

TYPICAL ELEVATIONS

SERIES ENV-450 ALUMINUM WINDOW WALL SYSTEM

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2014 (5TH EDITION)/2017 (6TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

1BY OR 2BY WOOD BUCKS & 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 2014/2017 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.

MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE. LABELING TO COMPLY WITH SECTION 1709.9.2.

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

- STEP 1** DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2** SEE CHARTS ON SHEET 3 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE.
- STEP 3** CHECK MULLION CAPACITY FOR A GIVEN SPACING AND HEIGHT USING CHARTS ON SHEET 4 FOR STOREFRONT MULLION AND SHEETS 7 THRU 11 FOR DOOR MULLION. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4** USING CHART ON SHEETS 5 & 6 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 5** THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

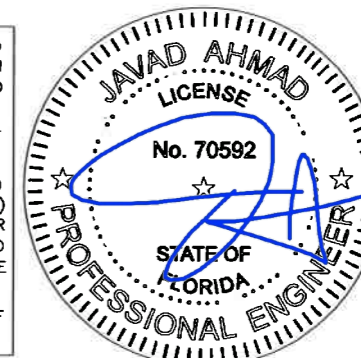
PRODUCT COMPLIES WITH REQUIREMENTS OF ANSI Z97.1.

THIS SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED. WINDOW WALL FRAMES MAY BE WITH OR WITHOUT THERMAL BREAK.

SINGLE 'O' PANEL:
 FRAME WIDTH = D.L.O. WIDTH + 5.500"
 FRAME HEIGHT = D.L.O. HEIGHT + 5.500"

A- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.
 B- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.
 C- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
 D- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

FL #19002



af c
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173 (C.A.N. 3538)
 TEL. (305) 264-8100 FAX. (305) 262-8978
 COMP-ANL\W15-74ENV

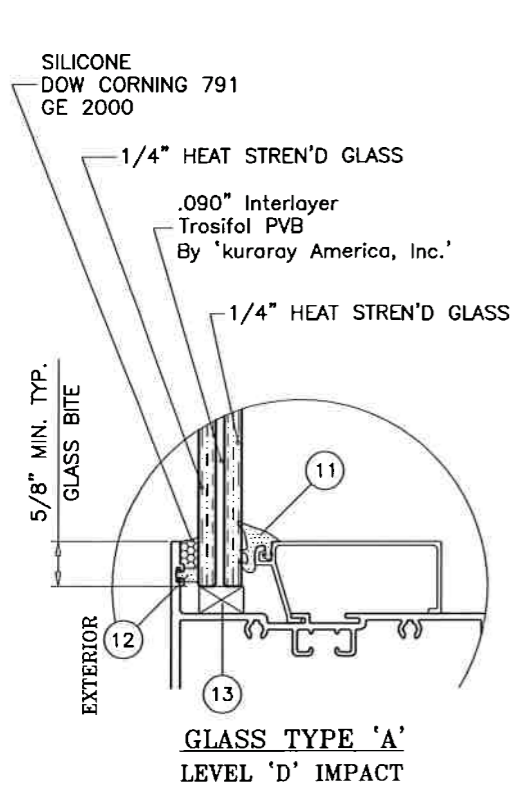
SERIES ENV-450 ALUM WINDOW WALL SYS. (L.M.I.)
ENVIRALUM INDUSTRIES INC.
 5100 N.W. 72 AVENUE BLDG. C
 MIAMI, FL. 33166
 TEL. (305) 752-4411 FAX. (305) 406-3877

| no | date | description |
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| A | 06.13.17 | GLASS OPTIONS ADDED |

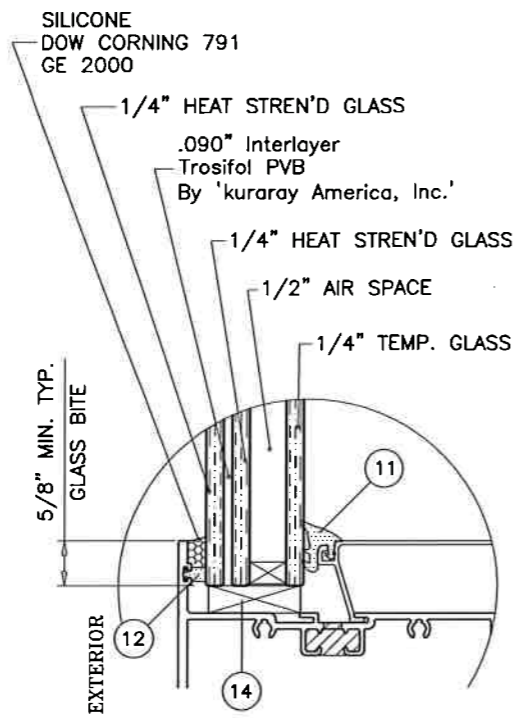
revisions:

date: 09-28-15
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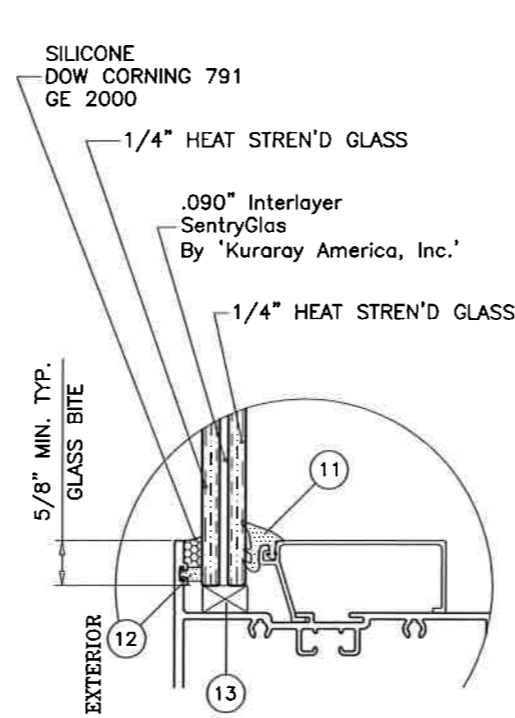
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W15-74
 sheet 1 of 16



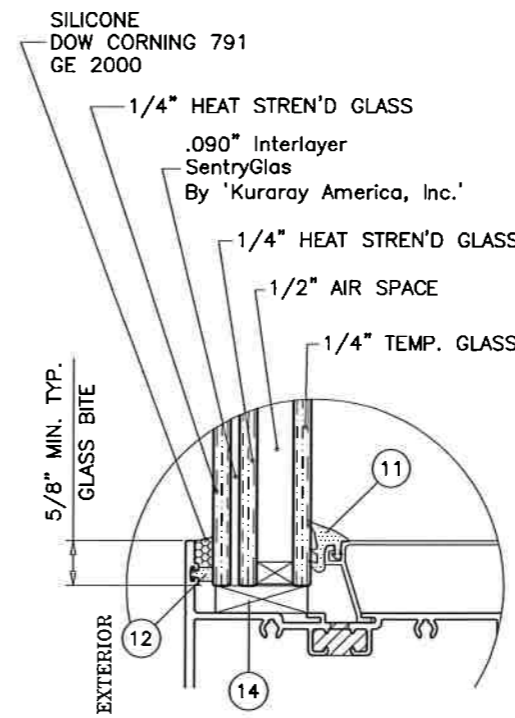
GLASS TYPE 'A'
LEVEL 'D' IMPACT



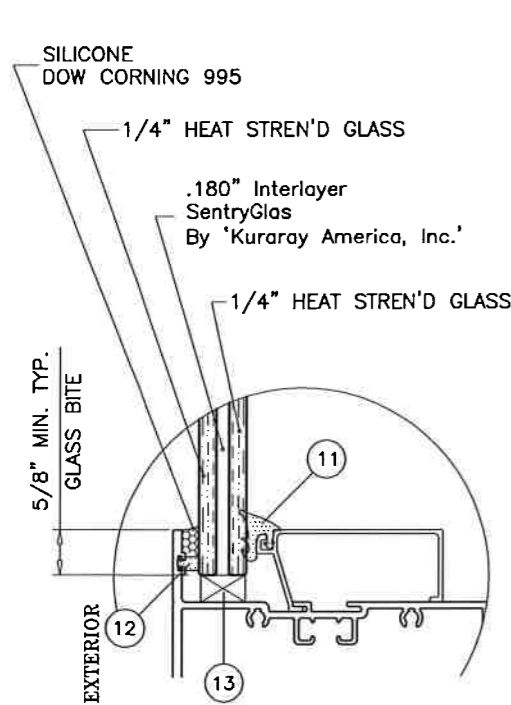
GLASS TYPE 'A1'
LEVEL 'D' IMPACT



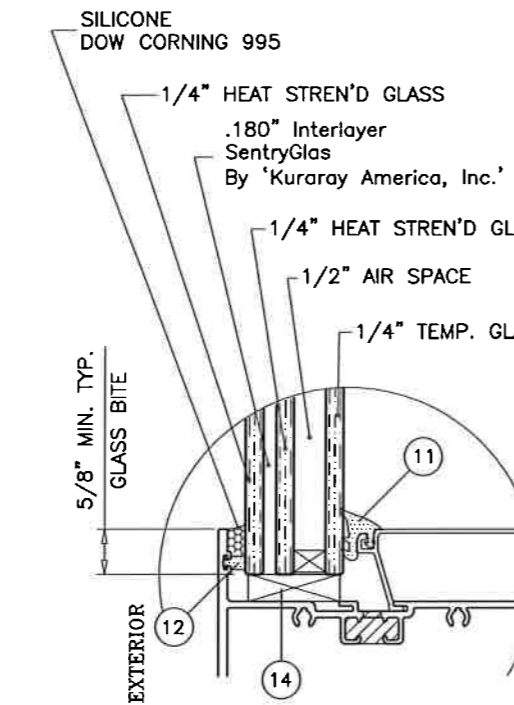
GLASS TYPE 'B'
LEVEL 'D' IMPACT



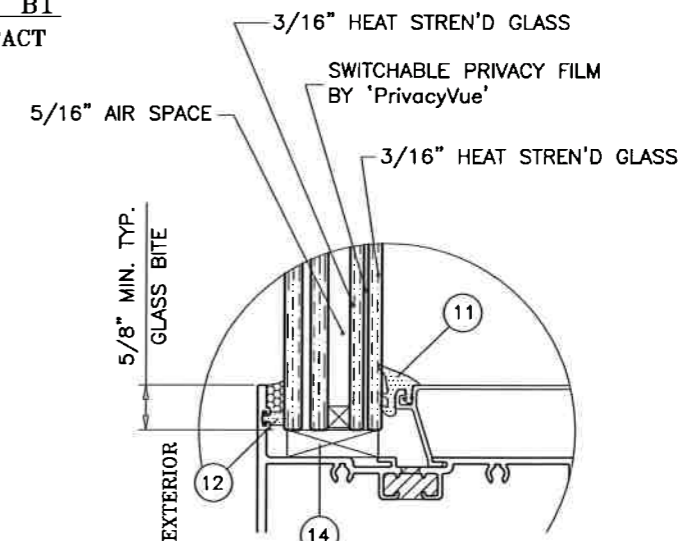
GLASS TYPE 'B1'
LEVEL 'D' IMPACT



GLASS TYPE 'C'
LEVEL 'E' IMPACT



GLASS TYPE 'C1'
LEVEL 'E' IMPACT



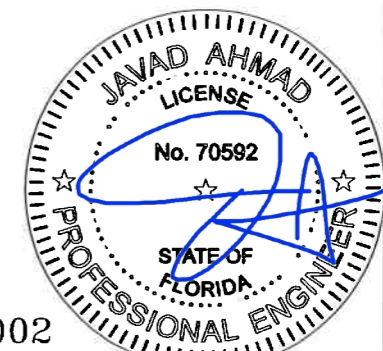
INTERIOR LITE OF GLASS TYPES 'A1' & 'B1'
CAN BE 7/16" OVERALL LAMINATED
SWITCHABLE GLASS BY 'PrivacyVue'

GLAZING OPTIONS

1/2" AIR SPACE CONSISTING OF:
SPACER:
ALUMINUM BOX SPACER AROUND
THE PERIMETER OF THE GLASS.
PERIMETER SEALANT:
SILICONE
DOW CORNING 791
GE 2000

GLASS

FL #19002



af c
AL-FAROOQ CORPORATION
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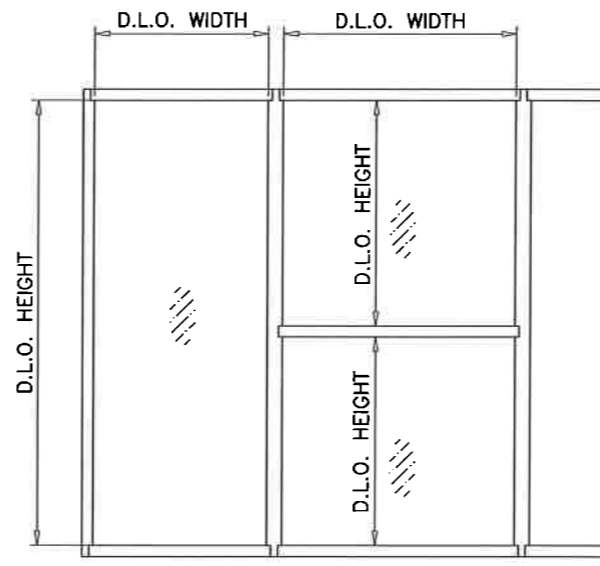
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date: 09-28-15
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:
drawing no.
W15-74
sheet 2 of 16

| GLASS LOAD CAPACITY - PSF LEVEL 'D' IMPACT ONLY | | | | | |
|--|---------------|---------------------------|---------|---------------------------|---------|
| NOMINAL DIMS. | | GLASS TYPES 'A' & 'A1' | | GLASS TYPES 'B' & 'B1' | |
| D.L.O. WIDTH | D.L.O. HEIGHT | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) |
| 30" | 78" | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 48" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 54" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 60" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 66-1/2" | | 65.0 | 65.0 | 100.0 | 131.0 |
| 30" | 84" | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 48" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 54" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 60" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 66-1/2" | 65.0 | 65.0 | 100.0 | 126.7 | |
| 30" | 90" | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 48" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 54" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 60" | | 65.0 | 65.0 | 100.0 | 126.0 |
| 66-1/2" | 65.0 | 65.0 | 100.0 | 116.8 | |
| 30" | 96" | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 48" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 60" | | 65.0 | 65.0 | 100.0 | 126.8 |
| 66-1/2" | 65.0 | 65.0 | 100.0 | 116.4 | |
| 30" | 102" | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 48" | | 90.0 | 90.0 | 100.0 | 129.4 |
| 60" | | 65.0 | 65.0 | 100.0 | 118.5 |
| 66-1/2" | - | - | 100.0 | 109.2 | |
| 30" | 108" | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 48" | | 65.0 | 65.0 | 100.0 | 125.6 |
| 60" | | 65.0 | 65.0 | 100.0 | 111.8 |
| 66-1/2" | - | - | 100.0 | 106.4 | |
| 30" | 114" | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 60" | | 65.0 | 65.0 | 100.0 | 119.5 |
| 66-1/2" | - | - | 100.0 | 105.6 | |
| 30" | 120" | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 48" | | 65.0 | 65.0 | 100.0 | 114.1 |
| 60" | | - | - | 100.0 | 106.6 |

| GLASS LOAD CAPACITY - PSF LEVEL 'D' IMPACT ONLY | | | | | |
|--|---------------|---------------------------|---------|---------------------------|---------|
| NOMINAL DIMS. | | GLASS TYPES 'A' & 'A1' | | GLASS TYPES 'B' & 'B1' | |
| D.L.O. WIDTH | D.L.O. HEIGHT | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) |
| 30" | 126" | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | 65.0 | 65.0 | 100.0 | 129.7 |
| 48" | | 65.0 | 65.0 | 100.0 | 109.7 |
| 60" | | - | - | 100.0 | 107.1 |
| 30" | 132" | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | 65.0 | 65.0 | 100.0 | 128.5 |
| 30" | 138" | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | 65.0 | 65.0 | 100.0 | 127.2 |
| 45" | | - | - | 100.0 | 112.5 |
| 60" | | - | - | 100.0 | 112.5 |
| 30" | 144" | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | 65.0 | 65.0 | 100.0 | 131.0 |
| 42" | | 65.0 | 65.0 | 100.0 | 126.1 |
| 60" | | - | - | 100.0 | 120.8 |

NOTE:
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



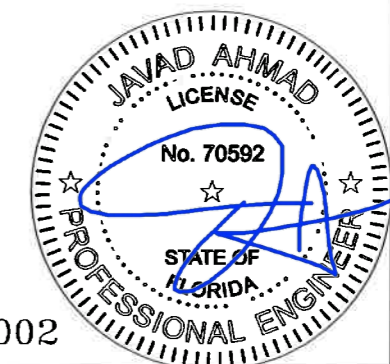
| GLASS LOAD CAPACITY - PSF LEVEL 'E' IMPACT | | | |
|---|---------------|---------------------------|---------|
| NOMINAL DIMS. | | GLASS TYPES 'C' & 'C1' | |
| D.L.O. WIDTH | D.L.O. HEIGHT | EXT.(+) | INT.(-) |
| 30" | 78" | 100.0 | 100.0 |
| 36" | | 100.0 | 100.0 |
| 42" | | 100.0 | 100.0 |
| 48" | | 100.0 | 100.0 |
| 54" | | 100.0 | 100.0 |
| 60" | | 100.0 | 100.0 |
| 66-1/2" | | 100.0 | 100.0 |
| 30" | 84" | 100.0 | 100.0 |
| 36" | | 100.0 | 100.0 |
| 42" | | 100.0 | 100.0 |
| 48" | | 100.0 | 100.0 |
| 54" | | 100.0 | 100.0 |
| 60" | | 100.0 | 100.0 |
| 66-1/2" | 100.0 | 100.0 | |
| 30" | 90" | 100.0 | 100.0 |
| 36" | | 100.0 | 100.0 |
| 42" | | 100.0 | 100.0 |
| 48" | | 100.0 | 100.0 |
| 54" | | 100.0 | 100.0 |
| 60" | | 100.0 | 100.0 |
| 66-1/2" | 100.0 | 100.0 | |
| 30" | 96" | 100.0 | 100.0 |
| 36" | | 100.0 | 100.0 |
| 42" | | 100.0 | 100.0 |
| 48" | | 100.0 | 100.0 |
| 60" | | 100.0 | 100.0 |

NOTE:
INTERPOLATION BETWEEN WIDTHS OR
HEIGHTS ALLOWED.

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-09 (3 SEC. GUSTS).

GLASS

FL #19002



afC
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
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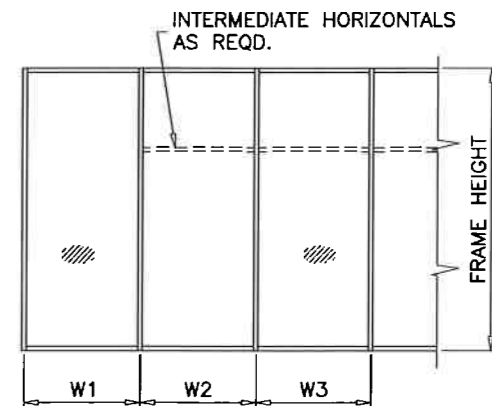
| revisions: | no | date | by | description |
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| date: 09-28-15 | scale: 3/8" = 1" | dr. by: TARIQ | chk. by: |
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drawing no.
W15-74
sheet 3 of 16

| UNSECURED JAMB/MULLION DESIGN LOAD CAPACITY - PSF | | | | | | | | | |
|---|--------------|--------------|--------------|-----------|-----------|-----------|---------|-----------|---------|
| NOMINAL DIMS. | | JAMB 'J1' | | JAMB 'J2' | | JAMB 'J3' | | JAMB 'J4' | |
| WIDTH (W) | FRAME HEIGHT | MULLION 'M1' | MULLION 'M2' | MULL 'M3' | MULL 'M4' | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) |
| 30" | 72" | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 36" | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 42" | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 48" | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 54" | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 60" | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 72" | | - | - | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 30" | 78" | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 36" | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 42" | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 48" | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 54" | | 95.3 | 95.3 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 60" | - | - | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 | |
| 30" | 84" | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 36" | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 42" | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 48" | | 91.8 | 91.8 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 54" | | 81.6 | 81.6 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 60" | - | - | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 | |
| 30" | 90" | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 36" | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 42" | | 90.8 | 90.8 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 48" | | 79.4 | 79.4 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 54" | | - | - | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 60" | - | - | - | - | 100.0 | 100.0 | 100.0 | 131.0 | |
| 30" | 96" | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 36" | | 92.5 | 92.5 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 42" | | 79.3 | 79.3 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 48" | | 69.3 | 69.3 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 54" | | - | - | 75.6 | 75.6 | 80.0 | 80.0 | 88.9 | 97.8 |
| 60" | - | - | - | - | 72.0 | 72.0 | 80.0 | 88.0 | |
| 30" | 97-3/4" | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 36" | | 89.0 | 89.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 42" | | 76.3 | 76.3 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 131.0 |
| 48" | | 66.8 | 66.8 | 98.1 | 98.1 | 100.0 | 100.0 | 100.0 | 131.0 |
| 54" | - | - | 75.6 | 75.6 | 80.0 | 80.0 | 88.9 | 97.8 | |
| 30" | 102" | - | - | 85.0 | 85.0 | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | - | - | 85.0 | 85.0 | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | - | - | 85.0 | 85.0 | 90.0 | 90.0 | 100.0 | 131.0 |
| 48" | | - | - | 85.0 | 85.0 | 90.0 | 90.0 | 100.0 | 127.8 |
| 54" | | - | - | - | - | 80.0 | 80.0 | 88.9 | 97.8 |
| 30" | 108" | - | - | 85.0 | 85.0 | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | - | - | 85.0 | 85.0 | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | - | - | 85.0 | 85.0 | 90.0 | 90.0 | 100.0 | 130.3 |
| 48" | | - | - | 79.3 | 79.3 | 90.0 | 90.0 | 100.0 | 114.0 |
| 54" | | - | - | - | - | - | - | 57.8 | 57.8 |
| 30" | 114" | - | - | - | - | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | - | - | - | - | 90.0 | 90.0 | 100.0 | 131.0 |
| 42" | | - | - | - | - | 90.0 | 90.0 | 100.0 | 116.9 |
| 48" | | - | - | - | - | 90.0 | 90.0 | 100.0 | 102.3 |
| 54" | | - | - | - | - | - | - | 57.8 | 57.8 |
| 30" | 120" | - | - | - | - | 90.0 | 90.0 | 100.0 | 131.0 |
| 36" | | - | - | - | - | 90.0 | 90.0 | 100.0 | 123.1 |
| 42" | | - | - | - | - | 90.0 | 90.0 | 100.0 | 105.5 |
| 48" | | - | - | - | - | 83.3 | 83.3 | 92.3 | 92.3 |
| 54" | | - | - | - | - | - | - | 57.8 | 57.8 |

| UNSECURED JAMB/MULLION DESIGN LOAD CAPACITY - PSF | | | | | | | | | |
|---|--------------|--------------|--------------|-----------|-----------|-----------|---------|-----------|---------|
| NOMINAL DIMS. | | JAMB 'J1' | | JAMB 'J2' | | JAMB 'J3' | | JAMB 'J4' | |
| WIDTH (W) | FRAME HEIGHT | MULLION 'M1' | MULLION 'M2' | MULL 'M3' | MULL 'M4' | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) |
| 30" | 126" | - | - | - | - | - | - | 65.0 | 65.0 |
| 36" | | - | - | - | - | - | - | 65.0 | 65.0 |
| 42" | | - | - | - | - | - | - | 65.0 | 65.0 |
| 48" | | - | - | - | - | - | - | 65.0 | 65.0 |
| 54" | | - | - | - | - | - | - | 57.8 | 57.8 |
| 30" | 132" | - | - | - | - | - | - | 65.0 | 65.0 |
| 36" | | - | - | - | - | - | - | 65.0 | 65.0 |
| 42" | | - | - | - | - | - | - | 65.0 | 65.0 |
| 30" | 138" | - | - | - | - | - | - | 65.0 | 65.0 |
| 36" | | - | - | - | - | - | - | 65.0 | 65.0 |
| 42" | | - | - | - | - | - | - | 65.0 | 65.0 |
| 48" | | - | - | - | - | - | - | 65.0 | 65.0 |
| 30" | 144" | - | - | - | - | - | - | 65.0 | 65.0 |
| 36" | | - | - | - | - | - | - | 65.0 | 65.0 |
| 42" | | - | - | - | - | - | - | 65.0 | 65.0 |
| 48" | | - | - | - | - | - | - | 64.1 | 64.1 |



WIDTH (W) = W1
AT FRAME JAMB

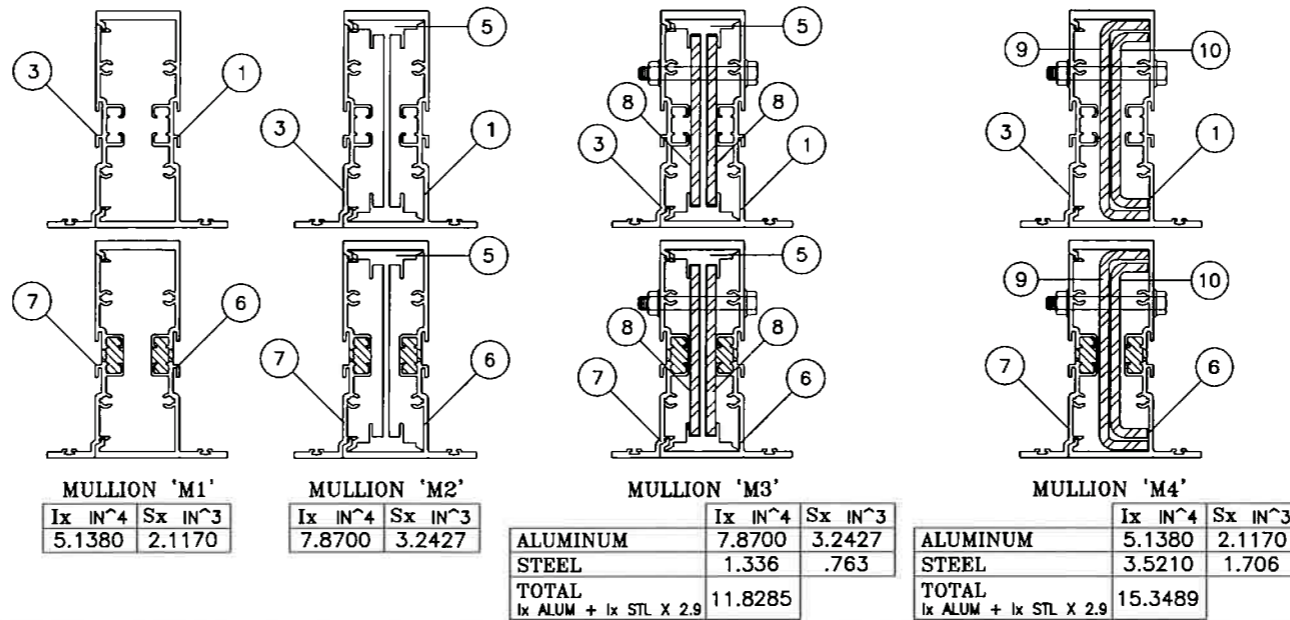
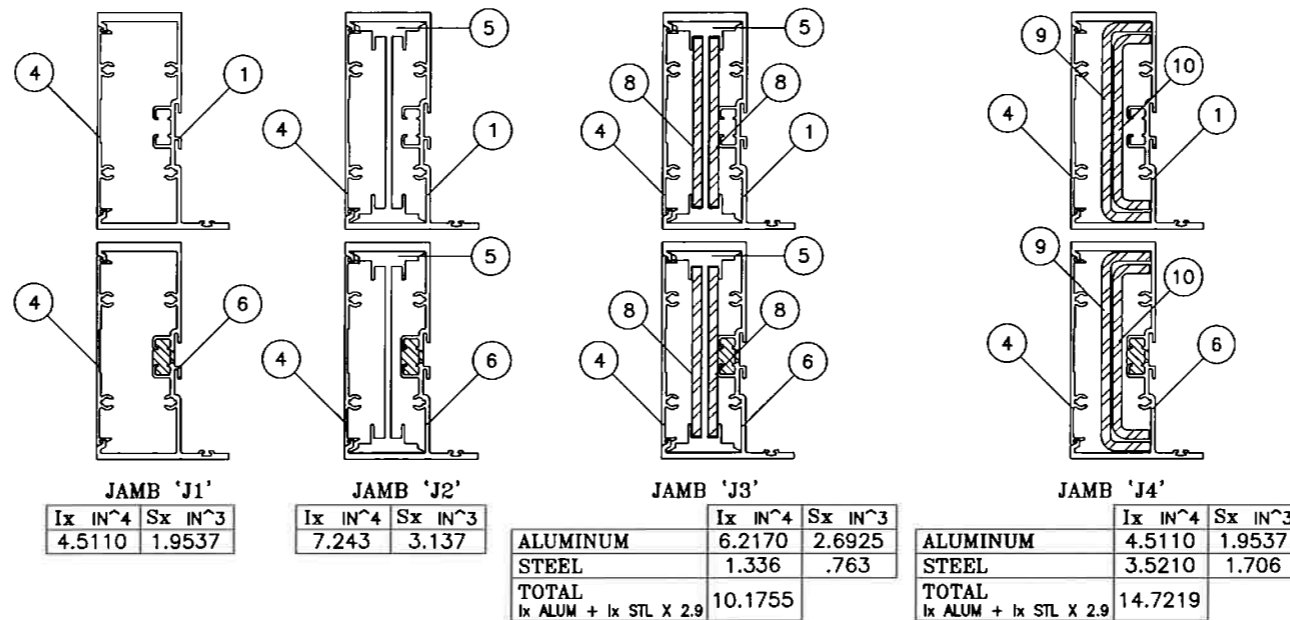
WIDTH (W) = $\frac{W2 + W3}{2}$
AT FRAME MULLION

CHARTS ABOVE SHOWS JAMB/MULLION CAPACITIES

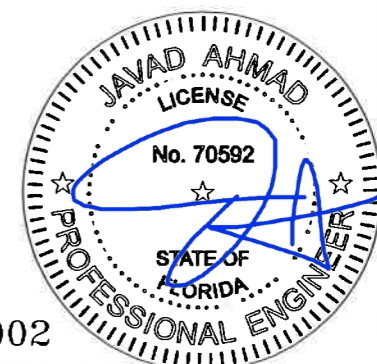
FOR LEVEL 'E' IMPACT RATING
LIMIT MAX. FRAME HEIGHT TO 97-3/4 IN.
AND MAX. DESIGN LOAD TO 100.0 PSF

FOR SECURED JAMBS CONDITION
SEE SHEET 9 OF 12.

UNSECURED JAMBS



MULLIONS



FL #19002

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220 (C.A.N. 3538)
MIAMI, FLORIDA 33173 FAX. (305) 262-6978
TEL. (305) 264-8100 COMP-ANL W15-74 ENV

SERIES ENV-450 ALUM WINDOW WALL SYS. (L.M.I.)

ENVIRALUM INDUSTRIES INC.
5100 N.W. 72 AVENUE BLDG. C
MIAMI, FL. 33166
TEL. (305) 752-4411 FAX. (305) 406-3877

| no | date | description |
|----|------|-------------|
| | | |
| | | |
| | | |

date: 09-28-15 scale: - dr. by: TARIQ chk. by:

drawing no. **W15-74**

sheet 4 of 16

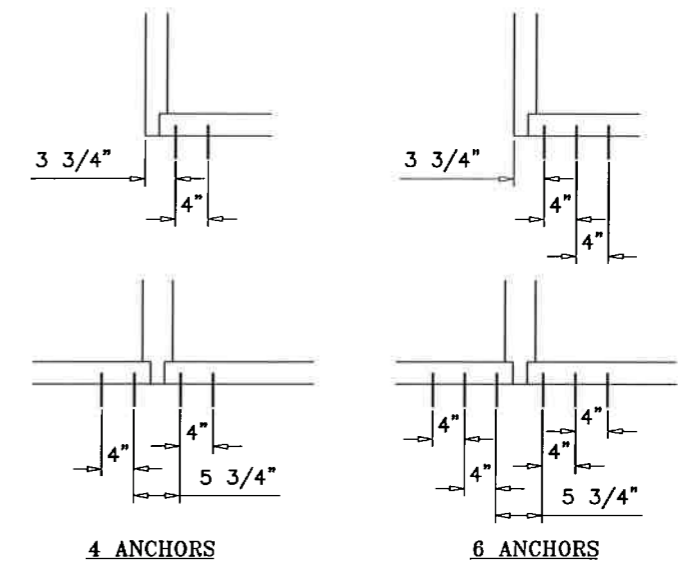
ANCHOR LOAD CAPACITY - PSF

Table with columns: ANCHOR TYPE, ANCHOR TYPE 'A1', ANCHOR TYPE 'B1', ANCHOR TYPE 'C1', ANCHOR TYPES 'A1' & 'B1', ANCHOR TYPE 'C1'. Rows include SHIM SPACE, WIDTH (W), LENGTH (L), and load capacity values for various dimensions (30" to 54" and 72" to 120").

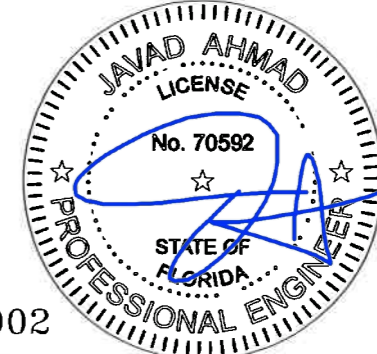
Table with columns: ANCHOR TYPE, ANCHOR TYPE 'A1', ANCHOR TYPE 'B1', ANCHOR TYPE 'C1', ANCHOR TYPES 'A1' & 'B1', ANCHOR TYPE 'C1'. Rows include SHIM SPACE, WIDTH (W), LENGTH (L), and load capacity values for various dimensions (30" to 48" and 126" to 144").

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

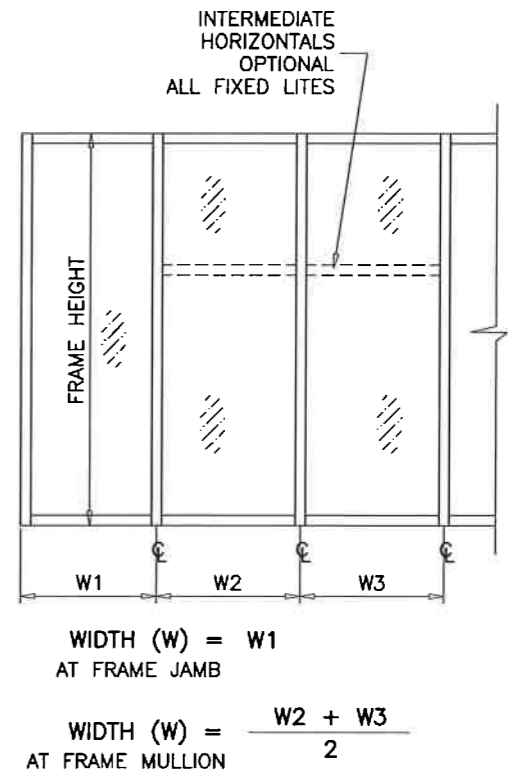
TYPE 'A1' - 5/16" DIA ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI) INTO WOOD STRUCTURES... TYPE 'AA1' - 5/16" DIA ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI) DIRECTLY INTO MASONRY... TYPE 'B1' - 5/16" DIA ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI) DIRECTLY INTO CONCRETE... TYPE 'C1' - 5/16" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS) INTO MIAMI-DADE COUNTY APPROVED MULLIONS OR INTO METAL STRUCTURES...



WOOD BUCKS AND METAL STRUCTURE NOT BY ENVIRALUM MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.



FL #19002



AL-FAROOQ CORPORATION ENGINEERS & PRODUCT DEVELOPMENT 9360 SUNSET DRIVE, SUITE 220 MIAMI, FLORIDA 33173

ENVIRALUM INDUSTRIES INC. 5100 N.W. 72 AVENUE BLDG. C MIAMI, FL. 33166

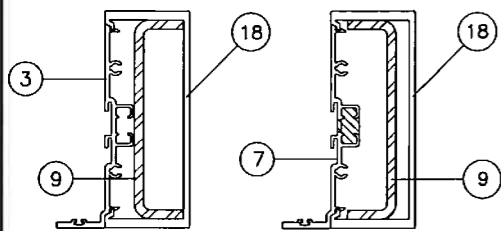
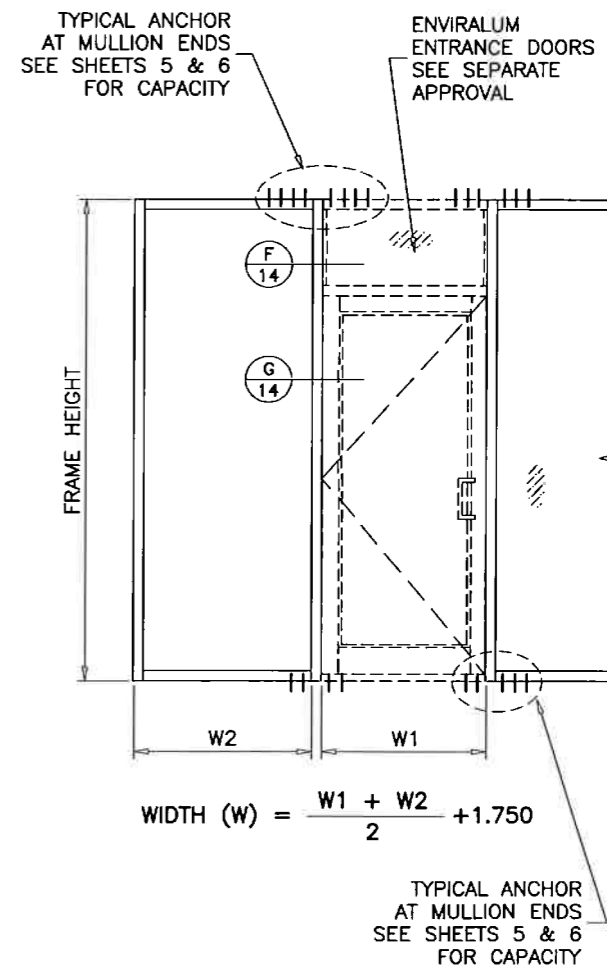
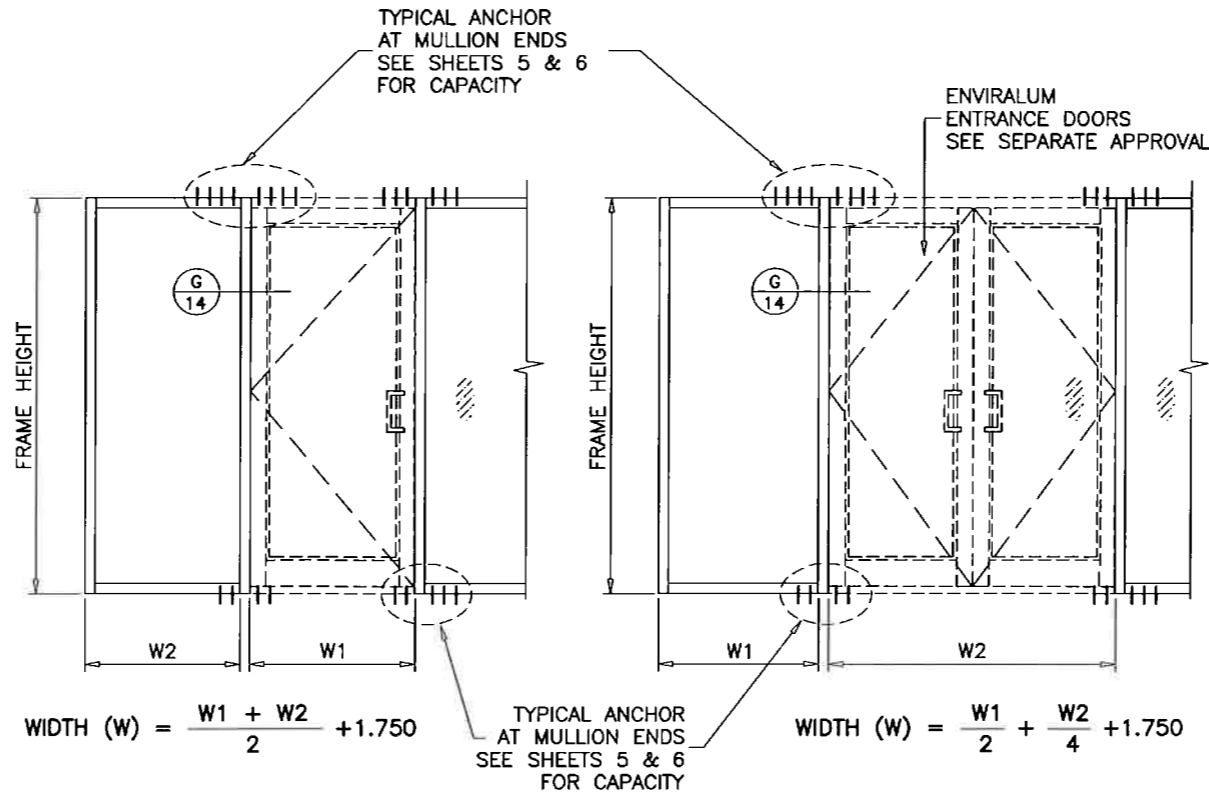
Table with columns: no, date, by, description. Revisions table with one entry: 09-28-15.

date: 09-28-15 scale: - dr. by: TARIQ chk. by: drawing no. W15-74 sheet 6 of 16

| DOOR MULLION LOAD CAPACITY | | | | | | | |
|----------------------------|--------------|------------|---------|------------|---------|------------|---------|
| NOMINAL DIMS. | | MULL 'DM1' | | MULL 'DM2' | | MULL 'DM3' | |
| WIDTH (W) | FRAME HEIGHT | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) | EXT.(+) | INT.(-) |
| 40-3/4" | 90" | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 43-3/4" | | 100.0 | 100.0 | 97.0 | 97.0 | 100.0 | 100.0 |
| 46-3/4" | | 100.0 | 100.0 | 90.8 | 90.8 | 100.0 | 100.0 |
| 49-3/4" | | 100.0 | 100.0 | 85.3 | 85.3 | 100.0 | 100.0 |
| 52-3/4" | | 100.0 | 100.0 | 80.4 | 80.4 | 100.0 | 100.0 |
| 55-3/4" | 100.0 | 100.0 | 76.1 | 76.1 | 100.0 | 100.0 | |
| 40-3/4" | 96" | 100.0 | 100.0 | 91.5 | 91.5 | 100.0 | 100.0 |
| 43-3/4" | | 100.0 | 100.0 | 85.3 | 85.3 | 100.0 | 100.0 |
| 46-3/4" | | 100.0 | 100.0 | 79.8 | 79.8 | 100.0 | 100.0 |
| 49-3/4" | | 100.0 | 100.0 | 75.0 | 75.0 | 100.0 | 100.0 |
| 52-3/4" | | 100.0 | 100.0 | 70.7 | 70.7 | 100.0 | 100.0 |
| 55-3/4" | 94.6 | 94.6 | 66.9 | 66.9 | 100.0 | 100.0 | |
| 40-3/4" | 97-3/4" | 100.0 | 100.0 | 88.3 | 88.3 | 100.0 | 100.0 |
| 43-3/4" | | 100.0 | 100.0 | 82.2 | 82.2 | 100.0 | 100.0 |
| 46-3/4" | | 100.0 | 100.0 | 76.9 | 76.9 | 100.0 | 100.0 |
| 49-3/4" | | 100.0 | 100.0 | 72.3 | 72.3 | 100.0 | 100.0 |
| 52-3/4" | | 96.4 | 96.4 | 68.2 | 68.2 | 100.0 | 100.0 |
| 55-3/4" | 91.2 | 91.2 | 64.5 | 64.5 | 100.0 | 100.0 | |
| 40-3/4" | 102" | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 43-3/4" | | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 | 75.0 |
| 46-3/4" | | 75.0 | 75.0 | 70.7 | 70.7 | 75.0 | 75.0 |
| 49-3/4" | | 75.0 | 75.0 | 66.4 | 66.4 | 75.0 | 75.0 |
| 52-3/4" | | 75.0 | 75.0 | 62.6 | 62.6 | 75.0 | 75.0 |
| 55-3/4" | 75.0 | 75.0 | 59.3 | 59.3 | 75.0 | 75.0 | |
| 40-3/4" | 108" | 75.0 | 75.0 | 72.3 | 72.3 | 75.0 | 75.0 |
| 43-3/4" | | 75.0 | 75.0 | 67.4 | 67.4 | 75.0 | 75.0 |
| 46-3/4" | | 75.0 | 75.0 | 63.0 | 63.0 | 75.0 | 75.0 |
| 49-3/4" | | 75.0 | 75.0 | 61.4 | 61.4 | 75.0 | 75.0 |
| 52-3/4" | | 75.0 | 75.0 | 59.2 | 59.2 | 75.0 | 75.0 |
| 55-3/4" | 75.0 | 75.0 | 55.9 | 55.9 | 75.0 | 75.0 | |
| 40-3/4" | 114" | 75.0 | 75.0 | 64.9 | 64.9 | 75.0 | 75.0 |
| 43-3/4" | | 75.0 | 75.0 | 60.5 | 60.5 | 75.0 | 75.0 |
| 46-3/4" | | 75.0 | 75.0 | 56.6 | 56.6 | 75.0 | 75.0 |
| 49-3/4" | | 75.0 | 75.0 | 53.2 | 53.2 | 75.0 | 75.0 |
| 40-3/4" | 120" | 75.0 | 75.0 | 58.6 | 58.6 | 75.0 | 75.0 |
| 43-3/4" | | 75.0 | 75.0 | 54.6 | 54.6 | 75.0 | 75.0 |
| 46-3/4" | | 72.2 | 72.2 | 51.1 | 51.1 | 75.0 | 75.0 |
| 49-3/4" | | 67.8 | 67.8 | 48.0 | 48.0 | 75.0 | 75.0 |

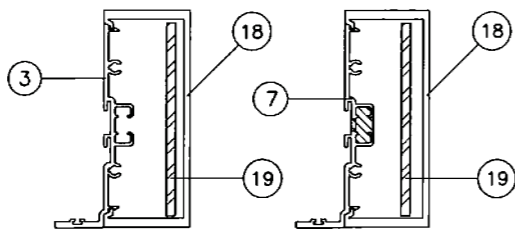
CHARTS ABOVE SHOWS DOOR MULLION CAPACITIES

FOR LEVEL 'E' IMPACT RATING
LIMIT MAX. FRAME HEIGHT TO 97-3/4 IN.
AND MAX. DESIGN LOAD TO 100.0 PSF



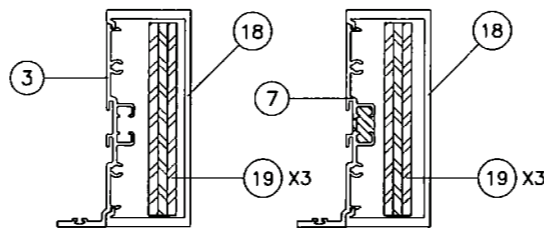
DOOR MULL 'DM1'

| | Ix IN ⁴ | Sx IN ³ |
|---------------------------------|--------------------|--------------------|
| ALUMINUM | 5.0950 | 2.0993 |
| STEEL | 2.2740 | 1.1025 |
| TOTAL Ix ALUM + Ix STL X 2.9 | 11.6896 | |



DOOR MULL 'DM2'

| | Ix IN ⁴ | Sx IN ³ |
|---------------------------------|--------------------|--------------------|
| ALUMINUM | 5.0950 | 2.0993 |
| STEEL | 3.281 | 1.590 |
| TOTAL Ix ALUM + Ix STL X 2.9 | 14.6099 | |

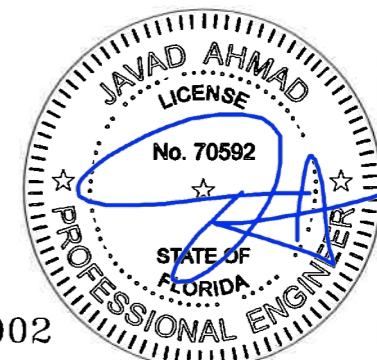


DOOR MULL 'DM3'

| | Ix IN ⁴ | Sx IN ³ |
|---------------------------------|--------------------|--------------------|
| ALUMINUM | 5.0950 | 2.0993 |
| STEEL | 3.281 | 1.590 |
| TOTAL Ix ALUM + Ix STL X 2.9 | 14.6099 | |

DOOR MULLION

FL #19002



af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220 (C.A.N. 3538)
MIAMI, FLORIDA 33173 FAX. (305) 262-8978
TEL. (305) 264-8100 COMP-ANL W15-74ENV

SERIES ENV-450 ALUM WINDOW WALL SYS. (L.M.I.)
ENVIRALUM INDUSTRIES INC.
5100 N.W. 72 AVENUE BLDG. C
MIAMI, FL. 33166
TEL. (305) 752-4411 FAX. (305) 406-3877

| revisions: | no | date | by | description |
|------------|----|------|----|-------------|
| | | | | |

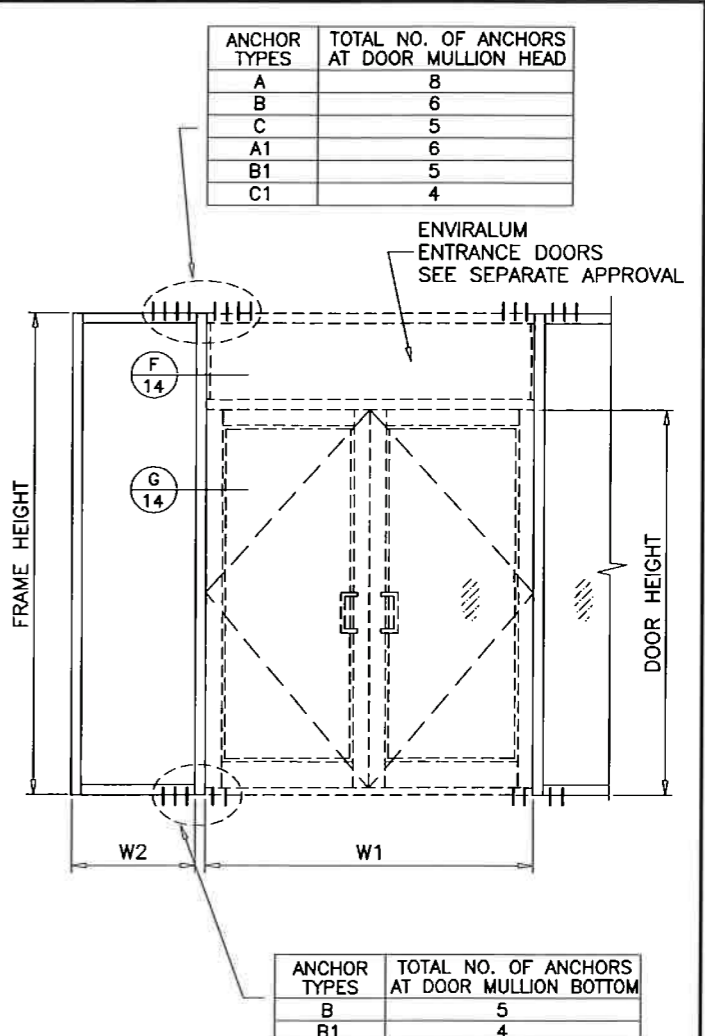
date: 09-28-15
scale: -
dr. by: TARIQ
chk. by:

drawing no. **W15-74**
sheet 7 of 16

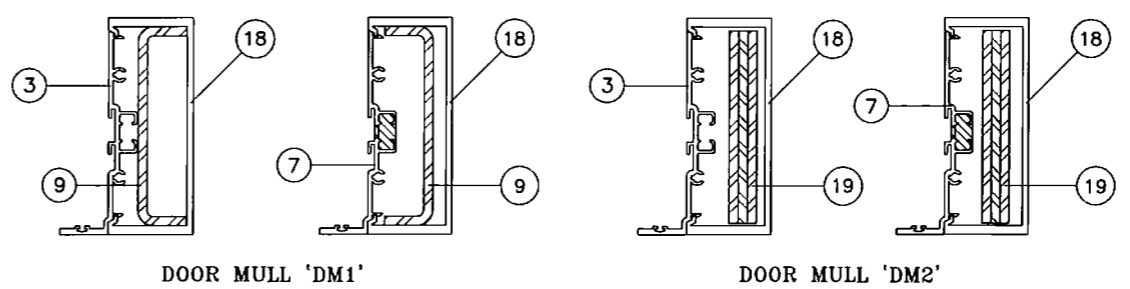
| DOOR MULLION LOAD CAPACITY - PSF | | | | | |
|----------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|
| NOMINAL DIMS. | | | | MULL 'DM1' | MULL 'DM2' |
| FRAME HEIGHT INCHES | DOOR HEIGHT INCHES | WIDTH (W1) INCHES | WIDTH (W2) INCHES | EXT. (+) INT. (-) | EXT. (+) INT. (-) |
| 102 | 80 | 84 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 75.0 | 75.0 |
| | | | 48 | 75.0 | 75.0 |
| | 96 | 84 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 75.0 | 75.0 |
| | | | 48 | 72.7 | 75.0 |
| 108 | 80 | 72 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 75.0 | 75.0 |
| | | | 48 | 74.6 | 75.0 |
| | 84 | 72 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 71.7 | 75.0 |
| | | | 48 | 68.2 | 75.0 |
| 96 | 84 | 18 | 75.0 | 75.0 | |
| | | 24 | 75.0 | 75.0 | |
| | | 30 | 72.6 | 75.0 | |
| | | 36 | 69.0 | 75.0 | |
| | | 42 | 65.7 | 75.0 | |
| | | 48 | 62.7 | 75.0 | |
| 114 | 80 | 60 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 75.0 | 75.0 |
| | | | 48 | 72.5 | 75.0 |
| | 72 | 60 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 73.2 | 75.0 |
| | | | 42 | 69.2 | 75.0 |
| | | | 48 | 65.5 | 75.0 |
| 84 | 72 | 18 | 75.0 | 75.0 | |
| | | 24 | 73.9 | 75.0 | |
| | | 30 | 69.8 | 75.0 | |
| | | 36 | 66.1 | 75.0 | |
| | | 42 | 62.8 | 75.0 | |
| | | 48 | 59.8 | 74.7 | |
| 96 | 84 | 18 | 70.4 | 75.0 | |
| | | 24 | 66.7 | 75.0 | |
| | | 30 | 63.3 | 75.0 | |
| | | 36 | 60.2 | 75.0 | |
| | | 42 | 57.5 | 71.8 | |
| | | 48 | 54.9 | 68.6 | |

| DOOR MULLION LOAD CAPACITY - PSF | | | | | |
|----------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|
| NOMINAL DIMS. | | | | MULL 'DM1' | MULL 'DM2' |
| FRAME HEIGHT INCHES | DOOR HEIGHT INCHES | WIDTH (W1) INCHES | WIDTH (W2) INCHES | EXT. (+) INT. (-) | EXT. (+) INT. (-) |
| 120 | 80 | 60 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 72.9 | 75.0 |
| | | | 42 | 68.4 | 75.0 |
| | | | 48 | 64.5 | 75.0 |
| | 72 | 60 | 18 | 75.0 | 75.0 |
| | | | 24 | 73.4 | 75.0 |
| | | | 30 | 68.9 | 75.0 |
| | | | 36 | 64.9 | 75.0 |
| | | | 42 | 61.4 | 75.0 |
| | | | 48 | 58.2 | 72.7 |
| 84 | 72 | 18 | 75.0 | 75.0 | |
| | | 24 | 73.4 | 75.0 | |
| | | 30 | 68.9 | 75.0 | |
| | | 36 | 64.9 | 75.0 | |
| | | 42 | 61.4 | 75.0 | |
| | | 48 | 58.2 | 72.7 | |
| 96 | 84 | 18 | 69.4 | 75.0 | |
| | | 24 | 65.3 | 75.0 | |
| | | 30 | 61.7 | 75.0 | |
| | | 36 | 58.5 | 73.2 | |
| | | 42 | 55.6 | 69.5 | |
| | | 48 | 53.0 | 66.3 | |
| 126 | 80 | 60 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 75.0 | 75.0 |
| | | | 48 | 72.5 | 75.0 |
| | 72 | 60 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 75.0 | 75.0 |
| | | | 48 | 72.5 | 75.0 |
| 84 | 72 | 18 | 75.0 | 75.0 | |
| | | 24 | 75.0 | 75.0 | |
| | | 30 | 75.0 | 75.0 | |
| | | 36 | 73.2 | 75.0 | |
| | | 42 | 69.2 | 75.0 | |
| | | 48 | 65.5 | 75.0 | |
| 96 | 84 | 18 | 75.0 | 75.0 | |
| | | 24 | 73.9 | 75.0 | |
| | | 30 | 69.8 | 75.0 | |
| | | 36 | 66.1 | 75.0 | |
| | | 42 | 62.8 | 75.0 | |
| | | 48 | 59.8 | 74.7 | |
| 132 | 80 | 60 | 18 | 72.8 | 75.0 |
| | | | 24 | 67.5 | 75.0 |
| | | | 30 | 62.9 | 75.0 |
| | | | 36 | 58.9 | 73.7 |
| | | | 42 | 55.4 | 69.3 |
| | | | 48 | 52.3 | 65.4 |
| | 72 | 60 | 18 | 63.1 | 75.0 |
| | | | 24 | 59.1 | 73.9 |
| | | | 30 | 55.6 | 69.5 |
| | | | 36 | 52.4 | 65.5 |
| | | | 42 | 49.6 | 62.0 |
| | | | 48 | 47.1 | 58.9 |
| 84 | 72 | 18 | 55.7 | 69.7 | |
| | | 24 | 52.6 | 65.7 | |
| | | 30 | 49.8 | 62.2 | |
| | | 36 | 47.2 | 59.0 | |
| | | 42 | 44.9 | 56.3 | |
| | | 48 | 42.7 | 53.6 | |

| DOOR MULLION LOAD CAPACITY - PSF | | | | | |
|----------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|
| NOMINAL DIMS. | | | | MULL 'DM1' | MULL 'DM2' |
| FRAME HEIGHT INCHES | DOOR HEIGHT INCHES | WIDTH (W1) INCHES | WIDTH (W2) INCHES | EXT. (+) INT. (-) | EXT. (+) INT. (-) |
| 138 | 80 | 60 | 18 | 66.1 | 75.0 |
| | | | 24 | 61.3 | 75.0 |
| | | | 30 | 57.2 | 71.5 |
| | | | 36 | 53.6 | 67.0 |
| | | | 42 | 50.4 | 63.0 |
| | | | 48 | 47.6 | 59.5 |
| | 72 | 60 | 18 | 57.3 | 71.6 |
| | | | 24 | 53.7 | 67.1 |
| | | | 30 | 50.5 | 63.1 |
| | | | 36 | 47.7 | 59.6 |
| | | | 42 | 45.1 | 56.4 |
| | | | 48 | 42.5 | 53.2 |
| 84 | 72 | 18 | 50.6 | 63.2 | |
| | | 24 | 47.7 | 59.7 | |
| | | 30 | 45.2 | 56.5 | |
| | | 36 | 42.7 | 53.2 | |
| | | 42 | 40.1 | 50.0 | |
| | | 48 | 37.6 | 46.8 | |
| 144 | 80 | 60 | 18 | 60.4 | 75.0 |
| | | | 24 | 56.1 | 70.1 |
| | | | 30 | 52.3 | 65.4 |
| | | | 36 | 49.0 | 61.3 |
| | | | 42 | 46.1 | 57.7 |
| | | | 48 | 43.6 | 54.4 |
| | 72 | 60 | 18 | 52.3 | 65.4 |
| | | | 24 | 49.1 | 61.3 |
| | | | 30 | 46.2 | 57.7 |
| | | | 36 | 43.6 | 54.5 |
| | | | 42 | 41.3 | 51.6 |
| | | | 48 | 39.1 | 48.7 |
| 84 | 72 | 18 | 46.2 | 57.7 | |
| | | 24 | 43.6 | 54.5 | |
| | | 30 | 41.3 | 51.6 | |
| | | 36 | 39.1 | 48.7 | |
| | | 42 | 36.9 | 46.0 | |
| | | 48 | 34.7 | 43.3 | |



CHARTS ABOVE SHOWS DOOR MULLION CAPACITIES FOR LEVEL 'E' IMPACT RATING LIMIT MAX. DESIGN LOAD TO 70.0 PSF

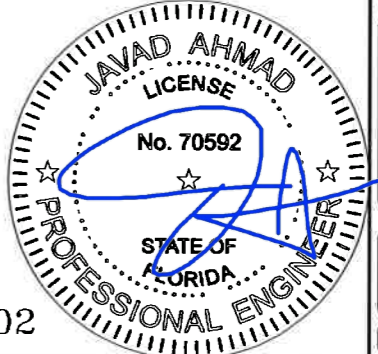


| | Ix IN^4 | Sx IN^3 |
|------------------------|---------|---------|
| ALUMINUM | 5.0950 | 2.0993 |
| STEEL | 2.2740 | 1.1025 |
| TOTAL | | |
| Ix ALUM + Ix STL X 2.9 | 11.6896 | |

| | Ix IN^4 | Sx IN^3 |
|------------------------|---------|---------|
| ALUMINUM | 5.0950 | 2.0993 |
| STEEL | 3.281 | 1.590 |
| TOTAL | | |
| Ix ALUM + Ix STL X 2.9 | 14.6099 | |

DOOR MULLION

FL #19002



AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220 (C.A.N. 3538)
 MIAMI, FLORIDA 33173
 TEL. (305) 262-8100 FAX. (305) 262-8978
 COMP-ANL \W15-74ENV

SERIES ENV-450 ALUM WINDOW WALL SYS. (L.M.I.)
ENVIRALUM INDUSTRIES INC.
 5100 N.W. 72 AVENUE BLDG. C
 MIAMI, FL. 33166
 TEL. (305) 752-4411 FAX. (305) 406-3877

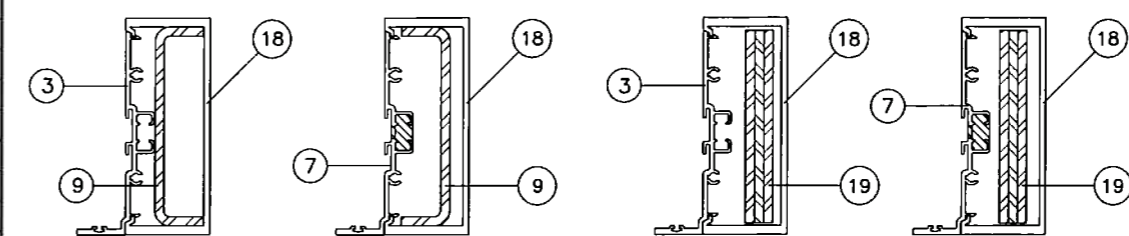
| Revisions: | |
|--------------------|---------------|
| no | date |
| description | |
| date | by |
| 09-28-15 | |
| scale | dr. by: TARIQ |
| | chk. by: |
| drawing no. W15-74 | |
| sheet 8 of 16 | |

| DOOR MULLION LOAD CAPACITY - PSF | | | | | | | | |
|----------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--|
| NOMINAL DIMS. | | | | MULL 'DM1' | | MULL 'DM2' | | |
| FRAME HEIGHT INCHES | DOOR HEIGHT INCHES | WIDTH (W1) INCHES | WIDTH (W2) INCHES | EXT. (+) INT. (-) | EXT. (+) INT. (-) | EXT. (+) INT. (-) | EXT. (+) INT. (-) | |
| 102 | 84 | 84 | 18 | 75.0 | 75.0 | | | |
| | | | 24 | 75.0 | 75.0 | | | |
| | | | 30 | 75.0 | 75.0 | | | |
| | | | 36 | 75.0 | 75.0 | | | |
| | | | 42 | 75.0 | 75.0 | | | |
| | | | 48 | 75.0 | 75.0 | | | |
| | 108 | 84 | 84 | 18 | 75.0 | 75.0 | | |
| | | | | 24 | 75.0 | 75.0 | | |
| | | | | 30 | 75.0 | 75.0 | | |
| | | | | 36 | 75.0 | 75.0 | | |
| | | | | 42 | 75.0 | 75.0 | | |
| | | | | 48 | 75.0 | 75.0 | | |
| 114 | | 84 | 84 | 18 | 75.0 | 75.0 | | |
| | | | | 24 | 75.0 | 75.0 | | |
| | | | | 30 | 75.0 | 75.0 | | |
| | | | | 36 | 75.0 | 75.0 | | |
| | | | | 42 | 73.7 | 75.0 | | |
| | | | | 48 | 70.0 | 75.0 | | |

| DOOR MULLION LOAD CAPACITY - PSF | | | | | | | | |
|----------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--|
| NOMINAL DIMS. | | | | MULL 'DM1' | | MULL 'DM2' | | |
| FRAME HEIGHT INCHES | DOOR HEIGHT INCHES | WIDTH (W1) INCHES | WIDTH (W2) INCHES | EXT. (+) INT. (-) | EXT. (+) INT. (-) | EXT. (+) INT. (-) | EXT. (+) INT. (-) | |
| 120 | 84 | 84 | 18 | 75.0 | 75.0 | | | |
| | | | 24 | 75.0 | 75.0 | | | |
| | | | 30 | 75.0 | 75.0 | | | |
| | | | 36 | 75.0 | 75.0 | | | |
| | | | 42 | 75.0 | 75.0 | | | |
| | | | 48 | 75.0 | 75.0 | | | |
| | 126 | 84 | 84 | 18 | 75.0 | 75.0 | | |
| | | | | 24 | 75.0 | 75.0 | | |
| | | | | 30 | 75.0 | 75.0 | | |
| | | | | 36 | 75.0 | 75.0 | | |
| | | | | 42 | 75.0 | 75.0 | | |
| | | | | 48 | 73.9 | 75.0 | | |
| 132 | | 84 | 84 | 18 | 75.0 | 75.0 | | |
| | | | | 24 | 75.0 | 75.0 | | |
| | | | | 30 | 75.0 | 75.0 | | |
| | | | | 36 | 71.1 | 75.0 | | |
| | | | | 42 | 67.7 | 75.0 | | |
| | | | | 48 | 64.5 | 75.0 | | |

| DOOR MULLION LOAD CAPACITY - PSF | | | | | | | | |
|----------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--|
| NOMINAL DIMS. | | | | MULL 'DM1' | | MULL 'DM2' | | |
| FRAME HEIGHT INCHES | DOOR HEIGHT INCHES | WIDTH (W1) INCHES | WIDTH (W2) INCHES | EXT. (+) INT. (-) | EXT. (+) INT. (-) | EXT. (+) INT. (-) | EXT. (+) INT. (-) | |
| 138 | 84 | 84 | 18 | 66.7 | 75.0 | | | |
| | | | 24 | 61.8 | 75.0 | | | |
| | | | 30 | 57.6 | 72.0 | | | |
| | | | 36 | 54.0 | 67.5 | | | |
| | | | 42 | 50.8 | 63.4 | | | |
| | | | 48 | 47.9 | 59.9 | | | |
| | 144 | 84 | 84 | 18 | 60.8 | 75.0 | | |
| | | | | 24 | 56.4 | 70.5 | | |
| | | | | 30 | 52.6 | 65.7 | | |
| | | | | 36 | 49.3 | 61.6 | | |
| | | | | 42 | 46.3 | 57.9 | | |
| | | | | 48 | 43.7 | 54.7 | | |

CHARTS ABOVE SHOWS DOOR MULLION CAPACITIES
FOR LEVEL 'E' IMPACT RATING
LIMIT MAX. DESIGN LOAD TO 70.0 PSF



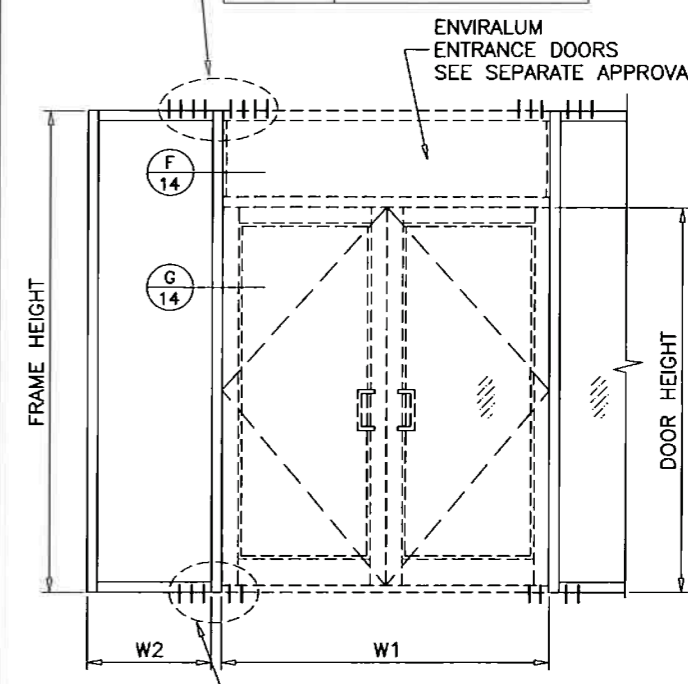
| | Ix IN^4 | Sx IN^3 |
|------------------------------|---------|---------|
| ALUMINUM | 5.0950 | 2.0993 |
| STEEL | 2.2740 | 1.1025 |
| TOTAL Ix ALUM + Ix STL X 2.9 | 11.6896 | |

| | Ix IN^4 | Sx IN^3 |
|------------------------------|---------|---------|
| ALUMINUM | 5.0950 | 2.0993 |
| STEEL | 3.281 | 1.590 |
| TOTAL Ix ALUM + Ix STL X 2.9 | 14.6099 | |

DOOR MULLION

FL #19002

| ANCHOR TYPES | TOTAL NO. OF ANCHORS AT DOOR MULLION HEAD |
|--------------|---|
| A | 8 |
| B | 6 |
| C | 5 |
| A1 | 6 |
| B1 | 5 |
| C1 | 4 |

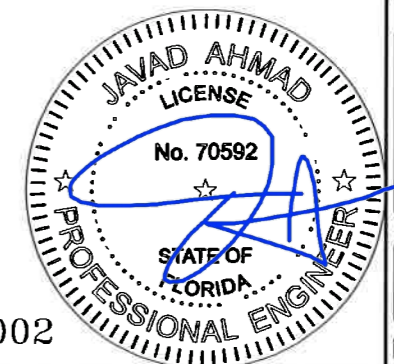


| ANCHOR TYPES | TOTAL NO. OF ANCHORS AT DOOR MULLION BOTTOM |
|--------------|---|
| B | 5 |
| B1 | 4 |

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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220 (C.A.N. 3538)
MIAMI, FLORIDA 33173 TEL. (305) 262-8978
COMP-ANL W15-74ENV

SERIES ENV-450 ALUM WINDOW WALL SYS. (L.M.I.)
ENVIRALUM INDUSTRIES INC.
5100 N.W. 72 AVENUE BLDG. C
MIAMI, FL. 33166
TEL. (305) 752-4411 FAX. (305) 406-3877

| revisions: | no | date | by | description |
|------------|----|------|----|-------------|
| | | | | |



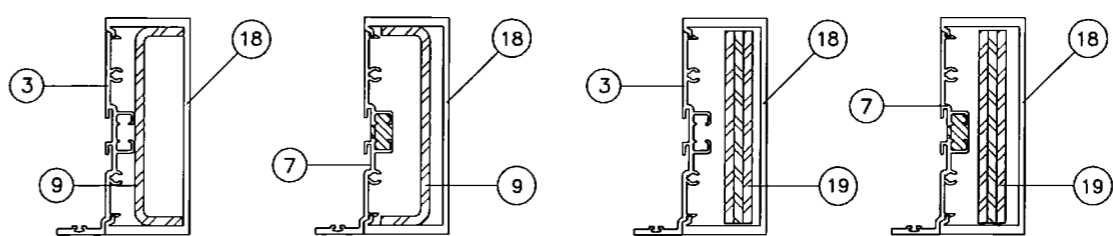
date: 09-28-15
scale: -
dr. by: TARIQ
chk. by:
drawing no. **W15-74**
sheet 9 of 16

| DOOR MULLION LOAD CAPACITY - PSF | | | | | | | |
|----------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| NOMINAL DIMS. | | | | MULL 'DM1' | | MULL 'DM2' | |
| FRAME HEIGHT INCHES | DOOR HEIGHT INCHES | WIDTH (W1) INCHES | WIDTH (W2) INCHES | EXT. (+) INT. (-) | EXT. (+) INT. (-) | EXT. (+) INT. (-) | EXT. (+) INT. (-) |
| 102 | 90 | 84 | 18 | 75.0 | 75.0 | | |
| | | | 24 | 75.0 | 75.0 | | |
| | | | 30 | 75.0 | 75.0 | | |
| | | | 36 | 75.0 | 75.0 | | |
| | | | 42 | 75.0 | 75.0 | | |
| | | 96 | 18 | 75.0 | 75.0 | | |
| | | | 24 | 75.0 | 75.0 | | |
| | | | 30 | 75.0 | 75.0 | | |
| | | | 36 | 75.0 | 75.0 | | |
| | | | 48 | 75.0 | 75.0 | | |
| 108 | 90 | 72 | 18 | 75.0 | 75.0 | | |
| | | | 24 | 75.0 | 75.0 | | |
| | | | 30 | 75.0 | 75.0 | | |
| | | | 36 | 75.0 | 75.0 | | |
| | | | 42 | 75.0 | 75.0 | | |
| | | 84 | 18 | 75.0 | 75.0 | | |
| | | | 24 | 75.0 | 75.0 | | |
| | | | 30 | 75.0 | 75.0 | | |
| | | | 36 | 75.0 | 75.0 | | |
| | | | 48 | 73.5 | 75.0 | | |
| 114 | 90 | 60 | 18 | 75.0 | 75.0 | | |
| | | | 24 | 75.0 | 75.0 | | |
| | | | 30 | 75.0 | 75.0 | | |
| | | | 36 | 75.0 | 75.0 | | |
| | | | 42 | 75.0 | 75.0 | | |
| | | 72 | 18 | 75.0 | 75.0 | | |
| | | | 24 | 75.0 | 75.0 | | |
| | | | 30 | 75.0 | 75.0 | | |
| | | | 36 | 75.0 | 75.0 | | |
| | | | 48 | 73.4 | 75.0 | | |
| 114 | 90 | 84 | 18 | 75.0 | 75.0 | | |
| | | | 24 | 75.0 | 75.0 | | |
| | | | 30 | 74.9 | 75.0 | | |
| | | | 36 | 70.6 | 75.0 | | |
| | | | 42 | 66.8 | 75.0 | | |
| | | 96 | 18 | 75.0 | 75.0 | | |
| | | | 24 | 72.0 | 75.0 | | |
| | | | 30 | 68.1 | 75.0 | | |
| | | | 36 | 64.5 | 75.0 | | |
| | | | 48 | 61.4 | 75.0 | | |

| DOOR MULLION LOAD CAPACITY - PSF | | | | | | | |
|----------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| NOMINAL DIMS. | | | | MULL 'DM1' | | MULL 'DM2' | |
| FRAME HEIGHT INCHES | DOOR HEIGHT INCHES | WIDTH (W1) INCHES | WIDTH (W2) INCHES | EXT. (+) INT. (-) | EXT. (+) INT. (-) | EXT. (+) INT. (-) | EXT. (+) INT. (-) |
| 120 | 90 | 60 | 18 | 75.0 | 75.0 | | |
| | | | 24 | 75.0 | 75.0 | | |
| | | | 30 | 75.0 | 75.0 | | |
| | | | 36 | 75.0 | 75.0 | | |
| | | | 42 | 71.4 | 75.0 | | |
| | | 72 | 18 | 75.0 | 75.0 | | |
| | | | 24 | 75.0 | 75.0 | | |
| | | | 30 | 72.6 | 75.0 | | |
| | | | 36 | 68.2 | 75.0 | | |
| | | | 42 | 64.3 | 75.0 | | |
| 126 | 90 | 84 | 18 | 73.8 | 75.0 | | |
| | | | 24 | 69.2 | 75.0 | | |
| | | | 30 | 65.2 | 75.0 | | |
| | | | 36 | 61.7 | 75.0 | | |
| | | | 42 | 58.5 | 73.1 | | |
| | | 96 | 18 | 66.2 | 75.0 | | |
| | | | 24 | 62.5 | 75.0 | | |
| | | | 30 | 59.2 | 74.0 | | |
| | | | 36 | 56.3 | 70.3 | | |
| | | | 42 | 53.6 | 67.0 | | |
| 132 | 90 | 60 | 18 | 75.0 | 75.0 | | |
| | | | 24 | 75.0 | 75.0 | | |
| | | | 30 | 72.5 | 75.0 | | |
| | | | 36 | 67.7 | 75.0 | | |
| | | | 42 | 63.5 | 75.0 | | |
| | | 72 | 18 | 73.4 | 75.0 | | |
| | | | 24 | 68.5 | 75.0 | | |
| | | | 30 | 64.2 | 75.0 | | |
| | | | 36 | 60.4 | 75.0 | | |
| | | | 42 | 57.0 | 71.3 | | |
| 132 | 90 | 84 | 18 | 64.9 | 75.0 | | |
| | | | 24 | 61.1 | 75.0 | | |
| | | | 30 | 57.6 | 72.0 | | |
| | | | 36 | 54.5 | 68.2 | | |
| | | | 42 | 51.8 | 64.7 | | |
| | | 96 | 18 | 58.2 | 72.8 | | |
| | | | 24 | 55.1 | 68.8 | | |
| | | | 30 | 52.3 | 65.3 | | |
| | | | 36 | 49.1 | 61.8 | | |
| | | | 48 | 45.9 | 58.3 | | |

| DOOR MULLION LOAD CAPACITY - PSF | | | | | | | |
|----------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| NOMINAL DIMS. | | | | MULL 'DM1' | | MULL 'DM2' | |
| FRAME HEIGHT INCHES | DOOR HEIGHT INCHES | WIDTH (W1) INCHES | WIDTH (W2) INCHES | EXT. (+) INT. (-) | EXT. (+) INT. (-) | EXT. (+) INT. (-) | EXT. (+) INT. (-) |
| 138 | 90 | 60 | 18 | 67.9 | 75.0 | | |
| | | | 24 | 62.8 | 75.0 | | |
| | | | 30 | 58.5 | 73.1 | | |
| | | | 36 | 54.8 | 68.4 | | |
| | | | 42 | 51.4 | 64.3 | | |
| | | 72 | 18 | 58.9 | 73.6 | | |
| | | | 24 | 55.1 | 68.8 | | |
| | | | 30 | 51.7 | 64.7 | | |
| | | | 36 | 48.8 | 61.0 | | |
| | | | 42 | 46.1 | 57.7 | | |
| 144 | 90 | 84 | 18 | 52.0 | 65.0 | | |
| | | | 24 | 49.0 | 61.3 | | |
| | | | 30 | 46.4 | 57.9 | | |
| | | | 36 | 44.6 | 54.2 | | |
| | | | 42 | 42.8 | 50.6 | | |
| | | 96 | 18 | 61.6 | 75.0 | | |
| | | | 24 | 57.1 | 71.3 | | |
| | | | 30 | 53.2 | 66.5 | | |
| | | | 36 | 49.8 | 62.3 | | |
| | | | 42 | 46.8 | 58.5 | | |

CHARTS ABOVE SHOWS DOOR MULLION CAPACITIES
FOR LEVEL 'E' IMPACT RATING
LIMIT MAX. DESIGN LOAD TO 70.0 PSF

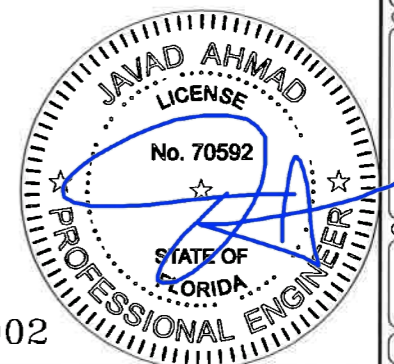


| | Ix IN^4 | Sx IN^3 |
|---------------------------------|---------|---------|
| ALUMINUM | 5.0950 | 2.0993 |
| STEEL | 2.2740 | 1.1025 |
| TOTAL Ix ALUM + Ix STL X 2.9 | 11.6896 | |

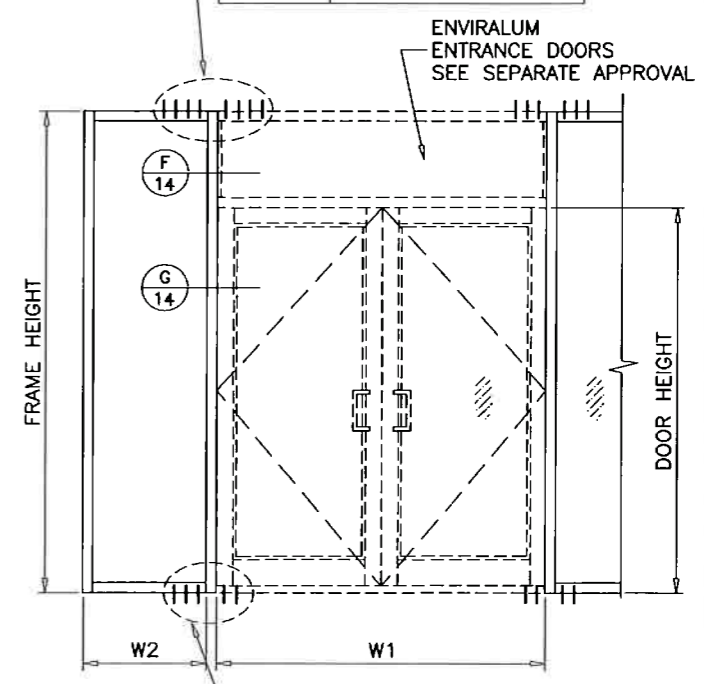
| | Ix IN^4 | Sx IN^3 |
|---------------------------------|---------|---------|
| ALUMINUM | 5.0950 | 2.0993 |
| STEEL | 3.281 | 1.590 |
| TOTAL Ix ALUM + Ix STL X 2.9 | 14.6099 | |

DOOR MULLION

FL #19002



| ANCHOR TYPES | TOTAL NO. OF ANCHORS AT DOOR MULLION HEAD |
|--------------|---|
| A | 8 |
| B | 6 |
| C | 5 |
| A1 | 6 |
| B1 | 5 |
| C1 | 4 |



| ANCHOR TYPES | TOTAL NO. OF ANCHORS AT DOOR MULLION BOTTOM |
|--------------|---|
| B | 5 |
| B1 | 4 |

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SERIES ENV-450 ALUM WINDOW WALL SYS. (L.M.I.)
ENVIRALUM INDUSTRIES INC.
5100 N.W. 72 AVENUE BLDG. C
MIAMI, FL. 33166
TEL. (305) 752-4411 FAX. (305) 406-3877

| revisions: | no | date | by | description |
|------------|----|------|----|-------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

date: 09-28-15
scale: -
dr. by: TARIQ
chk. by:

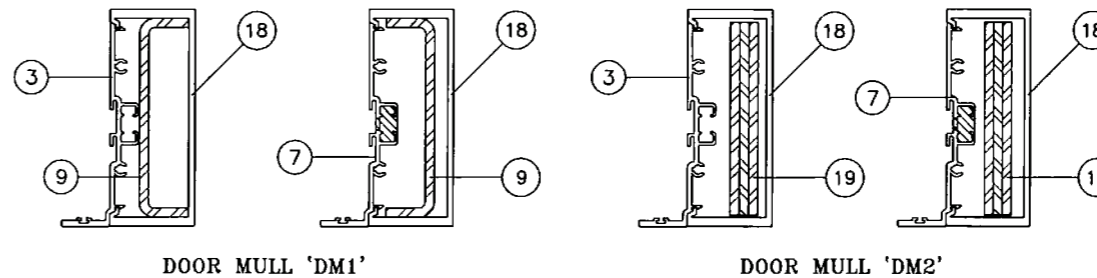
drawing no. **W15-74**
sheet 10 of 16

| DOOR MULLION LOAD CAPACITY - PSF | | | | | |
|----------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|
| NOMINAL DIMS. | | | | MULL 'DM1' | MULL 'DM2' |
| FRAME HEIGHT INCHES | DOOR HEIGHT INCHES | WIDTH (W1) INCHES | WIDTH (W2) INCHES | EXT. (+) INT. (-) | EXT. (+) INT. (-) |
| 102 | 96 | 84 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 75.0 | 75.0 |
| | | | 48 | 75.0 | 75.0 |
| | 96 | 96 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 75.0 | 75.0 |
| | | | 48 | 75.0 | 75.0 |
| 108 | 96 | 72 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 75.0 | 75.0 |
| | | | 48 | 75.0 | 75.0 |
| | 96 | 84 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 75.0 | 75.0 |
| | | | 48 | 75.0 | 75.0 |
| 114 | 96 | 60 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 75.0 | 75.0 |
| | | | 48 | 75.0 | 75.0 |
| | 96 | 72 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 75.0 | 75.0 |
| | | | 48 | 72.5 | 75.0 |
| 114 | 96 | 84 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 74.6 | 75.0 |
| | | | 42 | 70.3 | 75.0 |
| | | | 48 | 66.6 | 75.0 |
| | 96 | 96 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 72.3 | 75.0 |
| | | | 36 | 68.3 | 75.0 |
| | | | 42 | 64.7 | 75.0 |
| | | | 48 | 61.6 | 75.0 |

| DOOR MULLION LOAD CAPACITY - PSF | | | | | |
|----------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|
| NOMINAL DIMS. | | | | MULL 'DM1' | MULL 'DM2' |
| FRAME HEIGHT INCHES | DOOR HEIGHT INCHES | WIDTH (W1) INCHES | WIDTH (W2) INCHES | EXT. (+) INT. (-) | EXT. (+) INT. (-) |
| 120 | 96 | 60 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 75.0 | 75.0 |
| | | | 42 | 74.0 | 75.0 |
| | | | 48 | 69.5 | 75.0 |
| | 96 | 72 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 75.0 | 75.0 |
| | | | 36 | 71.0 | 75.0 |
| | | | 42 | 66.8 | 75.0 |
| | | | 48 | 63.1 | 75.0 |
| 126 | 96 | 84 | 18 | 75.0 | 75.0 |
| | | | 24 | 72.7 | 75.0 |
| | | | 30 | 68.3 | 75.0 |
| | | | 36 | 64.4 | 75.0 |
| | | | 42 | 60.9 | 75.0 |
| | | | 48 | 57.8 | 72.2 |
| | 96 | 96 | 18 | 69.8 | 75.0 |
| | | | 24 | 65.7 | 75.0 |
| | | | 30 | 62.1 | 75.0 |
| | | | 36 | 58.8 | 73.5 |
| | | | 42 | 55.9 | 69.9 |
| | | | 48 | 53.3 | 66.6 |
| 132 | 96 | 60 | 18 | 75.0 | 75.0 |
| | | | 24 | 75.0 | 75.0 |
| | | | 30 | 74.9 | 75.0 |
| | | | 36 | 69.8 | 75.0 |
| | | | 42 | 65.3 | 75.0 |
| | | | 48 | 61.4 | 75.0 |
| | 96 | 72 | 18 | 75.0 | 75.0 |
| | | | 24 | 71.1 | 75.0 |
| | | | 30 | 66.5 | 75.0 |
| | | | 36 | 62.4 | 75.0 |
| | | | 42 | 58.8 | 73.5 |
| | | | 48 | 55.6 | 69.5 |
| 132 | 96 | 84 | 18 | 67.7 | 75.0 |
| | | | 24 | 63.5 | 75.0 |
| | | | 30 | 59.8 | 74.7 |
| | | | 36 | 56.4 | 70.6 |
| | | | 42 | 53.5 | 66.9 |
| | | | 48 | 50.7 | 63.3 |
| | 96 | 96 | 18 | 60.7 | 75.0 |
| | | | 24 | 57.3 | 71.6 |
| | | | 30 | 54.3 | 67.8 |
| | | | 36 | 51.1 | 64.6 |
| | | | 42 | 48.2 | 61.7 |
| | | | 48 | 45.4 | 58.9 |

| DOOR MULLION LOAD CAPACITY - PSF | | | | | |
|----------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|
| NOMINAL DIMS. | | | | MULL 'DM1' | MULL 'DM2' |
| FRAME HEIGHT INCHES | DOOR HEIGHT INCHES | WIDTH (W1) INCHES | WIDTH (W2) INCHES | EXT. (+) INT. (-) | EXT. (+) INT. (-) |
| 138 | 96 | 60 | 18 | 69.5 | 75.0 |
| | | | 24 | 64.3 | 75.0 |
| | | | 30 | 59.8 | 74.7 |
| | | | 36 | 55.8 | 69.8 |
| | | | 42 | 52.4 | 65.5 |
| | | | 48 | 49.4 | 61.7 |
| | 96 | 72 | 18 | 60.4 | 75.0 |
| | | | 24 | 56.4 | 70.5 |
| | | | 30 | 52.9 | 66.1 |
| | | | 36 | 49.8 | 62.3 |
| | | | 42 | 47.1 | 58.8 |
| | | | 48 | 44.8 | 56.0 |
| 144 | 96 | 84 | 18 | 53.4 | 66.8 |
| | | | 24 | 50.3 | 62.8 |
| | | | 30 | 47.5 | 59.3 |
| | | | 36 | 44.8 | 56.0 |
| | | | 42 | 42.6 | 53.3 |
| | | | 48 | 40.2 | 50.2 |
| | 96 | 96 | 18 | 47.9 | 59.8 |
| | | | 24 | 45.1 | 56.3 |
| | | | 30 | 42.9 | 53.6 |
| | | | 36 | 40.2 | 50.2 |
| | | | 42 | 37.5 | 47.5 |
| | | | 48 | 34.8 | 44.8 |

CHARTS ABOVE SHOWS DOOR MULLION CAPACITIES
FOR LEVEL 'E' IMPACT RATING
LIMIT MAX. DESIGN LOAD TO 70.0 PSF



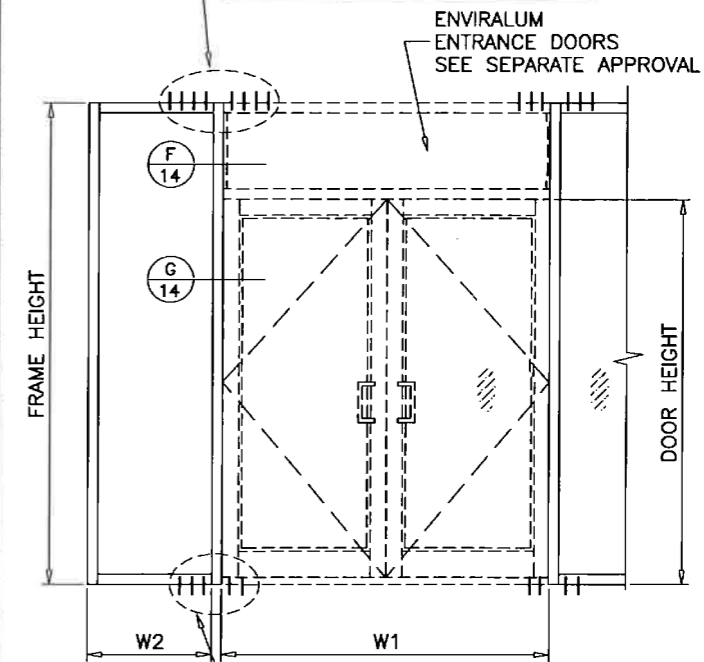
| | Ix IN^4 | Sx IN^3 |
|---------------------------------|---------|---------|
| ALUMINUM | 5.0950 | 2.0993 |
| STEEL | 2.2740 | 1.1025 |
| TOTAL Ix ALUM + Ix STL X 2.9 | 11.6896 | |

| | Ix IN^4 | Sx IN^3 |
|---------------------------------|---------|---------|
| ALUMINUM | 5.0950 | 2.0993 |
| STEEL | 3.281 | 1.590 |
| TOTAL Ix ALUM + Ix STL X 2.9 | 14.6099 | |

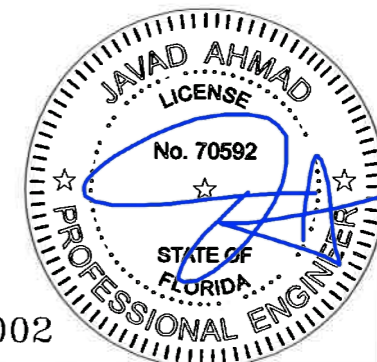
DOOR MULLION

FL #19002

| ANCHOR TYPES | TOTAL NO. OF ANCHORS AT DOOR MULLION HEAD |
|--------------|---|
| A | 8 |
| B | 6 |
| C | 5 |
| A1 | 6 |
| B1 | 5 |
| C1 | 4 |



| ANCHOR TYPES | TOTAL NO. OF ANCHORS AT DOOR MULLION BOTTOM |
|--------------|---|
| B | 5 |
| B1 | 4 |



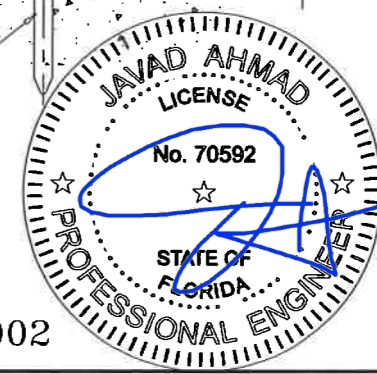
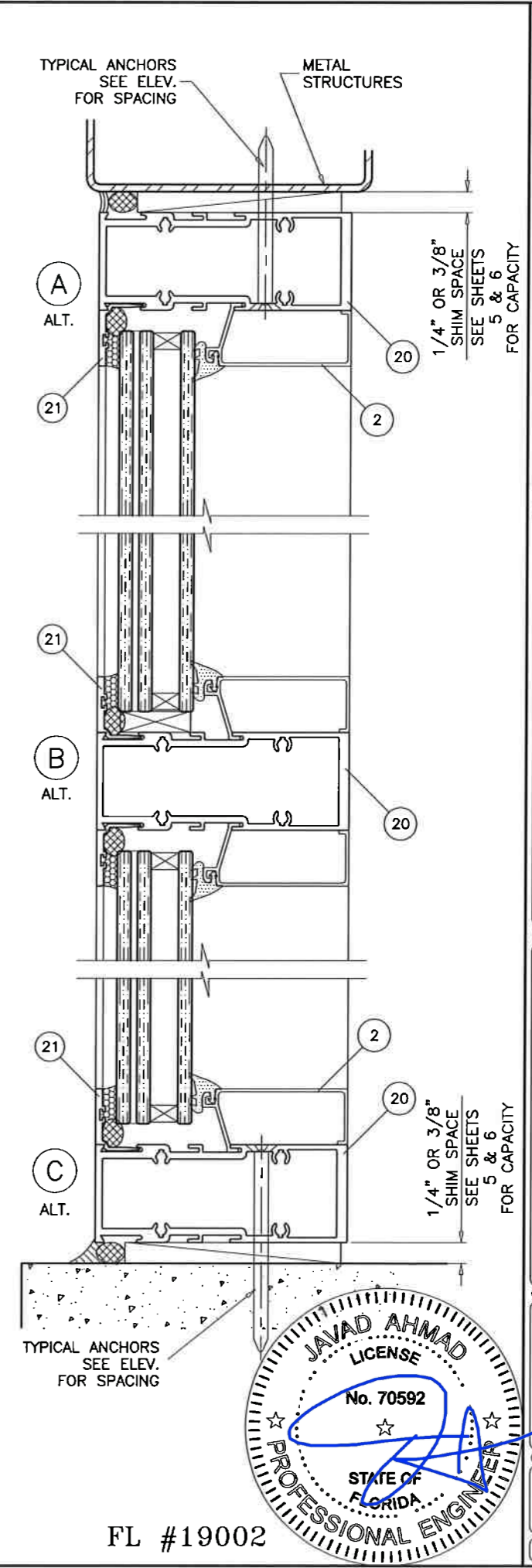
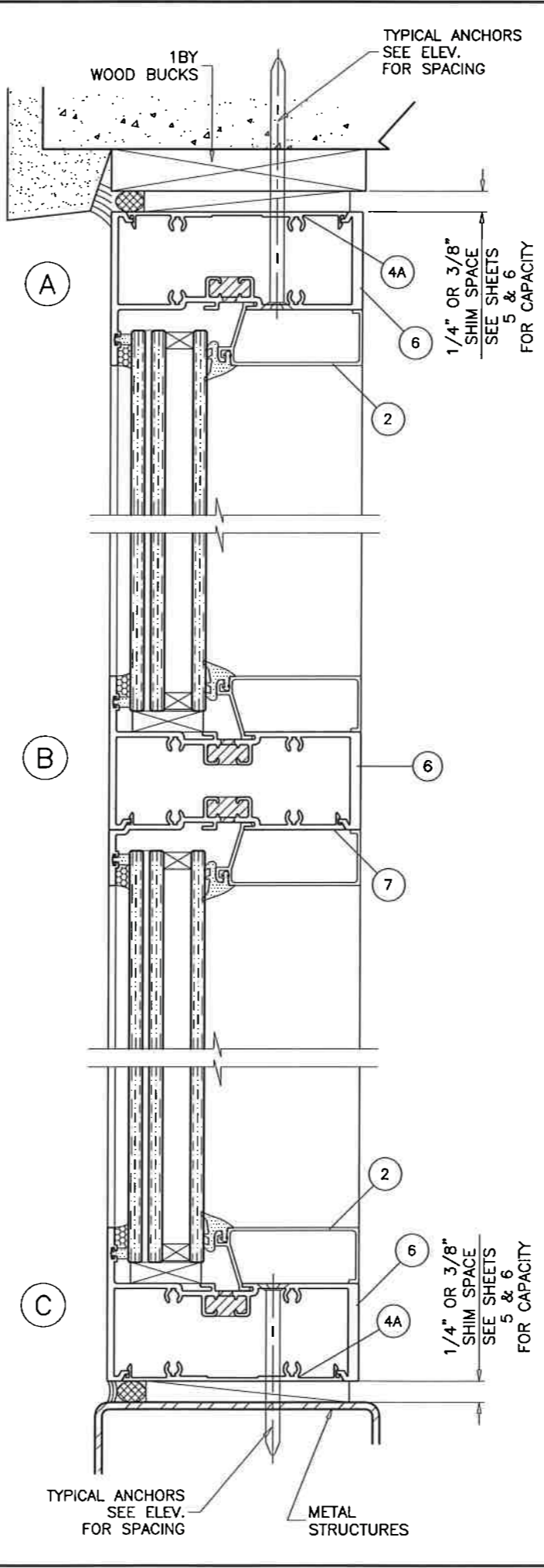
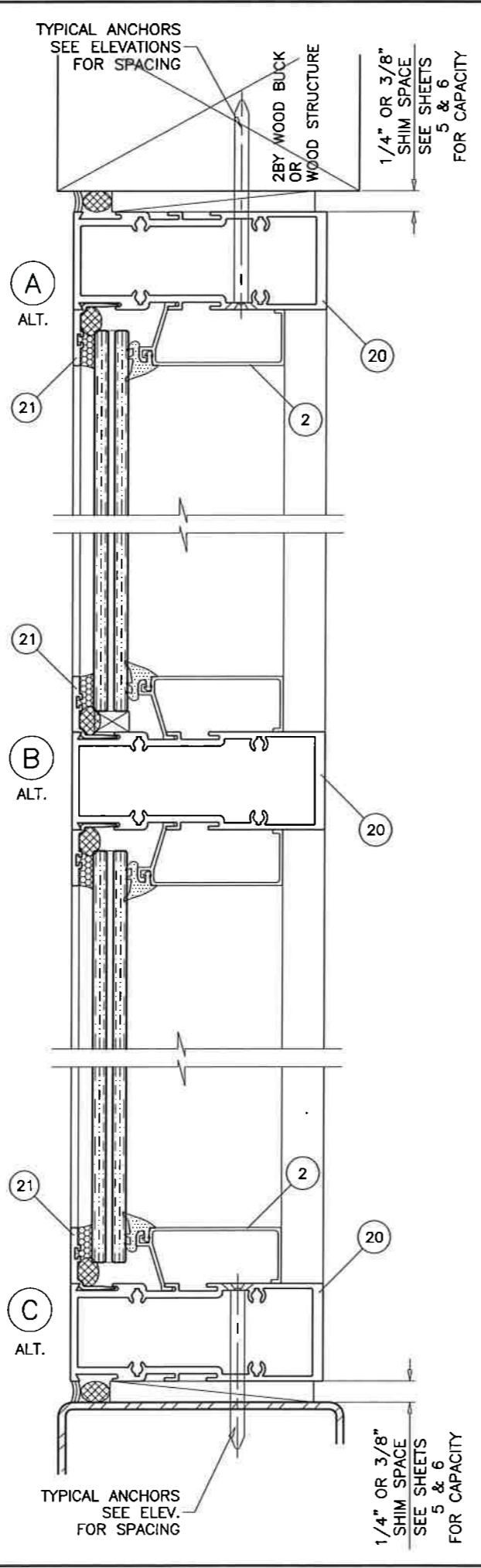
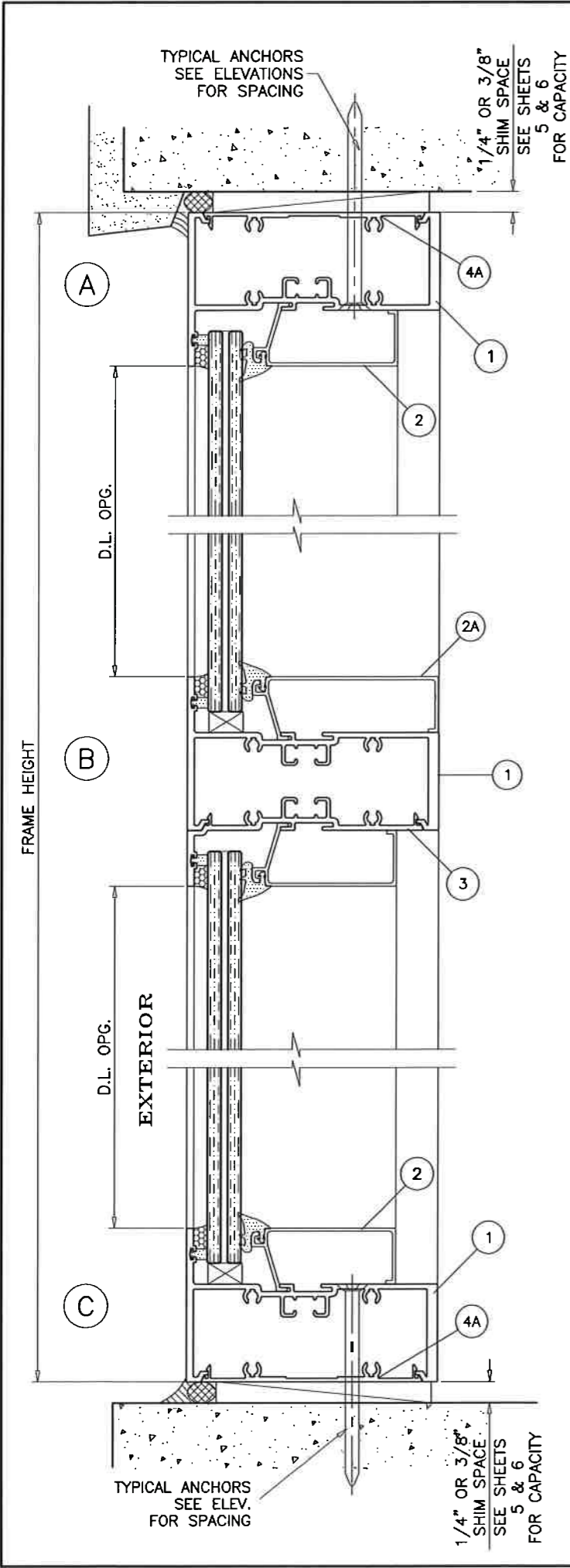
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ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
C.A.N. 3538

SERIES ENV-450 ALUM WINDOW WALL SYS. (L.M.I.)
ENVIRALUM INDUSTRIES INC.
5100 N.W. 72 AVENUE BLDG. C
MIAMI, FL. 33166
TEL. (305) 752-4411 FAX. (305) 406-3877

| revisions: | no | date | by | description |
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drawing no.
W15-74
sheet 11 of 16



FL #19002

Sealed: 08/18/2017

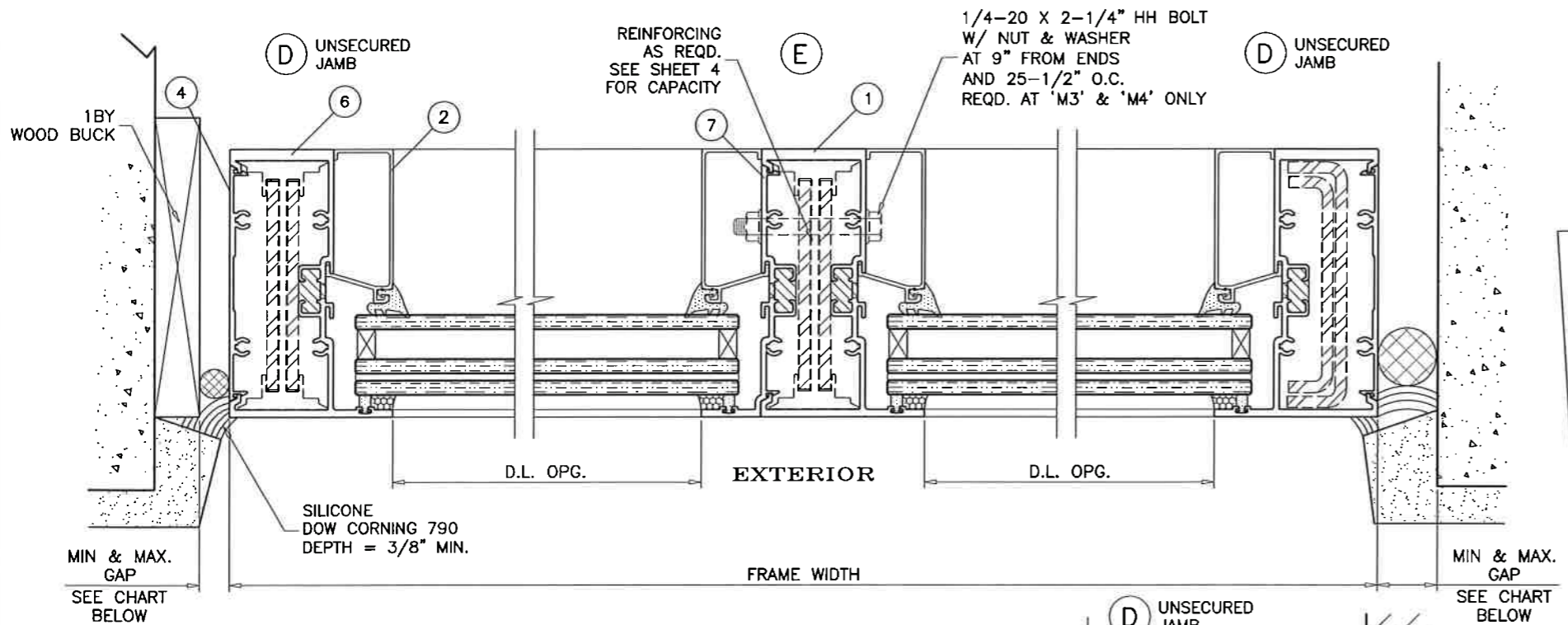
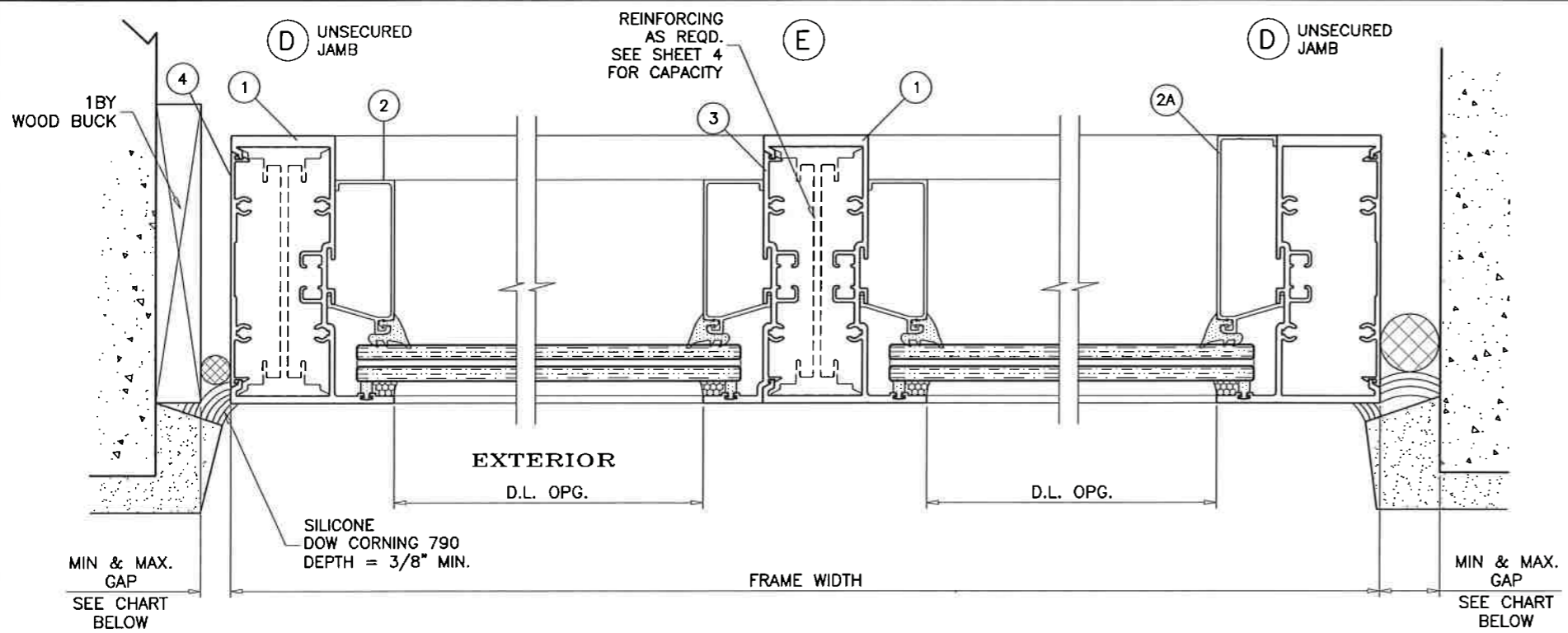
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 chk. by:

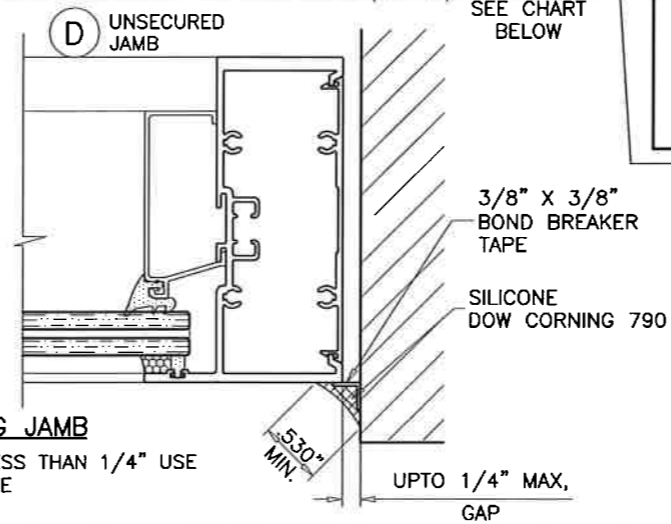
drawing no.
W15-74
 sheet 12 of 16



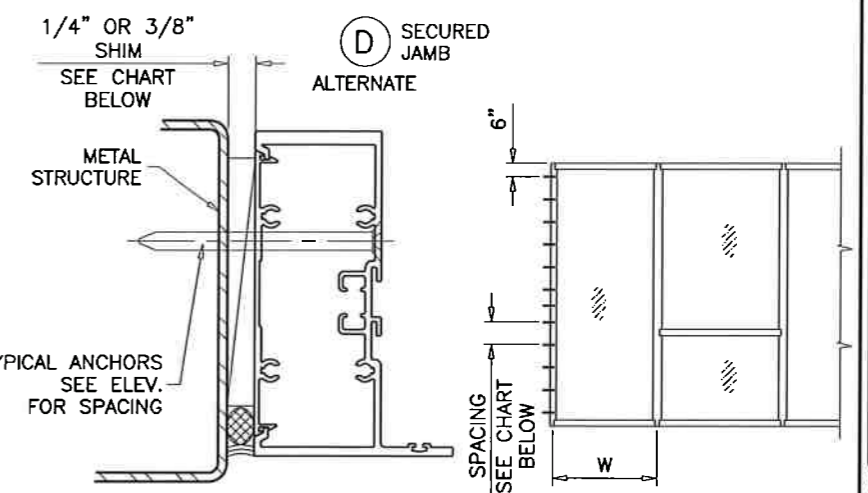
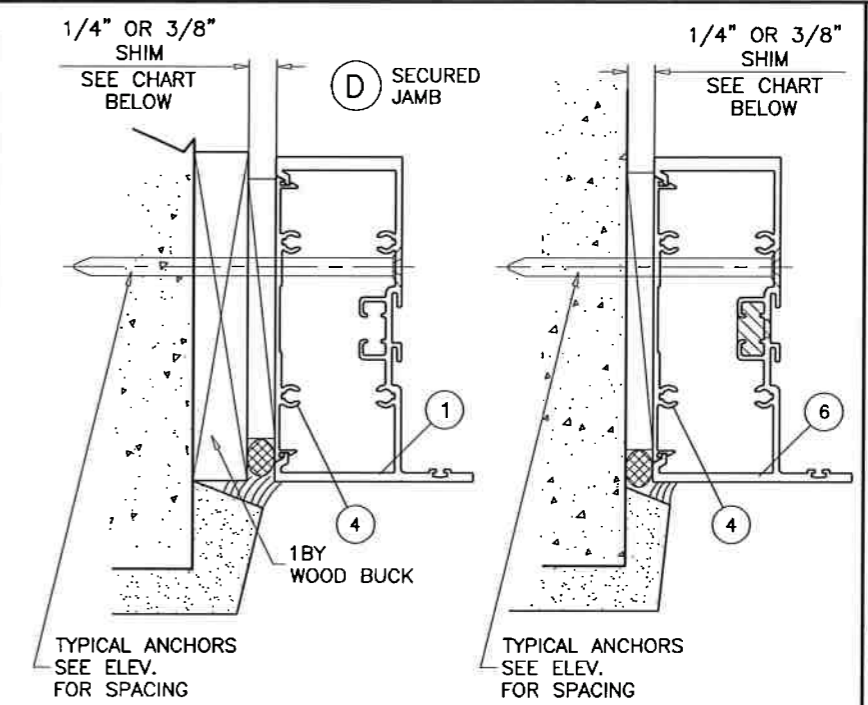
| MAX. FRAME HEIGHT | GAP | |
|-------------------|-------|------|
| | MIN. | MAX. |
| 84" | 1/4" | 1" |
| 96" | 5/16" | 1" |
| 120" | 3/8" | 1" |
| 144" | 1/2" | 1" |

ALTERNATE SEALANTS AT JAMB GAPS CAN BE DESIGNED BY ENGINEER OF RECORD BASED ON MANUFACTURER GUIDE LINES.

**UNSECURED JAMBS
FREE STANDING**

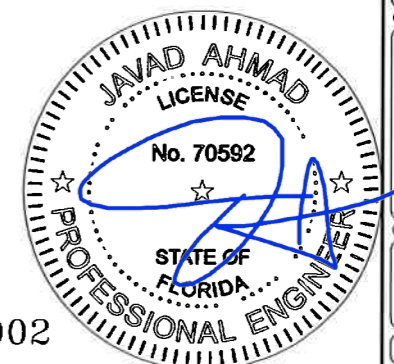


FREE STANDING JAMB
FOR JOINTS GAP LESS THAN 1/4" USE BOND BREAKER TAPE SEE DETAIL ABOVE



| WIDTH (W) | JAMB ANCHOR SPACING | | | | | | | |
|-----------|---------------------|--------------------|--------------------|-----------------------|--------------------|--------------------|--------------------|--------------------|
| | 1/4" MAX. SHIM | | 1/4" MAX. SHIM | | 3/8" MAX. SHIM | | 3/8" MAX. SHIM | |
| | TYPE 'A' | TYPE 'AA' | TYPE 'B' & 'C' | TYPE 'A1', 'B1', 'C1' | TYPE 'AA1' | TYPE 'A1' & 'B1' | TYPE 'AA1' | TYPE 'C1' |
| | EXT.(+) INT.(-) | EXT.(+) INT.(-) | EXT.(+) INT.(-) | EXT.(+) INT.(-) | EXT.(+) INT.(-) | EXT.(+) INT.(-) | EXT.(+) INT.(-) | EXT.(+) INT.(-) |
| 42" | 10" | 10" | 10" | 10" | 10" | 10" | 10" | 10" |
| 48" | 10" | 9" | 10" | 10" | 10" | 10" | 10" | 10" |
| 54" | 10" | 8" | 10" | 10" | 9" | 10" | 9" | 10" |
| 60" | 10" | 7" | 10" | 10" | 8" | 10" | 8" | 10" |
| 66" | 9" | 6" | 10" | 10" | 7" | 9" | 7" | 10" |
| 72" | 8" | 6" | 10" | 10" | 7" | 8" | 7" | 10" |

**SECURED JAMBS
(REINFORCING NOT REQUIRED)**



FL #19002

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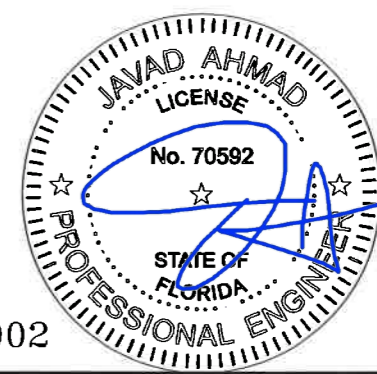
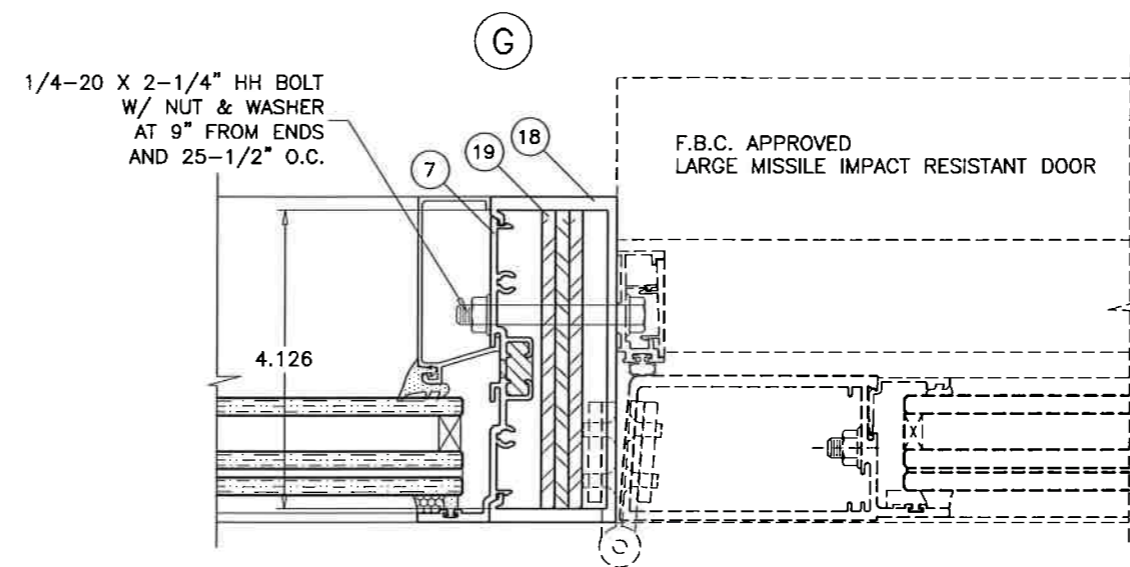
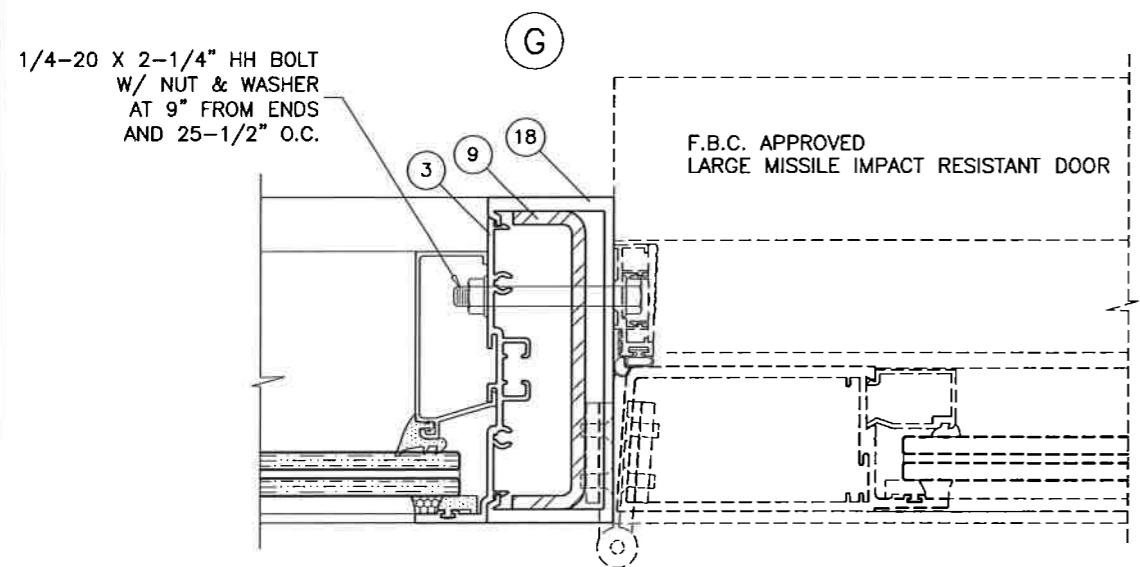
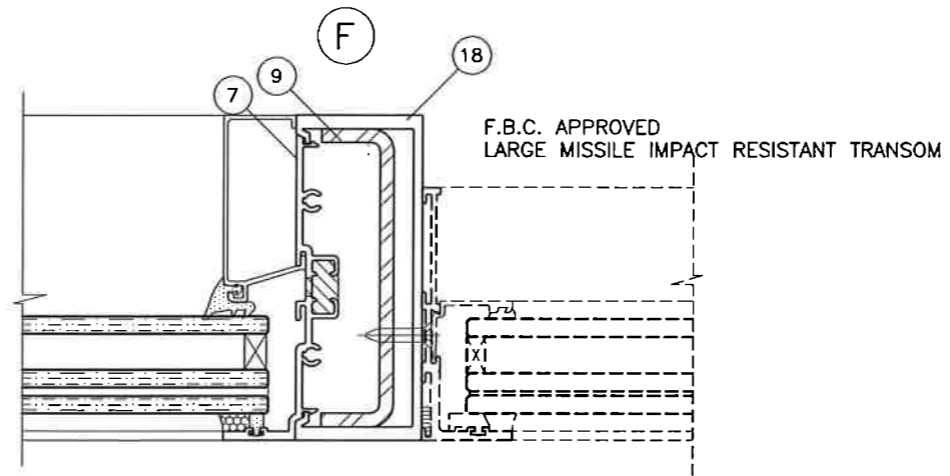
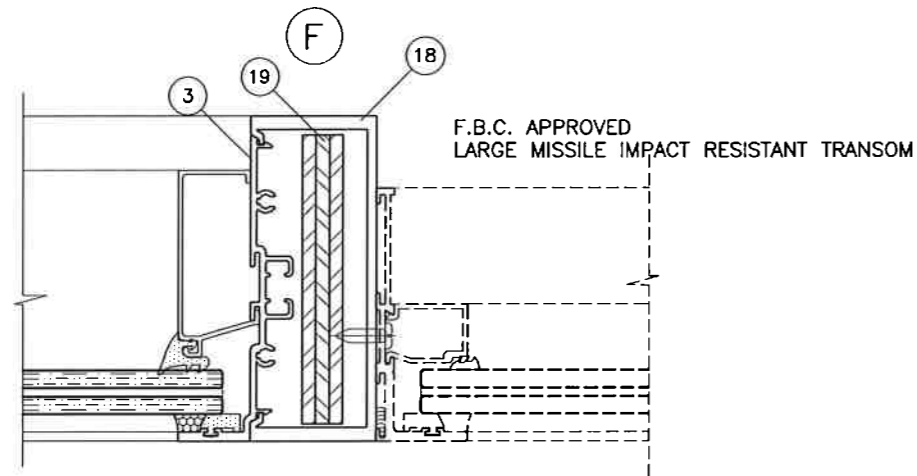
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chk. by:

drawing no.
W15-74
sheet 13 of 16

SEE SEPARATE APPROVAL FOR DESIGN LOAD CAPACITY OF DOORS AND DOOR ANCHORS.
 LOWER VALUES FROM DOORS APPROVAL OR STOREFRONT SYSTEM CAPACITY CHARTS WILL APPLY TO ENTIRE SYSTEM.



FL #19002

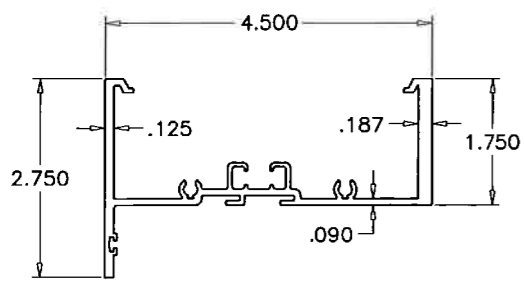
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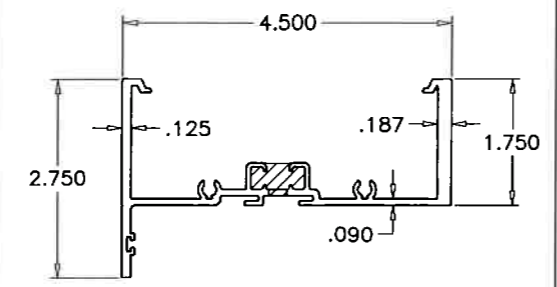
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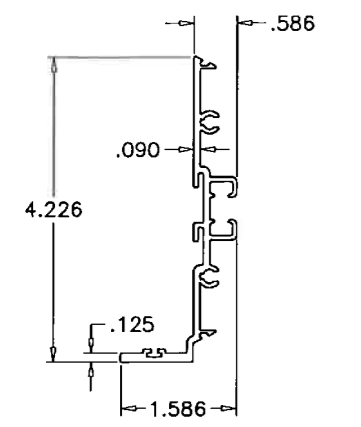
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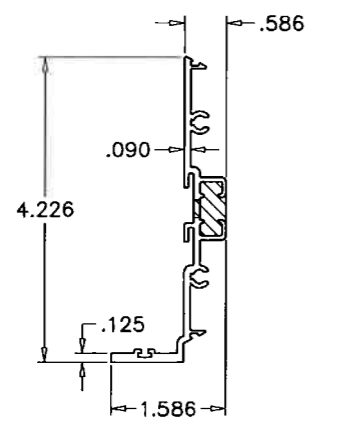
1 HEAD/SILL/JAMB/INTERMEDIATE



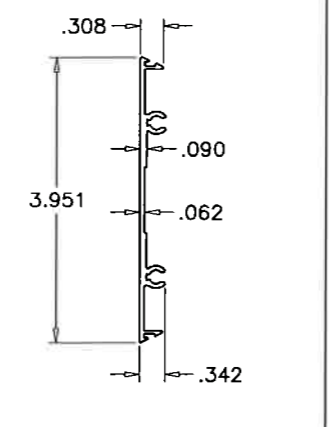
6 HEAD/SILL/JAMB/INTERMEDIATE



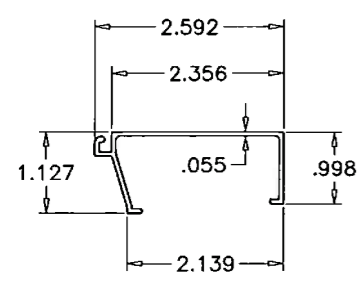
3 FIN SNAP



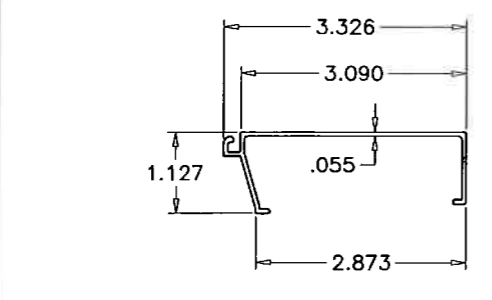
7 FIN SNAP



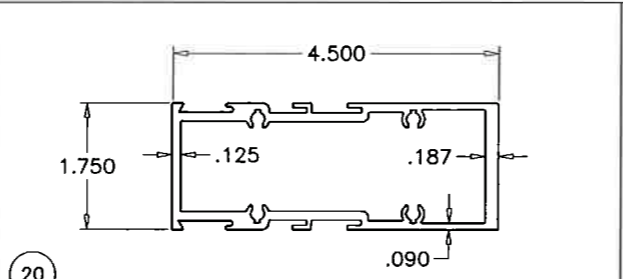
4 FLAT SNAP



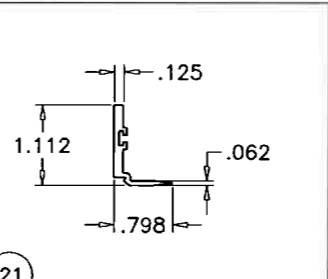
2 GLASS STOP



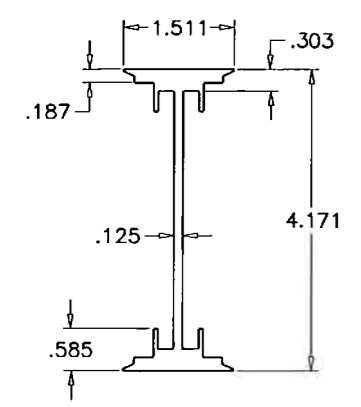
2A EXTENDED GLASS STOP



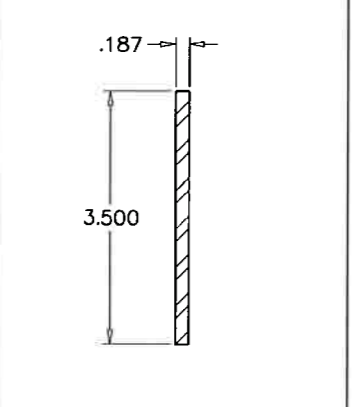
20 O.G. FRAME HEAD/SILL/JAMB/INTERMEDIATE



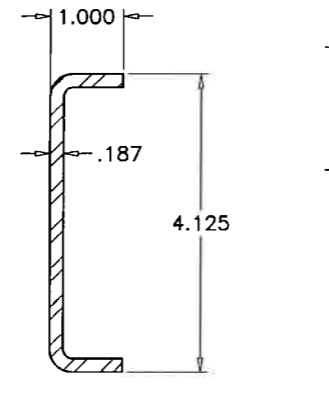
21 O.G. GLASS STOP



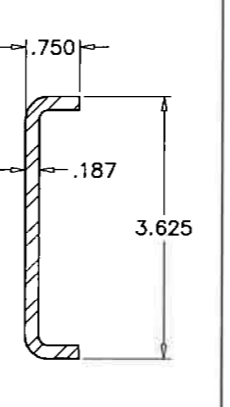
5 ALUM REINF.



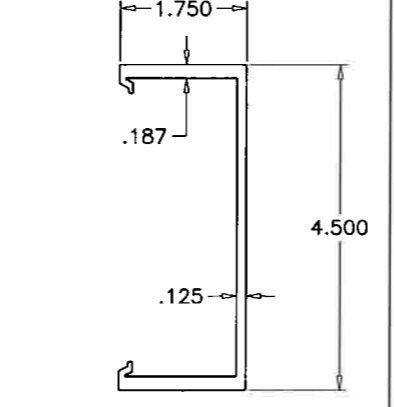
8 STEEL BAR REINF.



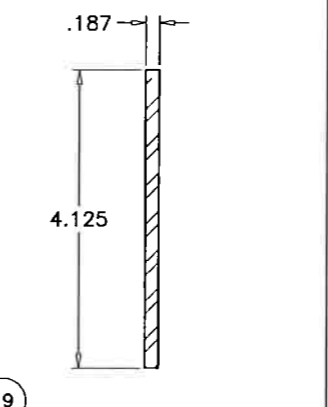
9 STEEL CHANNEL REINF.



10 STEEL CHANNEL REINF.



18 DOOR MULLION

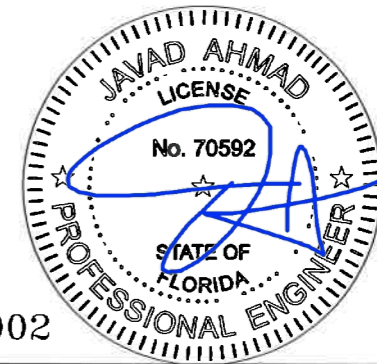


19 DOOR MULLION REINF.

| ITEM NO. | PART NUMBER | QUANTITY | DESCRIPTION | MATERIAL | MANF./SUPPLIER/REMARKS |
|----------|-------------|-----------------------|---|-----------|-------------------------|
| 1 | ENV-451 | AS REQD. | HEAD/SILL/JAMB & INTERMEDIATE | 6063-T6 | ENVIRALUM |
| 2 | ENV-452 | AS REQD. | GLASS STOP | 6063-T6 | ENVIRALUM |
| 2A | ENV-458 | AS REQD. | EXTENDED GLASS STOP (OPTION TO ENV-452) | 6063-T6 | ENVIRALUM |
| 3 | ENV-453 | AS REQD. | FIN SNAP | 6063-T6 | ENVIRALUM |
| 4 | ENV-454 | 1/ FREE STANDING JAMB | FLAT SNAP FULL LENGTH OF VERTICAL | 6063-T6 | ENVIRALUM |
| 4A | ENV-454-3 | 1/ INSTALL SCREW | FLAT SNAP, 3" LONG | 6063-T6 | ENVIRALUM |
| 4B | ENV-454-7 | 1/ CORNER | FLAT SNAP, 7" LONG | 6063-T6 | ENVIRALUM |
| 5 | ENV-455 | AS REQD. | ALUMINUM REINFORCEMENT | 6063-T6 | ENVIRALUM |
| 6 | ENV-451T | AS REQD. | HEAD/SILL/JAMB & INTERMEDIATE (THERMAL) | 6063-T6 | ENVIRALUM |
| 7 | ENV-453T | AS REQD. | FIN SNAP (THERMAL) | 6063-T6 | ENVIRALUM |
| 8 | ENV-ST1 | AS REQD. | 3/16" X 3-1/2" BAR | STEEL | Fy MIN. = 36 KSI |
| 9 | ENV-ST2 | AS REQD. | 1" X 4-1/8" X 1" X 3/16" THK. CHANNEL | STEEL | Fy MIN. = 36 KSI |
| 10 | ENV-ST3 | AS REQD. | 3/4" X 3-5/8" X 3/4" X 3/16" THK. CHANNEL | STEEL | Fy MIN. = 36 KSI |
| 11 | ENV-G01 | AS REQD. | INTERIOR GASKET | EPDM | GLAZING RUBBER PRODUCTS |
| 12 | ENV-G03 | AS REQD. | SPACER GASKET | EPDM | GLAZING RUBBER PRODUCTS |
| 13 | ENV-SB01 | 1/ QUARTER POINT | 3/8" X 1/2" X 2" SETTING BLOCKS, DUROMETER 70±5 | EPDM | FRANK LOWE RUBBER |
| 14 | ENV-SB02 | 1/ QUARTER POINT | 3/8" X 1-1/4" X 2" SETTING BLOCKS, DUROMETER 70±5 | EPDM | FRANK LOWE RUBBER |
| 15 | DOW 791 | AS REQD. | GLAZING COMPOUND | SILICONE | DOW CORNING |
| 16 | GE SCS2000 | AS REQD. | GLAZING COMPOUND | SILICONE | GE MOMENTIVE |
| 17 | #12 X 1-1/2 | 4/ CORNER | FRAME ASSEMBLY SCREWS | ST. STEEL | HWH SMS |
| 18 | ENV-355 | AS REQD. | DOOR MULLION | 6063-T6 | - |
| 19 | - | AS REQD. | 3/16" X 4" BAR FOR DOOR MULLION | STEEL | Fy MIN. = 36 KSI |
| 20 | ENV-459 | AS REQD. | O.G. FRAME HEAD/SILL/JAMB & INTERMEDIATE | 6063-T6 | ENVIRALUM |
| 21 | ENV-4510 | AS REQD. | O.G. GLASS STOP | 6063-T6 | ENVIRALUM |

SEALANTS:

ALL FRAME CORNERS, JOINTS, MULLION SEAMS AND PERIMETER OF GLAZING BEAD TO FRAME SEALED WITH SILICONE SEALANT.



FL #19002

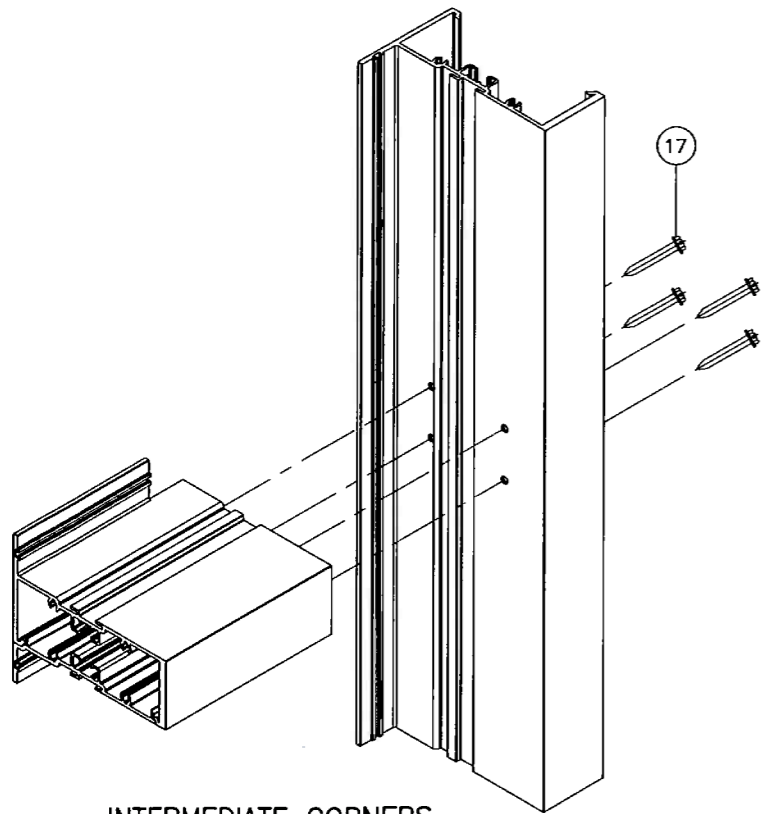
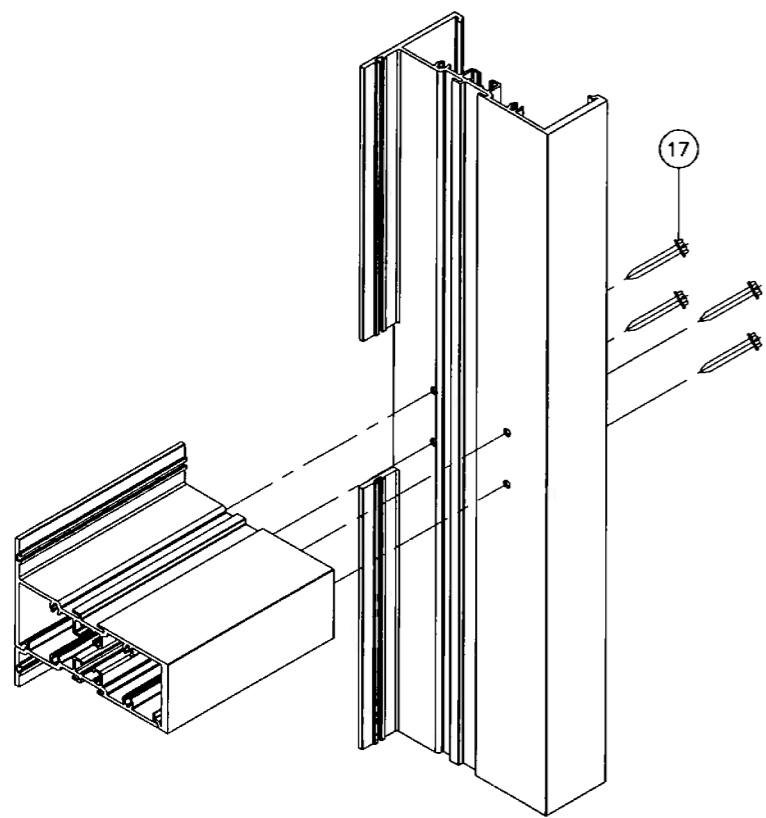
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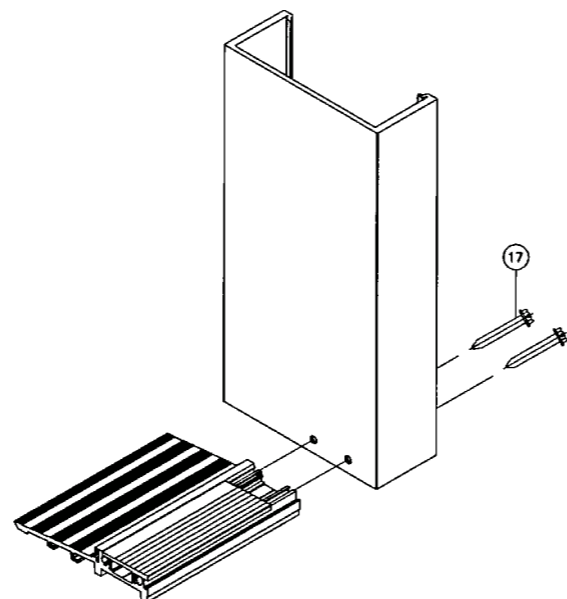
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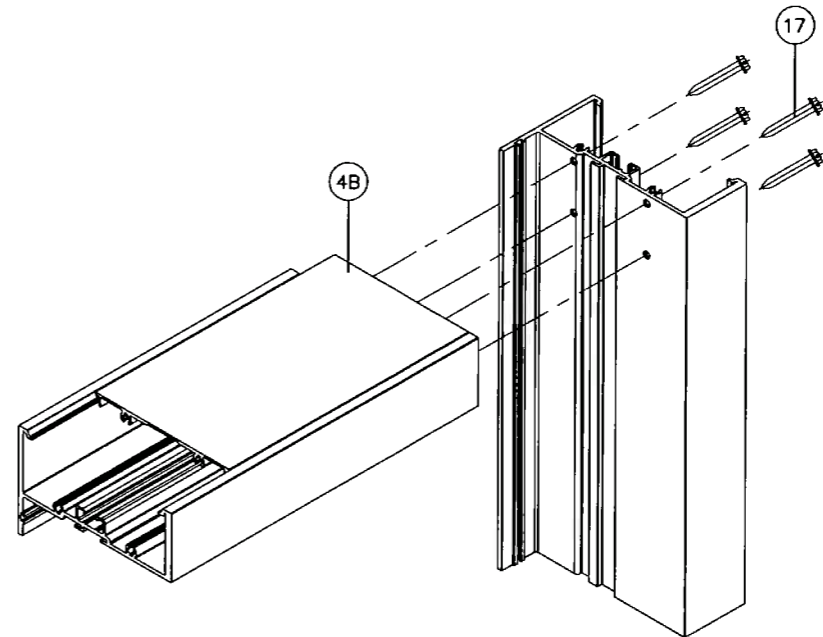
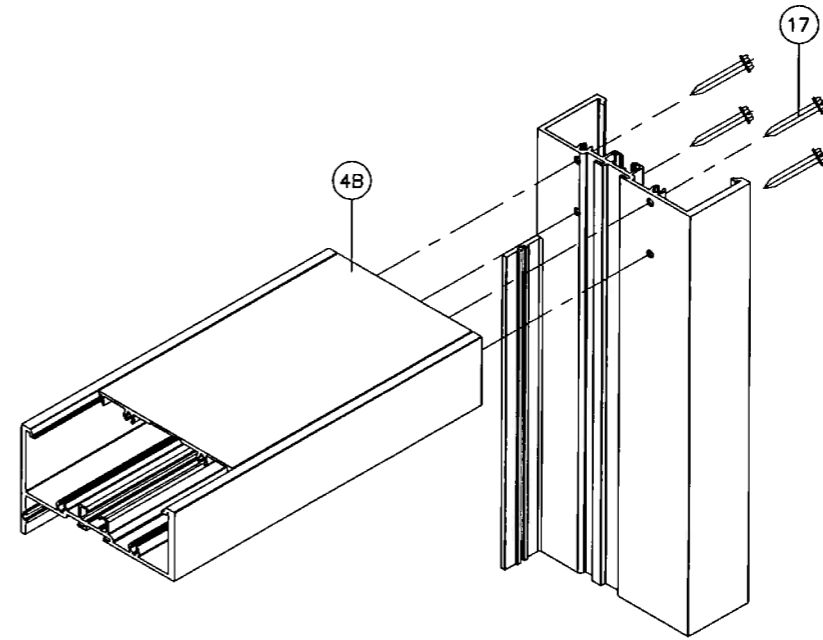
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 drawing no. **W15-74**
 sheet 15 of 16



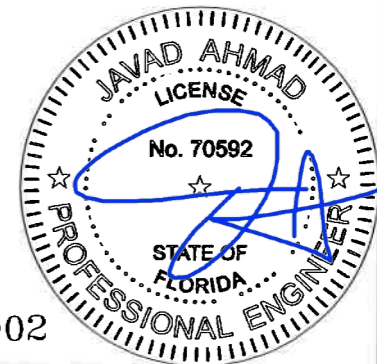
INTERMEDIATE CORNERS



DOOR MULLION BOTTOM CORNER



TOP/BOTTOM CORNERS



FL #19002

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| drawing no. | | | |
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