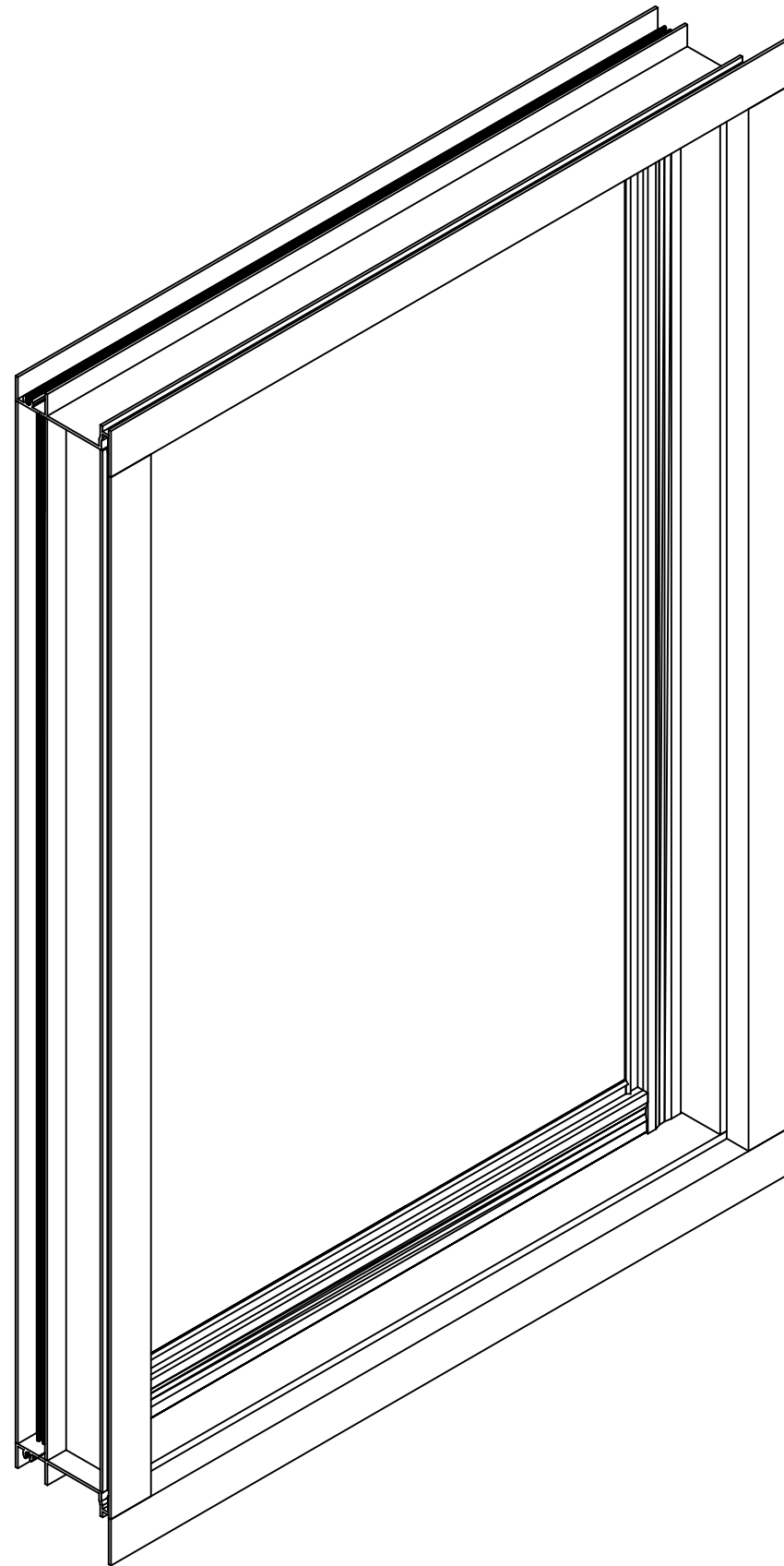


ASSURA WINDOWS & DOORS SERIES 300 ALUMINUM FIXED WINDOW

LARGE AND SMALL MISSILE IMPACT RESISTANT - MISSILE LEVEL "D"



GENERAL NOTES

1. THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE SEVENTH EDITION (2020), FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE, PER TAS 201 / 202 / 203 & ASTM E1300-04 STANDARDS AS QUALIFIED IN TEST REPORT #0611.01-12 BY AMERICAN TEST LAB OF SOUTH FLORIDA.
2. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
3. POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE. SITE SPECIFIC LOAD WIND LOAD REQUIREMENTS SHALL BE DETERMINED IN ACCORDANCE WITH ASCE 7 AND THE FLORIDA BUILDING CODE BY SEPARATE ENGINEERING CERTIFICATION AND SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUE LISTED HEREIN FOR ANY ASSEMBLY WITHIN THE LIMITATIONS STATED HEREIN.
4. THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
5. PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.
6. MULTIPLE UNITS MUST BE INSTALLED USING STRUCTURAL MULLIONS APPROVED BY OTHERS OR UNDER SEPARATE CERTIFICATION.
7. ALL EXTRUSIONS SHALL BE 6063-T5 ALUMINUM ALLOY, UNLESS NOTED OTHERWISE.
8. EXTERIOR SEAM OF FRAME CORNERS, INSTALLATION SCREWS, AND GLAZING BEAD ENDS SHALL BE SEALED WITH SILICONE.
9. ALL BOLTS & WASHERS SHALL BE ZINC COATED STEEL, GALVANIZED STEEL, OR STAINLESS STEEL WITH A MINIMUM TENSILE YIELD STRENGTH OF 60 KSI.
10. ALL DISSIMILAR MATERIALS SHALL BE PAINTED OR PLATED AS PRESCRIBED IN THE FLORIDA BUILDING CODE.
11. GLAZING DETAILS ILLUSTRATED HEREIN UTILIZE KURARAY AMERICA, INC. - TROSIFOL ULTRACLEAR, CLEAR AND COLOR PVB GLASS INTERLAYER N.O.A.# 16-1117.01 AND KURARAY AMERICA, INC. - SENTRYGLAS GLASS INTERLAYER N.O.A.# 14-0916.11
12. APPROVED FOR SMALL AND LARGE MISSILE IMPACT APPLICATIONS. SEE GLASS TYPES FOR ANY RESTRICTIONS.
13. WINDOW TO SUBSTRATE WATER PROOFING IS NOT INCLUDED IN THIS DOCUMENT AND MUST BE ADDRESSED ON A SITE SPECIFIC BASIS. NOT BY ASSURA WINDOWS & DOORS, LLC.
14. ENGINEER SEAL AFFIXED HERE TO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
15. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
16. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
17. PRODUCT SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER SYSTEM CONTAINING THE FOLLOWING:
 ASSURA WINDOWS & DOORS, LLC
 1543 N. POWERLINE ROAD
 POMPANO BEACH, FL 33069
 TAS 201/202/203
 APPROVED BY FLORIDA BUILDING COMMISSION
 FLORIDA PRODUCT APPROVAL NUMBER

FRANK BENNARDO, P.E.
PE# 0046549 CA 9885



FL#15920.1



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DEERFIELD BEACH, FL 33442
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POMPANO BEACH, FL
Phn. (954) 781-4430

SERIES 300 ALUMINUM FIXED WINDOW
LARGE & SMALL MISSILE IMPACT

REMARKS	DRWN	CHKD	DATE
FBC 2020 UPDATE	JEM	AJP	11/03/20

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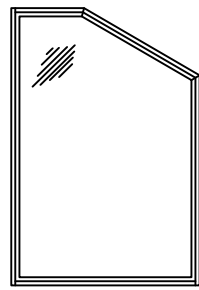
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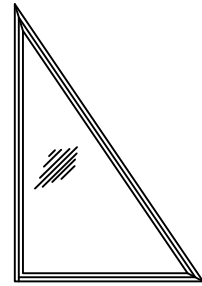
01 OF 08

POSSIBLE ARCHITECTURAL SHAPES:

NO SHAPE MAY EXCEED SIZE OF TESTED RECTANGLE TRANSCRIBED AROUND SHAPE.



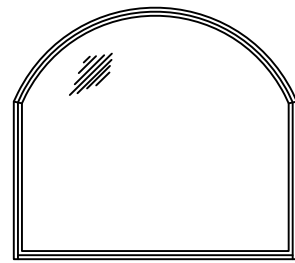
UE SIDED TRAPEZOID



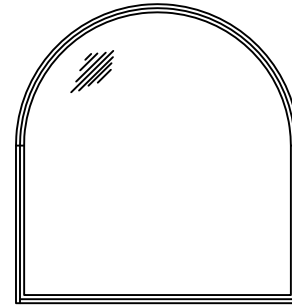
TRIANGLE



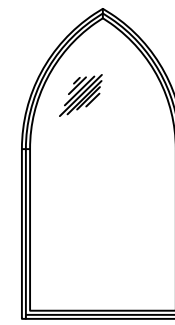
HALF-CIRCLE



EYEBROW



ARCH

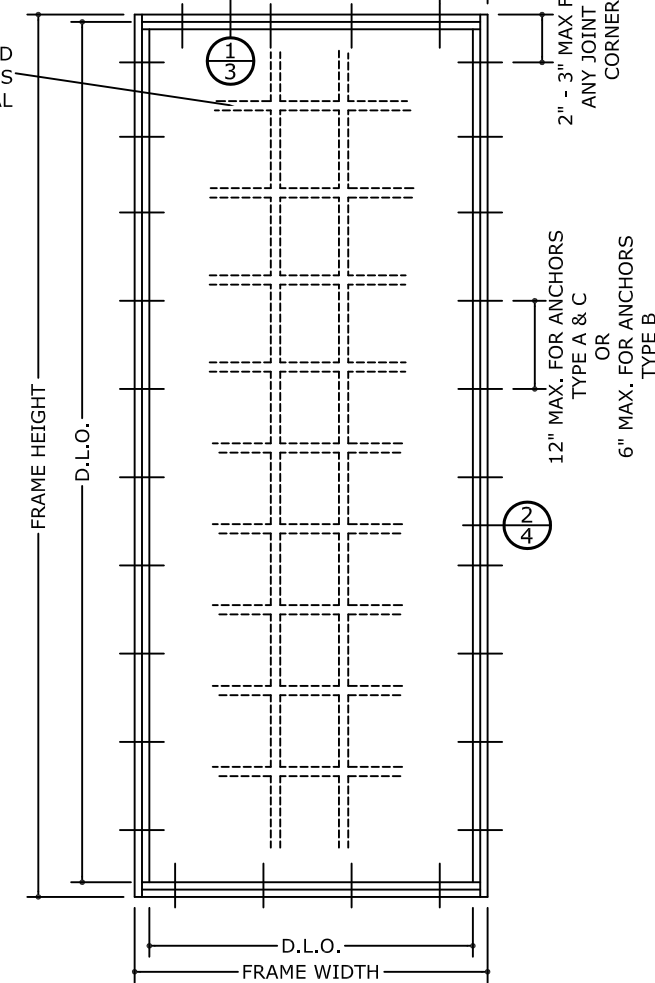


GOTHIC

JOINT WELD POINTS TYP. (MAY VARY)

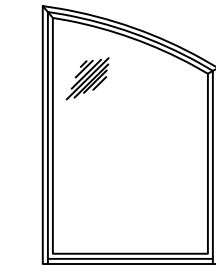
SURFACE APPLIED FALSE MUNTINS OPTIONAL

12" MAX. FOR ANCHORS TYPE A & C
OR
6" MAX. FOR ANCHORS TYPE B
2" - 3" MAX FROM ANY JOINT OR CORNER



TYPICAL ELEVATION

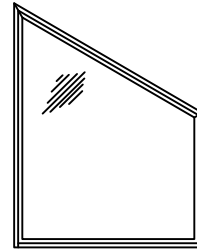
D.L.O. WIDTH = WINDOW WIDTH - 4"
D.L.O. LENGTH = WINDOW LENGTH - 4"



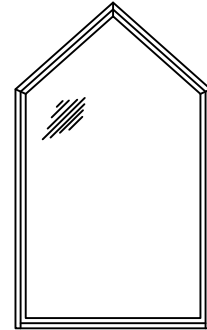
HALF EYEBROW



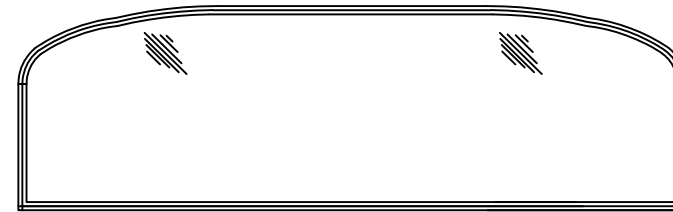
HALF ELLIPTICAL



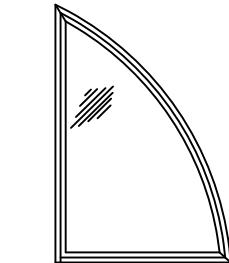
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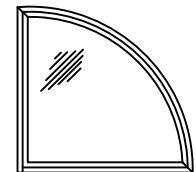
PENTAGON



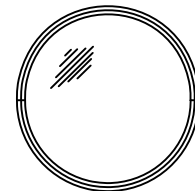
EXTENDED FULL ELLIPSE



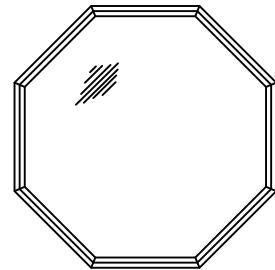
QUARTER SEGMENT



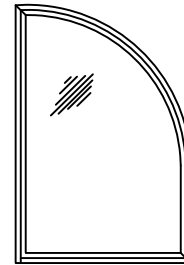
QUARTER CIRCLE



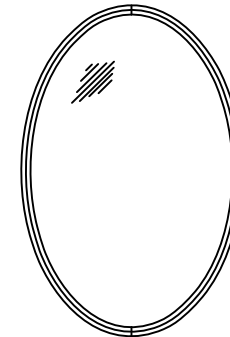
FULL CIRCLE



OCTAGON



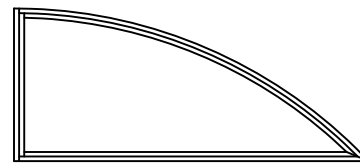
HALF ARCH



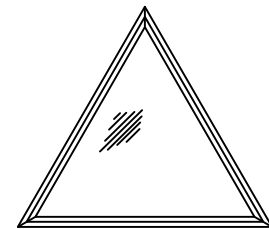
OVAL



ELLIPTICAL



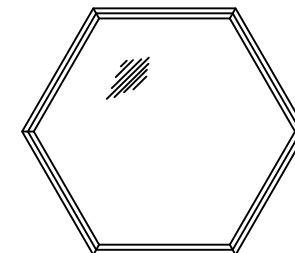
HALF FAN



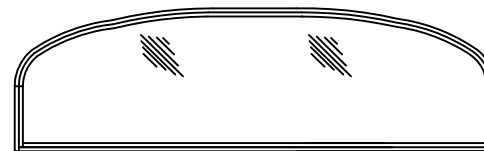
EQUAL LEG TRIANGLE



FAN



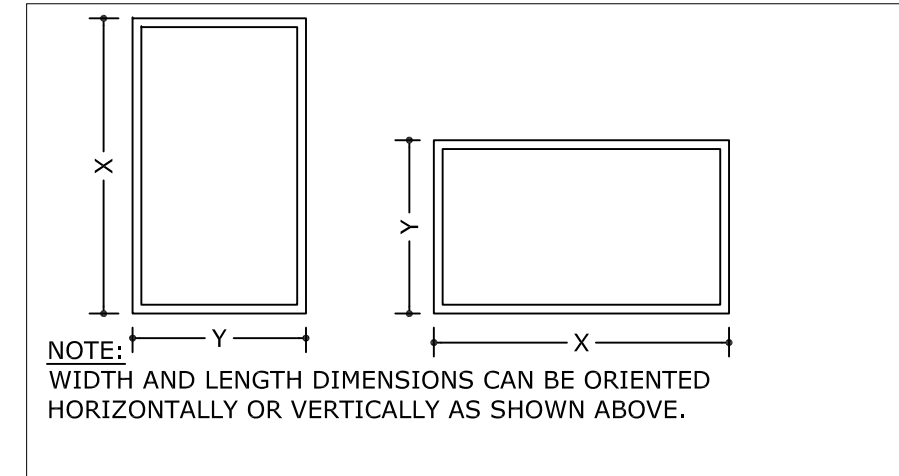
HEXAGON



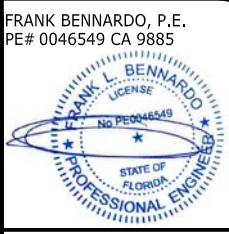
HOTDOG

ALLOWABLE SIZES & LOADS MAY BE DETERMINED BY INSCRIBING ARCHITECTURAL SHAPES IN SQUARES OR RECTANGLES THAT DO NOT EXCEED SIZES ON PAGES 4/8 & 5/8.

ARCHITECTURAL SHAPES ARE LIMITED TO ± 70 Psf. MAX.



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POMPANO BEACH, FL
Phn. (954) 781-4430
SERIES 300 ALUMINUM FIXED WINDOW
LARGE & SMALL MISSILE IMPACT

REMARKS	DRWN	CHKD	DATE
FBC 2020 UPDATE	JEM	AJP	11/03/20

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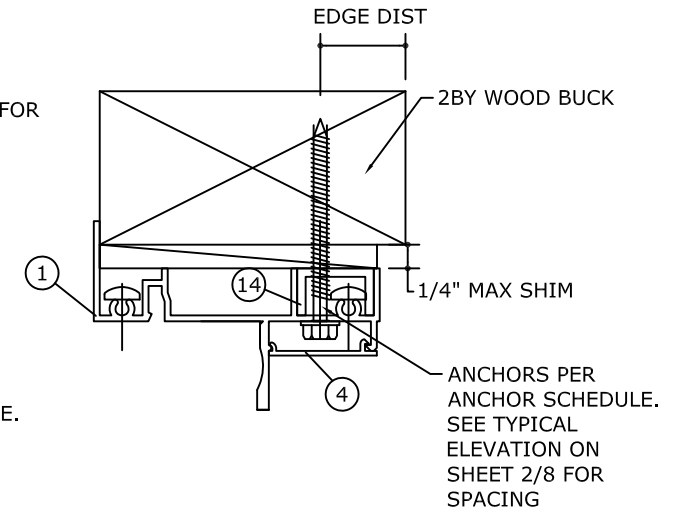
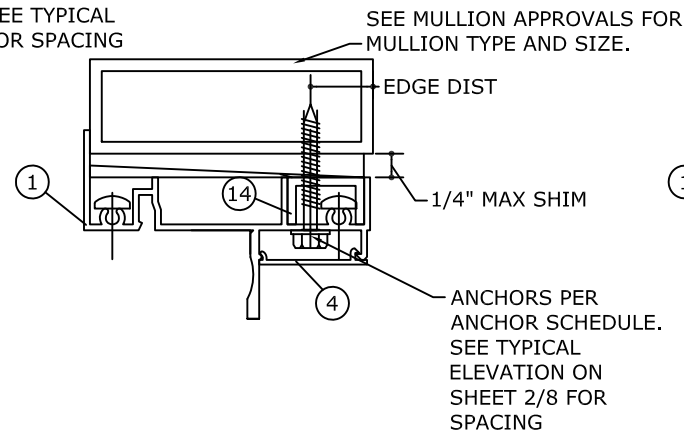
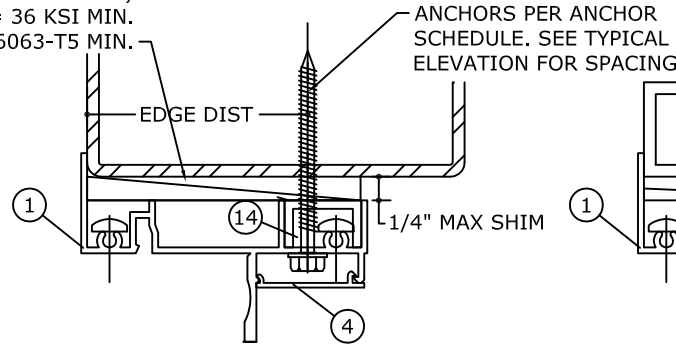
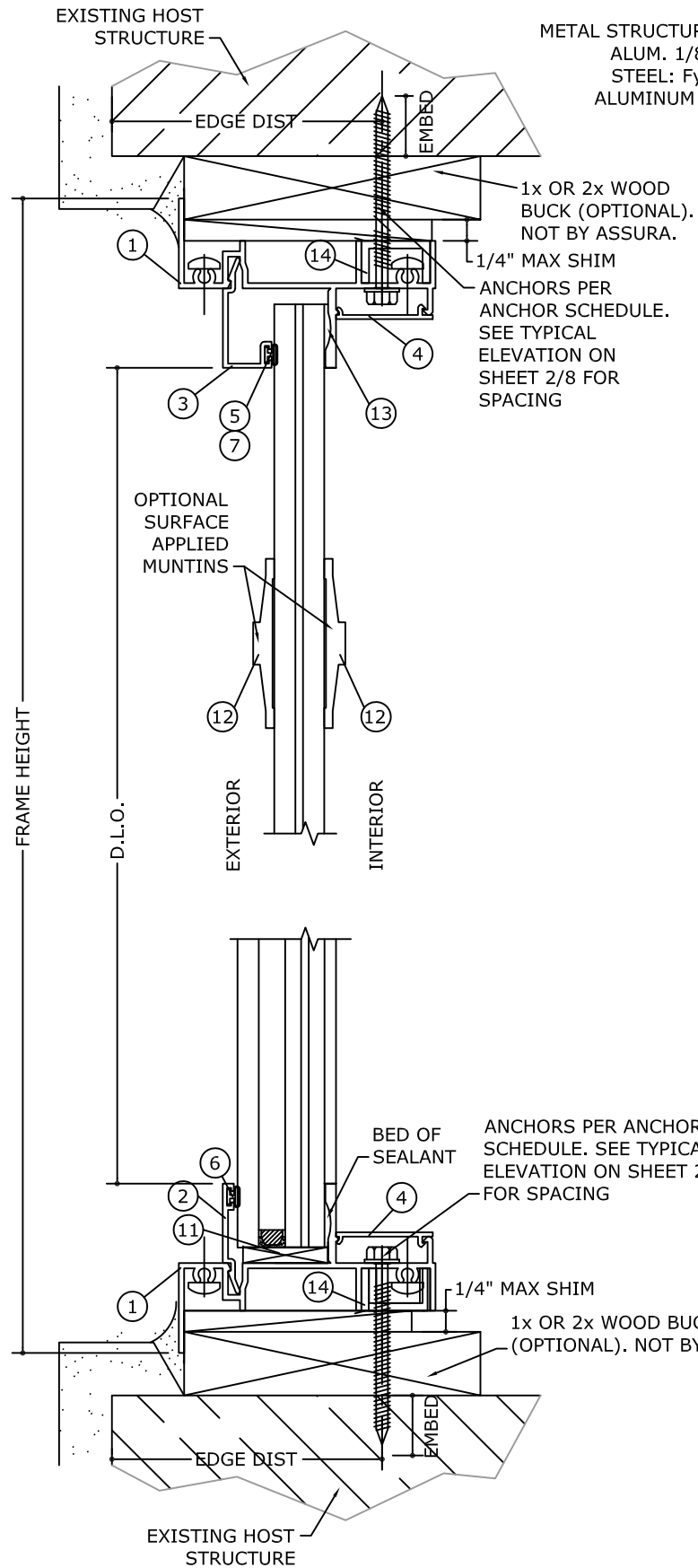
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WOOD BUCKS AND METAL STRUCTURE (NOT BY ASSURA) MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. ON PAGE 2/8 & ANCHOR CHARTS FOR SPACING & QUANTITY

TYPE 'A' - 1/4" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI)

THRU 1BY INTO CONCRETE (2846 PSI MIN) OR GROUT FILLED BLOCK (ASTM C90)
1-3/4" MIN. EMBED INTO CONCRETE OR GROUT FILLED BLOCK.

TYPE 'B' - 1/4" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES (SYP#2 G=0.55 MIN)
1-1/2" MIN. PENETRATION INTO WOOD

TYPE 'C' - 1/4-20 DIA. SHEET METAL SCREW (GRADE 5 MIN) (Fu=120 KSI, Fy=90 KSI)

INTO METAL STRUCTURES (5 PINCHES PASS THE THREAD PLANE MIN.) STEEL: 1/8" THK. MIN. (Fy=36 KSI MIN)
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN) (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE

INTO CONCRETE/GROUT FILLED BLOCK= 2-1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

1 TYPICAL SECTION
3 6" = 1'-0" VERT SECT



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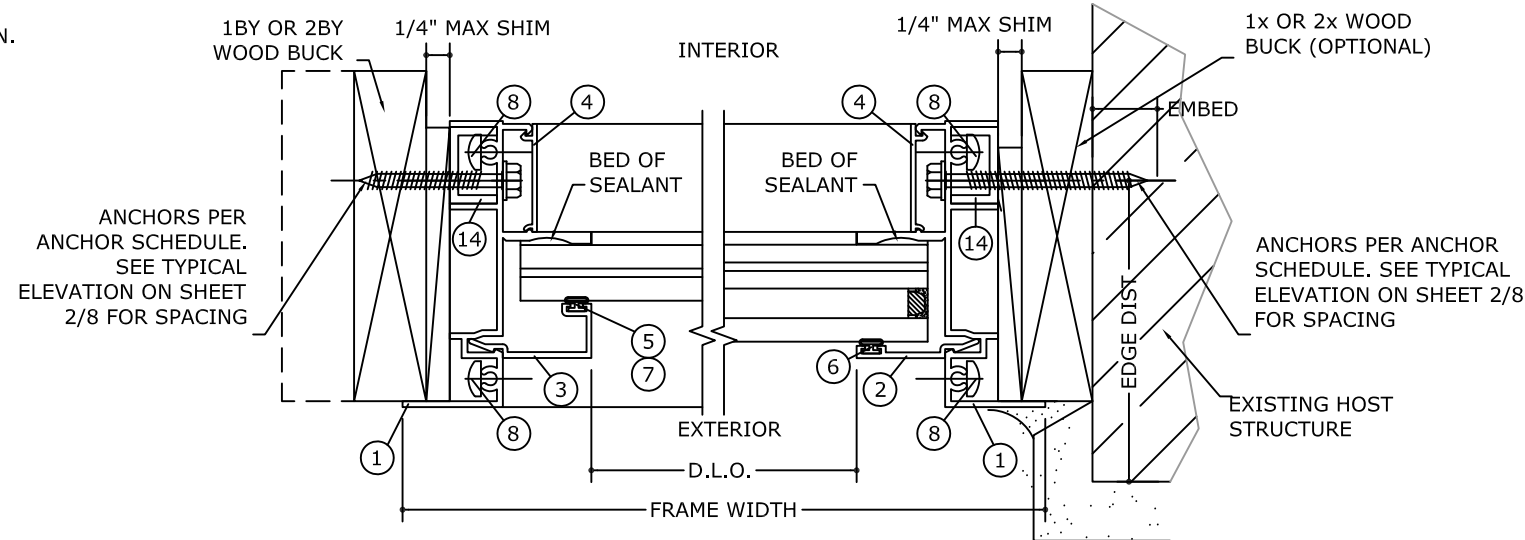
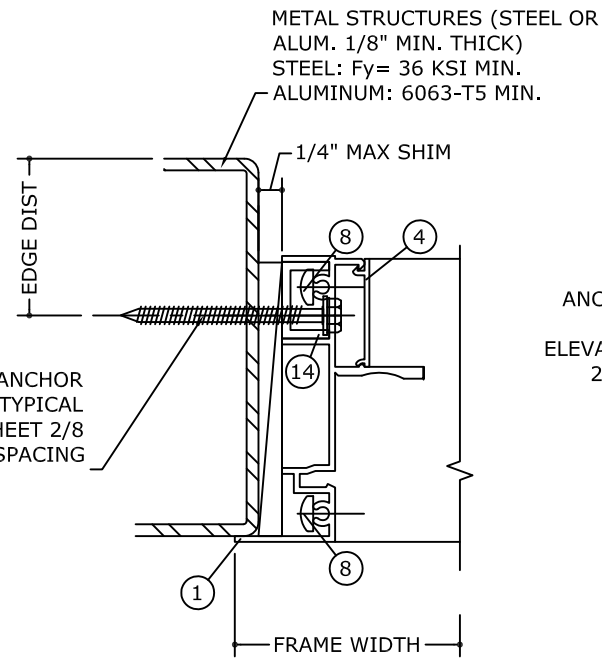
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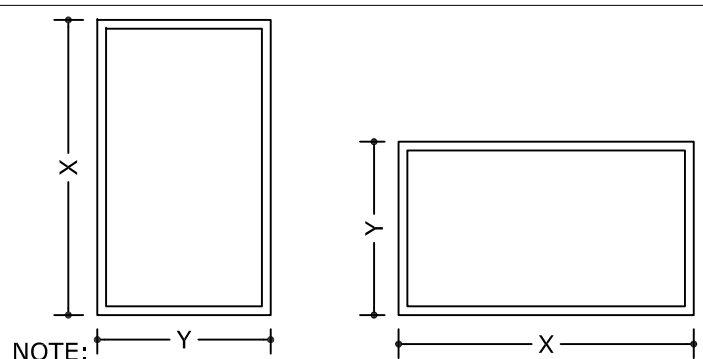
04 OF 08



2 TYPICAL SECTION
4 6" = 1'-0" HORIZ SECT

SCHEDULE "A" FOR SQUARE OR RECTANGLE OPTIONS - OTHER SHAPES ARE LIMITED TO ± 70 Psf (SEE PAGE 2)

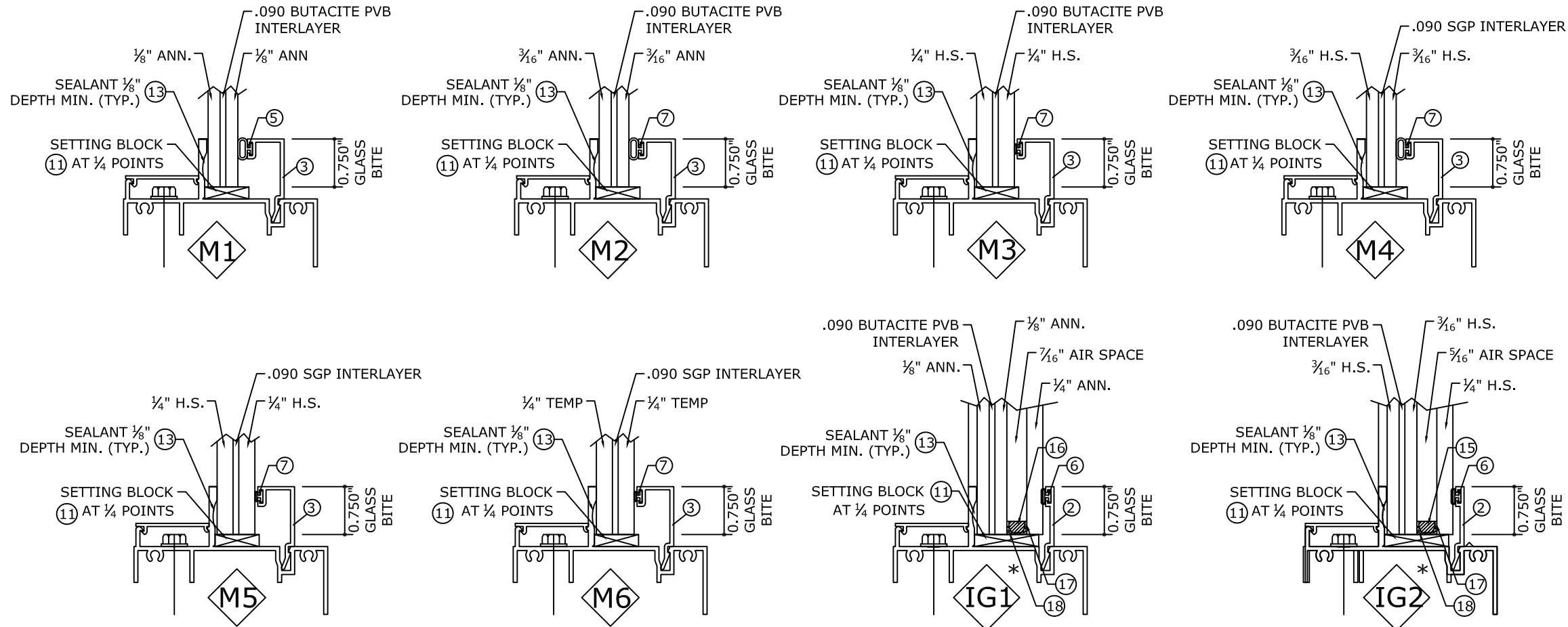
FRAME DIMENSION (X)	FRAME DIMENSION (Y)	DESIGN LOAD CAPACITY (ASD METHOD)															
		GLASS TYPE M1		GLASS TYPE M2		GLASS TYPE M3		GLASS TYPE M4		GLASS TYPE M5		GLASS TYPE M6		GLASS TYPE IG1		GLASS TYPE IG2	
		(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.	(+) P.S.F.	(-) P.S.F.
26"	26 1/2"	70	70	70	70	80	80	80	80	80	80	80	130	70	70	80	80
	37"	70	70	70	70	80	80	80	80	80	80	80	130	70	70	80	80
	53 1/8"	70	70	70	70	80	80	80	80	80	80	80	130	70	70	80	80
	74"	70	70	70	70	80	80	80	80	80	80	80	130	70	70	80	80
	106 1/4"	70	70	70	70	80	80	80	80	80	80	80	130	70	70	80	80
38 3/8"	26 1/2"	70	70	70	70	80	80	80	80	80	80	80	130	70	70	80	80
	37"	68	68	70	70	80	80	80	80	80	80	80	130	70	70	80	80
	53 1/8"	65	65	70	70	80	80	80	80	80	80	80	130	65	65	80	80
	74"	65	65	70	70	80	80	80	80	80	80	80	130	65	65	80	80
	106 1/4"	-	-	70	70	80	80	80	80	80	80	80	130	-	-	80	80
50 5/8"	26 1/2"	70	70	70	70	80	80	80	80	80	80	80	130	70	70	80	80
	37"	68	68	70	70	80	80	80	80	80	80	80	130	68	68	80	80
	53 1/8"	49	49	66	66	75	75	80	80	80	80	75	123	49	49	75	75
	74"	-	-	66	66	75	75	80	80	80	80	75	123	-	-	75	75
	106 1/4"	-	-	-	-	-	-	80	80	80	80	75	123	-	-	-	-
63"	26 1/2"	70	70	70	70	80	80	80	80	80	80	80	130	70	70	80	80
	37"	68	68	70	70	80	80	80	80	80	80	80	130	68	68	80	80
	53 1/8"	47	47	63	63	72	72	80	80	80	80	72	117	47	47	72	72
	74"	-	-	-	-	-	-	70	70	76	76	60	99	-	-	-	-
	106 1/4"	-	-	-	-	-	-	70	70	76	76	-	-	-	-	-	-
74 1/4"	26 1/2"	70	70	70	70	80	80	80	80	80	80	80	130	70	70	80	80
	37"	68	68	70	70	80	80	80	80	80	80	80	130	68	68	80	80
	53 1/8"	-	-	63	63	72	72	80	80	80	80	72	117	-	-	72	72
	74"	-	-	-	-	-	-	69	69	64	64	51	84	-	-	-	-
	106 1/4"	-	-	-	-	-	-	69	69	-	-	-	-	-	-	-	-
77 1/4"	26 1/2"	70	70	70	70	80	80	80	80	80	80	80	130	70	70	80	80
	37"	68	68	70	70	80	80	80	80	80	80	80	130	68	68	80	80
	53 1/8"	-	-	63	63	72	72	80	80	80	80	72	117	-	-	72	72
	74"	-	-	-	-	-	-	69	69	64	64	51	84	-	-	-	-
	106 1/4"	-	-	-	-	-	-	67	67	-	-	-	-	-	-	-	-
111 1/4"	-	-	-	-	-	-	67	67	-	-	-	-	-	-	-	-	



NOTE:
WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED HORIZONTALLY OR VERTICALLY AS SHOWN ABOVE.

EXAMPLE:
A WINDOW WITH A FRAME HEIGHT OF 63" AND FRAME WIDTH OF 53 3/8" HAS AN ALLOWABLE PRESSURE OF +/- 80 PSF FOR GLASS TYPE M4. THESE DIMENSIONS MAY BE REVERSED FOR AN ALLOWABLE FRAME HEIGHT OF 53 3/8" AND AN ALLOWABLE FRAME WIDTH OF 63" FOR THE SAME GLASS TYPE AND ALLOWABLE DESIGN PRESSURE. SEE () FOR EXAMPLE VALUE IN SCHEDULE "A."

GLASS TYPES



MATERIAL SCHEDULE				
ITEM	PART	DESCRIPTION	MATERIAL	MANUF./SUPPLIER/REMARKS
1	N3001	0.063" SILL/JAMB/HEADER EXTRUSION	6063-T6	
2	TM-326	1/8" GLASS STOP FOR 1" GLASS	6063-T6	
3	TM-327	1/8" GLASS STOP FOR 9/16" GLASS	6063-T6	
4	-	0.050" SNAP COVER	6063-T6	
5	-	0.370" HIGH D VINYL BULB AND 0.187" T-SLOT	TPE POLYPROPYLENE FOR 5/16" GLASS	ULTRAFAB
6	32001	VINYL BULB - 0.175"Ø	INSULATED GLASS GLAZING BEAD	AMESBURY
7	32011	VINYL BULB - 0.270"Ø	7/16 AND 9/16 GLASS GLAZING BEAD	AMESBURY
8	-	(2) #8 X 1 SMS SCREWS AT EACH FRAME CORNER SAE GR 2 MIN	FOR RECTANGULAR WINDOW SHAPES ONLY	
9	-	SEAM SEALER	ACRYLIC	SCHNEE-MOREHEAD
10	-	-	-	
11	-	SETTING BLOCK 1" LONG AT 1/4 POINTS	HIGH DENSITY RUBBER 70-90 SHORE A DUROMETER HARDNESS	
12	-	OPTIONAL SURFACE APPLIED MUNTINS	6063-T6	
13	-	RAPID STRENGTH RGS7700 STRUCTURAL SILICONE	ELASTOMETRIC ADHESIVE	BY MOMENTIVE PERFORMANCE MATERIALS
14	-	ALUMINUM "U" CHANNEL 2" LONG AT EVERY ANCHOR LOCATION (TYP.)	5052 H32 ALUMINUM	
15	-	5/16" XL EDGE GLASS SPACER	STAINLESS STEEL	ALL METAL
16	-	7/16" XL EDGE GLASS SPACER	STAINLESS STEEL	ALL METAL
17	-	PRIMARY SEAL	PIB	
18	-	SECONDARY SEAL	SILICONE	

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SERIES 300 ALUMINUM FIXED WINDOW
LARGE & SMALL MISSILE IMPACT

REMARKS	DRWN	CHKD	DATE
FBC 2020 UPDATE	JEM	AJP	11/03/20

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FL#15920.1

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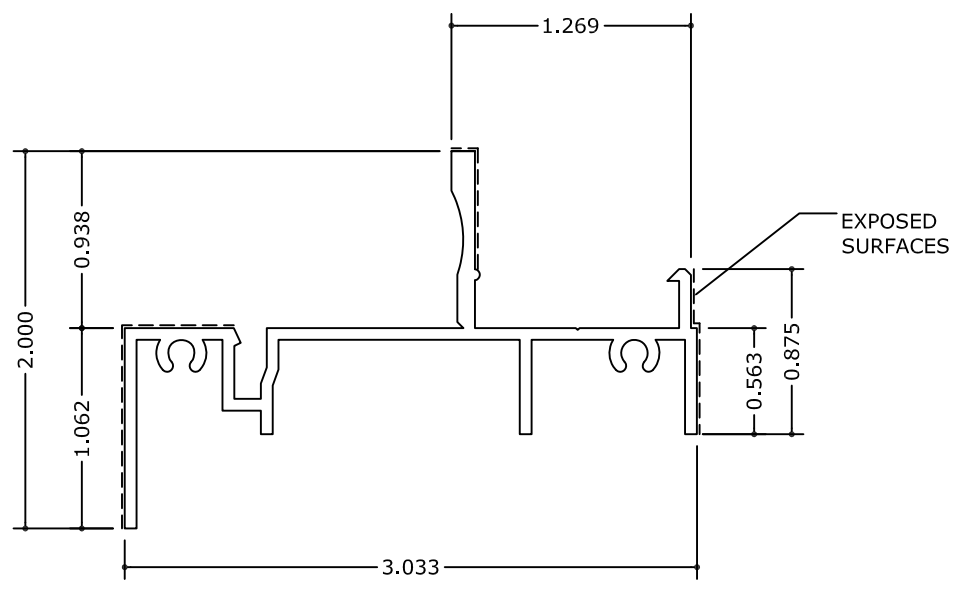
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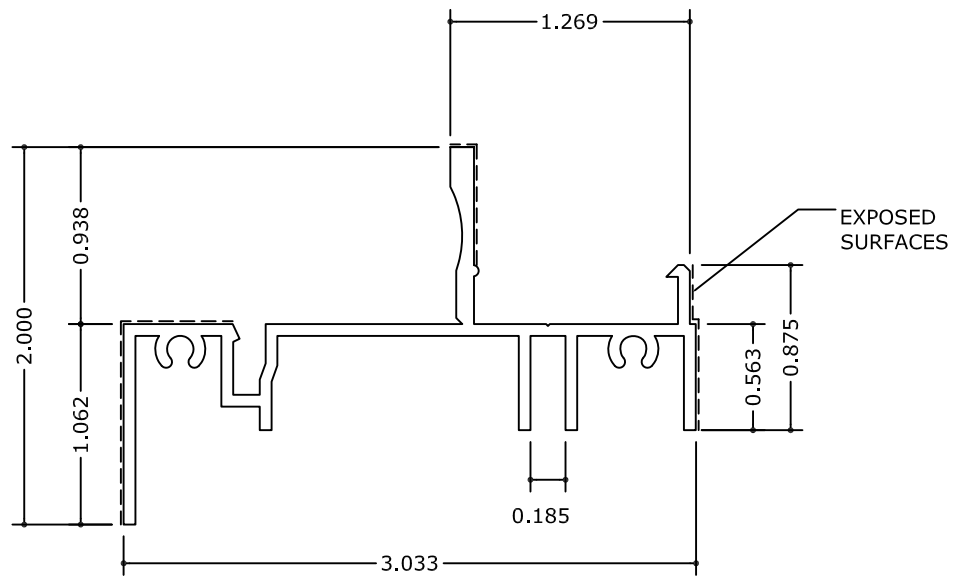
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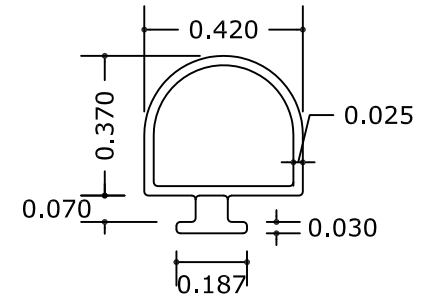


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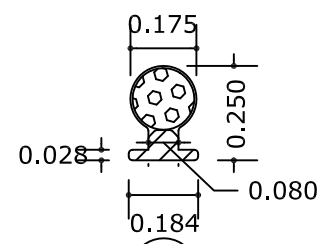


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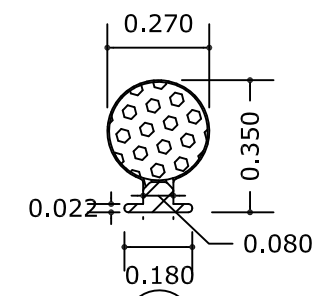
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PART #14 IS NOT REQUIRED
WHEN USING THIS EXTRUSION



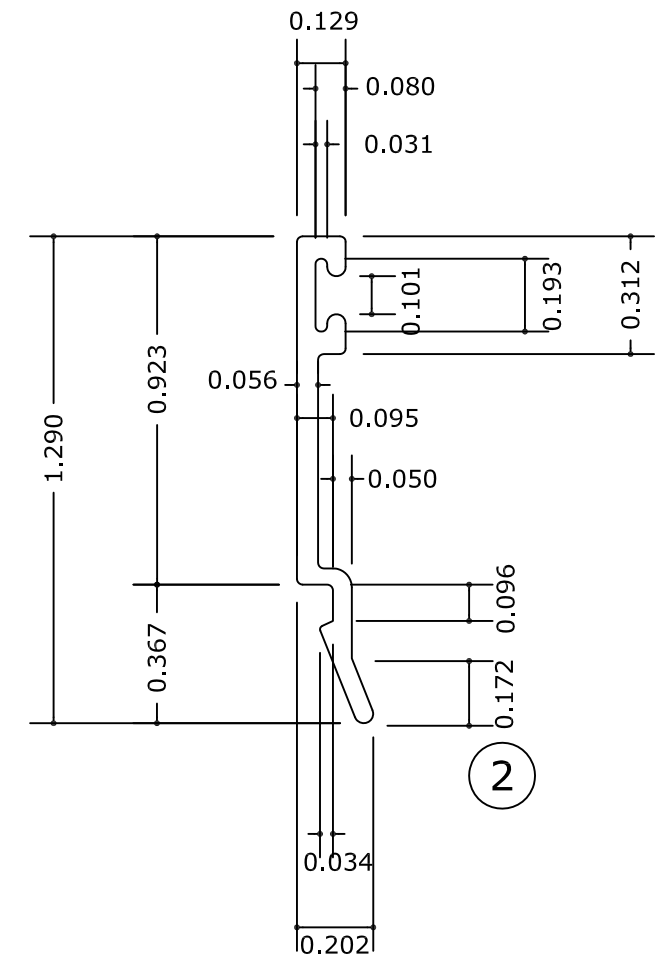
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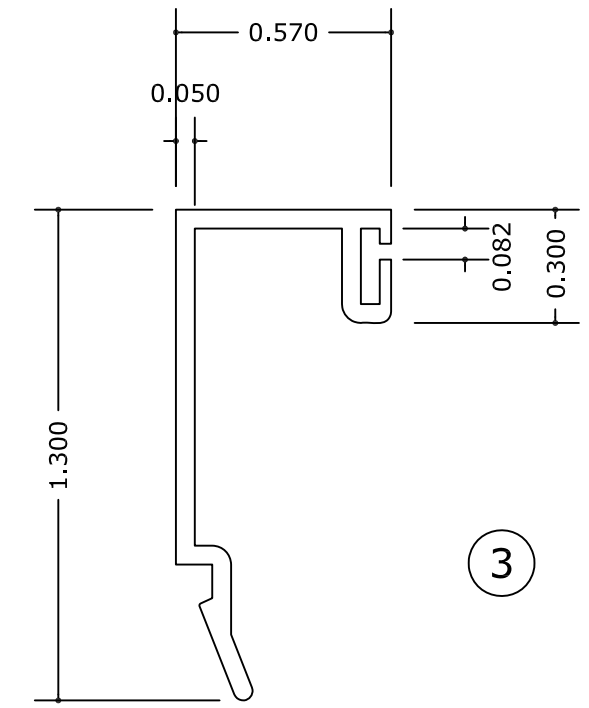
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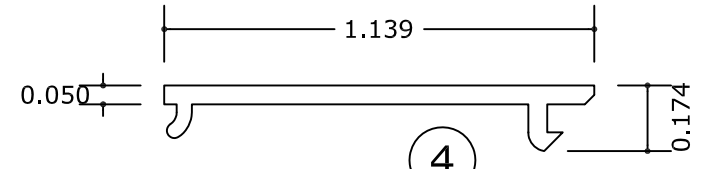
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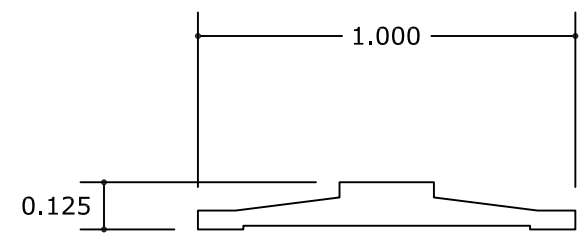
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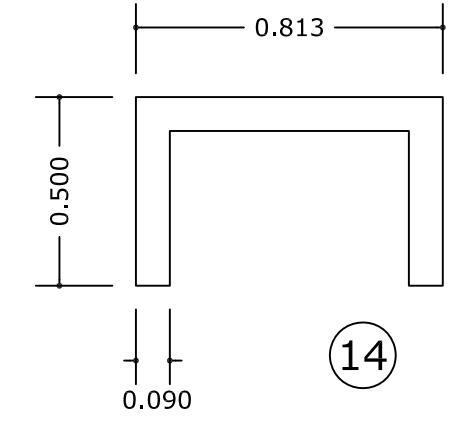
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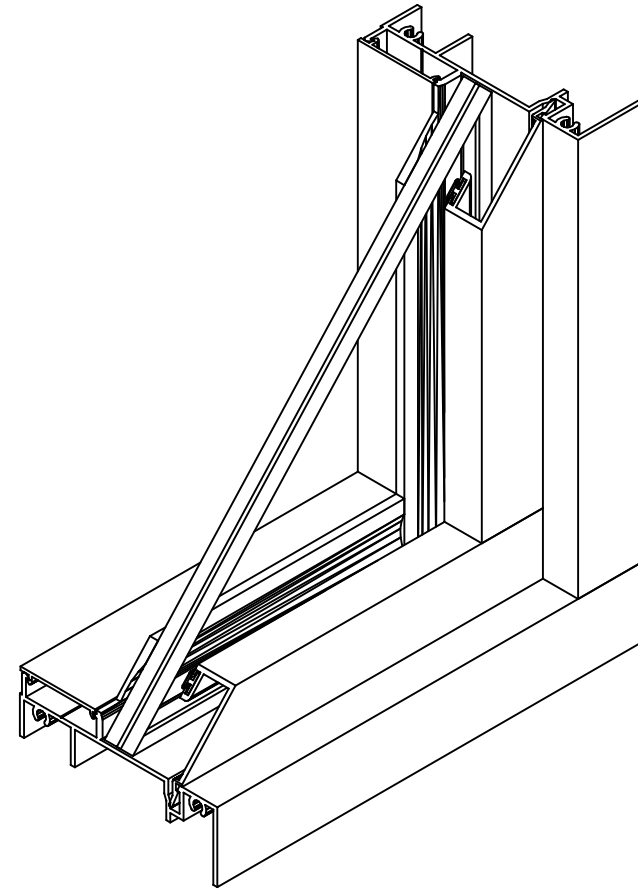
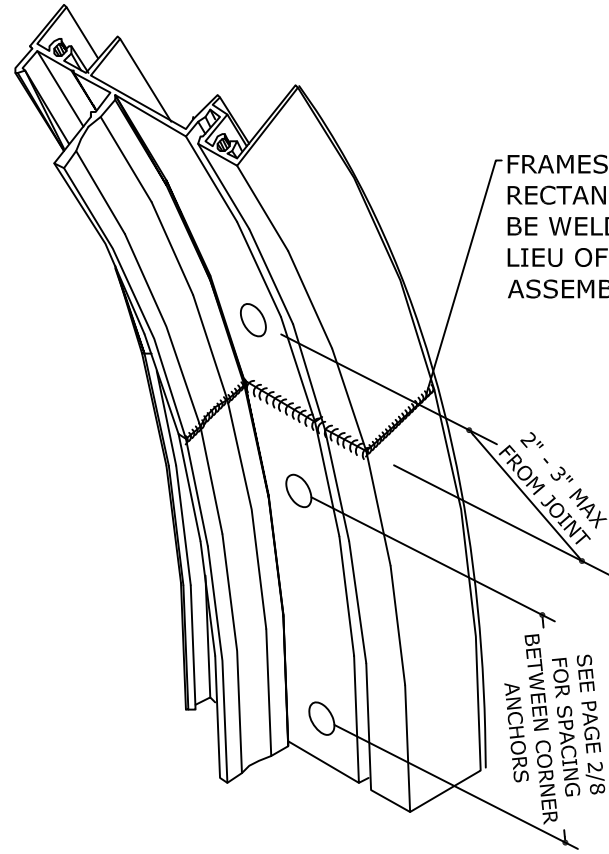
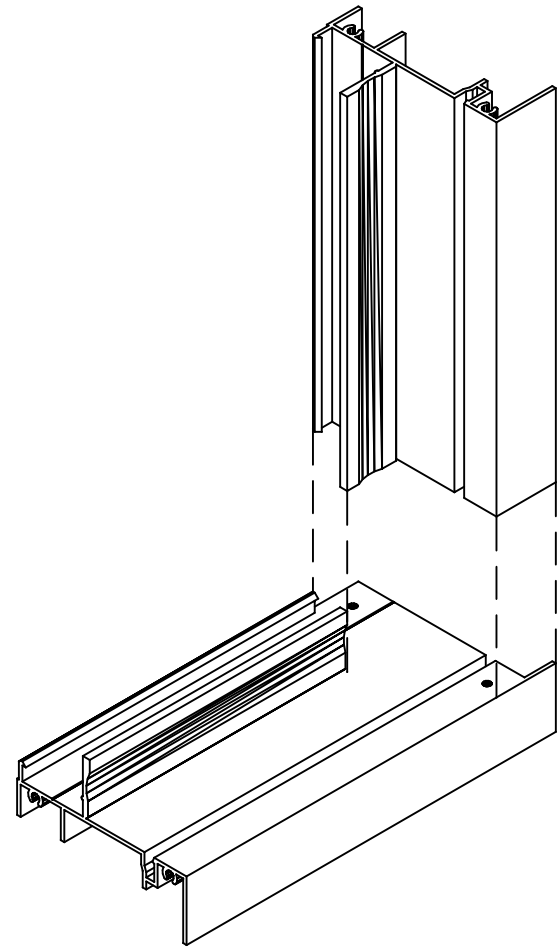
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NOTE:
EXTRUSIONS NOT TO SCALE.

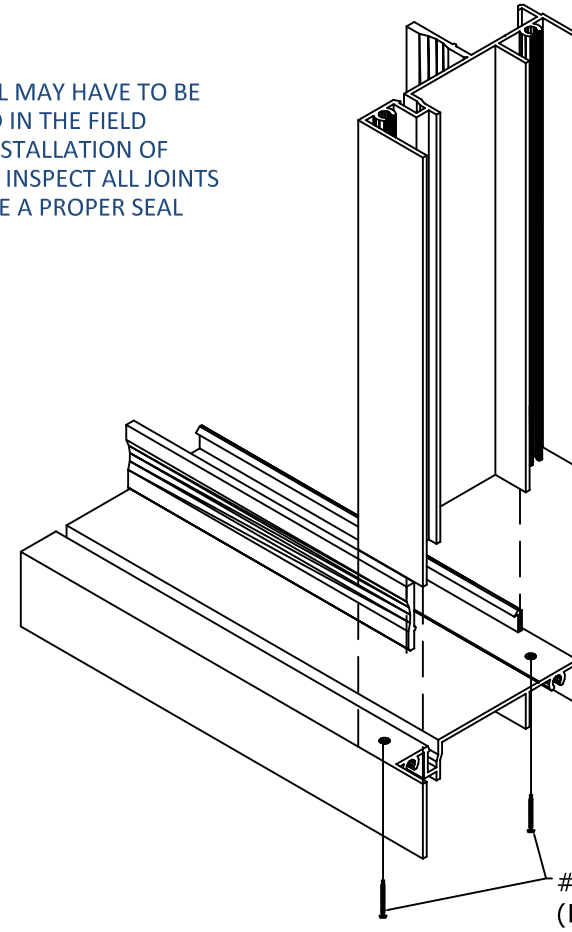
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SEAM SEAL MAY HAVE TO BE REAPPLIED IN THE FIELD BEFORE INSTALLATION OF WINDOW, INSPECT ALL JOINTS TO ENSURE A PROPER SEAL



FRANK BENNARDO, P.E.
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