

AH SCREENS, INC.

H-2 EGRESS IMPACT SCREEN - LMI - HVHZ

INSTALLATION ANCHORAGE DETAILS

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN TESTED, EVALUATED AND DESIGNED TO THE CURRENT EDITION OF THE FLORIDA BUILDING CODE. TESTING WAS CONDUCTED FOR STRUCTURAL PER NON-HVHZ TEST PROTOCOL ASTM E 330 AND FOR IMPACT RESISTANCE TO NON-HVHZ TEST STANDARDS ASTM E 1366 & ASTM E 1986 PER TEST REPORT R04A-1364.
2. THIS PRODUCT EVALUATION DOCUMENT IS APPROVED FOR USE OUTSIDE THE HIGH VELOCITY HURRICANE ZONE (HVHZ) AND IS RATED FOR WINDZONE 3, MISSILE LEVEL D.
3. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE / MASONRY AND 2X FRAMING FRAMING SUBSTRATES AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE LICENSED PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT ACTING AS THE DESIGN PROFESSIONAL OF RECORD FOR THE PROJECT OF INSTALLATION.
4. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE LICENSED PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT ACTING AS THE DESIGN PROFESSIONAL OF RECORD FOR THE PROJECT OF INSTALLATION.
5. WHEN INSTALLED IN LOCATIONS WHERE WINDBORNE DEBRIS PROTECTION REQUIREMENTS EXIST, THIS PRODUCT DOES NOT REQUIRE OPENING PROTECTION IN ACCORDANCE WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE USING AN APPROVED IMPACT PROTECTION DEVICE.
6. SITE CONDITIONS NOT COVERED IN THIS PRODUCT EVALUATION DOCUMENT ARE SUBJECT TO ADDITIONAL ENGINEERING ANALYSIS BY A LICENSED PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
7. THESE DRAWINGS CERTIFY THE IMPACT SCREEN INSTALLATION ONLY.
8. SEE IMPACT SCREEN-TO-FENESTRATION SEPARATION REQUIREMENTS ON SHEET 4 & 5.

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SHEET NO.	DESCRIPTION
1	GENERAL NOTES
2 & 3	ELEVATION AND ANCHOR LAYOUT
4	ANCHOR DETAILS INSIDE MOUNT INSTALLATION
5	ANCHOR DETAILS WALL INSTALLATION
6	BILL OF MATERIALS AND COMPONENTS

INSTALLATION NOTES:

1. PRODUCT ANCHORS SHALL BE AS DESIGNATED AND LOCATED AS SHOWN IN THIS PRODUCT EVALUATION DOCUMENT. ANCHOR EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER AND SIDING.
 - 1.1. EDGE DISTANCES SHALL BE MEASURED FROM CENTERLINE OF ANCHOR TO EDGE OF STRUCTURAL SUBSTRATE EITHER TO THE INTERIOR OR EXTERIOR OF THE FENESTRATION PRODUCT.
 - 1.2. MINIMUM EMBEDMENT SHALL BE BASED ON PENETRATION INTO MAIN WIND FORCE RESISTING SYSTEM SUBSTRATE.
2. INSTALLATION ANCHORS SHALL MEET THE FOLLOWING REQUIREMENTS.
 - 2.1. CONCRETE SUBSTRATES WITH MINIMUM 2500 PSI COMPRESSIVE STRENGTH
 - 2.1.1. DIAMETER: 3/8" WITH 1-1/2" MINIMUM EMBEDMENT AND 1-1/8" EDGE DISTANCE
 - 2.1.2. DIAMETER: 1/4" WITH 1-1/2" MINIMUM EMBEDMENT AND 1-1/2" EDGE DISTANCE
 - 2.1.3. SUPPLIER: ITW TAPCON (ADVANCED THREADFORM)
 - 2.2. MASONRY (CMU/BLOCK) MEETING ASTM C90, MEDIUM WEIGHT
 - 2.2.1. DIAMETER: 3/8" WITH 1" MINIMUM EMBEDMENT AND 2" EDGE DISTANCE
 - 2.2.2. SUPPLIER: ITW TAPCON (ADVANCED THREADFORM)
 - 2.3. 2X WOOD BUCK OR 2X WOOD FRAMING WITH MINIMUM SPECIFIC GRAVITY OF 0.42.
 - 2.3.1. MINIMUM DIAMETER: NO. 10 PAN HEAD WOOD OR TAPPING SCREW
 - 2.3.2. EMBEDMENT: 1-3/8" MINIMUM
 - 2.3.3. EDGE DISTANCE: 1/2" MINIMUM
 - 2.3.4. MATERIAL: GRADE 2 MINIMUM
 - 2.3.5. MEETING: ANSI B18.6.1 WOOD SCREW OR ASME B18.6.4 THREAD FORMING/CUTTING TAPPING SCREWS
3. SEE SHEET 4 & 5 FOR SPECIFIC ANCHOR INSTALLATION DETAILS.
3. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH SUBSTRATE ANCHOR LOCATION SHOWN ON SHEET 2 & 3.
4. ANCHOR QUANTITIES AND SPACING / EMBEDMENT AND EDGE DISTANCE
 - 4.1. THE NUMBER OF INSTALLATION ANCHORS IS BASED ON THE MAXIMUM END DISTANCE (ED) AND THE MAXIMUM ON CENTER (O.C.) SPACING PLACEMENT OF ANCHORS IN ACCORDANCE WITH ELEVATIONS ON SHEET 2 & 3.
 - 4.2. END DISTANCES AND O.C. SPACINGS LESS THAN THAT SHOWN IN THE ELEVATIONS ON SHEET 2 & 3 ARE ACCEPTABLE.
 - 4.3. FOR SCREEN SIZES SMALLER THAN THOSE SHOWN, ANCHOR QUANTITIES CAN BE REDUCED WHILE MAINTAINING EDGE DISTANCE AND O.C. SPACING REQUIREMENTS.
 - 4.4. ANCHOR QUANTITIES AND SPACINGS SHOWN ARE BASED ON THE LOWER OF ANCHOR SPACING USED IN TESTING OR REQUIRED BY LOADING AT DESIGN PRESSURE.
5. FOR CONCRETE BLOCK APPLICATIONS DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS.
6. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTRUCTIONS AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED IN NOTE 2 ABOVE

PROJECT # 423-0409

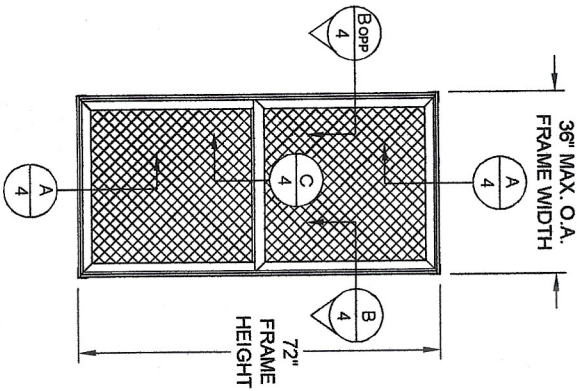
AH SCREENS, INC. 700 ATLANTIC ROAD, SUITE 101 Melbourne, FL 32904	
TITLE: MODEL H-2, EGRESS IMPACT SCREEN - LMI - NON-HVHZ GENERAL & INSTALLATION NOTES, PERFORMANCE RATING	
PREPARED BY: PIC	DRAWN BY: JRM
DATE: 5/25/2023	DRAWING NO: AHS0002
SCALE: NONE	SHEET: 1 OF 6
PTC PRODUCT DESIGN GROUP, LLC P.O. Box 520775 Longwood, FL 32750-0775 FBI/PC Cert. of Auth. No. 25925 Phone: 321.680.1768 Fax: 321.680.1769 Email: info@ptc-corp.com	

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JAMES D. WELLS, P.E.
Florida P.E. No. 53616



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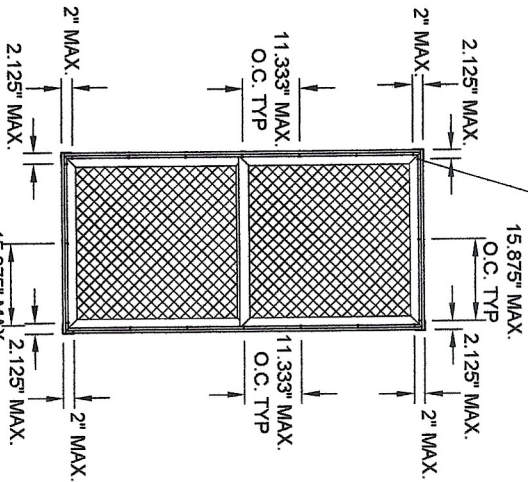


ELEVATION LAYOUT HURRICANE SCREEN EGRESS H-2

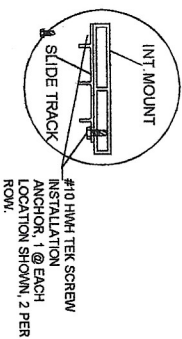
Anchor spacing and edge distance is maximum allowable +/- 1 inch tolerance. See Installation Note 4 on Sheet 1.

DESIGN PRESSURE RATING	IMPACT RATING
+ 80.0 PSIF / - 90.0 PSIF	LARGE AND SMALL MISSILE IMPACT

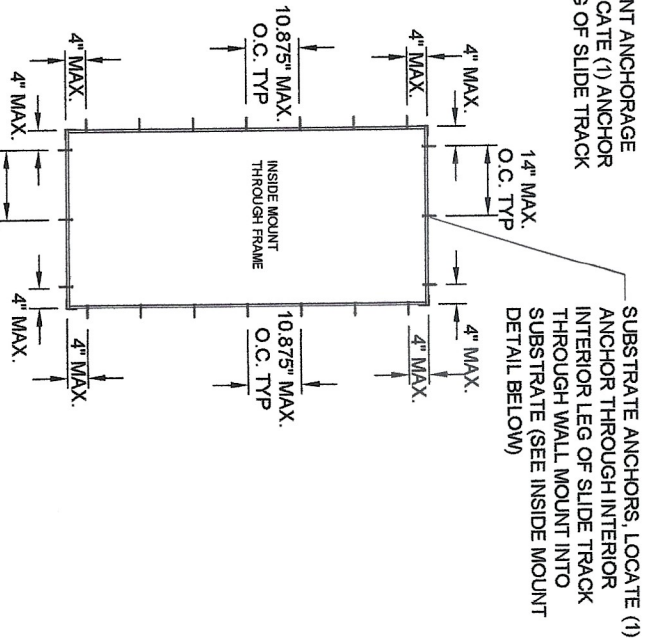
MISSILE LEVEL D, WIND ZONE 3 (NON-HVHZ)



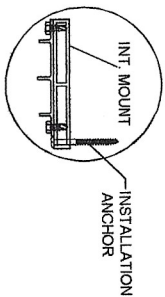
ANCHOR LAYOUT SUB-FRAME INSTALLATION



SLIDE TRACK TO WALL MOUNT INSTALLATION DETAIL



ANCHOR LAYOUT INTERIOR MOUNT INSTALLATION 3 ANCHORS HEAD/SILL 7 ANCHORS JAMBS



INSIDE MOUNT TO SUBSTRATE INSTALLATION DETAIL

PROJECT # 423-0409

AH SCREENS, INC.
700 ATLANTIC ROAD, SUITE 101
Melbourne, FL 32904

TITLE: MODEL H-2, EGRESS IMPACT SCREEN - LMI - NON-HVHZ
ELEVATIONS & ANCHOR LAYOUTS (THROUGH FRAME)

PREPARED BY: JRM	DATE: 5/25/2023
SCALE: NONE	DRAWING NO: AHS0002
REV: -	SHEET: 2 OF 6

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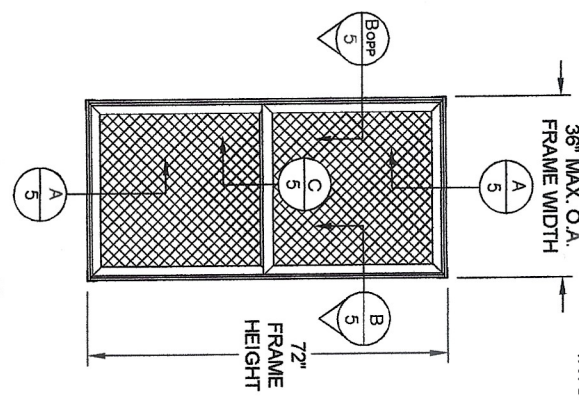
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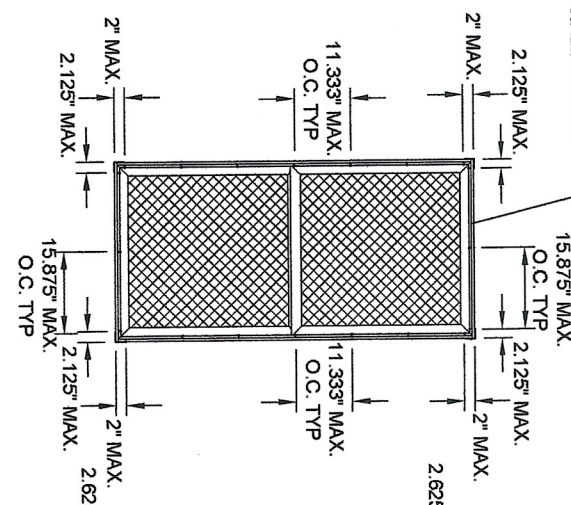
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SLIDE TRACK TO WALL MOUNT ANCHORAGE
(SEE TABLE THIS SHEET) LOCATE (1) ANCHOR
THROUGH EACH OUTER LEG OF SLIDE TRACK
INTO WALL MOUNT.

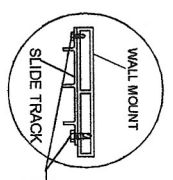


**ELEVATION LAYOUT
HURRICANE SCREEN
EGRESS H2**

Anchor spacing and edge distance is maximum allowable +/-
1 inch
tolerance. See Installation Note 4 on Sheet 1.

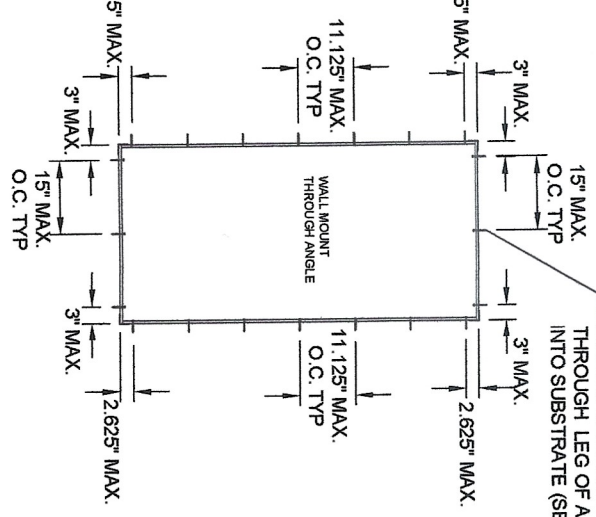


**ANCHOR LAYOUT
SUB-FRAME
INSTALLATION**

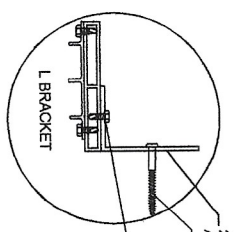


**SLIDE TRACK TO WALL MOUNT
INSTALLATION DETAIL**

SUBSTRATE ANCHORS. LOCATE (1) ANCHOR
THROUGH LEG OF ALUMINUM ANGLE BRACKET
INTO SUBSTRATE (SEE WALL DETAIL BELOW).



**ANCHOR LAYOUT
SUBSTRATE INSTALLATION
WALL MOUNT
3 ANCHORS HEADSILL
7 ANCHORS JAMBS**



**WALL MOUNT TO SUBSTRATE
INSTALLATION DETAIL**

DESIGN PRESSURE RATING	IMPACT RATING
+ 90.0 PSF / - 90.0 PSF	LARGE AND SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 3 (NON-HVHZ)

PROJECT # 423-0409

AH SCREENS, INC.
700 ATLANTIC ROAD, SUITE 101
Melbourne, FL 32904

TITLE: MODEL H-2, EGRESS IMPACT SCREEN - LMI - NON-HVHZ
ELEVATIONS & ANCHOR LAYOUTS (WALL MOUNT)

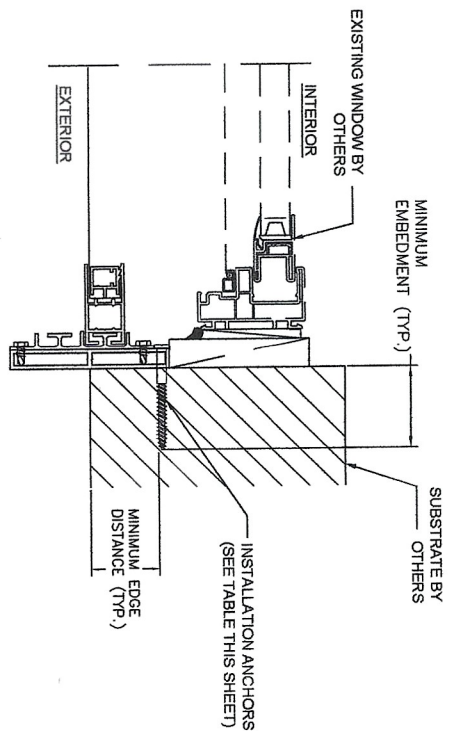
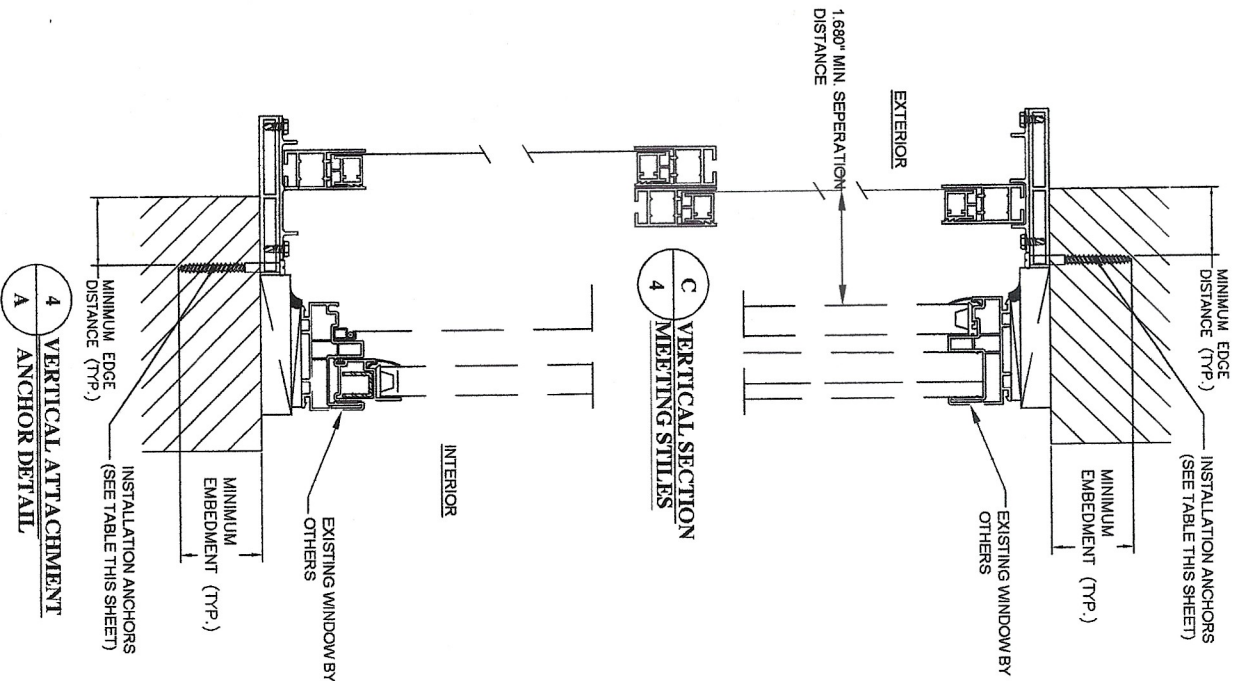
PREPARED BY: PTC	UNOWN BY: JRM	DATE: 5/25/2023
SCALE: NONE	DRAWING NO: AHS0002	
REV: --	SHEET: 3 OF 6	

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Florida P.E. No. 55616

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INSTALLATION ANCHOR REQUIREMENTS TABLE				
ANCHOR REQUIREMENTS				
ANCHORING METHOD	SUBSTRATE	ANCHOR SCHEDULE	MIN. EMBED. (IN)	MIN. EDGE DISTANCE (IN)
THROUGH FRAME	WOOD	MIN. 0.42 S.G. (NON-HVHZ)	#10 WOOD SCREW	1-3/8
	CONCRETE	2500 P.S.I. MIN. CONCRETE	3/16 T1W TA-PCON	1-1/2
	CMU	ASTM C90 (MED. WT. DENSITY) > 117 P.C.F. MASONRY (CMU) MIN.	3/16 T1W TA-PCON	1
NOTES:				
1)	CONCRETE AND MASONRY (BLOCK/CMU) SUBSTRATE ANCHORS TO BE 3/16" DIAMETER T1W ADVANCED THREADED/FORM TECHNOLOGIES CONCRETE SCREWS.			
2)	WOOD FRAME SUBSTRATE ANCHORS USE NO. 10 WOOD SCREW ANCHORS (ANSI B18.6.1) WITH MIN. GRADE 2 STRENGTH.			

4 VERTICAL ATTACHMENT ANCHOR DETAIL

B ANCHOR DETAIL HORIZONTAL ATTACHMENT

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Date: 2023.12.20
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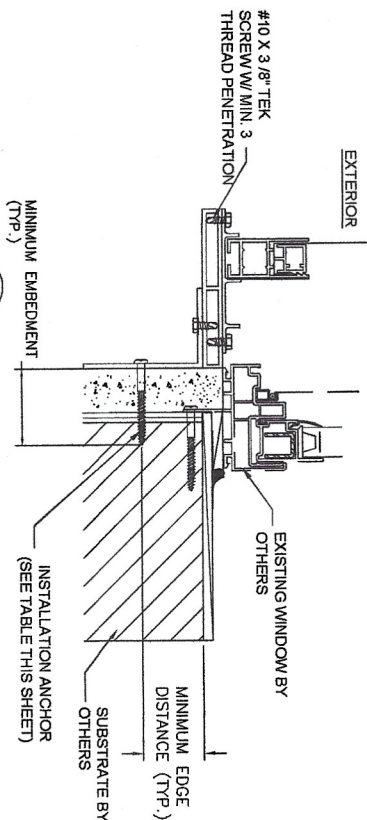
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TITLE: MODEL H-2, EGRESS IMPACT SCREEN - LMI - NON-HVHZ ANCHORAGE DETAILS - INSIDE MOUNT	
PREPARED BY: PTC	DRAWN BY: JRM
DATE: 5/25/2023	SCALE: NONE
REV: 1	SHEET: 4 OF 6

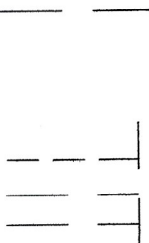
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PROJECT # 423-0409			
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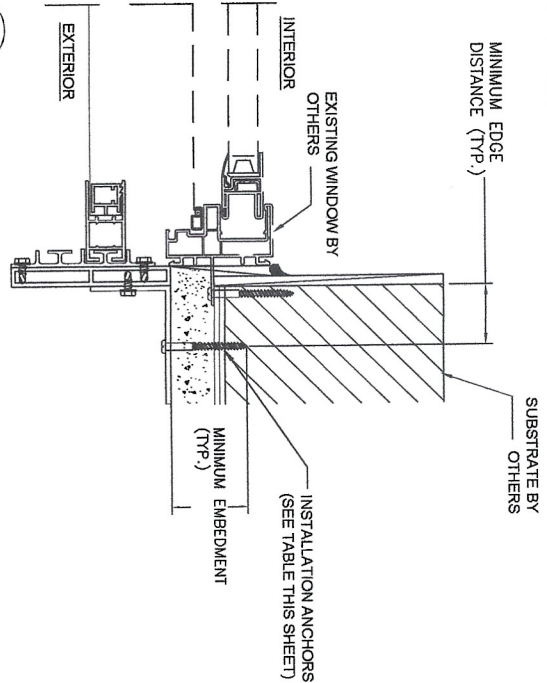
**A ANCHOR DETAIL
VERTICAL ATTACHMENT**



**C VERTICAL SECTION
MEETING STILES**



**B ANCHOR DETAIL
HORIZONTAL ATTACHMENT**



INSTALLATION ANCHOR REQUIREMENTS TABLE					
ANCHORING METHOD		ANCHOR REQUIREMENTS			
	SUBSTRATE	ANCHOR SCHEDULE	MIN. EMBED. (IN)	MIN. EDGE DISTANCE (IN)	
WALL MOUNT	WOOD	MIN. 0.42 S.G. (NOR-HVHZ)	#10 WOOD SCREW	1-3/8	1/2
	CONCRETE	2500 PSI MIN.	1/4 INW TAPCON	1-1/2	1-1/2
	CONCRETE	ASTM C90 MED. WT. (DENSITY) > 117 PCF	1/4 INW TAPCON	1	2
	CMU	MASONRY (CMU) MIN.	1/4 INW TAPCON	1	2
NOTES:					
1)	CONCRETE AND MASONRY (BLOCK/CMU) SUBSTRATE ANCHORS TO BE 1/4" DIAMETER 1/4" ADVANCED THREADFORM TECHNOLOGIES CONCRETE SCREWS.				
2)	WOOD FRAME SUBSTRATE ANCHORS USE NO. 10 WOOD SCREW ANCHORS (ANSI B19.6.1) WITH MIN. GRADE 2 STRENGTH.				

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 James D Wells Jr
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TITLE: MODEL H-2, EGRESS IMPACT SCREEN - LMI - NON-HVHZ ANCHORAGE DETAILS - WALL MOUNT
 PREPARED BY: JRM
 SCALE: NONE
 REV: 1

DATE: 5/25/2023
 DRAWING NO: AHS0002
 SHEET: 5 OF 6

PROJECT # 423-0409			
REV	DESCRIPTION	DATE	BY

