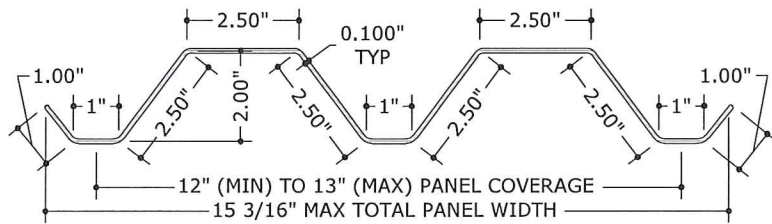


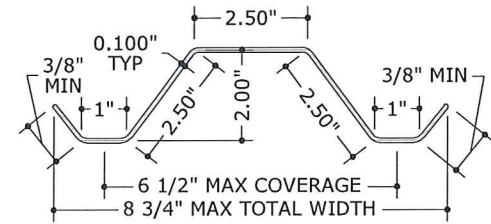


# POLYCARBONATE STORM PANELS (HVHZ)



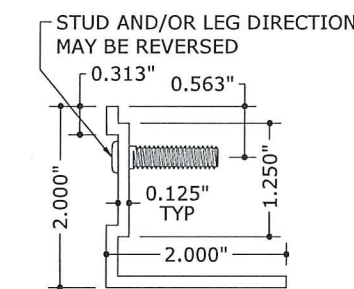
**1 FULL PANEL PROFILE**  
3" = 1'-0" (SEE GEN NOTE 6)

MOUNT WITH FASTENERS OR STUDS AT 13" O.C. MAX

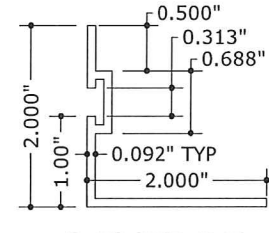


**2 HALF PANEL PROFILE**  
3" = 1'-0" (SEE GEN NOTE 6)

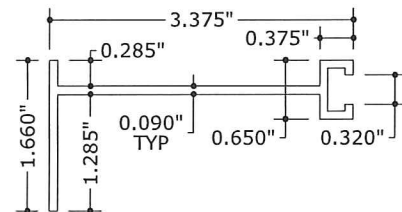
MOUNT WITH FASTENERS OR STUDS AT 6-1/2" O.C. MAX



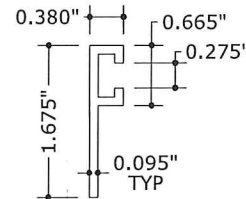
**3 STUD ANGLE**  
6" = 1'-0"



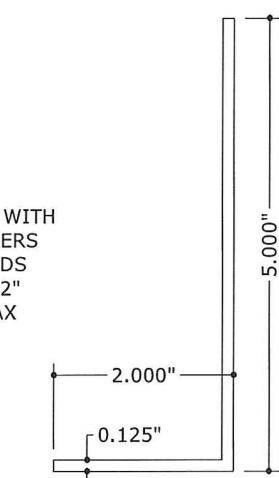
**4 REVERSE 'F' ANGLE**  
6" = 1'-0"



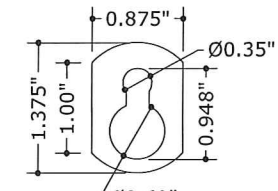
**5 BUILDOUT 'F' TRACK**  
6" = 1'-0"



**6 'F' TRACK**  
6" = 1'-0"



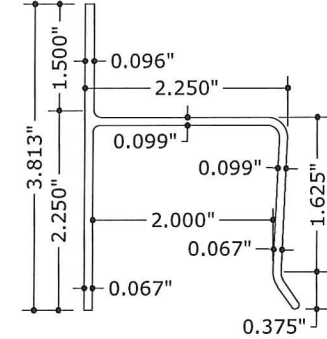
**7 CLOSURE ANGLE**  
6" = 1'-0"



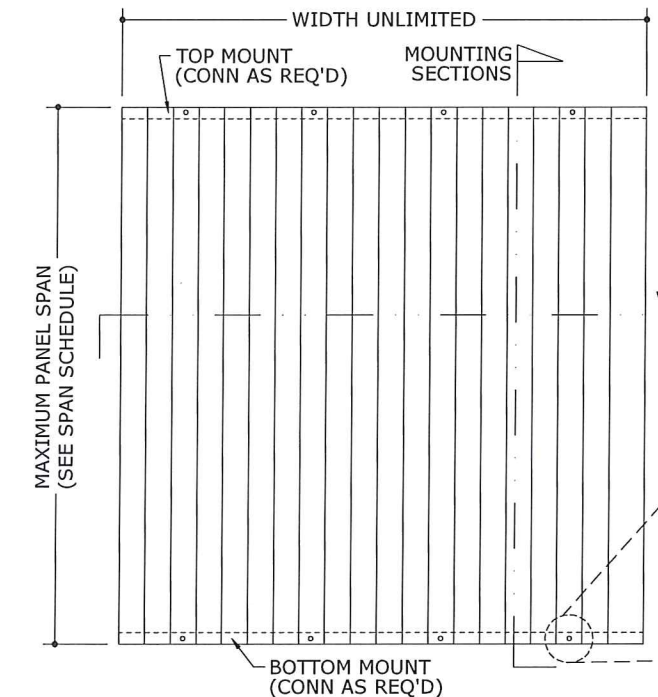
**8 KEYHOLE WASHER**  
6" = 1'-0"



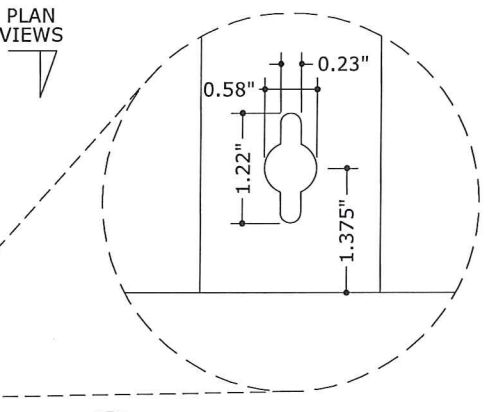
**9 WASHERED WINGNUT**  
6" = 1'-0"



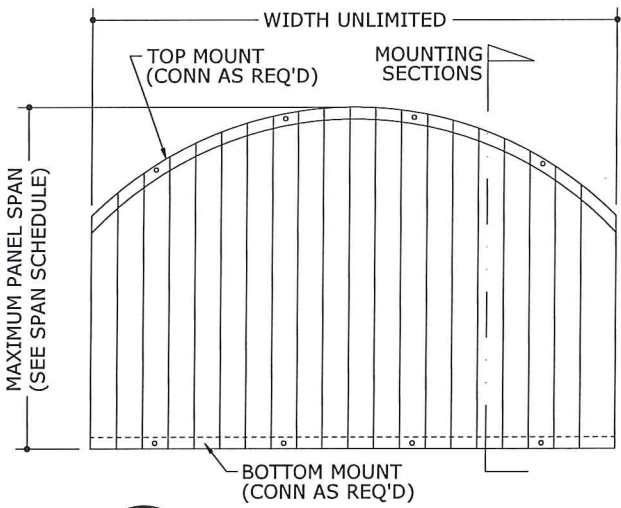
**10 'H' HEADER**  
6" = 1'-0"



**1 TYPICAL ELEVATION**  
1 N.T.S.



**2 KEYHOLE DETAIL**  
1 N.T.S. ALT: FIELD DRILL Ø3/8" HOLE (OR Ø5/8" HOLE W/ KEYHOLE WASHER)

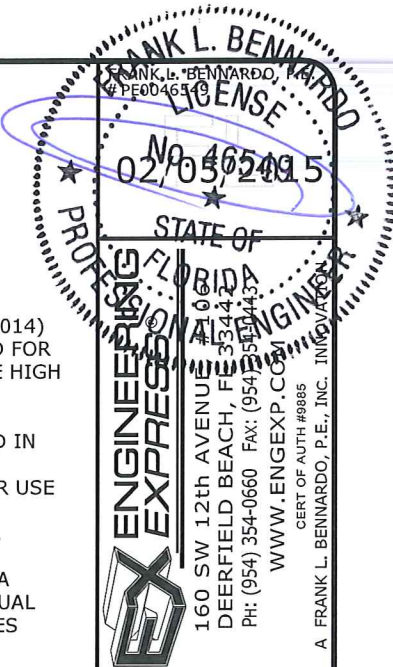


**3 ALT. ARCH TOP\***  
1 N.T.S.

## GENERAL NOTES:

- THIS SYSTEM HAS BEEN TESTED AND EVALUATED AS A LARGE MISSILE IMPACT PROTECTIVE SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE FIFTH EDITION (2014) PER TAS 201, 202, & 203 TEST PROTOCOLS. PANELS ARE APPROVED FOR USE THROUGHOUT THE STATE OF FLORIDA, INCLUDING WITHIN THE HIGH VELOCITY HURRICANE ZONE (HVHZ) COMPRISED OF MIAMI-DADE & BROWARD COUNTIES.
- NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT.
- POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE. SITE-SPECIFIC 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.
- DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
- 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.
- THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS IS OUTSIDE THE SCOPE OF THIS CERTIFICATION AND SHALL BE VERIFIED BY OTHERS.
- CLEAR POLYCARBONATE STORM PANELS (FULL, HALF, & DOUBLE-WIDE) MAY VARY IN "COVERAGE" WIDTH UP TO THE RESPECTIVE MAXIMA SHOWN HEREIN, PROVIDED THAT THE PANEL PROFILE HEIGHT BE MAINTAINED. PANELS SHALL BE MOUNTED WITH FASTENERS OR STUDS AT MAXIMUM SPACING SHOWN FOR EACH PROFILE.
- ALL POLYCARBONATE PANELS SHALL BE MANUFACTURED BY TRANSPARENT PROTECTION SYSTEMS, Inc.
- THIS PRODUCT APPROVAL IS FOR THE USE OF CLEAR POLYCARBONATE PANELS ONLY. ALL POLYCARBONATE PANELS SHALL BE EXTRUDED WITH THICKNESS  $t=0.100"$  ( $\pm 0.010"$ ) AND SHALL BE MANUFACTURED FROM 100% SYNTHETIC THERMOPLASTIC POLYMER RESIN (UV STABILIZED). ANY PLASTIC MATERIAL TO BE USED IN THE HVHZ MUST DEMONSTRATE COMPLIANCE WITH SECTION 2614 OF THE BUILDING CODE SPECIFIED ABOVE. TYPICAL TENSILE STRENGTH  $F_y=8,908$  KSI, FLEXURAL STRENGTH  $F_{by}=12.90$  KSI, & FLEXURAL MODULUS IS 328.7 KSI.
- ALL EXTRUSIONS SHALL BE 6063-T6 ALUMINUM ALLOY, U.N.O.
- PANELS SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER PANEL CONTAINING THE FOLLOWING:  
TRANSPARENT PROTECTION SYSTEMS, INC.  
633 DUNKSFERRY ROAD  
BENSALEM, PA 19020  
ASTM E330, E1886 & E1996  
PRODUCT APPROVAL NUMBER

- STORM PANELS HAVE BEEN DESIGNED AND TESTED TO THE MAXIMUM SPANS AND CORRESPONDING LOADS SHOWN HEREIN. REFERENCE CONSTRUCTION TESTING CORPORATION (CTC OF MIAMI, FL) TEST REPORTS #04-009-FE-FBC & #04-009-LE-FBC, AS WELL AS HURRICANE TEST LAB (HTL OF RIVIERA BEACH, FL) TEST REPORTS #0239-0107-05, #0239-1013-07, & #0239-0312-06.
- TOP & BOTTOM MOUNTING SECTIONS MAY BE INTERCHANGED AS FIELD CONDITIONS DICTATE. PANELS MAY BE MOUNTED VERTICALLY OR HORIZONTALLY AS APPLICABLE.
- USE OF KEYHOLE WASHERS IS OPTIONAL IN CONJUNCTION WITH ANY MOUNTING CONDITION. HOLES MAY BE FIELD DRILLED IN PANELS AT Ø3/8" (OR Ø5/8" WITH KEYHOLE WASHER) WITH ANY FASTENER TYPE. WASHERED WINGNUTS SHALL HAVE 0.865" MINIMUM WASHER DIAMETER.
- ALL BOLTS & WASHERS SHALL BE ZINC COATED STEEL, GALVANIZED STEEL, OR STAINLESS STEEL WITH A MINIMUM TENSILE YIELD STRENGTH OF 60 KSI.
- \*NOTE: FOR ALTERNATE ARCH TOP INSTALLATIONS, THE TOP TRACK OR U-HEADER SHALL BE CUT INTO 6" MINIMUM ADJACENT SEGMENTS. EACH SEGMENT SHALL HAVE ANCHORS SPACED PER THE ANCHOR SCHEDULE, WITH A MINIMUM OF (2) ANCHORS PER SEGMENT. ANCHORS SHALL BE 1-1/2" MIN FROM ENDS OF EACH SEGMENT AND SPACED 3" MINIMUM FROM ADJACENT ANCHORS. FOR STUDDED TRACKS ONLY, THERE SHALL BE A MINIMUM OF (1) STUD PER SEGMENT FASTENED TO THE STORM PANEL. STUDS SHALL BE LOCATED 2" MINIMUM FROM ENDS OF EACH SEGMENT.



**TPS** Transparent Protection Systems, Inc.  
633 Dunksferry Road  
Bensalem, PA 19020

CLEARGUARD POLYCARBONATE STORM PANELS  
FOR USE WITHIN AND OUTSIDE THE HVHZ  
FLORIDA STATEWIDE APPROVAL #FL 64116.1

DRWN	CHKD	DATE
CL	FLB	8/17/04
CL	FLB	8/5/05
KL	FLB	2/6/06
KL	FLB	12/12/11
IRVN	CSL	02/03/15

REMARKS: 2010 FBC UPDATE  
REV 2014 FBC (08-TPR-0007)  
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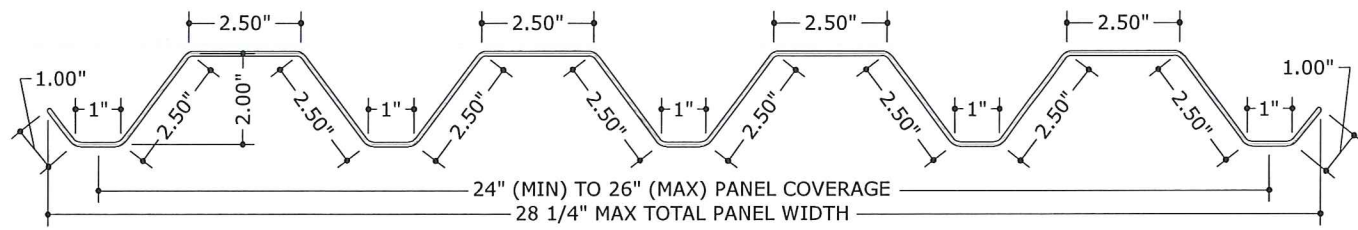
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PAGE DESCRIPTION: \_\_\_\_\_

1 OF 5

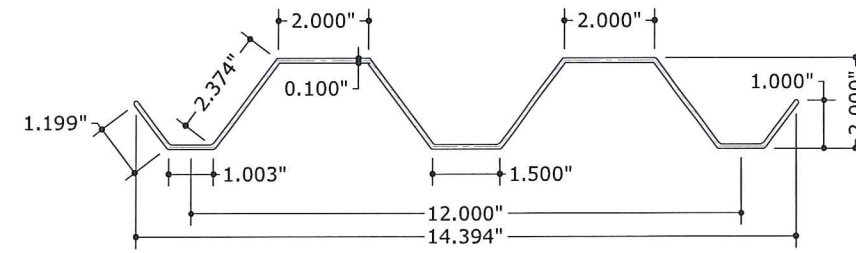
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 rickn 02/05/2015 - 3:46pm





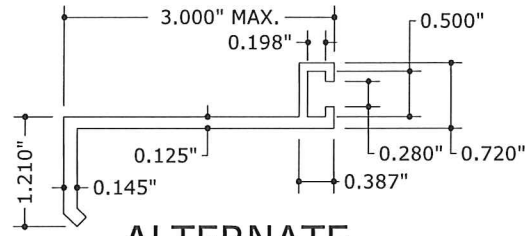
**11** "CLEARMAX™" DOUBLE-WIDE PANEL PROFILE  
 3" = 1'-0" (SEE GEN NOTE 6)

MOUNT WITH FASTENERS OR STUDS AT 13" O.C. MAX

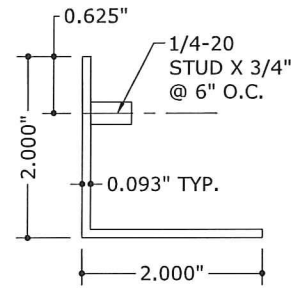


**12** ALT. FULL PANEL PROFILE  
 N.T.S. (SEE GEN NOTE 6)

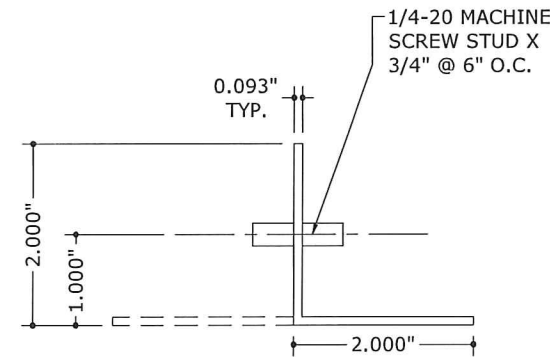
MOUNT WITH FASTENERS OR STUDS AT 13" O.C. MAX



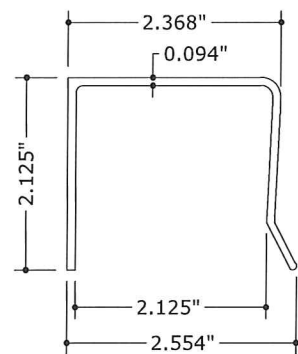
**13** ALTERNATE B.O. 'F' TRACK  
 6" = 1'-0"



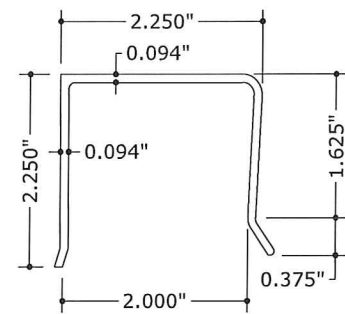
**14** ALTERNATE STUD ANGLE  
 6" = 1'-0"



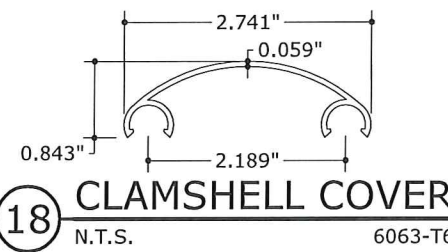
**15** STUDDED ANGLE  
 6" = 1'-0"



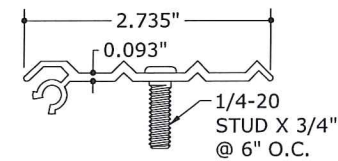
**16** U-HEADER  
 N.T.S. 6063-T6



**17** ALTERNATE U-HEADER  
 N.T.S. 6063-T6



**18** CLAMSHELL COVER  
 N.T.S. 6063-T6



**19** CLAMSHELL TRACK  
 N.T.S. 6063-T6

FRANK L. BENNARDO, P.E.  
 LICENSE No. 46549  
 02/05/2015  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
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 DEERFIELD BEACH, FL 33442  
 Ph: (954) 354-0660 Fax: (954) 354-0661  
 WWW.ENGPRESS.COM  
 CERT. OF AUTH. #0085  
 A FRANK L. BENNARDO, P.E., INC. IN CONNECTION WITH

Transparent Protection Systems, Inc.  
**TPS**  
 633 Dunksferry Road  
 BENSLEM, PA 19020  
 CLEARGUARD POLYCARBONATE STORM PANELS  
 FOR USE WITHIN AND OUTSIDE THE HVHZ  
 FLORIDA STATEWIDE APPROVAL #FL 6416.1

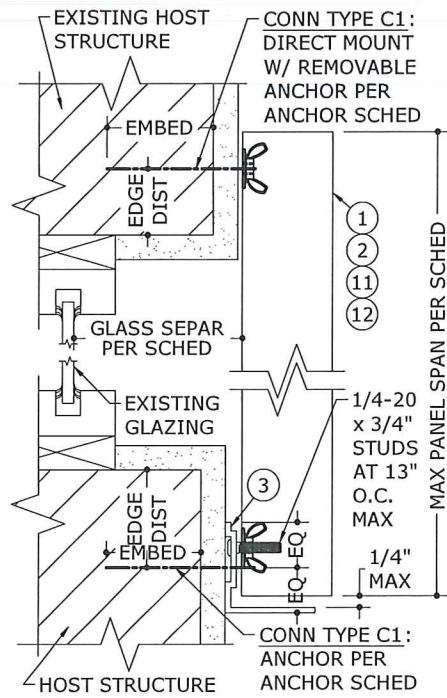
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CL	FLB	8/5/05
KL	FLB	2/6/06
LEFT	KL	12/12/11
IRWN	CSL	02/03/15

REMARKS  
 2004 FBC  
 2007 FBC  
 2010 FBC UPDATE  
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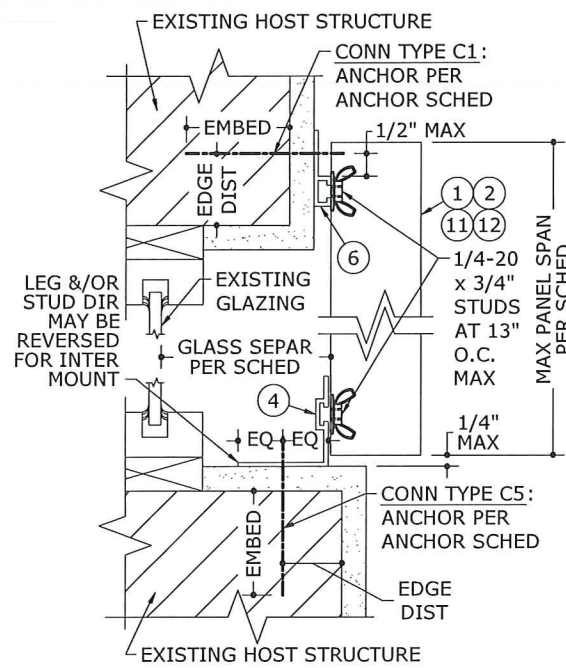
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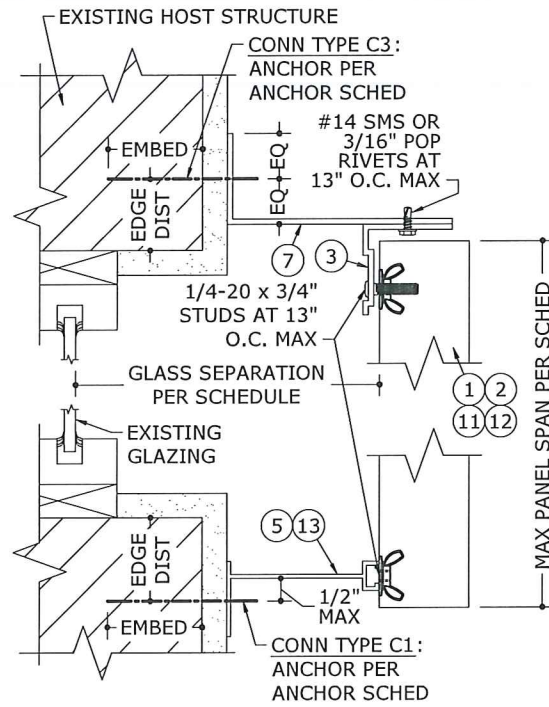




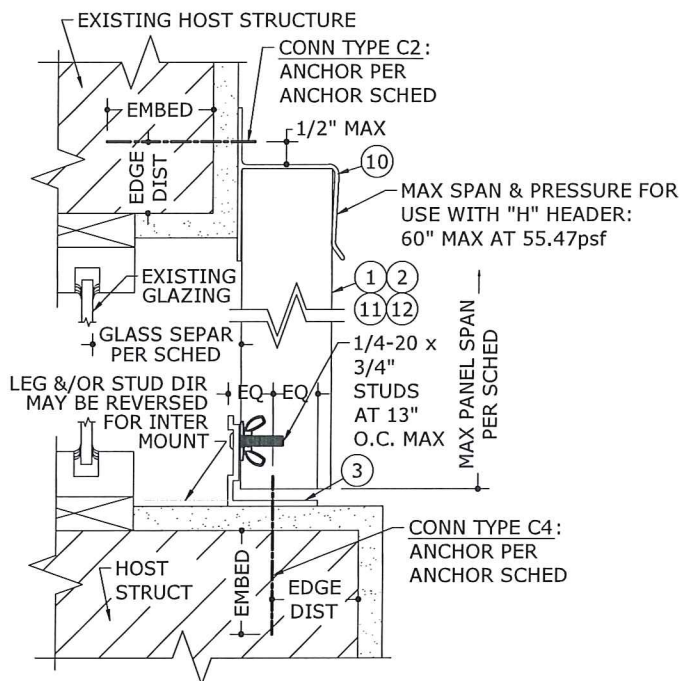
**1 MOUNTING SECTION**  
3" = 1'-0" VERT SECTION



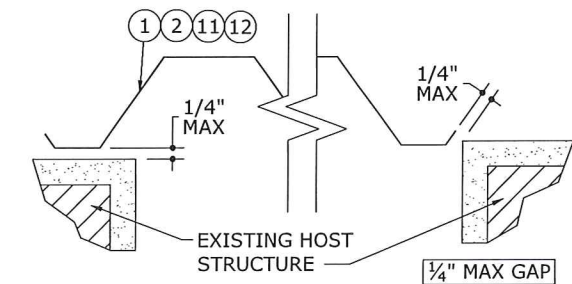
**2 MOUNTING SECTION**  
3" = 1'-0" VERT SECTION



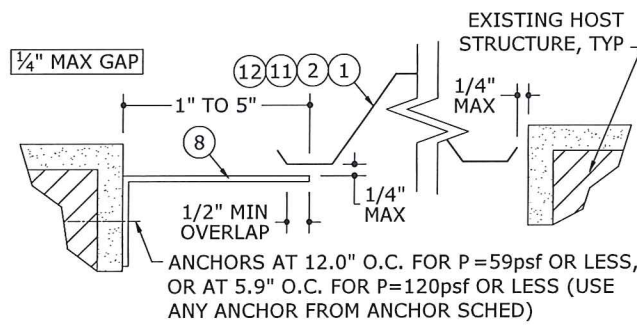
**3 MOUNTING SECTION**  
3" = 1'-0" VERT SECTION



**4 MOUNTING SECTION**  
3" = 1'-0" VERT SECTION



**7 WALL MOUNT CLOSURE**  
3" = 1'-0" PLAN VIEW



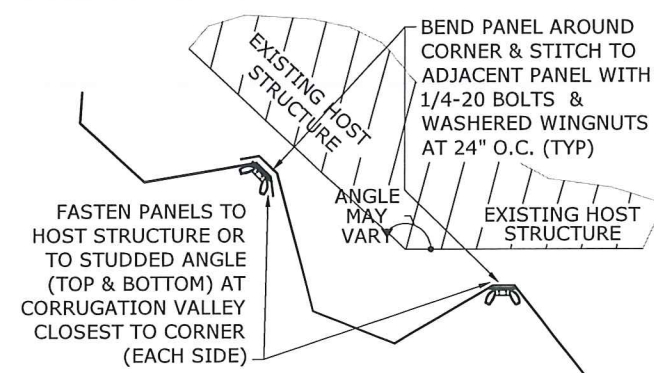
**8 TRAP MOUNT CLOSURE**  
3" = 1'-0" PLAN VIEW

**MAXIMUM PANEL SPAN SCHEDULE (POSITIVE CONN.)**

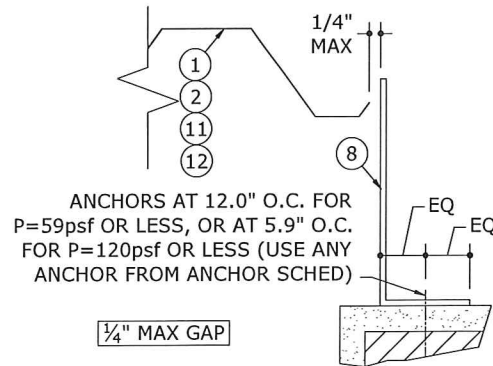
LOAD (psf)	MAX SPAN (ft)
±25	6'-5"
±30	6'-2"
±32	6'-1"
±35	5'-11"
±40	5'-9"
±45	5'-7"
±50	5'-5"
±55	5'-3"
±60	5'-2"
±65	5'-1"
±70	5'-0"
±75	4'-10"
±80	4'-9"
±90	4'-7"
±100	4'-4"
±110	3'-11"
±120	3'-7"

**MAXIMUM SPAN SCHEDULE NOTES:**

1. SPANS SHOWN IN "MAX PANEL SPAN SCHEDULE" ABOVE ARE MAXIMUM ALLOWABLE SPANS AT EACH RESPECTIVE DESIGN PRESSURE.
2. THIS SCHEDULE MAY BE USED TO DETERMINE MAXIMUM ALLOWABLE SPANS FOR PANELS INSTALLED USING ANY COMBINATION OF MOUNTING EXTRUSIONS INVOLVING A POSITIVE CONNECTION - i.e. ALL INSTALLATIONS WHICH DO NOT INCLUDE AN "H" OR "U" HEADER.
3. WHERE THE "H" HEADER IS USED, THE MAXIMUM ALLOWABLE SPAN IS 5'-0" (60") AND THE MAXIMUM ALLOWABLE PRESSURE IS 55.47psf.
4. WHERE "U" HEADER IS USED, THE MAXIMUM ALLOWABLE SPAN IS 4'-4" (52") AND THE MAXIMUM ALLOWABLE PRESSURE IS +78/-80 PSF.
5. TABLE ABOVE IS VALID FOR PANELS MOUNTED HORIZONTALLY OR VERTICALLY. SPAN DIRECTION IS ALWAYS PERPENDICULAR TO LINE OF ANCHORAGE.

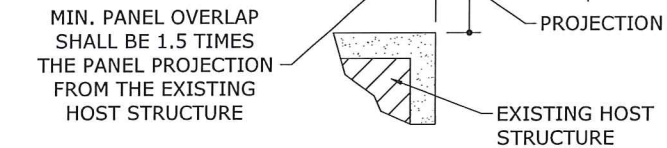


**5 CORNER CLOSURE**  
3" = 1'-0" PLAN VIEW



**6 BUILD-OUT CLOSURE**  
3" = 1'-0" PLAN VIEW

NOTE: DETAIL 9/3 MAY BE USED AS AN ALTERNATE TO CLOSURE DETAILS 7/3 AND 6/3.



**9 PANEL OVERLAP**  
3" = 1'-0" PLAN VIEW

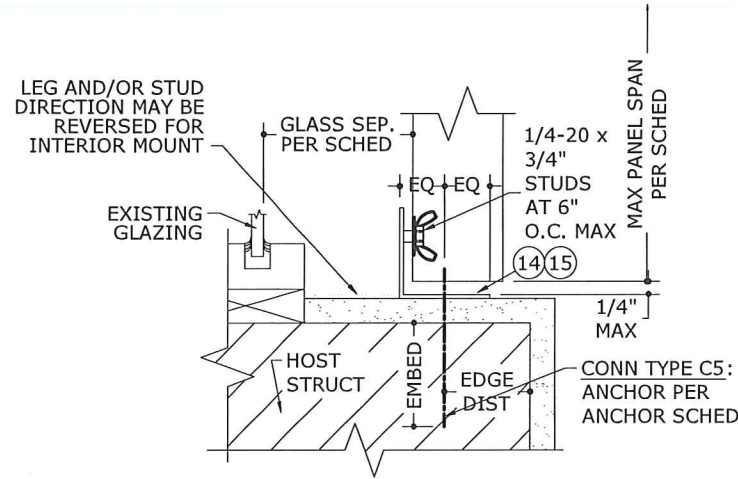
**FRANK L. BENNARDO**  
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A FRANK L. BENNARDO, P.E., INC. INDIANAPOLIS, IN

Transparent Protection Systems, Inc.  
**TPS**  
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CLEARGUARD POLYCARBONATE STORM PANELS  
FOR USE WITHIN AND OUTSIDE THE HVHZ  
FLORIDA STATEWIDE APPROVAL #FL 6416.1

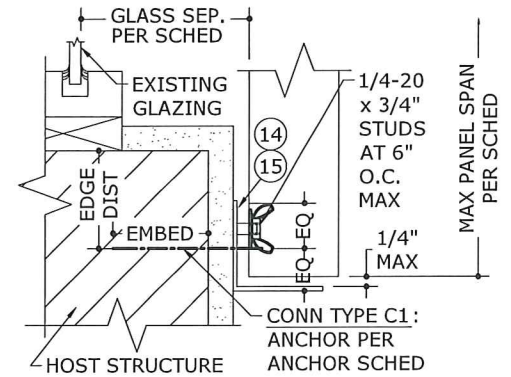
REMARKS	DRWN	CHKD	DATE
CL	FLB	8/17/04	
CL	FLB	8/15/05	
2004 FBC	CL	FLB	2/6/06
2007 FBC	KL	FLB	12/12/11
2010 FBC UPDATE	LEFT	KL	12/12/11
REV/2014 FBC (08-TPR-0007)	IRVYN	OSL	02/03/15
REV/2014 FBC (08-TPR-0007)	IRVYN	OSL	02/03/15

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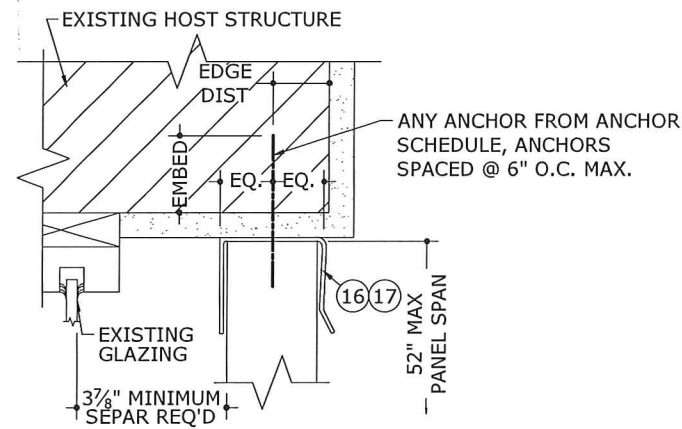




**1**  
4 MOUNTING SECTION  
3" = 1'-0" VERT SECTION

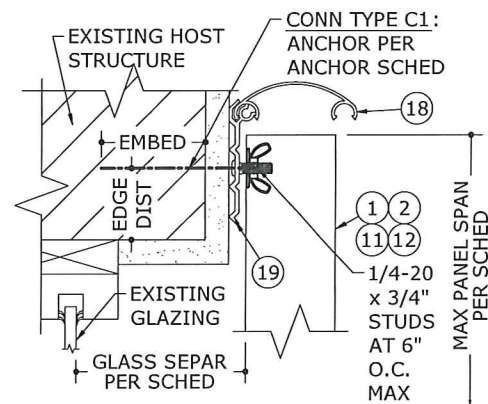


**2**  
4 MOUNTING SECTION  
3" = 1'-0" VERT SECTION



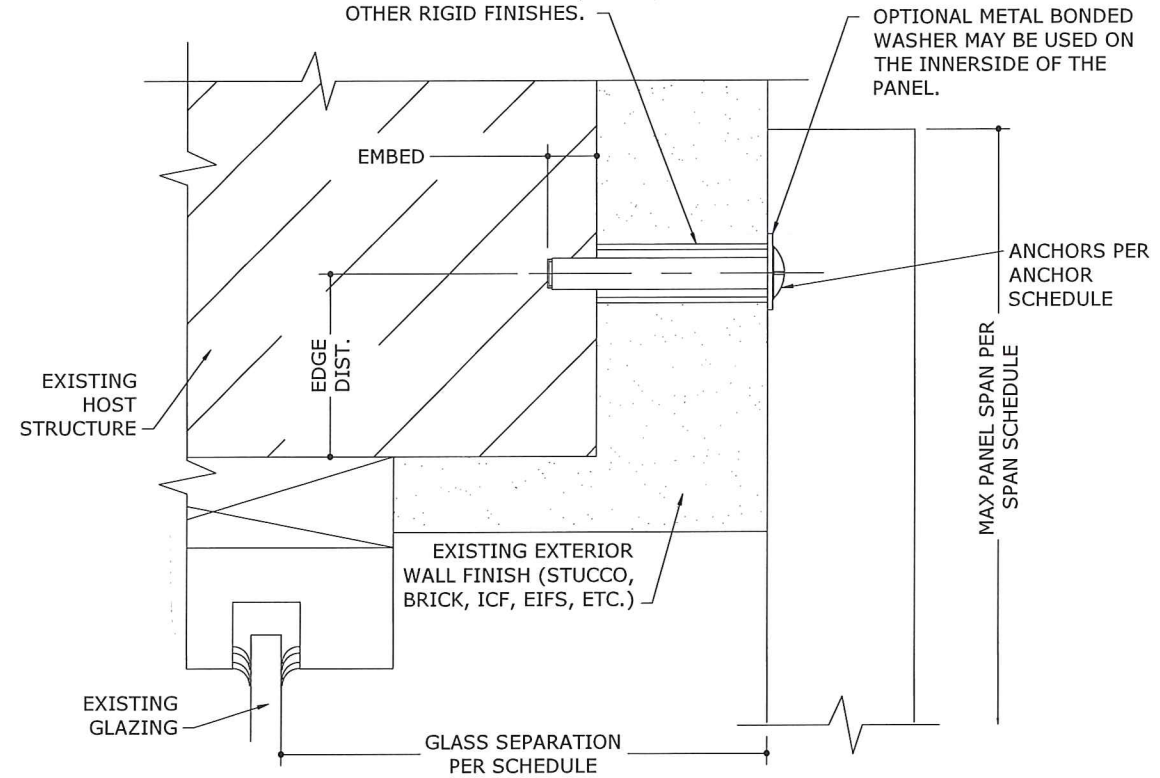
NOTE: MAXIMUM SPAN AND PRESSURE FOR USE WITH 'U' HEADERS: 52" MAX PANEL SPAN, +78/-80 PSF MAX DESIGN PRESSURE

**3**  
4 MOUNTING SECTION  
N.T.S. VERT SECTION



**4**  
4 MOUNTING SECTION  
N.T.S. VERT SECTION

- ALUMINUM OR GALVANIZED STEEL SPACER:
- REQUIRED ONLY FOR EIFS, ICF, OR OTHER MALLEABLE FINISHES.
  - OPTIONAL FOR STUCCO, BRICK, OR OTHER RIGID FINISHES.



NOTE: SHUTTER SYSTEM MAY BE ANCHORED THROUGH EXTERIOR WALL FINISH TO HOST STRUCTURE WITH ANY MOUNTING CONDITION SHOWN HEREIN.

**5**  
4 MOUNTING SECTION THRU EXTERIOR WALL FINISH (BRICK, ICF, EIFS, ETC.)  
N.T.S. VERT SECTION

FRANK L. BENNARDO, P.E.  
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A FRANK L. BENNARDO, P.E., INC. MEMBER

Transparent Protection Systems, Inc.  
633 Dunksferry Road  
Bensalem, PA 19020  
CLEARGUARD POLYCARBONATE STORM PANELS  
FOR USE WITHIN AND OUTSIDE THE HVHZ  
FLORIDA STATEWIDE APPROVAL #FL 6416.1

REMARKS	DRWN	CHKD	DATE
ORIG ISSUE	CL	FLB	8/17/04
2004 FBC	CL	FLB	8/5/05
2007 FBC	EFT	KL	2/6/06
2010 FBC UPDATE	IRVN	CSL	12/12/11
REV/2014 FBC (08-TPR-0007)	IRVN	CSL	02/03/15

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# ANCHOR SCHEDULE

HOST STRUCT.	ANCHOR	LOAD (psf)	2" MIN EDGE DISTANCE																	
			Spans Up To 4'-0"					Spans Up To 6'-0"					Spans Up To 7'-6"							
			CONN TYPE					CONN TYPE					CONN TYPE							
C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5						
CONCRETE	1/4" ELCO ULTRACON OR ITW ATT TAPCON WITH 1-3/4" EMBED (3000 PSI MIN CONC)	42	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		47	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		53	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		65	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	9.8"	7.6"	13.0"	13.0"	13.0"	7.8"	6.1"	13.0"	8.4"			
	120	13.0"	7.9"	6.2"	13.0"	8.5"	5.4"	5.3"	4.1"	5.1"	5.7"	4.3"	4.2"	3.3"	4.1"	4.5"				
	1/4" ELCO PANELMATE WITH 1-3/4" MIN EMBED (3350 PSI MIN CONC)	42	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		47	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		53	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		65	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	12.5"	9.7"	13.0"	13.0"	13.0"	10.0"	7.8"	13.0"	10.6"			
	120	13.0"	10.1"	7.9"	13.0"	10.8"	6.9"	6.8"	5.3"	6.5"	7.2"	5.5"	5.4"	4.2"	5.2"	5.8"				
	1/4-20 ALL POINTS SOLID- SET WITH 7/8" MIN EMBED (3000 PSI MIN CONC)	42	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		47	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
53		13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	
65		13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	9.8"	7.7"	13.0"	13.0"	13.0"	7.9"	6.1"	13.0"	9.8"				
120	13.0"	8.0"	6.2"	13.0"	9.9"	5.4"	5.3"	4.1"	5.9"	6.6"	4.3"	4.3"	3.3"	4.7"	5.3"					
1/4-20 POWERS CALK-IN WITH 7/8" MIN EMBED (3000 PSI MIN CONC)	42	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	
	47	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	
	53	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	
	65	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	
120	13.0"	5.0"	3.9"	8.6"	5.0"	3.4"	3.4"	N/A	3.0"	3.3"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

HOST STRUCT.	ANCHOR	LOAD (psf)	2" MIN EDGE DISTANCE																	
			Spans Up To 4'-0"					Spans Up To 6'-0"					Spans Up To 7'-6"							
			CONN TYPE					CONN TYPE					CONN TYPE							
C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5						
HOLLOW BLOCK (ASTM C-90 MIN)	1/4" ELCO ULTRACON WITH 1-1/4" EMBED	42	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	10.7"	10.7"	10.7"	11.2"	11.2"				
		47	13.0"	13.0"	13.0"	13.0"	13.0"	11.9"	11.9"	11.9"	12.5"	12.5"	9.5"	3.6"	9.5"	10.0"	10.0"			
		53	13.0"	13.0"	13.0"	13.0"	13.0"	10.6"	10.6"	10.6"	11.1"	11.1"	8.5"	3.2"	N/A	8.9"	8.9"			
		65	12.9"	12.9"	12.9"	13.0"	13.0"	8.6"	3.2"	N/A	9.0"	6.9"	N/A	N/A	7.2"	3.3"				
	120	7.0"	N/A	N/A	7.3"	3.3"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
	1/4" ELCO PANELMATE WITH 1-1/4" MIN EMBED	42	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		47	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		53	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		65	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	6.5"	5.0"	13.0"	13.0"	13.0"	5.2"	4.0"	12.4"	6.1"			
	120	13.0"	5.3"	4.1"	12.6"	6.2"	3.6"	3.5"	N/A	3.7"	4.1"	N/A	N/A	N/A	N/A	3.3"				
	1/4-20 ALL POINTS SOLID- SET WITH 7/8" MIN EMBED	42	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		47	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
53		13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	
65		13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	6.6"	5.1"	12.3"	12.3"	13.0"	5.2"	4.1"	9.8"	5.4"				
120	13.0"	5.3"	4.2"	10.0"	5.5"	3.6"	3.6"	N/A	3.3"	3.7"	N/A	N/A	N/A	N/A	N/A					

HOST STRUCT.	ANCHOR	LOAD (psf)	3/4" MIN EDGE DISTANCE																	
			Spans Up To 4'-0"					Spans Up To 6'-0"					Spans Up To 7'-6"							
			CONN TYPE					CONN TYPE					CONN TYPE							
C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5						
WOOD (G=0.55 MIN)	1/4" TAPCON (ELCO OR ITW) OR #14 WOOD SCREW W/ 1-1/2" EMBED	42	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	11.6"	11.6"	13.0"	13.0"	13.0"	9.3"	9.3"				
		47	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	10.4"	10.4"	13.0"	7.7"	13.0"	8.3"	8.3"				
		53	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	9.2"	9.2"	13.0"	6.8"	5.3"	7.4"	7.4"				
		65	13.0"	13.0"	13.0"	11.3"	11.3"	13.0"	6.9"	5.4"	7.5"	7.5"	13.0"	5.5"	4.3"	6.0"	4.1"			
	120	13.0"	5.6"	4.4"	6.1"	4.2"	3.8"	3.8"	2.9"	2.6"	2.8"	3.1"	3.0"	2.3"	2.1"	2.2"				
	1/4" ELCO PANELMATE (FEMALE, MALE, OR PLUS) W/ 1-7/8" MIN EMBED	42	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		47	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		53	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		65	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	11.8"	13.0"	13.0"	13.0"	12.1"	9.4"	13.0"	9.4"				
	120	13.0"	12.3"	9.6"	13.0"	9.6"	8.3"	8.2"	6.4"	5.9"	6.4"	6.7"	6.5"	5.1"	4.7"	5.1"				
	7/16" WOOD BUSHING W/ 7/8" MIN EMBED & 1/4-20 S.S. MACHINE SCREW	42	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
		47	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"
53		13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	
65		13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	
120	11.6"	4.3"	3.4"	11.6"	5.4"	2.9"	2.9"	2.2"	3.2"	3.6"	2.3"	2.3"	N/A	2.5"	2.9"					
1/4" LAG SCREW WITH 2-3/32" MIN THREAD PENETR	42	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	12.1"	12.1"	13.0"	13.0"	13.0"	9.7"	9.7"				
	47	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	10.8"	10.8"	13.0"	9.9"	13.0"	8.6"	8.6"				
	53	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	13.0"	9.6"	9.6"	13.0"	8.8"	6.9"	7.7"	7.7"				
	65	13.0"	13.0"	13.0"	11.7"	11.7"	13.0"	9.0"	7.0"	7.8"	7.8"	13.0"	7.2"	5.6"	6.3"	4.5"				
120	13.0"	7.3"	5.7"	6.4"	4.6"	5.0"	4.9"	3.8"	2.9"	3.1"	4.0"	3.9"	3.0"	2.3"	2.5"					

# MINIMUM GLASS SEPARATION SCHEDULE

POSITIVE LOAD (psf)	SPAN LESS THAN	MINIMUM SEPARATION AT OR BELOW 30' ABOVE GRADE	MINIMUM SEPARATION AT ELEV > 30' ABOVE GRADE
32	4'-0"	4.23"	1.37"
	4'-9"	4.23"	1.73"
	6'-1"	5.35"	3.00"
40	4'-0"	4.23"	1.46"
	4'-9"	4.23"	1.92"
	5'-9"	5.35"	3.00"
45	4'-0"	4.23"	1.52"
	4'-9"	4.23"	2.03"
	5'-7"	5.35"	3.00"
50	4'-0"	4.23"	1.58"
	4'-9"	4.23"	2.14"
	5'-6"	5.35"	3.00"
60	4'-0"	4.23"	1.69"
	4'-9"	4.23"	2.37"
	5'-3"	5.35"	3.00"
70	4'-0"	4.23"	1.81"
	4'-9"	4.23"	2.60"
	5'-0"	5.35"	3.00"
120	3'-8"	4.23"	1.97"

# ANCHOR NOTES:

- FOR ALL CONCRETE ANCHORS, UTILIZE EITHER 1/4" ITW ATT TAPCONS OR 1/4" ELCO ULTRACONS AS SPECIFIED IN THE ANCHOR SCHEDULES.
- "ELCO PANELMATE" ANCHORS MAY BE MALE, FEMALE, OR PANELMATE PLUS, AS ILLUSTRATED HEREIN. HEAD STYLE MAY BE STD 13/32" OR WASHERED 5/8" HEX HEAD.
- ENSURE MINIMUM 2" EDGE DISTANCE FOR ALL ANCHORS TO CONCRETE & TO HOLLOW BLOCK. ENSURE 3/4" EDGE DISTANCE FOR ALL ANCHORS TO WOOD.
- MINIMUM EMBEDMENT SHALL BE AS NOTED IN ANCHOR SCHEDULE. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
- CONCRETE ANCHORS NOTED HEREIN SHALL BE EMBEDDED TO UN-CRACKED CONCRETE ONLY. INSTALL ALL CONCRETE ANCHORS PER MANUFACTURE'S RECOMMENDATIONS.
- WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD.
- WHERE ANCHORS FASTEN TO NARROW FACE OF STUD FRAMING, ANCHOR SHALL BE LOCATED IN CENTER OF NOMINAL 2x4 (MIN) WOOD STUD (i.e. 3/4" EDGE DISTANCE IS ACCEPTABLE FOR ANCHORS TO WOOD FRAMING). WOOD STUD SHALL BE "SOUTHERN PINE" G=0.55 OR GREATER DENSITY.
- ANCHOR SCHEDULE APPLIES FOR ALL PRODUCTS CERTIFIED HEREIN, BUT ONLY PROVIDES MAXIMUM ALLOWABLE ANCHOR SPACING. MAXIMUM ALLOWABLE SPANS AND PRESSURES INDICATED IN SPAN SCHEDULE SHALL APPLY.
- MACHINE SCREWS SHALL HAVE MINIMUM OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR AND MAY HAVE EITHER A PAN HEAD, TRUSS HEAD, OR WAFFER HEAD ("SIDEWALK BOLT") U.N.O.
- \* DESIGNATES REMOVABLE ANCHORS. PANELS SHALL BE MOUNTED DIRECTLY TO THE HOST STRUCTURE ONLY WITH THESE ANCHORS, LOCATED AT KEYHOLES AND LESS THAN OR EQUAL TO ALLOWABLE SPACING SHOWN IN ANCHOR SCHEDULE.
- "N/A" DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE FOR USE.

# GLASS SEPARATION SCHEDULE NOTES:

- GLASS SEPARATION SCHEDULE PROVIDES MINIMUM SEPARATION DISTANCE REQUIRED BETWEEN EXTERIOR FACE OF GLAZING (OR OTHER PRODUCT BEING PROTECTED) AND INTERIOR FACE OF INSTALLED STORM PANEL.
- SEPARATION DISTANCE PER THIS SCHEDULE IS REQUIRED FOR USE WITH POSITIVE LOADS ONLY.
- SEPARATION FROM GLASS IS REQUIRED ONLY WHEN INSTALLED WITHIN THE HIGH VELOCITY HURRICANE ZONE, ASTM WIND ZONE 4 AND ESSENTIAL FACILITIES.

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