

GENERAL NOTES:
(FLORIDA BUILDING CODE 2023 - 8th EDITION - HVHZ & NON 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 6063-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- LIMITATIONS: PRODUCT MUST BE INSTALLED OFFSET FROM GLAZING PRODUCTS AS INDICATED PER TABLE 1.1.
- 9- 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.

- 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".

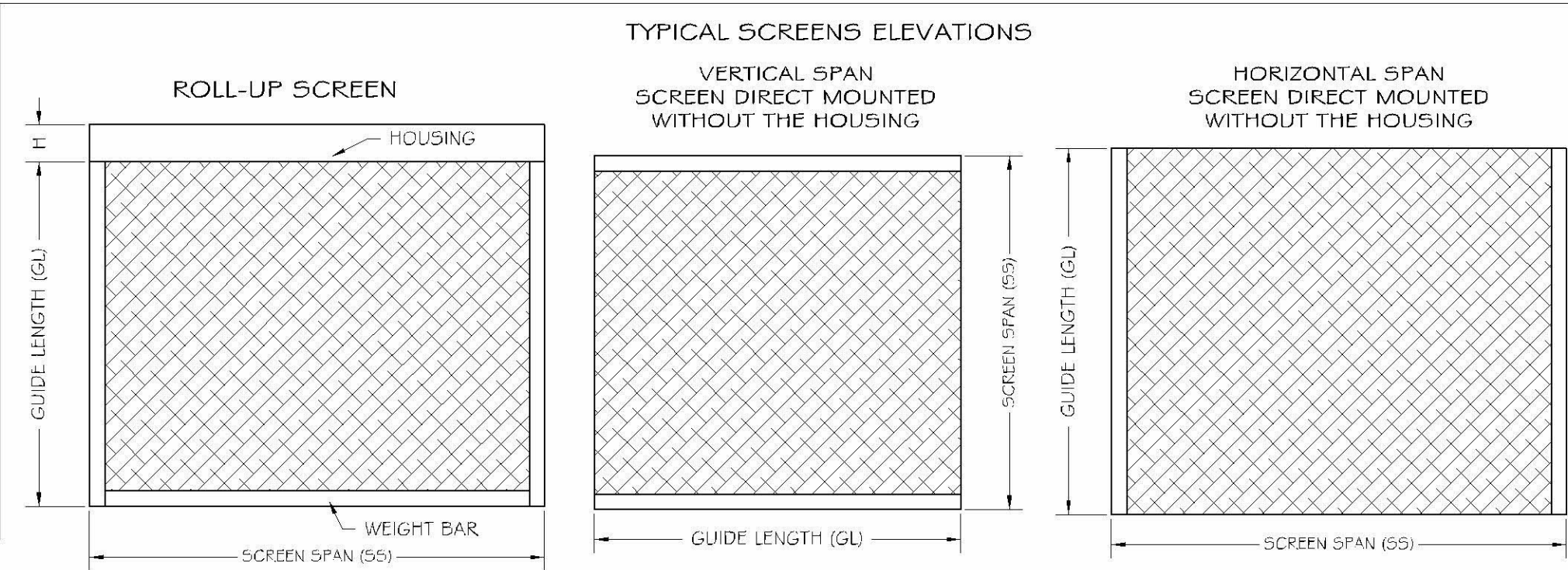


TABLE OF CONTENTS	
SHEET	DESCRIPTION
1	TABLE OF CONTENTS, GENERAL NOTES, TYPICAL ELEVATIONS
2	SCREEN - TABLE 1.1- DESIGN RATING & GLAZING SEPARATION SCREEN - TABLE 2.1- TRACK MAXIMUM END REACTIONS
3	SCREEN - TYPICAL CROSS SECTIONS
4	SCREEN - TABLE 3.1 - WALL MOUNTED ANCHOR SPACING SCREEN - TABLE 4.1 - 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

Pedro De Figueiredo

PE 52609

10/21/2025

Digitally signed by Pedro Figueiredo

Date: 2025.10.22 12:53:03 -04'00'

DIGITALLY SIGNED FOR: 6 PAGES

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PEDRO DE FIGUEIREDO, PE 52609 ON THE DATE INDICATED HERE. PRINTED COPIES OF THIS DOCUMENTS ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES



ENGINEERING SERVICES - CA 32459
9715 W. BROWARD BLVD. 247
PLANTATION, FL 33324
PPMF@AOL.COM
ENGINEER SEAL
PEDRO DE FIGUEIREDO
PE 52609

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:
10/21/2025

DRAWING #
25-157

SHEET
1 OF 6

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

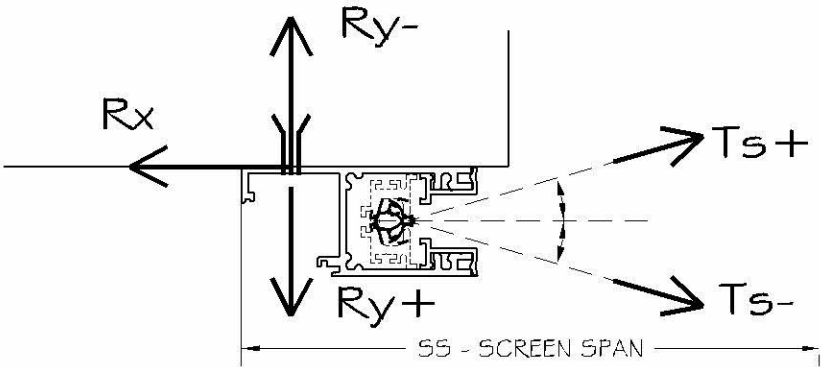
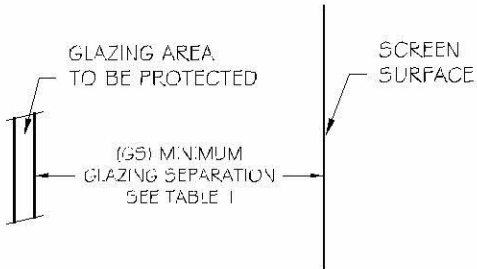
TABLE 2.1 - SCREEN 2 MAXIMUM TRACK END REACTIONS

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



Pedro De Figueiredo
PE 52609
10/21/2025

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
PEDRO DE FIGUEIREDO ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED
SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED
ON ANY ELECTRONIC COPIES



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

ENGINEERING SERVICES - CA 32459
9715 W. BROWARD BLVD. 247
PLANTATION, FL 33324
PPMF@AOL.COM
ENGINEER SEAL
PEDRO DE FIGUEIREDO
PE 52609

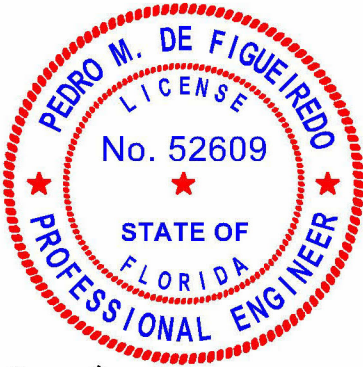
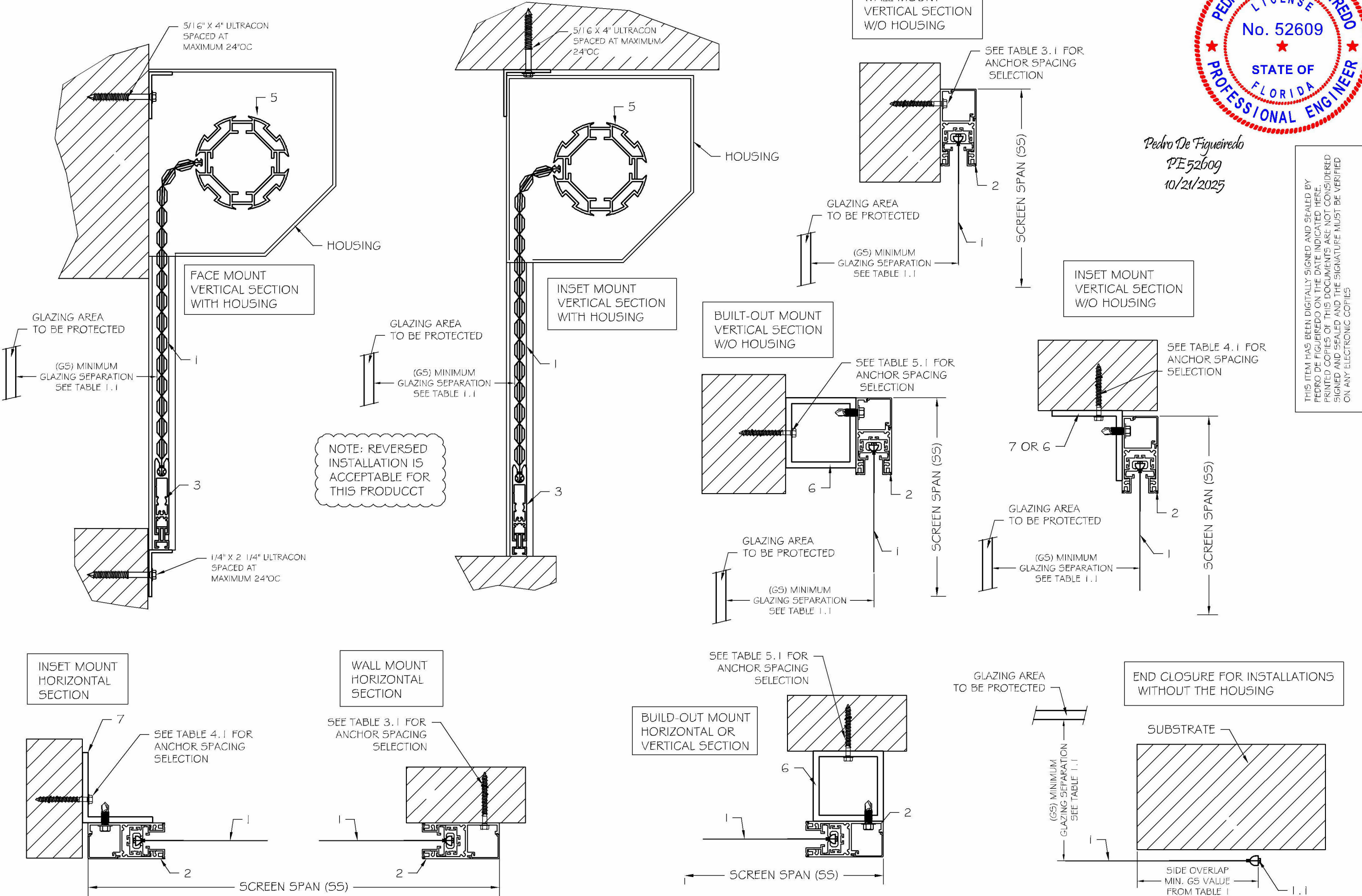


PRODUCT:
SHORELINE HVHZ HD IMPACT SCREEN
HURRICANE PROTECTION DEVICE
LARGE MISSILE IMPACT RATED

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

SCALE:
NA
DATE:
10/21/2025
DRAWING #
25-157
SHEET
2 OF 6

SCREEN TYPICAL SECTIONS



Pedro De Figueiredo
PE 52609
10/21/2025

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PEDRO DE FIGUEIREDO ON THE DATE INDICATED HERE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES



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:
10/21/2025
DRAWING #
25-157
SHEET
3 OF 6

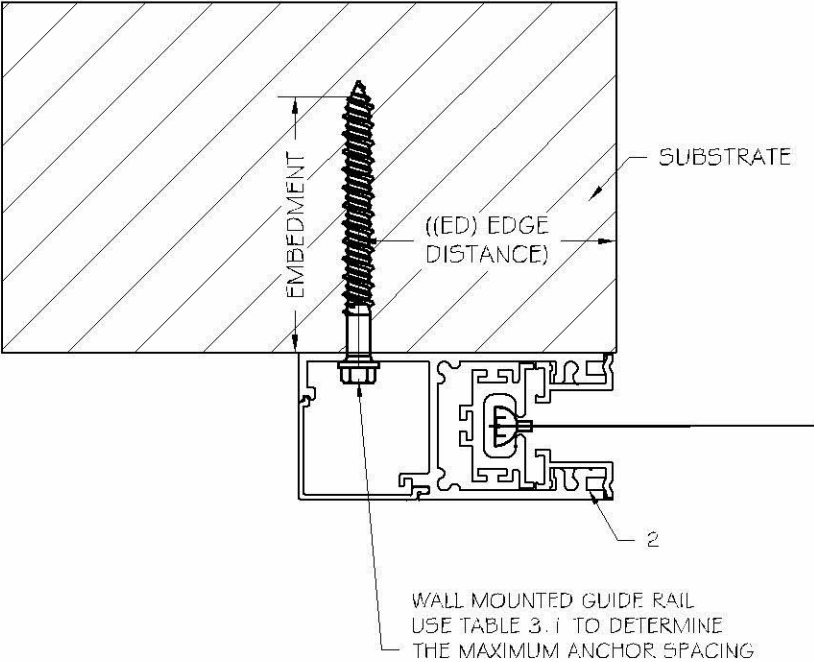
ENGINEERING SERVICES - CA 32459
9715 W. BROWARD BLVD. 247
PLANTATION, FL 33324
PPM@aol.com
ENGINEER SEAL
PEDRO DE FIGUEIREDO
PE 52609

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

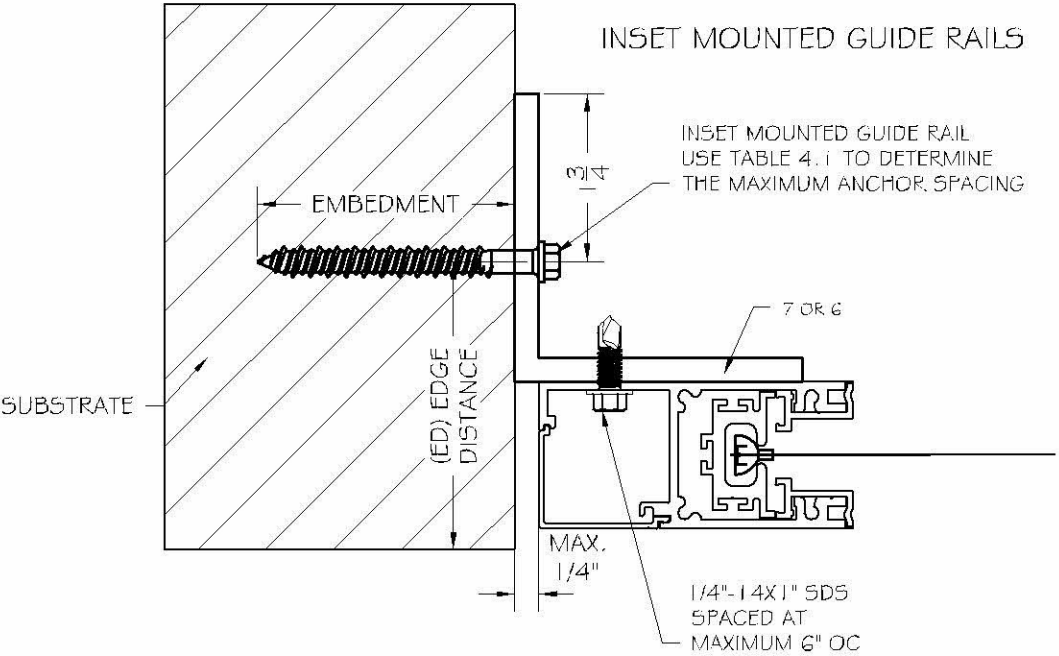


SEE SHEET 2, FOR ANCHOR TYPES

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



Pedro De Figueiredo
PE 52609
10/21/2025

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
PEDRO DE FIGUEIREDO ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED
SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED
ON ANY ELECTRONIC COPIES



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:
10/21/2025
DRAWING #
25-157
SHEET
4 OF 6

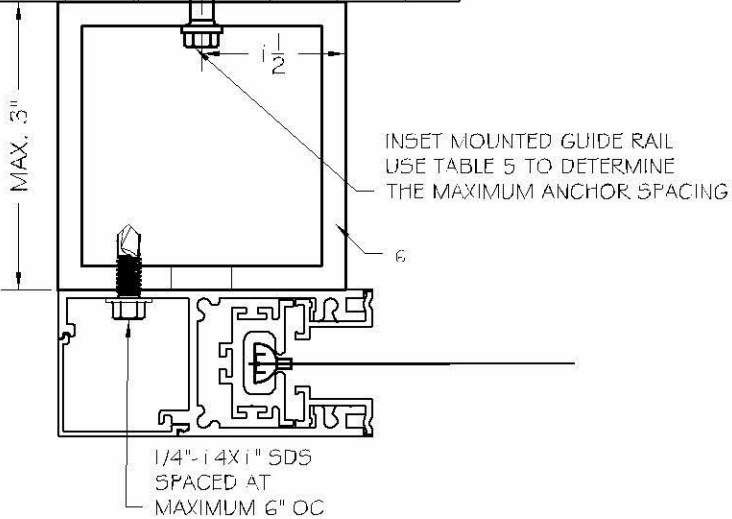
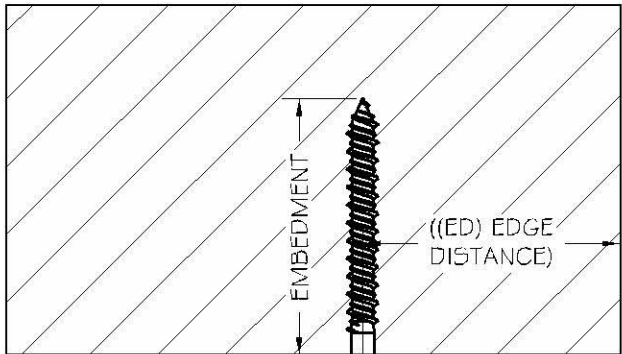
ENGINEERING SERVICES - CA 32459
9715 W. BROWARD BLVD. 247
PLANTATION, FL 33324
PPMF@AOL.COM
ENGINEER SEAL
PEDRO DE FIGUEIREDO
PE 52609

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

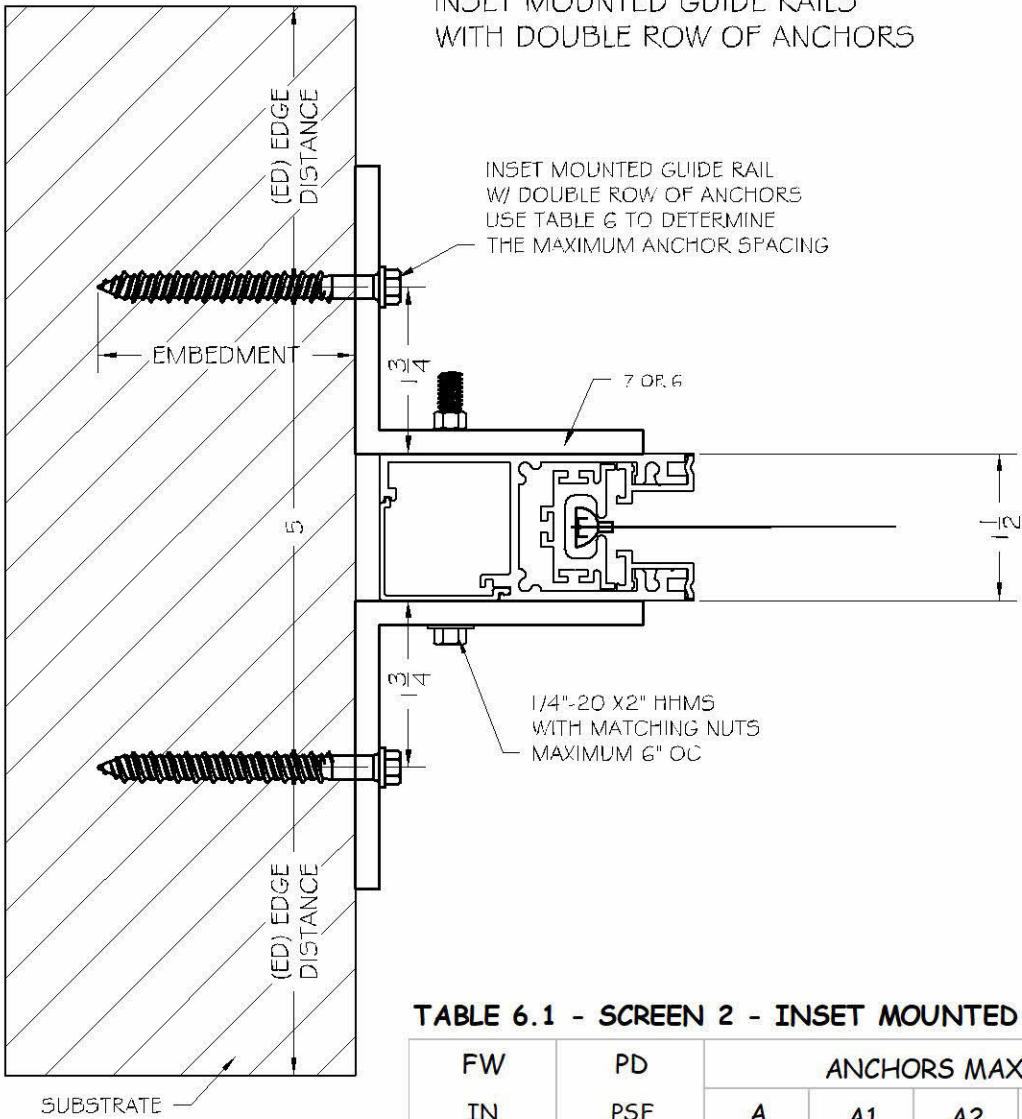


TABLE 6.1 - SCREEN 2 - INSET MOUNTED W/ DOUBLE ANCHOR SPACING

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



Pedro De Figueiredo
PE 52609
10/21/2025

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
PEDRO DE FIGUEIREDO ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED
SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED
ON ANY ELECTRONIC COPIES



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

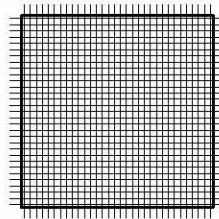
MANUFACTURER:
SHORELINE SHUTTERS
105 SEBASTIAN INDUSTRIAL PL #8
SEBASTIAN, FLORIDA 32958
TEL: (772) 581-9006

SCALE:
NA
DATE:
10/21/2025
DRAWING #
25-157
SHEET
5 OF 6

ENGINEERING SERVICES - CA 32459
9715 W. BROWARD BLVD. 247
PLANTATION, FL 33324
PPMF@AOL.COM
ENGINEER SEAL
PEDRO DE FIGUEIREDO
PE 52609

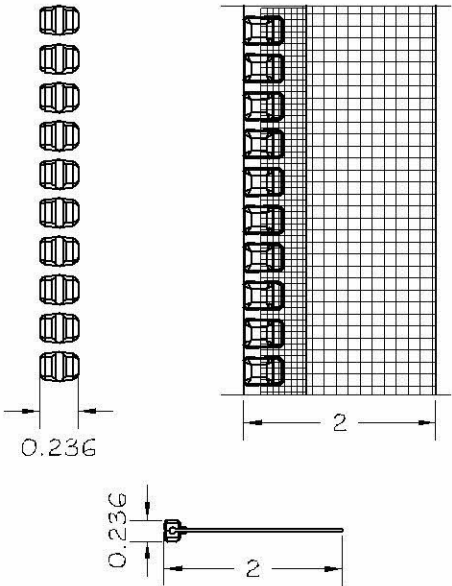
SCREEN COMPONENTS

1- 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.

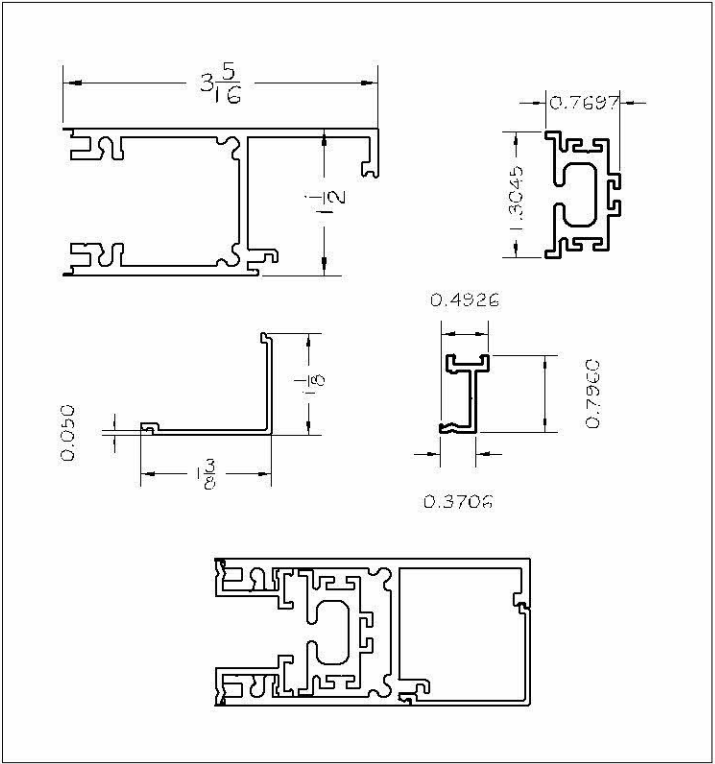


MANUFACTURER:	Twitchell Corporation		
WARP	0.027 DIAM VINYL COATED 1500 DENIER		
FILL	0.03 DIAM VINYL COATED 2000 DENIER		
TEST REPORT #:	TEST		
TEL 01980388A	ASTM D635	CLASS C	RATE OF BURN
TEL 01980388C	ASTM D2843	10.6	SMOKE DENSITY (≤ 75)
TEL 01980388B	ASTM D1929	751	SELF-IGNITION (≥ 650)
BT-TWI-15-001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

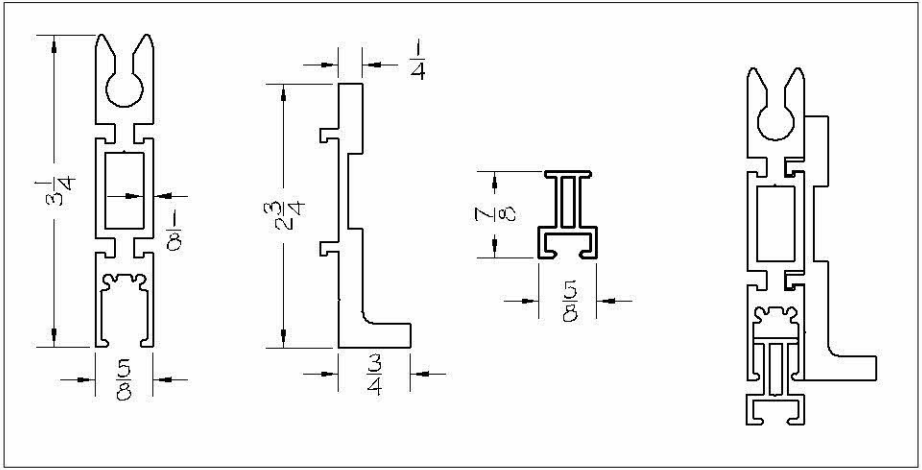
1.1 - FABRIC BULLETS ZIPPER
MANUFACTURED BY PASKAL



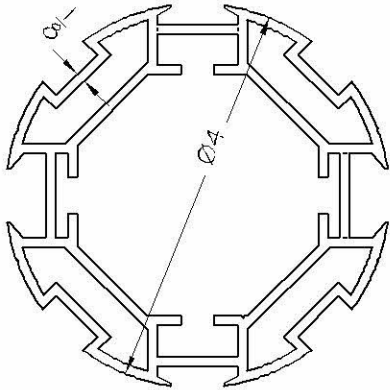
2- GUIDE RAIL (4 PCS)
ALUMINUM 6063-T6



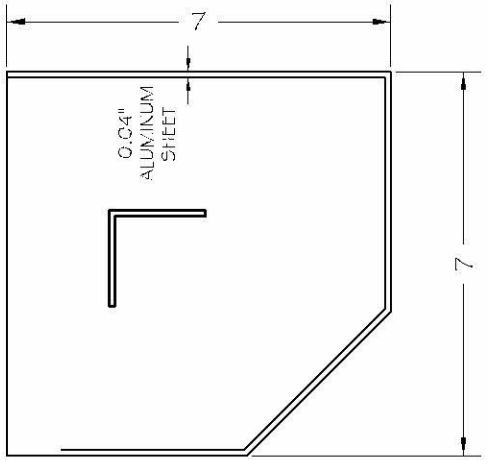
3- BOTTOM RAIL (3 PCS)
ALUMINUM 6063-T5



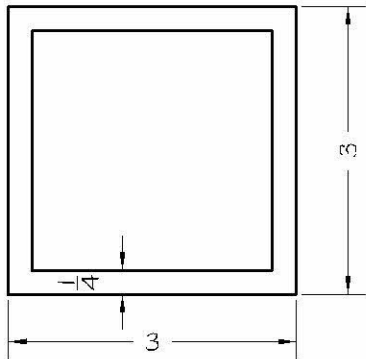
5- ALUMINUM REEL
ALUMINUM 6063-T6



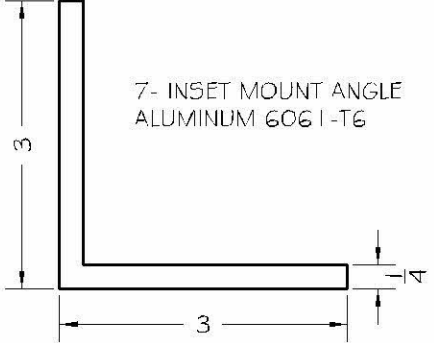
8- ALUMINUM HOUSING
WITH 1/8-2X2 ALUMINUM
ANGLE REINFORCEMENT



6- BUILT-OUT TUBE
ALUMINUM 6061-T6



7- INSET MOUNT ANGLE
ALUMINUM 6061-T6



THIS TEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
PEDRO DE FIGUEIREDO ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENTS ARE NOT CONSIDERED
SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED
ON ANY ELECTRONIC COPIES



Pedro De Figueiredo
PE 52609
10/21/2025



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:
10/21/2025
DRAWING #
25-157
SHEET
6 OF 6

ENGINEERING SERVICES - CA 32459
9715 W. BROWARD BLVD. 247
PLANTATION, FL 33324
PPMF@AOL.COM
ENGINEER SEAL
PEDRO DE FIGUEIREDO
PE 52609