

GENERAL NOTES: (FLORIDA BUILDING CODE 2026 - 9TH EDITION - HVHZ)

1- DEFINITION: THIS PRODUCT IS A WIND ABATEMENT SCREEN SYSTEM; DESIGNED, CONSTRUCTED AND ERECTED TO EASILY ENCLOSE AN AREA, PROVIDING PROTECTION FROM HURRICANE FORCE WINDS AND WIND BORNE DEBRIS WITHIN THE ALLOWABLE DESIGNED PRESSURES AND LIMITATIONS STATED IN THIS APPROVAL.

2- POSTING: A PERMANENT LABEL SHALL BE PROVIDED AS PER FBC. IT SHALL BE LOCATED ON THE BOTTOM OF THE HOOD FACING THE EXTERIOR OR ON THE SIDE TRACK WITH A MINIMUM OF ONE LABEL PER OPENING.

3- LOADS: DESIGNED LOAD CALCULATED BASED ON THE ASCE 7-22 AND PROVIDED BY A PROFESSIONAL ARCHITECT OR ENGINEER FOR EACH SPECIFIC PROJECT. THE CALCULATED DESIGNED PRESSURE MUST NOT EXCEED THE ALLOWABLE PRESSURES FOR EACH PRODUCT COMPONENT TO BE USED. THE ULTIMATE DESIGN PRESSURES, AS DETERMINED FROM ASCE 7-22 ARE PERMITTED TO BE MULTIPLIED BY 0.6.

4- MATERIAL: ALL EXTRUDED ALUMINUM SHAPES SHALL BE MADE OF 7063-T6 OR AS NOTED.

5- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED IN THE CURRENT SET OF DRAWINGS. INSTALLATION AND LOADS AS PER THIS APPROVAL.

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

- 6.1- THE STABILITY OF THE STRUCTURE WHERE THE PRODUCT IS TO BE ATTACHED INSURING PROPER ANCHORAGE
- 6.2- THE SITE SPECIFIC PROJECT CRITERIA, SUCH AS BUT NOT LIMITED TO, WIND LOADS, LOCAL CODE REQUIREMENTS, DESIGNED PRESSURES ETC.
- 6.3 THAT THIS APPROVAL IS ADEQUATE TO THE SPECIFIC PROJECT.

7- THE ROLL-UP MECHANISM (GEARS, MOTORS, SUPPORTING END PLATES) ARE NOT PART OF THIS APPROVAL. MANUFACTURER ARE RESPONSIBLE TO SPECIFY THESE COMPONENTS FOR PROPER DOOR OPERATION.

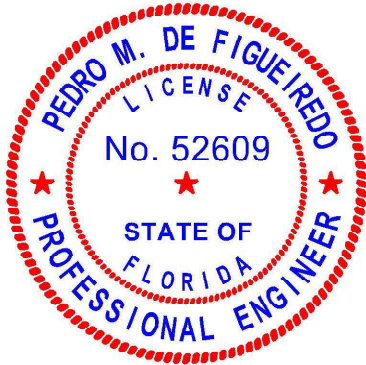
8- DISCLAIMER: PPMF INC. HAS NO CONTROL IN THE MANUFACTURING AND/OR PERFORMANCE OF THIS PRODUCT. THESE GENERIC PLANS WERE ENGINEERED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES AND TEST DATA PROVIDED BY THE MANUFACTURER.

9- LIMITATIONS: PRODUCT MUST BE INSTALLED OFFSET FROM GLAZING PRODUCTS AS INDICATED PER TABLE 1.1.

9.1- WHEN REQUIRED PRODUCT MUST BE INSTALLED OFFSET FROM GLAZING PRODUCTS AS INDICATED PER TABLE 1.1.

9.2- SITE SPECIFIC FOR CORROSION RESISTANCE ALTERNATE ANCHORAGE AS PER FBC 2026 SECTION 1711 ARE REQUIRED FOR PROJECTS LOCATED WITHIN 3000 FEET OF A SALTWATER COASTLINE. ANCHORS MUST COMPLY WITH SECTIONS 1711.1.1 AND 1711.1.2.

TABLE OF CONTENTS	
SHEET	DESCRIPTION
1	TABLE OF CONTENTS, GENERAL NOTES, TYPICAL ELEVATIONS
2	SCREEN - TABLE 1.1- DESIGN RATING & GLAZING SEPARATION
	SCREEN - TABLE 2.1- TRACK MAXIMUM END REACTIONS
3	SCREEN - TYPICAL CROSS SECTIONS
4	SCREEN - TABLE 3.1 - WALL MOUNTED ANCHOR SPACING
	SCREEN - TABLE 4.1 - INSET MOUNTED ANCHOR SPACING
5	SCREEN - TABLE 5.1 - BUILD-OUT MOUNTED ANCHOR SPACING
	SCREEN - TABLE 6.1 - INSET MOUNTED W/ DBL ANCHOR SPACING
6	SCREEN COMPONENTS
7	FBC 2026 SECTION 1711 - CORROSION RESITANCE OF FASTENERS



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PE 52609
9/7/2026

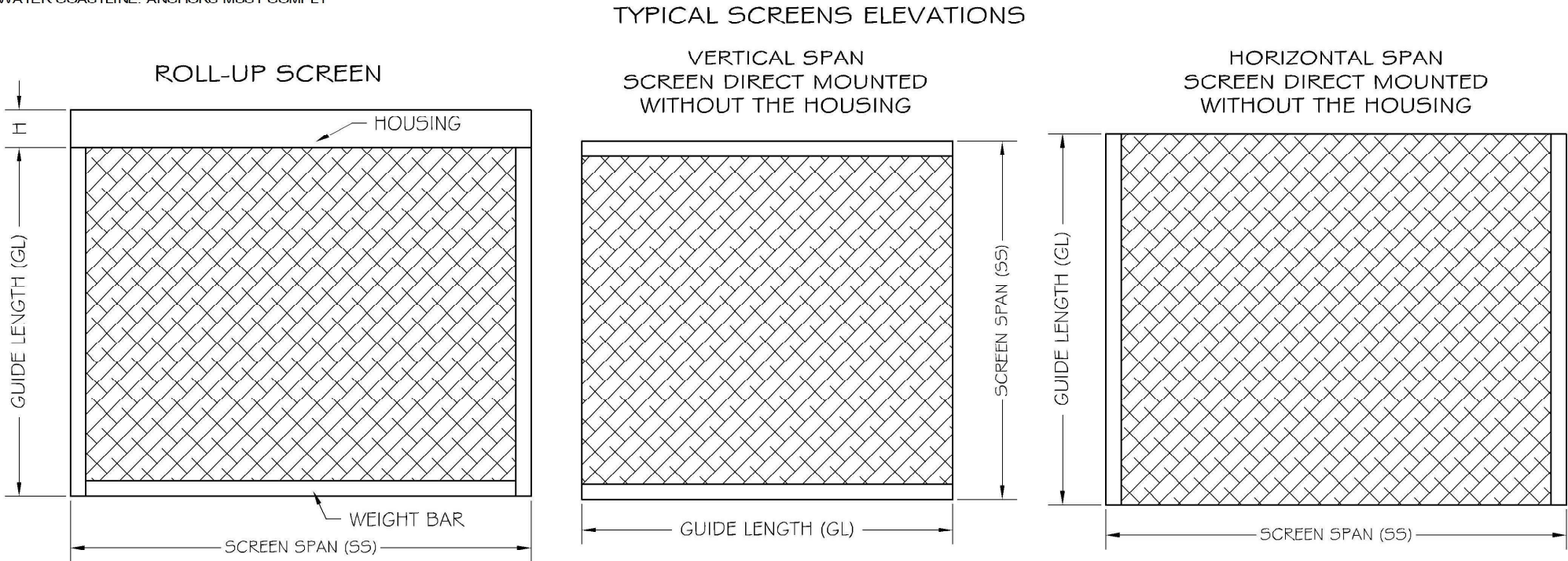
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DIGITALLY SIGNED FOR 7 PAGES

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DESIGN GUIDELINE NOTES:

- 1- DETERMINE OPENING LOADS IN ACCORDANCE WITH GENERAL NOTES #3.
- 2- COMPARE OPENING LOADS WITH ALLOWABLE SCREEN DESIGNED PRESSURE (TABLE 1.1)
- 3- DETERMINE THE TRACK ANCHORAGE FROM TABLES 2.1, 3.1, 4.1, 5.1 OR 6.1.
- 4- DESIGNED PRESSURES MUST NOT EXCEED 150 PSF.
- 5- PRODUCT LIMITED BY THE MAXIMUM SCREEN SPAN OF 288".



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PRODUCT:
SHORELINE HVHZ HD IMPACT SCREEN
HURRICANE PROTECTION DEVICE
LARGE MISSILE IMPACT RATED

MANUFACTURER:
SHORELINE SHUTTERS
105 SEBASTIAN INDUSTRIAL PL #8
SEBASTIAN, FLORIDA 32958
TEL: (772) 581-9006

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1 OF 7

ROLL-UP SCREEN DESIGN CAPACITY

TABLE 1.1 - SCREEN 2 DESIGN RATE TABLE AND GLAZING SEPARATION (GS)			
SCREEN SPAN (SS) IN	DESIGN PRESSURES (PSF)		GS IN
	POS +	NEG -	
288	50.0	50.0	23
264	56.0	56.0	23
240	61.0	61.0	23
216	68.0	68.0	22
192	77.0	77.0	22
168	86.0	86.0	21
144	93.0	93.0	20
120	100.0	100.0	18
108	113.0	113.0	17
96	125.0	125.0	15
72	150.0	150.0	11

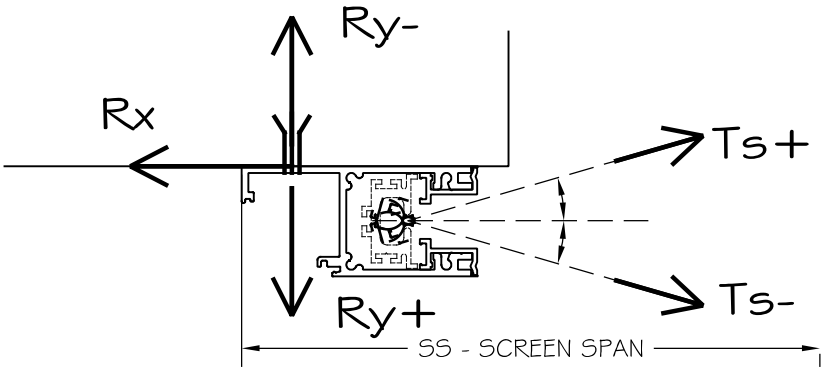
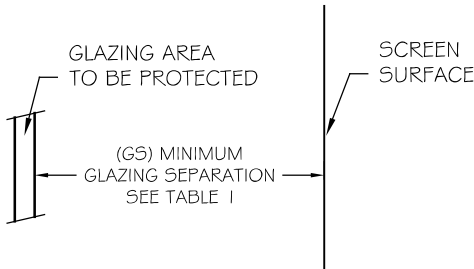
TABLE 2.1 - SCREEN 2 MAXIMUM TRACK END REACTIONS

SCREEN SPAN (SS) IN	DESIGNED LOADS (+/-) PSF	TRACK MAXIMUM END REACTIONS (LB/FT)		
		T	Ry	Rx
288	50	2069	596	1981
264	55	1943	601	1848
240	60	1794	593	1693
216	67	1660	593	1551
192	75	1531	595	1410
168	86	1374	578	1247
144	93	1185	532	1059
120	100	1019	472	903
108	113	985	477	862
96	125	951	465	829
72	150	868	409	766



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ANCHORS

MARK	ANCHOR	SUBSTRATE	EMBED	ED
A	5/16" DEWALT ULTRACON +	3 KSI CONCRETE	2	3.125
A1	5/16" DEWALT ULTRACON +	3.5 KSI CONCRETE	2	3.125
A2	3/8" DEWALT SCREW BOLT+	4 KSI CONCRETE	3.25	3.5
B	5/16" XL TAPCON BY ITW RED HEAD	ASTM C-90 - GROUT FILLED BLOCK	2.25	4
B1	3/8" DEWALT SCREW BOLT+	ASTM C-90 - GROUT FILLED BLOCK	3.25	4
C	5/16"-18 SDS 410 SS	1/8" 6063-T6 OR 1/8" ASTM A36 STEEL	3 TREADS	0.625
C1	3/8" ELCO TAP-FLEX	1/4" 6063-T5 OR 1/8" 1018 STEEL	3 TREADS	0.75
D	5/16" DEWALT ULTRACON +	WOOD SYP W/ SG>=0.55	3	1.5

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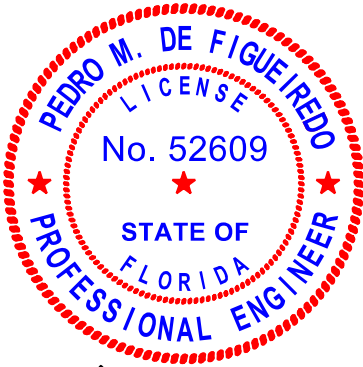
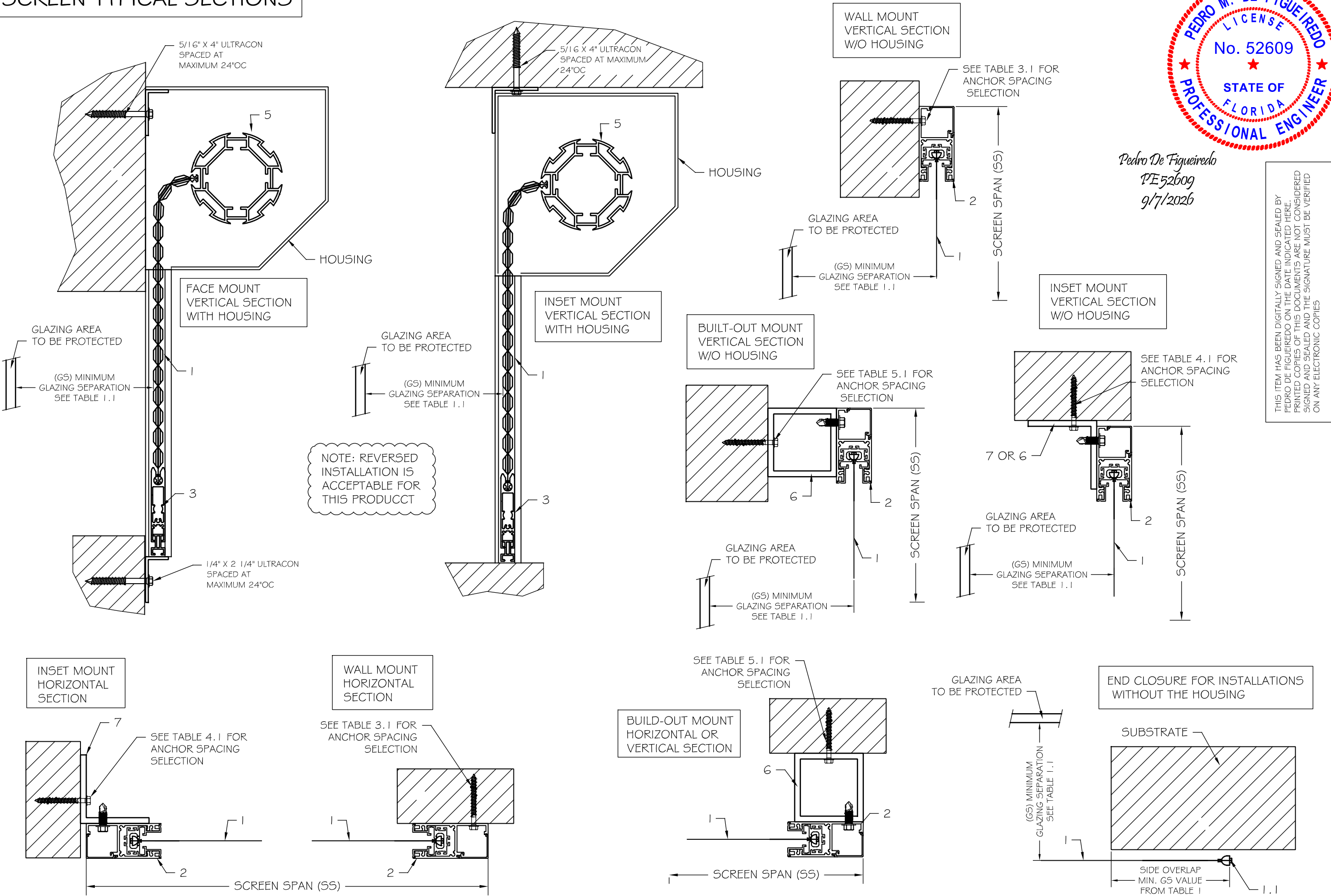
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SCREEN TYPICAL SECTIONS



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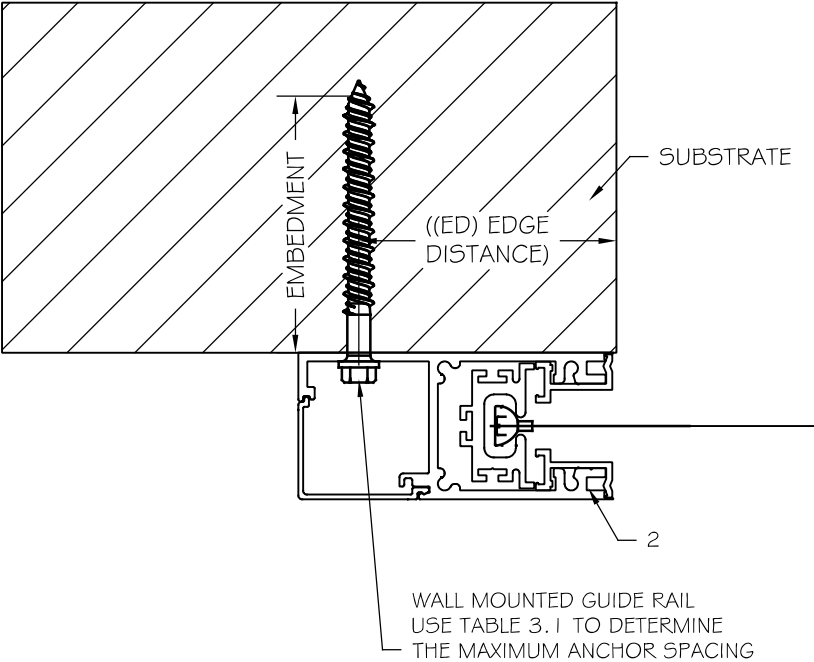
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SCREEN ANCHORAGE DESIGN

TABLE 3.1 - SCREEN 2 - WALL MOUNTED ANCHOR SPACING

FW IN	PD PSF	ANCHORS MAXIMUM ON CENTERS SPACING							
		A	A1	A2	B	B1	C	C1	D
288	50	na	na	5	na	3	4	5	na
264	55	na	na	5	na	3	5	5	na
240	60	na	na	5	na	3	5	6	na
216	67	na	na	6	na	3	5	6	3
192	75	na	5	6	na	4	5	6	3
168	86	na	5	6	4	4	6	6	3
144	93	5	6	6	5	5	6	6	4
120	100	6	6	6	5	6	6	6	5
108	113	6	6	6	5	6	6	6	5
96	125	6	6	6	6	6	6	6	5
72	150	6	6	6	6	6	6	6	5

WALL MOUNTED GUIDE RAILS

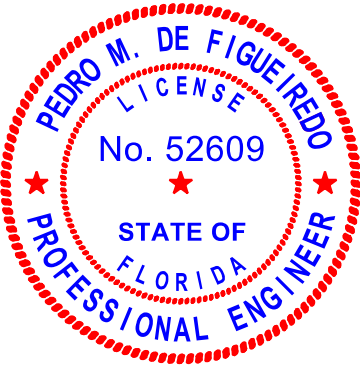
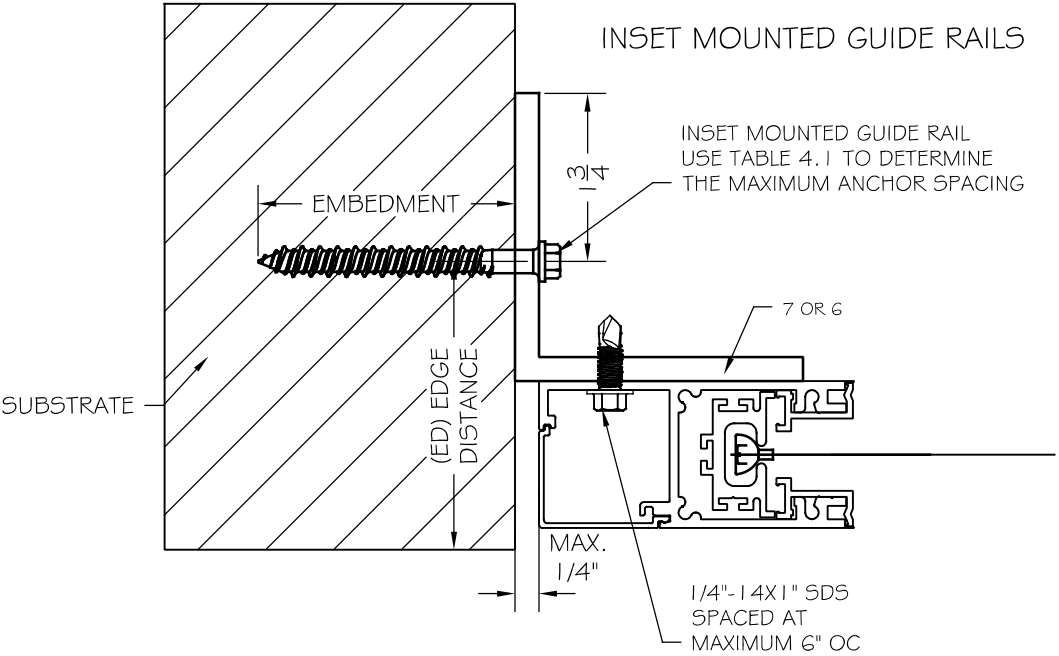


SEE SHEET 2, FOR ANCHOR TYPES

TABLE 4.1 - SCREEN 2 - INSET MOUNTED ANCHOR SPACING

FW IN	PD PSF	ANCHORS MAXIMUM ON CENTERS SPACING							
		A	A1	A2	B	B1	C	C1	D
288	50	na	na	6	na	3	4	5	na
264	55	na	na	6	na	3	5	5	na
240	60	na	na	6	na	3	5	6	na
216	67	na	na	6	na	3	5	6	3
192	75	na	5	6	na	4	5	6	3
168	86	na	5	6	4	4	6	6	3
144	93	5	6	6	5	5	6	6	4
120	100	6	6	6	5	6	6	6	5
108	113	6	6	6	5	6	6	6	5
96	125	6	6	6	6	6	6	6	5
72	150	6	6	6	6	6	6	6	5

INSET MOUNTED GUIDE RAILS



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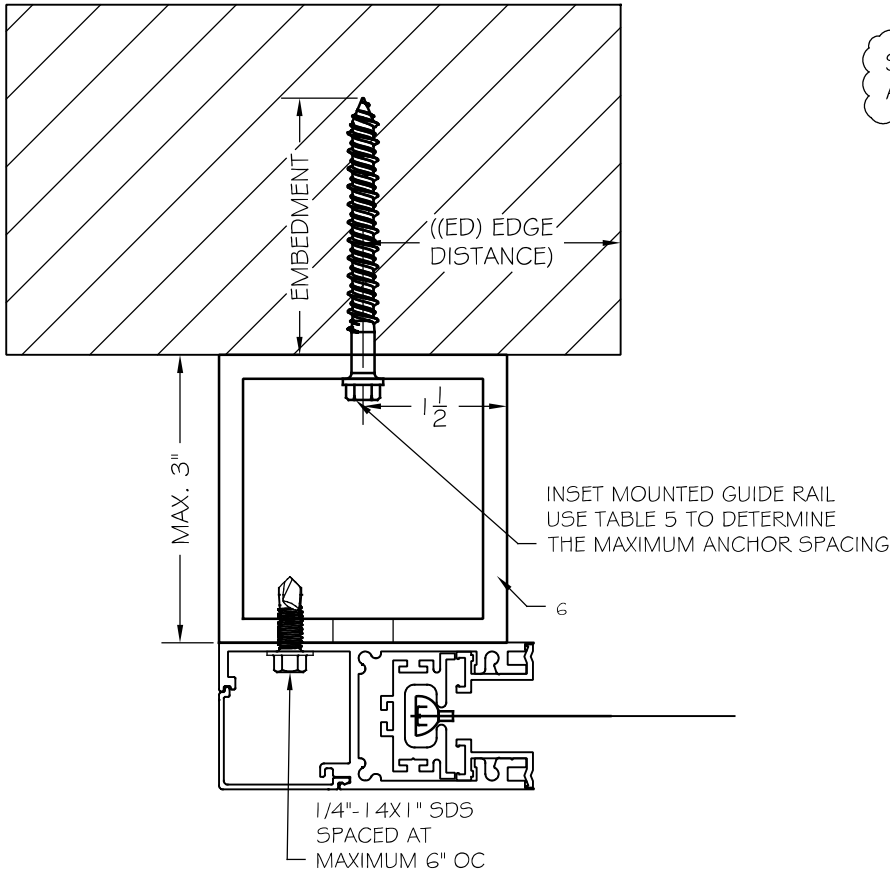
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SCREEN ANCHORAGE DESIGN

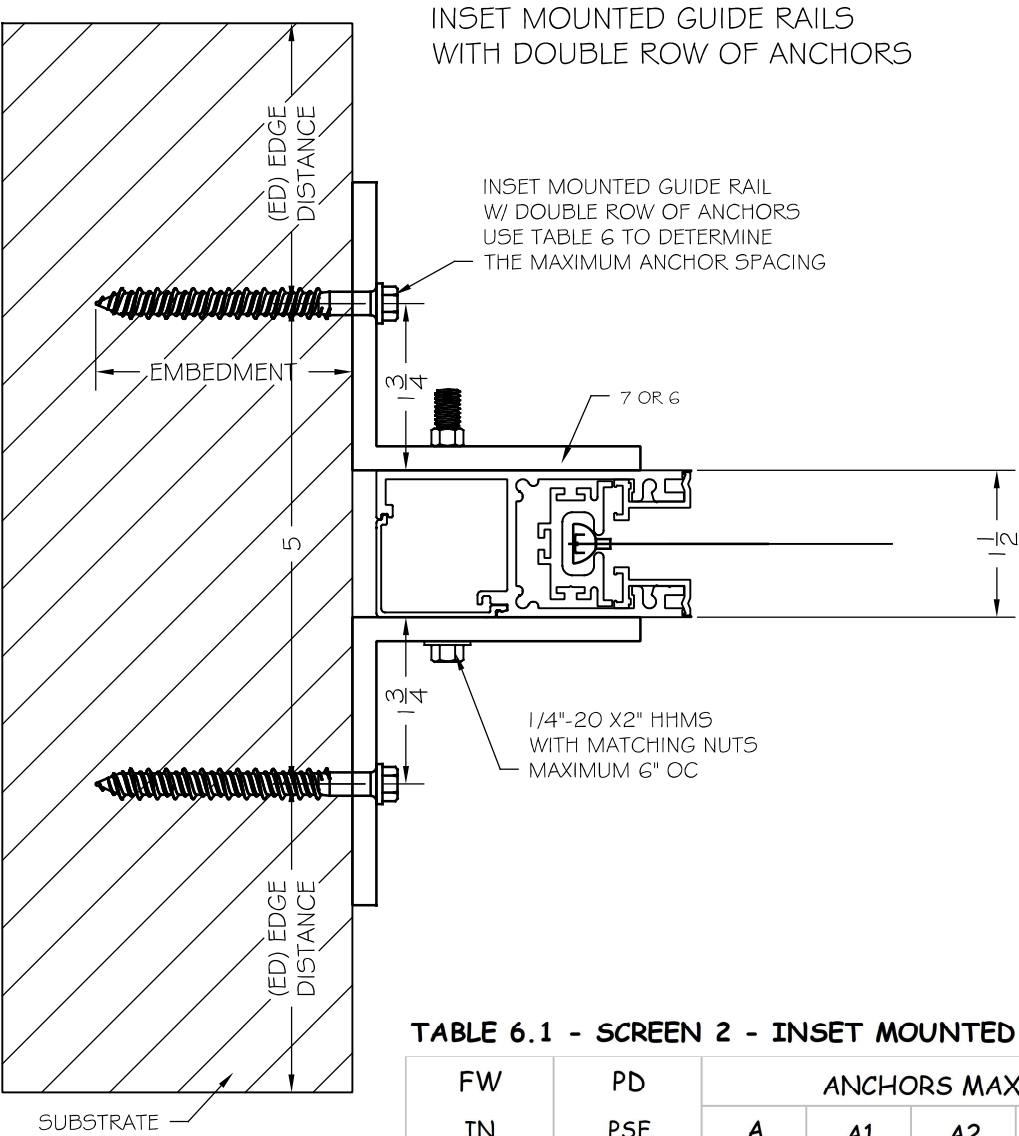
TABLE 5.1 - SCREEN 2 - BUILD OUT MOUNTED ANCHOR SPACING

FW IN	PD PSF	ANCHORS MAXIMUM ON CENTERS SPACING							
		A	A1	A2	B	B1	C	C1	D
288	50	na	na	na	na	3	4	5	na
264	55	na	na	na	na	3	5	5	na
240	60	na	na	3	na	3	5	6	na
216	67	na	na	3	na	3	5	6	3
192	75	na	na	3	na	4	5	6	3
168	86	na	na	4	4	4	6	6	3
144	93	na	na	4	5	5	6	6	4
120	100	na	na	5	5	6	6	6	5
108	113	na	na	5	5	6	6	6	5
96	125	na	na	5	6	6	6	6	5
72	150	na	na	6	6	6	6	6	5

BUILD-OUT MOUNTED GUIDE RAILS



SEE SHEET 2, FOR ANCHOR TYPES



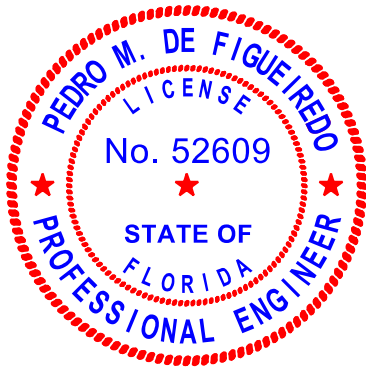
INSET MOUNTED GUIDE RAILS
WITH DOUBLE ROW OF ANCHORS

INSET MOUNTED GUIDE RAIL
W/ DOUBLE ROW OF ANCHORS
USE TABLE 6 TO DETERMINE
THE MAXIMUM ANCHOR SPACING

1/4"-20 X2" HHMS
WITH MATCHING NUTS
MAXIMUM 6" OC

TABLE 6.1 - SCREEN 2 - INSET MOUNTED W/ DOUBLE ANCHOR SPACING

FW IN	PD PSF	ANCHORS MAXIMUM ON CENTERS SPACING							
		A	A1	A2	B	B1	C	C1	D
288	50	6	6	6	na	3	4	5	na
264	55	6	6	6	na	3	5	5	na
240	60	6	6	6	na	3	5	6	na
216	67	6	6	6	na	3	5	6	3
192	75	6	6	6	na	4	5	6	3
168	86	6	6	6	4	4	6	6	3
144	93	6	6	6	5	5	6	6	4
120	100	6	6	6	5	6	6	6	5
108	113	6	6	6	5	6	6	6	5
96	125	6	6	6	6	6	6	6	5
72	150	6	6	6	6	6	6	6	5



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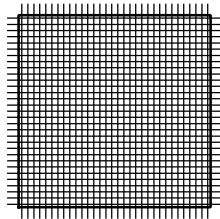
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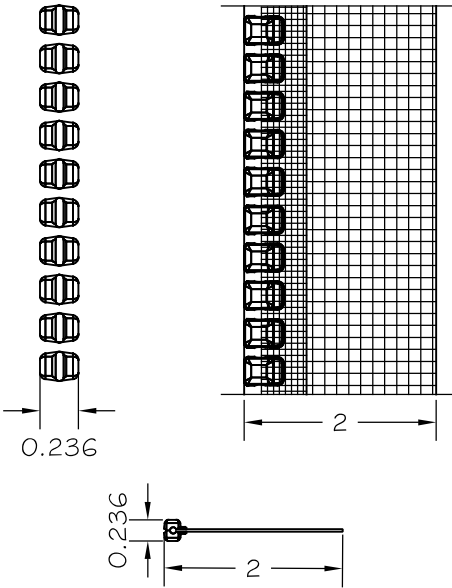
SCREEN COMPONENTS

I - IMPACT SCREEN - OMEGATX
MANUFACTURED BY TWITCHELL CORPORATION
BLACK WOVEN SCREEN FABRIC 0.027" DIAMETER WITH
VINYL COATED 1500 DENIER CORE YARNS IN WRAP AND
0.030" DIAMETER VINYL COATED DENIER TWARON CORE
YARNS IN FILL.

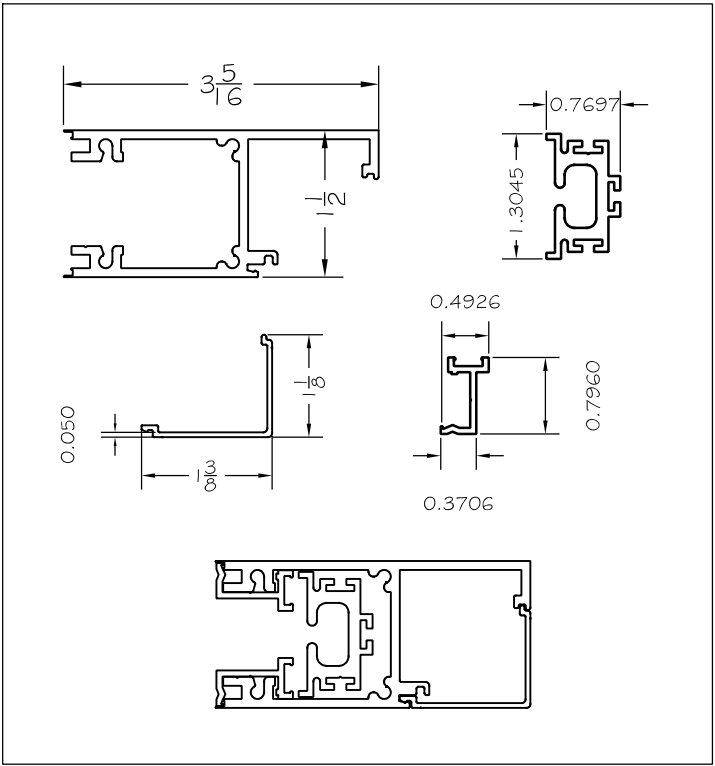


MANUFACTURER:	Twitchell Corporation		
WARP	0.027 DIAM VINYL COATED 1500 DENIER		
FILL	0.03 DIAM VINYL COATED 2000 DENIER		
TEST REPORT #:	TEST		
TEL 01980388A	ASTM D635	CLASS C	RATE OF BURN
TEL 01980388C	ASTM D2843	10.6	SMOKE DENSITY (≤ 75)
TEL 01980388B	ASTM D1929	751	SELF-IGNITION (≥ 650)
BT-TWI-15-001	ASTM G155	7.80%	WEATHERING
	ASTM D638		TENSILE PROPERTIES

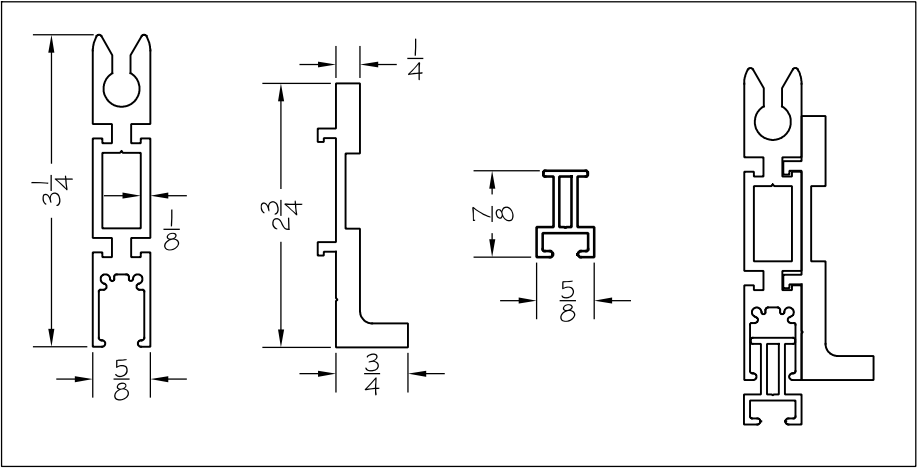
I.I - FABRIC BULLETS ZIPPER
MANUFACTURED BY PASKAL



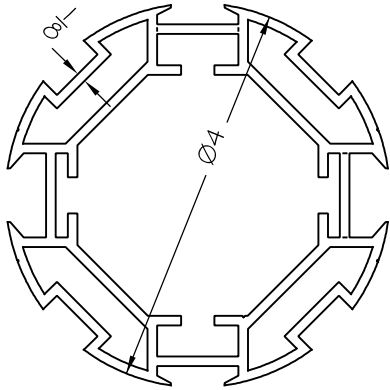
2- GUIDE RAIL (4 PCS)
ALUMINUM 6063-T6



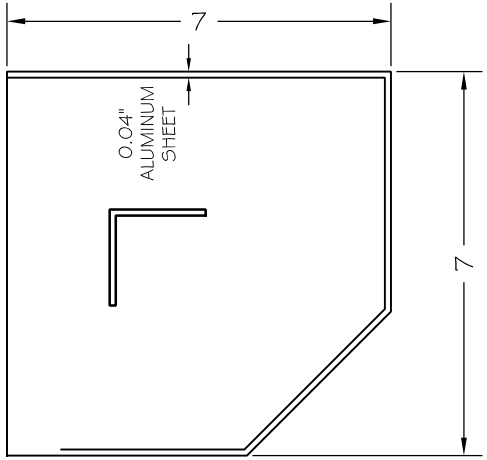
3- BOTTOM RAIL (3 PCS)
ALUMINUM 6063-T5



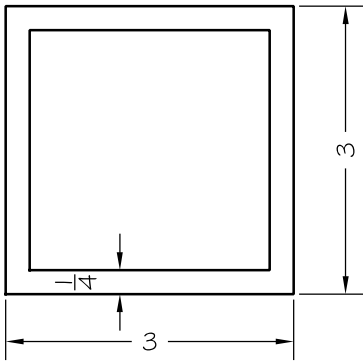
5- ALUMINUM REEL
ALUMINUM 6063-T6



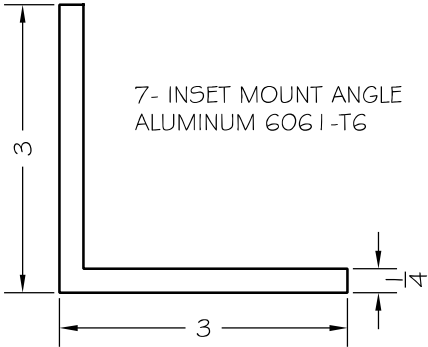
8- ALUMINUM HOUSING
WITH 1/8-2X2 ALUMINUM
ANGLE REINFORCEMENT



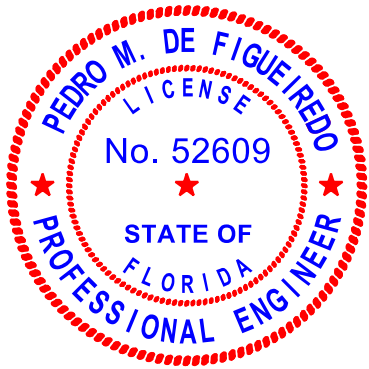
6- BUILT-OUT TUBE
ALUMINUM 6061-T6



7- INSET MOUNT ANGLE
ALUMINUM 6061-T6



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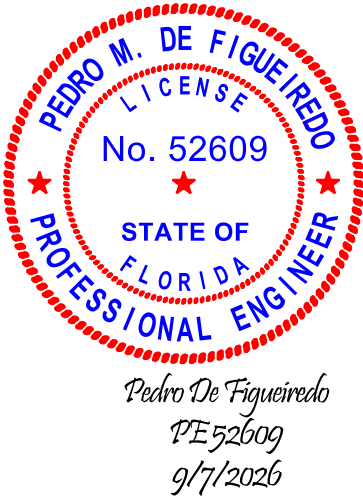
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TABLE 1711.1 - CORROSION RESISTANCE OF FASTENERS

EXPOSURE		BUILDING LOCATION FROM COASTAL SHORELINE	
		≤ 300 FEET	>300 AND ≤3000 FEET
EXTERIOR	PARTIALLY SHELTERED	STAINLESS STEEL SECTION 1711.1.1.1	GALVANIZED SECTION 1711.1.1.2
	OPEN EXPOSED		
INTERIOR UNCONDITIONED ENCLOSED	VENTED UNVENTED	GALVANIZED SECTION 1711.1.1.2	GALVANIZED SECTION 1711.1.1.2

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ANCHOR DATA						FBC 2026 SECTION 1711 COMPLIANCE
MARK	MANUFACTURER	DESCRIPTION	SUBSTRATE	EMB.	ED	
A	DEWALT	5/16" ULTRACON+	MIN. 3 KSI CONCRETE	2	3.125	1711.1.1.2
A1	DEWALT	5/16" ULTRACON+	MIN. 3.5 KSI CONCRETE	2	3.125	1711.1.1.2
A2	DEWALT	3/8" SCREW BOLT+	MIN. 4 KSI CONCRETE	3.25	3.5	1711.1.1.2
B	ITW RED HEAD	5/16" XL TAPCONS	GROUT FILLED C90 BLOCK	2.25	4	1711.1.1.2
B1	DEWALT	3/8" SCREW BOLT+	GROUT FILLED C90 BLOCK	3.25	4	1711.1.1.2
C	GENERIC MEETING COMPLIANCE WITH 1711.1.1.2	5/16"-18 SDS 410 SS	MIN. 1/8" THICK 6063-T6 ALUM.	MIN. 3 TREADS	0.625	1711.1.1.2
			MIN. 1/8" THICK A36 STEEL		0.75	1711.1.1.2
C1	DEWALT	3/8" TAP-FLEX	MIN. 1/4" THICK 6063-T5 ALUM.	MIN. 3 TREADS	0.625	1711.1.1.2
			MIN. 1/8" THICK 1018 STEEL		0.75	1711.1.1.2
D	DEWALT	5/16" ULTRACON+	WOOD SG>=0.55	3	1.5	1711.1.1.2
NOTES: 1- EMD.: MINIMUM EMBEDMENT INTO SUBSTRATE, E.D.: MINIMUM EDGE DISTANCE, S: MINIMUM ANCHOR SPACING 2- ALL DIMENSIONS IN INCHES 3- ANCHORS CAN BE CONSIDERED EXTERIOR OPEN OR PARTIALLY SHELTERED EXPOSED AS PER SECTION 1711 OF THE FBC 4- FASTENERS AND CONNECTORS (AS APPLICABLE) SHOWN IN THIS APPROVAL MAY NOT MEET CORROSION RESISTANCE FOR COASTAL OR SALT WATER EXPOSURE ZONES. COMPLIANCE WITH THESE CONDITIONS TO BE CHECKED PER FBC SECTION 1711.						

PRODUCT:
SHORELINE HVHZ HD IMPACT SCREEN
HURRICANE PROTECTION DEVICE
LARGE MISSILE IMPACT RATED

MANUFACTURER:
SHORELINE SHUTTERS
105 SEBASTIAN INDUSTRIAL PL #8
SEBASTIAN, FLORIDA 32958
TEL: (772) 581-9006

SCALE:
NA
DATE:
9/7/2026
DRAWING #
26-205
SHEET
7 OF 7