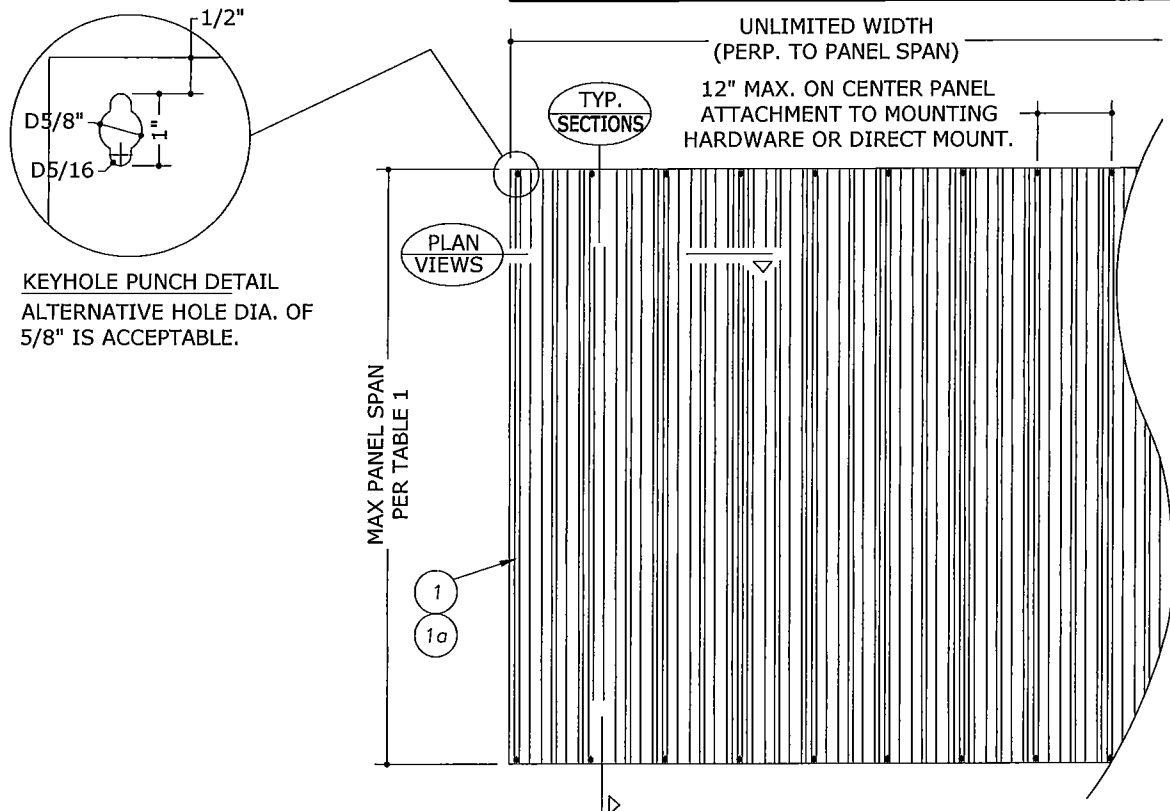


24GA STEEL STORM PANEL

FOR USE OUTSIDE THE HVHZ & WIND ZONE 4



KEYHOLE PUNCH DETAIL
ALTERNATIVE HOLE DIA. OF
5/8" IS ACCEPTABLE.

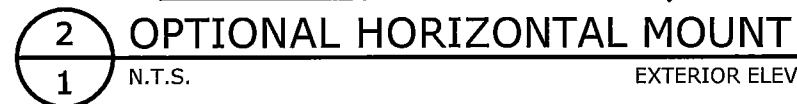
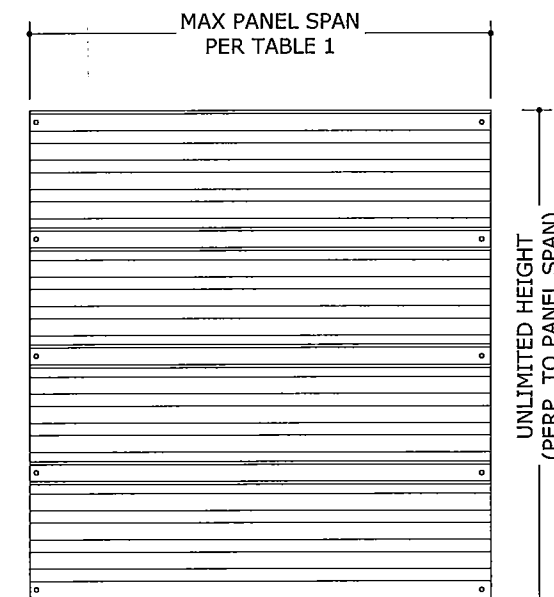
NOTE: TOP MAY BE SLOPED OR RADIUS TO MATCH GEOMETRY OF
OPENING. MOUNTING HARDWARE MUST BE ROLL-FORMED TO THE RADIUS;
NO NOTCHING OF MOUNTING HARDWARE TO ACHIEVE SHAPES IS ALLOWED.



TABLE 1		
ALLOWABLE SPAN SCHEDULE (STEEL PANELS ONLY)		
PANEL SPAN	ALLOWABLE DESIGN PRESSURE	
120"	+ 35.0 PSF	- 38.0 PSF
114"	+ 39.2 PSF	- 41.1 PSF
108"	+ 44.2 PSF	- 44.7 PSF
106"	+ 46.0 PSF	- 46.0 PSF
102"	+ 49.7 PSF	- 49.7 PSF
96"	+ 56.1 PSF	- 56.1 PSF
90"	+ 63.9 PSF	- 63.9 PSF
84"	+ 73.4 PSF	- 73.4 PSF
78"	+ 85.2 PSF	- 85.2 PSF
72"	+ 100.0 PSF	- 100.0 PSF

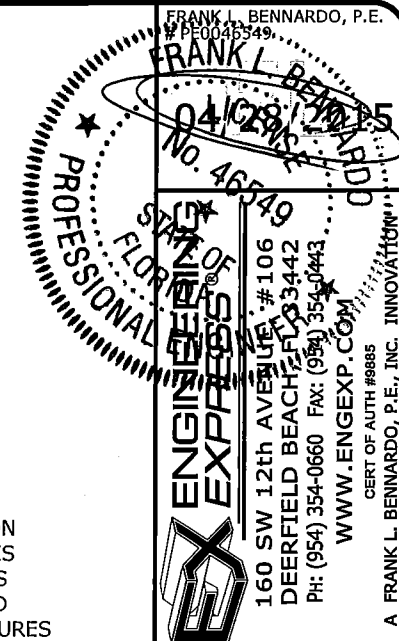
TABLE 1 NOTES:

- LINEAR INTERPOLATION BETWEEN SHUTTER SPANS IS NOT PERMITTED. FOR SPANS BETWEEN THOSE INDICATED ABOVE, THE DESIGN PRESSURES FOR THE NEXT HIGHER SPAN SHALL BE USED.
- DESIGN PRESSURES NOTED IN TABLE 1 APPLY TO ALL MOUNTING AND ANCHORAGE CONDITIONS AND SHALL NOT BE EXCEEDED.



GENERAL NOTES

1. THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC), INTERNATIONAL BUILDING CODE (IBC) AND INTERNATIONAL RESIDENTIAL CODE (IRC) FOR USE OUTSIDE THE HIGH VELOCITY HURRICANE ZONE & WIND ZONE 4. SEE PRODUCT EVALUATION REPORT FOR MORE INFORMATION.
2. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR $C_d=1.6$ HAS BEEN USED FOR WOOD ANCHOR DESIGN.
3. POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED PER SEPARATE ENGINEERING IN ACCORDANCE WITH THE GOVERNING CODE. PRESSURE REQUIREMENTS AS DETERMINED IN ACCORDANCE WITH ASCE 7-10 AND CHAPTER 1609 OF THE FLORIDA BUILDING CODE FIFTH EDITION (2014) SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE 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. THIS SYSTEM HAS BEEN DESIGNED WITH NO SEPARATION FROM GLAZING AND IS INTENDED FOR USE IN WIND ZONES 1-3 ONLY.
6. THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
7. THESE INSTALLATION INSTRUCTIONS ARE PART OF A PRODUCT APPROVAL EVALUATION AND SHALL ONLY BE USED IN CONJUNCTION WITH THE EVALUATION REPORT SUBMITTED FOR THE SAME PRODUCT APPROVAL. USE OF THESE APPROVAL DOCUMENTS SHALL COMPLY WITH CHAPTER 61G15-23 OF THE FLORIDA ADMINISTRATIVE CODE.
8. PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS. BRICK VENEER PER ASTM C62 (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER ANY APPLICABLE LOADS TO THE EXISTING HOST STRUCTURE.
9. STORM PANELS SHALL BE ASTM A653 GRADE 40 STEEL WITH G60 GALVANIZED COATING, TESTED THICKNESS 0.0232".
10. ALL POLYCARBONATE PANELS SHALL BE MANUFACTURED BY TRANSPARENT PROTECTION SYSTEMS, Inc.
11. ALL POLYCARB PANELS SHALL BE EXTRUDED WITH THICKNESS $t=0.100"$ ($\pm 0.010"$) AND SHALL BE MANUFACTURED FROM 100% SYNTHETIC THERMOPLASTIC POLYMER RESIN (UV STABILIZED). TYPICAL TENSILE STRENGTH $F_y=8.908$ KSI, FLEXURAL STRENGTH $F_{by}=12.90$ KSI, & FLEXURAL MODULUS IS 328.7 KSI.
12. ALL EXTRUSIONS SHALL BE 6063-T6 ALUMINUM ALLOY, UNLESS NOTED OTHERWISE. ALL TOLERANCES SHALL BE IN ACCORDANCE WITH ADM 2010.
13. TOP & BOTTOM DETAILS SHOWN MAY BE INTERCHANGED AS FIELD CONDITIONS DICTATE. PANELS MAY BE MOUNTED VERTICALLY OR HORIZONTALLY AS APPLICABLE.
14. PANELS SHALL BE PERMANENTLY LABELED WITH LABELS SPACED NOT MORE THAN EVERY THREE LINEAL FEET PER PANEL AND SHALL FACE THE EXTERIOR AND CONTAIN AT LEAST THE FOLLOWING:
TOWN & COUNTRY INDUSTRIES
FT. LAUDERDALE, FL
ASTM E330, E1886, & E1996 MISSILE LEVEL D
FLORIDA PRODUCT APPROVAL NUMBER
15. ALL BOLTS & WASHERS SHALL BE ZINC COATED STEEL, GALVANIZED STEEL, STAINLESS STEEL, OR 2024-T6 ALUMINUM ALLOY WITH A MINIMUM TENSILE YIELD STRENGTH OF 33 KSI, UNLESS OTHERWISE NOTED HEREIN.
16. CONTRACTOR IS RESPONSIBLE TO INSULATE OR PROTECT ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
17. SEALANT SHALL BE USED ON ANCHORS OR TRACKS WHEREVER WATER SEEPAGE IS POSSIBLE.



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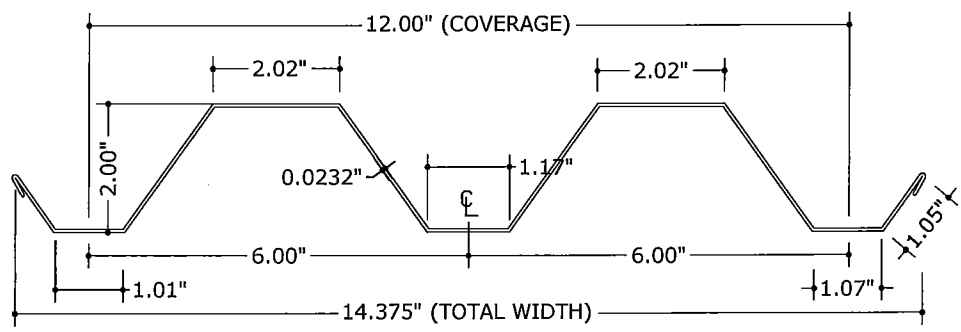
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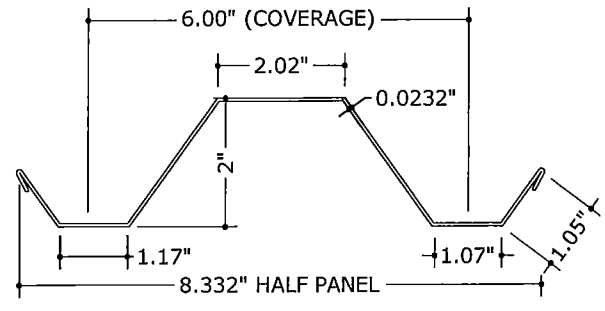
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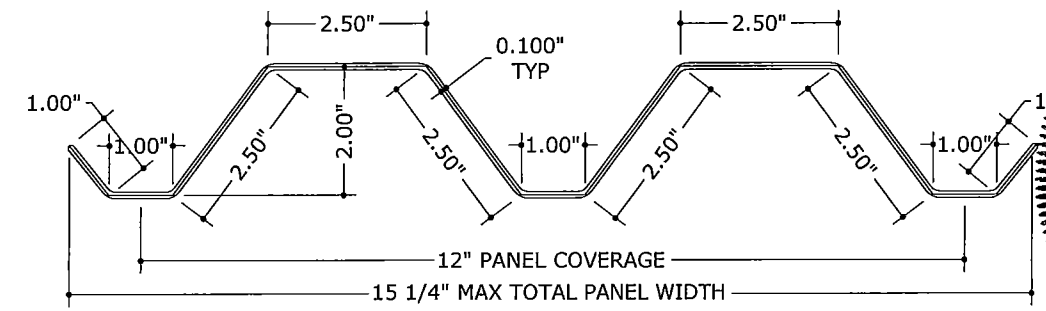


1 STEEL STORM PANEL

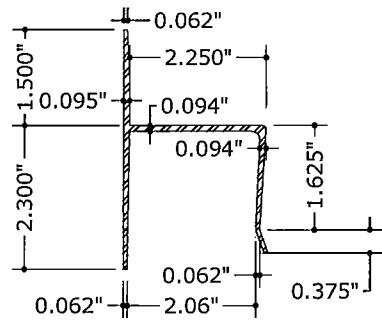


1a STEEL HALF STORM PANEL

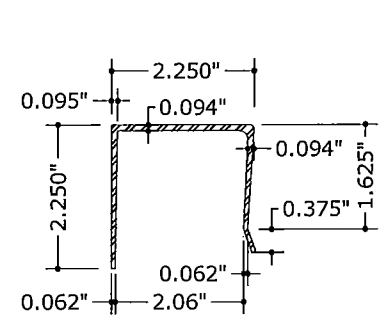
NOTE: HALF STORM PANEL SHALL ONLY BE USED AS AN END PANEL TO CLOSE THE REMAINING OPENING THAT MAY BE LESS THAN FULL PANEL WIDTH



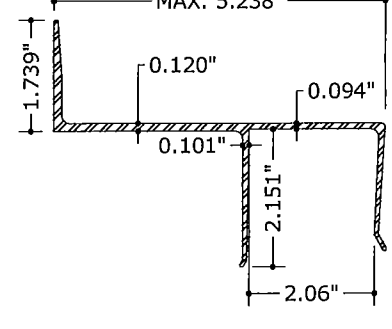
1b POLYCARBONATE STORM PANEL



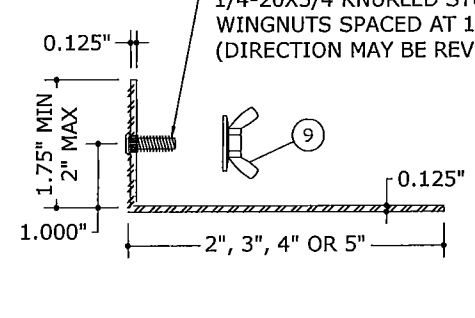
2 H HEADER



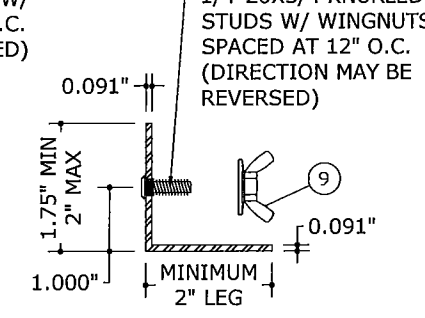
3 U HEADER



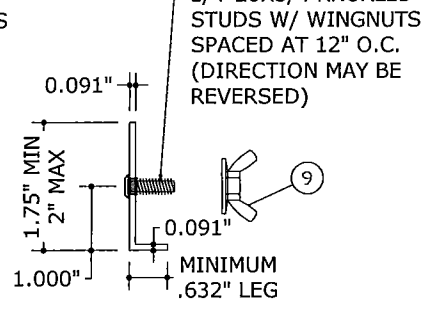
3a BUILD-OUT U HEADER



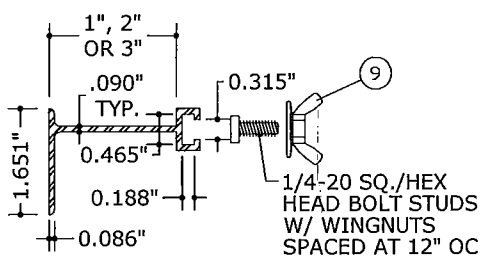
4 STUD ANGLE
SEE COMPONENT NOTES



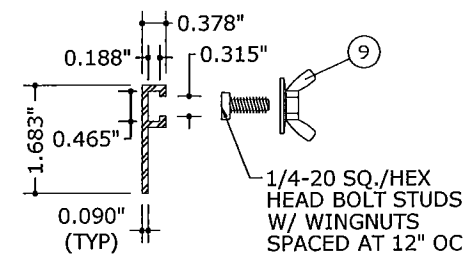
4a STUD ANGLE
SEE COMPONENT NOTES



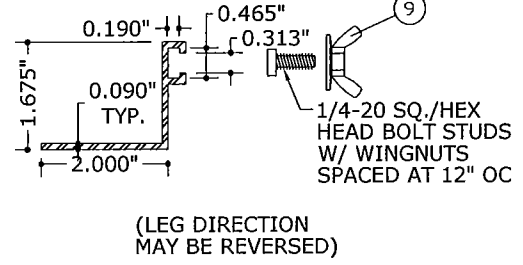
4b STUD ANGLE
SEE COMPONENT NOTES



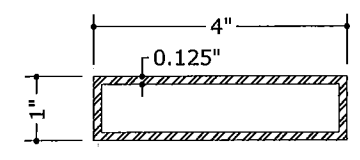
7 BUILD-OUT F TRACK



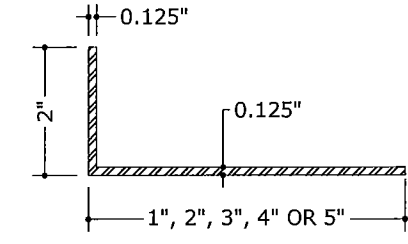
8 F TRACK



8a F ANGLE TRACK

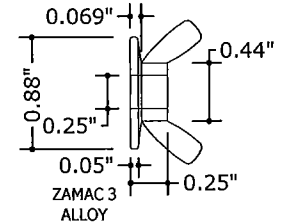


6 TUBE

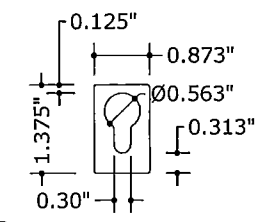


5 ANGLE

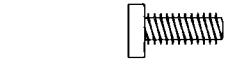
COMPONENT NOTES
ANCHOR HEADS MUST NOT INTERFERE WITH INSTALLATION OF THE PANEL. THE FIRST AND LAST ANCHOR IN ALL TRACKS SHALL BE INSTALLED WITHIN THE FIRST 3\"/>



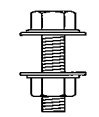
9 WASHER WINGNUT
NON-RECESSED FLAT SURFACE TYPE ONLY



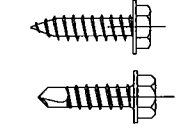
10 KEYHOLE WASHER
20 GA. GALV. STEEL (t=.038\"/>



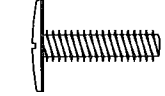
11 1/4-20 SQ./HEX HEAD BOLT



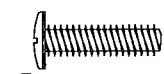
12 1/4-20 316 SS MACHINE BOLT W/NUT



13 #14x3/4 SDS/SMS SCREW



14 1/4-20 SIDEWALK BOLT



15 1/4-20 TRUSS HEAD BOLT
REQUIRES USE OF KEYHOLE WASHER IN DIRECT MOUNT APPLICATIONS

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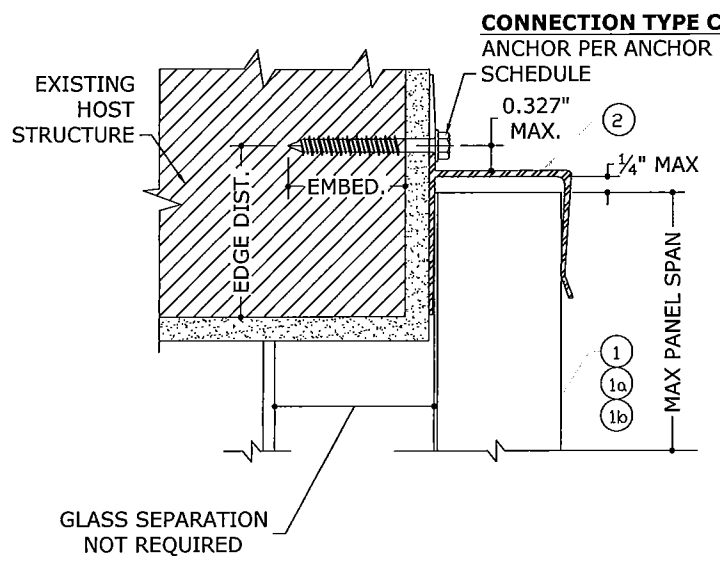
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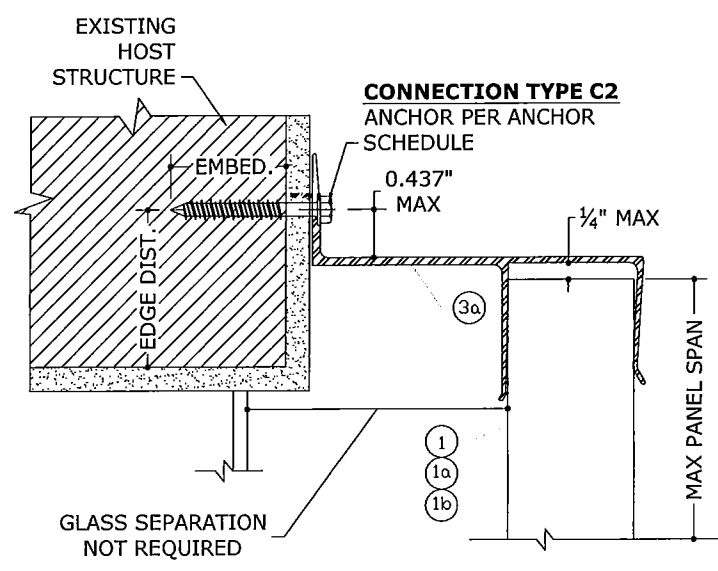
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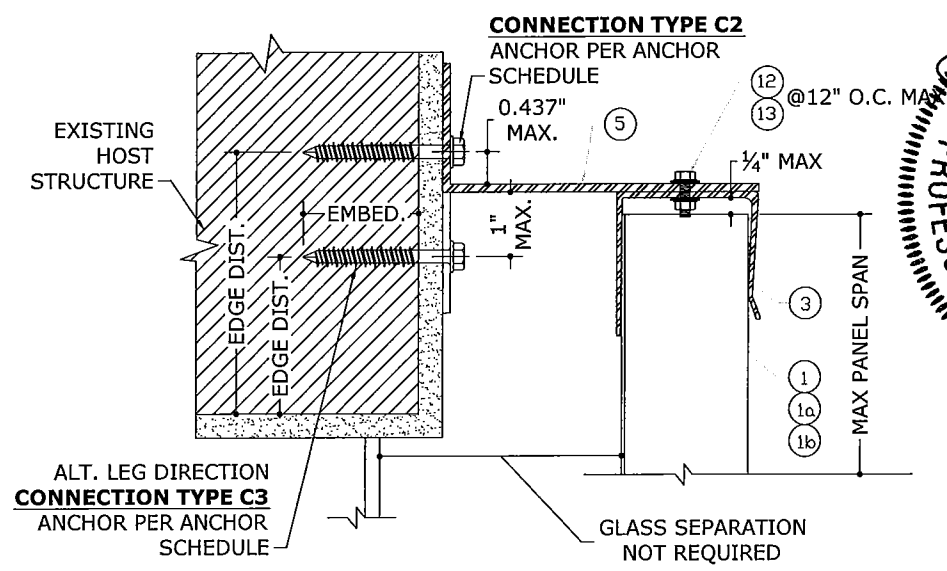
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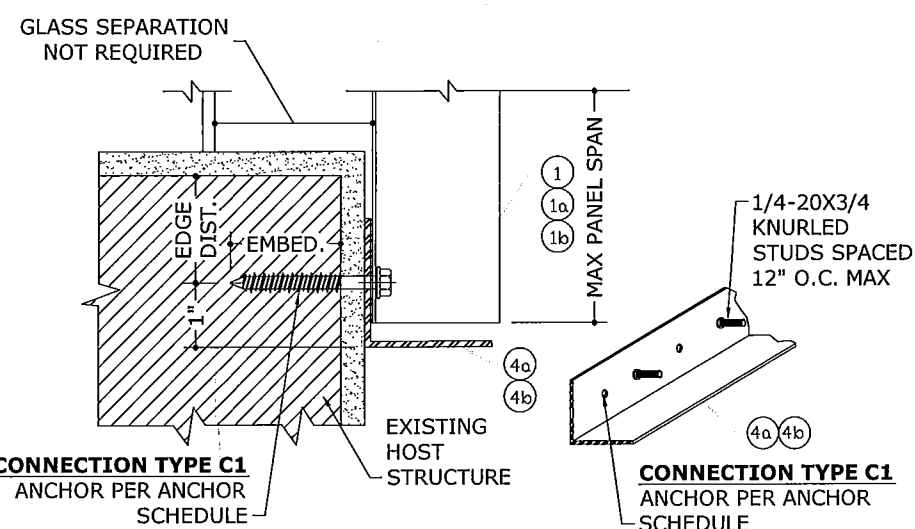
A "H" MOUNT SECTION



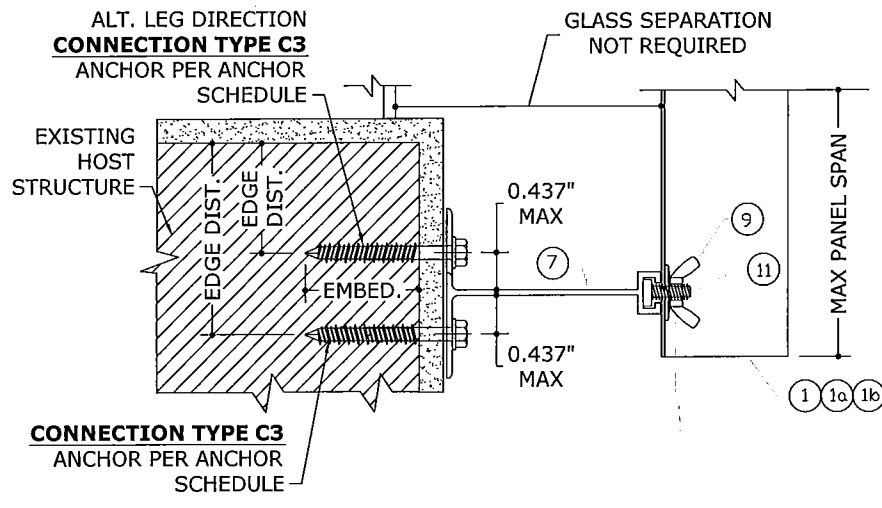
B BUILD-OUT "U" MOUNT SECTION



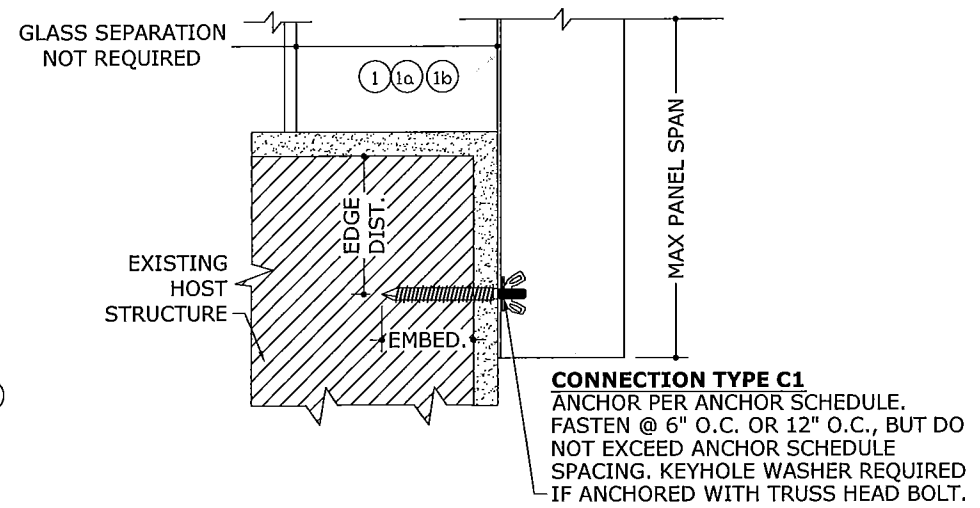
C ALT. BUILD-OUT "U" MOUNT SECTION



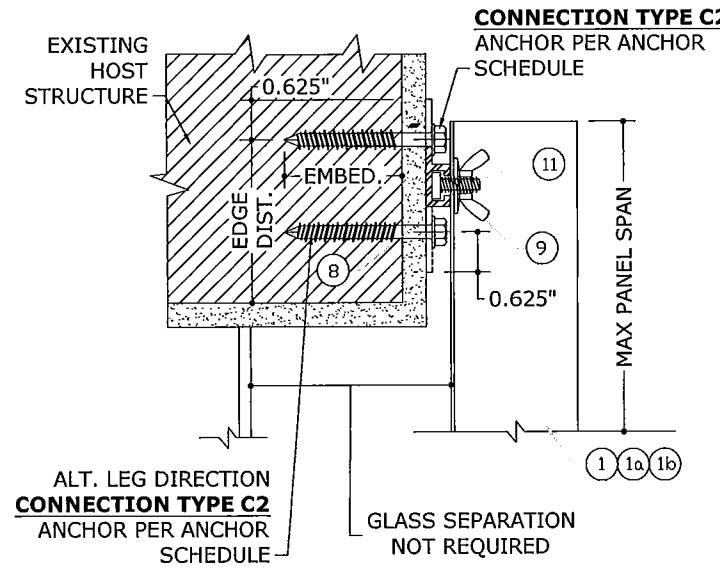
D STUD ANGLE WALL MOUNT SECTION



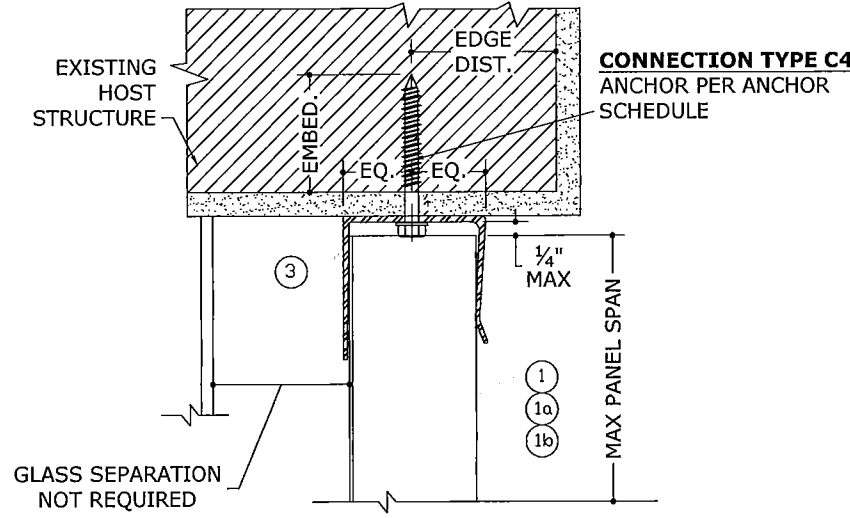
E BUILD-OUT "F" TRACK SECTION



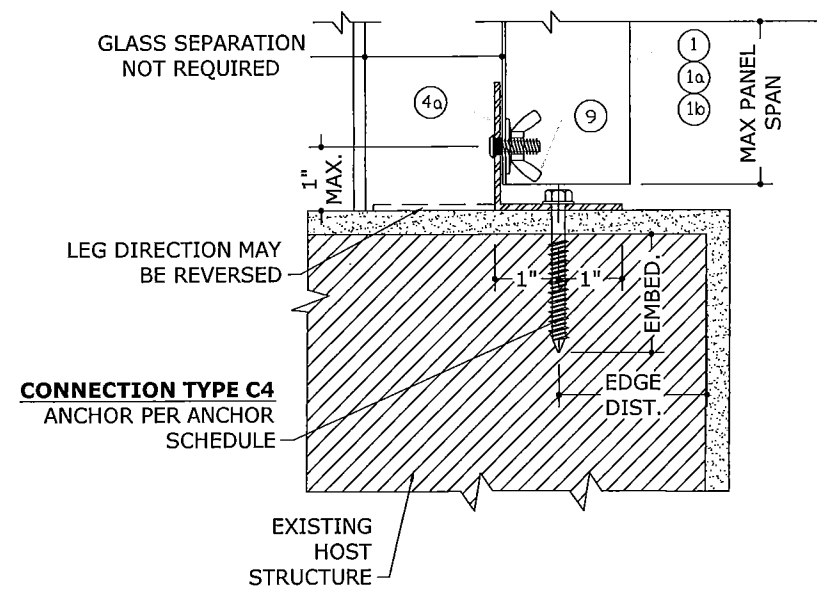
F DIRECT MOUNT SECTION



G "F" TRACK MOUNT SECTION



H TRAP "U" HEADER SECTION



I TRAP STUD ANGLE SECTION

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 04/28/2015
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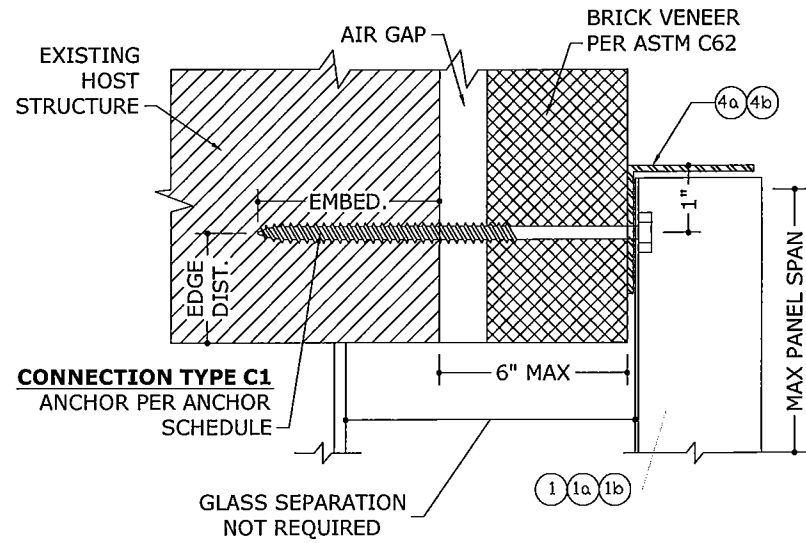
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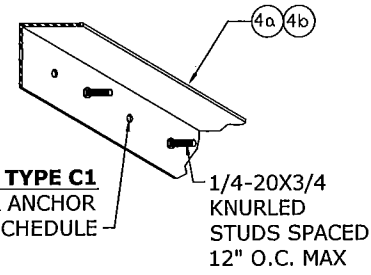
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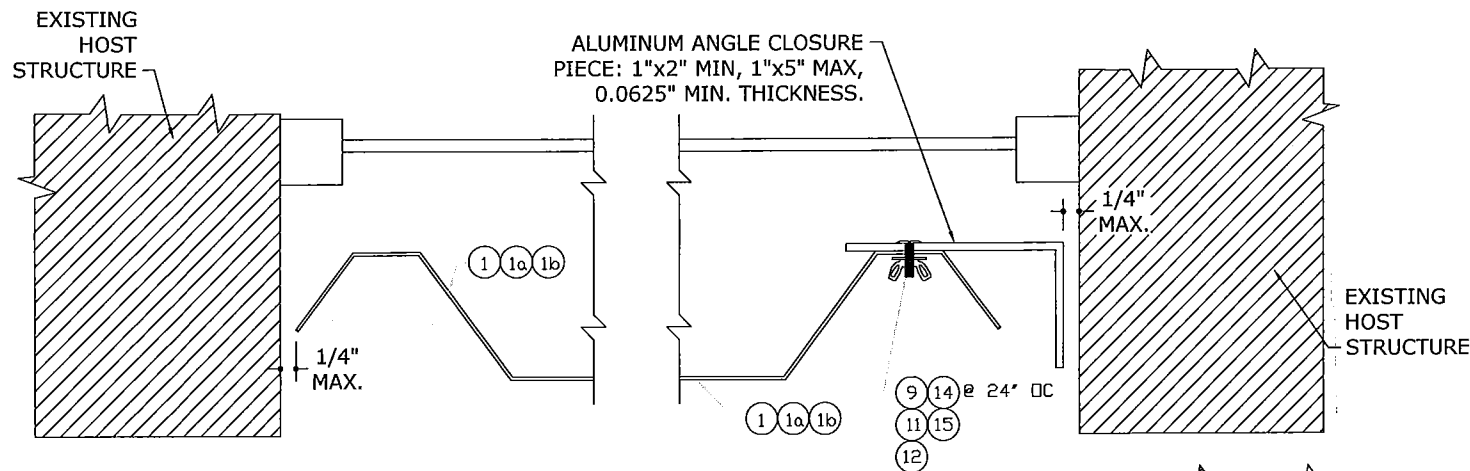
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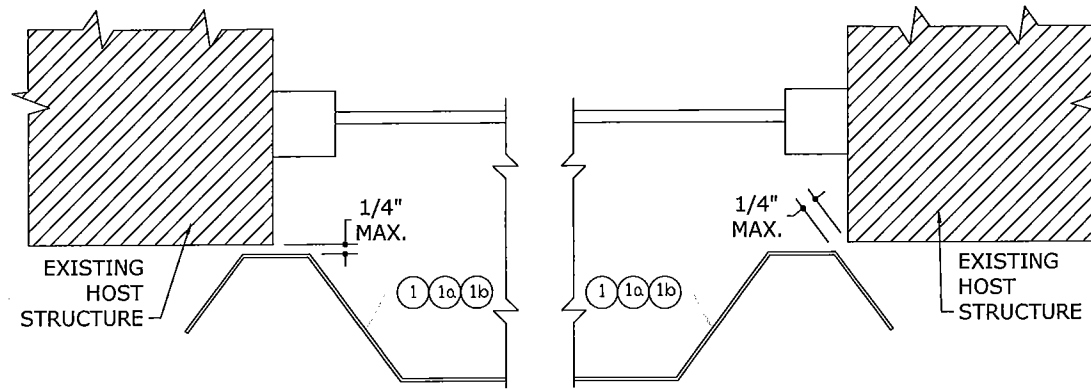
P STUD ANGLE THROUGH VENEER OVER STRUCTURAL BASE SECTION



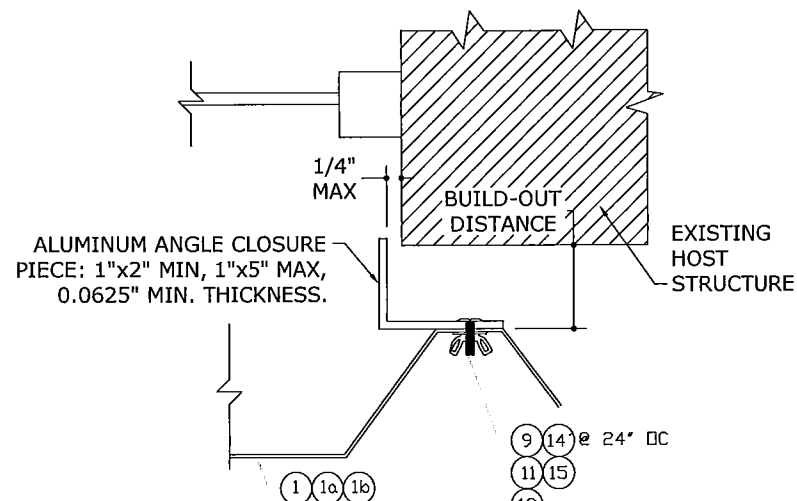
Q BUILD-OUT "F" TRACK THROUGH VENEER OVER STRUCTURAL BASE SECTION



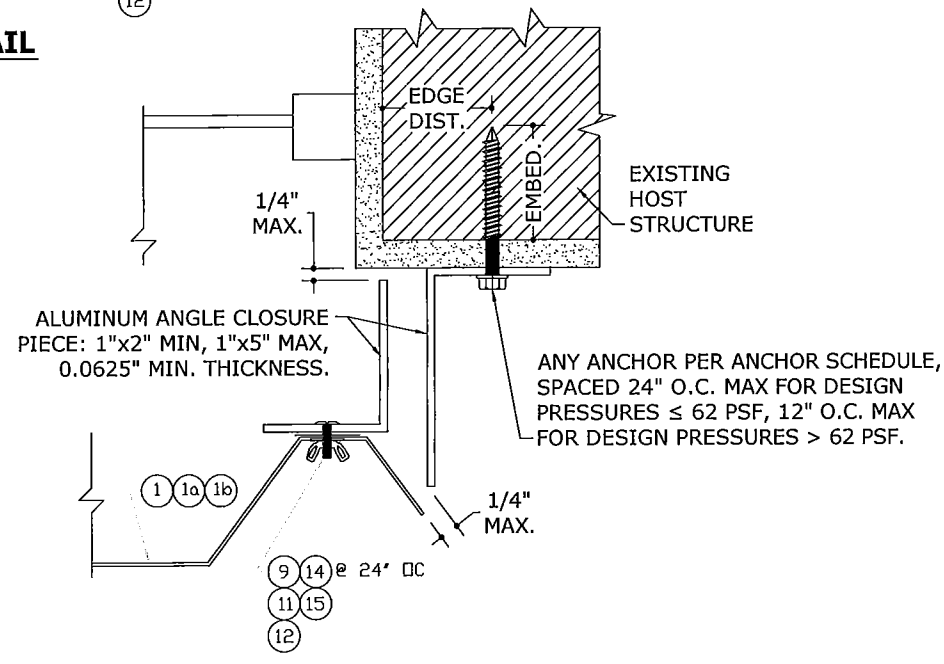
R TRAP MOUNT CLOSURE DETAIL



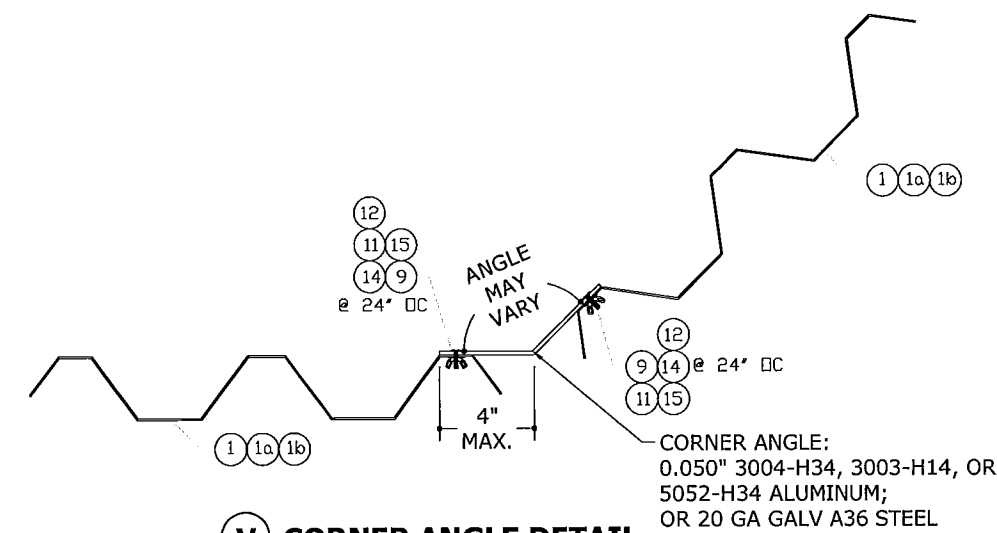
S WALL MOUNT CLOSURE DETAIL



T BUILD-OUT MOUNT CLOSURE DETAIL



U ALTERNATE CLOSURE DETAIL



V CORNER ANGLE DETAIL

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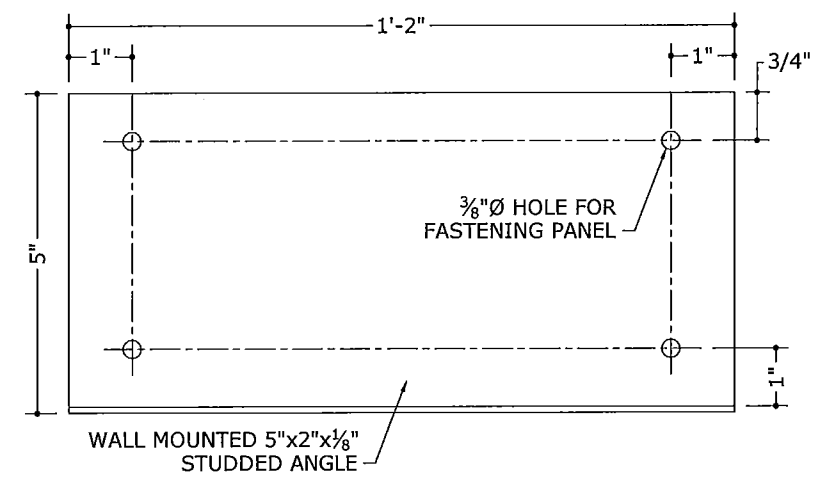
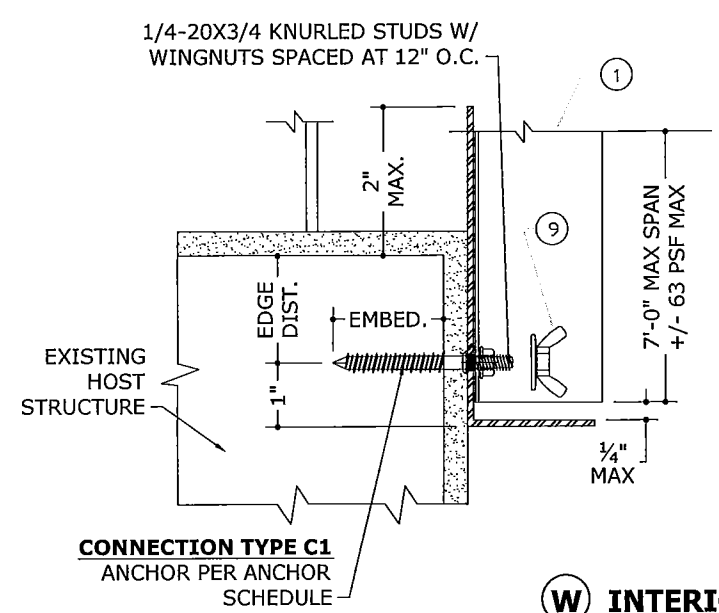
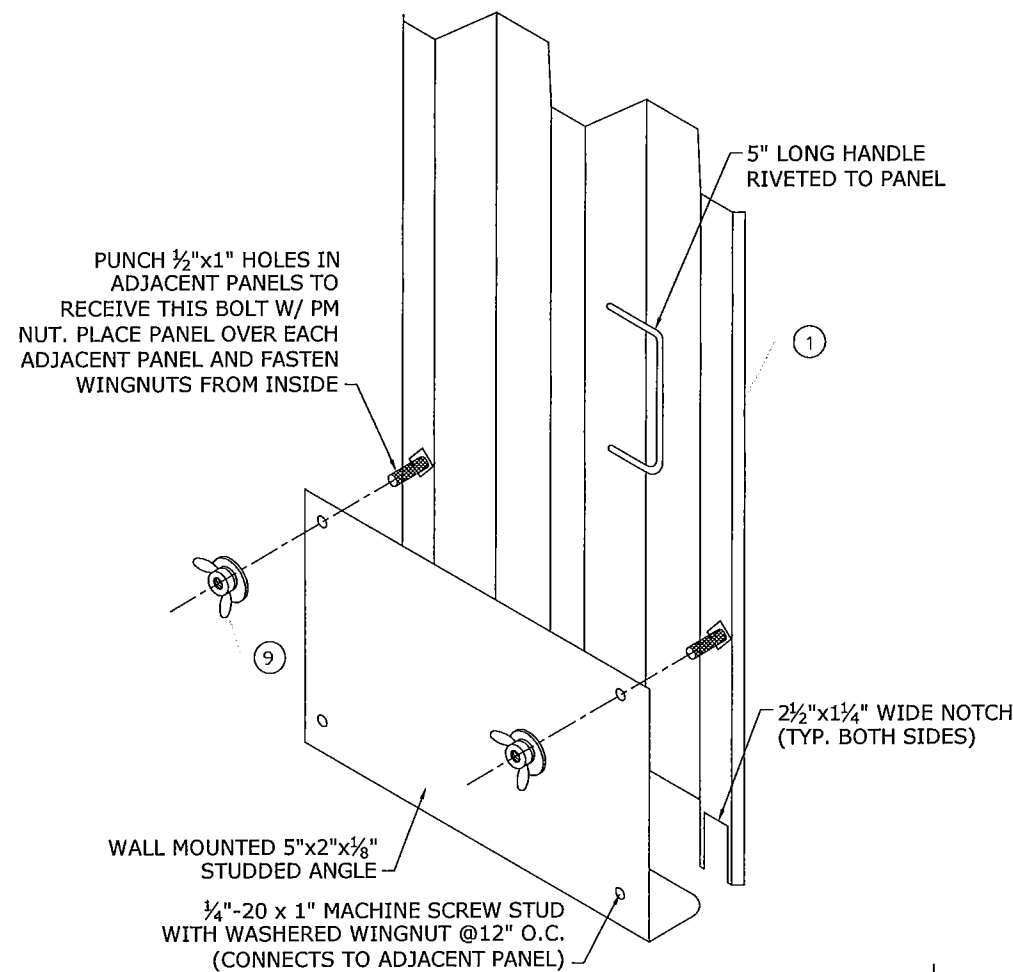
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W INTERIOR FASTENING ANGLE ASSEMBLY
 THESE DETAILS DEPICT THE CONNECTION OF ANY PANEL FOR AN OPENING WITH PANELS INSTALLED FROM INSIDE. USE OF THESE DETAILS SHALL BE IN CONJUNCTION WITH AN "H" HEADER OR "U" HEADER TOP MOUNT.

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 PE0046599
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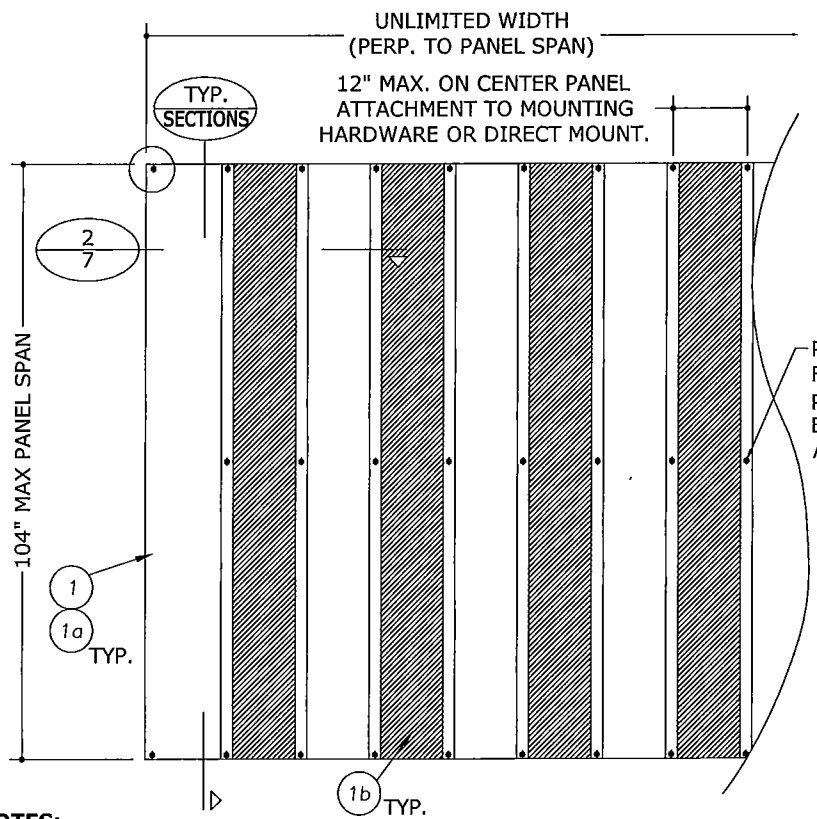
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POLYCARBONATE PANELS FASTENED TO ADJACENT STORM PANELS WITH 1/4\"-20 SIDEWALK BOLT AND WASHERED WINGUT AT MIDSPAN, TYPICAL.

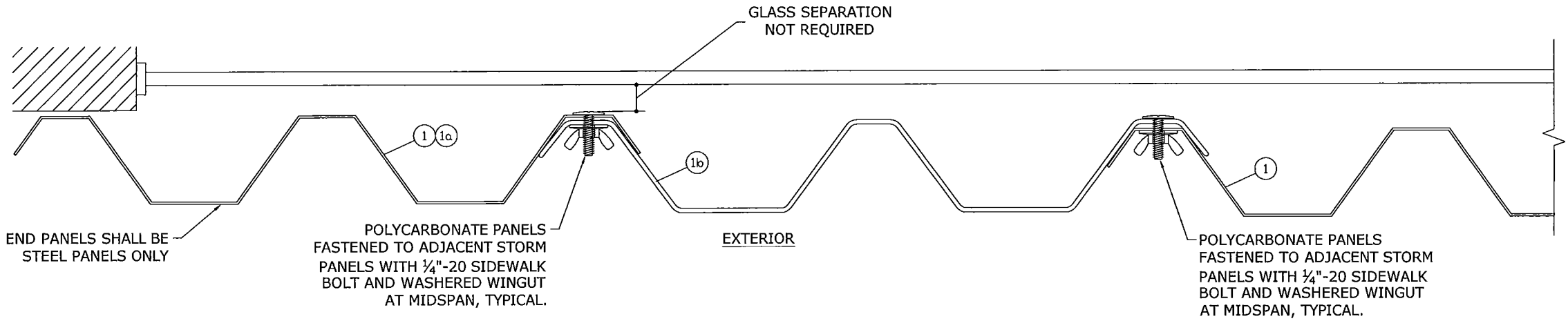
TABLE 2 ALLOWABLE SPAN SCHEDULE (STEEL WITH POLYCARB PANELS)		
PANEL SPAN	ALLOWABLE DESIGN PRESSURE	
106"	+ 33.3 PSF	- 33.3 PSF
102"	+ 35.7 PSF	- 35.7 PSF
96"	+ 39.8 PSF	- 39.8 PSF
90"	+ 44.7 PSF	- 44.7 PSF
84"	+ 50.6 PSF	- 50.6 PSF
78"	+ 57.9 PSF	- 57.9 PSF
72"	+ 67.0 PSF	- 67.0 PSF

TABLE 2 NOTES:

- LINEAR INTERPOLATION BETWEEN SHUTTER SPANS IS NOT PERMITTED. FOR SPANS BETWEEN THOSE INDICATED ABOVE, THE DESIGN PRESSURES FOR THE NEXT HIGHER SPAN SHALL BE USED.
- DESIGN PRESSURES NOTED IN TABLE 2 APPLY TO ALL MOUNTING AND ANCHORAGE CONDITIONS AND SHALL NOT BE EXCEEDED.

- NOTES:**
- TOP MAY BE SLOPED OR RADIUS TO MATCH GEOMETRY OF OPENING. MOUNTING HARDWARE MUST BE ROLL-FORMED TO THE RADIUS; NO NOTCHING OF MOUNTING HARDWARE TO ACHIEVE SHAPES IS ALLOWED.
 - STORM PANELS MAY BE MOUNTED VERTICALLY OR HORIZONTALLY.
 - STEEL AND POLYCARBONATE PANELS SHALL ALTERNATE.
 - END PANELS SHALL BE STEEL PANELS ONLY.

1
7 N.T.S. **TYPICAL ELEVATION WITH ALTERNATING STEEL AND POLYCARBONATE PANELS**
EXTERIOR ELEV
INTERIOR



2
7 N.T.S. **TYPICAL SECTION WITH ALTERNATING STEEL AND POLYCARBONATE PANELS**
HORIZ SECTION

FRANK L. BENNARDO, P.E.
#PE0048348
04/FEB/2015
No. 46549
PROFESSIONAL ENGINEERING
FLORIDA
EXPRESS OF
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DEERFIELD BEACH, FL 33442
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CERT OF AUTH #9885
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Town & Country
INDUSTRIES
Wholesale Aluminum and Building Products
A Division of ABC Supply Co., Inc.
400 WEST MCNAB ROAD
FT. LAUDERDALE, FL 33309
FL12856.3

DRWN	CHKD	DATE
CSL	FLB	04/01/15

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INIT ISSUE

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SCALE:
PAGE DESCRIPTION:
7 OF 10

ANCHOR SCHEDULES (CONTINUED):

HOST STRUCT.	ANCHOR	LOAD (psf)	EDGE DISTANCES AS NOTED														
			Spans Up To 6'-0" CONN TYPE					Spans Up To 8'-0" CONN TYPE					Spans Up To 10'-0" CONN TYPE				
			C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5
HOLLOW CONCRETE BLOCK	1/4" ITW S.S. TAPCON WITH 1-1/4" MIN. EMBED AND 2-1/2" MIN. EDGE DISTANCE	35	14.6"	14.6"	14.6"	9.1"	14.6"	11.0"	11.0"	11.0"	6.8"	11.0"	8.8"	8.8"	8.8"	5.5"	8.8"
		46	11.1"	11.1"	11.1"	6.9"	11.1"	8.3"	8.3"	8.3"	5.2"	8.3"	6.7"	6.7"	6.7"	4.0"	5.1"
		57	9.0"	9.0"	9.0"	5.6"	9.0"	6.7"	6.7"	6.7"	4.0"	5.2"	5.4"	3.8"	5.4"	3.1"	3.2"
		67	7.6"	7.1"	7.6"	4.6"	7.5"	5.7"	4.2"	5.7"	3.3"	3.6"	4.6"		4.6"		
		78	6.6"	5.3"	6.6"	3.9"	4.9"	4.9"	3.3"	4.9"			3.9"		3.9"		
		89	5.8"	4.2"	5.8"	3.3"	3.6"	4.3"		4.3"			3.5"		3.5"		
		100	5.1"	3.5"	5.1"			3.8"		3.8"							
		35	16.0"	16.0"	16.0"	8.3"	16.0"	12.0"	12.0"	12.0"	6.2"	12.0"	9.6"	9.6"	9.6"	5.0"	9.6"
		46	12.2"	12.2"	12.2"	6.3"	12.2"	9.1"	9.1"	9.1"	4.7"	9.1"	7.3"	6.0"	7.3"		5.6"
		57	9.8"	9.8"	9.8"	5.1"	9.8"	7.4"	6.1"	7.4"		5.7"	5.9"	4.2"	5.9"		
67	8.4"	7.8"	8.4"	4.2"	8.2"	6.3"	4.6"	6.3"		5.0"		5.0"					
78	7.2"	5.8"	7.2"		5.3"	5.4"		5.4"		4.3"		4.3"					
89	6.3"	4.6"	6.3"			4.7"		4.7"									
100	5.6"		5.6"			4.2"		4.2"									
HOLLOW CONCRETE BLOCK	1/4" ELCO ULTRACON WITH 1-1/4" MIN. EMBED AND 2-1/2" MIN. EDGE DISTANCE	35	16.0"	16.0"	16.0"	11.7"	16.0"	16.0"	16.0"	8.8"	16.0"	14.4"	14.4"	14.4"	7.0"	14.4"	
		46	16.0"	16.0"	16.0"	8.9"	16.0"	13.7"	13.7"	13.7"	6.6"	13.7"	11.0"	9.0"	11.0"	5.1"	8.4"
		57	14.7"	14.7"	14.7"	7.2"	14.7"	11.1"	11.1"	11.1"	5.2"	8.6"	8.8"	6.3"	8.8"	4.0"	5.2"
		67	12.5"	11.6"	12.5"	6.0"	12.4"	9.4"	6.9"	9.4"	4.3"	5.9"	7.5"	4.9"	7.5"		
		78	10.8"	8.7"	10.8"	5.0"	8.0"	8.1"	5.5"	8.1"		4.4"	6.5"		6.5"		
		89	9.4"	7.0"	9.4"	4.3"	5.9"	7.1"	4.5"	7.1"		5.7"		5.7"			
		100	8.4"	5.8"	8.4"		4.7"	6.3"		6.3"		5.0"		4.9"			
		35	16.0"	16.0"	16.0"	15.9"	16.0"	16.0"	16.0"	16.0"	11.9"	16.0"	16.0"	16.0"	16.0"	9.6"	16.0"
		46	16.0"	16.0"	16.0"	12.1"	16.0"	16.0"	16.0"	16.0"	9.1"	16.0"	16.0"	16.0"	16.0"	7.1"	15.5"
		57	16.0"	16.0"	16.0"	9.8"	16.0"	16.0"	16.0"	16.0"	7.1"	15.8"	16.0"	11.6"	16.0"	5.6"	9.6"
67	16.0"	16.0"	16.0"	8.2"	16.0"	16.0"	12.8"	16.0"	6.0"	10.9"	13.9"	9.1"	13.9"	4.7"	7.1"		
78	16.0"	16.0"	16.0"	6.9"	14.8"	14.9"	10.1"	14.9"	5.1"	8.1"	11.9"	7.3"	11.9"	4.0"	5.6"		
89	16.0"	12.8"	16.0"	6.0"	11.0"	13.1"	8.3"	13.1"	4.4"	6.4"	10.5"	6.2"	10.5"	3.5"	4.6"		
100	15.5"	10.7"	15.5"	5.3"	8.7"	11.6"	7.1"	11.6"	3.9"	5.4"	9.3"	5.3"	9.0"	3.1"	3.9"		
HOLLOW CONCRETE BLOCK	1/4-20 ALL POINTS SOLID-SET WITH 7/8" MIN EMBED AND 2" MIN. EDGE DISTANCE	35	16.0"	16.0"	16.0"	13.4"	16.0"	16.0"	16.0"	10.1"	16.0"	16.0"	16.0"	16.0"	8.1"	16.0"	
		46	16.0"	16.0"	16.0"	10.2"	16.0"	16.0"	16.0"	7.6"	16.0"	14.9"	12.2"	14.9"	5.9"	11.4"	
		57	16.0"	16.0"	16.0"	8.2"	16.0"	15.1"	12.4"	15.1"	6.0"	11.7"	12.1"	8.5"	12.1"	4.7"	7.1"
		67	16.0"	15.9"	16.0"	6.9"	16.0"	12.8"	9.4"	12.8"	5.0"	8.0"	10.3"	6.7"	10.3"	3.9"	5.3"
		78	14.7"	11.9"	14.7"	5.8"	10.9"	11.0"	7.4"	11.0"	4.3"	6.0"	8.8"	5.4"	8.8"	3.4"	4.1"
		89	12.9"	9.5"	12.9"	5.0"	8.1"	9.7"	6.1"	9.7"	3.7"	4.8"	7.7"	4.5"	7.7"		3.4"
		100	11.5"	7.9"	11.5"	4.4"	6.4"	8.6"	5.2"	8.6"	3.3"	4.0"	6.9"	3.9"	6.7"		
		35	15.4"	15.4"	15.4"	6.6"	15.4"	11.5"	11.5"	11.5"	5.0"	11.5"	9.2"	9.2"	9.2"		9.2"
		46	11.7"	11.7"	11.7"	5.1"	11.7"	8.8"	8.8"	8.8"		8.8"	7.0"	5.7"	7.0"		5.4"
		57	9.4"	9.4"	9.4"	4.1"	9.4"	7.1"	5.8"	7.1"		5.5"	5.7"	4.0"	5.7"		
67	8.0"	7.5"	8.0"		7.9"	6.0"	4.4"	6.0"			4.8"		4.8"				
78	6.9"	5.6"	6.9"		5.1"	5.2"		5.2"			4.1"		4.1"				
89	6.0"	4.4"	6.0"			4.5"		4.5"									
100	5.4"		5.4"			4.0"		4.0"									
HOLLOW CONCRETE BLOCK	1/4" MILLENIUM MILLFAST ANCHOR W/ 1-1/4" EMBED AND 1" EDGE DISTANCE	35	16.0"	16.0"	16.0"	10.0"	16.0"	12.7"	12.7"	12.7"	7.5"	12.7"	10.1"	10.1"	10.1"	6.0"	10.1"
		46	12.9"	12.9"	12.9"	7.6"	12.9"	9.7"	9.7"	9.7"	5.7"	9.7"	7.7"	6.3"	7.7"	4.4"	5.9"
		57	10.4"	10.4"	10.4"	6.2"	10.4"	7.8"	6.4"	7.8"	4.4"	6.0"	6.2"	4.4"	6.2"		
		67	8.8"	8.2"	8.8"	5.1"	8.7"	6.6"	4.9"	6.6"		4.1"	5.3"		5.3"		
		78	7.6"	6.1"	7.6"	4.3"	5.6"	5.7"		5.7"		4.6"		4.6"			
		89	6.7"	4.9"	6.7"		4.2"	5.0"		5.0"							
		100	5.9"	4.1"	5.9"			4.4"		4.4"							
		35	16.0"	16.0"	16.0"	12.2"	16.0"	16.0"	16.0"	16.0"	9.2"	16.0"	15.8"	15.8"	15.8"	7.3"	15.8"
		46	16.0"	16.0"	16.0"	9.3"	16.0"	15.0"	15.0"	15.0"	6.9"	15.0"	12.0"	9.8"	12.0"	5.4"	9.2"
		57	16.0"	16.0"	16.0"	7.5"	16.0"	12.1"	10.0"	12.1"	5.4"	9.4"	9.7"	6.9"	9.7"	4.2"	5.7"
67	13.7"	12.8"	13.7"	6.3"	13.5"	10.3"	7.6"	10.3"	4.5"	6.5"	8.2"	5.4"	8.2"	3.6"	4.2"		
78	11.8"	9.5"	11.8"	5.3"	8.8"	8.9"	6.0"	8.9"	3.8"	4.8"	7.1"	4.3"	7.1"	3.0"	3.3"		
89	10.3"	7.6"	10.3"	4.6"	6.5"	7.8"	4.9"	7.8"	3.3"	3.8"	6.2"	3.6"	6.2"				
100	9.2"	6.3"	9.2"	4.0"	5.2"	6.9"	4.2"	6.9"		3.2"	5.5"	3.1"	5.4"				

HOST STRUCT.	ANCHOR	LOAD (psf)	EDGE DISTANCES AS NOTED														
			Spans Up To 6'-0" CONN TYPE					Spans Up To 8'-0" CONN TYPE					Spans Up To 10'-0" CONN TYPE				
			C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5
HOLLOW CONCRETE BLOCK	1/4" ITW S.S. TAPCON WITH 1-1/4" MIN. EMBED AND 1" MIN. EDGE DISTANCE	35	10.7"	10.7"	10.7"	4.8"	10.7"	8.0"	8.0"	8.0"	3.6"	8.0"	6.4"	6.4"	6.4"		
		46	8.1"	8.1"	8.1"	3.6"	8.1"	6.1"	6.1"	6.1"		6.1"	4.9"	4.9"	4.9"		
		57	6.6"	6.6"	6.6"		6.6"	4.9"	4.1"	4.9"		3.8"	3.9"	4.0"	3.9"		
		67	5.6"	5.2"	5.6"		5.5"	4.2"	3.1"	4.2"		3.4"		3.4"			
		78	4.8"	3.9"	4.8"		3.6"	3.6"		3.6"							
		89	4.2"	3.1"	4.2"			3.2"		3.2"							
		100	3.7"		3.7"												
		35	16.0"	16.0"	16.0"	8.9"	16.0"	12.0"	12.0"	12.0"	6.7"	12.0"	9.6"	9.6"	9.6"	5.4"	9.6"
		46	12.2"	12.2"	12.2"	6.8"	12.2"	9.1"	9.1"	9.1"	5.1"	9.1"	7.3"	6.0"	7.3"		5.6"
		57	9.8"	9.8"	9.8"	5.5"	9.8"	7.4"	6.1"	7.4"		5.7"	5.9"	4.2"	5.9"		
67	8.4"	7.8"	8.4"	4.6"	8.2"	6.3"	4.6"	6.3"		5.0"		5.0"					
78	7.2"	5.8"	7.2"		5.3"	5.4"		5.4"		4.3"		4.3"					
89	6.3"	4.6"	6.3"			4.7"		4.7"									
100	5.6"		5.6"			4.2"		4.2"									
HOLLOW CONCRETE BLOCK	1/4" ELCO ULTRACON WITH 1-1/4" MIN. EMBED AND 1" MIN. EDGE DISTANCE	35	16.0"	16.0"	16.0"	12.3"	16.0"	16.0"	16.0"	9.2"	16.0"	15.0"	15.0"	15.0"	7.4"	15.0"	
		46	16.0"	16.0"	16.0"	9.4"	16.0"	14.2"	14.2"	14.2"	7.0"	14.2"	11.4"	9.3"	11.4"	5.4"	8.7"
		57	15.3"	15.3"	15.3"	7.5"	15.3"	11.5"	9.5"	11.5"	5.5"	8.9"	9.2"	6.5"	9.2"	4.3"	5.4"
		67	13.0"	12.1"	13.0"	6.3"	12.8"	9.8"	7.2"	9.8"	4.6"	6.1"	7.8"	5.1"	7.8"		4.0"
		78	11.2"	9.0"	11.2"	5.3"	8.3"	8.4"	5.7"	8.4"		4.6"	6.7"	4.1"	6.7"		
		89	9.8"	7.2"	9.8"	4.6"	6.2"	7.4"	4.7"	7.4"		5.9"		5.9"			
		100	8.7"	6.0"	8.7"	4.0"	4.9"	6.5"		6.5"		5.2"		5.1"			
		35	16.0"	16.0"	16.0"	9.6"	16.0"	16.0"	16.0"	16.0"	7.2"	16.0"	16.0"	16.0"	16.0"	5.8"	16.0"
		46	16.0"	16.0"	16.0"	7.3"	16.0"	16.0"	16.0"	16.0"	5.5"	16.0"	16.0"	16.0"	16.0"	4.3"	15.5"
		57	16.0"	16.0"	16.0"	5.9"	16.0"	16.0"	16.0"	16.0"	4.4"	15.8"	16.0"	11.6"	16.0"	3.4"	9.6"
67	16.0"	16.0"	16.0"	5.0"	16.0"	16.0"	12.8"	16.0"	3.7"	10.9"	13.9"	9.1"	13.9"		7.1"		
78	16.0"	16.0"	16.0"	4.2"	14.8"	14.9"	10.1"	14.9"	3.1"	8.1"	11.9"	7.3"	11.9"		5.6"		
89	16.0"	12.8"	16.0"	3.7"	11.0"	13.1"	8.3"	13.1"		6.4"	10.5"	6.2"	10.5"		4.6"		
100	15.5"	10.7"	15.5"	3.3"	8.7"	11.6"	7.1"	11.6"		5.4"	9.3"	5.3"	9.0"		3.9"		
HOLLOW CONCRETE BLOCK	1/4-20 ALL POINTS SOLID-SET WITH 7/8" MIN EMBED AND 1-1/4" MIN. EDGE DISTANCE	35	16.0"	16.0"	16.0"	8.1"	16.0"	14.3"	14.3"	14.3"	6.0"	14.3"	11.4"	11.4"	11.4"	4.8"	11.4"
		46	14.5"	14.5"	14.5"	6.1"	14.5"	10.9"	10.9"	10.9"	4.6"	10.9"	8.7"	7.1"	8.7"	3.6"	6.6"
		57	11.7"	11.7"	11.7"	4.9"	11.7"	8.8"	7.2"	8.8"	3.6"	6.8"	7.0"	5.0"	7.0"		4.1"
		67	9.9"	9.2"	9.9"	4.1"	9.8"	7.5"	5.5"	7.5"	3.0"	4.7"	6.0"	3.9"	6.0"		3.1"
		78	8.5"	6.9"	8.5"	3.5"	6.4"	6.4"	4.3"	6.4"		3.5"	5.1"	3.1"	5.1"		
		89	7.5"	5.5"	7.5"	3.0"	4.7										

HOST STRUCT.	ANCHOR	LOAD (psf)	3/4" MIN EDGE DISTANCE																																																																																																																																																																																																																																																																																																																																															
			Spans Up To 6'-0"					Spans Up To 8'-0"					Spans Up To 10'-0"																																																																																																																																																																																																																																																																																																																																					
			C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5																																																																																																																																																																																																																																																																																																																																	
WOOD (G=0.42 MIN.)	1/4" LAG SCREW OR HANGER BOLT WITH 1.5" MIN THREAD PENETRATION	35	16.0"	16.0"	16.0"	12.5"	16.0"	16.0"	16.0"	16.0"	9.4"	16.0"	16.0"	16.0"	16.0"	7.5"	16.0"	46	16.0"	16.0"	16.0"	9.5"	16.0"	16.0"	16.0"	16.0"	7.1"	16.0"	16.0"	16.0"	16.0"	5.6"	16.0"	57	16.0"	16.0"	16.0"	7.7"	16.0"	16.0"	16.0"	16.0"	16.0"	5.7"	16.0"	16.0"	12.4"	16.0"	4.5"	10.3"	67	16.0"	16.0"	16.0"	6.5"	16.0"	16.0"	13.7"	16.0"	4.8"	11.7"	14.9"	9.7"	14.9"	3.8"	7.6"	78	16.0"	16.0"	16.0"	5.5"	15.9"	16.0"	10.8"	16.0"	4.1"	8.7"	12.8"	7.9"	12.8"	3.2"	6.0"	89	16.0"	13.8"	16.0"	4.8"	11.7"	14.0"	8.9"	14.0"	3.5"	6.9"	11.2"	6.6"	11.2"	2.8"	4.9"	100	16.0"	11.5"	16.0"	4.2"	9.3"	12.5"	7.6"	12.5"	3.1"	5.7"	10.0"	5.7"	9.7"	2.5"	4.1"	* #14 WOOD SCREW OR SMS WITH 1.5" MIN. THREAD PENETRATION	35	16.0"	16.0"	16.0"	11.8"	16.0"	16.0"	16.0"	16.0"	8.9"	16.0"	16.0"	16.0"	7.1"	16.0"	46	16.0"	16.0"	16.0"	9.0"	16.0"	16.0"	16.0"	16.0"	6.7"	16.0"	15.2"	12.5"	15.2"	5.3"	11.6"	57	16.0"	16.0"	16.0"	7.3"	16.0"	15.4"	12.7"	15.4"	5.3"	11.9"	12.3"	8.7"	12.3"	4.2"	7.2"	67	16.0"	16.0"	16.0"	6.1"	16.0"	13.1"	9.6"	13.1"	4.5"	8.2"	10.5"	6.8"	10.5"	3.5"	5.4"	78	15.0"	12.1"	15.0"	5.2"	11.1"	11.2"	7.6"	11.2"	3.8"	6.1"	9.0"	5.5"	9.0"	3.0"	4.2"	89	13.1"	9.7"	13.1"	4.5"	8.2"	9.8"	6.3"	9.8"	3.3"	4.8"	7.9"	4.6"	7.9"	2.6"	3.4"	100	11.7"	8.0"	11.7"	3.9"	6.5"	8.8"	5.3"	8.8"	2.9"	4.0"	7.0"	4.0"	6.8"	2.3"	2.9"	1/4" ELCO PANELMATE (FEMALE, MALE, OR PLUS) W/ 1-7/8" MIN EMBED	35	16.0"	16.0"	16.0"	9.9"	16.0"	16.0"	16.0"	16.0"	7.4"	16.0"	16.0"	16.0"	16.0"	5.9"	16.0"	46	16.0"	16.0"	16.0"	7.5"	16.0"	16.0"	16.0"	16.0"	5.6"	16.0"	14.8"	12.1"	14.8"	4.4"	11.3"	57	16.0"	16.0"	16.0"	6.1"	16.0"	14.9"	12.3"	14.9"	4.4"	11.6"	11.9"	8.5"	11.9"	3.5"	7.0"	67	16.0"	15.7"	16.0"	5.1"	16.0"	12.7"	9.3"	12.7"	3.7"	7.9"	10.2"	6.6"	10.2"	2.9"	5.2"	78	14.5"	11.7"	14.5"	4.3"	10.8"	10.9"	7.4"	10.9"	3.2"	5.9"	8.7"	5.4"	8.7"	2.5"	4.1"	89	12.7"	9.4"	12.7"	3.8"	8.0"	9.6"	6.1"	9.6"	2.8"	4.7"	7.6"	4.5"	7.6"	2.2"	3.3"	100	11.3"	7.8"	11.3"	3.3"	6.4"	8.5"	5.2"	8.5"	2.4"	3.9"	6.8"	3.9"	6.6"	2.8"

HOST STRUCT.	ANCHOR	LOAD (psf)	3/4" MIN EDGE DISTANCE																																																																																																																																																																																																																																																																																																																																																			
			Spans Up To 6'-0"					Spans Up To 8'-0"					Spans Up To 10'-0"																																																																																																																																																																																																																																																																																																																																									
			C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5																																																																																																																																																																																																																																																																																																																																					
WOOD (G=0.55 MIN.)	1/4" ELCO PANELMATE (FEMALE, MALE, OR PLUS) W/ 1-7/8" MIN EMBED	35	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	46	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	57	16.0"	16.0"	16.0"	14.1"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	67	16.0"	16.0"	16.0"	11.8"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	78	16.0"	16.0"	16.0"	10.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	89	16.0"	16.0"	16.0"	8.7"	16.0"	16.0"	14.1"	16.0"	6.4"	10.9"	16.0"	10.4"	16.0"	5.1"	7.7"	100	16.0"	16.0"	16.0"	7.7"	14.8"	16.0"	12.0"	16.0"	5.7"	9.1"	15.8"	9.0"	15.3"	4.5"	6.6"	* 1/4" LAG SCREW OR HANGER BOLT WITH 1.5" MIN THREAD PENETRATION	35	16.0"	16.0"	16.0"	15.7"	16.0"	16.0"	16.0"	16.0"	11.7"	16.0"	16.0"	16.0"	16.0"	9.4"	16.0"	46	16.0"	16.0"	16.0"	11.9"	16.0"	16.0"	16.0"	16.0"	8.9"	16.0"	16.0"	16.0"	16.0"	7.0"	16.0"	57	16.0"	16.0"	16.0"	9.6"	16.0"	16.0"	16.0"	16.0"	7.1"	16.0"	16.0"	16.0"	16.0"	5.6"	15.4"	67	16.0"	16.0"	16.0"	8.1"	16.0"	16.0"	16.0"	16.0"	6.0"	16.0"	16.0"	16.0"	16.0"	4.7"	11.5"	78	16.0"	16.0"	16.0"	6.9"	16.0"	16.0"	16.0"	16.0"	5.1"	13.0"	16.0"	11.8"	16.0"	4.0"	8.9"	89	16.0"	16.0"	16.0"	6.0"	16.0"	16.0"	13.4"	16.0"	4.4"	10.3"	16.0"	9.9"	16.0"	3.5"	7.3"	100	16.0"	16.0"	16.0"	5.3"	14.0"	16.0"	11.4"	16.0"	3.9"	8.6"	15.0"	8.5"	14.5"	3.1"	6.2"	* #14 WOOD SCREW OR SMS WITH 1.5" MIN. THREAD PENETRATION	35	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	16.0"	12.2"	16.0"	16.0"	16.0"	16.0"	9.7"	16.0"	46	16.0"	16.0"	16.0"	12.3"	16.0"	16.0"	16.0"	16.0"	9.2"	16.0"	16.0"	16.0"	16.0"	7.2"	16.0"	57	16.0"	16.0"	16.0"	10.0"	16.0"	16.0"	16.0"	16.0"	7.3"	16.0"	16.0"	14.9"	16.0"	5.8"	12.4"	67	16.0"	16.0"	16.0"	8.4"	16.0"	16.0"	16.0"	16.0"	6.2"	14.0"	16.0"	11.7"	16.0"	4.9"	9.2"	78	16.0"	16.0"	16.0"	7.1"	16.0"	16.0"	13.0"	16.0"	5.2"	10.4"	15.4"	9.5"	15.4"	4.1"	7.2"	89	16.0"	16.0"	16.0"	6.2"	14.1"	16.0"	10.7"	16.0"	4.6"	8.3"	13.5"	7.9"	13.5"	3.6"	5.9"	100	16.0"	13.8"	16.0"	5.5"	11.2"	15.0"	9.1"	15.0"	4.0"	6.9"	12.0"	6.8"	11.7"	3.2"	5.0"

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).
- ALL CONCRETE ANCHORS SHALL BE INSTALLED TO NON-CRACKED CONCRETE ONLY.
- MINIMUM EMBEDMENT AND EDGE DISTANCE 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(S) 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.
- 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.
- DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE FOR USE.
- * DESIGNATES ANCHORS WHICH ARE REMOVABLE AND MAY BE USED FOR DIRECT MOUNT INSTALLATIONS.
- WHEN ANCHORING TO HOLLOW BLOCK, SDS DRILLS SHOULD NOT BE USED TO DRILL INTO HOLLOW BLOCK, NOR SHOULD IMPACT DRILLS BE USED TO INSTALL CONCRETE SCREWS TO HOLLOW BLOCK

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