

STRUCTURAL NOTES:

- THIS NON POROUS SYSTEM HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE AND THE 2018 INTERNATIONAL RESIDENTIAL CODE. THE ADEQUACY FOR IMPACT, DEFLECTION AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH APPROPRIATE SECTIONS OF THE ABOVE REFERENCED CODE, INCLUDING TESTING STANDARDS: TAS 201,202 AND 203; ASTM E330-02, ASTM E1886-05 AND ASTM E1996-05. SEE LIST OF REPORTS ON SHEET 1 OF 10.
- DESIGN PRESSURE REQUIREMENTS OF A SPECIFIC SITE SHALL BE DETERMINED BY OTHERS IN CONFORMANCE TO SECTION 1609 OF THE IBC FOR A BASIC WIND SPEED (ALLOWABLE STRESS DESIGN) AS REQUIRED BY THE JURISDICTION WHERE THE SYSTEM WILL BE INSTALLED. ULTIMATE DESIGN LOADS (UDL) DETERMINED BY ASCE 7-16 SHALL BE REDUCED TO ALLOWABLE STRESS DESIGN LOADS (ASD) BY MULTIPLYING THE UDL BY 0.6 TO COMPARE THEM TO THE ASD PRESSURE RATINGS SHOWN ON SHEET 2. USE OF DIRECTIONALITY FACTOR  $K_d=0.85$  IS ALLOWED.
- IMPACT AND FATIGUE RESISTANCE HAS BEEN DETERMINED IN ACCORDANCE WITH THE IBC SECTION 1609.2. LARGE MISSILE AS LISTED HEREIN.
- NO 33-1/3% INCREASE IN ALLOWABLE STRESS INCREASE HAS BEEN USED IN THE DESIGN OF THIS PRODUCT. A 1.6 WIND LOAD DURATION FACTOR WAS USED TO CALCULATE SCREW SPACINGS FOR LAG SCREWS INTO WOOD.
- THIS PRODUCT EVALUATION DOCUMENT (PED) 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 CONTRACTOR AND / OR PERMIT HOLDER IS TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS SYSTEM, INCLUDING VERIFYING THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND THE NEW SUPERIMPOSED LOADS SHOWN BELOW AND THE SOUNDNESS OF THE STRUCTURE WHERE THE SYSTEM IS TO BE ATTACHED TO ENSURE PROPER ANCHORAGE.
- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A TEXAS LICENSED ENGINEER WHO WILL BECOME THE ENGINEER OF RECORD (EOR) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE PED. THE ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE PED ENGINEER SHALL SUBMIT TO THIS ENGINEER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
- THIS PED SHALL BEAR THE DATE AND ORIGINAL SEAL OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT REGARDLESS OF ITS AVAILABILITY FROM THE TEXAS DEPARTMENT OF INSURANCE WEBSITE.
- THIS SYSTEM MAY ALSO BE INSTALLED HORIZONTALLY FOLLOWING INSTALLATION DETAILS SHOWN HEREIN.
- <RESERVED>
- CORRUGATED PANEL LIMITATIONS OF USE:  
THE MAXIMUM SIZE SHALL BE 25 PSF MAX. PRESSURE @135 INCHES MAXIMUM WIDTH (CENTER / CENTER OF WALL FASTENERS). SEE TABLES ON SHEET 2 OF 10.
- FLAT PANEL LIMITATIONS OF USE:  
THE MAXIMUM ALLOWABLE DESIGN PRESSURES ARE: +60PSF/-60PSF. SEE TABLES ON SHEET 2 OF 10.
- FOR DETERMINING INTERNAL PRESSURE IN THE ABOVE REFERENCED CODES, THIS PRODUCT IS CLASSIFIED AS NON-POROUS WITH A POROSITY OF LESS THAN 10% FOR THE CONDITIONS SHOWN IN THIS PRODUCT EVALUATION DOCUMENT. CLEAR PANELS MUST COMPLETELY COVER AN OPENING IN ALL DIRECTIONS. SEE END CAP BUILD OUT DETAIL ON SHEET 8 OF 10.
- ALL SCREWS TO BE STAINLESS STEEL 304 OR GALVANIZED A307 STEEL. ALL BOLTS TO BE ASTM A307, GALVANIZED OR 304 SERIES STAINLESS STEEL.
- PANEL OR PANELS CAN BE USED ADJACENT TO OTHER APPROVED CORRUGATED SYSTEMS.
- SUPPORTBRACKETS AND ANCHORS :  
A. ANCHORS INTO THE SUPPORT SUBSTRUCTURE ( WALL, CEILINGS, BEAMS AND FLOORS) SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.  
B. THE ANCHOR SPACING SHOWN ON SHEETS 2, 6, 7, 8, 9, & 10 OF 10, INDICATED FOR 1/4" AND 3/8" DIAMETERS REFER TO CENTER OF SUPPORTING BRACKETS.  
C. THE ANCHOR SPACING CHARTS ARE BASED ON A REMOVAL BRACKET SYSTEM USING MALE PANELMATES WITH WINGNUTS, FEMALE PANELMATES, SAMMY'S AND DROP-IN ANCHORS WITH SIDEWALK BOLTS. TAPCON TYPE ANCHOR OF THE SAME SIZE MAY BE SUBSTITUTED FOR PERMANENT BRACKET INSTALLATIONS.  
D. NO EMBEDMENT INTO NON-STRUCTURAL MATERIAL SUCH AS STUCCO, SIDING AND PAVERS SHALL BE INCLUDED AS PART OF THE EMBEDMENT REQUIREMENT.
- STEEL SURFACES TO BE PLACED IN CONTACT WITH ALUMINUM SHALL BE GIVEN ONE COAT OF ZINC CHROMATE PRIMER IN ACCORDANCE WITH FEDERAL SPEC NO.: TTP-645, OR BE GALVANIZED.
- MAXIMUM DESIGN PRESSURE VERSUS PANEL SPAN SHOWN ON SHEET 2 OF 10. INTERPOLATION IS ALLOWED IN BETWEEN TWO SPANS TO OBTAIN SPACINGS NOT LISTED.
- ALL ALUMINUM ALLOYS SHALL BE 6063-T6, 6061-T5, 6061-T6 OR 6005-T5.
- ANCHORING OR LOADING CONDITIONS OTHER THAN THOSE SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
- TRACKS MAY BE CURVED TO FOLLOW THE INSTALLATION PROFILE AROUND ARCHES AND RADII.
- PANEL'S MANUFACTURER LABEL SHALL BE PLACED ON A READILY AND VISIBLE LOCATION ON THE PANEL. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABEL SHALL READ AS FOLLOWS:  
ULTRATEK WORLDWIDE  
3801 N. Washington Blvd.  
Sarasota, FL 34234  
TEXAS DEPARTMENT OF INSURANCE APPROVAL NUMBER: SHU-XXX. OPENING NO.: XX
- THIS DOCUMENT IN ITS ENTIRETY WILL BE CONSIDERED INVALID IF IT IS ALTERED BY ANY MEANS OR DOES NOT BEAR THE DATE AND ORIGINAL SEAL OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

POLYCARBONATE SOURCES				
TYPICAL PROPERTIES	STANDARD	RESULT		
		SABIC LEXAN 103 RESIN	BAYER MAKROLON 3103	PALRAM PALSUN
<b>MECHANICAL</b>				
TENSILE YIELD STRENGTH	ASTM D638	9.5 ksi	9.4 ksi	9.5 ksi
FLEXURAL STRENGTH AT YIELD	ASTM D790	12.5 ksi	12.5 ksi	12.5 ksi
FLEXURAL MODULUS	ASTM D790	345 ksi	340 ksi	340 ksi
<b>IMPACT:</b>				
NOTCHED IZOD	ASTM D256	17 ft-lb/in	18 ft-lb/in	15 ft-lb/in
<b>FIRE BURNING CHARACTERISTICS:</b>				
SMOKE DENSITY	ASTM D2843	64.5% MAX.	47.20%	64.00%
RATE OF BURNING	ASTM D635	C-1 CLASS	C-1 CLASS	C-1 CLASS
SELF IGNITION	ASTM D1929	980 deg. F	1040 deg. F	1040 deg. F
<b>WEATHERING:</b>				
TENSILE STRENGTH AFTER WEATHERING	ASTM G155			
TENSILE STRESS BEFORE WEATHERING	ASTM G155	8.840 ksi	9.302 ksi	8.81 ksi
TENSILE STRESS BEFORE WEATHERING	ASTM G155	8.880 ksi	8.461 ksi	8.21 ksi
<b>PHYSICAL:</b>				
SPECIFIC GRAVITY	ASTM D792	0.043 lb/in <sup>3</sup>	0.043 lb/in <sup>3</sup>	0.043 lb/in <sup>3</sup>

TEST REPORTS  
UNIFORM STATIC AIR PRESSURE (TAS 202, E330)

HETI 07-4198	04/30/2007
HETI 07-4202/32	04/30/2007
HETI 07-4252	06/13/2007
HETI 07-4285	07/27/2007
HETI 08-2048/50/52	10/10/2008
HETI 09-2507A	01/28/2009
HETI 09-2508A	01/28/2009
A3398.01-401-44	04/30/2020
B9069.01-401-18	04/26/2012
BT-ULTK-13-001A	09/24/2013
BT-ULTK-13-001B	09/24/2013

LARGE MISSILE & CYCLIC LOADING (TAS 201, TAS 203, ASTM E1886, ASTM E1996)

HETI 07-4199/04/05	04/30/2007
HETI 07-4233/54	04/30/2007
HETI 07-4233/86	07/27/2009
HETI 08-2049	10/10/2008
HETI 09-2507B	01/28/2009
HETI 09-2508B	01/28/2009
A3398.01-401-44	04/30/2020
B9069.01-401-18	04/26/2012
BT-ULTK-13-001A	09/24/2013
BT-ULTK-13-001B	09/24/2013

TENSILE TEST (ASTM D638-03)

HETI 07-T750	09/07/2007
HETI 09-T104/05	01/28/2009

**THIS PRODUCT  
APPROVAL IS ONLY  
VALID FOR THE STATE  
OF TEXAS**

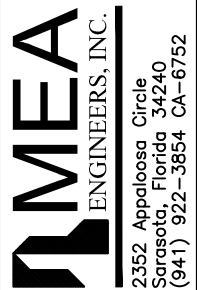
TEXAS DEPARTMENT OF INSURANCE

Drawn: JK  
Project #: 21-13  
Scale: NOTED  
Date: 3/4/21  
Sheet No.:

1/10

John H. Kampmann Jr., PE  
TX License #: 108168  
DATE:

TX REG. #: F-13337  
WWW.MEAENGINEERS.COM



DESCRIPTION  
XX/XX/XX - RESERVED.

REV. 1

Project Name:  
Ultratek Worldwide Inc.

3801 N. Washington Blvd.  
Sarasota, FL 34234  
PHONE: (941) 924-2285  
www.ultratekworldwide.com

DESCRIPTION:  
CLEARTEK  
STORM PANEL SYSTEM

# CORRUGATED PANEL TABLES

CORRUGATED  
SPAN LOAD TABLE  
DIRECT MOUNT PANELS AT BOTH ENDS

MAX. SPAN - IN.	MAX. DESIGN LOAD
60"	75.0
72"	60.0
84"	55.0
96"	52.0
108"	35.0
120"	32.0
132"	30.0
135"	25.0



MOUNT WITH FASTENERS AT MAX. 13 INCH O.C.

CORRUGATED  
SPAN LOAD TABLE  
DIRECT MOUNT PANELS AT ONE END ONLY

MAX. SPAN - IN.	MAX. DESIGN LOAD
60"	60.0
72"	50.0
84"	45.0
96"	40.0
102"	22.0



# FLAT PANEL TABLES

DESIGN PRESSURE  
30 PSF

FASTENERS	Span(in.)	4000 PSI CONCRETE	2000 PSI CONCRETE	HOLLOW BLOCK	WOOD
	1/4"	105	11	11	8
3/8"	86	11	11	10	9
	67	11	11	11	11
	48	11	11	11	11
	105	11	11	11	10
3/8"	86	11	11	11	11
	67	11	11	11	11
	48	11	11	11	11
	105	11	11	11	11

DESIGN PRESSURE  
50 PSF

FASTENERS	Span(in.)	4000 PSI CONCRETE	2000 PSI CONCRETE	HOLLOW BLOCK	WOOD
	1/4"	105	9	8	6
3/8"	86	10	9	7	6
	67	11	11	9	8
	48	11	11	11	10
	105	11	11	11	7
3/8"	86	11	11	11	8
	67	11	11	11	10
	48	11	11	11	11
	105	11	11	11	11

DESIGN PRESSURE  
40 PSF

FASTENERS	Span(in.)	4000 PSI CONCRETE	2000 PSI CONCRETE	HOLLOW BLOCK	WOOD
	1/4"	105	10	9	7
3/8"	86	11	11	8	7
	67	11	11	10	9
	48	11	11	11	11
	105	11	11	11	8
3/8"	86	11	11	11	10
	67	11	11	11	11
	48	11	11	11	11
	105	11	11	11	11

DESIGN PRESSURE  
60 PSF

FASTENERS	Span(in.)	4000 PSI CONCRETE	2000 PSI CONCRETE	HOLLOW BLOCK	WOOD
	1/4"	105	7	7	5
3/8"	86	9	8	6	5
	67	11	10	7	7
	48	11	11	10	9
	105	11	11	11	6
3/8"	86	11	11	11	7
	67	11	11	11	9
	48	11	11	11	11
	105	11	11	11	11

1/4" LAG SCREW TO G=0.55 MIN. WOOD: 1-1/2" MIN. EMBEDMENT; 3/4" MIN. EDGE DISTANCE 3/8" LAG SCREW TO G=0.55 MIN. WOOD: 1-1/2" MIN. EMBEDMENT; 1-1/2" MIN. EDGE DISTANCE	1/4" ITW BUILD EX SAMMYS GST TO G=0.55 MIN. WOOD: 1-1/2" MIN. EMBEDMENT; 3/4" MIN. EDGE DISTANCE 3/8" ITW BUILD EX SAMMYS GST TO G=0.55 MIN. WOOD: 1-1/2" MIN. EMBEDMENT; 1-1/2" MIN. EDGE DISTANCE	1/4" ELCO PANELMATE MALE PRO. PLUS. TVAS TO 3350 PSI MIN. CONC.: 2" MIN. EMBED.; 2-1/2" MIN. EDGE DISTANCE TO 2071 PSI MIN. GROUT FILLED BLOCK: 1-1/4" MIN. EMBED.; 3" MIN. EDGE DISTANCE TO G=0.54 MIN. WOOD: 1-7/8" MIN. EMBED.; 2" MIN. EDGE DISTANCE	1/4" ELCO PANELMATE FEMALE TO 3350 PSI MIN. CONC.: 1-3/4" MIN. EMBED.; 2-1/2" MIN. EDGE DISTANCE TO 2071 PSI MIN. GROUT FILLED BLOCK: 1-1/4" MIN. EMBED.; 3" MIN. EDGE DISTANCE TO G=0.54 MIN. WOOD: 1-7/8" MIN. EMBED.; 2" MIN. EDGE DISTANCE	SIDEWALK BOLTS FASTENAL 1/4-20X1 FASTENAL 3/8-16X1 TO FEMALE ANCHORS	1/4" DEWALT HOLLOW SET DROPIN OR LEAD ANCHOR TO 3000 PSI MIN. CONC.: 7/8" MIN. EMBED.; 3-1/2" MIN. EDGE DISTANCE TO 1500 PSI MIN. HOLLOW BLOCK: 7/8" MIN. EMBED.; 3-3/4" MIN. EDGE DISTANCE 3/8" DEWALT HOLLOW SET DROPIN OR LEAD ANCHOR TO 3000 PSI MIN. CONC.: 1-1/2" MIN. EMBED.; 5-1/4" MIN. EDGE DISTANCE TO 1500 PSI MIN. HOLLOW BLOCK: 1" MIN. EMBED.; 3-3/4" MIN. EDGE DISTANCE
1/4" WING NUT-PAT. PEND. TO STUDDED ANGLE, ELCO PANELMATE MALE, OR HEX HEAD MACHINE SCREW THRU TRACK	1/4" ITW BUILD EX SAMMYS CSI TO 3295 PSI MIN. CONC.: 2-1/4" MIN. EMBED.; 2-1/2" MIN. EDGE DISTANCE TO 2000 PSI MIN. GROUT FILLED BLOCK: 2-1/2" MIN. EMBED.; 2-1/2" MIN. EDGE DISTANCE TO 1500 PSI MIN. HOLLOW BLOCK: 1-1/4" MIN. EMBED.; 2-1/2" MIN. EDGE DISTANCE	1/4" ITW BUILD EX TAPCON. MAXI-SET. SCOTS TO 3000 PSI MIN. CONC.: 1-3/4" MIN. EMBED.; 3" MIN. EDGE DISTANCE TO 117 PCF MIN. HOLLOW BLOCK: 1" MIN. EMBED.; 4" MIN. EDGE DISTANCE	1/4" DEWALT FLANGE LIPPED DROPIN TO 3000 PSI MIN. CONC.: 1" MIN. EMBED.; 3-1/2" MIN. EDGE DISTANCE 3/8" DEWALT FLANGE LIPPED DROPIN TO 3000 PSI MIN. CONC.: 1-9/16" MIN. EMBED.; 5-1/4" MIN. EDGE DISTANCE	1/4" DEWALT SMOOTH WALL DROPIN TO 3000 PSI MIN. CONC.: 1" MIN. EMBED.; 3-1/2" MIN. EDGE DISTANCE 3/8" DEWALT SMOOTH WALL DROPIN TO 3000 PSI MIN. CONC.: 1-9/16" MIN. EMBED.; 5-1/4" MIN. EDGE DISTANCE	1/4" ELCO PANELMATE INSERT TO 2700 PSI MIN. CONC.: 1-5/8" MIN. EMBED.; 4" MIN. EDGE DISTANCE TO 2676 PSI MIN. GROUT FILLED BLOCK: 1-1/2" MIN. EMBED.; 4" MIN. EDGE DISTANCE TO 1794 PSI MIN. HOLLOW BLOCK: 1-1/4" MIN. EMBED.; 3-1/2" MIN. EDGE DISTANCE TO G=0.55 MIN. WOOD: 1-5/8" MIN. EMBED.; 3/4" MIN. EDGE DISTANCE

Minimum Glass Separation Schedule for  
Corrugated Panels

Direct Mount Panels at One End Only

Max. Span - In.	Min. Separation
60	6.125
72	6.56
84	7
96	7.06
102	7.125

Minimum Glass Separation Schedule  
for ClearTek Flat Panels

Positive Load (psf)	Span Less Than	Minimum Separation from Glass	Minimum Separation from Glass With Side Bracket (See Note 3)
30	49"	2.25"	2.25"
	70.5"	3.35"	2.47"
	92"	4.44"	2.68"
40	49"	2.25"	2.25"
	70.5"	-	2.69"
	92"	-	3.12"
50	49"	2.43"	2.25"
	70.5"	-	3.03"
	92"	-	3.80"
60	49"	3.00	2.25"
	70.5"	-	3.08"
	92"	-	3.90"

**GLASS SEPARATION SCHEDULE NOTES:**

- 1) 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.
- 2) SEPARATION DISTANCE PER THIS SCHEDULE IS REQUIRED FOR USE WITH POSITIVE LOADS ONLY.
- 3) SIDE BRACKET IS AN EXTRA BRACKET ADDED HALFWAY ACROSS SPAN ON BOTH SIDES.
- 4) SEPARATION FROM GLAZING IS REQUIRED FOR ALL INSTALLATIONS WITHIN ESSENTIAL FACILITIES.
- 5) SEPARATION IS NOT REQUIRED FROM ANY FENESTRATION PRODUCT THAT DOES NOT CONTAIN GLAZING.
- 6) SEPARATION FROM GLAZING IS NOT REQUIRED FOR INSTALLATIONS OUTSIDE OF ESSENTIAL FACILITIES.

TYPICAL FASTENERS/ANCHORS - 1/4" AND 3/8" 1  
N.T.S.

John H. Kampmann Jr., PE  
TX License #: 108168  
DATE:

TX REG. #: F-13337  
WWW.MEAENGINEERS.COM

**MEAE**  
ENGINEERS, INC.  
2352 Appaloosa Circle  
Sarasota, Florida 34240  
(941) 922-3854 CA-6752

DESCRIPTION  
XX/XX/XX - RESERVED.

REV. 1

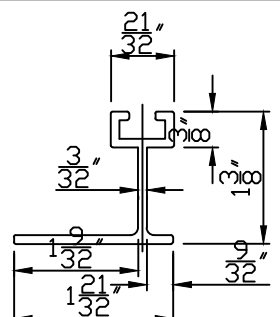
Project Name:  
**Ultratek Worldwide Inc.**  
3801 N. Washington Blvd.  
Sarasota, FL 34234  
PHONE: (941) 924-2285  
www.ultratekworldwide.com

Description:  
**CLEARTEK**  
**STORM PANEL SYSTEM**

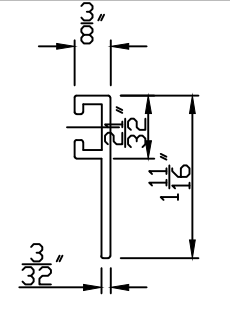
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Project #: 21-13  
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Date: 3/4/21  
Sheet No.:

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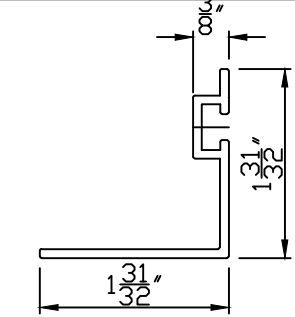
TEXAS DEPARTMENT OF INSURANCE



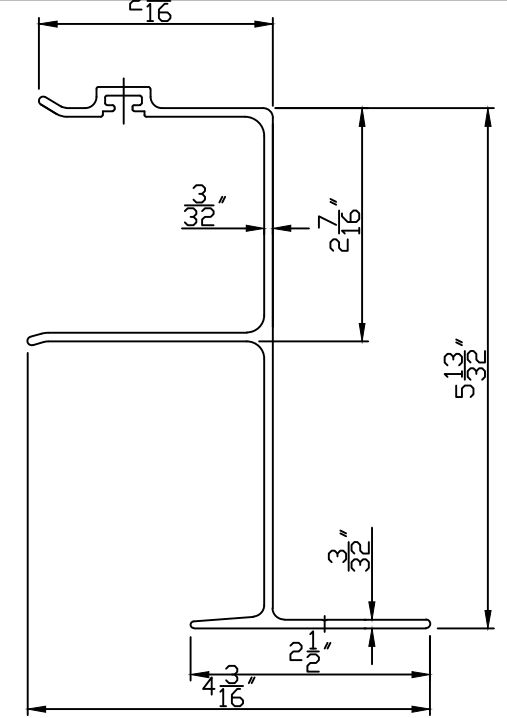
**1" F-TRACK**  
ALUMINUM (6061--T6)  
SCALE: 1:2



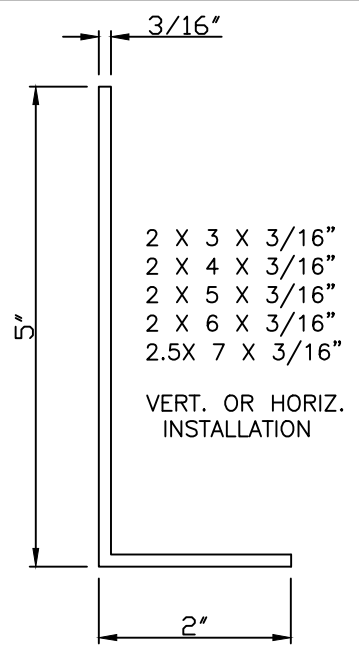
**FLAT F-TRACK**  
ALUMINUM (6061--T6)  
SCALE: 1:2



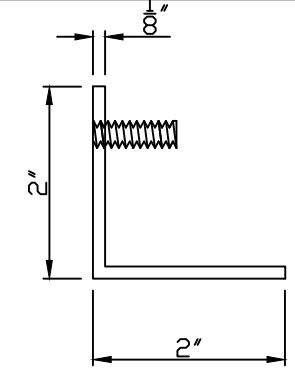
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ALUMINUM (6061--T6)  
SCALE: 1:2



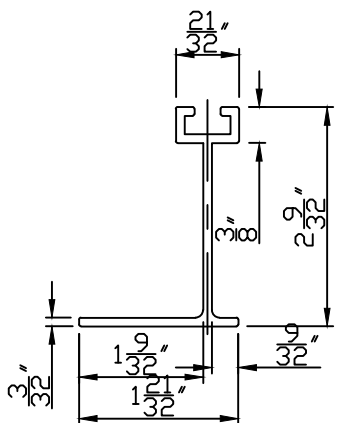
**3" H-TRACK**  
ALUMINUM (6061--T6)  
SCALE: 1:2



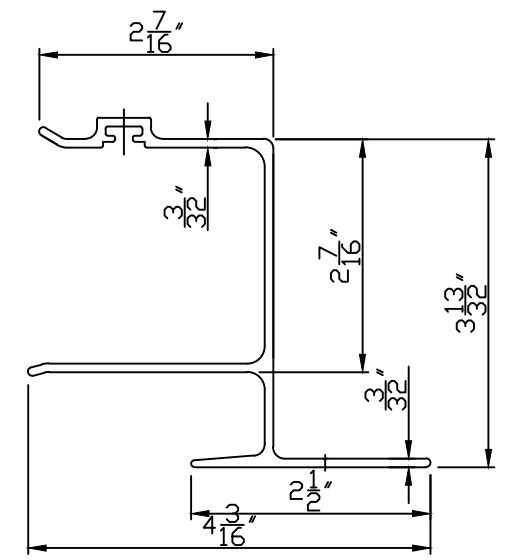
**BUILT-OUT ANGLES**  
ALUMINUM (6061--T6)  
SCALE: 1:2



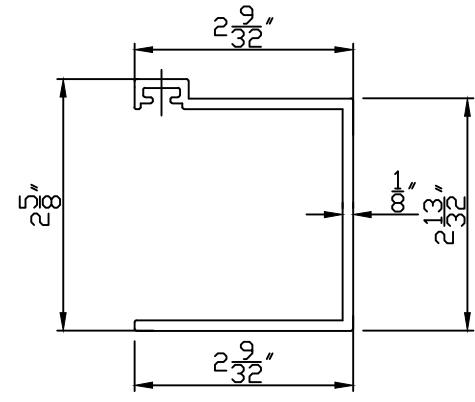
**STUDED ANGLE**  
ALUMINUM (6061--T6)  
SCALE: 1:2



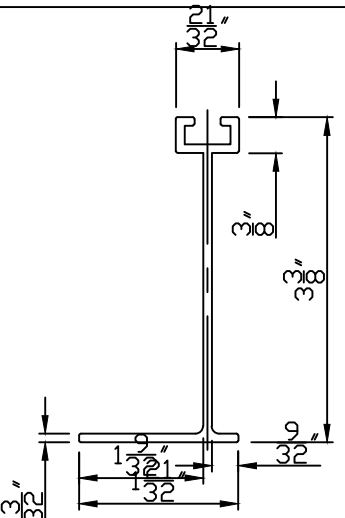
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ALUMINUM (6061--T6)  
SCALE: 1:2



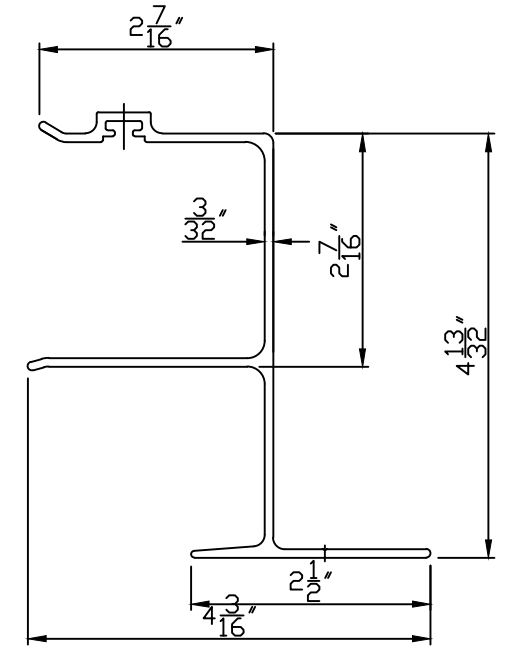
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ALUMINUM (6061--T6)  
SCALE: 1:2



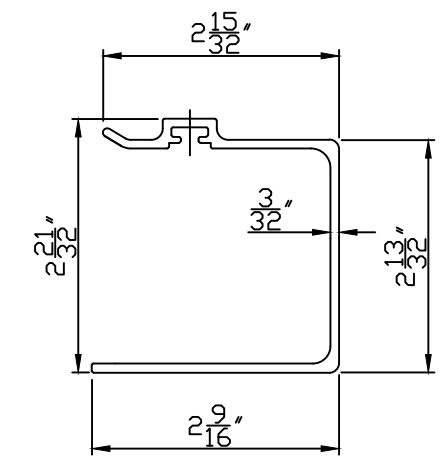
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ALUMINUM (6061--T6)  
SCALE: 1:2



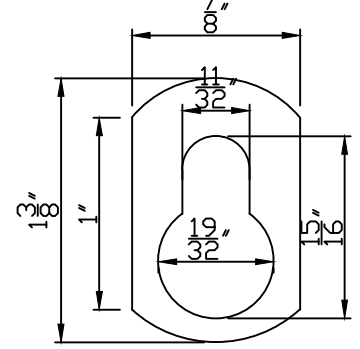
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ALUMINUM (6061--T6)  
SCALE: 1:2



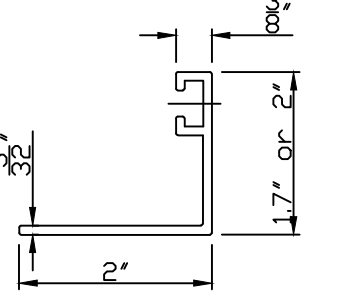
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ALUMINUM (6061--T6)  
SCALE: 1:2



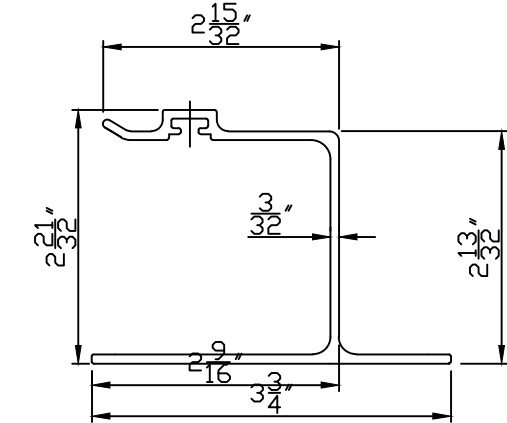
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ALUMINUM (6061--T6)  
SCALE: 1:2



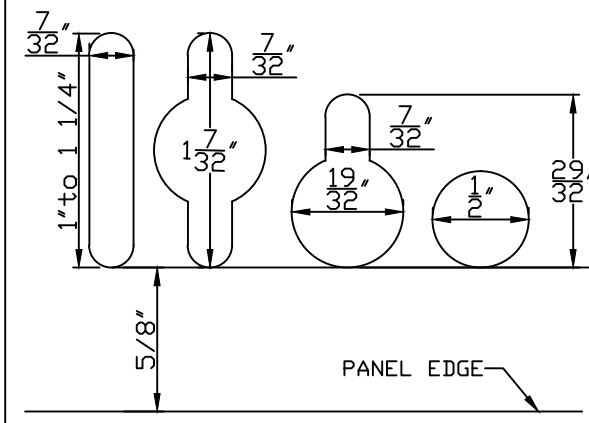
**KEYHOLE WASHER**  
ALUMINUM (6063--T6)  
SCALE: 1"=1'-0"



**E-TRACK**  
ALUMINUM (6061--T6)  
SCALE: 1:2



**STD H-TRACK**  
ALUMINUM (6061--T6)  
SCALE: 1:2



**KEYHOLE DETAIL OPTIONS**  
ALT. FIELD DRILL 3/8" OR 5/8" HOLE W/ KEYHOLE WASHER  
SCALE: 1"=1'-0"

TEXAS DEPARTMENT OF INSURANCE

Description:  
**CLEARTEK  
STORM PANEL SYSTEM**

Drawn: JK  
Project #: 21-13  
Scale: NOTED  
Date: 3/4/21  
Sheet No.:

**3/10**

Project Name:

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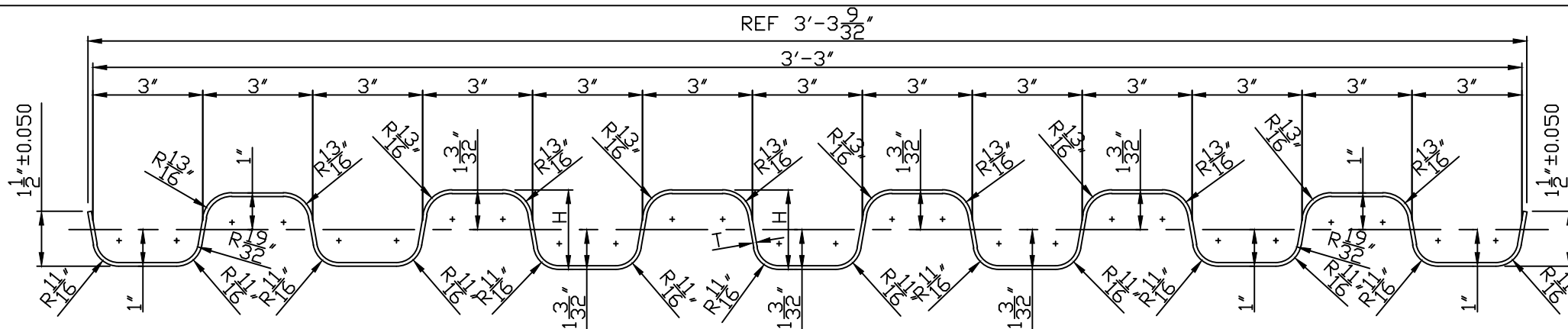
REV. 1  
XX/XX/XX - RESERVED.

DESCRIPTION

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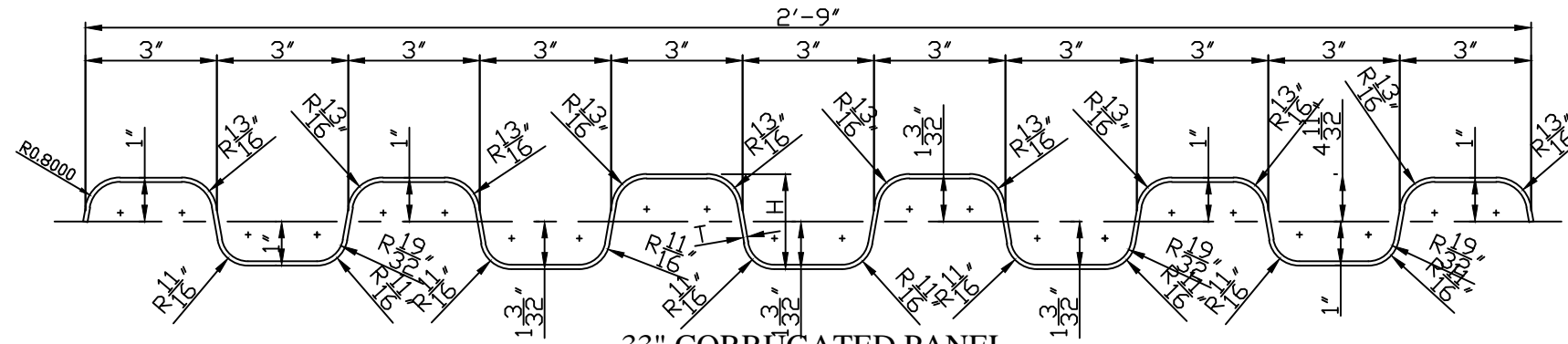
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Sarasota, Florida 34240  
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John H. Kampmann Jr., PE  
TX License #: 108168  
DATE:



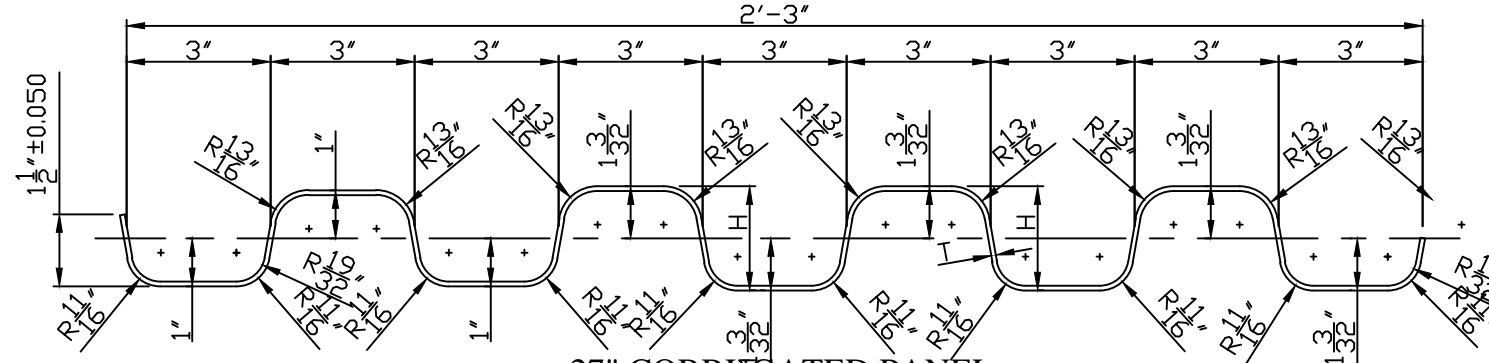
**39" CORRUGATED PANEL**

(GE LEXAN 103/BAYER MAKROLON 3103/POLYONE/SPARTECH)  
 Fu = 9367 PSI, Fy = 91346 PSI  
 SCALE: 3" = 1'-0"



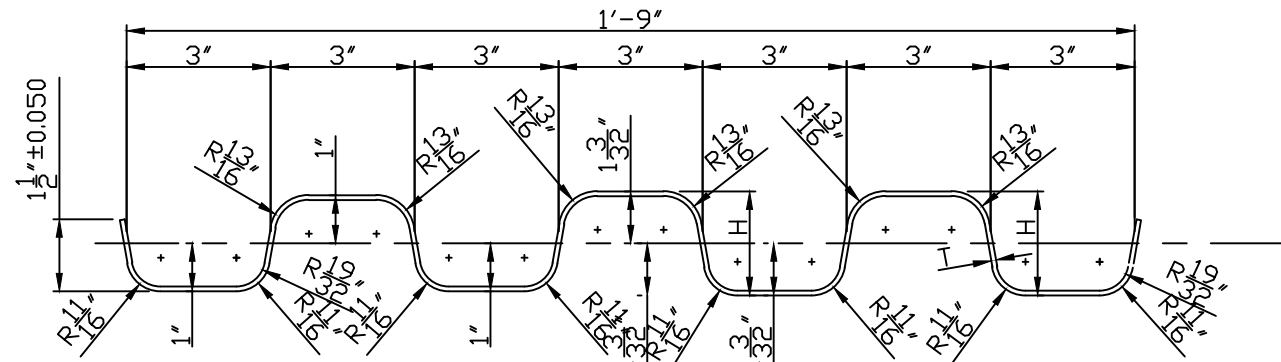
**33" CORRUGATED PANEL**

(GE LEXAN 103/BAYER MAKROLON 3103/POLYONE/SPARTECH)  
 Fu = 9367 PSI, Fy = 91346 PSI  
 SCALE: 3" = 1'-0"



**27" CORRUGATED PANEL**

(GE LEXAN 103/BAYER MAKROLON 3103/POLYONE/SPARTECH)  
 Fu = 9367 PSI, Fy = 91346 PSI  
 SCALE: 3" = 1'-0"



**21" CORRUGATED PANEL**

(GE LEXAN 103/BAYER MAKROLON 3103/POLYONE-SUNGUARD)  
 Fu = 9367 PSI, Fy = 91346 PSI  
 SCALE: 3" = 1'-0"

**NOTE :**

- 1) THICKNESS : 2.36 mm TO 2.50 mm ±0.05
- 2) MATERIAL : (GE LEXAN 103/BAYER MAKROLON 3103/POLYONE-SUNGUARD)
- 3) THE DIMENSION "H" MUST BE 53.3 ~ 55.0 mm .
- 4) ALL INCLINED PLANE THE THICKNESS "T" MUST BE MINIMUM 2.10 mm
- 5) PANELS MAY BE BENT ALONG CORRUGATION TO MATCH CURVED OR ANGLED OPENINGS
- 6) PANEL RADII MAY VARY BETWEEN 0.1 TO 0.6in.
- 7) ALL PANELS MAY BE CUT TO DECREASE ITS WIDTH.
- 8) TRACK MAY BE CURVED TO FOLLOW THE INSTALLATION PROFILE AROUND ARHES AND RADII.
- 9) HEIGHT OF WAVE MAY VARY DOWN TO 0.75 INCH.
- 10) PANELS MAY BE BENT OR CURVED TO ACCOMMODATE CURVED OR MITERED GLASS
- 11) PANEL WIDTH MAY VARY BY 5%..

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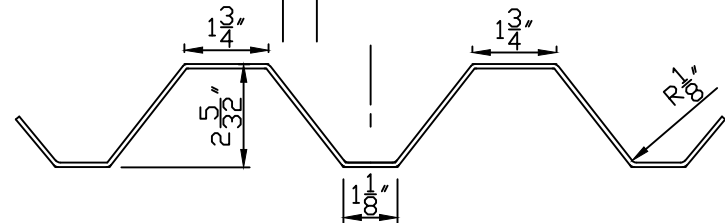
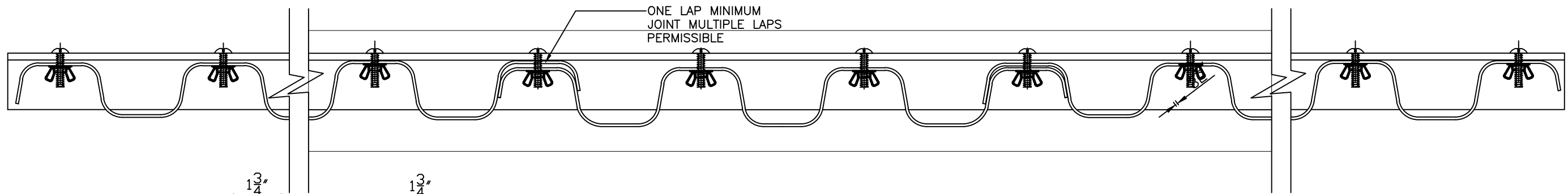
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**Ultratek Worldwide Inc.**  
 3801 N. Washington Blvd.  
 Sarasota, FL 34234  
 PHONE: (941) 924-2285  
 www.ultratekworldwide.com

Description:  
**CLEARTEK STORM PANEL SYSTEM**

Drawn: JK  
 Project #: 21-13  
 Scale: NOTED  
 Date: 3/4/21  
 Sheet No.:

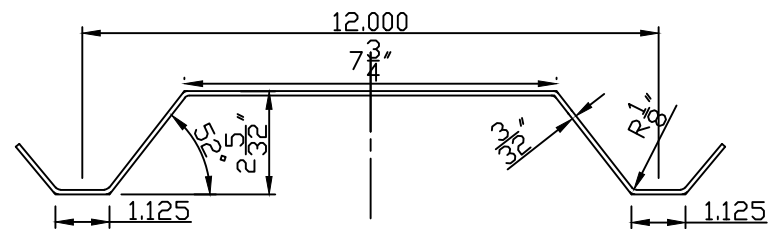
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**SECTION E-E**  
SCALE: 3" = 1'-0"

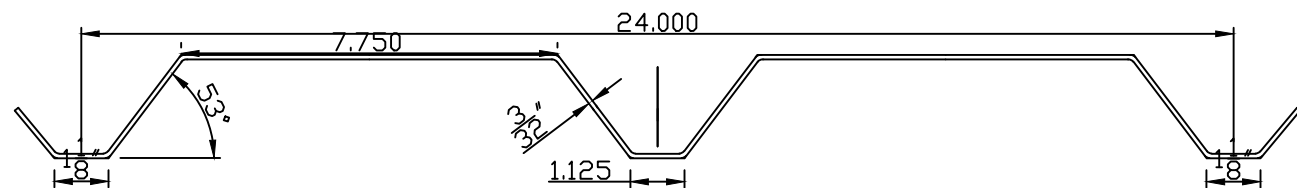
**ALTERNATE "A" 12IN. CORRIGATED PANEL**

SABIC-LEXAN 103/BAYER-MAKROLON 3103/POLYONE-SPARTECH/PALRAN-PALSUN)  
Fu = 9367 PSI, Fy = 91346 PSI  
SCALE: 3" = 1'-0"



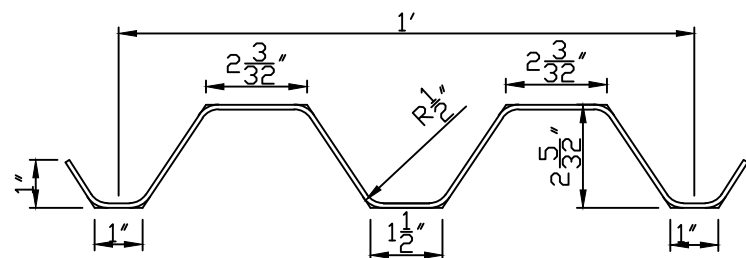
**ALTERNATE "B" 12IN. CORRIGATED PANEL**

SABIC-LEXAN 103/BAYER-MAKROLON 3103/POLYONE-SPARTECH/PALRAN-PALSUN)  
Fu = 9367 PSI, Fy = 91346 PSI  
SCALE: 3" = 1'-0"



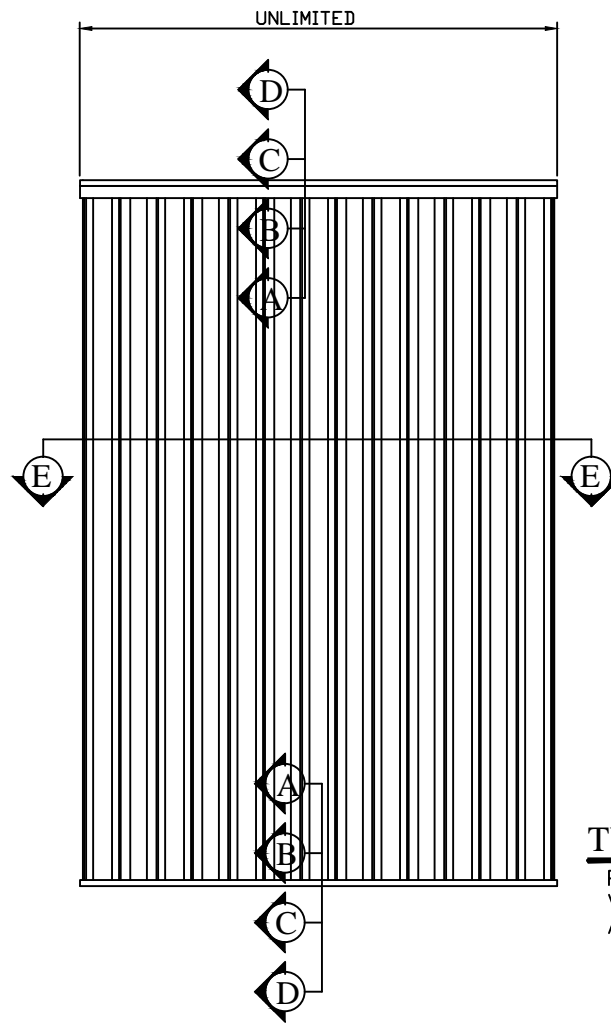
**ALTERNATE "C" 24IN. CORRIGATED PANEL**

SABIC-LEXAN 103/BAYER-MAKROLON 3103/POLYONE-SPARTECH/PALRAN-PALSUN)  
Fu = 9367 PSI, Fy = 91346 PSI  
SCALE: 3" = 1'-0"



**ALTERNATE "D" CORRIGATED PANEL**

SABIC-LEXAN 103/BAYER-MAKROLON 3103/POLYONE-SPARTECH/PALRAN-PALSUN)  
Fu = 9367 PSI, Fy = 91346 PSI  
SCALE: 3" = 1'-0"

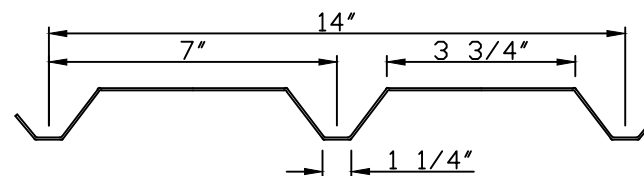


**TYPICAL ELEVATION**

PANELS CAN BE INSTALLED VERTICALLY OR HORIZONTALLY USING APPLICABLE ANCHORING DETAILS

**ALTERNATE PANEL NOTE:**

- 1) ALTERNATE PANEL "B", "C" AND "E" MAY ONLY BE USED AS A DIRECT MOUNT AT BOTH ENDS.

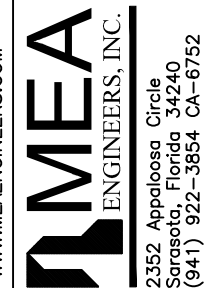


**ALTERNATE "E" CORRIGATED PANEL**

SABIC-LEXAN 103/BAYER-MAKROLON 3103/POLYONE-SPARTECH/PALRAN-PALSUN)  
Fu = 9367 PSI, Fy = 91346 PSI  
SCALE: 3" = 1'-0"

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TX License #: 108168  
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TX REG. #: F-13337  
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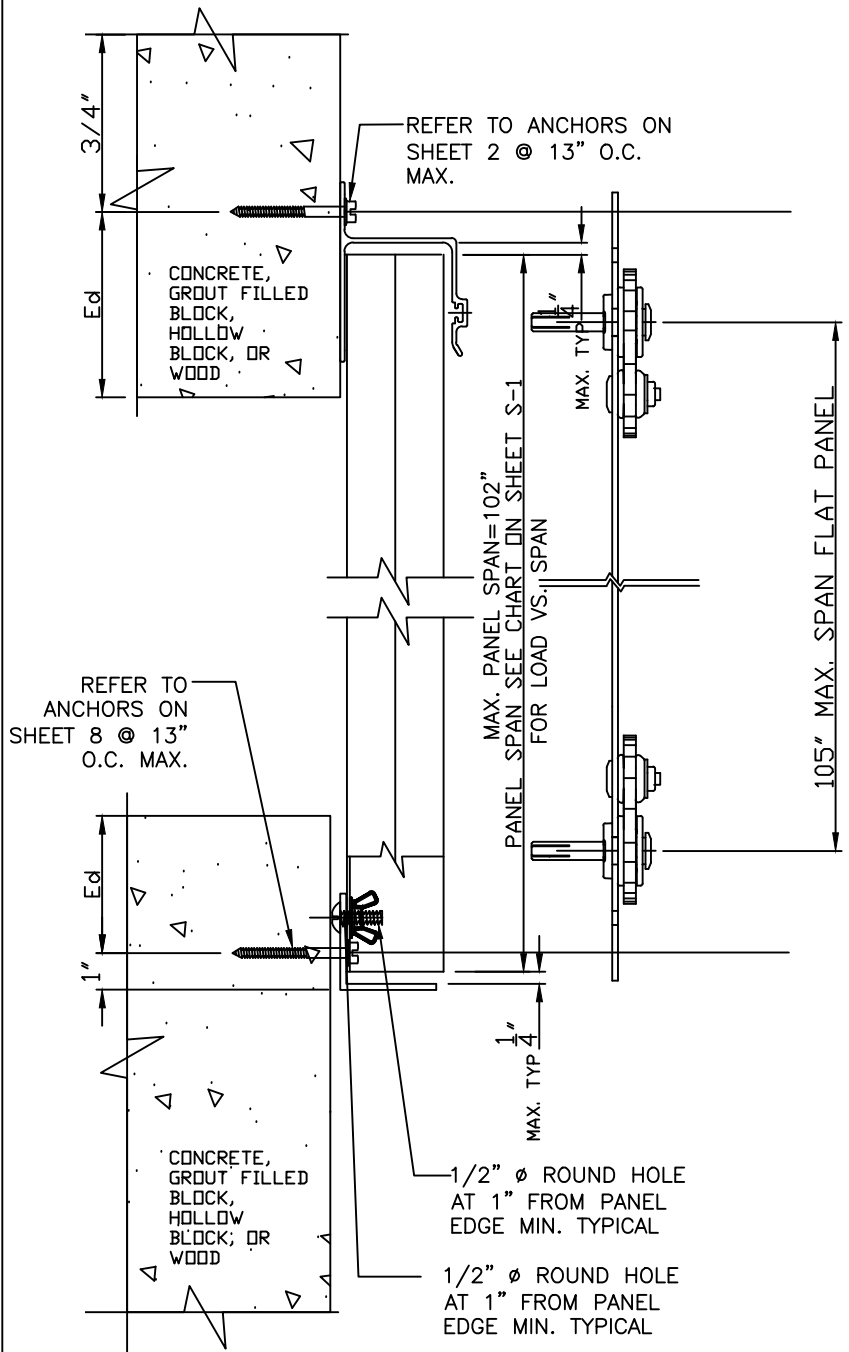
Project Name:  
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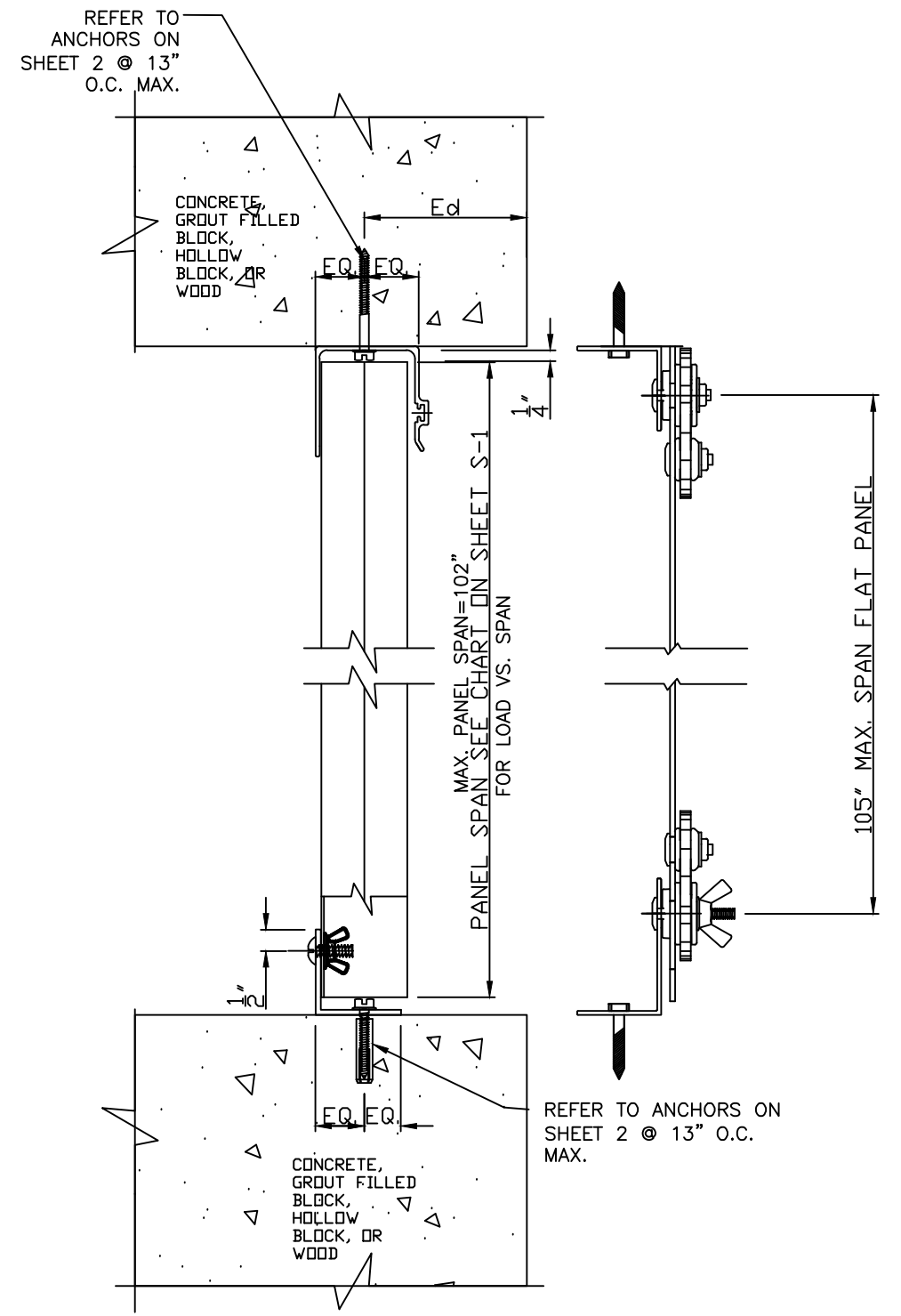
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**CLEARTEK  
STORM PANEL SYSTEM**

Drawn: JK  
Project #: 21-13  
Scale: NOTED  
Date: 3/4/21  
Sheet No.:

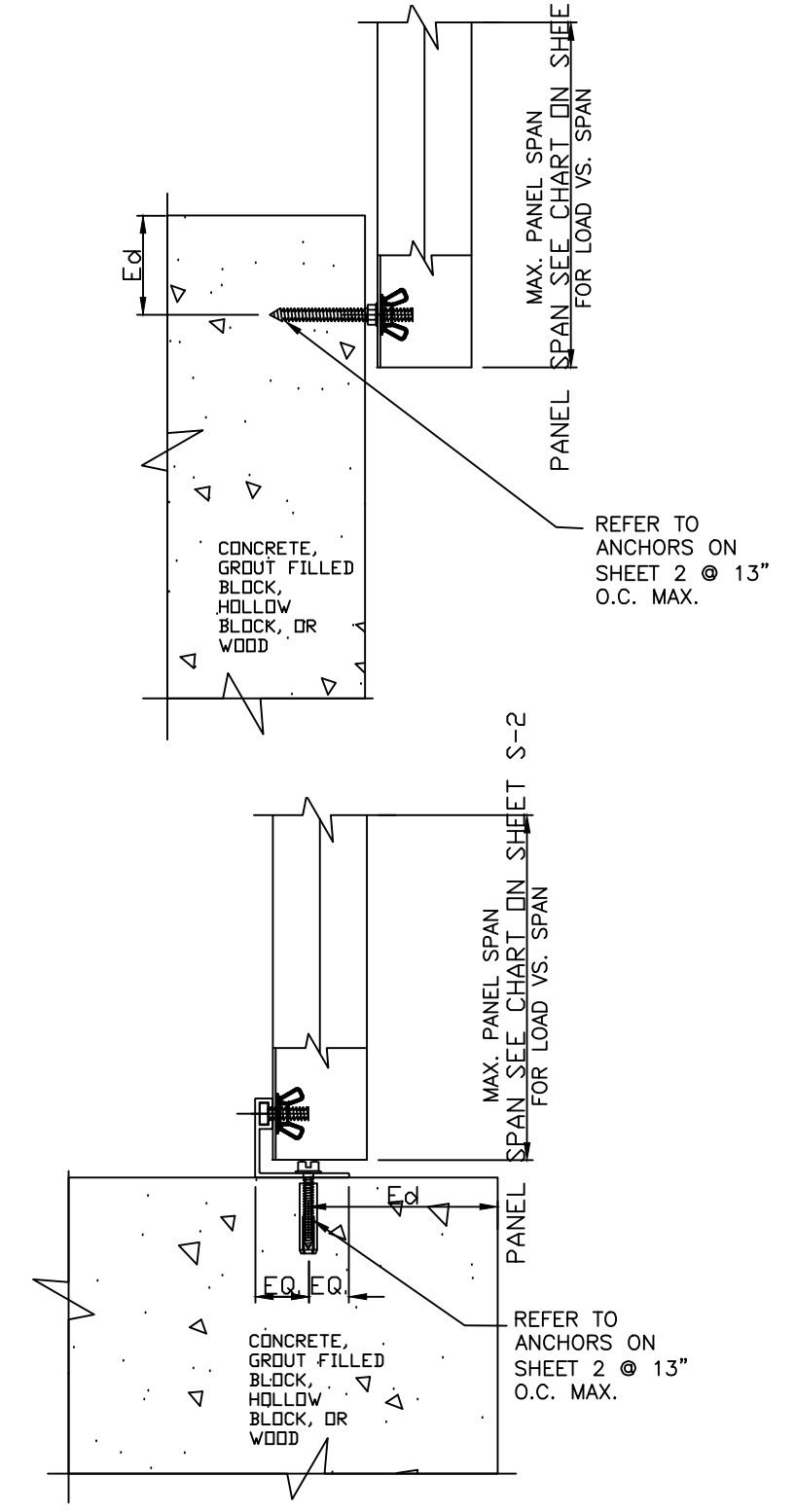
**5/10**



**SECTION A-A**



**SECTION B-B**



**SECTION C-C**

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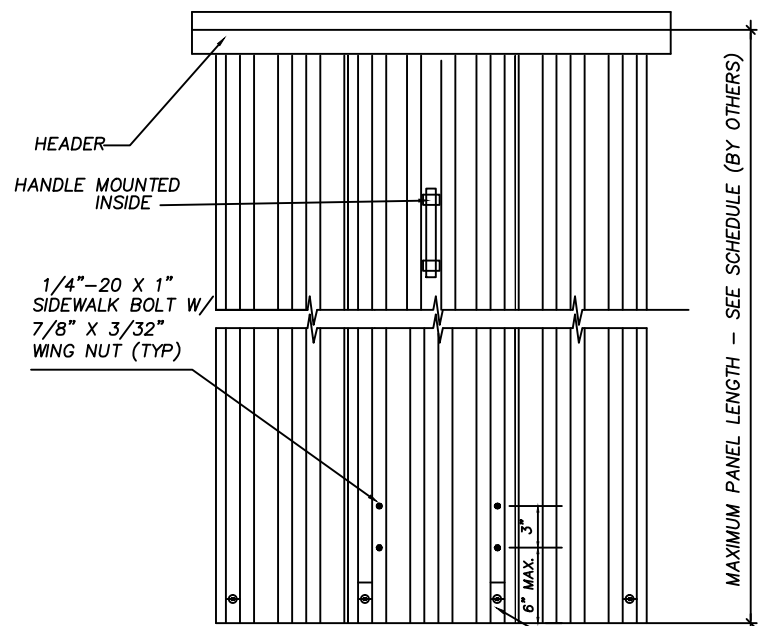
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Drawn: JK  
Project #: 21-13  
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Date: 3/4/21  
Sheet No.:

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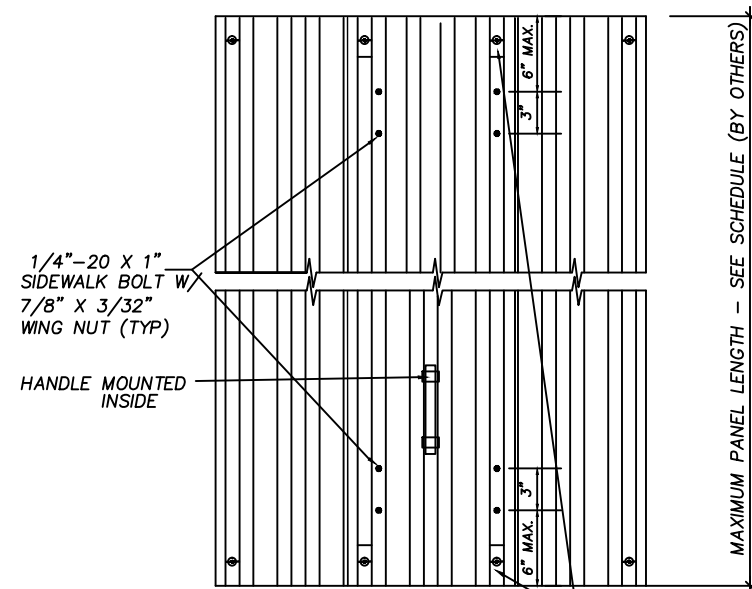
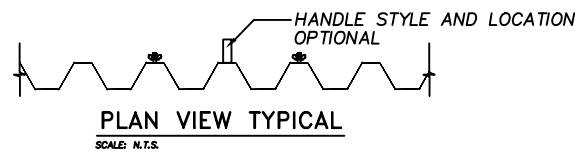
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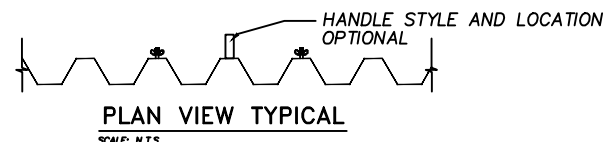
**OPTION #1 - EGRESS**  
TYPICAL ELEVATION  
SCALE: N.T.S.  
CUT CORNERS OF THE PULL-IN PANEL TO CLEAR SPACE FOR WINGNUT OF ADJACENT PANELS

**GENERAL NOTES:**  
1. THIS STORM PANEL SYSTEM IS DESIGNED IN ACCORDANCE WITH THE 2018 IBC / 2018 IRC.

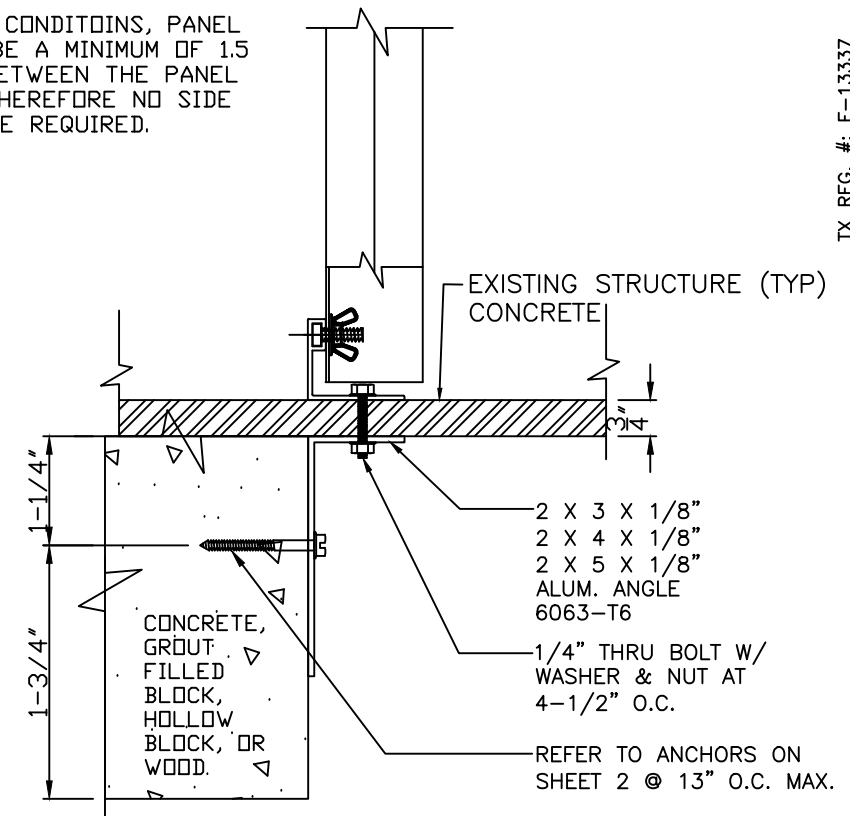


**OPTION #2 - EGRESS**  
TYPICAL ELEVATION  
SCALE: N.T.S.  
CUT CORNERS OF THE PULL-IN PANEL TO CLEAR SPACE FOR WINGNUT OF ADJACENT PANELS TOP & BOTTOM

**GENERAL NOTES:**  
1. THIS STORM PANEL SYSTEM IS DESIGNED IN ACCORDANCE WITH THE 2018 IBC / 2018 IRC.

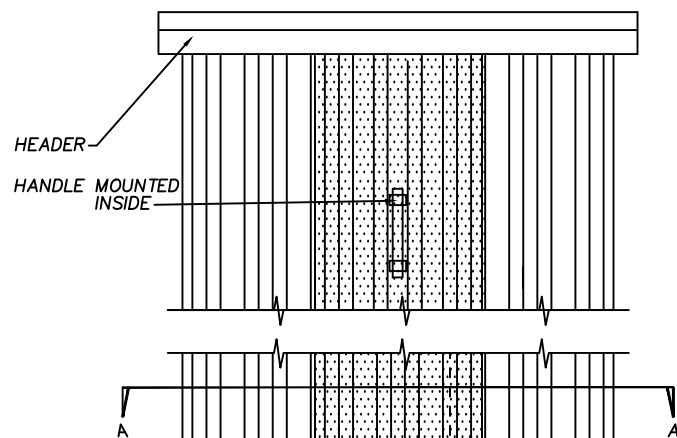


**SIDE CLOSURE NOTE:**  
1. FOR WALL MOUNT CONDITIONS, PANEL OVERLAP SHALL BE A MINIMUM OF 1.5 TIMES THE GAP BETWEEN THE PANEL AND THE WALL; THEREFORE NO SIDE CLOSURES WILL BE REQUIRED.



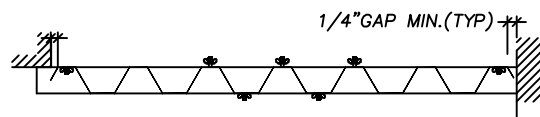
**COUNTER TOP CONDITION**

SCALE: 3" = 1'-0"  
(PASS THRU WINDOW)  
MAX. SHUTTER HEIGHT=6 FT.

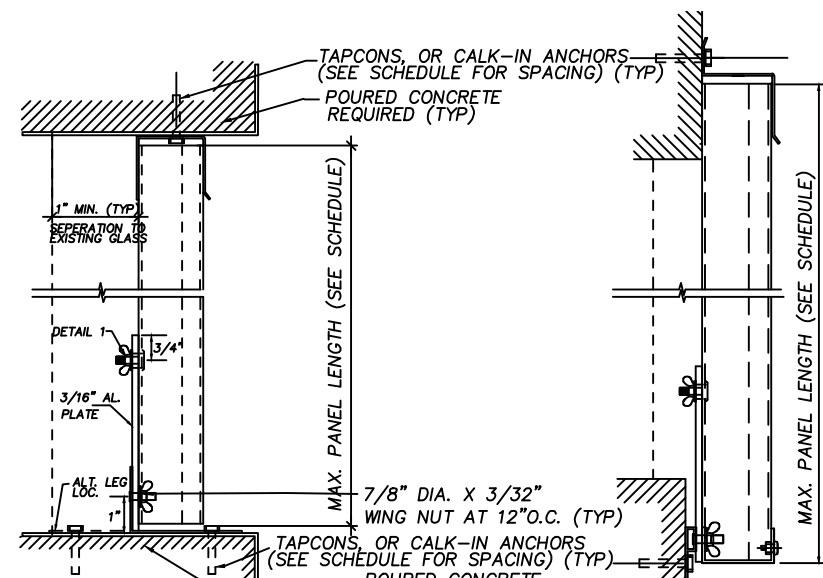


**OPTION #3 - EGRESS**  
TYPICAL ELEVATION  
SCALE: N.T.S.  
CUT CORNERS OF THE PULL-IN PANEL TO CLEAR SPACE FOR WINGNUT OF ADJACENT PANELS

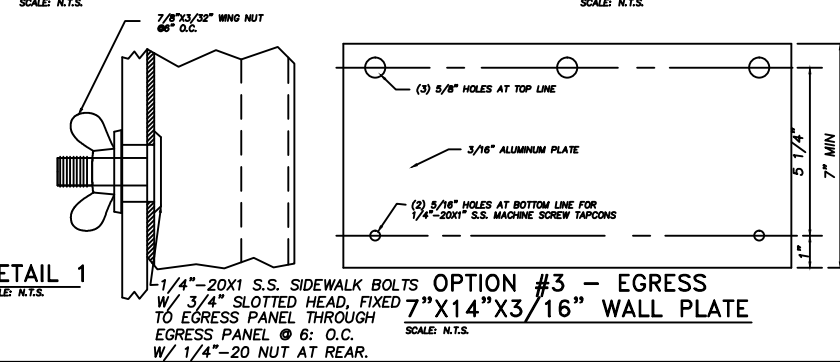
**GENERAL NOTES:**  
1. THIS STORM PANEL SYSTEM IS DESIGNED IN ACCORDANCE WITH THE 2018 IBC / 2018 IRC.  
2. SEE THIS SHEET FOR ADDITIONAL INFORMATION



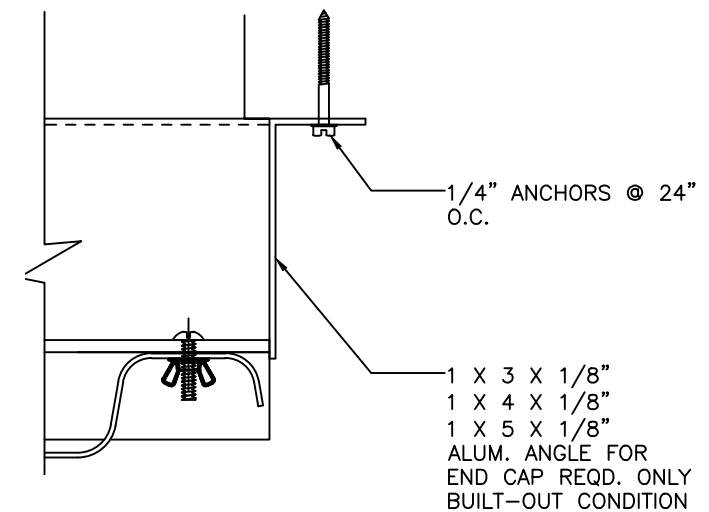
**SECTION A-A**  
SCALE: N.T.S.



**OPTION #3 - EGRESS**  
CEILING AND FLOOR MOUNTING INSTALLATION  
SCALE: N.T.S.



**OPTION #3 - EGRESS**  
WALL MOUNTING INSTALLATION  
SCALE: N.T.S.



**END CAP BUILT-OUT CONDITION DETAIL 'A'**

SCALE: 3" = 1'-0"

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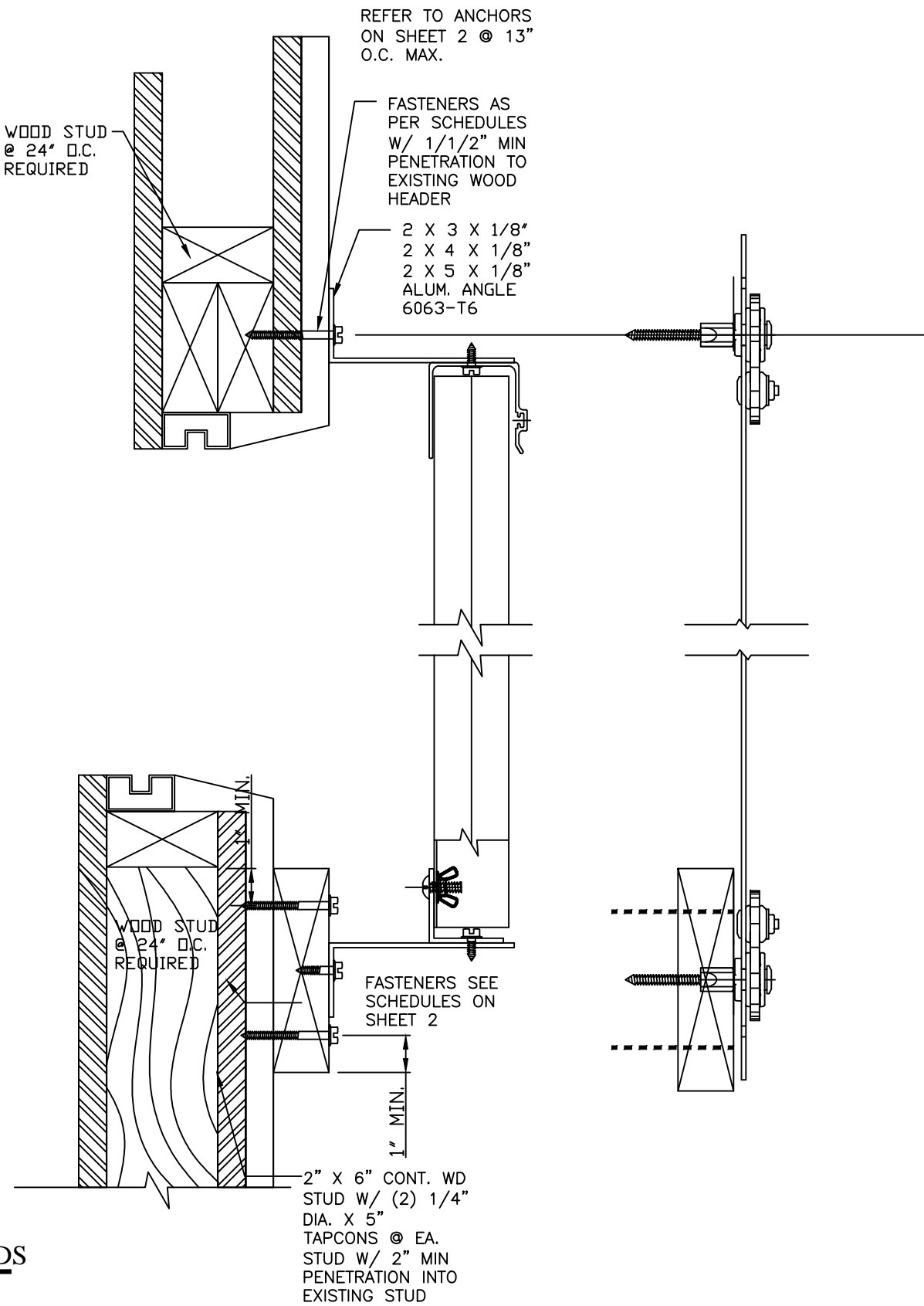
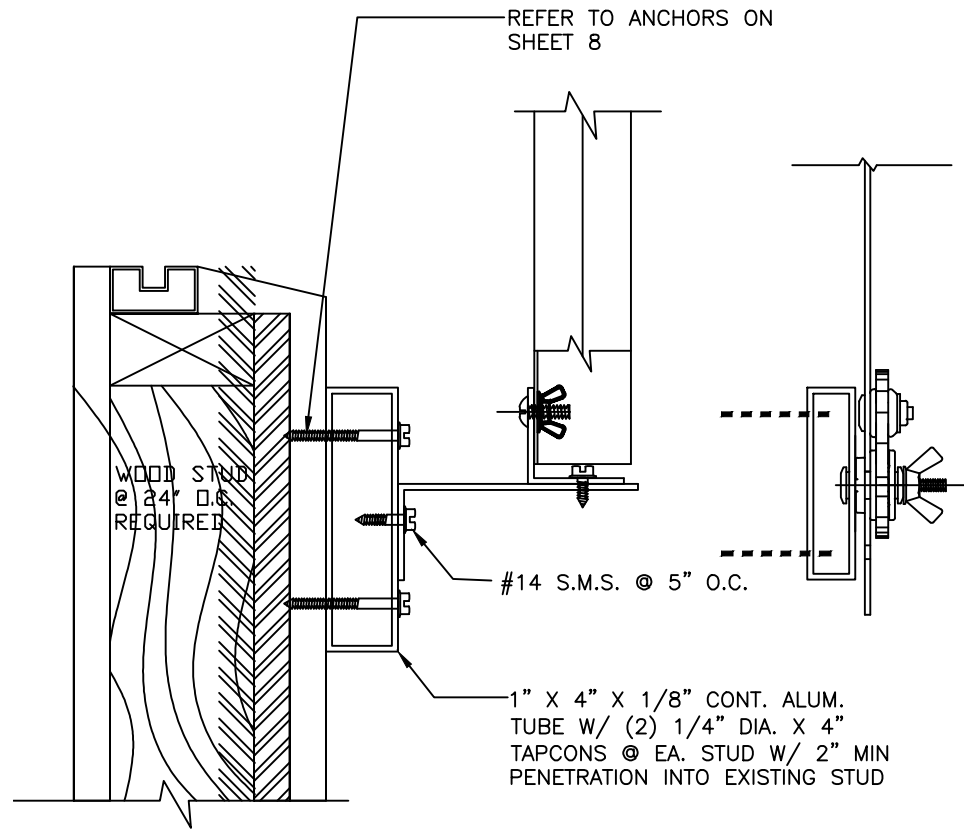
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**CLEARTEK**  
STORM PANEL SYSTEM

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Project #:	21-13
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Sheet No.:	

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**INSTALLATION DETAILS ON EXISTING WOOD STUDS**

ABOVE DETAILS SHOW CONNECTIONS OF 2X6 BUCK & 1X4 ALUM. TUBE TO WOOD STUDS TO PROVIDE A CONTINUOUS SURFACE FOR A SHUTTER INSTALLATION. FOR INSTALLATION DETAILS OF HEADER/SILL TO CONTINUOUS WOOD MEMBERS SEE SHEETS 6 THROUGH 9.

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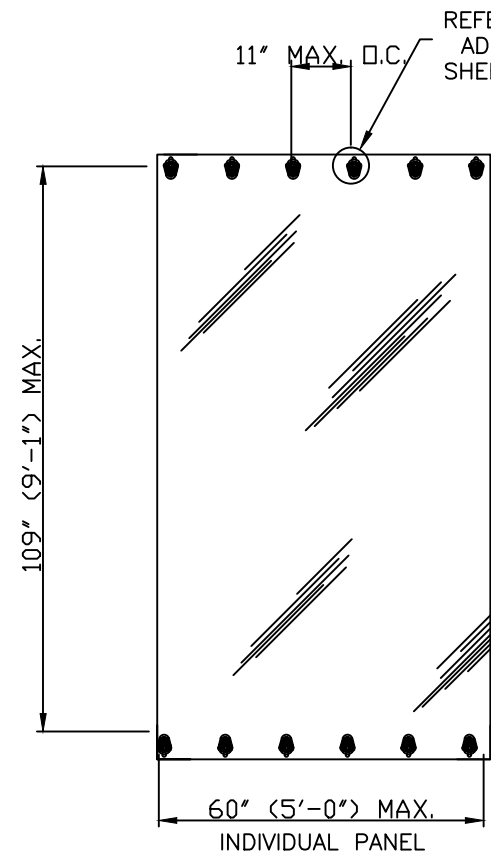
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**CLEARTEK  
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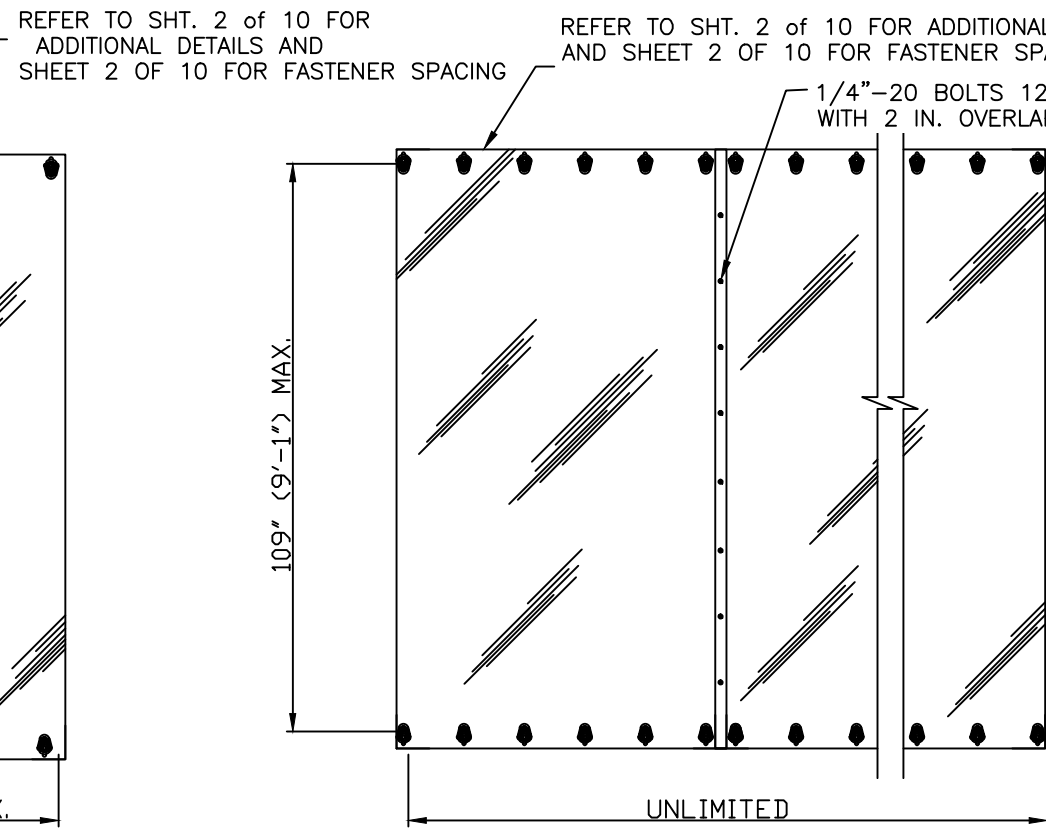
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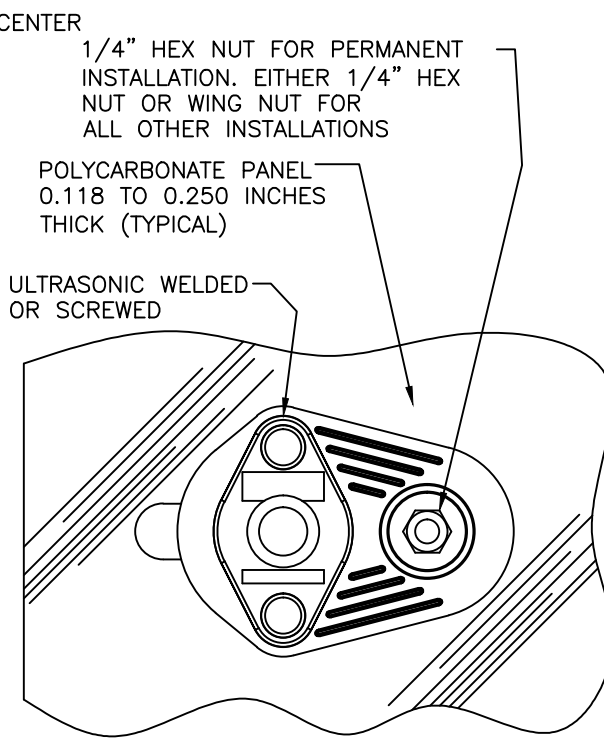
9/10



**TYPICAL TWO-SIDED INSTALLATION**  
VERTICAL OR HORIZONTAL INSTALLATION N.T.S.

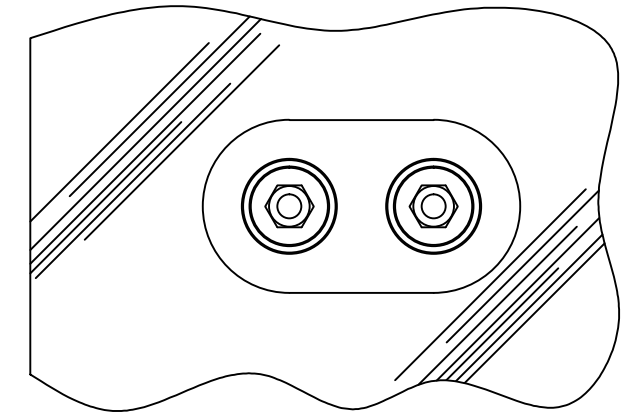


**TYPICAL OVERLAP INSTALLATION**  
VERTICAL OR HORIZONTAL INSTALLATION N.T.S.



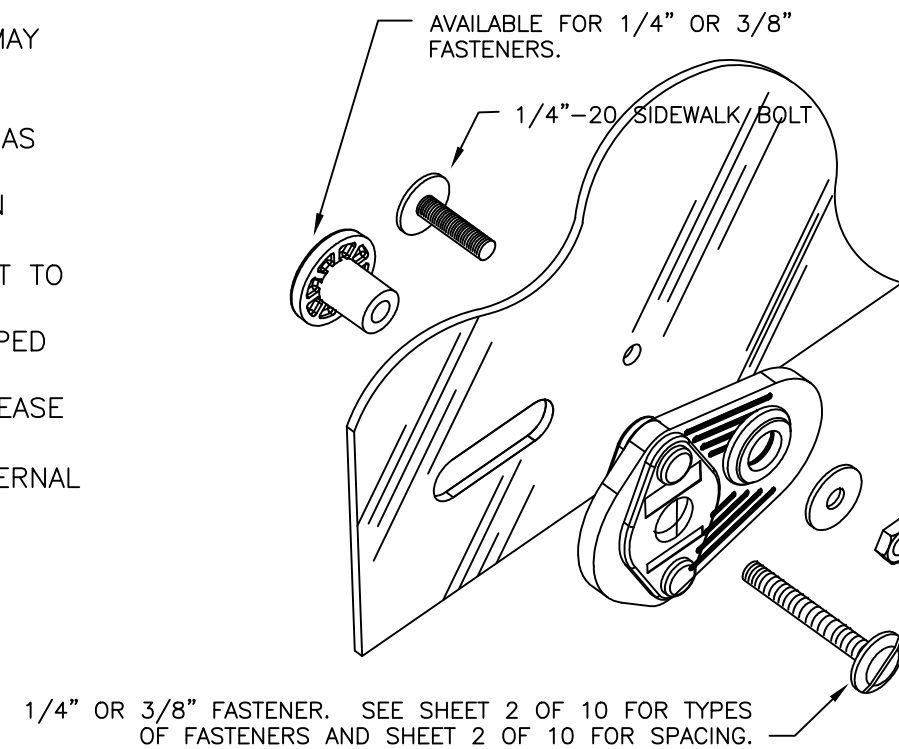
**CLEARTEK STRETCH BRACKET**  
VERTICAL OR HORIZONTAL INSTALLATION 1/2"=1"

FLAT PANELS

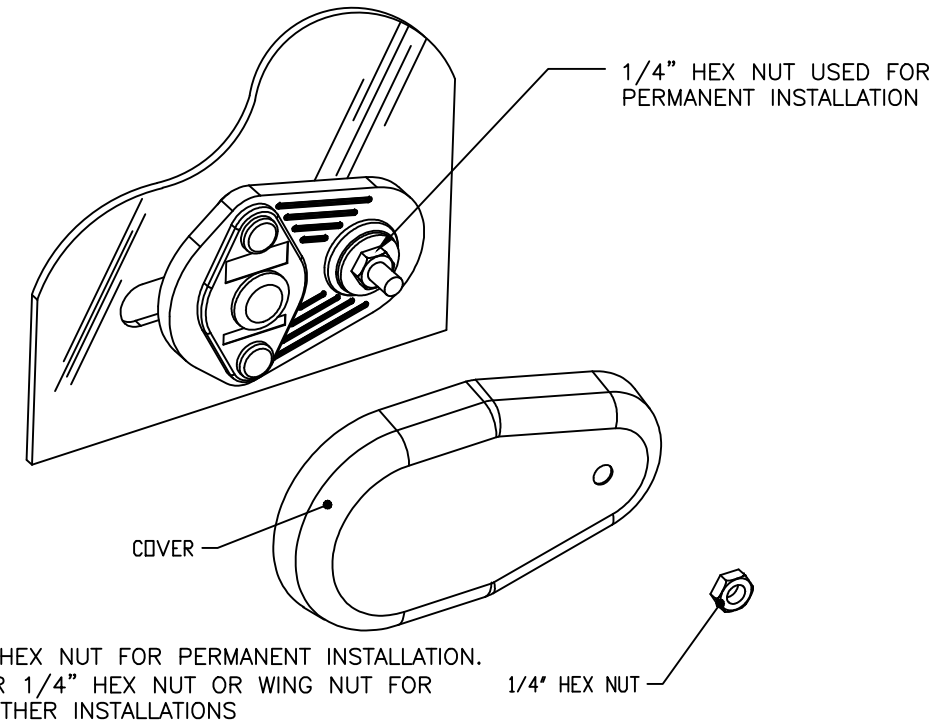


**CLEARTEK ALT. STRETCH BRACKET**  
VERTICAL OR HORIZONTAL INSTALLATION 1/2"=1"

- NOTE:
1. SIDE COURTESY STRETCH BRACKETS MAY BE USED.
  2. STITCHING OF PANELS CAN BE SUBSTITUTED BY SOLID PANELS AS LONG AS THE SPAN REQUIREMENTS ARE MET.
  3. STRETCH BRACKETS MAY BE USED ON ARCHED PANEL SECTIONS.
  4. PANELS MAY BE CURVED AND/OR CUT TO FOLLOW THE PROFILE AROUND CIRCLES, ARCHES AND ANY OTHER IRREGULAR-SHAPED OPENINGS.
  5. PANEL EDGES CAN BE BENT TO INCREASE RIGIDITY.
  6. AN OPTIONAL UV AND/OR SOLAR EXTERNAL LAYER MAY BE ADDED ONTO THE SYSTEM.



**TYPICAL ATTACHMENT DETAIL**  
VERTICAL OR HORIZONTAL INSTALLATION 1/2"=1"



**OPTIONAL COVER DETAIL**  
VERTICAL OR HORIZONTAL INSTALLATION 1/2"=1"

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