

QMI

STORMSAFE SCREEN - OPERABLE IMPACT SCREEN - HVHZ

INSTALLATION AND ANCHORAGE DETAILS

GENERAL NOTES:

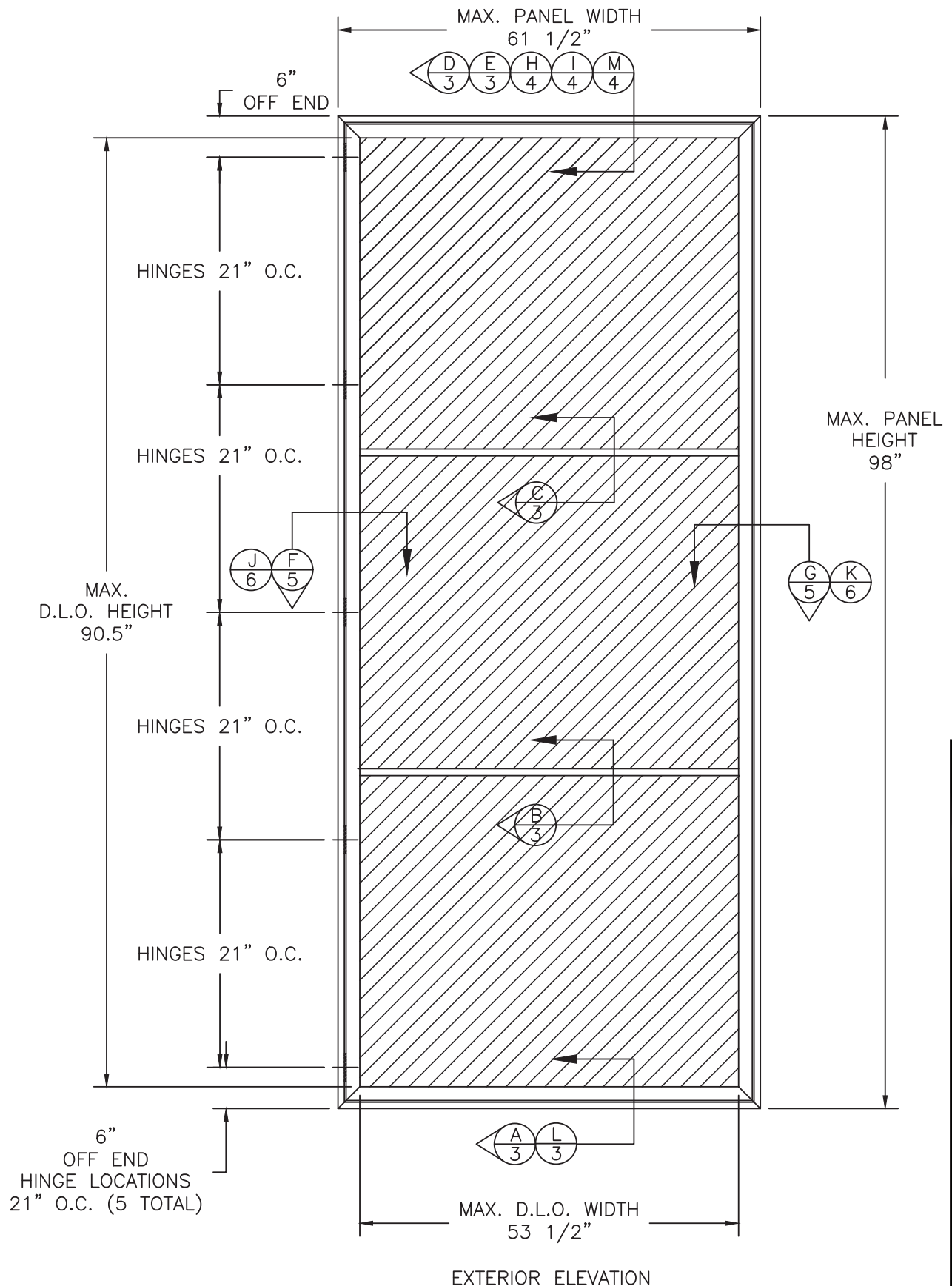
1. THIS PRODUCT IS DESIGNED TO COMPLY WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC) REQUIREMENTS INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ) AT THE DESIGN PRESSURE(S) STATED HEREIN. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORT # Q4160.01-450-18 R1 AND ASSOCIATED LABORATORY STAMPED DRAWINGS AND NAMI WAIVER OF RETEST NO. W-2113.
2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE / MASONRY AND 2X FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE STRUCTURE IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD.
3. MATERIALS:
 - 3.1. IMPACT SCREEN MATERIAL: 304 STAINLESS STEEL
 - 3.2. PANEL FRAME MATERIAL: 6005-T5 ALUMINUM ALLOY
 - 3.3. CORNER KEY MATERIAL: 6061-T6 ALUMINUM ALLOY
4. A MINIMUM SEPARATION DISTANCE OF 4 INCH SHALL BE PROVIDED FOR ALL INSTALLATIONS.

INSTALLATION NOTES:

1. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN.
2. THE NUMBER OF INSTALLATION ANCHORS BASED ON THE EDGED DISTANCE AND ON CENTER SPACING REQUIREMENTS IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION.
3. THE OPERABLE SCREENS MAY BE MOUNTED DIRECTLY TO THE CONCRETE / MASONRY OR WOOD SUBSTRATE, PROVIDED THE ANCHOR QUANTITY AND SPACING IS MAINTAINED.
4. FOR INSTALLATION OF THE ALUMINUM SUB-FRAME INTO WOOD FRAMING, USE 1/4" LAG SCREWS OF SUFFICIENT LENGTH TO ACHIEVE 1 1/2 INCH MINIMUM EMBEDMENT. MINIMUM EDGE DISTANCE IS 1 INCH.
5. FOR INSTALLATION OF THE ALUMINUM SUB-FRAME THROUGH 1X BUCK TO CONCRETE / MASONRY OR DIRECTLY INTO CONCRETE / MASONRY, USE 1/4 INCH ITW TAPCONS MEETING THE FOLLOWING INSTALLATION REQUIREMENTS::
 - 5.1. CONCRETE SUBSTRATE
 - 5.1.1. 1 1/2 INCH MINIMUM EMBEDMENT. & 1 1/2 MINIMUM EDGE DISTANCE.
 - 5.2. MASONRY (CMU) SUBSTRATE
 - 5.2.1. 1 INCH MINIMUM EMBEDMENT. & 2 MINIMUM EDGE DISTANCE.
6. FOR INSTALLATION OF THE SCREEN FRAME INTO THE ALUMINUM SUB-FRAME, USE #12 X 3/4 INCH HEX HEAD SMS SCREWS
7. MINIMUM EDGE DISTANCE AND EMBEDMENT EXCLUDE WALL FINISHES (INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER AND SIDING).
8. FOR CONCRETE BLOCK APPLICATIONS, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS.
9. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.
10. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
 - 10.1. WOOD - MINIMUM SPECIFIC GRAVITY IS 0.55.
 - 10.2. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.
 - 10.3. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, MEDIUM WEIGHT, DENSITY > 117 PCF.

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4	VERTICAL SECTIONS - OPTIONAL MULLION
5 & 6	HORIZONTAL SECTIONS
7	BILL OF MATERIALS & COMPONENTS

DESIGN PRESSURE RATING (PSF)	IMPACT RATING
+47.0/-53.0	LARGE & SMALL MISSILE IMPACT



PROJECT NO. 423-1202						
	B	A	REV	DATE	DESCRIPTION	BY
	1/28/24	5/6/15	RJA	RJA	RJA	RJA

1661 GLENLAKE AVE.
ITASCA, IL 60143

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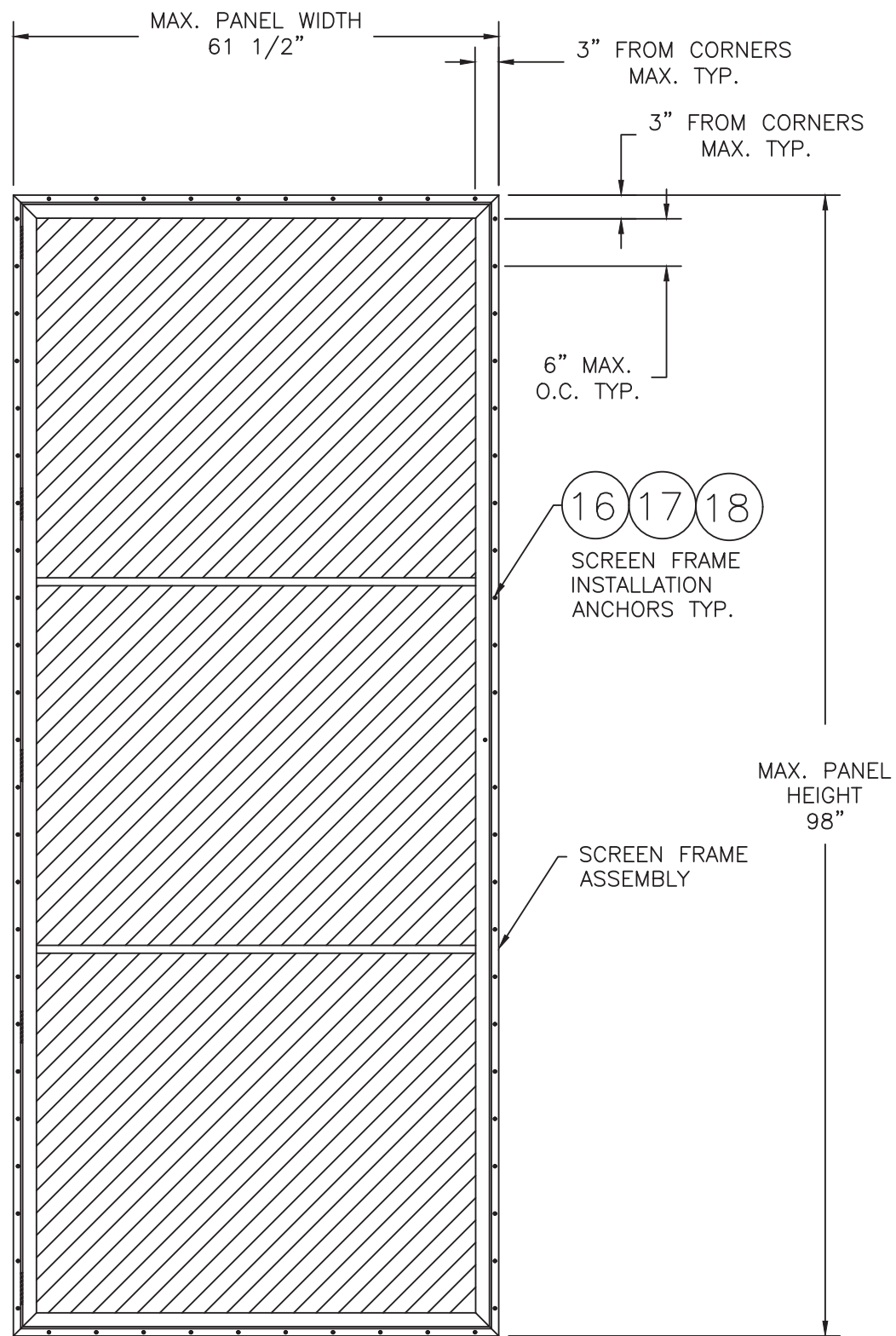
TITLE: STORMSAFE SCREEN - OPERABLE IMPACT SCREEN - HVHZ
GENERAL & INSTALLATION NOTES - ELEVATION

DRAWN BY:	RJA	DATE:	12/09/12	DRAWING NO.:	QMI0004
SCALE:	N.T.S.	REV:	B	SHEET:	1 OF 7

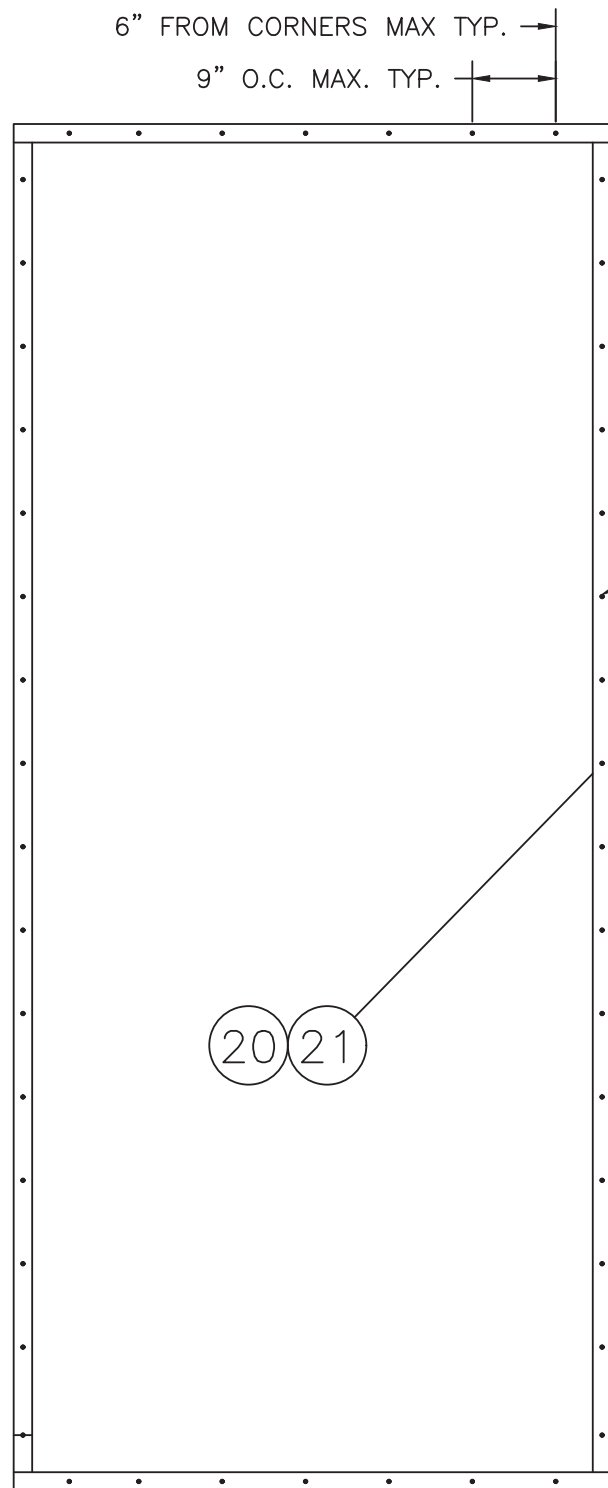
FBPE

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SCREEN FRAME ASSEMBLY TO SUPPORTING SUBSTRATE ANCHORING EXTERIOR ELEVATION



ALUMINUM TUBE (ITEM NO. 20 OR 21) SUB-FRAME TO SUBSTRATE/WALL ANCHORING EXTERIOR ELEVATION

NOTES:

1. SUB-FRAME IN CONCRETE:
 - 1.1. 1/4" DIA. HEX HD. I.T.W. BUILDEX TAPCON ANCHORS OF SUFFICIENT LENGTH TO ACHIEVE THE FOLLOWING
 - 1.1.1. CONCRETE SUBSTRATE
 - 1.1.1.1. 1-1/2" MIN. EMBEDMENT
 - 1.1.1.2. 1-1/2" MIN. EDGE DISTANCE
 - 1.1.2. MASONRY (CMU) SUBSTRATE
 - 1.1.2.1. 1" MIN. EMBEDMENT
 - 1.1.2.2. 2" MIN. EDGE DISTANCE
 - 1.2. SPACE 1/4" DIA. I.T.W. BUILDEX TAPCONS 6" FROM CORNERS & 9" O.C. MAX. THEREAFTER.
2. SUB-FRAME IN WOOD FRAMING:
 - 2.1. 1/4" LAG WOOD SCREW ANCHORS WITH MIN. GRADE 2 MATERIAL STRENGTH OF SUFFICIENT LENGTH TO ACHIEVE A MIN. EMBEDMENT OF 1-1/2" INTO WOOD FRAMING AND MIN. EDGE DISTANCE OF 1" TO WOOD FRAMING EDGE.
 - 2.2. SPACE 1/4" LAG WOOD SCREWS 6" FROM CORNERS & 9" O.C. MAX. THEREAFTER.
3. SCREEN FRAME TO ALUMINUM TUBE:
 - 3.1. #12 X 3/4" HEX HD. SMS SPACE 3" FROM CORNERS AND 6" O.C. MAX. THEREAFTER.

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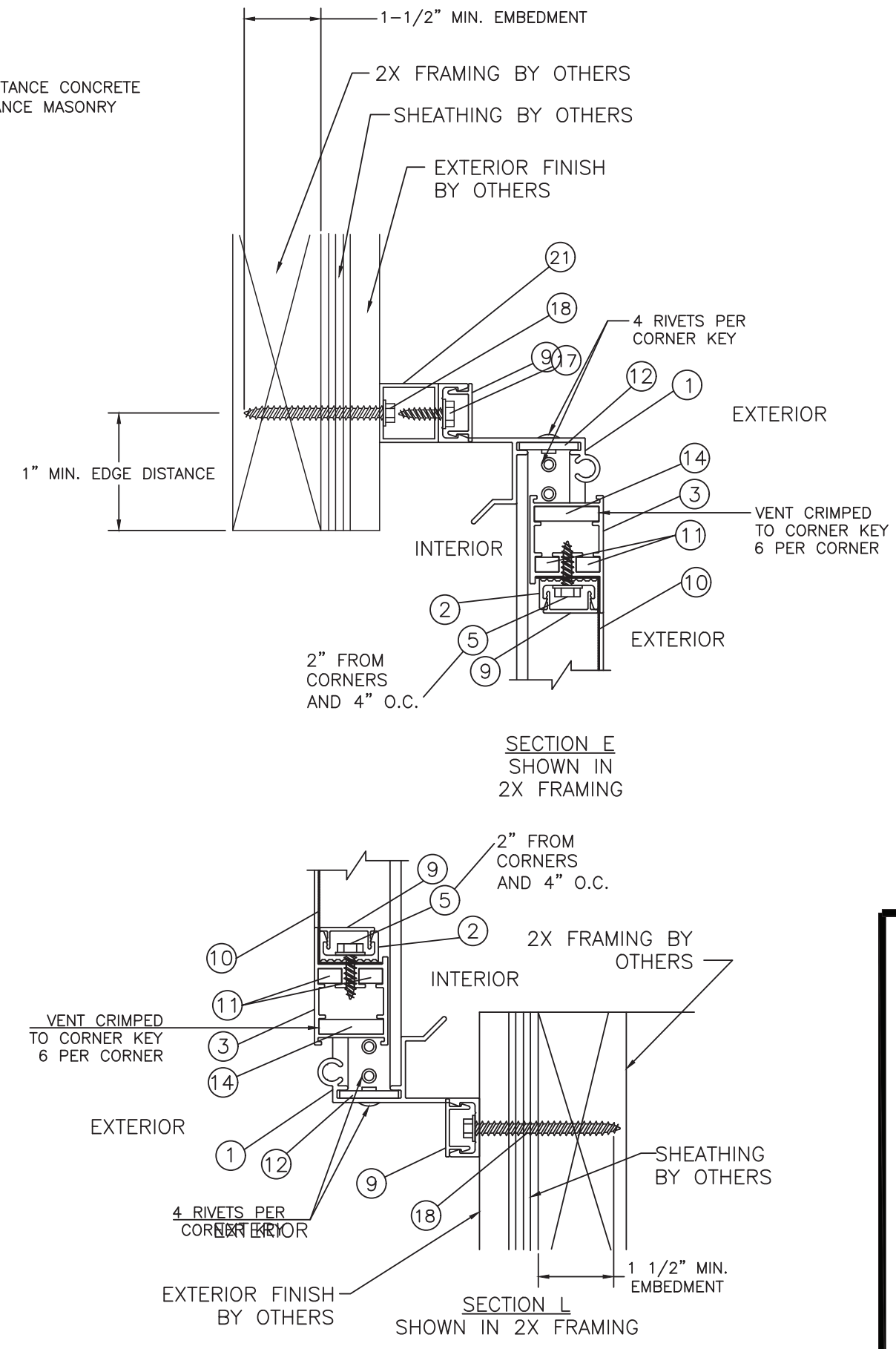
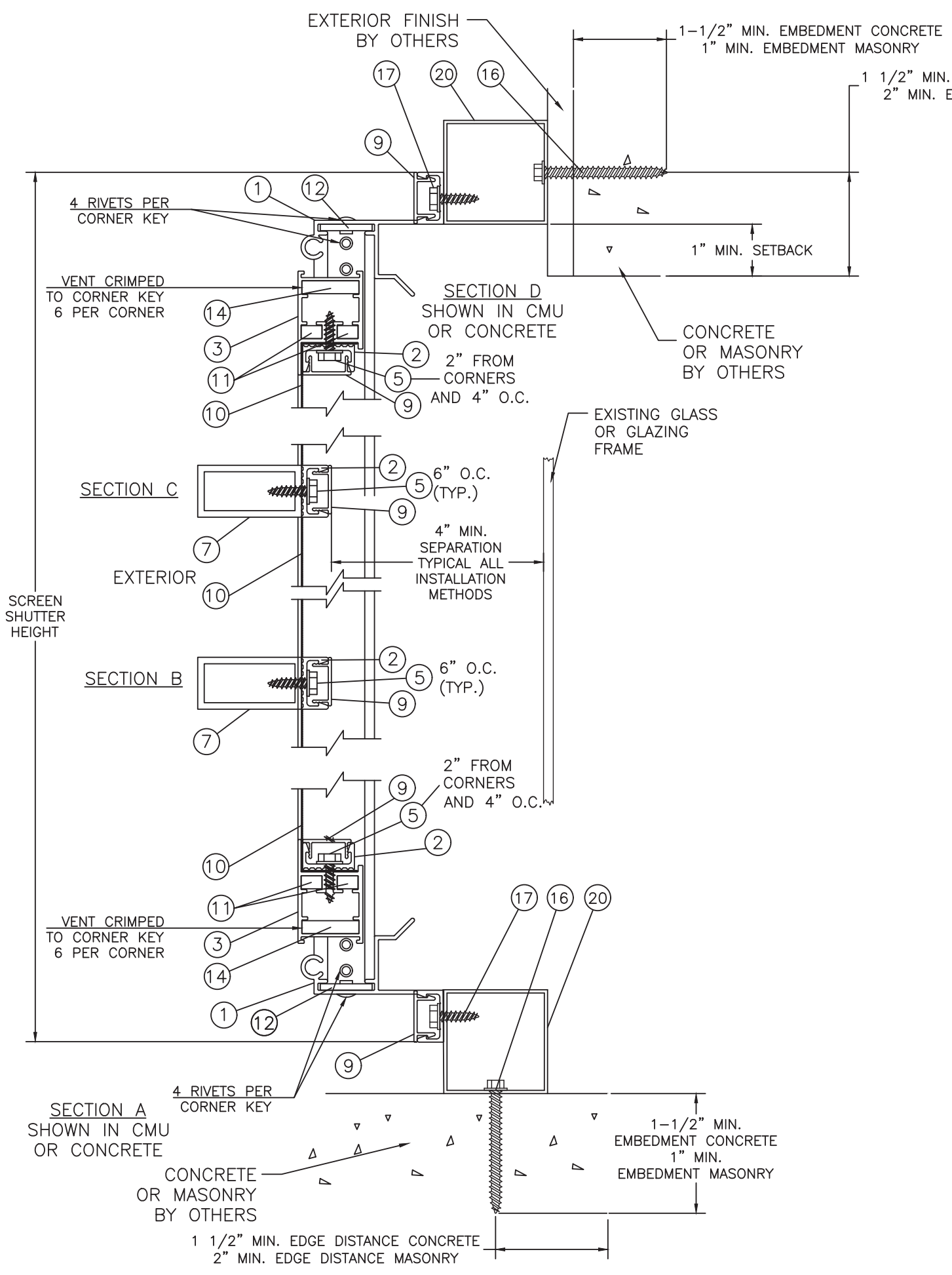
TITLE: STORMSAFE SCREEN - OPERABLE IMPACT SCREEN - HVHZ ELEVATION & ANCHOR LAYOUTS

DATE:	12/09/12
DRAWING NO:	QMI0004
SHEET:	2 OF 7
DRAWN BY:	RJA
SCALE:	N.T.S.
REV:	B

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PROJECT NO. 423-1202

REV	DESCRIPTION	DATE	BY
B	UPDATE TO 8TH ED. (2023) FLORIDA BUILDING CODE	1/28/24	RJA
A	UPDATE TO 5TH ED. (2014) FLORIDA BUILDING CODE	5/6/15	RJA



PROJECT NO. 423-1202

DATE	12/28/24	BY	RJA
DESCRIPTION	UPDATE TO 8TH ED. (2023) FLORIDA BUILDING CODE	DATE	5/6/15
REV	A	DESCRIPTION	UPDATE TO 5TH ED. (2014) FLORIDA BUILDING CODE

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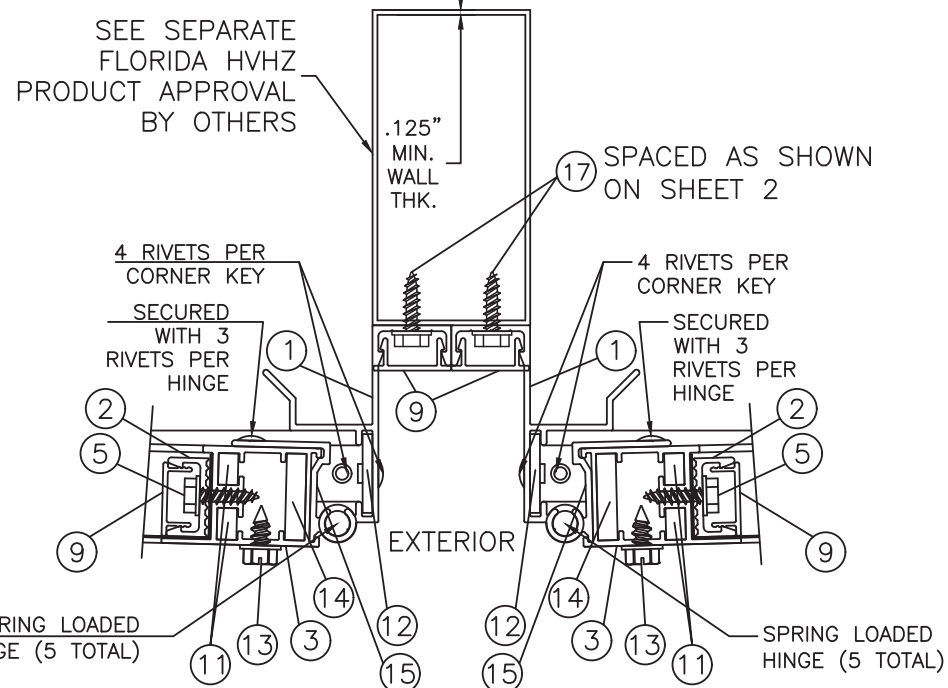
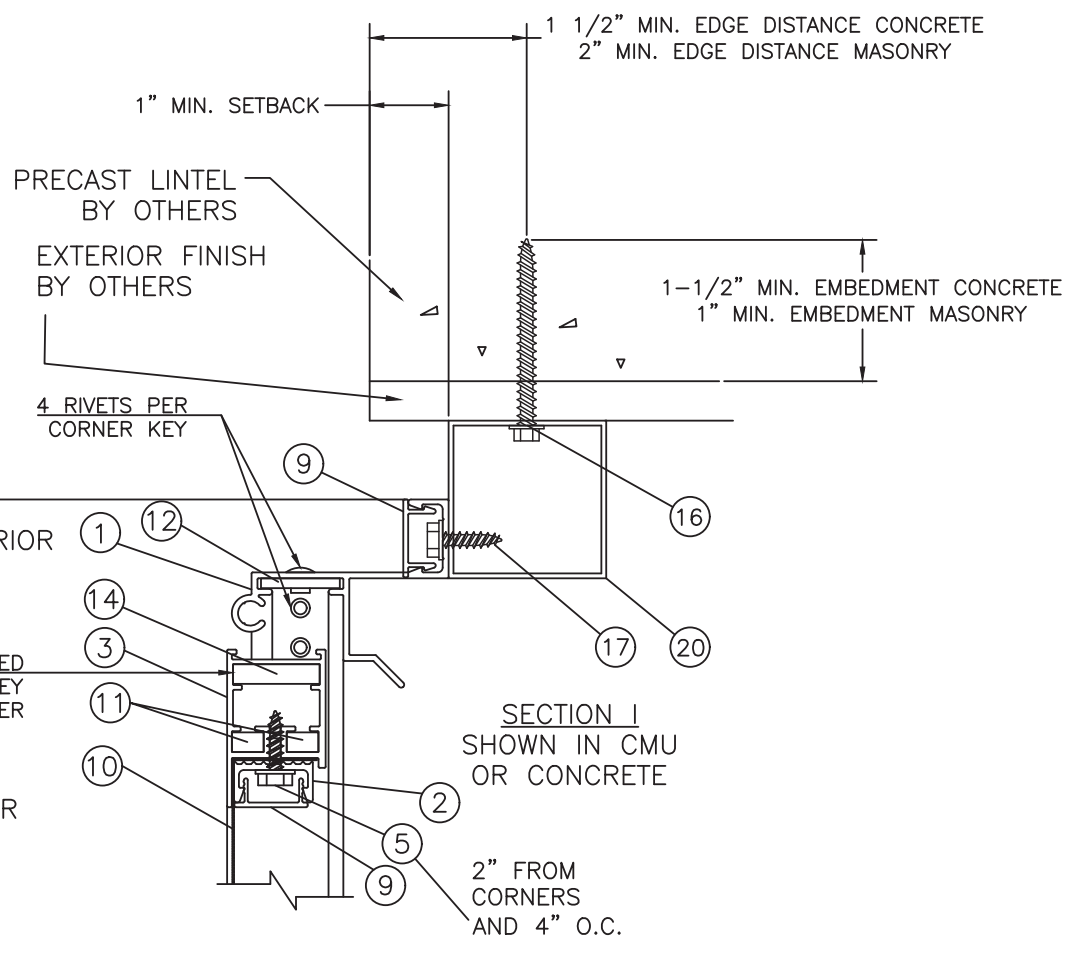
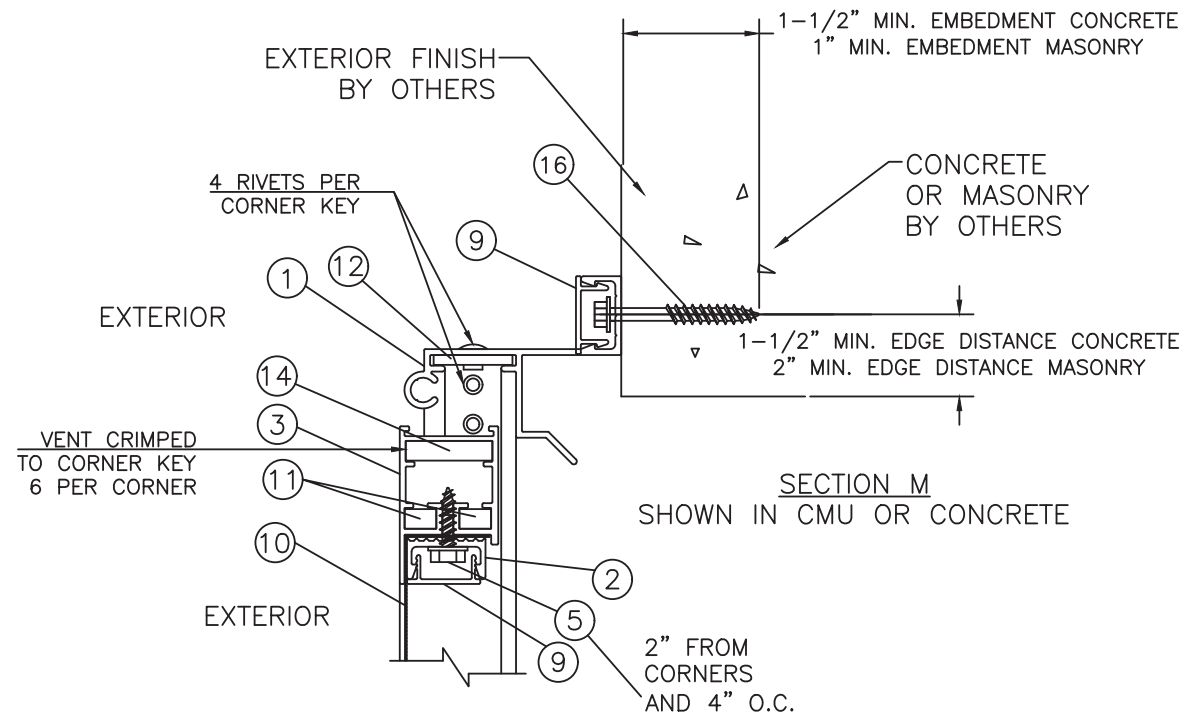
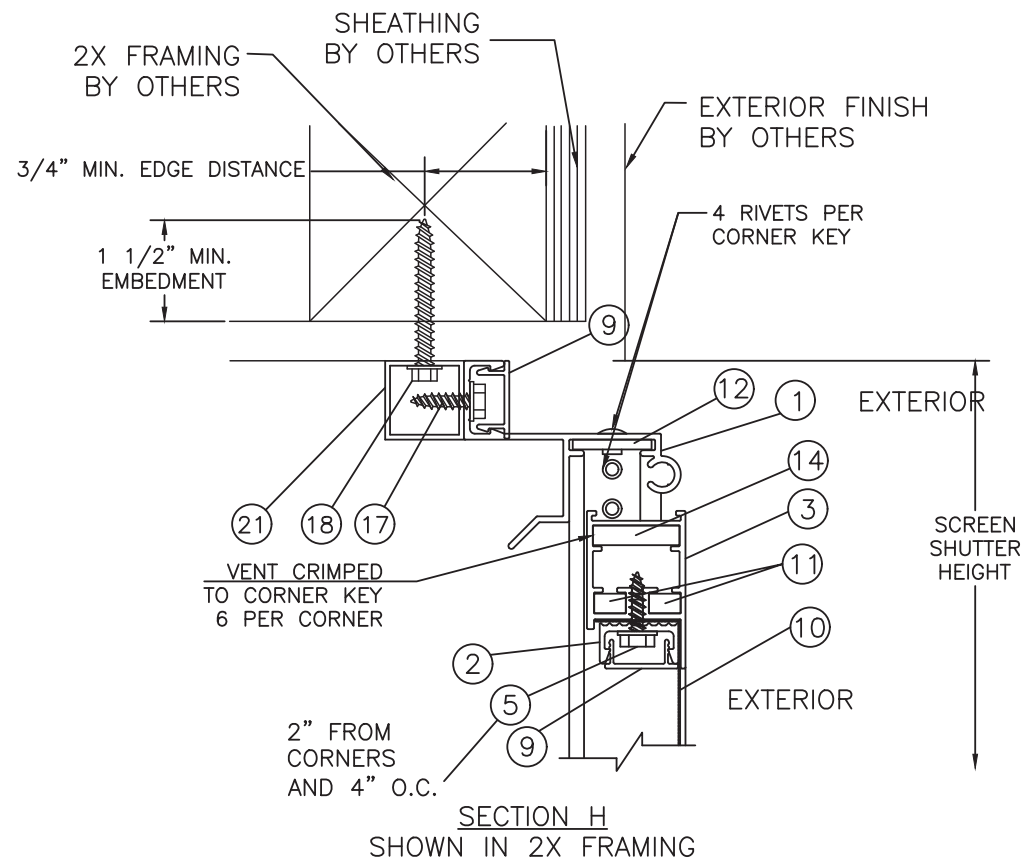
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PREPARED BY: RJA
SCALE: N.T.S.
REV: B

DATE: 12/09/12
DRAWING NO: QMI0004
SHEET: 3 OF 7

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OPTIONAL ALUM. MULLION
INSTALLATION, SEE SEPARATE
FLORIDA HVHZ PRODUCT APPROVAL

NOTES:

- 2" ALUMINUM TUBE HAS A 1" MIN. SETBACK DISTANCE FROM EDGE IN CONCRETE/MASONRY INSTALLATION.
- 1" ALUMINUM TUBE HAS A 1 1/2" MIN. SETBACK DISTANCE FROM EDGE IN CONCRETE/MASONRY INSTALLATION.

PROJECT NO. 423-1202

DATE	5/6/15	BY	RJA
DESCRIPTION	UPDATE TO 5TH ED. (2014) FLORIDA BUILDING CODE	REV	A
DESCRIPTION	UPDATE TO 8TH ED. (2023) FLORIDA BUILDING CODE	REV	B
DATE	1/28/24	BY	RJA

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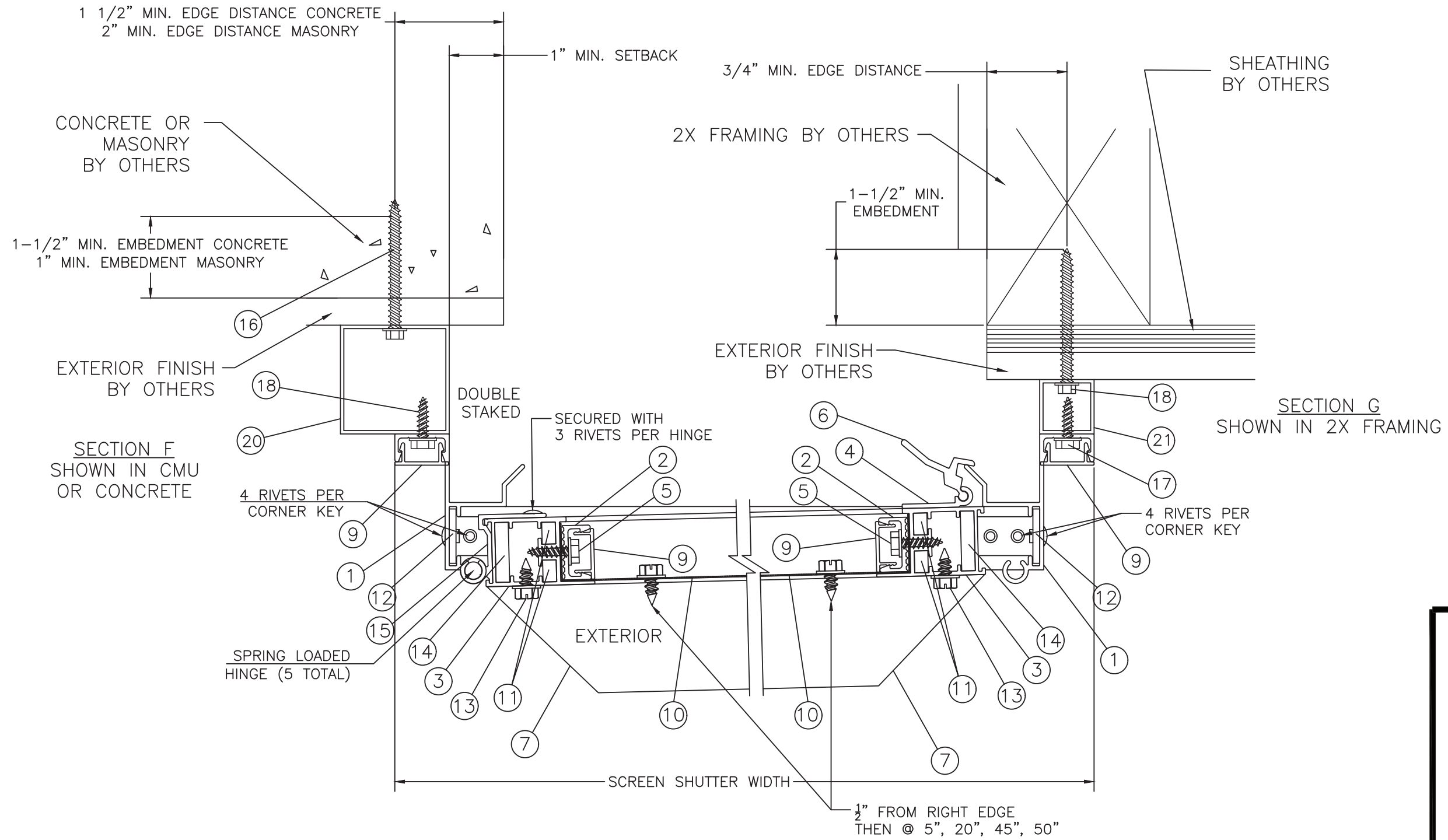
QMI
STORMSAFE SCREEN - OPERABLE IMPACT SCREEN - HVHZ
VERTICAL SECTIONS - OPTIONAL MULLION

DATE: 12/09/12
DRAWING NO: QM10004
SHEET: 4 OF 7

DRAWN BY: RJA
SCALE: N.T.S.
REV: B

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PROJECT NO. 423-1202

			RJA	BY
		1/28/24	RJA	DATE
B	UPDATE TO 8TH ED. (2023) FLORIDA BUILDING CODE			
A	UPDATE TO 5TH ED. (2014) FLORIDA BUILDING CODE	5/6/15	RJA	
REV	DESCRIPTION			

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ITASCA, IL 60143

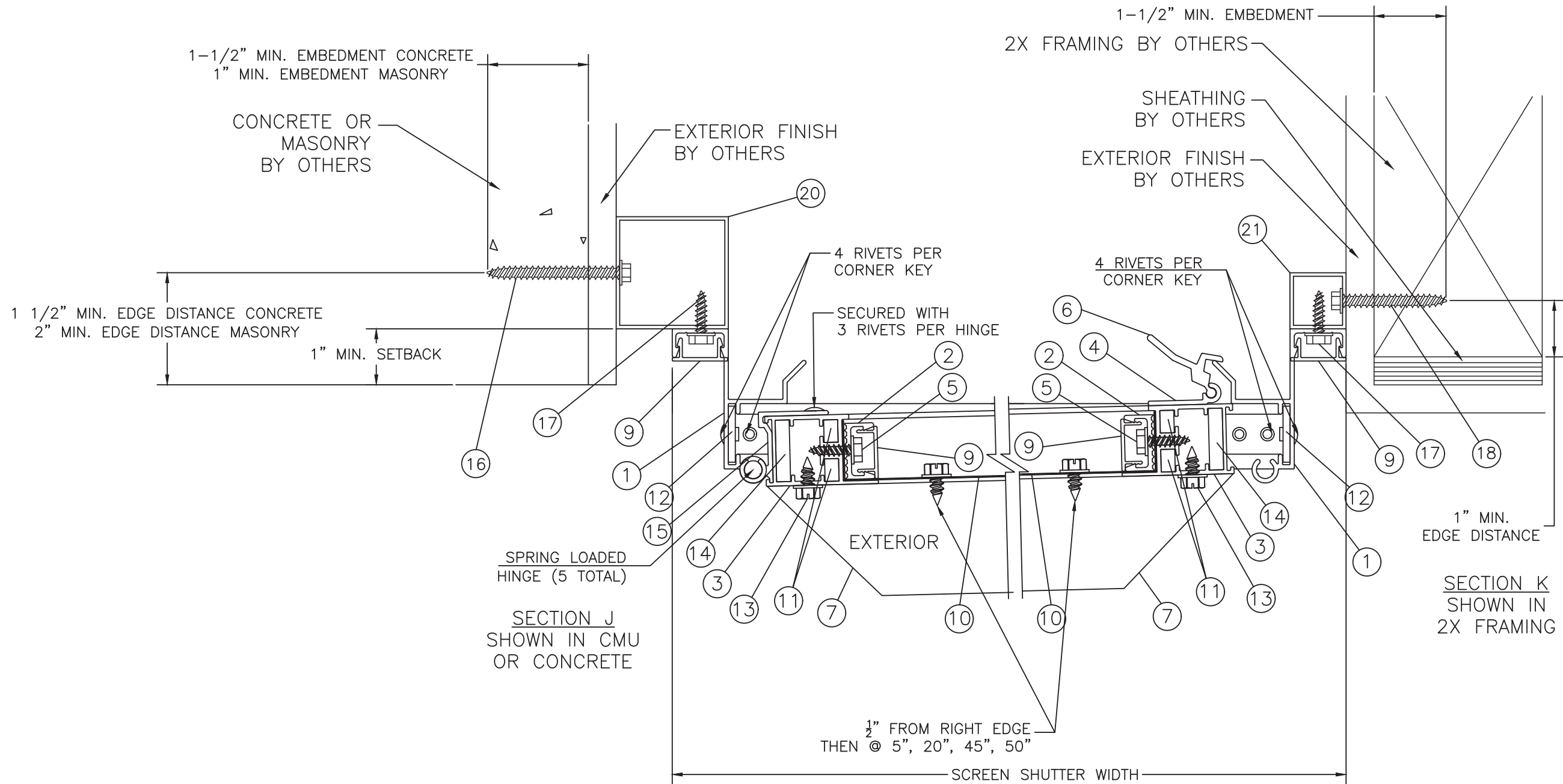
TITLE: STORMSAFE SCREEN - OPERABLE IMPACT SCREEN - HVHZ
HORIZONTAL SECTIONS

DRAWN BY:	RJA	DATE:	12/09/12
SCALE:	N.T.S.	DRAWING NO.:	QM10004
REV:	B	SHEET:	5 OF 7



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PROJECT NO. 423-1202

UPDATE TO 8TH ED. (2023) FLORIDA BUILDING CODE	1/28/24	RJA	BY
UPDATE TO 5TH ED. (2014) FLORIDA BUILDING CODE	5/6/15	RJA	DATE
REV	DESCRIPTION		

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TITLE: STORMSAFE SCREEN - OPERABLE IMPACT SCREEN - HVHZ
HORIZONTAL SECTIONS

DATE: 12/09/12

DRAWING NO: QMI0004

SHEET: 6 OF 7

PREPARED BY: B

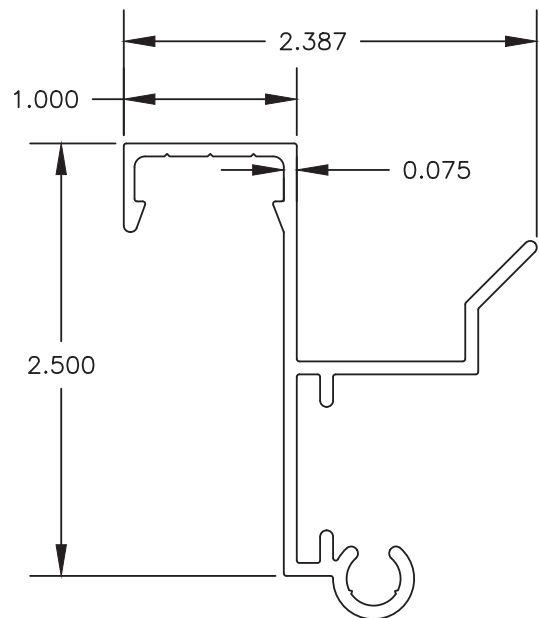
SCALE: N.T.S.

REV: B

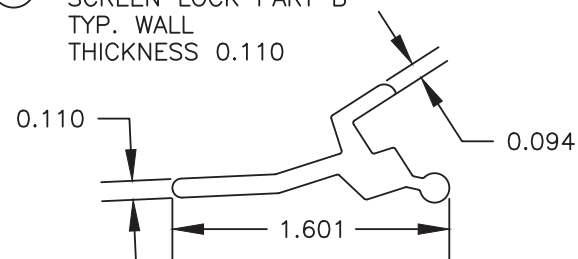
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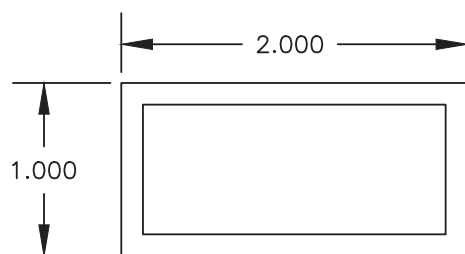
① FRAME HEAD, SILL & JAMB
TYP. WALL THICKNESS 0.075



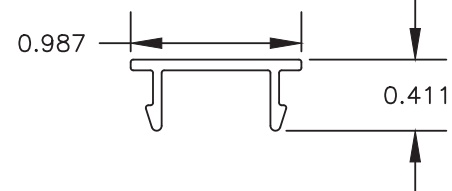
⑥ SCREEN LOCK PART B
TYP. WALL THICKNESS 0.110



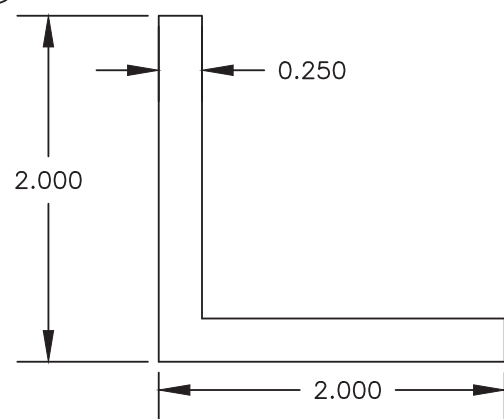
⑦ 1" X 2" ALUMINUM TUBE
TYP. WALL THICKNESS 0.125



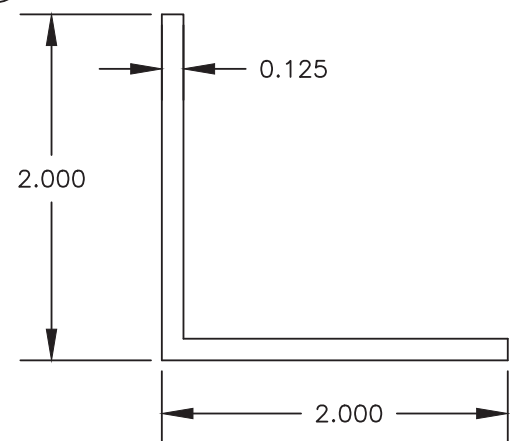
⑨ SCREW COVER
TYP. WALL THICKNESS 0.050



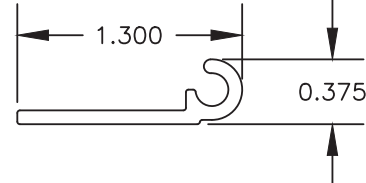
⑪ ⑭ 2" X 2" X 1/4" CORNER KEY



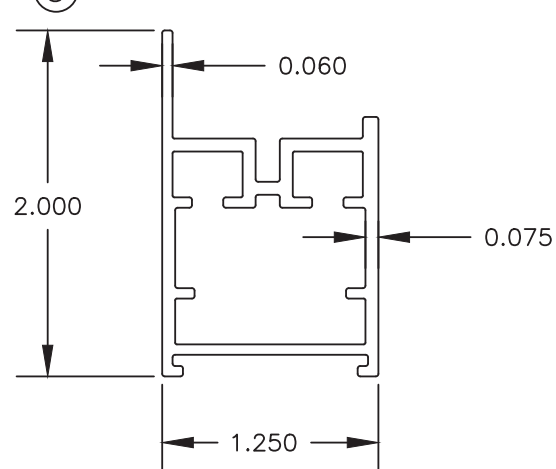
⑫ 2" X 2" X 1/8" CORNER KEY



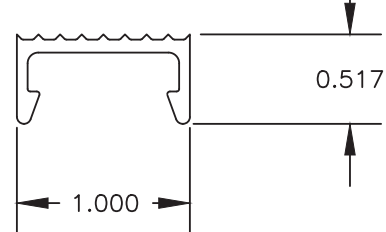
④ SCREEN LOCK PART A
TYP. WALL THICKNESS 0.080



③ VENT HEAD, SILL & JAMB
TYP. WALL THICKNESS 0.075



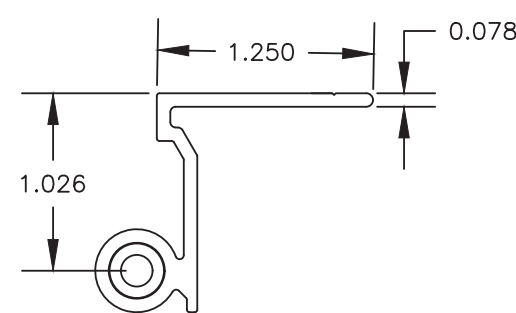
② WIRE RETAINER
TYP. WALL THICKNESS 0.075



BILL OF MATERIALS

ITEM #	DESCRIPTION
1	FRAME HEAD, SILL & JAMB 6005-T5 ALUMINUM
2	WIRE RETAINER 6005-T5 ALUMINUM
3	VENT HEAD, SILL & JAMB 6005-T5 ALUMINUM
4	SCREEN LOCK PART A 6005-T5 ALUMINUM
5	#12-14 X 3/4" HEX HEAD SMS SCREW
6	SCREEN LOCK PART B 6005-T5 ALUMINUM
7	1" X 2" ALUMINUM TUBE 6063-T5
8	NOT USED
9	SCREW COVER 6005-T5 ALUMINUM
10	MESH 12X12 SCREEN SS 304 THREAD 0.060" THICK
11	VENT CORNER KEY 2" X 2" X 1/4" LONG 6061-T6 ALUMINUM
12	FRAME CORNER KEY 2" X 2" X 1/8" 6061-T6 ALUMINUM
13	#14 X 1/2" TEK SCREW
14	VENT CORNER KEY 2" X 2" X 1/4" 6061-T6 ALUMINUM
15	OPERABLE FRAME HINGE (SPRING LOADED) 6005-T5 ALUMINUM
16	1/4" HEX HEAD ITW TAPCON
17	#12 -14 X 3/4" HEX HEAD SMS
18	1/4" LAG SCREW
19	NOT USED
20	2" X 2" X 1/16" ALUMINUM TUBE 6063-T5
21	1" X 1" & 1" X 2" X 1/16" ALUMINUM TUBE 6063-T5

⑮ OPERABLE FRAME HINGE



PROJECT NO. 423-1202

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TITLE: STORMSAFE SCREEN - OPERABLE IMPACT SCREEN - HVHZ
COMPONENTS & BILL OF MATERIALS

DATE:	12/09/12
DRAWING NO.:	QMI0004
SHEET:	7 OF 7
DRAWN BY:	RJA
SCALE:	N.T.S.
REV:	B

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		REV	DESCRIPTION