

SINGLE WALL ROLL-UP HURRICANE SHUTTER

AMERICAN SHUTTER SYSTEMS ASSOCIATION, INC.

LARGE MISSILE IMPACT RESISTANT (MISSILE LEVEL D)

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

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

GENERAL NOTES:

1.

THIS SYSTEM HAS BEEN TESTED AND EVALUATED AS A LARGE MISSILE IMPACT PROTECTIVE SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE NINTH EDITION (2026) FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE ("HVHZ"), PER ASTM E330, E1886, E1996 AND TAS 201, 202, & 203 STANDARDS. SEE PRODUCT APPROVAL EVALUATION FOR ADDITIONAL INFORMATION.
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 CURRENT VERSION OF ASCE 7 AND CHAPTER 1609 OF THE FLORIDA BUILDING CODE SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE ASD DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.
4.

DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
5.

ROLL-UP MECHANISM AND HOOD ASSEMBLY ARE NOT PART OF THIS APPROVAL.
6.

THIS DOCUMENT CONTAINS INFORMATION RELEVANT TO THE NECESSARY STRUCTURAL REQUIREMENTS OF THE SYSTEM INSTALLATION. COMPONENTS AND FASTENERS NOT REFERENCED WHICH ARE PART OF THE INTERNAL FABRICATION OF THE SPECIFIED SYSTEMS OR ASSEMBLIES SHALL BE PER MANUFACTURER PUBLISHED SPECIFICATIONS.
7.

THE STRUCTURAL ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS BY THIS SYSTEM SHALL BE VERIFIED BY OTHERS. 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.
8.

THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. IF SITE CONDITIONS DEVIATE FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS TO BE USED IN CONJUNCTION WITH THIS DOCUMENT.
9.

ALL EXTRUSIONS SHALL BE MINIMUM 6063-T6 ALUMINUM ALLOY, UNLESS NOTED OTHERWISE.
10.

EACH SHUTTER ASSEMBLY SHALL BEAR A PERMANENT LABEL ON THE BOTTOM OF THE HOOD FACING THE EXTERIOR, OR ANYWHERE ELSE ALLOWED PER SECTION 1709.9 OF THE FBC 2026 WITH THE FOLLOWING MINIMUM INFORMATION:

AMERICAN SHUTTER SYSTEMS ASSOC., INC.
WEST PALM BEACH, FL

MISSILE LEVEL D - ASTM E1886, E1996 & E330 - TAS 201, 202 & 203
FLORIDA PRODUCT APPROVAL NUMBER

11.

ALL BOLTS & WASHERS SHALL BE ZINC COATED STEEL, GALVANIZED STEEL, OR STAINLESS STEEL WITH A MINIMUM TENSILE YIELD STRENGTH OF 60 KSI. ALL ALUMINUM 3/16"Ø OR 1/4"Ø POP RIVETS SHALL BE 7075-T6 OR STRONGER.
12.

FOR PERMANENT OUTDOOR INSTALLATIONS, ALL EXPOSED ANCHORS, FASTENERS, CONNECTORS, AND METAL PLATES SHALL BE CORROSION RESISTANT. CORROSION RESISTANCE MAY BE PROVIDED BY INHERENT MATERIAL COMPOSITION OR, WHERE PERMITTED BY CODE, BY AN APPROVED PROTECTIVE COATING OR GALVANIZATION. WHERE APPLICABLE NEAR A SALTWATER COASTLINE, SUCH COMPONENTS SHALL COMPLY WITH FBC SECTION 1711, INCLUDING APPLICABLE REQUIREMENTS FOR EXPOSED, PROTECTED, OR ENCLOSED CONDITIONS. MATERIALS, COATINGS, AND FINISHES SHALL BE COMPATIBLE WITH CONNECTED MATERIALS, AND PROTECTIVE COATINGS SHALL BE CONTINUOUS OVER EXPOSED SURFACES. FASTENERS USED WITH ALUMINUM MEMBERS SHALL ALSO COMPLY WITH SECTION J.3.7.2 OF THE ALUMINUM DESIGN MANUAL, "SPECIFICATION FOR ALUMINUM STRUCTURES." SUBSTITUTION OF COMPONENTS FROM ALTERNATE MANUFACTURERS, OR WITH DIFFERENT MATERIALS, COATINGS, OR FINISHES, SHALL NOT BE ASSUMED EQUIVALENT AND MAY REQUIRE ADDITIONAL ENGINEERING REVIEW OR SITE-SPECIFIC ANALYSIS.
13.

ALL STEEL IN CONTACT WITH ALUMINUM SHALL BE PAINTED OR PLATED AS PRESCRIBED IN THE ABOVE-NOTED BUILDING CODE.
14.

CONTRACTOR IS RESPONSIBLE TO INSULATE OR PROTECT ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
15.

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.
16.

REFER TO FASTENER MANUFACTURER'S PUBLISHED DATA SHEETS AND RECOMMENDATIONS FOR FASTENER INSTALLATION INSTRUCTIONS.
17.

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.
18.

PRESSURE VALUES ON THIS APPROVAL ARE (ASD) ALLOWABLE DESIGN PRESSURES.
19.

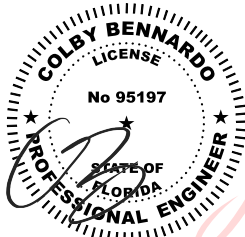
ALTERATIONS ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
20.

EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

SYSTEM PERFORMANCE DERIVATIONS

SYSTEM PERFORMANCE DERIVED FROM CERTIFIED TEST REPORT(S) #1127.01-19 BY AMERICAN TEST LAB OF SOUTH FLORIDA (ATL) PER TAS 201, TAS 202, TAS 203, ASTM E330, ASTM E1996 & ASTM E1886 TEST STANDARD(S).

COLBY BENNARDO, P.E.
PE# 95197 CA# 9885



Digitally signed by
Colby Bennardo
Date: 2026.08.17
12:32:25 -04'00'

NOTE REGARDING USE OF THIS DOCUMENT & USE OUTSIDE FLORIDA:

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TERMINOLOGY

THE FOLLOWING ABBREVIATIONS APPEAR IN THIS APPROVAL: "INC." FOR "INCORPORATION", "CORP." FOR "CORPORATION", "ALUM" FOR "ALUMINUM", "ASD" FOR "ALLOWABLE STRESS DESIGN", "ASTM" FOR "AMERICAN SOCIETY FOR TESTING AND MATERIALS", "CS" FOR "CARBON STEEL", "CONN" FOR "CONNECTION", "EMBED" FOR "EMBEDMENT", "DIST." FOR "DISTANCE", "GA" FOR "GAUGE", "HVHZ" FOR "HIGH-VELOCITY HURRICANE ZONE", "LB" FOR "POUND", "MAX" FOR "MAXIMUM", "N.T.S." FOR "NOT TO SCALE", "PSF" FOR "POUNDS PER SQUARE FOOT (lb/ft²)", "SPECS" FOR "SPECIFICATIONS", "&" FOR "AND", "MAX" FOR "MAXIMUM", "W/" FOR "WITH", "EXIST" FOR "EXISTING", "STRUCT" FOR "STRUCTURE", "CONC." FOR "CONCRETE". CONTACT ENGINEERING EXPRESS FOR ADDITIONAL ABBREVIATION/TERMINOLOGY CLARIFICATIONS.

VISIT ECALC.IO/EASTERNMETALS

FOR SITE-SPECIFIC DEVIATIONS
& MORE INFORMATION ABOUT THIS DOCUMENT
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WEST PALM BEACH, FL 33407
(800) 432-2204

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FLORIDA BUILDING CODE NINTH EDITION (2026)
FLORIDA STATEWIDE APPROVAL (FSA FL #31658.1)

REMARKS	DATE	DRWN	CHKD
2020 FBC (20-31286)	02/18/20	RWN	RWN
2023 FBC (23-65162)	09/26/25	MARH	RWN
2026 FBC UPDATE	07/15/26	MEF	CCB

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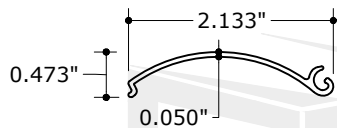
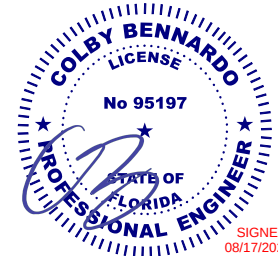


SEE REMAINING SHEETS FOR COMPLETE ELEVATION OPTIONS

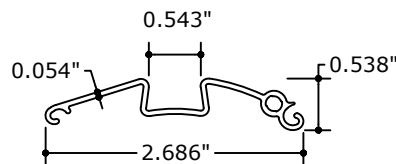
- SLAT SPAN IS DEFINED AS THE DISTANCE BETWEEN RAILS FOR SINGLE SPAN ASSEMBLIES.
- SEPARATION FROM GLAZING IS REQUIRED **ONLY** IN ASTM WIND ZONE 4 AND THE HVHZ.
- LINEAR INTERPOLATION BETWEEN SHUTTER SPANS IS NOT PERMITTED. FOR SPANS BETWEEN THOSE INDICATED ABOVE, THE SEPARATION FROM GLASS FOR THE NEXT HIGHER SPAN SHALL BE USED.

* SEE ELEVATION VIEW ON THIS SHEET FOR
ADDITIONAL REQUIREMENTS AS WELL AS PART
(11) DETAIL IN THIS DRAWING

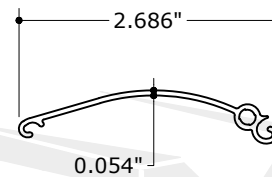
SLAT SPAN	INSTALLATIONS ≤ 30' ABOVE GRADE	INSTALLATIONS > 30' ABOVE GRADE
75.0"	5.8"	5.8"
80.0"	7.0"	5.9"
83.5"	7.0"	6.1"
87.0"	7.0"	6.2"
90.5"	7.0"	6.4"
94.0"	7.0"	6.5"
97.5"	7.0"	6.7"
101.0"	7.0"	6.9"
104.5"	7.0"	7.0"
108.0"	7.2"	7.2"
111.5"	7.5"	7.5"
115.0"	7.7"	7.7"
118.5"	8.0"	8.0"
120.0"	8.3"	8.3"
134.0"	10.5"	8.6"
146.0"	10.5"	8.8"
158.0"	10.5"	9.0"
170.0"	10.5"	9.2"
182.0"	10.5"	9.4"
194.0"	10.5"	9.6"
206.0"	10.5"	9.9"
218.0"	10.5"	10.1"
230.0"	10.5"	10.3"
241.5"	10.5"	10.5"



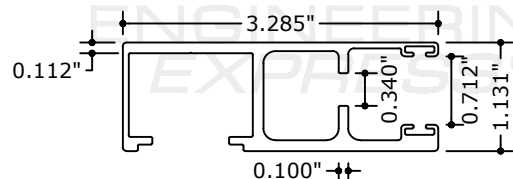
1 **STARTER SLAT**
N.T.S. 6063-T6 ALUM



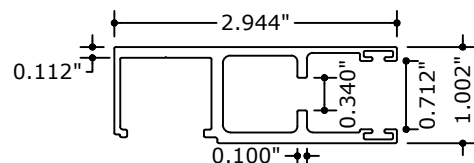
2 **FINGER PULL SLAT**
N.T.S. 6063-T6 ALUM
(1) PER SHUTTER AS APPLICABLE



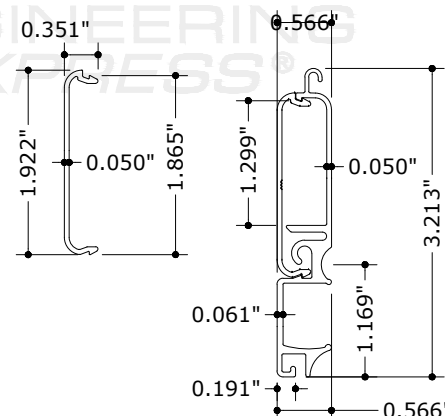
3 **SINGLE WALL SLAT**
N.T.S. 6063-T6 ALUM



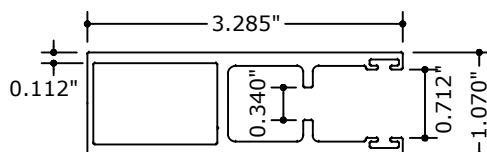
6 **SIDE RAIL TYPE 2**
N.T.S. 6063-T6 ALUM



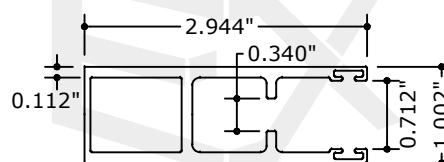
5 **SIDE RAIL TYPE 1**
N.T.S. 6063-T6 ALUM



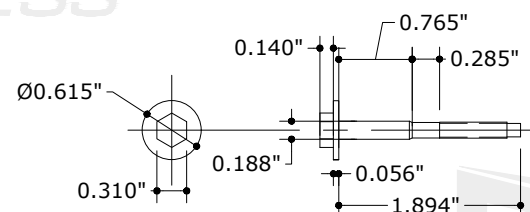
4 **BASE SLAT**
N.T.S. 6063-T6 ALUM
(OPTIONAL COMPONENT)



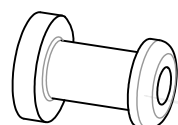
6A **SIDE RAIL TYPE 2 (CLOSED)**
N.T.S. 6063-T6 ALUM



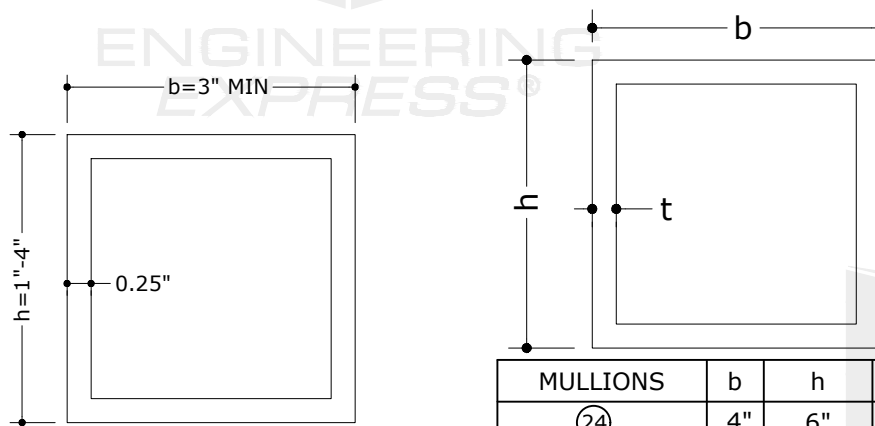
5A **SIDE RAIL TYPE 1 (CLOSED)**
N.T.S. 6063-T6 ALUM



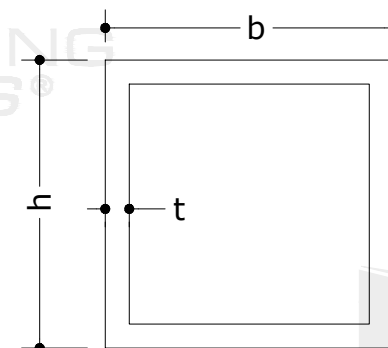
11 **#8-32 410 S.S. SCREW**
#8-32 X 1.894" AISI 410 S.S. SCREW W/ 0.31" DIAM HV MARKED HEAD & T=0.064" X 0.620" DIAM MONOLITHIC WASHER W/ BERTHA H.V. DACROSHIELD COATING SYSTEM AS MANUFACTURED BY APPROVED COATING APPLICATORS REGISTERED WITH AMERICAN SHUTTER SYSTEM ASSOCIATION. **SEE SHEET 1 FOR SCREW REQUIREMENTS, ALWAYS REQUIRED FOR BASE SLAT FOR ALL INSTALLATIONS**



8 **END CAP W/ MONOLITHIC SCREW SLEEVE**
N.T.S. (LEFT SHOWN, RIGHT IS MIRROR)
RIGID NYLON, 76-78 TYPE "O" SHORE HARDNESS

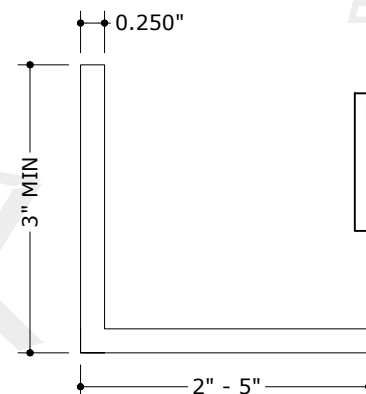


12 **BUILD-OUT MOUNTED TUBES**
N.T.S. 6063-T6



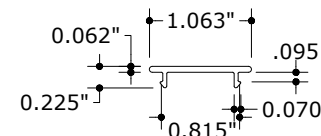
MULLIONS	b	h	t
(24)	4"	6"	0.250"
(25)	4"	8"	0.250"
(26)	4"	4"	0.250"

MULLIONS
N.T.S. 6061-T6 OR 6005-T5

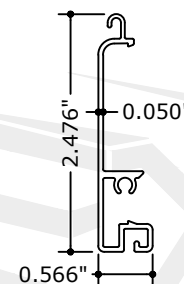


13 **TRAPPED ANGLE**
N.T.S. 6063-T6 ALUM

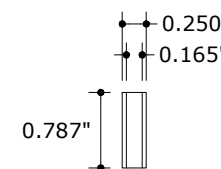
BUILD-OUT TUBES AND TRAPPED ANGLE NOTES: FOR 2X ANGLES OR TUBES, THE LONG SIDE OF THE ANGLE OR TUBE SHALL BE FLUSH AGAINST THE HOST WALL



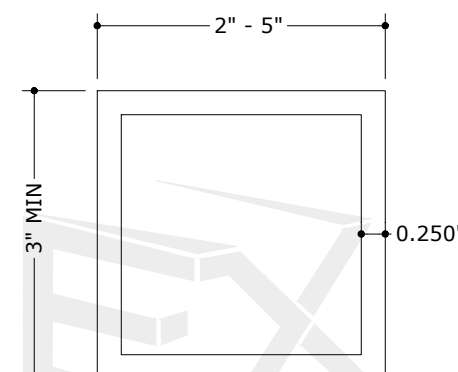
7 **SNAP CAP**
N.T.S. 6063-T6 ALUM



4A **SHORT BASE SLAT**
N.T.S. 6063-T6 ALUM
(OPTIONAL COMPONENT)



9 **EXTENDED SCREW SLEEVE W/O END CAP**
N.T.S. RIGID NYLON, 76-78 TYPE "O" SHORE HARDNESS



14 **OPTIONAL TRAPPED MOUNTED TUBE TO (13)**
N.T.S. 6063-T6 ALUM

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(800) 432-2204
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FLORIDA STATEWIDE APPROVAL (FSA FL #31658.1)

REMARKS	DRWN	CHKD	DATE
2020 FBC (20-31266)	RWN	RWN	02/18/20
2023 FBC (23-65162)	MARH	RWN	09/26/25
2026 FBC UPDATE	MEF	CCB	07/15/26

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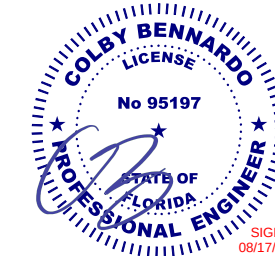
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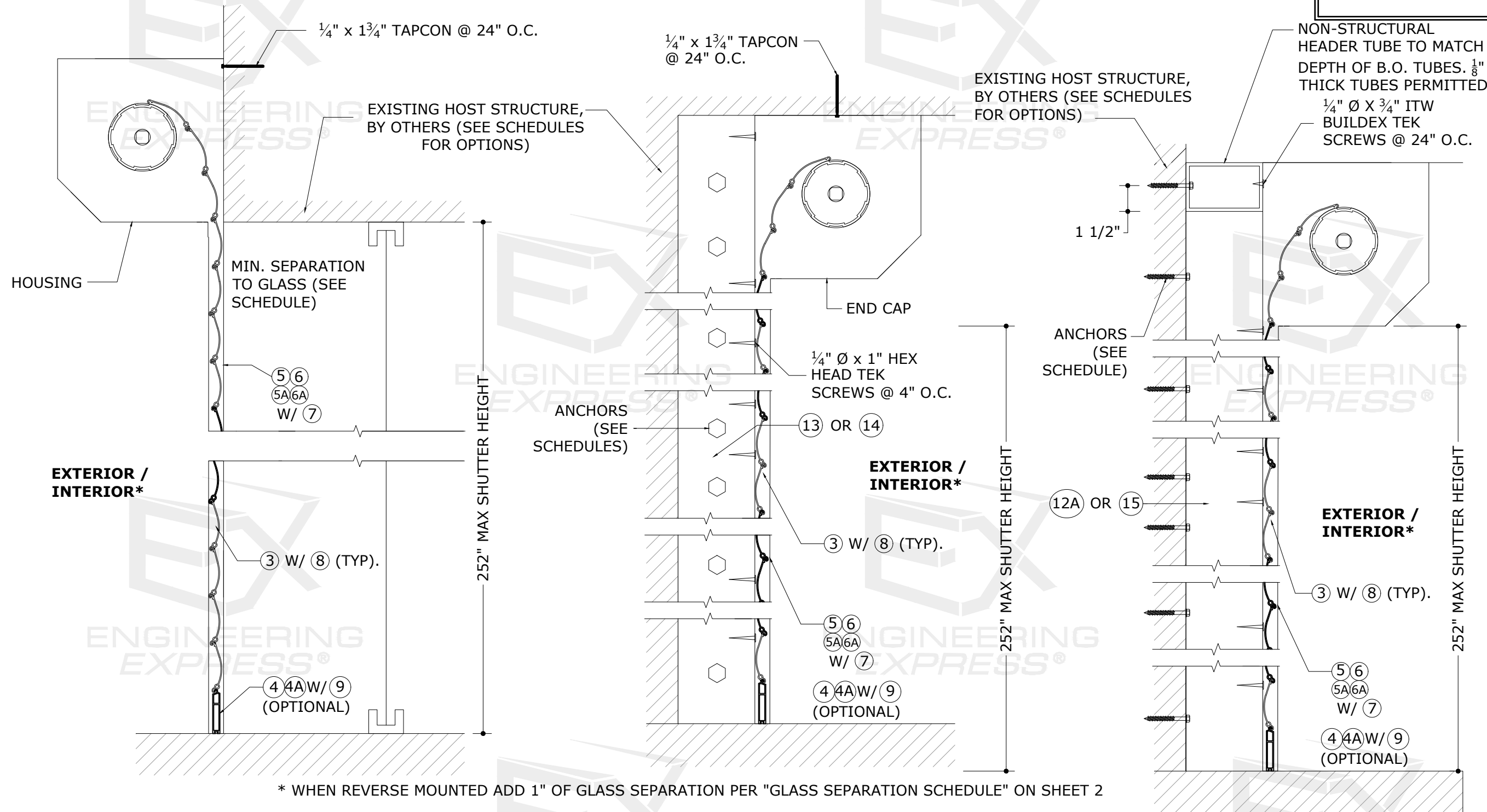


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PE# 95197 CA# 9885



SHUTTER ATTACHMENT TO HOST



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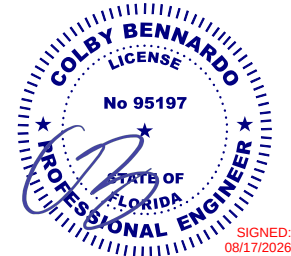
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SHUTTER ATTACHMENT TO HOST

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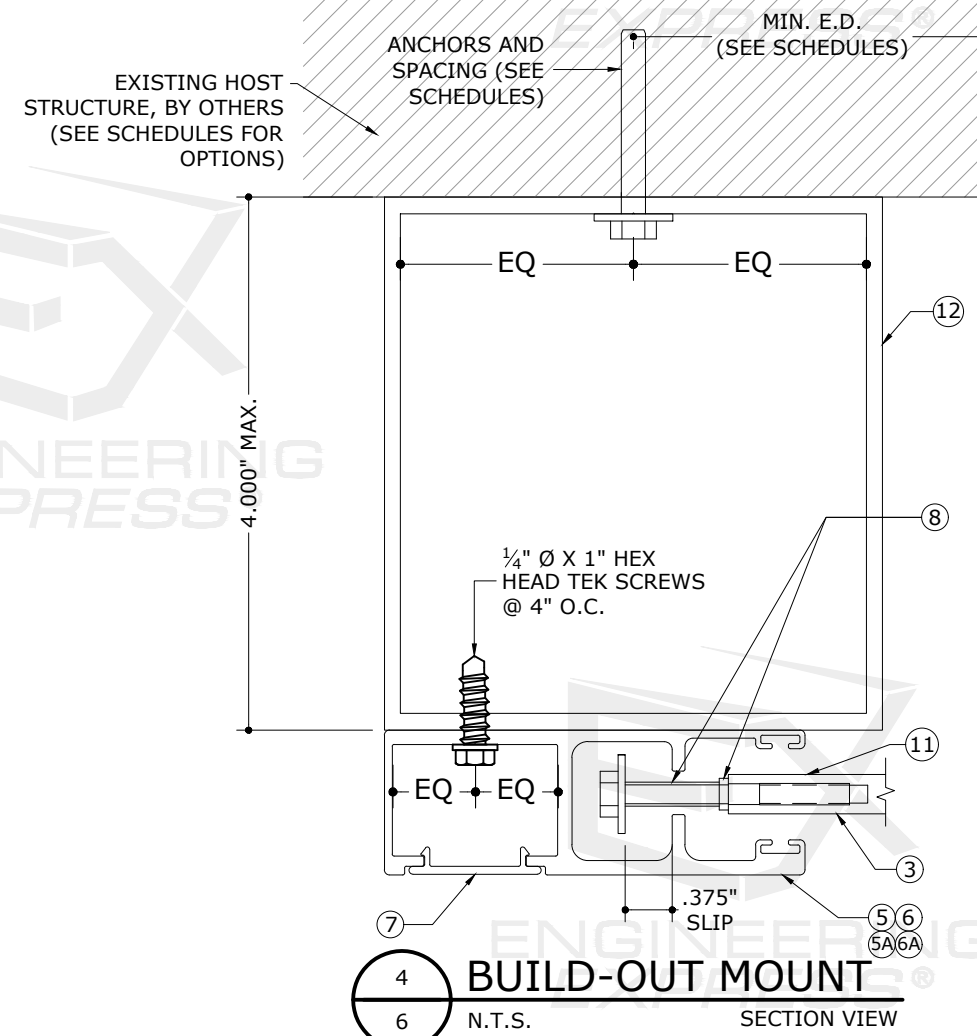
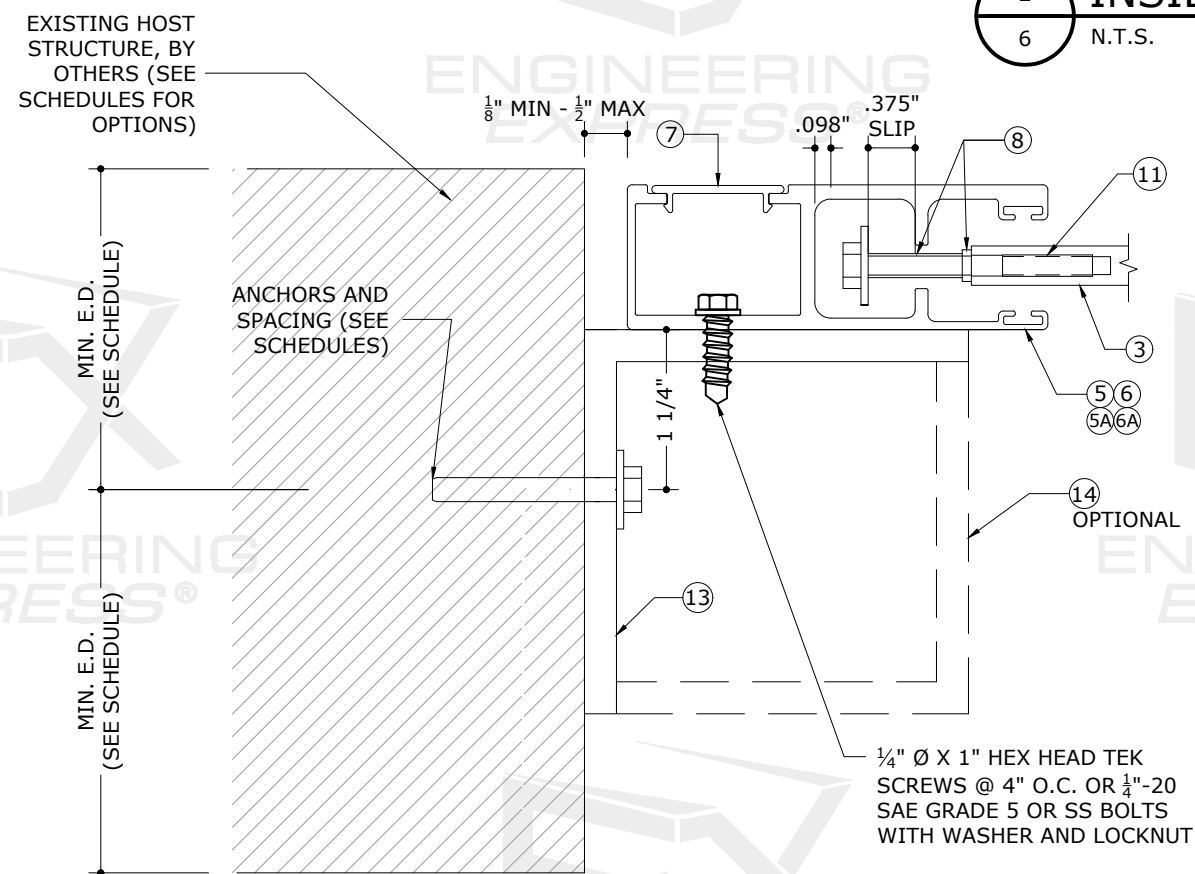
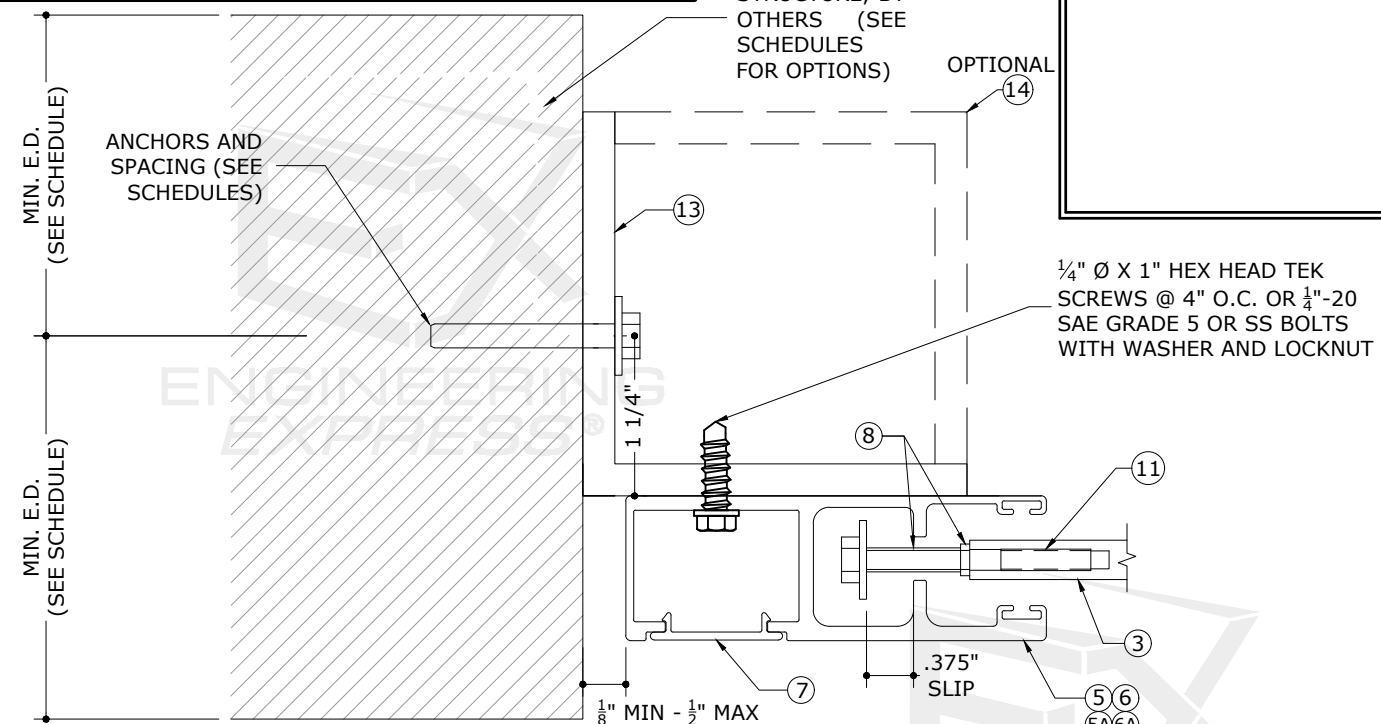
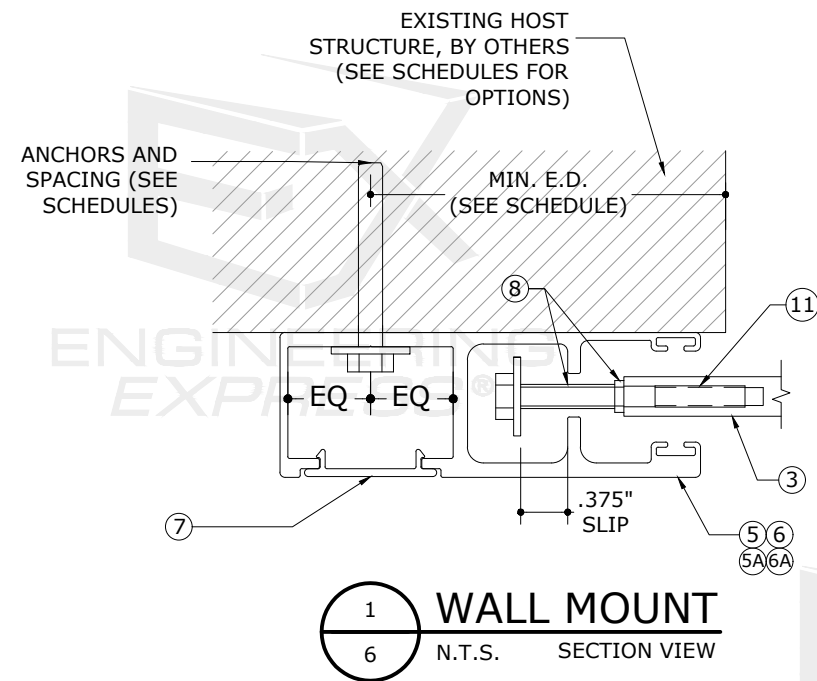
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-	-	-	-
-	-	-	-

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3
6

INSIDE/TRAPPED
MOUNT (REVERSED)

N.T.S.

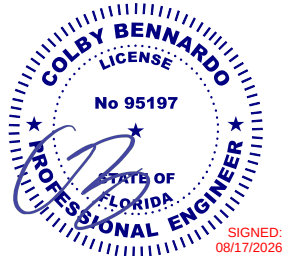
SECTION VIEW

2 INSIDE/TRAPPED MOUNT
6 N.T.S. SECTION VIEW

4 BUILD-OUT MOUNT
6 N.T.S. SECTION VIEW

SHUTTER ATTACHMENT OPTION TO ALUMINUM MULLIONS

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FLORIDA BUILDING CODE NINTH EDITION (2026)

FLORIDA STATEWIDE APPROVAL (FSA FL#31658.1)

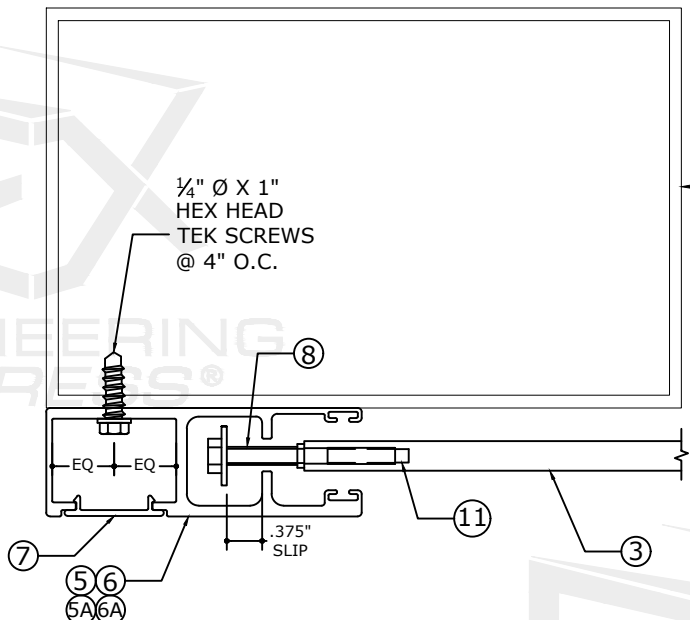
REMARKS	DRWN	CHKD	DATE
2020 FBC (20-31286)	RWN	RWN	02/18/20
2023 FBC (23-65162)	MARH	RWN	09/26/25
2026 FBC UPDATE	MEF	CCB	07/15/26
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26-102861

SCALE: NTS UNLESS NOTED

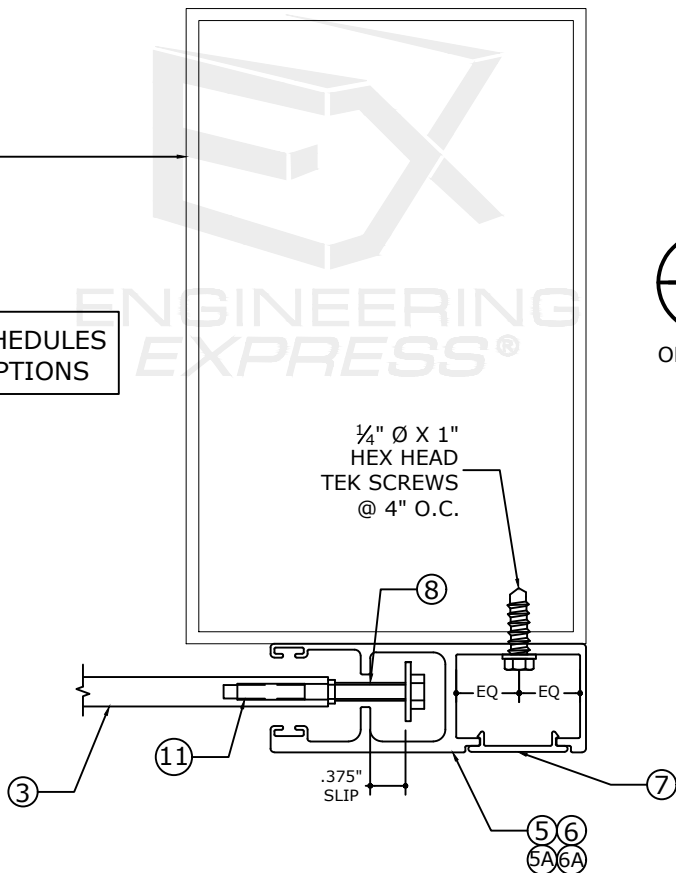
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OF 17

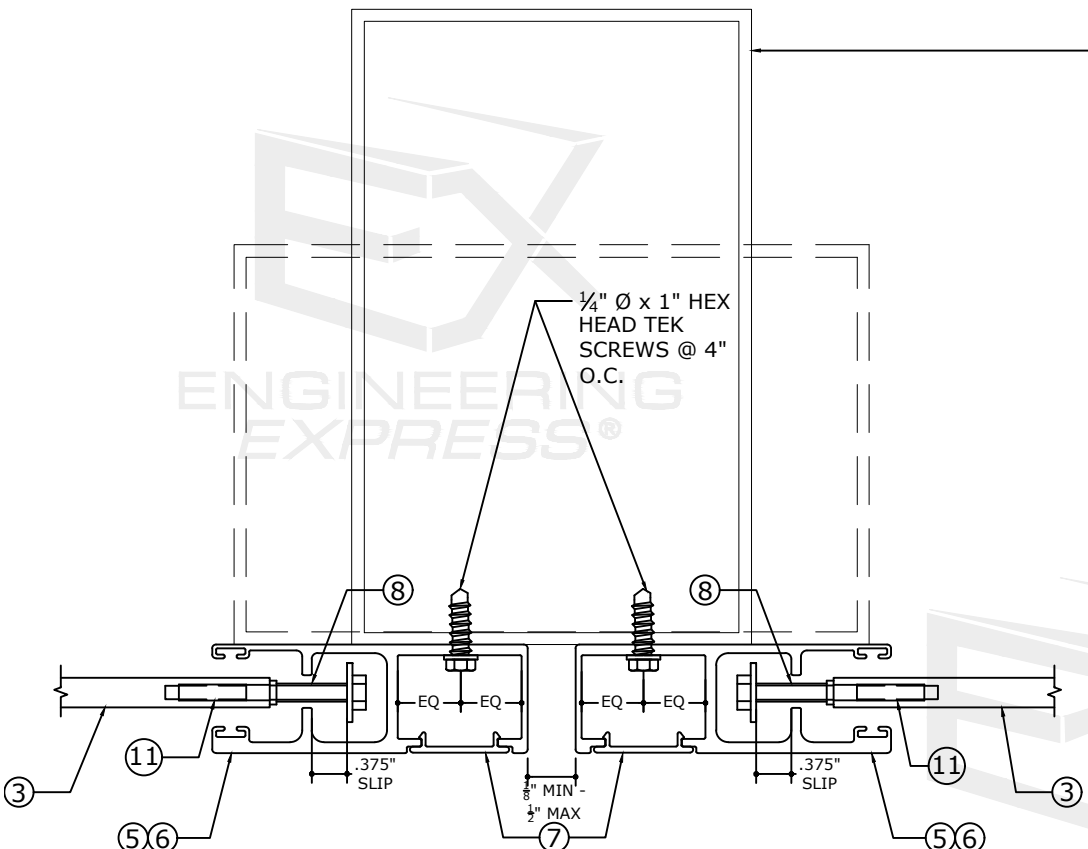


1 FACE MOUNT (END MULLION)
7 N.T.S.
SECTION VIEW

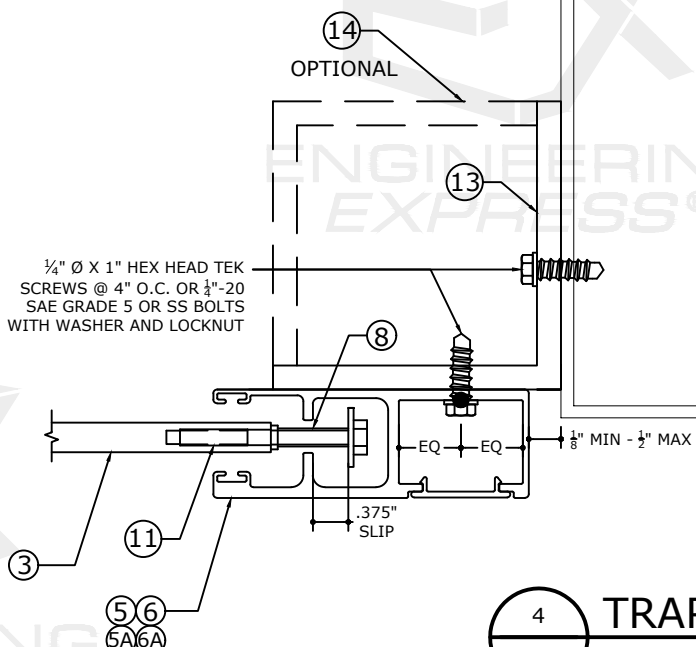
SEE MULLION SCHEDULES
FOR MULLION OPTIONS



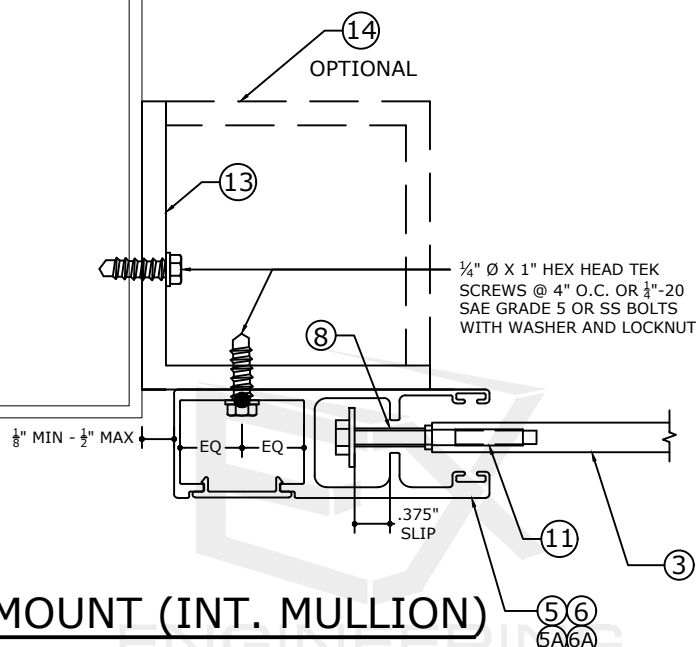
2 FACE MOUNT (END MULLION)
7 N.T.S.
SECTION VIEW
ORIENTATION #2 FACE MOUNT END MULLION

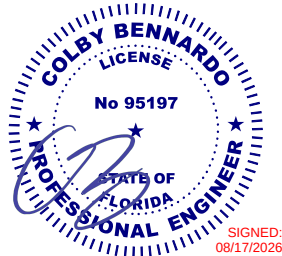


3 FACE MOUNT (INT. MULLION)
7 N.T.S.
SECTION VIEW



4 TRAPPED MOUNT (INT. MULLION)
7 N.T.S.
SECTION VIEW





OPTION 1 ANCHOR SCHEDULE: WALL MOUNT

				MAXIMUM SPACING (O.C.)																	
				1/4" DEWALT ULTRACON TO 3000 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT ; 2.5" MIN. EDGE DISTANCE	1/4" SS ITW TAPCON TO 3192 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT ; 2.5" MIN. EDGE DISTANCE	5/16" HILLMAN GROUP (ALL-POINTS) SCREW TO 3000 CONCRETE; 2.25" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" HILLMAN GROUP (ALL-POINTS) SCREW TO GROUT-FILLED BLOCK; 2.25" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" DEWALT ULTRACON TO 3500 PSI MIN. CONCRETE; 2" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" ITW TAPCON			1/4" DEWALT POWER-BOLT TO 3000 PSI MIN. CONCRETE; 2.5" MIN. EMBEDMENT; 3" MIN. EDGE DISTANCE	1/4" LAG SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT; 0.75" MIN. EDGE DISTANCE	5/16" LAG SCREW TO G=0.42 MIN WOOD; 2" MIN. EMBEDMENT ; 0.75" MIN. EDGE DISTANCE	#14 WOOD SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT; 0.75" MIN. EDGE DISTANCE	#14 410 SS SMS W/ FULL THREAD PENETRATION OR 1/4-20 410 SS THRU-BOLT TO 0.125" MIN. 6063-T6 ALUM; 0.5" MIN. EDGE DISTANCE	5/16" 410 SS SMS W/ FULL THREAD PENETRATION OR 5/16-18 410 SS THRU-BOLT TO 0.25" MIN. 6063-T6 ALUM; 0.625" MIN. EDGE DISTANCE	3/8" DEWALT SCREW BOLT TO 3000 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT; 4.5" MIN. EDGE DISTANCE	3/8" ELCO/DEWALT CONFLX		
SLAT SPAN	DESIGN PRESSURE	Rx	Ry						TO 3000 PSI MIN. CONCRETE; 2.25" MIN. EMBEDMENT ; 3.125" MIN. EDGE DISTANCE	TO GROUT-FILLED CONCRETE BLOCK; 2.25" MIN. EMBEDMENT ; 4" MIN. EDGE DISTANCE	TO HOLLOW CONCRETE BLOCK; 1.75" MIN. EMBEDMENT ; 4" MIN. EDGE DISTANCE										
76.5"	+/- 40 PSF	225.4 LB/FT	127.5 LB/FT	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"			
	+/- 68 PSF	623.6 LB/FT	215.2 LB/FT	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	5.00"	6.00"	3.00"	2.50"	3.25"	6.00"	6.00"	6.00"			
	+/- 95 PSF	1021.3 LB/FT	302.8 LB/FT	4.00"	4.25"	6.00"	6.00"	6.00"	6.00"	5.75"		5.00"			2.00"	4.25"	6.00"	6.00"			
	+/- 123 PSF	1418.6 LB/FT	390.5 LB/FT	3.00"	3.00"	5.75"	4.50"	5.50"	5.50"	4.25"		3.75"				3.00"	6.00"	6.00"			
	+/- 150 PSF	1815.4 LB/FT	478.1 LB/FT	2.25"	2.50"	4.50"	3.50"	4.25"	4.25"	3.25"		2.75"				2.50"	5.75"	6.00"			
108"	+/- 40 PSF	796.9 LB/FT	180.0 LB/FT	5.50"	5.75"	6.00"	6.00"	6.00"	6.00"	6.00"	4.50"	6.00"	2.50"	2.00"	2.50"	6.00"	6.00"	6.00"			
	+/- 57 PSF	1219.4 LB/FT	258.1 LB/FT	3.50"	3.75"	6.00"	5.50"	6.00"	6.00"	5.25"		4.50"				4.00"	6.00"	6.00"			
	+/- 75 PSF	1641.3 LB/FT	336.2 LB/FT	2.50"	2.75"	5.25"	4.00"	5.00"	5.00"	3.75"		3.25"				3.00"	6.00"	6.00"			
	+/- 92 PSF	2062.6 LB/FT	414.4 LB/FT	2.00"		4.25"		4.00"	4.00"	3.00"		2.75"				2.25"	5.25"	6.00"			
	+/- 109 PSF	2483.2 LB/FT	492.5 LB/FT			3.50"			3.25"							2.00"	4.25"	6.00"			
120"	+/- 40 PSF	998.5 LB/FT	200.0 LB/FT	4.25"	4.75"	6.00"	6.00"	6.00"	6.00"	6.00"	3.75"	5.75"	2.00"		2.00"	5.00"	6.00"	6.00"			
	+/- 55 PSF	1426.2 LB/FT	275.0 LB/FT	3.00"	3.25"	6.00"	4.75"	5.75"	5.75"	4.50"		4.00"				3.50"	6.00"	6.00"			
	+/- 70 PSF	1853.3 LB/FT	350.0 LB/FT	2.25"	2.50"	4.75"	3.75"	4.50"	4.50"	3.50"		3.00"				2.50"	6.00"	6.00"			
	+/- 85 PSF	2279.7 LB/FT	425.0 LB/FT			3.75"		3.75"	3.50"			2.50"				2.00"	4.75"	6.00"			
	+/- 100 PSF	2705.5 LB/FT	500.0 LB/FT						3.00"								4.00"	6.00"			
146"	+/- 40 PSF	1436.7 LB/FT	243.3 LB/FT	3.00"	3.25"	6.00"	4.75"	6.00"	6.00"	4.50"		4.00"				3.50"	6.00"	6.00"			
	+/- 52 PSF	1903.7 LB/FT	317.7 LB/FT	2.25"	2.50"	4.75"	3.75"	4.50"	4.50"	3.25"		3.00"				2.75"	6.00"	6.00"			
	+/- 64 PSF	2369.7 LB/FT	392.1 LB/FT			3.75"		3.50"	3.50"			2.50"				2.00"	4.75"	6.00"			
	+/- 77 PSF	2834.6 LB/FT	466.5 LB/FT						3.00"								4.00"	5.75"			
	+/- 89 PSF	3298.3 LB/FT	540.9 LB/FT														3.25"	5.00"			
170"	+/- 40 PSF	1850.9 LB/FT	283.3 LB/FT	2.25"	2.50"	4.75"	3.75"	4.75"	4.50"	3.50"		3.25"				2.75"	6.00"	6.00"			
	+/- 49 PSF	2301.8 LB/FT	350.4 LB/FT			4.00"		3.75"	3.75"			2.50"				2.25"	5.00"	6.00"			
	+/- 59 PSF	2750.7 LB/FT	417.5 LB/FT						3.00"								4.00"	6.00"			
	+/- 68 PSF	3197.6 LB/FT	484.5 LB/FT														3.50"	5.00"			
	+/- 78 PSF	3642.4 LB/FT	551.6 LB/FT														3.00"	4.50"			
206"	+/- 35 PSF	2212.8 LB/FT	300.4 LB/FT	2.00"		4.00"		4.00"	4.00"	3.00"		2.75"				2.25"	5.25"	6.00"			
	+/- 42 PSF	2638.2 LB/FT	356.9 LB/FT			3.50"			3.25"							2.00"	4.25"	6.00"			
	+/- 48 PSF	3063.5 LB/FT	413.4 LB/FT														3.75"	5.25"			
	+/- 55 PSF	3488.8 LB/FT	469.9 LB/FT														3.25"	4.75"			
	+/- 61 PSF	3914.1 LB/FT	526.3 LB/FT														3.00"	4.25"			
241.5"	+/- 30 PSF	2427.4 LB/FT	301.9 LB/FT			3.75"		3.50"	3.50"			2.50"				2.25"	4.75"	6.00"			
	+/- 34 PSF	2735.3 LB/FT	339.6 LB/FT						3.25"							2.00"	4.25"	6.00"			
	+/- 38 PSF	3043.3 LB/FT	377.3 LB/FT														3.75"	5.50"			
	+/- 41 PSF	3351.2 LB/FT	415.1 LB/FT														3.50"	5.00"			
	+/- 45 PSF	3659.1 LB/FT	452.8 LB/FT														3.00"	4.50"			

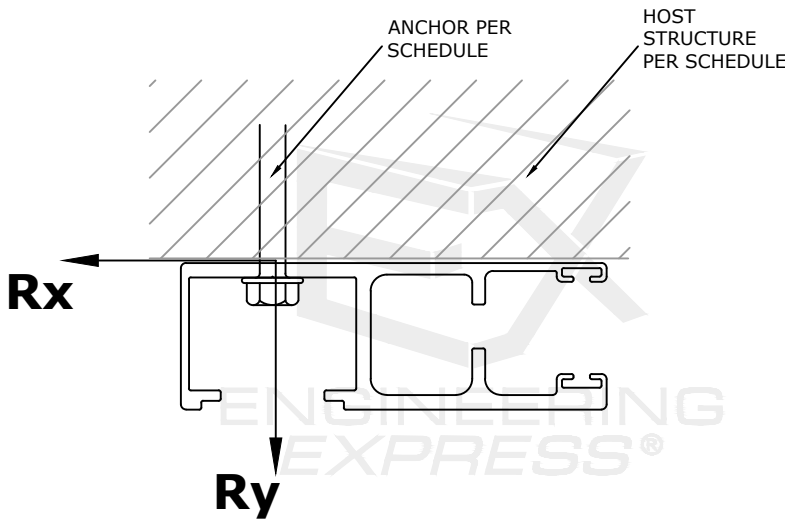
ANCHOR NOTES:

- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- 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).
- MINIMUM EMBEDMENT SHALL BE AS NOTED IN ANCHOR SCHEDULE. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
- 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.
- WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD.
- WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.
- 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.
- SHEET METAL SCREWS SHALL BE INSTALLED WITH FULL ENGAGEMENT OF THREADS INTO METAL HOST STRUCTURE.
- DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE FOR USE.
- ANCHORS TO GROUT-FILLED BLOCK SHALL PENETRATE THROUGH FACE SHELL INTO GROUTED CELL.

ALTERNATE ANCHOR NOTE:

FOR ALL 1/4" AND 5/16" DIAMETER ANCHOR OPTIONS LISTED IN THE ANCHOR SCHEDULES, AN EQUIVALENT DIAMETER HILLMAN/ALL-POINTS SOLID-SET ANCHOR (CARBON OR STAINLESS STEEL) MAY BE USED IN LIEU OF THE OPTION(S) LISTED SO LONG AS THE LISTED MINIMUM EMBEDMENT, EDGE DISTANCE AND SPACING ARE ACHIEVED.

WALL MOUNT DIRECTIVE



FL 31658.1

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2234 NORTH FEDERAL HWY #7664
BOCA RATON, FL 33431
ENGINEERINGEXPRESS.COM

AMERICAN SHUTTER SYSTEMS ASSOCIATION, INC.

4268 WESTROADS DR.

WEST PALM BEACH, FL 33407

(800) 432-2204

SINGLE WALL ROLL-UP HURRICANE SHUTTER

FLORIDA BUILDING CODE NINTH EDITION (2026)

FLORIDA STATEWIDE APPROVAL (FSA FL #31658.1)

REMARKS	DATE	DRWN	CHKD
2020 FBC (20-31266)	02/18/20	RWN	RWN
2023 FBC (23-65162)	09/26/25	MARH	RWN
2026 FBC UPDATE	07/15/26	MEF	OCB

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SINGLE WALL ROLL-UP HURRICANE SHUTTER
FLORIDA BUILDING CODE NINTH EDITION (2026)
FLORIDA STATEWIDE APPROVAL (FSA F1 #31658 1)

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26-102861

SCALE: NTS UNLESS NOTED

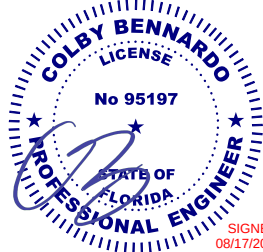
9

ANCHOR NOTES: SEE SHEET
8 FOR ANCHOR NOTES.

A schematic diagram of a bolted flange joint. A horizontal flange is shown with a vertical bolt passing through it. The bolt is labeled "ANCHOR PER SCHEDULE". The flange is labeled "HOST STRUCTURE PER SCHEDULE". A horizontal arrow labeled "Rx" points to the left from the center of the flange. A vertical arrow labeled "Ry" points downwards from the center of the flange. A spring is shown attached to the bottom of the flange, with a vertical arrow pointing upwards from the spring to the flange.

OPTION 1 ANCHOR SCHEDULE: INTERIOR MOUNT

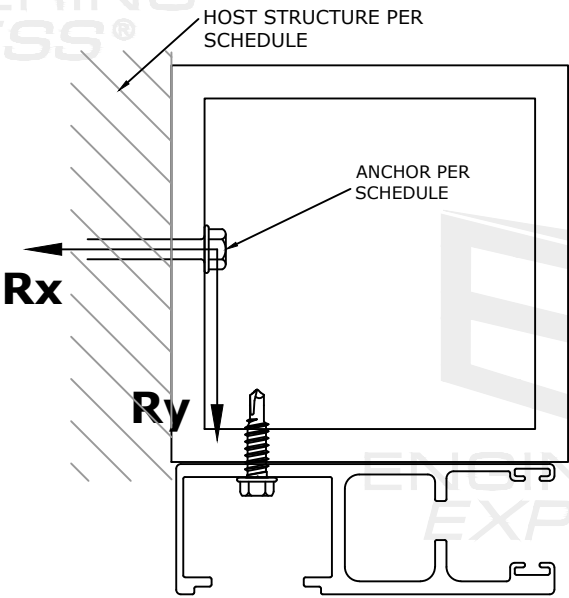
COLBY BENNARDO, P.E.
PE# 95197 CA# 9885



				MAXIMUM SPACING (O.C.)																
SLAT SPAN	DESIGN PRES SURE	Rx	Ry	1/4" DEWALT ULTRACON TO 3000 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT ; 2.5" MIN. EDGE DISTANCE	1/4" SS ITW TAPCON TO 3192 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMEN T; 2.5" MIN. EDGE DISTANCE	5/16" HILLMAN GROUP (ALL-POINTS) SCREW TO 3000 CONCRETE; 2.25" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" HILLMAN GROUP (ALL-POINTS) SCREW TO GROUT-FILLED BLOCK; 2.25" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" DEWALT ULTRACON TO 3500 PSI MIN. CONCRETE; 2" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" ITW TAPCON TO 3000 PSI MIN. CONCRETE; 2.25" MIN. EMBEDMEN T; 3.125" MIN. EDGE DISTANCE	TO GROUT-FILLED CONCRETE BLOCK; 2.25" MIN. EMBEDMEN T; 4" MIN. EDGE DISTANCE	TO HOLLOW CONCRETE BLOCK; 1.75" MIN. EMBEDMEN T; 4" MIN. EDGE DISTANCE	1/4" DEWALT POWER-BOLT TO 3000 PSI MIN. CONCRETE; 2.5" MIN. EMBEDMENT; 3" MIN. EDGE DISTANCE	1/4" LAG SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT; 0.75" MIN. EDGE DISTANCE	5/16" LAG SCREW TO G=0.42 MIN WOOD; 2" MIN. EMBEDMENT ; 0.75" MIN. EDGE DISTANCE	#14 WOOD SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT; 0.75" MIN. EDGE DISTANCE	#14 410 SS SMS W/ FULL THREAD PENETRATION OR 1/4-20 410 SS THRU-BOLT TO 0.125" MIN. 6063-T6 ALUM; 0.5" MIN. EDGE DISTANCE	5/16" 410 SS SMS W/ FULL THREAD PENETRATION OR 5/16-18 410 SS THRU-BOLT TO 0.25" MIN. 6063-T6 ALUM; 0.625" MIN. EDGE DISTANCE	3/8" DEWALT SCREW BOLT TO 3000 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT; 4.5" MIN. EDGE DISTANCE	3/8" ELCO/DEWALT CONFLX TO 1819 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT; 3.75" MIN. EDGE DISTANCE	TO 4510 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT; 3.75" MIN. EDGE DISTANCE
76.5"	+/- 40 PSF	225.4 LB/FT	127.5 LB/FT	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 68 PSF	623.6 LB/FT	215.2 LB/FT	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	4.75"	4.25"	4.50"	4.75"	6.00"	6.00"	6.00"	6.00"
	+/- 95 PSF	1021.3 LB/FT	302.8 LB/FT	4.50"	4.25"	6.00"	5.50"	6.00"	6.00"	6.00"		4.50"	3.00"	2.75"	2.75"	3.00"	6.00"	6.00"	6.00"	6.00"
	+/- 123 PSF	1418.6 LB/FT	390.5 LB/FT	3.25"	3.25"	6.00"	4.00"	5.25"	5.00"	4.50"		3.25"	2.25"	2.00"	2.00"	2.00"	6.00"	6.00"	6.00"	6.00"
108"	+/- 150 PSF	1815.4 LB/FT	478.1 LB/FT	2.50"	2.50"	4.50"		4.00"	3.75"	3.50"		2.50"					5.50"	6.00"	6.00"	6.00"
	+/- 40 PSF	796.9 LB/FT	180.0 LB/FT	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"		6.00"	4.50"	4.25"	4.25"	4.00"	6.00"	6.00"	6.00"	6.00"
	+/- 57 PSF	1219.4 LB/FT	258.1 LB/FT	4.00"	4.00"	5.00"	5.00"	6.00"	6.00"	5.50"		4.00"	3.00"	2.75"	2.75"	2.50"	6.00"	6.00"	6.00"	6.00"
	+/- 75 PSF	1641.3 LB/FT	336.2 LB/FT	3.00"	3.00"	5.50"	3.75"	4.75"	4.50"	4.00"		2.75"	2.25"	2.25"	2.00"	2.00"	6.00"	6.00"	6.00"	6.00"
120"	+/- 92 PSF	2062.6 LB/FT	414.4 LB/FT	2.50"		4.25"		3.75"	3.50"	3.25"							5.00"	6.00"	6.00"	6.00"
	+/- 109 PSF	2483.2 LB/FT	492.5 LB/FT	2.00"		3.50"		3.00"									4.25"	6.00"	6.00"	6.00"
	+/- 40 PSF	998.5 LB/FT	200.0 LB/FT	5.25"	5.00"	6.00"	6.00"	6.00"	6.00"	6.00"		4.75"	3.75"	3.75"	3.50"	3.25"	6.00"	6.00"	6.00"	6.00"
	+/- 55 PSF	1426.2 LB/FT	275.0 LB/FT	3.50"	3.50"	6.00"	4.25"	5.50"	5.25"	4.75"		3.25"	2.75"	2.50"	2.50"	2.25"	6.00"	6.00"	6.00"	6.00"
146"	+/- 70 PSF	1853.3 LB/FT	350.0 LB/FT	2.75"	2.75"	5.00"		4.25"	4.00"	3.75"		2.50"	2.00"	2.00"	2.00"		5.75"	6.00"	6.00"	6.00"
	+/- 85 PSF	2279.7 LB/FT	425.0 LB/FT	2.25"		4.00"		3.50"	3.25"	3.00"							4.50"	6.00"	6.00"	6.00"
	+/- 100 PSF	2705.5 LB/FT	500.0 LB/FT														3.75"	6.00"	5.75"	6.00"
	+/- 40 PSF	1436.7 LB/FT	243.3 LB/FT	3.75"	3.50"	6.00"	4.50"	5.75"	5.50"	5.00"		3.50"	2.75"	2.75"	2.50"	2.25"	6.00"	6.00"	6.00"	6.00"
170"	+/- 52 PSF	1903.7 LB/FT	317.7 LB/FT	2.75"	2.75"	5.00"		4.25"	4.00"	3.75"		2.50"	2.25"	2.00"	2.00"		5.75"	6.00"	6.00"	6.00"
	+/- 64 PSF	2369.7 LB/FT	392.1 LB/FT	2.25"		4.00"		3.50"	3.25"	3.00"							4.50"	6.00"	6.00"	6.00"
	+/- 77 PSF	2834.6 LB/FT	466.5 LB/FT														3.75"	6.00"	5.75"	6.00"
	+/- 89 PSF	3298.3 LB/FT	540.9 LB/FT														3.25"	6.00"	4.75"	6.00"
206"	+/- 40 PSF	1850.9 LB/FT	283.3 LB/FT	3.00"	2.75"	5.25"	3.50"	4.50"	4.25"	3.75"		2.75"	2.25"	2.25"	2.00"		6.00"	6.00"	6.00"	6.00"
	+/- 49 PSF	2301.8 LB/FT	350.4 LB/FT	2.25"		4.00"		3.50"	3.25"	3.00"							4.75"	6.00"	6.00"	6.00"
	+/- 59 PSF	2750.7 LB/FT	417.5 LB/FT	2.00"		3.50"											4.00"	6.00"	6.00"	6.00"
	+/- 68 PSF	3197.6 LB/FT	484.5 LB/FT														3.50"	6.00"	5.00"	6.00"
241.5"	+/- 78 PSF	3642.4 LB/FT	551.6 LB/FT														3.00"	5.50"	4.50"	6.00"
	+/- 35 PSF	2212.8 LB/FT	300.4 LB/FT	2.50"		4.25"		3.75"	3.50"	3.25"			2.00"	2.00"			5.00"	6.00"	6.00"	6.00"
	+/- 42 PSF	2638.2 LB/FT	356.9 LB/FT	2.00"		3.75"			3.00"								4.25"	6.00"	6.00"	6.00"
	+/- 48 PSF	3063.5 LB/FT	413.4 LB/FT														3.50"	6.00"	5.50"	6.00"
	+/- 55 PSF	3488.8 LB/FT	469.9 LB/FT														3.25"	6.00"	4.75"	6.00"
	+/- 61 PSF	3914.1 LB/FT	526.3 LB/FT														2.75"	5.25"		6.00"
	+/- 30 PSF	2427.4 LB/FT	301.9 LB/FT	2.25"		4.00"		3.50"	3.25"	3.00"							4.50"	6.00"	6.00"	6.00"
	+/- 34 PSF	2735.3 LB/FT	339.6 LB/FT	2.00"		3.50"			3.00"								4.00"	6.00"	6.00"	6.00"
	+/- 38 PSF	3043.3 LB/FT	377.3 LB/FT														3.75"	6.00"	5.50"	6.00"
	+/- 41 PSF	3351.2 LB/FT	415.1 LB/FT														3.25"	6.00"	5.00"	6.00"
	+/- 45 PSF	3659.1 LB/FT	452.8 LB/FT														3.00"	5.75"	4.50"	6.00"

ANCHOR NOTES: SEE SHEET 8 FOR ANCHOR NOTES.

INTERIOR MOUNT DIRECTIVE



FL 31658.1

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4268 WESTROADS DR.

WEST PALM BEACH, FL 33407

(800) 432-2204

SINGLE WALL ROLL-UP HURRICANE SHUTTER

FLORIDA BUILDING CODE NINTH EDITION (2026)

FLORIDA STATEWIDE APPROVAL (FSA FL#31658.1)

REMARKS	DRWN	CHKD	DATE
2020 FBC (20-31266)	RWN	RWN	02/18/20
2023 FBC (23-65162)	MARH	RWN	09/26/25
2026 FBC UPDATE	MEF	OCB	07/15/26

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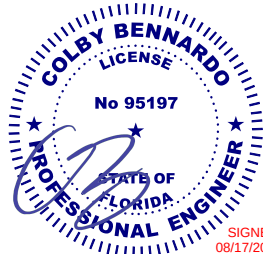
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SCALE: NTS UNLESS NOTED

10 OF 17

OPTION 2 ANCHOR SCHEDULE: WALL MOUNT

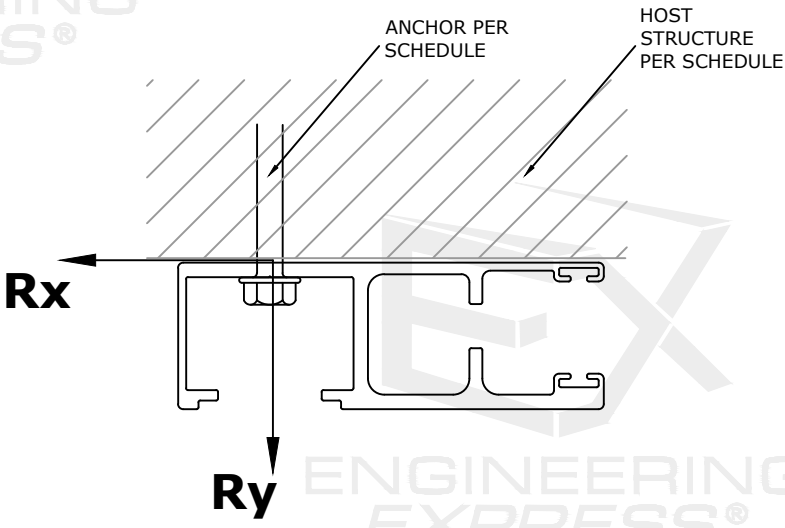
COLBY BENNARDO, P.E.
PE# 95197 CA# 9885



				MAXIMUM SPACING (O.C.)																	
				1/4" DEWALT ULTRACON TO 3000 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT ; 2.5" MIN. EDGE DISTANCE	1/4" SS ITW TAPCON TO 3192 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMEN T; 2.5" MIN. EDGE DISTANCE	5/16" HILLMAN GROUP (ALL- POINTS) SCREW TO 3000 CONCRETE; 2.25" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" HILLMAN GROUP (ALL- POINTS) SCREW TO GROUT- FILLED BLOCK; 2.25" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" DEWALT ULTRACON TO 3500 PSI MIN. CONCRETE; 2" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" ITW TAPCON			1/4" DEWALT POWER-BOLT TO 3000 PSI MIN. CONCRETE; 2.5" MIN. EMBEDMENT; 3" MIN. EDGE DISTANCE	1/4" LAG SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT; 0.75" MIN. EDGE DISTANCE	5/16" LAG SCREW TO G=0.42 MIN WOOD; 2" MIN. EMBEDMENT ; 0.75" MIN. EDGE DISTANCE	#14 WOOD SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT; 0.75" MIN. EDGE DISTANCE	#14 410 SS SMS W/ FULL THREAD PENETRATION OR 1/4-20 410 SS THRU-BOLT TO 0.125" MIN. 6063- T6 ALUM; 0.5" MIN. EDGE DISTANCE	5/16" 410 SS SMS W/ FULL THREAD PENETRATION OR 5/16-18 410 SS THRU-BOLT TO 0.25" MIN. 6063-T6 ALUM; 0.625" MIN. EDGE DISTANCE	3/8" DEWALT SCREW BOLT TO 3000 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT; 4.5" MIN. EDGE DISTANCE	3/8" ELCO/DEWALT CONFLX		
SLAT SPAN	DESIGN PRESSURE	R _x	R _y						TO 3000 PSI MIN. CONCRETE; 2.25" MIN. EMBEDMEN T; 3.125" MIN. EDGE DISTANCE	TO GROUT- FILLED CONCRETE BLOCK; 2.25" MIN. EMBEDMEN T; 4" MIN. EDGE DISTANCE	TO HOLLOW CONCRETE BLOCK; 1.75" MIN. EMBEDMEN T; 4" MIN. EDGE DISTANCE									TO 1819 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT; 3.75" MIN. EDGE DISTANCE	TO 4510 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT; 3.75" MIN. EDGE DISTANCE
76.5"	+/- 40 PSF	225.4 LB/FT	127.5 LB/FT	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 68 PSF	623.6 LB/FT	215.2 LB/FT	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	5.00"	6.00"	3.00"	2.50"	3.25"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 95 PSF	1021.3 LB/FT	302.8 LB/FT	4.00"	4.25"	6.00"	6.00"	6.00"	6.00"	6.00"	5.75"		5.00"		2.00"	4.25"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 123 PSF	1418.6 LB/FT	390.5 LB/FT	3.00"	3.00"	5.75"	4.50"	5.50"	5.50"	4.25"		3.75"				3.00"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 150 PSF	1815.4 LB/FT	478.1 LB/FT	2.25"	2.50"	4.50"	3.50"	4.25"	4.25"	3.25"		2.75"				2.50"	5.75"	6.00"	6.00"	6.00"	6.00"
108"	+/- 40 PSF	796.9 LB/FT	180.0 LB/FT	5.50"	5.75"	6.00"	6.00"	6.00"	6.00"	6.00"	4.50"	6.00"	2.50"	2.00"	2.50"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 56 PSF	1192.4 LB/FT	253.1 LB/FT	3.50"	4.00"	6.00"	5.75"	6.00"	6.00"	5.25"		4.75"				4.00"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 73 PSF	1587.3 LB/FT	326.3 LB/FT	2.75"	3.00"	5.50"	4.25"	5.25"	5.25"	4.00"		3.50"				3.00"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 89 PSF	1981.8 LB/FT	399.4 LB/FT	2.00"		4.25"	3.50"	4.25"	4.00"	3.25"		2.75"				2.50"	5.50"	6.00"	6.00"	6.00"	6.00"
	+/- 105 PSF	2375.7 LB/FT	472.5 LB/FT			3.50"		3.50"	3.50"							2.00"	4.50"	6.00"	6.00"	6.00"	6.00"
120"	+/- 40 PSF	998.5 LB/FT	200.0 LB/FT	4.25"	4.75"	6.00"	6.00"	6.00"	6.00"	6.00"	3.75"	5.75"	2.00"		2.00"	5.00"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 51 PSF	1319.3 LB/FT	256.3 LB/FT	3.25"	3.50"	6.00"	5.25"	6.00"	6.00"	4.75"		4.25"				3.75"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 63 PSF	1639.8 LB/FT	312.5 LB/FT	2.50"	2.75"	5.25"	4.25"	5.00"	5.00"	3.75"		3.50"				3.00"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 74 PSF	1959.9 LB/FT	368.8 LB/FT	2.25"		4.50"	3.50"	4.25"	4.25"	3.25"		2.75"				2.50"	5.50"	6.00"	6.00"	6.00"	6.00"
	+/- 85 PSF	2279.7 LB/FT	425.0 LB/FT			3.75"		3.75"	3.50"			2.50"				2.00"	4.75"	6.00"	6.00"	6.00"	6.00"
146"	+/- 40 PSF	1436.7 LB/FT	243.3 LB/FT	3.00"	3.25"	6.00"	4.75"	6.00"	6.00"	4.50"		4.00"				3.50"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 47 PSF	1705.1 LB/FT	286.1 LB/FT	2.50"	2.75"	5.25"	4.00"	5.00"	5.00"	3.75"		3.25"				3.00"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 54 PSF	1973.3 LB/FT	328.8 LB/FT	2.25"	2.50"	4.50"	3.50"	4.25"	4.25"	3.25"		3.00"				2.50"	5.75"	6.00"	6.00"	6.00"	6.00"
	+/- 61 PSF	2241.0 LB/FT	371.5 LB/FT	2.00"		4.00"		3.75"	3.75"			2.50"				2.25"	5.00"	6.00"	6.00"	6.00"	6.00"
	+/- 68 PSF	2508.4 LB/FT	414.3 LB/FT			3.50"		3.25"								2.00"	4.50"	6.00"	6.00"	6.00"	6.00"
170"	+/- 35 PSF	1612.1 LB/FT	247.9 LB/FT	2.75"	3.00"	5.50"	4.50"	5.25"	5.25"	4.00"		3.75"				3.25"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 39 PSF	1817.5 LB/FT	278.4 LB/FT	2.50"	2.75"	5.00"	4.00"	4.75"	4.75"	3.50"		3.25"				2.75"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 44 PSF	2022.6 LB/FT	308.8 LB/FT	2.25"		4.50"	3.50"	4.25"	4.25"	3.25"		2.75"				2.50"	5.50"	6.00"	6.00"	6.00"	6.00"
	+/- 48 PSF	2227.2 LB/FT	339.3 LB/FT	2.00"		4.00"		3.75"	3.75"	3.00"		2.50"				2.25"	5.00"	6.00"	6.00"	6.00"	6.00"
	+/- 52 PSF	2431.5 LB/FT	369.8 LB/FT			3.75"		3.50"	3.50"							2.00"	4.75"	6.00"	6.00"	6.00"	6.00"
182"	+/- 30 PSF	1545.9 LB/FT	227.5 LB/FT	2.75"	3.25"	5.75"	4.50"	5.50"	5.50"	4.25"		3.75"				3.25"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 34 PSF	1747.0 LB/FT	255.9 LB/FT	2.50"	2.75"	5.25"	4.00"	5.00"	5.00"	3.75"		3.25"				3.00"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 38 PSF	1948.1 LB/FT	284.4 LB/FT	2.25"	2.50"	4.75"	3.75"	4.50"	4.50"	3.25"		3.00"				2.75"	5.75"	6.00"	6.00"	6.00"	6.00"
	+/- 41 PSF	2149.3 LB/FT	312.8 LB/FT	2.00"		4.25"		4.00"	4.00"	3.00"		2.75"				2.50"	5.25"	6.00"	6.00"	6.00"	6.00"
	+/- 45 PSF	2350.4 LB/FT	341.3 LB/FT			3.75"		3.75"	3.75"			2.50"				2.25"	4.75"	6.00"	6.00"	6.00"	6.00"

ANCHOR NOTES: SEE SHEET
8 FOR ANCHOR NOTES.

WALL MOUNT DIRECTIVE



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WEST PALM BEACH, FL 33407
(800) 432-2204
SINGLE WALL ROLL-UP HURRICANE SHUTTER
FLORIDA BUILDING CODE NINTH EDITION (2026)
FLORIDA STATEWIDE APPROVAL (FSA FL#31658.1)

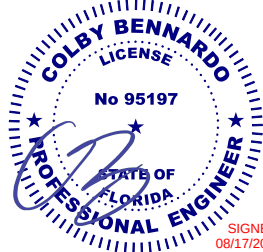
REMARKS	DRWN	CHKD	DATE
2020 FBC (20-31266)	RWN	RWN	02/18/20
2023 FBC (23-65162)	MARH	RWN	09/26/25
2026 FBC UPDATE	MEF	OCB	07/15/26

26-102861

SCALE: NTS UNLESS NOTED

OPTION 2 ANCHOR SCHEDULE: BUILD-OUT MOUNT

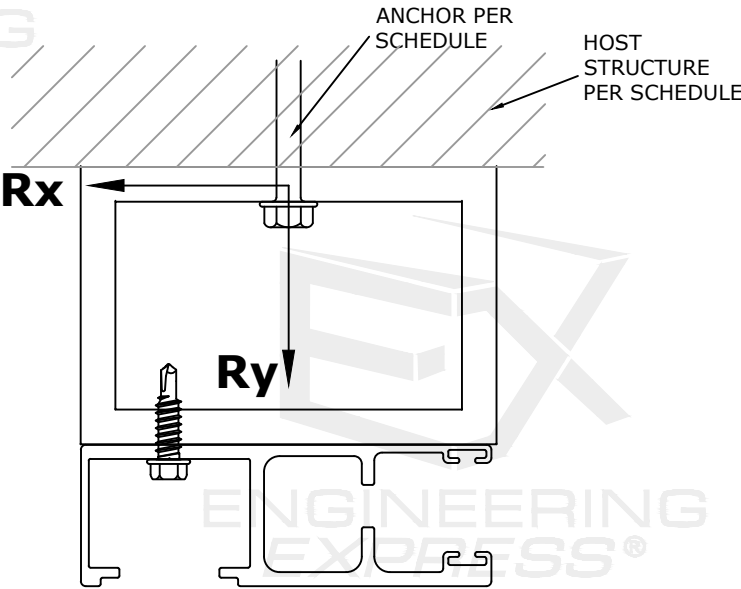
COLBY BENNARDO, P.E.
PE# 95197 CA# 9885



				MAXIMUM SPACING (O.C.)																
				1/4" DEWALT ULTRACON TO 3000 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT ; 2.5" MIN. EDGE DISTANCE	1/4" SS ITW TAPCON TO 3192 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMEN T; 2.5" MIN. EDGE DISTANCE	5/16" HILLMAN GROUP (ALL- POINTS) SCREW TO 3000 CONCRETE; 2.25" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" HILLMAN GROUP (ALL- POINTS) SCREW TO GROUT- FILLED BLOCK; 2.25" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" DEWALT ULTRACON TO 3500 PSI MIN. CONCRETE; 2" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" ITW TAPCON TO 3000 PSI MIN. CONCRETE; 2.25" MIN. EMBEDMEN T; 3.125" MIN. EDGE DISTANCE	TO GROUT- FILLED CONCRETE BLOCK; 2.25" MIN. EMBEDMEN T; 4" MIN. EDGE DISTANCE	TO HOLLOW CONCRETE BLOCK; 1.75" MIN. EMBEDMEN T; 4" MIN. EDGE DISTANCE	1/4" DEWALT POWER-BOLT TO 3000 PSI MIN. CONCRETE; 2.5" MIN. EMBEDMENT; 3" MIN. EDGE DISTANCE	1/4" LAG SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT; 0.75" MIN. EDGE DISTANCE	5/16" LAG SCREW TO G=0.42 MIN WOOD; 2" MIN. EMBEDMENT ; 0.75" MIN. EDGE DISTANCE	#14 WOOD SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT; 0.75" MIN. EDGE DISTANCE	#14 410 SS SMS W/ FULL THREAD PENETRATION OR 1/4-20 410 SS THRU-BOLT TO 0.125" MIN. 6063- T6 ALUM; 0.5" MIN. EDGE DISTANCE	5/16" 410 SS SMS W/ FULL THREAD PENETRATION OR 5/16-18 410 SS THRU-BOLT TO 0.25" MIN. 6063-T6 ALUM; 0.625" MIN. EDGE DISTANCE	3/8" DEWALT SCREW BOLT TO 3000 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT; 4.5" MIN. EDGE DISTANCE	3/8" ELCO/DEWALT CONFLX TO 1819 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT; 3.75" MIN. EDGE DISTANCE	TO 4510 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT; 3.75" MIN. EDGE DISTANCE
SLAT SPAN	DESIGN PRESSURE	R _x	R _y																	
76.5"	+/- 40 PSF	225.4 LB/FT	127.5 LB/FT	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	5.75"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 68 PSF	623.6 LB/FT	215.2 LB/FT	5.25"	5.75"	6.00"	6.00"	6.00"	6.00"	6.00"	4.25"	6.00"	2.50"	2.00"	2.50"	5.75"	6.00"	6.00"	6.00"	6.00"
	+/- 95 PSF	1021.3 LB/FT	302.8 LB/FT	3.25"	3.50"	6.00"	5.25"	6.00"	6.00"	4.75"		4.75"				3.50"	6.00"	6.00"	6.00"	6.00"
	+/- 123 PSF	1418.6 LB/FT	390.5 LB/FT	2.25"	2.50"	4.75"	3.75"	4.50"	4.50"	3.50"		3.50"				2.50"	6.00"	6.00"	6.00"	6.00"
	+/- 150 PSF	1815.4 LB/FT	478.1 LB/FT			3.75"		3.50"	3.50"			2.75"				2.00"	4.75"	6.00"	6.00"	6.00"
108"	+/- 40 PSF	796.9 LB/FT	180.0 LB/FT	4.50"	4.75"	6.00"	6.00"	6.00"	6.00"	6.00"	3.75"	6.00"	2.00"		2.00"	5.00"	6.00"	6.00"	6.00"	6.00"
	+/- 56 PSF	1192.4 LB/FT	253.1 LB/FT	3.00"	3.25"	6.00"	4.75"	5.75"	5.75"	4.25"		4.25"				3.50"	6.00"	6.00"	6.00"	6.00"
	+/- 73 PSF	1587.3 LB/FT	326.3 LB/FT	2.25"		4.50"	3.50"	4.25"	4.25"	3.25"		3.25"				2.50"	5.75"	6.00"	6.00"	6.00"
	+/- 89 PSF	1981.8 LB/FT	399.4 LB/FT			3.50"		3.50"	3.50"			2.50"				2.00"	4.50"	6.00"	6.00"	6.00"
	+/- 105 PSF	2375.7 LB/FT	472.5 LB/FT														3.75"	5.50"	6.00"	6.00"
120"	+/- 40 PSF	998.5 LB/FT	200.0 LB/FT	3.50"	3.75"	6.00"	5.75"	6.00"	6.00"	5.25"		5.25"				4.00"	6.00"	6.00"	6.00"	6.00"
	+/- 51 PSF	1319.3 LB/FT	256.3 LB/FT	2.75"	3.00"	5.50"	4.25"	5.25"	5.25"	4.00"		4.00"				3.00"	6.00"	6.00"	6.00"	6.00"
	+/- 63 PSF	1639.8 LB/FT	312.5 LB/FT	2.00"		4.25"	3.50"	4.25"	4.25"	3.25"		3.25"				2.50"	5.50"	6.00"	6.00"	6.00"
	+/- 74 PSF	1959.9 LB/FT	368.8 LB/FT			3.75"		3.50"	3.50"			2.75"				2.00"	4.50"	6.00"	6.00"	6.00"
	+/- 85 PSF	2279.7 LB/FT	425.0 LB/FT						3.00"								4.00"	5.75"	6.00"	6.00"
146"	+/- 40 PSF	1436.7 LB/FT	243.3 LB/FT	2.50"	2.75"	5.00"	4.00"	4.75"	4.75"	3.75"		3.75"				3.00"	6.00"	6.00"	6.00"	6.00"
	+/- 47 PSF	1705.1 LB/FT	286.1 LB/FT	2.00"		4.25"		4.00"	4.00"	3.00"		3.00"				2.50"	5.50"	6.00"	6.00"	6.00"
	+/- 54 PSF	1973.3 LB/FT	328.8 LB/FT			3.75"		3.50"	3.50"			2.75"				2.00"	4.75"	6.00"	6.00"	6.00"
	+/- 61 PSF	2241.0 LB/FT	371.5 LB/FT						3.00"								4.00"	6.00"	6.00"	6.00"
	+/- 68 PSF	2508.4 LB/FT	414.3 LB/FT														3.75"	5.25"	5.75"	6.00"
170"	+/- 35 PSF	1612.1 LB/FT	247.9 LB/FT	2.25"	2.50"	4.50"	3.50"	4.50"	4.25"	3.25"		3.25"				2.75"	5.75"	6.00"	6.00"	6.00"
	+/- 39 PSF	1817.5 LB/FT	278.4 LB/FT	2.00"		4.00"		3.75"	3.75"	3.00"		3.00"				2.25"	5.00"	6.00"	6.00"	6.00"
	+/- 44 PSF	2022.6 LB/FT	308.8 LB/FT			3.50"		3.50"	3.50"			2.75"				2.00"	4.50"	6.00"	6.00"	6.00"
	+/- 48 PSF	2227.2 LB/FT	339.3 LB/FT						3.00"			2.50"				2.00"	4.25"	6.00"	6.00"	6.00"
	+/- 52 PSF	2431.5 LB/FT	369.8 LB/FT														3.75"	5.50"	6.00"	6.00"
182"	+/- 30 PSF	1545.9 LB/FT	227.5 LB/FT	2.25"	2.50"	4.75"	3.75"	4.50"	4.50"	3.50"		3.50"				2.75"	6.00"	6.00"	6.00"	6.00"
	+/- 34 PSF	1747.0 LB/FT	255.9 LB/FT	2.00"		4.25"		4.00"	4.00"	3.00"		3.00"				2.50"	5.25"	6.00"	6.00"	6.00"
	+/- 38 PSF	1948.1 LB/FT	284.4 LB/FT			3.75"		3.50"	3.50"			2.75"				2.25"	4.75"	6.00"	6.00"	6.00"
	+/- 41 PSF	2149.3 LB/FT	312.8 LB/FT			3.50"			3.25"			2.50"				2.00"	4.25"	6.00"	6.00"	6.00"
	+/- 45 PSF	2350.4 LB/FT	341.3 LB/FT						3.00"								4.00"	5.75"	6.00"	6.00"

ANCHOR NOTES: SEE SHEET
8 FOR ANCHOR NOTES.

BUILD-OUT MOUNT DIRECTIVE



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WEST PALM BEACH, FL 33407

(800) 432-2204

SINGLE WALL ROLL-UP HURRICANE SHUTTER

FLORIDA BUILDING CODE NINTH EDITION (2026)

FLORIDA STATEWIDE APPROVAL (FSA FL #31658.1)

REMARKS	DRWN	CHKD	DATE
2020 FBC (20-31266)	RWN	RWN	02/18/20
2023 FBC (23-65162)	MARH	RWN	09/26/25
2026 FBC UPDATE	MEF	OCB	07/15/26

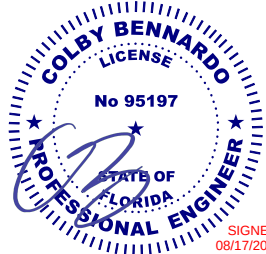
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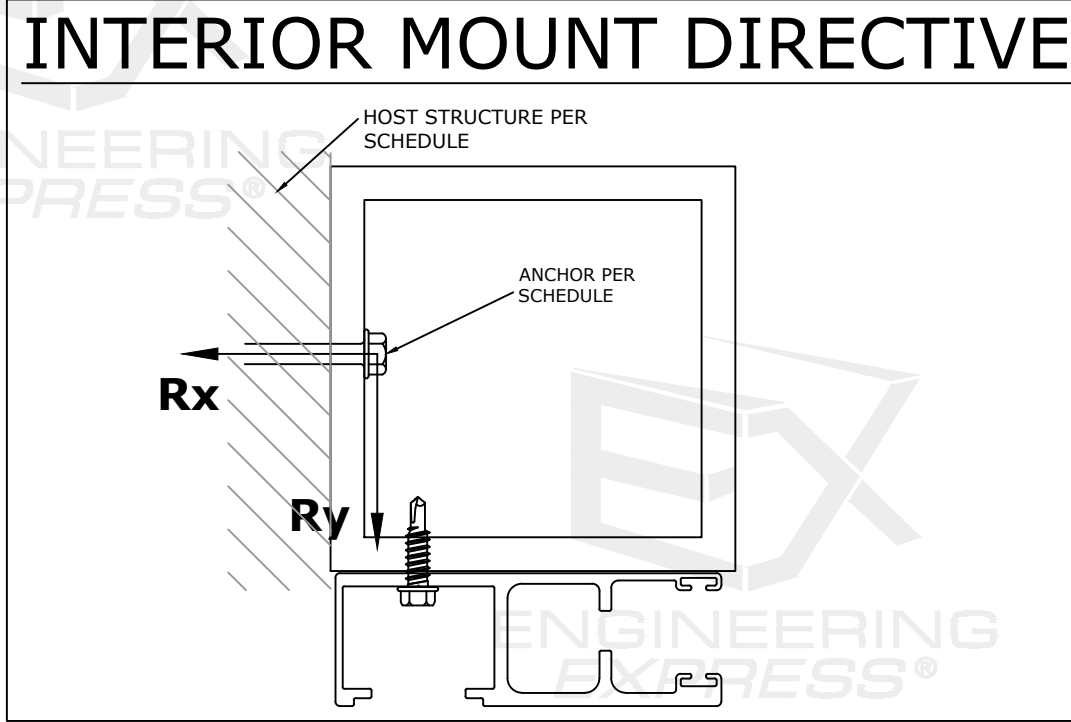
OPTION 2 ANCHOR SCHEDULE: INTERIOR MOUNT

COLBY BENNARDO, P.E.
PE# 95197 CA# 9885



				MAXIMUM SPACING (O.C.)																
SLAT SPAN	DESIGN PRESSURE	Rx	Ry	1/4" DEWALT ULTRACON TO 3000 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMENT ; 2.5" MIN. EDGE DISTANCE	1/4" SS ITW TAPCON TO 3192 PSI MIN. CONCRETE; 1.75" MIN. EMBEDMEN T; 2.5" MIN. EDGE DISTANCE	5/16" HILLMAN GROUP (ALL- POINTS) SCREW TO 3000 CONCRETE; 2.25" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" HILLMAN GROUP (ALL- POINTS) SCREW TO GROUT- FILLED BLOCK; 2.25" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" DEWALT ULTRACON TO 3500 PSI MIN. CONCRETE; 2" MIN. EMBEDMENT; 3.125" MIN. EDGE DISTANCE	5/16" ITW TAPCON TO 3000 PSI MIN. CONCRETE; 2.25" MIN. EMBEDMEN T; 3.125" MIN. EDGE DISTANCE	TO GROUT- FILLED CONCRETE BLOCK; 2.25" MIN. EMBEDMEN T; 4" MIN. EDGE DISTANCE	TO HOLLOW CONCRETE BLOCK; 1.75" MIN. EMBEDMEN T; 4" MIN. EDGE DISTANCE	1/4" DEWALT POWER-BOLT TO 3000 PSI MIN. CONCRETE; 2.5" MIN. EMBEDMENT; 3" MIN. EDGE DISTANCE	1/4" LAG SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT; 0.75" MIN. EDGE DISTANCE	5/16" LAG SCREW TO G=0.42 MIN WOOD; 2" MIN. EMBEDMENT ; 0.75" MIN. EDGE DISTANCE	#14 WOOD SCREW TO G=0.55 MIN WOOD; 1.5" MIN. EMBEDMENT; 0.75" MIN. EDGE DISTANCE	#14 410 SS SMS W/ FULL THREAD PENETRATION OR 1/4-20 410 SS THRU-BOLT TO 0.125" MIN. 6063- T6 ALUM; 0.5" MIN. EDGE DISTANCE	5/16" 410 SS SMS W/ FULL THREAD PENETRATION OR 5/16-18 410 SS THRU-BOLT TO 0.25" MIN. 6063-T6 ALUM; 0.625" MIN. EDGE DISTANCE	3/8" DEWALT SCREW BOLT TO 3000 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT; 4.5" MIN. EDGE DISTANCE	3/8" ELCO/DEWALT CONFLX TO 1819 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT; 3.75" MIN. EDGE DISTANCE	TO 4510 PSI MIN. CONCRETE; 3.5" MIN. EMBEDMENT; 3.75" MIN. EDGE DISTANCE
76.5"	+/- 40 PSF	225.4 LB/FT	127.5 LB/FT	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"
	+/- 68 PSF	623.6 LB/FT	215.2 LB/FT	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"		6.00"	4.75"	4.25"	4.50"	4.75"	6.00"	6.00"	6.00"	6.00"
	+/- 95 PSF	1021.3 LB/FT	302.8 LB/FT	4.50"	4.25"	6.00"	5.50"	6.00"	6.00"	6.00"		4.50"	3.00"	2.75"	2.75"	3.00"	6.00"	6.00"	6.00"	6.00"
	+/- 123 PSF	1418.6 LB/FT	390.5 LB/FT	3.25"	3.25"	6.00"	4.00"	5.25"	5.00"	4.50"		3.25"	2.25"	2.00"	2.00"	2.00"	6.00"	6.00"	6.00"	6.00"
	+/- 150 PSF	1815.4 LB/FT	478.1 LB/FT	2.50"	2.50"	4.50"		4.00"	3.75"	3.50"		2.50"					5.50"	6.00"	6.00"	6.00"
108"	+/- 40 PSF	796.9 LB/FT	180.0 LB/FT	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"	6.00"		6.00"	4.50"	4.25"	4.25"	4.00"	6.00"	6.00"	6.00"	6.00"
	+/- 56 PSF	1192.4 LB/FT	253.1 LB/FT	4.25"	4.00"	6.00"	5.25"	6.00"	6.00"	5.75"		4.00"	3.25"	3.00"	2.75"	2.50"	6.00"	6.00"	6.00"	6.00"
	+/- 73 PSF	1587.3 LB/FT	326.3 LB/FT	3.25"	3.00"	5.75"	3.75"	5.00"	4.75"	4.25"		3.00"	2.25"	2.25"	2.25"	2.00"	6.00"	6.00"	6.00"	6.00"
	+/- 89 PSF	1981.8 LB/FT	399.4 LB/FT	2.50"	2.50"	4.50"		4.00"	3.75"	3.50"			2.00"				5.25"	6.00"	6.00"	6.00"
	+/- 105 PSF	2375.7 LB/FT	472.5 LB/FT	2.00"		3.75"			3.00"								4.25"	6.00"	6.00"	6.00"
120"	+/- 40 PSF	998.5 LB/FT	200.0 LB/FT	5.25"	5.00"	6.00"	6.00"	6.00"	6.00"	6.00"		4.75"	3.75"	3.75"	3.50"	3.25"	6.00"	6.00"	6.00"	6.00"
	+/- 51 PSF	1319.3 LB/FT	256.3 LB/FT	4.00"	3.75"	6.00"	4.75"	6.00"	5.75"	5.25"		3.75"	3.00"	2.75"	2.75"	2.50"	6.00"	6.00"	6.00"	6.00"
	+/- 63 PSF	1639.8 LB/FT	312.5 LB/FT	3.00"	3.00"	5.50"	3.75"	4.75"	4.50"	4.25"		3.00"	2.25"	2.25"	2.25"	2.00"	6.00"	6.00"	6.00"	6.00"
	+/- 74 PSF	1959.9 LB/FT	368.8 LB/FT	2.50"	2.50"	4.75"		4.00"	3.75"	3.50"		2.50"	2.00"				5.25"	6.00"	6.00"	6.00"
	+/- 85 PSF	2279.7 LB/FT	425.0 LB/FT	2.25"		4.00"		3.50"	3.25"	3.00"							4.50"	6.00"	6.00"	6.00"
146"	+/- 40 PSF	1436.7 LB/FT	243.3 LB/FT	3.75"	3.50"	6.00"	4.50"	5.75"	5.50"	5.00"		3.50"	2.75"	2.75"	2.50"	2.25"	6.00"	6.00"	6.00"	6.00"
	+/- 47 PSF	1705.1 LB/FT	286.1 LB/FT	3.00"	3.00"	5.50"	3.75"	4.75"	4.50"	4.00"		2.75"	2.50"	2.25"	2.25"	2.00"	6.00"	6.00"	6.00"	6.00"
	+/- 54 PSF	1973.3 LB/FT	328.8 LB/FT	2.75"	2.50"	4.75"		4.00"	4.00"	3.50"		2.50"	2.00"	2.00"			5.50"	6.00"	6.00"	6.00"
	+/- 61 PSF	2241.0 LB/FT	371.5 LB/FT	2.25"		4.25"		3.50"	3.50"	3.00"							4.75"	6.00"	6.00"	6.00"
	+/- 68 PSF	2508.4 LB/FT	414.3 LB/FT	2.00"		3.75"			3.00"								4.25"	6.00"	6.00"	6.00"
170"	+/- 35 PSF	1612.1 LB/FT	247.9 LB/FT	3.25"	3.25"	6.00"	4.00"	5.00"	4.75"	4.50"		3.00"	2.75"	2.50"	2.25"	2.00"	6.00"	6.00"	6.00"	6.00"
	+/- 39 PSF	1817.5 LB/FT	278.4 LB/FT	3.00"	2.75"	5.25"	3.50"	4.50"	4.25"	4.00"		2.75"	2.25"	2.25"	2.00"	2.00"	6.00"	6.00"	6.00"	6.00"
	+/- 44 PSF	2022.6 LB/FT	308.8 LB/FT	2.75"	2.50"	4.75"		4.00"	3.75"	3.50"		2.50"	2.00"	2.00"			5.50"	6.00"	6.00"	6.00"
	+/- 48 PSF	2227.2 LB/FT	339.3 LB/FT	2.50"		4.25"		3.75"	3.50"	3.25"			2.00"				5.00"	6.00"	6.00"	6.00"
	+/- 52 PSF	2431.5 LB/FT	369.8 LB/FT	2.25"		4.00"			3.25"	3.00"							4.50"	6.00"	6.00"	6.00"
182"	+/- 30 PSF	1545.9 LB/FT	227.5 LB/FT	3.50"	3.25"	6.00"	4.25"	5.50"	5.00"	4.75"		3.25"	2.75"	2.75"	2.50"	2.00"	6.00"	6.00"	6.00"	6.00"
	+/- 34 PSF	1747.0 LB/FT	255.9 LB/FT	3.00"	3.00"	5.50"	3.75"	4.75"	4.50"	4.00"		2.75"	2.50"	2.50"	2.25"		6.00"	6.00"	6.00"	6.00"
	+/- 38 PSF	1948.1 LB/FT	284.4 LB/FT	2.75"	2.75"	5.00"		4.25"	4.00"	3.75"		2.50"	2.25"	2.00"	2.00"		5.75"	6.00"	6.00"	6.00"
	+/- 41 PSF	2149.3 LB/FT	312.8 LB/FT	2.50"	2.50"	4.50"		3.75"	3.75"	3.25"			2.00"	2.00"			5.00"	6.00"	6.00"	6.00"
	+/- 45 PSF	2350.4 LB/FT	341.3 LB/FT	2.25"		4.00"		3.50"	3.25"	3.00"							4.75"	6.00"	6.00"	6.00"

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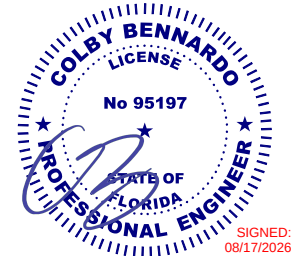
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PE# 95197 CA# 9885



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MULLION SCHEDULE: INTERMEDIATE MULLIONS											
		4"x6"x0.25" ALUM TUBE		6"x4"x0.25" ALUM TUBE		4"x8"x0.25" ALUM TUBE		8"x4"x0.25" ALUM TUBE		4"x4"x0.25" ALUM TUBE	
SLAT SPAN	DESIGN PRESSURE	MAX MULLION LENGTH	END REACTION Rt	MAX MULLION LENGTH	END REACTION Rt	MAX MULLION LENGTH	END REACTION Rt	MAX MULLION LENGTH	END REACTION Rt	MAX MULLION LENGTH	END REACTION Rt
77"	+/- 40 PSF	144.0"	1530.0 LB	144.0"	1530.0 LB	144.0"	1530.0 LB	144.0"	1530.0 LB	139.0"	1476.8 LB
	+/- 68 PSF	144.0"	2581.9 LB	130.6"	2341.1 LB	144.0"	2581.9 LB	142.0"	2545.2 LB	116.7"	2093.3 LB
	+/- 95 PSF	144.0"	3633.8 LB	116.5"	2940.1 LB	144.0"	3633.8 LB	126.7"	3196.5 LB	104.2"	2628.9 LB
	+/- 123 PSF	132.6"	4314.8 LB	107.0"	3483.1 LB	144.0"	4685.6 LB	116.4"	3786.9 LB	95.7"	3114.5 LB
	+/- 150 PSF	123.7"	4929.7 LB	100.1"	3986.6 LB	138.9"	5534.0 LB	108.8"	4334.3 LB	89.5"	3564.7 LB
108"	+/- 40 PSF	144.0"	2160.0 LB	138.6"	2078.6 LB	144.0"	2160.0 LB	144.0"	2160.0 LB	123.9"	1858.5 LB
	+/- 57 PSF	144.0"	3139.2 LB	122.3"	2666.9 LB	144.0"	3139.2 LB	133.0"	2899.5 LB	109.4"	2384.6 LB
	+/- 75 PSF	136.5"	4069.4 LB	110.2"	3285.1 LB	144.0"	4291.7 LB	119.8"	3571.5 LB	98.6"	2937.3 LB
	+/- 92 PSF	125.9"	4787.6 LB	101.6"	3864.8 LB	142.2"	5406.7 LB	110.5"	4201.9 LB	90.9"	3455.8 LB
	+/- 109 PSF	114.5"	5324.7 LB	95.0"	4418.2 LB	128.6"	5977.4 LB	103.3"	4803.5 LB	85.0"	3950.5 LB
146"	+/- 40 PSF	144.0"	3331.5 LB	119.9"	2774.7 LB	144.0"	3331.5 LB	130.4"	3016.7 LB	107.2"	2481.0 LB
	+/- 52 PSF	134.0"	4226.7 LB	108.2"	3412.1 LB	144.0"	4543.0 LB	117.6"	3709.6 LB	96.7"	3050.9 LB
	+/- 64 PSF	122.9"	4962.8 LB	99.6"	4022.4 LB	138.0"	5571.2 LB	108.3"	4373.2 LB	89.1"	3596.7 LB
	+/- 77 PSF	110.9"	5502.0 LB	93.0"	4615.4 LB	124.4"	6176.4 LB	101.1"	5017.9 LB	83.1"	4126.9 LB
	+/- 89 PSF	101.4"	6013.9 LB	87.6"	5196.7 LB	113.9"	6751.1 LB	95.3"	5649.9 LB	76.2"	4516.9 LB
170"	+/- 40 PSF	134.6"	4188.1 LB	108.7"	3380.9 LB	144.0"	4480.9 LB	118.1"	3675.8 LB	97.2"	3023.1 LB
	+/- 49 PSF	122.7"	4971.4 LB	99.5"	4031.7 LB	137.7"	5580.8 LB	108.2"	4383.3 LB	89.0"	3605.0 LB
	+/- 59 PSF	109.8"	5555.6 LB	92.4"	4675.5 LB	123.2"	6236.7 LB	100.5"	5083.3 LB	82.5"	4172.7 LB
	+/- 68 PSF	99.7"	6117.6 LB	86.6"	5316.6 LB	111.9"	6867.6 LB	94.2"	5780.2 LB	74.9"	4594.8 LB
	+/- 78 PSF	91.5"	6662.8 LB	81.3"	5918.7 LB	102.8"	7479.5 LB	89.0"	6477.0 LB	68.8"	5004.3 LB
206"	+/- 35 PSF	140.5"	3843.8 LB	113.4"	3102.9 LB	144.0"	3939.8 LB	123.3"	3373.5 LB	101.4"	2774.5 LB
	+/- 42 PSF	132.5"	4322.9 LB	106.9"	3489.7 LB	144.0"	4698.8 LB	116.3"	3794.0 LB	95.6"	3120.3 LB
	+/- 48 PSF	126.0"	4777.0 LB	101.7"	3856.3 LB	142.4"	5397.7 LB	110.6"	4192.6 LB	91.0"	3448.1 LB
	+/- 55 PSF	118.8"	5132.2 LB	97.4"	4206.5 LB	133.4"	5761.3 LB	105.9"	4573.4 LB	87.1"	3761.3 LB
	+/- 61 PSF	112.2"	5437.1 LB	93.7"	4543.0 LB	125.9"	6103.6 LB	101.9"	4939.2 LB	83.8"	4062.1 LB
242"	+/- 30 PSF	140.0"	3873.5 LB	113.0"	3126.9 LB	144.0"	3985.5 LB	122.8"	3399.6 LB	101.0"	2796.0 LB
	+/- 34 PSF	134.5"	4194.8 LB	108.6"	3386.3 LB	144.0"	4491.6 LB	118.0"	3681.6 LB	97.1"	3027.9 LB
	+/- 38 PSF	129.8"	4504.3 LB	104.8"	3636.1 LB	144.0"	4997.7 LB	113.9"	3953.2 LB	93.7"	3251.3 LB
	+/- 41 PSF	125.7"	4803.5 LB	101.5"	3877.7 LB	141.8"	5420.1 LB	110.3"	4215.9 LB	90.7"	3467.3 LB
	+/- 45 PSF	120.9"	5045.5 LB	98.5"	4112.0 LB	135.7"	5664.0 LB	107.1"	4470.6 LB	88.1"	3676.8 LB

1. VALUES SHOWN IN MULLION SCHEDULES ARE MAXIMUM ALLOWABLE MULLION LENGTHS AT EACH RESPECTIVE SLAT SPAN AND DESIGN PRESSURE.
2. "INTERMEDIATE MULLIONS" ARE AS DEFINED IN ELEVATION 2/4.
3. "END MULLIONS" ARE AS DEFINED IN ELEVATION 2/4
4. ALL MULLIONS SHALL BE 6061-T6 ALUMINUM OR EQUIVALENT.
5. ALLOWABLE DESIGN PRESSURES AND SLAT SPANS INDICATED ARE FOR DETERMINING PERMISSIBLE MULLION LENGTHS ONLY. ACTUAL SLAT SPANS AND DESIGN PRESSURES SHALL NOT EXCEED THOSE INDICATED IN SPAN SCHEDULES.
6. "END REACTIONS" ARE LISTED FOR EACH COMBINATION OF DESIGN LOAD, MULLION TYPE, SLAT TYPE (OPEN OR CLOSED) & SLAT SPAN. CHOOSE MOUNTING CONNECTIONS (PER APPLICABLE CONNECTION DETAILS HEREIN) THAT PROVIDES "CONNECTION CAPACITY" GREATER THAN OR EQUAL TO "END REACTIONS" GIVEN ABOVE.
7. "INTERMEDIATE MULLIONS" SHALL HAVE EQUAL SLAT SPANS (+/- 12") ON ADJACENT SIDES OF MULLION. OTHERWISE, USE "END MULLION" TABLES.

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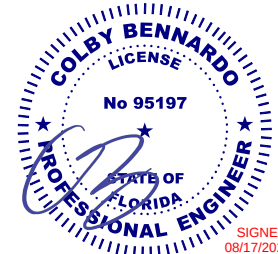
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END MULLION SCHEDULES

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2026 FBC UPDATE	MEF	CCB	07/15/26

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MULLION SCHEDULE: END MULLIONS																					
		4"x6"x0.25" ALUM TUBE				6"x4"x0.25" ALUM TUBE				4"x8"x0.25" ALUM TUBE				8"x4"x0.25" ALUM TUBE				4"x4"x0.25" ALUM TUBE			
SLAT SPAN	DESIGN PRESSURE	MAX MULLION LENGTH	END REACTION Rv	END REACTION Rt	END REACTION Rsum	MAX MULLION LENGTH	END REACTION Rv	END REACTION Rt	END REACTION Rsum	MAX MULLION LENGTH	END REACTION Rv	END REACTION Rt	END REACTION Rsum	MAX MULLION LENGTH	END REACTION Rv	END REACTION Rt	END REACTION Rsum	MAX MULLION LENGTH	END REACTION Rv	END REACTION Rt	END REACTION Rsum
77"	+/- 40 PSF	144.0"	1352.6 LB	765.0 LB	1553.9 LB	144.0"	1352.6 LB	765.0 LB	1553.9 LB	144.0"	1352.6 LB	765.0 LB	1553.9 LB	144.0"	1352.6 LB	765.0 LB	1553.9 LB	144.0"	1352.6 LB	765.0 LB	1553.9 LB
	+/- 68 PSF	120.7"	3135.0 LB	1081.7 LB	3316.4 LB	115.4"	2997.8 LB	1034.4 LB	3171.3 LB	136.5"	3546.5 LB	1223.7 LB	3751.7 LB	125.4"	3259.3 LB	1124.6 LB	3447.8 LB	99.2"	2578.0 LB	889.5 LB	2727.2 LB
	+/- 95 PSF	95.7"	4073.9 LB	1208.0 LB	4249.2 LB	97.9"	4165.3 LB	1235.1 LB	4344.6 LB	108.3"	4609.7 LB	1366.8 LB	4808.1 LB	106.4"	4528.6 LB	1342.8 LB	4723.5 LB	79.0"	3360.5 LB	996.4 LB	3505.1 LB
	+/- 123 PSF	81.8"	4834.4 LB	1330.7 LB	5014.2 LB	87.5"	5169.9 LB	1423.0 LB	5362.1 LB	92.6"	5470.7 LB	1505.9 LB	5674.2 LB	95.4"	5637.7 LB	1551.8 LB	5847.4 LB	67.6"	3993.4 LB	1099.2 LB	4141.9 LB
	+/- 150 PSF	72.6"	5490.2 LB	1445.9 LB	5677.4 LB	77.8"	5881.5 LB	1549.0 LB	6082.0 LB	82.1"	6213.3 LB	1636.4 LB	6425.2 LB	87.5"	6618.5 LB	1743.1 LB	6844.2 LB	60.0"	4538.8 LB	1195.4 LB	4693.6 LB
108"	+/- 40 PSF	110.9"	3682.8 LB	831.9 LB	3775.6 LB	106.3"	3530.4 LB	797.4 LB	3619.3 LB	125.6"	4168.7 LB	941.6 LB	4273.7 LB	115.6"	3838.3 LB	867.0 LB	3935.0 LB	91.9"	3052.7 LB	689.6 LB	3129.7 LB
	+/- 57 PSF	90.0"	4573.0 LB	981.1 LB	4677.1 LB	92.3"	4688.0 LB	1005.7 LB	4794.6 LB	101.9"	5176.7 LB	1110.6 LB	5294.5 LB	100.3"	5096.8 LB	1093.5 LB	5212.8 LB	74.7"	3793.9 LB	813.9 LB	3880.2 LB
	+/- 75 PSF	77.5"	5299.5 LB	1154.8 LB	5423.8 LB	83.6"	5714.9 LB	1245.3 LB	5849.1 LB	87.7"	5999.0 LB	1307.2 LB	6139.7 LB	90.9"	6213.4 LB	1353.9 LB	6359.2 LB	64.3"	4395.4 LB	957.8 LB	4498.6 LB
	+/- 92 PSF	69.0"	5934.1 LB	1313.0 LB	6077.6 LB	74.5"	6398.2 LB	1415.7 LB	6553.0 LB	78.2"	6717.2 LB	1486.3 LB	6879.7 LB	83.8"	7197.9 LB	1592.7 LB	7372.0 LB	57.3"	4920.6 LB	1088.8 LB	5039.6 LB
	+/- 109 PSF	62.9"	6503.9 LB	1461.0 LB	6665.9 LB	67.7"	7008.8 LB	1574.4 LB	7183.5 LB	71.2"	7362.0 LB	1653.8 LB	7545.5 LB	76.2"	7884.9 LB	1771.2 LB	8081.4 LB	52.1"	5391.7 LB	1211.2 LB	5526.0 LB
146"	+/- 40 PSF	83.5"	4999.9 LB	966.2 LB	5092.4 LB	87.4"	5229.5 LB	1010.6 LB	5326.3 LB	94.6"	5660.6 LB	1093.9 LB	5765.3 LB	95.0"	5685.6 LB	1098.7 LB	5790.8 LB	69.4"	4154.6 LB	802.8 LB	4231.5 LB
	+/- 52 PSF	72.4"	5744.4 LB	1142.4 LB	5856.9 LB	78.4"	6216.2 LB	1236.2 LB	6338.0 LB	82.0"	6503.3 LB	1293.3 LB	6630.7 LB	86.5"	6859.2 LB	1364.1 LB	6993.5 LB	60.2"	4771.3 LB	948.8 LB	4864.7 LB
	+/- 64 PSF	64.8"	6396.8 LB	1308.1 LB	6529.2 LB	70.0"	6915.8 LB	1414.2 LB	7058.9 LB	73.3"	7241.6 LB	1480.8 LB	7391.5 LB	78.8"	7779.1 LB	1590.7 LB	7940.1 LB	53.8"	5310.8 LB	1086.0 LB	5420.7 LB
	+/- 77 PSF	59.1"	6982.8 LB	1467.2 LB	7135.3 LB	63.9"	7542.5 LB	1584.8 LB	7707.2 LB	66.9"	7904.8 LB	1660.9 LB	8077.4 LB	71.8"	8484.4 LB	1782.7 LB	8669.6 LB	49.1"	5795.0 LB	1217.6 LB	5921.5 LB
	+/- 89 PSF	54.7"	7518.1 LB	1621.9 LB	7691.1 LB	59.0"	8113.3 LB	1750.3 LB	8300.0 LB	61.9"	8510.5 LB	1836.0 LB	8706.3 LB	66.4"	9126.9 LB	1969.0 LB	9336.9 LB	45.4"	6236.6 LB	1345.5 LB	6380.1 LB
170"	+/- 40 PSF	73.4"	5658.7 LB	1141.6 LB	5772.7 LB	79.4"	6120.5 LB	1234.8 LB	6243.8 LB	83.1"	6406.1 LB	1292.4 LB	6535.2 LB	87.3"	6731.8 LB	1358.1 LB	6867.4 LB	60.9"	4699.0 LB	948.0 LB	4793.7 LB
	+/- 49 PSF	65.6"	6290.0 LB	1328.8 LB	6428.8 LB	70.8"	6792.8 LB	1435.0 LB	6942.8 LB	74.2"	7120.4 LB	1504.2 LB	7277.6 LB	79.7"	7641.2 LB	1614.2 LB	7809.8 LB	54.4"	5219.5 LB	1102.6 LB	5334.7 LB
	+/- 59 PSF	59.8"	6854.0 LB	1513.1 LB	7019.1 LB	64.5"	7390.7 LB	1631.6 LB	7568.7 LB	67.7"	7758.5 LB	1712.8 LB	7945.4 LB	72.5"	8314.3 LB	1835.5 LB	8514.5 LB	49.6"	5683.6 LB	1254.7 LB	5820.4 LB
	+/- 68 PSF	55.3"	7366.4 LB	1696.3 LB	7559.1 LB	59.5"	7931.2 LB	1826.4 LB	8138.8 LB	62.6"	8338.0 LB	1920.1 LB	8556.3 LB	67.0"	8923.0 LB	2054.8 LB	9156.6 LB	45.8"	6104.2 LB	1405.7 LB	6263.9 LB
	+/- 78 PSF	51.6"	7837.2 LB	1879.3 LB	8059.3 LB	55.5"	8425.7 LB	2020.4 LB	8664.5 LB	58.4"	8870.5 LB	2127.1 LB	9121.9 LB	62.5"	9480.0 LB	2273.2 LB	9748.7 LB	42.8"	6489.8 LB	1556.2 LB	6673.8 LB
206"	+/- 35 PSF	68.4"	6302.8 LB	935.1 LB	6371.8 LB	74.6"	6880.1 LB	1020.8 LB	6955.4 LB	77.4"	7137.6 LB	1059.0 LB	7215.8 LB	82.2"	7583.0 LB	1125.1 LB	7666.0 LB	57.0"	5256.0 LB	779.8 LB	5313.5 LB
	+/- 42 PSF	62.6"	6881.8 LB	1021.4 LB	6957.2 LB	68.3"	7512.0 LB	1115.0 LB	7594.3 LB	70.9"	7793.3 LB	1156.7 LB	7878.7 LB	76.8"	8445.9 LB	1253.6 LB	8538.4 LB	52.2"	5738.8 LB	851.8 LB	5801.6 LB
	+/- 48 PSF	58.1"	7415.6 LB	1101.1 LB	7496.9 LB	63.4"	8094.7 LB	1201.9 LB	8183.4 LB	65.8"	8397.9 LB	1246.9 LB	8489.9 LB	71.3"	9101.0 LB	1351.3 LB	9200.7 LB	48.4"	6183.9 LB	918.2 LB	6251.7 LB
	+/- 55 PSF	54.4"	7913.5 LB	1175.5 LB	8000.3 LB	59.4"	8638.1 LB	1283.1 LB	8732.9 LB	61.6"	8961.7 LB	1331.2 LB	9060.0 LB	66.8"	9711.9 LB	1442.6 LB	9818.5 LB	45.4"	6599.1 LB	980.2 LB	6671.5 LB
	+/- 61 PSF	51.4"	8381.8 LB	1245.5 LB	8473.8 LB	56.1"	9149.2 LB	1359.5 LB	9249.6 LB	58.2"	9492.0 LB	1410.5 LB	9596.2 LB	63.1"	10286.5 LB	1528.5 LB	10399.5 LB	42.9"	6989.6 LB	1038.6 LB	7066.3 LB
242"	+/- 30 PSF	65.5"	6628.4 LB	906.9 LB	6690.1 LB	71.7"	7250.7 LB	992.1 LB	7318.3 LB	74.2"	7506.9 LB	1027.1 LB	7576.8 LB	79.7"	8065.6 LB	1103.6 LB	8140.7 LB	54.7"	5532.8 LB	757.0 LB	5584.3 LB
	+/- 34 PSF	61.7"	7036.2 LB	962.8 LB	7101.8 LB	67.5"	7696.8 LB	1053.2 LB	7768.6 LB	69.9"	7968.8 LB	1090.4 LB	8043.0 LB	75.9"	8652.8 LB	1184.0 LB	8733.4 LB	51.5"	5873.2 LB	803.7 LB	5927.9 LB
	+/- 38 PSF	58.5"	7421.7 LB	1015.7 LB	7490.8 LB	64.0"	8118.5 LB	1111.0 LB	8194.1 LB	66.3"	8405.3 LB	1150.3 LB	8483.6 LB	72.0"	9126.7 LB	1249.0 LB	9211.8 LB	48.9"	6194.9 LB	847.8 LB	6252.7 LB
	+/- 41 PSF	55.8"	7788.0 LB	1065.9 LB	7860.6 LB	61.0"	8519.2 LB	1166.0 LB	8598.6 LB	63.2"	8820.2 LB	1207.2 LB	8902.5 LB	68.6"	9577.3 LB	1310.8 LB	9666.6 LB	46.6"	6500.7 LB	889.7 LB	6561.3 LB
	+/- 45 PSF	53.4"	8137.9 LB	1113.9 LB	8213.8 LB	58.4"	8901.9 LB	1218.5 LB	8984.9 LB	60.5"	9216.5 LB	1261.5 LB	9302.5 LB	65.6"	10007.5 LB	1369.8 LB	10100.8 LB	44.6"	6792.8 LB	929.8 LB	6856.1 LB

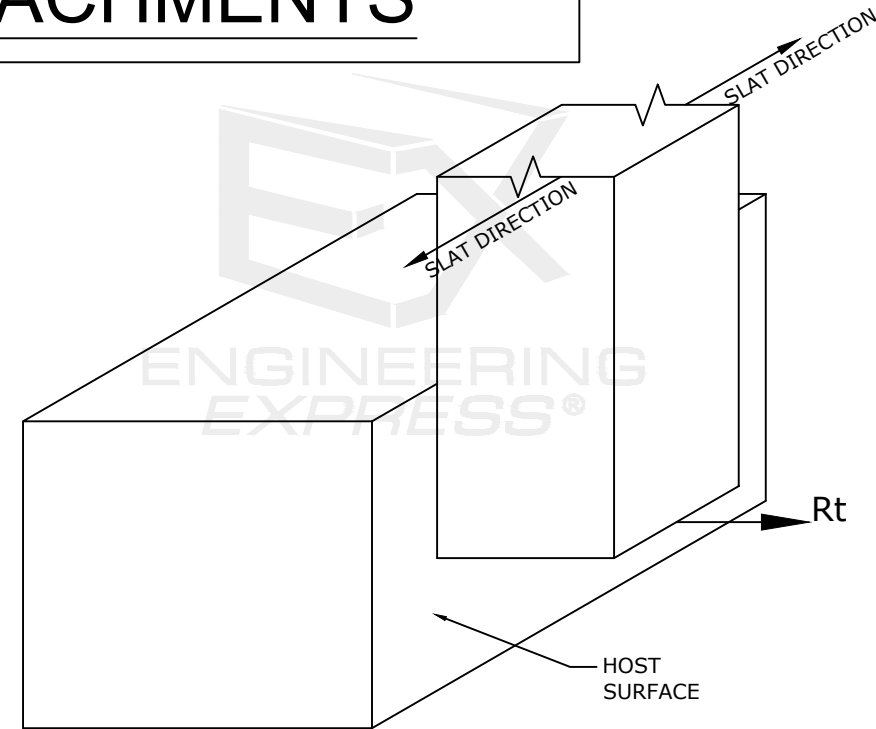
MULLION SCHEDULE NOTES:
SEE SHEET 14 FOR MULLION
SCHEDULE NOTES.

A 3D schematic diagram illustrating the geometry and forces in a host-slab system. A rectangular slab is positioned on top of a larger rectangular host. The top surface of the host is labeled "HOST SURFACE". An arrow labeled "SLAT DIRECTION" points along the length of the slab. At the front edge of the slab, two reaction force vectors are shown: R_v (vertical) and R_t (horizontal, pointing to the right).

$$\frac{1}{16}$$

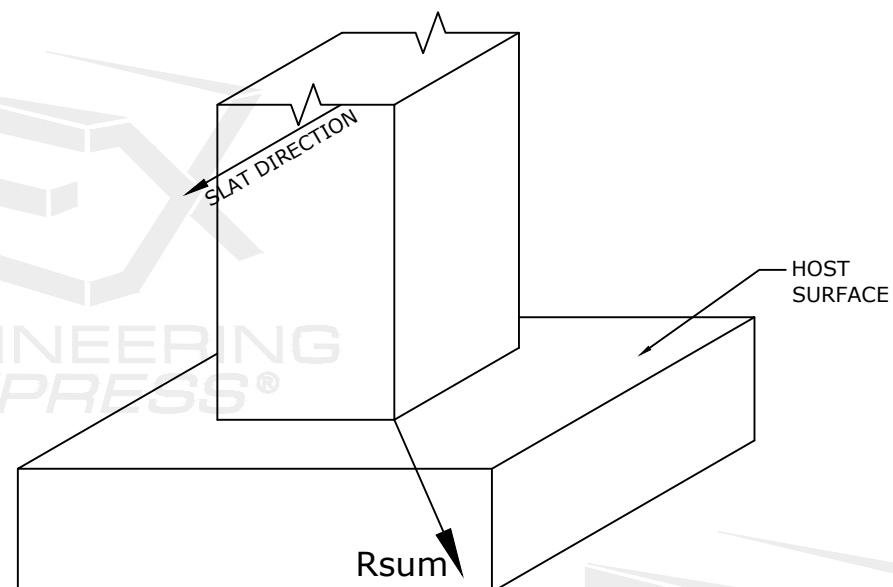
N.T.S.

ISOMETRIC


$$\frac{2}{16}$$

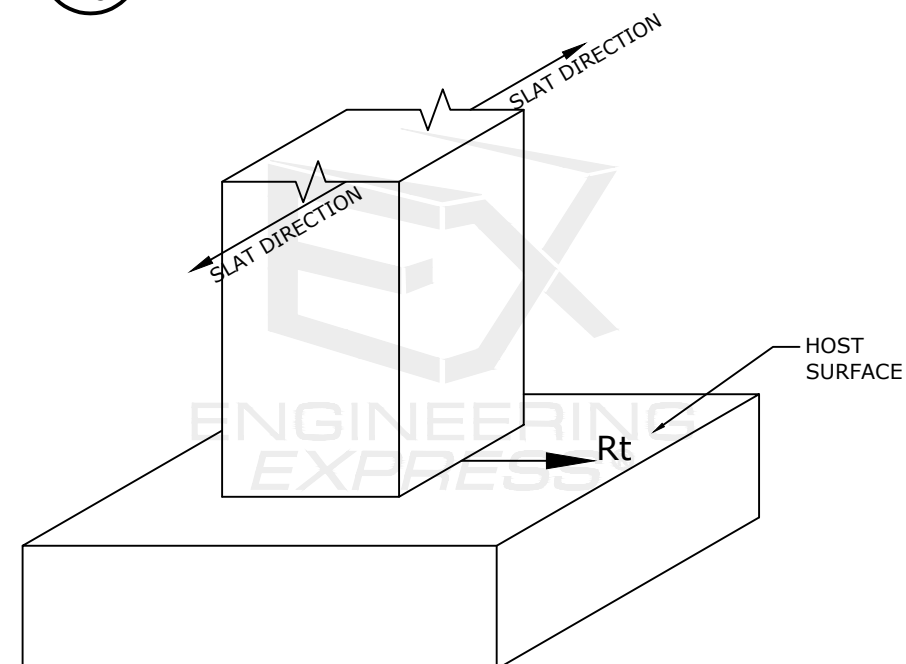
N.T.S.

ISOMETRIC


$$\frac{3}{16}$$

N.T.S.

ISOMETRIC


$$\frac{4}{16}$$

N.T.S.

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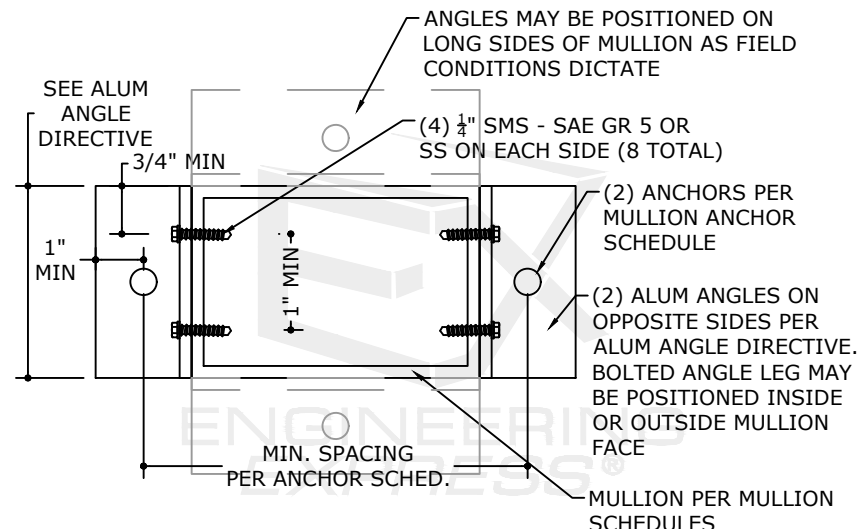
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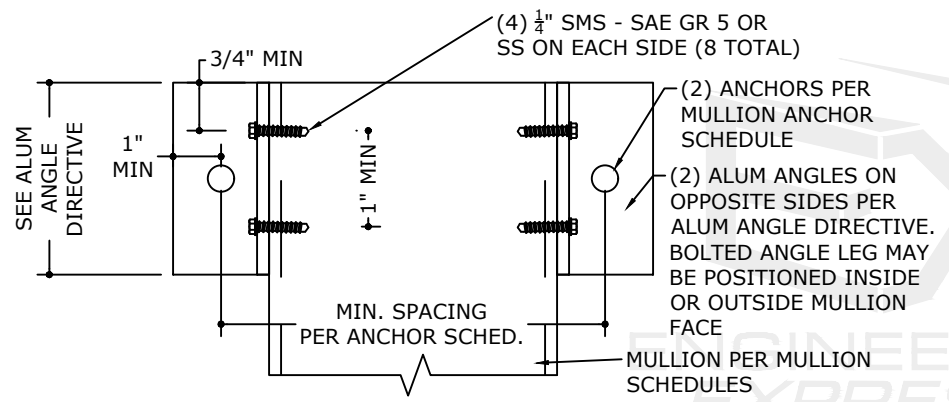
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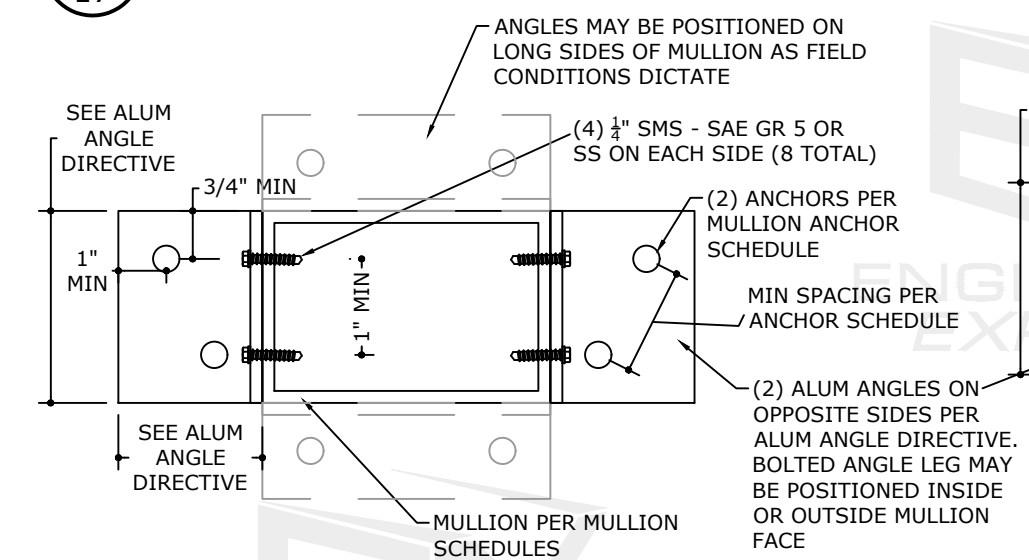
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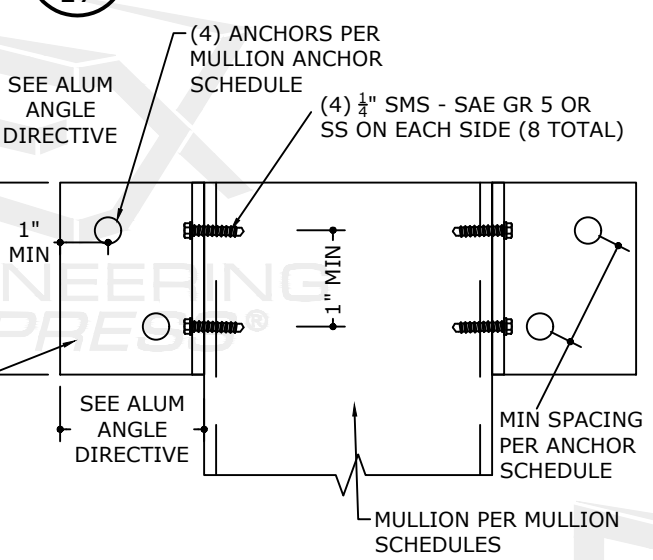
1A TRAPPED MOUNT OPTION 1
17 N.T.S.



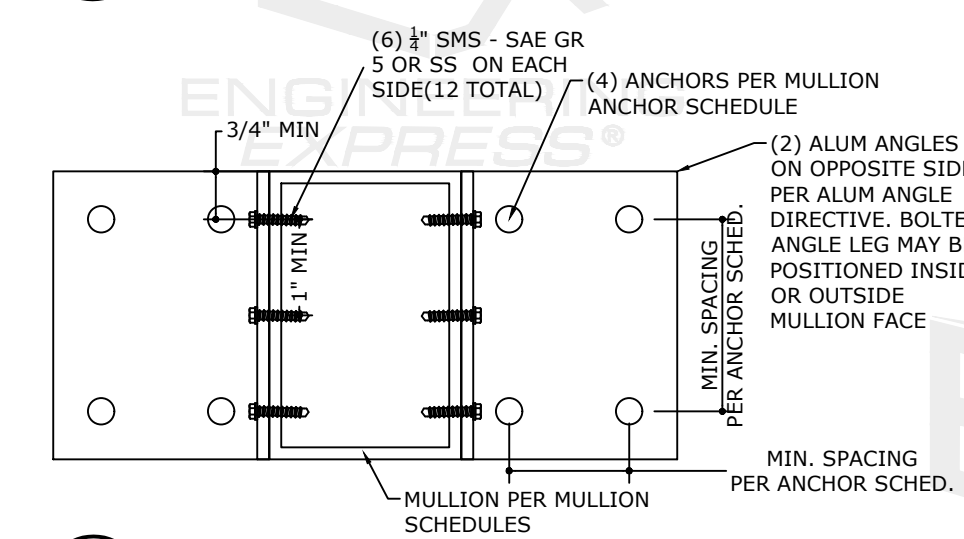
1B FACE MOUNT OPTION 1
17 N.T.S.



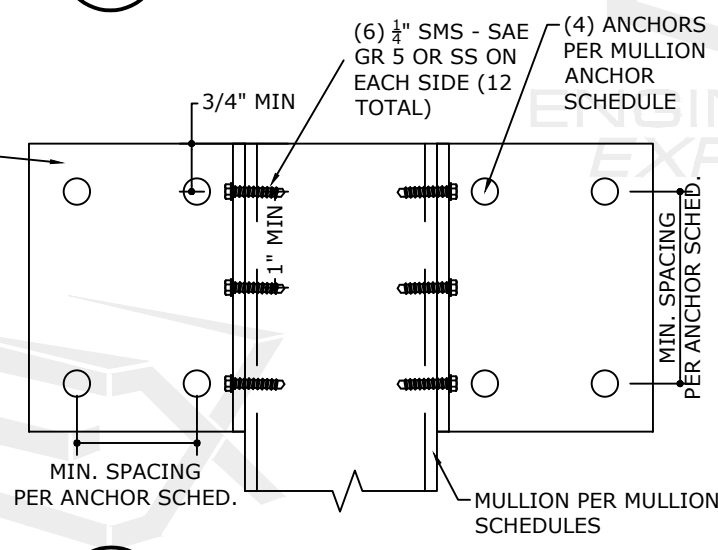
2A TRAPPED MOUNT OPTION 2
17 N.T.S.



2B FACE MOUNT OPTION 2
17 N.T.S.



3A TRAPPED MOUNT OPTION 3
17 N.T.S.



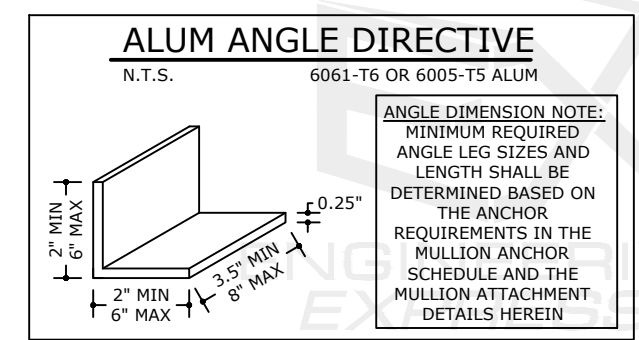
3B FACE MOUNT OPTION 3
17 N.T.S.

MULLION ANCHOR SCHEDULE

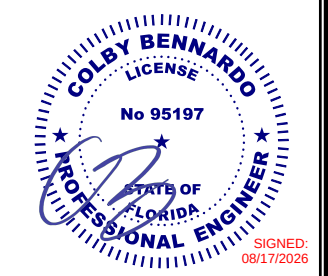
ANCHOR TYPE	MINIMUM SPACING	MINIMUM EDGE DISTANCE	CONNECTION DETAIL	CONNECTION CAPACITY
1/2" DEWALT SCREW BOLTS (OR EQUIV.) W/ 2-1/2" EMBED TO 3KSI MIN. CONCRETE	6"	4.5"	1A/13, 1B/13	Tcap 3660 LB Vcap 2249 LB
	4.0"	4.5"	2A/13, 2B/13	Tcap 6442 LB Vcap 4106 LB
	4.0"	4.5"	3A/13, 3B/13	Tcap 12883 LB Vcap 8213 LB
3/8" DEWALT SCREW BOLTS (OR EQUIV.) W/ 2" EMBED TO 3KSI MIN. CONCRETE	6.0"	2.5"	1A/13, 1B/13	Tcap 1905 LB Vcap 1007 LB
	3.0"	2.5"	2A/13, 2B/13	Tcap 3801 LB Vcap 1700 LB
	3.0"	2.5"	3A/13, 3B/13	Tcap 7622 LB Vcap 3399 LB
3/8" DEWALT SCREW BOLTS (OR EQUIV.) W/ 3-1/4" EMBED TO GROUT-FILLED CONCRETE BLOCK*	6.0"	4.5"	1A/13, 1B/13	Tcap 1953 LB Vcap 1233 LB
	3.0"	4.5"	2A/13, 2B/13	Tcap 3906 LB Vcap 2467 LB
	3.0"	4.5"	3A/13, 3B/13	Tcap 7812 LB Vcap 4934 LB
5/16" LAG SCREW W/ 2" MIN. THREAD PENETRATION TO G=0.42 MIN WOOD	2.0"	1.25"	1A/13, 1B/13	Tcap 1310 LB Vcap 302 LB
	2.0"	1.25"	2A/13, 2B/13	Tcap 2620 LB Vcap 604 LB
	2.0"	1.25"	3A/13, 3B/13	Tcap 3930 LB Vcap 906 LB
5/16" DEWALT ULTRACON (OR EQUIV.) W/ 2" EMBED TO 3.5KSI MIN CONCRETE	5.0"	3.125"	1A/13, 1B/13	Tcap 1670 LB Vcap 1700 LB
	3.75"	3.125"	2A/13, 2B/13	Tcap 1820 LB Vcap 2840 LB
	3.75"	3.125"	3A/13, 3B/13	Tcap 3640 LB Vcap 5680 LB
5/16" DEWALT ULTRACON (OR EQUIV.) W/ 2-1/4" EMBED TO GROUT-FILLED CONCRETE BLOCK	5.0"	2.5"	1A/13, 1B/13	Tcap 580 LB Vcap 750 LB
	5.0"	2.5"	2A/13, 2B/13	Tcap 1160 LB Vcap 1500 LB
	5.0"	2.5"	3A/13, 3B/13	Tcap 2320 LB Vcap 3000 LB

- MULLION ANCHOR SCHEDULE NOTES:**
- FOR "TRAPPED MOUNT" CONDITIONS WITH END MULLIONS, 'Rsum' VALUES IN MULLION SCHEDULE SHALL NOT EXCEED MAX 'Vcap' VALUES NOTED IN THIS SCHEDULE.
 - FOR "FACE MOUNT" CONDITIONS WITH END MULLIONS, **Rv/Vcap + Rt/Tcap SHALL BE LESS THAN OR EQUAL TO 1.0**, WHERE 'Rv' AND 'Rt' ARE PER MULLION SCHEDULES, AND 'Tcap' AND 'Vcap' ARE PER THIS SCHEDULE.
 - FOR "TRAPPED MOUNT" CONDITIONS WITH INTERMEDIATE MULLIONS, 'Rt' VALUES IN MULLION SCHEDULES SHALL NOT EXCEED 'Vcap' VALUES NOTED IN THIS SCHEDULE.
 - FOR "FACE MOUNT" CONDITIONS WITH INTERMEDIATE MULLIONS, 'Rt' VALUES IN MULLION SCHEDULES SHALL NOT EXCEED 'Tcap' VALUES NOTED IN THIS SCHEDULE
 - * ANCHORS SHALL PENETRATE THROUGH FACE SHELL INTO GROUTED CELL.
 - ALTERNATE ANCHORS AND OR END CONNECTION CONFIGURATIONS MAY BE DESIGNED/CERTIFIED ON A SITE SPECIFIC BASIS BASED ON THE END LOADINGS LISTED IN THE MULLION SCHEDULES.
 - 1/2" UNC THRU BOLTS MAY BE USED IN LIEU OF 1/4" SMS PER THE FOLLOWING DIRECTIVE
7.1. (4) SMS PER SIDE = (2) 1/2" UNC THRU BOLTS / (6) SMS PER SIDE = (3) 1/2" UNC THRU BOLTS

ALTERNATE ANCHOR NOTE:
FOR ALL 1/4" AND 5/16" DIAMETER ANCHOR OPTIONS LISTED IN THE ANCHOR SCHEDULES, AN EQUIVALENT DIAMETER HILLMAN/ALL-POINTS SOLID-SET ANCHOR (CARBON OR STAINLESS STEEL) MAY BE USED IN LIEU OF THE OPTION(S) LISTED SO LONG AS THE LISTED MINIMUM EMBEDMENT, EDGE DISTANCE AND SPACING ARE ACHIEVED.



COLBY BENNARDO, P.E.
PE# 95197 CA# 9885



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REMARKS	DATE	DRWN	CHKD
2020 FBC (20-31266)	02/18/20	RWN	RWN
2023 FBC (23-65162)	09/26/25	MARH	RWN
2026 FBC UPDATE	07/15/26	MEF	CCB

26-102861
SCALE: NTS UNLESS NOTED