

ALPOLIC MCM PANEL SYSTEM
BY
ARCHITECTURAL GRAPHICS INC.

GENERAL NOTES

1. THE ALPOLIC 4MM COMPOSITE PANEL SYSTEM HAS BEEN TESTED PER TAS 201, 202, & 203 AND MEET THE REQUIREMENTS OF THE CURRENT EDITION OF THE FLORIDA BUILDING CODE, INCLUDING THE HVHZ PROVISIONS. THEY ARE LARGE AND SMALL MISSILE IMPACT RESISTANT, SHUTTERS ARE NOT REQUIRED.
2. THE ALPOLIC 4MM COMPOSITE PANEL SYSTEM SHALL BE USED FOR WALL CONSTRUCTION ONLY. EACH ACTUAL WALL PROJECT SHALL BE CONSTRUCTED USING THE DETAILS SHOWN ON THESE DRAWINGS AS MINIMUM REQUIRED SPECIFICATIONS. SITE SPECIFIC DETAILS THAT VARY FROM THE CONDITIONS SHOWN MUST BE APPROVED BY A FLORIDA LICENSED ENGINEER OR ARCHITECT AND THE LOCAL BUILDING OFFICIAL.
3. THE MAX ALLOWABLE (ASD) DESIGN PRESSURES FOR THIS WALL PANEL SYSTEM ARE +66.5 PSF / -66.5 PSF.
4. ANCHORS SHALL BE AS LISTED AND SPACED AS SHOWN ON DETAILS. ANCHOR EMBEDMENT IN BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
5. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH DISSIMILAR MATERIALS SHALL BE SEPARATED TO PREVENT GALVANIC REACTIONS PER FBC REQUIREMENTS.

MATERIAL SPECIFICATIONS

COMPOSITE PANEL

1. ALPOLIC ALUMINUM COMPOSITE METAL PANEL 4MM THICK (0.157") AND 6MM THICK (0.236") [NOT TESTED] AS MANUFACTURED BY MITSUBISHI CHEMICAL AMERICA, INC., CHESAPEAKE, VA.
2. CORE: THERMOPLASTIC MATERIAL WHICH IN COMPOSITE ASSEMBLY MEETS PERFORMANCE CHARACTERISTICS SPECIFIED.
3. FACE SHEET: 0.020" ALUMINUM 3105-H14 ALLOY
4. FINISH: LUMIFLON-BASE FLUROPOLYMER RESIN COATING.
5. MAXIMUM DIMENSIONS: 62" WIDE X 288" LONG.
6. TECHNICAL DATA

DESCRIPTION	TEST	4MM ALPOLIC	4MM ALPOLIC/fr [NOT TESTED]	6MM ALPOLIC [NOT TESTED]
SPECIFIC GRAVITY		1.38	1.90	1.23
WEIGHT		1.12 LB/SQ. FT	1.56 LB/SQ. FT	1.50 LB/SQ. FT
TENSILE STRENGTH	ASTM E-8	7452 PSI	5693 PSI	5399 PSI
YIELD STRENGTH	ASTM E-8	NDY	NDY	NDY
ELONGATION	ASTM E-8	16%	8%	13%
PUNCHING SHEAR RESISTANCE (1" DIA.)	ASTM D-732	4025 PSI	4637 PSI	2816 PSI
PUNCHING SHEAR MAX LOAD	ASTM D-732	1920 PSI	2259 PSI	2121 PSI
BOND INTEGRITY VERTICAL PULL	ASTM C-297	1806 PSI	427 PSI	1664 PSI
DRUM PEEL	ASTM D-1781-76	33.6 IN-LB/IN	27.6 IN-LB/IN	33.6 IN-LB/IN
FLATWISE SHEAR	ASTM C-273	1225 PSI	949 PSI	1195 PSI
RATE OF BURNING	ASTM D-635	CC1	---	---
FLAME SPREAD INDEX	ASTM E-84	00	00	00
SMOKE DEVELOPED INDEX	ASTM E-84	00	10	10
SELF IGNITION TEMPERATURE	ASTM D-1929	752°F	837°F	752°F
FLASH IGNITION TEMPERATURE	ASTM D-1929	716°F	811°F	716°F
SURFACE FLAMMABILITY	ASTM E-108-88	PASSED	PASSED	PASSED
SOUND TRANSMISSION	ASTM E-413	STC-26	---	STC-26

ALUMINUM EXTRUSIONS

1. MATERIAL: AG-1J, AG-2F, AG-3M AND AG-4T ARE EXTRUDED ALUMINUM ALLOY 6063 WITH A T5 TEMPER (BY ARCHITECTURAL GRAPHICS INC.)
2. FINISH: MILL FINISH

FRAMING & ACCESSORIES

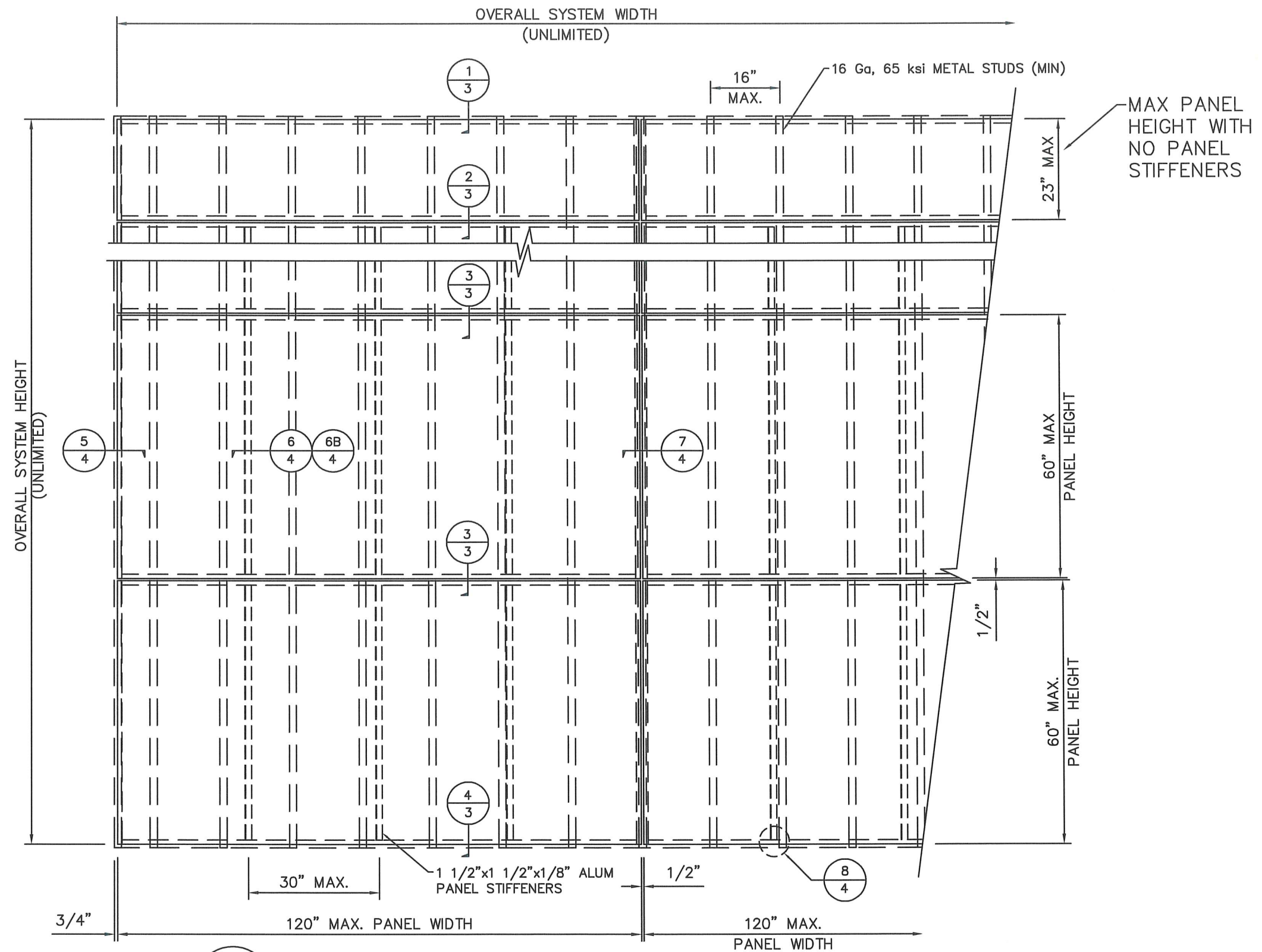
1. STEEL STUDS AND TRACKS: 16GA. MIN. GALVINIZED STEEL WITH MIN. PROPERTIES OF 50 KSI YIELD, 65 KSI ULTIMATE.
2. STUD & TRACK FASTENERS: #12 x 1 1/2" HEX WASHER HEAD TEK 3 SCREWS.
3. PANEL FASTENERS: 3/16" ALUMINUM BUTTON HEAD POP-RIVET AT 2" FROM EDGES AND 8" MAX. O.C.
4. JOINT SILICONE: DOW CORNING #795 SILICONE SEALANT.
5. BACKER ROD: 1 1/8" DIA. DENVER FOAM OPEN CELL BACKER ROD
6. THE STRUCTURAL ADEQUACY OF THE 16 GA. GALVINIZED STEEL STUDS AND THE REST OF THE STRUCTURAL FRAMING SUPPORTING THE METAL PANELS IS NOT PART OF THIS PRODUCT CONTROL APPROVAL AND IT SHALL BE REVIEWED BY THE STRUCTURAL PLANS EXAMINER OF THE CORRESPONDING BUILDING DEPARTMENT.

SCOTT WOLTERS
FL PE# 62354

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
PH/FAX: (561) 225-1982



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PRJ.MGR./T.R.		DRAWINGS MARKED "APPROVED" OR "APPROVED AS NOTED" SHALL BE INTERPRETED AS AUTHORIZATION FOR FABRICATION		
JOB NO.		DWG NO.		REV
N/A		ALPOLIC-1		0
Scale N/A		DO NOT SCALE DRAWING		Sheet 1 of 6



1
2 ALUMINUM COMPOSITE PANEL ELEVATION
SCALE: NONE

PANEL DRAWINGS
DRAWN TO 1/2 SIZE- DIM. TO FULL SIZE

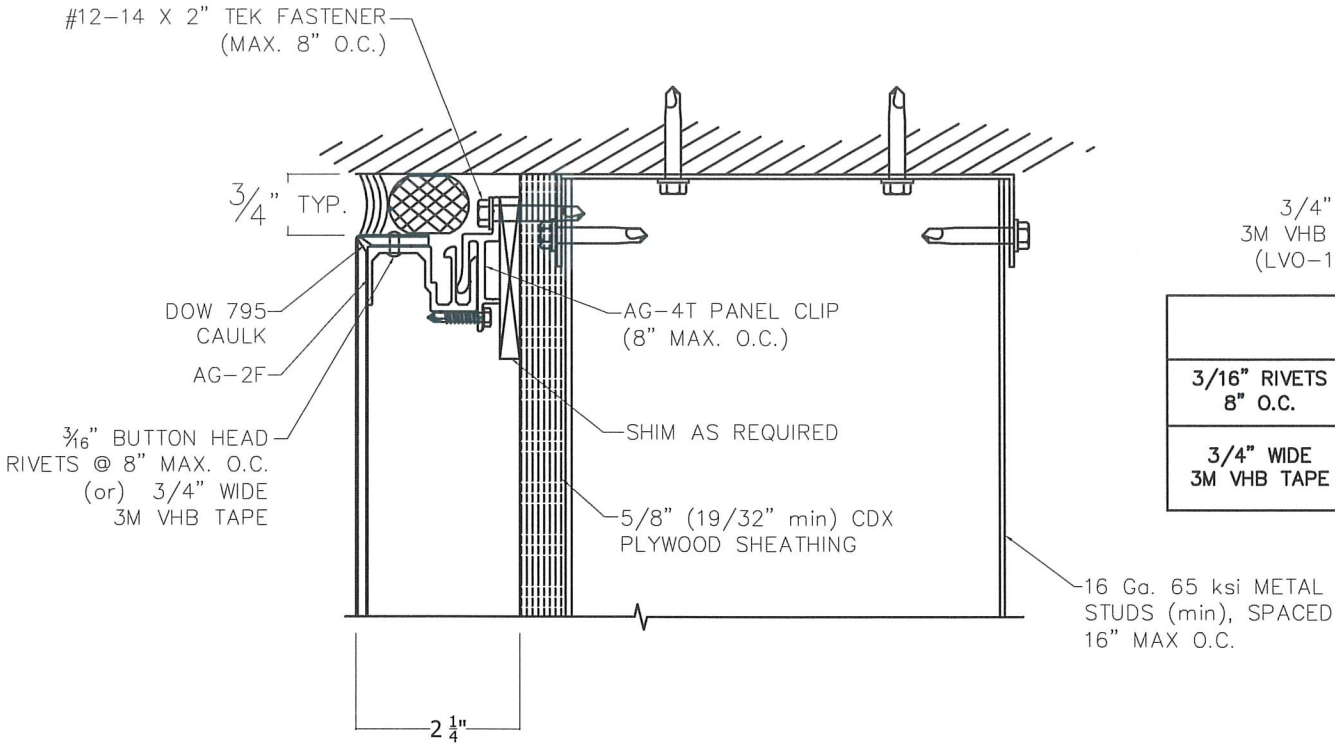
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		Sheet 2 of 6	REV 0

ALTERNATE DETAIL

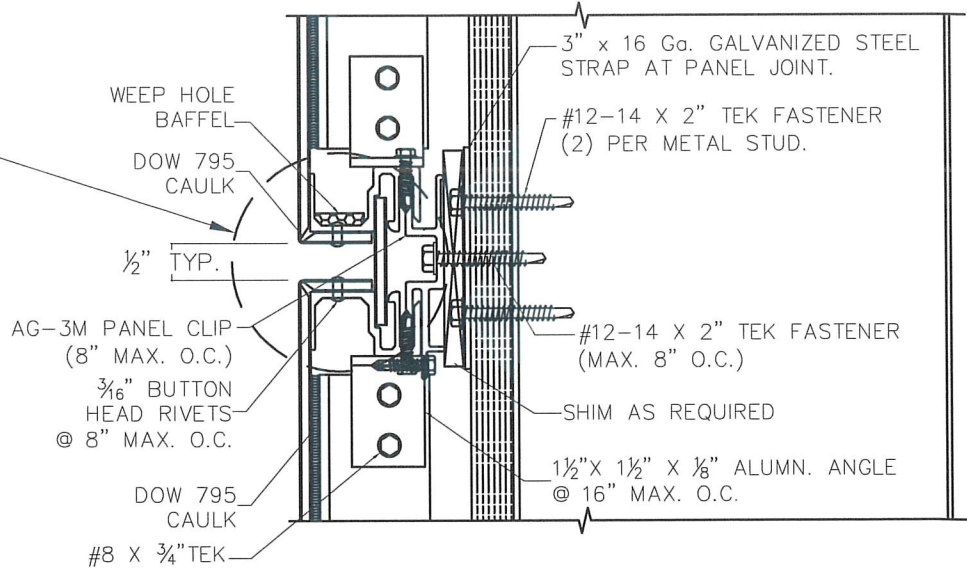


1

HEAD
SCALE: NONE

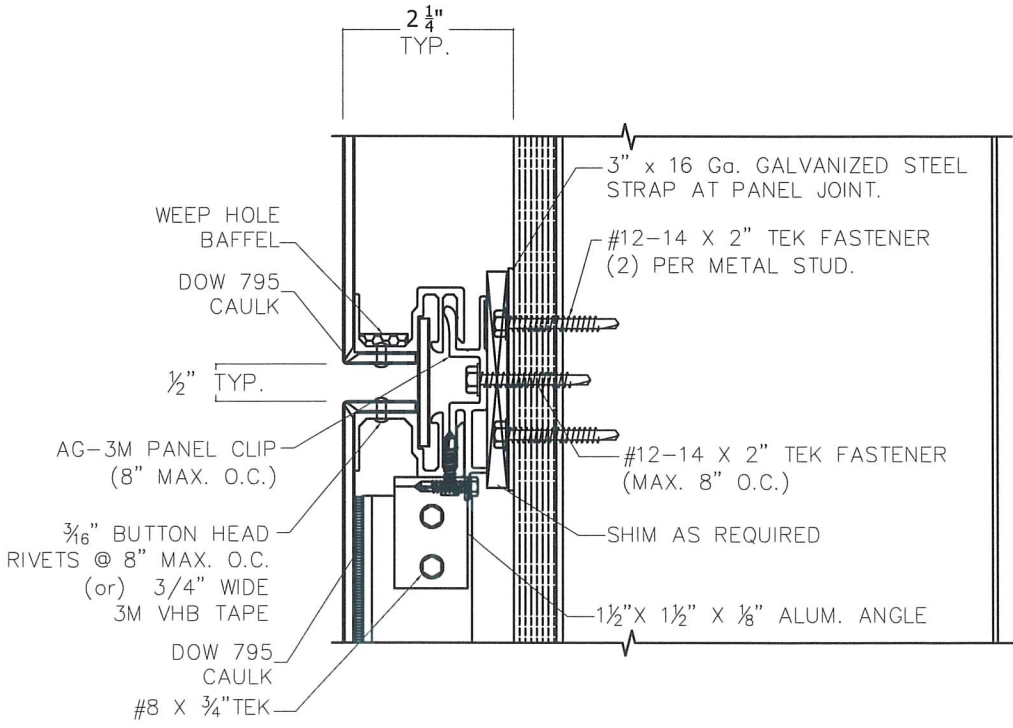
	PANEL WIDTH (in)	MAX DESIGN PRESSURE (ASD)
3/16" RIVETS 8" O.C.	60	±66.5 psf
3/4" WIDE 3M VHB TAPE	60 48 39	±43.2 psf ±54.0 psf ±66.5 psf

3/4" WIDE 3M VHB TAPE (LVO-110BF)



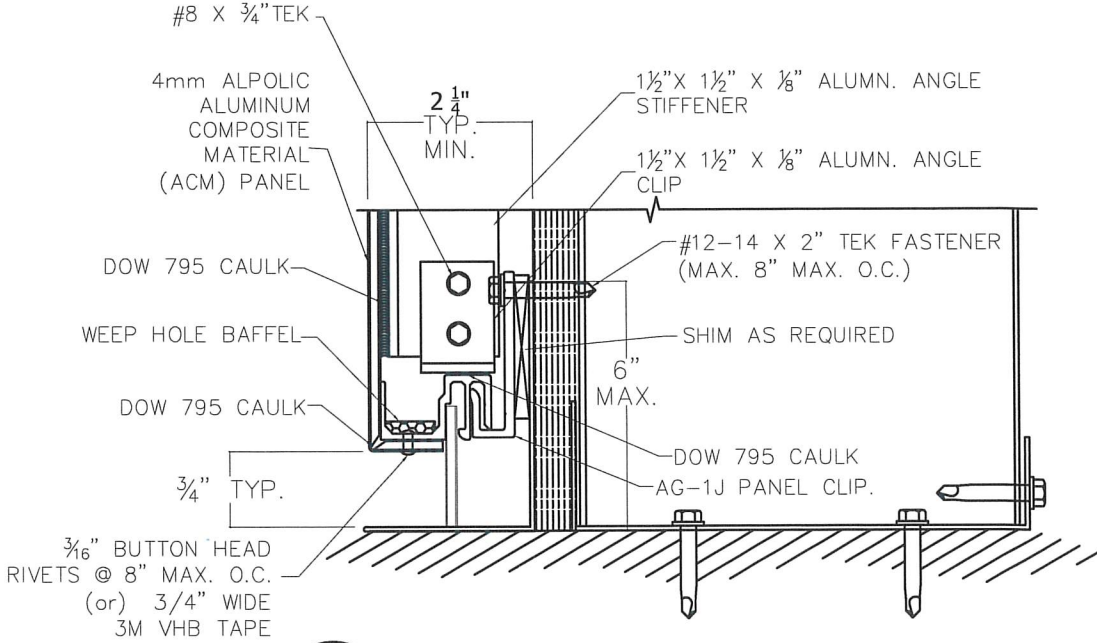
3

HORIZONTAL INTERMEDIATE
SCALE: NONE



2

HORIZONTAL INTERMEDIATE
SCALE: NONE



4

SILL
SCALE: NONE

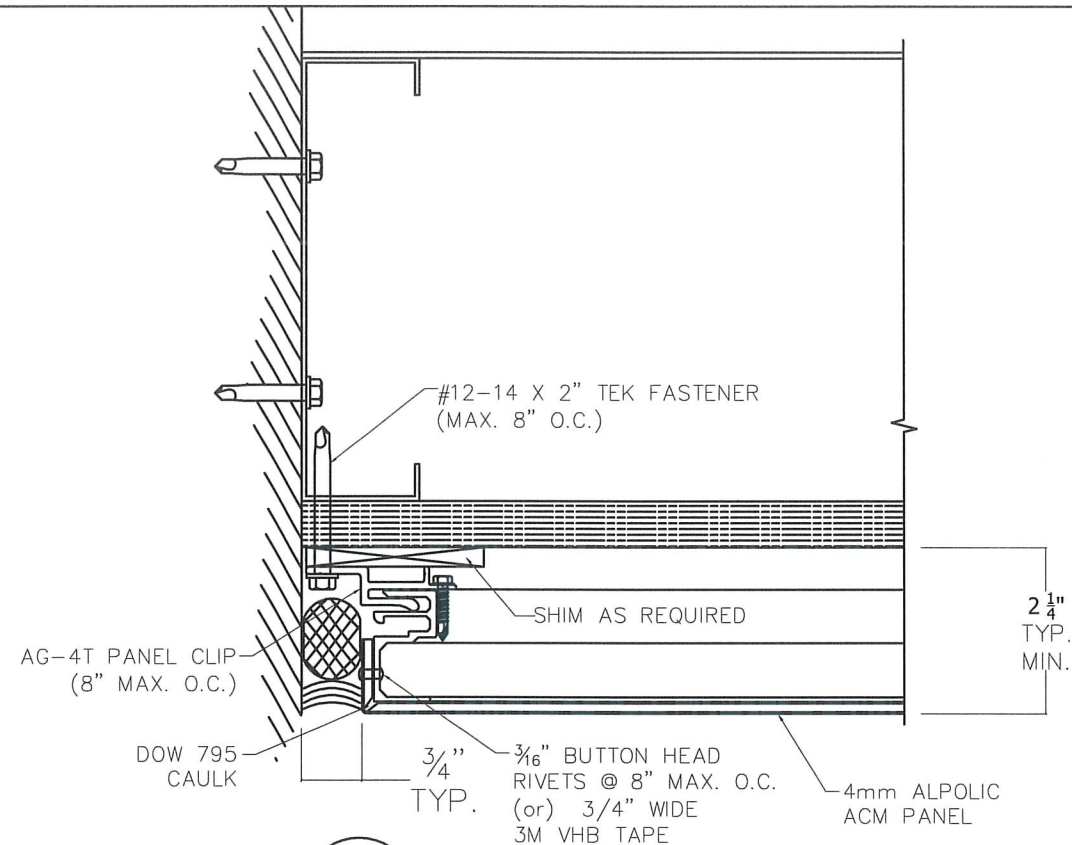
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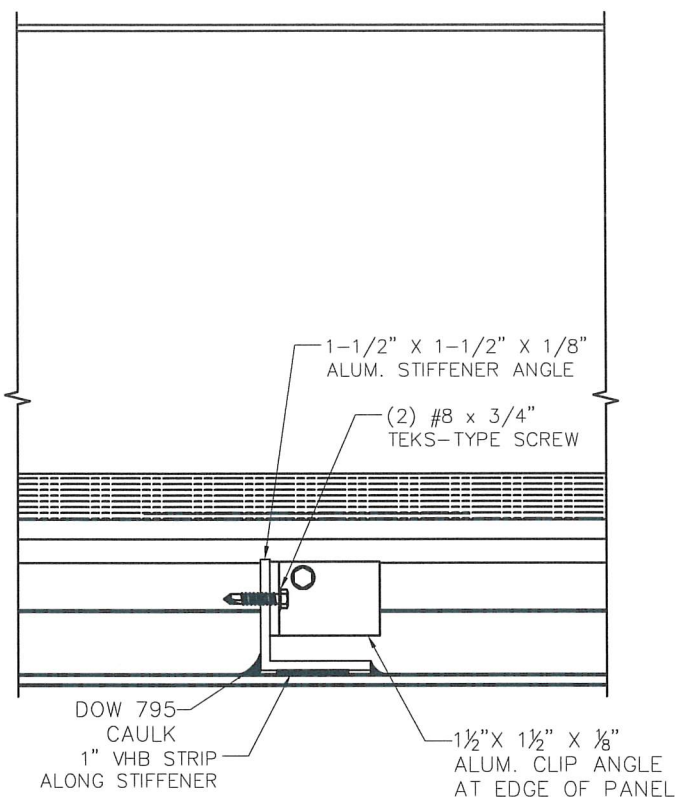
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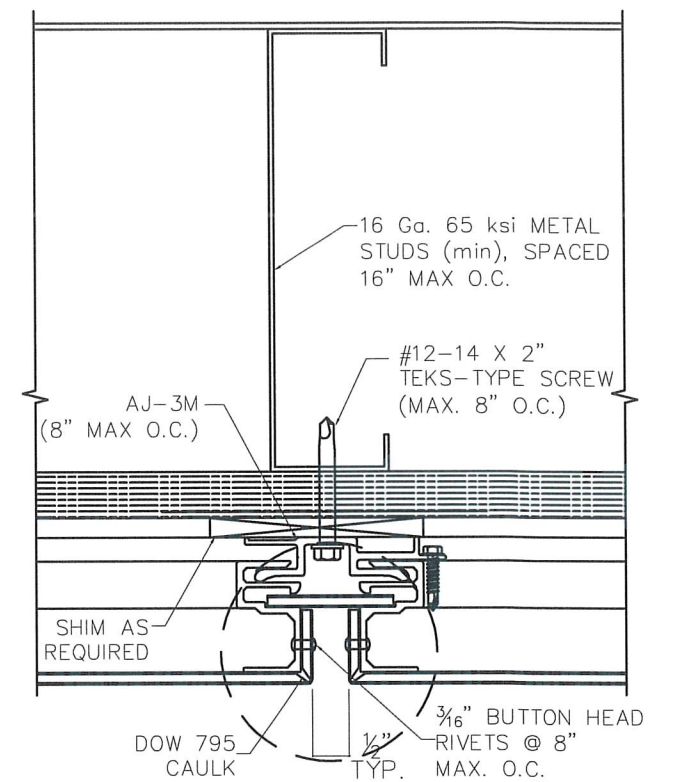
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Sheet 3 of 6	REV 0



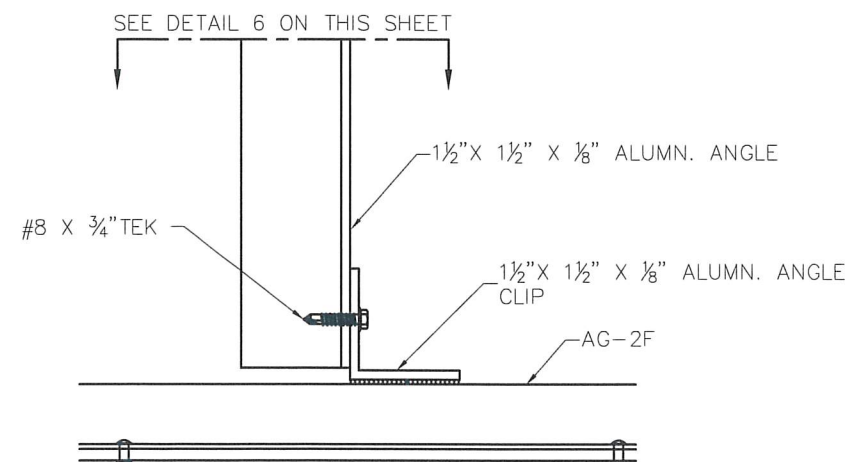
5 JAMB
SCALE: NONE



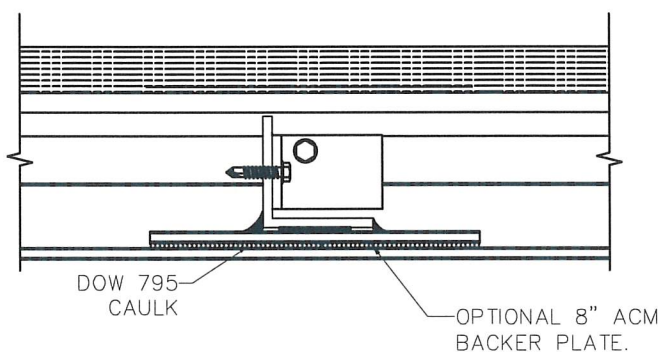
6 VERTICAL STIFFENER
SCALE: NONE



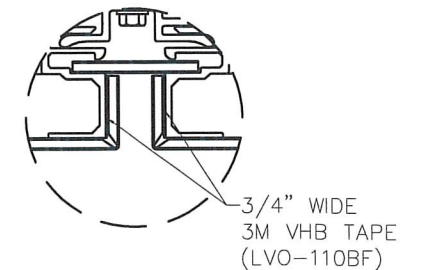
7 VERTICAL PANEL JOINT
SCALE: NONE



8 STIFFENER AT PANEL EDGE
SCALE: (FRONT VIEW)



6B OPTIONAL STIFFENER DETAIL
SCALE: NONE



ALTERNATE DETAIL

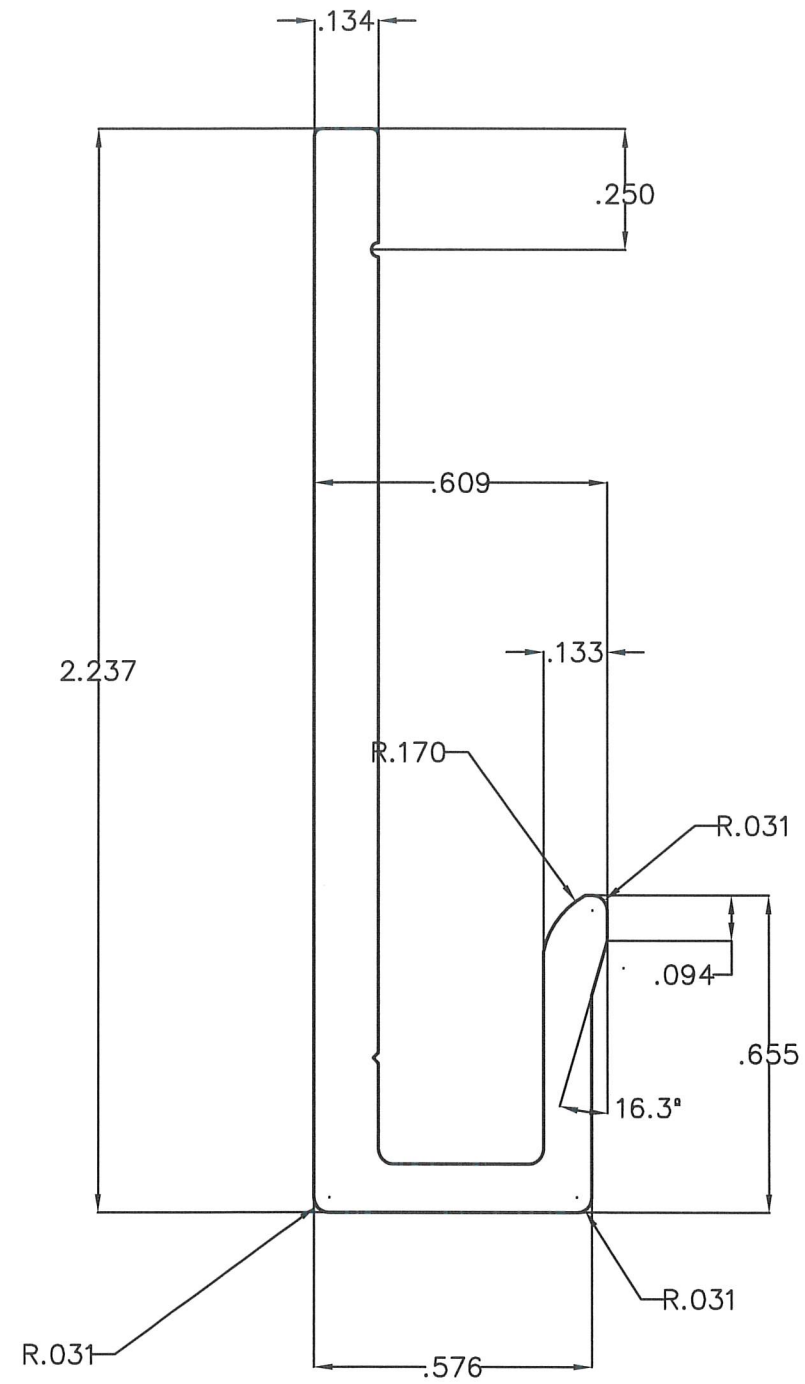
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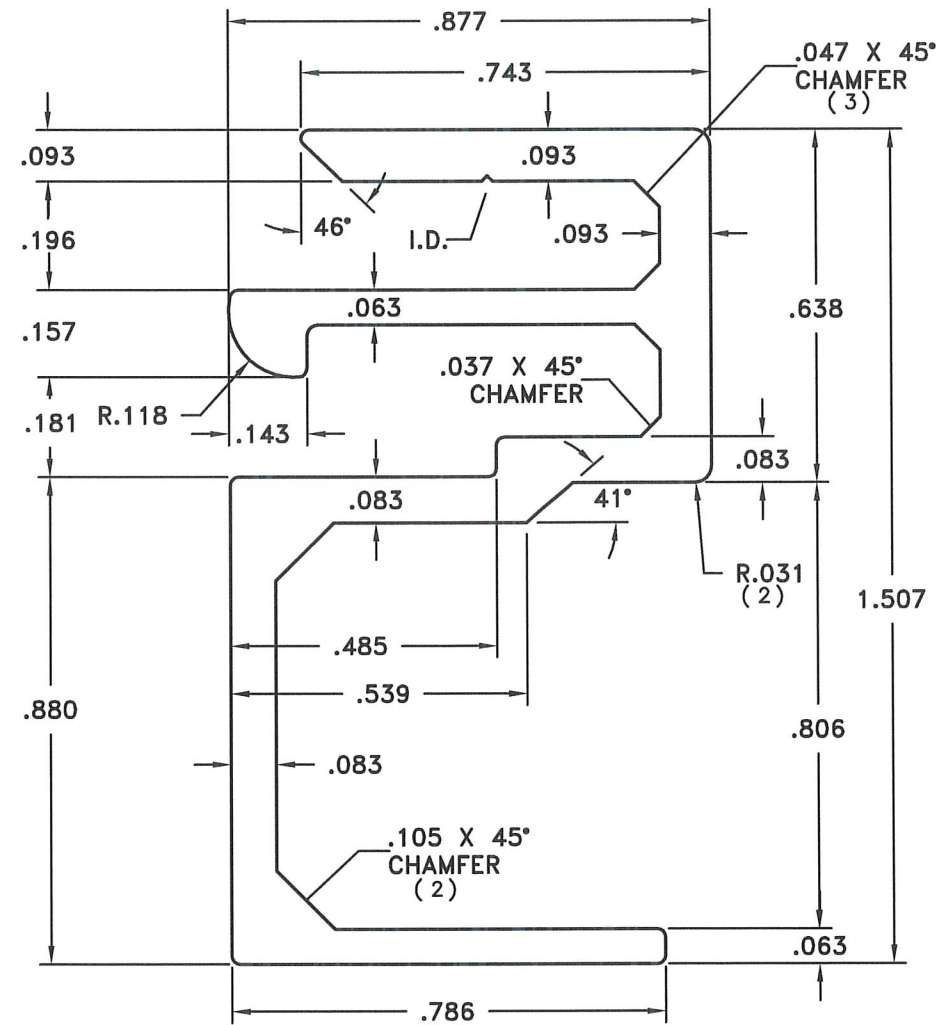


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AG-1J
EXTRUSION
DIE DATA

MASS: .481 lb/f
EST. PER.: 6.691 in
FACTOR: 14



AG-2F
EXTRUSION
DIE DATA

MASS: .448 lb/f
EST. PER.: 8.772 in
FACTOR: 20

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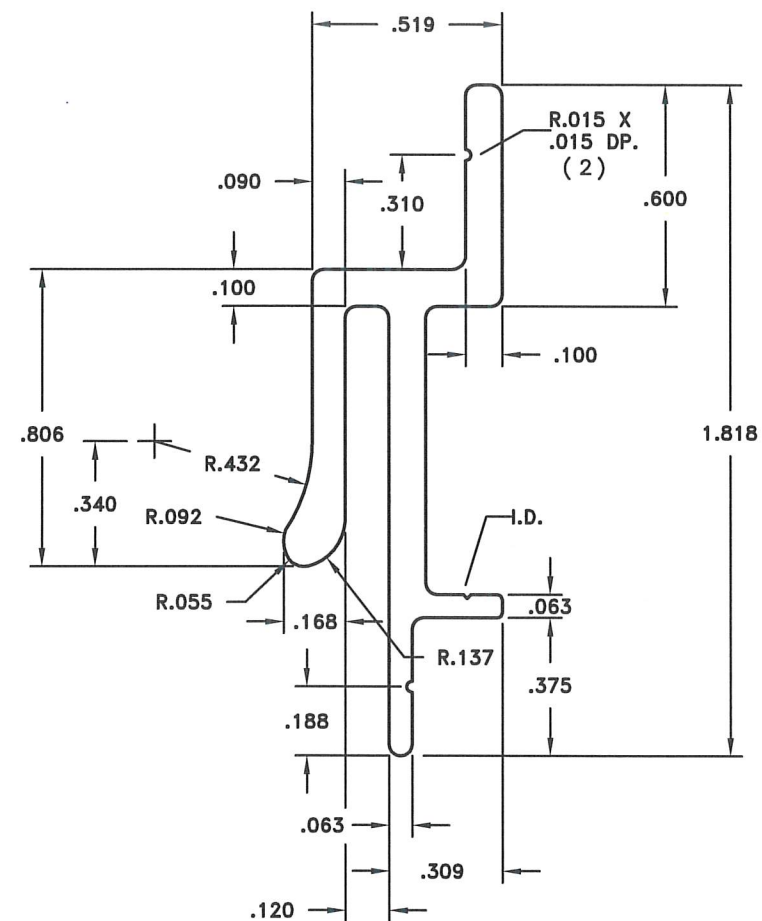
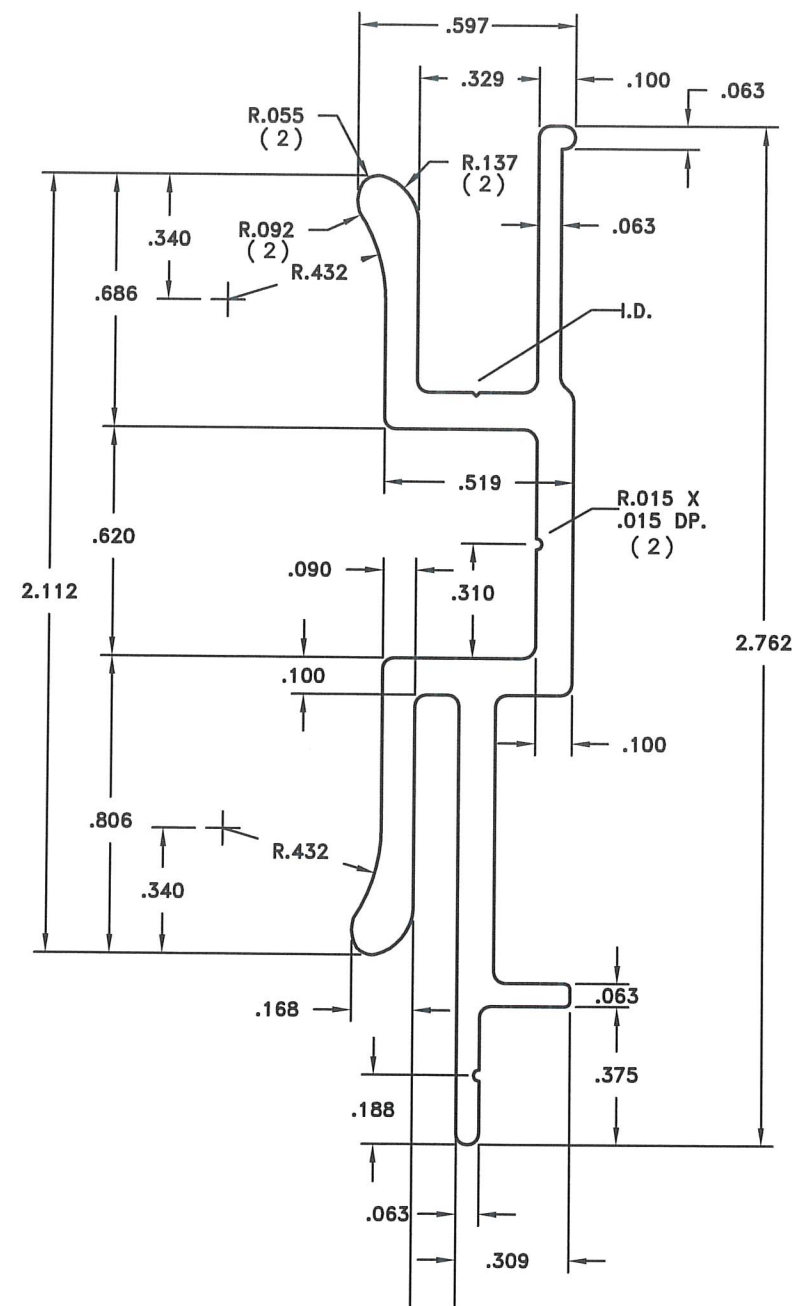
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