

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

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.

A circular professional engineer seal for Colby Bennardo. The outer ring contains the text "COLBY BENNARDO" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside the ring, the word "LICENSE" is at the top and "STATE OF FLORIDA" is at the bottom, also separated by two stars. In the center, the license number "No 95197" is displayed. A large, stylized signature is written across the seal.

Digitally signed by
Colby Bennardo
Date: 2025.06.23
13:49:17 -04'00'

POSITIVE & NEGATIVE (ASD) DESIGN PRESSURES FOR USE WITH THIS SYSTEM SHALL BE DETERMINED ON A SITE-SPECIFIC BASIS AND COMPARED TO LIMITING FACTORS AS STIPULATED HEREIN. THEY SHALL BE CALCULATED IN ACCORDANCE WITH THE GOVERNING CODE REQUIREMENTS & IN ACCORDANCE WITH ASCE 7-22 AND CHAPTER 1609 OF THE FLORIDA BUILDING CODE. THEY SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN. THIS PRODUCT IS APPROVED FOR USE WITHIN THE HIGH VELOCITY HURRICANE ZONE (HVHZ)

AS NOTED IN DESIGN
SCHEDULES

1. THIS SPECIFICATION HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 8TH EDITION (2023) FOR USE WITHIN & OUTSIDE OF THE HVHZ, PER ASTM E330, E1886, E1996, & TAS 201/202/203 TEST PROTOCOLS. CONTRACTOR SHALL INVESTIGATE AND CONFORM TO ALL LOCAL BUILDING CODE AMENDMENTS WHICH MAY APPLY. DESIGN CRITERIA BEYOND AS STATED HEREIN MAY REQUIRE ADDITIONAL SITE-SPECIFIC SEALED ENGINEERING.
2. 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.
3. SEPARATE 'SITE-SPECIFIC' SIGNED AND SEALED ENGINEERING SHALL BE REQUIRED IN ORDER TO DEVIATE, INTERPOLATE, AND EXTRAPOLATE FROM LOADS, DEFLECTIONS, OR SPANS CONTAINED HEREIN. CONTACT THIS ENGINEER AND VISIT THE ACCOMPANYING DIGITAL INFORMATION REFERENCED HEREIN FOR ALTERNATE SPAN CALCULATIONS AS MAY BE REQUIRED.
4. 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.
5. DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR
6. ALL FASTENERS TO BE "Ø OR GREATER SAE GRADE 5 UNLESS NOTED OTHERWISE.
7. FASTENERS SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTION J.3 BY THE ALUMINUM ASSOCIATION, INC., & ANY APPLICABLE FEDERAL, STATE, AND/OR LOCAL CODES.
8. REFER TO FASTENER MANUFACTURER'S PUBLISHED DATA SHEETS AND RECOMMENDATIONS FOR FASTENER INSTALLATION INSTRUCTIONS.
9. ALL STORM PANELS SHALL BE 0.050" THICK, 3004-H34 OR 5052-H32 TYPE ALUMINUM, AND SHALL CONFORM TO THE SPECIFICATIONS LISTED HEREIN.
10. ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T6 ALUMINUM ALLOY OR BETTER, UNLESS NOTED OTHERWISE.
11. CONCRETE ANCHORS NOTED HEREIN SHALL BE EMBEDDED TO NON-CRACKED CONCRETE ONLY. INSTALL ALL CONCRETE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.
12. THE CONTRACTOR IS RESPONSIBLE TO INSULATE OR PROTECT ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
13. ENGINEER SEAL AFFIXED HERE TO VALIDATES 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.
14. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
15. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
16. UNITS SHALL BE LABELED IN ACCORDANCE WITH THE FLORIDA BUILDING COMMISSION AND THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION SPECIFICATION.

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4537 TRANSPORT DRIVE, BLDG 5
TAMPA FL, 33605

2" X 0.050" ALUM STORM PANEL
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL

[illegible]

SCALE: NTS UNLESS NOTED

1

6/6/2025 4:07 PM RICHARDNEETPFUsers\richardneetp\engineering express\production - documents\projects\23-\23-63217 2023 product fbc update f17989\work\23-63217.4b - f17989.4 - 0.050" dwg.dwg

2" x 0.050" ALUMINUM PANELS

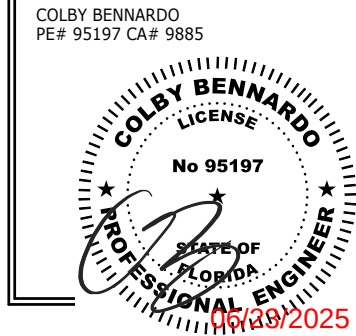
SCHEDULE 1 MAX ALLOWABLE SPAN SCHEDULE FOR USE w/: DIRECT MOUNTS & ALL MOUNTING TYPES		
PANEL SPAN	ALLOWABLE DESIGN PRESSURE	
144"	+ 30 PSF	- 30 PSF
138"	+ 46 PSF	- 32 PSF
132"	+ 49 PSF	- 35 PSF
126"	+ 52 PSF	- 38 PSF
120"	+ 56 PSF	- 42 PSF
114"	+ 60 PSF	- 46 PSF
108"	+ 64 PSF	- 51 PSF
102"	+ 69 PSF	- 57 PSF
96"	+ 75 PSF	- 60 PSF
90"	+ 80 PSF	- 50 PSF
84"	+ 86 PSF	- 55 PSF
78"	+ 92 PSF	- 61 PSF
72"	+ 100 PSF	- 68 PSF
66"	+ 109 PSF	- 76 PSF
60"	+ 120 PSF	- 86 PSF
54"	+ 133 PSF	- 98 PSF
48"	+ 150 PSF	- 150 PSF

1. SELECT SPAN SCHEDULE BASED ON HEADER/SILL EXTRUSION TYPE OR DIRECT MOUNTING CONDITION. ENTER SCHEDULE WITH PANEL SPAN AND DETERMINE MAX ALLOWABLE POSITIVE/NEGATIVE DESIGN PRESSURES.
2. LINEAR INTERPOLATION BETWEEN LOADS IS ACCEPTABLE, OTHERWISE USE NEXT HIGHER LOAD.

2" x 0.050" ALUMINUM PANELS

SCHEDULE 2		
MINIMUM STORM PANEL SEPARATION FROM GLASS		
PANEL SPAN	INSTALLATIONS ≤ 30' ABOVE GRADE	INSTALLATIONS > 30' ABOVE GRADE
144"	5.75 "	4.25 "
138"	5.25 "	5.25 "
132"	4.75 "	4.75 "
126"	4.25 "	4.25 "
120"	4.00 "	3.75 "
114"	4.00 "	3.25 "
108"	4.00 "	3.00 "
102"	4.00 "	2.75 "
96"	4.00 "	2.50 "
90"	4.00 "	2.25 "
84"	4.00 "	2.00 "
78"	4.00 "	1.75 "
72"	4.00 "	1.75 "
66"	4.00 "	1.50 "
60"	4.00 "	1.50 "
54"	4.00 "	1.50 "
48"	4.00 "	1.25 "

1. THIS SCHEDULE SHALL APPLY FOR ALL INSTALLATIONS THAT ARE REQUIRED TO MAINTAIN A MINIMUM SEPARATION BETWEEN THE STORM PANEL AND ANY GLAZING, AS REQUIRED BY THE BUILDING DEPARTMENT OR AUTHORITY HAVING JURISDICTION.
2. ENTER SEPARATION SCHEDULE WITH PANEL SPAN AND DETERMINE THE REQUIRED SEPARATION FROM GLASS.
3. SCHEDULE IS REQUIRED FOR USE WITH POSITIVE LOADS ONLY. INTERPOLATION BETWEEN LOADS IS ACCEPTABLE, OTHERWISE USE NEXT HIGHER LOAD.



JUNE 20, 2025

FL 7989.4

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TAMPA FL, 33605
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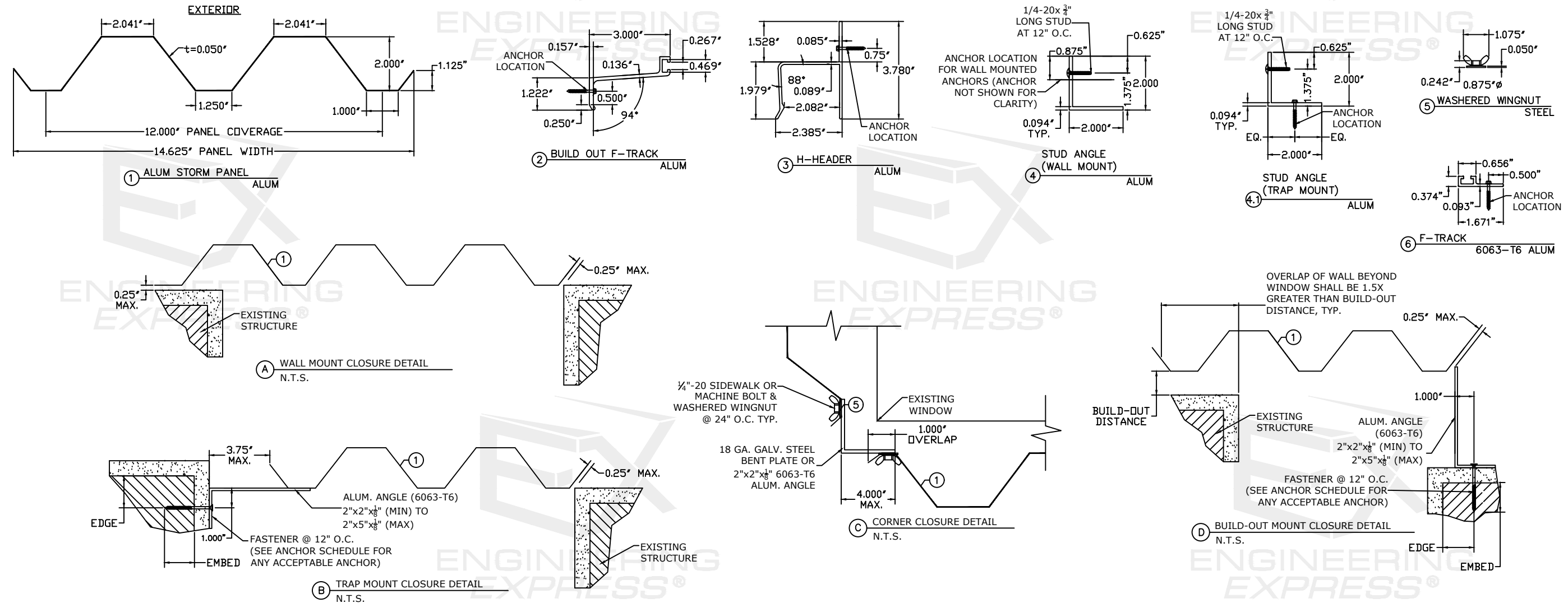
Z X 0.050 ALUM STORM PANEL
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL

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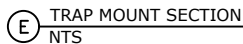
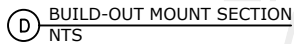
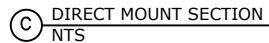
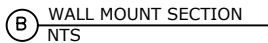
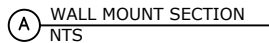
2" X 0.050" ALUM STORM PANEL
FLORIDA BUILDING CODE EIGHTH EDITION (2023)
FLORIDA STATEWIDE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	10/14/20
2023 FBC	MDF	CCB	8/15/23
-	-	-	-
-	-	-	-
-	-	-	-

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OF





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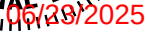
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4537 TRANSPORT DRIVE, BLDG 5
TAMPA FL, 33605

TAMPA FL, 33605

2" X 0.050" ALUM STORM PANEL

FLORIDA STATEWIDE APPROVAL

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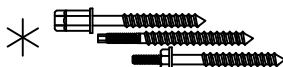
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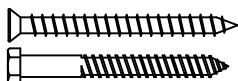
OF

HOLLOW BLOCK or GROUT-FILLED BLOCK

HOST STRUCT.	ANCHOR	LOAD (psf)	ANCHOR SPACING BY SPAN AND CONNECTION TYPE								
			Spans Up To 4'-0"			Spans Up To 8'-0"			Spans Up To 12'-0"		
			CONN TYPE			CONN TYPE			CONN TYPE		
			C1	C2	C3	C1	C2	C3	C1	C2	C3
HOLLOW BLOCK or GROUT-FILLED BLOCK	1/4" ITW TAPCON or DEWALT ULTRACON WITH 1-3/4" EMBED AND 1-1/2" MIN EDGE DISTANCE (1900 psi MIN CMU) 	30	12.0"	11.0"	12.0"	11.5"	5.5"	11.5"	7.5"		7.5"
		50	12.0"	6.5"	12.0"	7.0"		7.0"	4.5"		
		70	10.0"	4.5"	10.0"	5.0"					
		90	7.5"		7.5"						
		110	6.0"		5.5"						
		130	5.0"		4.0"						
		150	4.5"								
	1/4" DEWALT PANELMATE (FEMALE, MALE, or PLUS) W/ 1-1/4" EMBED AND 2" MIN EDGE DISTANCE (2000 psi MIN CMU) 	30	12.0"	12.0"	12.0"	12.0"	9.0"	12.0"	12.0"	6.0"	12.0"
		50	12.0"	10.5"	12.0"	12.0"	5.0"	12.0"	8.5"	3.5"	5.5"
		70	12.0"	7.5"	12.0"	9.0"	3.5"	6.5"	6.0"		3.5"
		90	12.0"	6.0"	12.0"	7.0"	3.0"	4.0"	4.5"		
		110	11.5"	4.5"	10.5"	5.5"		3.0"	3.5"		
		130	10.0"	4.0"	7.5"	5.0"			3.0"		
		150	8.5"	3.5"	5.5"	4.0"					
	1/4-20 DEWALT CALK-IN W/ 7/8" EMBED AND 2-1/2" MIN EDGE DISTANCE (1500 psi MIN CMU w/GROUT FILL) 	30	12.0"	12.0"	12.0"	12.0"	8.0"	12.0"	11.5"	5.5"	11.5"
		50	12.0"	10.0"	12.0"	10.5"	5.0"	10.5"	7.0"		4.5"
		70	12.0"	7.0"	12.0"	7.5"		5.0"	5.0"		
		90	11.5"	5.5"	11.5"	5.5"					
		110	9.5"	4.5"	8.5"	4.5"					
		130	8.0"		6.0"	4.0"					
150		7.0"		4.5"							
1/4 DEWALT ZAMAC NAILIN W/ 1-1/4" EMBED AND 3" MIN EDGE DISTANCE (1500 psi MIN CMU) 	30	12.0"	12.0"	12.0"	12.0"	8.0"	12.0"	12.0"	5.5"	12.0"	
	50	12.0"	9.5"	12.0"	12.0"	4.5"	12.0"	8.0"		5.0"	
	70	12.0"	7.0"	12.0"	8.5"		6.0"	5.5"			
	90	12.0"	5.5"	12.0"	6.5"		4.0"	4.0"			
	110	10.5"	4.5"	9.5"	5.0"						
	130	9.0"		7.0"	4.5"						
	150	8.0"		5.0"	4.0"						
1/4-20 ALL POINTS SOLID- SET WITH 7/8" EMBED AND 1-1/4" MIN EDGE DISTANCE (1800 psi MIN CMU) 	30	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	11.0"	4.0"	11.0"	
	50	12.0"	7.0"	12.0"	9.5"		9.5"	6.5"		4.5"	
	70	12.0"	5.0"	12.0"	7.0"		5.0"	4.5"			
	90	11.0"	4.0"	11.0"	5.5"						
	110	9.0"		8.0"	4.5"						
	130	7.5"		5.5"							
	150	6.5"		4.5"							

1. SEE NOTES ON SHEET 4.

1. SEE NOTES ON SHEET 4.

HOST STRUCT.	ANCHOR	LOAD (psf)	ANCHOR SPACING BY SPAN AND CONNECTION TYPE								
			Spans Up To 4'-0"			Spans Up To 8'-0"			Spans Up To 12'-0"		
			CONN TYPE			CONN TYPE			CONN TYPE		
			C1	C2	C3	C1	C2	C3	C1	C2	C3
WOOD	1/4" ITW TAPCON WITH 1-3/8" THREAD PEN. AND 3/4" MIN EDGE DISTANCE (G=0.42 MIN) 	30	12.0"	12.0"	12.0"	12.0"	8.5"	12.0"	12.0"	5.5"	12.0"
		50	12.0"	10.5"	12.0"	12.0"	5.0"	12.0"	11.0"	3.5"	7.5"
		70	12.0"	7.5"	12.0"	11.5"	3.5"	8.5"	7.5"		4.5"
		90	12.0"	5.5"	12.0"	9.0"		5.5"	6.0"		3.0"
		110	12.0"	4.5"	12.0"	7.5"		4.0"	5.0"		
		130	12.0"	4.0"	9.5"	6.0"		3.0"	4.0"		
		150	11.0"	3.5"	7.5"	5.5"			3.5"		
	1/4" DEWALT ULTRA CON WITH 1-3/8" THREAD PEN. AND 3/4" MIN EDGE DISTANCE (G=0.42 MIN) 	30	12.0"	12.0"	12.0"	12.0"	8.5"	12.0"	12.0"	5.5"	12.0"
		50	12.0"	10.5"	12.0"	12.0"	5.0"	12.0"	11.0"	3.5"	7.5"
		70	12.0"	7.5"	12.0"	11.5"	3.5"	8.5"	7.5"		4.5"
		90	12.0"	5.5"	12.0"	9.0"		5.5"	6.0"		3.0"
		110	12.0"	4.5"	12.0"	7.5"		4.0"	5.0"		
		130	12.0"	4.0"	9.5"	6.0"		3.0"	4.0"		
		150	11.0"	3.5"	7.5"	5.5"			3.5"		
	1/4" DEWALT PANELMATE (FEMALE, MALE, or PLUS) W/ 1-7/8" EMBED AND 3/4" MIN EDGE DISTANCE (G=0.54 MIN) 	30	12.0"	12.0"	12.0"	12.0"	12.0"	12.0"	12.0"	9.5"	12.0"
		50	12.0"	12.0"	12.0"	12.0"	8.5"	12.0"	12.0"	5.5"	12.0"
		70	12.0"	12.0"	12.0"	12.0"	6.0"	12.0"	12.0"	4.0"	8.5"
		90	12.0"	9.5"	12.0"	12.0"	4.5"	10.5"	11.5"	3.0"	6.0"
		110	12.0"	7.5"	12.0"	12.0"	3.5"	8.0"	9.5"		4.5"
		130	12.0"	6.5"	12.0"	12.0"	3.0"	6.5"	8.0"		3.5"
		150	12.0"	5.5"	12.0"	10.5"		5.0"	7.0"		3.0"
	1/4" ITW TAPCON STORM GUARD W/ 1-3/4" EMBED AND 1-1/4" MIN EDGE DISTANCE (G=0.42 MIN) 	30	12.0"	12.0"	12.0"	12.0"	8.5"	12.0"	12.0"	5.5"	12.0"
		50	12.0"	10.5"	12.0"	12.0"	5.0"	12.0"	11.0"	3.5"	7.5"
		70	12.0"	7.5"	12.0"	11.5"	3.5"	8.5"	7.5"		4.5"
90		12.0"	5.5"	12.0"	9.0"		5.5"	6.0"		3.0"	
110		12.0"	4.5"	12.0"	7.5"		4.0"	5.0"			
130		12.0"	4.0"	9.5"	6.0"		3.0"	4.0"			
150		11.0"	3.5"	7.5"	5.5"			3.5"			
1/4-20 PANELMATE INSERT WITH 1-5/8" EMBED AND 3/4" MIN EDGE DISTANCE (G=0.42 MIN) 	30	12.0"	12.0"	12.0"	12.0"	9.0"	12.0"	12.0"	6.0"	12.0"	
	50	12.0"	11.0"	12.0"	12.0"	5.5"	12.0"	8.5"	3.5"	6.0"	
	70	12.0"	8.0"	12.0"	9.5"	4.0"	6.5"	6.0"		3.5"	
	90	12.0"	6.0"	12.0"	7.0"	3.0"	4.5"	4.5"			
	110	12.0"	5.0"	10.5"	6.0"		3.0"	4.0"			
	130	10.0"	4.0"	7.5"	5.0"			3.0"			
	150	8.5"	3.5"	6.0"	4.0"						
1/4" WOOD OR LAG SCREW WITH 1-3/8" MIN THREAD PEN. AND 3/4" MIN EDGE DISTANCE (G=0.42 MIN) 	30	12.0"	12.0"	12.0"	12.0"	8.0"	12.0"	12.0"	5.0"	12.0"	
	50	12.0"	9.5"	12.0"	12.0"	4.5"	12.0"	9.0"	3.0"	6.0"	
	70	12.0"	7.0"	12.0"	9.5"	3.5"	6.5"	6.0"		3.5"	
	90	12.0"	5.0"	12.0"	7.5"		4.5"	5.0"			
	110	12.0"	4.0"	11.0"	6.0"		3.5"	4.0"			
	130	10.0"	3.5"	7.5"	5.0"			3.0"			
	150	9.0"	3.0"	6.0"	4.5"			3.0"			