

KINGSPAN LIGHT & AIR FENESTRATION, INC.

16 MM PENTACLAD™ CLADDING SYSTEM

(HVHZ) (NON-IMPACT)

GENERAL NOTES:

1.

THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC) **INCLUDING** HVHZ. ALL PRODUCTS UNDER THE SCOPE OF THIS DOCUMENT HAVE BEEN EVALUATED ACCORDING TO THE FOLLOWING:
 - ASTM E330-14(21)
 - ASTM E1886-19
 - TAS 202-94
 - TAS 203-94
2.

ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY, 2X AND METAL STUD FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
3.

APPROVED IMPACT PROTECTIVE SYSTEM **IS REQUIRED** TO PROTECT THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
4.

APPROVED IMPACT PROTECTIVE SYSTEM **IS NOT REQUIRED** TO PROTECT THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE IF THIS PRODUCT IS INSTALLED IN FRONT OF CBS CONSTRUCTION (ASTM C90) OR 5/8" (5 PLY) PLYWOOD SUPPORTED BY 2X STUDS OR 2X6 - 18 GA. METAL STUDS, EACH AT 16" O.C. REFER TO THE CURRENT FLORIDA BUILDING CODE FOR OTHER APPLICATIONS (e.g. SECTION 1626.1.a) THAT ARE EXEMPTED FROM IMPACT REQUIREMENTS.
5.

CLADDING MATERIAL: POLYCARBONATE.
6.

ALL STRUCTURAL MATERIALS & DISSIMILAR METALS SHALL BE PROTECTED, TREATED, PAINTED, COATED, AND/OR ISOLATED AS REQUIRED IN THE APPLICABLE SECTIONS OF THE CURRENT FLORIDA BUILDING CODE AND REFERENCED DESIGN SPECIFICATIONS.
7.

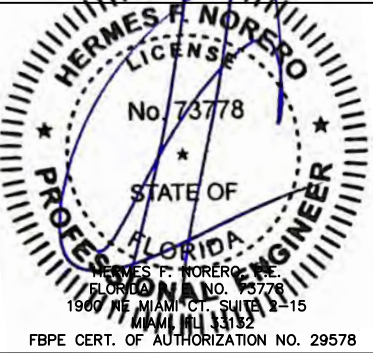
MAX. DESIGN PRESSURE APPLIES TO ASSEMBLIES SUCH THAT PURLIN SPACING AND PANEL UNSUPPORTED DISTANCE ARE NOT EXCEEDED AS SHOWN HEREIN.
8.

STRUCTURAL ADEQUACY OF SUPPORTING SUBSTRUCTURE IS NOT PART OF THIS APPROVAL AND SHALL BE REVIEWED BY THE AUTHORITY HAVING JURISDICTION.

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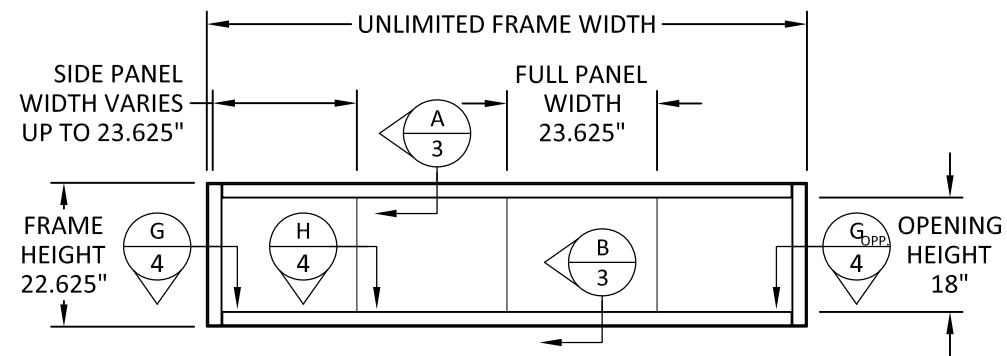
FRAME SIZE	MAX. DESIGN PRESSURE W/ 1.5X SAFETY FACTOR	IMPACT MISSILE RATING
SEE SHEET 2	+/- 120 PSF	NON-IMPACT

Digitally signed by Hermes F. Norero, P.E.
Reason: I am approving this document
Date: 2025.02.12 18:14:04 -05'00'

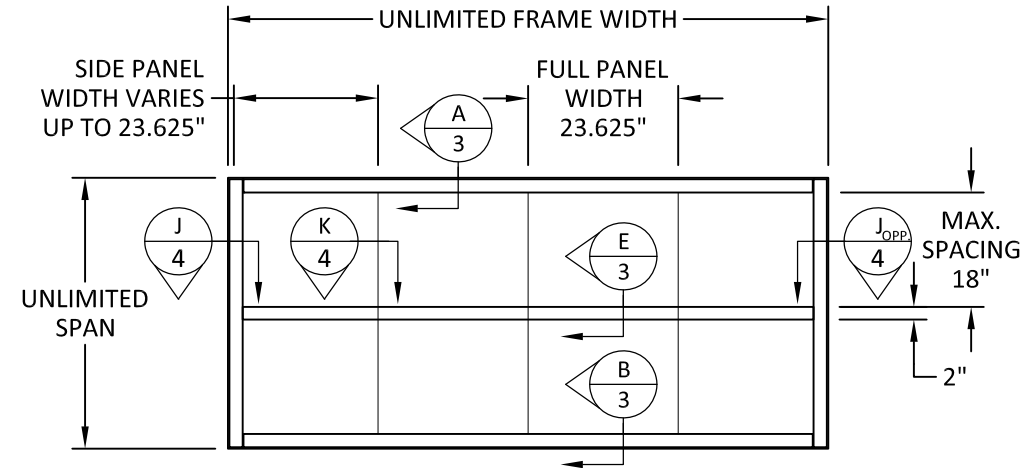


HERMES F. NORERO
P.E.
FLORIDA NO. 73778
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION NO. 29578

DATE				
DESCRIPTION				
REV.				
 28662 N. BALLARD DR., LAKE FOREST, IL 60045 (647) 816-1060 • FAX (647) 816-1925				
PROJECT:	16 MM PENTACLAD CLADDING SYSTEM		ARCHITECT:	ERECTOR:
DRAWING NO.	KLA018		REV.	-
DRAWN BY		MS		
DATE		02/07/25		
CHECKED BY				
DATE				
REFERENCE NO.				
SHEET NO.		1 OF 6		



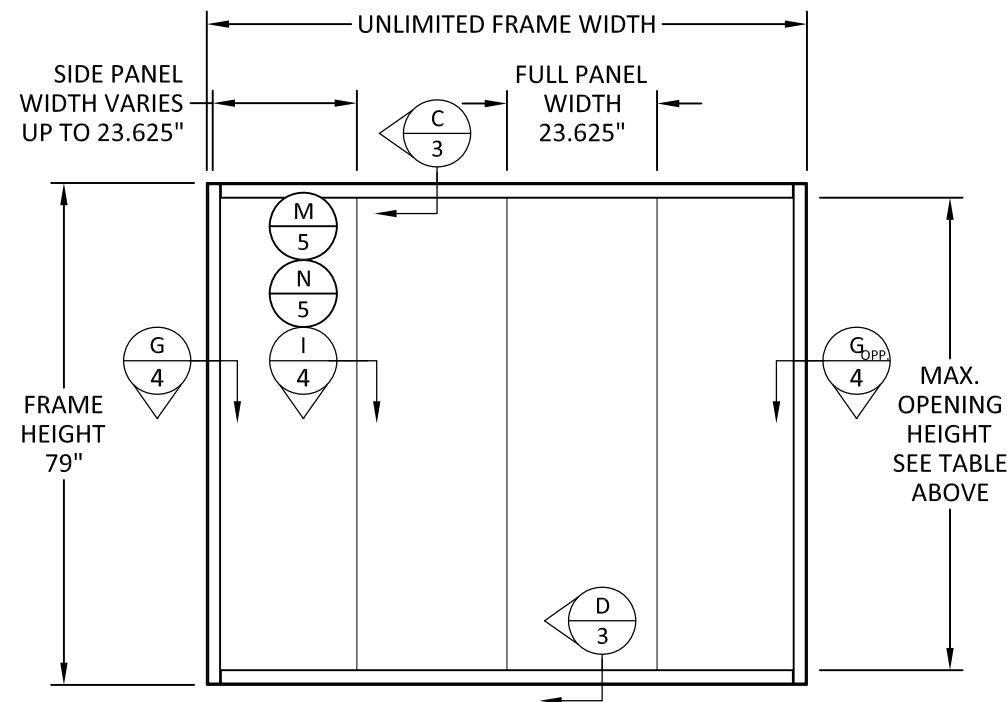
ELEVATION A



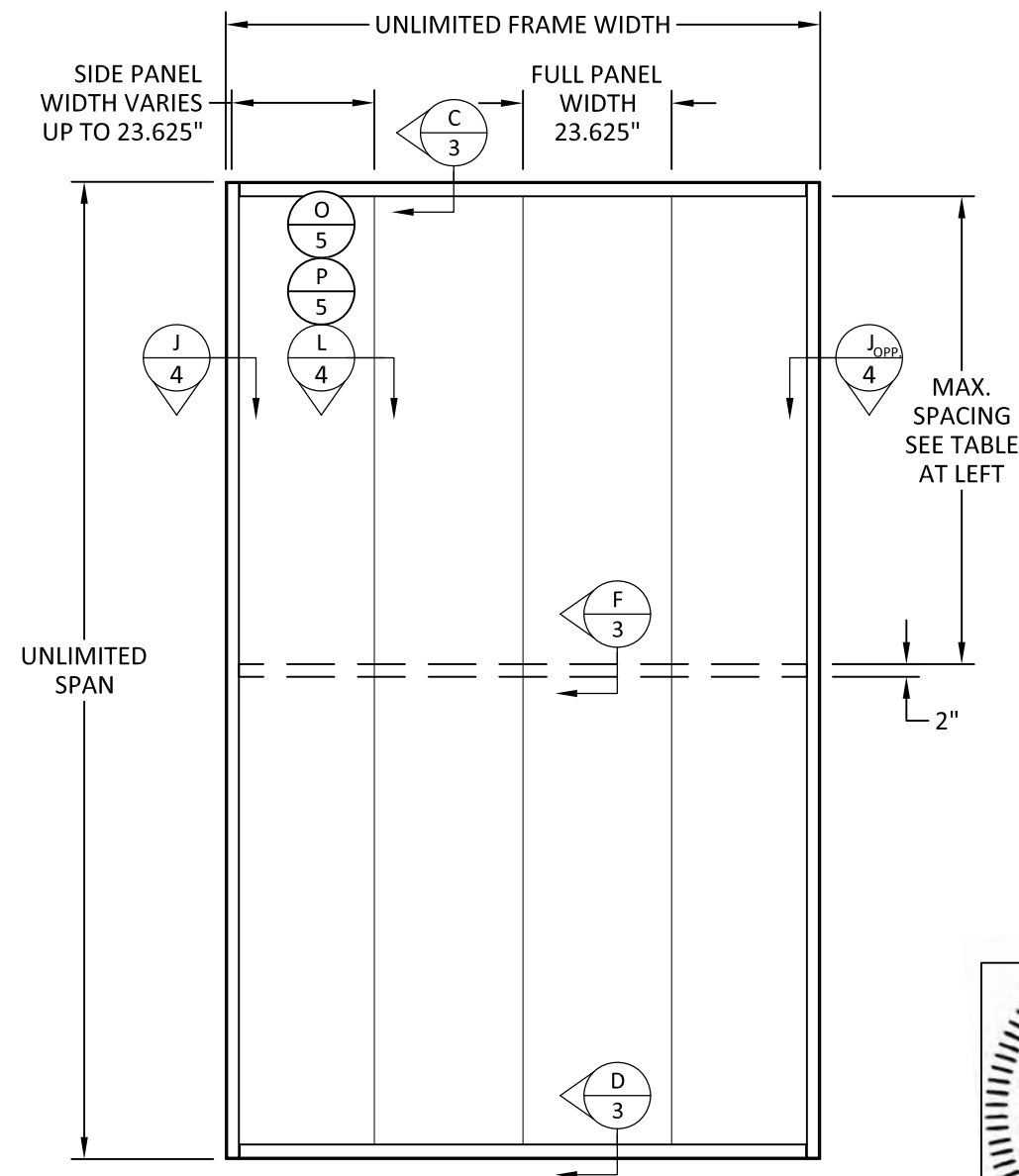
ELEVATION B

THE MAXIMUM DESIGN PRESSURE FOR U2 POLY BATTEN IS +/- 120 PSF AT A MAXIMUM 18" SPACING.

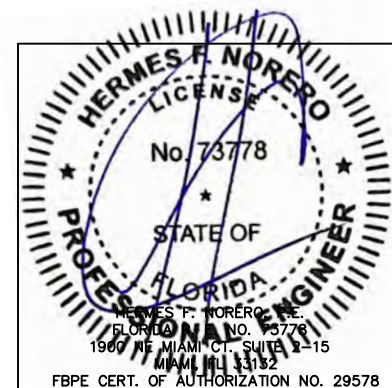
DESIGN PRESSURE CHART (PSF)			
SPAN SPACING (IN.)	ALUMINUM BATTEN		
	2"	3"	4"
47	120.00	120.00	120.00
51	101.97	120.00	120.00
54	90.95	120.00	120.00
57	81.63	120.00	120.00
60	73.67	120.00	120.00
63	66.82	120.00	120.00
66	60.89	120.00	120.00
69	55.71	110.80	120.00
72	51.16	101.76	120.00
74.4	47.91	95.30	120.00



ELEVATION C



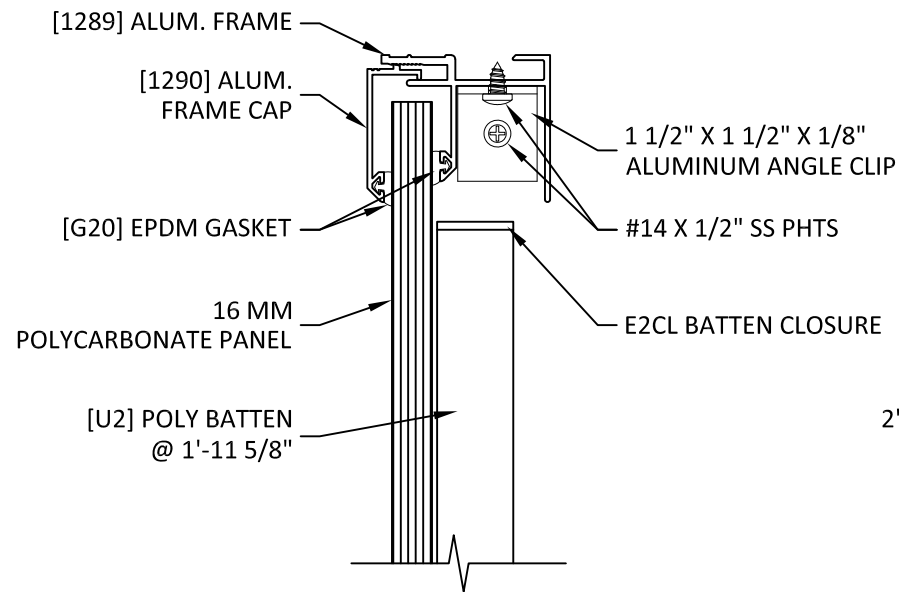
ELEVATION D



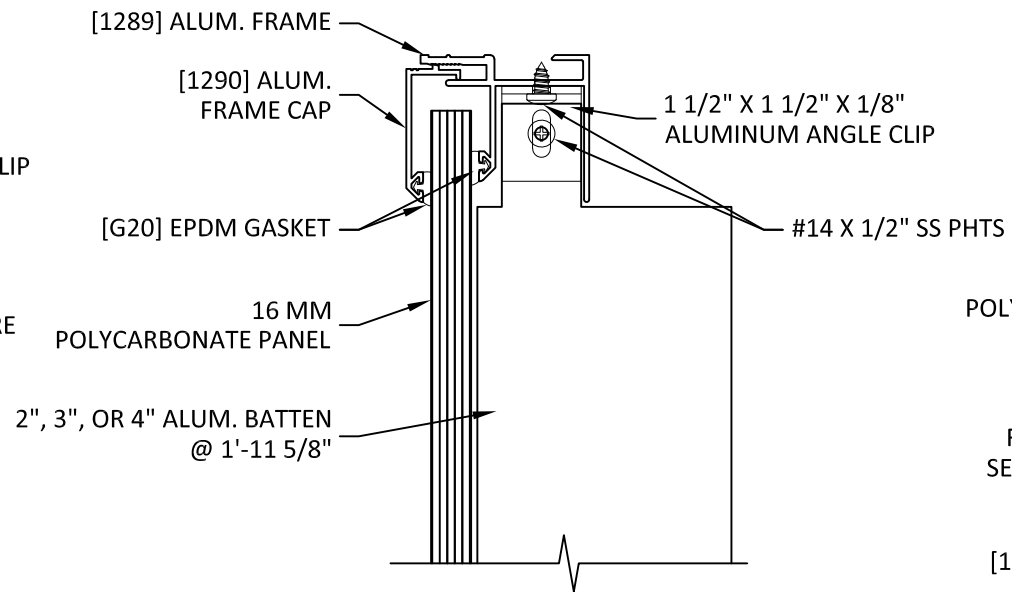
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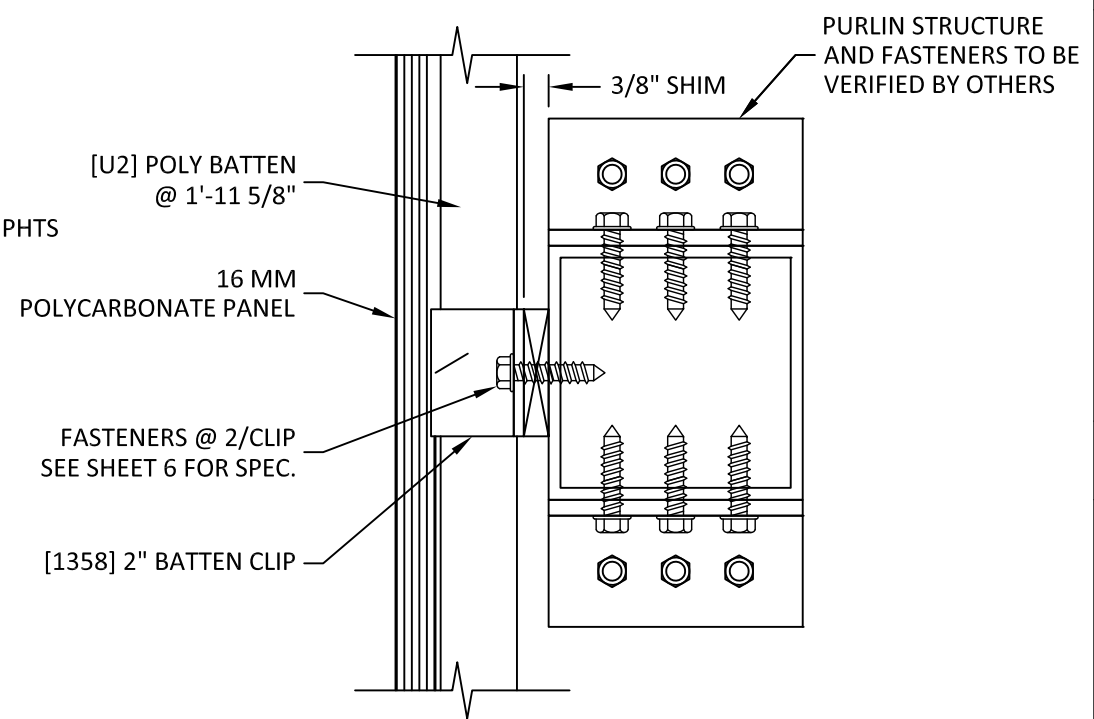
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DRAWN BY MS		DATE 02/07/25	
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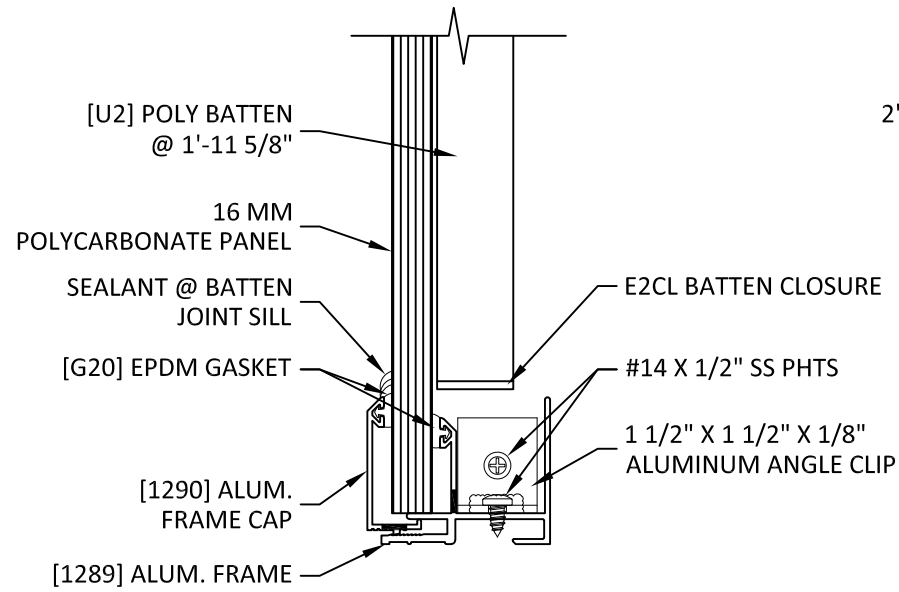
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3 VERTICAL SECTION
ELEVATION 'A' & 'B' HEAD



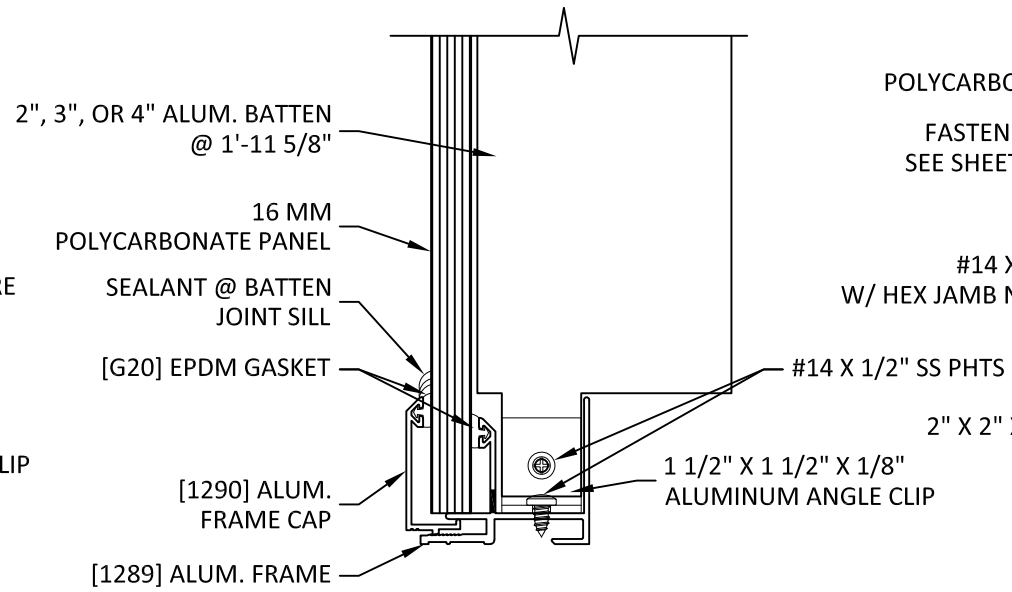
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ELEVATION 'C' & 'D' HEAD



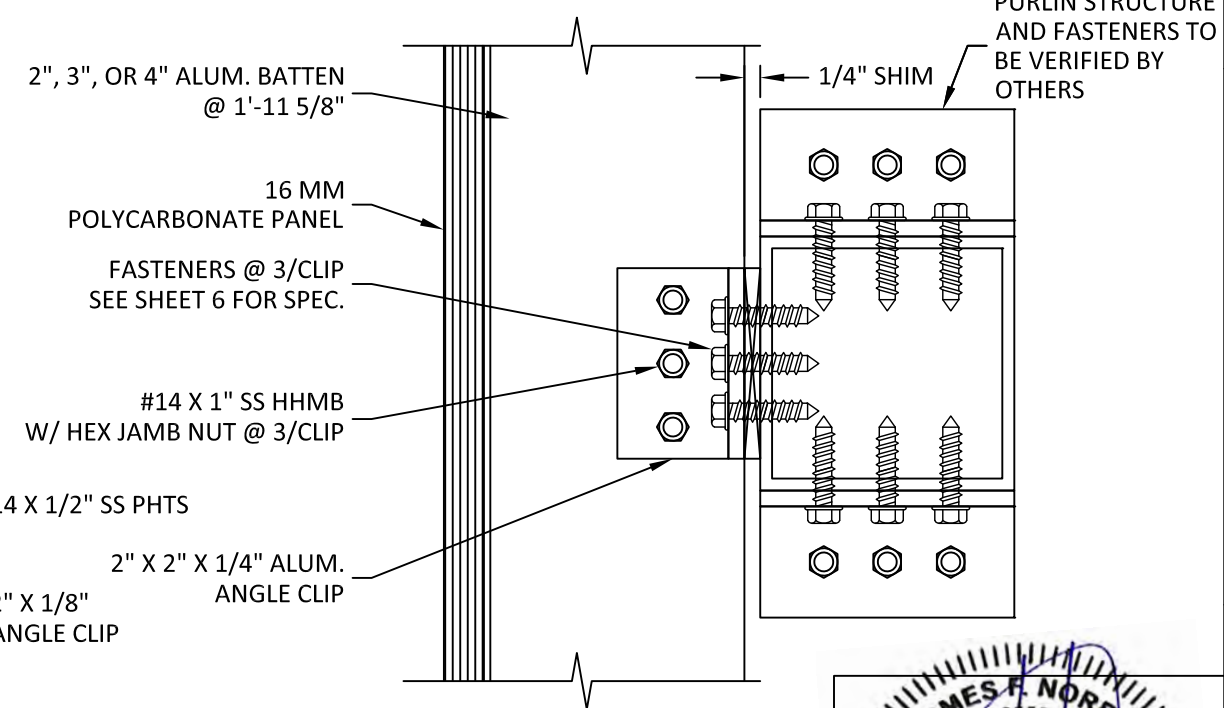
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ELEVATION 'B' PURLIN



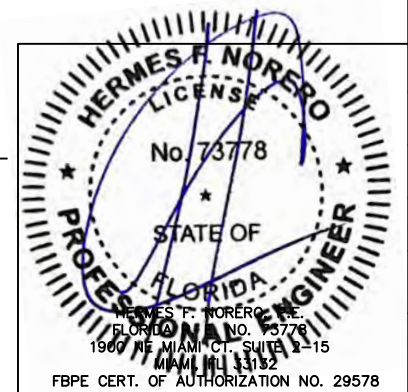
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ELEVATION 'A' & 'B' SILL



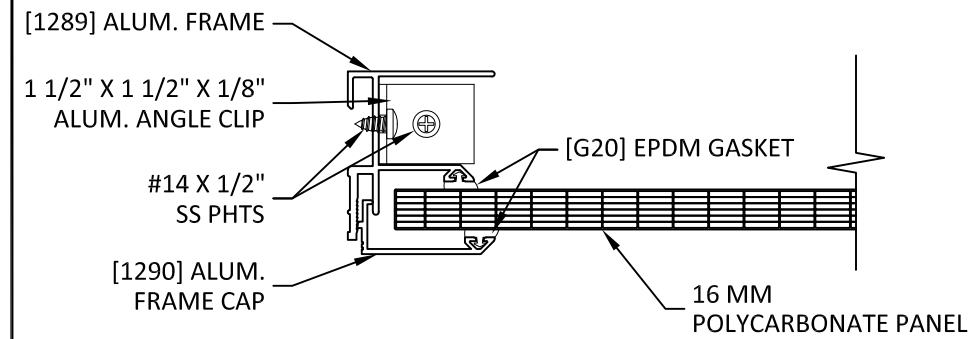
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ELEVATION 'C' & 'D' SILL



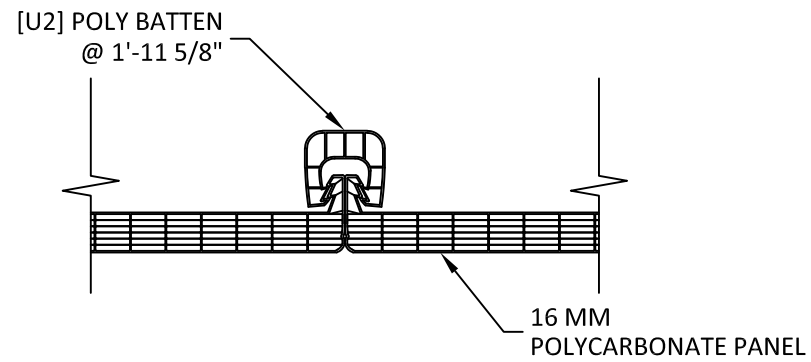
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3 VERTICAL SECTION
ELEVATION 'D' PURLIN



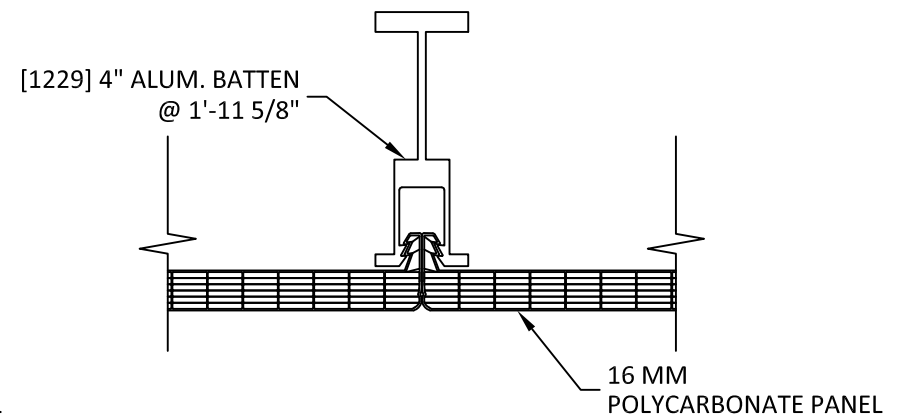
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 28662 N. BALLARD DR., LAKE FOREST, IL 60045 (847) 816-1060 • FAX (847) 816-0425				
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REV.	-			
DRAWN BY	MS			
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REFERENCE NO.				
SHEET NO.	3 OF 6			



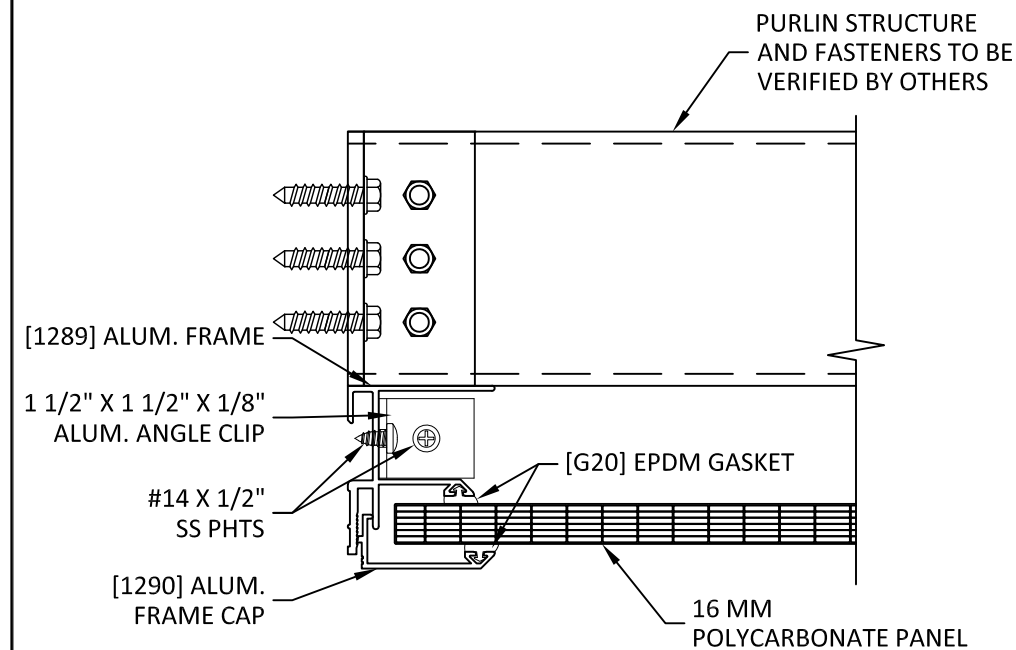
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4 HORIZONTAL SECTION
ELEVATION 'A' & 'C' JAMB



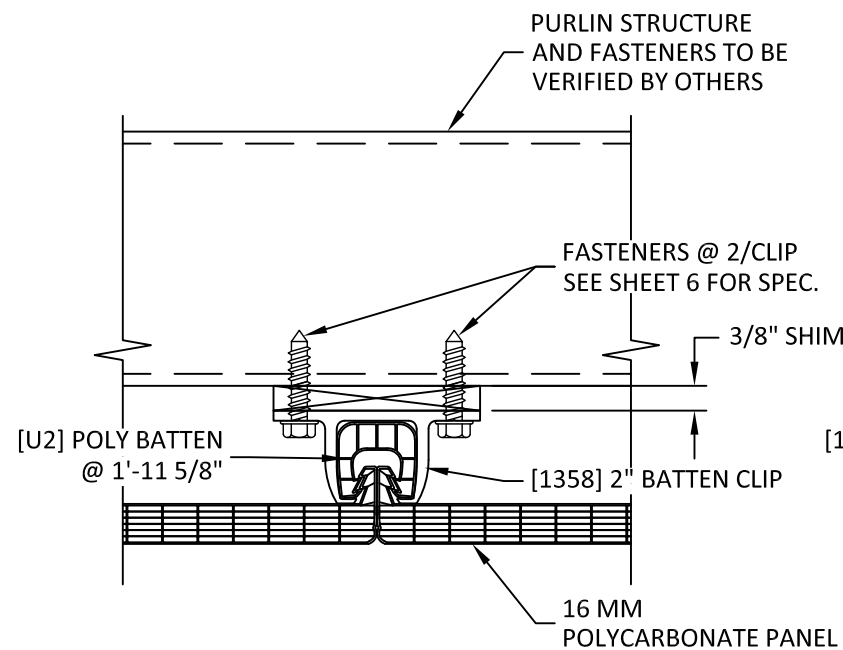
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4 HORIZONTAL SECTION
ELEVATION 'A' BATTEN



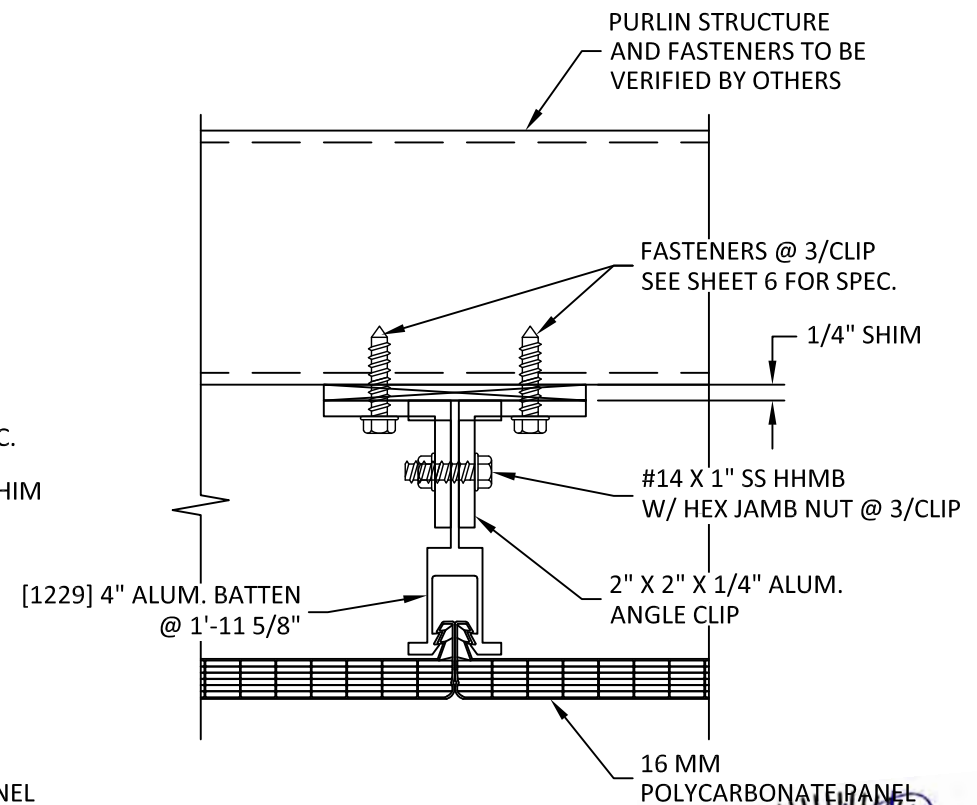
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4 HORIZONTAL SECTION
ELEVATION 'C' BATTEN
4\"/>



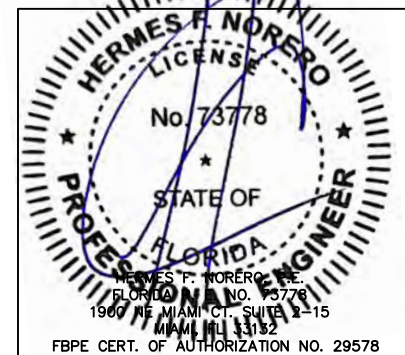
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4 HORIZONTAL SECTION
ELEVATION 'B' & 'D' JAMB



K
4 HORIZONTAL SECTION
ELEVATION 'B' BATTEN



L
4 HORIZONTAL SECTION
ELEVATION 'D' BATTEN
4\"/>



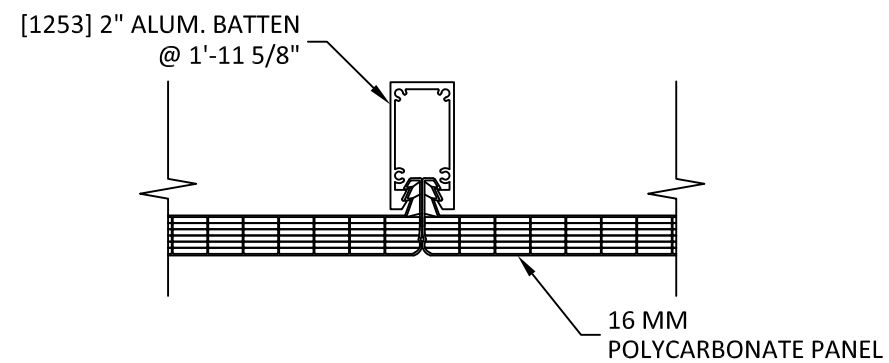
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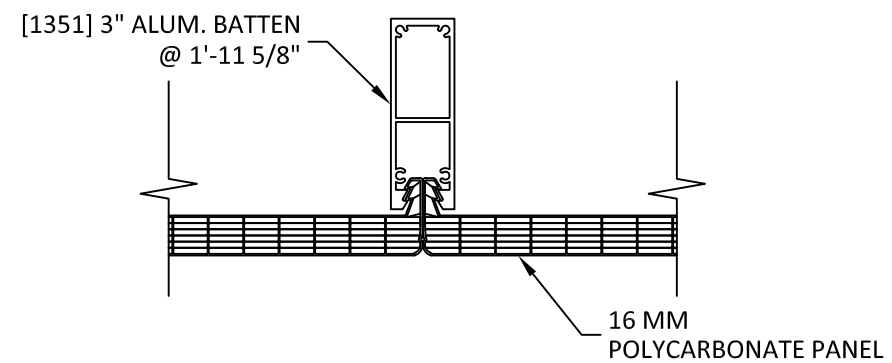
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ARCHITECT:	
ERECTOR:	

DRAWING NO.	KLA018
REV.	-

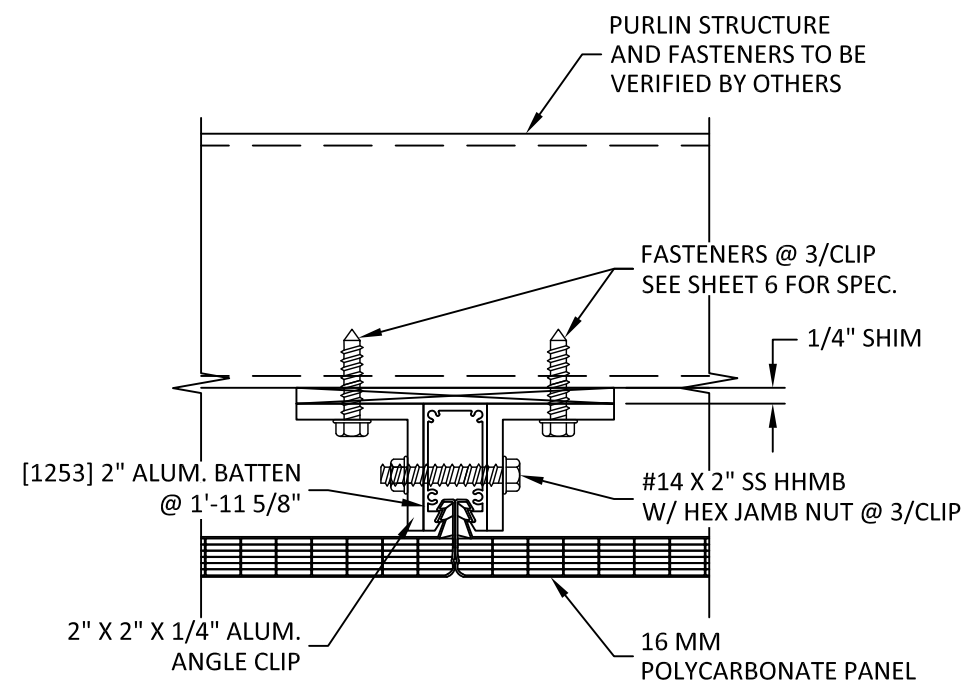
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DATE	02/07/25
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SHEET NO.	4 OF 6



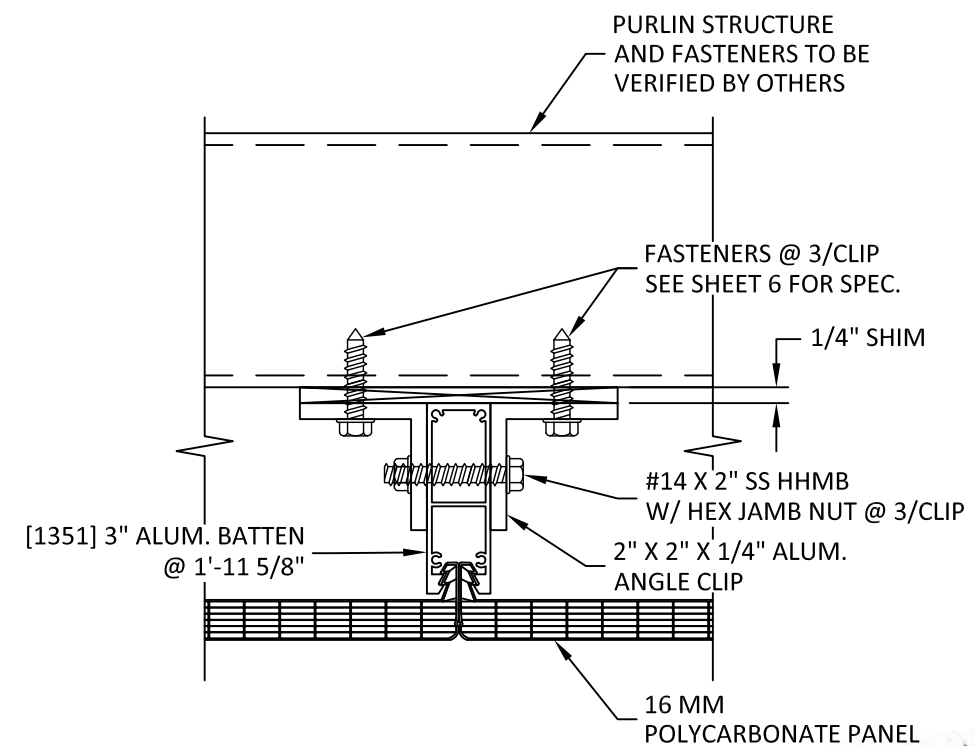
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5 **HORIZONTAL SECTION**
ELEVATION 'C' BATTEN
2" BATTEN



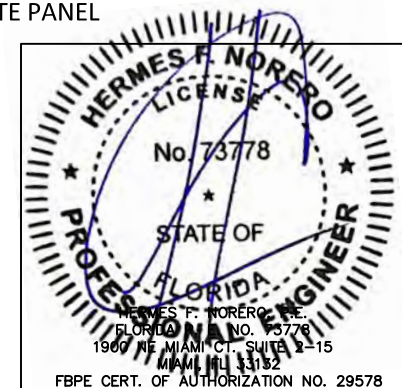
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5 **HORIZONTAL SECTION**
ELEVATION 'C' BATTEN
3" BATTEN



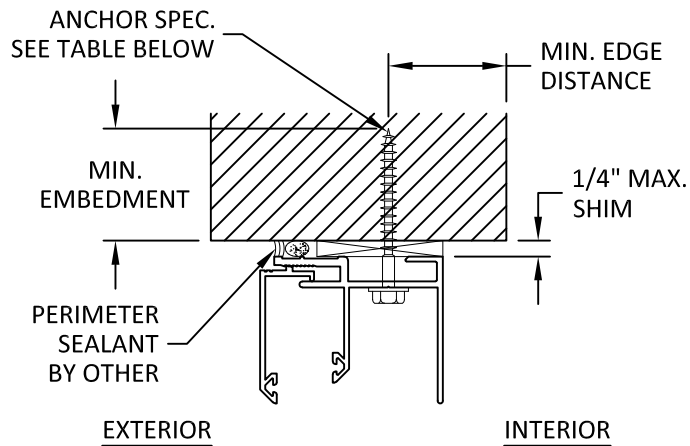
05 HORIZONTAL SECTION
ELEVATION 'D' BATTEN
2" BATTEN



P
5 **HORIZONTAL SECTION**
ELEVATION 'D' BATTEN
3" BATTEN

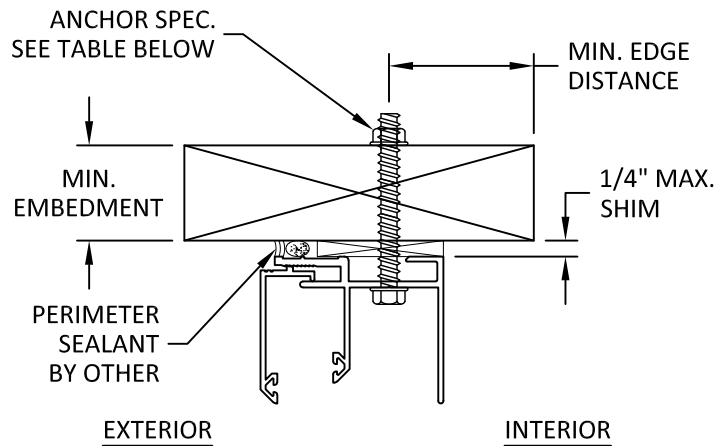


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5 OF 6						



Q
6

INSTALLATION DETAIL
HEAD SHOWN, JAMB & SILL SIMILAR



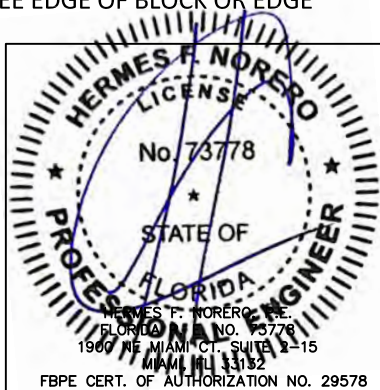
R
6

INSTALLATION DETAIL
HEAD SHOWN, JAMB & SILL SIMILAR

ANCHOR SCHEDULE						
LOCATION	SUBSTRATE	ANCHOR TYPE	MIN. EMBEDMENT	MIN. EDGE DISTANCE	MAX. SPACING O.C. @ ELEV. 'A' & 'B'	MAX. SPACING O.C. @ ELEV. 'C' & 'D'
HEAD/ JAMB/ SILL	WOOD: MIN. S.G. = 0.55	#14 WOOD SCREW	1-1/2"	1"	8"	4"
	2X WOOD STUD: MIN. S.G. = 0.55	1/4"-20 BOLT W/ WASHER AND NUT	1-1/2"	1"	16"	8"
	STEEL: MIN. 18 GA. MIN. Fy = 33 ksi	1/4" GRADE 5 SELF-DRILLING/ SELF-TAPPING SCREW	3 THREADS MIN PENETRATION BEYOND METAL	1/2"	8"	8"
	ALUMINUM: MIN. 1/8" THICK MIN. 6063-T5					
	CONCRETE: MIN. f'c = 3000 psi	1/4" ITW TAPCON	1-1/2"	1-1/2"	8"	8"
	MASONRY: CMU per ASTM C90 MIN. 2000 PSI		1"	2-1/4"	8"	8"
PURLIN CLIP	WOOD: MIN. S.G. = 0.55	#14 WOOD SCREW	1-1/2"	1"	-	-
	STEEL: MIN. 14 GA. MIN. Fy = 33 ksi	1/4" GRADE 5 SELF-DRILLING/ SELF-TAPPING SCREW	3 THREADS MIN PENETRATION BEYOND METAL	1/2"	-	-
	ALUMINUM: MIN. 3/16" THICK MIN. 6061-T6				-	-
	CONCRETE: MIN. f'c = 3000 psi	1/4" ITW TAPCON	1-1/2"	1-1/4"	-	-

INSTALLATION NOTES:

- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION.
- THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION OF THE MAXIMUM SIZE LISTED.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF $\pm 1/4$ INCH THE DEPICTED LOCATION & SPACING IN THE ANCHOR LAYOUT DETAILS (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
- SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM STACK TO BE 1/2 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF WOOD OR BETTER.
- FOR MASONRY OR CONCRETE OPENINGS, A 1X WOOD BUCK MAY BE USED (OPTIONAL) AS LONG AS THE MINIMUM EMBEDMENT AND EDGE DISTANCE REQUIREMENTS ARE STILL MET WITHIN THE CORRESPONDING HOST SUBSTRATE. SEE GENERAL NOTE #3 ON SHEET 1 FOR MORE INFORMATION.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
- INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
- FOR HOLLOW BLOCK AND GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS. EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.



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DRAWN BY MS		REV. -		
DATE 02/07/25				
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SHEET NO. 6 OF 6				