

MELFL, INC.

HURRICANE SCREEN NO. 1 (HS1)

INSTALLATION ANCHORAGE DETAILS

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN TESTED, EVALUATED AND DESIGNED TO COMPLY WITH REQUIREMENTS OF THE 2018 IBC AND 2018 IRC AT THE DESIGN PRESSURES SHOWN ON SHEET 1.
2. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORT LAB NO. 10870 AND ASSOCIATED LABORATORY DRAWINGS BY FTL, MEDLEY, FL 33166, SIGNED AND SEALED BY IDALMIS ORTEGA, FL PE NO. 76905.
3. THIS PRODUCT EVALUATION DOCUMENT IS APPROVED FOR USE IN WINDBORNE DEBRIS REGIONS.
4. 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.
5. 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.
6. WHEN INSTALLED IN LOCATIONS WHERE WINDBORNE DEBRIS PROTECTION REQUIREMENTS EXIST, THIS PRODUCT DOES NOT REQUIRE OPENING PROTECTION.
7. 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.
8. THESE DRAWINGS CERTIFY THE IMPACT SCREEN INSTALLATION ONLY.
9. SEE IMPACT SCREEN-TO-FENESTRATION SEPARATION REQUIREMENTS ON SHEET 3.

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. MINIMUM DIAMETER: 1/4"
 - 2.1.2. EMBEDMENT: 1-1/2" MINIMUM
 - 2.1.3. EDGE DISTANCE: 1-1/4" MINIMUM
 - 2.1.4. SUPPLIER: ITW TAPCON (ADVANCED THREADFORM)
 - 2.2. MASONRY (CMU/BLOCK) MEETING ASTM C90, MEDIUM WEIGHT
 - 2.2.1. MINIMUM DIAMETER: 1/4"
 - 2.2.2. EMBEDMENT: 1" MINIMUM
 - 2.2.3. EDGE DISTANCE: 2" MINIMUM
 - 2.2.4. SUPPLIER: ITW TAPCON (ADVANCED THREADFORM)
 - 2.3. 2X WOOD BUCK OR 2X WOOD FRAMING WITH MINIMUM SPECIFIC GRAVITY OF 0.55.
 - 2.3.1. MINIMUM DIAMETER: NO. 14 PAN HEAD WOOD OR TAPPING SCREW
 - 2.3.2. EMBEDMENT: 1-1/2" MINIMUM
 - 2.3.3. EDGE DISTANCE: 1" 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 3 FOR SPECIFIC ANCHOR INSTALLATION DETAILS.
3. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN ON SHEET 2.
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.
 - 4.2. END DISTANCES AND O.C. SPACINGS LESS THAN THAT SHOWN IN THE ELEVATIONS ON SHEET 2 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 INSTALLATION INSTRUCTIONS AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED IN NOTE 2 ABOVE

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SHEET	SHEET DESCRIPTION
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PERFORMANCE RATING

MAXIMUM FRAME SIZE	ELEVATION	DESIGN PRESSURE (PSF)	IMPACT RATING (ASTM E1996 EQUIVALENT)
NOMINAL 48" x 96"	SHEET 2	+/- 90	WIND ZONE 4 MISSILE LEVEL D

PROJECT # 419-0605

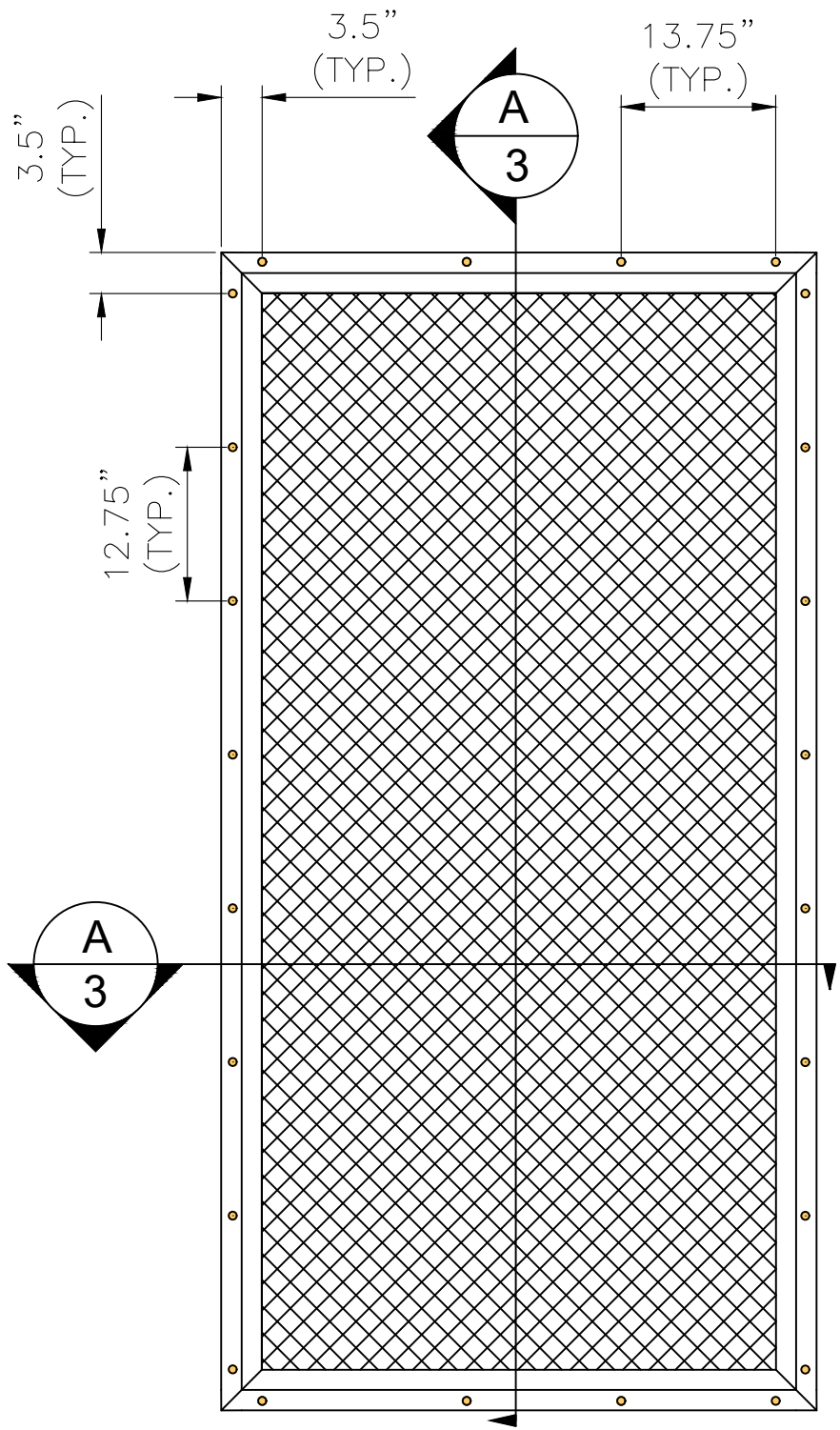
MELFL, Inc.
3870 Dairy Road #103
Melbourne, FL 32904

HURRICANE SCREEN NO. 1 (HS1)
GENERAL & INSTALLATION NOTES, PERFORMANCE RATING

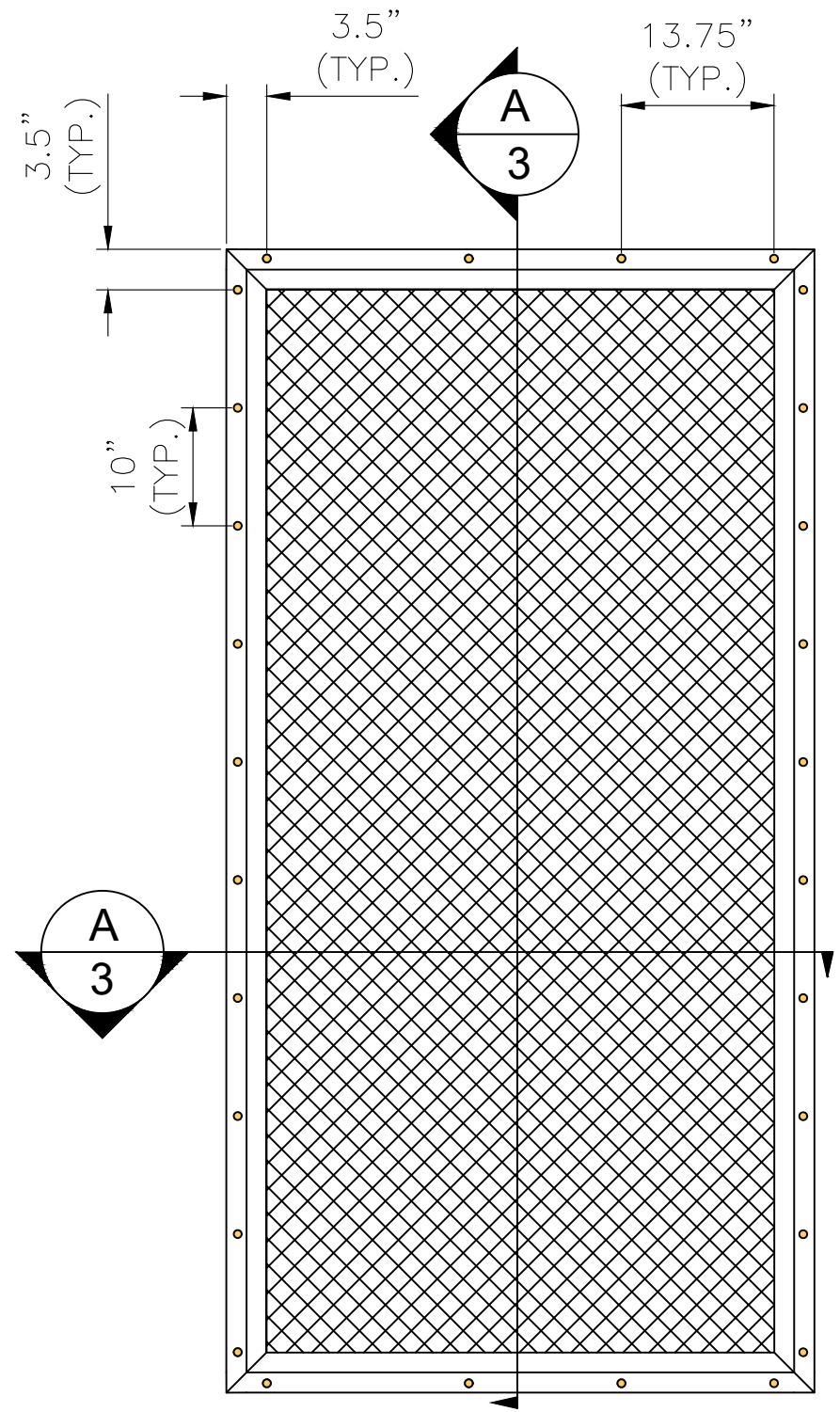
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SCALE:	NONE	REV:	---	SHEET:	1 OF 5



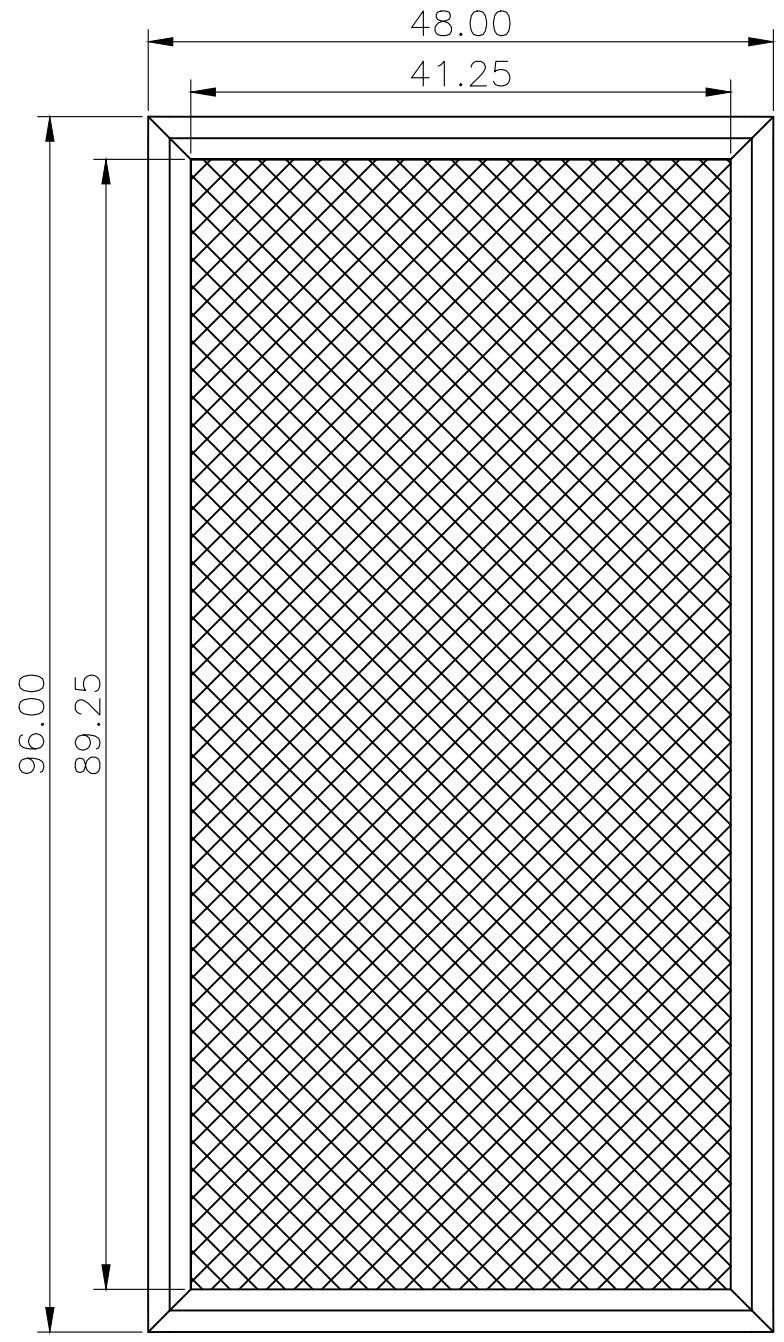
Robert J. Amoruso, P.E.
Texas P.E. No. 80817



Installation Elevation
2X and Concrete Substrates
4 Anchors Head/Sill
8 Anchors jambs



Installation Elevation
Masonry (CMU/Block) Substrates
4 Anchors Head/Sill
10 Anchors jambs



Elevation

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

PROJECT # 419-0605

MELFL, Inc.
 3870 Dairy Road #103
 Melbourne, FL 32904

TITLE: HURRICANE SCREEN NO. 1 (HS1)
 ELEVATIONS

PREPARED BY: PTC
 DRAWN BY: RJA
 SCALE: NONE
 REV: ---

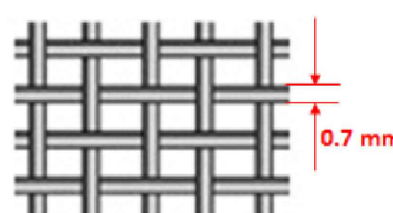
PTC Product Design Group, LLC
 Longwood, FL 32752-0775
 TX Registration No. F-13740
 Phone: 321.690.1788
 Fax: 321.690.1789
 Email: info@ptc-corp.com

DATE:	5/19/2020
DRAWING NO.:	MELFL1001
SHEET:	2 OF 5

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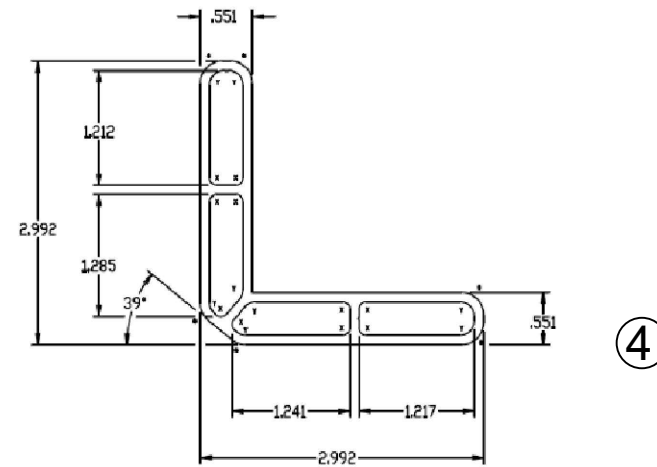
REV	DESCRIPTION	DATE	BY

STEEL MESH

Product	DESCRIPTION	Drawing
0.7 mm	Material - stainless steel 304 Mesh - 12, Diameter - 0.7 mm, Width - 48 in, Length - 30 m Black powder coated	

⑤

CORNER KEYS

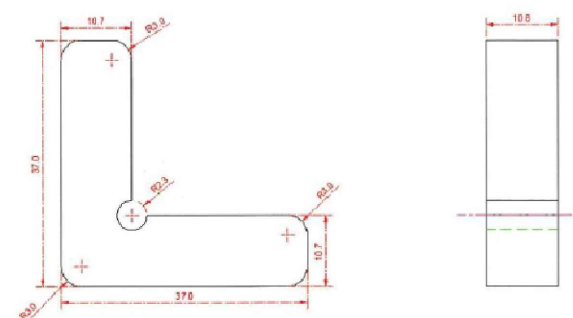


④

* Aluminum 6005-T6 extrusion
Cut by 0.75" wide

Exterior

(Unit : mm)



③

* Nylon, Self fixed corner key to fix to the interior frame

Interior

EXTERIOR

INTERIOR

EXTERIOR
FRAME
HEAD, SILL
& JAMB, AL
6005-T6

EXTERIOR FINISH BY OTHERS

2X WOOD BUCK
OR FRAMING

NO. 14 PH
WOOD OR
TAPPING
SCREW

FACE OF
FENESTRATION

4-3/4"
SEPARATION
DISTANCE

1/4" DIA. ITW
TAPCON

CONCRETE OR MASONRY

EXTERIOR FINISH BY OTHERS

A

HEAD/SILL OR JAMB SECTIONS

3

WOOD AND/OR CONCRETE/MASONRY
SUBSTRATES SHOWN

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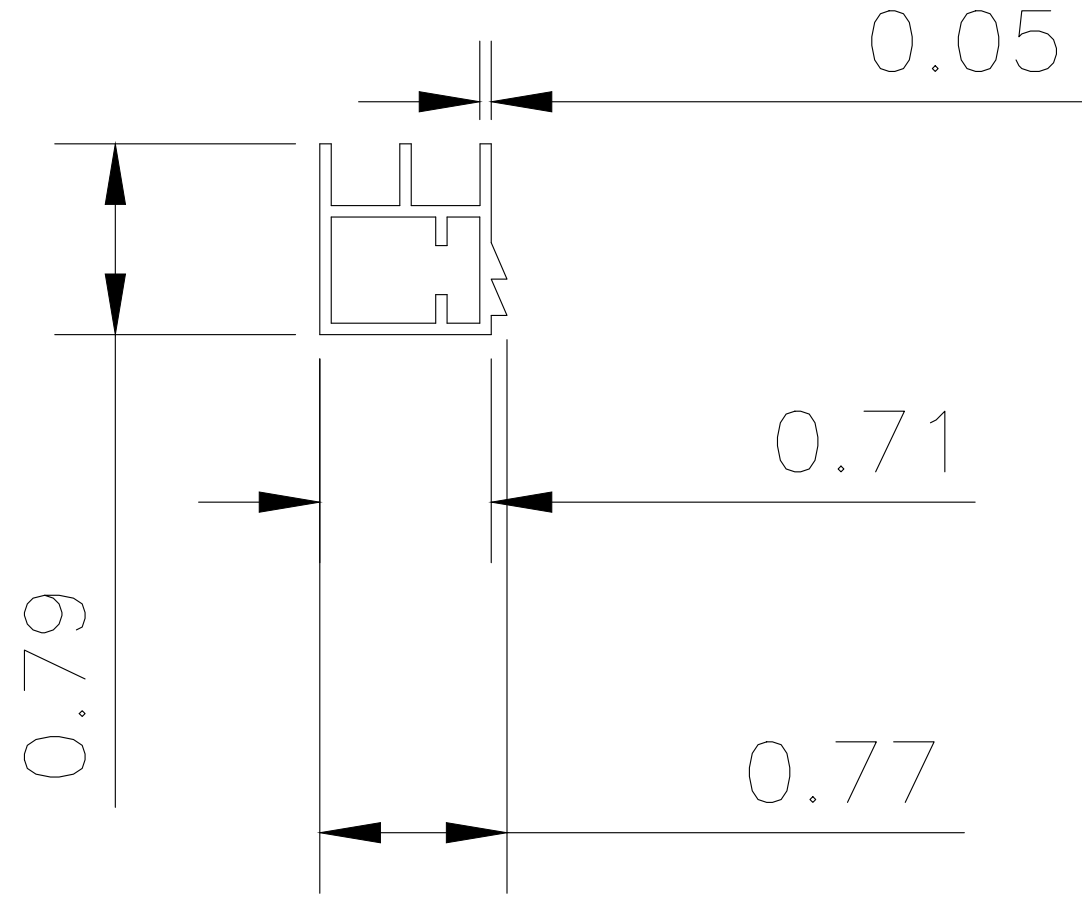
HURRICANE SCREEN NO. 1 (HS1)
SECTIONS AND COMPONENTS

DRAWN BY: RJA
SCALE: NONE
REV: ---
DATE: 5/19/2020
DRAWING NO: MELFL1001
SHEET: 3 OF 5

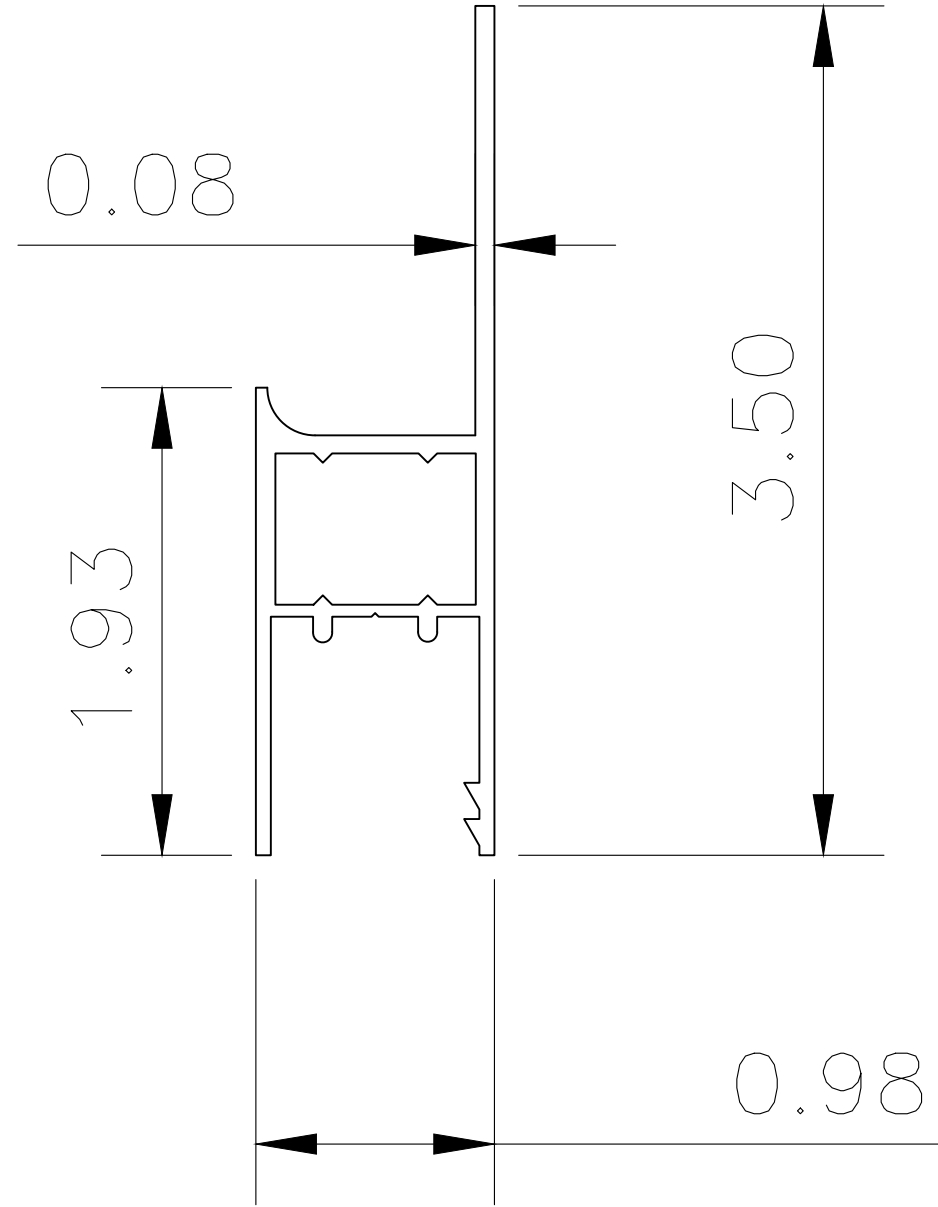
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① INTERIOR FRAME, SILL & JAMB
AL 6063-T6



② EXTERIOR FRAME, SILL & JAMB
AL 6005-T6



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Melbourne, FL 32904

TITLE: HURRICANE SCREEN NO. 1 (HS1)
COMPONENTS

PREPARED BY: RJA
SCALE: NONE
REV: ---

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DRAWN BY: RJA
DATE: 5/19/2020
DRAWING NO: MELFL1001
SHEET: 4 OF 5

PROJECT # 419-0605

REV	DESCRIPTION	DATE	BY

BILL OF MATERIALS

ITEM #	PART #	DESCRIPTION
1	SP4145-4	INTERIOR FRAME, SILL & JAMB, AL 6063-T6
2	SP4145-3	EXTERIOR FRAME, SILL & JAMB, AL 6005-T6
3	MT002	CORNER KEY FOR INTERIOR FRAME, Nylon, 1.440" X 1.440" X 0.428"
4	MT001	CORNER KEY FOR EXTERIOR FRAME, AL 6005-T6, 2" X 2" X 0.767"
5	0.7 X 48	STAINLESS STEEL MESH, SUS304, 12 MESH, BLACK POWDER COATED
6	8412-002	PHILLIPS/SLOTTED COMBO DRIVE SIDEWALK BOLT, 1/4"-20 X 1-1/4"
7	#11/2	SCREW FOR FRAMES, SS, 1/8" X 1-1/2", HEX HEAD
8	#8 X 3/4	SCREW FOR EXTERIOR CORNER KEY, SS, 1/8" X 3/4", HEX HEAD

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HURRICANE SCREEN NO. 1 (HS1)
 BILL OF MATERIALS



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DRAWN BY: RJA

SCALE: NONE

REV: ---

DATE: 5/19/2020

DRAWING NO: MELFL1001

SHEET: 5 OF 5

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