



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

Fixed Window with Operable Drawer

Florida Product Approval # 6587.3 R8

Florida Building Code 2023

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:

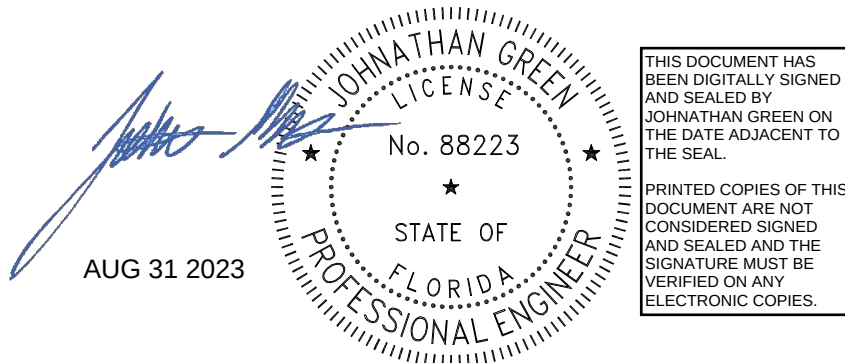
Johnathan Green, P.E. #88223

Florida Evaluation ANE ID: 12901

Contents:

Evaluation Report: Page 1 - 3

Installation Detail: Page 4 - 22





Compliance Statement:	The product as described in this report has demonstrated compliance with the Florida Building Code 2023 including High Velocity Hurricane Zone.
Product Description:	Fixed Window with Operable Drawer Model #12103991.
Window Frame Size:	4'-11 1/2" wide x 5'-3" high x 8 7/8" deep
Window Frame:	Material: 14 Ga. ASTM A653 Grade 50, Galvannealed A60 Frame Coating: Nominal 3 mils Powder Coat
Glazing:	1 1/4" (nominal) thick bullet resistant glass. The glass consists of 3/32" annealed on interior face, 3/8" annealed, 1/2" annealed and 1/4" 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: 23-0717.28
Window Frame Anchorage:	Header: Four fasteners equally spaced. Sill: Four fasteners located 5 3/4" & 16 3/4" from each end of sill plate. Jamb: Four fasteners located 6 1/4", 23 3/4", 41 5/8" and 58 3/4" from bottom of frame for each jamb. All fasteners shall be corrosion resistance per Florida Building Code 2023.
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 2023.
Anchor Edge Distance:	Minimum 3/4" edge distance for 14 Ga. steel framing Minimum 3" edge distance for Grout filled C90 Concrete Block Nominal 8" Minimum 1 1/4" edge distance for No 2 S.P.F. Wood frame
Design Wind Pressures:	+ / - 65.0 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 T196-08
Farabaugh Engineering & Testing, Inc.
2. Test Reports T185-04 (Includes Impact Testing on Operable Drawer)
Farabaugh Engineering & Testing, Inc.
3. Anchor Calculations
Terrence E. Wolfe, P.E. # 44923
4. 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:

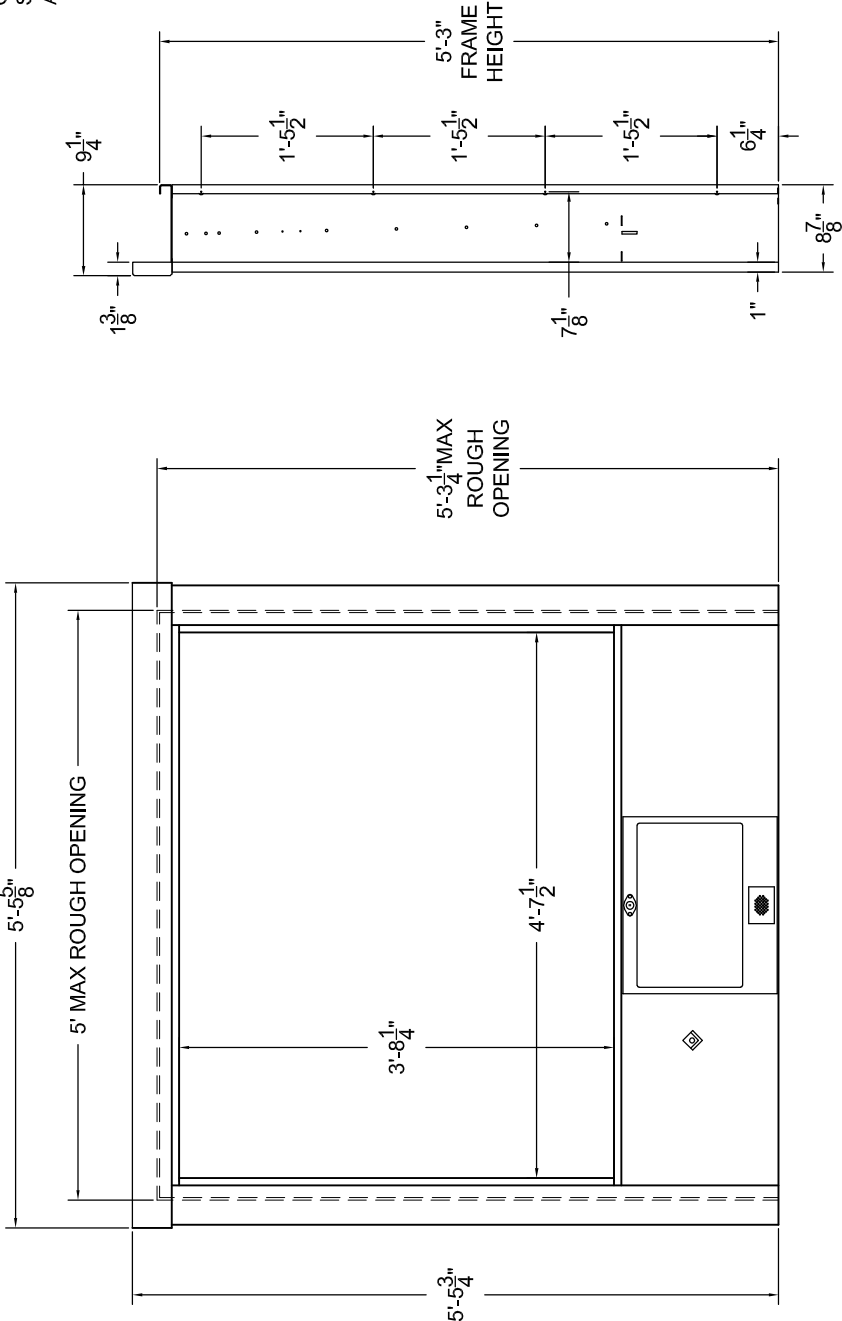
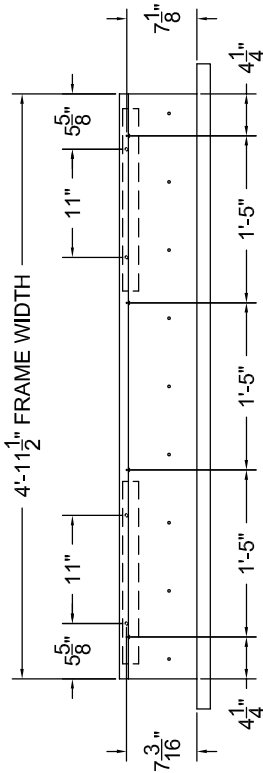
Based on the dimensions of the structure, appropriate wind loads are determined using Chapter 16 of the Florida Building Code 2023 for wall cladding wind loads. These component wind loads for wall cladding are compared to the allowable pressure listed above. The design professional shall select the appropriate erection details to reference in his drawings for proper fastener attachment to the structure. Support framing must be in compliance with Florida Building Code 2023.

DATE	ECN	REVISION RECORD	DR	CK
12/29/15	17006	UPDATE FILE NUMBER AND CODE VERSION	MC	MB
01/09/18	18728	UPDATE CODE VERSION	MC	MB
10/01/20	21149	UPDATE CODE VERSION	MC	MB
01/24/23	23398	UPDATE GLASS MANUFACTURERS UL FILE NUMBER	MC	DM

FOR INSTALLATION AND MOUNTING REQUIREMENTS,
GO TO THE FLORIDA BUILDING CODE WEBSITE AT:
http://www.floridabuilding.org/pr/pr_app_srch.aspx

SEARCH:
CODE VERSION: 2023
FL#: 6587

CATEGORY: WINDOWS
SUBCATEGORY: FIXED
APPLICATION STATUS: APPROVED



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

PROPRIETARY
THIS DOCUMENTATION AND INFORMATION CONTAINED HEREIN ARE THE SOLE PROPERTY OF E.F. BAVIS & ASSOCIATES, 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 & ASSOCIATES, INC.

FT & IN
DIMENSIONS ARE IN
UNLESS OTHERWISE
SPECIFIED

REVISED
10/01/20

DRAWN
B.PRINCE

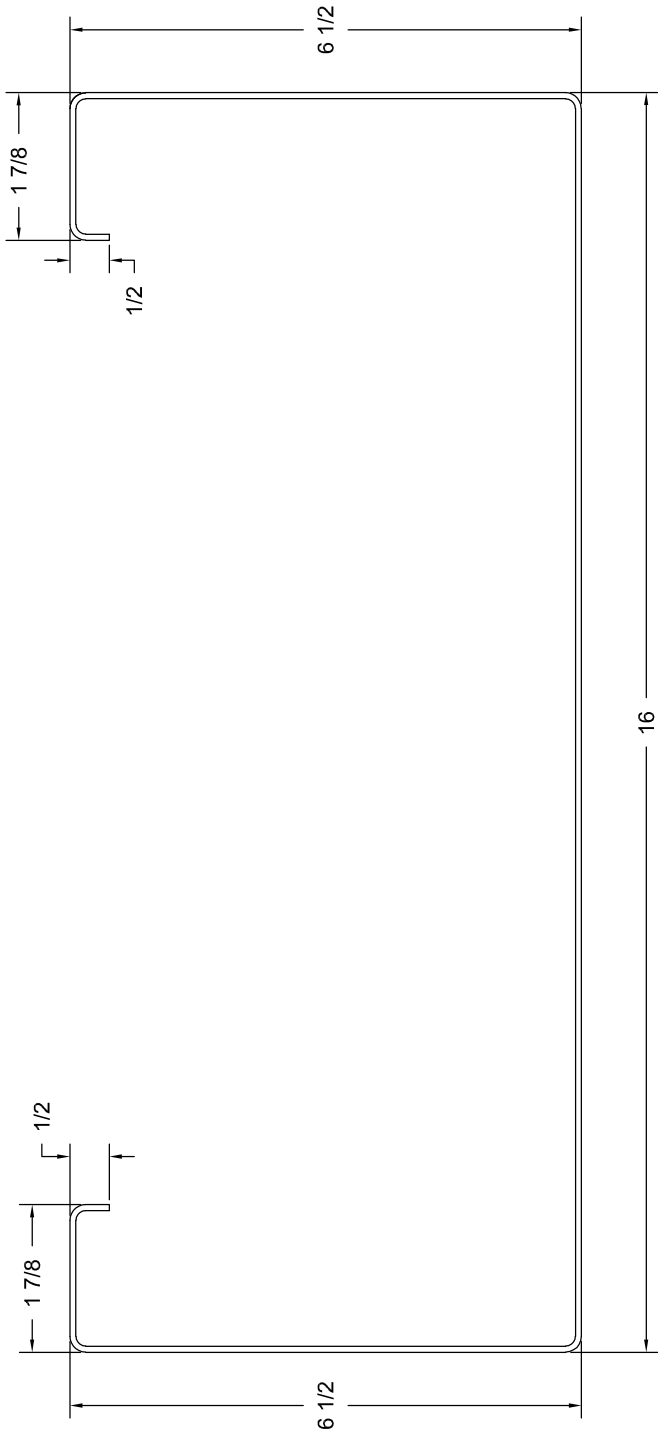
DATE
9-14-05

DRAWING NO.
12103991

SHEET
1 OF 1

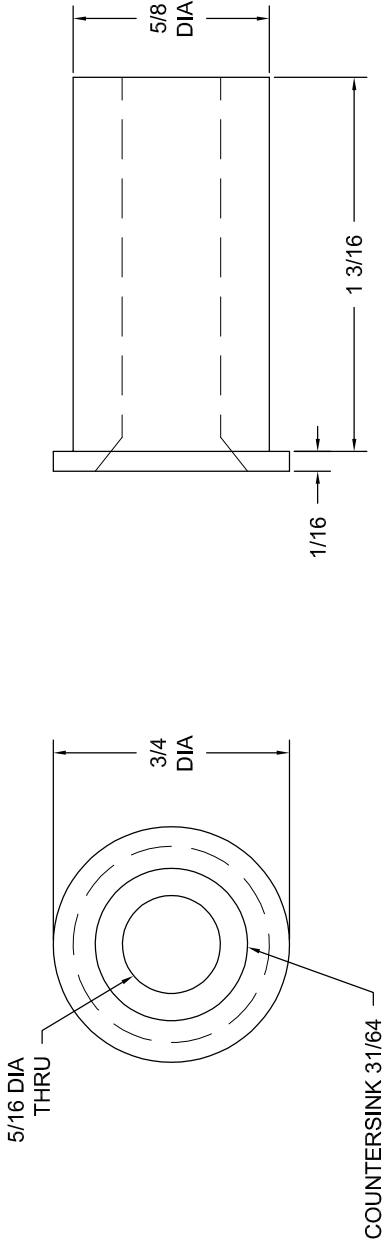
TITLE
HVHZ LG (64") ALL-IN-ONE JR.
FIXED WINDOW W/OPERABLE DRAWER
HURRICANE WINDOW

E F 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.		FIXED WINDOW WITH OPERABLE DRAWER		MODEL 12103991	PAGE 3 OF 18	
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. WT-HUR		DATE CREATED 04/01/04		BAP		
		REV. DATE:		09/20/04		COPYRIGHT 1986,2002 E.F.Bavis & Assoc. Inc.		
FRONT PANEL CROSS SECTION, FOR PLANT QUALITY CONTROL								



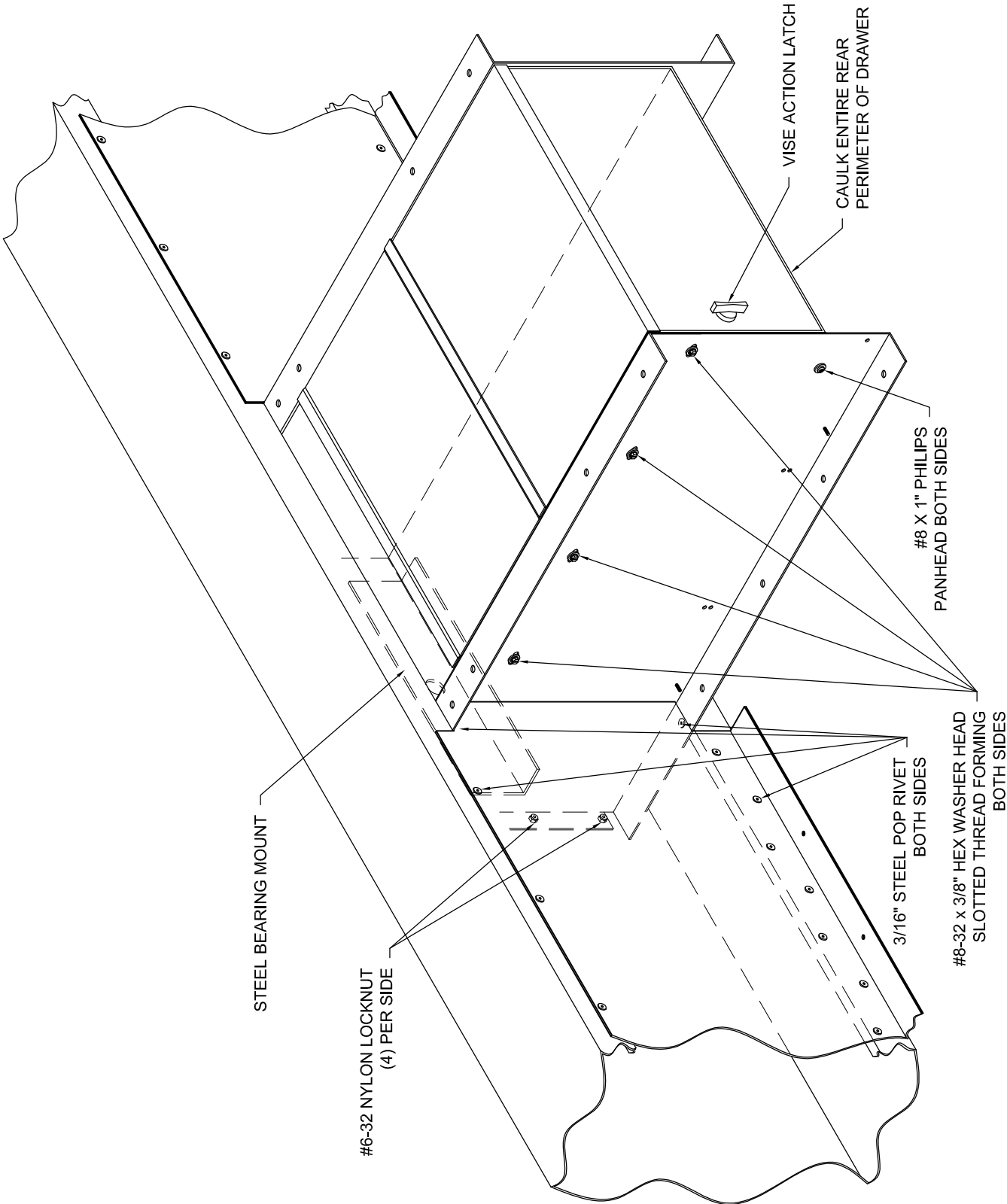
	E.F.BAVIS & ASSOC. INC.		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES DECIMALS: XX +-.01 ; XXX +-.005 FRACTIONS: + - 1/32" ANGLES: + - 30' REMOVE ALL BURRS AND SHARP EDGES TO R .02 OR .02 X .02 CHAMFER MAX.		FIXED WINDOW WITH OPERABLE DRAWER		MODEL	12103991	PAGE 5 OF 18	
	201 GRANDIN RD. P.O.BOX 337		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.	WT-HUR	DATE CREATED: 04/01/04	BAP
	MAINEVILLE, OH. 45039 0337						REV.	09/20/04	LAST DATE: 08/11/04	BAP
	PH 513-677-0500 FAX 513-677-0552						DATE:		COPYRIGHT 1996,2002 E.F.Bavis & Assoc. Inc.	

WINDOW FILLER PLUG, FOR PLANT QUALITY CONTROL



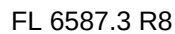
ITEM - 5
MATERIAL: 12L14 STEEL

DRAWER INSTALLATION DETAILS, FOR PLANT QUALITY CONTROL





CUSTOMER DOOR, FOR PLANT QUALITY CONTROL





E.F.BAVIS & ASSOC. INC.
201 GRANDIN RD. P.O. BOX 337
MAINEVILLE, OH. 45039 0337
PH 513-677-0500 FAX 513-677-0552

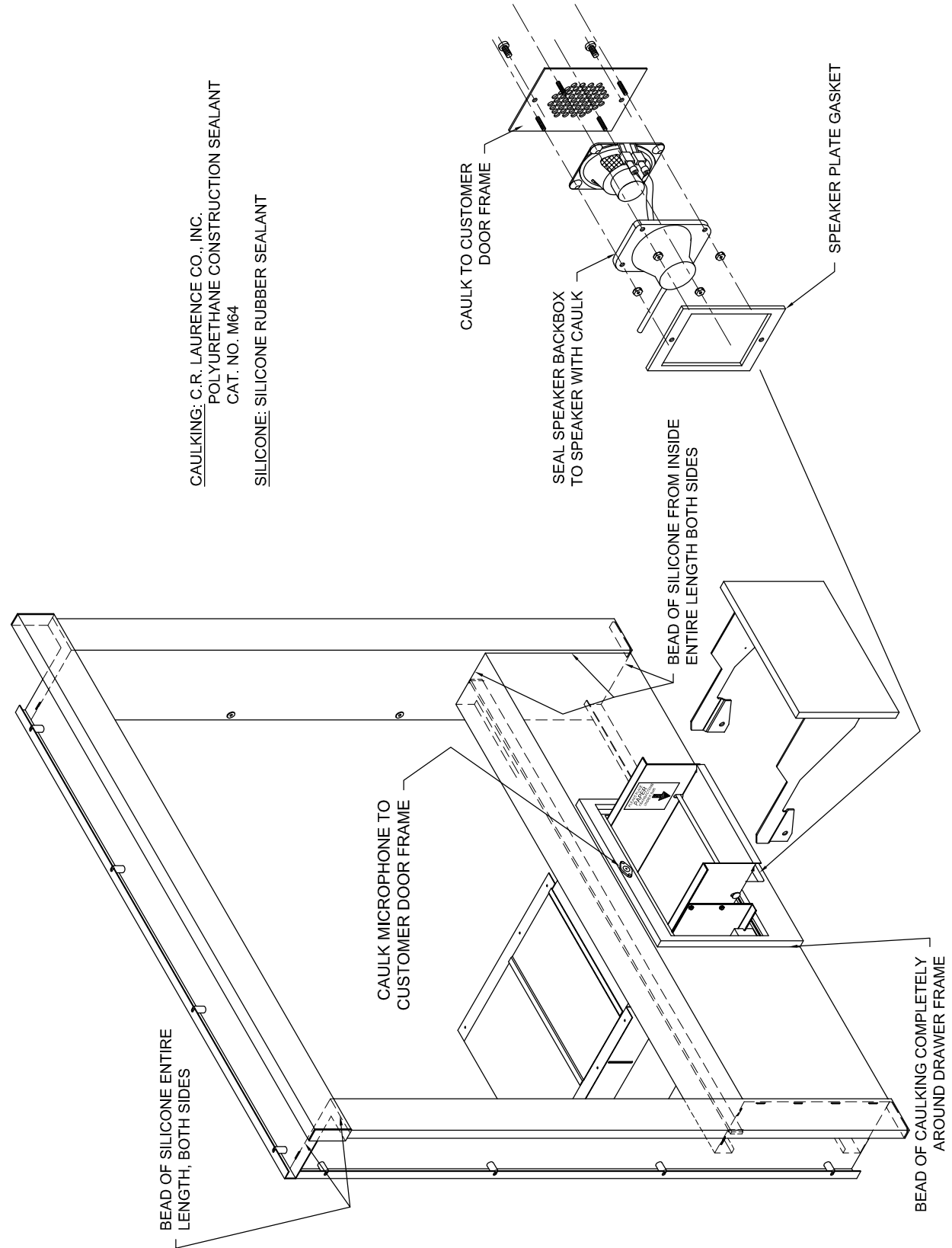
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES
DECIMALS: .XX + -.01 ; .XXX + -.005 FRACTIONS: + - 1/32; ANGLES: + - 30'
REMOVE ALL BURRS AND SHARP EDGES TO R .02 OR .02 X .02 CHAMFER MAX.
THIS DOCUMENTATION AND INFORMATION CONTAINED ARE THE SOLE PROPERTY OF
E.F.BAVIS & ASSOC. INC. IT SHALL BE 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.

FIXED WINDOW WITH OPERABLE DRAWER

MODEL: 12103991
DWG: WT-HUR
REV: 09/20/04
DATE:

PAGE 11 OF 18
DATE ORDERED: 04/01/04 BAP
LAST DATE: 08/11/04 BAP
COPYRIGHT 1996,2002
BAP E.F.Bavis & Assoc. Inc.

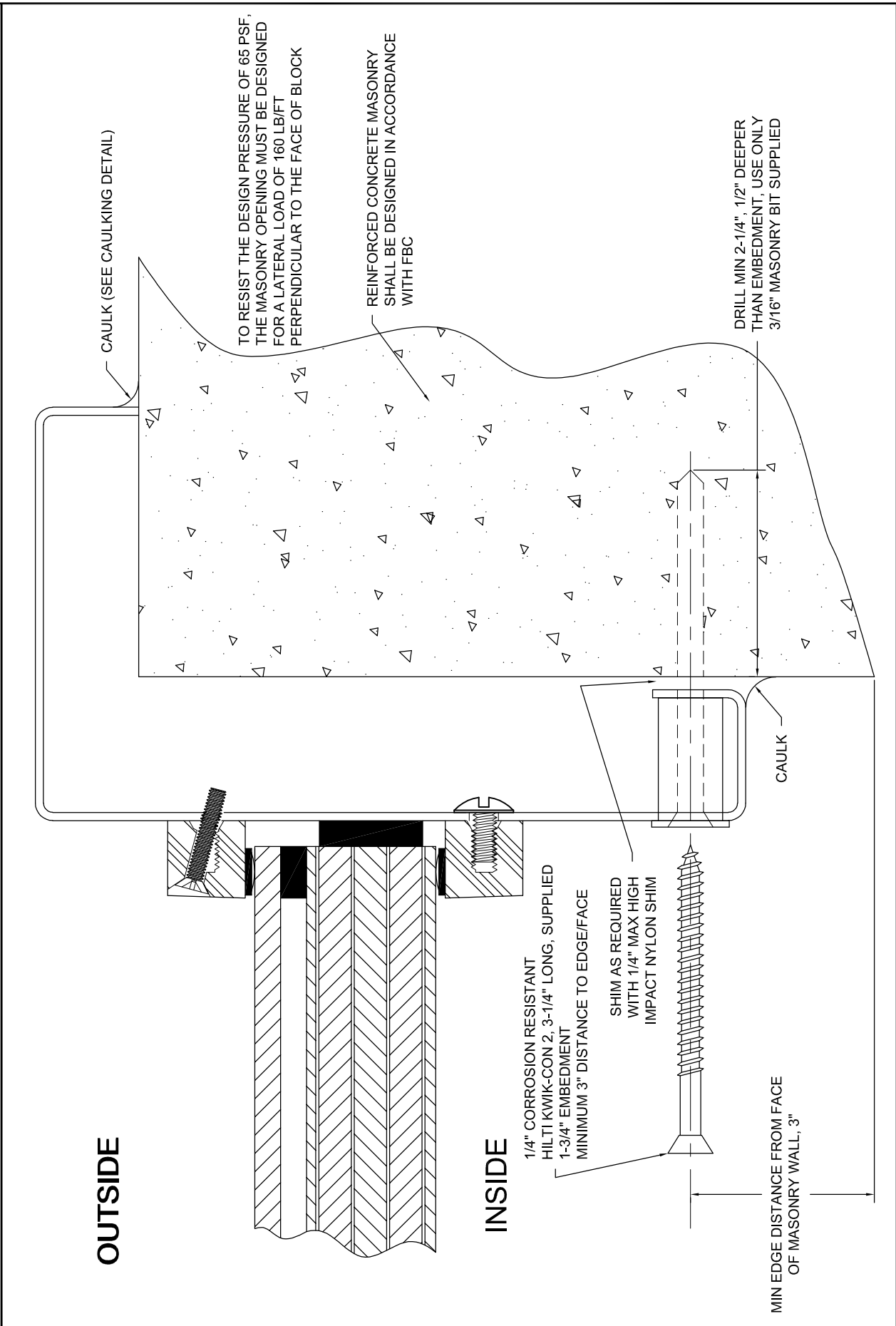
CAULKING DETAIL, FOR PLANT QUALITY CONTROL



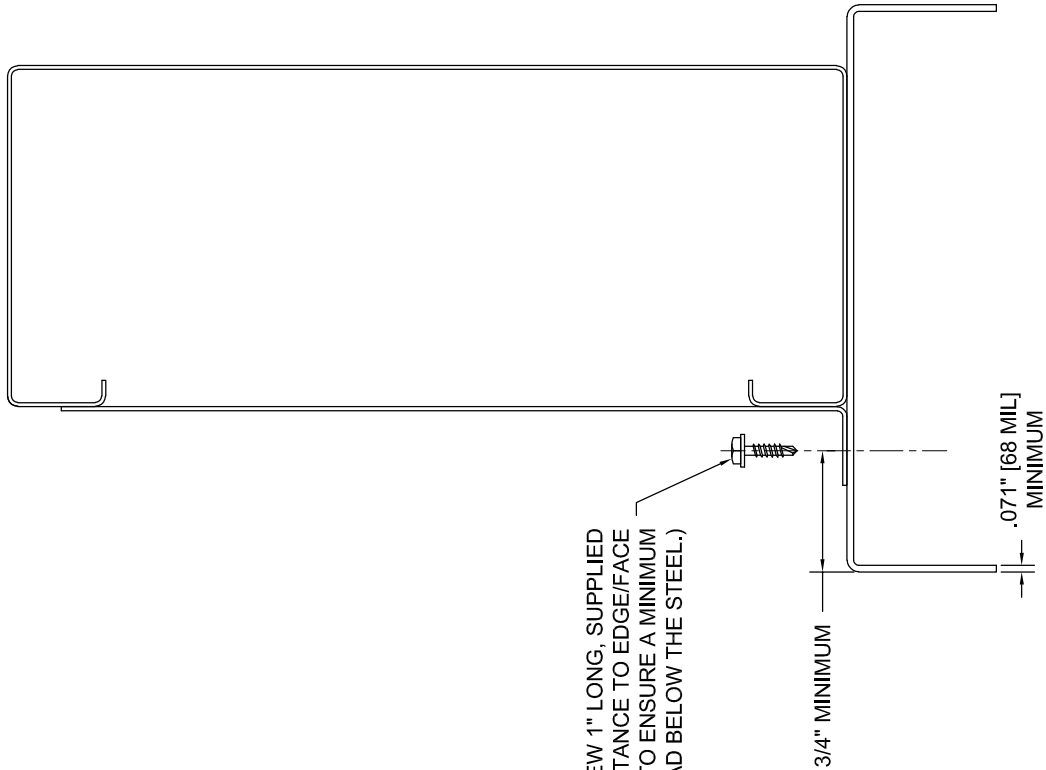
CAULKING: C.R. LAURENCE CO., INC.
POLYURETHANE CONSTRUCTION SEALANT
CAT. NO. M64
SILICONE: SILICONE RUBBER SEALANT

	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. 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.	FIXED WINDOW WITH OPERABLE DRAWER	MODEL 12103991 DWG. WT-HUR REV. 10/01/04 DATE:	PAGE 12 OF 18 DATE REVISION 04/01/04 BAP LAST DATE: 08/11/04 BAP BAP COPYRIGHT 1996, 2002 E.F. Bavis & Assoc. Inc.
--	---	--	--	---	---

FASTENER INSTALLATION DETAIL: MASONRY, HEAD & JAMB



	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.		FIXED WINDOW WITH OPERABLE DRAWER		MODEL	12103991	PAGE 16 OF 18	
		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.	WT-HUR	DATE CREATED: 04/01/04 BAP	04/01/04 BAP
						REV.	09/20/04	LAST DATE: 08/11/04 BAP	08/11/04 BAP
						DATE:		BAP	COPYRIGHT 1996,2002 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 160 LB/FT
PERPENDICULAR TO THE FACE
OF WALL IN ORDER TO RESIST
THE DESIGN PRESSURE OF 65 PSF

