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**Product Approval**  
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 **Application Detail**

OFFICE OF THE SECRETARY

FL #	FL18507-R2								
Application Type	Revision								
Code Version	2014								
Application Status	Approved								
Comments									
Archived	<input type="checkbox"/>								
Product Manufacturer	La Finestra, LC								
Address/Phone/Email	2790 NW 104th Court Miami, FL 33172 (305) 599-8093 brunosalvoni@lafinestra.us								
Authorized Signature	Bruno Salvoni brunosalvoni@lafinestra.us								
Technical Representative									
Address/Phone/Email									
Quality Assurance Representative									
Address/Phone/Email									
Category	Windows								
Subcategory	Fixed								
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer <input type="checkbox"/> Evaluation Report - Hardcopy Received								
Florida Engineer or Architect Name who developed the Evaluation Report	Frank L. Bennardo, P.E.								
Florida License	PE-0046549								
Quality Assurance Entity	National Accreditation & Management Institute								
Quality Assurance Contract Expiration Date	04/30/2018								
Validated By	Troy Bishop, P.E. <input checked="" type="checkbox"/> Validation Checklist - Hardcopy Received								
Certificate of Independence	<a href="#">FL18507_R2_COI_Indep_.pdf</a>								
Referenced Standard and Year (of Standard)	<table border="0"> <thead> <tr> <th><b>Standard</b></th> <th><b>Year</b></th> </tr> </thead> <tbody> <tr> <td>TAS 201</td> <td>1994</td> </tr> <tr> <td>TAS 202</td> <td>1994</td> </tr> <tr> <td>TAS 203</td> <td>1994</td> </tr> </tbody> </table>	<b>Standard</b>	<b>Year</b>	TAS 201	1994	TAS 202	1994	TAS 203	1994
<b>Standard</b>	<b>Year</b>								
TAS 201	1994								
TAS 202	1994								
TAS 203	1994								
Equivalence of Product Standards Certified By									
Sections from the Code									

Product Approval Method

Method 1 Option D

Date Submitted

08/26/2016

Date Validated

08/26/2016

Date Pending FBC Approval

08/30/2016

Date Approved

10/13/2016

**Summary of Products**

FL #	Model, Number or Name	Description
18507.1	Preglazed Window Wall	Preglazed Window Wall Large & Small Missile Impact Resistant
<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> Yes <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> Yes <b>Design Pressure:</b> +100/-100 <b>Other:</b>		<b>Installation Instructions</b> <a href="#">FL18507_R2_II_Dwg.pdf</a> Verified By: Frank L. Bennardo, P.E. PE0046549 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL18507_R2_AE_Eval .pdf</a> Created by Independent Third Party: Yes

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**Product Approval Accepts:**

August 26, 2016

Florida Department of Business and Professional Regulation  
1940 North Monroe Street, Tallahassee FL 32304

Regarding: La Finestra, LC  
Pre-Glazed Window Wall with Unitized Option  
(Large & Small Missile Impact Resistant)  
Project #15-2573

To Whom It May Concern:

Please be advised that the below-signed engineer does not have nor will acquire a financial interest in the company manufacturing or distributing the product(s) for which an evaluation report or validation certification has been prepared, as referenced above. This engineer is not owned, operated, nor controlled by the manufacturer or distributor noted above and does not have any financial interest in any other entity involved in the approval process of the above-noted product(s).

Respectfully,

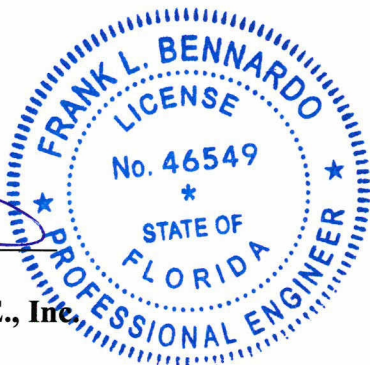
**AUG 26 2016**

Frank L. Bennardo, P.E.

**Frank L. Bennardo, P.E., Inc.**

FL PE 0046549

Cert of Auth #9885



**ENGINEERING EXPRESS® EXPERT**  
**PRODUCT EVALUATION REPORT**

August 26, 2016

Application Number: FL#18507.1-R2  
EX Project Number: 15-2573Product Manufacturer: La Finestra, LC  
Manufacturer Address: 2790 NW 104<sup>TH</sup> Court.  
Miami, FL 33172Product Name & Description: Pre-Glazed Window Wall with Unitized Option  
Large & Small Missile Impact Resistant**Scope of Evaluation:**

This Product Evaluation Report is being issued in accordance with the requirements of the Florida Department of Business and Professional Regulation (Florida Building Commission) Rule Chapter 61G20-3.005, F.A.C., for statewide acceptance per Method 1(d). The product noted above has been tested and/or evaluated as summarized herein to show compliance with the Fifth Edition of the Florida Building Code (2014) and is, for the purpose intended, at least equivalent to that required by the Code. Re-evaluation of this product shall be required following pertinent Florida Building Code modifications or revisions.

**Substantiating Data:**

- **PRODUCT EVALUATION DOCUMENTS**

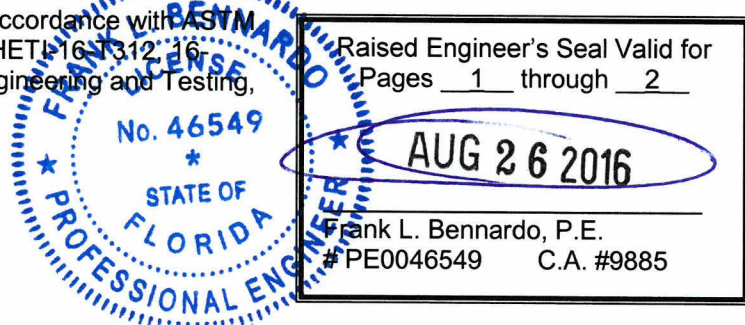
EX drawing #15-2573 titled "Pre-Glazed Window Wall with Unitized Option", sheets 1- 34, prepared by Engineering Express, signed & sealed by Frank L. Bennardo, P.E. is an integral part of this Evaluation Report.

- **TEST REPORTS**

Uniform static structural performance has been tested in accordance with TAS 202 test standards per test report(s) HETI-08-2140A, 08-2141A, 15-5108, 15-5122, 16-5030, 16-5032, 16-5034, 16-5086 by Hurricane Engineering and Testing, Inc. and test report(s) FTL-3545 by Fenestration Testing Laboratory, Inc.

Large missile impact resistance and cyclic loading performance have been tested in accordance with TAS 201 & 203 test standards per test report(s) HETI-08-2140B, 08-2141B, 08-2142, 15-5109, 15-5123, 16-5030, 16-5033, 16-5035, 16-5083, 16-5087 by Hurricane Engineering and Testing, Inc. and test report(s) FTL-3545, FTL-3546, FTL-3547 by Fenestration Testing Laboratory, Inc.

Tensile performance has been tested in accordance with ASTM E 8-15a test standards per test report(s) HETI-16-T312, 16-T313, 16-T314, 16-T330 by Hurricane Engineering and Testing, Inc.



- **STRUCTURAL ENGINEERING CALCULATIONS**

Structural engineering calculations have been prepared which evaluate the product based on comparative and/or rational analysis to qualify the following design criteria:

1. Anchor Spacing
2. Maximum Allowable Size/Pressure Combinations
3. Glass Capacity
4. Anchor Capacity

No 33% increase in allowable stress has been used in the design of each product.

The following are approved for use in the HVHZ as specified in their corresponding NOAs:

- SentryGlas Interlayer by Kuraray America, Inc. (NOA #14-0916.11)

### ***Impact Resistance:***

Large and Small Missile Impact Resistance has been demonstrated as evidenced in previously listed test reports, and is accounted for in the engineering design of this product.

### ***Wind Load Resistance***

Each product has been designed to resist wind loads as indicated in the design schedule(s) on its respective Product Evaluation Document (i.e. engineering drawing).

### ***Installation***

Each product listed above shall be installed in strict compliance with its respective Product Evaluation Document (i.e. engineering drawing), along with all components noted therein.

Each product component shall be of the material specified in that product's respective Product Evaluation Document (i.e. engineering drawing).

### ***Limitations & Conditions of Use:***

Use of each product shall be in strict accordance with its respective Product Evaluation Document (i.e. engineering drawing) as noted herein.

All supporting host structures shall be designed to resist all superimposed loads and shall be of a material listed in each product's respective anchor schedule. Host structure conditions which are not accounted for in each product's respective anchor schedule shall be designed for on a site-specific basis by a registered professional engineer.

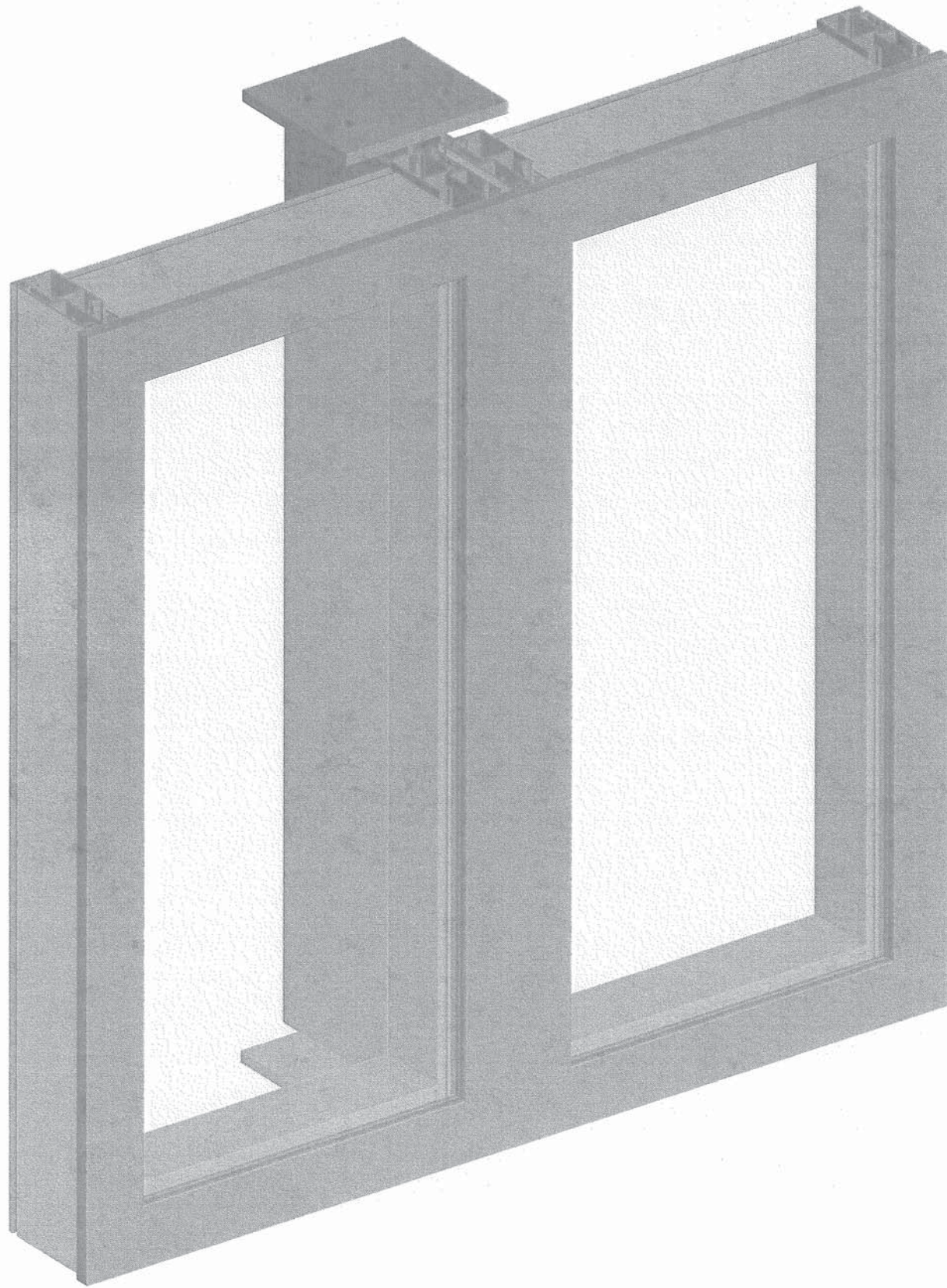
All components which are permanently installed shall be protected against corrosion, contamination, and other such damage at all times.

Each product has been designed for use within and outside of the High Velocity Hurricane Zone (HVHZ).

# LA FINESTRA LC

## PREGLAZED WINDOW WALL WITH UNITIZED OPTION

### LARGE AND SMALL MISSILE IMPACT RESISTANT

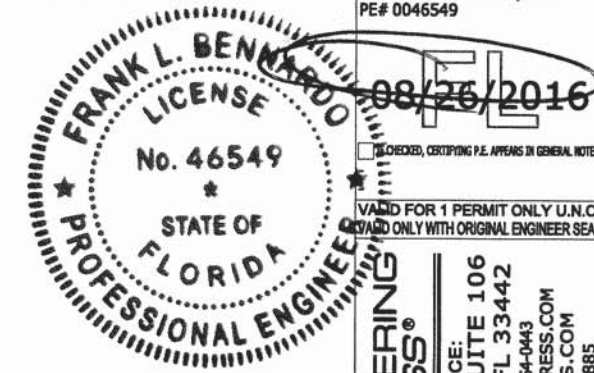


#### GENERAL NOTES:

- THIS SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE FLORIDA BUILDING CODE FIFTH EDITION (2014) PER
  - AASTM E330-14, E331-00, E283-04, E1886-13A, E1996-14
  - TAS 201 / 202 / 203
  - AAMA 101-97, AAMA 501
 FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE (HVHZ). AS QUALIFIED IN TEST REPORTS.
- DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
- UNITS GLAZED WITH 9/16" LAMINATED GLASS OR 1-5/16" INSULATED LAMINATED (HEAT STRENGTHENED) ARE LARGE MISSILE IMPACT RESISTANT AND DO NOT REQUIRE IMPACT RESISTANT SHUTTERS.
- NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
- THE ARCHITECT/ENGINEER OF RECORD FOR THE PROJECT SUPERSTRUCTURE WITH WHICH THIS DESIGN IS USED SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES TO THIS DESIGN WHICH SHALL BE COORDINATED BY THE PERMITTING CONTRACTOR. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.
- THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- ALL CONCRETE ANCHORS SPECIFIED HEREIN REFER TO ELCO CARBON STEEL ULTRACONS. FASTENED TO 6" MIN. THICK 3,000 PSI MIN. NON-CRACKED CONCRETE (BY OTHERS) OR POWERS WEDGE-BOLT+ 3/8" Ø 2-1/8" GRADE 2 MIN INTO 3,000 PSI NON-CRACKED CONCRETE INSTALL ALL CONCRETE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.
- ALL FASTENERS INTO METAL SUBSTRATES TO BE 5/16"Ø ELCO DRILL-FLEX UNLESS NOTED OTHERWISE. ALL THRU-BOLTS AT INTERMEDIATE VERTICAL MULLIONS TO BE 1/4" DIA THRU-BOLTS WITH FENDER WASHERS AND NUT AS SHOWN HEREIN. FASTENERS SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTION J.3.1 BY THE ALUMINUM ASSOCIATION, INC., & ANY APPLICABLE FEDERAL, STATE, AND/OR LOCAL CODES.
- ALL EXTRUSIONS SHALL BE 6063-T6 MIN ALLOY AND TEMPER, MANUFACTURED BY LA FINESTRA LC.
- GLAZING ILLUSTRATED HEREIN UTILIZES SENTRYGLAS INTERLAYER BY KURARAY AMERICA INC. (NOA# 14-0916.11)
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- ENGINEER SEAL AFFIXED HERE TO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
- SAFEGUARDS MUST BE OBSERVED (NOT IN THIS CERTIFICATION)
- THIS DOCUMENT DOES NOT ADDRESS ANY ENERGY EFFICIENCY RATING
- PRODUCT SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER SYSTEM CONTAINING THE FOLLOWING:  
 LA FINESTRA, LC  
 DORAL, FLORIDA  
 TAS 201/202/203  
 APPROVED BY FLORIDA BUILDING COMMISSION  
 FLORIDA PRODUCT APPROVAL NUMBER

SHEET INDEX	
# SHEET	DESCRIPTION
1	COVER SHEET
2	GLASS TYPES AND SHAPES
3	WINDOW LOADS
4	ELEVATIONS - ANCHORING
5	ELEVATIONS - ANCHORING
6	SMALL MULLION CHARTS
7-12	DETAILS
13	ELEVATIONS - ANCHORING
14	ELEVATIONS - ANCHORING

SHEET INDEX	
# SHEET	DESCRIPTION
15-17	LARGE MULLION CHARTS
18-23	DETAILS
24	ELEVATIONS - ANCHORING
25-26	UNITIZED MULLION CHARTS
27-28	DETAILS
29-32	PARTS
33	PARTS LIST
34	ASSEMBLY DIAGRAMS
34	TOTAL



FRANK L. BENNARDO, P.E.  
PE# 0046549

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 P: (954) 354-0660 F: (954) 354-0443  
 E: HELLO@ENGINEERINGEXPRESS.COM  
 ENGINEERINGEXPRESS.COM  
 CERT OF AUTH #9885

- #### TEST REPORTS:
- Static - TAS 202**  
 Hurricane Engineering and Testing, Inc.  
 HETI-08-2140A  
 HETI-08-2141A  
 HETI-15-5108  
 HETI-15-5109  
 HETI-15-5122  
 HETI-15-5123  
 HETI-16-5030  
 HETI-16-5032  
 HETI-16-5034  
 HETI-16-5086  
 Fenestration Testing Laboratory, Inc.  
 FTL-3545
- Missile - TAS 201 and 203**  
 Hurricane Engineering and Testing, Inc.  
 HETI-08-2140B  
 HETI-08-2141B  
 HETI-08-2142  
 HETI-15-5109  
 HETI-15-5123  
 HETI-16-5030  
 HETI-16-5033  
 HETI-16-5035  
 HETI-16-5083  
 HETI-16-5087  
 Fenestration Testing Laboratory, Inc.  
 FTL-3545  
 FTL-3546  
 FTL-3547
- Tensile - ASTM E8-15a**  
 Hurricane Engineering and Testing, Inc.  
 HETI-16-T312  
 HETI-16-T313  
 HETI-16-T314  
 HETI-16-T330

**LA FINESTRA, LC**  
 2790 NW 104TH COURT  
 DORAL, FL  
 (305) 599-8093  
 PREGLAZED WINDOW WALL  
 FLORIDA PRODUCT APPROVAL  
 FL18507.1-R2

DRWN	CHKD	DATE
SSQ	FLB	08/31/15
SSQ	FLB	12/18/15
JEM	FLB	08/26/16

REMARKS  
 INIT ISSUE  
 REV1  
 REV2

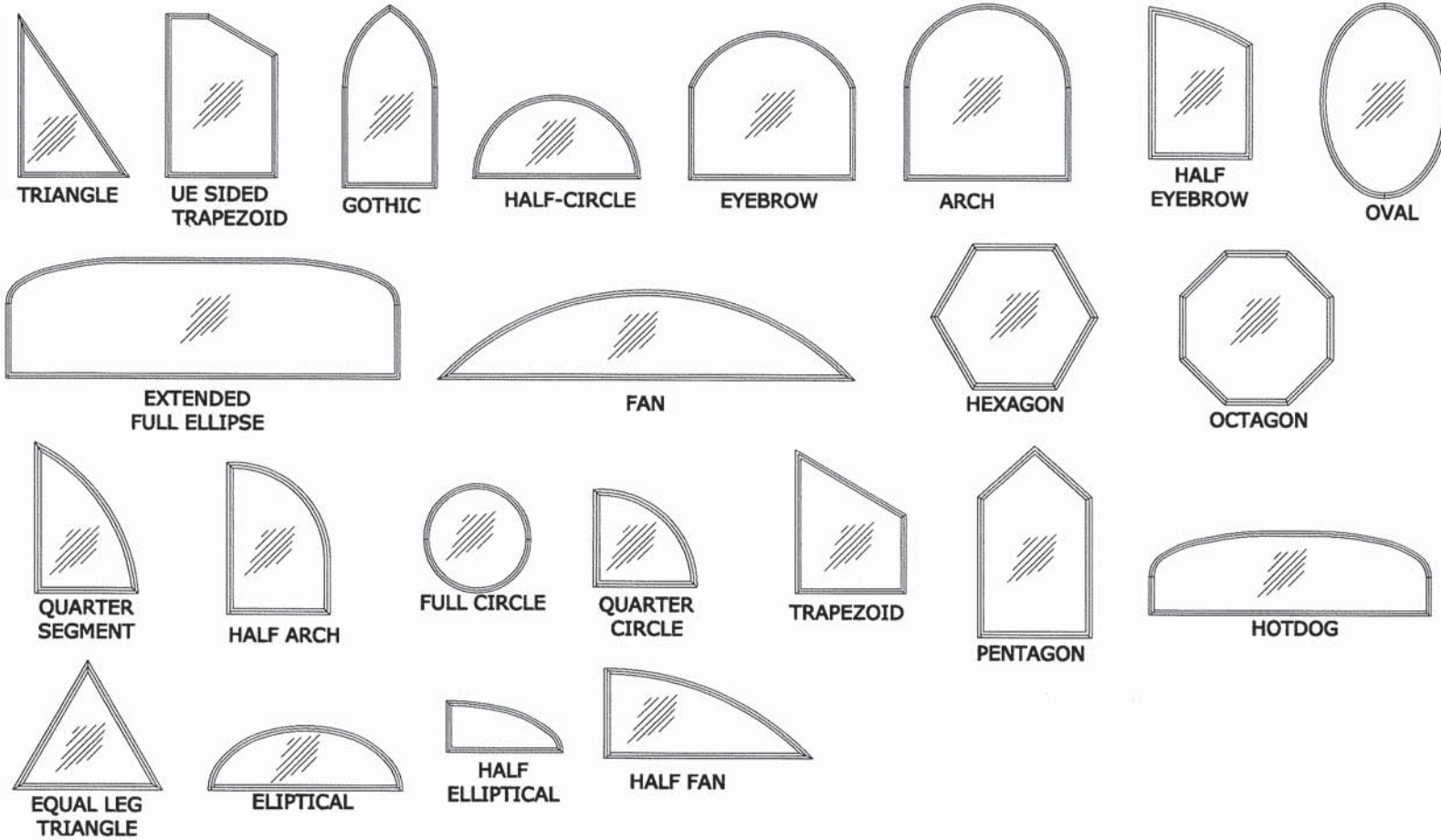
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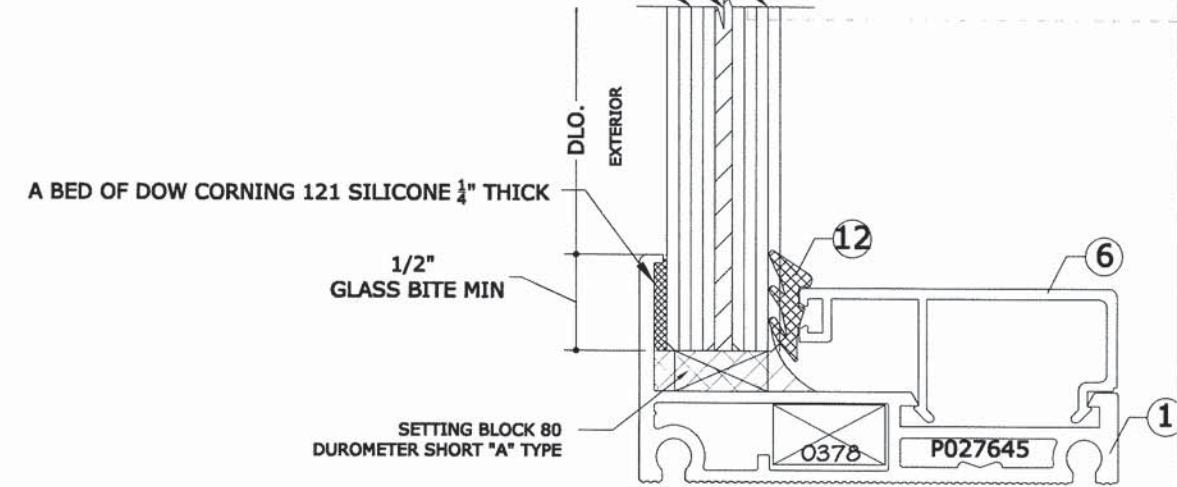
FL #18507.1-R2

**POSSIBLE ARCHITECTURAL SHAPES:**

NO SHAPE MAY EXCEED SIZE OF TESTED RECTANGLE  
TRANSCRIBED AROUND SHAPE.

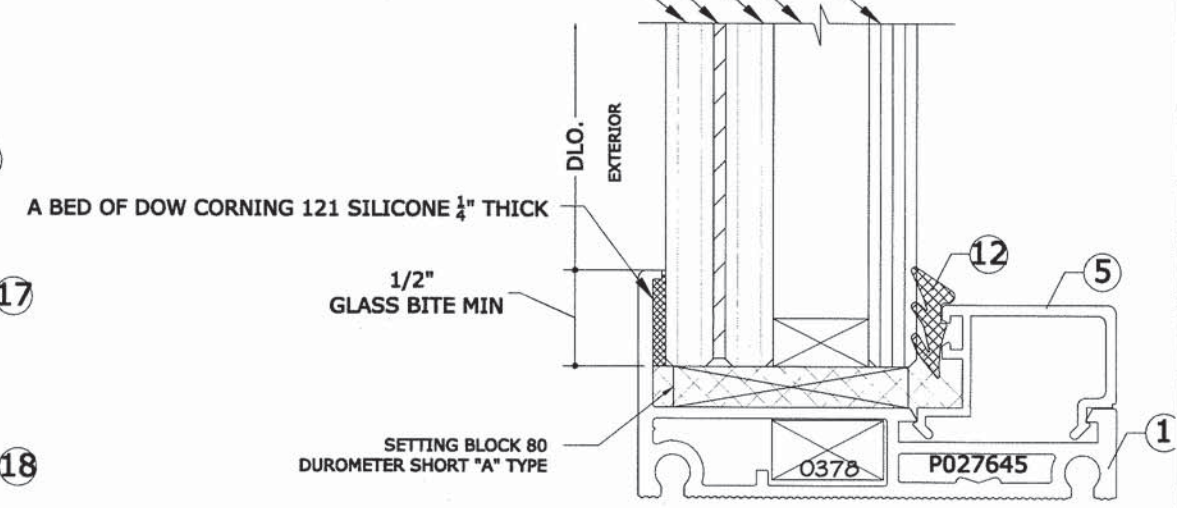


1/4" HEAT STRENGTHENED GLASS  
.090 SENTRYGLAS INTERLAYER BY DUPONT  
1/4" HEAT STRENGTHENED GLASS



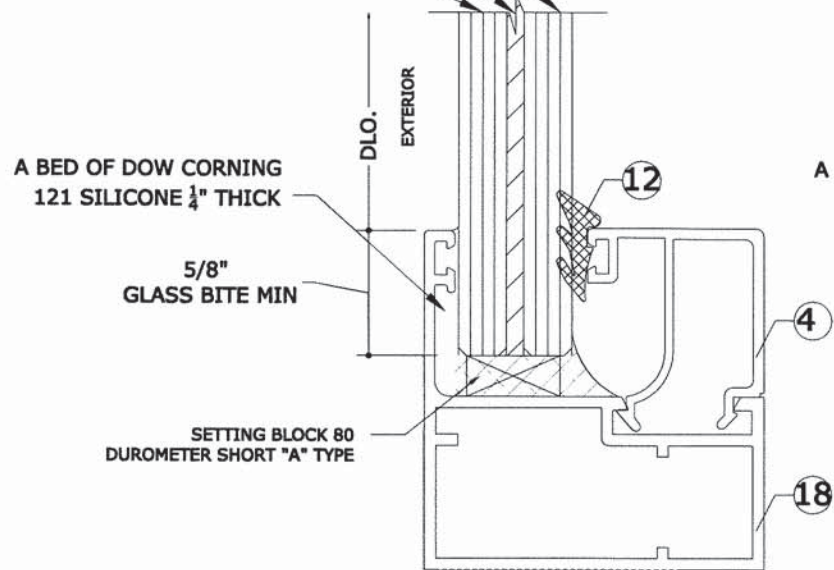
**GLASS TYPE A**  
1'-0" = 1'-0"

1/4" TEMPERED GLASS  
1/2" AIR SPACE  
1/4" HEAT STRENGTHENED GLASS  
.090 SENTRYGLAS INTERLAYER BY DUPONT  
1/4" HEAT STRENGTHENED GLASS



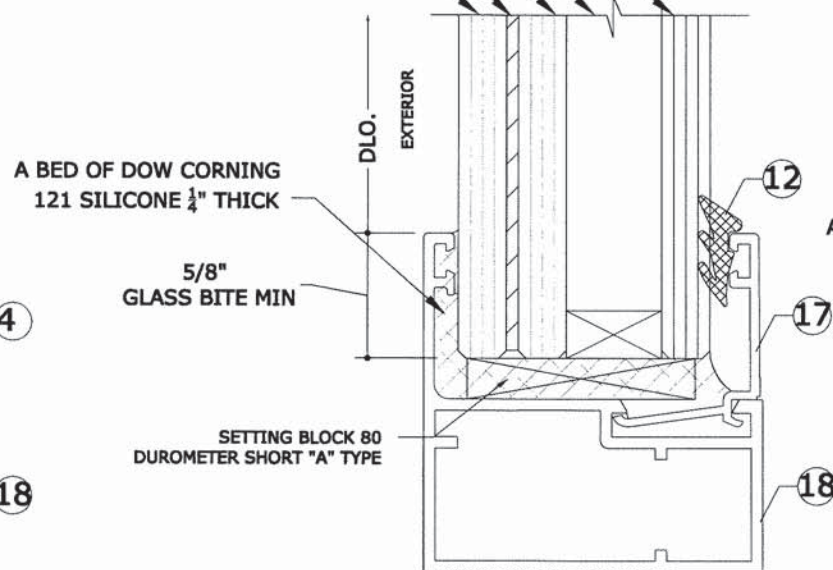
**GLASS TYPE B**  
1'-0" = 1'-0"

1/4" HEAT STRENGTHENED GLASS  
.090 SENTRYGLAS INTERLAYER BY DUPONT  
1/4" HEAT STRENGTHENED GLASS



**GLASS TYPE A**  
1'-0" = 1'-0"

1/4" TEMPERED GLASS  
1/2" AIR SPACE  
1/4" HEAT STRENGTHENED GLASS  
.090 SENTRYGLAS INTERLAYER BY DUPONT  
1/4" HEAT STRENGTHENED GLASS



**GLASS TYPE B**  
1'-0" = 1'-0"



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REMARKS  
INIT ISSUE  
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REV2

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joem  
08/26/2016 - 8:46pm

WINDOW LOADING			
NOMINAL DIMS		(+).P.S.F.	(-).P.S.F.
WIDTH	HEIGHT		
36"	48"	+120	-140
42"		+120	-140
46"		+110	-130
48.5"		+105	-124
54"		+105	-124
60.25"		+105	-124
62.375"		+105	-124
66"		+105	-124
72"		+105	-124
78"		+105	-124
84"		+105	-124
90"		+105	-124
96"		+105	-124
102"		+105	-124
108"		+105	-124
114"		+105	-124
120"		+90	-101
126"		+90	-101
132"	+90	-101	
138"	+90	-101	
144"	+90	-101	
150"	+90	-100	
156"	+90	-100	

36"	54"	+120	-140
42"		+120	-140
46"		+110	-130
48.5"		+104	-123
54"		+93	-110
60.25"		+93	-110
62.375"		+93	-110
66"		+93	-110
72"		+93	-110
78"		+93	-110
84"		+93	-110
90"		+93	-110
96"		+93	-110
102"		+93	-110
108"		+90	-100
114"		+90	-100
120"		+90	-100
126"		+90	-100
132"	+90	-100	
138"	+90	-100	
144"	+90	-100	
150"	+90	-100	
156"	+90	-100	

WINDOW LOADING			
NOMINAL DIMS		(+).P.S.F.	(-).P.S.F.
WIDTH	HEIGHT		
36"	60"	+120	-140
42"		+120	-140
46"		+110	-130
48.5"		+104	-123
54"		+93	-110
60.25"		+90	-100
62.375"		+90	-100
66"		+90	-100
72"		+90	-100
78"		+90	-100
84"		+90	-100
90"		+90	-100
96"		+90	-100
102"		+90	-100
108"		+90	-100
114"		+90	-100
120"		+90	-100
126"		+90	-100
132"	+90	-100	
138"	+90	-100	
144"	+90	-100	

36"	66"	+120	-140
42"		+120	-140
46"		+110	-130
48.5"		+104	-123
54"		+93	-110
60.25"		+90	-100
62.375"		+86	-96
66"		+82	-91
72"		+82	-91
78"		+82	-91
84"		+82	-91
90"		+82	-91
96"		+82	-91
102"		+82	-91
108"		+82	-91
114"		+82	-91
120"		+82	-91
126"		+82	-91

36"	72"	+120	-140
42"		+120	-140
46"		+110	-130
48.5"		+104	-123
54"		+93	-110
60.25"		+90	-100
62.375"		+86	-96
66"		+82	-91
72"		+75	-83
78"		+75	-83
84"		+75	-83
90"		+75	-83
96"		+75	-83
102"		+75	-83
108"		+75	-83
114"		+75	-83
120"		+75	-83

WINDOW LOADING			
NOMINAL DIMS		(+).P.S.F.	(-).P.S.F.
WIDTH	HEIGHT		
36"	78"	+120	-140
42"		+120	-140
46"		+110	-130
48.5"		+104	-123
54"		+93	-110
60.25"		+90	-100
62.375"		+86	-96
66"		+82	-91
72"		+75	-83
78"		+69	-77
84"		+69	-77
90"		+69	-77
96"		+69	-77
102"		+69	-77
108"		+69	-77

36"	84"	+120	-140
42"		+120	-140
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48.5"		+104	-123
54"		+93	-110
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66"		+82	-91
72"		+75	-83
78"		+69	-77
84"		+64	-71
90"		+64	-71
96"		+64	-71
102"		+64	-71

36"	90"	+120	-140
42"		+120	-140
46"		+110	-130
48.5"		+104	-123
54"		+93	-110
60.25"		+90	-100
62.375"		+86	-96
66"		+82	-91
72"		+75	-83
78"		+69	-77
84"		+64	-71
90"		+60	-66
96"		+60	-66

36"	96"	+120	-140
42"		+120	-140
46"		+110	-130
48.5"		+104	-123
54"		+93	-110
60.25"		+90	-100
62.375"		+86	-96
66"		+82	-91
72"		+75	-83
78"		+69	-77
84"		+64	-71
90"		+60	-66

WINDOW LOADING			
NOMINAL DIMS		(+).P.S.F.	(-).P.S.F.
WIDTH	HEIGHT		
36"	102"	+120	-140
42"		+120	-140
46"		+110	-130
48.5"		+104	-123
54"		+93	-110
60.25"		+90	-100
62.375"		+86	-96
66"		+82	-91
72"		+75	-83
78"		+69	-77
84"		+64	-71

36"	108"	+120	-140
42"		+120	-140
46"		+110	-130
48.5"		+104	-123
54"		+90	-100
60.25"		+90	-100
62.375"		+86	-96
66"		+82	-91
72"		+75	-83
78"		+69	-77

36"	114"	+120	-140
42"		+120	-140
46"		+110	-130
48.5"		+90	-100
54"		+90	-100
60.25"		+90	-100
62.375"		+86	-96
66"		+82	-91
72"		+75	-83

36"	120"	+120	-140
42"		+119	-140
46"		+110	-130
48.5"		+90	-100
54"		+90	-100
60.25"		+90	-100
62.375"		+86	-96
66"		+82	-91
72"		+75	-83

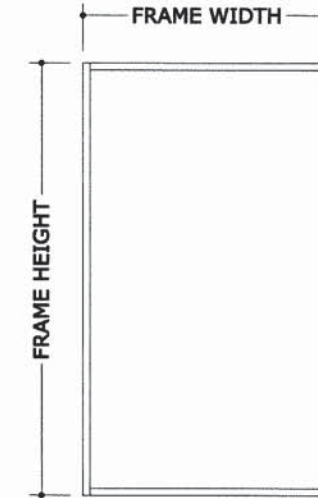
36"	122.375"	+120	-140
42"		+114	-135
46"		+90	-105
48.5"		+90	-100
54"		+90	-100
60.25"		+90	-100
62.375"		+86	-96
66"		+82	-91

36"	126"	+120	-140
42"		+107	-127
46"		+90	-105
48.5"		+90	-100
54"		+90	-100
60.25"		+90	-100
62.375"		+86	-96
66"		+82	-91

WINDOW LOADING			
NOMINAL DIMS		(+).P.S.F.	(-).P.S.F.
WIDTH	HEIGHT		
36"	132"	+113	-133
42"		+90	-110
46"		+90	-105
48.5"		+90	-100
54"		+90	-100
60.25"		+90	-100
62.375"		+86	-96

36"	138"	+103	-122
42"		+90	-110
46"		+90	-105
48.5"		+90	-100
54"		+90	-100
60.25"		+90	-100
62.375"		+86	-96

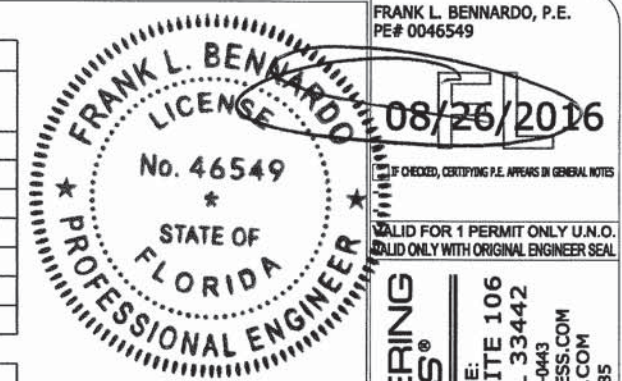
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42"		+90	-110
46"		+90	-105
48.5"		+90	-100
54"		+90	-100
60.25"		+90	-100



NOTE: TO DETERMINE ALLOWABLE LOADS FOR FIX WINDOWS ONLY, SEE CHARTS THIS PAGE.  
FOR MULLED WINDOWS USE THE LOWEST PRESSURE OF WINDOW CHART AND RESPECTIVE MULLION CAPACITY CHART.  
GLASS DESIGN PER ASTM E1300-12

NOTE: WATER INFILTRATION 20 Psf. PER ASTM E331-00

NOTE: CHARTS ARE APPLICABLE FOR GLASS TYPES "A" AND "B"



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PE# 0046549

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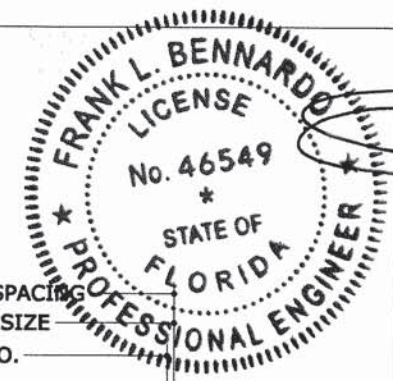
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# P027645 FRAME - SMALL MULLION



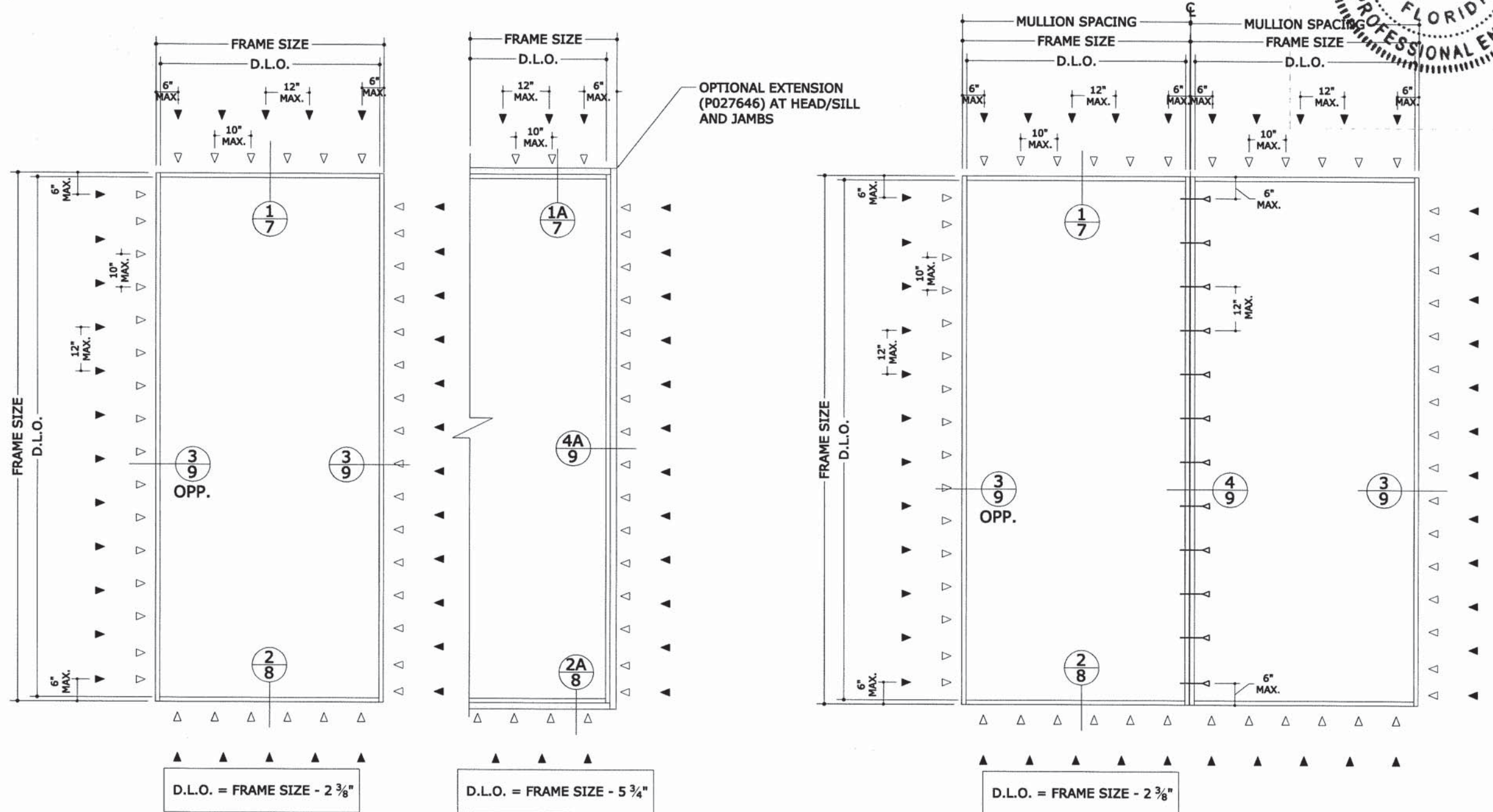
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## ANCHOR TYPES

- ▲ 1/4" THRU-BOLT WITH FENDER WASHERS AND NUT
- ▼ 5/16" ULTRACON BY ELCO (Fu=177 KSI Fy= 155 KSI) WITH 1 3/4" MIN. EMBEDMENT INTO 3000 PSI. CONCRETE MIN. AND 2 3/16" MIN. EDGE DISTANCE.
- ▼ 1/4-20 SMS SCREWS GRADE 5 MIN. (Fu= 120 KSI Fy= 155 KSI) WITH 5 PINCHES MIN. PASS THE THREAD PLANE AND 1" MIN. EDGE DISTANCE INTO 1/8" MIN. THICK ALUMINUM (6063-T5 MIN.) OR 1/8" MIN THICK STEEL (A-36 MIN.)
- ▽ 5/16" ULTRACON BY ELCO (Fu=177 KSI Fy= 155 KSI) INTO 2BY WOOD BUCK (SYP#2 G= 0.55 MIN) WITH 1 1/2" MIN. ENGAGEMENT INTO WOOD AND 1" MIN. EDGE DISTANCE.

## TYPICAL ELEVATIONS

NOTE:  
SIZES ARE THE MAXIMUM ALLOWED UNLESS ADDRESSED SEPARATELY UNDER SITE SPECIFIC ENGINEERING PER FLORIDA BUILDING CODE 2411.3.2.4 1710.3.1

NOTE:  
FOR PRESSURES USING TESTED MULLIONS SEE CHARTS ON SHEET 6

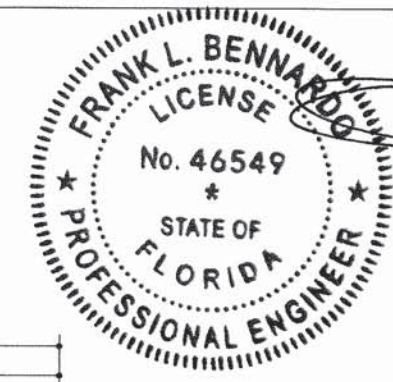
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REV2	JEM	FLB	08/26/16

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# 7013 FRAME - SMALL MULLION

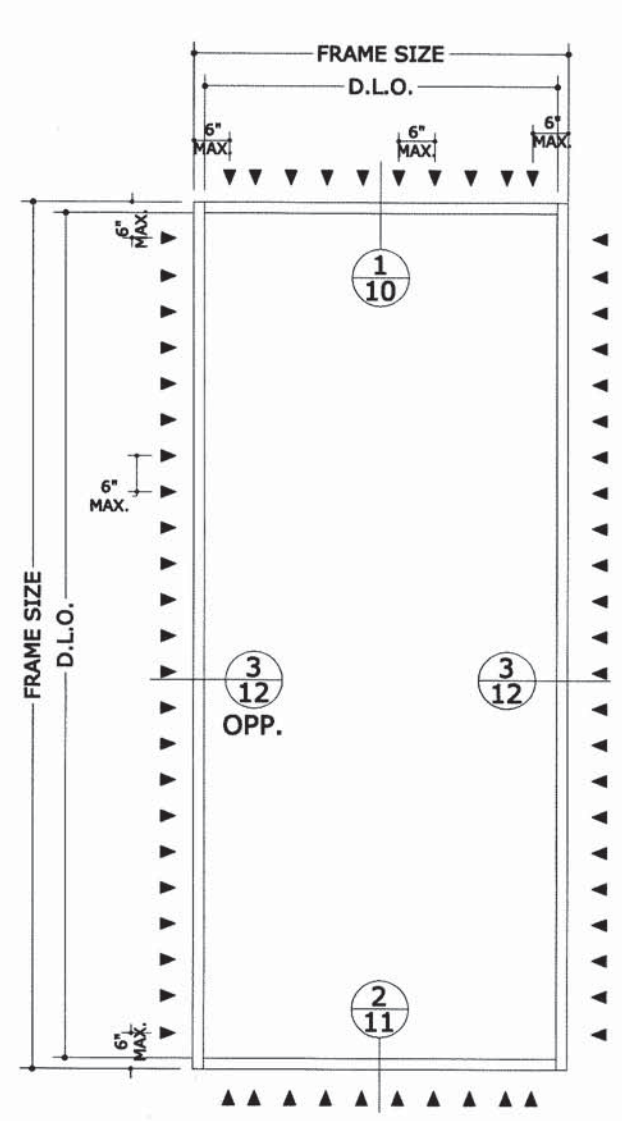


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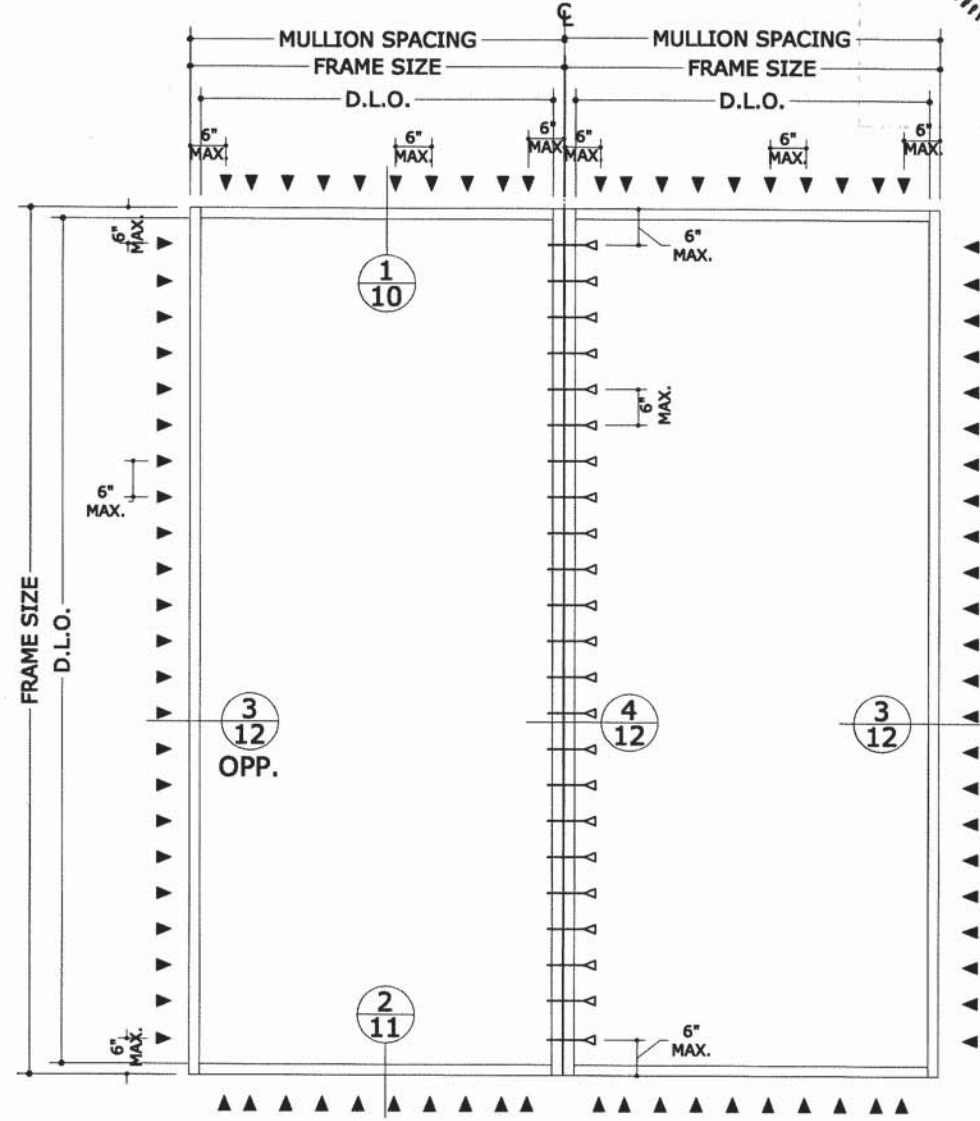
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D.L.O. = FRAME SIZE - 3 5/8"



D.L.O. = FRAME SIZE - 3 5/8"

### ANCHOR TYPES

- 1/4" THRU-BOLT WITH FENDER WASHERS AND NUT
- ▼ 5/16" ULTRACON BY ELCO (Fu=177 KSI Fy= 155 KSI) WITH 1 3/4" MIN. EMBEDMENT INTO 3000 Psi. CONCRETE MIN. AND 2 3/16" MIN. EDGE DISTANCE.
- ▼ 1/4-20 SMS SCREWS GRADE 5 MIN. (Fu= 120 KSI Fy= 155 KSI) WITH 5 PINCHES MIN. PASS THE THREAD PLANE AND 1" MIN. EDGE DISTANCE INTO 1/8" MIN. THICK ALUMINUM (6063-T5 MIN.) OR 1/8" MIN THICK STEEL (A-36 MIN.)
- ▼ 5/16" ULTRACON BY ELCO (Fu=177 KSI Fy= 155 KSI) INTO 2BY WOOD BUCK (SYP#2 G= 0.55 MIN) WITH 1 1/2" MIN. ENGAGEMENT INTO WOOD AND 1" MIN. EDGE DISTANCE.

### TYPICAL ELEVATIONS

NOTE:  
SIZES ARE THE MAXIMUM ALLOWED UNLESS ADDRESSED SEPARATELY UNDER SITE SPECIFIC ENGINEERING PER FLORIDA BUILDING CODE 2411.3.2.4 1710.3.1

NOTE:  
FOR PRESSURES USING TESTED MULLIONS SEE CHARTS ON SHEET 6

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MULLION DESIGN CAPACITY (PSF)		
NOMINAL DIMS		NON-REINF
WIDTH	HEIGHT	(+/-) P.S.F
36"	48"	100
42"		100
48"		100
54"		100
60"		100
66"		100
72"		100
78"		100
84"		100
90"		100
96"		100

MULLION DESIGN CAPACITY (PSF)		
NOMINAL DIMS		NON-REINF
WIDTH	HEIGHT	(+/-) P.S.F
36"	66"	100
42"		100
48"		100
54"		100
60"		94
66"		85
72"		78
78"		72
84"		67
90"		62
96"		58

MULLION DESIGN CAPACITY (PSF)		
NOMINAL DIMS		NON-REINF
WIDTH	HEIGHT	(+/-) P.S.F
36"	84"	89
42"		76
48"		66
54"		59
60"		53
66"		48
72"		44
78"		41
84"		38
90"		35
96"		33

36"	54"	100
42"		100
48"		100
54"		100
60"		100
66"		100
72"		100
78"		100
84"		100
90"		93
96"		87

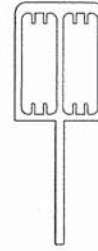
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42"		100
48"		98
54"		87
60"		79
66"		71
72"		65
78"		60
84"		56
90"		52
96"		49

36"	90"	72
42"		62
48"		54
54"		48
60"		43
66"		39
72"		36
78"		33
84"		31
90"		28
96"		27

36"	60"	100
42"		100
48"		100
54"		100
60"		100
66"		100
72"		95
78"		87
84"		81
90"		76
96"		71

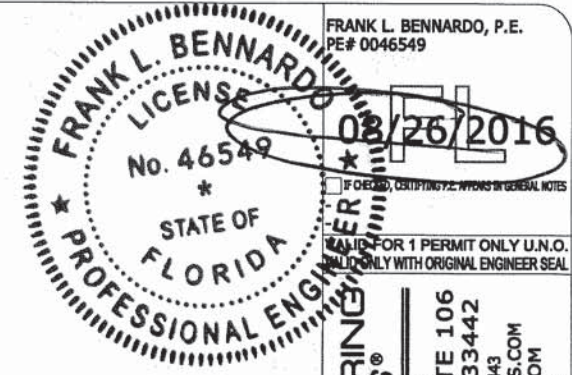
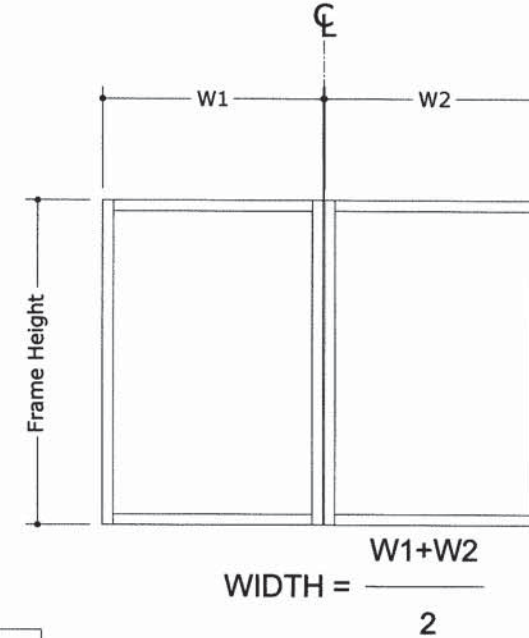
36"	78"	100
42"		95
48"		83
54"		74
60"		66
66"		60
72"		55
78"		51
84"		47
90"		44
96"		41

36"	96"	59
42"		51
48"		44
54"		39
60"		35
66"		32
72"		29
78"		27
84"		25
90"		23
96"		22



P027569  
Non-Reinforced

NOTE: FOR ALLOWABLE PRESSURES THE LOWEST PRESSURE RATING OF MULLION AND FIXED WINDOW SHALL APPLY.



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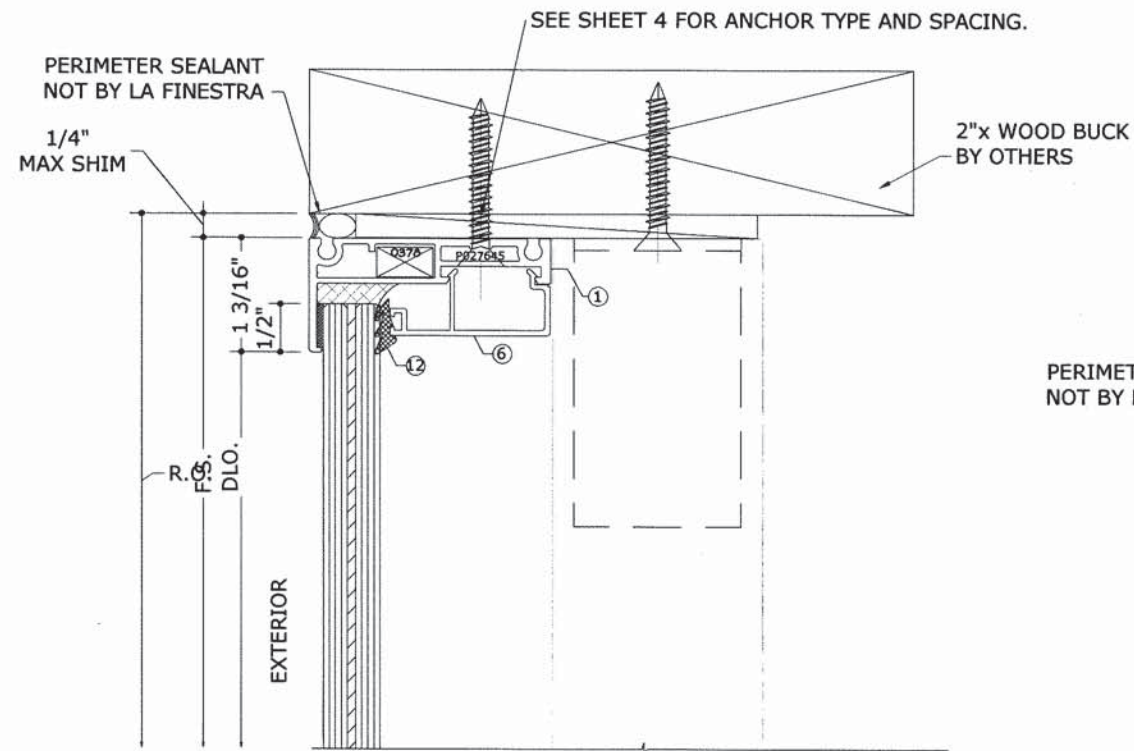
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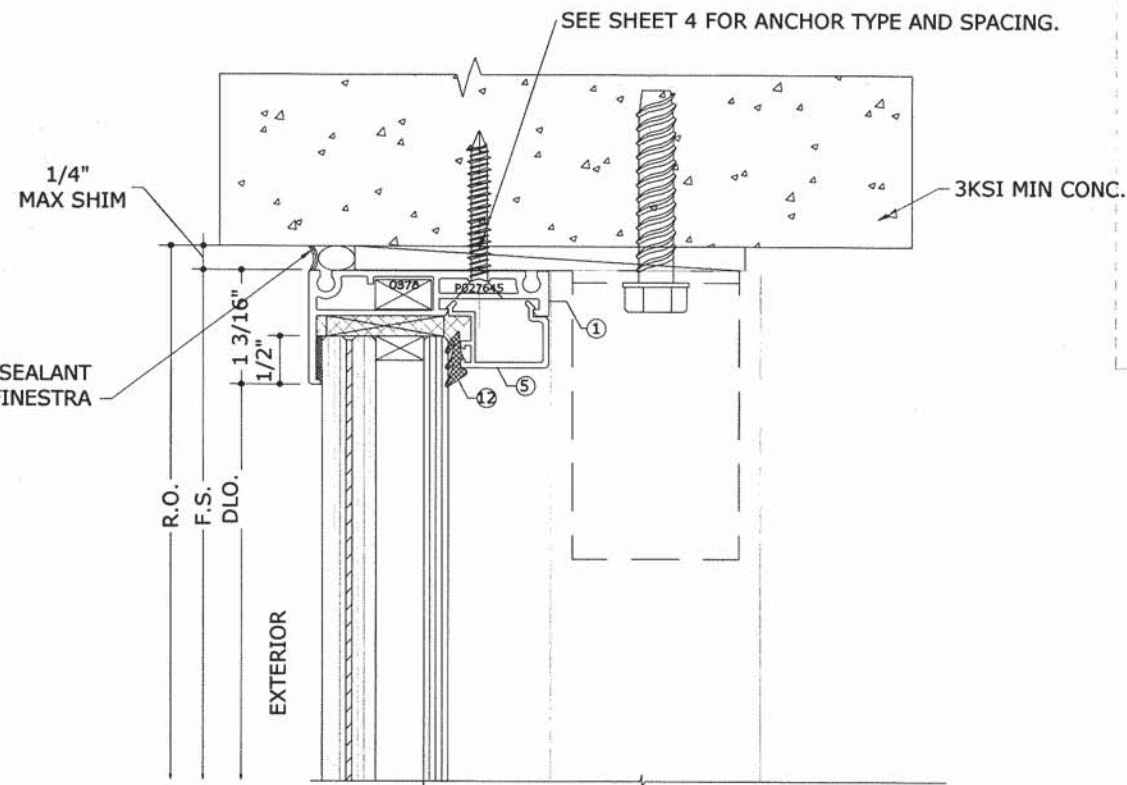
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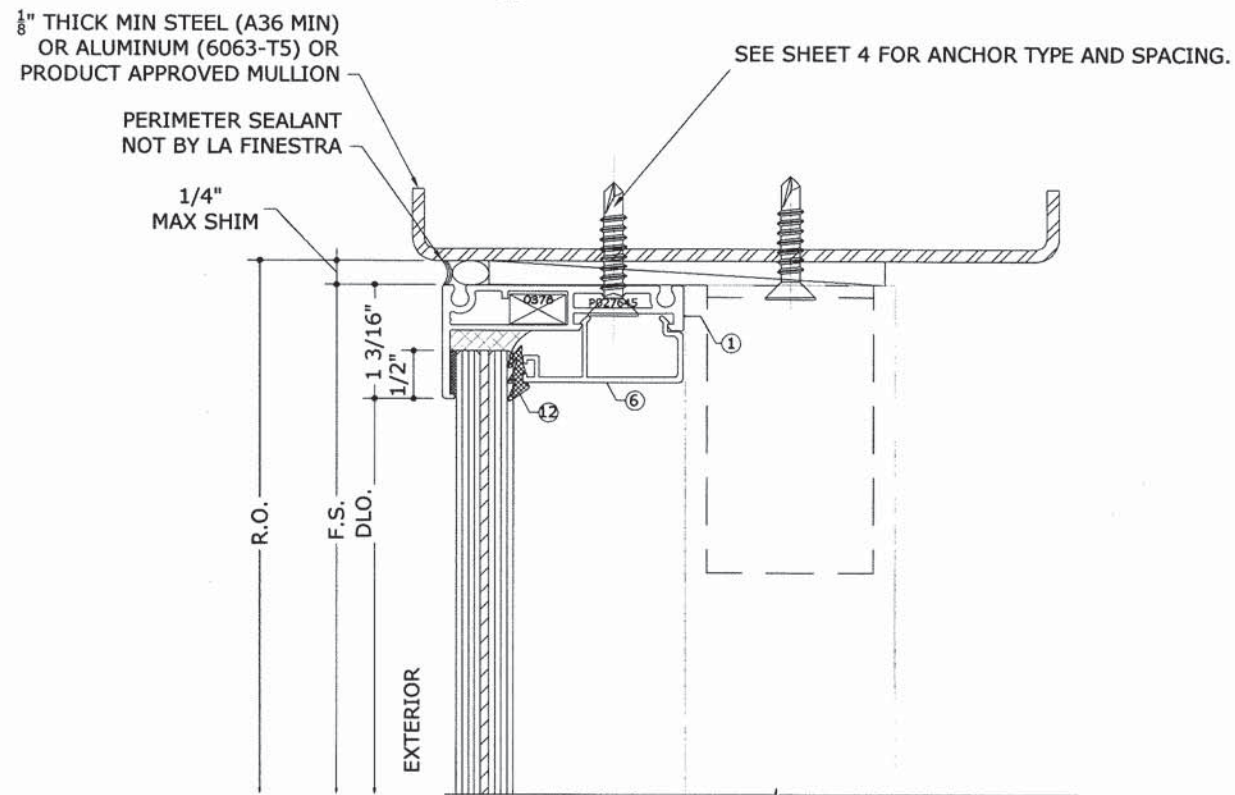
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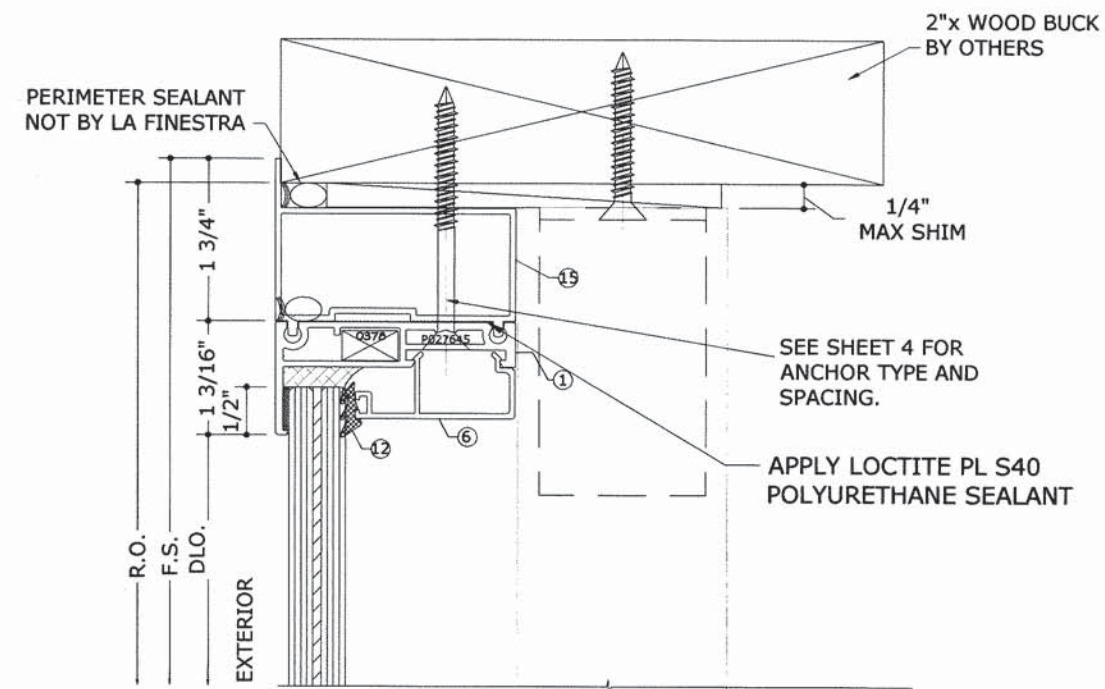
**1** HEADER INTO WOOD  
7 6" = 1'-0"



**1** HEADER INTO CONCRETE  
7 6" = 1'-0"

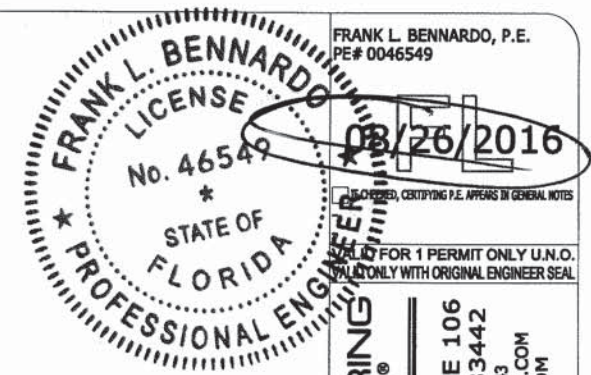


**1** HEADER INTO METAL  
7 6" = 1'-0"



**1A** HEADER INTO WOOD W/ EXTENSION (OPTIONAL)  
7 6" = 1'-0"

NOTE:  
WOOD BUCKS AND METAL STRUCTURES NOT BY LA FINESTRA  
MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND  
TRANSFER THEM TO THE BUILDING STRUCTURE.



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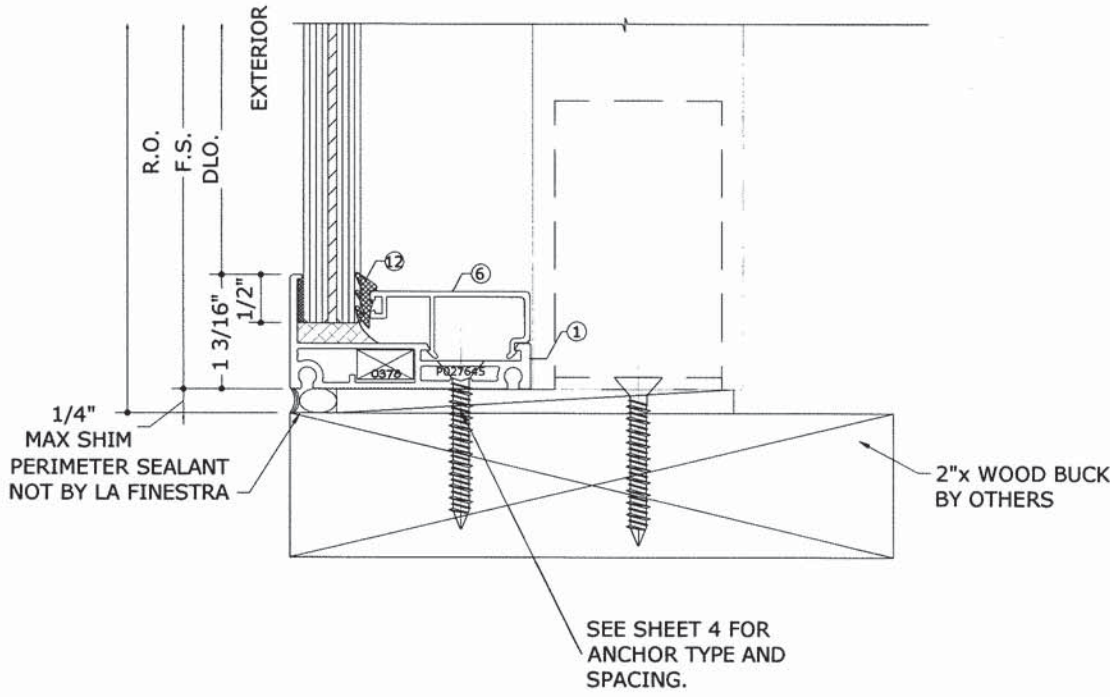
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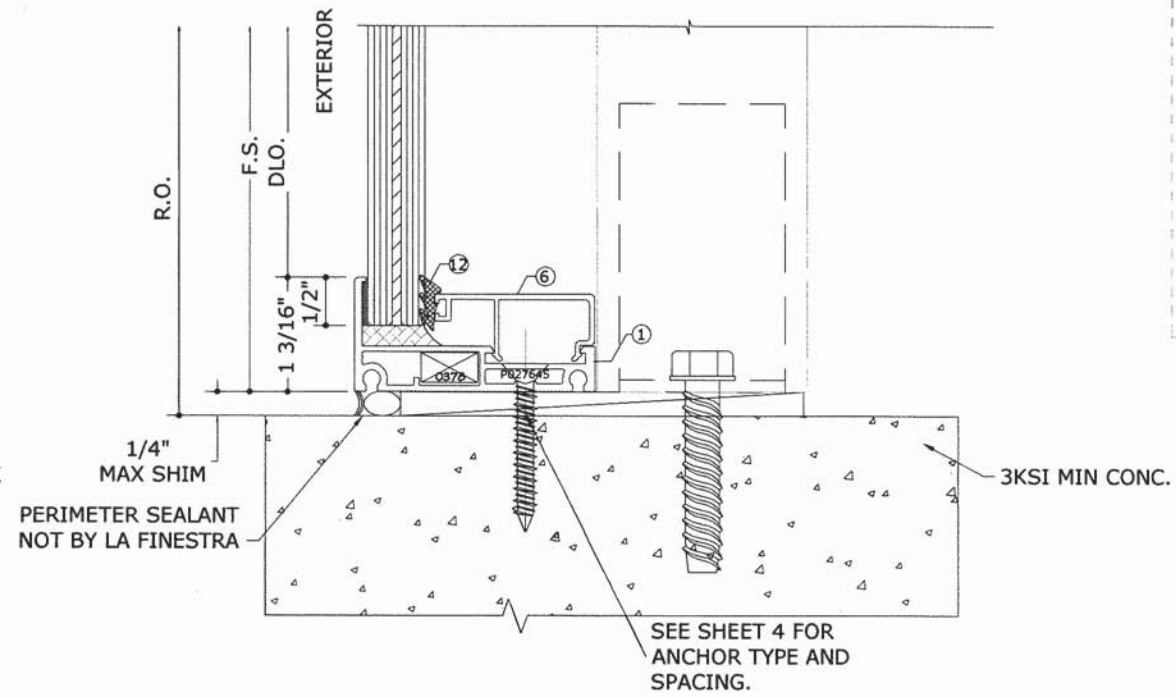
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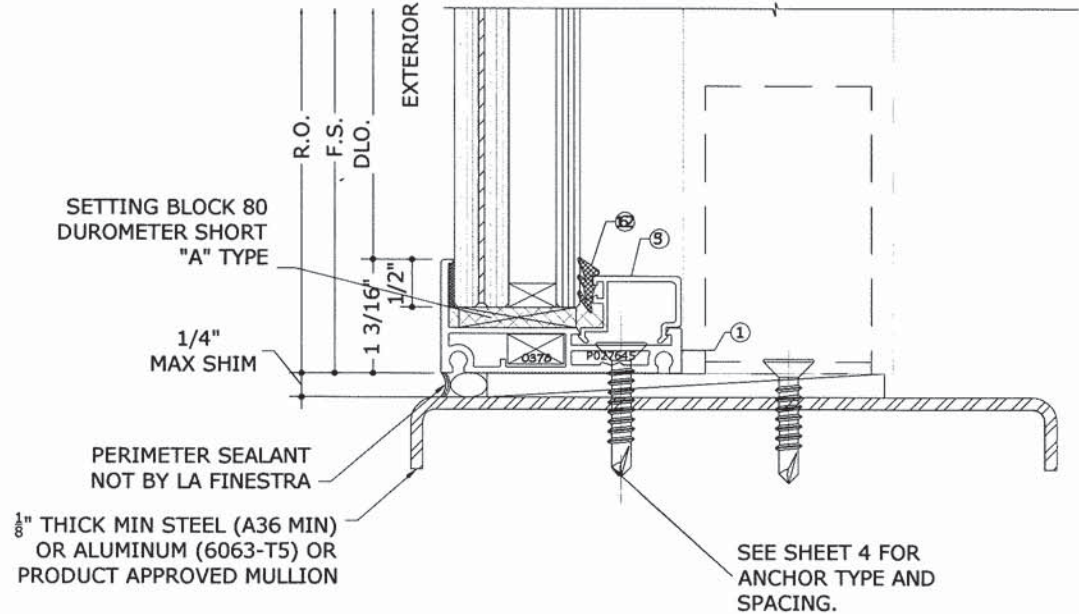
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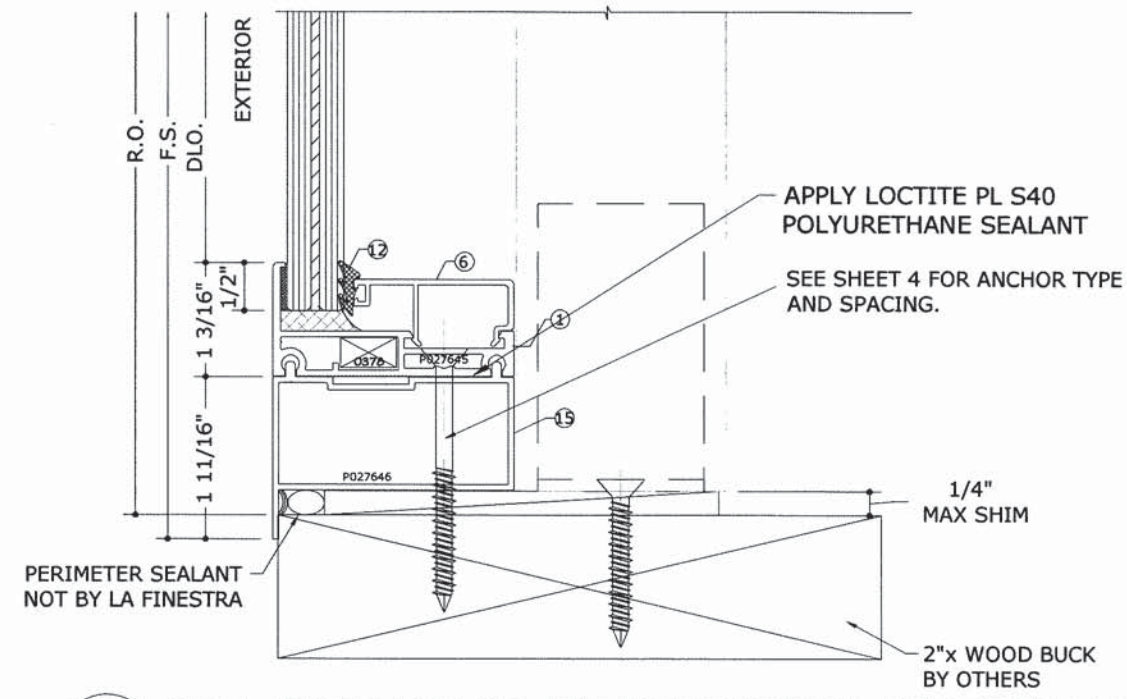
**2** SILL INTO WOOD  
**8** 6" = 1'-0"



**2** SILL INTO CONCRETE  
**8** 6" = 1'-0"

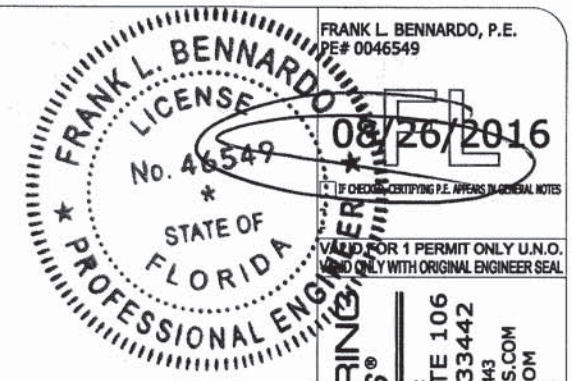


**2** SILL INTO METAL  
**8** 6" = 1'-0"



**2A** SILL INTO WOOD W/ EXTENSION (OPTIONAL)  
**8** 6" = 1'-0"

**NOTE:**  
WOOD BUCKS AND METAL STRUCTURES NOT BY LA FINESTRA MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.



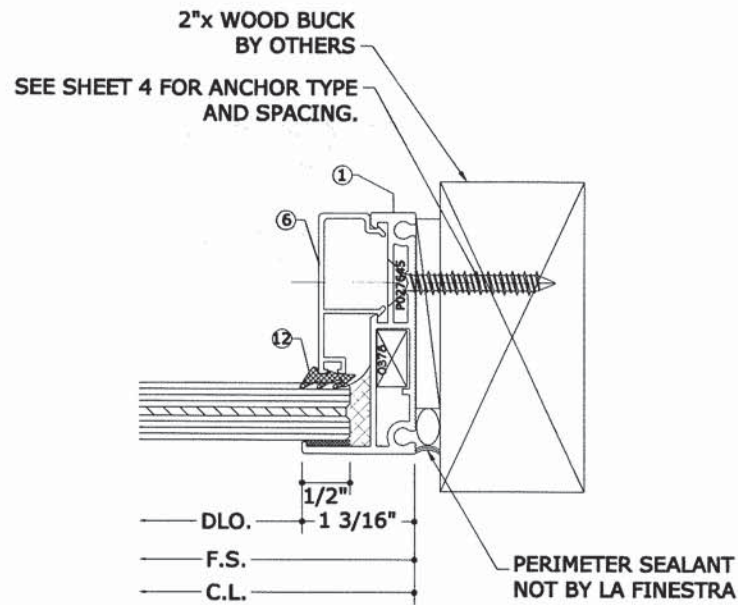
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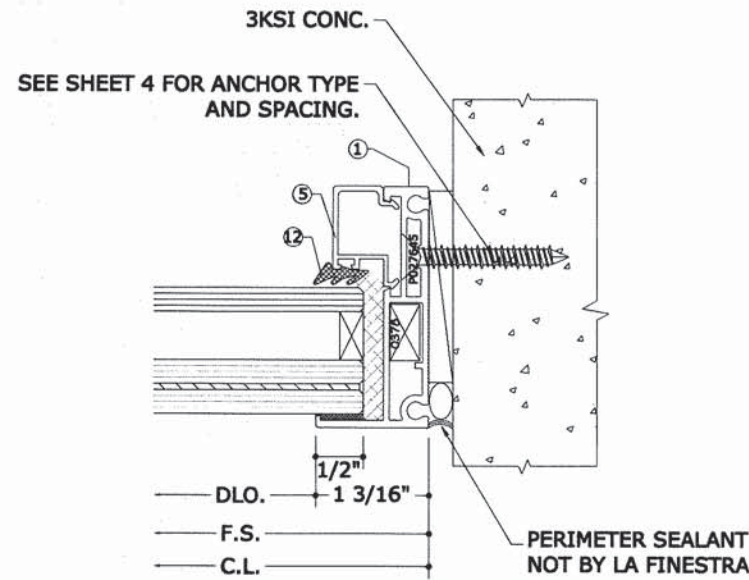
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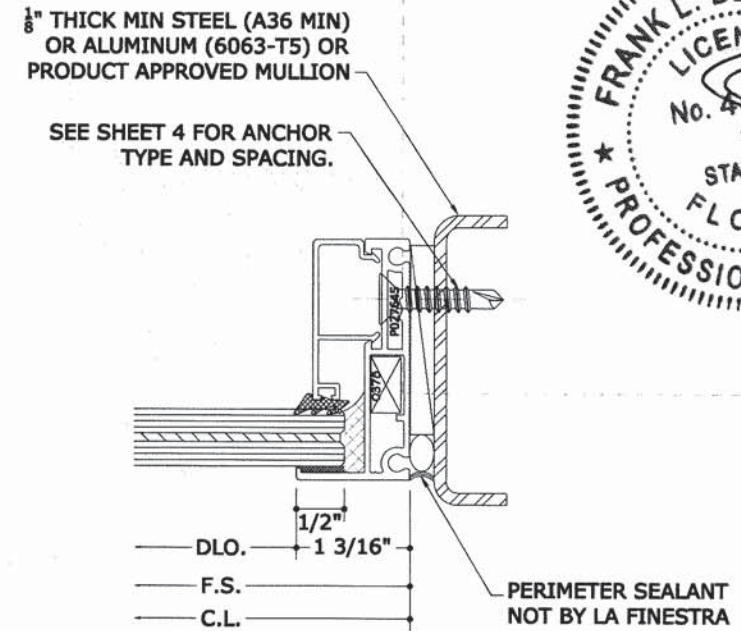
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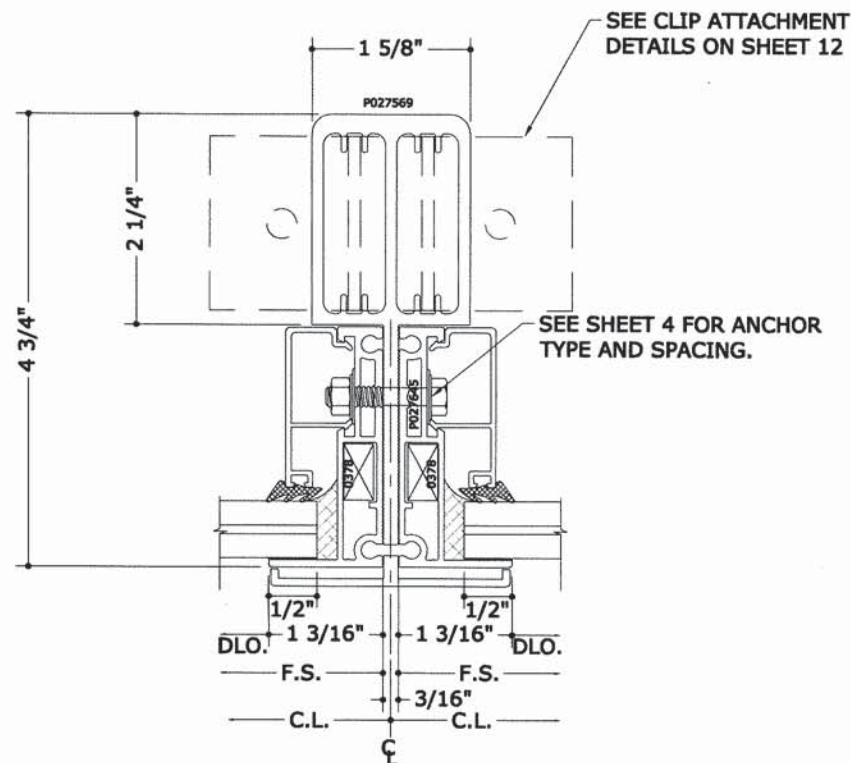
**3** JAMB INTO WOOD  
**9** 6" = 1'-0"



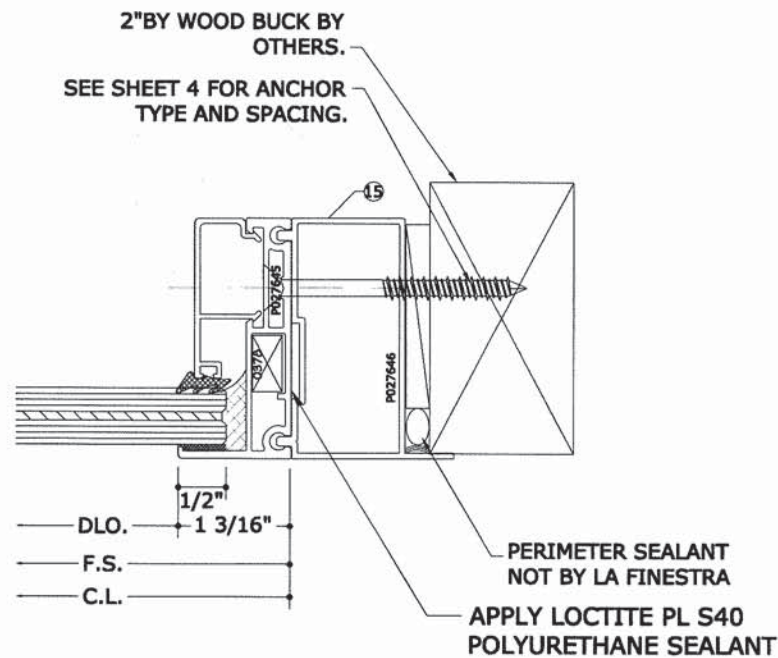
**3** JAMB INTO CONC  
**9** 6" = 1'-0"



**3** JAMB INTO METAL  
**9** 6" = 1'-0"



**4** VERTICAL INTERMEDIATE DETAIL  
**9** 6" = 1'-0"



**4A** JAMB INTO WOOD W/ EXTENSION  
**9** 6" = 1'-0"

**NOTE:**  
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 FLORIDA PRODUCT APPROVAL  
 FL18507.1-R2

DRWN	CHKD	DATE
SSQ	FLB	08/31/15
SSQ	FLB	12/18/15
JEM	FLB	08/28/16

REMARKS  
 INIT ISSUE  
 REV1  
 REV2

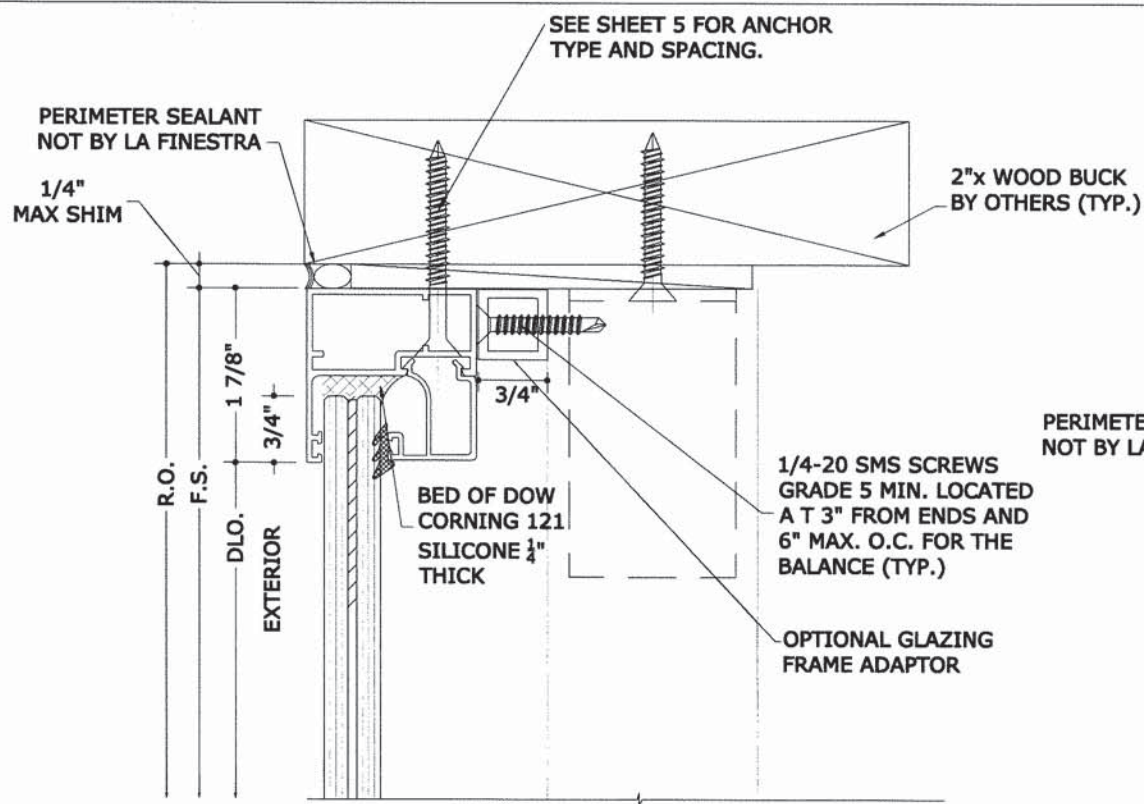
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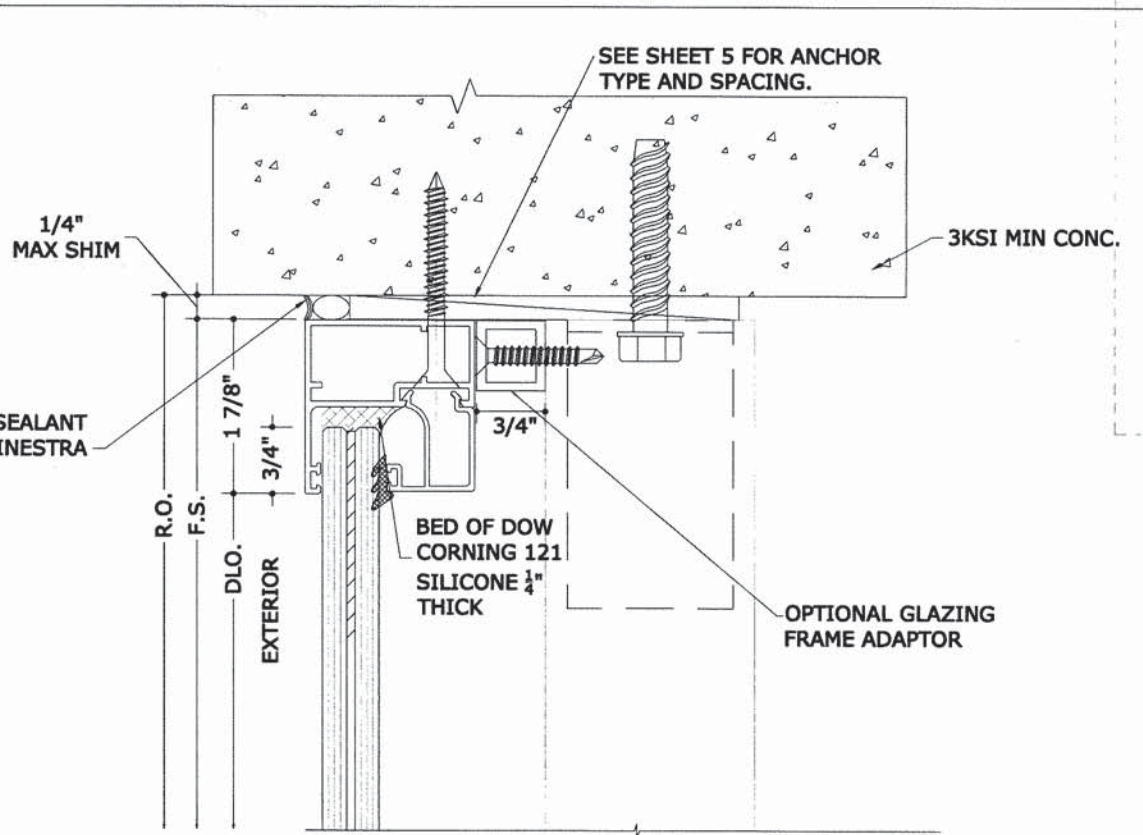
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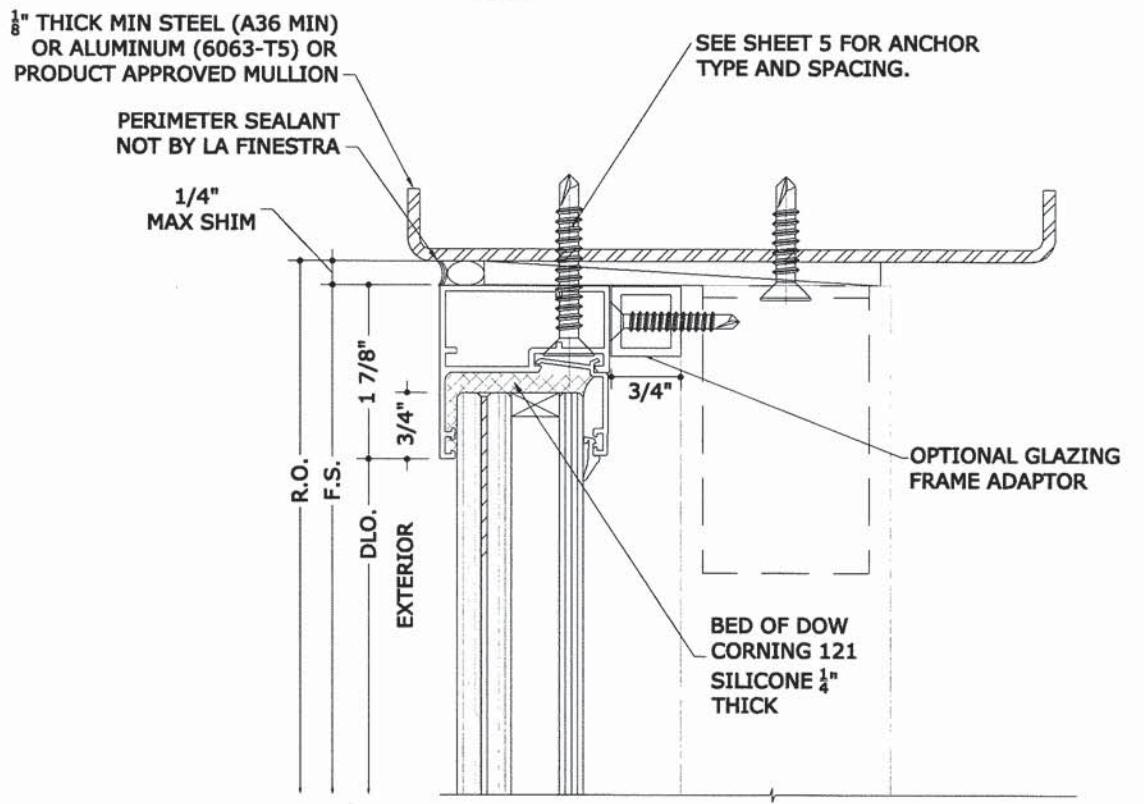
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**1** HEADER INTO WOOD  
**10** 6" = 1'-0"



**1** HEADER INTO CONCRETE  
**10** 6" = 1'-0"



**1** HEADER INTO METAL  
**10** 6" = 1'-0"

FRANK L. BENNARDO, P.E.  
 PE# 0046549  
 LICENSE No. 46549  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
 08/26/2016

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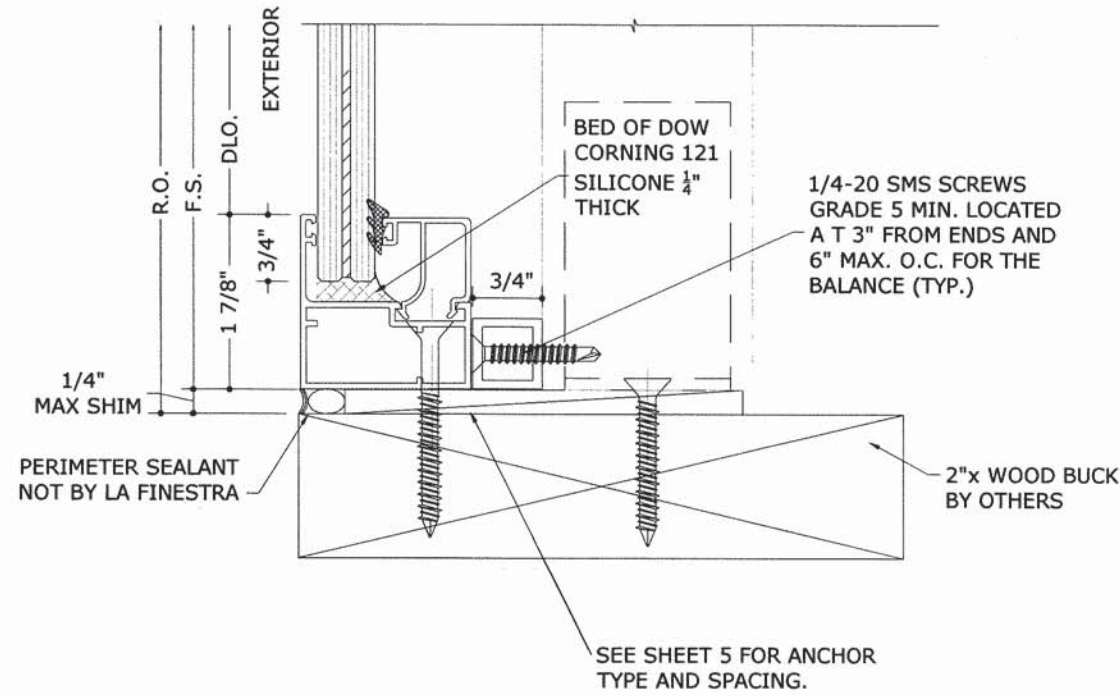
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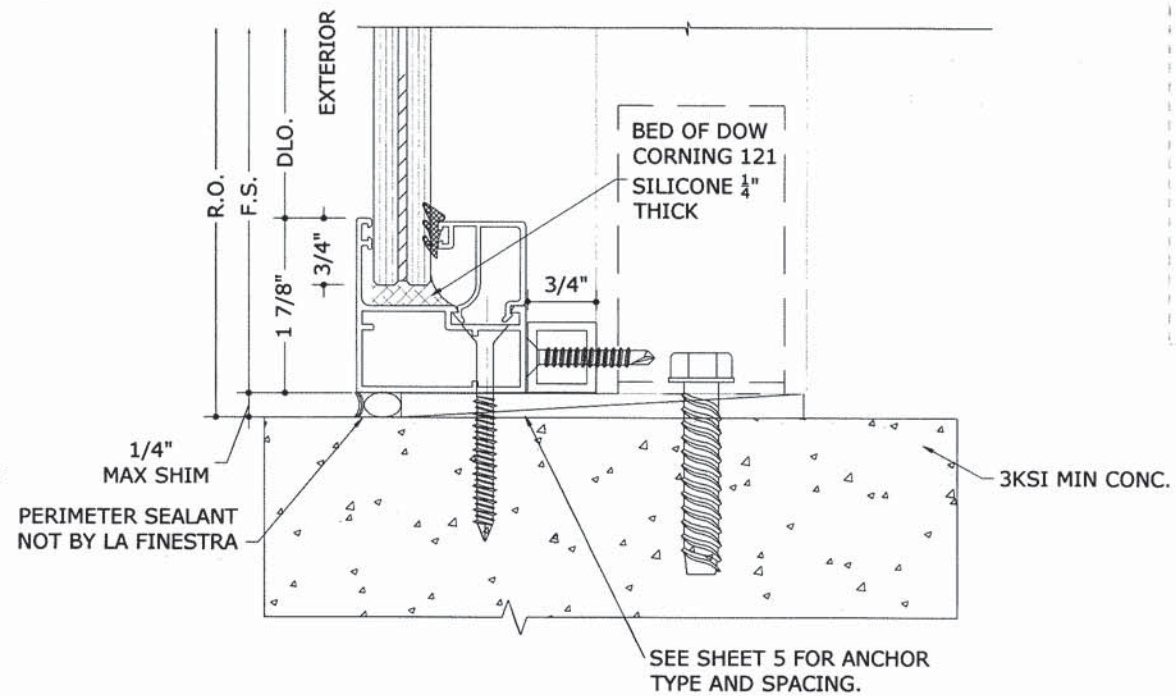
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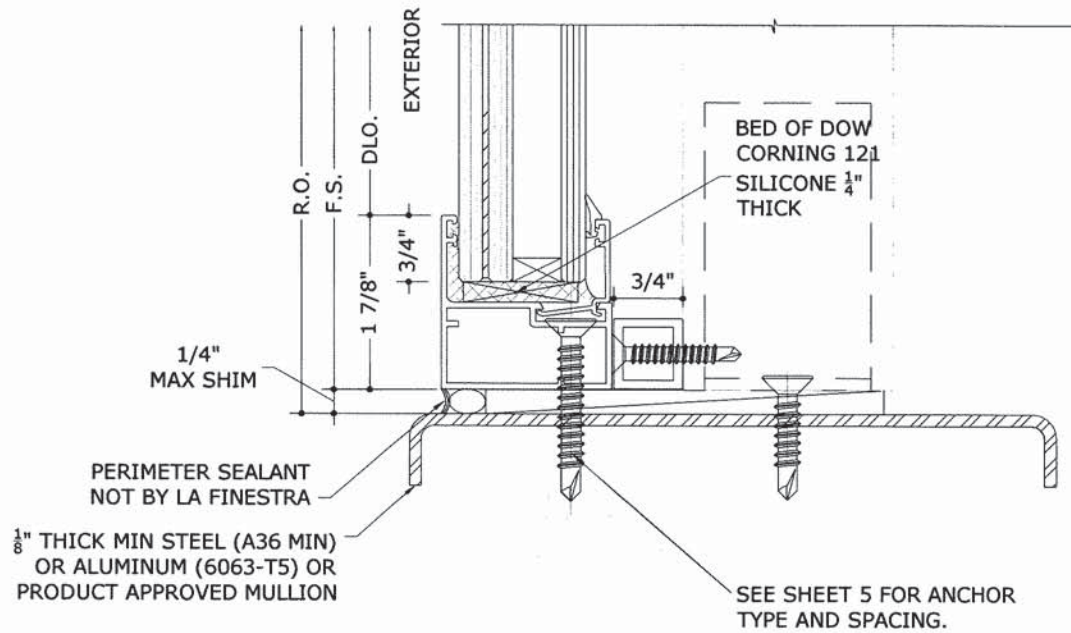
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**2** SILL INTO WOOD  
**11** 6" = 1'-0"

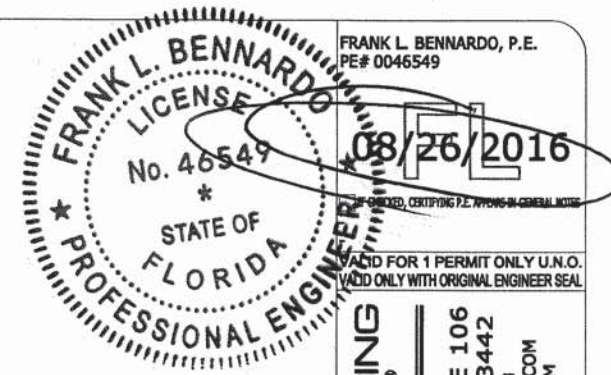


**2** SILL INTO CONCRETE  
**11** 6" = 1'-0"



**2** SILL INTO METAL  
**11** 6" = 1'-0"

**NOTE:**  
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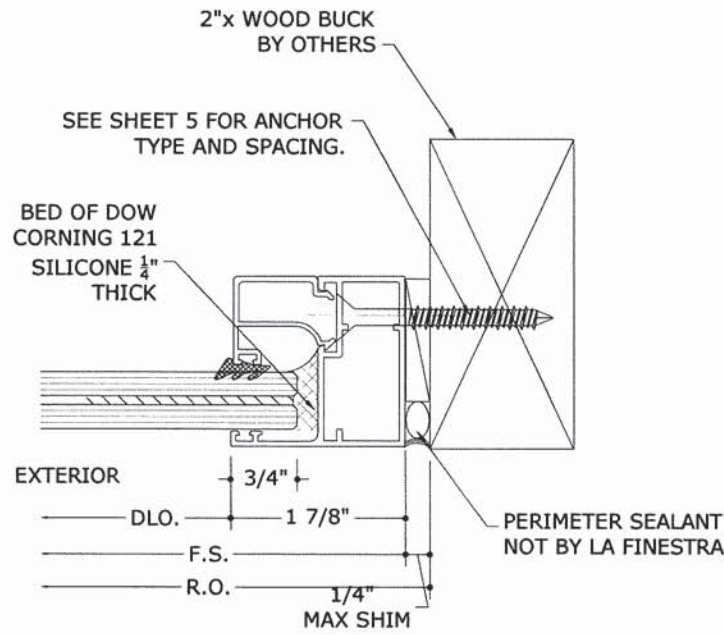
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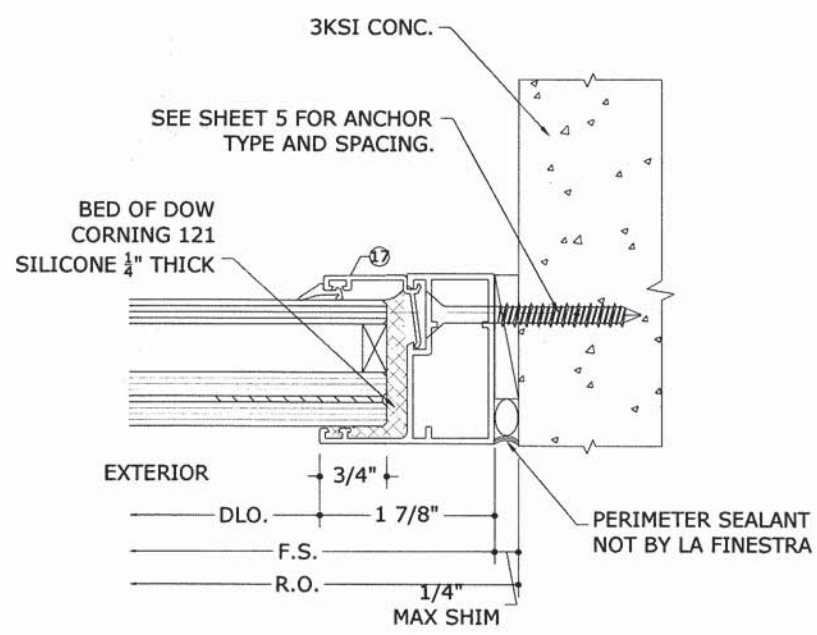
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of 34

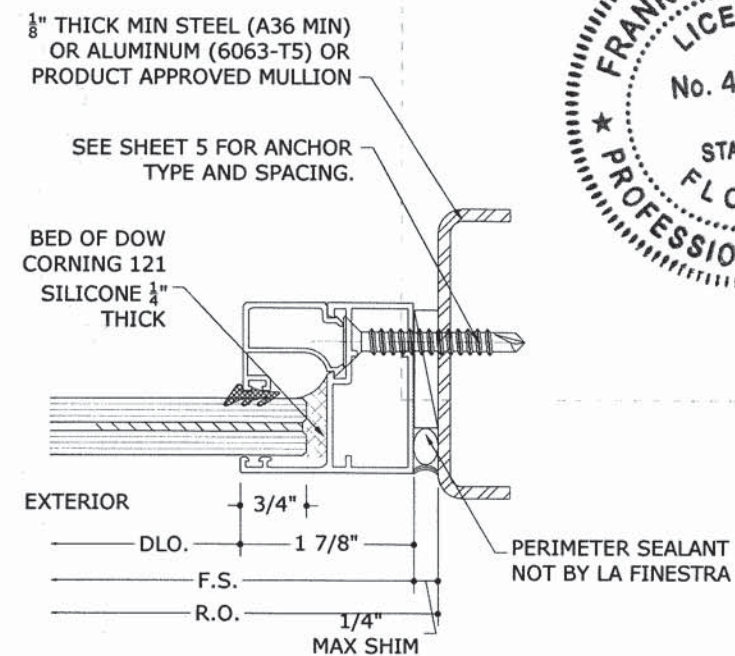




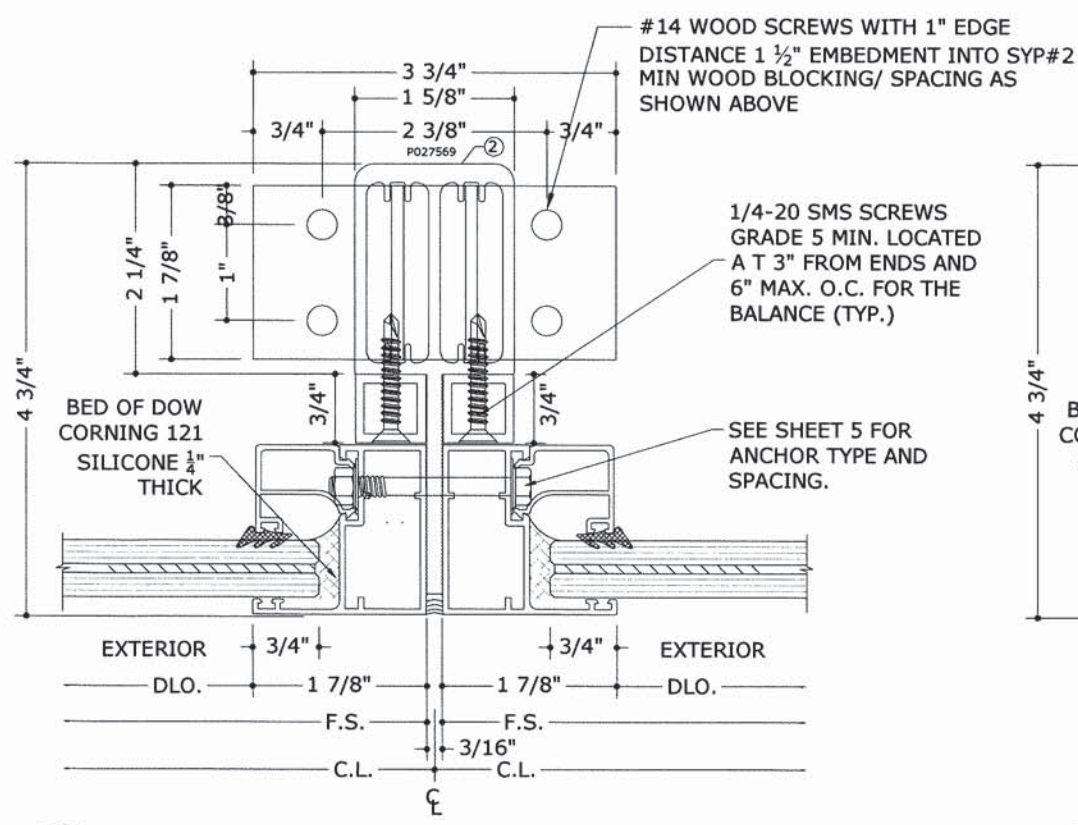
**3 JAMB INTO WOOD**  
 12 6" = 1'-0"



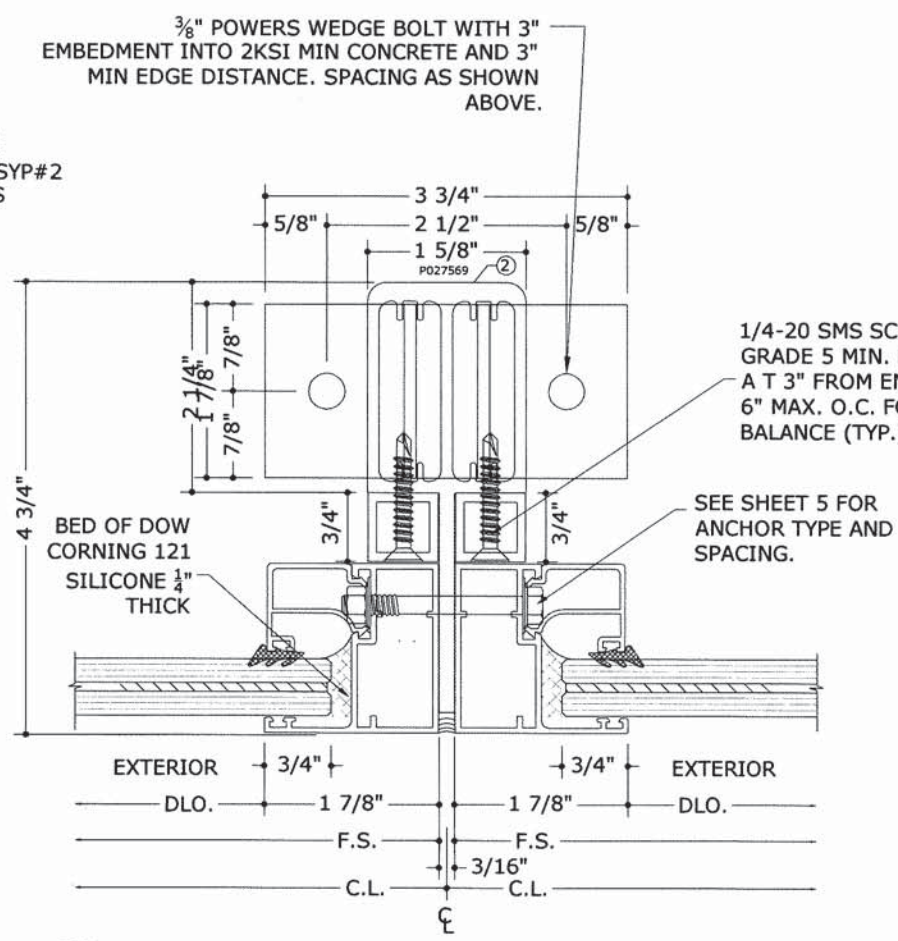
**3 JAMB INTO CONC**  
 12 6" = 1'-0"



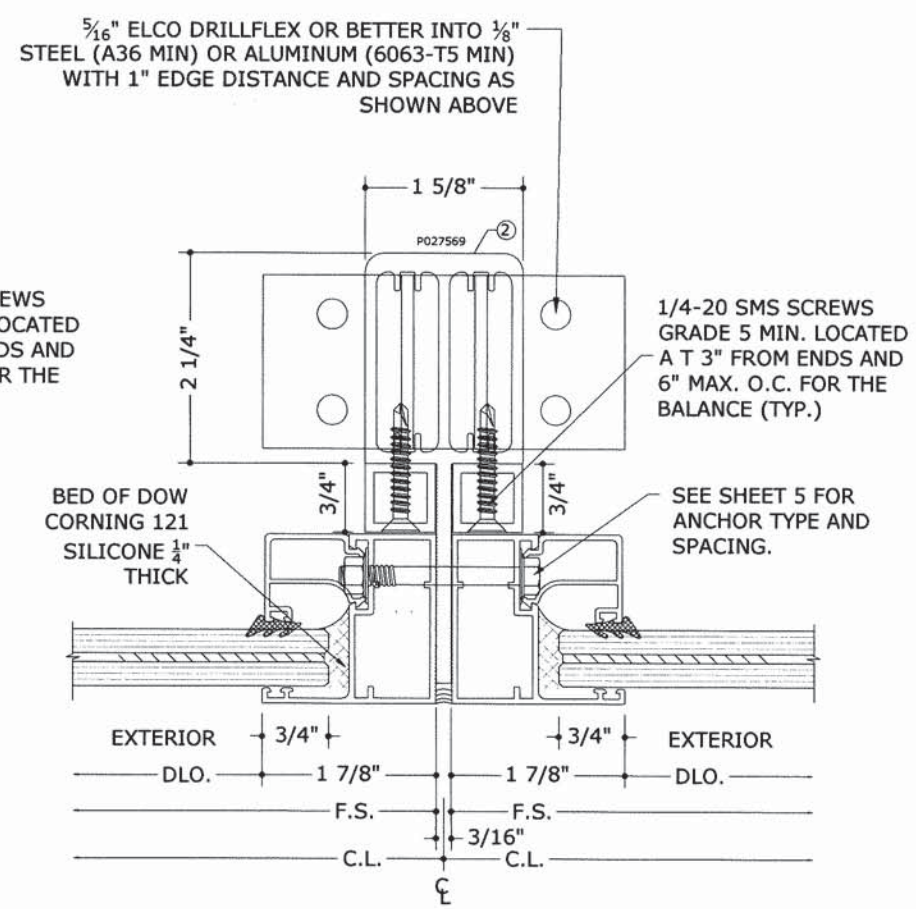
**3 JAMB INTO METAL**  
 12 6" = 1'-0"



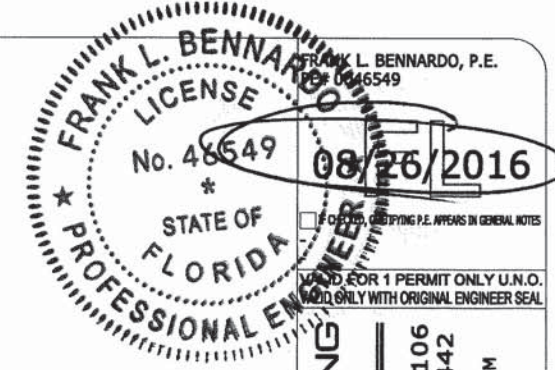
**4 VERTICAL INTERMEDIATE DETAIL**  
 12 6" = 1'-0" WOOD ANCHORING  
 small mull



**4 VERTICAL INTERMEDIATE DETAIL**  
 12 6" = 1'-0" CONC ANCHORING  
 small mull



**4 VERTICAL INTERMEDIATE DETAIL**  
 12 6" = 1'-0" METAL ANCHORING  
 small mull



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DRWN	CHKD	DATE
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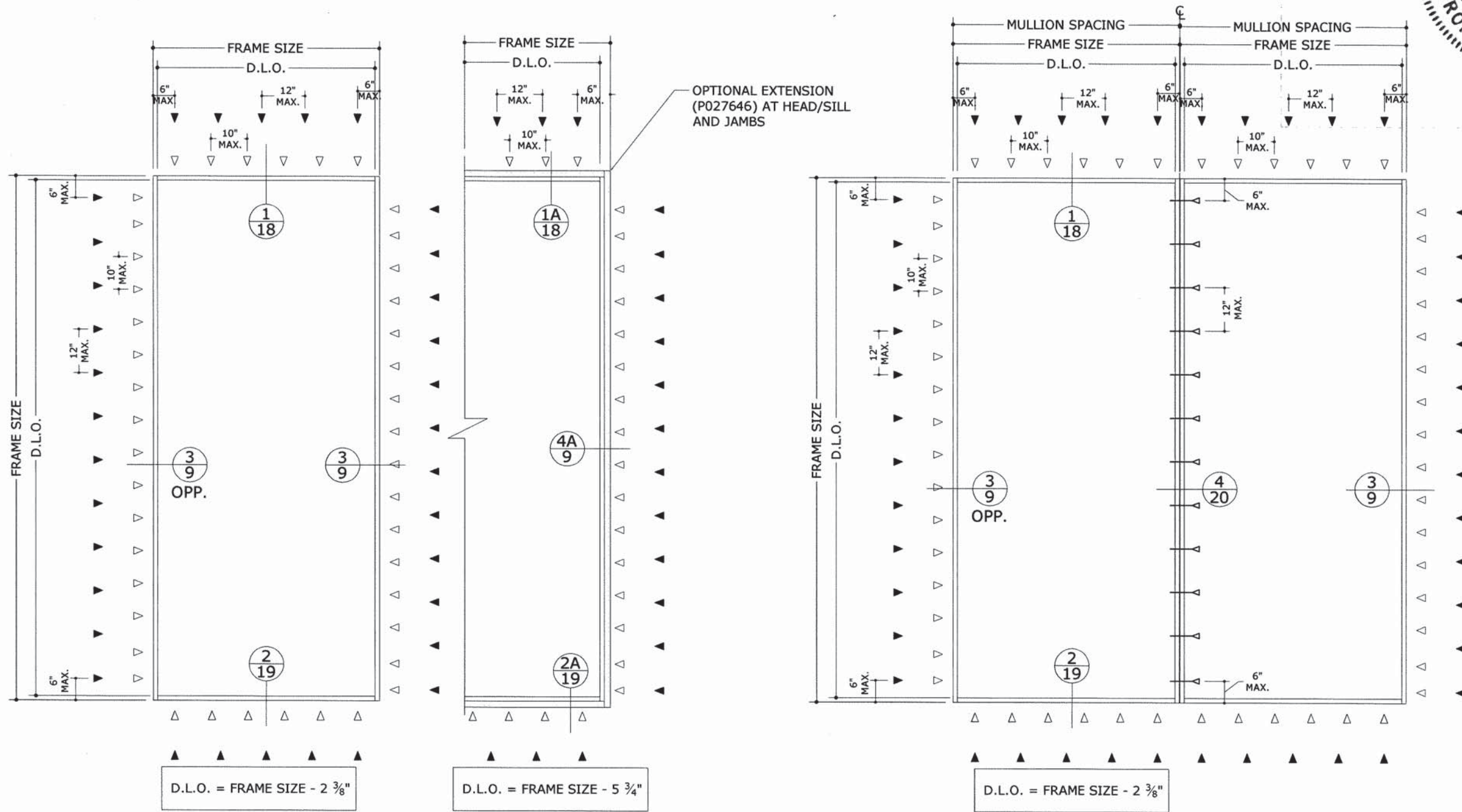
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# P027645 FRAME - LARGE MULLION



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## ANCHOR TYPES

- ▲ 1/4" THRU-BOLT WITH FENDER WASHERS AND NUT
- ▼ 5/16" ULTRACON BY ELCO (Fu=177 KSI Fy= 155 KSI) WITH 1 3/4" MIN. EMBEDMENT INTO 3000 Psi. CONCRETE MIN. AND 2 3/16" MIN. EDGE DISTANCE.
- ▼ 1/4"-20 SMS SCREWS GRADE 5 MIN. (Fu= 120 KSI Fy= 155 KSI) WITH 5 PINCHES MIN. PASS THE THREAD PLANE AND 1" MIN. EDGE DISTANCE INTO 1/8" MIN. THICK ALUMINUM (6063-T5 MIN.) OR 1/8" MIN THICK STEEL (A-36 MIN.)
- ▽ 5/16" ULTRACON BY ELCO (Fu=177 KSI Fy= 155 KSI) INTO 2BY WOOD BUCK (SYP#2 G= 0.55 MIN) WITH 1 1/2" MIN. ENGAGEMENT INTO WOOD AND 1" MIN. EDGE DISTANCE.

## TYPICAL ELEVATIONS

NOTE:  
 SIZES ARE THE MAXIMUM ALLOWED UNLESS ADDRESSED SEPARATELY UNDER SITE SPECIFIC ENGINEERING PER FLORIDA BUILDING CODE 2411.3.2.4 1710.3.1

NOTE:  
 FOR PRESSURES USING TESTED MULLIONS SEE CHARTS ON SHEETS 15, 16 & 17

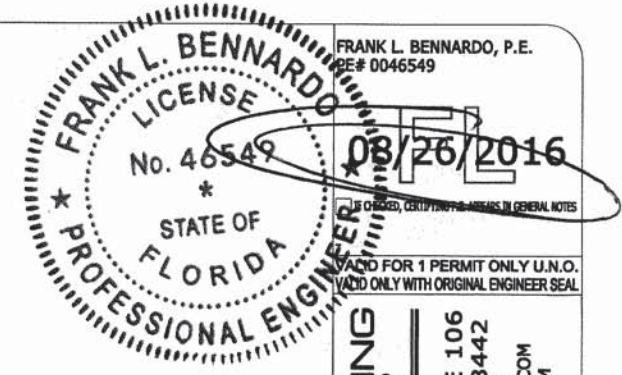
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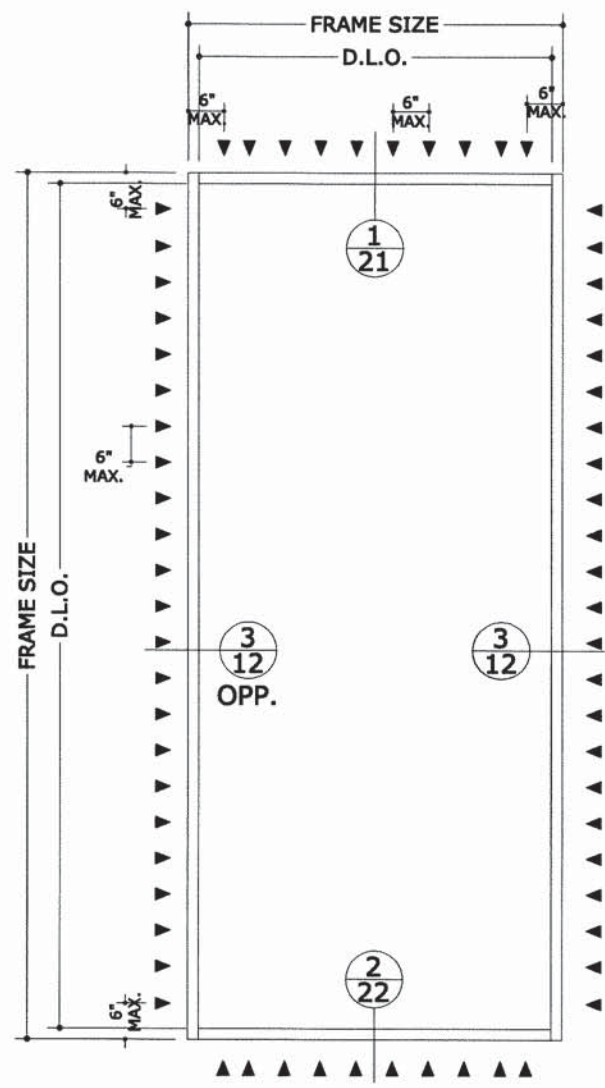
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# 7013 FRAME - LARGE MULLION

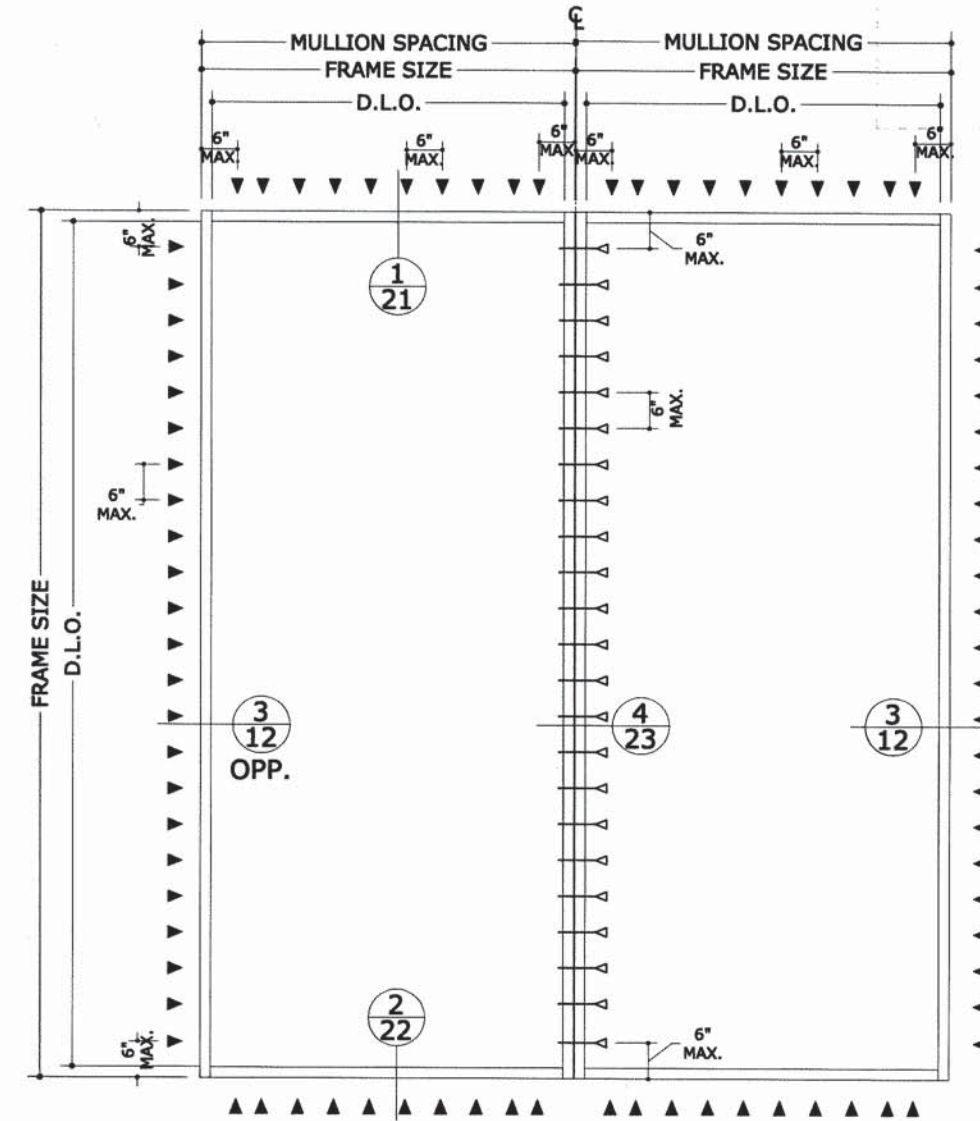


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D.L.O. = FRAME SIZE - 3 5/8"



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MULLION DESIGN CAPACITY (PSF)					
NOMINAL DIMS		LARGE NON-REINF		LARGE REINFORCED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.
36"	48"	+120	-120	+120	-120
42"		+120	-120	+120	-120
46"		+120	-120	+120	-120
48.5"		+120	-120	+120	-120
54"		+120	-120	+120	-120
60.25"		+120	-120	+120	-120
62.375"		+120	-120	+120	-120
66"		+120	-120	+120	-120
72"		+120	-120	+120	-120
78"		+120	-120	+120	-120
84"		+120	-120	+120	-120
90"		+120	-120	+120	-120
96"		+120	-120	+120	-120
102"		+120	-120	+120	-120
108"		+120	-120	+120	-120
114"		+120	-120	+120	-120
120"		+120	-120	+120	-120
126"		+120	-120	+120	-120
132"	+120	-120	+120	-120	
138"	+120	-120	+120	-120	
144"	+120	-120	+120	-120	
150"	+120	-120	+120	-120	
156"	+120	-120	+120	-120	

MULLION DESIGN CAPACITY (PSF)					
NOMINAL DIMS		LARGE NON-REINF		LARGE REINFORCED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.
36"	60"	+120	-120	+120	-120
42"		+120	-120	+120	-120
46"		+120	-120	+120	-120
48.5"		+120	-120	+120	-120
54"		+120	-120	+120	-120
60.25"		+120	-120	+120	-120
62.375"		+120	-120	+120	-120
66"		+120	-120	+120	-120
72"		+120	-120	+120	-120
78"		+120	-120	+120	-120
84"		+120	-120	+120	-120
90"		+120	-120	+120	-120
96"		+120	-120	+120	-120
102"		+120	-120	+120	-120
108"		+120	-120	+120	-120
114"		+120	-120	+120	-120
120"		+120	-120	+120	-120
126"		+120	-120	+120	-120
132"	+120	-120	+120	-120	
138"	+120	-120	+120	-120	
144"	+120	-120	+120	-120	
150"	+120	-120	+120	-120	
156"	+120	-120	+120	-120	

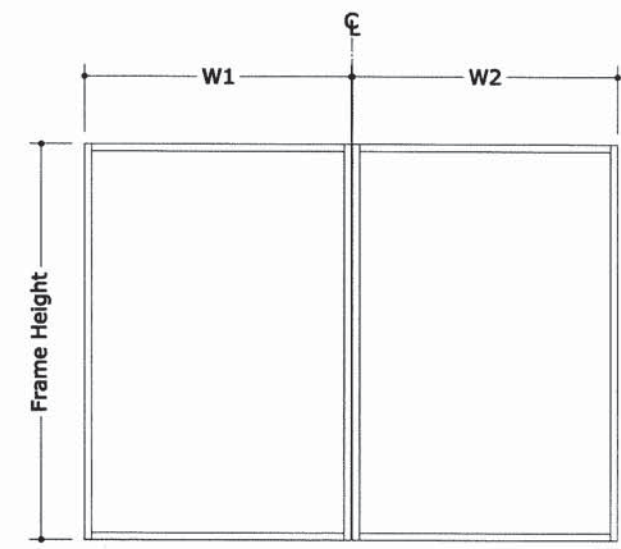
MULLION DESIGN CAPACITY (PSF)					
NOMINAL DIMS		LARGE NON-REINF		LARGE REINFORCED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.
36"	72"	+120	-120	+120	-120
42"		+120	-120	+120	-120
46"		+120	-120	+120	-120
48.5"		+120	-120	+120	-120
54"		+120	-120	+120	-120
60.25"		+120	-120	+120	-120
62.375"		+120	-120	+120	-120
66"		+120	-120	+120	-120
72"		+120	-120	+120	-120
78"		+120	-120	+120	-120
84"		+120	-120	+120	-120
90"		+120	-120	+120	-120
96"		+120	-120	+120	-120
102"		+120	-120	+120	-120
108"		+120	-120	+120	-120
114"		+120	-120	+120	-120
120"		+120	-120	+120	-120
126"		+120	-120	+120	-120
132"	+120	-120	+120	-120	
138"	+120	-120	+120	-120	
144"	+120	-120	+120	-120	
150"	+120	-120	+120	-120	
156"	+120	-120	+120	-120	

MULLION DESIGN CAPACITY (PSF)					
NOMINAL DIMS		LARGE NON-REINF		LARGE REINFORCED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.
36"	84"	+120	-120	+120	-120
42"		+120	-120	+120	-120
46"		+120	-119	+120	-120
48.5"		+120	-115	+120	-120
54"		+120	-109	+120	-120
60.25"		+120	-103	+120	-120
62.375"		+120	-101	+120	-120
66"		+120	-99	+120	-120
72"		+120	-97	+120	-120
78"		+120	-95	+120	-120
84"		+120	-95	+120	-120
90"		+120	-95	+120	-120
96"		+120	-95	+120	-120
102"		+120	-95	+120	-120
108"		+120	-95	+120	-120
114"		+120	-95	+120	-120
120"		+120	-95	+120	-120
126"		+120	-95	+120	-120
132"	+120	-95	+120	-120	
138"	+120	-95	+120	-120	
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156"	+120	-95	+120	-120	

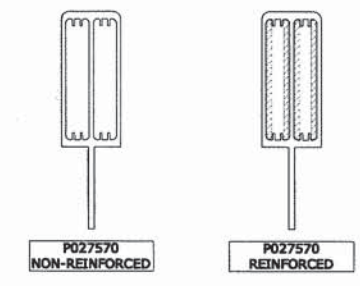
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42"		+120	-120	+120	-120
46"		+120	-120	+120	-120
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54"		+120	-120	+120	-120
60.25"		+120	-120	+120	-120
62.375"		+120	-120	+120	-120
66"		+120	-120	+120	-120
72"		+120	-120	+120	-120
78"		+120	-120	+120	-120
84"		+120	-120	+120	-120
90"		+120	-120	+120	-120
96"		+120	-120	+120	-120
102"		+120	-120	+120	-120
108"		+120	-120	+120	-120
114"		+120	-120	+120	-120
120"		+120	-120	+120	-120
126"		+120	-120	+120	-120
132"	+120	-120	+120	-120	
138"	+120	-120	+120	-120	
144"	+120	-120	+120	-120	
150"	+120	-120	+120	-120	
156"	+120	-120	+120	-120	

36"	66"	+120	-120	+120	-120
42"		+120	-120	+120	-120
46"		+120	-120	+120	-120
48.5"		+120	-120	+120	-120
54"		+120	-120	+120	-120
60.25"		+120	-120	+120	-120
62.375"		+120	-120	+120	-120
66"		+120	-120	+120	-120
72"		+120	-120	+120	-120
78"		+120	-120	+120	-120
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126"		+120	-120	+120	-120
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138"	+120	-120	+120	-120	
144"	+120	-120	+120	-120	
150"	+120	-120	+120	-120	
156"	+120	-120	+120	-120	

36"	78"	+120	-120	+120	-120
42"		+120	-120	+120	-120
46"		+120	-120	+120	-120
48.5"		+120	-120	+120	-120
54"		+120	-120	+120	-120
60.25"		+120	-116	+120	-120
62.375"		+120	-114	+120	-120
66"		+120	-112	+120	-120
72"		+120	-110	+120	-120
78"		+120	-110	+120	-120
84"		+120	-110	+120	-120
90"		+120	-110	+120	-120
96"		+120	-110	+120	-120
102"		+120	-110	+120	-120
108"		+120	-110	+120	-120
114"		+120	-110	+120	-120
120"		+120	-110	+120	-120
126"		+120	-110	+120	-120
132"	+120	-110	+120	-120	
138"	+120	-110	+120	-120	
144"	+120	-110	+120	-120	
150"	+120	-110	+120	-120	
156"	+120	-110	+120	-120	



$$\text{WIDTH} = \frac{W1+W2}{2}$$



NOTE: FOR ALLOWABLE PRESSURES THE LOWEST PRESSURE RATING OF MULLION AND FIXED WINDOW SHALL APPLY.

FRANK R. BERNARDO  
 PE # 0046349  
 LICENSE No. 0028/2016  
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 CERT OF AUTH #9885

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 (305) 599-8093  
 PREGLAZED WINDOW WALL  
 FLORIDA PRODUCT APPROVAL  
 FL18507.1-R2

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	SSQ	FLB	08/31/15
REV1	SSQ	FLB	12/18/15
REV2	JEM	FLB	08/26/16

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joem

08/26/2016 - 8:47pm

MULLION DESIGN CAPACITY (PSF)					
NOMINAL DIMS		LARGE NON-REINF		LARGE REINFORCED	
WIDTH	HEIGHT	(+)P.S.F.	(-)P.S.F.	(+)P.S.F.	(-)P.S.F.
36"	90"	+120	-120	+120	-120
42"		+120	-115	+120	-120
46"		+120	-108	+120	-120
48.5"		+120	-105	+120	-120
54"		+120	-98	+120	-120
60.25"		+120	-93	+117	-117
62.375"		+120	-91	+115	-115
66"		+120	-89	+113	-113
72"		+117	-86	+109	-109
78"		+114	-84	+106	-106
84"		+112	-83	+105	-105
90"		+112	-82	+105	-105
96"		+112	-82	+105	-105
102"		+112	-82	+105	-105
108"		+112	-82	+105	-105
114"		+112	-82	+105	-105
120"		+112	-82	+105	-105
126"		+112	-82	+105	-105
132"	+112	-82	+105	-105	
138"	+112	-82	+105	-105	
144"	+112	-82	+105	-105	
150"	+112	-82	+105	-105	
156"	+112	-82	+105	-105	

MULLION DESIGN CAPACITY (PSF)					
NOMINAL DIMS		LARGE NON-REINF		LARGE REINFORCED	
WIDTH	HEIGHT	(+)P.S.F.	(-)P.S.F.	(+)P.S.F.	(-)P.S.F.
36"	102"	+120	-110	+120	-120
42"		+120	-98	+120	-120
46"		+120	-92	+117	-117
48.5"		+120	-88	+112	-112
54"		+112	-82	+105	-105
60.25"		+105	-77	+98	-98
62.375"		+103	-75	+96	-96
66"		+99	-73	+93	-93
72"		+95	-70	+89	-89
78"		+92	-68	+86	-86
84"		+90	-66	+84	-84
90"		+88	-65	+82	-82
96"		+87	-64	+82	-82
102"		+87	-64	+81	-81
108"		+87	-64	+81	-81
114"		+87	-64	+81	-81
120"		+87	-64	+81	-81
126"		+87	-64	+81	-81
132"	+87	-64	+81	-81	
138"	+87	-64	+81	-81	
144"	+87	-64	+81	-81	
150"	+87	-64	+81	-81	
156"	+87	-64	+81	-81	

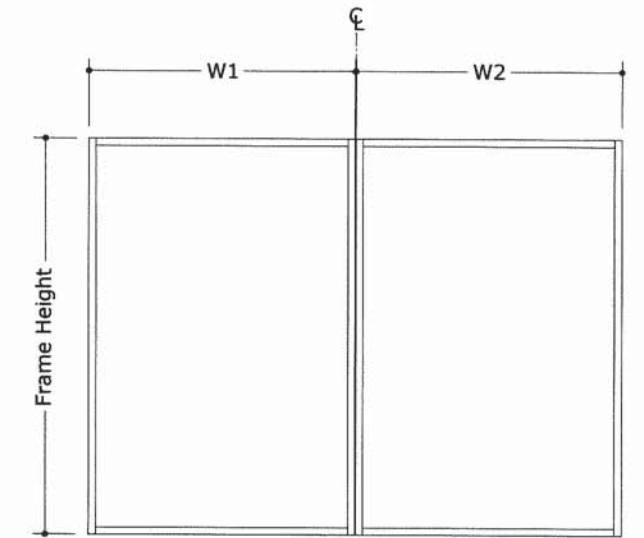
MULLION DESIGN CAPACITY (PSF)					
NOMINAL DIMS		LARGE NON-REINF		LARGE REINFORCED	
WIDTH	HEIGHT	(+)P.S.F.	(-)P.S.F.	(+)P.S.F.	(-)P.S.F.
36"	114"	+120	-97	+120	-120
42"		+116	-85	+108	-108
46"		+108	-80	+101	-101
48.5"		+104	-77	+97	-97
54"		+96	-71	+90	-90
60.25"		+90	-66	+84	-84
62.375"		+88	-64	+82	-82
66"		+85	-62	+79	-79
72"		+81	-59	+75	-75
78"		+77	-57	+72	-72
84"		+75	-55	+70	-70
90"		+73	-54	+68	-68
96"		+71	-52	+67	-67
102"		+70	-51	+66	-66
108"		+69	-51	+65	-65
114"		+69	-50	+65	-65
120"		+69	-50	+65	-65
126"		+69	-50	+65	-65
132"	+69	-50	+65	-65	
138"	+69	-50	+65	-65	
144"	+69	-50	+65	-65	
150"	+69	-50	+65	-65	
156"	+69	-50	+65	-65	

MULLION DESIGN CAPACITY (PSF)					
NOMINAL DIMS		LARGE NON-REINF		LARGE REINFORCED	
WIDTH	HEIGHT	(+)P.S.F.	(-)P.S.F.	(+)P.S.F.	(-)P.S.F.
36"	122.375"	+120	-89	+113	-113
42"		+106	-78	+99	-99
46"		+99	-73	+93	-93
48.5"		+95	-70	+89	-89
54"		+88	-65	+82	-82
60.25"		+81	-60	+76	-76
62.375"		+80	-59	+74	-74
66"		+76	-56	+72	-72
72"		+71	-52	+68	-68
78"		+67	-49	+65	-65
84"		+64	-47	+62	-62
90"		+61	-45	+61	-61
96"		+59	-44	+59	-59
102"		+58	-42	+58	-58
108"		+57	-42	+57	-57
114"		+56	-41	+57	-57
120"		+55	-41	+56	-56
126"		+55	-41	+56	-56
132"	+55	-41	+56	-56	
138"	+55	-41	+56	-56	
144"	+55	-41	+56	-56	
150"	+55	-41	+56	-56	
156"	+55	-41	+56	-56	

36"	96"	+120	-119	+120	-120
42"		+120	-106	+120	-120
46"		+120	-99	+120	-120
48.5"		+120	-96	+120	-120
54"		+120	-90	+114	-114
60.25"		+114	-84	+107	-107
62.375"		+112	-83	+105	-105
66"		+109	-80	+102	-102
72"		+105	-77	+98	-98
78"		+102	-75	+95	-95
84"		+100	-73	+93	-93
90"		+99	-73	+92	-92
96"		+98	-72	+92	-92
102"		+98	-72	+92	-92
108"		+98	-72	+92	-92
114"		+98	-72	+92	-92
120"		+98	-72	+92	-92
126"		+98	-72	+92	-92
132"	+98	-72	+92	-92	
138"	+98	-72	+92	-92	
144"	+98	-72	+92	-92	
150"	+98	-72	+92	-92	
156"	+98	-72	+92	-92	

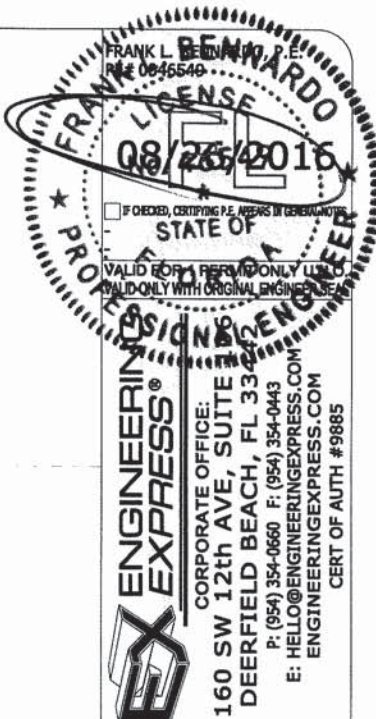
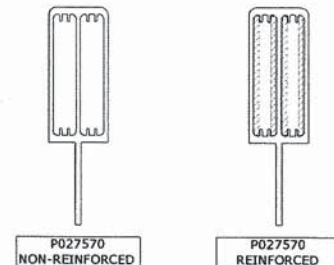
36"	108"	+120	-103	+120	-120
42"		+120	-91	+116	-116
46"		+116	-85	+108	-108
48.5"		+112	-82	+104	-104
54"		+104	-76	+97	-97
60.25"		+96	-71	+90	-90
62.375"		+94	-70	+88	-88
66"		+91	-67	+85	-85
72"		+87	-64	+82	-82
78"		+84	-62	+79	-79
84"		+82	-60	+76	-76
90"		+80	-59	+75	-75
96"		+78	-58	+73	-73
102"		+78	-57	+73	-73
108"		+78	-57	+72	-72
114"		+78	-57	+72	-72
120"		+78	-57	+72	-72
126"		+78	-57	+72	-72
132"	+78	-57	+72	-72	
138"	+78	-57	+72	-72	
144"	+78	-57	+72	-72	
150"	+78	-57	+72	-72	
156"	+78	-57	+72	-72	

36"	120"	+120	-91	+115	-115
42"		+109	-80	+102	-102
46"		+101	-75	+95	-95
48.5"		+97	-72	+91	-91
54"		+90	-66	+84	-84
60.25"		+84	-61	+78	-78
62.375"		+82	-60	+76	-76
66"		+79	-58	+74	-74
72"		+74	-55	+70	-70
78"		+70	-52	+67	-67
84"		+67	-49	+64	-64
90"		+64	-47	+63	-63
96"		+62	-46	+61	-61
102"		+61	-45	+60	-60
108"		+60	-44	+59	-59
114"		+59	-43	+59	-59
120"		+59	-43	+59	-59
126"		+59	-43	+59	-59
132"	+59	-43	+59	-59	
138"	+59	-43	+59	-59	
144"	+59	-43	+59	-59	
150"	+59	-43	+59	-59	
156"	+59	-43	+59	-59	



$$\text{WIDTH} = \frac{W1+W2}{2}$$

NOTE: FOR ALLOWABLE PRESSURES THE LOWEST PRESSURE RATING OF MULLION AND FIXED WINDOW SHALL APPLY.



**LA FINESTRA, LC**  
 2790 NW 104TH COURT  
 DORAL, FL  
 (305) 599-8093

PREGLAZED WINDOW WALL  
 FLORIDA PRODUCT APPROVAL  
 FL18507.1-R2

DRWN	CHKD	DATE
SSQ	FLB	08/31/15
SSQ	FLB	12/18/15
JEM	FLB	08/26/16

REMARKS  
 INIT ISSUE  
 REV1  
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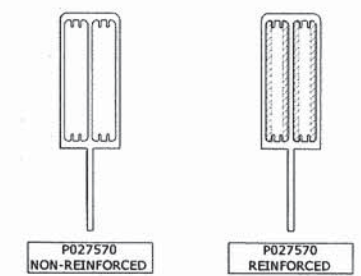
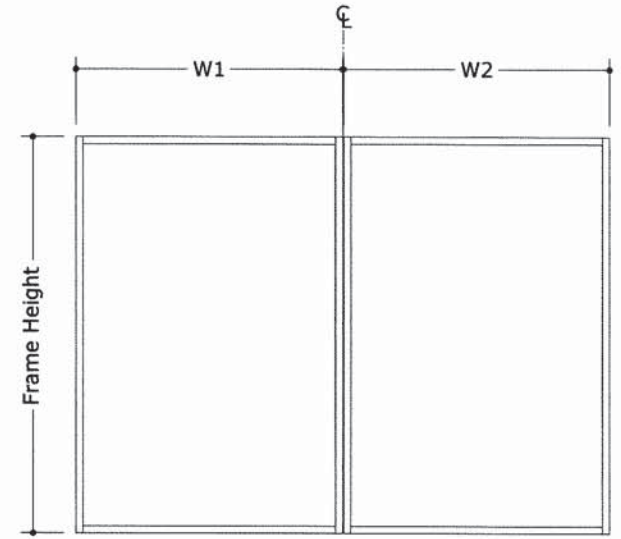
16 OF 34

MULLION DESIGN CAPACITY (PSF)					
NOMINAL DIMS		LARGE NON-REINF		LARGE REINFORCED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.
36"	126"	+117	-86	+109	-109
42"		+102	-76	+96	-96
46"		+94	-70	+89	-89
48.5"		+89	-67	+86	-86
54"		+82	-61	+79	-79
60.25"		+74	-56	+73	-73
62.375"		+72	-54	+71	-71
66"		+69	-52	+69	-69
72"		+65	-49	+65	-65
78"		+61	-46	+62	-62
84"		+58	-44	+60	-60
90"		+56	-42	+58	-58
96"		+54	-40	+56	-56
102"		+53	-39	+55	-55
108"		+52	-38	+54	-54
114"		+51	-38	+53	-53
120"		+51	-37	+53	-53
126"		+50	-37	+53	-53
132"	+50	-37	+53	-53	
138"	+50	-37	+53	-53	
144"	+50	-37	+53	-53	
150"	+50	-37	+53	-53	
156"	+50	-37	+53	-53	

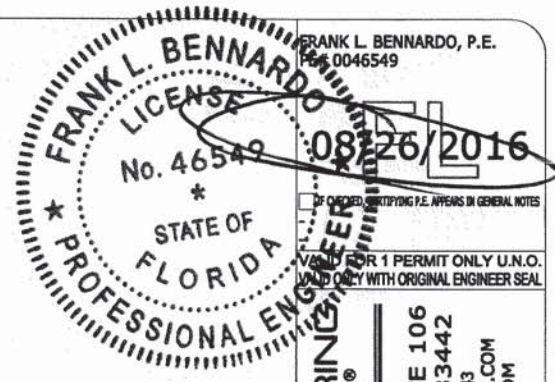
36"	132"	+102	-76	+103	-103
42"		+88	-66	+91	-91
46"		+81	-61	+84	-84
48.5"		+77	-58	+81	-81
54"		+70	-53	+75	-75
60.25"		+64	-48	+69	-69
62.375"		+62	-47	+67	-67
66"		+59	-45	+65	-65
72"		+56	-42	+61	-61
78"		+52	-39	+58	-58
84"		+50	-37	+56	-56
90"		+48	-36	+53	-53
96"		+46	-34	+51	-51
102"		+45	-33	+49	-49
108"		+44	-33	+48	-48
114"		+43	-32	+47	-47
120"		+42	-32	+46	-46
126"		+42	-31	+46	-46
132"	+42	-31	+46	-46	
138"	+42	-31	+46	-46	
144"	+42	-31	+46	-46	
150"	+42	-31	+46	-46	
156"	+42	-31	+46	-46	

MULLION DESIGN CAPACITY (PSF)					
NOMINAL DIMS		LARGE NON-REINF		LARGE REINFORCED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.
36"	138"	+89	-67	+98	-98
42"		+77	-58	+86	-86
46"		+71	-53	+80	-80
48.5"		+67	-50	+77	-77
54"		+61	-46	+70	-70
60.25"		+56	-42	+65	-65
62.375"		+54	-40	+63	-63
66"		+52	-39	+61	-61
72"		+48	-36	+56	-56
78"		+45	-34	+53	-53
84"		+43	-32	+50	-50
90"		+41	-31	+48	-48
96"		+39	-29	+46	-46
102"		+38	-29	+44	-44
108"		+37	-28	+43	-43
114"		+36	-27	+42	-42
120"		+36	-27	+41	-41
126"		+35	-26	+40	-40
132"	+35	-26	+40	-40	
138"	+35	-26	+40	-40	
144"	+35	-26	+40	-40	
150"	+35	-26	+40	-40	
156"	+35	-26	+40	-40	

36"	144"	+78	-58	+93	-93
42"		+67	-50	+82	-82
46"		+62	-46	+76	-76
48.5"		+59	-44	+73	-73
54"		+53	-40	+66	-66
60.25"		+49	-36	+60	-60
62.375"		+47	-35	+58	-58
66"		+45	-34	+55	-55
72"		+42	-31	+51	-51
78"		+39	-29	+48	-48
84"		+37	-28	+45	-45
90"		+35	-27	+43	-43
96"		+34	-25	+41	-41
102"		+33	-25	+40	-40
108"		+32	-24	+39	-39
114"		+31	-23	+37	-37
120"		+30	-23	+37	-37
126"		+30	-22	+36	-36
132"	+30	-22	+36	-36	
138"	+29	-22	+35	-35	
144"	+29	-22	+35	-35	
150"	+29	-22	+35	-35	
156"	+29	-22	+35	-35	



NOTE: FOR ALLOWABLE PRESSURES THE LOWEST PRESSURE RATING OF MULLION AND FIXED WINDOW SHALL APPLY.



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 FL18507.1-R2

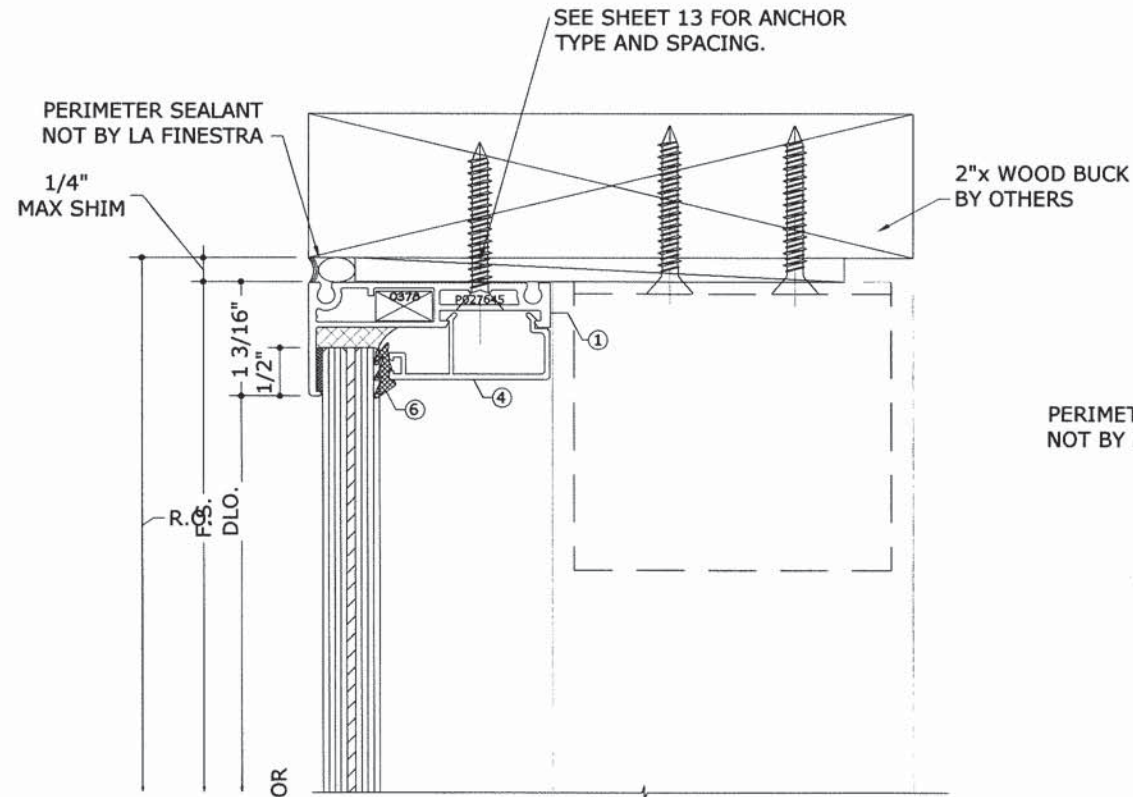
DRWN	CHKD	DATE
SSQ	FLB	08/31/15
SSQ	FLB	12/18/15
JEM	FLB	08/26/16

REMARKS  
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 REV1  
 REV2

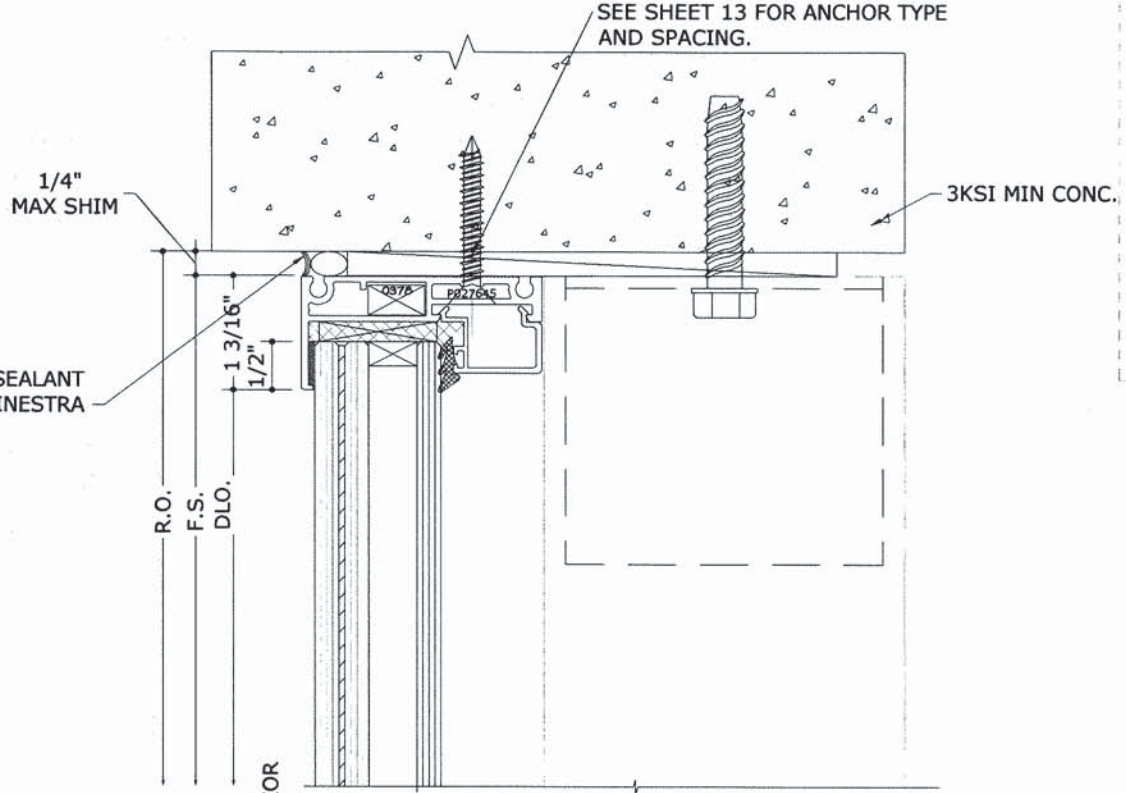
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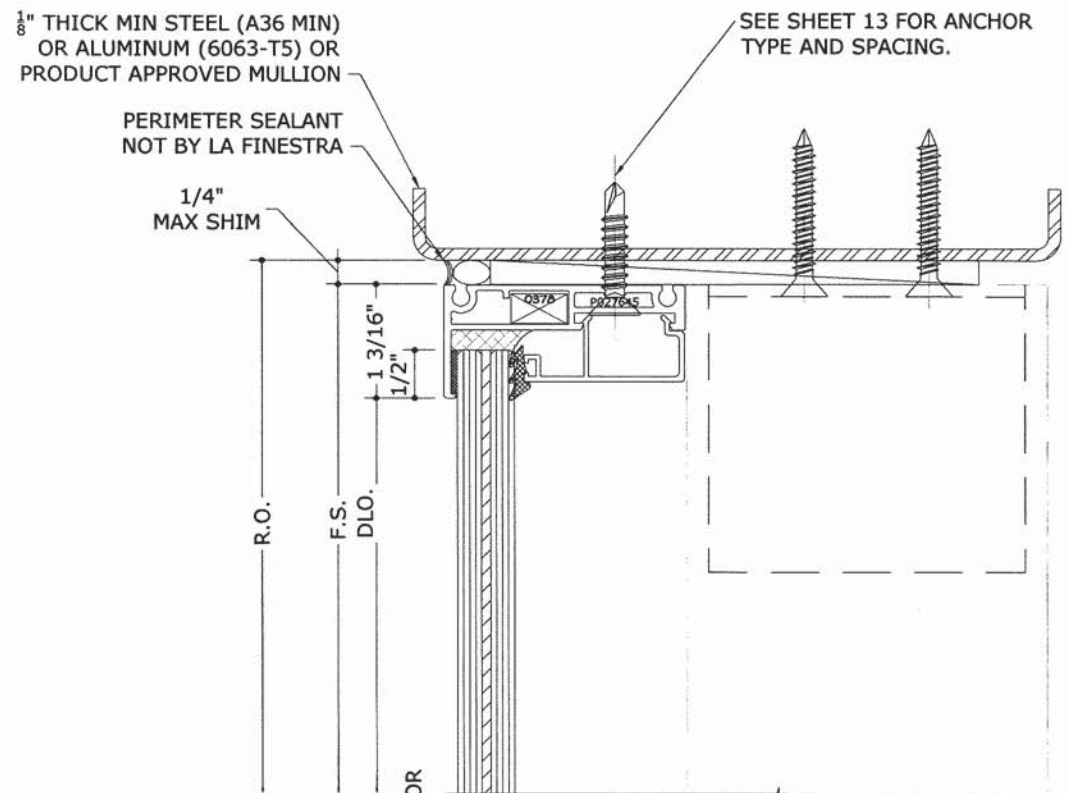
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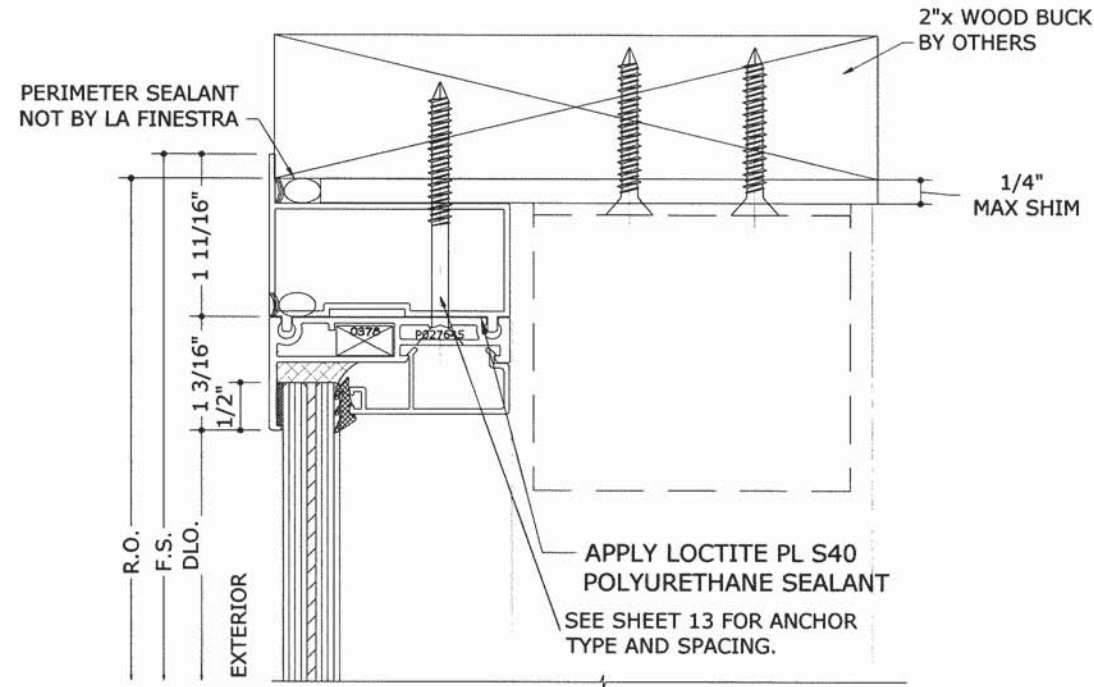
**1** **HEADER INTO WOOD**  
**18** 6" = 1'-0"



**1** **HEADER INTO CONCRETE**  
**18** 6" = 1'-0"

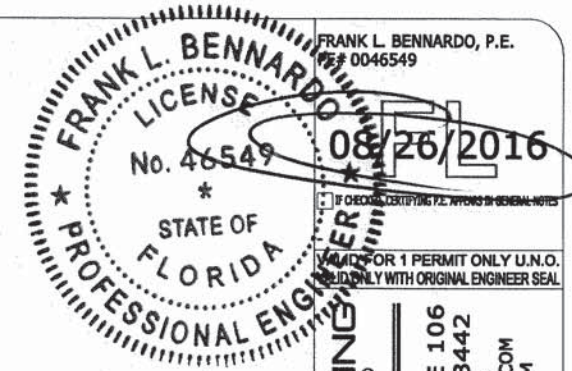


**1** **HEADER INTO METAL**  
**18** 6" = 1'-0"



**1A** **HEADER INTO WOOD W/ EXTENSION (OPTIONAL)**  
**18** 6" = 1'-0"

**NOTE:**  
WOOD BUCKS AND METAL STRUCTURES NOT BY LA FINESTRA MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.



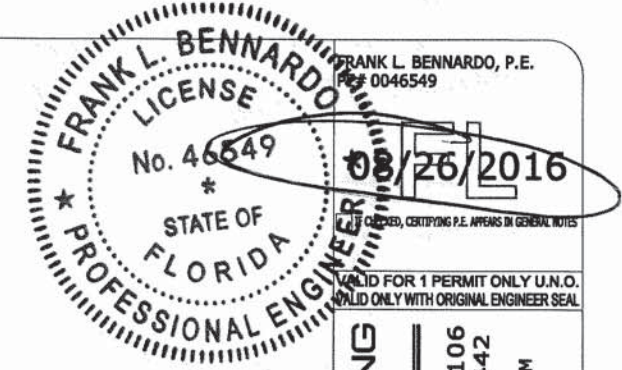
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FLORIDA PRODUCT APPROVAL  
FL18507.1-R2

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	SSQ	FLB	08/31/15
REV1	SSQ	FLB	12/18/15
REV2	JEM	FLB	08/28/16

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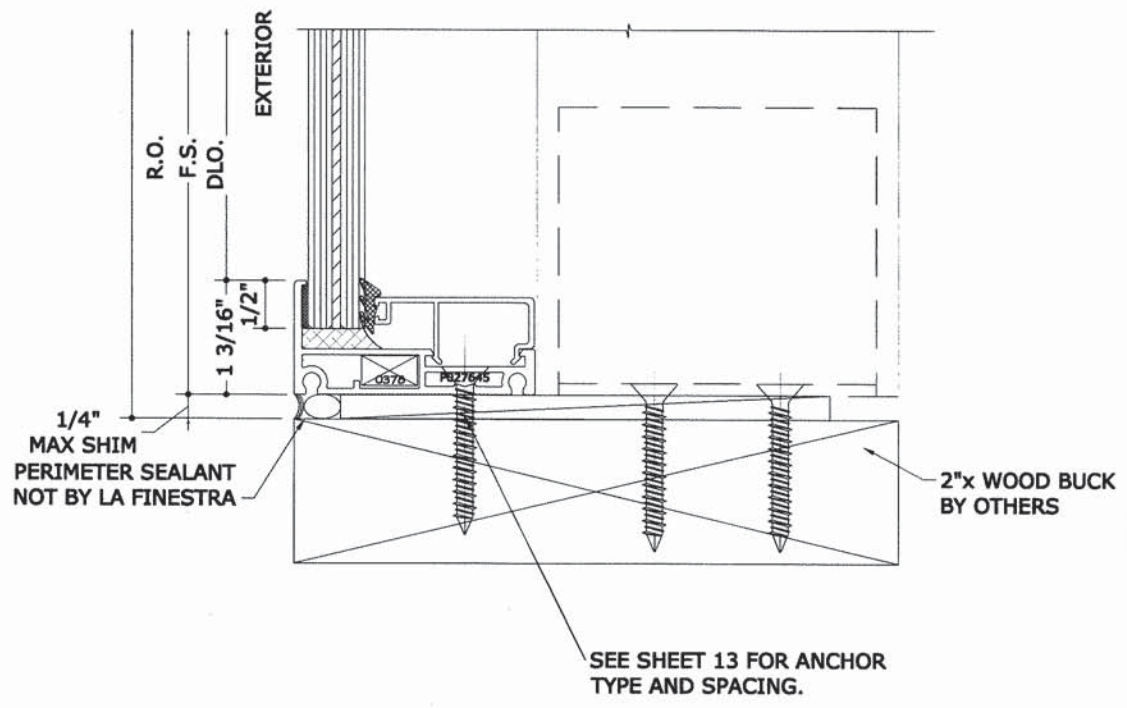
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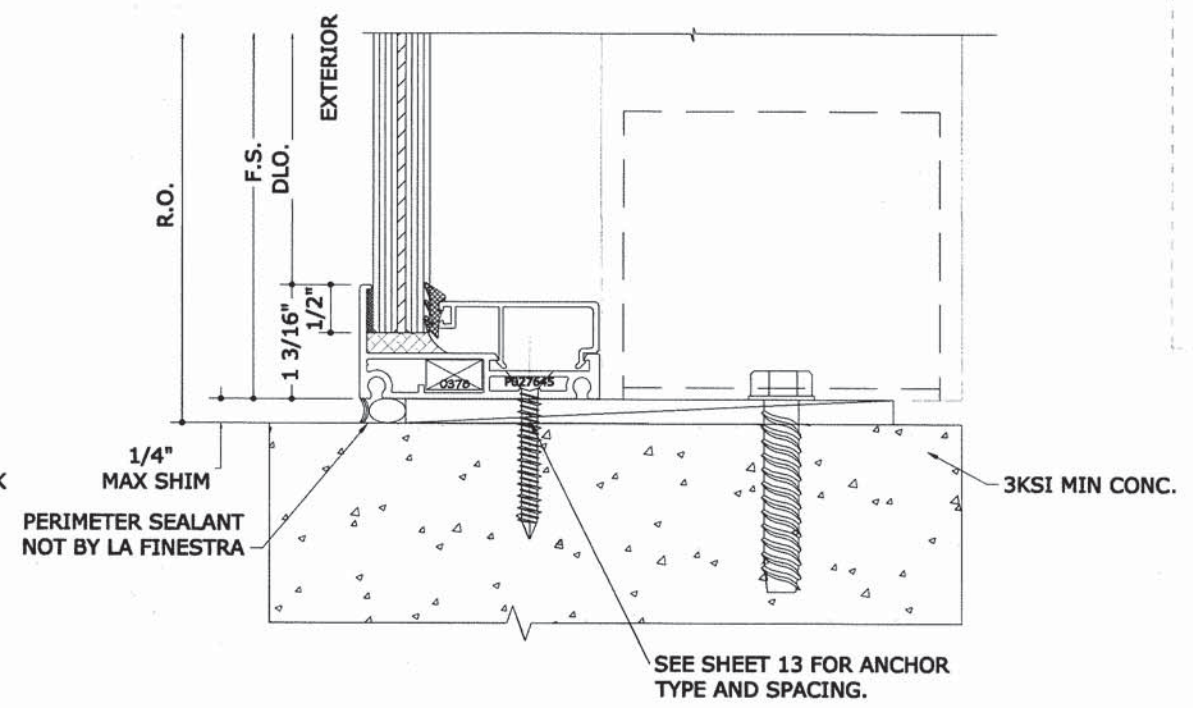
FRANK L. BENNARDO, P.E.  
No. 46549  
08/26/2016

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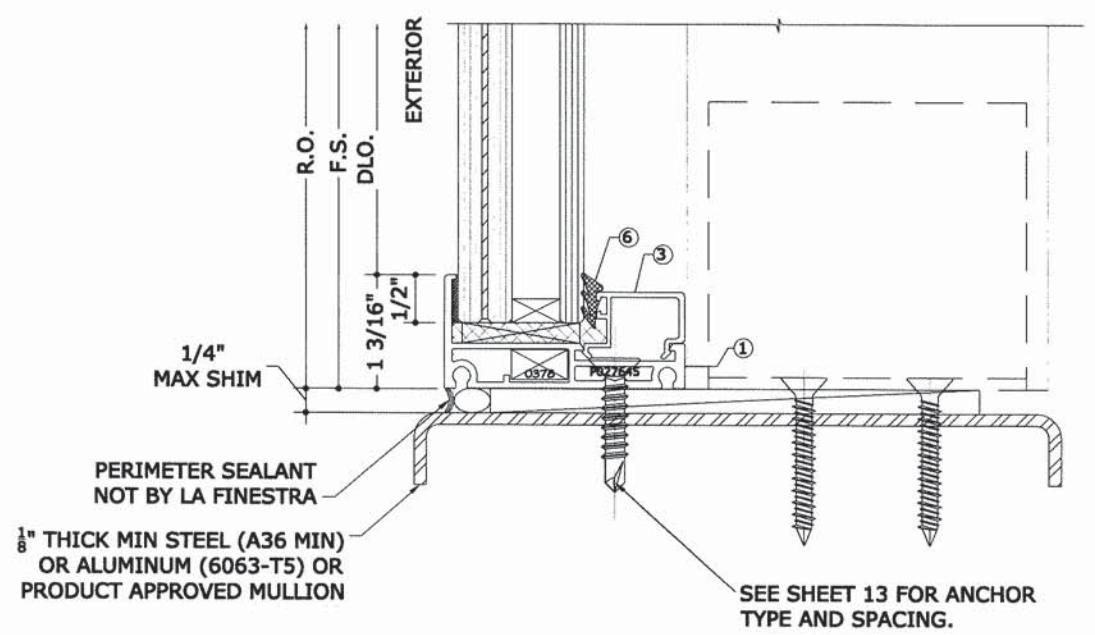
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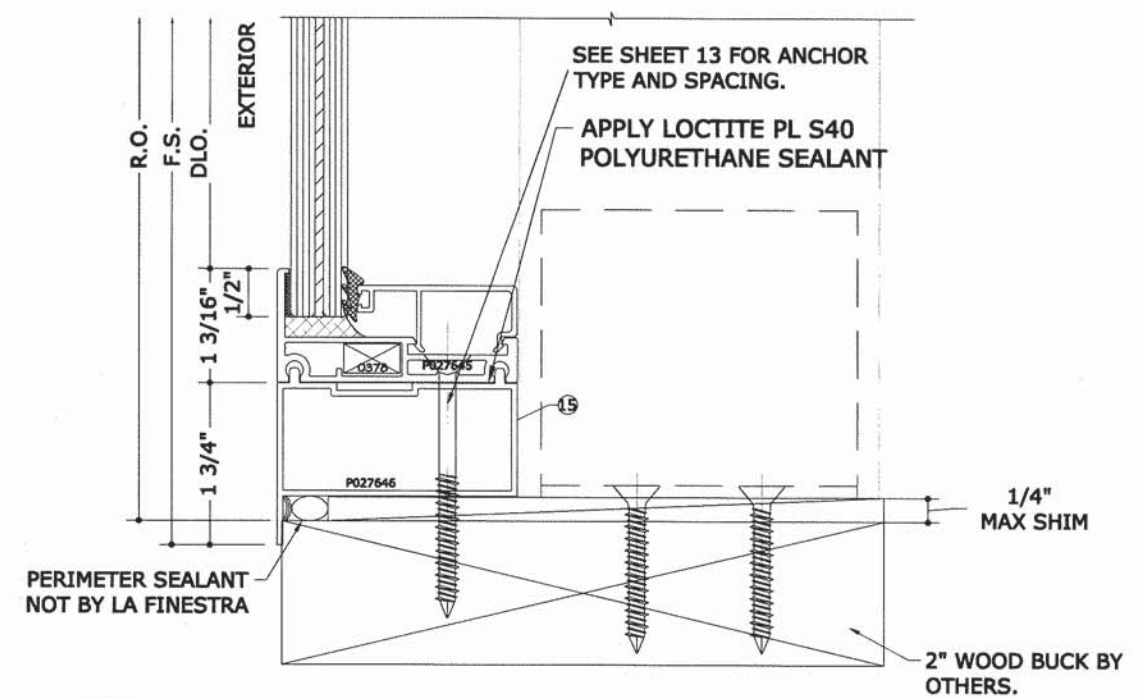
**2** **SILL INTO WOOD**  
**19** 6" = 1'-0"



**2** **SILL INTO CONCRETE**  
**19** 6" = 1'-0"



**2** **SILL INTO METAL**  
**19** 6" = 1'-0"



**2A** **SILL INTO WOOD W/ EXTENSION (OPTIONAL)**  
**19** 6" = 1'-0"

**NOTE:**  
WOOD BUCKS AND METAL STRUCTURES NOT BY LA FINESTRA MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

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DORAL, FL  
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FL18507.1-R2

DRWN	CHKD	DATE
SSQ	FLB	08/31/15
SSQ	FLB	12/18/15
JEM	FLB	08/26/16

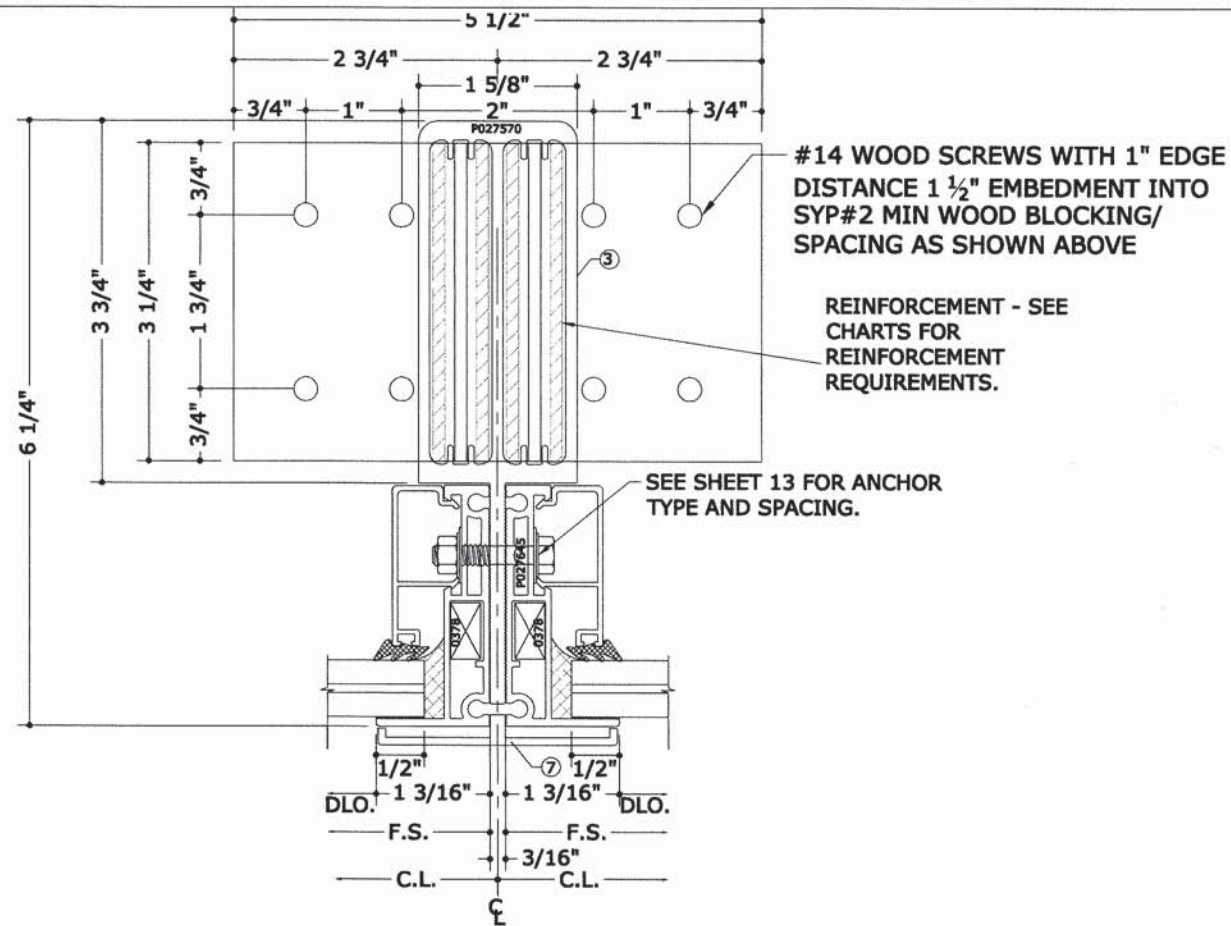
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	REV1	
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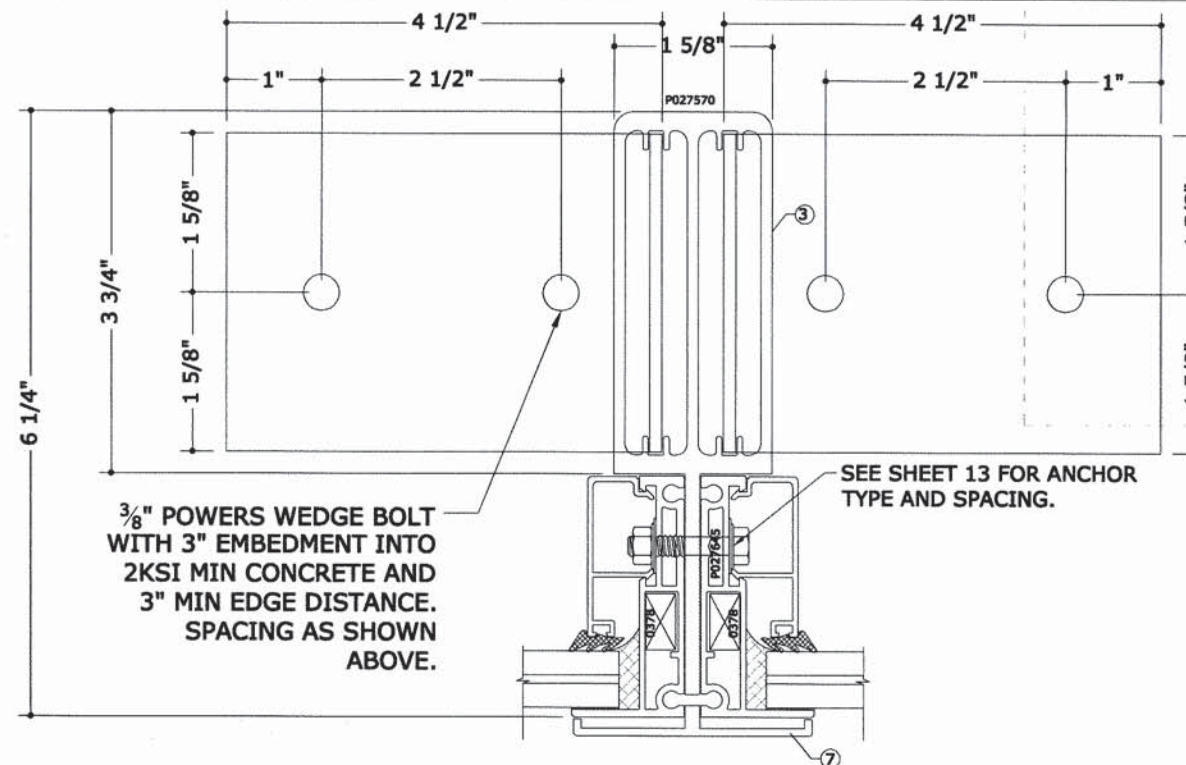
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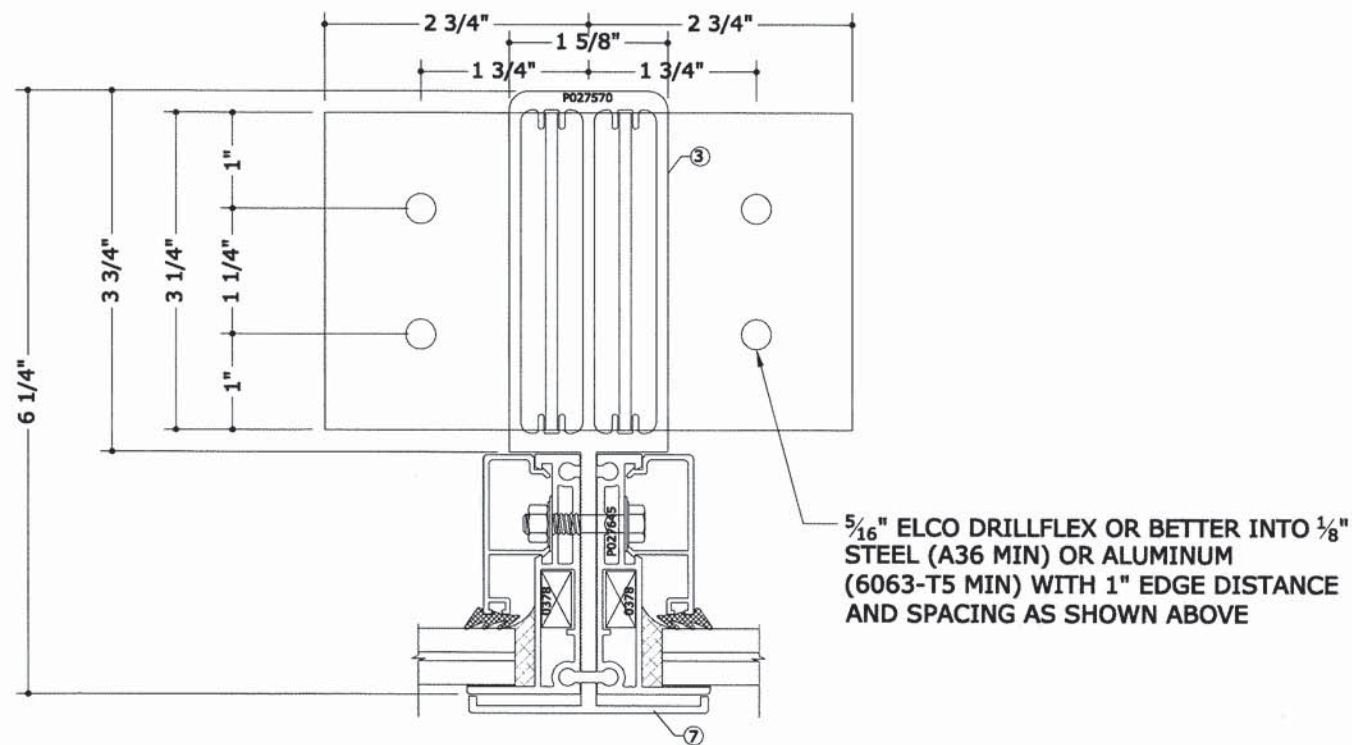




**4** VERTICAL INTERMEDIATE DETAIL  
**20** 6" = 1'-0" WOOD ANCHORING  
 NON-REINF. + REINF.



**4** VERTICAL INTERMEDIATE DETAIL  
**20** 6" = 1'-0" CONCRETE  
 NON-REINF. + REINF. + UNITIZED



**4** VERTICAL INTERMEDIATE DETAIL  
**20** 6" = 1'-0" METAL ANCHORING  
 NON-REINF. + REINF.

NOTE:  
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JEM	FLB	08/28/16

REMARKS  
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 REV1  
 REV2

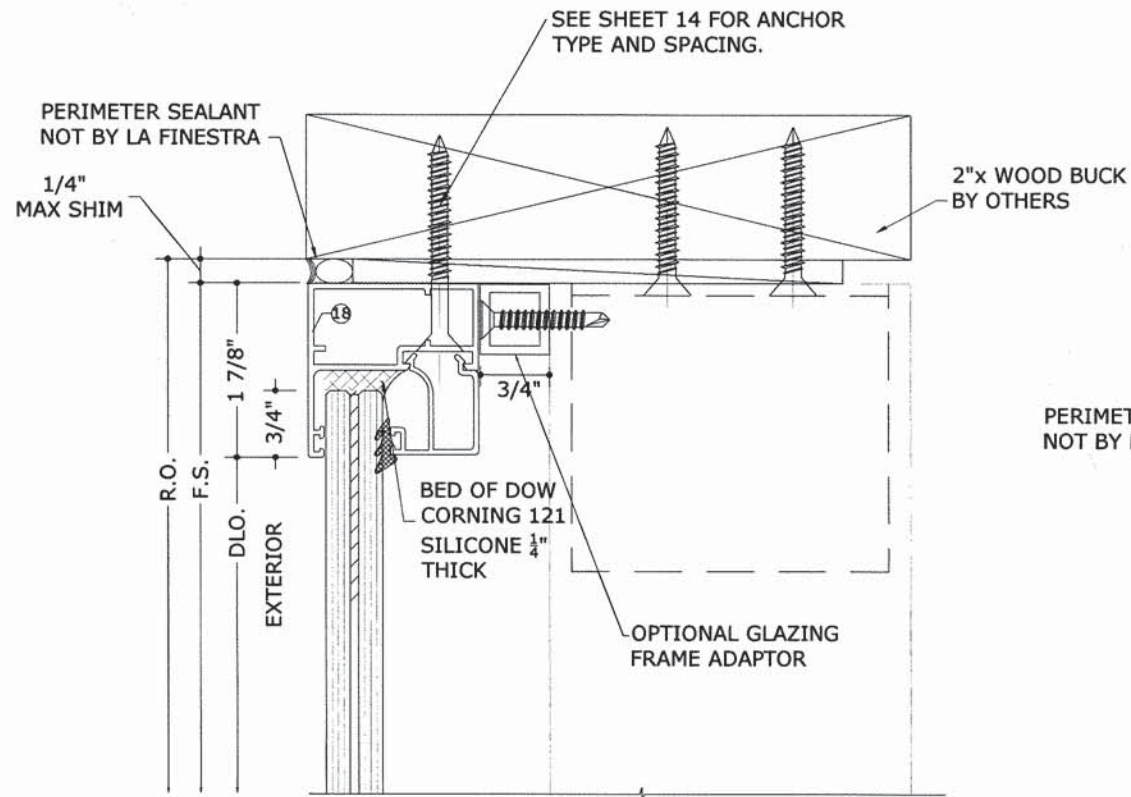
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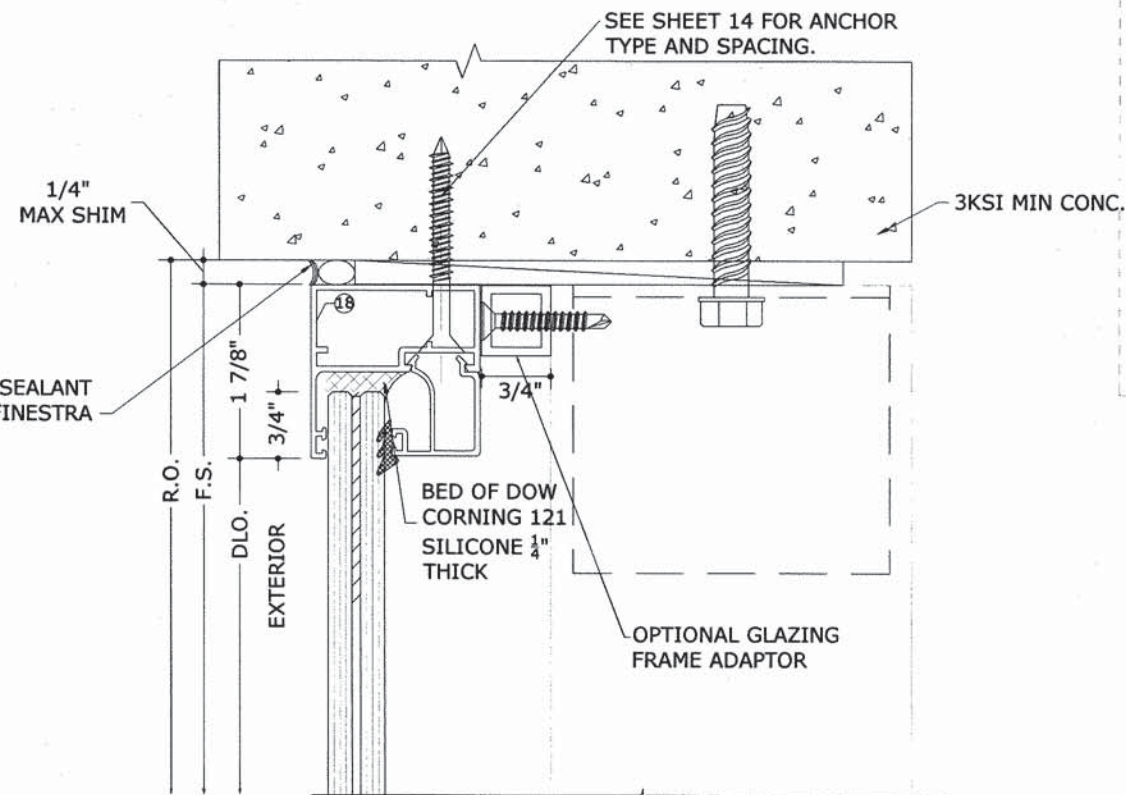
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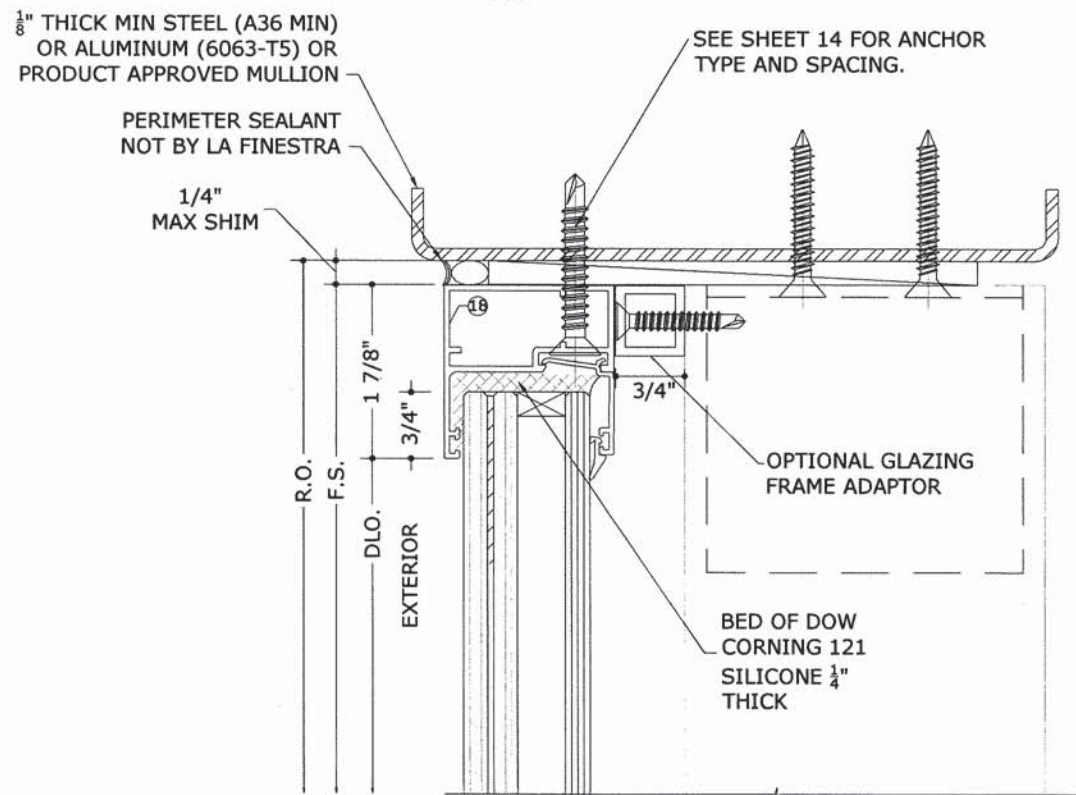
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**1** **HEADER INTO WOOD**  
**21** 6" = 1'-0"



**1** **HEADER INTO CONCRETE**  
**21** 6" = 1'-0"



**1** **HEADER INTO METAL**  
**21** 6" = 1'-0"

**NOTE:**  
 WOOD BUCKS AND METAL STRUCTURES NOT BY LA FINESTRA MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.



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REV2	JEM	FLB	08/28/16

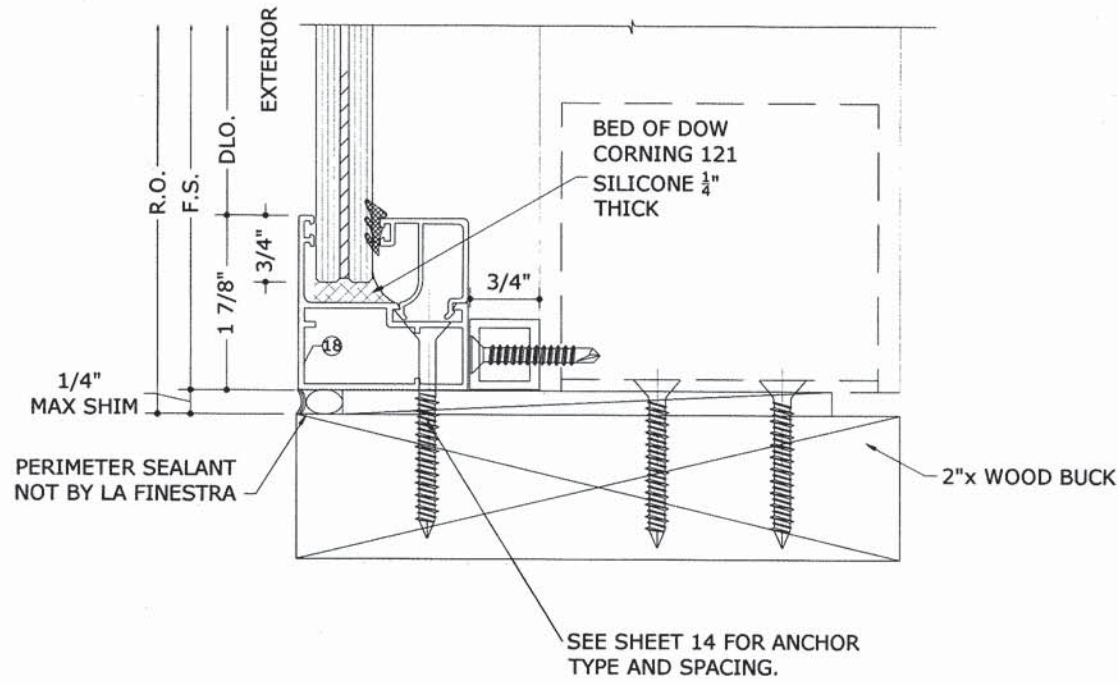
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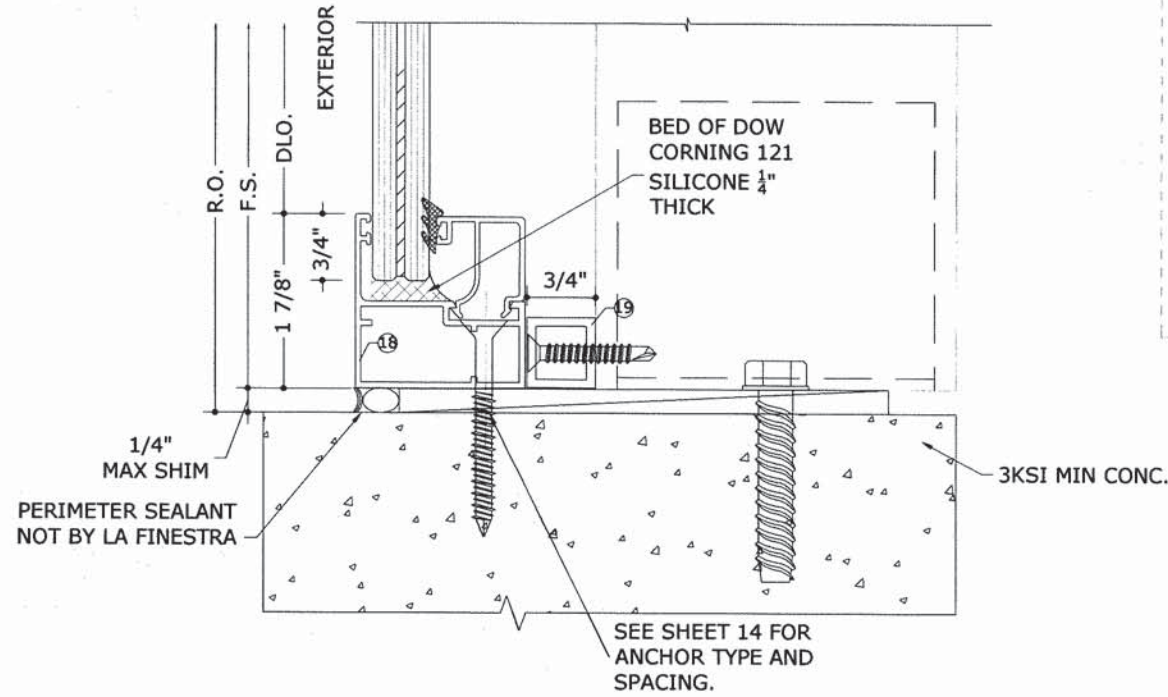
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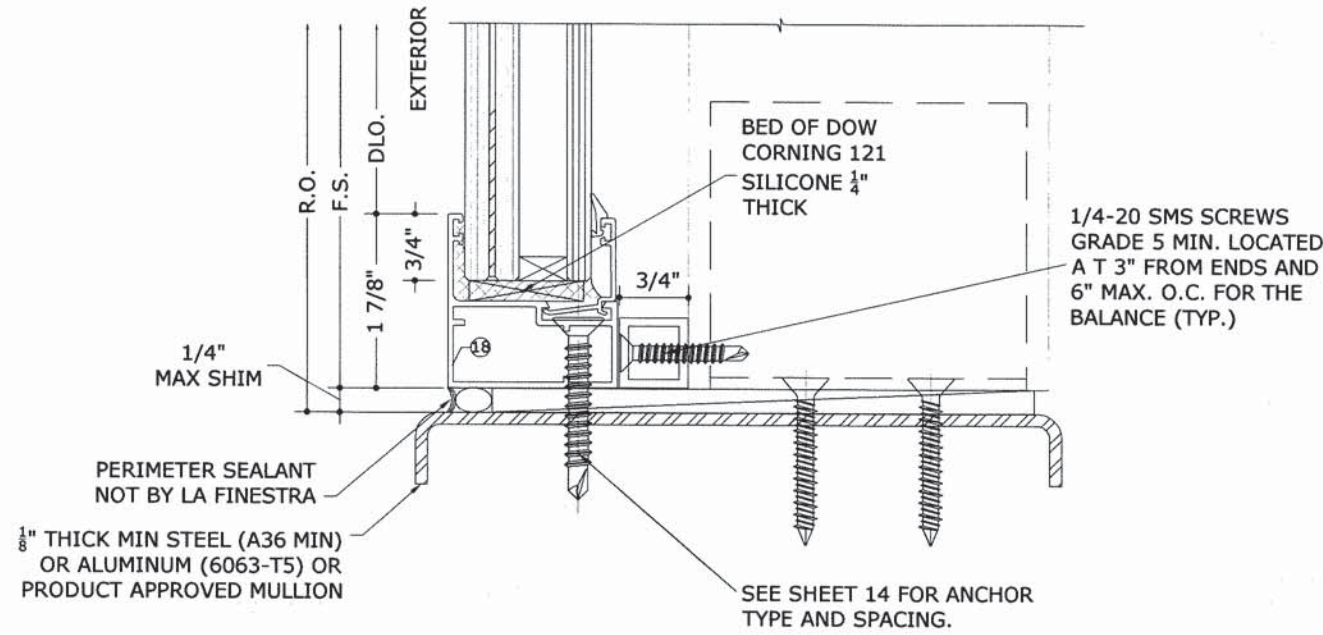
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**2** SILL INTO WOOD  
**22** 6" = 1'-0"



**2** SILL INTO CONCRETE  
**22** 6" = 1'-0"



**2** SILL INTO METAL  
**22** 6" = 1'-0"

NOTE:  
WOOD BUCKS AND METAL STRUCTURES NOT BY LA FINESTRA  
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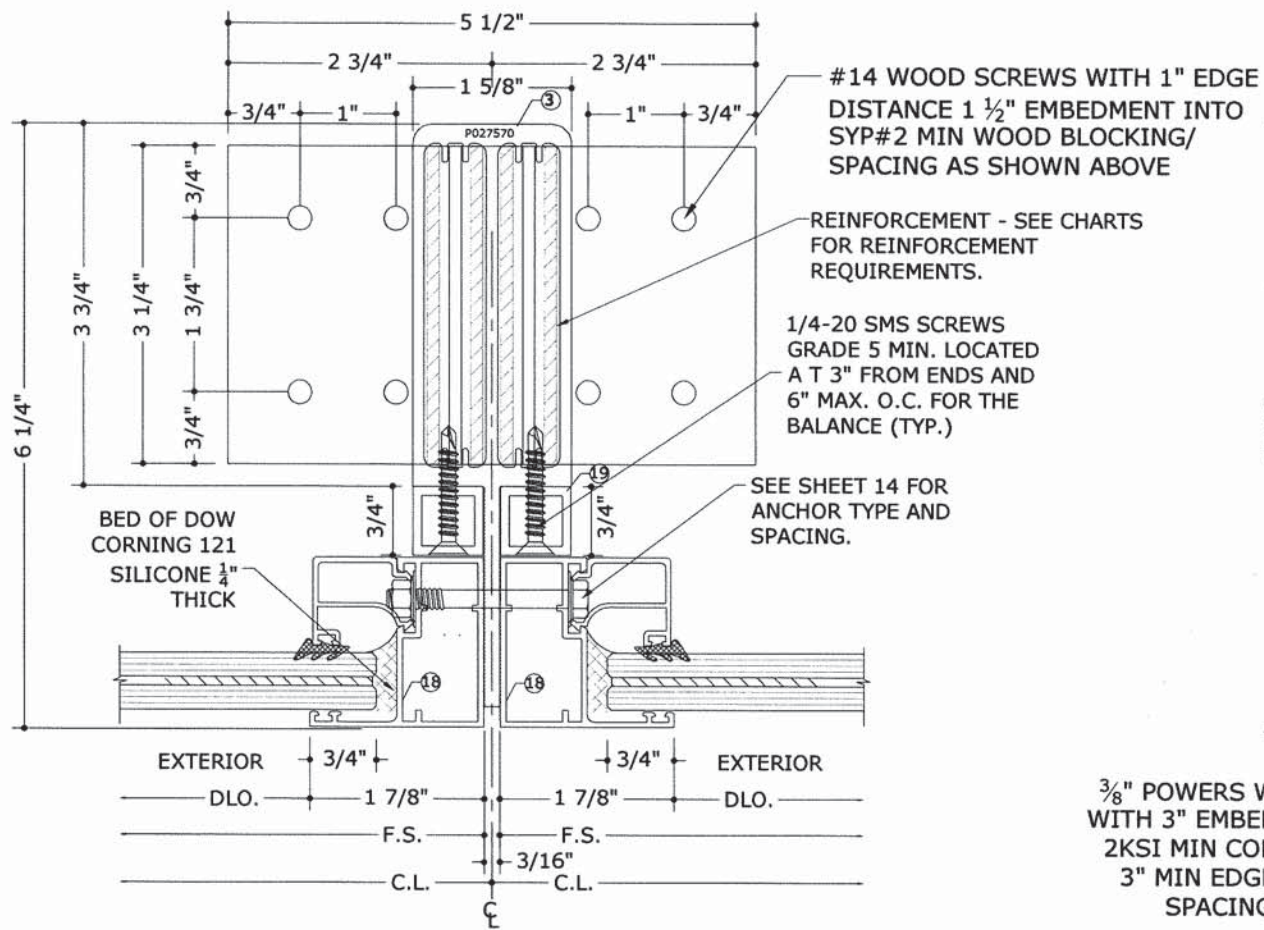
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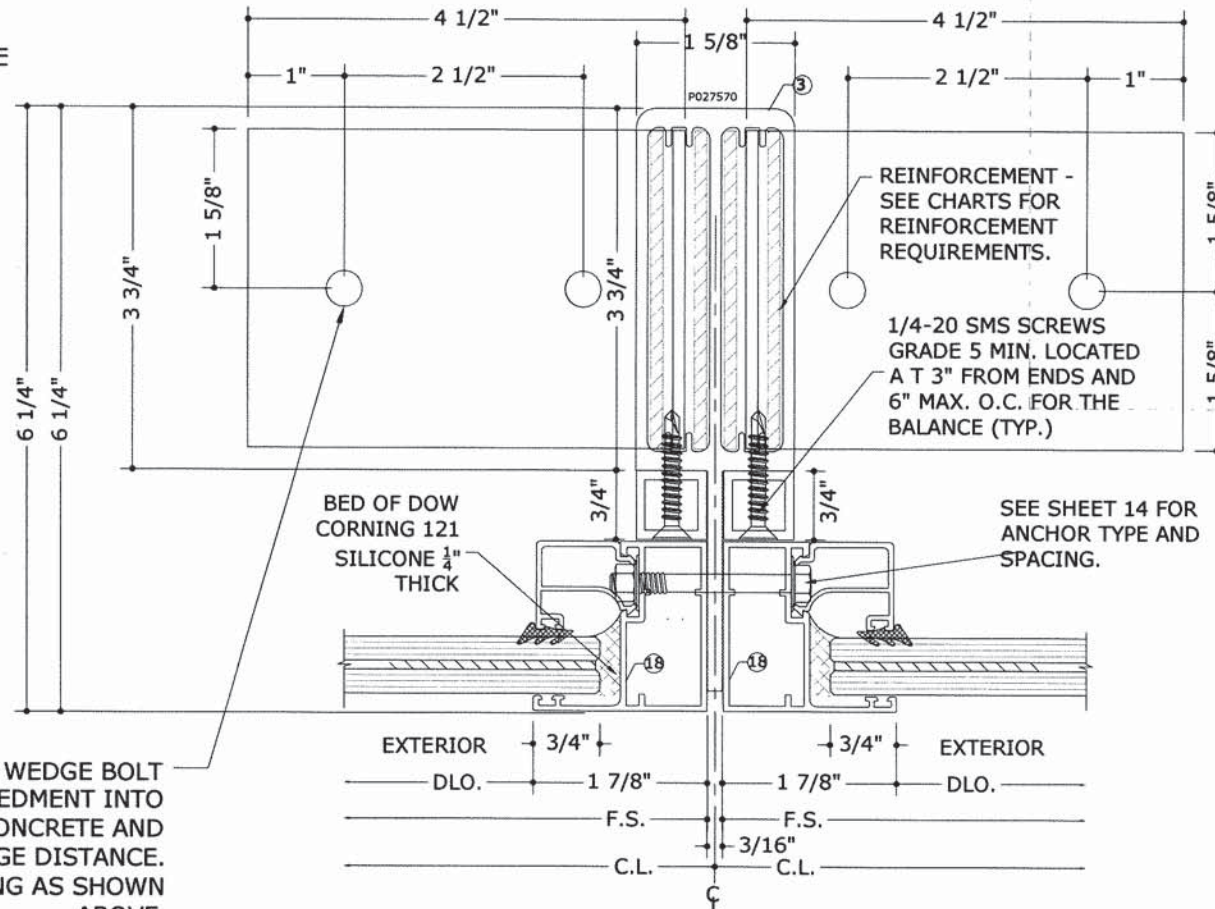
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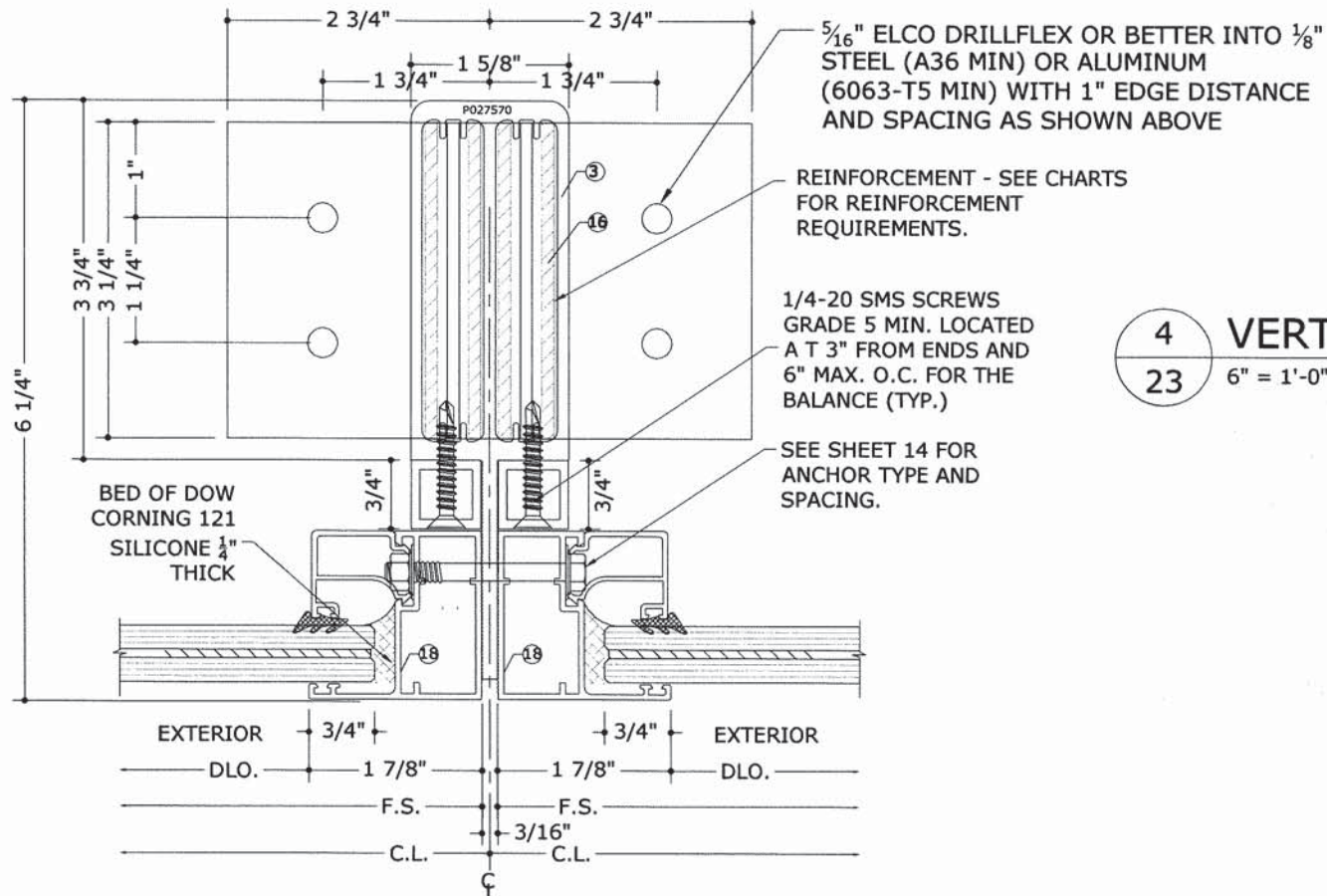
**4 VERTICAL INTERMEDIATE DETAIL**

**23** 6" = 1'-0" WOOD ANCHORING  
NON-REINF. + REINF.



**4 VERTICAL INTERMEDIATE DETAIL**

**23** 6" = 1'-0" CONCRETE  
NON-REINF. + REINF. + UNITIZED

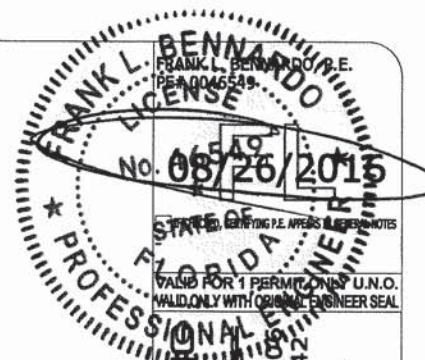


**4 VERTICAL INTERMEDIATE DETAIL**

**23** 6" = 1'-0" METAL ANCHORING  
NON-REINF. + REINF.

3/8" POWERS WEDGE BOLT WITH 3" EMBEDMENT INTO 2KSI MIN CONCRETE AND 3" MIN EDGE DISTANCE. SPACING AS SHOWN ABOVE.

**NOTE:**  
WOOD BUCKS AND METAL STRUCTURES NOT BY LA FINESTRA MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.



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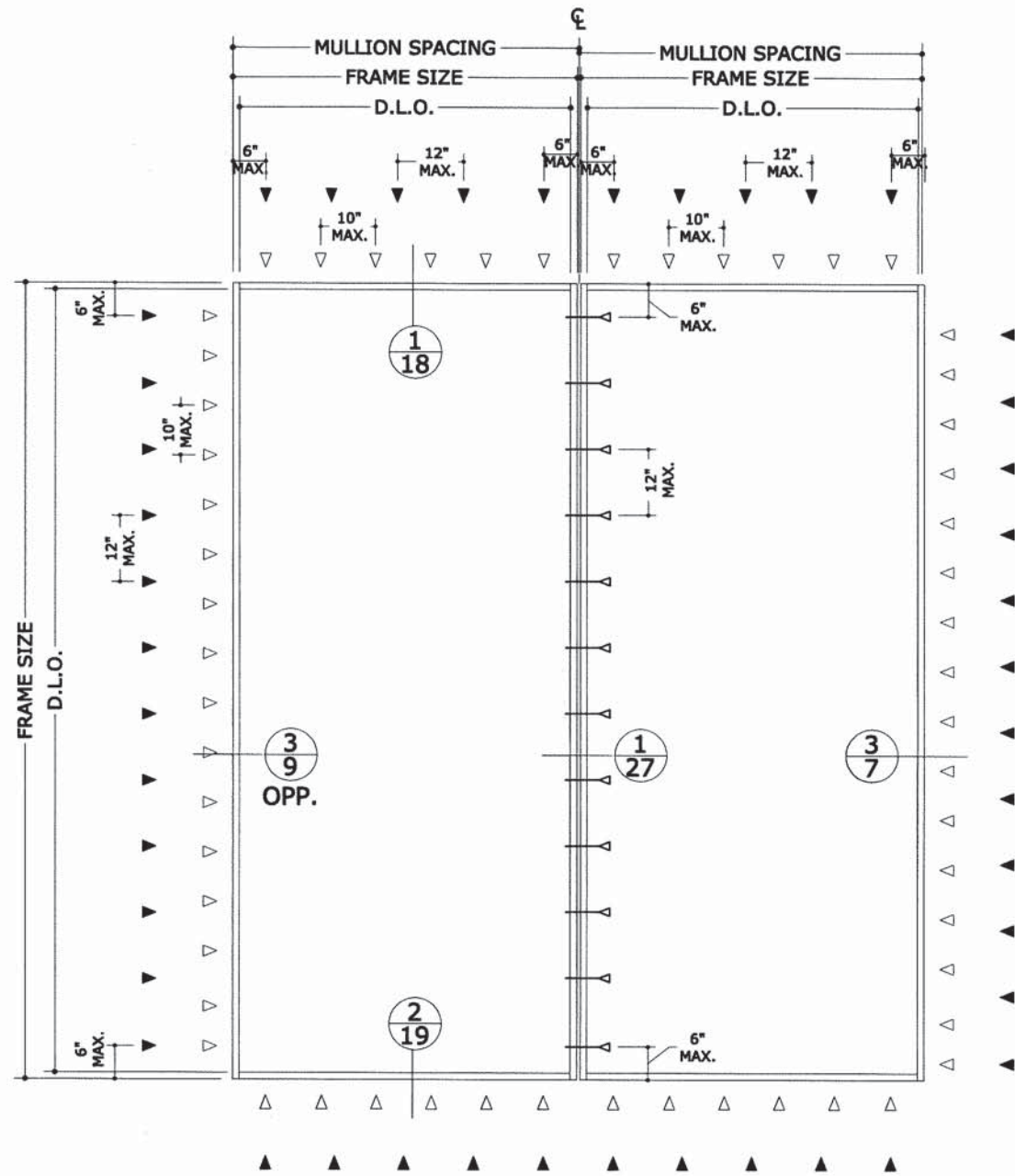
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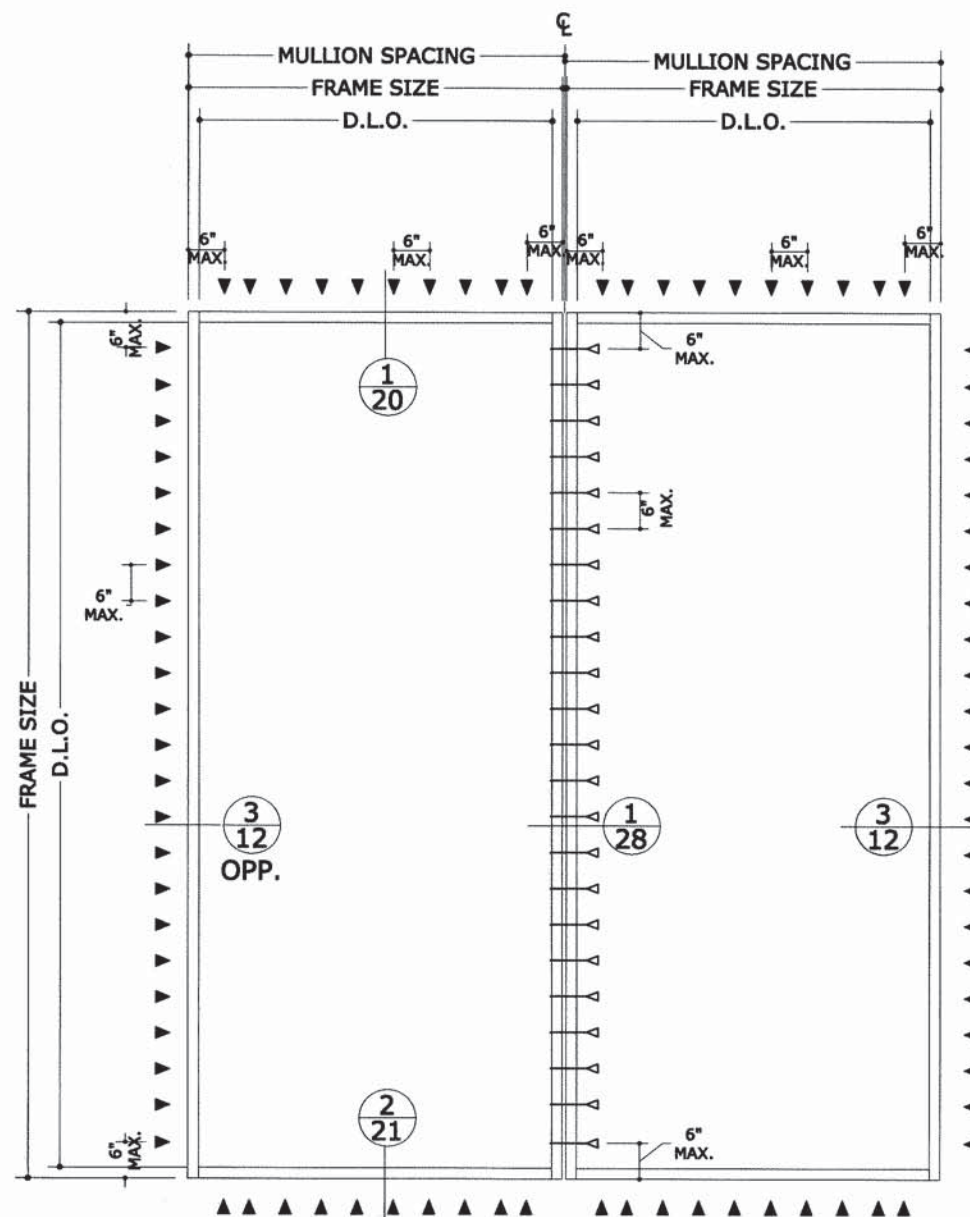
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# P027645 FRAME - UNITIZED

# 7013 FRAME - UNITIZED



D.L.O. = FRAME SIZE - 2 3/8"



D.L.O. = FRAME SIZE - 3 5/8"

NOTE:  
SIZES ARE THE MAXIMUM ALLOWED UNLESS ADDRESSED SEPARATELY UNDER  
SITE SPECIFIC ENGINEERING PER FLORIDA BUILDING CODE 2411.3.2.4 1710.3.1

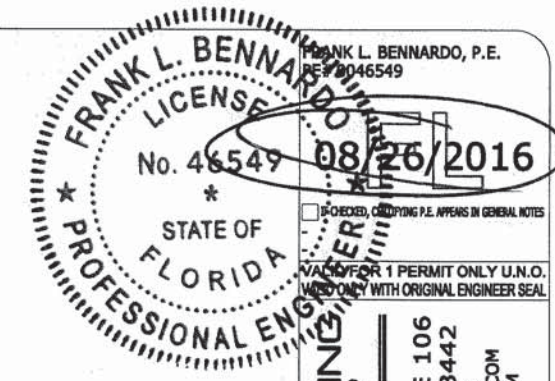
### ANCHOR TYPES

- △ 1/4" THRU-BOLT WITH FENDER WASHERS AND NUT
- ▼ 5/16" ULTRACON BY ELCO (Fu=177 KSI Fy= 155 KSI) WITH 1 3/4" MIN. EMBEDMENT INTO 3000 PSI. CONCRETE MIN. AND 2 3/16" MIN. EDGE DISTANCE.
- ▼ 1/4-20 SMS SCREWS GRADE 5 MIN. (Fu= 120 KSI Fy= 155 KSI) WITH 5 PINCHES MIN. PASS THE THREAD PLANE AND 1" MIN. EDGE DISTANCE INTO 1/8" MIN. THICK ALUMINUM (6063-T5 MIN.) OR 1/8" MIN THICK STEEL (A-36 MIN.)
- ▽ 5/16" ULTRACON BY ELCO (Fu=177 KSI Fy= 155 KSI) INTO 2BY WOOD BUCK (SYP#2 G= 0.55 MIN) WITH 1 1/2" MIN. ENGAGEMENT INTO WOOD AND 1" MIN. EDGE DISTANCE.

### ANCHOR TYPES

- △ 1/4" THRU-BOLT WITH FENDER WASHERS AND NUT
- ▼ 5/16" ULTRACON BY ELCO (Fu=177 KSI Fy= 155 KSI) WITH 1 3/4" MIN. EMBEDMENT INTO 3000 PSI. CONCRETE MIN. AND 2 3/16" MIN. EDGE DISTANCE.
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NOTE:  
FOR PRESSURES USING TESTED MULLIONS  
SEE CHARTS ON SHEETS 25 & 26



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MULLION DESIGN CAPACITY (PSF)			
NOMINAL DIMS		LARGE UNITIZED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.
36"	48"	+120	-140
42"		+120	-140
46"		+120	-140
48.5"		+120	-140
54"		+120	-140
60.25"		+120	-140
62.375"		+120	-140
66"		+120	-140
72"		+120	-140
78"		+120	-140
84"		+120	-140
90"		+120	-140
96"		+120	-140
102"		+120	-140
108"		+120	-140
114"		+120	-140
120"		+120	-140
126"		+120	-140
132"	+120	-140	
138"	+120	-140	
144"	+120	-140	
150"	+120	-140	
156"	+120	-140	

MULLION DESIGN CAPACITY (PSF)			
NOMINAL DIMS		LARGE UNITIZED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.
36"	60"	+120	-140
42"		+120	-140
46"		+120	-140
48.5"		+120	-140
54"		+120	-140
60.25"		+120	-140
62.375"		+120	-140
66"		+120	-140
72"		+120	-140
78"		+120	-140
84"		+120	-140
90"		+120	-140
96"		+120	-140
102"		+120	-140
108"		+120	-140
114"		+120	-140
120"		+120	-140
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132"	+120	-140	
138"	+120	-140	
144"	+120	-140	
150"	+120	-140	
156"	+120	-140	

MULLION DESIGN CAPACITY (PSF)			
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WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.
36"	72"	+120	-140
42"		+120	-140
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54"		+120	-140
60.25"		+120	-140
62.375"		+120	-140
66"		+120	-140
72"		+120	-140
78"		+120	-140
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144"	+120	-140	
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MULLION DESIGN CAPACITY (PSF)			
NOMINAL DIMS		LARGE UNITIZED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.
36"	84"	+120	-140
42"		+120	-140
46"		+120	-140
48.5"		+120	-140
54"		+120	-140
60.25"		+120	-140
62.375"		+120	-140
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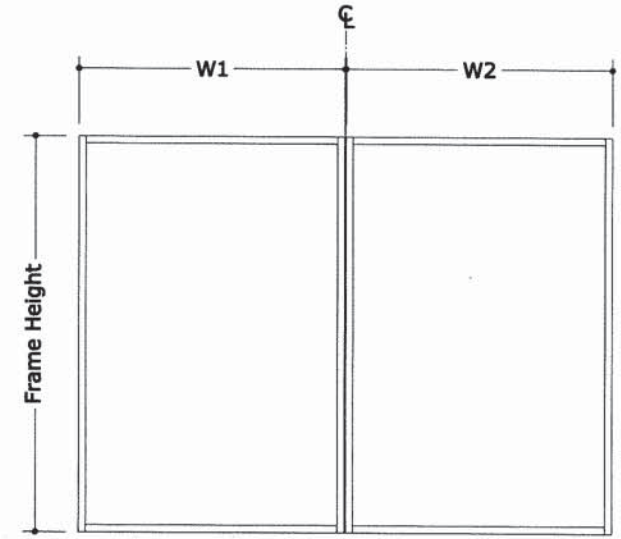
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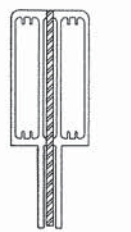
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66"		+120	-140
72"		+120	-140
78"		+120	-140
84"		+120	-140
90"		+120	-140
96"		+120	-140
102"		+120	-140
108"		+120	-140
114"		+120	-140
120"		+120	-140
126"		+120	-140
132"	+120	-140	
138"	+120	-140	
144"	+120	-140	
150"	+120	-140	
156"	+120	-140	

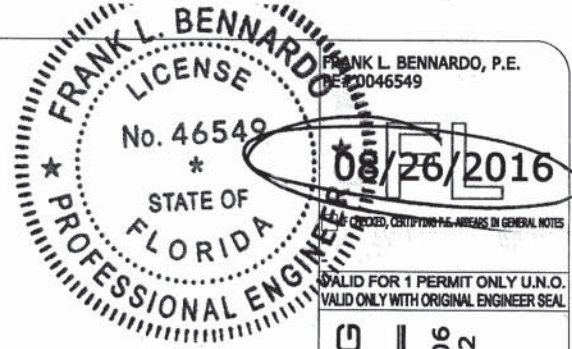


$$\text{WIDTH} = \frac{W1+W2}{2}$$



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NOTE: FOR ALLOWABLE PRESSURES THE LOWEST PRESSURE RATING OF MULLION AND FIXED WINDOW SHALL APPLY.



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 FLORIDA PRODUCT APPROVAL  
 FL18507.1-R2

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	SSQ	FLB	08/31/15
REV1	SSQ	FLB	12/18/15
REV2	JEM	FLB	08/28/16

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**25**

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joem

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MULLION DESIGN CAPACITY (PSF)			
NOMINAL DIMS		LARGE UNITIZED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.
36"	102"	+120	-140
42"		+120	-140
46"		+120	-140
48.5"		+120	-140
54"		+120	-140
60.25"		+120	-140
62.375"		+120	-140
66"		+120	-140
72"		+120	-140
78"		+120	-139
84"		+120	-136
90"		+120	-133
96"		+119	-132
102"		+118	-131
108"		+118	-131
114"		+118	-131
120"		+118	-131
126"		+118	-131
132"	+118	-131	
138"	+118	-131	
144"	+118	-131	
150"	+118	-131	
156"	+118	-131	

MULLION DESIGN CAPACITY (PSF)			
NOMINAL DIMS		LARGE UNITIZED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.
36"	114"	+120	-140
42"		+120	-140
46"		+120	-140
48.5"		+120	-140
54"		+120	-140
60.25"		+120	-135
62.375"		+119	-132
66"		+115	-128
72"		+109	-122
78"		+105	-117
84"		+102	-113
90"		+99	-110
96"		+97	-108
102"		+96	-106
108"		+95	-105
114"		+95	-105
120"		+95	-105
126"		+95	-105
132"	+95	-105	
138"	+95	-105	
144"	+95	-105	
150"	+95	-105	
156"	+95	-105	

MULLION DESIGN CAPACITY (PSF)			
NOMINAL DIMS		LARGE UNITIZED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.
36"	122.375"	+120	-140
42"		+120	-140
46"		+120	-140
48.5"		+120	-140
54"		+119	-133
60.25"		+111	-123
62.375"		+108	-120
66"		+104	-116
72"		+99	-110
78"		+94	-105
84"		+91	-101
90"		+88	-98
96"		+86	-96
102"		+84	-94
108"		+83	-92
114"		+82	-92
120"		+82	-91
126"		+82	-91
132"	+82	-91	
138"	+82	-91	
144"	+82	-91	
150"	+82	-91	
156"	+82	-91	

MULLION DESIGN CAPACITY (PSF)			
NOMINAL DIMS		LARGE UNITIZED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.
36"	132"	+120	-140
42"		+120	-140
46"		+120	-136
48.5"		+118	-131
54"		+108	-121
60.25"		+100	-111
62.375"		+98	-109
66"		+94	-105
72"		+89	-99
78"		+85	-94
84"		+81	-90
90"		+78	-87
96"		+76	-85
102"		+74	-82
108"		+72	-80
114"		+70	-78
120"		+69	-77
126"		+69	-76
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144"	+69	-76	
150"	+69	-76	
156"	+69	-76	

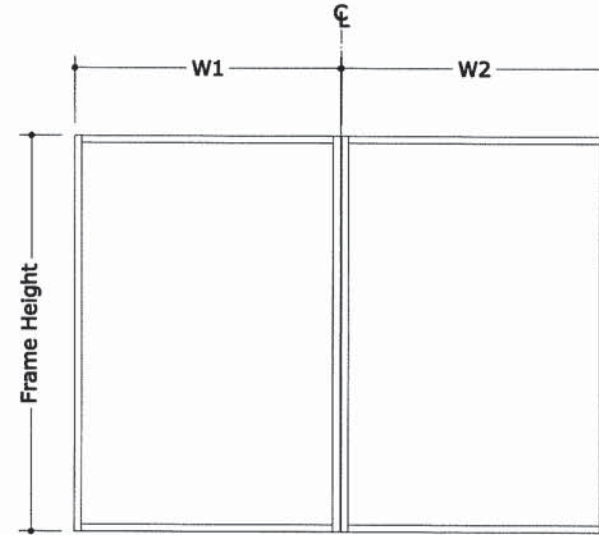
MULLION DESIGN CAPACITY (PSF)			
NOMINAL DIMS		LARGE UNITIZED	
WIDTH	HEIGHT	(+) P.S.F.	(-) P.S.F.
36"	144"	+120	-140
42"		+119	-132
46"		+110	-123
48.5"		+106	-118
54"		+97	-108
60.25"		+90	-99
62.375"		+87	-96
66"		+83	-92
72"		+77	-85
78"		+72	-80
84"		+68	-76
90"		+65	-72
96"		+62	-69
102"		+60	-66
108"		+58	-64
114"		+56	-62
120"		+55	-61
126"		+54	-60
132"	+53	-59	
138"	+53	-59	
144"	+53	-59	
150"	+53	-59	
156"	+53	-59	

36"	108"	+120	-140
42"		+120	-140
46"		+120	-140
48.5"		+120	-140
54"		+120	-140
60.25"		+120	-140
62.375"		+120	-140
66"		+120	-138
72"		+119	-132
78"		+114	-127
84"		+111	-123
90"		+108	-121
96"		+107	-119
102"		+106	-118
108"		+105	-117
114"		+105	-117
120"		+105	-117
126"		+105	-117
132"	+105	-117	
138"	+105	-117	
144"	+105	-117	
150"	+105	-117	
156"	+105	-117	

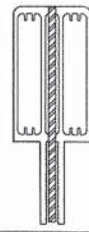
36"	120"	+120	-140
42"		+120	-140
46"		+120	-140
48.5"		+120	-140
54"		+120	-136
60.25"		+114	-126
62.375"		+111	-123
66"		+107	-119
72"		+102	-113
78"		+97	-108
84"		+94	-104
90"		+91	-101
96"		+89	-99
102"		+87	-97
108"		+86	-96
114"		+85	-95
120"		+85	-95
126"		+85	-95
132"	+85	-95	
138"	+85	-95	
144"	+85	-95	
150"	+85	-95	
156"	+85	-95	

36"	126"	+120	-140
42"		+120	-140
46"		+120	-140
48.5"		+120	-139
54"		+115	-128
60.25"		+106	-118
62.375"		+104	-116
66"		+100	-111
72"		+95	-105
78"		+90	-101
84"		+87	-97
90"		+84	-94
96"		+82	-91
102"		+80	-89
108"		+79	-88
114"		+78	-87
120"		+77	-86
126"		+77	-86
132"	+77	-86	
138"	+77	-86	
144"	+77	-86	
150"	+77	-86	
156"	+77	-86	

36"	138"	+120	-140
42"		+120	-139
46"		+116	-129
48.5"		+111	-124
54"		+103	-114
60.25"		+95	-105
62.375"		+92	-102
66"		+89	-99
72"		+84	-93
78"		+79	-88
84"		+75	-83
90"		+71	-79
96"		+69	-76
102"		+66	-74
108"		+64	-71
114"		+63	-70
120"		+61	-68
126"		+61	-67
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144"	+60	-67	
150"	+60	-67	
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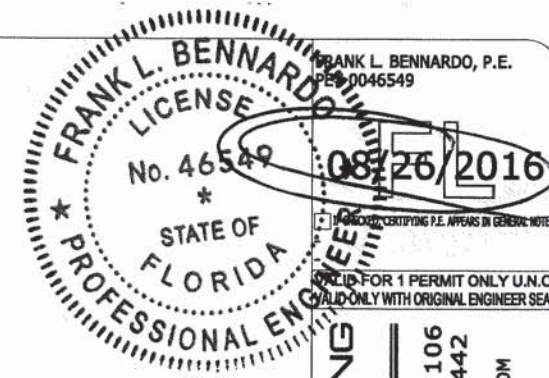


$$\text{WIDTH} = \frac{W1+W2}{2}$$



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REMARKS	DRWN	CHKD	DATE
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REV1	SSQ	FLB	12/18/15
REV2	JEM	FLB	08/26/16

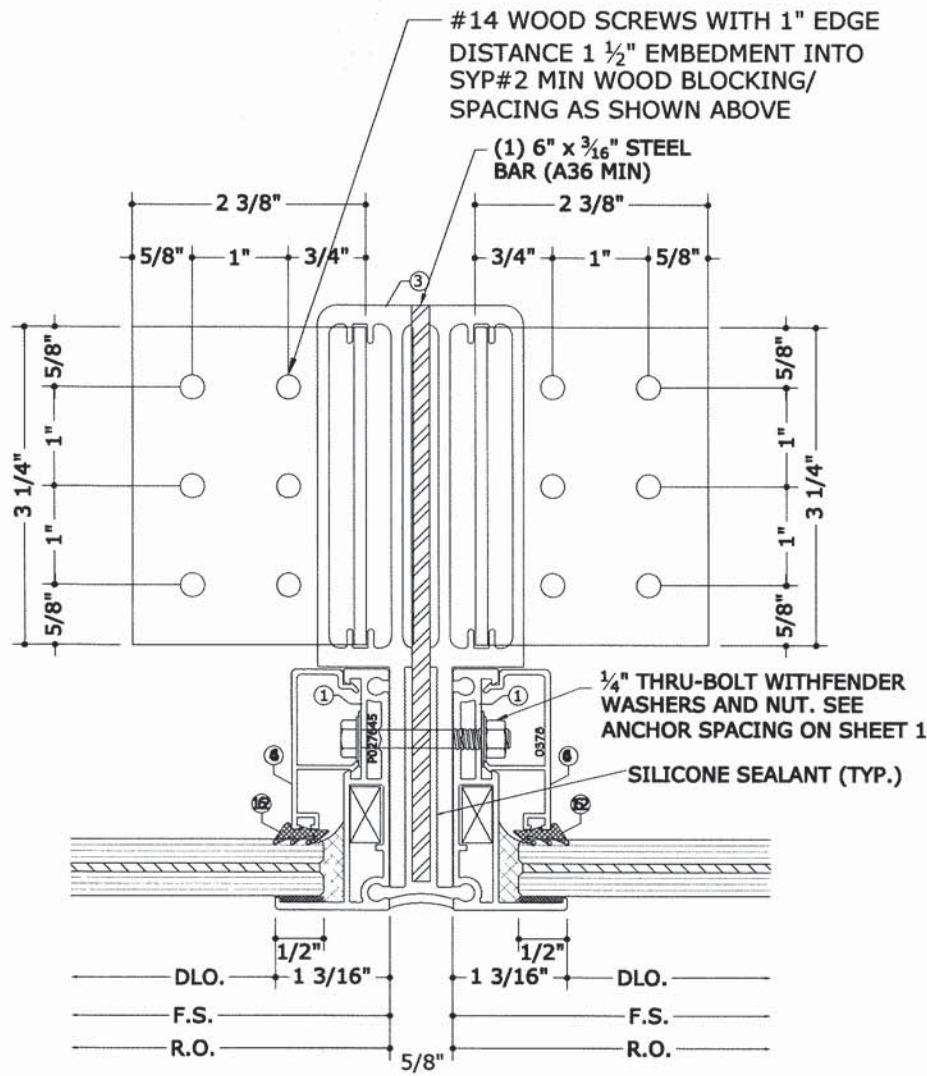
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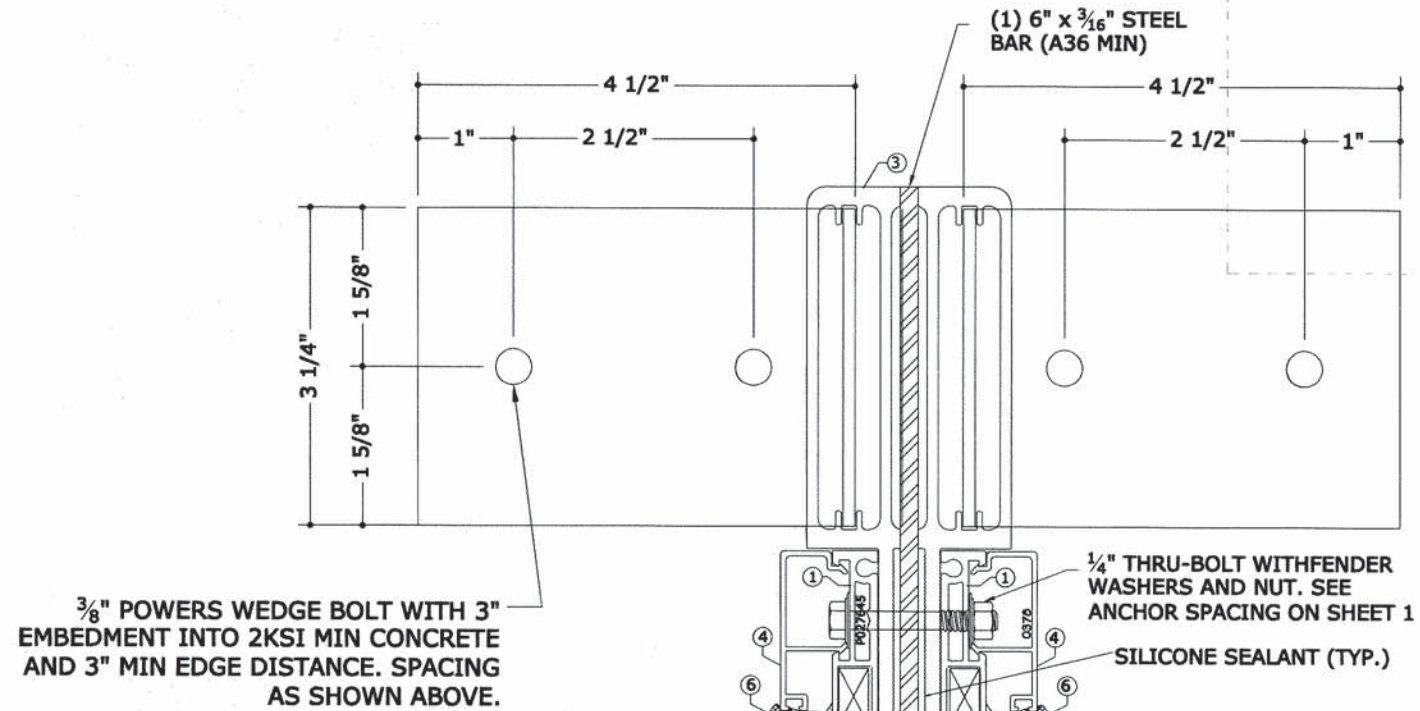
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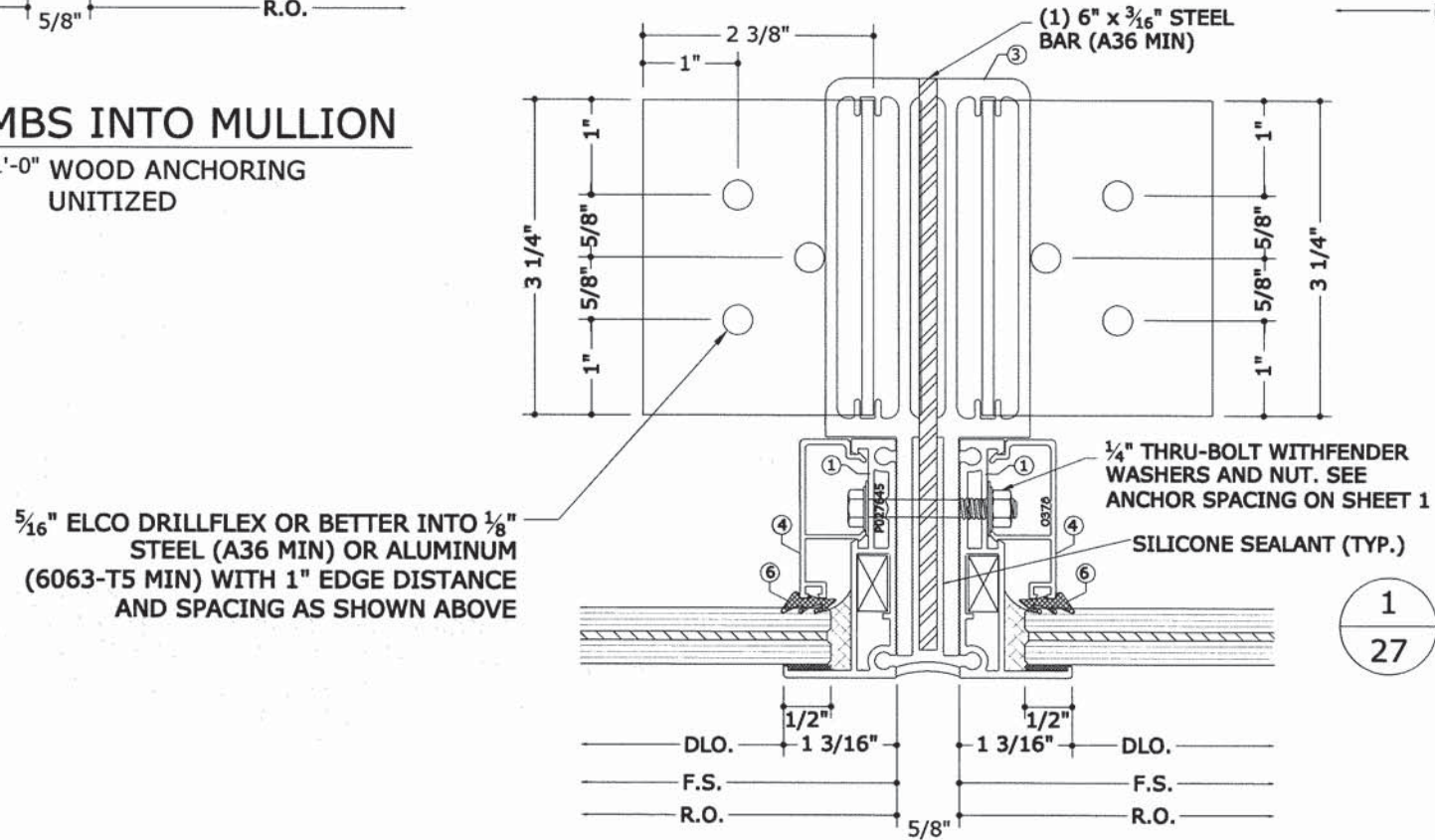
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1  
27 JAMBS INTO MULLION  
6" = 1'-0" WOOD ANCHORING  
UNITIZED

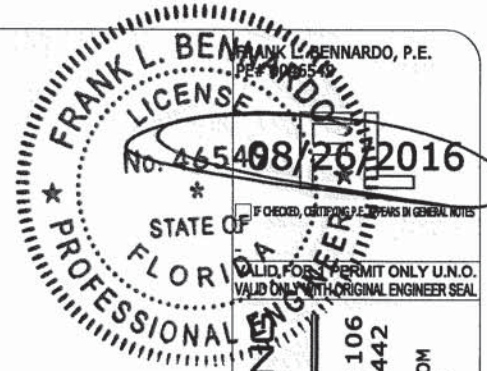


1  
27 JAMBS INTO MULLION  
6" = 1'-0" CONCRETE  
NON-REINF. + REINF. + UNITIZED



1  
27 JAMBS INTO MULLION  
6" = 1'-0" METAL ANCHORING  
UNITIZED

NOTE:  
WOOD BUCKS AND METAL STRUCTURES NOT BY LA FINESTRA  
MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND  
TRANSFER THEM TO THE BUILDING STRUCTURE.



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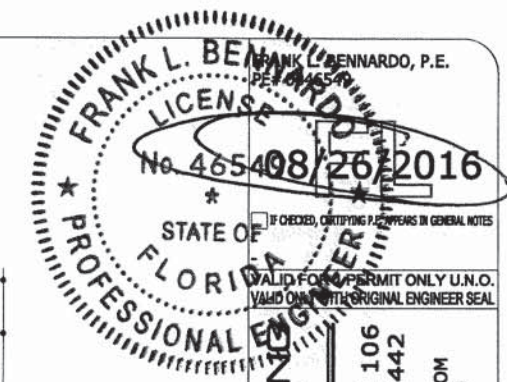
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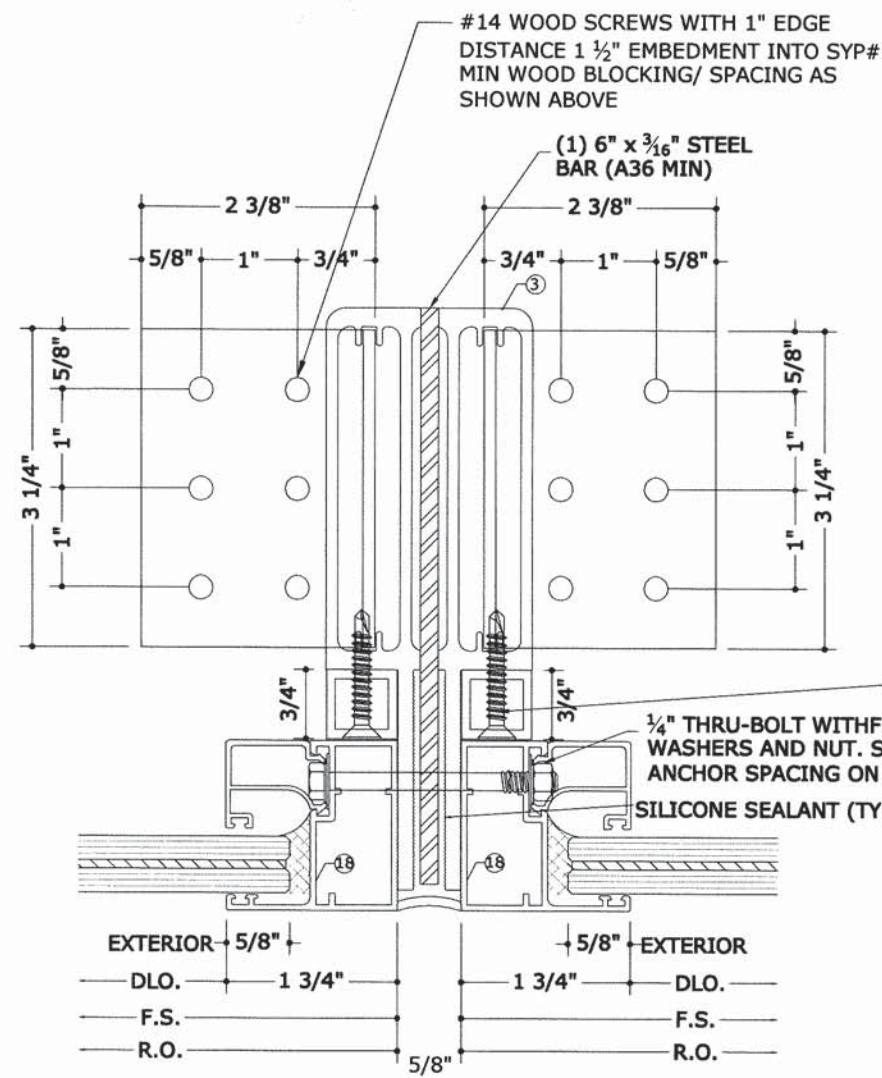
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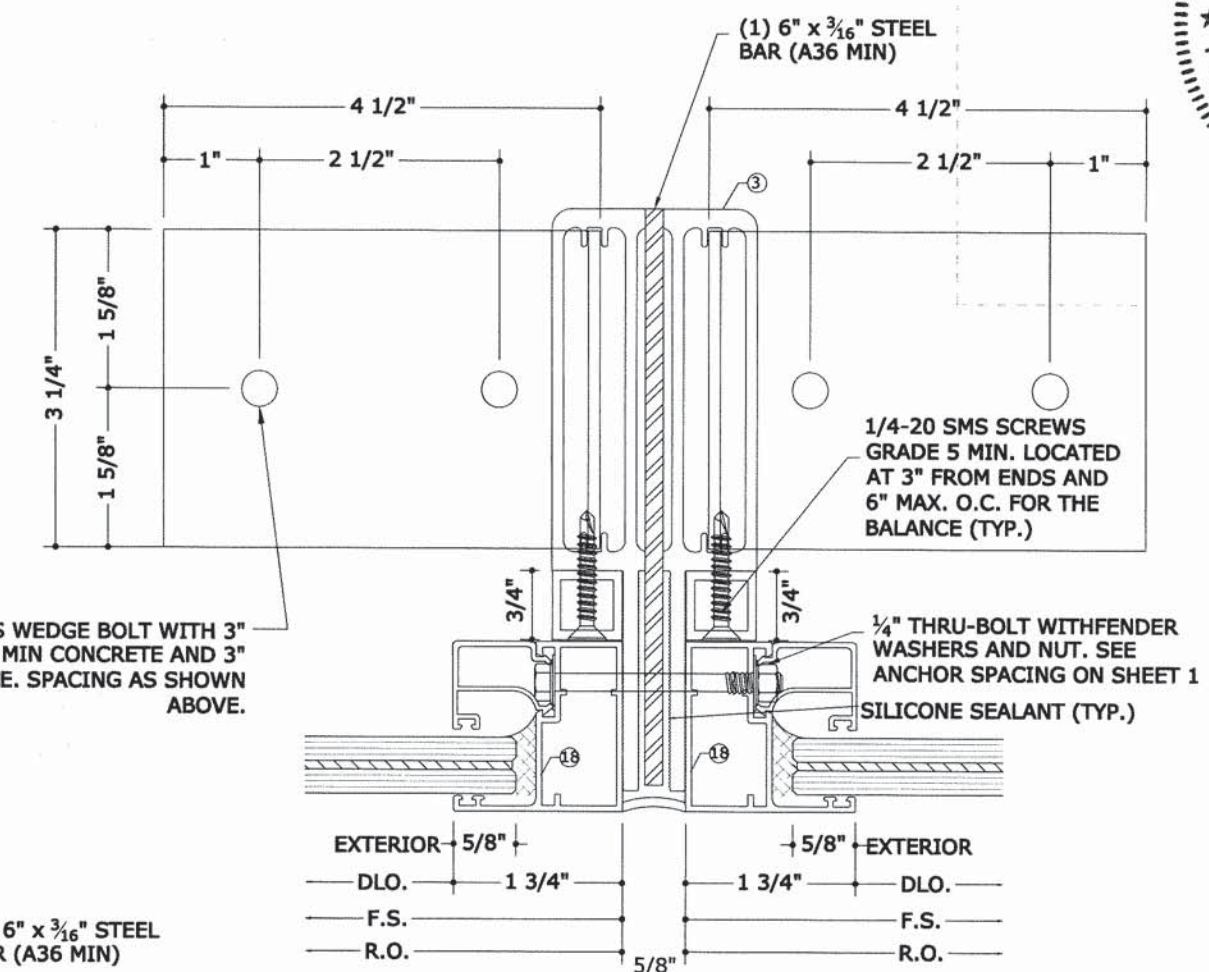




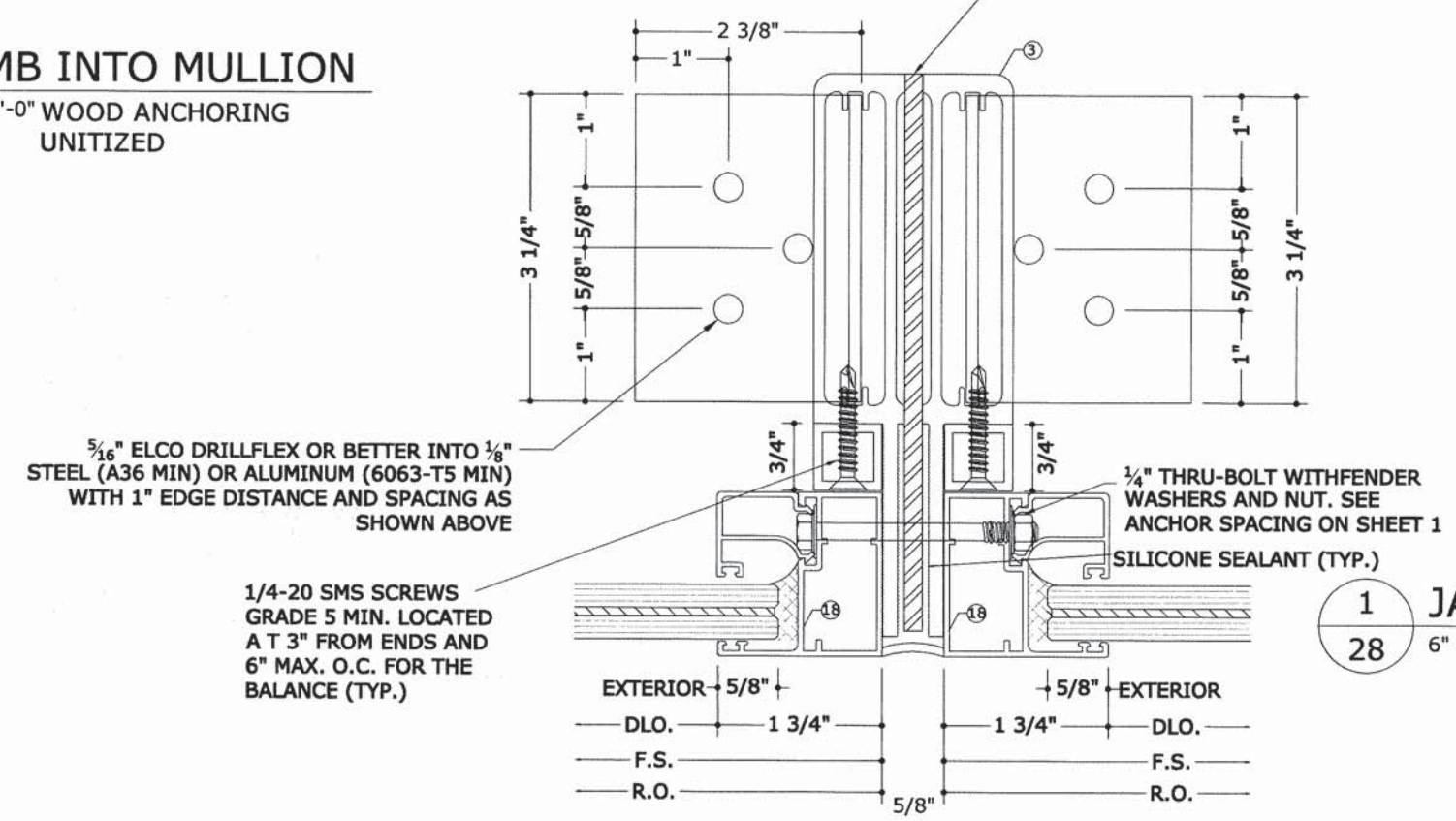
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**1**  
**28** JAMB INTO MULLION  
 6" = 1'-0" WOOD ANCHORING UNITIZED



**1**  
**28** JAMB INTO MULLION  
 6" = 1'-0" CONCRETE NON-REINF. + REINF. + UNITIZED



**1**  
**28** JAMB INTO MULLION  
 6" = 1'-0" METAL ANCHORING UNITIZED

**NOTE:**  
 WOOD BUCKS AND METAL STRUCTURES NOT BY LA FINESTRA MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

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 FL18507.1-R2

DRWN	CHKD	DATE
SSQ	FLB	08/31/15
SSQ	FLB	12/18/15
JEM	FLB	08/28/16

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 REV2

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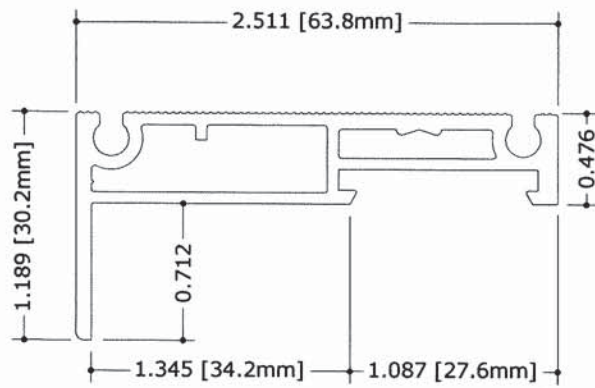
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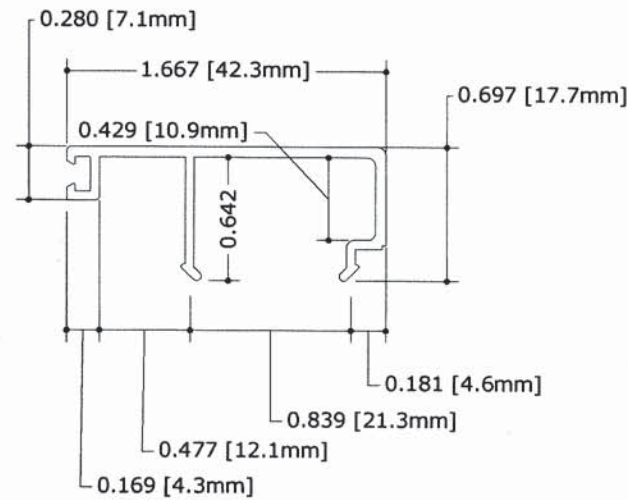
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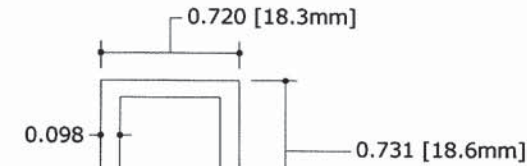
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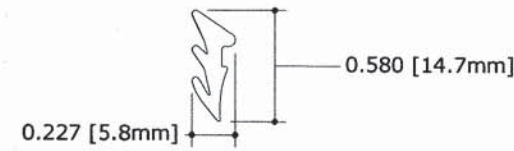
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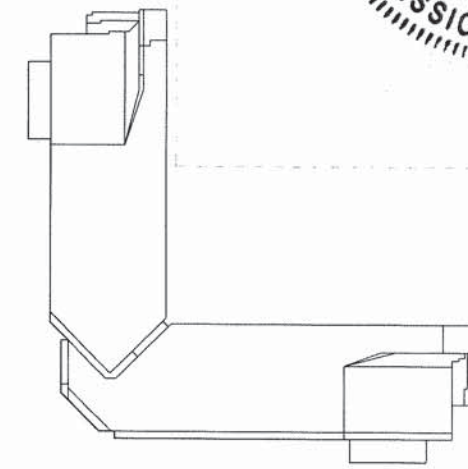
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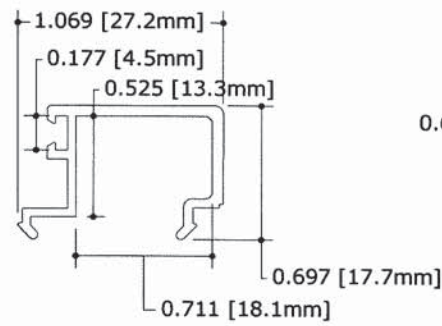
⑱ 3/4" ALUM. TUBE



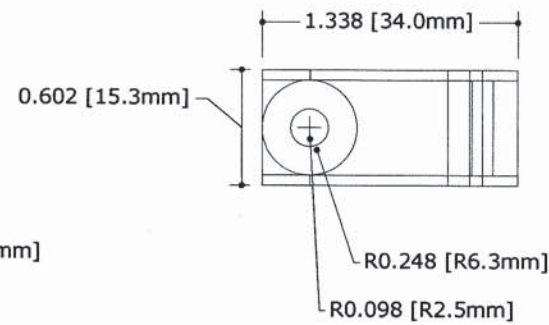
⑫ GLAZING WEDGE GASKET



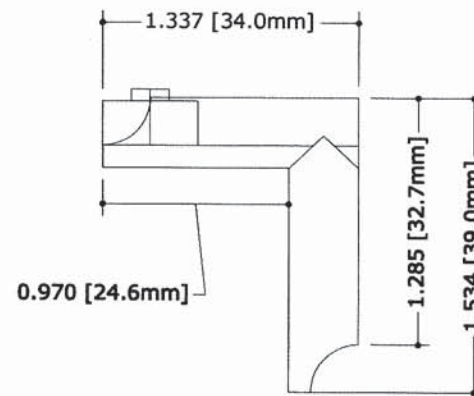
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CORNER KEY FOR  
ARCHITECTURAL SHAPES



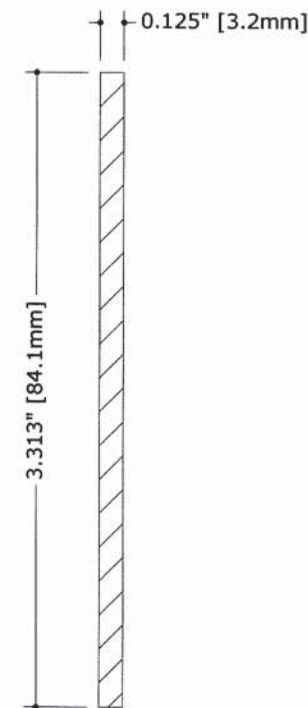
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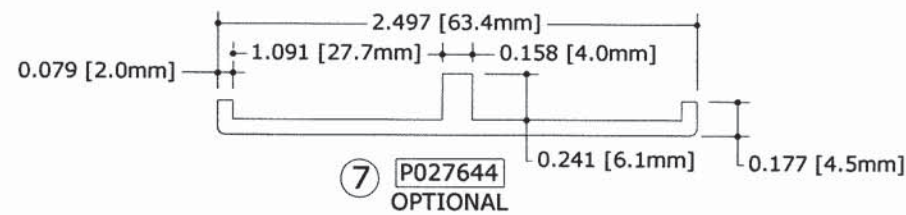
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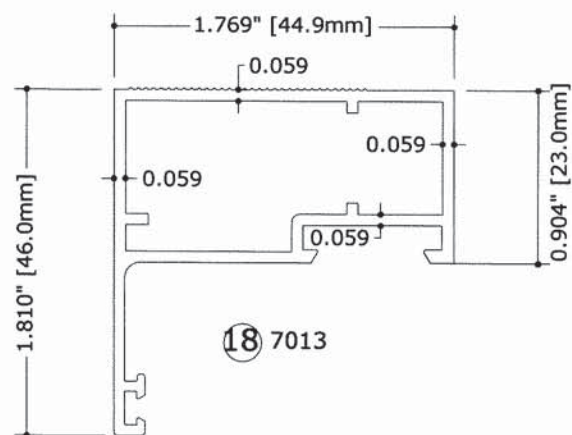
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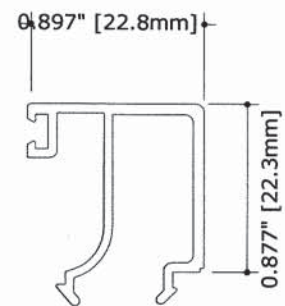
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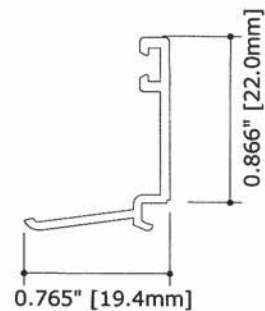
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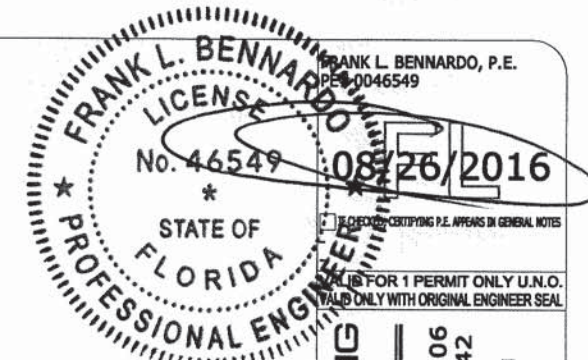
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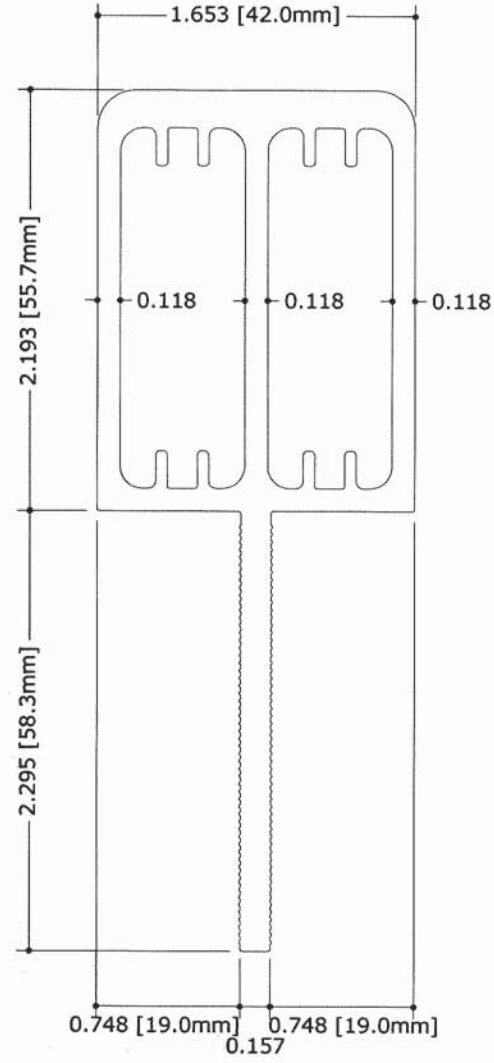


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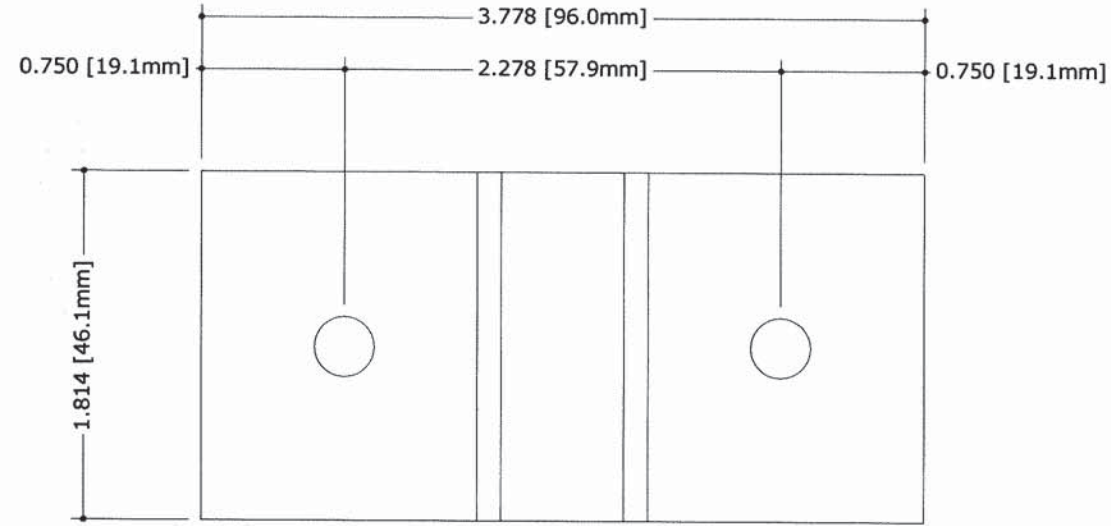
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REV1	SSQ	FLB	12/18/15
REV2	JEM	FLB	08/28/16

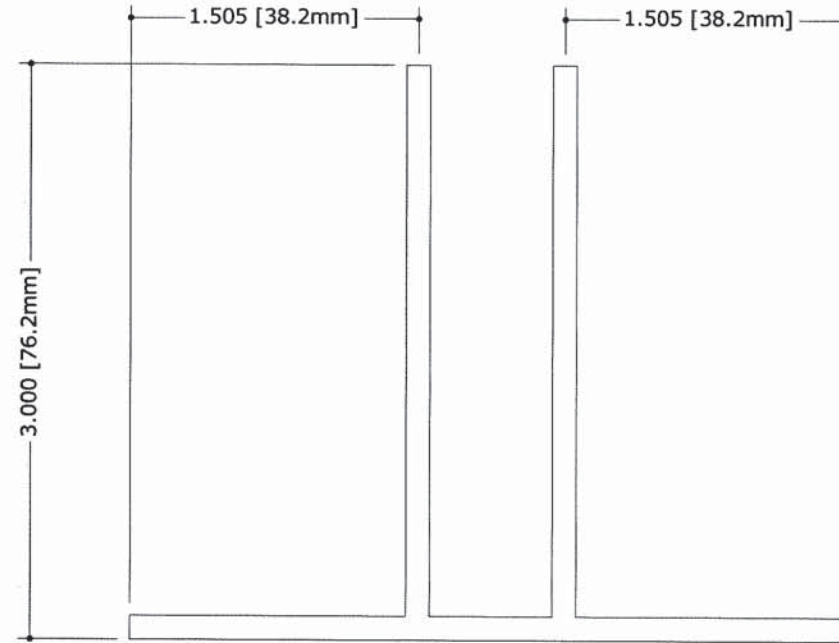
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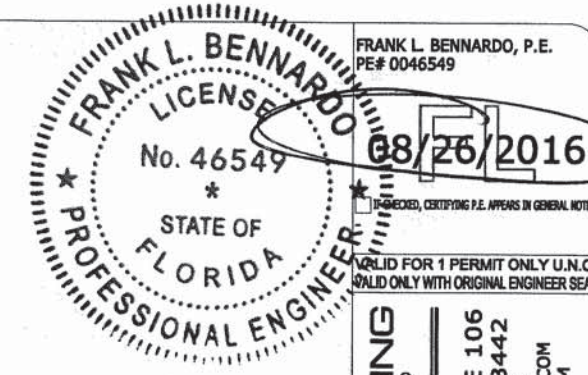
② P027569



⑧ "T" CLIP (TOP VIEW)



⑧ "T" CLIP (FRONT VIEW)



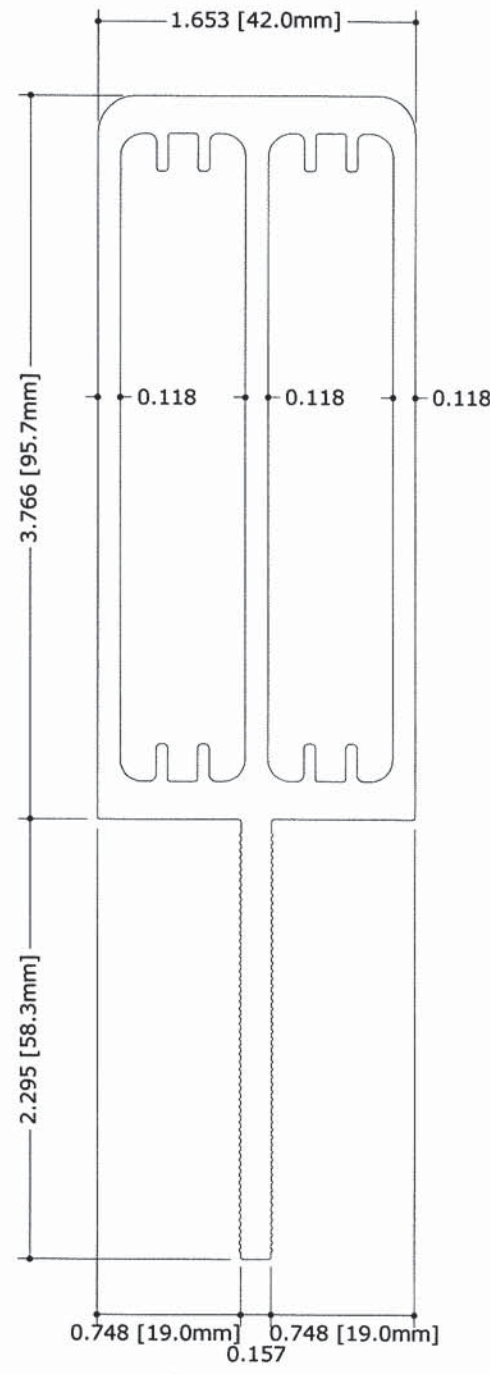
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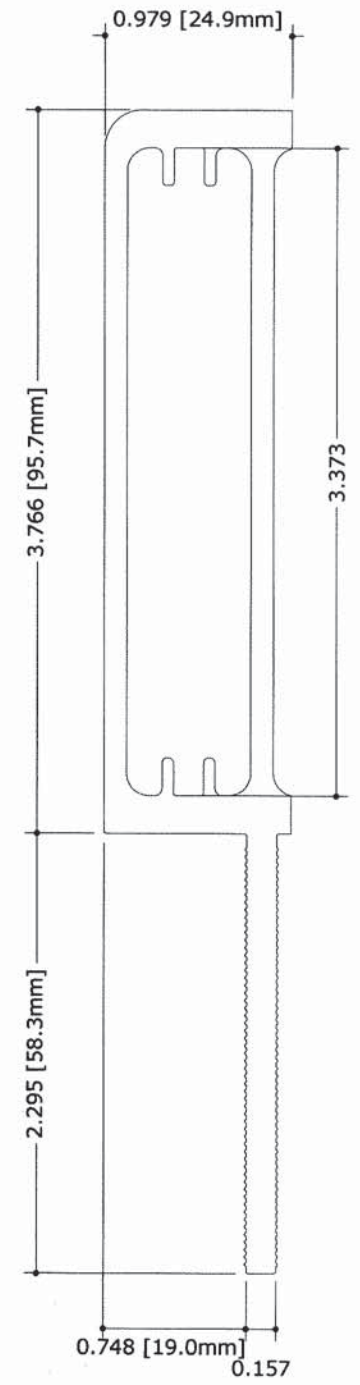
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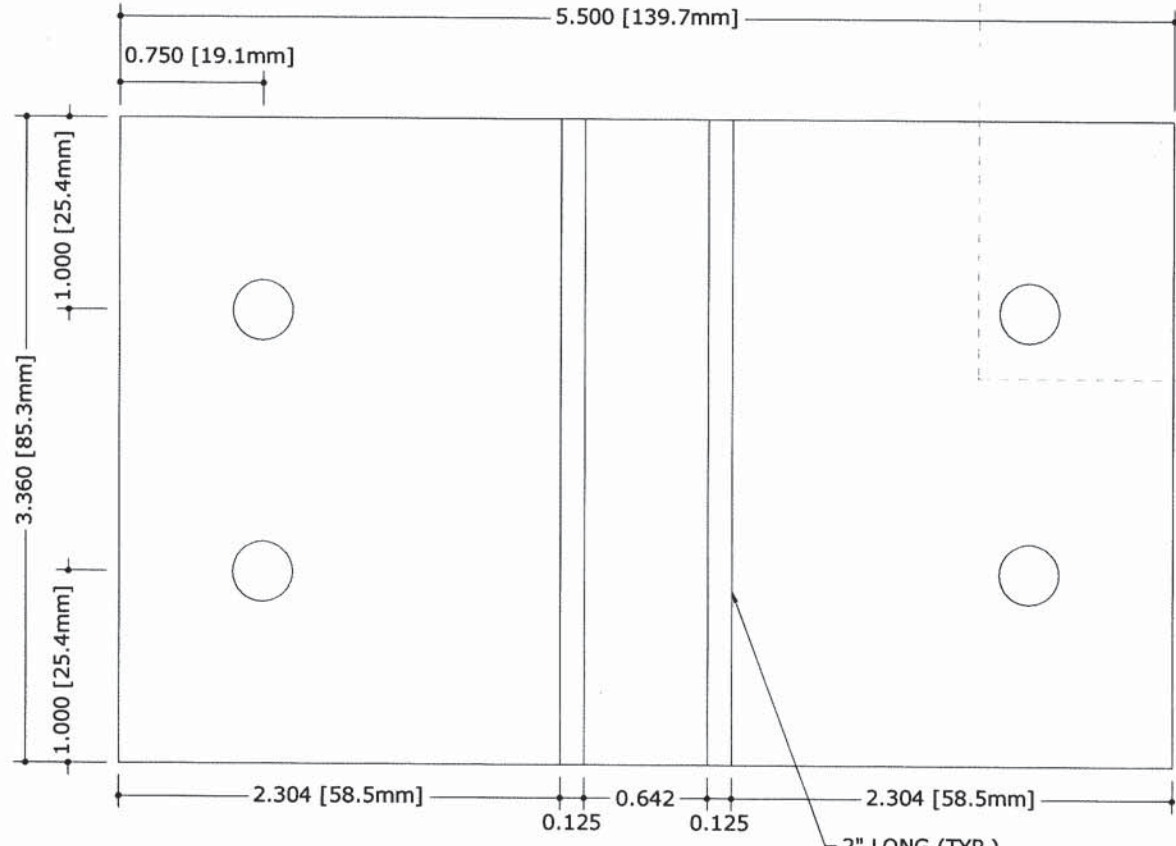
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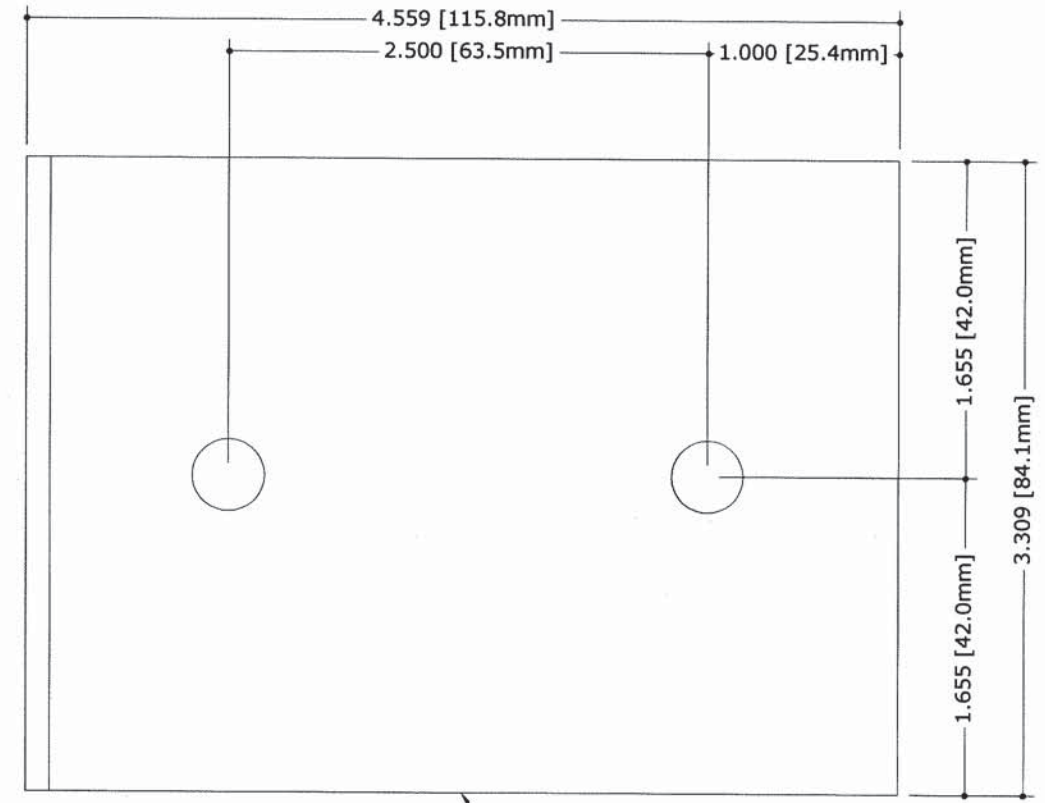
③ P027570



④ P027570 MODIFIED



⑨ 0.125" THICK ALUMINUM CLIP



⑪ "ANGLE" CLIP (TOP VIEW)  
4 1/2"x 3"x 3.3" ALUMINUM ANGLE (6063-T6) 1/8" THICK.

FRANK L. BERNARDO, P.E.  
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 08/26/2016  
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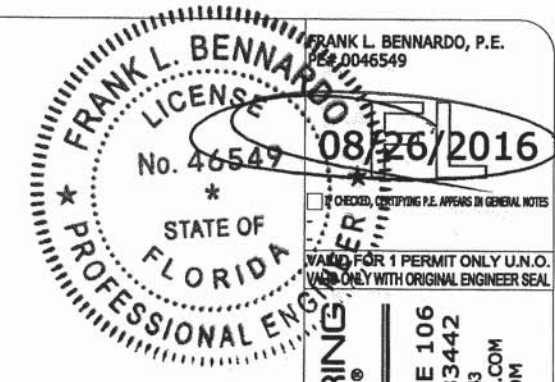
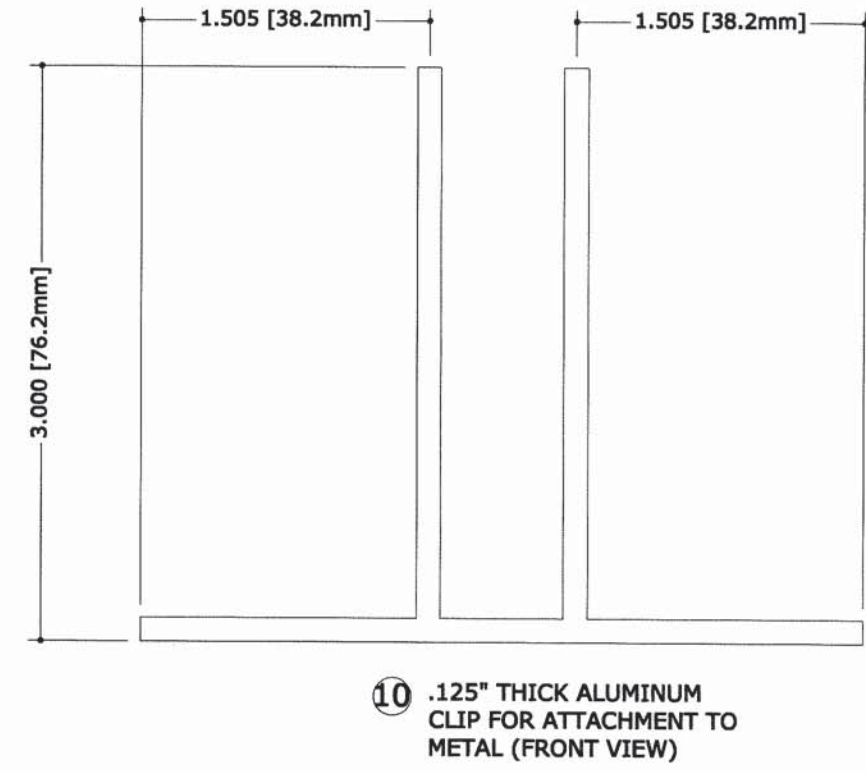
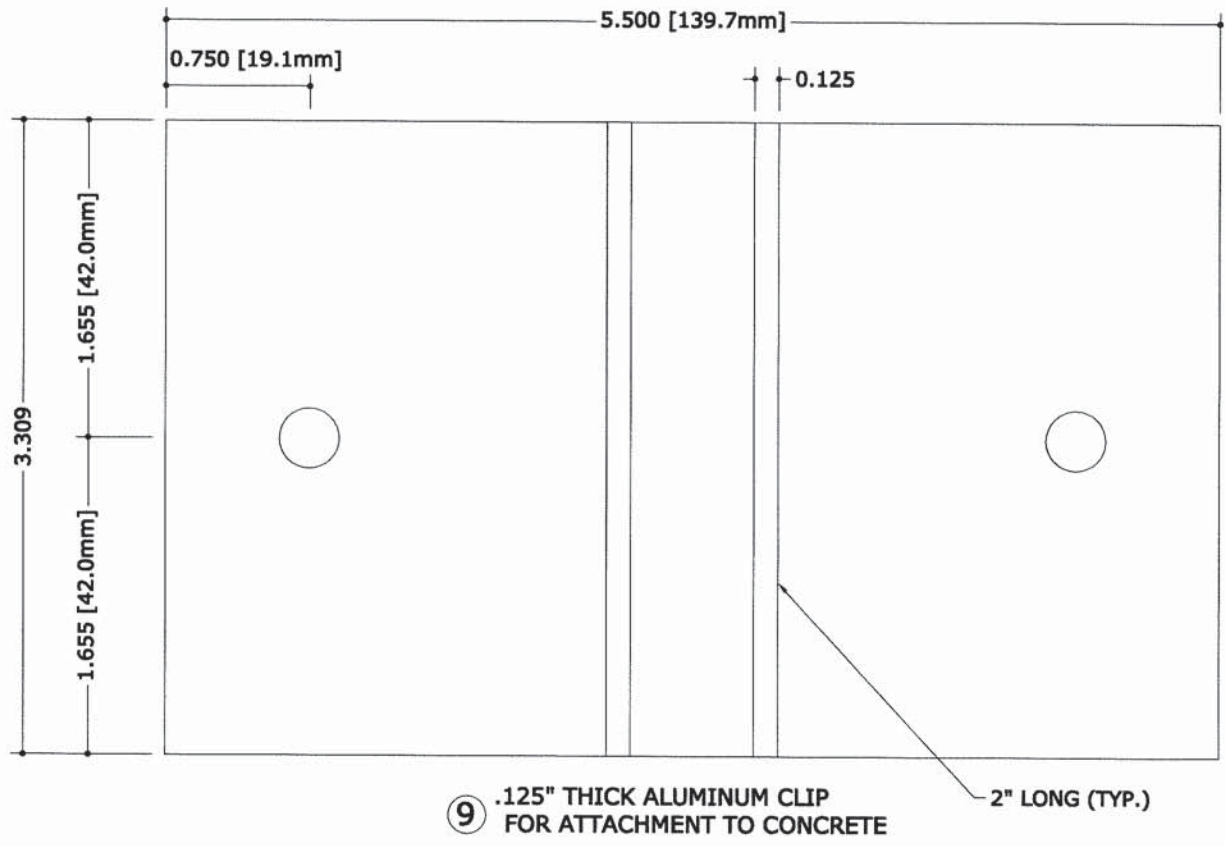
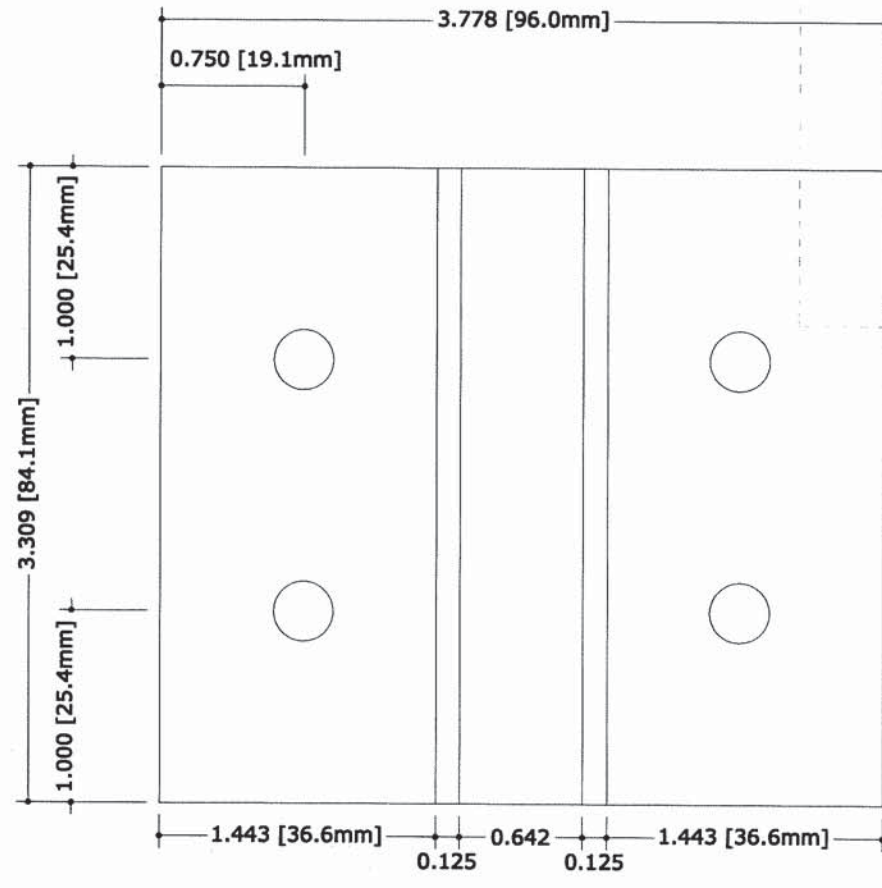
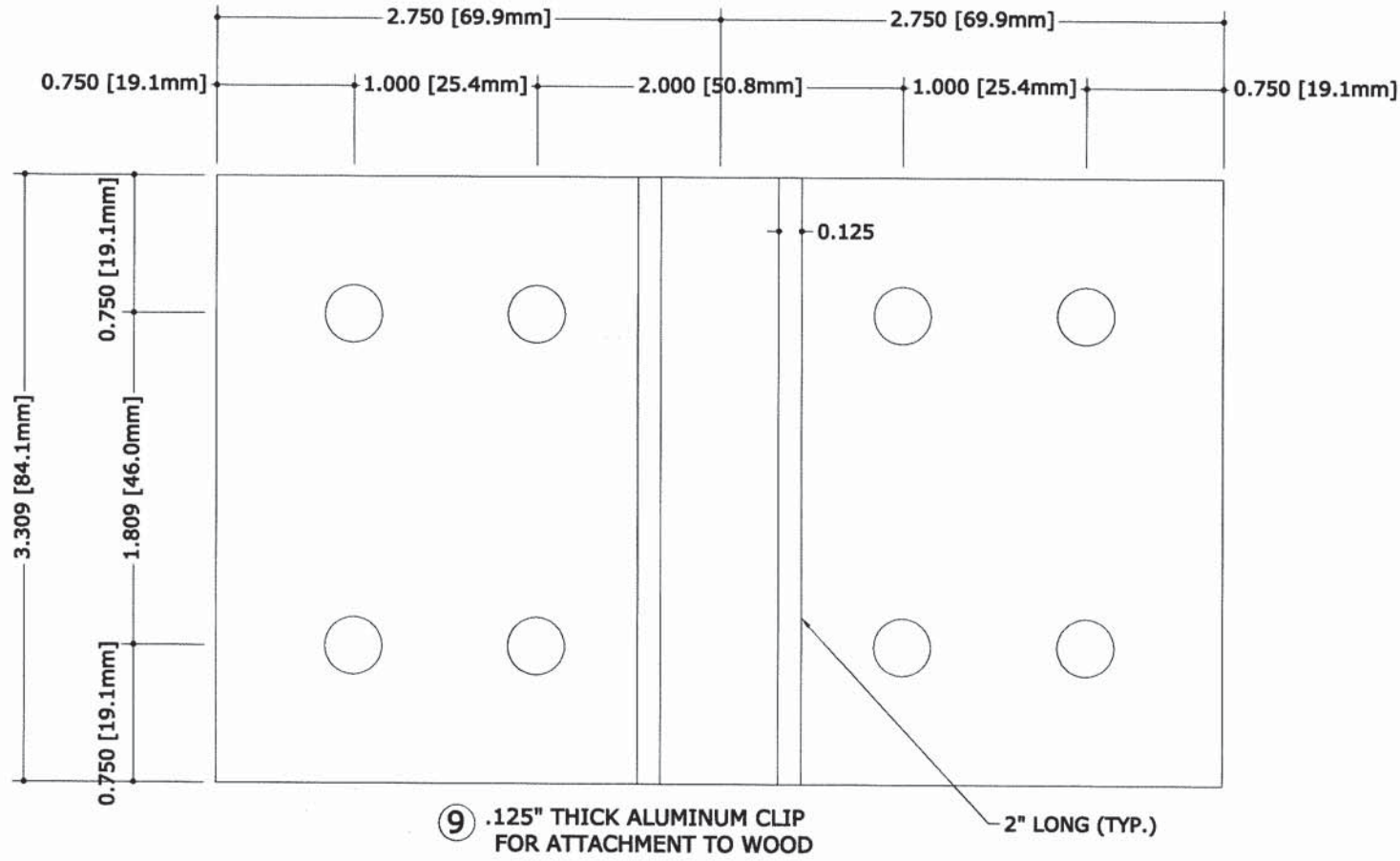
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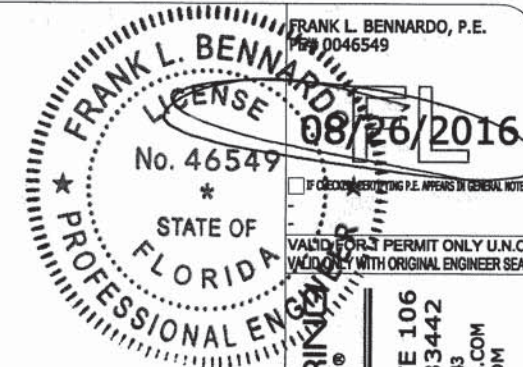
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### BILL OF MATERIALS

ITEM #	PART #	ITEM	MATERIAL
1	P027645	0.063" SILL/JAMB/HEADER EXTRUSION	ALUMINUM (6063-T6)
2	P027569	INTERMEDIATE VERTICAL CUSTOM TESTED MULLION (SMALL)	ALUMINUM (6063-T6)
3	P027570	INTERMEDIATE VERTICAL CUSTOM TESTED MULLION (LARGE)	ALUMINUM (6063-T6)
4	P027570 (MODIF.)	MODIFIED INTERMEDIATE VERTICAL CUSTOM TESTED MULLION (LARGE)	ALUMINUM (6063-T6)
5	P027642	GLASS STOP FOR 1" GLASS	ALUMINUM (6063-T6)
6	P027643	GLASS STOP FOR 9/16" GLASS	ALUMINUM (6063-T6)
7	P027644	0.050" SNAP COVER	ALUMINUM (6063-T6)
8	P027569	"T" CLIP FOR SMALL MULLION (P027569)	ALUMINUM (6063-T6)
9	P027570	"T" CLIP FOR LARGE MULLION (P027570)	ALUMINUM (6063-T6)
10	N/A	"T" CLIP FOR LARGE MULLION	ALUMINUM (6063-T6)
11	N/A	"ANGLE" CLIP FOR LARGE MULLION 4 1/2"x 3"x 3.3"x 1/8"	ALUMINUM (6063-T6)
12	-	GLAZING WEDGE GASKET	RUBBER
13	-	#10 PHILLIPS HS SMS SCREWS AT EACH FRAME CORNER	SAE GR 2 MIN
14	0378	CORNER KEY BY MONTICELLI	SAE GR 2 MIN
15	P027646	0.059" SILL/JAMB/HEADER EXTENSION EXTRUSION	ALUMINUM (6063-T6)
16		3.3"x 1/8" STEEL REINFORCEMENT	STEEL (A36)
17	4293	GLASS STOP FOR 1 5/16" GLASS	ALUMINUM (6063-T6)
18	7013	SILL/JAMB/HEADER EXTRUSION	ALUMINUM (6063-T6)
19	N/A	3/4" ALUM. TUBE	ALUMINUM (6063-T6)



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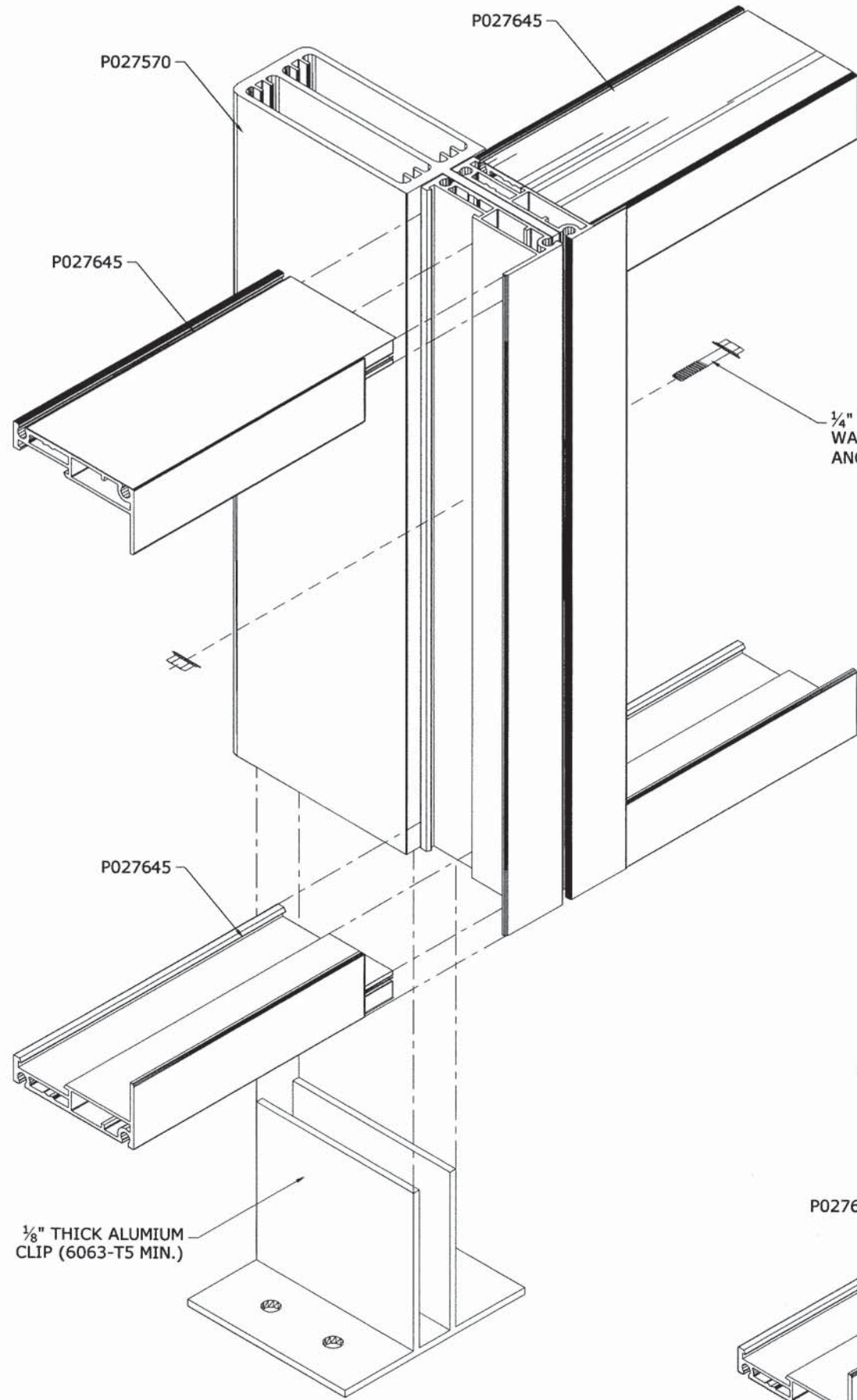
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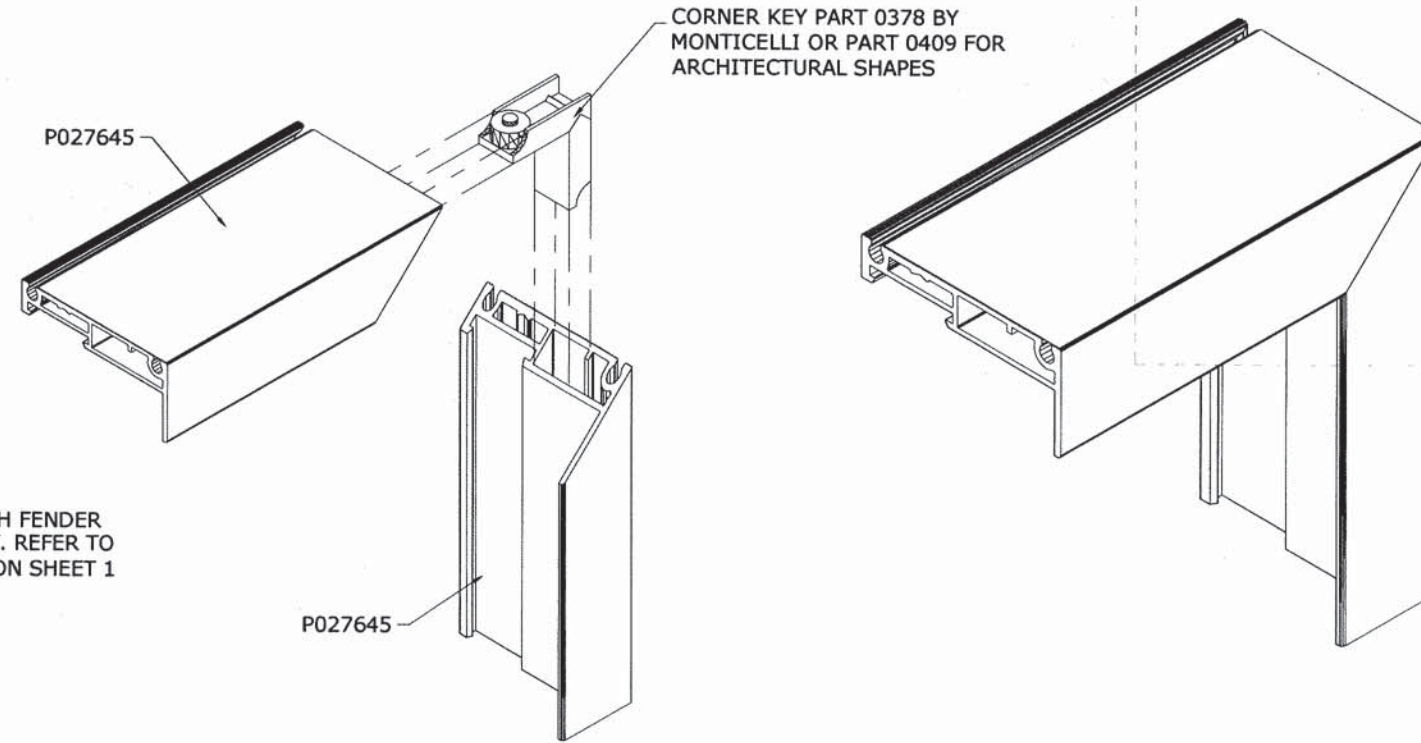
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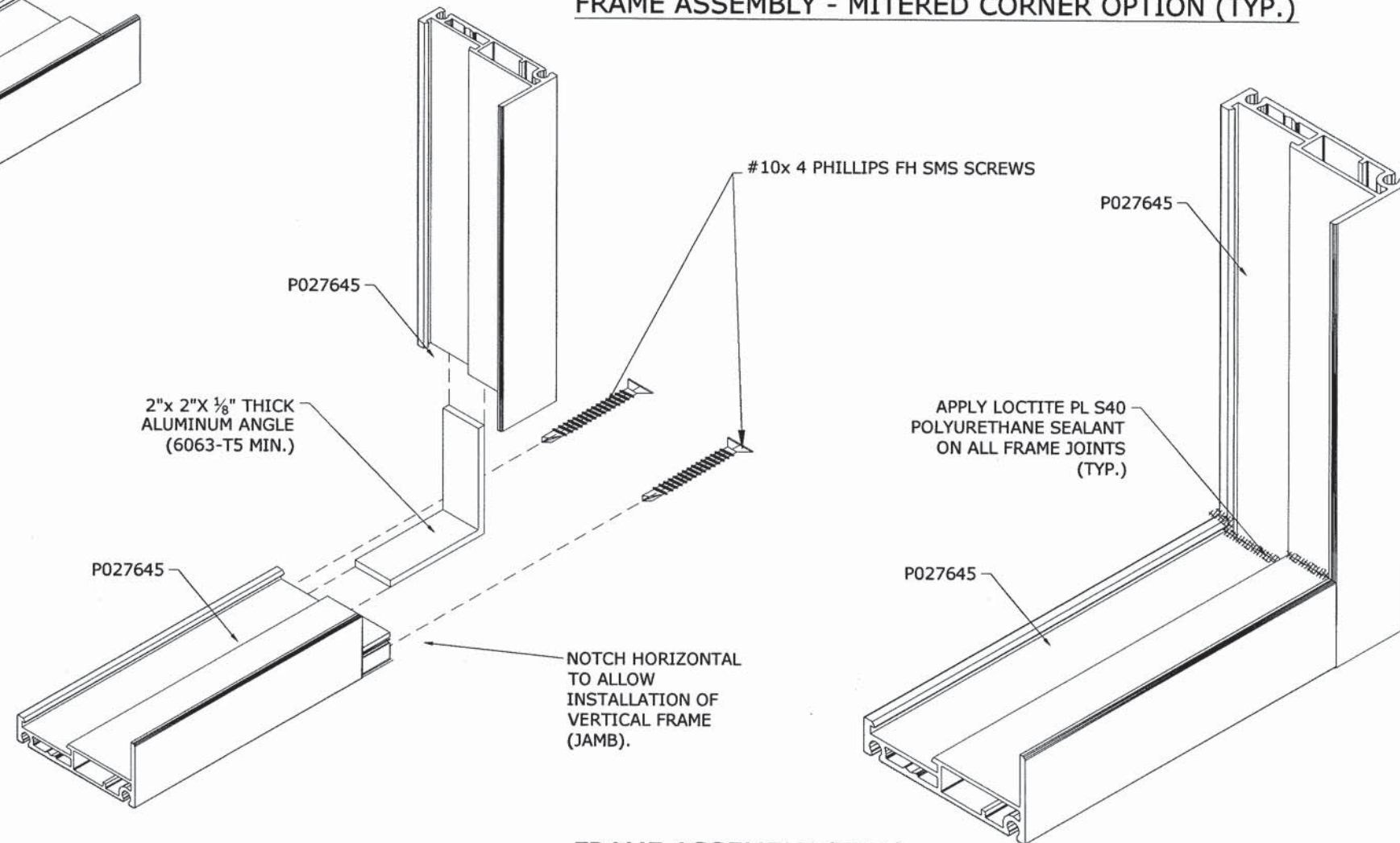
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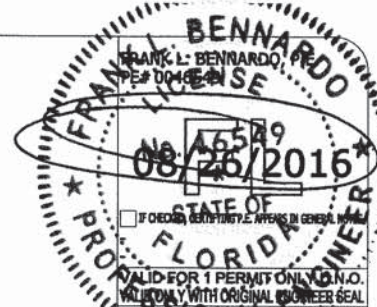
**FRAME ASSEMBLY AT VERTICAL INTERMEDIATE CONDITION**



**FRAME ASSEMBLY - MITERED CORNER OPTION (TYP.)**



**FRAME ASSEMBLY (TYP.)**



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