

GENERAL NOTES:

1. GPP FABRIC SHUTTER – SERIES 2000 SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE **2023 (8th EDITION)** OF THE FLORIDA BUILDING CODE. THIS PRODUCT SHALL NOT BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES (MIAMI-DADE / BROWARD COUNTIES).
- DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION **1609** OF THE ABOVE MENTIONED CODE, FOR A WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE THESE SHUTTERS WILL BE INSTALLED AND FOR A DIRECTIONALITY FACTOR $K_d=0.85$. USING **ASCE 7-22** AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON NOTES 1 & 4.
- IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER **ASCE 7-22** SHALL BE FIRST REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY 0.6 IN ORDER TO COMPARE THESE W/ MAX. (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON NOTES 1 & 4.

IN ORDER TO VERIFY THAT COMPONENTS AND ANCHORS ON THIS P.E.D. AS TESTED WERE NOT OVER STRESSED, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS **NOT** USED IN THEIR ANALYSIS.

MAXIMUM A.S.D. DESIGN PRESSURE RATING, MAXIMUM PANEL SPAN & MINIMUM SEPARATION TO GLASS SHALL BE AS INDICATED ON SCHEDULES #1 & #2 ON SHEET 13.

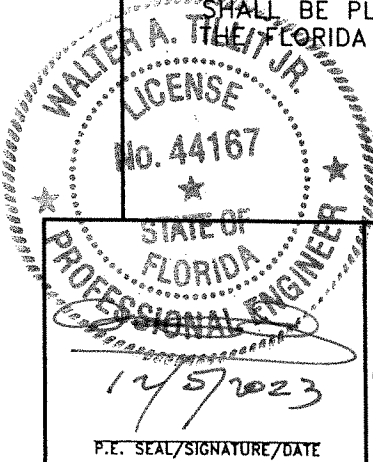
PRODUCT'S ADEQUACY FOR IMPACT AND WIND RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1609.1.2 OF THE ABOVE MENTIONED CODE AS PER AMERICAN TESTING LAB OF SOUTH FLORIDA. REPORTS #0904.01-09 & 0805.01-20 AS PER ASTM E 1886, E 1996 AND TAS 201, 202 & 203 PROTOCOLS RESPECTIVELY AND E 330 STANDARDS, QUALIFYING INSTALLATIONS FOR WIND ZONES 1, 2, 3 & 4, MISSILE TYPE D, APPLICABLE TO BASIC PROTECTION FOR INSTALLATIONS AT NON ESSENTIAL FACILITIES AS DEFINED BY ASTM E 1996.

2. ALL COMPONENTS TO BE AS PER DETAILS AND BILL OF MATERIALS ON SHEETS 2 & 3.
3. FABRIC MADE FROM HIGH DENSITY POLYETHYLENE TAPES, COATED ON (2) SIDES WITH LOW DENSITY POLYETHYLENE AND LAMINATED TOGETHER WITH (3) LOW DENSITY POLYETHYLENE, MODEL X719N1N1, MANUFACTURED BY FABRENE INC., 240 DUPONT RD. P.O. BOX 4040 NORTH BAY, ON, CANADA P1B 8Z4. SHALL HAVE THE FOLLOWING PROPERTIES:

PROPERTIES	RESULT	TEST METHOD
(1) UNIT WEIGHT:	30.4 oz/yd?	ASTM D3776
(2) WARP CONSTRUCTION:	16 TAPES/in WARP 27.9 TAPES/in WEFT	ASTM D3775
(3) TENSILE MAXIMUM STRENGTH:	14.8 psi (VERTICAL) 11.4 psi (HORIZONTAL)	ASTM D751
(4) COATING:	0.9 mil NATURAL	ASTM D1777 MOD
(5) SELF IGNITION TEMPERATURE: FLASH IGNITION TEMPERATURE:	380°C 390°C	ASTM D1929
(6) RATE OF BURN:	25mm/min, CLASS CC2	ASTM D635
(7) AVERAGE SMOKE DENSITY RATING:	2.2	ASTM D2843

4. MAXIMUM ANCHORS SPACING & ANCHOR SPECS SHALL BE AS PER SCHEDULES #3 & #3A ON SHEETS 2, 14, 14A & 15

5. PRODUCT MAY ALSO BE INSTALLED HORIZONTALLY FOLLOWING INSTALLATION DETAILS SHOWN ON SECTIONS A, B, C, D, F & F' ON SHEETS 5 THRU 8.
6. THIS PRODUCT SHALL BE ONLY INSTALLED WHEN A HURRICANE WARNING IS ISSUED AND SHALL BE IMMEDIATELY REMOVED AFTER THOSE CONDITIONS ARE OVER. FABRIC SHALL BE STORED IN A PLACE NOT EXPOSED TO THE WEATHER AND SHALL BE PROPERLY MAINTAINED, PER MANUFACTURER'S RECOMMENDATIONS.
7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE PRODUCT IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE. THIS PRODUCT SHALL ONLY BE ATTACHED TO POURED CONCRETE, GROUT FILLED BLOCK, HOLLOW BLOCK, WOOD AND STEEL FRAME BUILDINGS WITH LIMITATIONS INDICATED ON THIS DRAWING.
8. THE INSTALLATION CONTRACTOR IS TO SEAL/CAULK ALL PRODUCT COMPONENT EDGES WHICH REMAIN IN CONTINUOUS CONTACT WITH THE BUILDING TO PREVENT WIND/RAIN INTRUSION. INSTALLATION AND DRIVING OF FASTENERS AND SLEEVES (AS APPLICABLE) INTO EXISTING STRUCTURE'S FINISH SHALL BE CAREFULLY PERFORMED IN SUCH A WAY THAT FINISH AROUND FASTENERS IS NOT DAMAGED. SIDEWALK BOLTS (SCREWS OR RODS) SHALL BE LEFT AT ALL CORRESPONDING ANCHOR'S LOCATION.
9. PRODUCT'S INSTALLATION SHALL COMPLY WITH SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.
10. (a) THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) PREPARED BY THIS ENGINEER GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.
- (b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT BASED ON THIS P.E.D. PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.
- (c) THIS P.E.D. WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.
- (d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
- (e) THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.
11. PRODUCT MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT PRODUCT IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABELING TO COMPLY WITH SECTION 1709.9.2 OF THE FLORIDA BUILDING CODE.



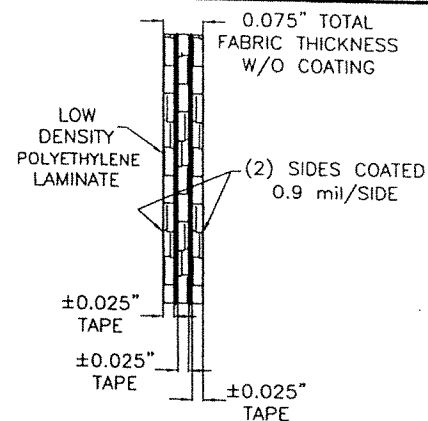
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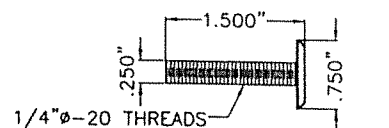
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305 - VIRGINIA GARDENS, FL 33166
Phone : (305) 871-1530 . Fax : (305) 871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILJUT Jr., P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

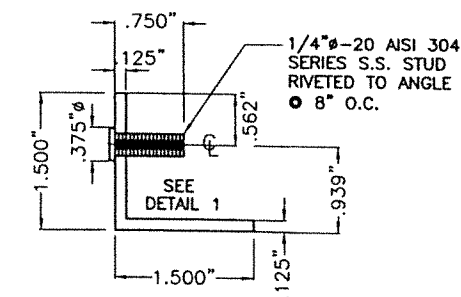
GPP FABRIC SHUTTER – SERIES 2000				W.H. DRAWN BY	
GLOBAL PROTECTION PRODUCTS, LLC.				08/25/2023	
4800 S.W. 51 STREET DAVIE, FL. 33314 PHONE: (954)689-7545, FAX: (954)689-8797				23-195	
REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 20-177	08/25/23	3		
2	NEW HILLMAN ANCHORS	11/08/23	4		
				SHEET 1 OF 15	



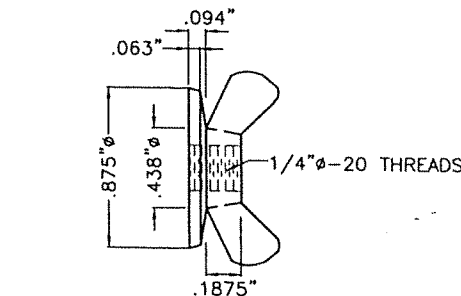
(A) COATED POLYETHYLENE FABRIC:
(SEE SHEET 2 FOR END DETAILS WITH HEMMED EDGES)
N.T.S.



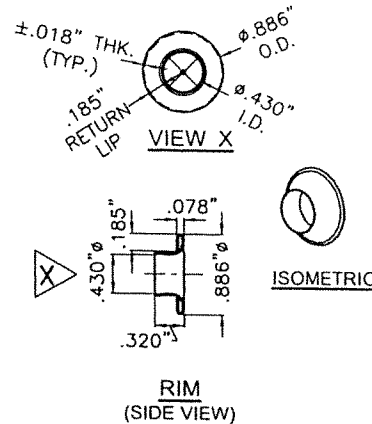
(C) 1/4"Ø-20x1 1/2" SIDE WALK BOLT
(AISI 304 SERIES STAINLESS STEEL)
SCALE: 1/2" = 1"



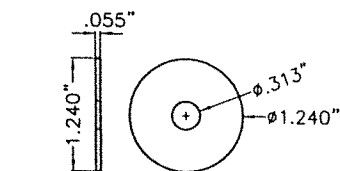
(F) ANGLE WITH STUD
(6063-T6 ALLOY)
SCALE: 1/2" = 1"



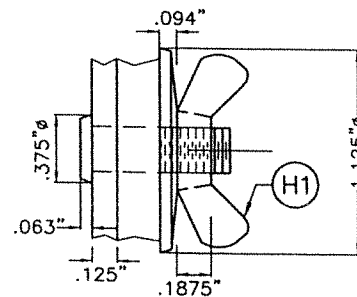
(H) 7/8"Ø WASHERED WINGNUT
W/ 1/4"Ø-20 THREADS
(ZAMAC NICKEL PLATED)
SCALE: 1/2" = 1"



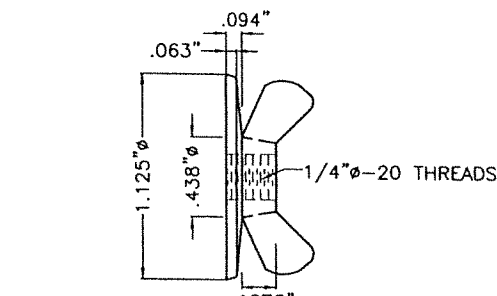
(B) ROLLED GROMMET
SCALE: 1/2" = 1"



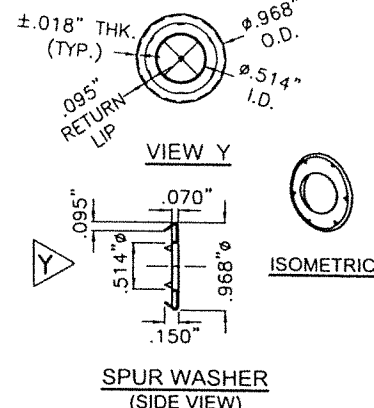
(D) FENDER WASHER
(AISI 304 SERIES STAINLESS STEEL)
SCALE: 1/2" = 1"



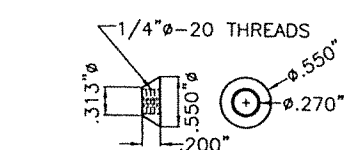
DETAIL 1:
STUD W/ WINGNUT (H1)
N.T.S.



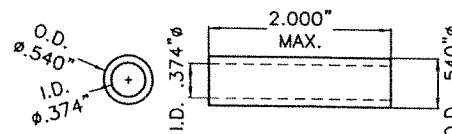
(H1) 1 1/8"Ø WASHERED WINGNUT
W/ 1/4"Ø-20 THREADS
(ZAMAC NICKEL PLATED)
SCALE: 1/2" = 1"



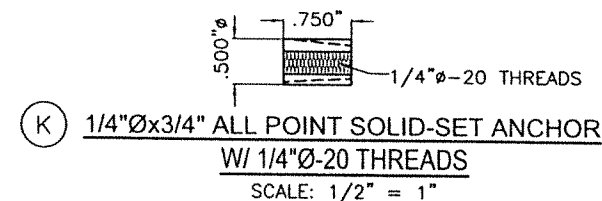
(J) 1/4"Ø ELCO CONSTRUCTION PRODUCTS PANELMATE® PRO
W/ 1/4"Ø-20 THREADS
SCALE: 1/2" = 1"



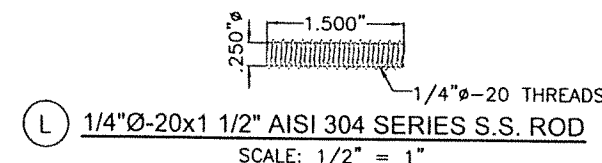
(E) SAFETY NUT
(AISI 304 SERIES STAINLESS STEEL)
SCALE: 1/2" = 1"



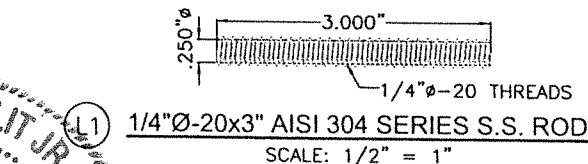
(G) ALUMINUM SLEEVE
(6063-T6 ALLOY)
SCALE: 1/2" = 1"



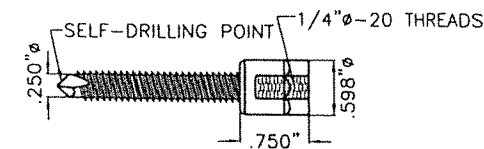
(K) 1/4"Øx3/4" ALL POINT SOLID-SET ANCHOR
W/ 1/4"Ø-20 THREADS
SCALE: 1/2" = 1"



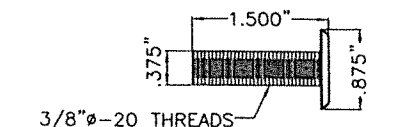
(L) 1/4"Ø-20x1 1/2" AISI 304 SERIES S.S. ROD
SCALE: 1/2" = 1"



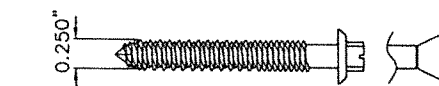
(L1) 1/4"Ø-20x3" AISI 304 SERIES S.S. ROD
SCALE: 1/2" = 1"



(M1) 1/4"Ø-10 ELCO CONSTRUCTION PRODUCTS HANGERMATE®
W/ 1/4"Ø-20 THREADS (EZG910 ANCHOR)
CARBON STEEL (AISI C10B21) CASE HARDENED AND TEMPERED
SCALE: 1/2" = 1"



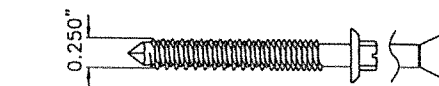
(Q) 3/8"Ø-20x1 1/2" SIDE WALK BOLT
(AISI 304 SERIES STAINLESS STEEL)
SCALE: 1/2" = 1"



(R) 1/4"Ø THE HILLMAN SOLID SET CARBON STEEL
SCALE: 1/2" = 1"



(S) #14 THE HILLMAN FEMALE SOLID SET CARBON STEEL
SCALE: 1/2" = 1"



(T) 1/4"Ø THE HILLMAN SOLID SET 410 SS.
SCALE: 1/2" = 1"

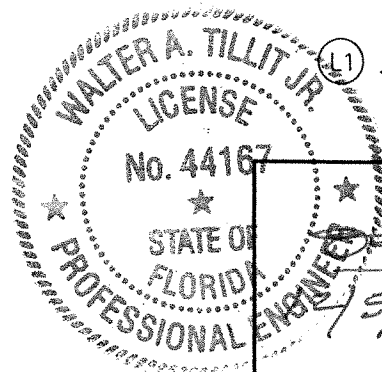


(U) #14 THE HILLMAN MALE SOLID SET CARBON STEEL
SCALE: 1/2" = 1"



(V) #14 THE HILLMAN MALE SOLID SET CARBON STEEL OR 304 SS
SCALE: 1/2" = 1"

COMPONENTS



P.E. SEAL/SIGNATURE/DATE

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WALTER A. TILLIT Jr., P.E.
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FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

GPP FABRIC SHUTTER - SERIES 2000

GLOBAL PROTECTION PRODUCTS, LLC.

4800 S.W. 51 STREET
DAVIE, FL. 33314
PHONE: (954) 689-7545, FAX: (954) 689-8797

REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 20-177	08/25/23	3		
2	NEW HILLMAN ANCHORS	11/06/23	4		

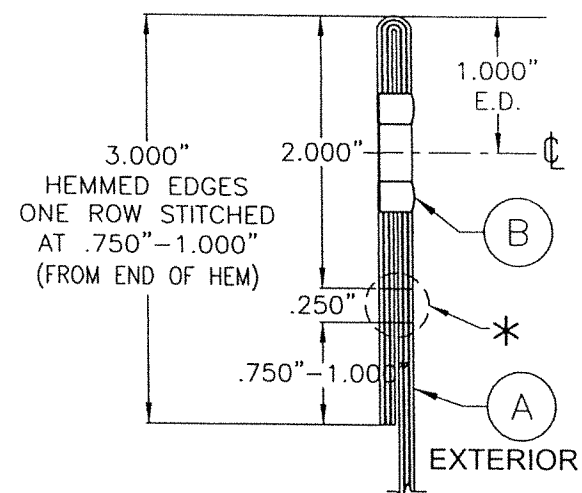
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08/25/2023

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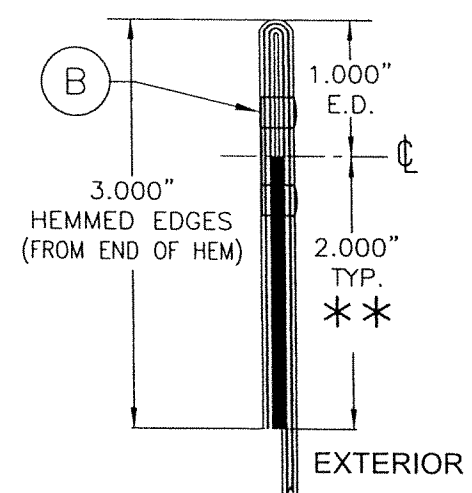
SHEET 2 OF 15

BILL OF MATERIALS	
ITEM No.	DESCRIPTION
(A)	3-PLY FABRIC: MADE FROM HIGH DENSITY POLYETHYLENE TAPES, COATED ON (2) SIDES WITH LOW DENSITY POLYETHYLENE AND LAMINATED TOGETHER WITH (3) LOW DENSITY POLYETHYLENE, PER FABRENE INC. MODEL X719N1N1 W/ 3.00"-3.25" HEMMED EDGES AT TOP & BOTTOM ENDS, PER DETAILS X & X' ON THIS SHEET. (A) IS ALWAYS ONE ENTIRE PIECE, EXCEPT WHERE OVERLAPS ARE ALLOWED.
(B)	ROLLED RIM GROMMET (RRG#2/45-00992) WITH SPUR WASHER (RRG#2/45-00882) HEAVY-DUTY BRASS W/ 1" E.D. IN RESPECT TO FABRIC
(C)	1/4"Ø-20x1 1/2" SIDE WALK BOLT (AISI 304 SERIES STAINLESS STEEL)
(D)	FENDER WASHER (AISI 304 SERIES STAINLESS STEEL)
(E)	SAFETY NUT W/ 1/4"Ø-20 THREADS (AISI 304 SERIES STAINLESS STEEL)
(F)	1 1/2"x1 1/2"x1/8" EXTRUDED 6063-T6 ALUMINUM ALLOY ANGLE W/ STUDS @ 8" o.c.
(G)	ALUMINUM SLEEVE (6063-T5 ALUMINUM ALLOY)
(H)	7/8"Øx3 3/132" WASHERED WINGNUT W/ 1/4"Ø-20 THREADS (ZAMAC NICKEL PLATED)
(H1)	1 1/8"Øx3 3/132" WASHERED WINGNUT W/ 1/4"Ø-20 THREADS (ZAMAC NICKEL PLATED)
(I)	1/4"Ø ELCO CONSTRUCTION PRODUCTS ULTRACON ANCHOR
(I1)	5/16"Ø ELCO CONSTRUCTION PRODUCTS ULTRACON ANCHOR
(I2)	5/16"Ø ELCO CONSTRUCTION PRODUCTS ULTRACON ANCHOR W/ 1" THREADED PENETRATION
(I3)	5/16"Ø ELCO CONSTRUCTION PRODUCTS ULTRACON ANCHOR W/ 2" THREADED PENETRATION
(J)	1/4"Ø ELCO CONSTRUCTION PRODUCTS PANELMATE® PRO W/ 1/4"Ø-20 THREADS
(J1)	1/4"Ø ELCO CONSTRUCTION PRODUCTS PANELMATE® FEMALE ID W/ 1/4"Ø-20 THREADS
(K)	1/4"Øx3/4" ALL POINT SOLID-SET ANCHOR W/ 1/4"Ø-20 THREADS
(K1)	1/2"Ø ELCO CONSTRUCTION PRODUCTS PANELMATE® L INSERT W/ 1/4"Ø-20 THREADS
(L)	1/4"Ø-20 x1 1/2" AISI 304 SERIES S.S. ROD W/ 1/4"Ø-20 THREADS
(L1)	1/4"Ø-20 x3" AISI 304 SERIES S.S. ROD W/ 1/4"Ø-20 THREADS
(M)	5/16"Ø ELCO CONSTRUCTION PRODUCTS HANGERIMATE® W/ 1/4"Ø-20 THREADS (EZG365 ANCHOR, GIMLET POINT) CARBON STEEL (AISI C10B21) CASE HARDENED AND TEMPERED
(M1)	1/4"Ø-10 ELCO CONSTRUCTION PRODUCTS HANGERIMATE® W/ 1/4"Ø-20 THREADS (EZG910 ANCHOR, SELF-DRILLING POINT) CARBON STEEL (AISI C10B21) CASE HARDENED AND TEMPERED
(N)	1/4"Ø ELCO CONSTRUCTION PRODUCTS FAB-LOK HD W/ 1/4"Ø-20 THREADS
(O)	3/8"Ø ELCO CONSTRUCTION PRODUCTS MODIFIED CONFLX W/ 1/4"Ø-20 THREADS
(P)	1/2"Øx1 9/16" POWER ANCHOR W/ 3/8"Ø-20 THREADS
(Q)	3/8"Ø-20x1 1/2" SIDE WALK BOLT (AISI 304 SERIES STAINLESS STEEL)
(R)	1/4"Ø THE HILLMAN SOLID SET CARBON STEEL
(S)	#14 THE HILLMAN FEMALE SOLID SET CARBON STEEL
(T)	1/4"Ø THE HILLMAN SOLID SET 410 SS.
(U)	#14 THE HILLMAN MALE SOLID SET CARBON STEEL
(V)	#14 THE HILLMAN MALE SOLID SET CARBON STEEL OR 304 SS



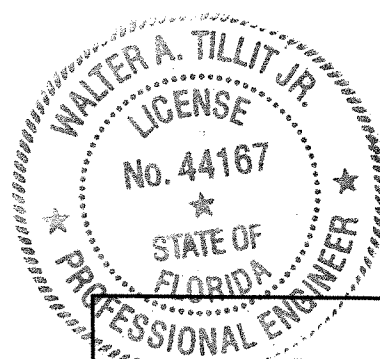
TYPICAL HEMMED EDGE
FABRIC (STITCHED) DETAIL X

* TWO ROWS STITCHING SHALL CONSIST OF SIX LOCK STITCHES PER INCH WITH 12/4 POLYESTER THREADS, TWISTED TOGETHER WITH 7% LUBRICATION & SILICONE PER ASTM D-6193. THIS DETAIL IS APPLICABLE TO BOTH SINGLE AND OVERLAPPED PANELS. AT ALL DESIGN WIND LOADS AND ALL PANEL SPANS PER SHEET 13.



TYPICAL HEMMED EDGE
FABRIC (WELDED) DETAIL X'

** AIR WELDED FULL WIDTH @ ± 4 INCH/Sec. BY MEANS OF MOVABLE CARRIAGE/KNIFE AT WELDING MACHINE IS PERFORMED AT 740 F°. THIS DETAIL IS ONLY APPLICABLE TO SINGLE & OVERLAPPED PANELS AND FOR DESIGN WIND LOADS UP TO 53.3 psf & 194' PANEL SPAN.



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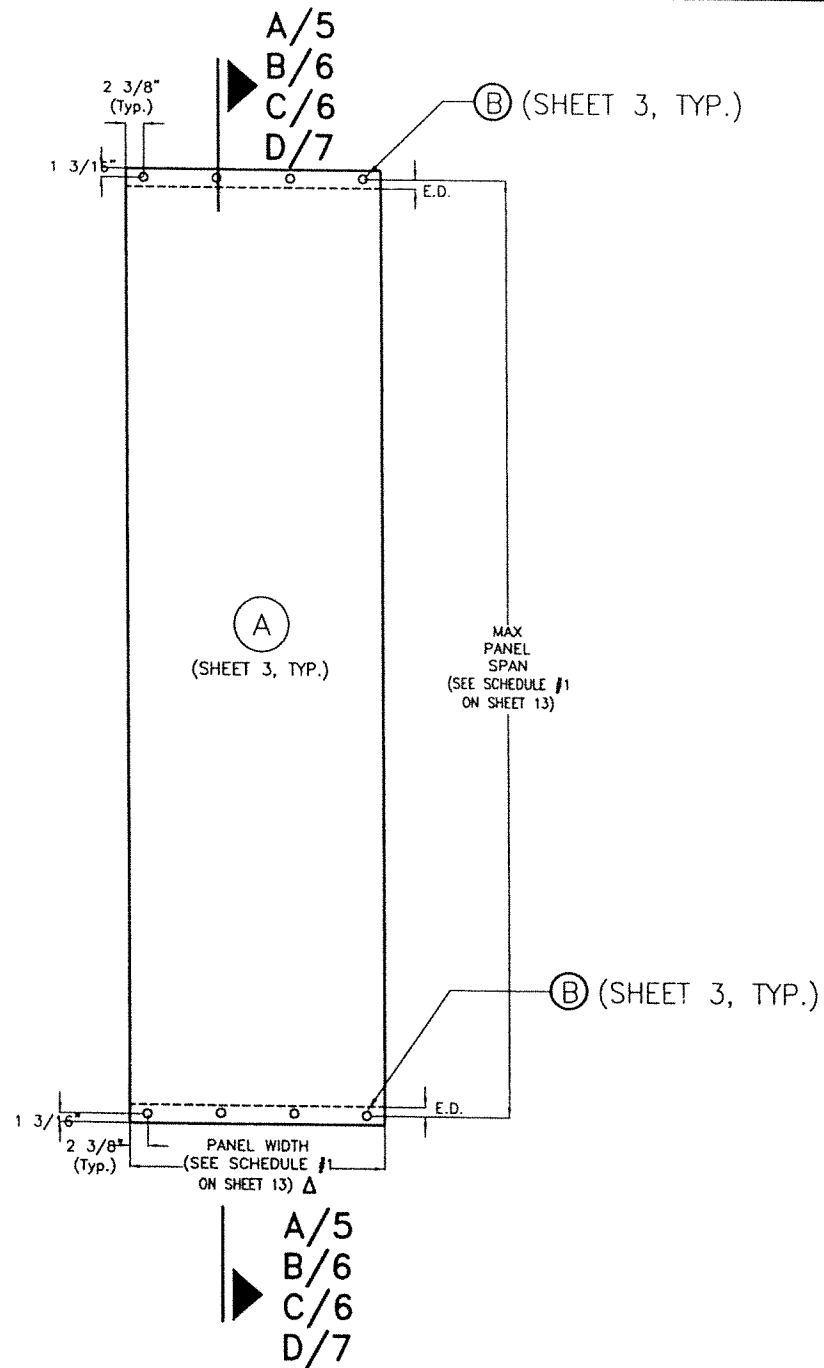
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23-195

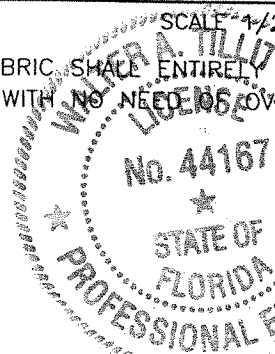
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1	OLD 20-177	08/25/23	3		
2	NEW HILLMAN ANCHORS	11/08/23	4		

SHEET 3 OF 15



TYPICAL SINGLE PANEL WALL MOUNT, FLOOR TO CEILING
MOUNT OR ANY COMBINATION.
(ANCHORS NOT SHOWN FOR CLARITY)

SCALE: 1/2" = 1'-0"
 Δ FABRIC SHALL ENTIRELY COVER THE OPENING WIDTH
 WITH NO NEED OF OVERLAPPING BEYOND IT



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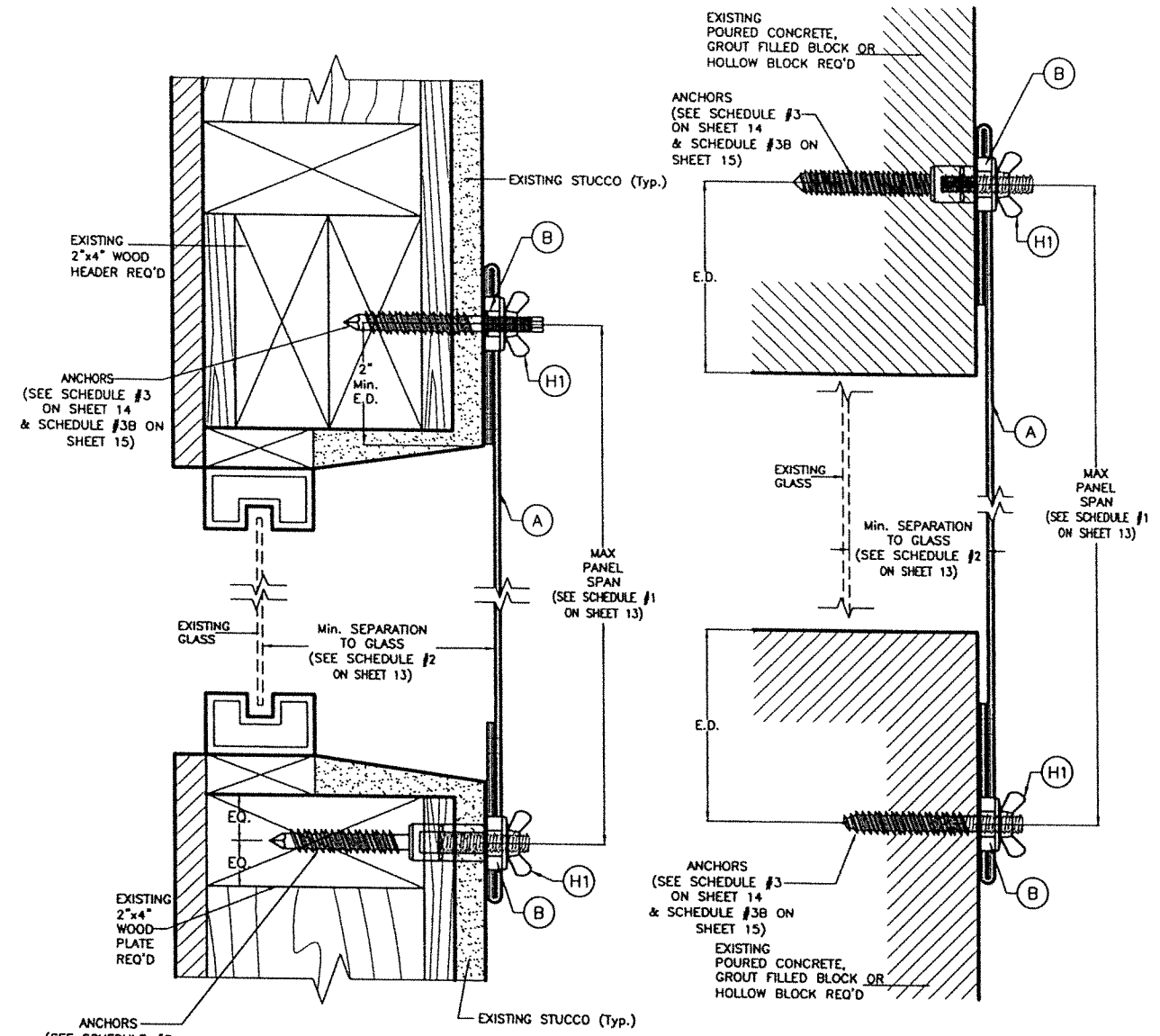
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23-195

REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 20-177	08/25/23	3		
2	NEW HILLMAN ANCHORS	11/08/23	4		

SHEET 4 OF 15

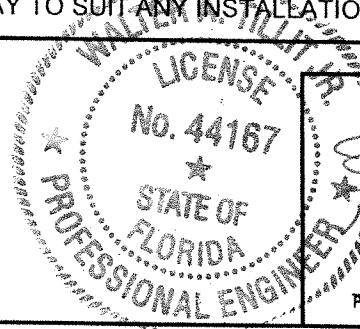


FOR DIRECT WALL MOUNT TO
WOOD SUBSTRATE
AT TOP & BOTTOM

FOR DIRECT WALL MOUNT TO
POURED CONCRETE,
GROUT FILLED BLOCK OR
HOLLOW BLOCK SUBSTRATE
AT TOP & BOTTOM

SECTIONS A - A
SCALE 3/8"=1"

NOTE FOR COMBINATION OF SECTIONS:
TOP AND BOTTOM MOUNTINGS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.



P.E. SEAL/SIGNATURE/DATE
5/5/2023

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TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305 - VIRGINIA GARDENS, FL 33166
Phone : (305) 871-1530 , Fax : (305) 871-1531
e-mail: tilteco@aol.com
CA-0006719
WALTER A. TILLIT Jr., P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

GPP FABRIC SHUTTER - SERIES 2000

GLOBAL PROTECTION PRODUCTS, LLC.

4800 S.W. 51 STREET
DAVIE, FL 33314
PHONE: (954)689-7545, FAX: (954)689-8797

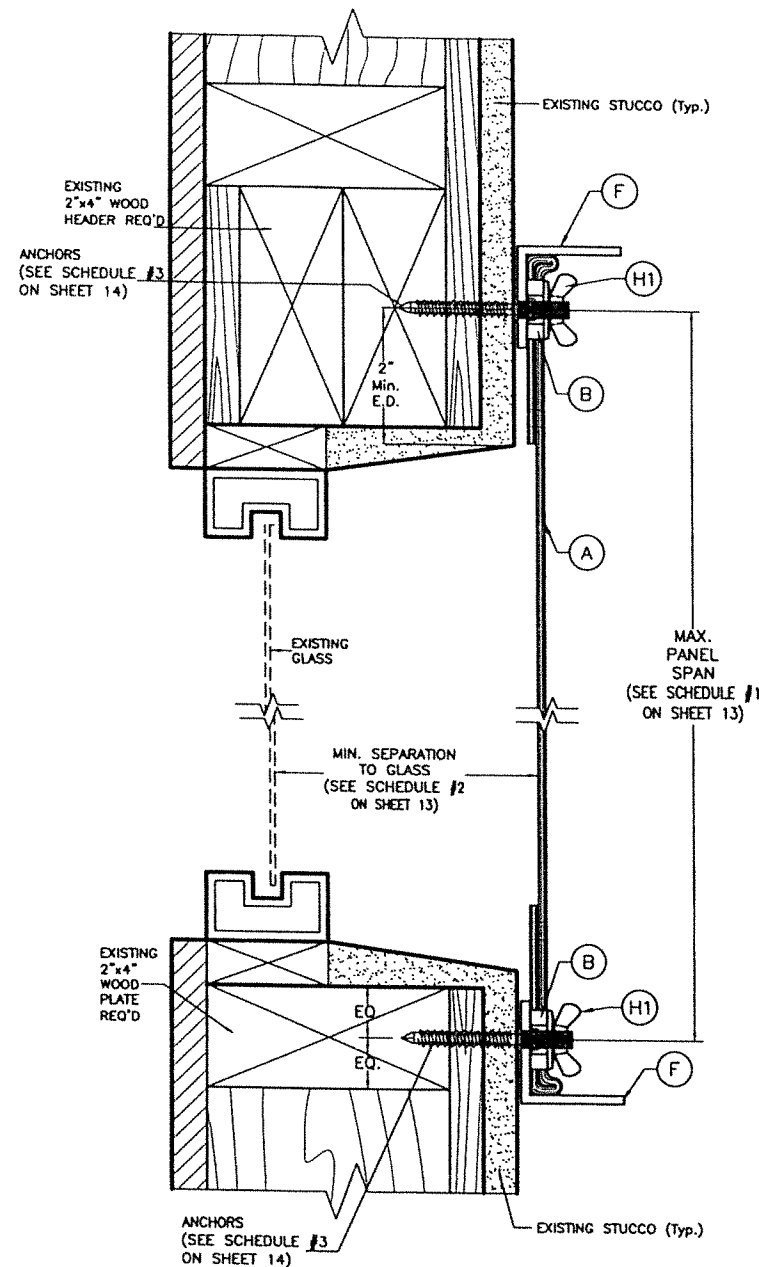
REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 30-177	08/28/23	3		
2	NEW HILLMAN ANCHORS	11/08/23	4		

W.H.
DRAWN BY

08/25/2023

23-195

SHEET 5 OF 15

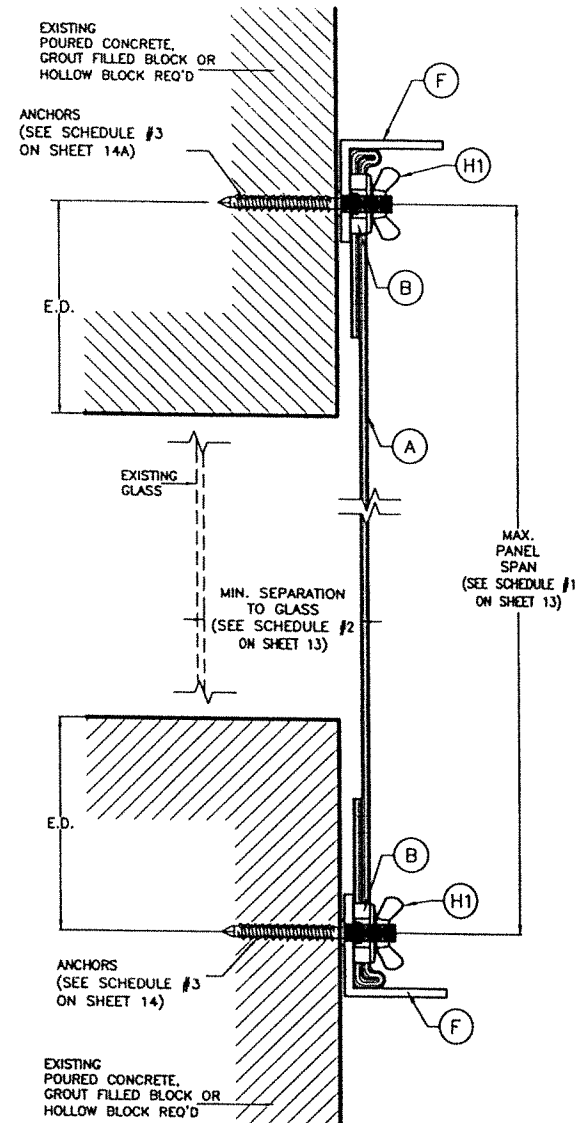


FOR STUDDED ANGLE WALL MOUNT TO
WOOD SUBSTRATE AT TOP & BOTTOM

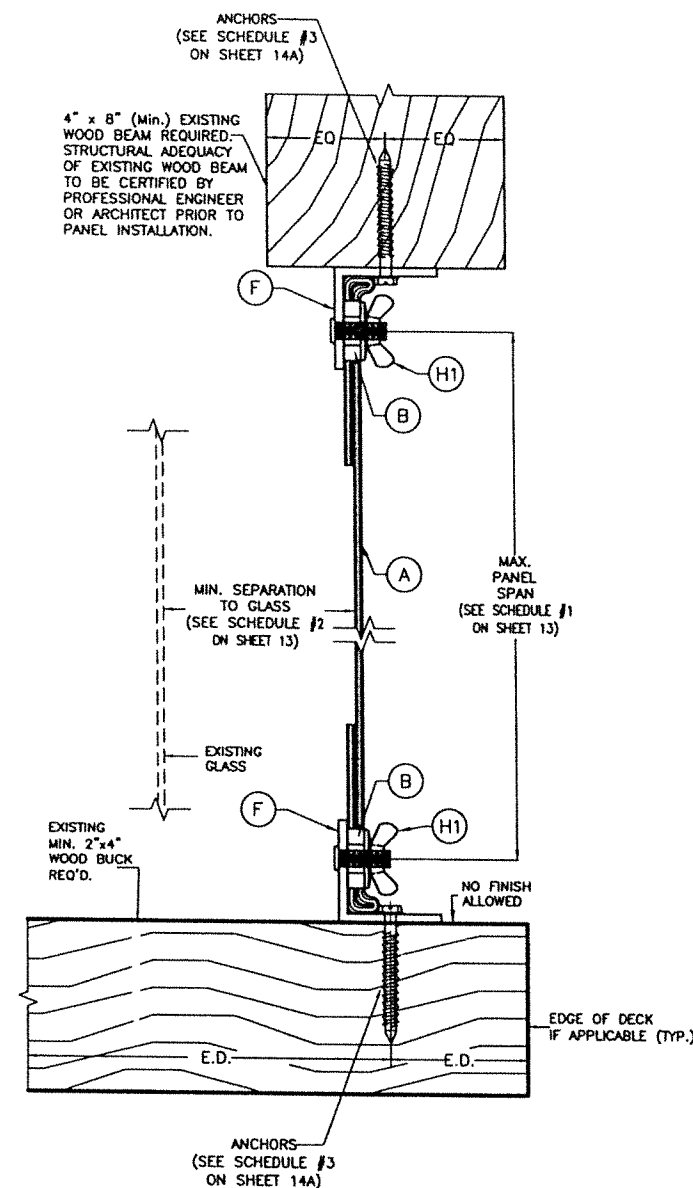
SECTIONS B - B
SCALE 3/8"=1"

NOTE FOR COMBINATION OF SECTIONS:

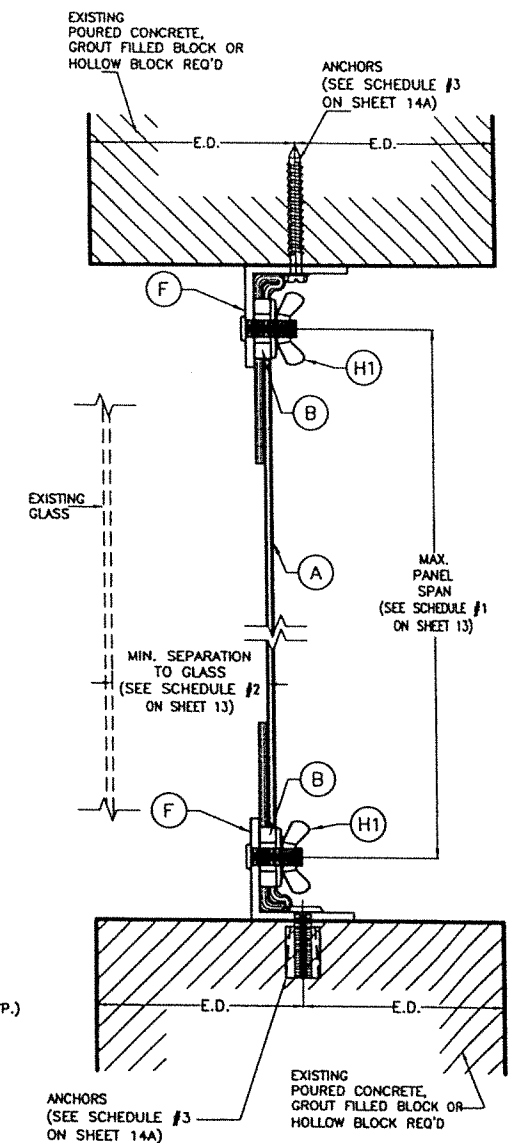
TOP AND BOTTOM MOUNTINGS CAN BE COMBINED IN
ANY WAY TO SUIT ANY INSTALLATION.



FOR STUDDED ANGLE WALL MOUNT TO
POURED CONCRETE, GROUT FILLED BLOCK OR
HOLLOW BLOCK SUBSTRATE AT TOP & BOTTOM



FOR STUDDED ANGLE FLOOR TO CEILING MOUNT
TO WOOD SUBSTRATE AT TOP & BOTTOM



FOR STUDDED ANGLE FLOOR TO CEILING MOUNT
TO POURED CONCRETE, GROUT FILLED BLOCK OR
HOLLOW BLOCK SUBSTRATE AT TOP & BOTTOM

SECTIONS C - C
SCALE 3/8"=1"



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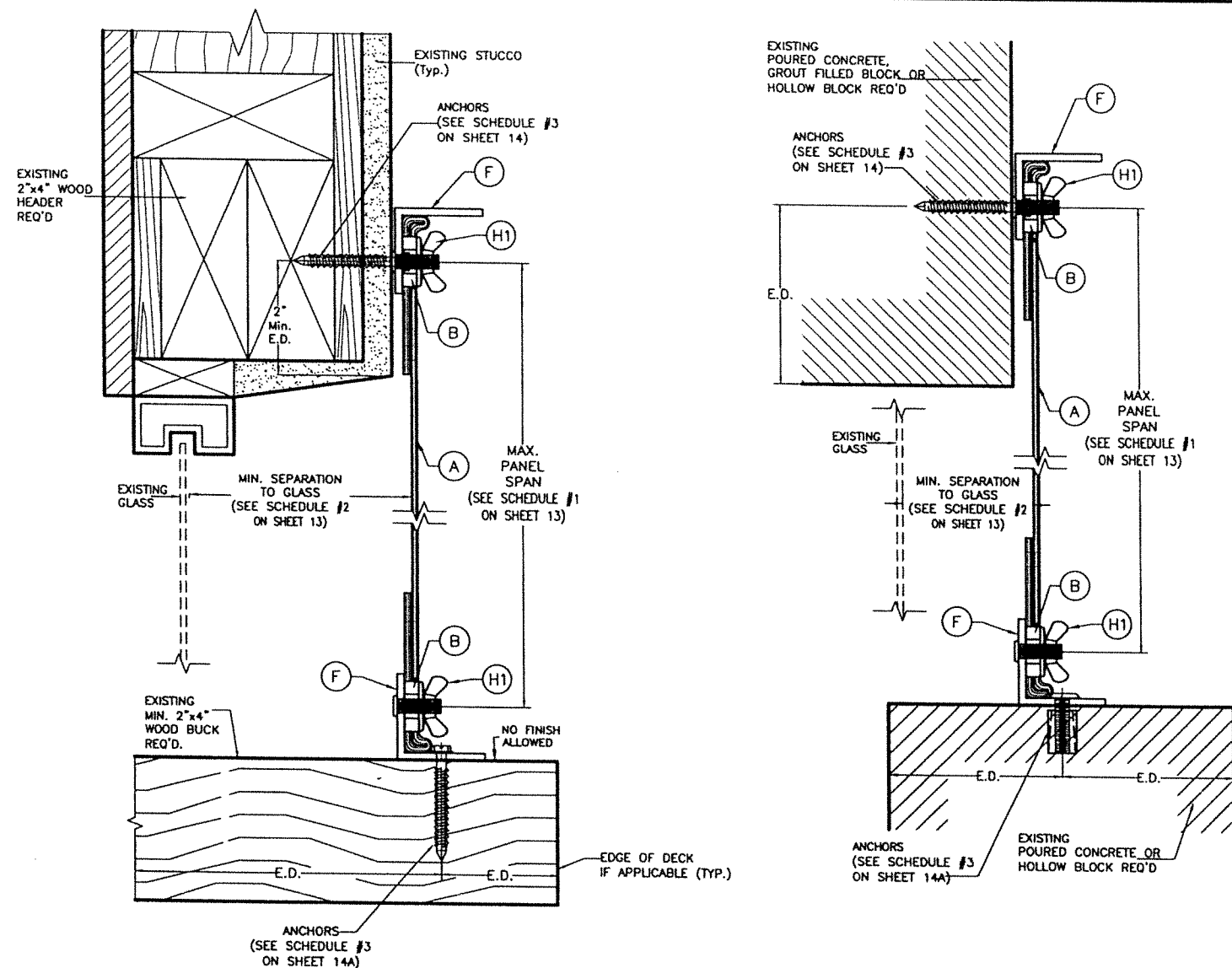
REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 20-177	04/25/23	3		
2	NEW HILLMAN ANCHORS	11/06/23	4		

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SHEET 6 OF 15



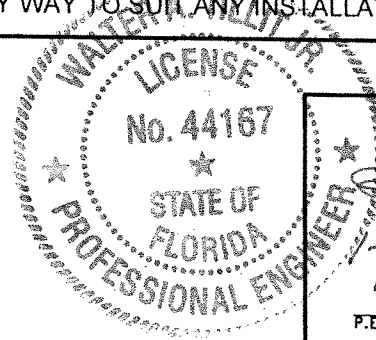
FOR STUDDED ANGLE WALL MOUNT TO
WOOD SUBSTRATE AT TOP &
STUDDED ANGLE FLOOR MOUNT TO WOOD
SUBSTRATE AT BOTTOM

FOR STUDDED ANGLE WALL MOUNT TO
POURED CONCRETE, GROUT FILLED BLOCK OR
HOLLOW BLOCK SUBSTRATE AT TOP &
STUDDED ANGLE FLOOR MOUNT TO POURED
CONCRETE, GROUT FILLED BLOCK OR HOLLOW
BLOCK SUBSTRATE AT BOTTOM

SECTIONS D - D SCALE 3/8"=1"

NOTE FOR COMBINATION OF SECTIONS:

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ANY WAY TO SUIT ANY INSTALLATION.



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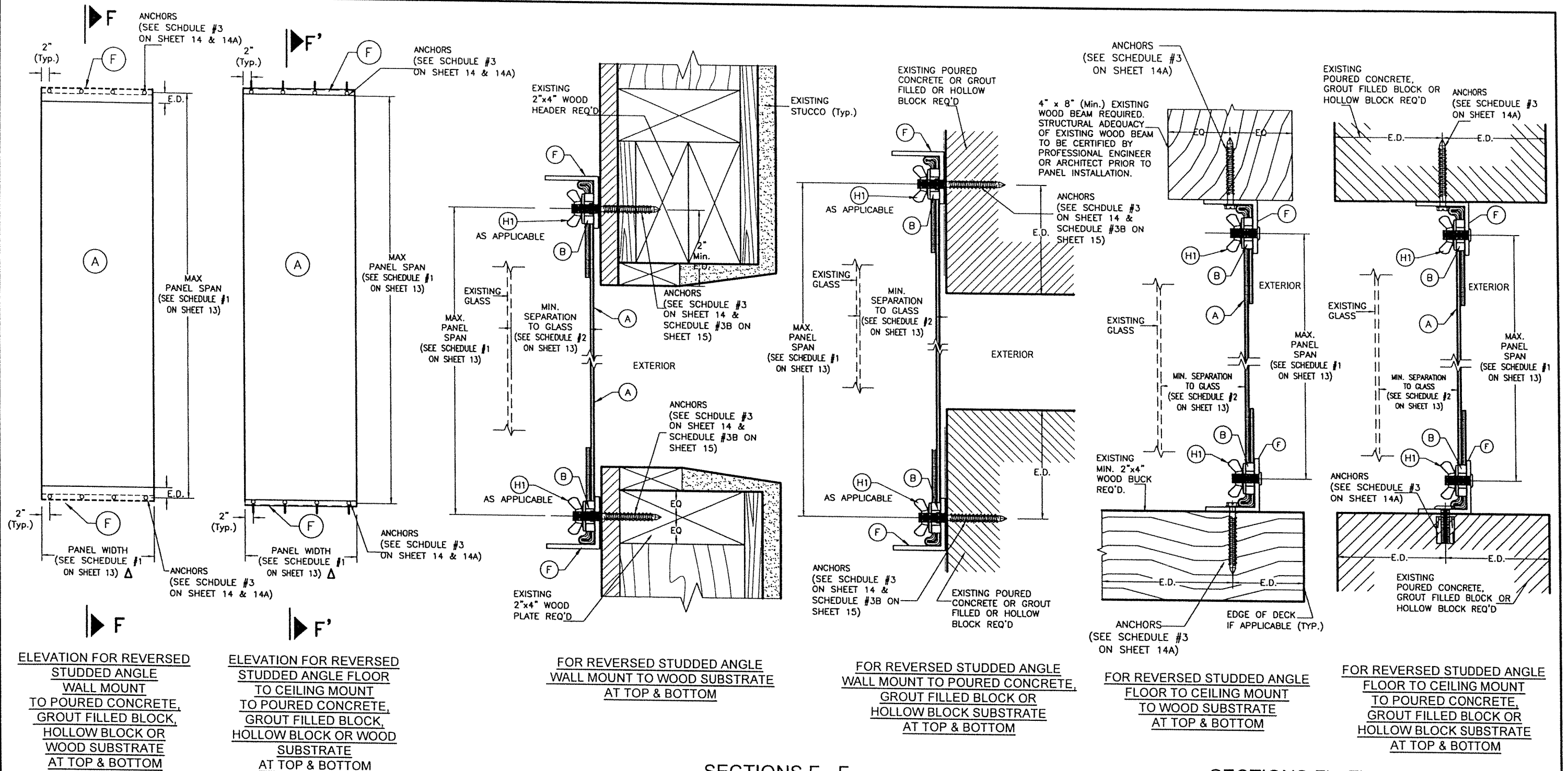
REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 20-177	08/28/23	3		
2	NEW HILLMAN ANCHORS	11/06/23	4		

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08/25/2023

23-195

SHEET 7 OF 15



SINGLE PANEL (REVERSED) ELEVATIONS

SCALE 1/2"= 1"

△ FABRIC SHALL ENTIRELY COVER THE OPENING WIDTH WITH NO NEED OF OVERLAPPING BEYOND IT

NOTE FOR COMBINATION OF SECTIONS:

TOP AND BOTTOM MOUNTINGS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

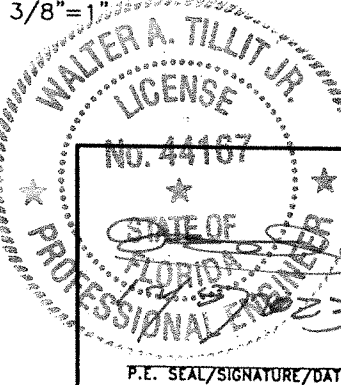
SECTIONS F - F

SCALE 3/8"=1"

SECTIONS F' - F'

SCALE 3/8"=1"

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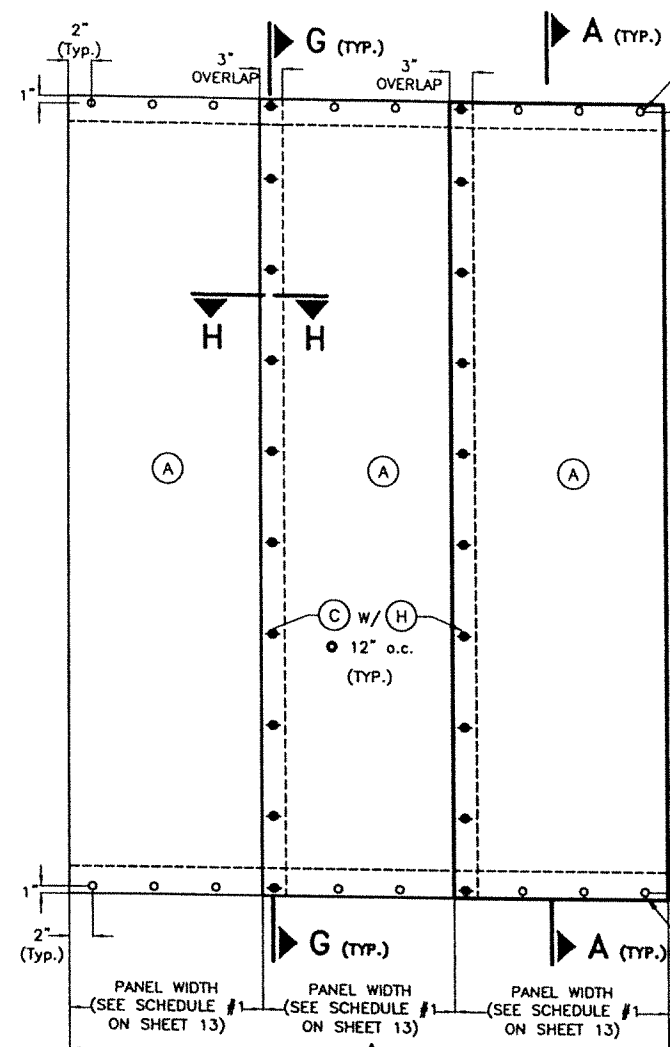
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08/25/2023

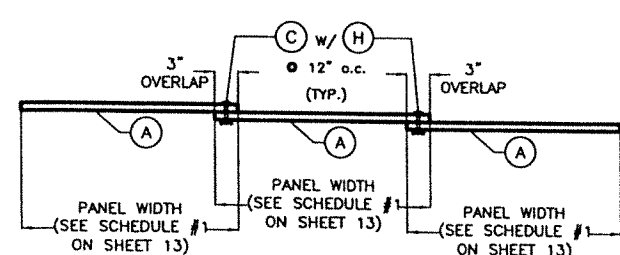
23-195

SHEET 8 OF 15

REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 20-177	08/25/23	3		
2	NEW HILLMAN ANCHORS	11/06/23	4		



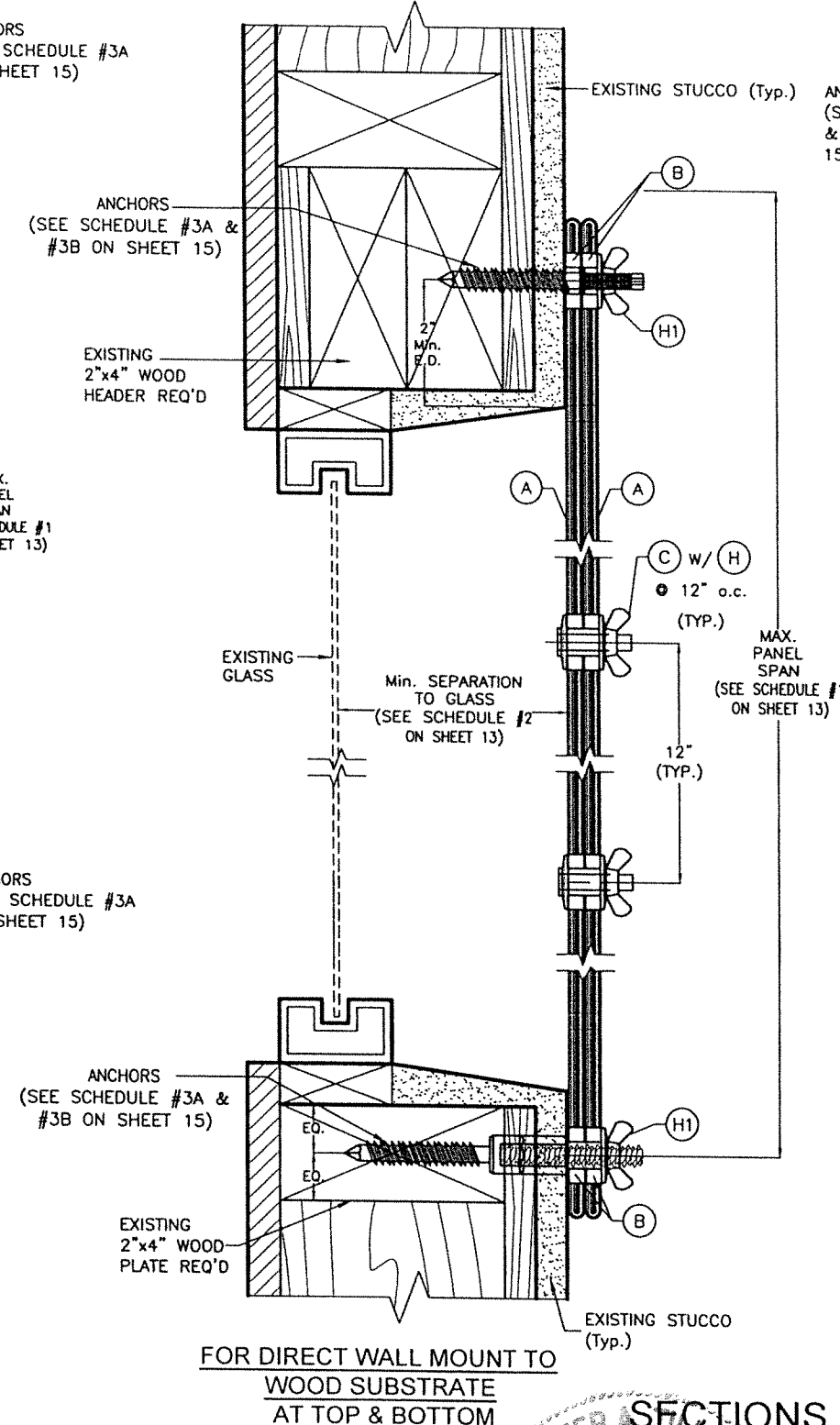
ELEVATION FOR DIRECT WALL MOUNT TO
POURED CONCRETE, GROUT FILLED BLOCK,
HOLLOW BLOCK OR WOOD SUBSTRATE
AT TOP & BOTTOM



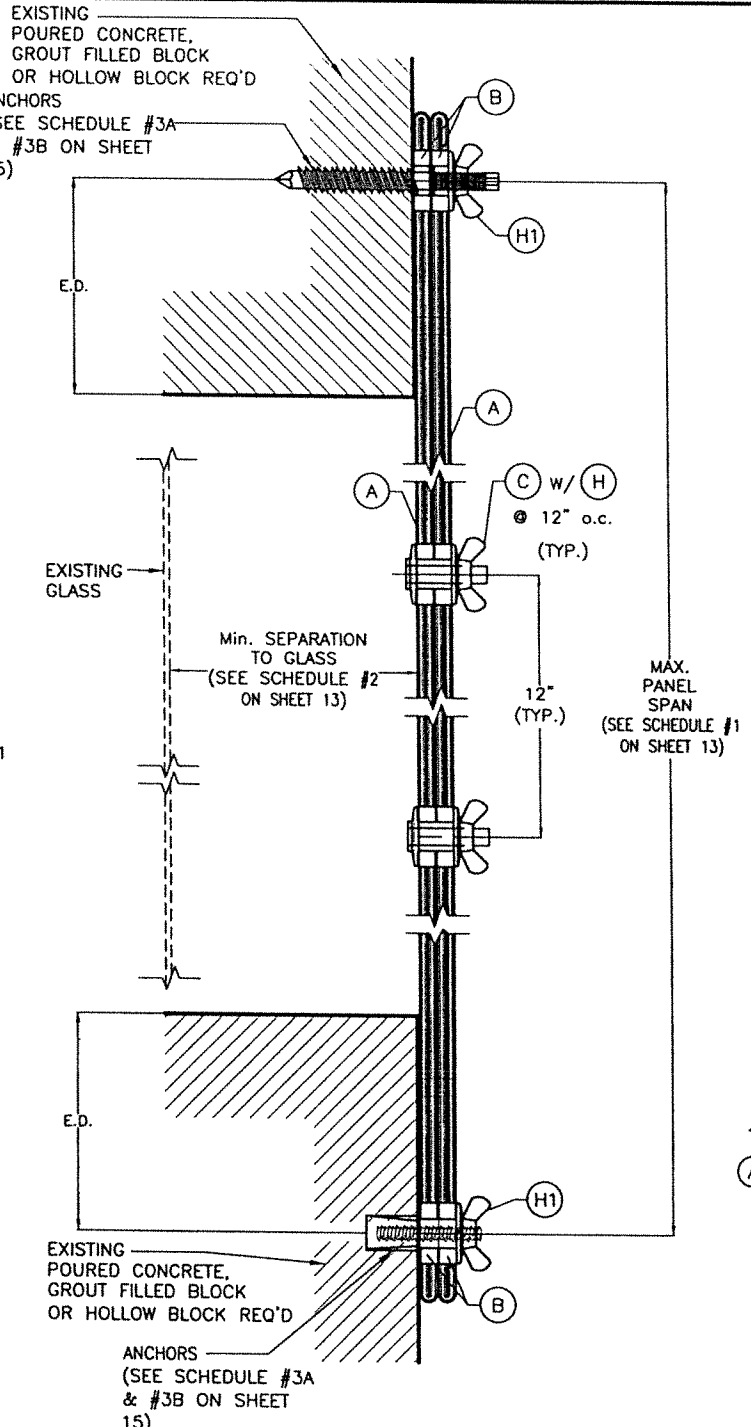
EXTERIOR
PLAN

OVERLAPPED MULTIPLE PANELS
SCALE 1/2" = 1'-0"

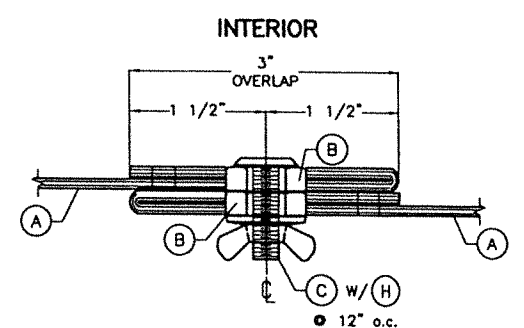
△ FABRIC SHALL ENTIRELY COVER THE OPENING WIDTH
WITH NO NEED OF OVERLAPPING BEYOND IT



FOR DIRECT WALL MOUNT TO
WOOD SUBSTRATE
AT TOP & BOTTOM



FOR DIRECT WALL MOUNT TO POURED
CONCRETE, GROUT FILLED BLOCK OR
HOLLOW BLOCK SUBSTRATE
AT TOP & BOTTOM



SECTION H - H
SCALE 3/8" = 1"

NOTE FOR COMBINATION OF SECTIONS:
TOP AND BOTTOM MOUNTINGS CAN BE COMBINED IN
ANY WAY TO SUIT ANY INSTALLATION.

SECTIONS G - G
(AT OVERLAPPED FABRIC)
SCALE 3/8" = 1"
WALTER A. TILLOT Jr., P.E.
FLORIDA Lic. # 44167
P.E. SEAL/SIGNATURE/DATE

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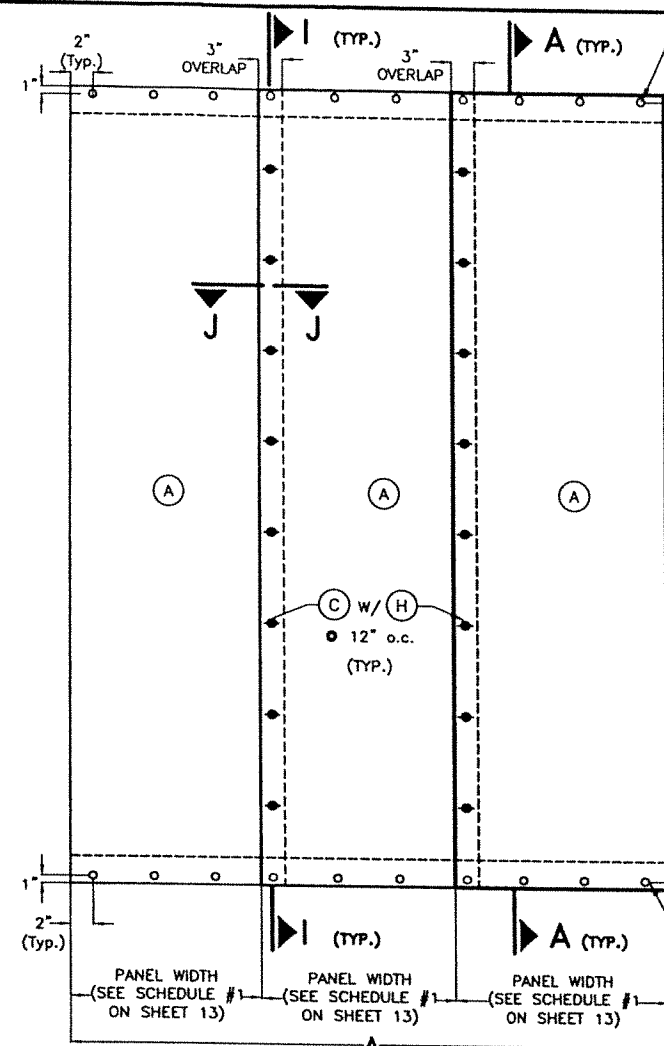
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GLOBAL PROTECTION PRODUCTS, LLC.

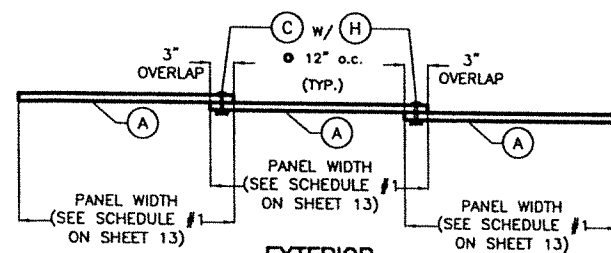
4800 S.W. 51 STREET
DAVIE, FL 33314
PHONE: (954) 689-7545, FAX: (954) 689-8797

REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 20-177	06/25/23	3		
2	NEW HILLMAN ANCHORS	11/06/23	4		

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08/25/2023
23-195
SHEET 9 OF 15



ELEVATION FOR DIRECT WALL MOUNT TO
POURED CONCRETE, GROUT FILLED BLOCK,
HOLLOW BLOCK OR WOOD SUBSTRATE
AT TOP & BOTTOM



EXTERIOR

PLAN

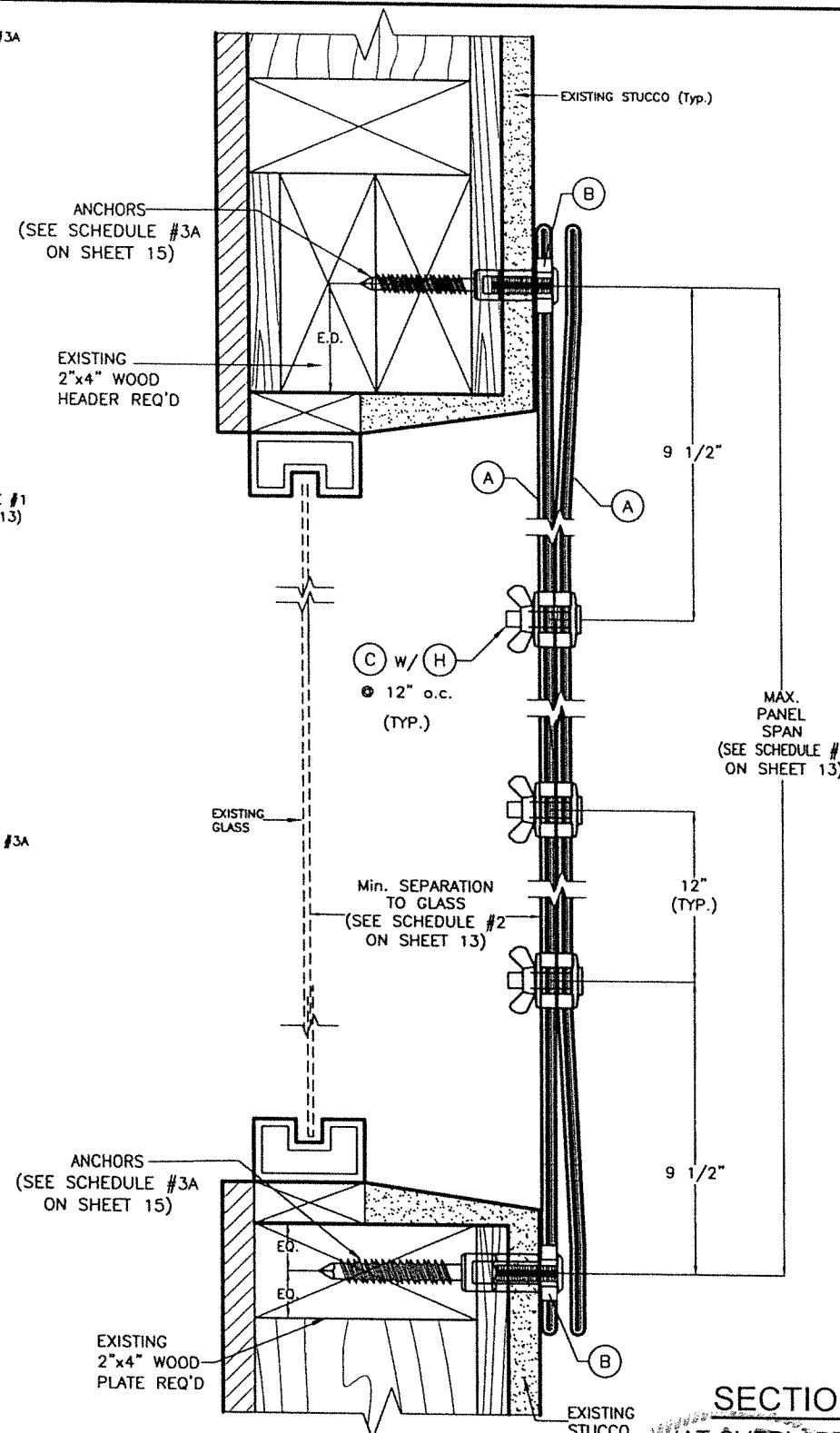
SAFETY PANEL FOR DOORS W/
OVERLAPPED MULTIPLE PANELS

SCALE 1/2" = 1'-0"

△ FABRIC SHALL ENTIRELY COVER THE OPENING WIDTH
WITH NO NEED OF OVERLAPPING BEYOND IT

NOTE FOR COMBINATION OF SECTIONS:

TOP AND BOTTOM MOUNTINGS CAN BE COMBINED IN
ANY WAY TO SUIT ANY INSTALLATION.

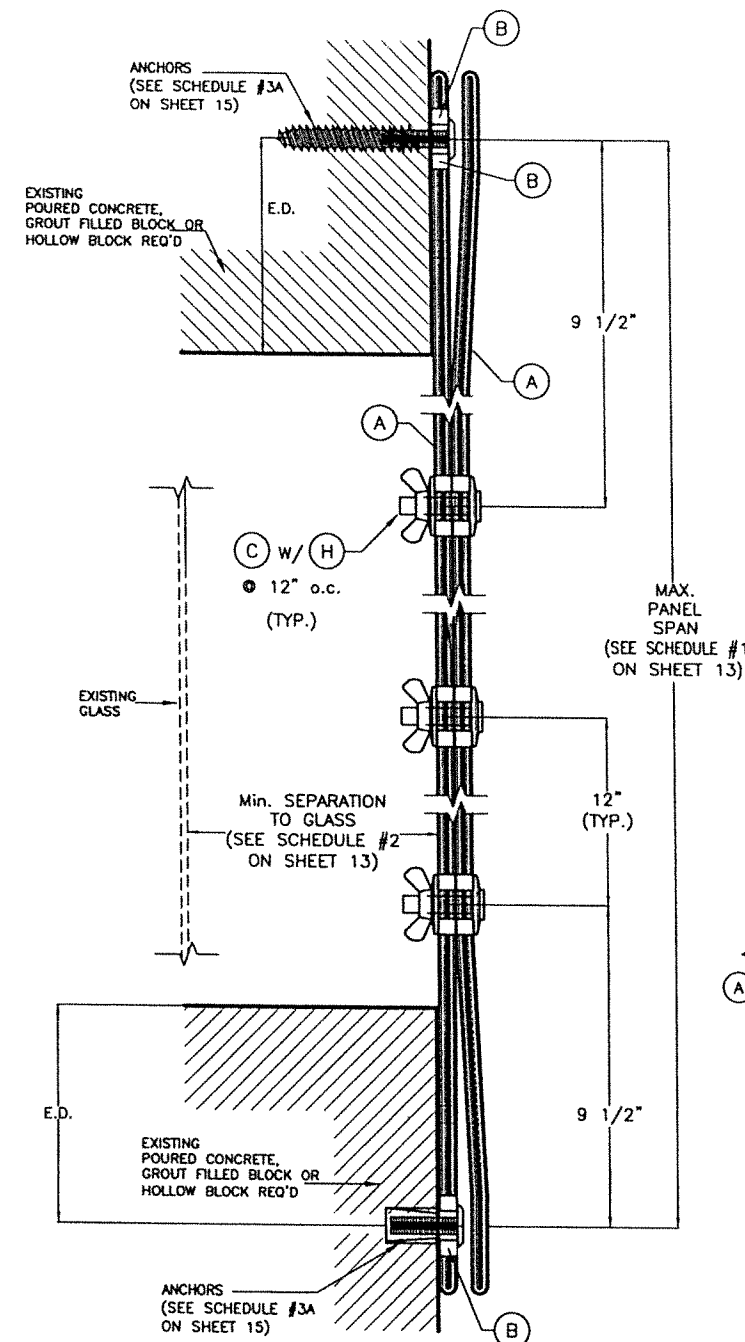


FOR DIRECT WALL MOUNT TO WOOD
SUBSTRATE AT TOP & BOTTOM

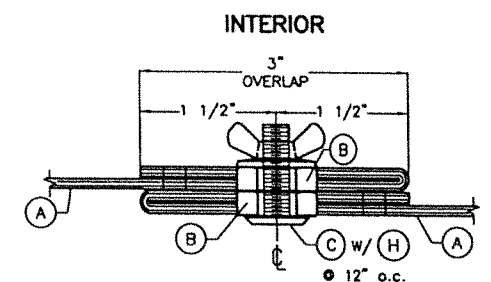
SECTIONS I - I

AT OVERLAPPED FABRIC

SCALE 3/8" = 1"



FOR DIRECT WALL MOUNT TO POURED
CONCRETE, GROUT FILLED BLOCK OR
HOLLOW BLOCK SUBSTRATE
AT TOP & BOTTOM



SECTION J - J
N.T.S.

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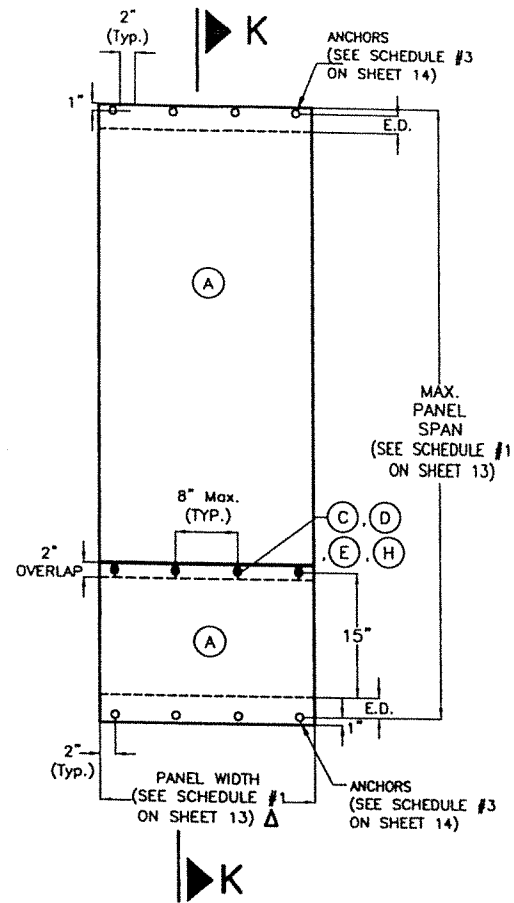
REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 20-177	06/25/23	3		
2	NEW HILLMAN ANCHORS	11/06/23	4		

W.H.
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08/25/2023

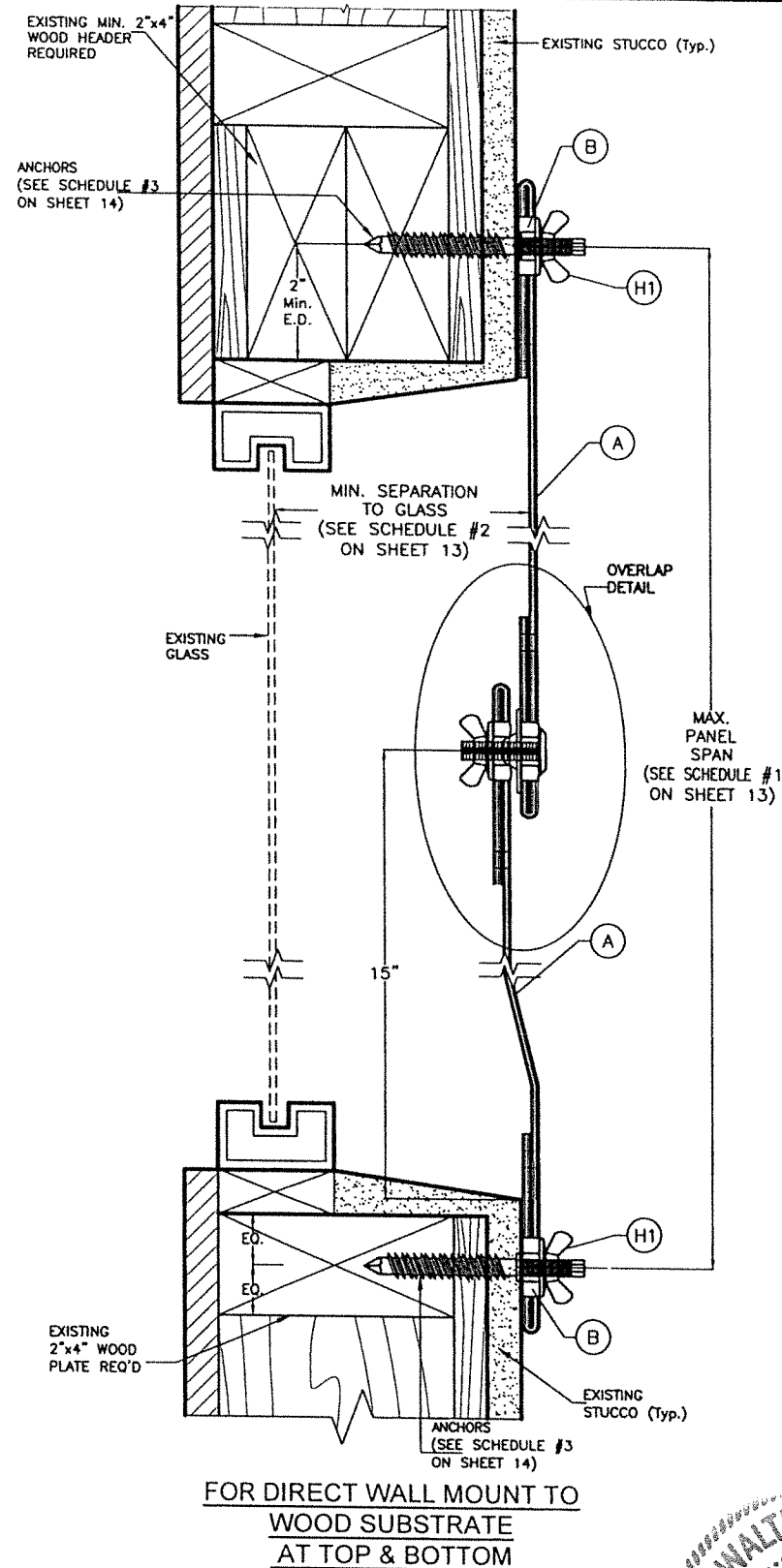
23-195

SHEET 10 OF 15

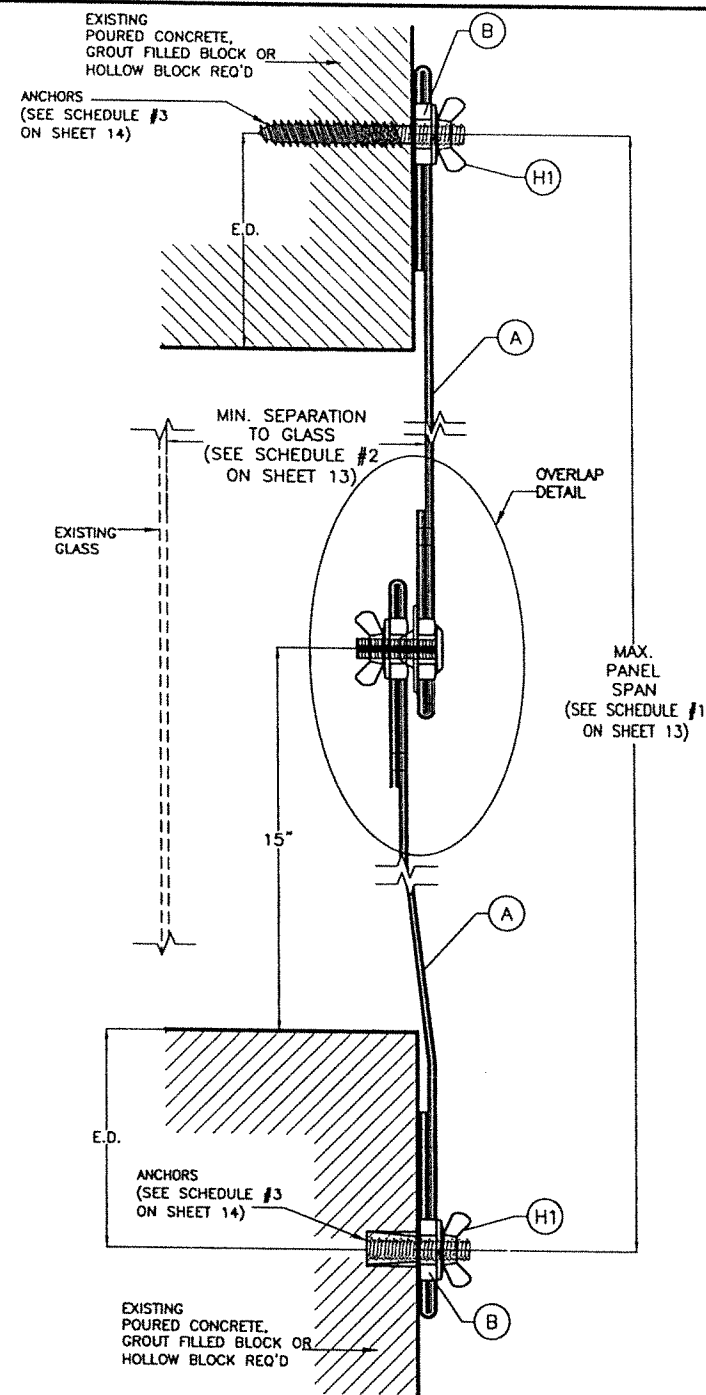


**SAFETY SINGLE PANEL
FOR SINGLE HUNG WINDOWS**
SCALE 1/2" = 1'-0"

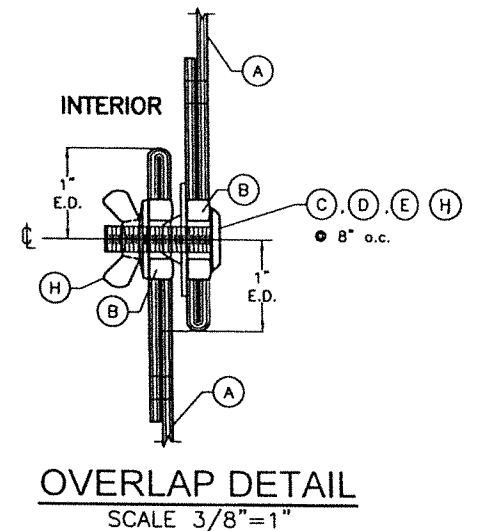
Δ FABRIC SHALL ENTIRELY COVER THE
OPENING WIDTH WITH NO NEED OF
OVERLAPPING BEYOND IT.



**FOR DIRECT WALL MOUNT TO
WOOD SUBSTRATE
AT TOP & BOTTOM**



**FOR DIRECT WALL MOUNT TO
POURED CONCRETE, GROUT
FILLED BLOCK OR HOLLOW BLOCK
SUBSTRATE AT TOP & BOTTOM**

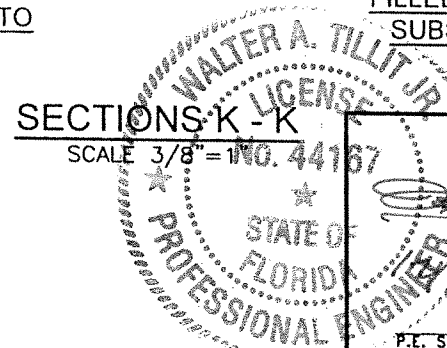


NOTE FOR COMBINATION OF SECTIONS:

TOP AND BOTTOM MOUNTINGS CAN BE COMBINED IN
ANY WAY TO SUIT ANY INSTALLATION.

SECTIONS K-K

SCALE 3/8" = 1'-0"



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GLOBAL PROTECTION PRODUCTS, LLC.

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DAVIE, FL 33314

PHONE: (954) 689-7545, FAX: (954) 689-8797

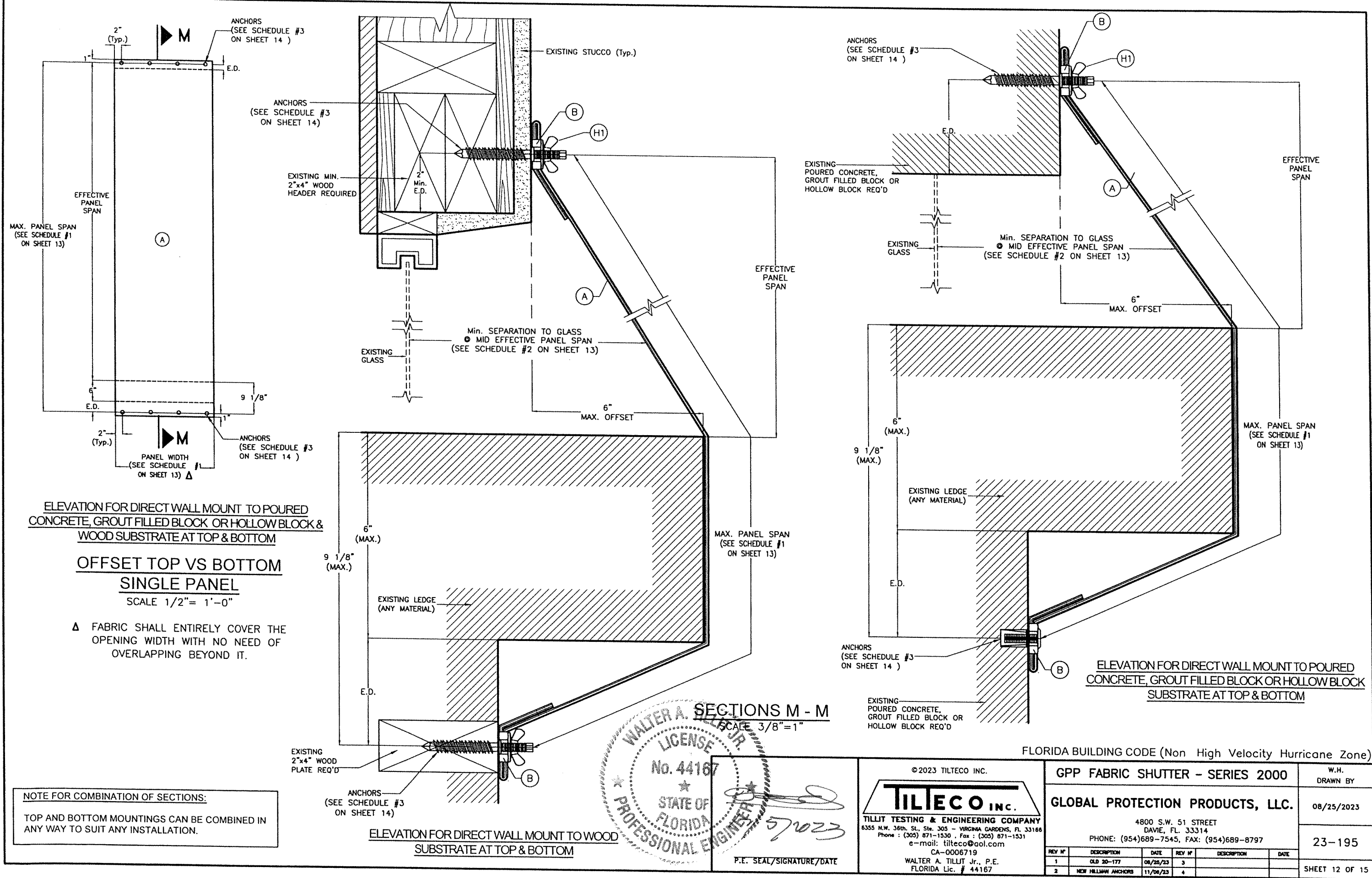
REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 20-177	08/25/23	3		
2	NEW HILLMAN ANCHORS	11/08/23	4		

W.H.
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08/25/2023

23-195

SHEET 11 OF 15



ELEVATION FOR DIRECT WALL MOUNT TO POURED
CONCRETE, GROUT FILLED BLOCK OR HOLLOW BLOCK &
WOOD SUBSTRATE AT TOP & BOTTOM

OFFSET TOP VS BOTTOM
SINGLE PANEL

SCALE 1/2"= 1'-0"

Δ FABRIC SHALL ENTIRELY COVER THE
OPENING WIDTH WITH NO NEED OF
OVERLAPPING BEYOND IT.

NOTE FOR COMBINATION OF SECTIONS:

TOP AND BOTTOM MOUNTINGS CAN BE COMBINED IN
ANY WAY TO SUIT ANY INSTALLATION.

ELEVATION FOR DIRECT WALL MOUNT TO WOOD
SUBSTRATE AT TOP & BOTTOM

ELEVATION FOR DIRECT WALL MOUNT TO POURED
CONCRETE, GROUT FILLED BLOCK OR HOLLOW BLOCK
SUBSTRATE AT TOP & BOTTOM

SECTIONS M - M
SCALE 3/8"=1"
WALTER A. TILTECO, JR.
LICENSE
No. 44167
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
57023
P.E. SEAL/SIGNATURE/DATE

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TILTECO INC.
TILLOT TESTING & ENGINEERING COMPANY
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PHONE: (954)689-7545, FAX: (954)689-8797

REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 20-177	08/26/23	3		
2	NEW HILLMAN ANCHORS	11/06/23	4		

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08/25/2023

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SHEET 12 OF 15

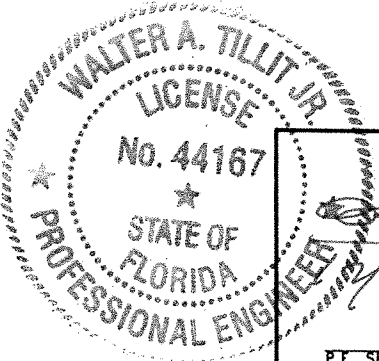
MAXIMUM A.S.D. DESIGN PRESSURE RATING, CORRESPONDING TO MAXIMUM PANEL SPAN, MAXIMUM & MINIMUM PANEL WIDTH AND REQUIRED MINIMUM SEPARATION TO GLASS FOR SINGLE & OVERLAPPED MULTIPLE PANEL

SCHEDULE # 1								SCHEDULE # 2	
MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.)	MAXIMUM PANEL SPAN (ft.)	FOR SINGLE PANELS		APPLICABLE TO SECTIONS & ANY COMBINATION OF THEM	FOR OVERLAPPED MULTIPLE PANELS		IMPACT RESISTANCE MISSILE TYPE & SPEED *	REQUIRED MIN. SEPARATION TO GLASS MEASURED TO BACK OF FABRIC (in)	
		MAXIMUM & MINIMUM PANEL WIDTH (ft.)			MAXIMUM & MINIMUM PANEL WIDTH (ft.)	APPLICABLE TO SECTIONS & ANY COMBINATION OF THEM		WIND ZONES 1 THRU 3 *	WIND ZONE 4 *
		MAX.	MIN.						
53.3 OR LESS	16' - 2"	12' - 0" †	2' - 4"	A-A , F-F ,G-G	-	-	TYPE D 50 ft/sec.	1" Δ	34 1/2"
60.0 OR LESS	12' - 7"	12' - 0" †	2' - 4"	A-A , A'-A' , B-B, D-D , E-E & F-F	12' - 0" †	2' - 4"		1" Δ	34 1/2"
75.0 OR LESS	8' - 7"	12' - 0" †	1' - 0"	A-A , A'-A' , B-B , D -D , E-E , F-F & M-M	12' - 0" †	2' - 4"		1" Δ	28 5/8"
75.0 OR LESS	6' - 7"	12' - 0" †	2' - 4"	K-K	-	-		1" Δ	15 3/8"

† USE MAXIMUM PANEL WIDTH OF 6'-6" FOR INSTALLATIONS WITHIN WIND ZONE 4, AS DEFINED BY SECTION 6.2.2.4 OF ASTM E 1996 STANDARD.

* PER ASTM E 1996 STANDARD W/ A BASIC WIND SPEED IN EXCESS OF 175 M.P.H.

Δ MINIMUM SEPARATION TO GLASS MAY BE REDUCED TO 1/4" ONLY FOR INSTALLATION W/ 8'-0" MAX. PANEL SPAN AND FOR INSTALLATION INTO WOOD FRAME BUILDING.



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08/25/2023

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SHEET 13 OF 15

SCHEDULE # 3

MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING FOR SINGLE PANELS

DIRECT MOUNT OR WALL MOUNT W/ STUDDED ANGLE

MAXIMUM A.S.D DESIGN PRESSURE RATING (p.s.f.)	1/4"Ø ELCO ULTRACON ANCHOR				HILLMAN SOLID SET 1/4" SCREW CS				HILLMAN SOLID SET 1/4" SCREW 410 SS.				MAXIMUM PANEL SPAN (ft.)	APPLICABLE TO SECTIONS & ANY COMBINATION OF THEM.
	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD		
	W/MIN. REQ'D f'c= 2700 psi 1 3/4" EMBDM 3 1/8" E.D	W/MIN. REQ'D f'm= 1924psi 1 1/4" EMBDM 2 1/2" E.D	W/MIN. REQ'D f'm= 1924psi 1 1/4" EMBDM 2 1/2" E.D	W/MIN. REQ'D G=0.55 1" thread 2" E.D	W/MIN. REQ'D f'c= 3000 psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 1/2" thread 0.75" E.D	W/MIN. REQ'D f'c= 3000 psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 1/2" thread 0.75" E.D		
30.00 OR LESS	7 1/2"	5 1/2"	4 1/2"	2 1/2"	7 1/2"	5 1/2"	4"	4"	8"	6 1/2"	3 1/2"	4"	12'-7"	B-B, D-D (TOP) & F-F
30.00 - 45.00	5"	4"	N/A	2"	5 1/2"	4"	N/A	3"	6 1/2"	4 1/2"	N/A	3"		
45.00 - 60.00	4"	N/A	N/A	1 1/2"	4"	3"	N/A	2 1/2"	5"	3 1/2"	N/A	2 1/2"		
37.50 OR LESS	7"	5"	4 1/2"	2 1/2"	7"	5 1/2"	4"	3 1/2"	8"	6"	3 1/2"	4"	8'-7"	B-B
37.50 - 56.25	5"	N/A	N/A	2"	5"	4"	N/A	2 1/2"	6 1/2"	4 1/2"	N/A	2 1/2"		
56.25 - 75.00	4"	N/A	N/A	1 1/2"	4"	3"	N/A	2"	5"	3 1/2"	N/A	2"		
37.50 OR LESS	8"	8"	8"	5 1/2"	8"	8"	7"	8"	8"	8"	7"	8"	6'-7"	B-B, D-D (TOP) F-F.
37.50 - 56.25	8"	8"	6"	4"	8"	8"	4 1/2"	5 1/2"	8"	8"	4 1/2"	5 1/2"		
56.25 - 75.00	7 1/2"	6"	4 1/2"	3"	8"	6 1/2"	3 1/2"	4 1/2"	8"	6 1/2"	N/A	4 1/2"		

MAXIMUM A.S.D DESIGN PRESSURE RATING (p.s.f.)	1/4"Ø ELCO PANELMATE PRO			1/4"Ø ELCO FEMALE ID PANELMATE			1/4"Ø ALL POINT SOLID SET		HILLMAN SOLID SET #14 FEMALE ANCHOR CS				MAXIMUM PANEL SPAN (ft.)	APPLICABLE TO SECTIONS & ANY COMBINATION OF THEM.
	TO CONCRETE	TO GROUT OR HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO GROUT OR HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO HOLLOW BLOCK	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD		
	W/MIN. REQ'D f'c= 3350 psi 2" EMBDM 2 1/2" E.D	W/MIN. REQ'D f'm= 2071psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 7/8" EMBDM 3/4" E.D	W/MIN. REQ'D f'c= 3350 psi 1 3/4" EMBDM 2 1/2" E.D	W/MIN. REQ'D f'm= 2071psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 7/8" EMBDM 3/4" E.D	W/MIN. REQ'D f'c= 3000 psi 7/8" EMBDM 3" E.D	W/MIN. REQ'D f'm= 1800psi 3" E.D	W/MIN. REQ'D f'c= 3000 psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 1/2" thread 0.75" E.D		
30.00 OR LESS	8"	5"	7"	7"	N/A	7"	8"	6 1/2"	8"	7 1/2"	4"	5 1/2"	12'-7"	A-A, B-B, D-D (TOP) & F-F
30.00 - 45.00	6 1/2"	N/A	5"	5"	N/A	5"	6 1/2"	4 1/2"	7"	5"	N/A	4"		
45.00 - 60.00	5"	N/A	4"	N/A	N/A	4"	5"	3 1/2"	5 1/2"	4"	N/A	3"		
37.50 OR LESS	8"	4 1/2"	6 1/2"	6 1/2"	N/A	6 1/2"	8"	6"	8"	7"	4"	5"	8'-7"	A-A, B-B & M-M
37.50 - 56.25	6 1/2"	N/A	5"	4 1/2"	N/A	5"	6"	4 1/2"	6 1/2"	5"	N/A	3 1/2"		
56.25 - 75.00	5"	N/A	4"	N/A	N/A	4"	5"	3 1/2"	5 1/2"	4"	N/A	3"		
37.50 OR LESS	8"	8"	8"	8"	7 1/2"	8"	8"	8"	8"	8"	7"	8"	6'-7"	A-A, B-B, D-D (TOP) F-F, M-M & K-K
37.50 - 56.25	8"	6 1/2"	8"	8"	5 1/2"	8"	8"	8"	8"	8"	5"	7 1/2"		
56.25 - 75.00	8"	5"	8"	7 1/2"	4"	8"	8"	6 1/2"	8"	7 1/2"	3 1/2"	5 1/2"		

* SEE SCHEDULE 3B ON SHEET 15
FOR ADDITIONAL ANCHOR
SPACING FOR MAXIMUM PANEL
SPANS >12'-7" UP TO 16'-2"

NOTE: EMBEDMENT AND EDGE
DISTANCE ARE BEYOND ANY
FINISH MATERIAL.

MAXIMUM A.S.D DESIGN PRESSURE RATING (p.s.f.)	1/4"Ø ELCO HANGER MATE	HILLMAN SOLID SET #14 MALE ANCHOR CS.				HILLMAN SOLID SET #14 MALE ANCHOR 304 SS				MAXIMUM PANEL SPAN (ft.)	APPLICABLE TO SECTIONS & ANY COMBINATION OF THEM.
	TO A36 STEEL	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD		
	W/MIN. REQ'D 1/8" THK. (A36) 1/8" threaded 1 3/4" E.D	W/MIN. REQ'D f'c= 3000 psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 1/2" thread 0.75" E.D	W/MIN. REQ'D f'c= 3000 psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 1/2" thread 0.75" E.D		
30.00 OR LESS	8"	8"	7 1/2"	4"	5 1/2"	7 1/2"	6 1/2"	3"	5"	12'-7"	A-A, B-B, D-D (TOP) & F-F
30.00 - 45.00	8"	7"	5"	N/A	4"	5 1/2"	4 1/2"	N/A	3 1/2"		
45.00 - 60.00	7"	5 1/2"	4"	N/A	3"	4"	3 1/2"	N/A	3"		
37.50 OR LESS	8"	8"	7"	4"	5"	7"	6 1/2"	3"	4 1/2"	8'-7"	A-A, B-B & M-M
37.50 - 56.25	8"	6 1/2"	5"	N/A	3 1/2"	5"	4 1/2"	N/A	3 1/2"		
56.25 - 75.00	7"	5 1/2"	4"	N/A	3"	4"	3 1/2"	N/A	3"		
37.50 OR LESS	8"	8"	8"	7"	8"	8"	8"	5 1/2"	8"	6'-7"	A-A, B-B, D-D (TOP) F-F, M-M & K-K
37.50 - 56.25	8"	8"	8"	5"	7 1/2"	8"	8"	3 1/2"	7"		
56.25 - 75.00	8"	8"	7 1/2"	3 1/2"	5 1/2"	7 1/2"	6 1/2"	N/A	5 1/2"		

WALTER A. TILLIT JR.
LICENSE
No. 44167
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
1/25/2023
P.E. SEAL/SIGNATURE/DATE

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WALTER A. TILLIT Jr., P.E.

FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

GPP FABRIC SHUTTER - SERIES 2000

W.H. DRAWN BY

GLOBAL PROTECTION PRODUCTS, LLC.

08/25/2023

4800 S.W. 51 STREET

DAVIE, FL 33314

PHONE: (954)689-7545, FAX: (954)689-8797

23-195

REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 20-177	08/25/23	3		
2	NEW HILLMAN ANCHORS	11/06/23	4		

SHEET 14 OF 15

SCHEDULE # 3
MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING FOR SINGLE PANELS

FLOOR/CEILING MOUNT W/ STUDDED ANGLE

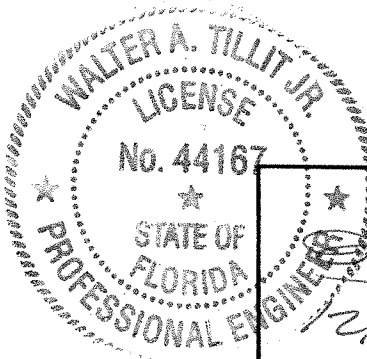
MAXIMUM A.S.D DESIGN PRESSURE RATING (p.s.f.)	1/4"Ø ELCO ULTRACON ANCHOR				1/4"Ø ALL POINT SOLID SET		MAXIMUM PANEL SPAN (ft.)	APPLICABLE TO SECTIONS & ANY COMBINATION OF THEM.
	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO HOLLOW BLOCK		
	W/MIN. REQ'D f'c = 2700psi 1 3/4" EMBDM 3 1/8" E.D	W/MIN. REQ'D f'm = 1924psi 1 1/4" EMBDM 2 1/2" E.D	W/MIN. REQ'D f'm = 1924psi 1 1/4" EMBDM 2 1/2" E.D	W/MIN. REQ'D G = 0.55 1" thread 2" E.D	W/MIN. REQ'D f'c = 3000 psi 7/8" EMBDM 3" E.D	W/MIN. REQ'D f'm = 1800psi 7/8" EMBDM 3" E.D		
	30.00 OR LESS	7 1/2"	7"	N/A	4"	8"	6 1/2"	
30.00 - 45.00	5 1/2"	5"	N/A	3"	6 1/2"	4 1/2"	12' - 7"	C-C, D-D (BOTTOM) & F'-F'
45.00 - 60.00	4"	N/A	N/A	2 1/2"	5"	3 1/2"		

MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.)	5/16"Ø ELCO ULTRACON ANCHOR	5/16"Ø ELCO ULTRACON ANCHOR	MAXIMUM PANEL SPAN (ft.)	APPLICABLE TO SECTIONS & ANY COMBINATION OF THEM
	TO WOOD	TO WOOD		
	W/MIN. REQ'D. G = 0.55 1" Thread. Penet. 3 1/8" E.D.	W/MIN. REQ'D. G = 0.55 2" Thread. Penet. 3 1/8" E.D.		
	30.00 OR LESS	5 1/2 "	8 "	
30.00 - 45.00	4 "	8 "	12' - 7 "	C - C, D - D (BOTTOM) & F' - F'
45.00 - 60.00	3 "	6 1/2 "		

MAXIMUM A.S.D DESIGN PRESSURE RATING (p.s.f.)	Ⓜ HILLMAN SOLID SET 1/4" SCREW CS				Ⓢ HILLMAN SOLID SER #14 FEMALE ANCHOR CS.				Ⓣ HILLMAN SOLID SET 1/4" SCREW 410 SS				Ⓤ HILLMAN SOLID SET #14 MALE ANCHOR CS.				Ⓥ HILLMAN SOLID SET #14 MALE ANCHOR 304 SS				MAXIMUM PANEL SPAN (ft.)	APPLICABLE TO SECTIONS & ANY COMBINATION OF THEM.
	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD						
	W/MIN. REQ'D f'c= 3000 psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 1/2" thread 0.75" E.D	W/MIN. REQ'D f'c= 3000 psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 1/2" thread 0.75" E.D	W/MIN. REQ'D f'c= 3000 psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 1/2" thread 0.75" E.D	W/MIN. REQ'D f'c= 3000 psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 1/2" thread 0.75" E.D						
30.00 OR LESS	7 1/2"	6 1/2"	3"	5 1/2"	8"	6 1/2"	N/A	6"	8"	6 1/2"	NA	5"	8"	7 1/2"	NA	6"	6 1/2"	5"	N/A	6 1/2"	12'-7"	C-C, D-D (BOTTOM) & F'-F'
30.00 - 45.00	5 1/2"	4 1/2"	N/A	4"	5 1/2"	4 1/2"	N/A	3 1/2"	5 1/2"	4 1/2"	NA	3 1/2"	6"	5 1/2"	NA	4 1/2"	4 1/2"	3 1/2"	N/A	4 1/2"		
45.00 - 60.00	4 1/2"	3 1/2"	N/A	3"	4 1/2"	4"	N/A	3"	4 1/2"	4"	NA	3"	5"	4 1/2"	NA	3 1/2"	4"	N/A	N/A	3 1/2"		

* SEE SCHEDULE 3B ON SHEET 15 FOR ADDITIONAL ANCHOR
SPACING FOR MAXIMUM PANEL SPANS >12'-7" UP TO 16'-2"

NOTE: EMBEDMENT AND EDGE DISTANCE ARE
BEYOND ANY FINISH MATERIAL.



P.E. SEAL/SIGNATURE/DATE

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WALTER A. TILLIT Jr., P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

GPP FABRIC SHUTTER - SERIES 2000
GLOBAL PROTECTION PRODUCTS, LLC.

4800 S.W. 51 STREET
DAVIE, FL. 33314
PHONE: (954)689-7545, FAX: (954)689-8797

REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 30-177	08/28/23	3		
2	NEW HILLMAN ANCHORS	11/06/23	4		

W.H.
DRAWN BY
08/25/2023
23-195
SHEET 14A OF 15

SCHEDULE # 3A
MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.) AND CORRESPONDING
MAXIMUM ANCHOR SPACING FOR OVERLAPPED MULTIPLE PANELS:

DIRECT MOUNT

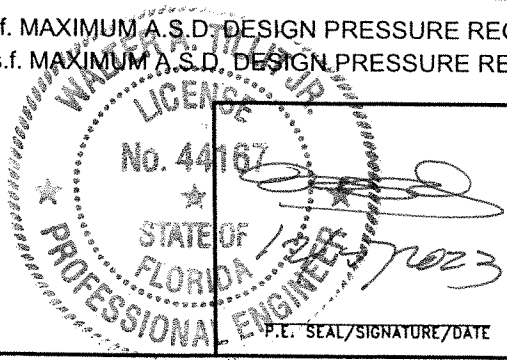
MAXIMUM A.S.D DESIGN PRESSURE RATING (p.s.f.)	J 1/4"Ø ELCO PANELMATE PRO			J1 1/4"Ø ELCO FEMALE ID PANELMATE			K 1/4"Ø ALL POINT SOLID-SET		S SOLID SET #14 MALE ANCHOR CS.				U SOLID SET #14 MALE ANCHOR CS.				V SOLID SET #14 MALE ANCHOR 304 SS				MAXIMUM PANEL SPAN (ft.)	APPLICABLE TO SECTIONS & ANY COMBINATION OF THEM.
	TO CONCRETE	TO GROUT OR HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO GROUT OR HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO HOLLOW BLOCK	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO GROUT FILLET	TO HOLLOW BLOCK	TO WOOD		
	W/MIN. REQ'D f'c = 3350 psi 2" EMBDM 2 1/2" E.D	W/MIN. REQ'D f'm = 2071psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 7/8" thread 3/4" E.D	W/MIN. REQ'D f'c = 3350 psi 1 3/4" EMBDM 2 1/2" E.D	W/MIN. REQ'D f'm = 2071psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 7/8" thread 3/4" E.D	W/MIN. REQ'D f'c = 3000 psi 7/8" EMBDM 3" E.D	W/MIN. REQ'D f'm = 1800psi 7/8" EMBDM 3" E.D	W/MIN. REQ'D f'c = 3000 psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 1/2" thread 0.75" E.D	W/MIN. REQ'D f'c = 3000 psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 1/2" thread 0.75" E.D	W/MIN. REQ'D f'c = 3000 psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 1/2" thread 0.75" E.D		
30.00 OR LESS	8"	4 1/2"	7"	6 1/2"	N/A	7"	8"	6"	8"	7"	3 1/2"	5"	8"	7"	3 1/2"	5"	7"	6 1/2"	N/A	5"	12'-7"	G-G
30.00 - 45.00	6 1/2"	N/A	5"	5"	N/A	5"	6"	4 1/2"	6 1/2"	5"	NA	4"	6 1/2"	5"	N/A	4"	5"	4 1/2"	N/A	3 1/2"		
45.00 - 60.00	5 1/2"	N/A	4 1/2"	4"	N/A	4 1/2"	5"	3 1/2"	5 1/2"	4 1/2"	NA	3"	5 1/2"	4 1/2"	N/A	3"	4 1/2"	3 1/2"	N/A	3"		
37.50 OR LESS	5"	N/A	3 1/2"	N/A	N/A	3 1/2"	4 1/2"	3 1/2"	5"	4"	NA	2 1/2"	5"	4"	N/A	2 1/2"	4"	4"	N/A	2 1/2"	8'-7"	I-I
37.50 - 56.25	N/A	N/A	2 1/2"	N/A	N/A	2 1/2"	3 1/2"	N/A	4"	N/A	N/A	2"	4"	N/A	N/A	2"	3"	N/A	N/A	2"		
56.25 - 75.00	N/A	N/A	2 1/2"	N/A	N/A	2 1/2"	3"	N/A	3 1/2"	N/A	N/A	2"	3 1/2"	N/A	N/A	2"	N/A	N/A	N/A	1 1/2"		

SCHEDULE # 3B
MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING FOR
SINGLE AND OVERLAPPED PANELS AS PER SECTIONS A-A , F-F , G-G

MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.)	J 1/4" Ø ELCO PANELMATE PRO			S SOLID SET #14 FEMALE ANCHOR CS & U SOLID SET #14 MALE ANCHOR CS.				MAXIMUM PANEL SPAN (ft.)	APPLICABLE TO SECTIONS & ANY COMBINATION OF THEM
	TO CONCRETE	TO GROUT FILLED & HOLLOW BLOCK	TO WOOD	TO CONCRETE	TO GROUT FILLED BLOCK	TO HOLLOW BLOCK	TO WOOD		
	W/MIN. REQ'D. f'c = 3350 p.s.i 2" EMBEDMENT 2 1/2" E.D	W/MIN. REQ'D. f'm = 2071p.s.i 1 1/4" EMBEDMENT 3" E.D	W/MIN. REQ'D. G = 0.55 1 7/8" THREADED PENET. 3/4" E.D	W/MIN. REQ'D f'c = 3000 psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 3/4" EMBDM 3" E.D	W/MIN. REQ'D ASTM C-90psi 1 1/4" EMBDM 3" E.D	W/MIN. REQ'D G=0.55 1 1/2" thread 0.75" E.D		
30.00 OR LESS	5"	4"	5"	5"	4"	4"	3 1/2"	>12'-7" UP TO 14'-0"	A-A TOP F-F & G-G TOP/BOTTOM
30.00 - 45.00	5"	N/A	4"	5"	N/A	N/A	3"		
>45.00 TO 53.3	4"	N/A	3"	4"	N/A	N/A	N/A		
30.00 OR LESS	5"	4" **	5"	5"	4" **	4" **	3 1/2"	>14'-0" UP TO 16'-2"	A-A TOP F-F & G-G TOP/BOTTOM
30.00 - 45.00	4"	N/A	3"	4"	N/A	N/A	N/A		
>45.00 TO 53.3	4" *	N/A	3"	4" *	N/A	N/A	N/A		

* LIMITED TO 47.00 p.s.f. MAXIMUM A.S.D. DESIGN PRESSURE REQ'D.
** LIMITED TO 28.00 p.s.f. MAXIMUM A.S.D. DESIGN PRESSURE REQ'D.

NOTE: EMBEDMENT AND EDGE DISTANCE ARE BEYOND ANY FINISH MATERIAL.



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REV #	DESCRIPTION	DATE	REV #	DESCRIPTION	DATE
1	OLD 20-177	08/25/23	3		
2	NEW HILLMAN ANCHORS	11/08/23	4		

W.H.
DRAWN BY

08/25/2023

23-195