



**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)

**Glass America
1301 W. Copans Road F7
Pompano Beach, FL 33064**

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 High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Series "5000" Aluminum Glazed Window Wall System w/ wo Reinforcements-LM Impact

APPROVAL DOCUMENT: Drawing No. 02-883R1, titled "series 5000 Aluminum Storefront", Sheets 1 through 4 of 4, dated 06/25/02 and last revised on 04-08-04, prepared by EngCo Inc., signed and sealed by Pedro De Figueiredo, 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 Division.

MISSILE IMPACT RATING: Large Missile Impact Resistant

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 replaces & revises NOA # 03-0307.03 consists of this page 1, evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by Ishaq I. Chanda, P.E.



**NOA No 04-0318.02
Expiration Date: May 15, 2008
Approval Date: April 29, 2004
Page 1**

4/29/04

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **02-883R1**, titled "series 5000 Aluminum Storefront", Sheets 1 thru 4 of 4, dated 06/25/02 and last revised on 04-08-04, prepared by EngCo Inc., signed and sealed by Pedro De Figueiredo, P. E.

B. TESTS (Transferred from file # 03-0307.03)

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, TAS 201-94
 - 5.) Cyclic Loading Test, per TAS 203-94

along with installation diagram of aluminum glazed Window wall system marked-up by Fenestration Testing Laboratory, Test Report No. **FTL 02158 (3614)**, **FTL 02160 (3616)** and **FTL 02068 (3573)**, all dated 12-10-02, signed and sealed by Joseph C. Chan, P.E. (These test reports have been revised by addendum letter clarifying shear block length, issued by Fenestration Testing lab dated April 14, 2003)

2. Additional test:

- 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, TAS 201-94
 - 5.) Cyclic Loading Test, per TAS 203-94

along with installation diagram of aluminum glazed Window wall system marked-up by American Testing Lab of South Florida, Test Report No. **ATL -0819.01-03** dated 01-27-04, signed and sealed by William R. Mehner, P.E.

C. CALCULATIONS:

1. Anchor Calculations and structural analysis, dated 02-03-04 and last revised on 04-08-04, prepared by prepared by Eng. Inc., signed and sealed Pedro De Figueiredo, P. E.
2. Anchor Calculations and structural analysis, dated 02-28-03 and last revised on 04-22-03, prepared by prepared by Eng. Inc. , signed and sealed Pedro De Figueiredo, P. E.

D. QUALITY ASSURANCE BY:

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

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **01-0205.02** issued to Solutia Inc. for "Saflex /Keepsafe PVB", expiring on 05/21/06.
2. Notice of Acceptance No. **02-0916.04** issued to Viracon Inc for "Storm Guard (laminated)", expiring on 04/14/08.
3. Notice of Acceptance No. **01-1204.01** issued to E. I. DuPont DeNumours for "SentryGlas Plus", expiring on 01/14/07.

E. STATEMENTS

1. Statement letter of conformance & No financial interest, dated 02-03-04, signed by Pedro De Figueiredo, P. E.
2. Letters of compliance, (statements of compliance stated in above test reports)

F. OTHER

1. Test proposal No. 02-0575 approved by BCCO dated 08-20-02.
2. This NOA **replaces & revises** NOA # **03-0307.03**.

Ishaq I. Chanda
Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No 04-0318.02

Expiration Date: May 15, 2008
Approval Date: April 29, 2004

INDEX:

- SHEET 1 of 4 - GENERAL NOTES AND FRAMING COMPONENTS
- SHEET 2 of 4 - ALLOWABLE LOADS TABLES AND TYPICAL UNIT ELEVATION
- SHEET 3 of 4 - TYPICAL FRAME ANCHORAGE LAYOUT, GLAZING CONFIGURATIONS, ANCHOR SELECTION TABLE
- SHEET 4 of 4 - SECTION DETAILS AND FRAME ASSEMBLY

GENERAL NOTES:

1- CODE: THIS PRODUCT HAS BEEN TESTED AND DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2001 EDITION - (HIGH VELOCITY SECTION).

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

3- POSTING:

*GLASS AMERICA - 5000 SERIES - IMPACT
GLASS AMERICA
POMPANO BEACH - FLORIDA
DADE COUNTY PRODUCT CONTROL APPROVED*

4- DESIGN LOADS: WIND LOADS MUST BE CALCULATED, AS PER ASCE 7-98, BY A PROFESSIONAL ARCHITECT OR ENGINEER FOR EACH SPECIFIC PROJECT. THE CALCULATED DESIGNED PRESSURE MUST NOT EXCEED THE ALLOWABLE APPROVED PRESSURE ON THIS PRODUCT APPROVAL.

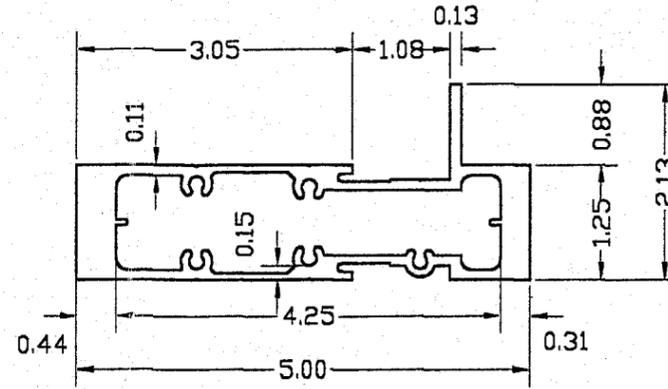
5- MATERIAL: ALL ALUMINUM PARTS TO BE 6063-T5, 6063-T6 OR 6005-T5 ALLOYS AS INDICATED AND GLAZING TO BE LAMINATED IMPACT RESISTANT GLASS AS SPECIFIED ON THIS APPROVAL.

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

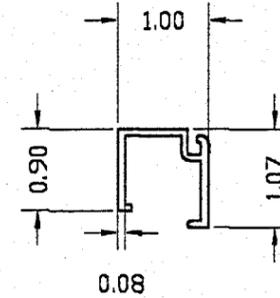
7- USE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ARCHITECT OR ENGINEER OF RECORD TO VERIFY THE FOLLOWING:

- 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.

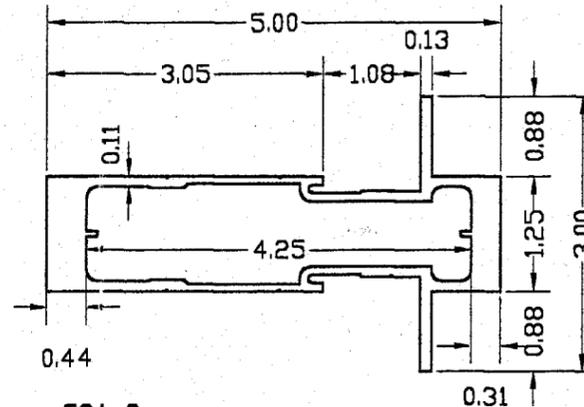
FRAMING COMPONENTS



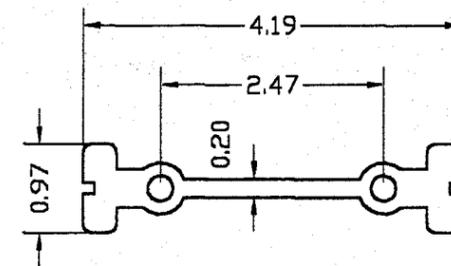
GSA-1
PERIMETER FRAMING
ALLOY: 6063-T5



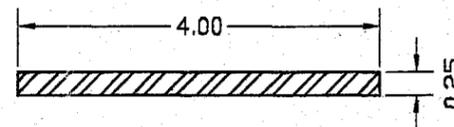
GSA-3
GLAZING STOP
ALLOY: 6063-T5



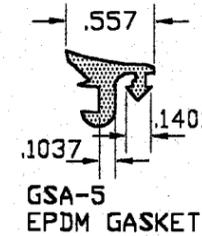
GSA-2
INTERMEDIATE MULLION SECTION
ALLOY: 6063-T6



GSA-4
SHEAR BLOCK OR REINFORCEMENT
ALLOY: 6005-T5



ST-1 (2X REQUIRED)
STEEL REINFORCEMENT
ASTM A36



GSA-5
EPDM GASKET

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 04-0318-02
Expiration Date MAY 15 2008
By Ishag I. Chanda
Miami Dade Product Control
Division

MANUFACTURER:
Glass America
1301 W. COPANS ROAD F7
POMPANO BEACH - FL
TEL: (954) 968-5222
FAX: (954) 968-5288

PRODUCT:
Glass America Series 5000
ALUMINUM STOREFRONT

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


APR 08 2004

Engineer Seal
Pedro De Figueiredo
PE 52609

Date: 6/25/02
Scale: 1:1/4
Design by: PPMF

Revision:
#1 - 11/18/03
#2 - 4/8/04

Drawing Number
02-883R1

Sheet
1 of 4

TABLE 1 - NO REINFORCEMENT
DESIGN LOAD CAPACITY IN PSF (EXT./INT.)
(SEE INSTRUCTIONS)

MODULE WIDTH	MODULE HEIGHT						
	36	48	60	72	84	96	108
36	100	100	100	100	100	100	100
42	100	100	100	100	100	100	100
48	100	100	100	100	100	100	100

MAXIMUM ALLOWABLE MODULE: 48X108

TABLE 2 - GSA-2 W/ (2) ST1 REINFORCEMENT (FULL LENGTH)
MULLION DESIGN LOAD CAPACITY IN PSF (EXT./INT.)
(SEE INSTRUCTIONS)

MODULE WIDTH	MODULE HEIGHT									
	36	48	60	72	84	96	108	120	132	144
48	100	100	100	100	100	100	100	100	68	61
54	100	100	100	100	100	100	100	100	62	55
60	100	100	100	100	100	100	100	100	57	51
72	100	100	100	90	77	68	60	54	49	45

MAXIMUM ALLOWABLE MODULE: 72X144

TABLE 3 - GSA-2 W/ GAS-4 REINFORCEMENT (FULL LENGTH)
MULLION DESIGN LOAD CAPACITY IN PSF (EXT./INT.)
(SEE INSTRUCTIONS)

MODULE WIDTH	MODULE HEIGHT						
	36	48	60	72	84	96	108
48	100	100	100	100	100	100	100
54	100	100	100	100	100	100	100
60	100	100	100	100	100	100	100

MAXIMUM ALLOWABLE MODULE: 60X108

TABLE 4 - GLAZING DESIGN LOAD CAPACITY IN PSF (EXT./INT.)
USE IN CONJUNCTION WITH TABLES 1, 2 AND 3
(SEE INSTRUCTIONS)

DLO WIDTH	DLO HEIGHT				
	<=67.75	79.75	91.75	103.75	115.75
45	100	100	100	100	100
51	100	100	100	97	90
57	100	100	92	83	76
69	90	77	68	45	45

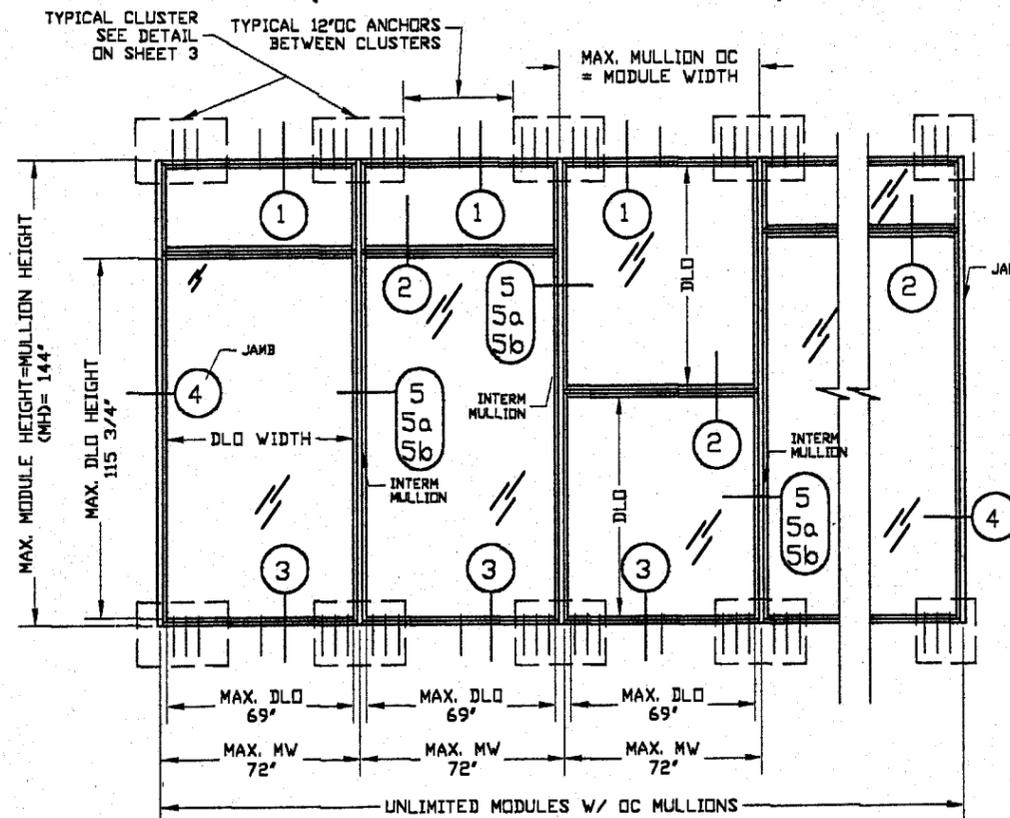
MAX. DLO HEIGHT <= 115 3/4"

DLO HEIGHT = MODULE HEIGHT - 4 1/4"
DLO WIDTH = MODULE WIDTH - 3"

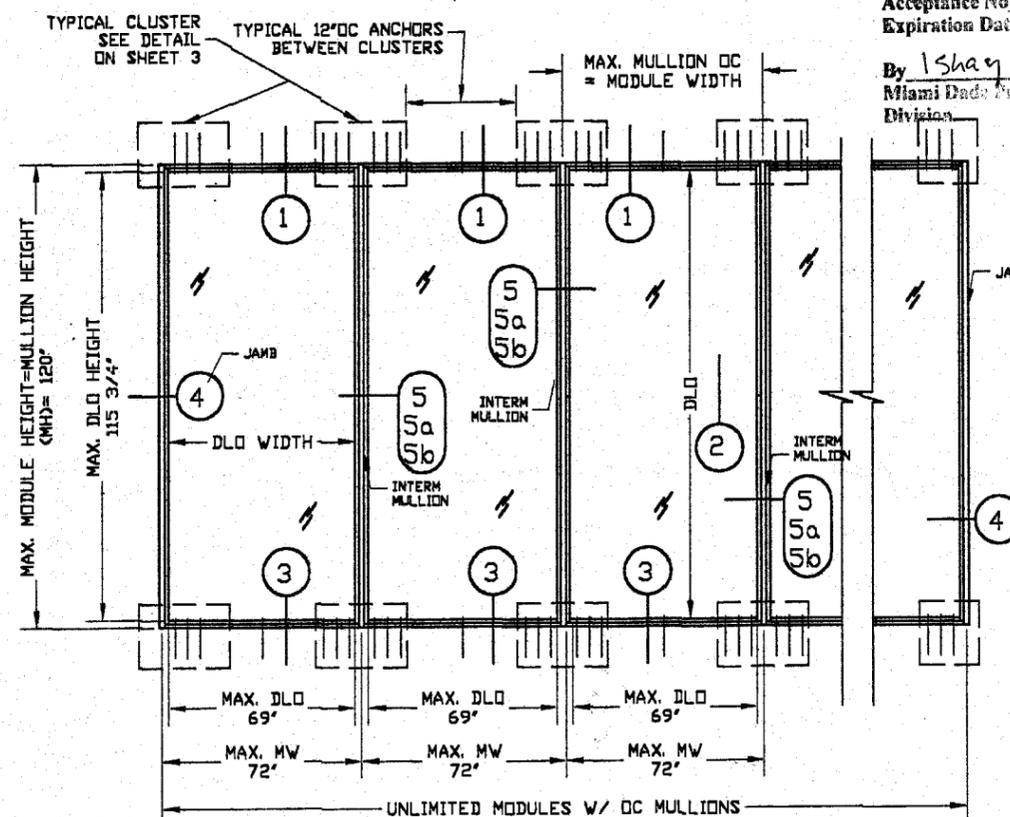
INSTRUCTIONS:

- STEP 1:** - DETERMINE DESIGN WIND LOAD PRESSURES AS PER ITEM 4 OF GENERAL NOTES, SHEET 1.
- STEP 2:** - CHECK MULLION CAPACITY FOR A GIVEN SPACING AND HEIGHT BY USING TABLE 1 (W/OUT REINFORCEMENT), TABLE 2 (W/ STEEL REINF.) AND TABLE 3 (W/ ALUM. REINFORC). MULLION CAPACITY MUST NOT EXCEED THE CALCULATED WIND PRESSURE.
- STEP 3:** - CHECK GLASS CAPACITY FOR A GIVEN DLO HEIGHT AND WIDTH BY USING CHART 4. GLASS CAPACITY MUST NOT EXCEED THE CALCULATED PRESSURE.
- STEP 4:** - CHECK QUANTITY AND TYPE OF ANCHOR TO BE USED FOR A GIVEN MODULE HEIGHT AND MODULE WIDTH FROM TABLE 5, SHEET 3.

**TYPICAL UNIT EXTERIOR ELEVATION
(WITH INTERMEDIATE HORIZONTAL)**



**TYPICAL UNIT EXTERIOR ELEVATION
(WITHOUT INTERMEDIATE HORIZONTAL)**



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TYPICAL FRAME ANCHORAGE LAY-OUT

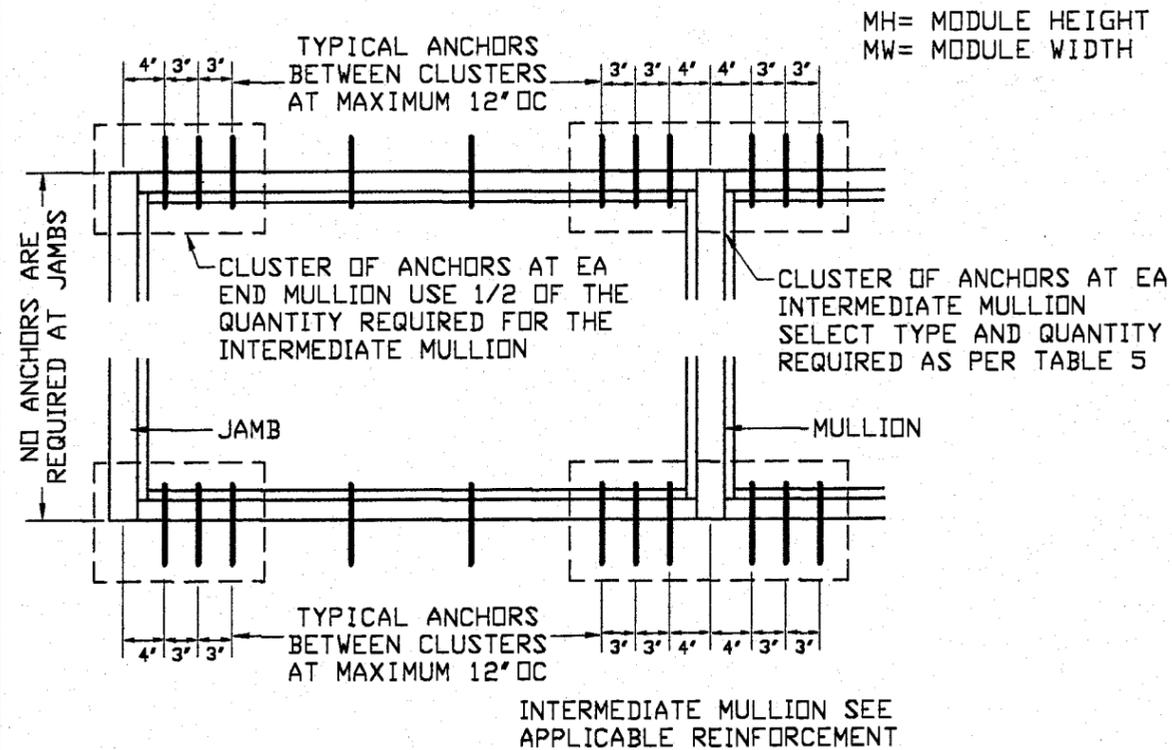


TABLE 5 - ANCHORS SELECTION (INTERMEDIATE MULLION)

ANCHOR TYPE A								
MINIMUM NUMBER OF ANCHOR PER MULLION CLUSTER								
	MODULE HEIGHT (MH)							
MW	60	72	84	96	108	120	132	144
48	6	6	6	8	10	10	8	8
54	6	6	8	8	10	12	8	8
60	6	6	8	10	10	12	8	8
72	6	6	6	8	8	8	8	8

ANCHOR TYPE B or E								
MINIMUM NUMBER OF ANCHOR PER MULLION CLUSTER								
	MODULE HEIGHT (MH)							
MW	60	72	84	96	108	120	132	144
48	6	6	6	6	6	6	6	6
54	6	6	6	6	6	6	6	6
60	6	6	6	6	6	6	6	6
72	6	6	6	6	6	6	6	6

ANCHOR TYPE C								
MINIMUM NUMBER OF ANCHOR PER MULLION CLUSTER								
	MODULE HEIGHT (MH)							
MW	60	72	84	96	108	120	132	144
48	6	6	6	6	6	6	6	6
54	6	6	6	6	6	6	6	6
60	6	6	6	6	6	8	6	6
72	6	6	6	6	6	6	6	6

ANCHOR TYPE D								
MINIMUM NUMBER OF ANCHOR PER MULLION CLUSTER								
	MODULE HEIGHT (MH)							
MW	60	72	84	96	108	120	132	144
48	6	6	6	6	6	6	6	6
54	6	6	6	6	6	6	6	6
60	6	6	6	6	6	6	6	6
72	6	6	6	6	6	6	6	6

MINIMUM QUANTITY OF ANCHORS ARE FUNCTION OF MODULE HEIGHT, MODULE WIDTH AND MAXIMUM ALLOWABLE DESIGNED PRESSURE ON SHEET 2 OF 4.

ANCHOR SCHEDULE (ED = MINIMUM EDGE DISTANCE)

TYPE	DESCRIPTION	EMBEDMENT	SUBSTRATE	ED
A	#14 SS WOOD SCREWS	1 1/2"	PT WOOD (SG) = .55	3/4"
B	1/4" TAPCONS BY ELCO	1 3/4"	3350 PSI CONCRETE	2 1/2"
C	1/4-20x 2 1/2" DRIL-FLEX SCREWS		1/8" 6063-T5 ALUMINUM	1/2"
D	1/4-20x 2 1/2" DRIL-FLEX SCREWS		1/8" ASTM-A36 STEEL	3/8"
E	1/4" CRETE-FLEX SS4 ANCHOR	1 3/4"	3350 PSI CONCRETE	2 1/2"

NOTES:

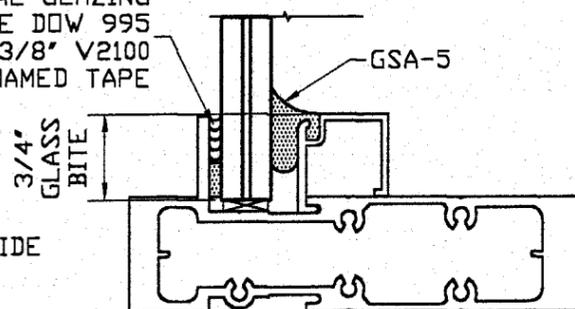
- ANCHORS B, C, D AND E ARE GRADE 5 AND MANUFACTURED BY ELCO
- ANCHOR A IS A GENERIC STAINLESS STEEL 300 SERIES
- ANCHORS ARE REQUIRED ONLY AT SILL AND HEADER LOCATIONS, JAMBS ARE NOT ANCHORED TO SIDE STRUCTURE. (SEE TYPICAL ANCHOR LAY-OUT)

GLAZING CONFIGURATIONS

MINIMUM 9/16" LAMINATED IMPACT GLASS
1/4" HS GLASS + INTERLAYER + 1/4" HS GLASS

TYPE	BRAND - MANUFACTURER	INTERLAYER
X1	STORMGUARD, BY VIRACON INC.	.09" SAFLEX HP
X2	SAFLEX/KEEPSAFE MAXIMUM, BY SOLUTIA INC.	.09" SAFLEX IIIG PVB
X3	SENTRY GLASS(R) PLUS, BY E. I. DUPONT DENEMOURS	.09 SENTRYGLAS PLUS

STRUCTURAL GLAZING
SILICONE DOW 995
AND 1/4"x3/8" V2100
FOAMED TAPE



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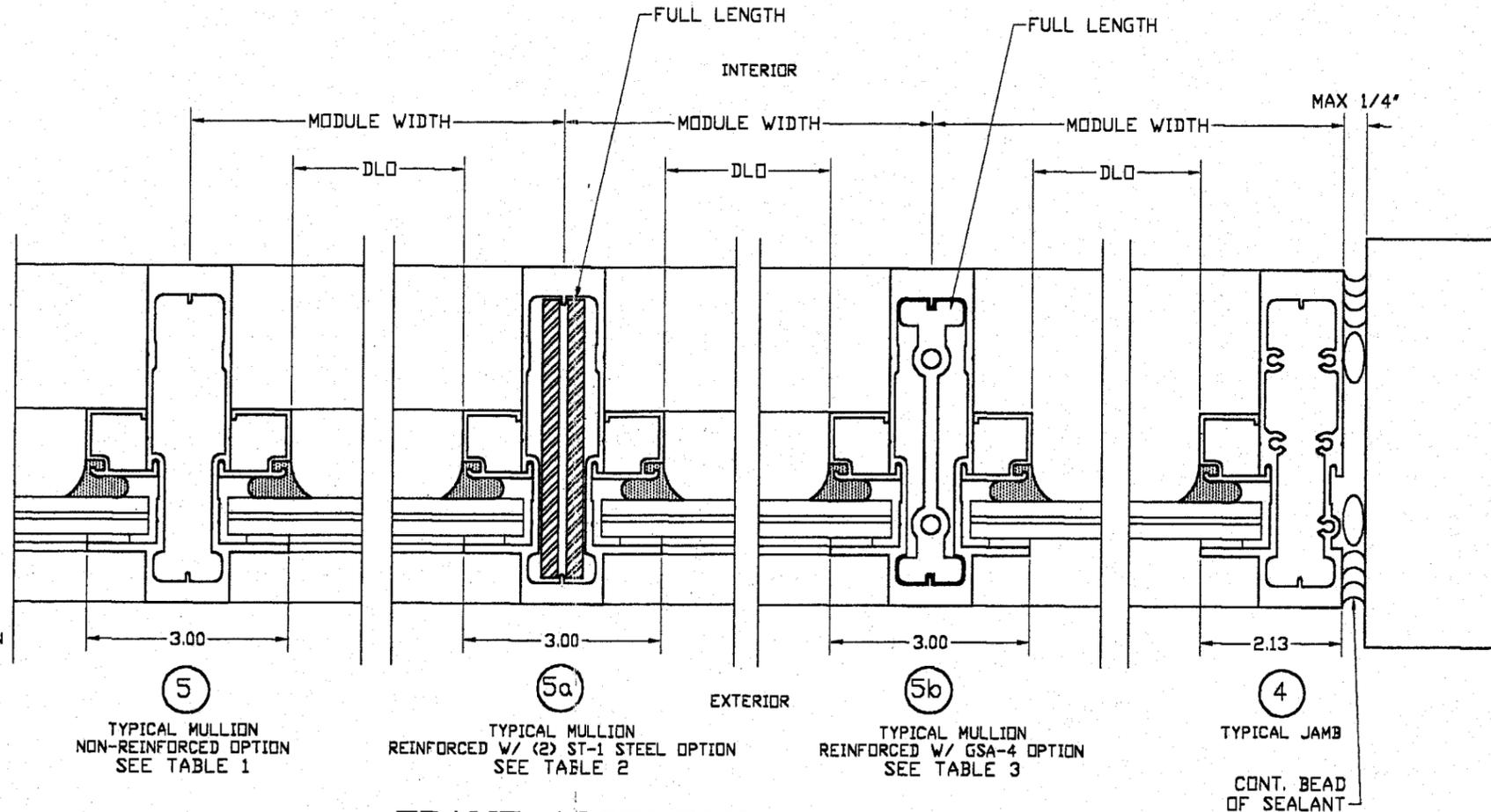
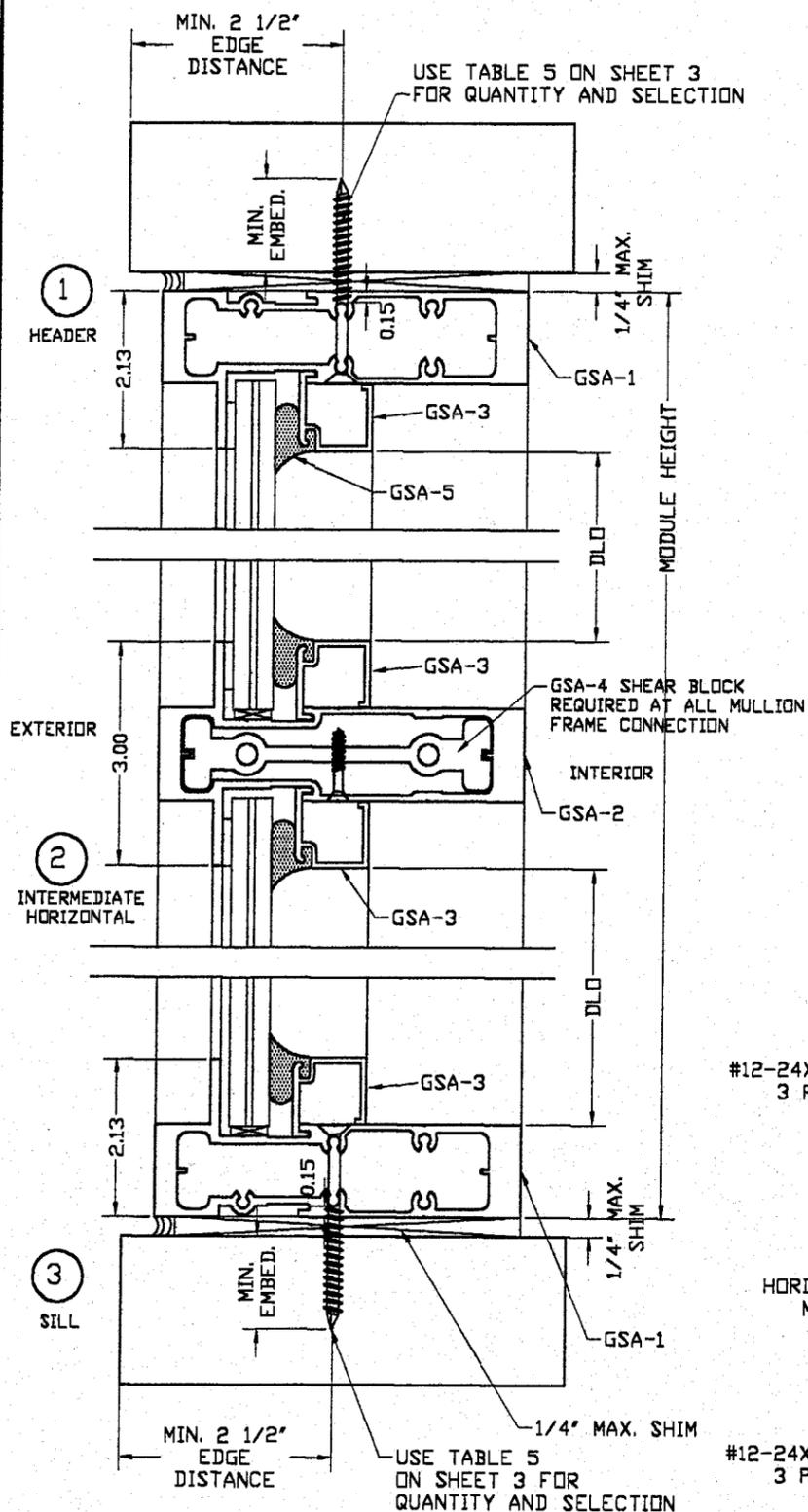
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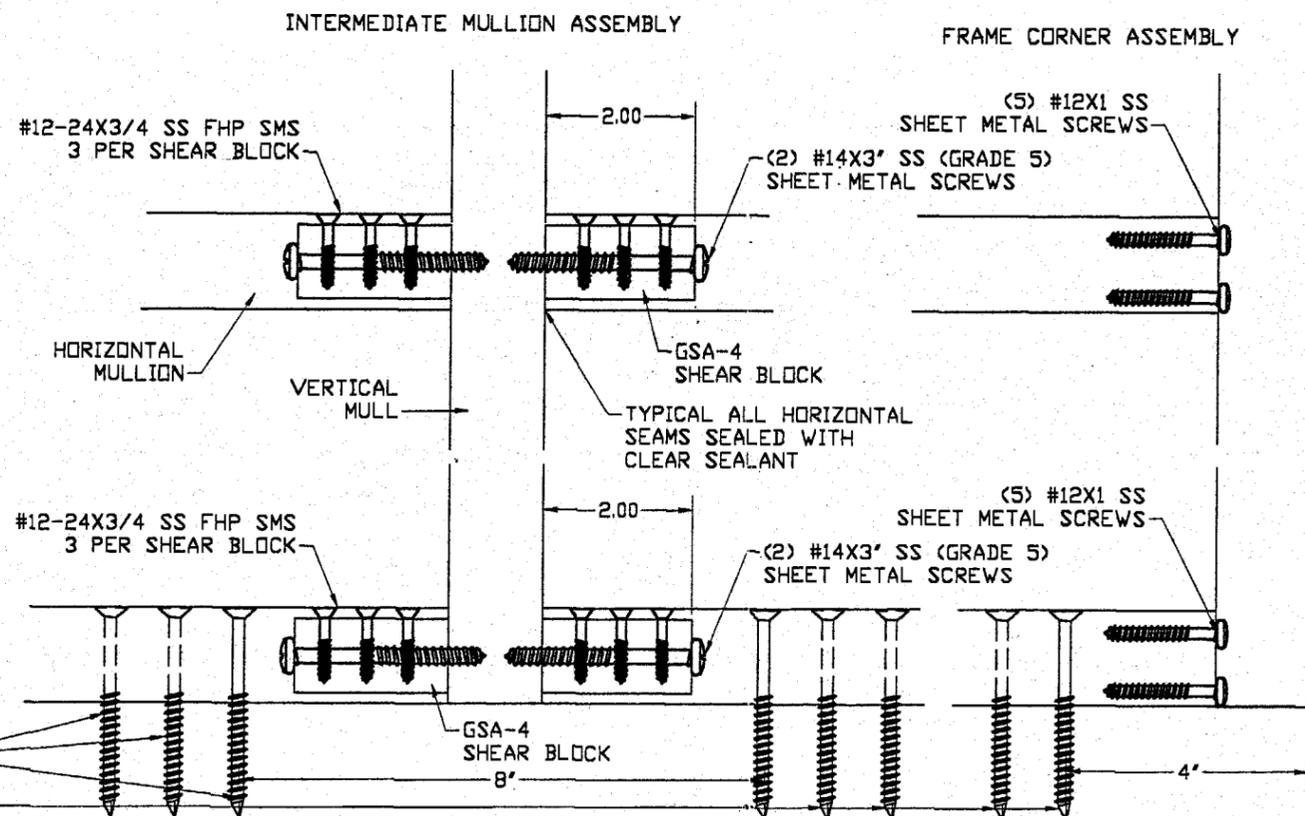
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SECTION DETAILS



FRAME ASSEMBLY



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