

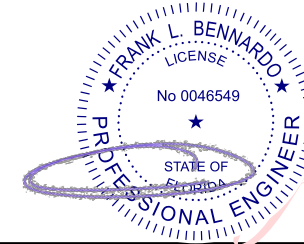
FLORIDA SHUTTERS, INC.

0.05" ALUMINUM STORM PANEL

IMPACT RESISTANT (LARGE MISSILE IMPACT, MISSILE LEVEL D)
VALID FOR USE OUTSIDE THE HVHZ ONLY (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.

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



| Digitally signed by
| Frank Bennardo
| Date: 2026.08.18
| 12:51:17 -04'00'

FL 11732.1

GENERAL NOTES

1. PRESSURE VALUES ON THIS APPROVAL ARE (ASD) ALLOWABLE DESIGN PRESSURES.
2. THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE NINTH EDITION (2026), FOR USE OUTSIDE THE HIGH VELOCITY HURRICANE ZONE, PER ASTM E330, E1886, AND E1996 STANDARDS.
3. DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
4. MULTIPLE UNITS MAY BE INSTALLED TO UNLIMITED WIDTH AS SHOWN.
5. 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.
6. PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS.
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. ALL STORM PANELS SHALL BE 5052-H32 ALUMINUM ALLOY AND HAVE A MINIMUM THICKNESS $t=0.050"$.
9. ALL EXTRUSIONS SHALL BE 6063-T6 ALUMINUM ALLOY, UNLESS NOTED OTHERWISE.
10. UNLESS NOTED OTHERWISE, FASTENERS TO BE 18-8 SERIES 300 NON-MAGNETIC STAINLESS STEEL, SAE GRADE 5, OR CADMIUM PLATED OR OTHERWISE CORROSION RESISTANT MATERIAL AND SHALL COMPLY WITH J.3, SPECIFICATIONS FOR ALUM. STRUCTURES, THE ALUMINUM ASSOCIATION INC., & APPLICABLE FEDERAL, STATE, AND LOCAL CODES.
11. 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.

12. REFER TO FASTENER MANUFACTURER'S PUBLISHED DATA SHEETS AND RECOMMENDATIONS FOR FASTENER INSTALLATION INSTRUCTIONS.
13. HALF STORM PANEL CAN ONLY BE USED AS AN END PANEL TO CLOSE THE REMAINING OPENING THAT MAY BE LESS THAN FULL PANEL WIDTH
14. PANELS SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER PANEL CONTAINING THE FOLLOWING:

FLORIDA SHUTTERS, INC.
VERO BEACH, FLORIDA
FLORIDA PRODUCT APPROVAL NUMBER
15. TOP & BOTTOM DETAILS SHOWN MAY BE INTERCHANGED AS FIELD CONDITIONS DICTATE. PANELS MAY BE MOUNTED VERTICALLY OR HORIZONTALLY AS APPLICABLE.
16. USE OF KEYHOLE WASHERS IS OPTIONAL IN CONJUNCTION WITH ANY MOUNTING CONDITION. WASHERED WINGNUTS SHALL HAVE 0.865" MINIMUM WASHER DIAMETER.
17. ALL BOLTS & WASHERS SHALL BE ZINC COATED STEEL, GALVANIZED STEEL, OR STAINLESS STEEL WITH A MINIMUM TENSILE YIELD STRENGTH OF 60 KSI.
18. ALL STEEL IN CONTACT WITH ALUMINUM SHALL BE PAINTED OR PLATED AS PRESCRIBED IN THE ABOVE-NOTED BUILDING CODE.
19. THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
20. 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.
21. ALTERATIONS ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
22. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

DESIGN NOTES

23. 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 NINTH EDITION (2026) SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.

SYSTEM PERFORMANCE DERIVATIONS

24. SYSTEM PERFORMANCE DERIVED FROM CERTIFIED TEST REPORT # 0218-0601-08 BY HURRICANE TEST LABORATORY (HTL).

**NOTE REGARDING USE OF THIS DOCUMENT &
USE OUTSIDE FLORIDA:**

THIS IS A 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.

ENGINEER SIGNATURE & SEAL NOTICE:

*PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

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ORIGINAL, SEALED COPIES OF APPROVED FLORIDA PRODUCT APPROVALS ARE NOT REQUIRED FOR PERMIT.
SEE ECALC.IO/SEAL TO LEARN MORE.

VISIT [ECALC.IO/FLORIDASHUTTERS](https://ecalc.io/floridashutters)

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

VISIT ENGINEERINGEXPRESS.COM/STORE FOR ADDITIONAL
PLANS, REPORTS & RESOURCES



TERMINOLOGY:

THE FOLLOWING ABBREVIATIONS MAY APPEAR IN THIS APPROVAL:

"ADTL." 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".

VISIT ECALC.IO/GLOSSARY OR CONTACT ENGINEERING EXPRESS FOR ADDITIONAL ABBREVIATION/TERMINOLOGY CLARIFICATIONS.

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(722) 569-2200

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1

0.05" ALUMINUM STORM PANEL

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FLORIDA BUILDING CODE NINTH EDITION (2026)
FLORIDA STATEWIDE APPROVAL (FSA FL#11732.1)

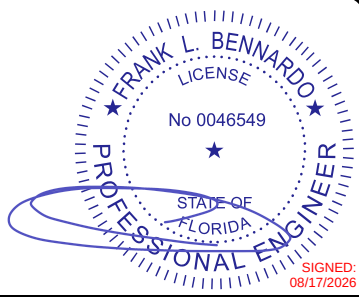
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26-103044

SCALE: NTS UNLESS NOTED

1

OF



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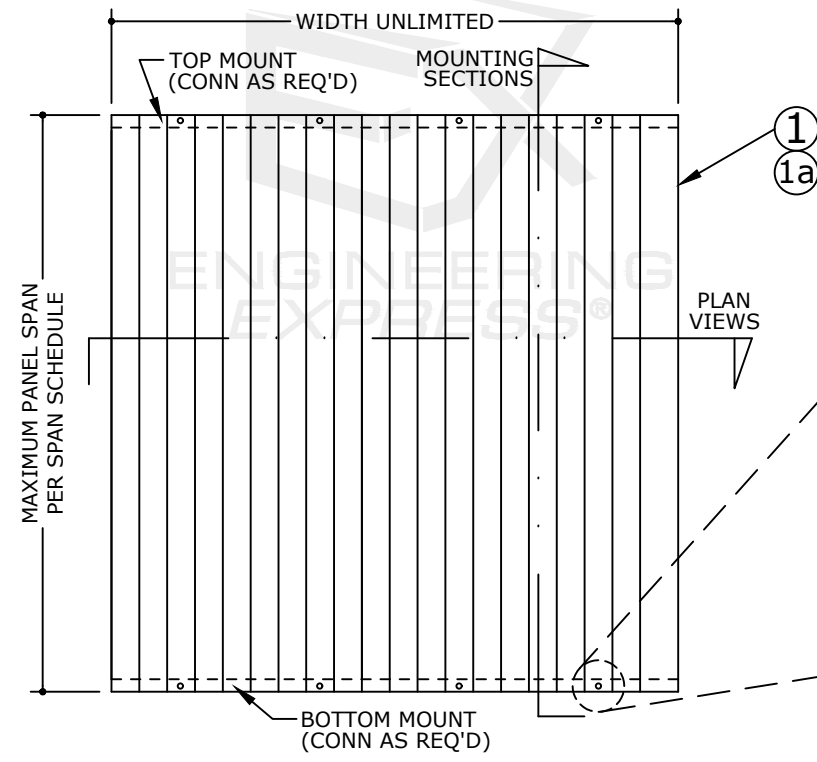
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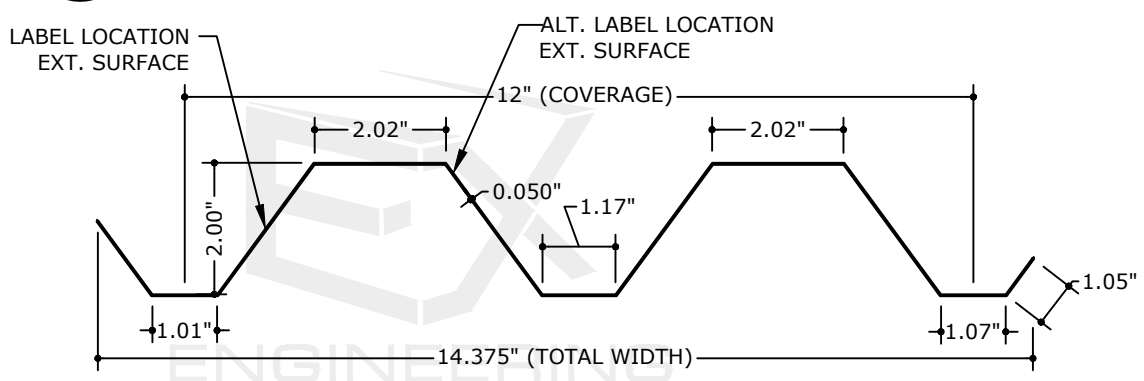
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PREV. SUBMITTAL (20-28471)	CCB	RWN	07/06/20
PREV. SUBMITTAL (23-61782)	MRT	RWN	09/20/23
2026 FBC UPDATE	NRD	CCB	07/17/26

26-103044

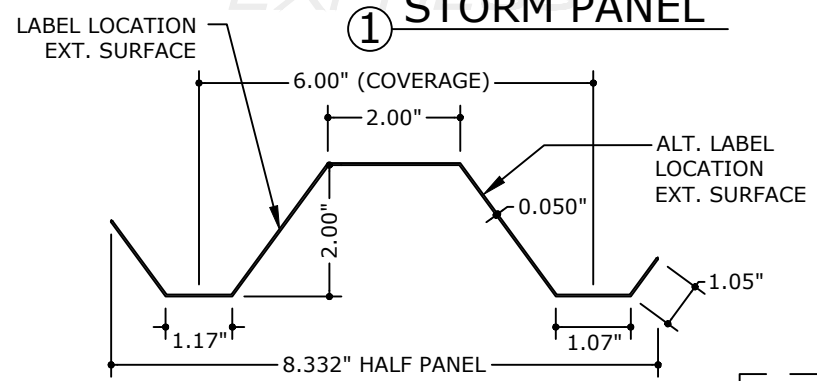
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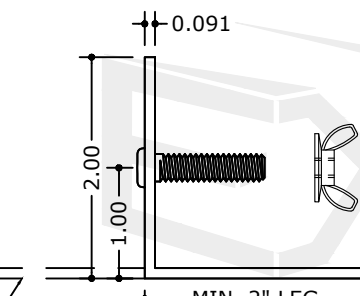
1 TYPICAL ELEVATION
2 N.T.S.



1 STORM PANEL

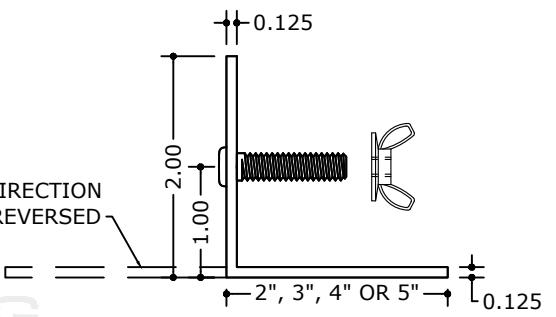
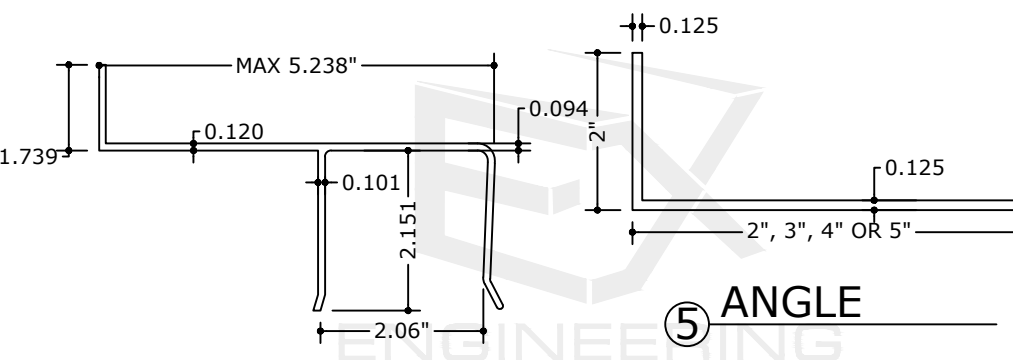


1a HALF STORM PANEL



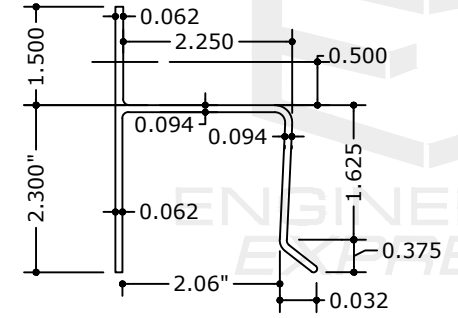
4 STUD ANGLE

3a BUILD-OUT "U" HEADER

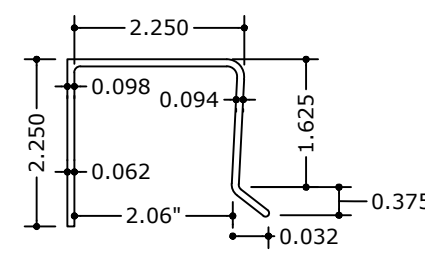


4a ALT. STUD ANGLE

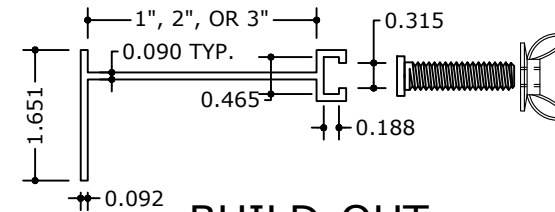
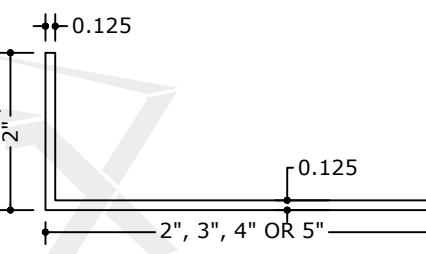
2 "H" HEADER



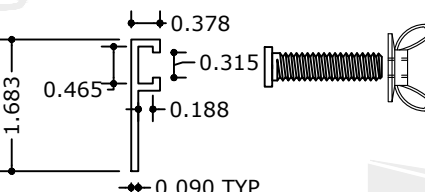
3 "U" HEADER



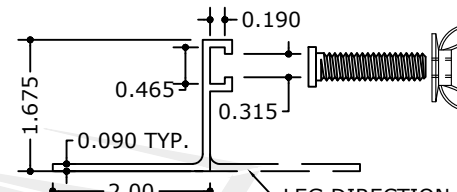
5 ANGLE



6 BUILD-OUT "F" TRACK



7 "F" TRACK

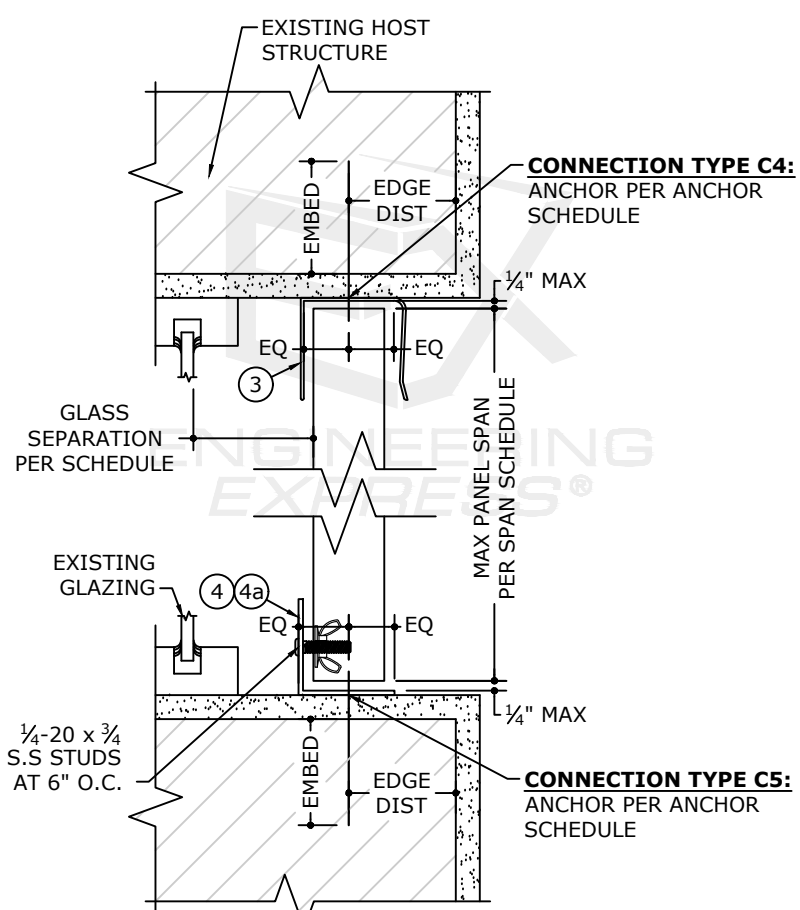


8 "F" ANGLE TRACK

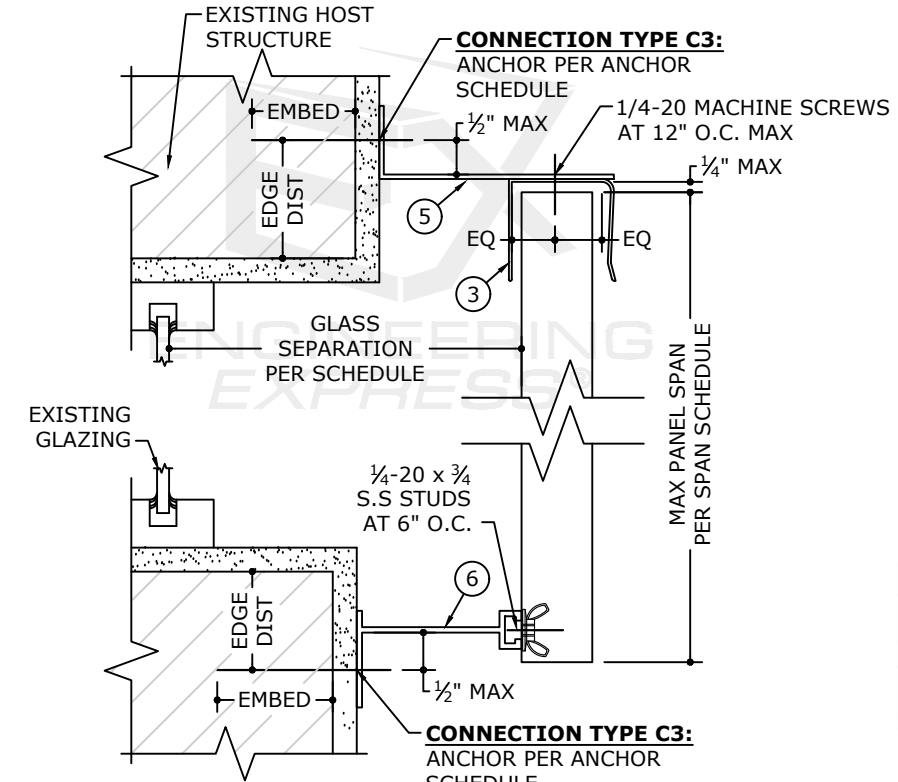
LEG DIRECTION MAY BE REVERSED

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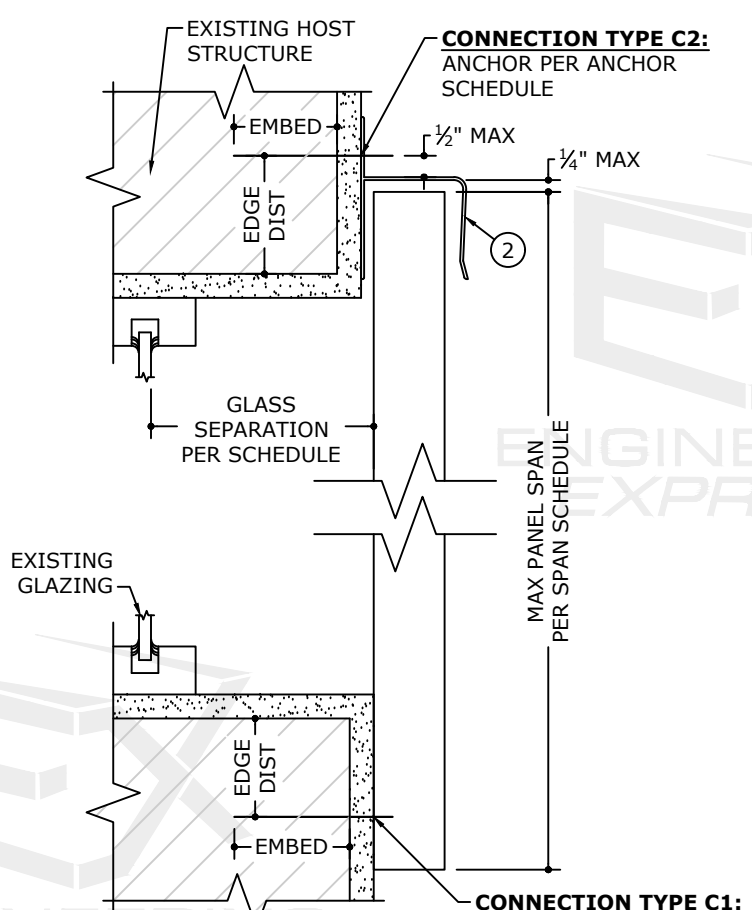
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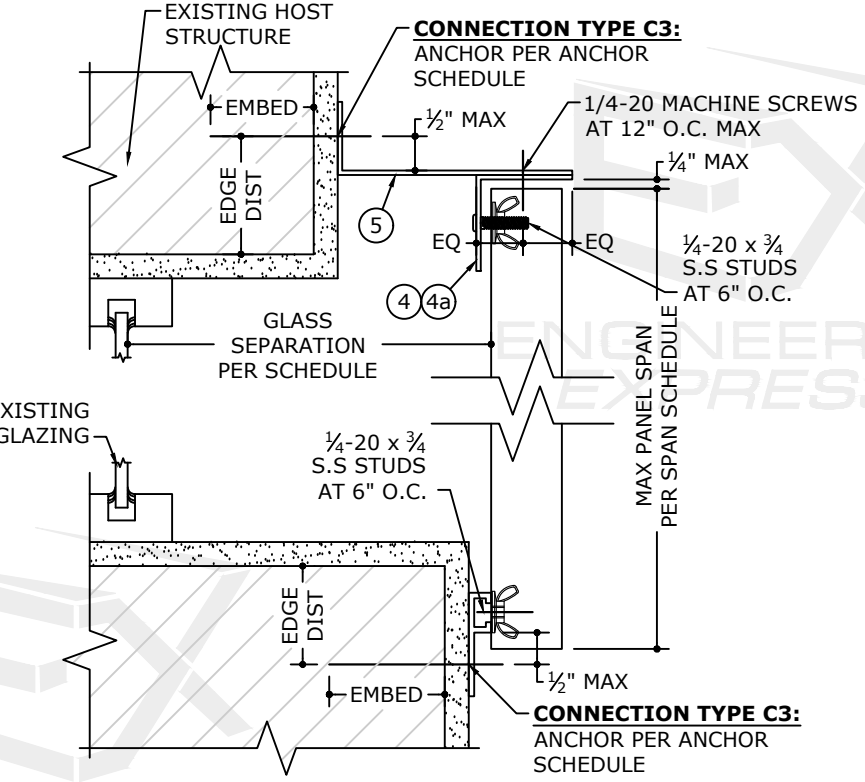
1
"U" HEADER STUDDED ANGLE
3 N.T.S. MOUNTING SECTION



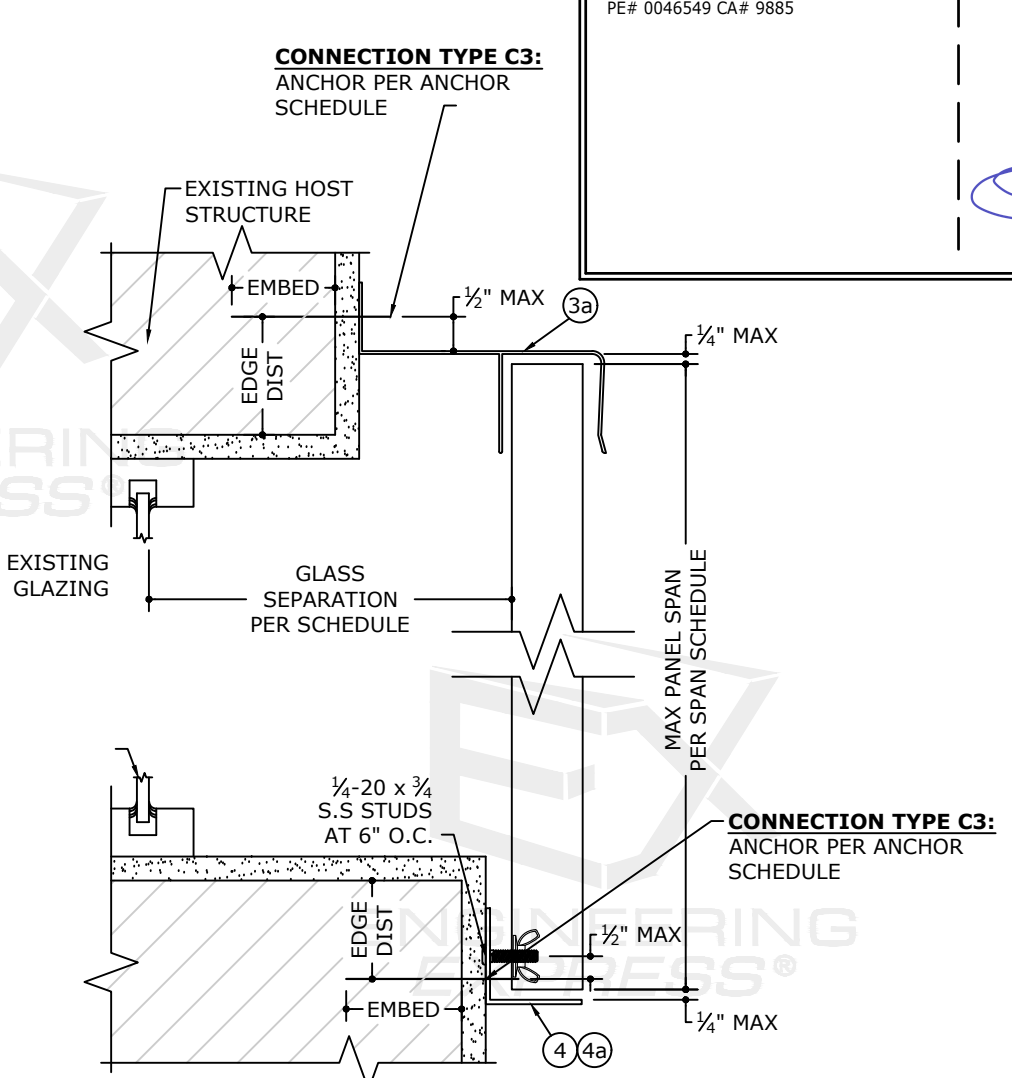
4
2"x5" + "U" HEADER BUILD-OUT F-TRACK
3 N.T.S. MOUNTING SECTION



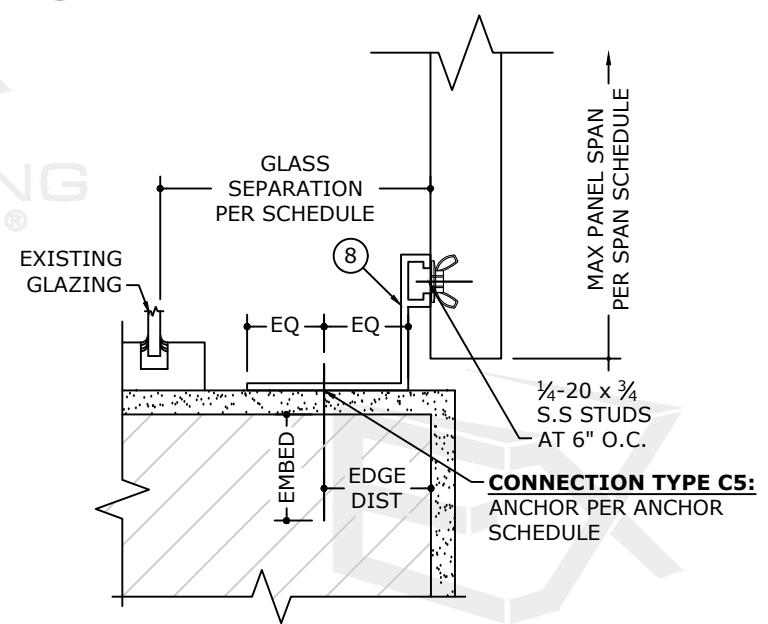
2
"H" HEADER DIRECT MOUNT
3 N.T.S. MOUNTING SECTION



5
2"x5" + STUDDED ANGLE F-TRACK
3 N.T.S. MOUNTING SECTION

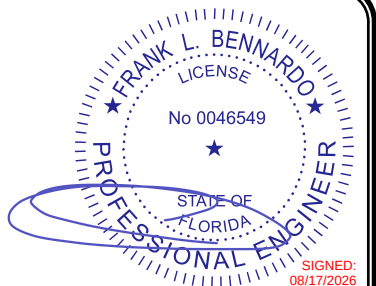


3
BUILD-OUT "U" HEADER STUDDED ANGLE
3 N.T.S. MOUNTING SECTION



6
DIRECT MOUNT F-ANGLE TRACK
3 N.T.S. MOUNTING SECTION

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



FL 11732.1

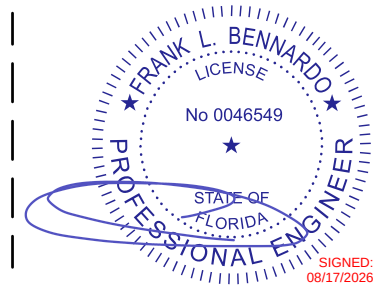
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(722) 569-2200
0.05" ALUMINUM STORM PANEL
FLORIDA BUILDING CODE NINTH EDITION (2026)
FLORIDA STATEWIDE APPROVAL (FSA FL#11732.1)

REMARKS	DRWN	CHKD	DATE
PREV. SUBMITTAL (20-28471)	CCB	RWN	07/06/20
PREV. SUBMITTAL (23-61292)	MRT	RWN	09/20/23
2026 FBC UPDATE	NRD	CCB	07/17/26

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4 OF 5

SPAN SCHEDULE:

ALLOWABLE PRESSURES	MAX PANEL SPAN
30 psf	134.0 in
35 psf	130.1 in
40 psf	121.7 in
45 psf	114.8 in
50 psf	108.9 in
55 psf	103.8 in
60 psf	99.4 in
65 psf	95.5 in
70 psf	89.1 in
75 psf	83.2 in
80 psf	78.0 in

SPAN SCHEDULE NOTES:

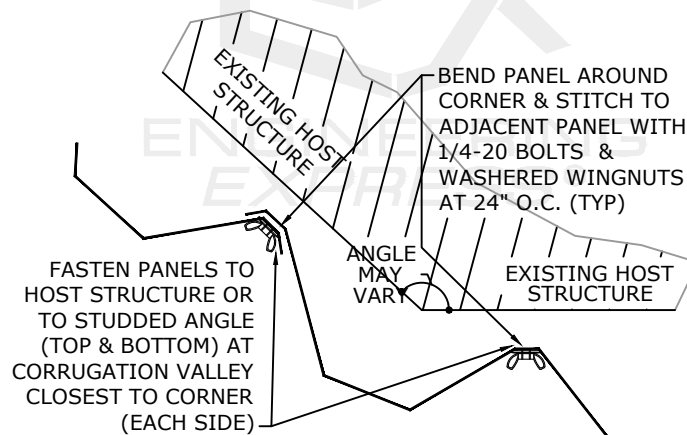
- SPANS SHOWN IN "SPAN SCHEDULE" ABOVE ARE MAXIMUM ALLOWABLE SPANS AT EACH RESPECTIVE DESIGN PRESSURE.
- THIS SCHEDULE MAY BE USED FOR ALL PANELS MOUNTED WITH ANY COMBINATION OF EXTRUSIONS OR DIRECTLY TO HOST STRUCTURE.
- TABLES ABOVE ARE VALID FOR PANELS MOUNTED HORIZONTALLY OR VERTICALLY.

GLASS SEPARATION SCHEDULE:

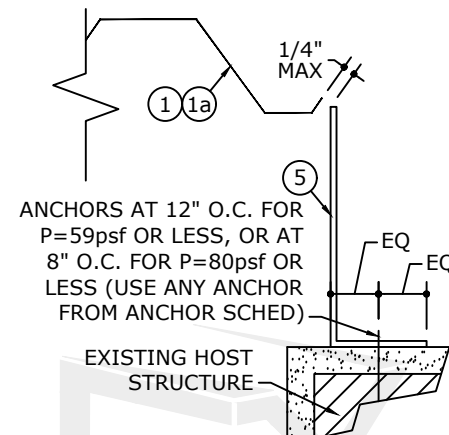
POSITIVE DESIGN LOAD	MAX PANEL SPAN	INSTALLATIONS LESS THAN 30' ABOVE GRADE	INSTALLATIONS GREATER THAN 30' ABOVE GRADE
30 PSF	6'-6"	5.23 "	1.19 "
	8'-8"	6.60 "	1.78 "
	11'-2"	6.60 "	3.15 "
40 PSF	6'-6"	5.23 "	1.26 "
	8'-8"	6.60 "	2.04 "
	10'-1"	6.60 "	2.91 "
50 PSF	6'-6"	5.23 "	1.32 "
	8'-8"	6.60 "	2.30 "
	9'-0"	6.60 "	2.51 "
60 PSF	6'-6"	5.23 "	1.39 "
	8'-3"	6.60 "	2.23 "
70 PSF	6'-6"	5.23 "	1.45 "
	7'-5"	6.60 "	1.85 "
80 PSF	6'-6"	5.23 "	1.52 "

GLASS SEPARATION SCHEDULE NOTES:

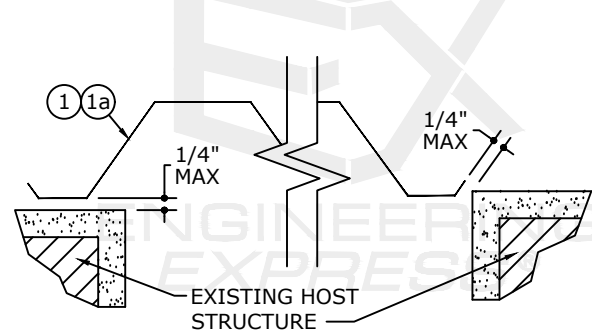
- ENTER GLASS SEPARATION SCHEDULE WITH POSITIVE DESIGN LOAD TO DETERMINE MINIMUM ALLOWABLE SEPARATION FROM FENESTRATION TO BE PROTECTED.
- SCHEDULE IS REQUIRED FOR USE WITH POSITIVE LOADS ONLY. FOR SPANS OR PRESSURES BETWEEN THOSE SHOWN, USE NEXT HIGHER VALUE.
- FOR INSTALLATIONS OUTSIDE ESSENTIAL FACILITIES, AND OUTSIDE OF ASTM WIND ZONE 4, THE GLASS SEPARATION SCHEDULE IS NOT REQUIRED AND NO MINIMUM SEPARATION FROM THE PROTECTED OPENING IS REQUIRED.



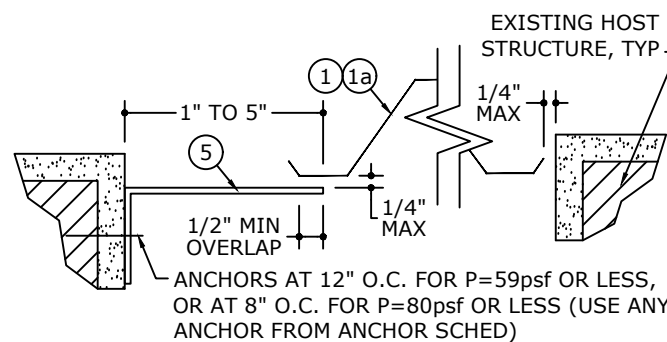
1 CORNER CLOSURE
4 N.T.S. PLAN VIEW



2 BUILD-OUT CLOSURE
4 N.T.S. PLAN VIEW



3 WALL MOUNT CLOSURE
4 N.T.S. PLAN VIEW



4 TRAP MOUNT CLOSURE
4 N.T.S. PLAN VIEW

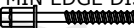
FRANK BENNARDO, P.E.
PE# 0046549 CA# 9885

FRANK L. BENNARDO
LICENSE
No 0046549
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
SIGNED:
08/17/2026

HOST STRUCT.	ANCHOR	LOAD (psf)	2-1/2" MIN EDGE DISTANCE															
			Spans Up To 4'-0" CONN TYPE					Spans Up To 8'-8" CONN TYPE					Spans Up To 11'-2" CONN TYPE					
			C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	
CONCRETE	1/4" ITW TAPCON S.S. WITH 1 3/4" MIN EMBED (3192psi MIN CONC) 	35	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"
		45	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	11.8"	12.0"	12.0"	12.0"	12.0"
		55	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	11.4"	12.0"	12.0"	12.0"	12.0"
		65	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	11.4"	12.0"	12.0"	12.0"	6.0"	11.4"	12.0"	12.0"	12.0"	12.0"
		80	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	11.4"	12.0"	12.0"	12.0"	6.0"	11.4"	12.0"	12.0"	12.0"	12.0"
	1/4" ITW TAPCON SG WITH 1 3/4" MIN EMBED (3295psi MIN CONC) 	35	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"
		45	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"
		55	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"
		65	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"
		80	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"
	1/4" DEWALT FEMALE PANELMATE WITH 1 3/4" MIN EMBED (3323psi MIN CONC) 	35	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"
		45	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	11.8"	12.0"	12.0"	12.0"	12.0"
		55	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	11.3"	12.0"	12.0"	12.0"	12.0"
		65	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	11.3"	12.0"	12.0"	12.0"	6.0"	11.3"	12.0"	12.0"	12.0"	12.0"
		80	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	11.3"	12.0"	12.0"	12.0"	6.0"	11.3"	12.0"	12.0"	12.0"	12.0"
	1/4-20 ALL POINTS SOLID-SET W/ 7/8" MIN EMBED (3000psi MIN CONC) 	35	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"
		45	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	10.5"	12.0"	11.2"	12.0"	12.0"
		55	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	11.2"	12.0"	11.9"	12.0"	6.0"	10.1"	12.0"	10.7"	12.0"	12.0"
		65	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	10.1"	12.0"	10.7"	12.0"	6.0"	10.1"	12.0"	10.7"	12.0"	12.0"
		80	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	10.1"	12.0"	10.7"	12.0"	6.0"	10.1"	12.0"	10.7"	12.0"	12.0"

ANCHOR NOTES:

1. ITW TAPCONS SHALL BE 410 S.S. MIN. ALL OTHER ANCHORS LISTED HEREIN SHALL BE IN IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS.
2. TAPCONS SHALL BE MANUFACTURED BY ITW. "DEWALT PANELMATE" ANCHORS FOR USE IN CONCRETE OR HOLLOW BLOCK SHALL BE FEMALE ONLY.
3. ENSURE MINIMUM 2-1/2" EDGE DISTANCE FOR ALL ANCHORS TO NON-CRACKED CONCRETE & TO HOLLOW BLOCK, UNLESS NOTED OTHERWISE.
4. 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. WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD.
11. 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.
12.  DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE FOR USE.
13. * DESIGNATES ANCHORS WHICH ARE REMOVABLE AND MAY BE USED FOR DIRECT MOUNT INSTALLATIONS.

HOST STRUCT.	ANCHOR	LOAD (psf)	2-1/2" MIN EDGE DISTANCE														
			Spans Up To 4'-0" CONN TYPE					Spans Up To 8'-8" CONN TYPE					Spans Up To 11'-2" CONN TYPE				
			C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5
HOLLOW BLOCK	1/4" ITW TAPCON S.S. WITH 1 3/4" MIN EMBED 	35	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	5.3"	10.1"	5.6"	10.1"	6.0"	3.8"	7.9"	4.0"	7.9"
		45	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	3.8"	7.9"	4.0"	7.9"	6.0"		6.1"		6.0"
		55	6.0"	8.6"	12.0"	9.0"	12.0"	6.0"	3.0"	6.4"	3.1"	6.4"	5.9"		5.9"		5.7"
		65	6.0"	6.6"	11.8"	7.0"	11.8"	5.9"		5.9"		5.7"	5.9"		5.9"		5.7"
		80	6.0"	4.9"	9.6"	5.2"	9.6"	5.9"		5.9"		5.7"	5.9"		5.9"		5.7"
	1/4" ITW TAPCON SG W/ 1 3/4" MIN EMBED 	35	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	11.5"	12.0"	12.0"	12.0"
		45	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	11.5"	12.0"	12.0"	12.0"	6.0"	8.4"	12.0"	8.9"	10.4"
		55	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	8.9"	12.0"	9.5"	11.0"	6.0"	8.1"	12.0"	8.6"	10.0"
		65	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	8.1"	12.0"	8.6"	10.0"	6.0"	8.1"	12.0"	8.6"	10.0"
		80	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	8.1"	12.0"	8.6"	10.0"	6.0"	8.1"	12.0"	8.6"	10.0"
	1/4" DEWALT FEMALE PANELMATE W/ 1 3/4" MIN EMBED & 3" MIN EDGE DISTANCE 	35	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	8.7"	12.0"	9.2"	12.0"	6.0"	6.2"	12.0"	6.6"	12.0"
		45	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	6.2"	12.0"	6.6"	12.0"	6.0"	4.5"	10.0"	4.8"	9.5"
		55	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	4.8"	10.6"	5.2"	10.0"	6.0"	4.4"	9.7"	4.6"	9.2"
		65	6.0"	10.9"	12.0"	11.5"	12.0"	6.0"	4.4"	9.7"	4.6"	9.2"	6.0"	4.4"	9.7"	4.6"	9.2"
		80	6.0"	8.1"	12.0"	8.6"	12.0"	6.0"	4.4"	9.7"	4.6"	9.2"	6.0"	4.4"	9.7"	4.6"	9.2"
	1/4-20 ALL POINTS SOLID-SET WITH 7/8" MIN EMBED 	35	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	8.9"	12.0"	9.4"	12.0"
		45	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	8.9"	12.0"	9.5"	12.0"	6.0"	6.5"	12.0"	6.9"	12.0"
		55	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	6.9"	12.0"	7.4"	12.0"	6.0"	6.3"	12.0"	6.7"	11.9"
		65	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	6.3"	12.0"	6.7"	11.9"	6.0"	6.3"	12.0"	6.7"	11.9"
		80	6.0"	11.6"	12.0"	12.0"	12.0"	6.0"	6.3"	12.0"	6.7"	11.9"	6.0"	6.3"	12.0"	6.7"	11.9"

HOST STRUCT.	ANCHOR	LOAD (psf)	3/4" MIN EDGE DISTANCE															
			Spans Up To 4'-0"					Spans Up To 8'-8"					Spans Up To 11'-2"					
			CONN TYPE					CONN TYPE					CONN TYPE					
			C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	
WOOD	1/4" ITW TAPCON S.S. OR #14 WOOD SCREW W/ 1 7/8" MIN EMBED 	35	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"
		45	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	11.4"	11.4"
		55	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	11.1"	11.1"
		65	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	11.1"	11.1"	6.0"	12.0"	12.0"	11.1"	11.1"
		80	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	11.1"	11.1"	6.0"	12.0"	12.0"	11.1"	11.1"
	1/4" DEWALT FEMALE PANELMATE W/ 1 7/8" MIN EMBED 	35	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"
		45	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"
		55	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"
		65	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"
		80	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"
	1/4" LAG SCREW WITH 1 7/8" MIN EMBED 	35	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	10.8"	10.8"
		45	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	10.8"	10.8"	6.0"	12.0"	12.0"	8.4"	8.4"
		55	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	8.8"	8.8"	6.0"	12.0"	12.0"	8.1"	8.1"
		65	6.0"	12.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	8.1"	8.1"	6.0"	12.0"	12.0"	8.1"	8.1"
			80	6.0"	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	8.1"	8.1"	6.0"	12.0"	12.0"	8.1"	8.1"