

HURRICANE FABRIC, LLC

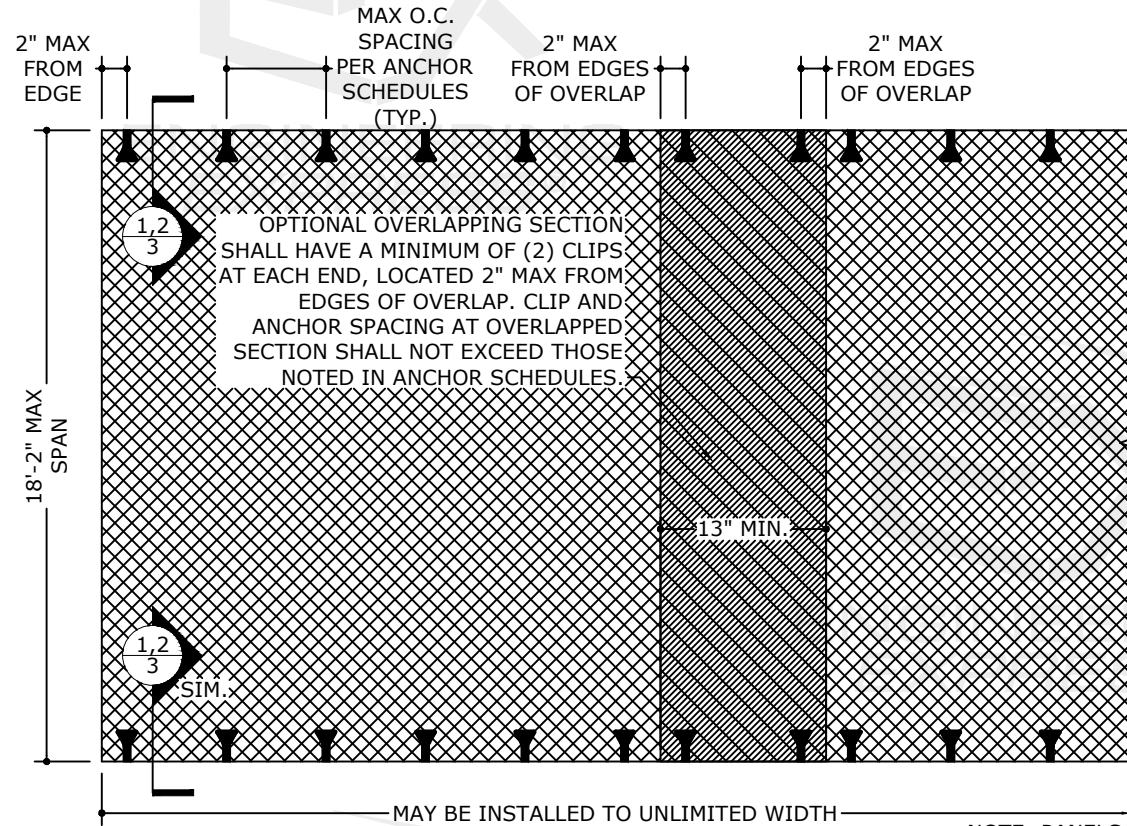
ASTROGUARD WIND ABATEMENT SYSTEM LARGE MISSILE IMPACT RESISTANT

VALID FOR USE INSIDE AND OUTSIDE THE HVHZ (SEE LIMITATIONS HEREIN)

NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. A DESIGN PROFESSIONAL SHALL BE RESPONSIBLE FOR CERTIFYING THE APPLICATION OF THIS INFORMATION TO ANY SITE-SPECIFIC LOCATION.

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

DECEMBER 20, 2023



NOTE: PANELS CAN OPTIONALLY BE ANCHORED ON THREE OR FOUR SIDES. FOR FOUR SIDE ATTACHMENT, THE SPAN IS THE SHORT DIMENSION BETWEEN FASTENERS.

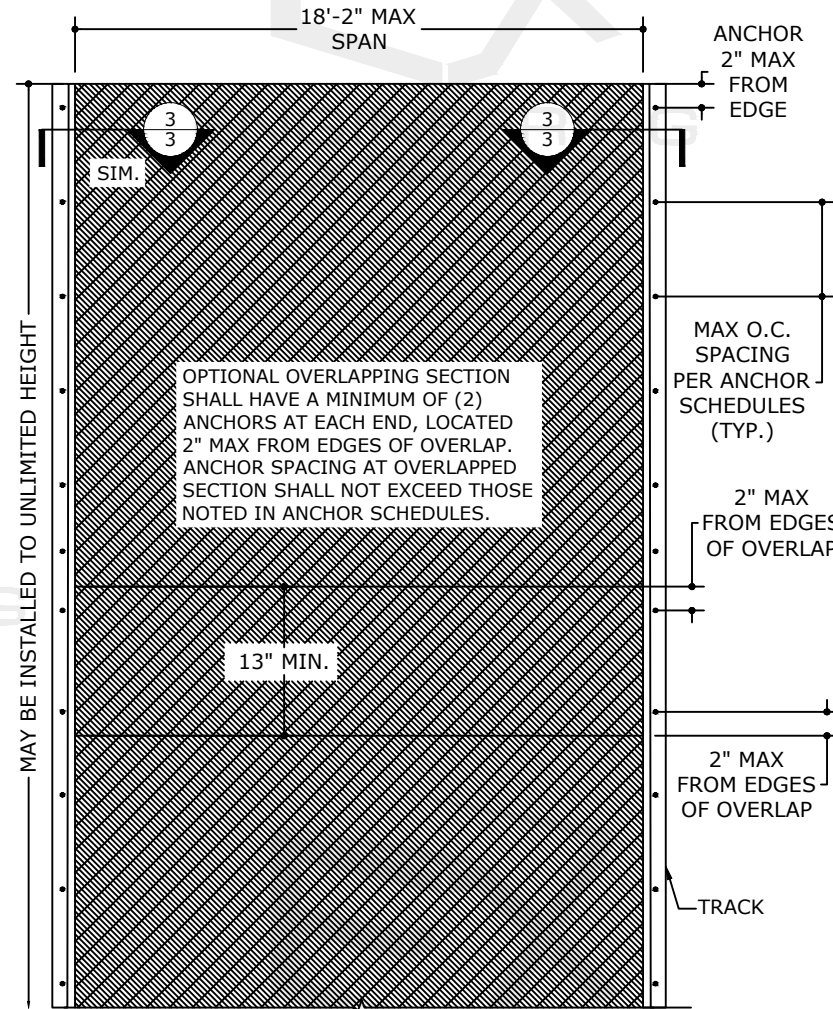
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1

CLIP OPTION, PANEL INSTALLATION, TYP.

NOT TO SCALE

EXTERIOR ELEV

NOTE: PANELS MAY ALSO BE ANCHORED WITH A COMBINATION OF CLIP OPTION ON ONE SIDE AND TRACK OPTION ON ONE SIDE, IF DESIRED. THIRD AND FOURTH SIDES MAY BE OPTIONALLY ANCHORED USING THE CLIP OPTION.



2
1

TRACK OPTION, PANEL INSTALLATION, TYP.

NOT TO SCALE

EXTERIOR ELEV

NOTE REGARDING USE OF THIS DOCUMENT & USE OUTSIDE FLORIDA:

NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. THIS PRODUCT EVALUATION IS VALID FOR USE IN **FLORIDA ONLY**. USE OF THIS EVALUATION REQUIRES A REVIEW & CERTIFICATION BY A LOCAL DESIGN PROFESSIONAL WHO SHALL BE RESPONSIBLE FOR THE PROPER ADAPTATION OF THIS GENERAL PERFORMANCE EVALUATION TO ANY SITE-SPECIFIC PROJECT. CONTACT THIS OFFICE AT ENGINEERINGEXPRESS.COM/QUOTE FOR ASSISTANCE WITH YOUR PROJECT-SPECIFIC NEEDS & FOR ADAPTATION & CERTIFICATION OF THIS DOCUMENT OUTSIDE OF FLORIDA.

RETENTION CLIP END CONNECTOR:

RHODIA ENGINEERING PLASTICS
POLYAMIDE 66

WELT BAR SPECIFICATION:

PVC WELT CORD WELDED OR ENCAPSULATED TO HURRICANE FABRIC PANEL EDGE. WELT FLAP SEWN OR WELDED TO HURRICANE FABRIC PANEL. (SEE DETAILS NEXT PAGE).

HURRICANE FABRIC SPECIFICATION:

- TYPE OF YARN: TEXTILE FABRIC
- CONSTRUCTION: 25 X 25 WEAVE
- THICKNESS: 1000 MICRONS ± 5%
- FINISH: RESIN COATED
- WEIGHT (ASTM D 3776): 10.83 OZ/YD²
- TENSILE STRENGTH (GRAB METHOD, ASTM D 4632):
WARP: 879 lb, WEFT: 879 lb
- BURST STRENGTH (ASTM D 3786): 1500 PSI
- ABRASION RESISTANCE (ASTM D 4886): 95% STRENGTH RETAINED

SEWING:

SEWING ONLY AT SPLICE (SEE SPLICE DETAIL NEXT PAGE).
NO SEWING AT EDGES.

SEE LAST SHEET FOR
TERMINOLOGY &
PAGE INDEX

GENERAL NOTES

1. THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE EIGHTH EDITION (2023) FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE PER TAS 201, 202 AND 203 TESTING STANDARDS. THE SYSTEM IS DESIGNED AS LARGE MISSILE RESISTANT.
2. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
3. POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED PER SEPARATE ENGINEERING IN ACCORDANCE WITH THE GOVERNING CODE. PRESSURE REQUIREMENTS AS DETERMINED IN ACCORDANCE WITH ASCE 7 AND THE FLORIDA BUILDING CODE SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.
4. PRESSURE & REACTIONS VALUES IN THIS APPROVAL ARE BASED ON (ASD) ALLOWABLE STRESS DESIGN METHODOLOGY.
5. DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR. PANELS HAVE BEEN DESIGNED WITH A TOTAL 2" PRE-LOAD SLACK.
6. 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.
7. 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 EXISTING STRUCTURE.
8. ENGINEER SEAL AFFIXED HERETO VALIDATE 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.

9. THIS SYSTEM IS INTENDED FOR USE ONLY DURING WIND STORM EVENTS. WHEN NOT IN USE, PRODUCT SHALL BE PROPERLY STORED AWAY FROM PROLONGED EXPOSURE TO DIRECT SUNLIGHT OR OTHER WEATHERING CONDITIONS.
10. ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T6, U.N.O.
11. FASTENERS SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTION J.3.7.2 BY THE ALUMINUM ASSOCIATION IN.C, AND ANY APPLICABLE FEDERAL, STATE AND OR LOCAL CODES.
12. REFER TO FASTENER MANUFACTURER'S PUBLISHED DATA SHEETS AND RECOMMENDATIONS FOR FASTENER INSTALLATION INSTRUCTIONS.
13. UNLESS OTHERWISE NOTED HEREIN, ALL SCREWS SHALL BE 304 OR 316 STAINLESS STEEL OR CORROSION RESISTANT COATED SAE GR. 5 CARBON STEEL. MAXIMUM PANEL SPAN: 18'-2"
14. MAXIMUM ALLOWABLE DESIGN PRESSURE: ±60 PSF. PRESSURE VALUES ON THIS APPROVAL ARE (ASD) ALLOWABLE DESIGN PRESSURES.
15. PANELS SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER PANEL CONTAINING THE FOLLOWING:
HURRICANE FABRIC.COM LLC
PO BOX 50153
CLAYTON, MD 63105
TAS 201, 202, 203
FLORIDA PRODUCT APPROVAL NUMBER
16. HURRICANE FABRIC PANELS MAY BE MOUNTED VERTICALLY OR HORIZONTALLY AS APPLICABLE.
17. ROLL-UP AND HOOD MECHANISM ARE NOT PART OF THIS APPROVAL AND ARE OUTSIDE THE BOUNDS OF THIS CERTIFICATION.
18. THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
19. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
20. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

FL 17661.1

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DELRAY BEACH, FL 33444
WWW.HURRICANEFABRIC.COM

ASTROGUARD WIND ABATEMENT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA #17661.1)

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-29198)	EPR	RWN	04/17/23
2023 FBC UPDATE	MRT	RWN	11/20/23

23-69640

SCALE: NTS UNLESS NOTED

1 OF 18

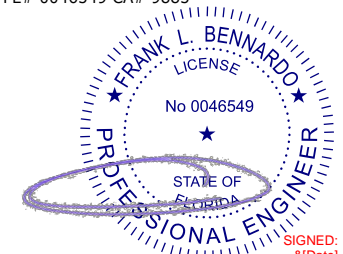
VISIT ECALC.IO/69640

FOR SITE-SPECIFIC DEVIATIONS
& MORE INFORMATION ABOUT THIS DOCUMENT
OR SCAN THIS QR CODE

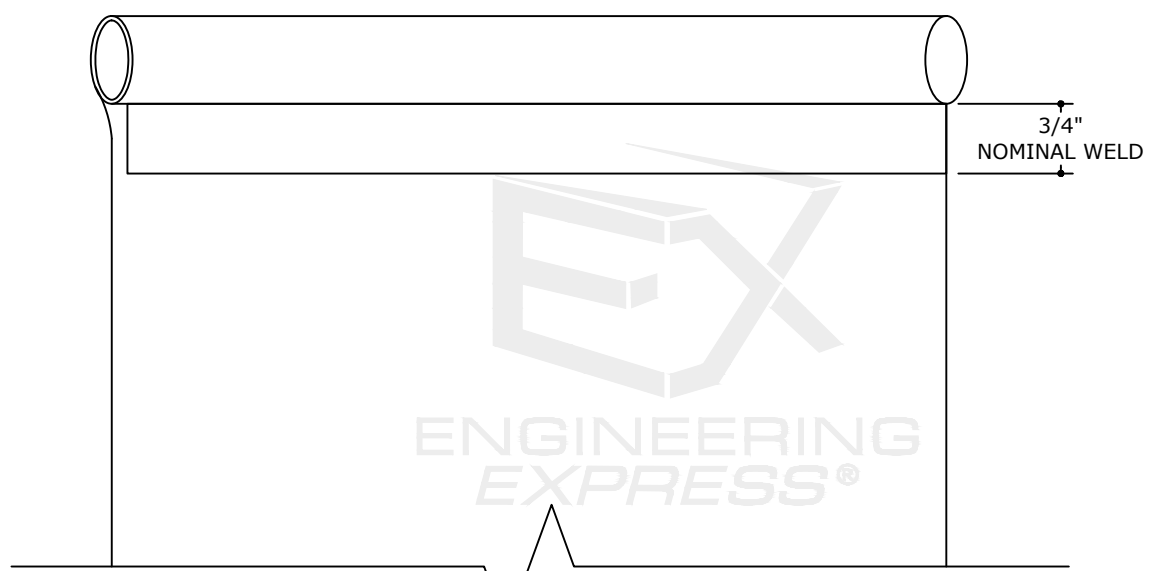
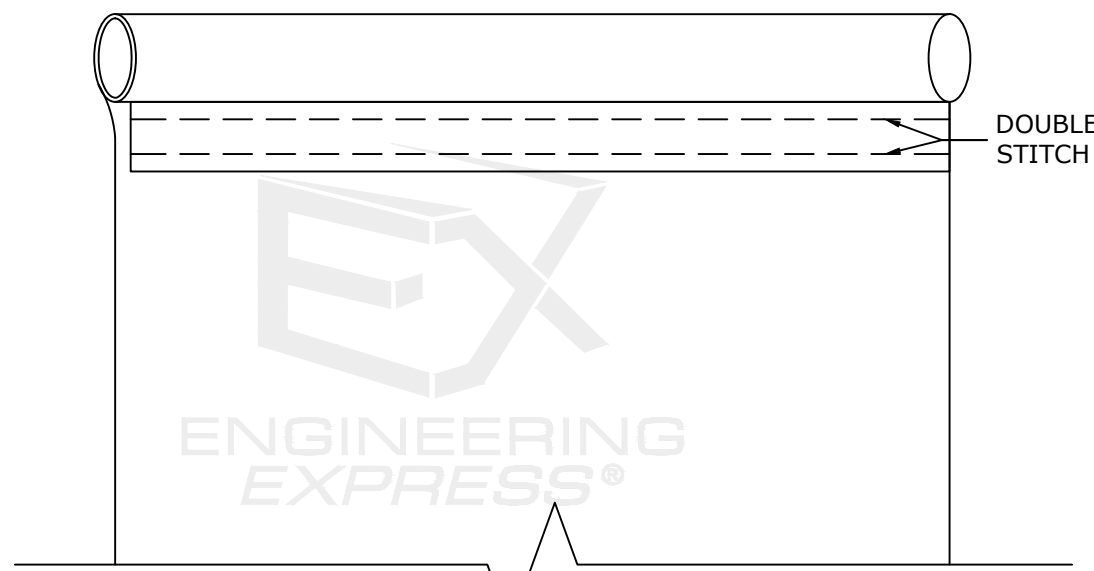
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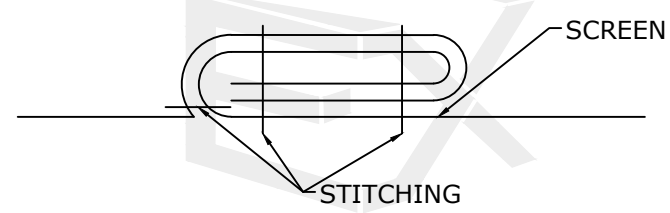


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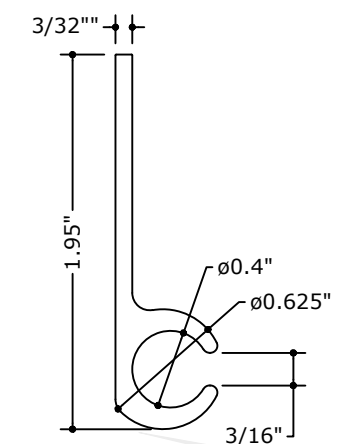
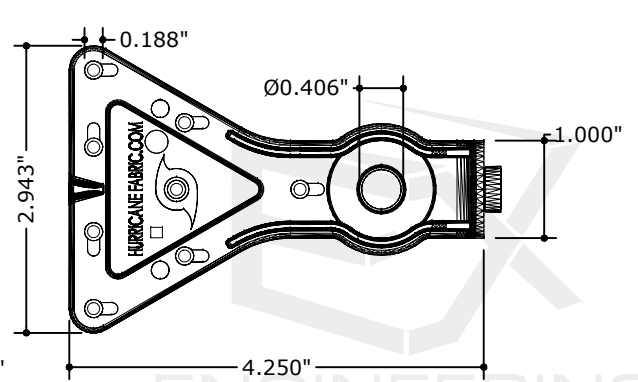
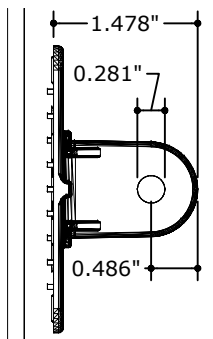
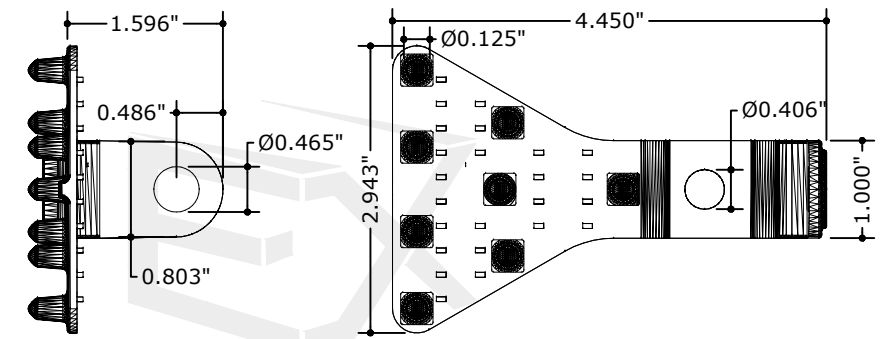


1 SEWN ON SINGLE FLAP
WELT TRACK INSERT
2 NOT TO SCALE

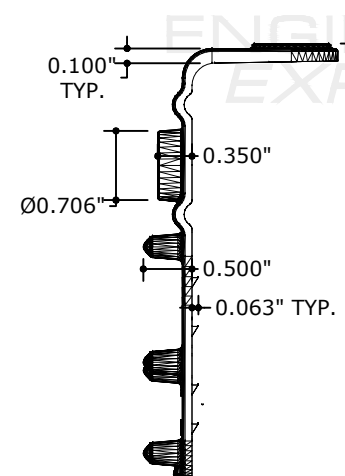
2 WELDED
WELT TRACK INSERT
2 NOT TO SCALE



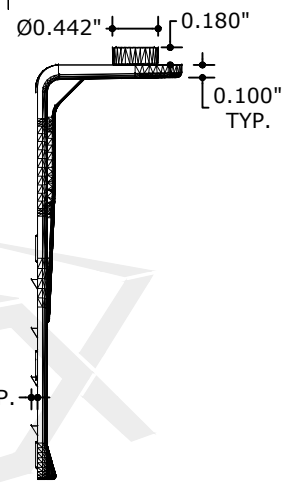
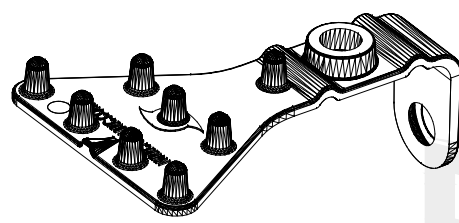
3 SPLICE DETAIL
2 NOT TO SCALE



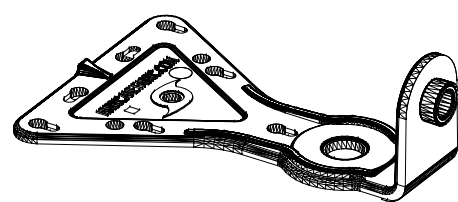
3 TRACK - SECTION VIEW
N.T.S. 85-SKR-90 | ALUM 6063 T-6



1 BOTTOM MOUNTING CLIP
N.T.S. POLYAMIDE 66



2 TOP MOUNTING CLIP
N.T.S. POLYAMIDE 66



NOTE: TRACK IS CONTINUOUS AND SHALL BE USED FOR THE SEWN WELT TRACK AND THE WELDED WELT TRACK.

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DELRAY BEACH, FL 33444
WWW.HURRICANEFABRIC.COM
ASTROGUARD WIND ABATEMENT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA #17661.1)

REMARKS	DRWN	CHKD	DATE
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FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

DECEMBER 20, 2023

FL

FRANK L. BENNARDO
LICENSE
No 0046549
STATE OF FLORIDA
PROFESSIONAL ENGINEER
SIGNED: & (Date)

MINIMUM GLAZING SEPARATION FROM GLASS INCLUDING INSTALLATION SLACK

SPAN	POSITIVE ASD DESIGN LOAD (PSF)			
	+60 PSF	+50 PSF	+40 PSF	+30 PSF
4'-0"	6.88"	6.63"	6.13"	5.75"
6'-0"	11.13"	10.50"	9.88"	9.00"
8'-0"	15.75"	14.88"	14.00"	12.75"
10'-0"	20.88"	19.75"	18.38"	16.88"
12'-0"	26.38"	24.88"	23.13"	21.13"
14'-0"	32.13"	30.38"	28.25"	25.75"
14'-8"	34.13"	32.38"	32.38"	32.38"
16'-0"	38.25"	36.88"	36.88"	36.88"
17'-0"	41.38"	39.00"	36.88"	36.88"
18'-2"	45.13"	42.50"	39.50"	36.88"

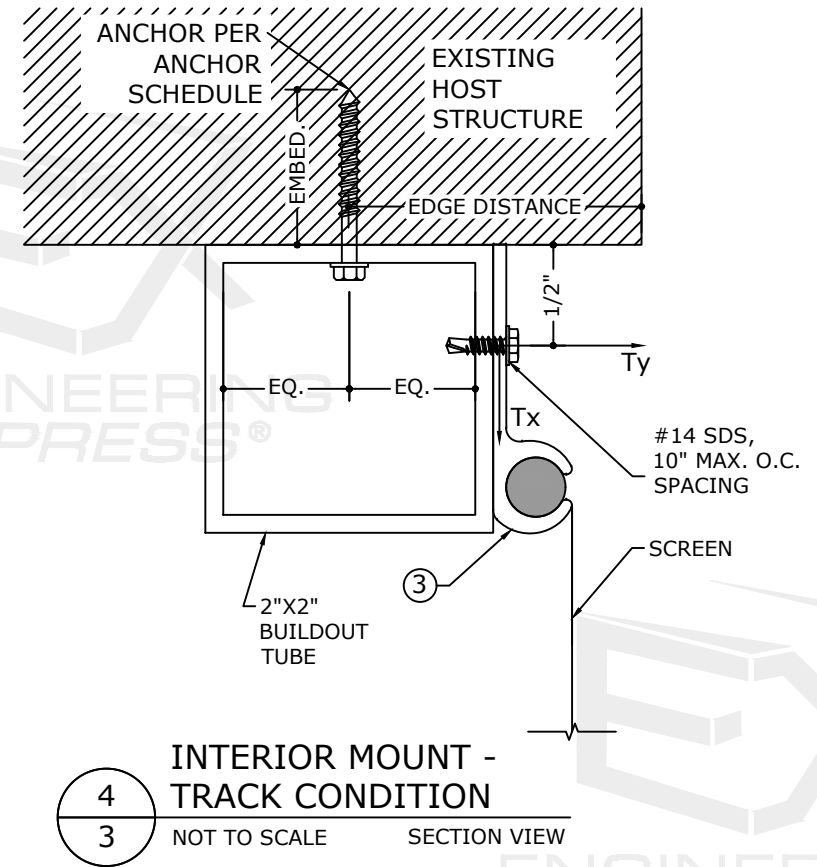
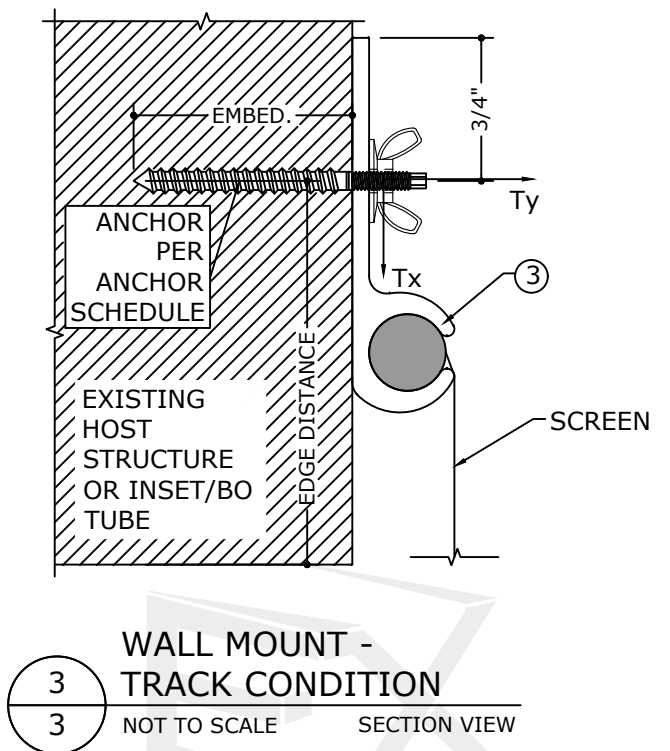
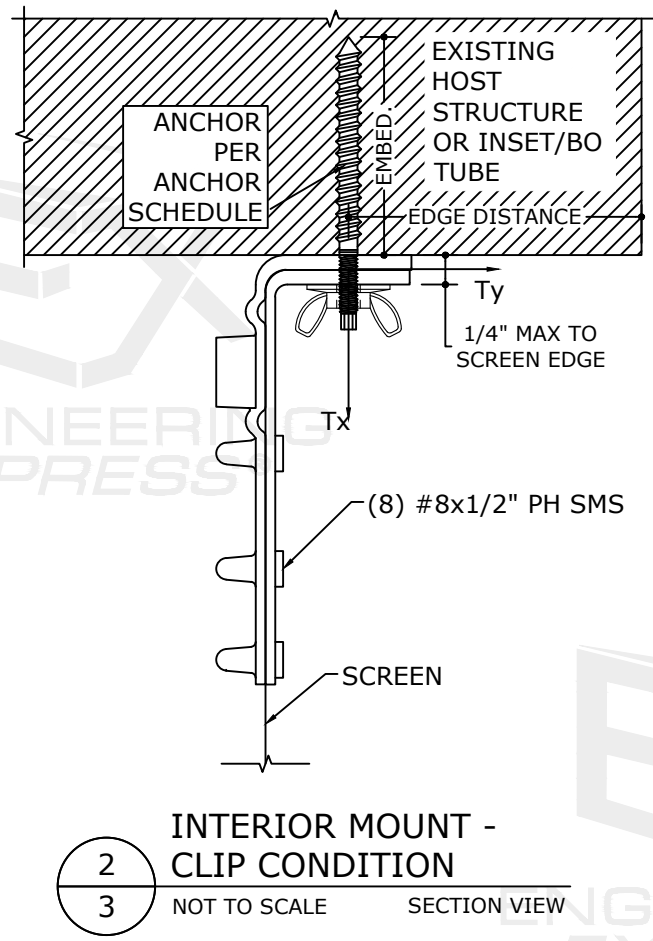
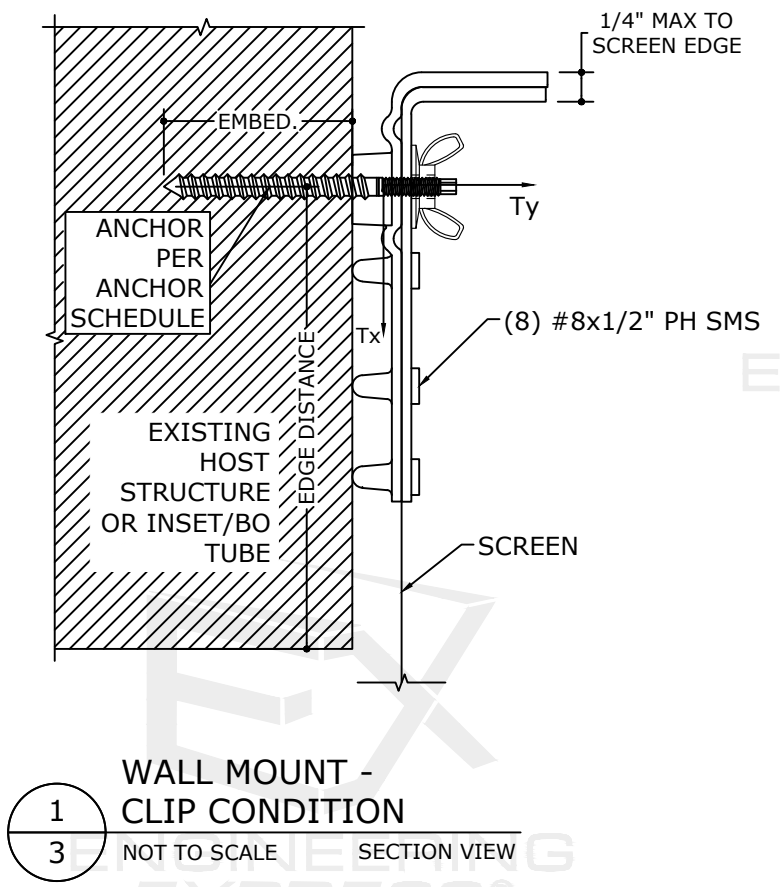
- SEPARATION FROM GLASS/GLAZING NOTES:**
- SEPARATION FROM GLAZING IS REQUIRED IF THE INSTALLATION MEETS ANY OF THE FOLLOWING CRITERIA:
 - THE INSTALLATION IS LOCATED WITHIN THE HIGH-VELOCITY HURRICANE ZONE.
 - THE INSTALLATION IS LOCATED WITHIN WIND ZONE 4.
 - THE INSTALLATION IS FOR A RISK CATEGORY IV BUILDING OR STRUCTURE AS DEFINED BY FBC TABLE 1604.5 (ESSENTIAL FACILITIES)".
 - SEPARATION IS NOT REQUIRED FROM ANY FENESTRATION PRODUCT THAT DOES NOT CONTAIN GLAZING.
 - SEPARATION FROM GLAZING IS NOT REQUIRED FOR INSTALLATIONS ON RISK CATEGORY I-III BUILDINGS OR STRUCTURES AS DEFINED BY FBC TABLE 1604.5 (NON-ESSENTIAL FACILITIES) LOCATED OUTSIDE OF WIND ZONE 4.
 - INTERPOLATION OF THIS TABLE IS NOT PERMITTED. UTILIZE NEXT HIGHEST SEPARATION FROM GLAZING VALUE IF NEEDED.

LOAD ON EXISTING STRUCTURE FROM SCREEN SYSTEM
Tx = PARALLEL LOADS (PLF)

SPAN	ASD DESIGN PRESSURE (+/- PSF)			
	60	50	40	30
4'-0"	235.4	208.5	179.6	148.3
6'-0"	308.5	273.2	235.4	194.3
8'-0"	373.7	330.9	285.2	235.4
10'-0"	433.6	384.0	330.9	273.2
12'-0"	489.7	433.6	373.7	308.5
14'-0"	542.7	480.6	414.1	341.9
14'-8"	559.8	495.7	427.2	352.6
16'-0"	593.2	525.3	452.7	373.7
17'-0"	617.7	547.0	471.4	389.1
18'-2"	645.6	571.7	492.7	406.7

LOAD ON EXISTING STRUCTURE FROM SCREEN SYSTEM
Ty = PERPENDICULAR LOADS (PLF)

SPAN	ASD DESIGN PRESSURE (+/- PSF)			
	60	50	40	30
4'-0"	120.0	100.0	80.0	60.0
6'-0"	180.0	150.0	120.0	90.0
8'-0"	240.0	200.0	160.0	120.0
10'-0"	300.0	250.0	200.0	150.0
12'-0"	360.0	300.0	240.0	180.0
14'-0"	420.0	350.0	280.0	210.0
14'-8"	440.0	366.7	293.3	220.0
16'-0"	480.0	400.0	320.0	240.0
17'-0"	510.0	425.0	340.0	255.0
18'-2"	545.0	454.2	363.3	272.5



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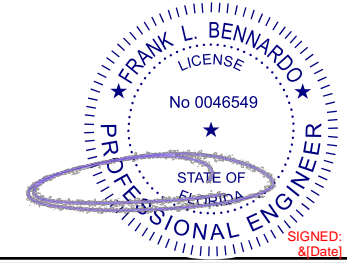
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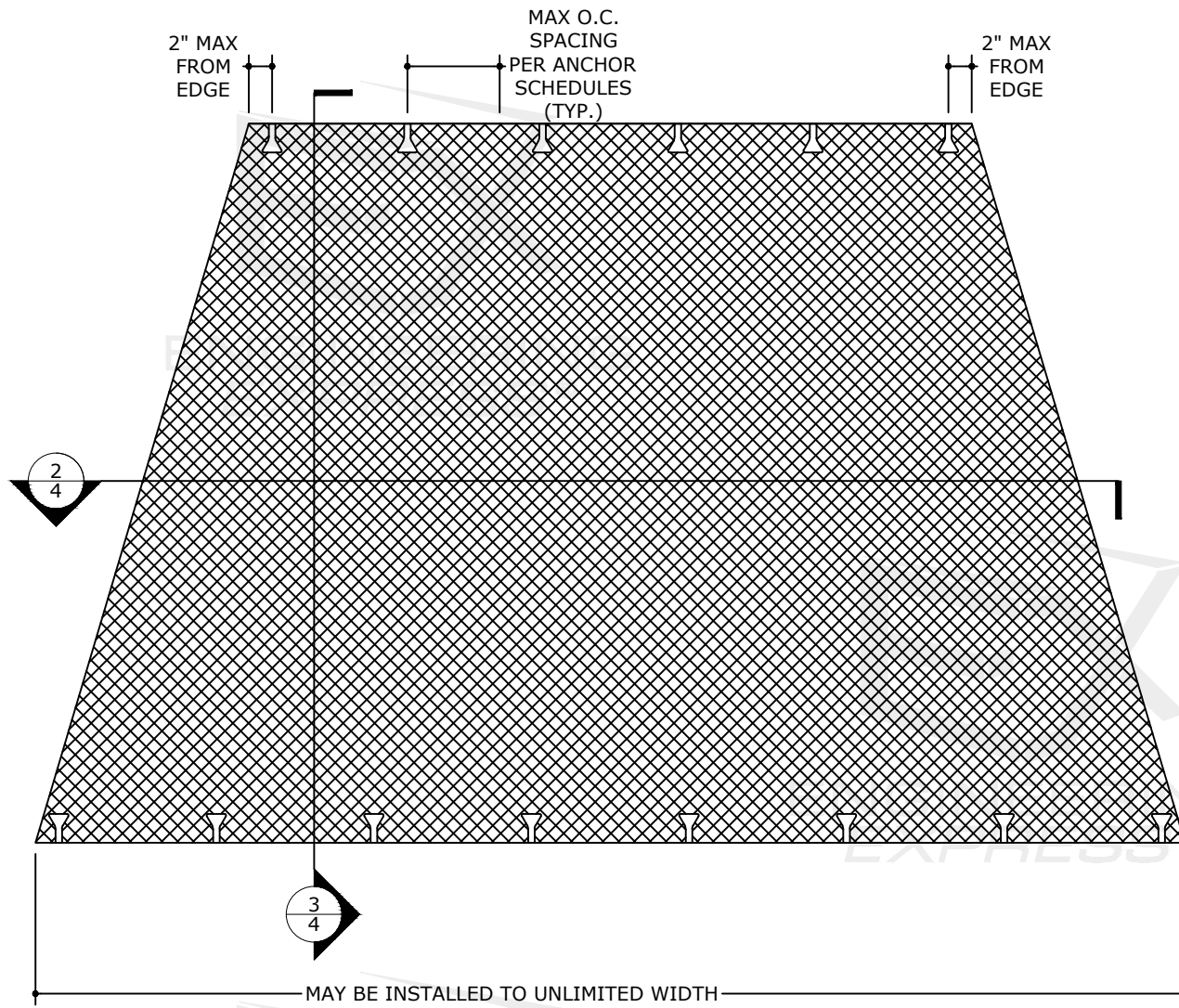
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3 OF 18

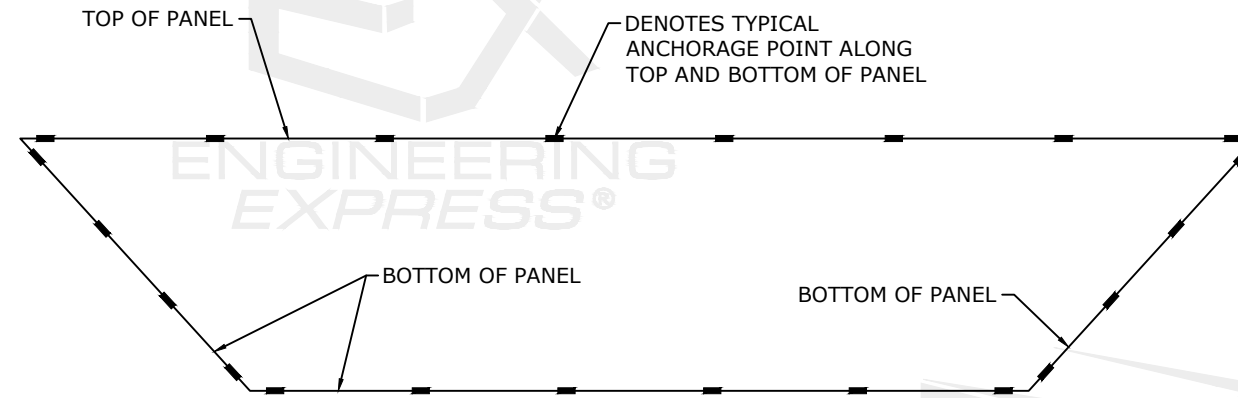


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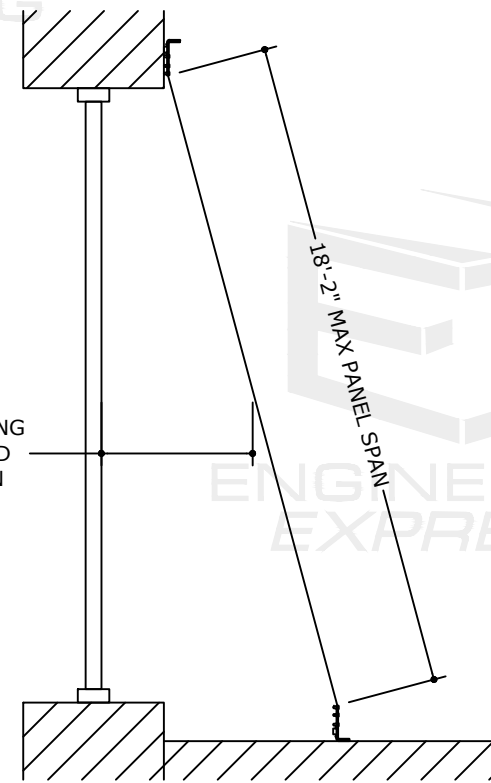


1 ANGLD PANEL INSTALLATION
N.T.S. EXTERIOR ELEV

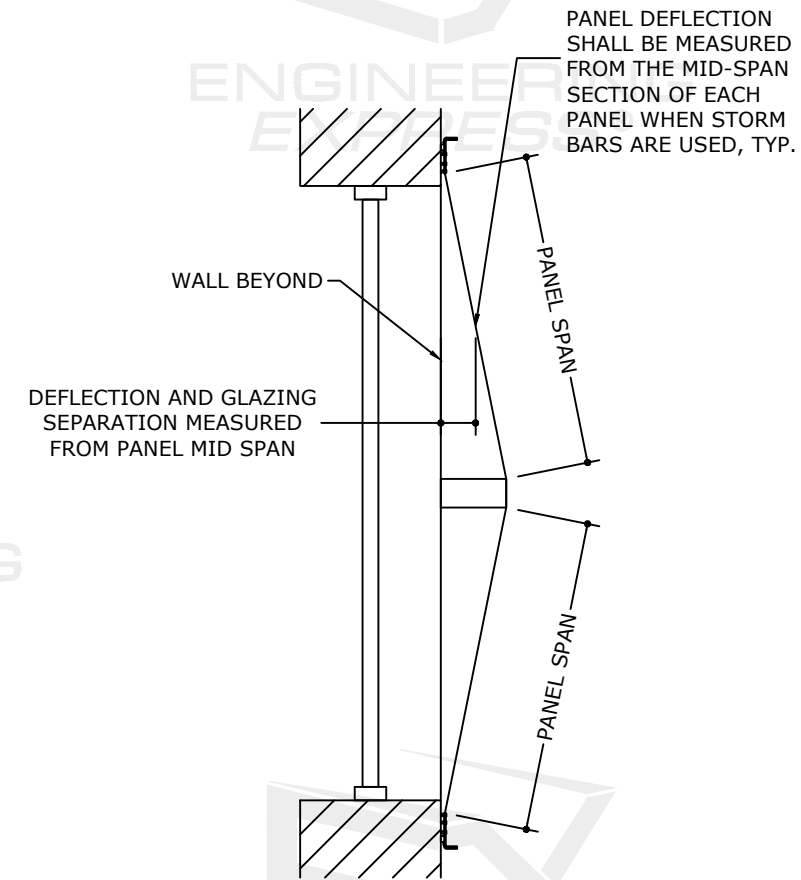
NOTE: NON-SPAN OVERLAP SHALL BE A MINIMUM OF 1.5 X THE PANEL PROJECTION FROM OPENING



2 ANGLD PANEL INSTALLATION
N.T.S. PLAN VIEW



3 ANGLD PANEL INSTALLATION
N.T.S. VERTICAL SECTION



4 INSTALLATION W/ STORM BAR
N.T.S. VERTICAL SECTION

NOTE: THE DETAILS ON THIS PAGE APPLY TO BOTH CLIP AND TRACK OPTIONS. CLIP OPTION (TOP AND BOTTOM) IS DEPICTED IN THE DETAILS ON THIS PAGE.

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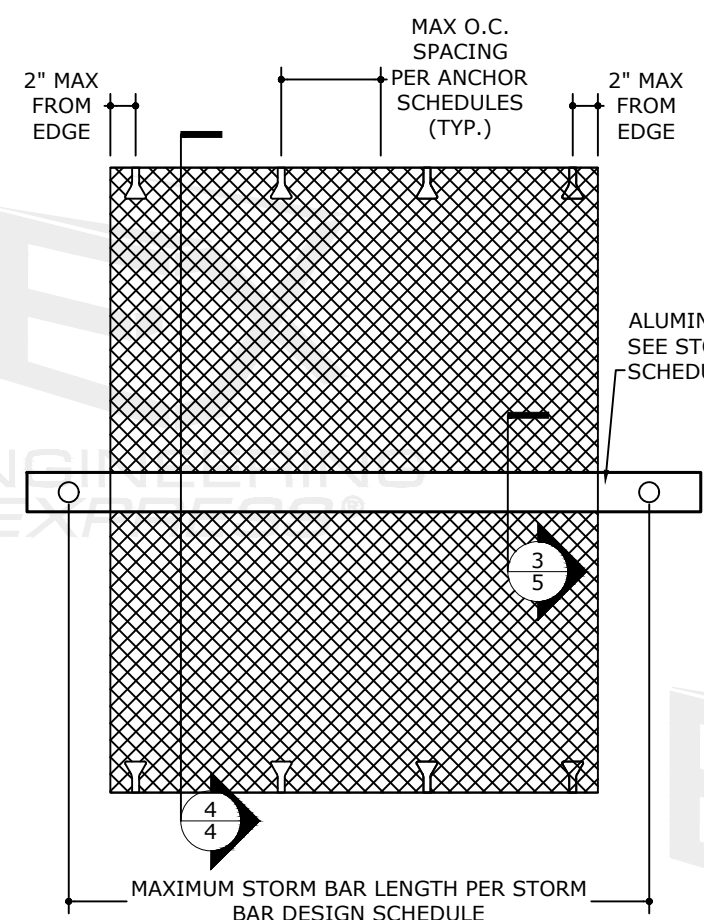
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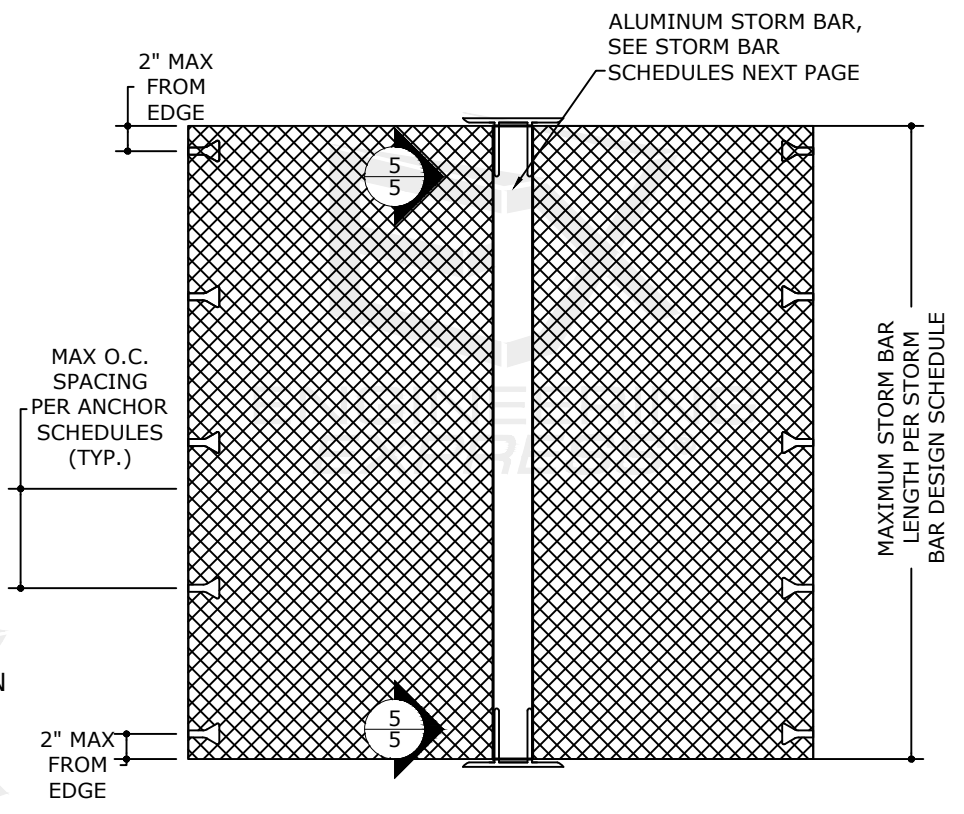
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1 INSTALLATION W/ STORM BAR
5 N.T.S. EXTERIOR ELEV

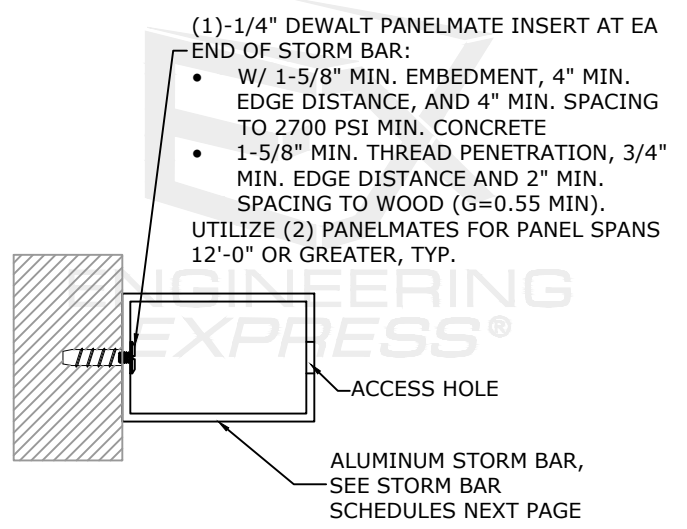
STORM BARS & FABRIC MAY BE INSTALLED HORIZONTALLY OR VERTICALLY AS APPLICABLE (HORIZONTAL STORM BAR INSTALLATION WITH VERTICAL PANEL SPAN SHOWN HEREIN)



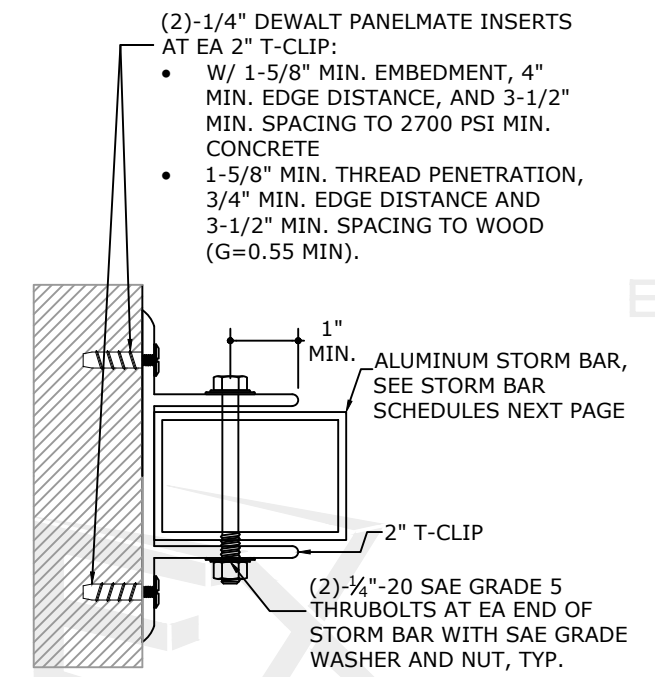
2 INSTALLATION W/ STORM BAR
5 N.T.S. EXTERIOR ELEV

STORM BARS & FABRIC MAY BE INSTALLED HORIZONTALLY OR VERTICALLY AS APPLICABLE (VERTICAL STORM BAR INSTALLATION WITH HORIZONTAL PANEL SPAN SHOWN HEREIN)

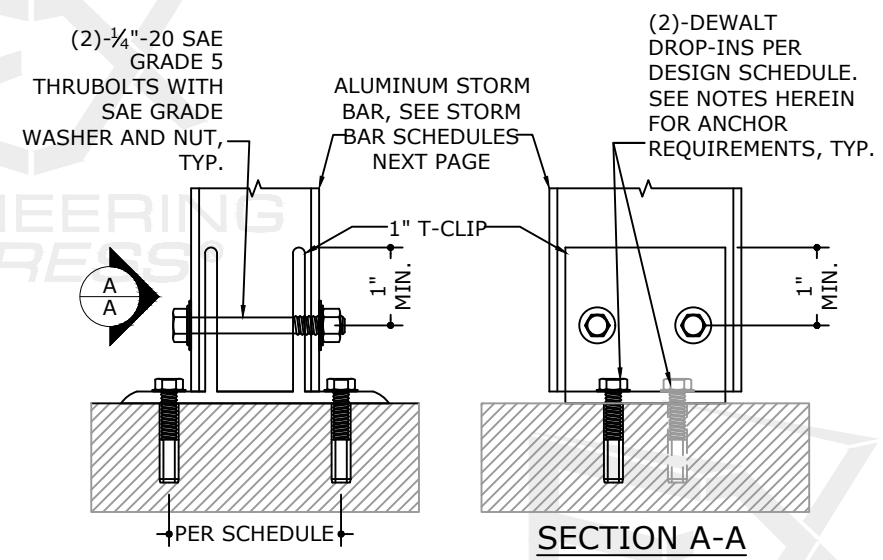
- STORM BAR NOTES:**
1. THE STORM BAR SCHEDULES NEXT PAGE ARE GOVERNED BY POSITIVE WIND LOAD DIRECTIONS ONLY. NEGATIVE WIND LOAD DIRECTIONS DO NOT SUBJECT THE STORM BARS TO ANY EXTERIOR LOADING.
 2. DIRECT MOUNTS AND 2" T-CLIP MOUNTS SHALL BE ATTACHED TO THE HOST STRUCTURE PER DETAILS 3/5 AND 4/5, RESPECTIVELY.
 3. 1" T-CLIP MOUNTS (DETAIL 5/5) SHALL BE ATTACHED PER THE ANCHOR SCHEDULE NEXT PAGE.
 4. STORM BAR LENGTHS, SHAPES OR ATTACHMENT METHODS THAT ARE NOT DETAILED IN THIS DRAWING SHALL BE DESIGNED ON A SITE SPECIFIC BASIS.
 5. BOTH CLIP AND TRACK OPTIONS DESCRIBED HEREIN ARE VALID FOR INSTALLATION WITH STORM BAR.



3 STORM BAR DIRECT MOUNT
5 N.T.S. SECTION



4 STORM BAR 2" T-CLIP MOUNT
5 N.T.S. SECTION



5 STORM BAR 1" T-CLIP MOUNT
5 N.T.S. SECTION

*SEE NEXT PAGE FOR 1" T-CLIP ANCHOR DESIGN SCHEDULE

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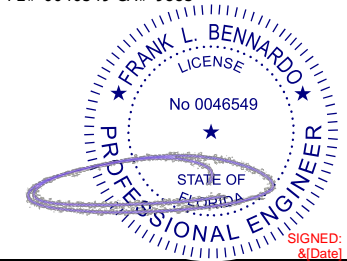
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FLORIDA STATEWIDE APPROVAL (FSA FL#17661.1)

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-29198)	EPR	RWN	04/17/23
2023 FBC UPDATE	MRT	RWN	11/20/23

23-69640

SCALE: NTS UNLESS NOTED

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STORM BAR ALLOWABLE SPAN SCHEDULES

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

2"x3"x1/8" STORM BAR								
MAX PANEL SPAN	60 PSF		50 PSF		40 PSF		30 PSF	
	MAX STORM BAR SPAN	END REACTION	MAX STORM BAR SPAN	END REACTION	MAX STORM BAR SPAN	END REACTION	MAX STORM BAR SPAN	END REACTION
3 FT	75"	281.2 lb	80"	249.0 lb	86"	214.6 lb	94"	177.1 lb
4 FT	68"	340.6 lb	72"	301.6 lb	78"	259.9 lb	86"	214.6 lb
5 FT	63"	395.2 lb	67"	350.0 lb	72"	301.6 lb	80"	249.0 lb
6 FT	60"	446.3 lb	63"	395.2 lb	68"	340.6 lb	75"	281.2 lb
7 FT	57"	494.6 lb	60"	438.0 lb	65"	377.5 lb	71"	311.6 lb
8 FT	54"	540.7 lb	57"	478.8 lb	62"	412.6 lb	68"	340.6 lb
9 FT	52"	584.8 lb	55"	517.9 lb	60"	446.3 lb	65"	368.4 lb
10 FT	50"	624.7 lb	53"	555.6 lb	57"	478.8 lb	63"	395.2 lb
11 FT	48"	655.2 lb	52"	592.0 lb	56"	510.2 lb	61"	421.2 lb
12 FT	46"	684.4 lb	50"	624.7 lb	54"	540.7 lb	60"	446.3 lb
13 FT	44"	712.3 lb	48"	650.2 lb	53"	570.3 lb	58"	470.8 lb
14 FT	42"	739.2 lb	46"	674.8 lb	51"	599.2 lb	57"	494.6 lb
15 FT	41"	765.1 lb	45"	698.5 lb	50"	624.7 lb	55"	517.9 lb
16 FT	40"	790.2 lb	43"	721.4 lb	48"	645.2 lb	54"	540.7 lb
17 FT	38"	814.5 lb	42"	743.6 lb	47"	665.1 lb	53"	563.0 lb
18.17 FT	37"	842.1 lb	41"	768.7 lb	45"	687.6 lb	52"	588.5 lb

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

2"x5"x1/8" STORM BAR								
MAX PANEL SPAN	60 PSF		50 PSF		40 PSF		30 PSF	
	MAX STORM BAR SPAN	END REACTION	MAX STORM BAR SPAN	END REACTION	MAX STORM BAR SPAN	END REACTION	MAX STORM BAR SPAN	END REACTION
3 FT	114"	428.8 lb	120"	375.0 lb	120"	300.0 lb	120"	225.0 lb
4 FT	104"	519.5 lb	110"	460.0 lb	119"	396.4 lb	120"	300.0 lb
5 FT	96"	602.8 lb	102"	533.8 lb	110"	460.0 lb	120"	375.0 lb
6 FT	91"	680.7 lb	96"	602.8 lb	104"	519.5 lb	114"	428.8 lb
7 FT	86"	754.3 lb	92"	668.0 lb	99"	575.7 lb	109"	475.2 lb
8 FT	82"	821.0 lb	88"	730.2 lb	94"	629.3 lb	104"	519.5 lb
9 FT	77"	870.8 lb	84"	789.9 lb	91"	680.7 lb	100"	561.9 lb
10 FT	73"	917.9 lb	80"	837.9 lb	88"	730.2 lb	96"	602.8 lb
11 FT	70"	962.7 lb	77"	878.8 lb	85"	778.1 lb	93"	642.3 lb
12 FT	67"	1005.5 lb	73"	917.9 lb	82"	821.0 lb	91"	680.7 lb
13 FT	64"	1046.5 lb	71"	955.3 lb	79"	854.5 lb	88"	718.0 lb
14 FT	62"	1086.0 lb	68"	991.4 lb	76"	886.7 lb	86"	754.3 lb
15 FT	60"	1124.2 lb	66"	1026.2 lb	73"	917.9 lb	84"	789.9 lb
16 FT	58"	1161.0 lb	64"	1059.9 lb	71"	948.0 lb	82"	821.0 lb
17 FT	56"	1196.8 lb	62"	1092.5 lb	69"	977.1 lb	80"	846.2 lb
18.17 FT	54"	1237.3 lb	60"	1129.5 lb	67"	1010.2 lb	77"	874.9 lb

1" T-CLIP ANCHOR SCHEDULE

SUBSTRATE	ANCHOR TYPE	EMBEDMENT	MINIMUM SPACING	MINIMUM EDGE DISTANCE	MAXIMUM END CAPACITY
CONCRETE (f _c =3000 psi MIN.)	(2) - 1/4" DIAMETER DEWALT STEEL DROP-IN	1"	3"	3 1/2"	1060 lb
	(2) - 3/8" DIAMETER DEWALT STEEL DROP-IN	1 9/16"	3"	5 1/4"	1534 lb

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

2"x4"x1/8" STORM BAR								
MAX PANEL SPAN	60 PSF		50 PSF		40 PSF		30 PSF	
	MAX STORM BAR SPAN	END REACTION	MAX STORM BAR SPAN	END REACTION	MAX STORM BAR SPAN	END REACTION	MAX STORM BAR SPAN	END REACTION
3 FT	95"	355.9 lb	101"	315.2 lb	109"	271.6 lb	120"	224.2 lb
4 FT	86"	431.2 lb	92"	381.8 lb	99"	329.0 lb	109"	271.6 lb
5 FT	80"	500.3 lb	85"	443.1 lb	92"	381.8 lb	101"	315.2 lb
6 FT	75"	565.0 lb	80"	500.3 lb	86"	431.2 lb	95"	355.9 lb
7 FT	72"	626.1 lb	76"	554.5 lb	82"	477.8 lb	90"	394.4 lb
8 FT	68"	684.4 lb	73"	606.1 lb	78"	522.3 lb	86"	431.2 lb
9 FT	65"	730.7 lb	70"	655.6 lb	75"	565.0 lb	83"	466.4 lb
10 FT	62"	770.2 lb	67"	703.1 lb	73"	606.1 lb	80"	500.3 lb
11 FT	59"	807.8 lb	64"	737.4 lb	70"	645.9 lb	78"	533.2 lb
12 FT	56"	843.7 lb	62"	770.2 lb	68"	684.4 lb	75"	565.0 lb
13 FT	54"	878.2 lb	59"	801.7 lb	66"	717.0 lb	73"	596.0 lb
14 FT	52"	911.3 lb	57"	831.9 lb	64"	744.1 lb	72"	626.1 lb
15 FT	50"	943.3 lb	55"	861.1 lb	62"	770.2 lb	70"	655.6 lb
16 FT	49"	974.3 lb	53"	889.4 lb	60"	795.5 lb	68"	684.4 lb
17 FT	47"	1004.2 lb	52"	916.7 lb	58"	820.0 lb	67"	710.1 lb
18.17 FT	46"	1038.2 lb	50"	947.8 lb	56"	847.7 lb	65"	734.1 lb

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

2"x6"x1/8" STORM BAR								
MAX PANEL SPAN	60 PSF		50 PSF		40 PSF		30 PSF	
	MAX STORM BAR SPAN	END REACTION	MAX STORM BAR SPAN	END REACTION	MAX STORM BAR SPAN	END REACTION	MAX STORM BAR SPAN	END REACTION
3 FT	120"	450.0 lb	120"	375.0 lb	120"	300.0 lb	120"	225.0 lb
4 FT	120"	600.0 lb	120"	500.0 lb	120"	400.0 lb	120"	300.0 lb
5 FT	113"	703.6 lb	120"	623.0 lb	120"	500.0 lb	120"	375.0 lb
6 FT	106"	794.5 lb	113"	703.6 lb	120"	600.0 lb	120"	450.0 lb
7 FT	101"	880.5 lb	107"	779.7 lb	115"	671.9 lb	120"	525.0 lb
8 FT	95"	946.8 lb	102"	852.3 lb	110"	734.5 lb	120"	600.0 lb
9 FT	89"	1004.3 lb	98"	916.8 lb	106"	794.5 lb	117"	655.8 lb
10 FT	85"	1058.6 lb	93"	966.3 lb	102"	852.3 lb	113"	703.6 lb
11 FT	81"	1110.3 lb	88"	1013.5 lb	99"	906.5 lb	109"	749.7 lb
12 FT	77"	1159.6 lb	85"	1058.6 lb	95"	946.8 lb	106"	794.5 lb
13 FT	74"	1207.0 lb	81"	1101.8 lb	91"	985.5 lb	103"	838.0 lb
14 FT	72"	1252.5 lb	78"	1143.4 lb	88"	1022.7 lb	101"	880.5 lb
15 FT	69"	1296.5 lb	76"	1183.5 lb	85"	1058.6 lb	98"	916.8 lb
16 FT	67"	1339.0 lb	73"	1222.3 lb	82"	1093.3 lb	95"	946.8 lb
17 FT	65"	1380.2 lb	71"	1260.0 lb	80"	1126.9 lb	92"	976.0 lb
18.17 FT	63"	1426.9 lb	69"	1302.6 lb	77"	1165.1 lb	89"	1009.0 lb

ANCHOR SCHEDULE NOTES:

1. THE "END REACTION" LISTED IN THE STORM BAR SCHEDULES ABOVE SHALL BE LESS THAN OR EQUAL TO THE "MAXIMUM END CAPACITY" LISTED IN THIS ANCHOR SCHEDULE.
2. THIS ANCHOR SCHEDULE APPLIES ONLY TO 1" T-CLIP MOUNTS. DIRECT MOUNT AND 2" T-CLIP MOUNTS SHALL BE INSTALLED PER THE DETAILS ON THE PREVIOUS PAGE.
3. ANCHORS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

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 FLORIDA BUILDING CODE EIGHTH EDITION (2023)
 FLORIDA STATEWIDE APPROVAL (FSA FL#17661.1)

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2023 FBC UPDATE	MRT	RWN	11/20/23

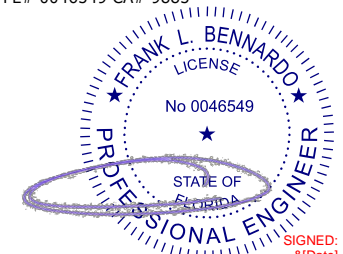
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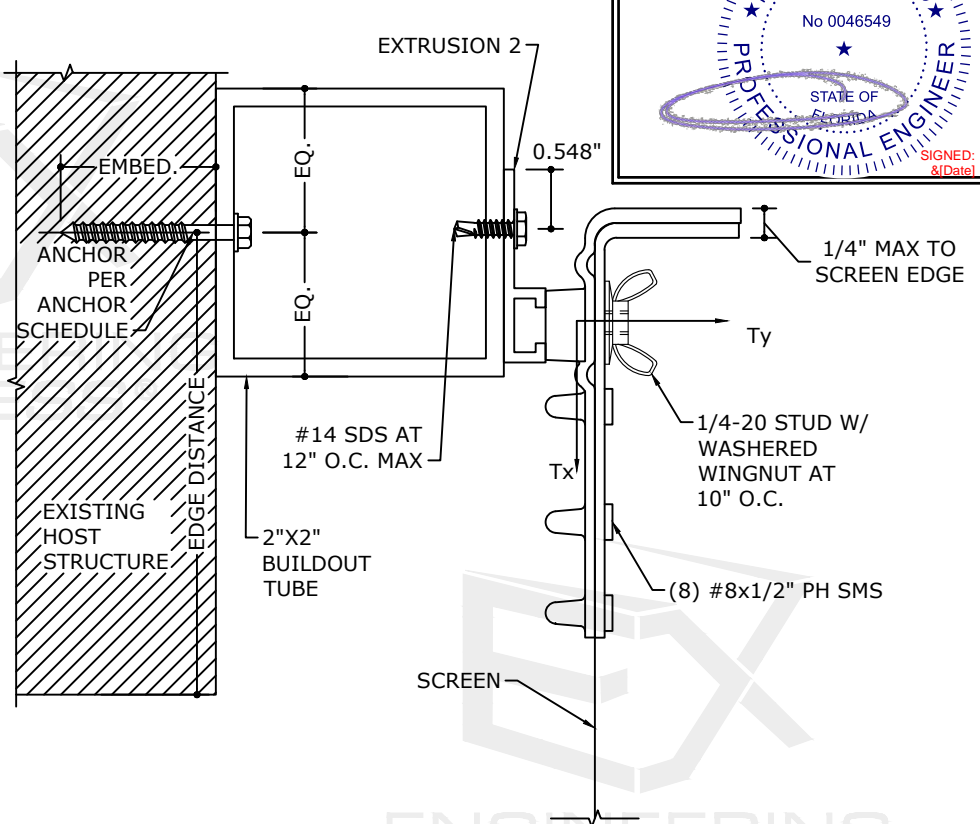
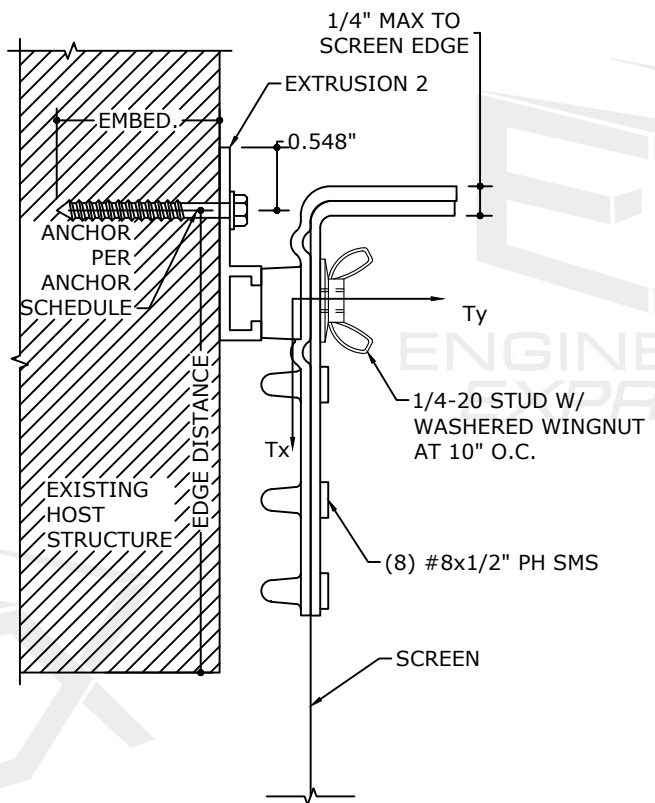
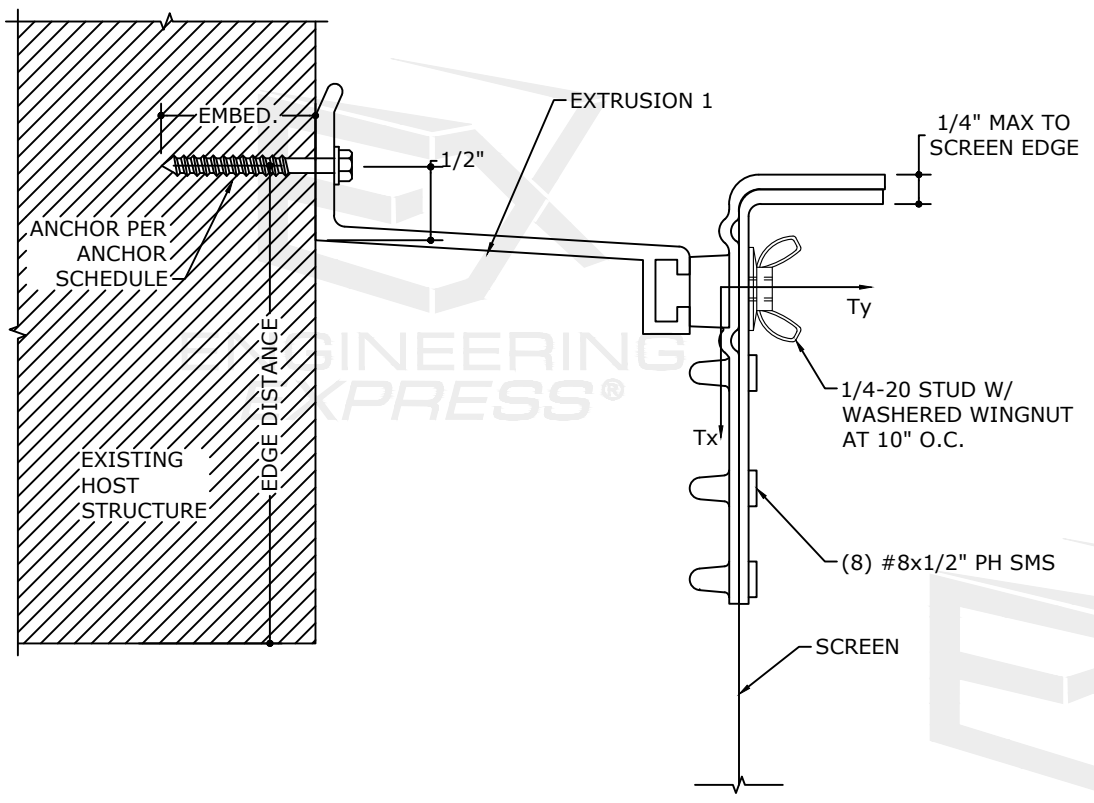
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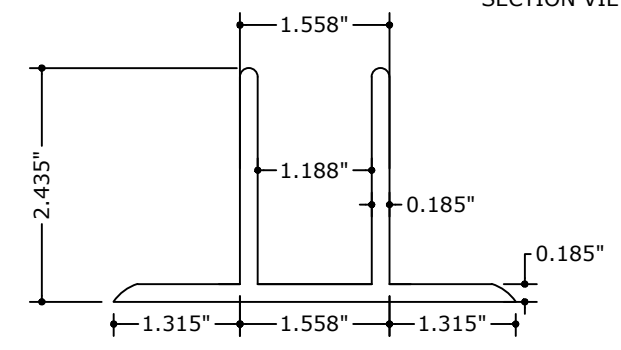
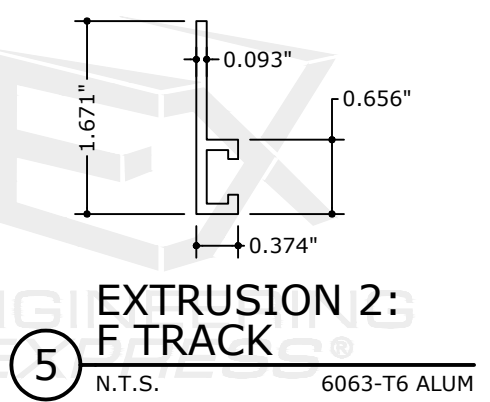
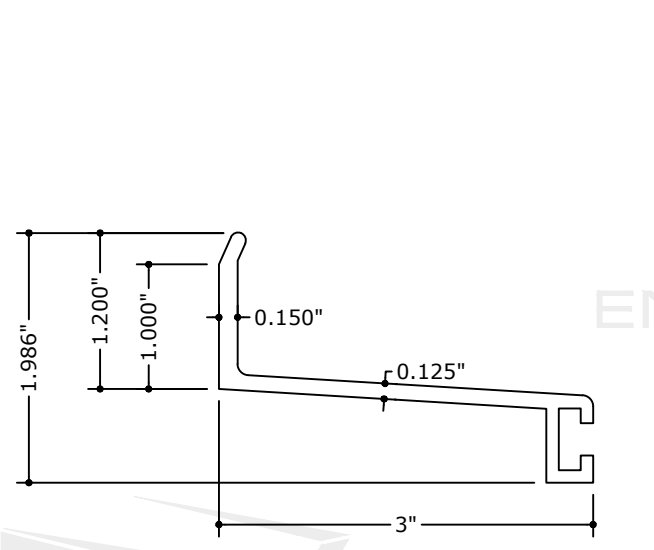
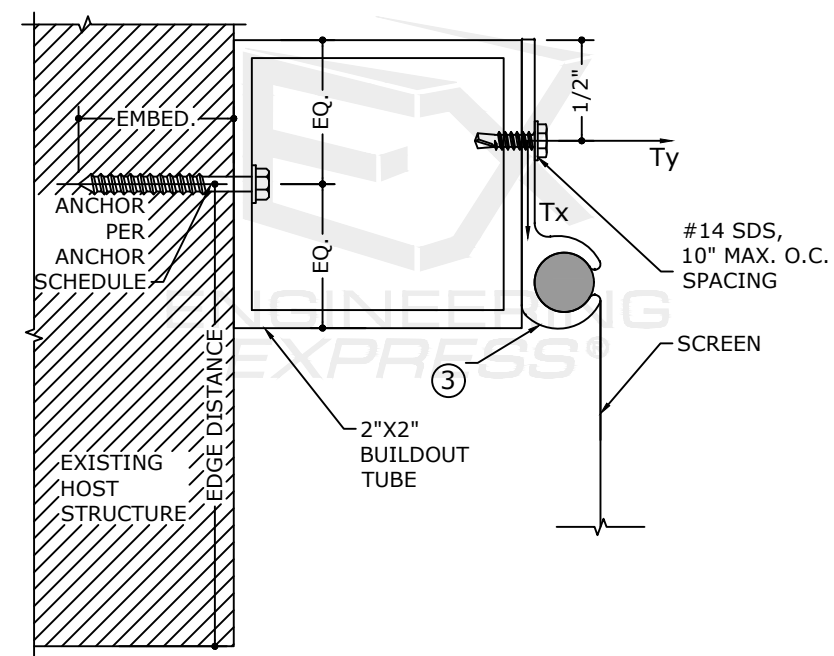
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1
7 ALTERNATE ATTACHMENT #1:
EXTRUSION 1 MOUNT
N.T.S. SECTION VIEW

2
7 ALTERNATE ATTACHMENT #2:
EXTRUSION 2 MOUNT
N.T.S. SECTION VIEW

3
7 ALTERNATE ATTACHMENT #3:
BUILD OUT TUBE MOUNT (CLIP)
N.T.S. SECTION VIEW

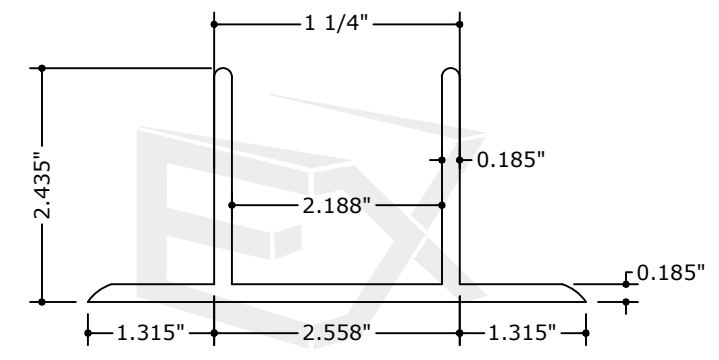
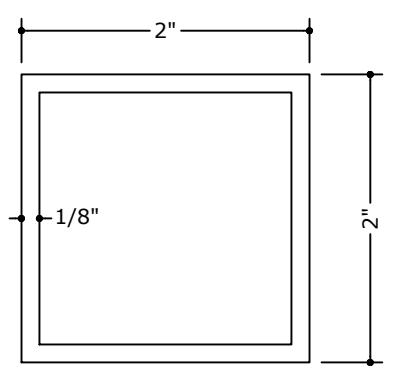


4
7 EXTRUSION 1:
BUILD OUT F TRACK
N.T.S. 6063-T6 ALUM

5
7 EXTRUSION 2:
F TRACK
N.T.S. 6063-T6 ALUM

7
7 1" T-CLIP
N.T.S. 6063-T6 ALUM

4
7 ALTERNATE ATTACHMENT #4:
BUILD OUT TUBE MOUNT
N.T.S. SECTION VIEW



6
7 2"X2" BUILDOUT TUBE
N.T.S. 6063-T6 ALUM

8
7 2" T-CLIP
N.T.S. 6063-T6 ALUM

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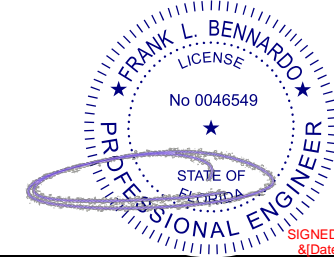
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SCALE: NTS UNLESS NOTED



ANCHOR NOTES

1. SEE EXTERIOR ELEVATION FOR ANCHOR LOCATIONS AND/OR SPACING.
2. PRESSURES LISTED IN ANCHOR SPACING SCHEDULES REPRESENT BOTH POSITIVE AND NEGATIVE PRESSURES.
3. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
4. UNLESS OTHERWISE NOTED HEREIN, WHERE ANCHORS FASTEN TO NARROW FACE OF STUD FRAMING, ANCHOR SHALL BE LOCATED IN CENTER OF NOMINAL 2x (MIN) WOOD STUD (i.e. 3/4" EDGE DISTANCE IS ACCEPTABLE FOR ANCHORS TO WOOD FRAMING).
5. WOOD HOST STRUCTURE SHALL BE "SOUTHERN PINE" G=0.55 OR GREATER DENSITY.
6. MINIMUM EMBEDMENT SHALL BE AS NOTED IN ANCHOR SCHEDULE. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
7. ANCHOR SCHEDULE APPLIES TO ALL PRODUCTS CERTIFIED HEREIN, BUT ONLY PROVIDES MAXIMUM ALLOWABLE ANCHOR SPACING. MAXIMUM ALLOWABLE SPANS AND PRESSURES INDICATED IN SPAN SCHEDULE SHALL APPLY.
8. ALL CONCRETE ANCHORS SHALL BE INSTALLED TO NON-CRACKED CONCRETE ONLY. ALL EXISTING BLOCK SHALL BE ASTM C-90 MIN.
9. WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD.
10. MACHINE SCREWS SHALL HAVE MINIMUM OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR AND MAY HAVE EITHER A PAN HEAD, TRUSS HEAD, OR WAFER HEAD ("SIDEWALK BOLT") U.N.O.
11. DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE FOR USE.
12. EDGE DISTANCES AND EMBEDMENT REQUIREMENTS ARE AS FOLLOWS:

12.1. 1/4" ITW SAMMY SSC

- 12.1.1. 2-1/4" EMBEDMENT AND 2-1/2" EDGE DISTANCE TO CONCRETE
- 12.1.2. 1-1/4" EMBEDMENT AND 2-1/2" EDGE DISTANCE TO HOLLOW CONCRETE BLOCK
- 12.1.3. 2-1/2" EMBEDMENT AND 2-1/2" EDGE DISTANCE TO GROUT-FILLED CONCRETE BLOCK

12.2. 1/4" DEWALT PANELMATE (MALE OR FEMALE)

- 12.2.1. 1-3/4" EMBEDMENT AND 2-1/2" EDGE DISTANCE TO CONCRETE
- 12.2.2. 1-1/4" EMBEDMENT AND 3" EDGE DISTANCE TO HOLLOW AND GROUT-FILLED CONCRETE BLOCK
- 12.2.3. 1-7/8" EMBEDMENT AND 3/4" EDGE DISTANCE TO WOOD

12.3. 1/4" DEWALT HOLLOW-SET DROPIN

- 12.3.1. 7/8" EMBEDMENT AND 3-1/2" EDGE DISTANCE TO CONCRETE AND HOLLOW AND GROUT-FILLED CONCRETE BLOCK

12.4. 1/4" DEWALT PANELMATE INSERT

- 12.4.1. 1-5/8" EMBEDMENT AND 4" EDGE DISTANCE TO CONCRETE
- 12.4.2. 1-1/4" EMBEDMENT AND 3-1/2" EDGE DISTANCE TO HOLLOW CONCRETE BLOCK
- 12.4.3. 1-1/2" EMBEDMENT AND 3-1/2" EDGE DISTANCE TO GROUT-FILLED CONCRETE BLOCK

12.5. 1/4" ALL POINTS SOLID-SET

- 12.5.1. 7/8" EMBEDMENT AND 3" EDGE DISTANCE TO CONCRETE AND HOLLOW AND GROUT-FILLED CONCRETE BLOCK

12.6. 1/4" DEWALT STEEL DROPIN

- 12.6.1. 1" EMBEDMENT AND 3-1/2" EDGE DISTANCE TO CONCRETE

12.7. 3/8" DEWALT STEEL DROPIN

- 12.7.1. 1-9/16" EMBEDMENT AND 5-1/4" EDGE DISTANCE TO CONCRETE

12.8. 1/4" DEWALT POWER-STUD (STAINLESS STEEL)

- 12.8.1. 2" EMBEDMENT AND 3" EDGE DISTANCE TO CONCRETE
- 12.8.2. 2" EMBEDMENT AND 5-1/4" EDGE DISTANCE TO GROUT-FILLED CONCRETE BLOCK

12.9. 1/4" DEWALT PANELMATE TVAS

- 12.9.1. 2" EMBEDMENT AND 2-1/2" EDGE DISTANCE TO CONCRETE
- 12.9.2. 1-1/4" EMBEDMENT AND 3" EDGE DISTANCE TO HOLLOW AND GROUT-FILLED CONCRETE BLOCK
- 12.9.3. 1-7/8" EMBEDMENT AND 3/4" EDGE DISTANCE TO WOOD

12.10. 1/4" DEWALT PANELMATE FEMALE ID

- 12.10.1. 1-3/4" EMBEDMENT AND 2-1/2" EDGE DISTANCE TO CONCRETE
- 12.10.2. 1-1/4" EMBEDMENT AND 3" EDGE DISTANCE TO HOLLOW AND GROUT-FILLED CONCRETE BLOCK
- 12.10.3. 1-7/8" EMBEDMENT AND 3/4" EDGE DISTANCE TO WOOD

12.11. 3/8" DEWALT SCREW-BOLT+ OR ITW REDHEAD LDT OR KWIK BOLT TZ

- 12.11.1. 2-1/2" EMBEDMENT AND 3-1/2" MIN. EDGE DISTANCE TO CONCRETE
- 12.11.2. 3-1/2" EMBEDMENT AND 3-1/2" MIN. EDGE DISTANCE TO GROUT-FILLED CONCRETE BLOCK

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ANCHOR SPACING SCHEDULES: WALL MOUNT (PAGE 1 OF 2)

NOTE: SEE ANCHOR NOTES ON PAGE 8. ANCHOR SCHEDULES MAY BE USED FOR BOTH CLIP AND TRACK OPTIONS.

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

DECEMBER 20, 2023

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NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	1/4" ITW SAMMY SSC ANCHOR SCHEDULE - WALL MOUNT CONDITION (IN. O.C.)											
	3295 PSI MIN CONCRETE				HOLLOW CONCRETE BLOCK				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	9.7	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	7.2	8.2	9.7	10.0	8.3	9.4	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	5.8	6.7	7.8	9.7	6.8	7.7	9.0	10.0
10'-0"	10.0	10.0	10.0	10.0	4.9	5.6	6.7	8.2	5.8	6.6	7.7	9.4
12'-0"	10.0	10.0	10.0	10.0	4.3	4.9	5.8	7.2	5.1	5.8	6.8	8.3
14'-0"	9.0	10.0	10.0	10.0		4.4	5.2	6.4	4.6	5.2	6.1	7.4
14'-8"	8.7	10.0	10.0	10.0		4.2	5.0	6.2	4.4	5.0	5.9	7.2
16'-0"	8.2	9.4	10.0	10.0			4.7	5.8	4.1	4.7	5.5	6.8
17'-0"	7.8	9.0	10.0	10.0			4.5	5.6		4.5	5.3	6.5
18'-2"	7.4	8.5	10.0	10.0			4.3	5.3		4.3	5.1	6.2

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR SCHEDULE - WALL MOUNT CONDITION (IN. O.C.)											
	3323 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	8.7	9.9	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	6.4	7.3	8.7	10.0	8.9	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	5.1	5.9	7.0	8.7	7.2	8.3	9.7	10.0
10'-0"	9.4	10.0	10.0	10.0	4.3	5.0	5.9	7.3	6.1	7.0	8.3	10.0
12'-0"	8.2	9.4	10.0	10.0		4.3	5.1	6.4	5.3	6.1	7.2	8.9
14'-0"	7.3	8.3	9.9	10.0			4.6	5.7	4.8	5.5	6.4	8.0
14'-8"	7.0	8.1	9.5	10.0			4.4	5.5	4.6	5.3	6.2	7.7
16'-0"	6.6	7.5	8.9	10.0			4.1	5.1	4.3	4.9	5.8	7.2
17'-0"	6.3	7.2	8.5	10.0			4.9	4.1	4.7	5.6	6.9	
18'-2"	6.0	6.8	8.1	10.0			4.7		4.5	5.3	6.6	

NOTE: FOR THE ABOVE 1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR SCHEDULE:

- 1/4" Ø OR 5/16" Ø DEWALT (FORMERLY ELCO) ULTRACON+ MAY BE USED AT THE SAME ANCHOR SPACING VALUES AS SHOWN ABOVE.
- 5/16" Ø OR 3/8" Ø WOOD SCREWS OR LAG SCREWS MAY BE USED AT THE SAME ANCHOR SPACING VALUES FOR THE G = 0.55 MIN. WOOD HOST SUBSTRATE (HOST BY OTHERS) AS SHOWN ABOVE.
- FOLLOW THE SAME EMBEDMENT & EDGE DIST. REQUIREMENTS AS THE 1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR. (SEE PAGE 8).

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

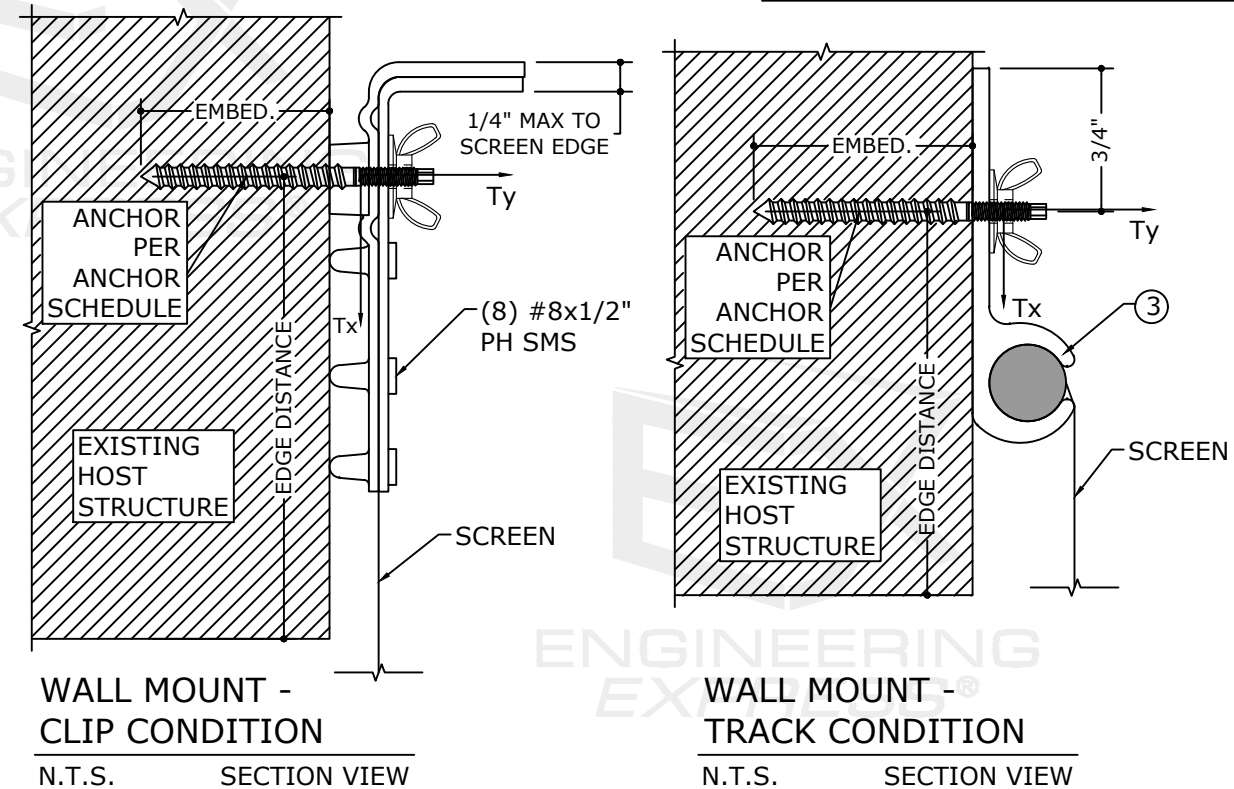
SPAN	1/4" DEWALT PANELMATE INSERT ANCHOR SCHEDULE - WALL MOUNT CONDITION (IN. O.C.)											
	2700 PSI MIN CONCRETE				HOLLOW CONCRETE BLOCK				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	9.2	10.0	10.0	10.0	9.3	10.0	10.0	10.0
8'-0"	8.3	9.4	10.0	10.0	7.4	8.5	10.0	10.0	7.5	8.6	10.0	10.0
10'-0"	7.1	8.1	9.4	10.0	6.2	7.2	8.5	10.0	6.3	7.2	8.6	10.0
12'-0"	6.2	7.1	8.3	10.0	5.4	6.2	7.4	9.2	5.5	6.3	7.5	9.3
14'-0"	5.6	6.3	7.4	9.1	4.8	5.5	6.6	8.2	4.9	5.6	6.6	8.3
14'-8"	5.4	6.1	7.2	8.8	4.6	5.3	6.3	7.9	4.7	5.4	6.4	8.0
16'-0"	5.1	5.8	6.8	8.3	4.3	5.0	5.9	7.4	4.4	5.1	6.0	7.5
17'-0"	4.8	5.5	6.5	7.9	4.1	4.8	5.7	7.1	4.2	4.8	5.7	7.1
18'-2"	4.6	5.3	6.2	7.6		4.5	5.4	6.7		4.6	5.4	6.8

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	1/4" ALL POINTS SOLID-SET ANCHOR SCHEDULE - WALL MOUNT CONDITION (IN. O.C.)											
	3000 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK							
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	8.1	9.3	10.0	10.0	8.1	9.3	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0	6.8	7.8	9.3	10.0	6.8	7.8	9.3	10.0
12'-0"	10.0	10.0	10.0	10.0	5.9	6.8	8.1	10.0	5.9	6.8	8.1	10.0
14'-0"	9.1	10.0	10.0	10.0	5.2	6.0	7.1	8.9	5.2	6.0	7.1	8.9
14'-8"	8.8	10.0	10.0	10.0	5.0	5.8	6.9	8.6	5.0	5.8	6.9	8.6
16'-0"	8.2	9.5	10.0	10.0	4.7	5.4	6.4	8.1	4.7	5.4	6.4	8.1
17'-0"	7.8	9.0	10.0	10.0	4.4	5.1	6.1	7.7	4.4	5.1	6.1	7.7
18'-2"	7.4	8.5	10.0	10.0	4.2	4.9	5.8	7.3	4.2	4.9	5.8	7.3

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	1/4" DEWALT STEEL DROPIN ANCHOR SCHEDULE WALL MOUNT CONDITION (IN. O.C.)			
	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0
12'-0"	9.5	10.0	10.0	10.0
14'-0"	8.4	9.8	10.0	10.0
14'-8"	8.1	9.4	10.0	10.0
16'-0"	7.6	8.8	10.0	10.0
17'-0"	7.2	8.4	10.0	10.0
18'-2"	6.8	7.9	9.5	10.0



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HURRICANE FABRIC, LLC
 1505 POINSETTIA DR, SUITE H-3
 DELRAY BEACH, FL 33444
 WWW.HURRICANEFABRIC.COM
 ASTROGUARD WIND ABATEMENT SYSTEM
 FLORIDA BUILDING CODE EIGHTH EDITION (2023)
 FLORIDA STATEWIDE APPROVAL (FSA #17661.1)

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-29198)	EPR	RWN	04/17/23
2023 FBC UPDATE	MRT	RWN	11/20/23

23-69640

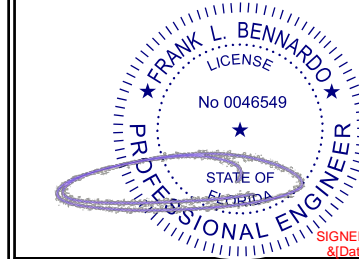
SCALE: NTS UNLESS NOTED

ANCHOR SPACING SCHEDULES: WALL MOUNT (PAGE 2 OF 2)

NOTE: SEE ANCHOR NOTES ON PAGE 8. ANCHOR SCHEDULES MAY BE USED FOR BOTH CLIP AND TRACK OPTIONS.

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

DECEMBER 20, 2023



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NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	8.7	9.9	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	6.4	7.3	8.7	10.0	8.9	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	5.1	5.9	7.0	8.7	7.2	8.3	9.7	10.0
10'-0"	9.4	10.0	10.0	10.0	4.3	5.0	5.9	7.3	6.1	7.0	8.3	10.0
12'-0"	8.2	9.4	10.0	10.0	4.3	5.1	6.4	6.4	5.3	6.1	7.2	8.9
14'-0"	7.3	8.3	9.9	10.0	4.6	5.7	4.6	5.7	4.8	5.5	6.4	8.0
14'-8"	7.0	8.1	9.5	10.0	4.4	5.5	4.4	5.5	4.6	5.3	6.2	7.7
16'-0"	6.6	7.5	8.9	10.0	4.1	5.1	4.1	5.1	4.3	4.9	5.8	7.2
17'-0"	6.3	7.2	8.5	10.0	4.9	4.1	4.9	4.1	4.7	5.6	6.9	6.9
18'-2"	6.0	6.8	8.1	10.0	4.7	4.5	4.7	4.5	4.5	5.3	6.6	6.6

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	7.7	8.9	10.0	10.0	8.9	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	6.1	7.1	8.4	10.0	7.2	8.3	9.7	10.0
10'-0"	10.0	10.0	10.0	10.0	5.1	5.9	7.1	8.9	6.1	7.0	8.3	10.0
12'-0"	10.0	10.0	10.0	10.0	4.4	5.1	6.1	7.7	5.3	6.1	7.2	8.9
14'-0"	9.6	10.0	10.0	10.0	4.5	5.4	6.8	4.8	5.5	6.4	8.0	8.0
14'-8"	9.2	10.0	10.0	10.0	4.3	5.2	6.6	4.6	5.3	6.2	7.7	7.7
16'-0"	8.6	9.9	10.0	10.0	4.0	4.8	6.1	4.3	4.9	5.8	7.2	7.2
17'-0"	8.2	9.5	10.0	10.0	4.6	5.8	4.1	4.7	5.6	6.9	6.9	6.9
18'-2"	7.8	9.0	10.0	10.0	4.4	5.5	4.5	5.3	4.5	5.3	6.6	6.6

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	4000 PSI MIN CONCRETE				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	8.4	9.6	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	6.8	7.7	9.1	10.0
10'-0"	9.3	10.0	10.0	10.0	5.7	6.6	7.7	9.6
12'-0"	8.1	9.3	10.0	10.0	5.0	5.7	6.8	8.4
14'-0"	7.2	8.3	9.8	10.0	4.5	5.1	6.0	7.5
14'-8"	7.0	8.0	9.5	10.0	4.3	4.9	5.8	7.2
16'-0"	6.5	7.5	8.9	10.0	4.0	4.6	5.5	6.8
17'-0"	6.2	7.2	8.5	10.0	4.4	5.2	6.5	6.5
18'-2"	5.9	6.8	8.1	10.0	4.2	5.0	6.2	6.2

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

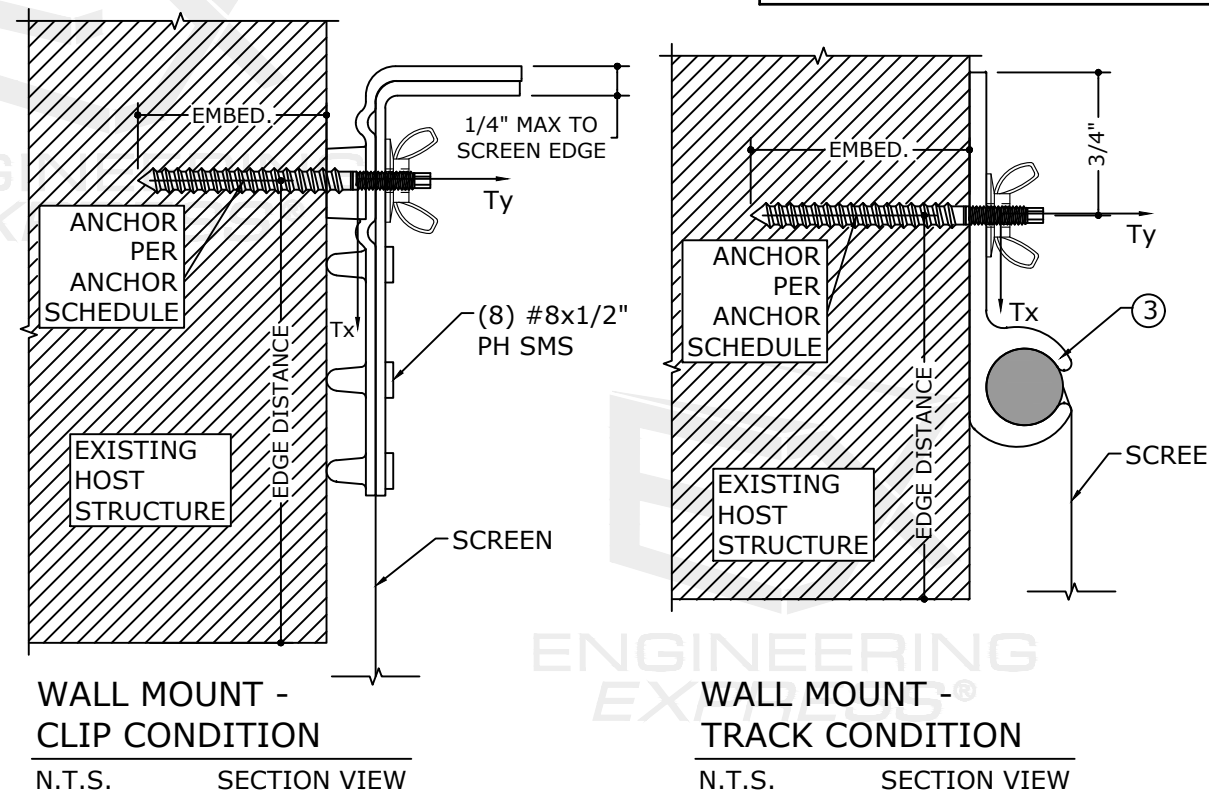
SPAN	4000 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	8.3	9.7	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	5.7	6.8	8.3	10.0
8'-0"	8.4	9.7	10.0	10.0	4.4	5.2	6.4	8.3
10'-0"	7.0	8.1	9.7	10.0	4.3	5.2	6.8	6.8
12'-0"	6.0	7.0	8.4	10.0	4.4	5.7	6.8	5.7
14'-0"	5.3	6.2	7.4	9.3	4.4	5.7	6.8	5.0
14'-8"	5.1	5.9	7.1	9.0	4.4	5.7	6.8	4.8
16'-0"	4.8	5.5	6.6	8.4	4.4	5.7	6.8	4.4
17'-0"	4.5	5.3	6.3	8.0	4.4	5.7	6.8	4.2
18'-2"	4.3	5.0	6.0	7.6	4.4	5.7	6.8	4.2

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0
12'-0"	10.0	10.0	10.0	10.0
14'-0"	10.0	10.0	10.0	10.0
14'-8"	10.0	10.0	10.0	10.0
16'-0"	10.0	10.0	10.0	10.0
17'-0"	10.0	10.0	10.0	10.0
18'-2"	10.0	10.0	10.0	10.0

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	3000 PSI MIN. CONCRETE OR GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE (ASD)			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0
12'-0"	10.0	10.0	10.0	10.0
14'-0"	10.0	10.0	10.0	10.0
14'-8"	10.0	10.0	10.0	10.0
16'-0"	10.0	10.0	10.0	10.0
17'-0"	10.0	10.0	10.0	10.0
18'-2"	10.0	10.0	10.0	10.0



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1505 POINSETTIA DR, SUITE H-3
DELRAY BEACH, FL 33444
WWW.HURRICANEFABRIC.COM
ASTROGUARD WIND ABATEMENT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#17661.1)

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-29198)	EPR	RWN	04/17/23
2023 FBC UPDATE	MRT	RWN	11/20/23

23-69640

SCALE: NTS UNLESS NOTED

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0
12'-0"	9.4	10.0	10.0	10.0
14'-0"	8.3	9.6	10.0	10.0
14'-8"	8.0	9.2	10.0	10.0
16'-0"	7.5	8.6	10.0	10.0
17'-0"	7.1	8.2	9.8	10.0
18'-2"	6.8	7.8	9.3	10.0

ANCHOR SPACING SCHEDULES: INTERIOR MOUNT (PAGE 1 OF 2)

NOTE: SEE ANCHOR NOTES ON PAGE 8.
ANCHOR SCHEDULES MAY BE USED FOR BOTH CLIP AND TRACK OPTIONS.

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	1/4" DEWALT PANELMATE INSERT ANCHOR SCHEDULE - INTERIOR MOUNT CONDITION (IN. O.C.)											
	2700 PSI MIN CONCRETE				HOLLOW CONCRETE BLOCK				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	9.7	10.0	10.0	10.0	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	7.8	9.0	10.0	10.0	7.9	9.2	10.0	10.0
10'-0"	8.6	10.0	10.0	10.0	6.5	7.5	9.0	10.0	6.6	7.7	9.2	10.0
12'-0"	7.3	8.6	10.0	10.0	5.6	6.5	7.8	9.7	5.7	6.6	7.9	10.0
14'-0"	6.4	7.5	9.2	10.0	5.0	5.7	6.9	8.6	5.1	5.9	7.0	8.8
14'-8"	6.1	7.2	8.8	10.0	4.8	5.5	6.6	8.3	4.9	5.6	6.8	8.5
16'-0"	5.7	6.7	8.1	10.0	4.4	5.2	6.2	7.8	4.5	5.3	6.3	7.9
17'-0"	5.4	6.3	7.7	10.0	4.2	4.9	5.9	7.4	4.3	5.0	6.0	7.6
18'-2"	5.1	6.0	7.3	9.4	4.6	5.6	7.0	4.1	4.7	5.7	7.2	

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	1/4" DEWALT PANELMATE TVAS ANCHOR SCHEDULE - INTERIOR MOUNT CONDITION (IN. O.C.)											
	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	9.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	7.0	8.0	9.5	10.0	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	5.7	6.5	7.7	9.5	8.6	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0	4.8	5.5	6.5	8.0	7.1	8.3	10.0	10.0
12'-0"	10.0	10.0	10.0	10.0	4.2	4.8	5.7	7.0	6.0	7.1	8.6	10.0
14'-0"	9.7	10.0	10.0	10.0	4.3	5.0	6.3	5.3	6.2	7.5	9.6	
14'-8"	9.4	10.0	10.0	10.0	4.1	4.9	6.1	5.0	5.9	7.2	9.2	
16'-0"	8.7	10.0	10.0	10.0	4.6	5.7	4.7	5.5	6.7	8.6		
17'-0"	8.3	9.6	10.0	10.0	4.4	5.4	4.4	5.2	6.3	8.1		
18'-2"	7.9	9.1	10.0	10.0	4.1	5.2	4.2	4.9	6.0	7.7		

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

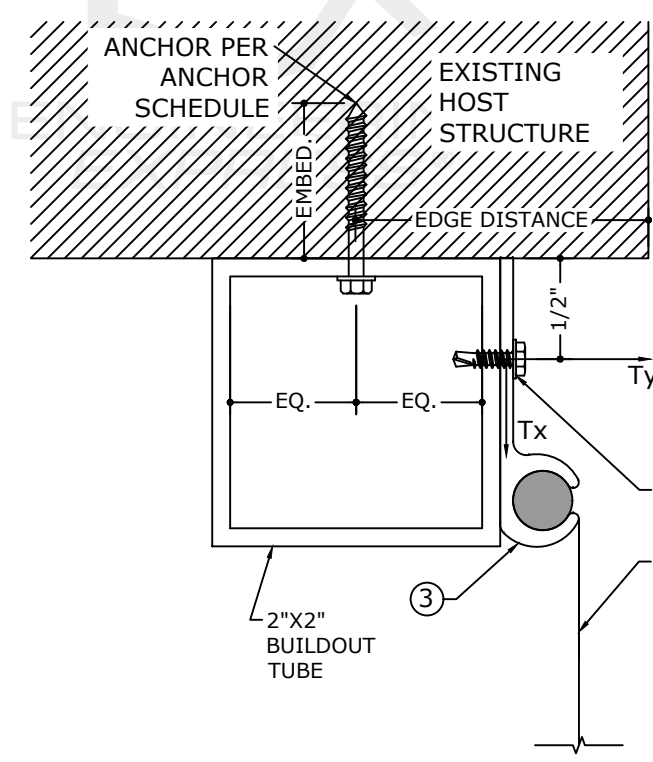
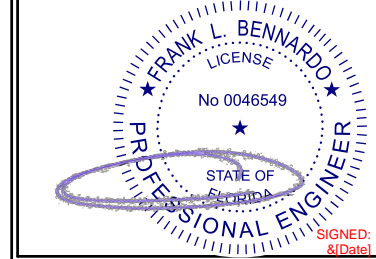
SPAN	1/4" DEWALT PANELMATE FEMALE ID ANCHOR SCHEDULE - INTERIOR MOUNT CONDITION (IN. O.C.)											
	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	8.9	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	6.5	7.5	8.9	10.0	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	5.2	6.0	7.2	8.9	8.6	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0	4.4	5.1	6.0	7.5	7.1	8.3	10.0	10.0
12'-0"	8.8	10.0	10.0	10.0	4.4	5.2	6.5	6.0	7.1	8.6	10.0	
14'-0"	7.7	9.0	10.0	10.0	4.6	5.8	5.3	6.2	7.5	9.6		
14'-8"	7.4	8.7	10.0	10.0	4.5	5.6	5.0	5.9	7.2	9.2		
16'-0"	6.9	8.1	9.7	10.0	4.2	5.2	4.7	5.5	6.7	8.6		
17'-0"	6.6	7.7	9.2	10.0	5.0	4.4	5.2	6.3	8.1			
18'-2"	6.2	7.2	8.7	10.0	4.7	4.2	4.9	6.0	7.7			

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

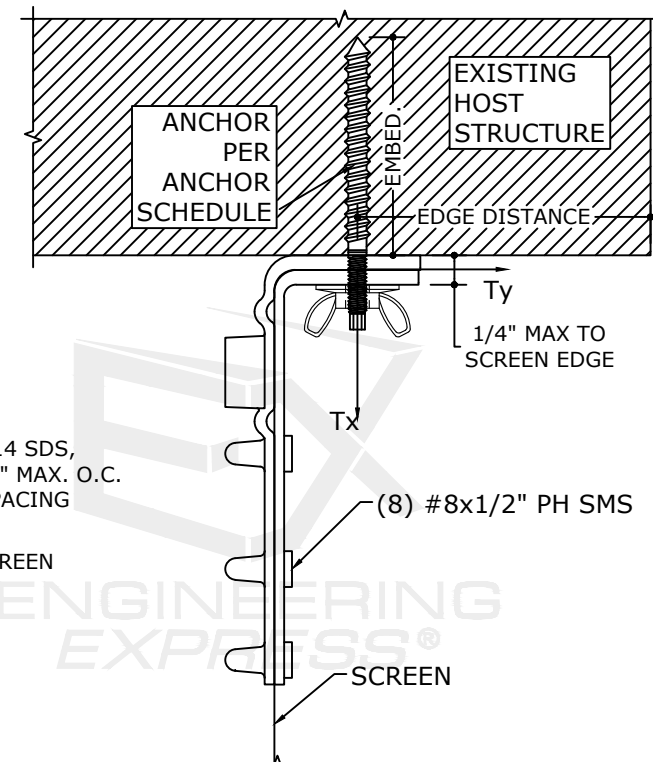
SPAN	1/4" ALL POINTS SOLID-SET ANCHOR SCHEDULE - INTERIOR MOUNT CONDITION (IN. O.C.)							
	3000 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	8.0	9.3	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0	6.8	7.8	9.3	10.0
12'-0"	10.0	10.0	10.0	10.0	5.9	6.8	8.0	10.0
14'-0"	9.0	10.0	10.0	10.0	5.2	6.0	7.1	8.9
14'-8"	8.7	10.0	10.0	10.0	5.0	5.8	6.9	8.6
16'-0"	8.1	9.4	10.0	10.0	4.7	5.4	6.4	8.0
17'-0"	7.7	8.9	10.0	10.0	4.4	5.1	6.1	7.7
18'-2"	7.3	8.5	10.0	10.0	4.2	4.9	5.8	7.3

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

DECEMBER 20, 2023



INTERIOR MOUNT -
TRACK CONDITION
N.T.S. SECTION VIEW



INTERIOR MOUNT -
CLIP CONDITION
N.T.S. SECTION VIEW

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	3/8" DEWALT STEEL DROPIN ANCHOR SCHEDULE INTERIOR MOUNT CONDITION (IN. O.C.)			
	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0
12'-0"	10.0	10.0	10.0	10.0
14'-0"	10.0	10.0	10.0	10.0
14'-8"	10.0	10.0	10.0	10.0
16'-0"	10.0	10.0	10.0	10.0
17'-0"	10.0	10.0	10.0	10.0
18'-2"	10.0	10.0	10.0	10.0

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DELRAY BEACH, FL 33444
WWW.HURRICANEFABRIC.COM
ASTROGUARD WIND ABATEMENT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#17661.1)

REMARKS	DATE	DRWN	CHKD
PREV. SUBMITTAL (20-29198) EPR	04/17/23	RWN	
2023 FBC UPDATE	11/20/23	RWN	

23-69640

SCALE: NTS UNLESS NOTED

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NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	1/4" DEWALT POWER-STUD ANCHOR SCHEDULE - INTERIOR MOUNT CONDITION (IN. O.C.)				4000 PSI MIN CONCRETE				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	9.5	10.0	10.0	10.0	9.5	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	7.5	8.8	10.0	10.0	7.5	8.8	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0	6.3	7.3	8.8	10.0	6.3	7.3	8.8	10.0
12'-0"	8.6	10.0	10.0	10.0	5.4	6.3	7.5	9.5	5.4	6.3	7.5	9.5
14'-0"	7.6	8.9	10.0	10.0	4.7	5.5	6.7	8.4	4.7	5.5	6.7	8.4
14'-8"	7.3	8.5	10.0	10.0	4.6	5.3	6.4	8.1	4.6	5.3	6.4	8.1
16'-0"	6.8	7.9	9.5	10.0	4.2	4.9	6.0	7.5	4.2	4.9	6.0	7.5
17'-0"	6.5	7.5	9.1	10.0	4.0	4.7	5.7	7.2	4.0	4.7	5.7	7.2
18'-2"	6.1	7.1	8.6	10.0	4.4	5.4	6.8		4.4	5.4	6.8	

ANCHOR SPACING SCHEDULES: INTERIOR MOUNT (PAGE 2 OF 2)

NOTE: SEE ANCHOR NOTES ON PAGE 8.
ANCHOR SCHEDULES MAY BE USED FOR BOTH CLIP AND TRACK OPTIONS.

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

DECEMBER 20, 2023

FL

FRANK L. BENNARDO
LICENSE
No 0046549
STATE OF FLORIDA
PROFESSIONAL ENGINEER
SIGNED: & (Date)

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	1/4" ITW SAMMY SSC ANCHOR SCHEDULE - INTERIOR MOUNT CONDITION (IN. O.C.)				3295 PSI MIN CONCRETE				HOLLOW CONCRETE BLOCK				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	8.2	9.4	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	6.5	7.5	9.0	10.0	8.8	10.0	10.0	10.0	10.0	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0	5.4	6.3	7.5	9.4	7.2	8.5	10.0	10.0	10.0	10.0	10.0	10.0
12'-0"	10.0	10.0	10.0	10.0	4.6	5.4	6.5	8.2	6.1	7.2	8.8	10.0	10.0	10.0	10.0	10.0
14'-0"	10.0	10.0	10.0	10.0	4.1	4.7	5.7	7.2	5.3	6.3	7.6	9.9	10.0	10.0	10.0	10.0
14'-8"	9.6	10.0	10.0	10.0	4.6	5.5	6.9	8.8	5.1	6.0	7.3	9.5	10.0	10.0	10.0	10.0
16'-0"	8.9	10.0	10.0	10.0	4.2	5.1	6.5	8.4	4.7	5.5	6.8	8.8	10.0	10.0	10.0	10.0
17'-0"	8.4	9.9	10.0	10.0	4.0	4.9	6.2	8.0	4.4	5.3	6.4	8.3	10.0	10.0	10.0	10.0
18'-2"	7.9	9.3	10.0	10.0	4.6	5.8	7.4	9.4	4.2	4.9	6.1	7.8	10.0	10.0	10.0	10.0

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

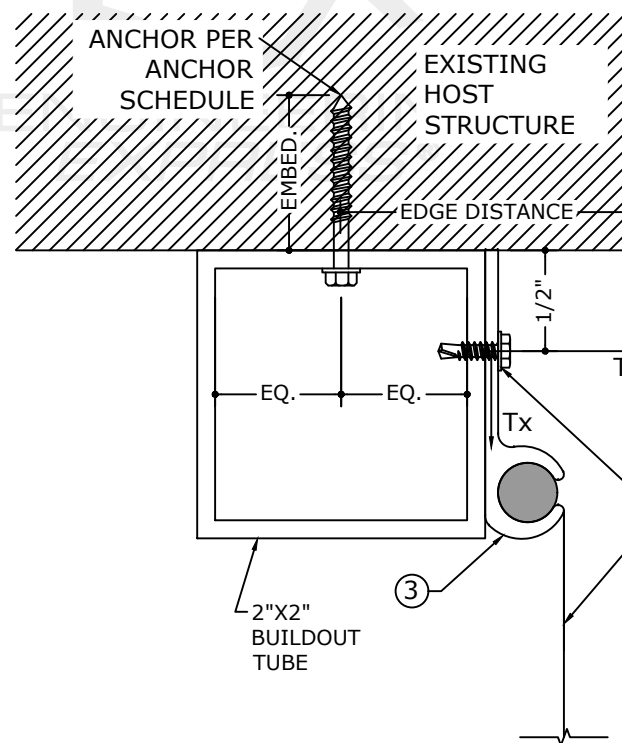
SPAN	1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR SCHEDULE - INTERIOR MOUNT CONDITION (IN. O.C.)				3323 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	8.9	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	6.5	7.5	8.9	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	5.2	6.0	7.2	8.9	8.6	10.0	10.0	10.0	10.0	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0	4.4	5.1	6.0	7.5	7.1	8.3	10.0	10.0	10.0	10.0	10.0	10.0
12'-0"	8.8	10.0	10.0	10.0	4.4	5.2	6.5	8.2	6.0	7.1	8.6	10.0	10.0	10.0	10.0	10.0
14'-0"	7.7	9.0	10.0	10.0	4.6	5.8	7.4	9.4	5.3	6.2	7.5	9.6	10.0	10.0	10.0	10.0
14'-8"	7.4	8.7	10.0	10.0	4.5	5.6	7.0	8.8	5.0	5.9	7.2	9.2	10.0	10.0	10.0	10.0
16'-0"	6.9	8.1	9.7	10.0	4.2	5.2	6.7	8.6	4.7	5.5	6.7	8.6	10.0	10.0	10.0	10.0
17'-0"	6.6	7.7	9.2	10.0	4.0	4.9	6.2	8.0	4.4	5.2	6.3	8.1	10.0	10.0	10.0	10.0
18'-2"	6.2	7.2	8.7	10.0	4.7	5.8	7.4	9.4	4.2	4.9	6.0	7.7	10.0	10.0	10.0	10.0

NOTE: FOR THE ABOVE 1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR SCHEDULE:

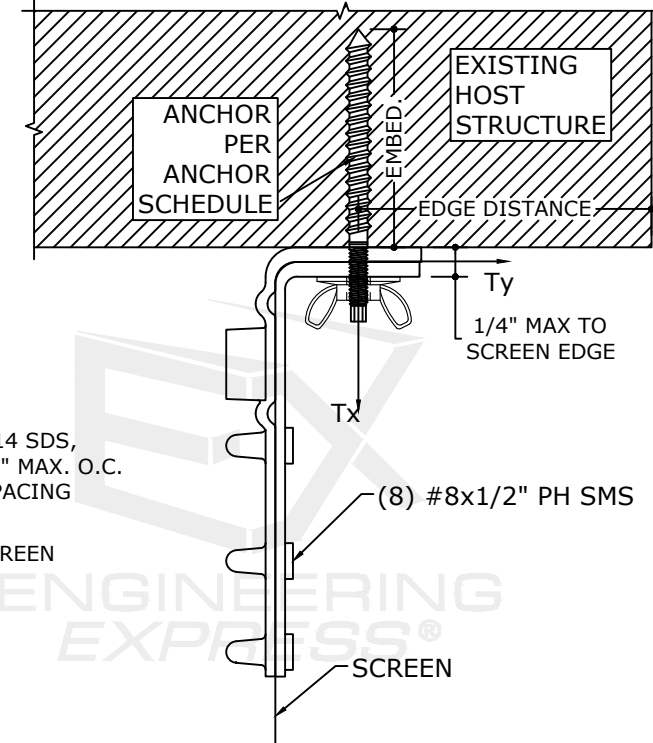
- 1/4" Ø OR 5/16" Ø DEWALT (FORMERLY ELCO) ULTRACON+ MAY BE USED AT THE SAME ANCHOR SPACING VALUES AS SHOWN ABOVE.
- 5/16" Ø OR 3/8" Ø WOOD SCREWS OR LAG SCREWS MAY BE USED AT THE SAME ANCHOR SPACING VALUES FOR THE G = 0.55 MIN. WOOD HOST SUBSTRATE (HOST BY OTHERS) AS SHOWN ABOVE.
- FOLLOW THE SAME EMBEDMENT & MIN. EDGE DIST. REQUIREMENTS AS THE 1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR. (SEE PAGE 8).

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	1/4" DEWALT HOLLOW-SET DROPIN ANCHOR SCHEDULE				4000 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	5.2	5.9	6.8	8.3	5.2	5.9	6.8	8.3
6'-0"	9.6	10.0	10.0	10.0	4.5	5.2	6.3	7.8	4.5	5.2	6.3	7.8
8'-0"	7.7	8.9	10.0	10.0	4.3	5.1	6.2	7.7	4.3	5.1	6.2	7.7
10'-0"	6.5	7.5	8.9	10.0	4.5	5.4	6.5	8.0	4.5	5.4	6.5	8.0
12'-0"	5.7	6.5	7.7	9.6	4.5	5.4	6.5	8.0	4.5	5.4	6.5	8.0
14'-0"	5.1	5.8	6.9	8.5	4.5	5.4	6.5	8.0	4.5	5.4	6.5	8.0
14'-8"	4.9	5.6	6.7	8.3	4.5	5.4	6.5	8.0	4.5	5.4	6.5	8.0
16'-0"	4.6	5.3	6.2	7.7	4.5	5.4	6.5	8.0	4.5	5.4	6.5	8.0
17'-0"	4.4	5.0	5.9	7.4	4.5	5.4	6.5	8.0	4.5	5.4	6.5	8.0
18'-2"	4.1	4.8	5.7	7.0	4.5	5.4	6.5	8.0	4.5	5.4	6.5	8.0



INTERIOR MOUNT - TRACK CONDITION
N.T.S. SECTION VIEW



INTERIOR MOUNT - CLIP CONDITION
N.T.S. SECTION VIEW

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	3/8" DEWALT SCREW-BOLT+ OR ITW REDHEAD LDT OR KWIK BOLT TZ ANCHOR SCHEDULE - INTERIOR MOUNT CONDITION (IN. O.C.)			
	3000 PSI MIN. CONCRETE OR GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE (ASD)			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0
12'-0"	10.0	10.0	10.0	10.0
14'-0"	10.0	10.0	10.0	10.0
14'-8"	10.0	10.0	10.0	10.0
16'-0"	10.0	10.0	10.0	10.0
17'-0"	10.0	10.0	10.0	10.0
18'-2"	10.0	10.0	10.0	10.0

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	3/8" DEWALT STEEL DROPIN ANCHOR SCHEDULE			
	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0
12'-0"	10.0	10.0	10.0	10.0
14'-0"	10.0	10.0	10.0	10.0
14'-8"	10.0	10.0	10.0	10.0
16'-0"	10.0	10.0	10.0	10.0
17'-0"	10.0	10.0	10.0	10.0
18'-2"	10.0	10.0	10.0	10.0

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FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#17661.1)

REMARKS	DATE	DRWN	CHKD
PREV. SUBMITTAL (20-29198)	04/17/23	RWN	RWN
2023 FBC UPDATE	11/20/23	MRT	RWN

23-69640

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12 OF 18

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ANCHOR SPACING SCHEDULES: ALT. ATTACHMENT #1: EXTRUSION 1 MOUNT (CLIP ONLY) (PAGE 1 OF 1)

NOTE: SEE ANCHOR NOTES ON PAGE 8.
THIS ALTERNATE ATTACHMENT METHOD APPLIES TO THE CLIP OPTION ONLY.
SEE OTHER ATTACHMENT METHODS HEREIN FOR THE TRACK OPTION.

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" ALL POINTS SOLID-SET ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)				
SPAN	3000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.4	5.0	5.8	7.1
6'-0"			4.4	5.4
8'-0"				4.4

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" DEWALT STEEL DROPIN ANCHOR SCHEDULE EXTRUSION 1 MOUNT (IN. O.C.)				
SPAN	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.0	4.6	5.3	6.5
6'-0"			4.0	4.9

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

3/8" DEWALT STEEL DROPIN ANCHOR SCHEDULE EXTRUSION 1 MOUNT (IN. O.C.)				
SPAN	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	8.5	9.6	11.2	12.0
6'-0"	6.4	7.3	8.5	10.4
8'-0"	5.2	5.9	6.9	8.5
10'-0"		5.1	5.9	7.3
12'-0"			5.2	6.4
14'-0"			4.7	5.7
14'-8"			4.5	5.6
16'-0"				5.2
17'-0"				5.0
18'-2"				4.8

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" DEWALT POWER-STUD ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)								
SPAN	4000 PSI MIN CONCRETE				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.1	4.7	5.5	6.7				4.3
6'-0"			4.1	5.1				

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

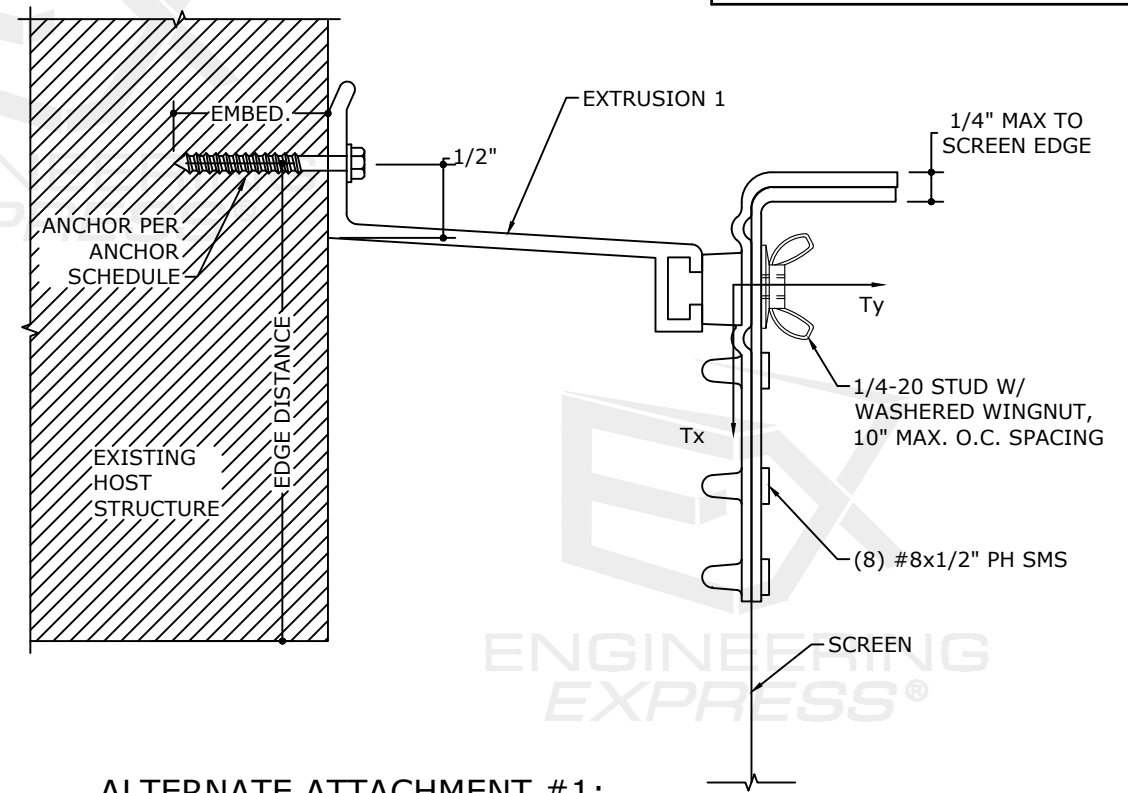
1/4" DEWALT PANELMATE TVAS ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)								
SPAN	3350 PSI MIN CONCRETE				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.9	5.6	6.6	8.0		4.5	5.3	6.4
6'-0"		4.2	4.9	6.0				4.9
8'-0"			4.1	4.9				
10'-0"				4.2				

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" DEWALT PANELMATE FEMALE ID ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)												
SPAN	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.3	4.9	5.7	7.0					4.5	5.3		6.4
6'-0"			4.3	5.3								4.9
8'-0"				4.3								

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" ITW SAMMY SSC ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)								
SPAN	3295 PSI MIN CONCRETE				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	6.1	6.9	8.0	9.8		4.4	5.1	6.2
6'-0"	4.6	5.2	6.1	7.4				4.7
8'-0"		4.2	5.0	6.1				
10'-0"			4.2	5.2				
12'-0"				4.6				



ALTERNATE ATTACHMENT #1:
EXTRUSION 1 (BUILD OUT F TRACK) MOUNT
N.T.S. SECTION VIEW

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)								
SPAN	3323 PSI MIN CONCRETE				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.3	4.9	5.7	7.0		4.5	5.3	6.4
6'-0"			4.3	5.3				4.9
8'-0"				4.3				

NOTE: FOR THE ABOVE 1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR SCHEDULE:
- 1/4" Ø OR 5/16" Ø DEWALT (FORMERLY ELCO) ULTRACON+ MAY BE USED AT THE SAME ANCHOR SPACING VALUES AS SHOWN ABOVE.
- 5/16" Ø OR 3/8" Ø WOOD SCREWS OR LAG SCREWS MAY BE USED AT THE SAME ANCHOR SPACING VALUES FOR THE G = 0.55 MIN. WOOD HOST SUBSTRATE (HOST BY OTHERS) AS SHOWN ABOVE.
- FOLLOW THE SAME EMBEDMENT & EDGE DIST. REQUIREMENTS AS THE 1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR. (SEE PAGE 8).

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" DEWALT PANELMATE INSERT ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)								
SPAN	2700 PSI MIN CONCRETE				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.4	5.0	5.9	7.2				4.3
6'-0"			4.4	5.4				
8'-0"				4.4				

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1505 POINSETTIA DR, SUITE H-3
DELRAY BEACH, FL 33444
WWW.HURRICANEFABRIC.COM
ASTROGUARD WIND ABATEMENT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#17661.1)

REMARKS	DATE
PREV. SUBMITTAL (20-29198)	04/17/23
2023 FBC UPDATE	11/20/23

23-69640

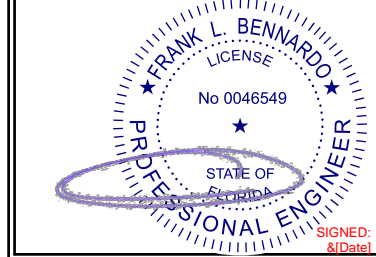
SCALE: NTS UNLESS NOTED

ANCHOR SPACING SCHEDULES: ALT. ATTACHMENT #2: EXTRUSION 2 MOUNT (CLIP ONLY) (PAGE 1 OF 2)

NOTE: SEE ANCHOR NOTES ON PAGE 8.
THIS ALTERNATE ATTACHMENT METHOD APPLIES TO THE CLIP OPTION ONLY.
SEE OTHER ATTACHMENT METHODS HEREIN FOR THE TRACK OPTION.

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

DECEMBER 20, 2023



FL

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" ITW SAMMY SSC ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)												
SPAN	3295 PSI MIN CONCRETE				HOLLOW CONCRETE BLOCK				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0	6.9	8.0	9.6	12.0	9.2	10.6	12.0	12.0
6'-0"	12.0	12.0	12.0	12.0	5.0	5.8	6.9	8.8	6.8	7.8	9.2	11.4
8'-0"	9.7	11.3	12.0	12.0		4.5	5.5	6.9	5.4	6.2	7.4	9.2
10'-0"	8.1	9.4	11.3	12.0			4.5	5.8	4.5	5.2	6.2	7.8
12'-0"	6.9	8.1	9.7	12.0				5.0		4.5	5.4	6.8
14'-0"	6.1	7.1	8.6	10.9				4.4		4.0	4.8	6.0
14'-8"	5.9	6.8	8.3	10.5				4.2			4.6	5.8
16'-0"	5.4	6.4	7.7	9.7							4.3	5.4
17'-0"	5.2	6.0	7.3	9.3							4.1	5.2
18'-2"	4.9	5.7	6.9	8.8								4.9

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)												
SPAN	3323 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0	5.7	6.6	8.0	10.1	9.1	10.4	12.0	12.0
6'-0"	9.4	11.0	12.0	12.0	4.0	4.7	5.7	7.2	6.6	7.6	9.1	11.3
8'-0"	7.4	8.6	10.4	12.0			4.4	5.7	5.2	6.1	7.2	9.1
10'-0"	6.1	7.1	8.6	11.0				4.7	4.4	5.1	6.1	7.6
12'-0"	5.2	6.1	7.4	9.4				4.0		4.4	5.2	6.6
14'-0"	4.6	5.4	6.5	8.3							4.6	5.8
14'-8"	4.4	5.1	6.2	8.0							4.5	5.6
16'-0"	4.1	4.8	5.8	7.4							4.2	5.2
17'-0"		4.5	5.5	7.0								5.0
18'-2"		4.3	5.2	6.6								4.7

NOTE: FOR THE ABOVE 1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR SCHEDULE:

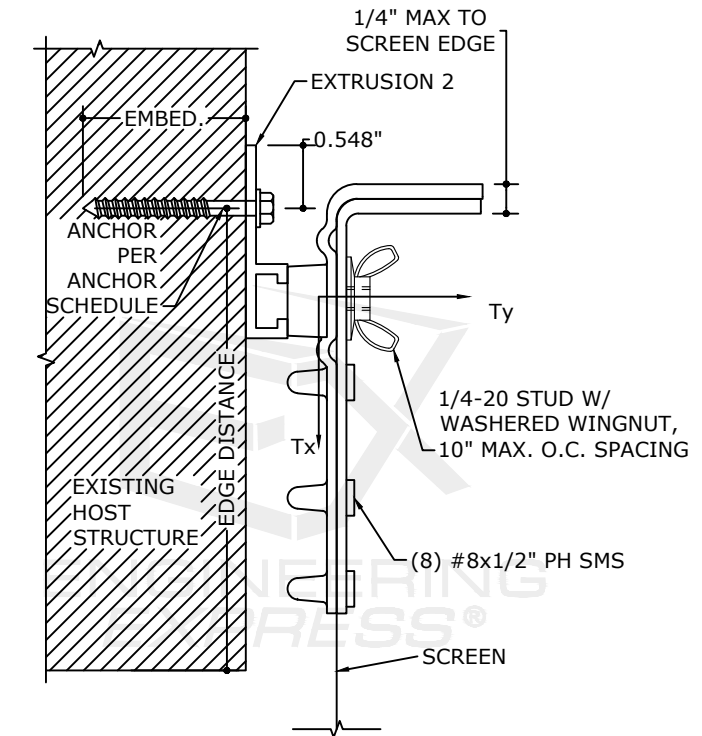
- 1/4" Ø OR 5/16" Ø DEWALT (FORMERLY ELCO) ULTRACON+ MAY BE USED AT THE SAME ANCHOR SPACING VALUES AS SHOWN ABOVE.
- 5/16" Ø OR 3/8" Ø WOOD SCREWS OR LAG SCREWS MAY BE USED AT THE SAME ANCHOR SPACING VALUES FOR THE G = 0.55 MIN. WOOD HOST SUBSTRATE (HOST BY OTHERS) AS SHOWN ABOVE.
- FOLLOW THE SAME EMBEDMENT & EDGE DIST. REQUIREMENTS AS THE 1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR. (SEE PAGE 8).

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" DEWALT HOLLOW-SET DROPIN ANCHOR SCHEDULE EXTRUSION 2 MOUNT (IN. O.C.)								
SPAN	4000 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	8.5	9.9	12.0	12.0		4.3	5.2	6.8
6'-0"	5.9	6.9	8.5	10.9				4.7
8'-0"	4.6	5.4	6.6	8.5				
10'-0"		4.4	5.4	6.9				
12'-0"			4.6	5.9				
14'-0"				5.1				
14'-8"				4.9				
16'-0"				4.6				
17'-0"				4.3				
18'-2"				4.1				

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" DEWALT PANELMATE INSERT ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)												
SPAN	2700 PSI MIN CONCRETE				HOLLOW CONCRETE BLOCK				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	11.1	12.0	12.0	12.0	8.4	9.8	11.8	12.0	8.6	10.0	12.0	12.0
6'-0"	8.1	9.3	11.1	12.0	6.0	7.0	8.4	10.7	6.1	7.1	8.6	10.9
8'-0"	6.4	7.4	8.9	11.1	4.6	5.4	6.6	8.4	4.8	5.6	6.7	8.6
10'-0"	5.4	6.2	7.4	9.3		4.5	5.4	7.0		4.6	5.6	7.1
12'-0"	4.7	5.4	6.4	8.1			4.6	6.0			4.8	6.1
14'-0"	4.1	4.8	5.7	7.2			4.1	5.2			4.2	5.3
14'-8"		4.6	5.5	6.9				5.0				5.1
16'-0"		4.3	5.1	6.4				4.6				4.8
17'-0"		4.1	4.9	6.1				4.4				4.5
18'-2"			4.6	5.8				4.2				4.3



ALTERNATE ATTACHMENT #2:
EXTRUSION 2 (F TRACK) MOUNT
N.T.S. SECTION VIEW

FL 17661.1

ENGINEERING EXPRESS
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BOCA RATON, FL 33431
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1505 POINSETTIA DR, SUITE H-3
DELRAY BEACH, FL 33444
WWW.HURRICANEFABRIC.COM
ASTROGUARD WIND ABATEMENT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#17661.1)

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-29198)	EPR	RWN	04/17/23
2023 FBC UPDATE	MRT	RWN	11/20/23

23-69640

SCALE: NTS UNLESS NOTED

14 OF 18

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ANCHOR SPACING SCHEDULES: ALT. ATTACHMENT #2: EXTRUSION 2 MOUNT (CLIP ONLY) (PAGE 2 OF 2)

NOTE: SEE ANCHOR NOTES ON PAGE 8.
THIS ALTERNATE ATTACHMENT METHOD APPLIES TO THE CLIP OPTION ONLY.
SEE OTHER ATTACHMENT METHODS HEREIN FOR THE TRACK OPTION.

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

DECEMBER 20, 2023

FL

FRANK L. BENNARDO
LICENSE
No 0046549
STATE OF FLORIDA
PROFESSIONAL ENGINEER
SIGNED: & (Date)

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" DEWALT PANELMATE TVAS ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)												
SPAN	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0	6.2	7.3	8.8	11.3	9.1	10.4	12.0	12.0
6'-0"	11.6	12.0	12.0	12.0	4.3	5.1	6.2	8.0	6.6	7.6	9.1	11.3
8'-0"	9.1	10.6	12.0	12.0			4.8	6.2	5.2	6.1	7.2	9.1
10'-0"	7.4	8.7	10.6	12.0				5.1	4.4	5.1	6.1	7.6
12'-0"	6.3	7.4	9.1	11.6				4.3	4.4	5.2	6.6	6.6
14'-0"	5.5	6.5	7.9	10.2						4.6	5.8	5.8
14'-8"	5.3	6.2	7.6	9.8						4.5	5.6	5.6
16'-0"	4.9	5.8	7.0	9.1						4.2	5.2	5.2
17'-0"	4.6	5.5	6.7	8.6							5.0	5.0
18'-2"	4.4	5.1	6.3	8.1							4.7	4.7

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" DEWALT PANELMATE FEMALE ID ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)												
SPAN	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0	5.7	6.6	8.0	10.1	9.1	10.4	12.0	12.0
6'-0"	9.4	11.0	12.0	12.0	4.0	4.7	5.7	7.2	6.6	7.6	9.1	11.3
8'-0"	7.4	8.6	10.4	12.0			4.4	5.7	5.2	6.1	7.2	9.1
10'-0"	6.1	7.1	8.6	11.0				4.7	4.4	5.1	6.1	7.6
12'-0"	5.2	6.1	7.4	9.4				4.0	4.4	5.2	6.6	6.6
14'-0"	4.6	5.4	6.5	8.3						4.6	5.8	5.8
14'-8"	4.4	5.1	6.2	8.0						4.5	5.6	5.6
16'-0"	4.1	4.8	5.8	7.4						4.2	5.2	5.2
17'-0"		4.5	5.5	7.0							5.0	5.0
18'-2"		4.3	5.2	6.6							4.7	4.7

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" ALL POINTS SOLID-SET ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)								
SPAN	3000 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0	8.7	10.2	12.0	12.0
6'-0"	10.7	12.0	12.0	12.0	6.1	7.2	8.7	11.1
8'-0"	8.3	9.7	11.8	12.0	4.8	5.6	6.8	8.7
10'-0"	6.8	8.0	9.7	12.0		4.6	5.6	7.2
12'-0"	5.8	6.8	8.3	10.7			4.8	6.1
14'-0"	5.0	5.9	7.2	9.3			4.2	5.4
14'-8"	4.8	5.7	6.9	9.0				5.2
16'-0"	4.5	5.3	6.4	8.3				4.8
17'-0"	4.2	5.0	6.1	7.9				4.5
18'-2"		4.7	5.7	7.4				4.3

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

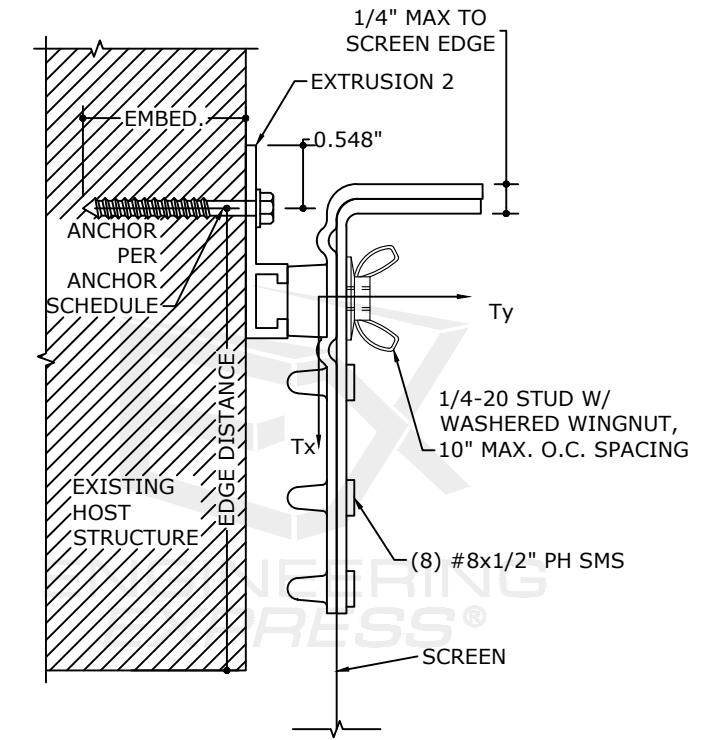
1/4" DEWALT POWER-STUD ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)									
SPAN	4000 PSI MIN CONCRETE				GROUT-FILLED CONCRETE BLOCK				
	DESIGN PRESSURE				DESIGN PRESSURE				
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	
4'-0"	12.0	12.0	12.0	12.0	8.1	9.4	11.2	12.0	
6'-0"	9.2	10.8	12.0	12.0	5.8	6.7	8.1	10.2	
8'-0"	7.2	8.4	10.2	12.0	4.5	5.3	6.4	8.1	
10'-0"	6.0	7.0	8.4	10.8		4.4	5.3	6.7	
12'-0"	5.1	6.0	7.2	9.2			4.5	5.8	
14'-0"	4.5	5.2	6.3	8.1				5.1	
14'-8"	4.3	5.0	6.1	7.8				4.9	
16'-0"		4.6	5.6	7.2				4.5	
17'-0"		4.4	5.4	6.9				4.3	
18'-2"		4.2	5.1	6.5				4.1	

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

1/4" DEWALT STEEL DROPIN ANCHOR SCHEDULE EXTRUSION 2 MOUNT (IN. O.C.)				
SPAN	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0
6'-0"	9.8	11.5	12.0	12.0
8'-0"	7.6	8.9	10.9	12.0
10'-0"	6.2	7.3	8.9	11.5
12'-0"	5.3	6.2	7.6	9.8
14'-0"	4.6	5.4	6.6	8.6
14'-8"	4.4	5.2	6.4	8.2
16'-0"	4.1	4.8	5.9	7.6
17'-0"		4.6	5.6	7.2
18'-2"		4.3	5.2	6.8

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

3/8" DEWALT STEEL DROPIN ANCHOR SCHEDULE EXTRUSION 2 MOUNT (IN. O.C.)				
SPAN	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0
6'-0"	12.0	12.0	12.0	12.0
8'-0"	12.0	12.0	12.0	12.0
10'-0"	12.0	12.0	12.0	12.0
12'-0"	11.2	12.0	12.0	12.0
14'-0"	9.8	11.5	12.0	12.0
14'-8"	9.4	11.0	12.0	12.0
16'-0"	8.6	10.2	12.0	12.0
17'-0"	8.2	9.7	11.8	12.0
18'-2"	7.7	9.1	11.1	12.0



ALTERNATE ATTACHMENT #2:
EXTRUSION 2 (F TRACK) MOUNT
N.T.S. SECTION VIEW

FL 17661.1

ENGINEERING EXPRESS
POSTAL ADDRESS:
2234 NORTH FEDERAL HWY # 7664
BOCA RATON, FL 33431
ENGINEERINGEXPRESS.COM

HURRICANE FABRIC, LLC
1505 POINSETTA DR, SUITE H-3
DELRAY BEACH, FL 33444
WWW.HURRICANEFABRIC.COM
ASTROGUARD WIND ABATEMENT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#17661.1)

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-29198)	EPR	RWN	04/17/23
2023 FBC UPDATE	MRT	RWN	11/20/23

23-69640

SCALE: NTS UNLESS NOTED

15 OF 18

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ANCHOR SPACING SCHEDULES: ALTERNATE ATTACHMENT #3 & #4: BUILD OUT MOUNTS (PAGE 1 OF 2)

NOTE: SEE ANCHOR NOTES ON PAGE 8.
ANCHOR SCHEDULES MAY BE USED FOR BOTH CLIP AND TRACK OPTIONS.

FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

DECEMBER 20, 2023

FL

FRANK L. BENNARDO
LICENSE
No 0046549
STATE OF FLORIDA
PROFESSIONAL ENGINEER
SIGNED: & (Date)

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	1/4" ITW SAMMY SSC ANCHOR SCHEDULE - BUILD OUT TUBE MOUNT (IN. O.C.)											
	3295 PSI MIN CONCRETE				HOLLOW CONCRETE BLOCK				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	11.8	12.0	12.0	12.0	4.6	5.2	6.1	7.5	7.0	7.9	9.2	11.3
6'-0"	8.8	10.1	11.8	12.0			4.6	5.6	5.2	5.9	7.0	8.5
8'-0"	7.2	8.2	9.6	11.8			4.6	4.3	4.9	5.7	7.0	
10'-0"	6.1	7.0	8.2	10.1					4.1	4.9	5.9	
12'-0"	5.4	6.1	7.2	8.8						4.3	5.2	
14'-0"	4.8	5.5	6.4	7.9							4.7	
14'-8"	4.6	5.3	6.2	7.7							4.5	
16'-0"	4.3	5.0	5.8	7.2							4.3	
17'-0"	4.2	4.8	5.6	6.9							4.1	
18'-2"		4.5	5.3	6.6								

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR SCHEDULE - BUILD OUT TUBE MOUNT (IN. O.C.)												
	3323 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD				
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE				
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	
4'-0"	8.7	9.9	11.6	12.0			4.0	4.7	5.8	6.7	7.6	8.9	10.9
6'-0"	6.5	7.4	8.7	10.7				4.4	5.1	5.8	6.7	8.2	
8'-0"	5.3	6.0	7.1	8.7					4.1	4.7	5.5	6.7	
10'-0"	4.5	5.1	6.0	7.4						4.0	4.7	5.8	
12'-0"		4.5	5.3	6.5							4.1	5.1	
14'-0"		4.0	4.7	5.8								4.5	
14'-8"			4.6	5.6								4.4	
16'-0"			4.3	5.3								4.1	
17'-0"			4.1	5.1									
18'-2"				4.8									

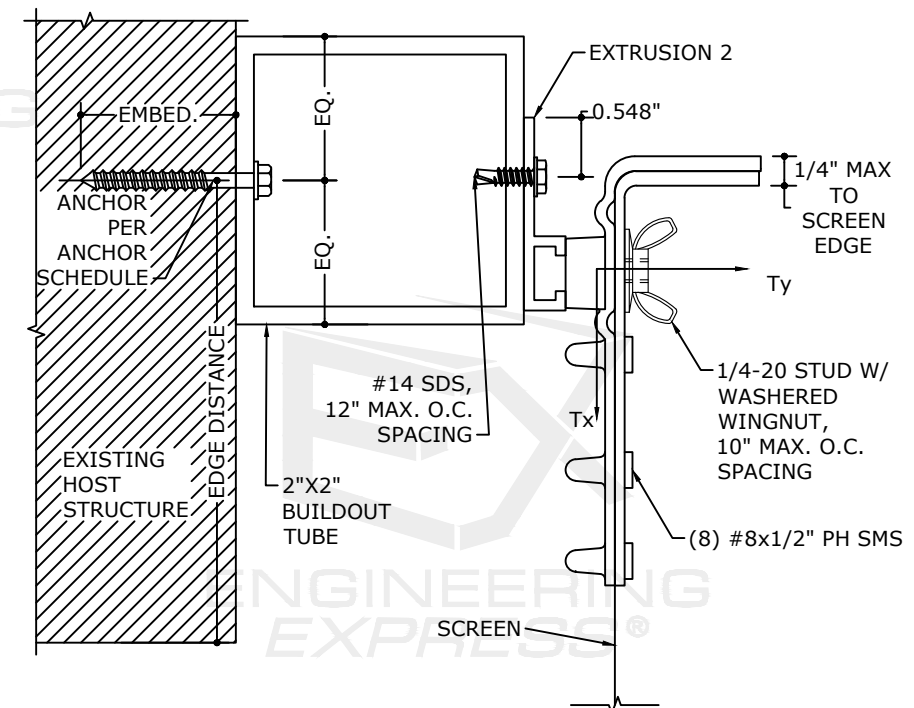
NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	1/4" DEWALT PANELMATE INSERT ANCHOR SCHEDULE - BUILD OUT TUBE MOUNT (IN. O.C.)											
	2700 PSI MIN CONCRETE				HOLLOW CONCRETE BLOCK				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	8.2	9.3	10.9	12.0	5.3	6.1	7.1	8.7	5.5	6.3	7.3	9.0
6'-0"	6.1	7.0	8.2	10.0		4.5	5.3	6.6	4.1	4.7	5.5	6.7
8'-0"	5.0	5.7	6.7	8.2			4.3	5.3			4.5	5.5
10'-0"	4.3	4.9	5.7	7.0				4.5				4.7
12'-0"		4.3	5.0	6.1								4.1
14'-0"			4.5	5.5								
14'-8"			4.3	5.3								
16'-0"			4.1	5.0								
17'-0"				4.8								
18'-2"				4.6								

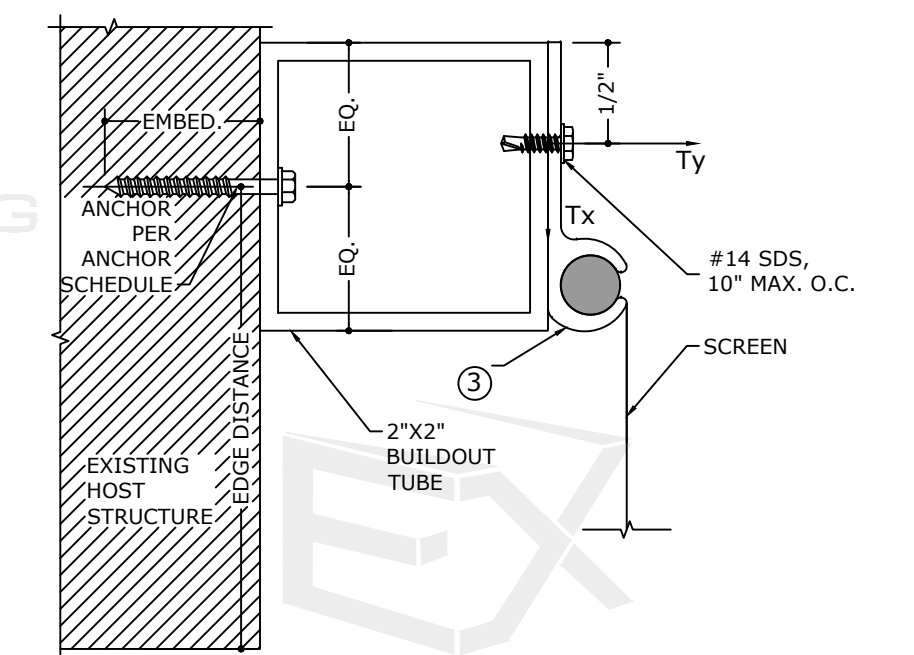
NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	1/4" DEWALT PANELMATE FEMALE ID ANCHOR SCHEDULE - BUILD OUT TUBE MOUNT (IN. O.C.)												
	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD				
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE				
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	
4'-0"	8.7	9.9	11.6	12.0			4.0	4.7	5.8	6.7	7.6	8.9	10.9
6'-0"	6.5	7.4	8.7	10.7				4.4	5.1	5.8	6.7	8.2	
8'-0"	5.3	6.0	7.1	8.7					4.1	4.7	5.5	6.7	
10'-0"	4.5	5.1	6.0	7.4						4.0	4.7	5.8	
12'-0"		4.5	5.3	6.5							4.1	5.1	
14'-0"		4.0	4.7	5.8								4.5	
14'-8"			4.6	5.6								4.4	
16'-0"			4.3	5.3								4.1	
17'-0"			4.1	5.1									
18'-2"				4.8									

NOTE: FOR THE 1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR SCHEDULE:
- 1/4" Ø OR 5/16" Ø DEWALT (FORMERLY ELCO) ULTRACON+ MAY BE USED AT THE SAME ANCHOR SPACING VALUES AS SHOWN LEFT.
- 5/16" Ø OR 3/8" Ø WOOD SCREWS OR LAG SCREWS MAY BE USED AT THE SAME ANCHOR SPACING VALUES FOR THE G = 0.55 MIN. WOOD HOST SUBSTRATE (HOST BY OTHERS) AS SHOWN LEFT.
- FOLLOW THE SAME EMBEDMENT & MIN. EDGE DIST. REQUIREMENTS AS THE 1/4" DEWALT PANELMATE (MALE OR FEMALE) ANCHOR. (SEE PAGE 8).



ALTERNATE ATTACHMENT #3:
BUILD OUT MOUNT (CLIP OPTION)
N.T.S. SECTION VIEW



ALTERNATE ATTACHMENT #4:
BUILD OUT MOUNT (TRACK OPTION)
N.T.S. SECTION VIEW

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ASTROGUARD WIND ABATEMENT SYSTEM
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL (FSA #17661.1)

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16 OF 18

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ANCHOR SPACING SCHEDULES: ALTERNATE ATTACHMENT #3 & #4: BUILD OUT MOUNTS (PAGE 2 OF 2)

NOTE: SEE ANCHOR NOTES ON PAGE 8.
ANCHOR SCHEDULES MAY BE USED FOR BOTH CLIP AND TRACK OPTIONS.

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	3000 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	9.3	10.6	12.0	12.0	5.4	6.1	7.2	8.8
6'-0"	6.9	7.9	9.3	11.4	4.0	4.6	5.4	6.6
8'-0"	5.6	6.4	7.6	9.3			4.4	5.4
10'-0"	4.8	5.5	6.4	7.9				4.6
12'-0"	4.2	4.8	5.6	6.9				4.0
14'-0"		4.3	5.0	6.2				
14'-8"		4.1	4.9	6.0				
16'-0"			4.6	5.6				
17'-0"			4.4	5.4				
18'-2"			4.2	5.1				

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	8.5	9.7	11.4	12.0
6'-0"	6.3	7.2	8.5	10.5
8'-0"	5.1	5.9	6.9	8.5
10'-0"	4.4	5.0	5.9	7.2
12'-0"		4.4	5.1	6.3
14'-0"			4.6	5.7
14'-8"			4.4	5.5
16'-0"			4.2	5.1
17'-0"				4.9
18'-2"				4.7

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.3	11.8	12.0	12.0		4.2	4.9	6.1	6.7	7.6	8.9	10.9
6'-0"	7.7	8.8	10.3	12.0				4.5	5.1	5.8	6.7	8.2
8'-0"	6.2	7.1	8.4	10.3					4.1	4.7	5.5	6.7
10'-0"	5.3	6.1	7.1	8.8					4.0	4.7	5.8	
12'-0"	4.6	5.3	6.2	7.7						4.1	5.1	
14'-0"	4.1	4.7	5.6	6.9							4.5	
14'-8"	4.0	4.6	5.4	6.7							4.4	
16'-0"		4.3	5.1	6.2							4.1	
17'-0"		4.1	4.8	6.0								
18'-2"			4.6	5.7								

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0
6'-0"	12.0	12.0	12.0	12.0
8'-0"	10.9	12.0	12.0	12.0
10'-0"	9.2	10.6	12.0	12.0
12'-0"	8.1	9.2	10.9	12.0
14'-0"	7.2	8.3	9.7	12.0
14'-8"	7.0	8.0	9.4	11.6
16'-0"	6.5	7.5	8.8	10.9
17'-0"	6.2	7.1	8.4	10.4
18'-2"	5.9	6.8	8.0	9.9

NOTE: FOR THE ABOVE 1/4" DEWALT PANELMATE TVAS ANCHOR SCHEDULE:
- 1/4" Ø OR 5/16" Ø DEWALT (FORMERLY ELCO) ULTRACON+ MAY BE USED AT THE SAME ANCHOR SPACING VALUES AS SHOWN ABOVE.
- 5/16" Ø OR 3/8" Ø WOOD SCREWS OR LAG SCREWS MAY BE USED AT THE SAME ANCHOR SPACING VALUES FOR THE G = 0.55 MIN. WOOD HOST SUBSTRATE (HOST BY OTHERS) AS SHOWN ABOVE.
- FOLLOW THE SAME EMBEDMENT & EDGE DIST. REQUIREMENTS AS THE 1/4" DEWALT PANELMATE TVAS ANCHOR. (SEE PAGE 8).

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

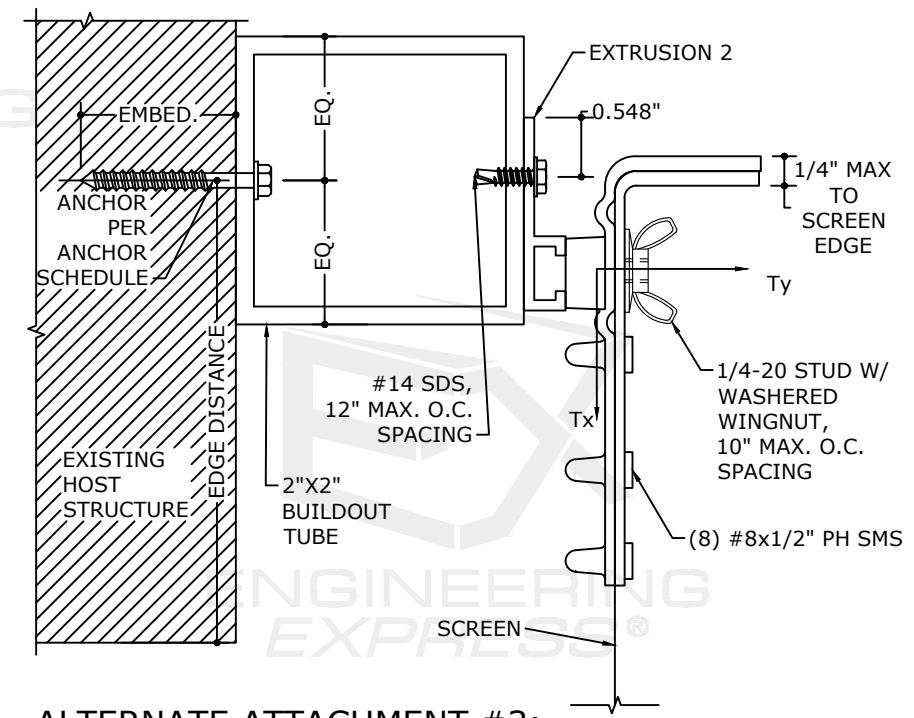
SPAN	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	5.0	5.7	6.7	8.2
6'-0"		4.3	5.0	6.2
8'-0"			4.1	5.0
10'-0"				4.3

NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	3000 PSI MIN. CONCRETE OR GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE (ASD)			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0
12'-0"	10.0	10.0	10.0	10.0
14'-0"	10.0	10.0	10.0	10.0
14'-8"	10.0	10.0	10.0	10.0
16'-0"	10.0	10.0	10.0	10.0
17'-0"	10.0	10.0	10.0	10.0
18'-2"	10.0	10.0	10.0	10.0

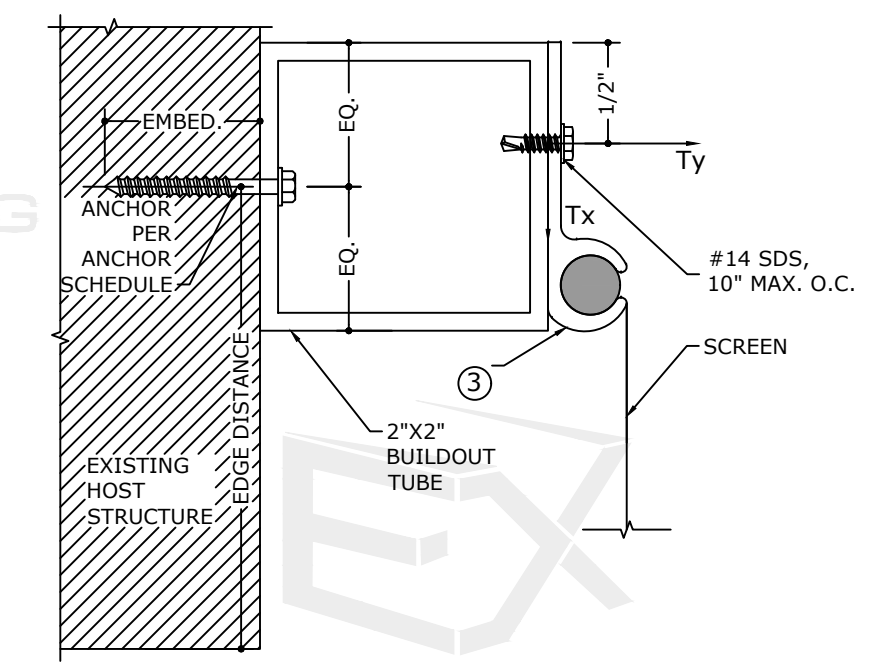
NOTE: PRESSURES LISTED IN THIS TABLE ARE ALLOWABLE (ASD) PRESSURES

SPAN	4000 PSI MIN CONCRETE				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	8.4	9.6	11.3	12.0	5.4	6.1	7.1	8.8
6'-0"	6.3	7.2	8.4	10.4	4.0	4.6	5.4	6.6
8'-0"	5.1	5.8	6.9	8.4			4.4	5.4
10'-0"	4.4	5.0	5.8	7.2				4.6
12'-0"		4.4	5.1	6.3				4.0
14'-0"			4.6	5.6				
14'-8"			4.4	5.5				
16'-0"			4.2	5.1				
17'-0"				4.9				
18'-2"				4.7				



ALTERNATE ATTACHMENT #3:
BUILD OUT MOUNT (CLIP OPTION)

N.T.S. SECTION VIEW



ALTERNATE ATTACHMENT #4:
BUILD OUT MOUNT (TRACK OPTION)

N.T.S. SECTION VIEW

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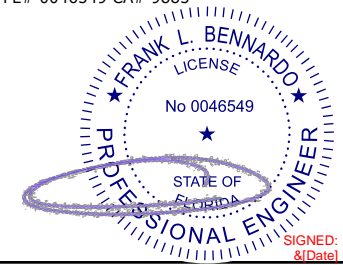
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FLORIDA BUILDING CODE EIGHTH EDITION (2023)
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PAGE INDEX:

TERMINOLOGY:

SHEET INDEX	
# SHEET	DESCRIPTION
1	COVER SHEET
2	TYP. DETAILS & TOP AND BOTTOM MOUNTING CLIP DETAILS
3	TYP. MOUNT DETAILS, GLAZING SEPARATION SCHEDULE & LOADS ON EXISTING STRUCTURE SCHEDULE
4	ANGLED PANEL INSTALLATION DETAILS
5	STORM BAR INSTALLATION DETAILS
6	STORM BAR ALLOWABLE SPAN SCHEDULES
7	ALTERNATE ATTACHMENT & PARTS DETAILS
8	ANCHOR NOTES
9-10	ANCHOR SPACING SCHEDULES: WALL MOUNT
11-12	ANCHOR SPACING SCHEDULES: INTERIOR MOUNT
13	ANCHOR SPACING SCHEDULES: ALT. ATTACHMENT #1: EXTRUSION 1 MOUNT (CLIP ONLY)
14-15	ANCHOR SPACING SCHEDULES: ALT. ATTACHMENT #2: EXTRUSION 2 MOUNT (CLIP ONLY)
16-17	ANCHOR SPACING SCHEDULES: ALT. ATTACHMENT #3 & #4: BUILD OUT MOUNTS
18	PAGE INDEX & TERMINOLOGY

THE FOLLOWING ABBREVIATIONS MAY APPEAR IN THIS APPROVAL:

"ADDTL." FOR "ADDITIONAL", "AHJ" FOR "AUTHORITY HAVING JURISDICTION", "ALUM" FOR "ALUMINUM", "ASD" FOR "ALLOWABLE STRESS DESIGN", "BO" FOR "BUILD-OUT", "CS" FOR "CARBON STEEL", "EA." FOR "EACH", "E.D."/"EDGE"/"EDGE DIST." FOR "EDGE DISTANCE", "ELEV" FOR "ELEVATION", "EMBED" FOR "EMBEDMENT", "EQ"/"EQUIV." FOR "EQUIVALENT", "EXT" FOR "EXTERIOR", "FBC" FOR "FLORIDA BUILDING CODE", "ft" OR " ' " FOR "FEET", "G" FOR "SPECIFIC GRAVITY", "GA" FOR "GAUGE", "GALV" FOR "GALVANIZED", "GFB" FOR "GROUT-FILLED BLOCK", "GR" FOR "GRADE", "HOLLOW" FOR "HOLLOW BLOCK", "HORIZ" FOR "HORIZONTAL", "HVHZ" FOR "HIGH-VELOCITY HURRICANE ZONE", "in" OR " " " FOR "INCHES", "INT" FOR "INTERIOR", "KSI" FOR "1,000 lb / in²", "L" FOR "LENGTH", "LB" FOR "POUND", "MAX" FOR "MAXIMUM", "MIN" FOR "MINIMUM", "N.T.S." FOR "NOT TO SCALE", "O.C." FOR "ON-CENTER", "P.E." FOR "PROFESSIONAL ENGINEER", "PERP" FOR "PERPENDICULAR", "PSF" FOR "POUNDS PER SQUARE FOOT (lb/ft²)", "PSI" FOR "POUNDS PER SQUARE INCH (lb/in²)", "QTY" FOR "QUANTITY", "REF." FOR "REFERENCE", "SCHED." FOR "SCHEDULE", "SDS" FOR "SELF-DRILLING SCREWS", "SMS" FOR "SHEET METAL SCREWS", "SPECS" FOR "SPECIFICATIONS", "SS" FOR "STAINLESS STEEL", "SUB" FOR "SUBMITTAL", "TAS" FOR "TESTING APPLICATION STANDARD", "TYP." FOR "TYPICAL", "ULT" FOR "ULTIMATE LOADS", "U.N.O." FOR "UNLESS NOTED OTHERWISE", "UTS" OR "Fu" FOR "ULTIMATE TENSILE STRENGTH/STRESS", "VERT" FOR "VERTICAL", "WLL" FOR "WORKING LOAD LIMIT", "W/" FOR "WITH", "W/O" FOR "WITHOUT", "YS" FOR "YIELD STRENGTH", "#" FOR "NUMBER", "&" FOR "AND", AND "Ø" FOR "DIAMETER".

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18 OF 18

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