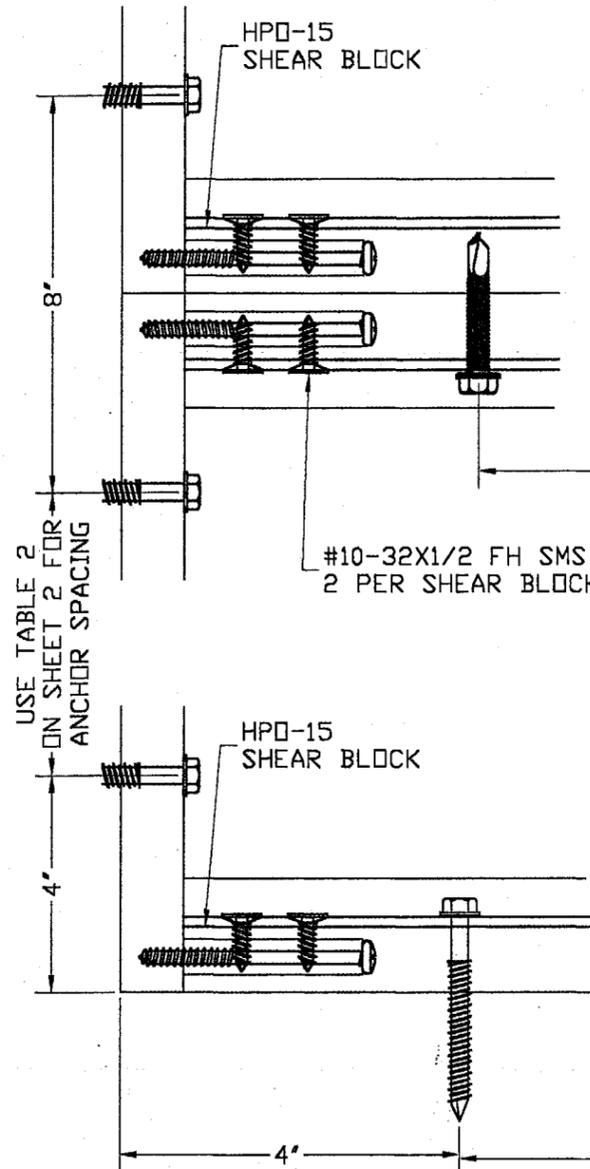
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Miami Dade Product Control Division
By: *[Signature]*

Drawing Number
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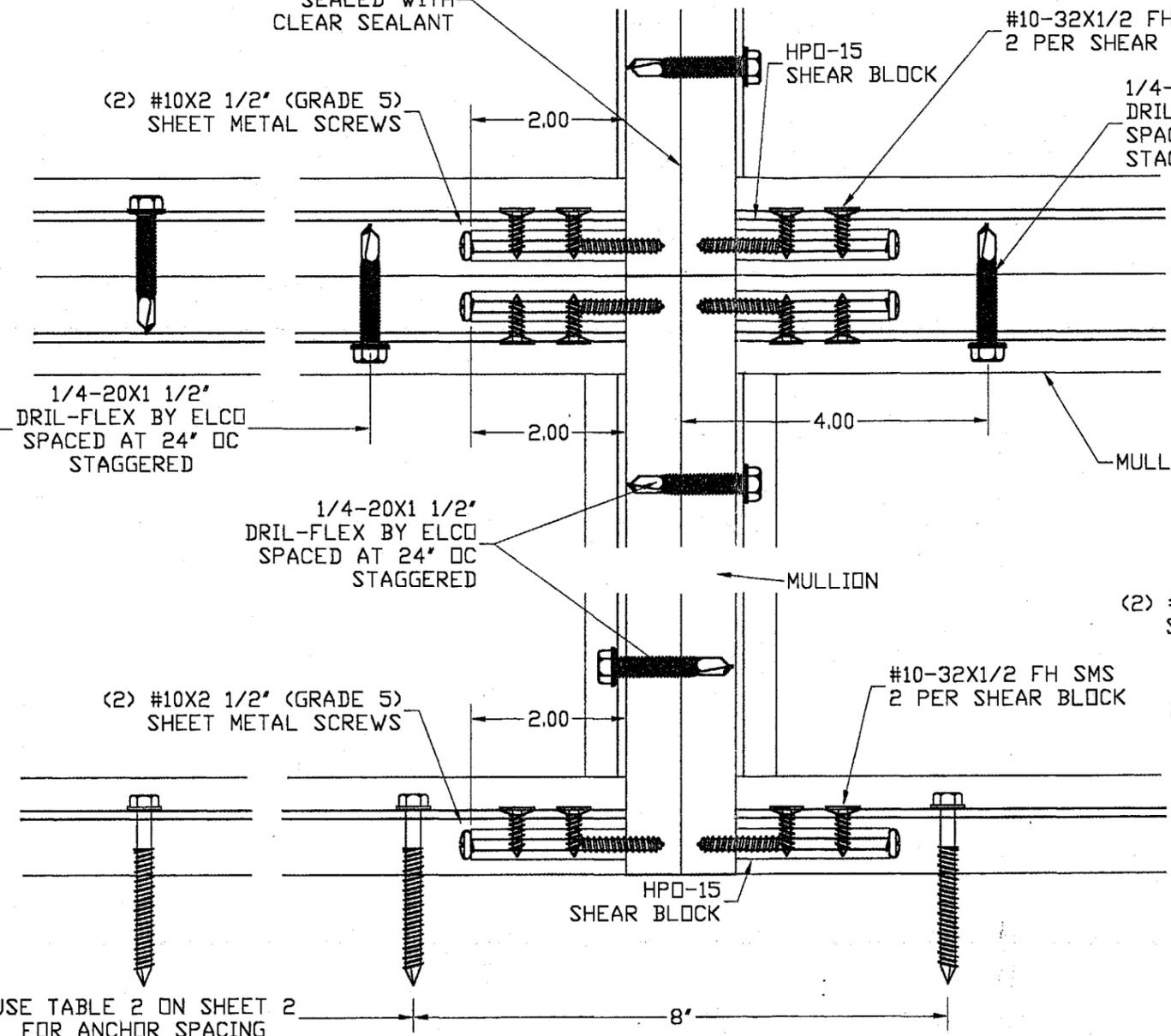
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JAMB CORNER ASSEMBLY



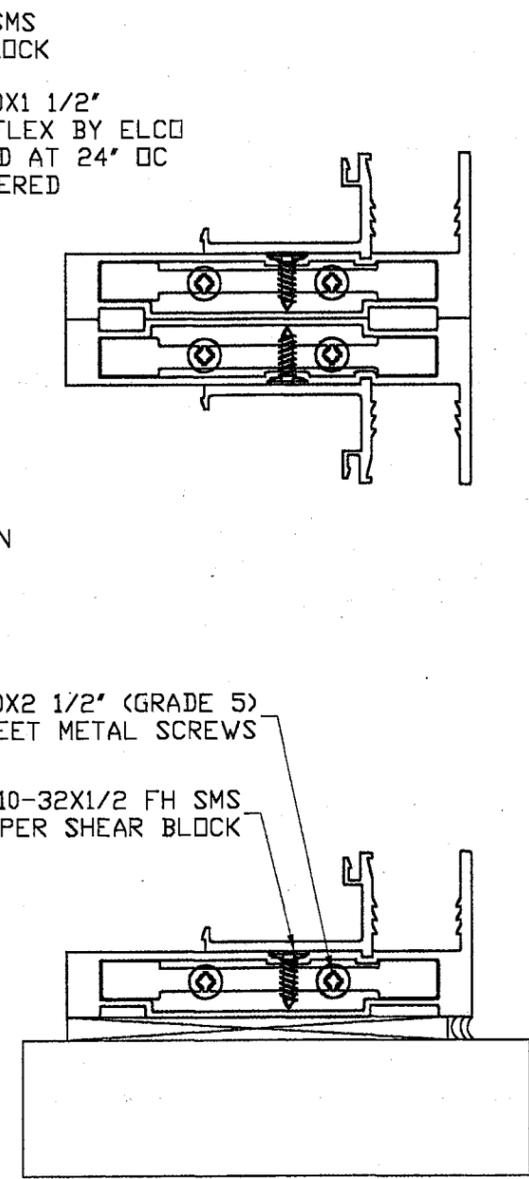
USE TABLE 2 ON SHEET 2 FOR ANCHOR SPACING

TYPICAL ALL SEAMS SEALED WITH CLEAR SEALANT INTERMEDIATE MULLION ASSEMBLY



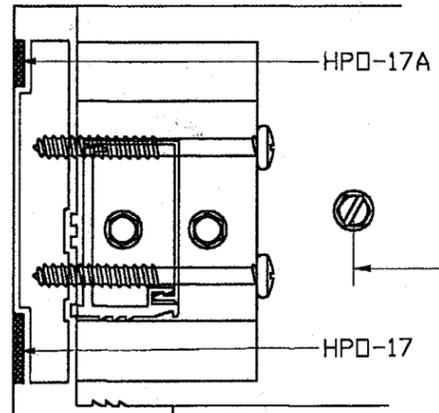
USE TABLE 2 ON SHEET 2 FOR ANCHOR SPACING

FRAME ASSEMBLY

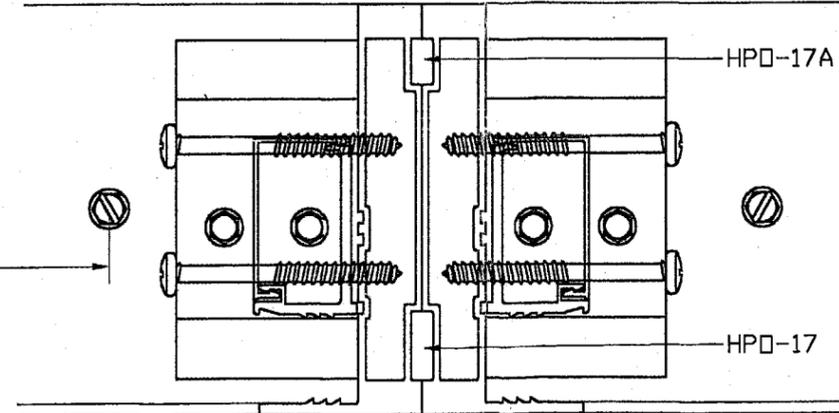


(2) #10X2 1/2 (GRADE 5) SHEET METAL SCREWS

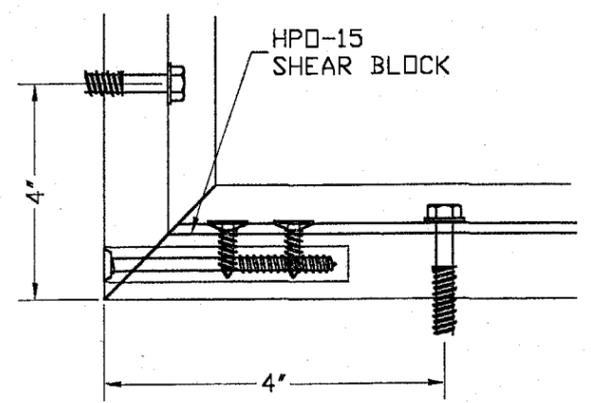
#10-32X1/2 FH SMS 2 PER SHEAR BLOCK



USE TABLES 2 ON SHEET 2 FOR ANCHOR SPACING



ALTERNATE MITTER CORNER



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Sheet
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