



Product Evaluation Report
E.F. BAVIS & ASSOCIATES, INC.

10' Fixed Window with Center Mullion

Florida Product Approval # 6587.5 R9

Florida Building Code 2026

Per Rule 61G20-3

Method: 1 -D

Category: Windows

Subcategory: Fixed

Compliance Method: 61G20-3.005(1)(d)

HVHZ

Product Manufacturer:

E.F. Bavis & Associates, Inc.

201 Grandin Road

Maineville, Ohio 45039

Engineer Evaluator:

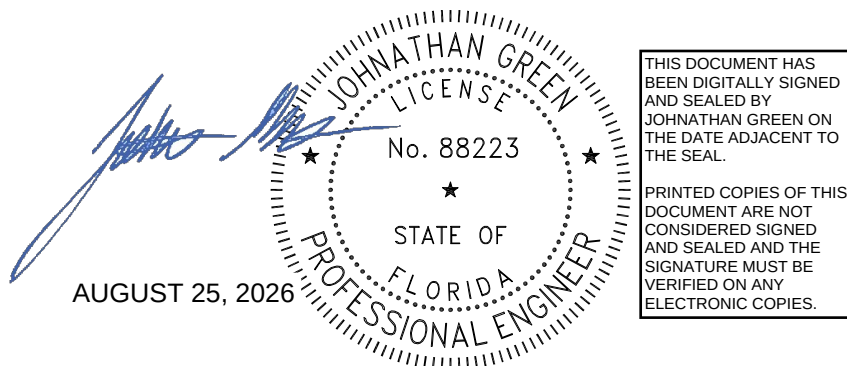
Johnathan Green, P.E. #88223

Florida Evaluation ANE ID: 12901

Contents:

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Installation Detail: Page 4 - 23





Compliance Statement:	The product as described in this report has demonstrated compliance with the Florida Building Code 2026 including High Velocity Hurricane Zone.
Product Description:	10' Fixed Window with Center Mullion Model #12103994.
Window Frame Size:	9'-3 ½" wide x 2'-8 ¾" high x 6 7/8" deep
Window Frame:	Material: 14 Ga. ASTM A653 Grade 50, Galvannealed A60 Frame Coating: Nominal 3 mils Powder Coat
Window Center Mullion:	Three piece, 11 Ga. & 14 Ga. steel and aluminum stop bar.
Glazing:	1 ¼" (nominal) thick bullet resistant glass. The glass consists of 3/32" annealed on interior face, 3/8" annealed, ½" annealed and ¼" annealed on the exterior side. A layer of 0.030" Kuraray Trosifol PVB is placed between each layer of glass.
Glazing Interlayer:	Kuraray America, Inc. 0.030" Kuraray Trosifol PVB Interlayer Miami Dade NOA NO: 26-0625.05
Window Frame Anchorage:	Header: Eight fasteners equally spaced, 7 ¼" from each end then 13 7/8" O.C. Sill: Eight fasteners located in pairs of two at 2" apart, 7" and 46 7/8" from each end. Jamb: Three fasteners located 6", 17 ¼" and 28 ½" from bottom of frame for each jamb. All fasteners shall be Corrosion Resistance: Per Florida Building Code 2026 and Section 1711 for installations within 3000 ft. of a saltwater coastline.
Substrate:	Minimum 14 Ga. Stud framed opening or Minimum Grout filled C90 Concrete Block Nominal 8" or Minimum No 2 S.P.F. Wood frame Substrate must be designed in accordance w/ Florida Building Code 2026.
Anchor Edge Distance:	Minimum ¾" edge distance for 14 Ga. steel framing Minimum 3" edge distance for Grout filled C90 Concrete Block Nominal 8" Minimum 1 ¼" edge distance for No 2 S.P.F. Wood frame
Design Wind Pressures:	+ / - 75.0 psf



Performance Standards:

The product described herein has demonstrated compliance with:

- TAS 201-94: Large Missile Impact Test.
- TAS 202-94: Criteria for Testing Impact and Non-Impact Resistance Building Envelope Components Using Static Air Pressure.
- TAS 203-94: Criteria for Testing Products Subject to Cyclic Wind Pressure Loading.
- ASTM F588: Type D Hand & Tool Manipulation Test

Reference Data:

1. Test Reports T101-06
Farabaugh Engineering & Testing, Inc.
2. Anchor Calculations
Terrence E. Wolfe, P.E. # 44923
3. Certificate of Independence
By Johnathan Green, P.E. (No. 88223) @ Force Engineering & Testing
(FBC Organization # ANE ID: 12901)

Quality Assurance Entity:

The manufacturer has established compliance of roof panel products in accordance with the Florida Building Code and Rule 61G20-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity.

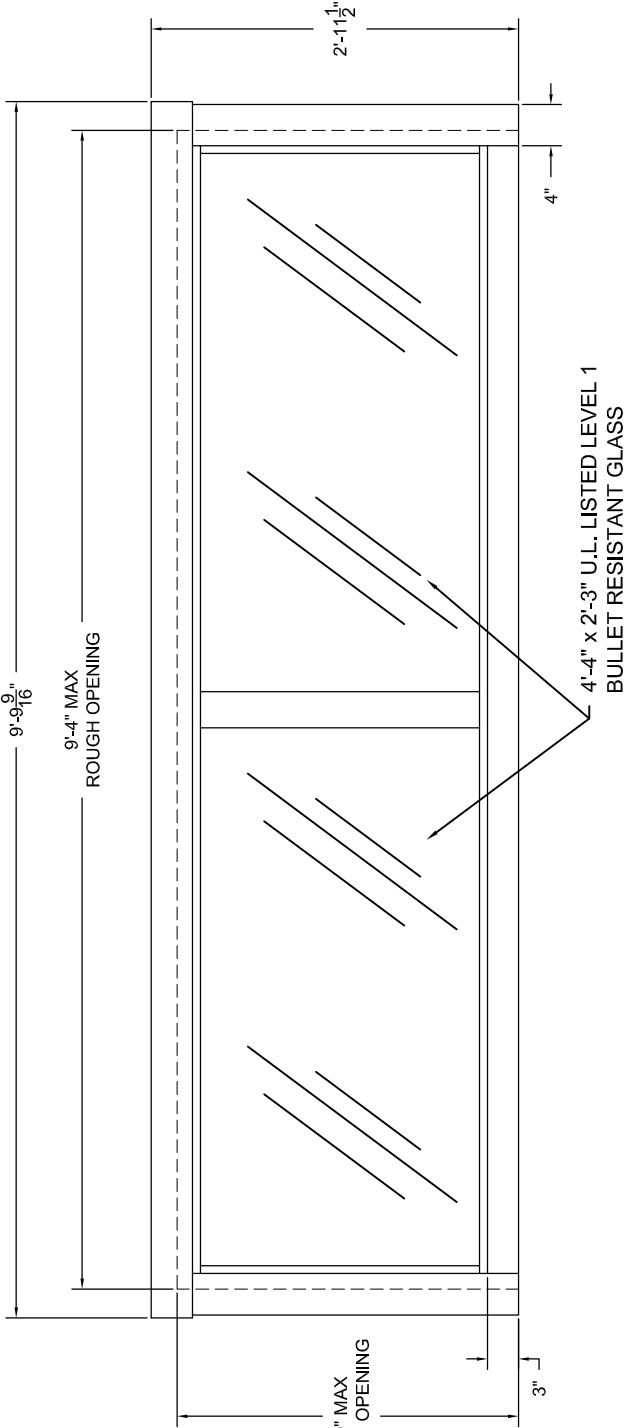
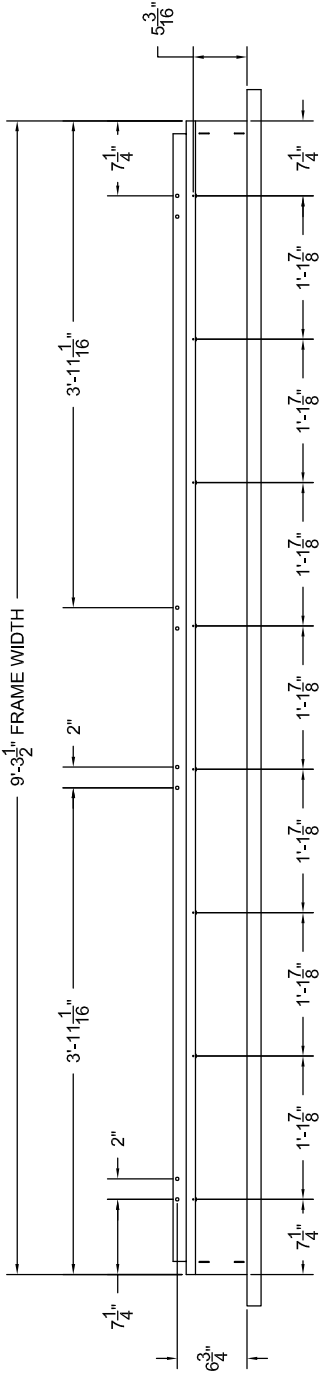
Installation:

Install per manufacturer's recommended details.

Design Procedure:

Based on the dimensions of the structure, appropriate wind loads are determined using Chapter 16 of the Florida Building Code 2026 for wall cladding wind loads. These component wind loads for wall cladding are compared to the allowable pressure listed above. The design professional shall select the appropriate erection details to reference in his drawings for proper fastener attachment to the structure. Support framing must be in compliance with Florida Building Code 2026.

REVISION RECORD		DATE	ECN	DR	CK
12/29/15	17008	UPDATE FILE NUMBER AND CODE VERSION	MC	MB	MC
01/09/16	18731	UPDATE CODE VERSION	MC	MB	MC
10/01/20	21151	UPDATE CODE VERSION	MC	MB	MC
01/24/23	23577	UPDATE GLASS MANUFACTURER'S UL FILE NUMBER	MC	DM	MC



WINDOW MODEL #
12103994

PROPRIETARY

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E.F.BAVIS & ASSOCIATES INC.
201 GRANDIN RD.
MAINEVILLE, OH 45039
T: 513-677-0500 F: 513-677-0552 E: info@bavfs.com www.bavfs.com

REVIEWED
10/01/20

DRAWN
M. CRAVEN

DATE
12/29/15

SCALE
A

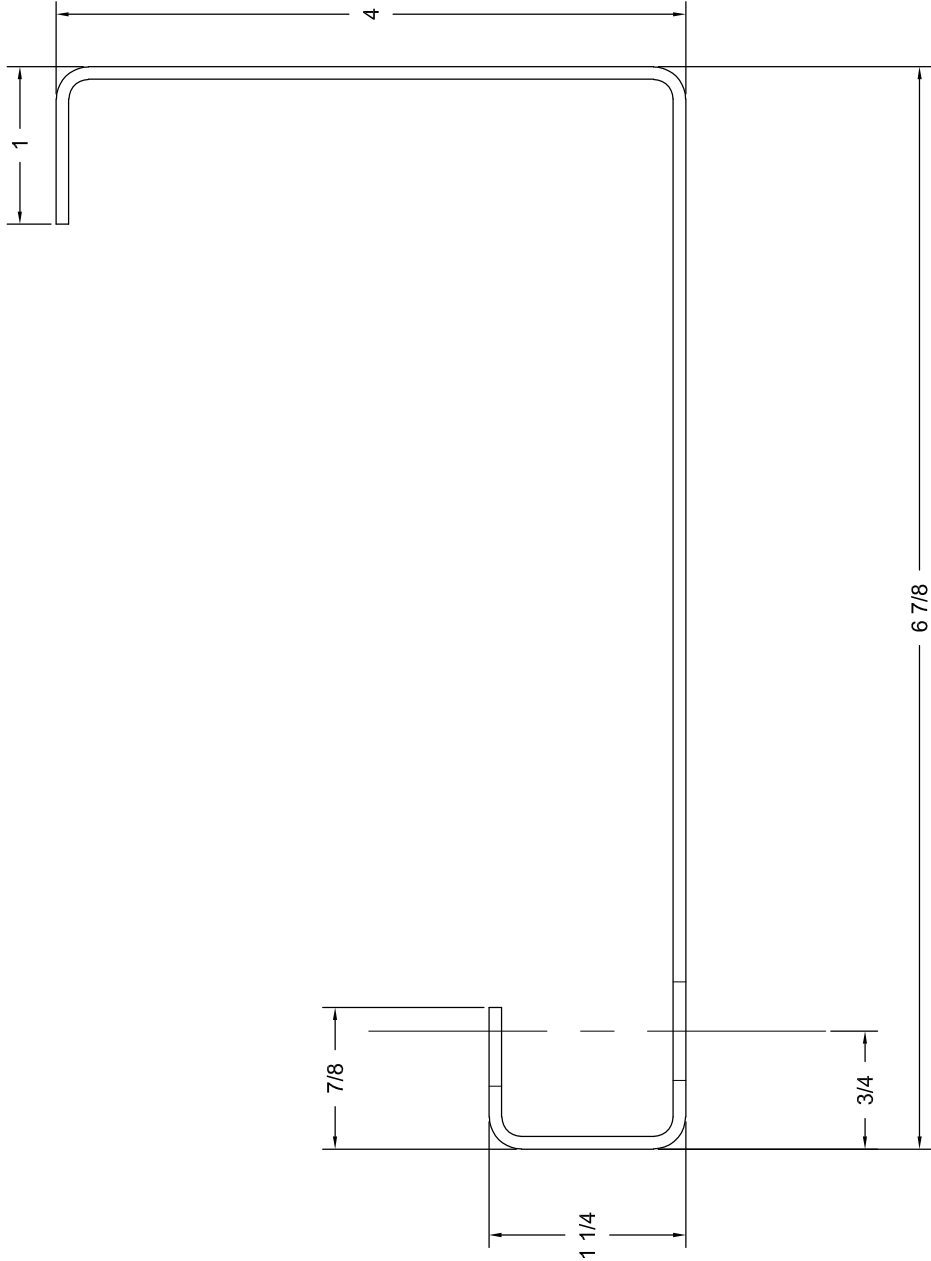
TITLE
HVHZ 10' TRIMMED WINDOW

DRAWING NO
12103994

SHEET
1 OF 1

CATEGORY: WINDOWS
SUBCATEGORY: FIXED
APPLICATION STATUS: APPROVED

	E.F.BAVIS & ASSOC. INC.		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES DECIMALS: XX +/- .01 ; XXX +/- .005 FRACTIONS: + - 1/32" ANGLES: + - 30' REMOVE ALL BURRS AND SHARP EDGES TO R .02 OR .02 X .02 CHAMFER MAX.		10' FIXED WINDOW		MODEL	12103994	PAGE 2 OF 17	
	201 GRANDIN RD. P.O.BOX 337 MAINEVILLE, OH. 45039 0337 PH 513-677-0500 FAX 513-677-0552		THIS DOCUMENTATION AND INFORMATION CONTAINED ARE THE SOLE PROPERTY OF E.F.BAVIS & ASSOC. INC. IT SHALL BE RETURNED UPON REQUEST AND SHALL NOT BE REPRODUCED IN WHOLE OR IN PART, OR DISCLOSED TO ANYONE ELSE, OR USED, WITHOUT WRITTEN CONSENT OF E.F.BAVIS & ASSOC. INC.				DWG.	40019	DATE ORDERED: 7-13-05 BAP	
							REV.	06/27/08	COPYRIGHT 2005	
							DATE:		E.F.Bavis & Assoc. Inc.	
VERTICAL FRAME CROSS SECTION, FOR PLANT QUALITY CONTROL										



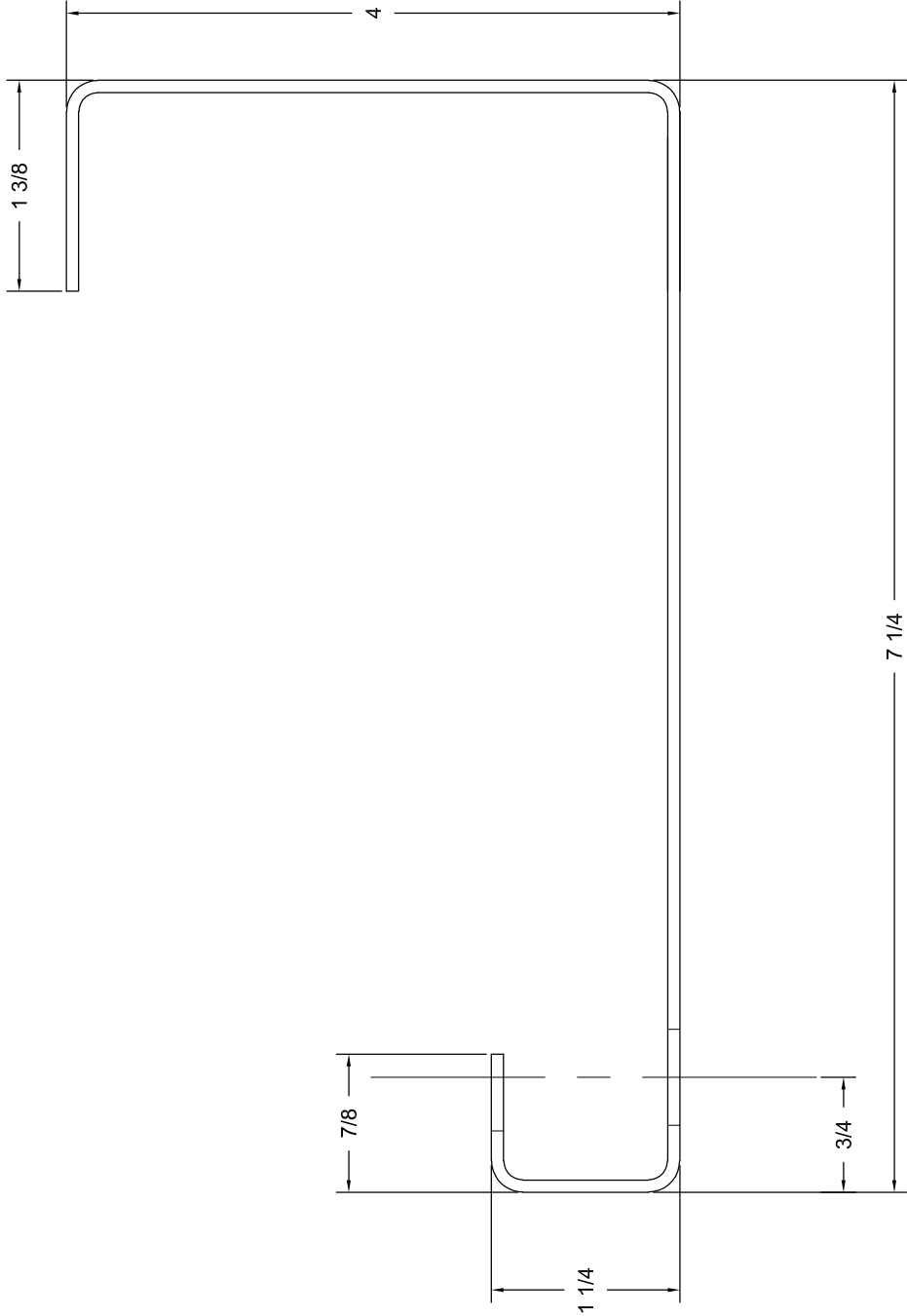
ITEM - 1

MATERIAL: ASTM A653 .0785 (14 GAUGE) GALVANNEALED A60

	E.F.BAVIS & ASSOC. INC.		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES DECIMALS: .XX +-.01 ; .XXX +-.005 FRACTIONS: + - 1/32" ANGLES: + - 30' REMOVE ALL BURRS AND SHARP EDGES TO R .02 OR .02 X .02 CHAMFER MAX.		12103994		PAGE 3 OF 17	
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					REV. 06/27/08		COPYRIGHT 2005 E.F.Bavis & Assoc. Inc.	
					DATE:		MJC	

10' FIXED WINDOW

TOP FRAME CROSS SECTION, FOR PLANT QUALITY CONTROL



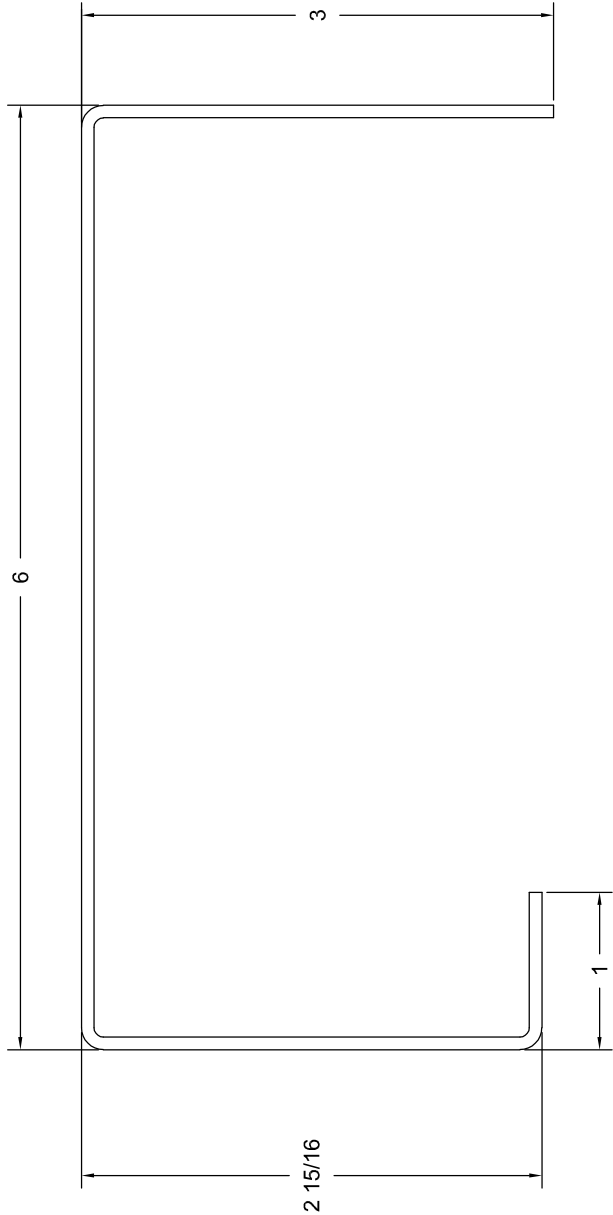
ITEM - 2

MATERIAL: ASTM A653 .0785 (14 GAUGE) GALVANNEALED A60

	E.F.BAVIS & ASSOC. INC.		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES DECIMALS: XX +-.01; XXX +-.005 FRACTIONS: + 1/32; ANGLES: +-.30° REMOVE ALL BURRS AND SHARP EDGES TO R .02 OR .02 X .02 CHAMFER MAX.		12103994		PAGE 5 OF 17
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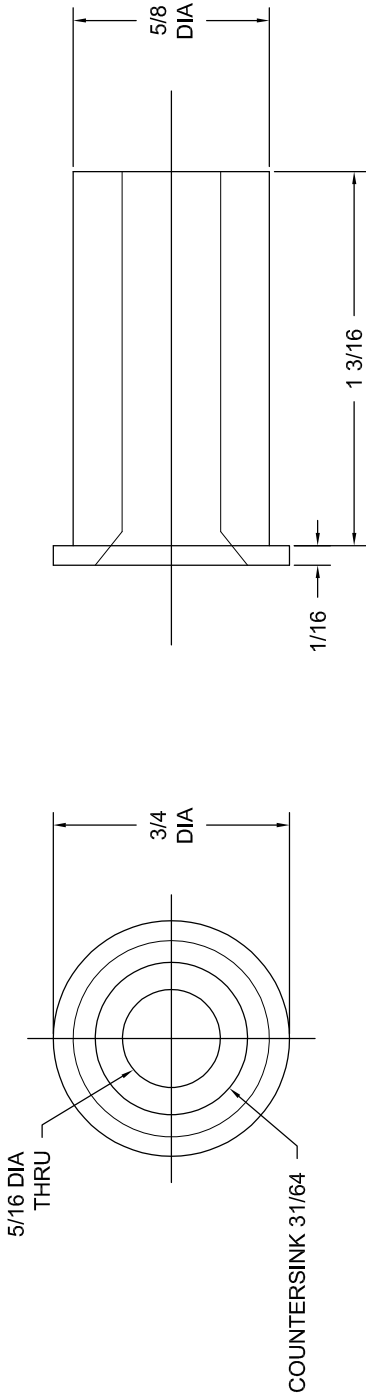
UPPER SILL CROSS SECTION, FOR PLANT QUALITY CONTROL

NO.	ECN
2	7624



	E.F.BAVIS & ASSOC. INC.		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES DECIMALS: .XX ± .01 ; .XXX ± .005 FRACTIONS: + - 1/32" ANGLES: ± .30° REMOVE ALL BURRS AND SHARP EDGES TO R .02 OR .02 X .02 CHAMFER MAX.		10' FIXED WINDOW		MODEL	12103994	PAGE	6 OF 17
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							REV.		COPYRIGHT 2005 E.F.Bavis & Assoc. Inc.	
							DATE:			

WINDOW FILLER PLUG, FOR PLANT QUALITY CONTROL

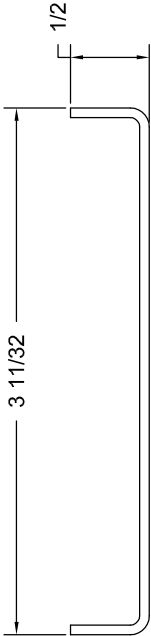
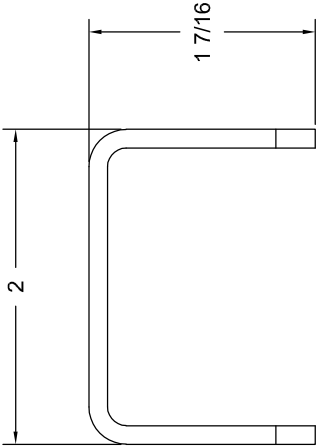


ITEM - 6

MATERIAL: 12L14 STEEL

	E.F.BAVIS & ASSOC. INC. 201 GRANDIN RD. P.O.BOX 337 MAINEVILLE, OH. 45039 0337 PH 513-677-0500 FAX 513-677-0552	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES DECIMALS: .XX +-.01; .XXX +-.005 FRACTIONS: + - 1/32; ANGLES: + - 30' REMOVE ALL BURRS AND SHARP EDGES TO R .02 OR .02 X .02 CHAMFER MAX.		10' FIXED WINDOW		MODEL	12103994	PAGE	7 OF 17	
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						REV.		COPYRIGHT 2005 E.F.Bavis & Assoc. Inc.		
						DATE:				
WINDOW DIVIDER CROSS SECTION, FOR PLANT QUALITY CONTROL										

NO.	ECN
1	7353

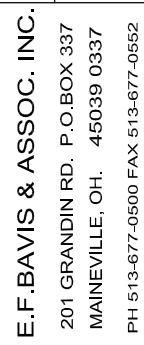


ITEM - 7

MATERIAL: ASTM A653 .118 (11 GAUGE) COLD FINISHED

ITEM - 8

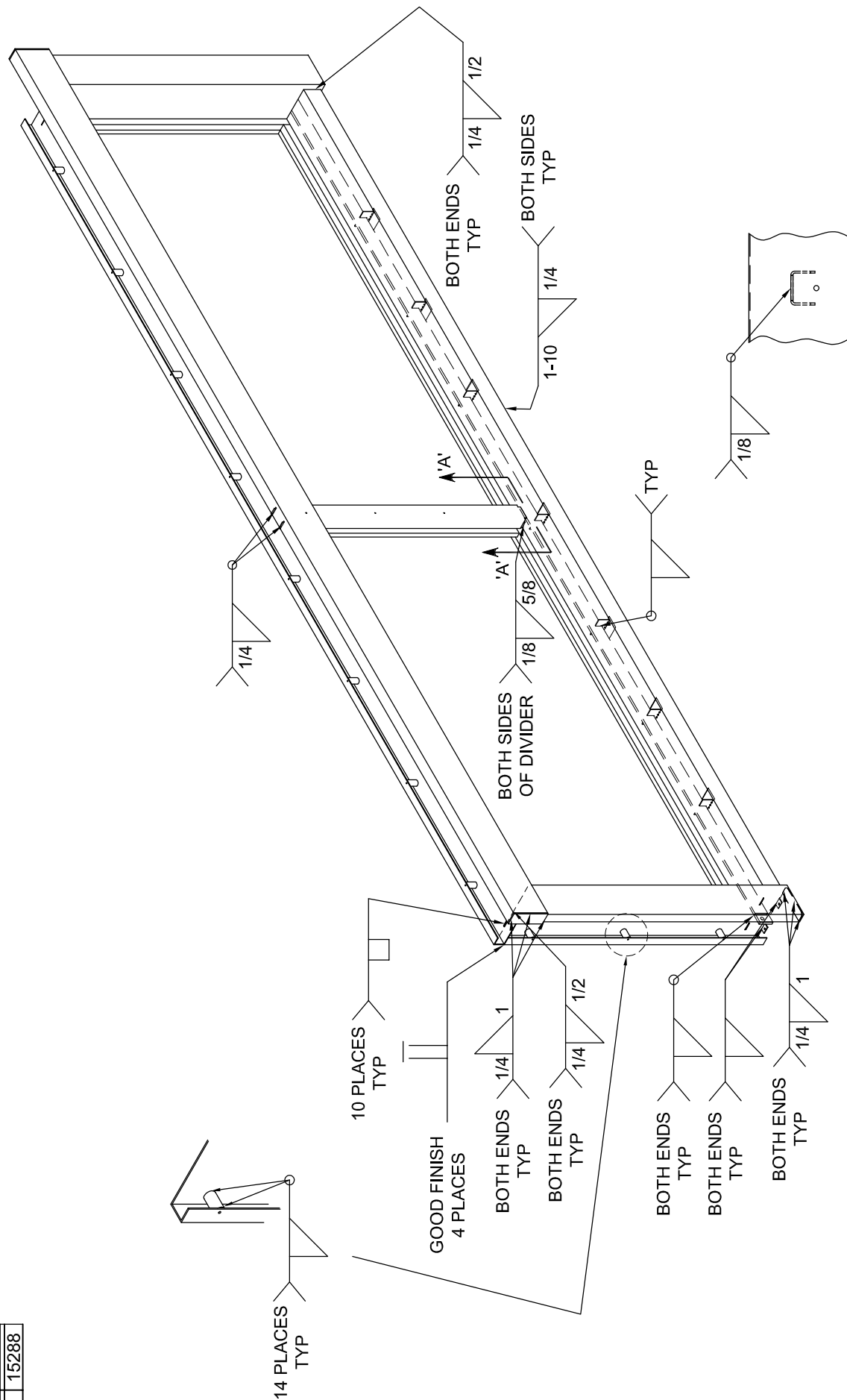
MATERIAL: ASTM A653 .0785 (14 GAUGE) GALVANNEALED A60



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WINDOW WELDMENT DETAIL, FOR PLANT QUALITY CONTROL

NO.	ECN
1	15288



SECTION VIEW 'A-A'

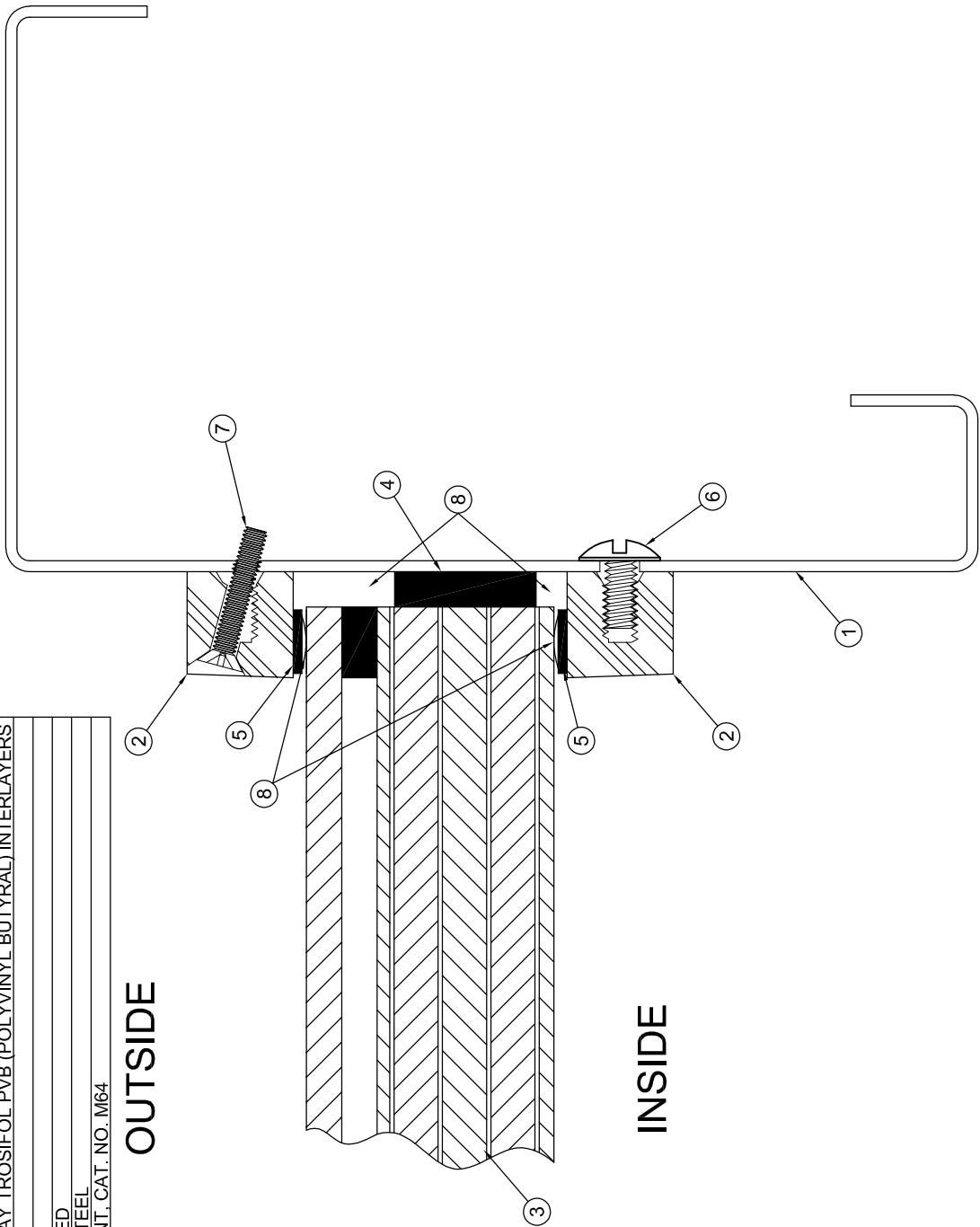
2x SCALE

10' FIXED WINDOW

INSULATED GLASS WINDOW GLAZING DETAIL, FOR PLANT QUALITY CONTROL

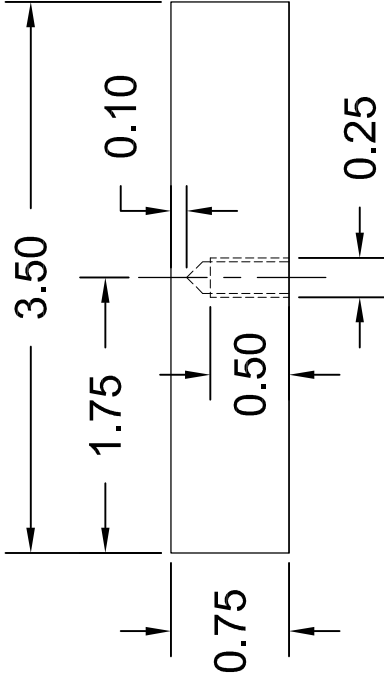
ITEM	DESCRIPTION
1	VERTICAL FRAME
2	3/4" X 3/4" ALUMINUM EXTRUSION
3	UL LISTED 78CL, LEVEL 1 BULLET RESISTANT GLASS
	STANDARD MAKE-UP: 1/4" ANNEALED, 1/2" ANNEALED, 3/8" ANNEALED & 3/32" ANNEALED GLASS
	WITH 0.030" KURARAY TROSIFOL PVB (POLYVINYL BUTYRAL) INTERLAYERS
	INSULATED MAKE-UP: 1/4" ANNEALED, 1/4" AIR SPACE, 1/4" ANNEALED, 1/2" ANNEALED, 3/8" ANNEALED
	& 3/32" ANNEALED GLASS WITH 0.030" KURARAY TROSIFOL PVB (POLYVINYL BUTYRAL) INTERLAYERS
4	1" X 4" X 3/16" THICK, RUBBER SETTING BLOCK
5	1/16" BUTYL TAPE, TREMCO 7242YA1760
6	1/4-20 X 1/2" PHILIPS TRUSS HEAD, ZINC COATED
7	#8-32 X 1" SPANNER FLAT HEAD, STAINLESS STEEL
8	CRL POLYURETHANE CONSTRUCTION SEALANT, CAT. NO. M64

NO.	ECN
1	18555
2	23577



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		10' FIXED WINDOW		MODEL	10.1 OF 17	
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		REV.	DATE:	COPYRIGHT 2005 E.F.Bavis & Assoc. Inc.		
OUTSIDE WINDOW STOP BAR CROSS SECTION, FOR PLANT QUALITY CONTROL						

NO.	ECN
1	7353

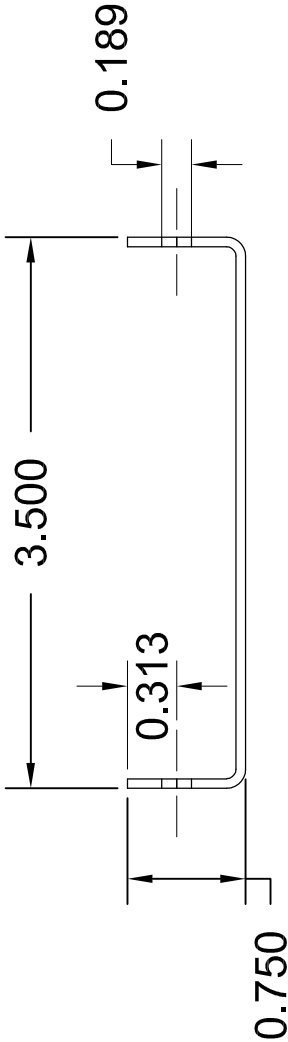


ITEM 2

MATERIAL: 6061-T6 ALUMINUM

	E.F.BAVIS & ASSOC. INC. 201 GRANDIN RD. P.O. BOX 337 MAINEVILLE, OH. 45039 0337 PH 513-677-0500 FAX 513-677-0552	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES DECIMALS: .XX ± .01; .XXX ± .005 FRACTIONS: + - 1/32; ANGLES: + - 30' REMOVE ALL BURRS AND SHARP EDGES TO R .02 OR .02 X .02 CHAMFER MAX.		12103994		PAGE
		10' FIXED WINDOW		10.2 OF 17		
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		REV. DATE:		BB		COPYRIGHT 2005 E.F.Bavis & Assoc. Inc.
WINDOW DIVIDER INSIDE COVER CROSS SECTION, FOR PLANT QUALITY CONTROL						

NO.	ECN
1	7353

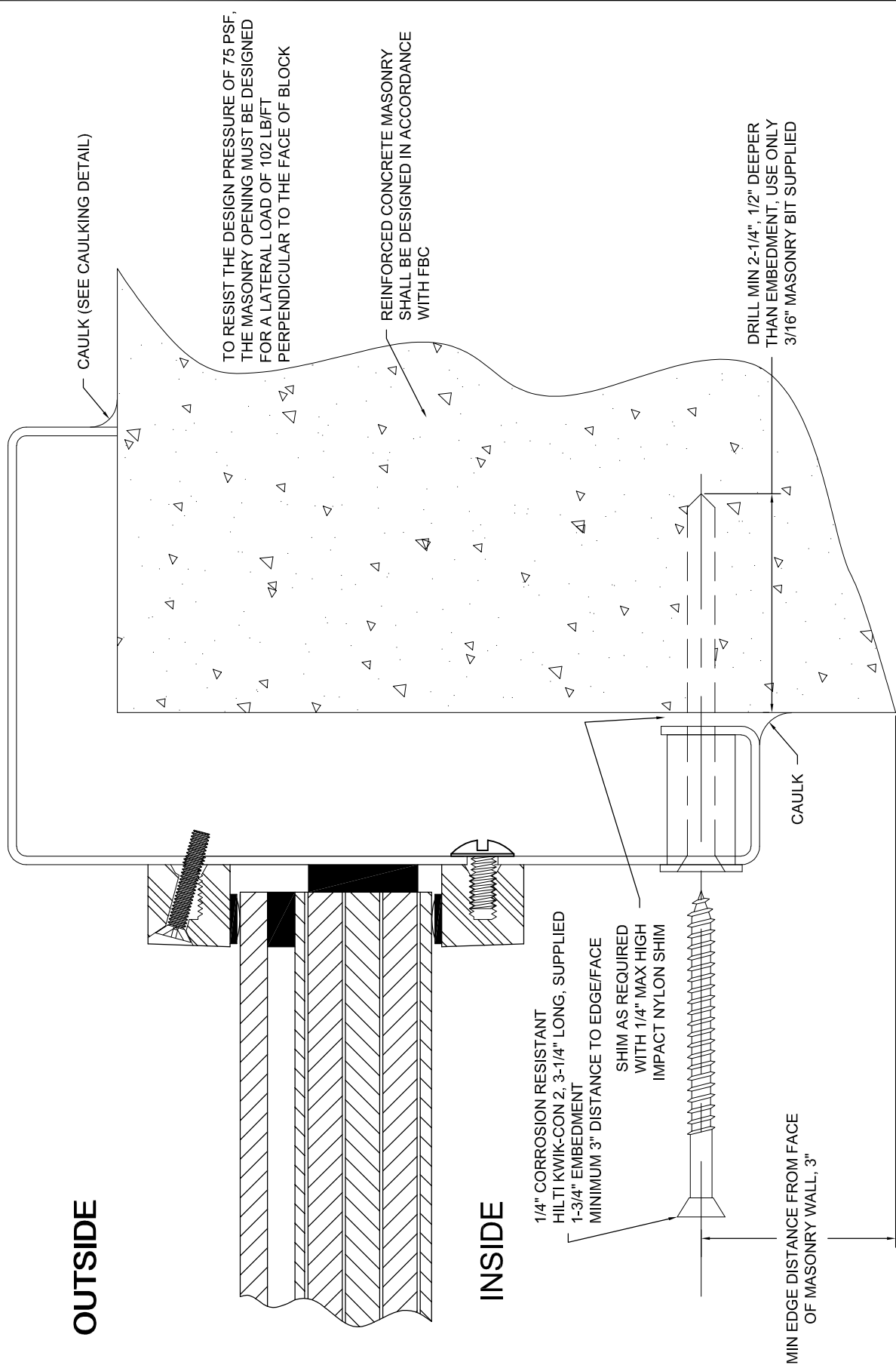


ITEM - 6

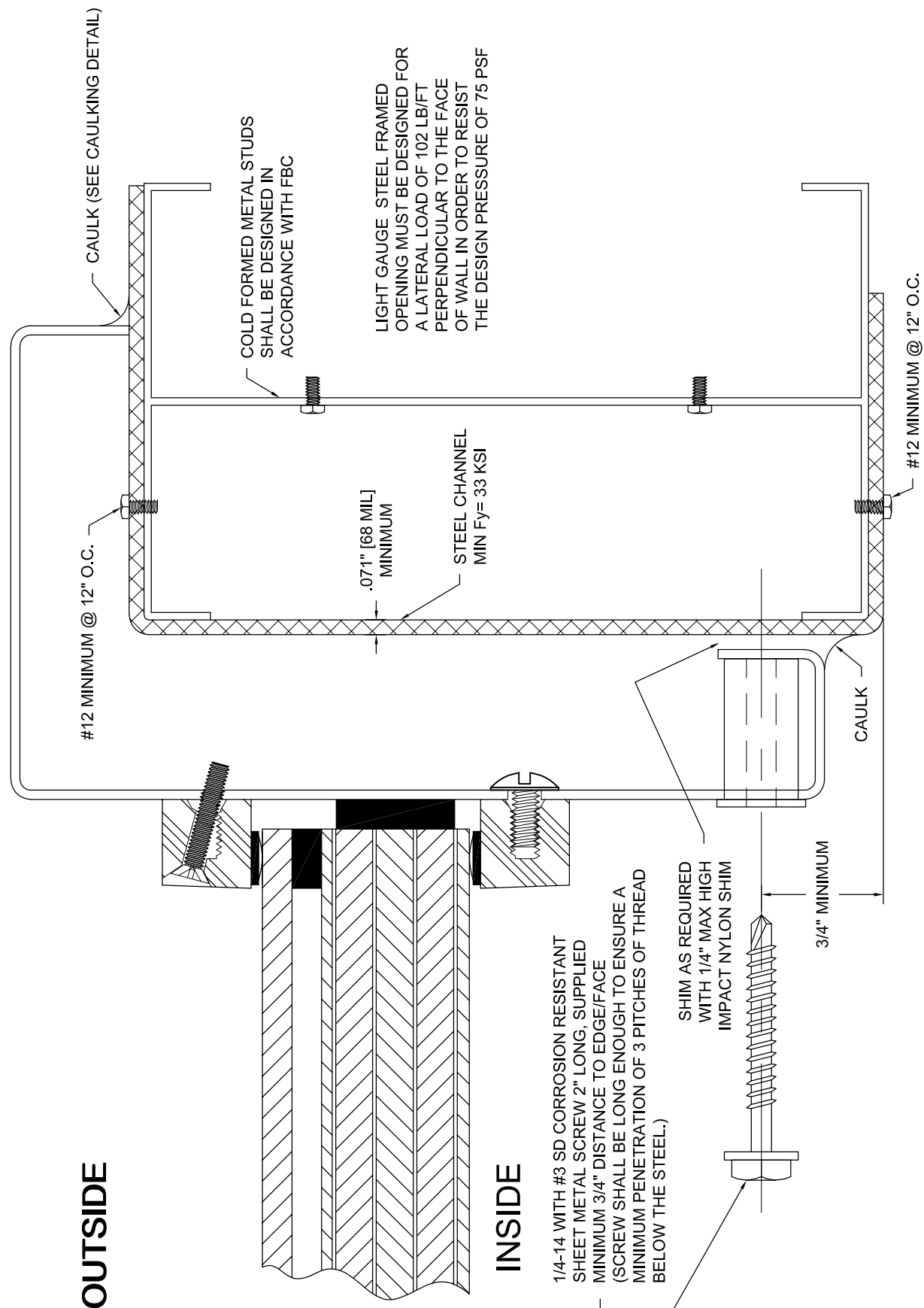
MATERIAL: 16 GAUGE GALVANNEALED STEEL

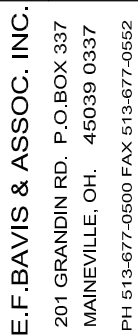
 E.F. BAVIS & ASSOC. INC. 201 GRANDIN RD. P.O. BOX 337 MAINEVILLE, OH. 45039 0337 PH 513-677-0500 FAX 513-677-0552	UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES DECIMALS: .XX ± .01 ; .XXX ± .005 FRACTIONS: + - 1/32; ANGLES: + - 30' REMOVE ALL BURRS AND SHARP EDGES TO R .02 OR .02 X .02 CHAMFER MAX.		10' FIXED WINDOW		MODEL 12103994	PAGE 11 OF 17
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FASTENER INSTALLATION DETAIL: MASONRY, HEAD & JAMB



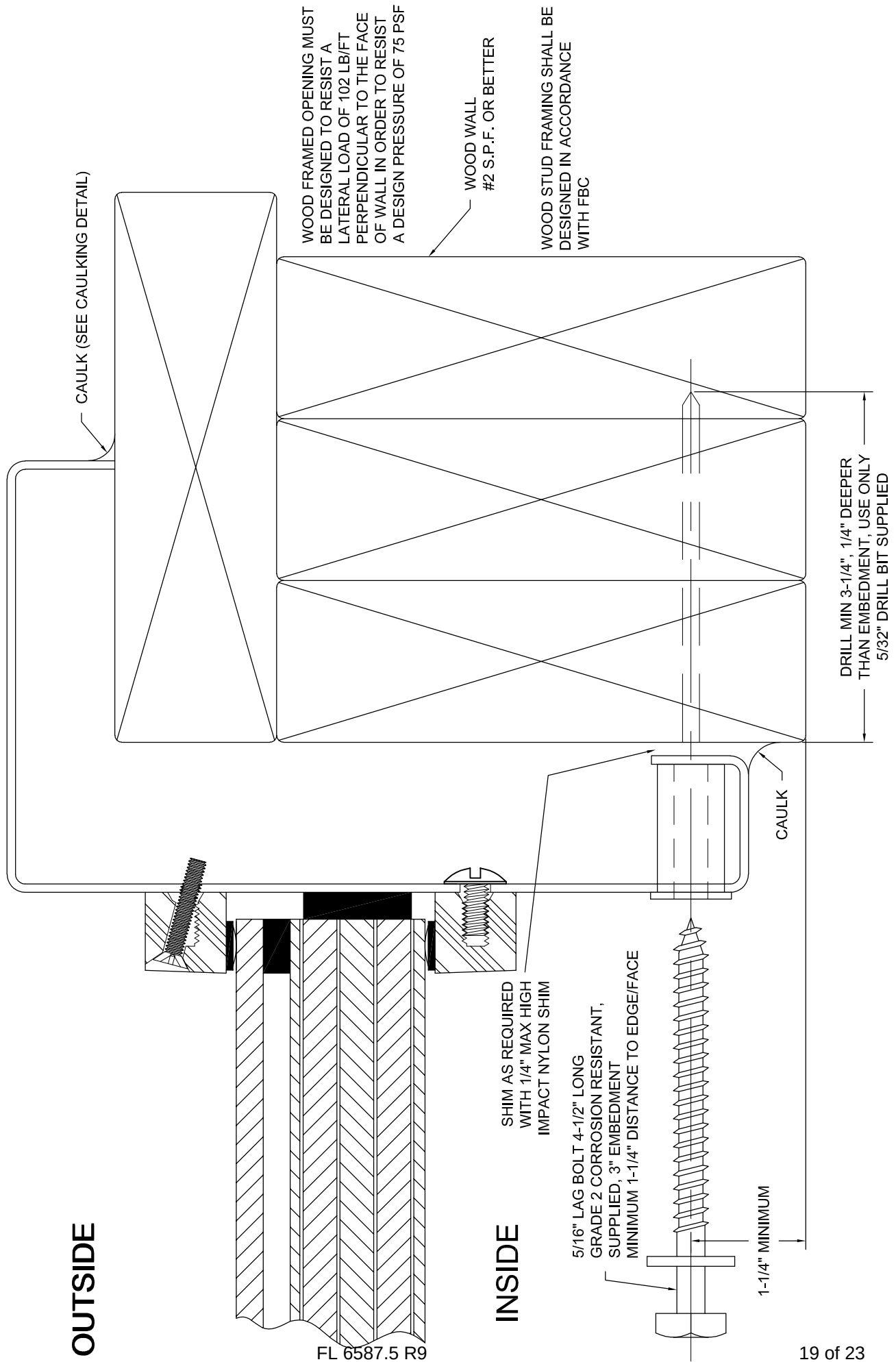
FASTENER INSTALLATION DETAIL: METAL, HEAD AND JAMB, FIELD VERIFIED





MODEL	12103994			PAGE 13 OF 17	
DWG.	40019			DATE CREATED:	7-13-05
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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES
DECIMALS. XX +/- .01; XXX +/- .005 FRACTIONS; +/- 1/32; ANGLES; +/- 30°
REMOVE ALL BURRS AND SHARP EDGES TO R 02 OR .02 X CHAMFER MAX.

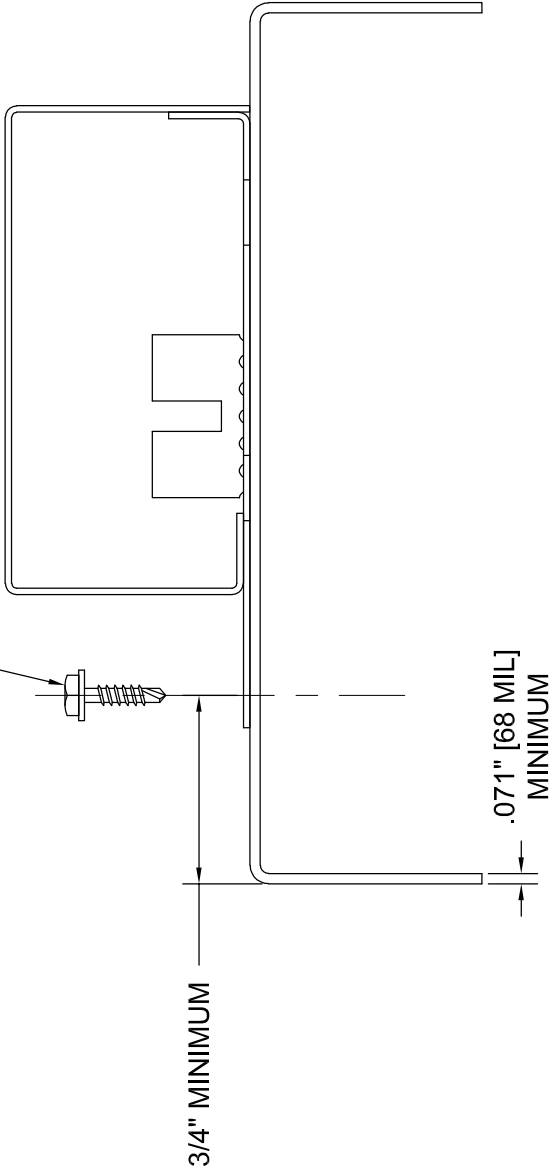


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	PH 513-677-0500 FAX 513-677-0552						DATE:			COPYRIGHT 2005 E.F.Bavis & Assoc. Inc.
FASTENER INSTALLATION DETAIL: SILL, METAL WALL, FIELD VERIFIED										

COLD FORMED METAL STUDS
SHALL BE DESIGNED IN
ACCORDANCE WITH FBC

LIGHT GAUGE STEEL FRAMED
OPENING MUST BE DESIGNED FOR
A LATERAL LOAD OF 102 LB/FT
PERPENDICULAR TO THE FACE
OF WALL IN ORDER TO RESIST
THE DESIGN PRESSURE OF 75 PSF

1/4-14 WITH #3 SD SHEET METAL SCREW 1" LONG, SUPPLIED
MINIMUM 3/4" DISTANCE TO EDGE/FACE
(SCREW SHALL BE LONG ENOUGH TO ENSURE A MINIMUM
PENETRATION OF 3 PITCHES OF THREAD BELOW THE STEEL.)



	E.F.BAVIS & ASSOC. INC.		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES DECIMALS: .XX +-.01; .XXX +-.005 FRACTIONS: + - 1/32; ANGLES: + - 30' REMOVE ALL BURRS AND SHARP EDGES TO R .02 OR .02 X .02 CHAMFER MAX.		10' FIXED WINDOW		12103994		PAGE 17 OF 17	
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FINISH CAULKING, FIELD VERIFIED

