



BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 372-6339

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/buldingcode

Ruskin Company
3900 Dr. Greaves Road
Grandview, MO 64030

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami Dade County Product Control Division (in Miami-Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade county Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Model ELF375DXD Aluminum Louver.

APPROVAL DOCUMENT: Drawing No. **60-021902-01D, 02D, 03D, 04B, 05B**, titled "ELF375DXD Test Louver", sheets 1 through 5 of 5, dated 05/26/06, with last revision dated 11/20/07, prepared by Ruskin Company, signed and sealed by Daniel J. Rau, P.E., bearing the Miami-Dade County Product Control Approval stamp with the NOA number and approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1, evidence page E-1 as well as approval document mentioned above.

The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**



[Handwritten signature]
12/10/07

NOA No: 07-0621.07
Expiration Date: January 3, 2013
Approval Date: January 3, 2008
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **60-021902-01D, 02D, 03D, 04B, 05B**, titled "ELF375DXD Test Louver", sheets 1 through 5 of 5, dated 05/26/06, with last revision dated 11/20/07, prepared by Ruskin Company, signed and sealed by Daniel J. Rau, P.E.

B. TESTS

1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202
2) Large Missile Impact Test per FBC, TAS 201
3) Cyclic Wind Pressure Loading per FBC, TAS 203
along with marked-up drawings and installation diagram of ELF375DXD Test Louver, prepared by National Certified Testing Laboratories, Test Report No. **210-3377-1**, dated 03/19/07, signed and sealed by Gerard J. Ferrara, P.E.

C. CALCULATIONS

1. Louver and anchor calculations prepared by Ruskin Engineering, dated 05/14/07 and 11/20/07, signed and sealed by Daniel J. Rau, P.E.

D. QUALITY ASSURANCE

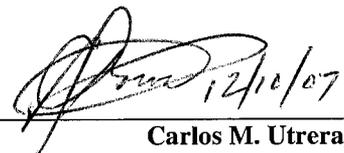
1. Miami Dade Building Code Compliance Office (BCCO)

E. MATERIAL CERTIFICATIONS

1. None

F. STATEMENTS

1. Code compliance letter issued by Ruskin Company, dated 05/25/07, signed and sealed by Daniel J. Rau, P.E.
2. No financial interest letter issued by Ruskin Company, dated 05/25/07, signed and sealed by Daniel J. Rau, P.E.
3. Code compliance letter issued by National Certified Testing Laboratories, dated 04/04/07, signed and sealed by Gerard J. Ferrara, P.E.

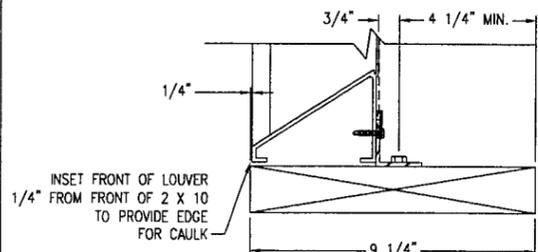
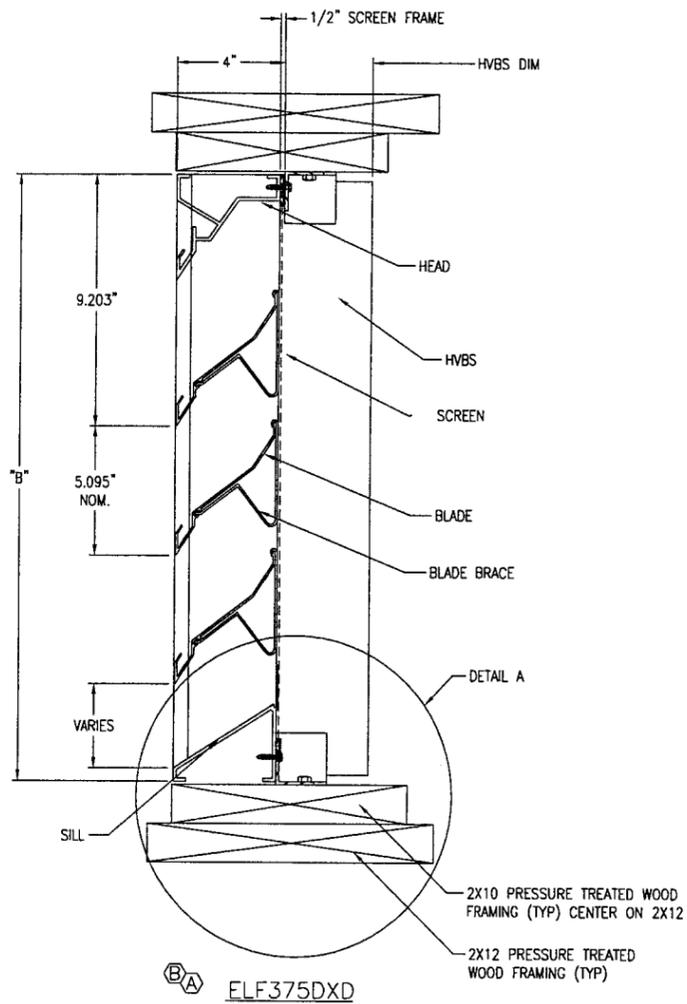


12/10/07

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No 07-0621.07

Expiration Date: January 3, 2013
Approval: Date: January 3, 2008

FRAME	
6063-T5 extruded aluminum with .081" nominal wall thickness.	
Flange frame is same material and thickness as above.	
BLADES	
6063-T5 extruded aluminum with .081" nominal wall thickness. Blades are positioned at 37.5° angle.	
SCREEN	
5/8" x .040" expanded flat-tened aluminum bird screen.	
1/2" mesh x .063" aluminum bird screen.	
18-16 mesh alum insect screen.	
No screen.	
FINISH	
Mill.	
Kynar (opt).	
Baked enamel (modified fluoropolymer, 50% Kynar, opt).	
Color Anodize (opt).	
Clear Anodize (opt).	
Color:	



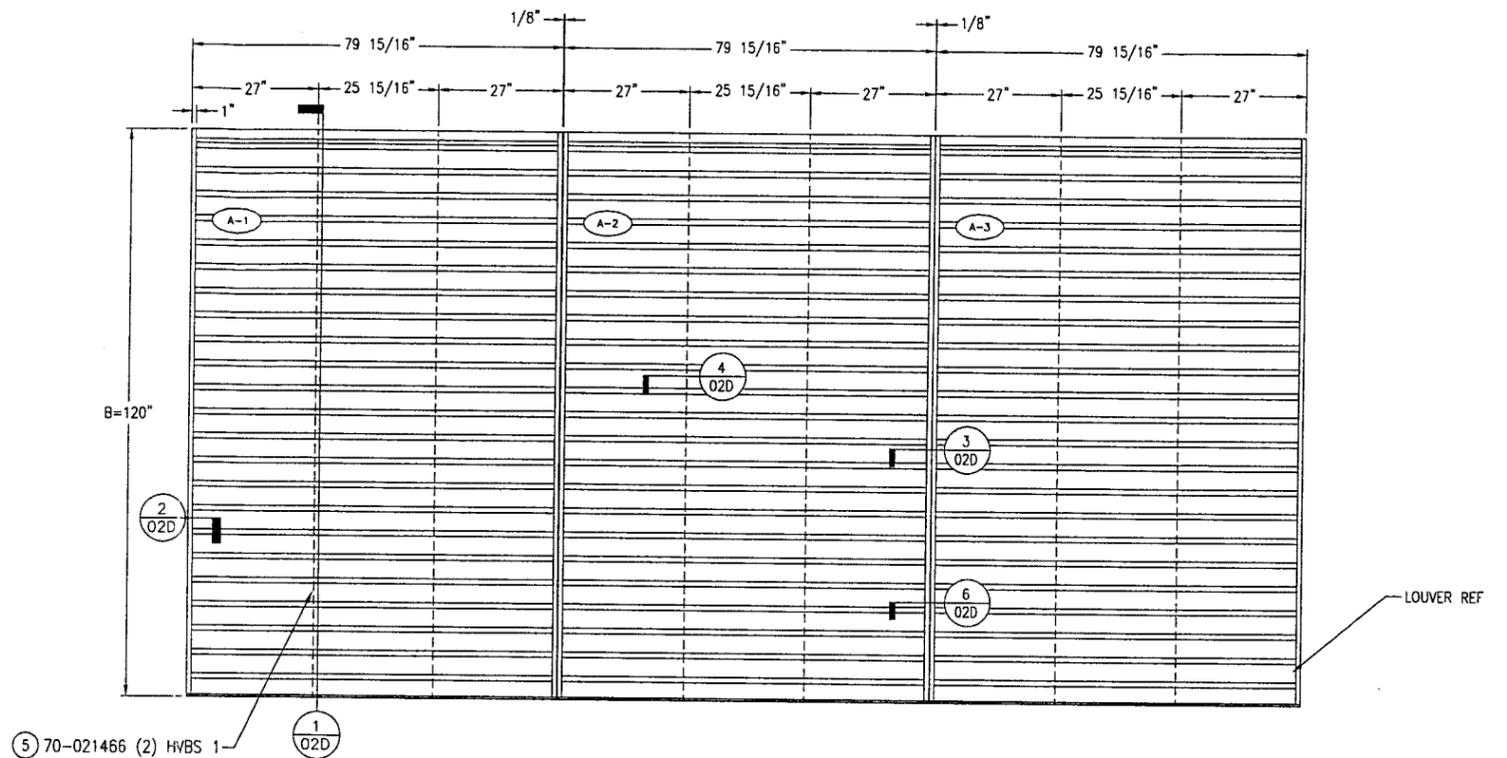
DETAIL A
N.T.S.

NOTES:

- 1) THE ELF375DXD HAS BEEN TESTED IN ACCORDANCE WITH MIAMI-DADE COUNTY PROTOCOLS PA-201, 202 & 203 FOR LARGE MISSILE IMPACT, UNIFORM PRESSURE AND CYCLIC WIND PRESSURE.
- 2) THIS LOUVER SYSTEM IS APPROVED FOR APPLICATIONS WITH DESIGN PRESSURES OF +/- 130 PSF OR LESS.
- 3) THIS LOUVER SYSTEM IS NON-BEARING AND IS NOT DESIGNED TO WITHSTAND BUILDING DEAD LOADS.
- 4) LOUVER ANCHORS ARE REVIEWED FOR ATTACHMENT INTO STEEL, CONCRETE, MASONRY OR TIMBER SUBSTRUCTURE. MINIMUM EDGE DISTANCE AND EMBEDMENT REQUIREMENTS ARE SHOWN. RUSKIN DOES NOT DETERMINE THE STRUCTURAL INTEGRITY OF THE SUB-STRUCTURE.
- 5) MAXIMUM SINGLE SECTION SIZE: 79 15/16" WIDE X 120" HIGH.
- 7) MAXIMUM ASSEMBLED LOUVER SIZE: UNLIMITED WIDE X 120" HIGH. MAX. MULLION SPACING IS 79 15/16".
- 8) SECTIONS OR ASSEMBLIES MAY BE STACKED VERTICALLY PROVIDING A SUITABLE STRUCTURAL SUPPORT IS DESIGNED AND INSTALLED BY OTHERS TO SUPPORT ALL LOADS TRANSFERRED FROM THE LOUVER.
- 9) TAS -100 (A) WIND DRIVEN RAIN TEST WAS NOT PERFORMED.

FOR OFFICE USE ONLY

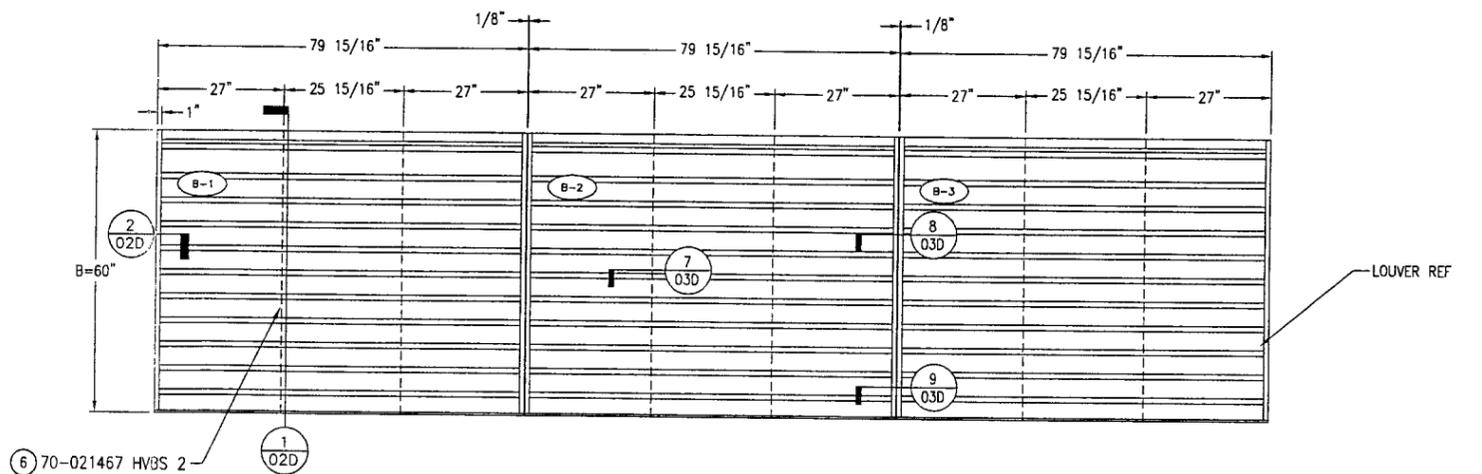
01/03/2008
07.0624.07
[Signature]



ASSEMBLY 'A' (FOR 'B' DIMENSIONS OVER 60" TO 120")
N.T.S.

TESTS PERFORMED:
PA-201/TAS-201 LARGE MISSILE IMPACT
PA-202/TAS-202 UNIFORM STATIC AIR PRESSURE TEST
PA-203/TAS-203 CYCLIC WIND PRESSURE TEST
DESIGN PRESSURE RATING 130 PSF

FRONT VIEW

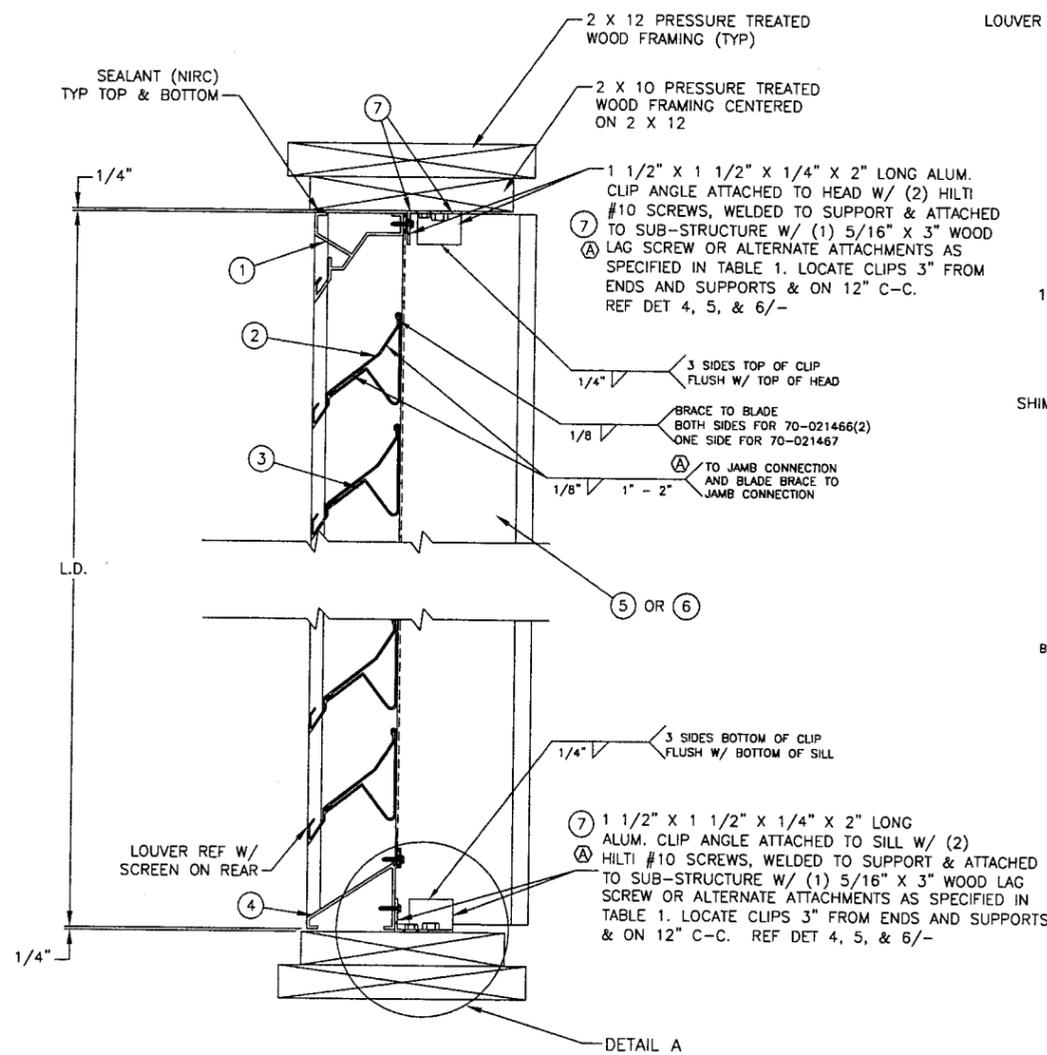


ASSEMBLY 'B' (FOR 'B' DIMENSIONS OF 12" TO 60")
N.T.S.

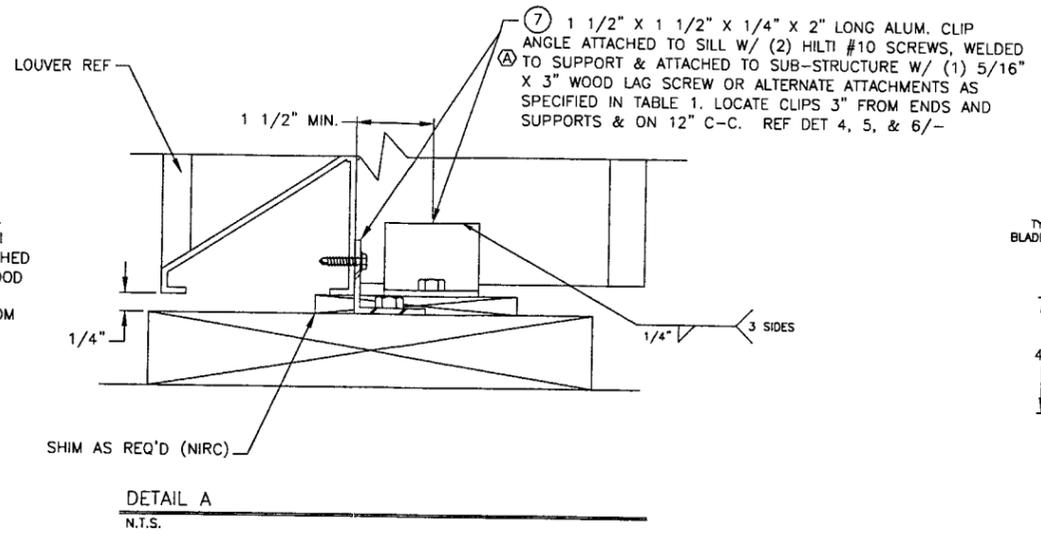
TESTS PERFORMED:
PA-201/TAS-201 LARGE MISSILE IMPACT
PA-202/TAS-202 UNIFORM STATIC AIR PRESSURE TEST
PA-203/TAS-203 CYCLIC WIND PRESSURE TEST
DESIGN PRESSURE RATING 130 PSF

FRONT VIEW

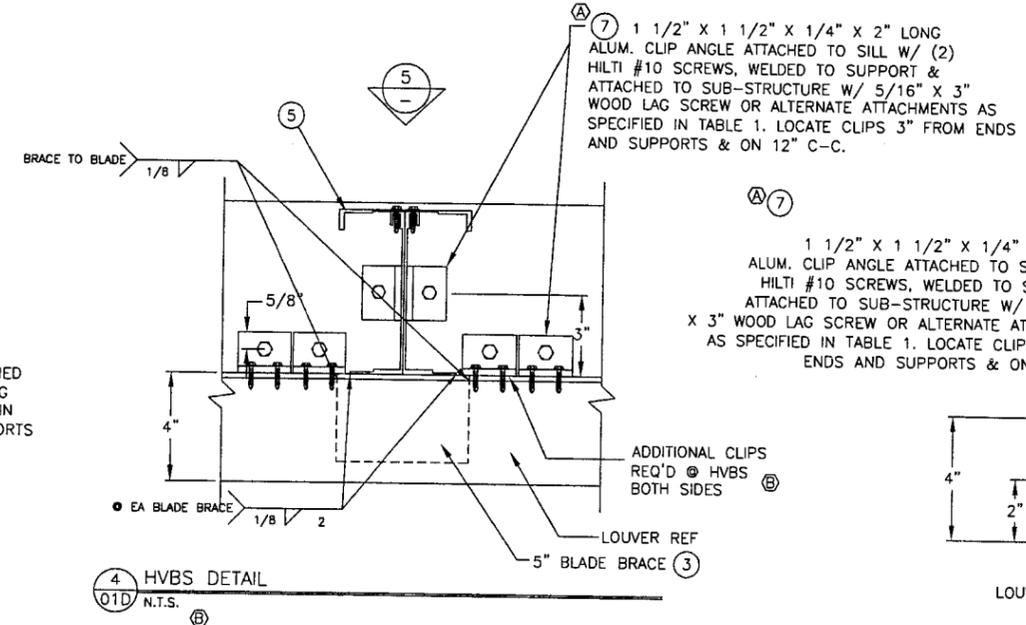
ENGINEER OF RECORD DANIEL J. RAU		REVISIONS		GKJ	DJR	DJR	11/20/07
ENGINEERING DISCIPLINE CIVIL ENGINEER		CHANGE LETTER					
REGISTRATION NUMBER STATE OF FLORIDA #0063636		REVISION DESCRIPTION		CHKD. BY:	CHKD. BY:	APPROV. BY:	APPROV. BY:
DATE: 3/15/08		DATE: 5/26/08		DATE: 5/26/08		DATE:	
DRAWN BY: DJR		CHECKED BY: DLC		APPROVED BY: DLC		DATE:	
DATE: 3/15/08		DATE: 5/26/08		DATE: 5/26/08		DATE:	
RUSKIN		PLOT SCALE		NONE		BY: DATE:	
SHEET 1 OF 5		TITLE		ELF375DXD TEST LOUVER, SPEC, ASSY & NOTES		CNC. NO.	
						60-021902-01D	



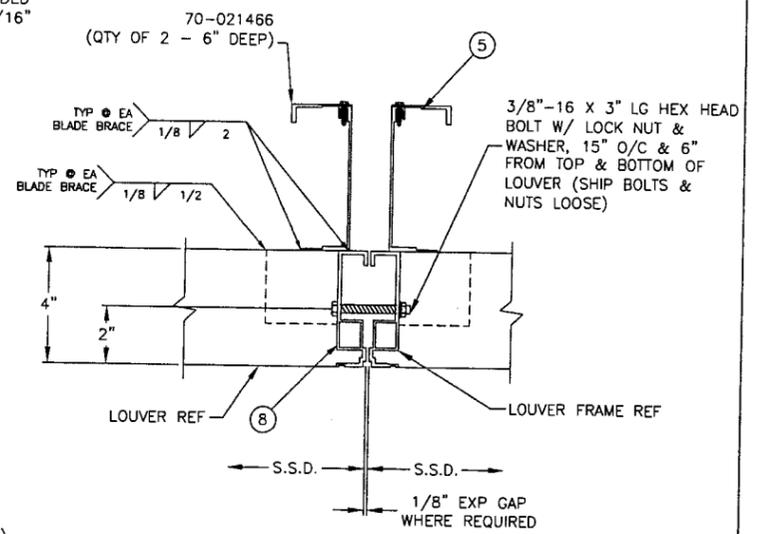
1 LOUVER DETAIL @ HEAD & SILL
01D N.T.S.



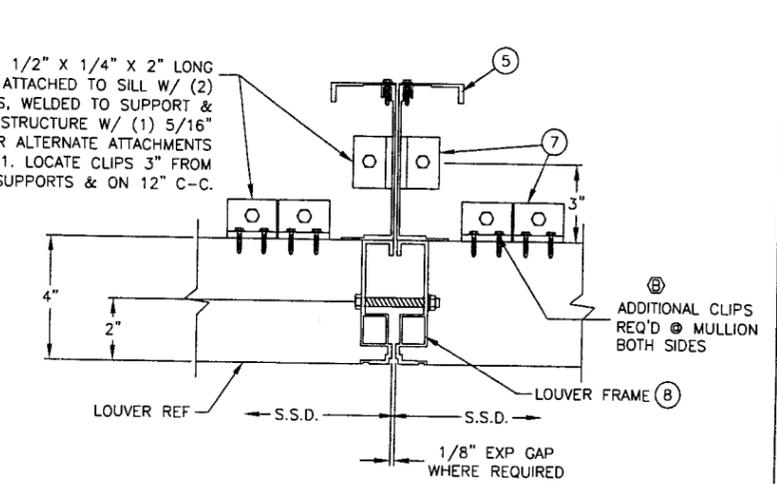
DETAIL A
N.T.S.



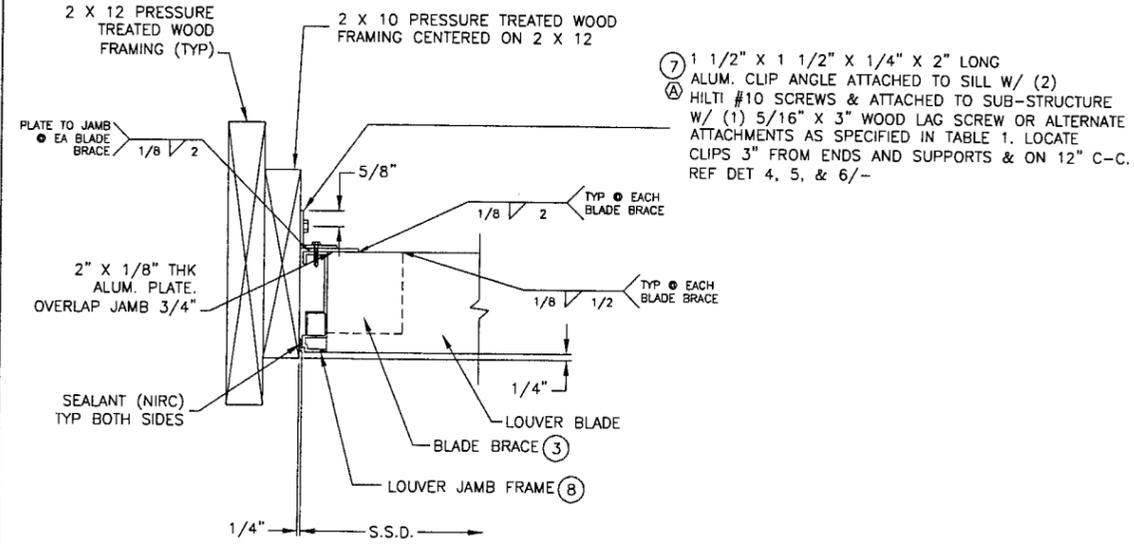
4 HVBS DETAIL
01D N.T.S.



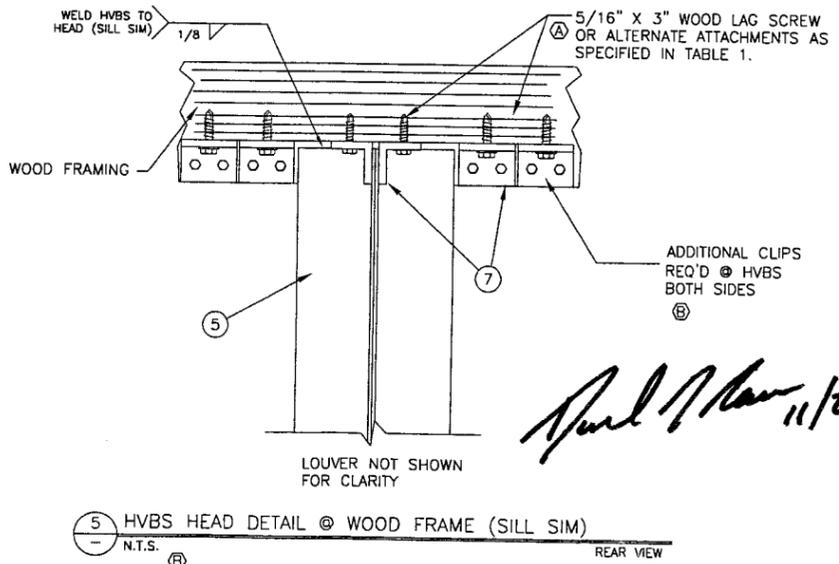
3 VISIBLE MULLION CONNECTION DETAIL
01D N.T.S.



6 LOUVER ATTACHMENT @ VISIBLE MULLION DETAIL
01D N.T.S.



2 LOUVER @ JAMB DETAIL
01D N.T.S.



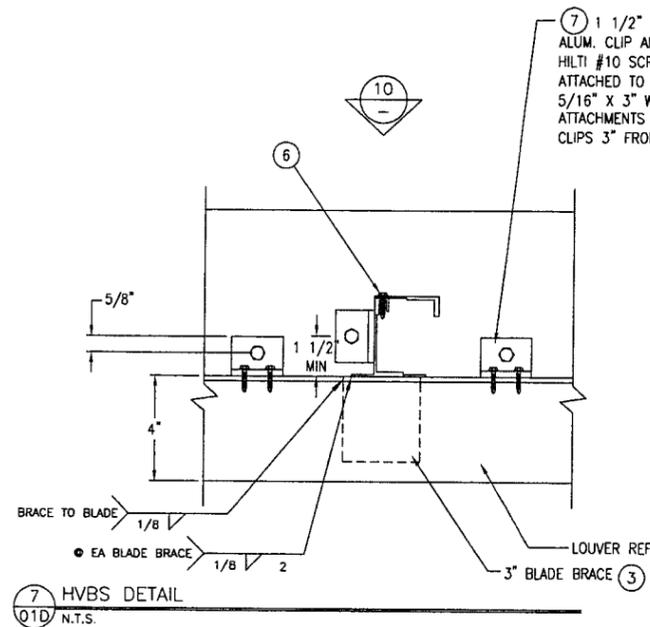
5 HVBS HEAD DETAIL @ WOOD FRAME (SILL SIM)
N.T.S.

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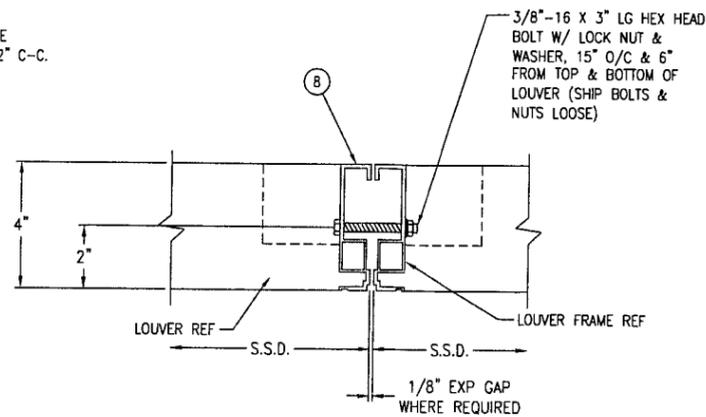
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07-0621.07
[Signature]

[Signature] 11/20/2007

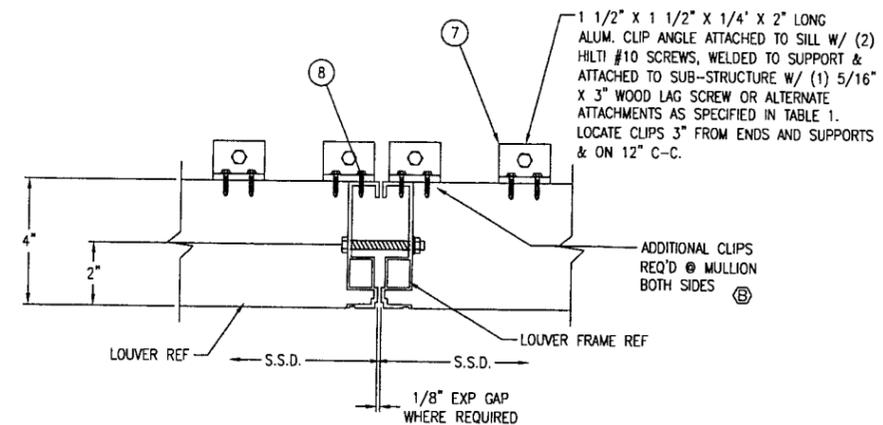
ENGINEER OF RECORD DANIEL J. RAU CIVIL ENGINEER STATE OF FLORIDA #0063636 REGISTRATION NUMBER		(B) ADDED CLIP ANGLES PER CALCULATION REQUIREMENTS (A) REVISED DETAILS	DWS VMA DJR 11/20/07
DATE: 3-20-2006 BY: DJR DATE: 5/26/06 CHECKED: DJR DATE: 5/28/06 APPROVED: DJR DATE: 5/28/06	REVISION DESCRIPTION RUSKIN SWARTWOUT 3900 DR. GREAVES RD GRANOVEN, MO 64030 PROPRIETARY INFORMATION	DWG. EPI: NONE CHK'D. EPI: NONE APP'D. EPI: NONE DATE:	DWG. CERTIFIED BY: NONE DATE:
SHEET 2 OF 5		ELF375DXD TEST LOUVER DETAILS 60-021902-02D	



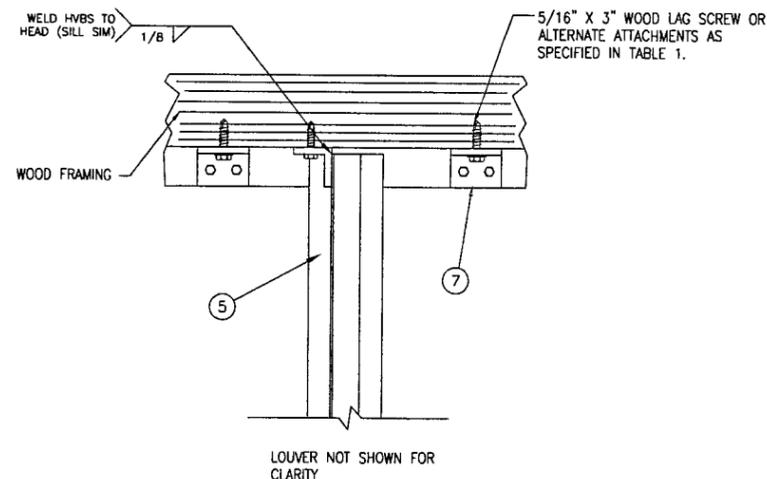
7 HVBS DETAIL
01D N.T.S.



8 VISIBLE MULLION CONNECTION DETAIL
01D N.T.S.



9 LOUVER ATTACHMENT @ VISIBLE MULLION DETAIL
01D N.T.S.



10 HVBS HEAD DETAIL @ WOOD FRAME (SILL SIM)
01D N.T.S.

TABLE #1: ALTERNATE APPROVED ATTACHMENTS

BASE MATERIAL	DESCRIPTION	INSTRUCTIONS
CONCRETE 3000 MIN PSI	5/16 DIA TAPCON (ITW OR EQUAL)	1 3/4" EMBED., 2 IN MIN EDGE
CONCRETE 2000 MIN PSI	5/16 DIA EXPANSION ANCHOR (HILTI OR EQUAL)	2 1/2" EMBED., 5 IN MIN EDGE
GROUT FILLED BLOCK	5/16 DIA TAPCON (ITW OR EQUAL)	1 3/4" EMBED., 4 IN MIN EDGE
STEEL FRAMING (12 GA MIN)	5/16 DIA A307 BOLT OR SELF-TAPPING SCREW	1 1/2 x FASTENER DIA. MIN EDGE

NOTE: ALL FASTENERS MUST BE INSTALLED PER THE MANUFACTURER'S FLORIDA/DADE COUNTY APPROVED INSTALLATION INSTRUCTIONS

TABLE #2: DRAWING CROSS REFERENCE

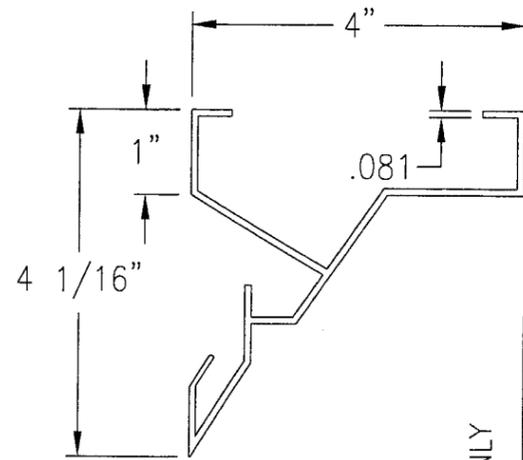
ITEM	DRAWING	MATERIAL	DESCRIPTION	RUSKIN #
1	60-021902-04B	6063-T5 AL	HEAD FRAME	70-020574-00B
2	60-021902-04B	6063-T5 AL	BLADE	70-021524-00B
3	60-021902-04B	6063-T5 AL	BLADE BRACE	70-021526-00B
4	60-021902-04B	6063-T5 AL	SILL FRAME	70-020373-00B
5	60-021902-04B	6063-T6 AL	HVBS 1	70-021466-00B
6	60-021902-04B	6063-T6 AL	HVBS 2	70-021467-00B
7	60-021902-05B	VARIABLE	CLIP ATTACHMENT	85-020366-00B
8	60-021902-05B	6063-T5 AL	JAMB FRAME	70-020374-00B

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01/03/2008
07-0621.07
[Signature]

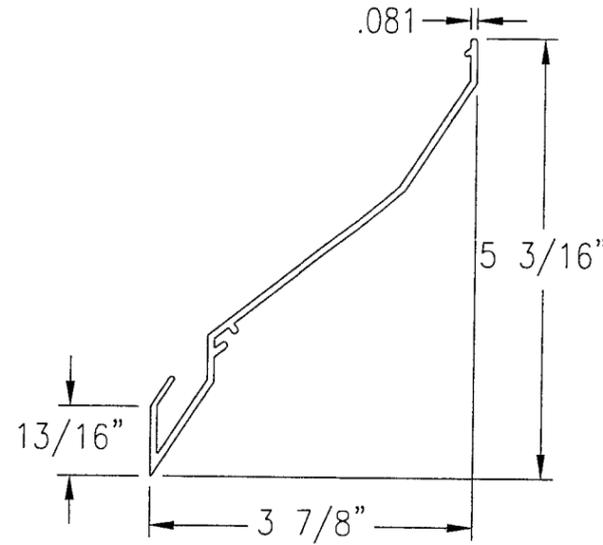
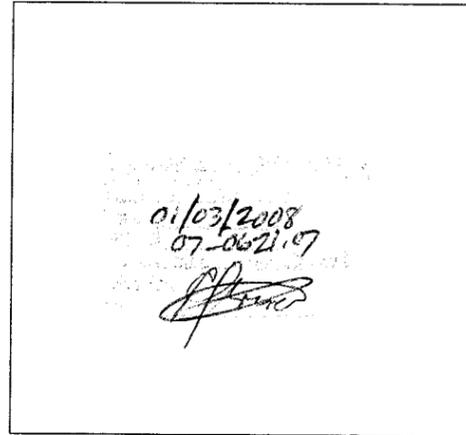
Daniel J. Rau 11/20/2007

DANIEL J. RAU CIVIL ENGINEER STATE OF FLORIDA #0063636		DWS DJR DJR		11/20/07
REVISION DESCRIPTION		CHG'D BY:	CHK'D BY:	APPR'D BY:
⑥ ADDED CLIP ANGLES TO DETAIL 9 PER CALCULATIONS.		DWS	DJR	DJR
④ REVISED TABLE & DETAILS		GKJ		
DATE: 5/19/06	DATE: 5/26/06	DATE: 5/26/06		
SHEET 3 OF 5		ELF375DXD TEST LOUVER DETAILS		60-021902-03D

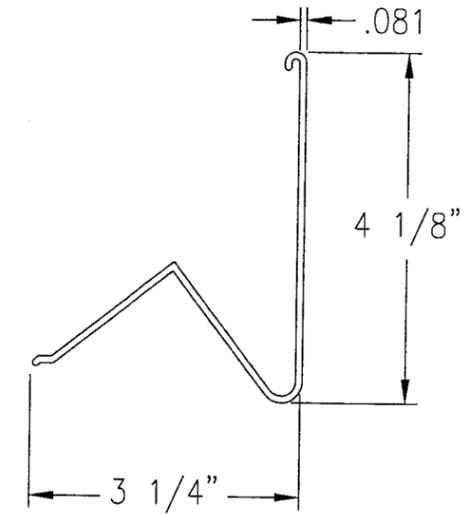


ITEM 1 - HEAD FRAME
RUSKIN# 70-020574-00B

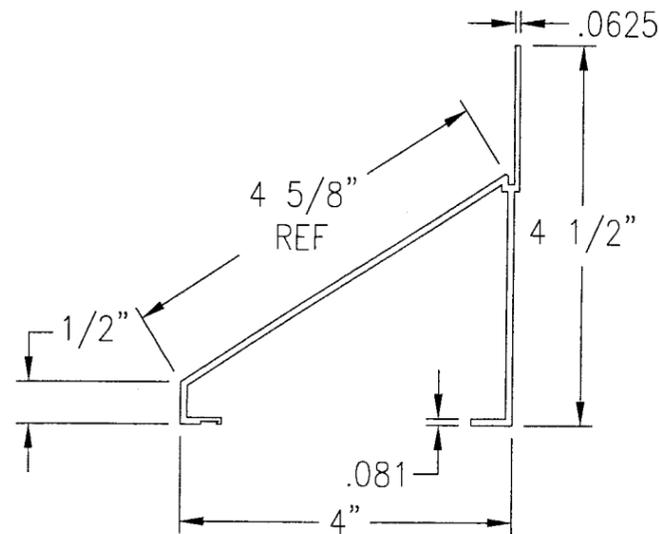
FOR OFFICE USE ONLY



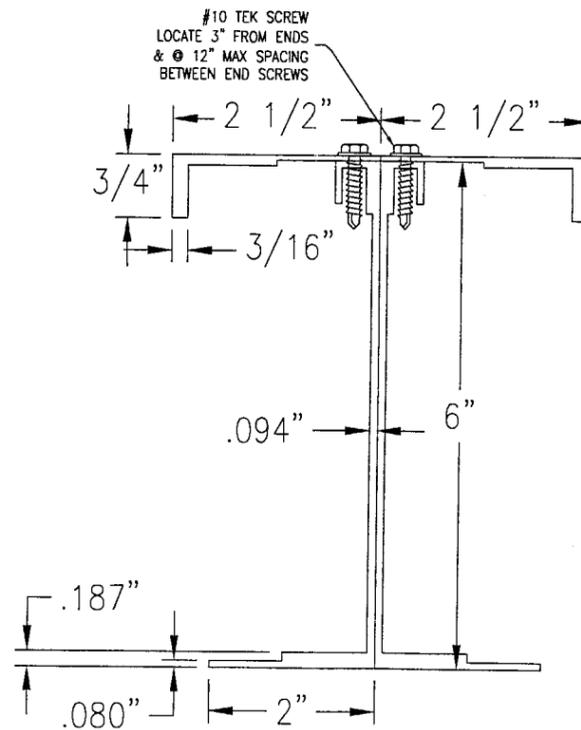
ITEM 2 - LOUVER BLADE
RUSKIN# 70-021524-00B



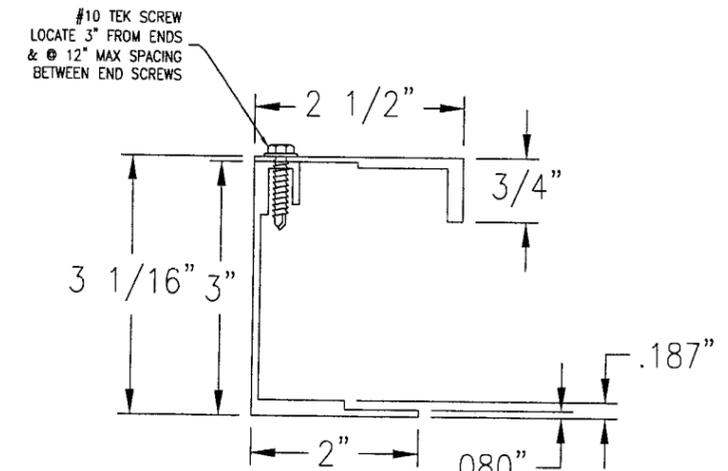
ITEM 3 - BLADE BRACE
RUSKIN# 70-021526-00B



ITEM 4 - SILL FRAME
RUSKIN# 70-020373-00B



ITEM 5 - HIDDEN VERTICAL BLADE SUPPORT 1
RUSKIN# 70-021466-00B



ITEM 6 - HIDDEN VERTICAL BLADE SUPPORT 2
RUSKIN# 70-021467-00B

Handwritten signature and date: Daniel J. Rau 11/20/2007

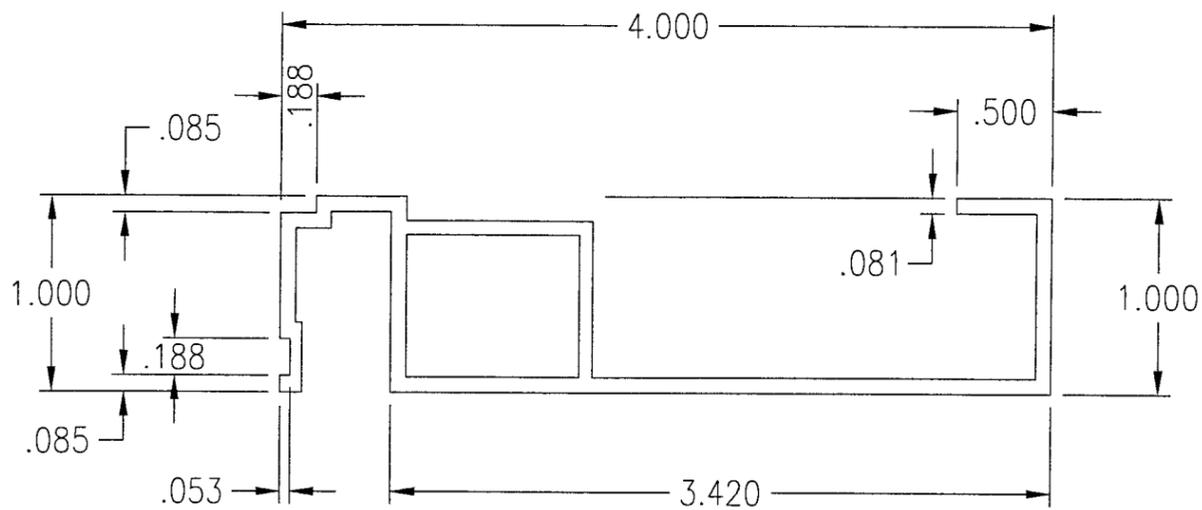
ENGINEER OF RECORD
DANIEL J. RAU
ENGINEERING DISCIPLINE
CIVIL ENGINEER
REGISTRATION NUMBER
STATE OF FLORIDA #0063636

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX ±.010
2 PLACE .XX ±.020
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: ± 2'
USE W10-007 & 008
UNLESS SPECIFIED OTHERWISE

DWN. BY: DLV CHK. BY: DLC APPV'D. BY: DLC APPV'D. BY:
DATE: 5/19/06 DATE: 5/26/06 DATE: 5/26/06 DATE:

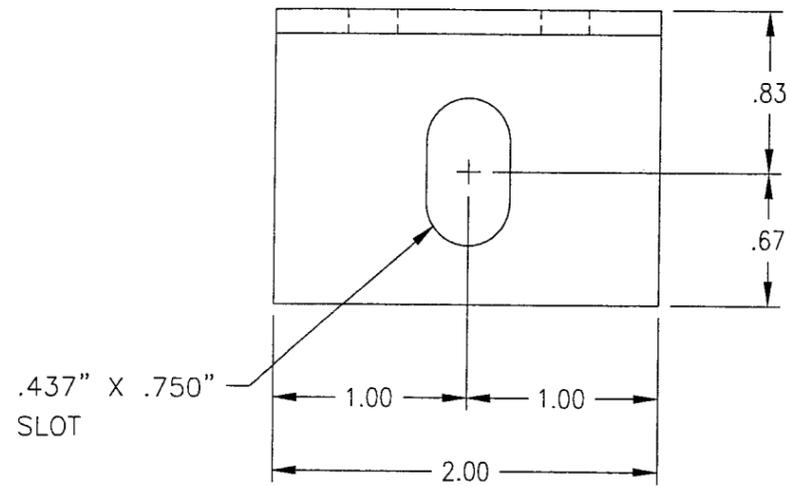
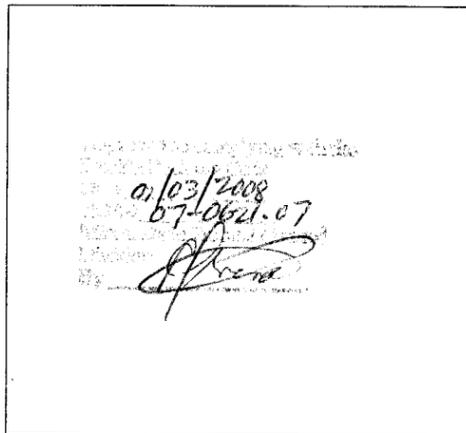
SHEET 4 OF 5

CHANGE LETTER	REVISION DESCRIPTION	GKJ	DJR	DJR	11/20/07
	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:
RUSKIN SWARTWOUT PROPRIETARY INFORMATION 3900 DR. GREAVES RD GRANDVIEW, MO 64030		PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____	
TITLE ELF375DXD TEST LOUVER PART DETAILS				DWG. NO. 60-021902-04B	

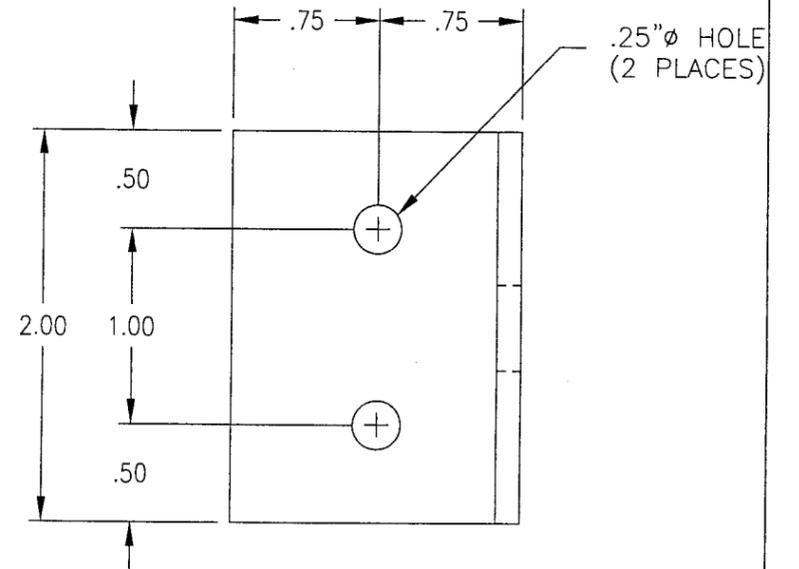
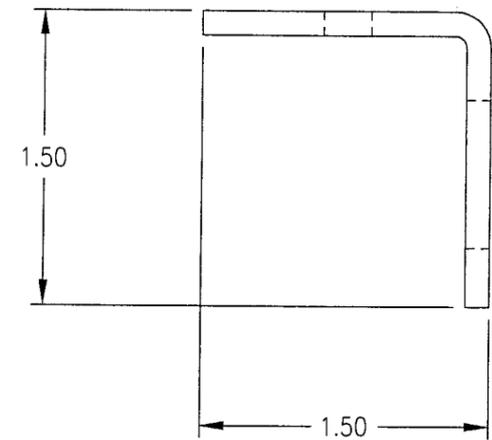


ITEM 8 - JAMB FRAME
RUSKIN# 70-020374-00B

FOR OFFICE USE ONLY



ITEM 7 - CLIP ANGLE
RUSKIN# 85-020366-00B



PART NO.	MATERIAL
85-020366-00B	1/8" ALUM
85-020366-01B	12 GA. GALV.
85-020366-02B	12 GA. 304 STN. STL.
85-020366-03B	1/4" ALUM

Daniel J. Rau 11/20/07

ENGINEER OF RECORD DANIEL J. RAU
ENGINEERING DISCIPLINE CIVIL ENGINEER
REGISTRATION NUMBER STATE OF FLORIDA #0063636

TOLERANCES
 DECIMAL DIMENSIONS:
 3 PLACE .XXX ±.010
 2 PLACE .XX ±.020
 FRACTION DIMENSIONS: ± 1/16
 ANGLE DIMENSIONS: ± 2
 USE: W10-007 & 008
 UNLESS SPECIFIED OTHERWISE

DWN. BY: DLV	CHK. BY: DLC	APPV'D. BY: DLC	APPV'D. BY:
DATE: 5/19/06	DATE: 5/26/6	DATE: 5/26/6	DATE:

SHEET 5 OF 5

A	REVISED LABELS	GKJ	DJR	DJR	11/20/07	
	CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:
RUSKIN SWARTWOUT		3900 DR. GREAVES RD GRANDVIEW, MO 64030 PROPRIETARY INFORMATION	PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____	
TITLE ELF375DXD TEST LOUVER PART DETAILS			DWG. NO. 60-021902-05B			