



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

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 and accepted by Miami-Dade County RER-Product Control Section 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 Section (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. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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 through 05B, titled "ELF375DXD Louver", sheets 1 through 5 of 5, dated 05/26/2006, with revision C dated 09/11/2015, prepared by Ruskin Company, signed and sealed by Chelsea GQ Welch, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

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

LIMITATION: This louver is to be installed in a location where the room behind the louver is designed to drain water penetrating into the room, and the room will house water resistant/water proof equipment, components, or supplies.

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 revises NOA # 12-0816.02 and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

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



[Handwritten Signature]
11/16/2015

NOA No. 15-0923.05
Expiration Date: January 3, 2018
Approval Date: November 25, 2015
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **60-021902-01D** through **05B**, titled "ELF375DXD Louver", sheets 1 through 5 of 5, dated 05/26/2006, with revision C dated 09/11/2015, prepared by Ruskin Company, signed and sealed by Chelsea GQ Welch, P.E.

B. TESTS "Submitted under NOA # 07-0621.07"

1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
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 03/19/2007, signed and sealed by Gerard J. Ferrara, P.E.

B. CALCULATIONS

1. Louver and anchor calculations prepared by Ruskin Engineering, dated 09/08/2015, signed and sealed by Chelsea GQ Welch, P.E.

"Submitted under NOA # 07-0621.07"
2. Louver and anchor calculations prepared by Ruskin Engineering, dated 05/14/2007 and 11/20/2007, signed and sealed by Daniel J. Rau, P.E.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS "Submitted under NOA # 12-0816.02"

1. Test report on impact test of an ELF375DXD louver per AMCA 540, prepared by Ruskin Company, Test Report No. **053012E**, dated 05/30/2012, signed and sealed by Daniel J. Rau, P.E.

F. STATEMENTS

1. Statement letter of code conformance to the 5th edition (2014) FBC, issued by Ruskin Company, dated 09/08/2015, signed and sealed by Chelsea GQ Welch, P.E.

"Submitted under NOA # 12-0816.02"
2. Statement letter of code conformance to 2010 FBC, issued by Ruskin Company, dated 06/13/2012, signed and sealed by Daniel J. Rau, P.E.

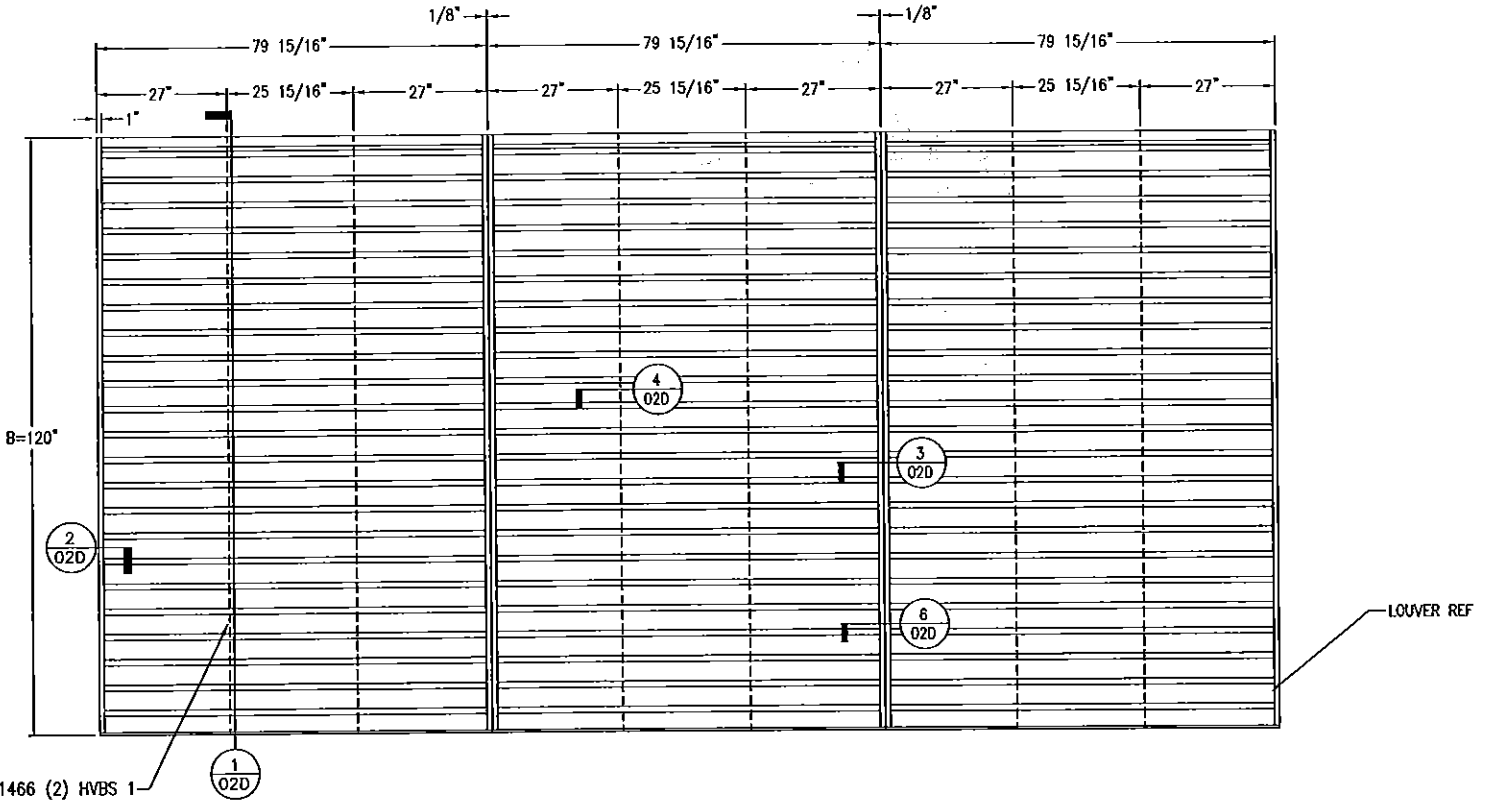
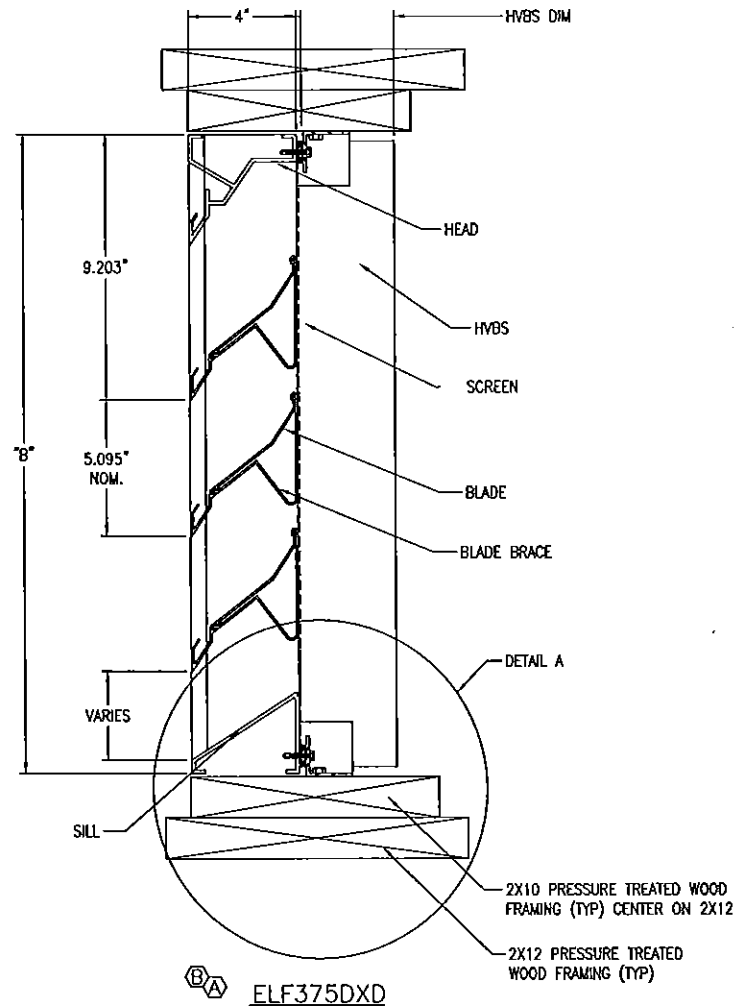
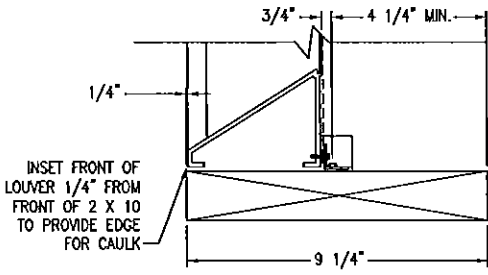
"Submitted under NOA # 07-0621.07"
3. No financial interest letter issued by Ruskin Company, dated 05/25/2007, signed and sealed by Daniel J. Rau, P.E.



11/18/2015

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 15-0923.05
Expiration Date: January 3, 2018
Approval Date: November 25, 2015

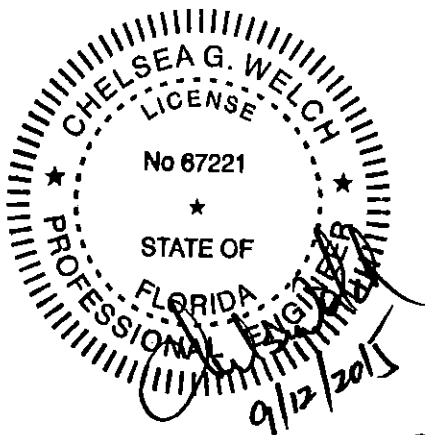
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6063-T6 extruded aluminum (C) with .081" nominal wall thickness.	<input checked="" type="checkbox"/>
Flange frame is same material and thickness as above.	<input type="checkbox"/>
BLADES	
6063-T6 extruded aluminum (C) with .081" nominal wall thickness. Blades are positioned at 37.5° angle.	<input checked="" type="checkbox"/>
SCREEN	
5/8" x .040" expanded flat-tened aluminum bird screen.	<input type="checkbox"/>
1/2" mesh x .063" aluminum bird screen.	<input checked="" type="checkbox"/>
18-16 mesh alum insect screen	<input type="checkbox"/>
No screen.	<input type="checkbox"/>
FINISH	
Mill.	<input checked="" type="checkbox"/>
Kynar (opt).	<input type="checkbox"/>
Baked enamel (modified fluoropolymer, 50% Kynar, opt).	<input type="checkbox"/>
Color Anodize (opt).	<input type="checkbox"/>
Clear Anodize (opt).	<input type="checkbox"/>
Color:	<input type="checkbox"/>



ASSEMBLY 'A' (FOR 'B' DIMENSIONS OVER 60" TO 120")
 N.T.S.
 TESTS PERFORMED:
 TAS-201 LARGE MISSILE IMPACT TEST
 TAS-202 UNIFORM STATIC AIR PRESSURE TEST
 TAS-203 CYCLIC WIND PRESSURE TEST
 DESIGN PRESSURE RATING 130 PSF

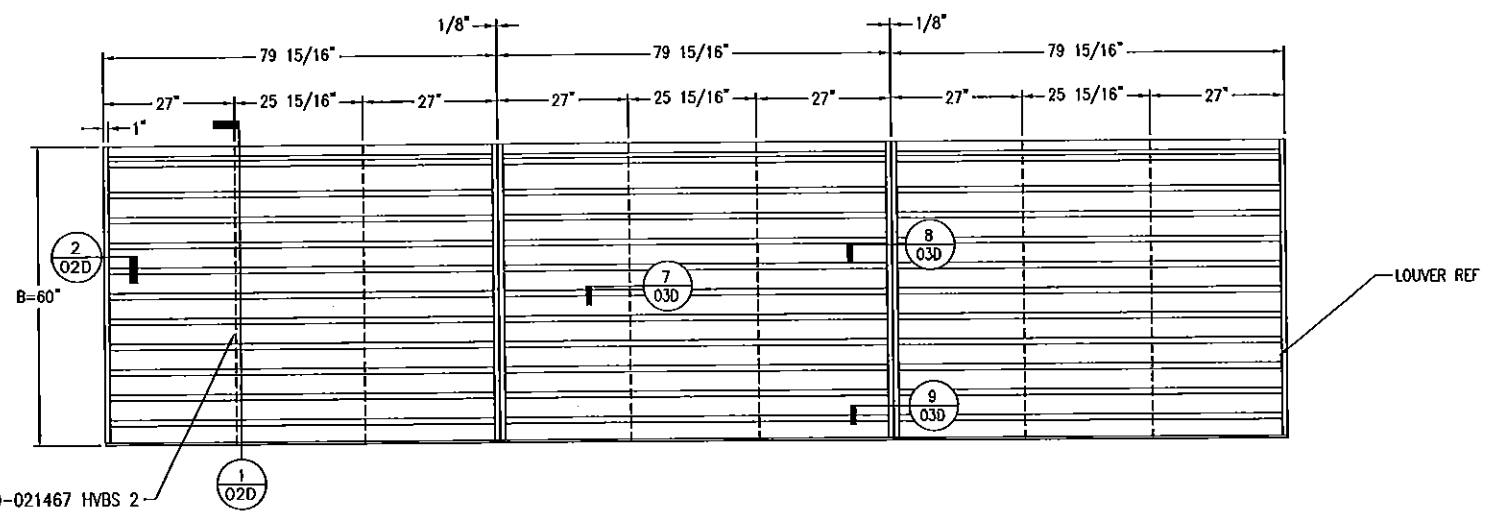
DETAIL A
N.T.S.

- NOTES:** (C)
- THE ELF375DXD HAS BEEN TESTED IN ACCORDANCE WITH FLORIDA PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT, UNIFORM PRESSURE AND CYCLIC WIND PRESSURE.
 - THIS LOUVER SYSTEM IS APPROVED FOR APPLICATIONS WITH DESIGN PRESSURES OF +/- 130 PSF OR LESS.
 - THIS LOUVER SYSTEM IS NON-BEARING AND IS NOT DESIGNED TO WITHSTAND BUILDING DEAD LOADS.
 - IT SHALL BE THE RESPONSIBILITY OF PERMIT HOLDER/BUILDING DESIGN ENGINEER OF RECORD TO VERIFY THE STRUCTURAL INTEGRITY OF THE STRUCTURE TO SUPPORT THE LOADS IMPOSED BY THIS LOUVER SYSTEM.
 - MAXIMUM SINGLE SECTION SIZE: 79 15/16" WIDE X 120" HIGH.
 - MAXIMUM ASSEMBLED LOUVER SIZE: UNLIMITED WIDE X 120" HIGH. MAX. MULLION SPACING IS 79 15/16".
 - SECTIONS OR ASSEMBLIES MAY BE STACKED VERTICALLY PROVIDED A SUITABLE STRUCTURAL SUPPORT IS DESIGNED AND INSTALLED BY OTHERS TO SUPPORT ALL LOADS TRANSFERRED FROM THE LOUVER.
 - THIS LOUVER SYSTEM IS TO BE INSTALLED IN A LOCATION WHERE THE ROOM BEHIND THE LOUVER IS DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM AND THE ROOM WILL HOUSE WATER RESISTANT/WATER PROOF EQUIPMENT, COMPONENTS OR SUPPLIES.
 - CMU BLOCKS MUST BE TYPE 1, GRADE N, LIGHT, MEDIUM OR NORMAL WEIGHT CONFORMING TO ASTM C90. CMU BLOCKS MUST BE FULLY GROUTED WITH COARSE GROUT CONFORMING TO FLORIDA BUILDING CODE SECTION 2122.8. TYPE N, S OR M MORTAR MUST COMPLY WITH FLORIDA BUILDING CODE SECTION 2103.9. MASONRY COMPRESSIVE STRENGTH MUST BE AT LEAST 1500 PSI AT TIME OF INSTALLATION.
 - ABBREVIATIONS: NIRC = NOT IN RUSKIN'S CONTRACT
 - ALL FASTENERS SHALL BE CORROSION RESISTANT.



FOR OFFICE USE ONLY

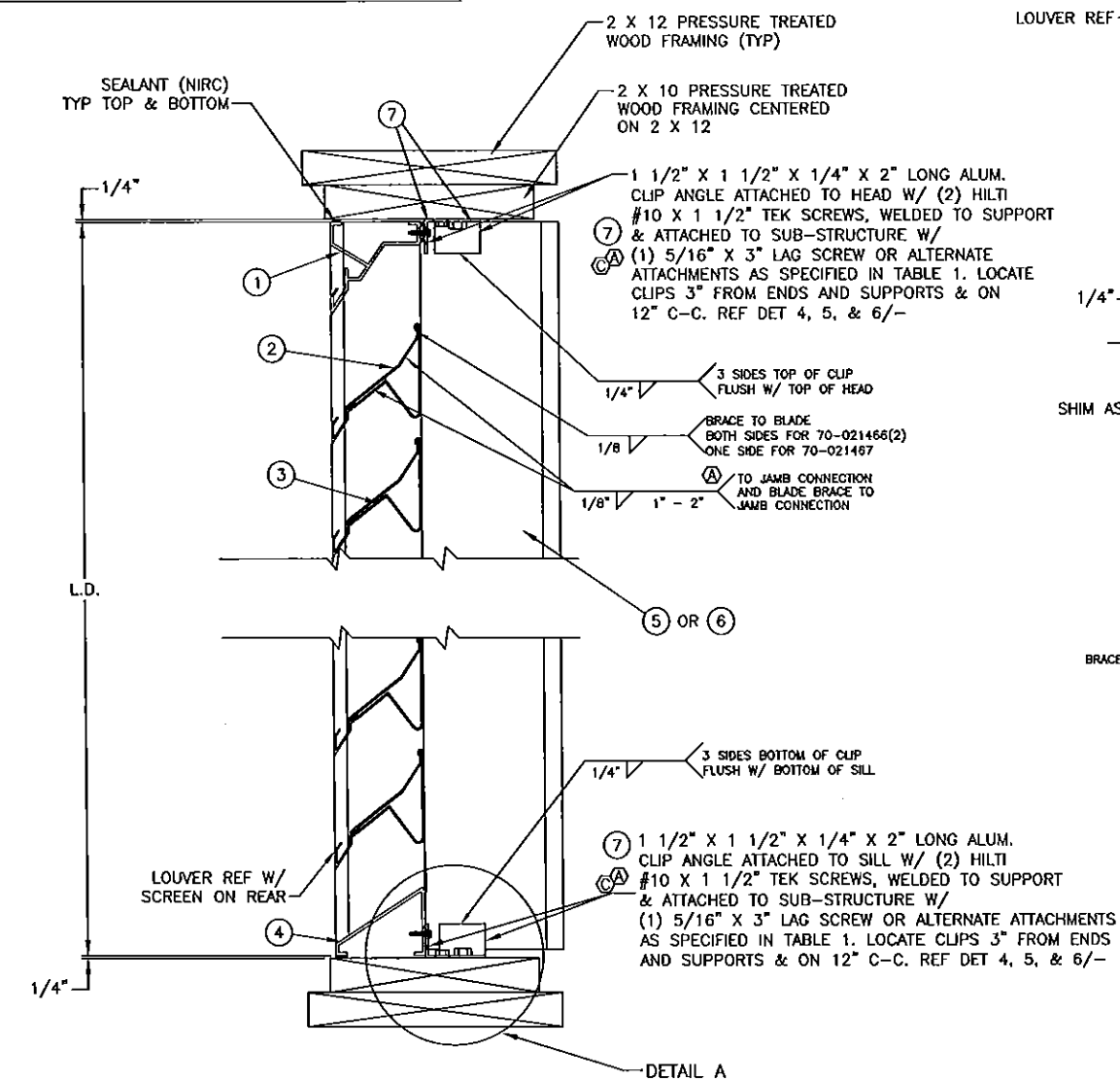
PRODUCT REVISED
 as complying with the Florida Building Code
 Acceptance No 15-0723-05
 Expiration Date 01/02/2018
 By [Signature]
 Miami Trade Product Control



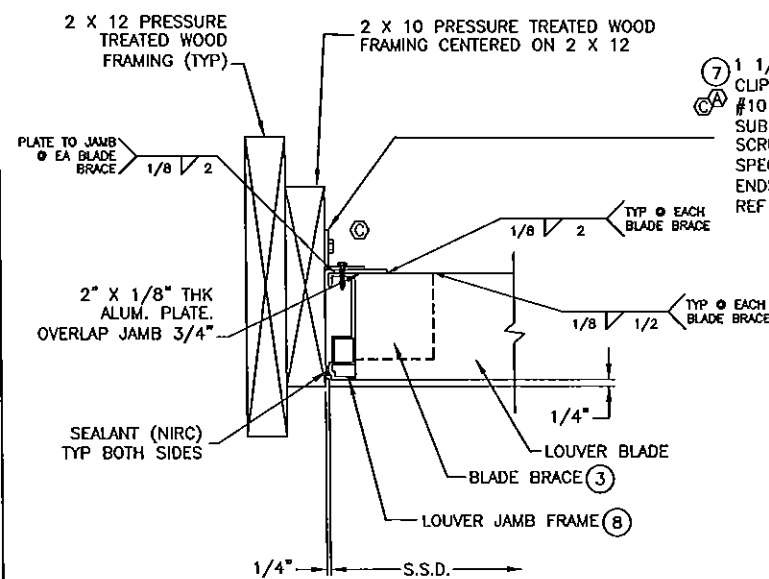
ASSEMBLY 'B' (FOR 'B' DIMENSIONS OF 12" TO 60")
 N.T.S.
 TESTS PERFORMED:
 TAS-201 LARGE MISSILE IMPACT TEST
 TAS-202 UNIFORM STATIC AIR PRESSURE TEST
 TAS-203 CYCLIC WIND PRESSURE TEST
 DESIGN PRESSURE RATING 130 PSF

ENGINEER OF RECORD CHELSEA G. WELCH		REVISION ENGINEER OF RECORD, SPECS & NOTES		KLR	NLT	CGW	09/11/15
ENGINEERING DISCIPLINE CIVIL/STRUCTURAL		REVISION NOTES		GKJ	DJR	DJR	11/26/01
REGISTRATION NUMBER FL #67221		REVISION DESCRIPTION		CHK BY	CHK'D BY	APPR'D BY	DATE
DATE 3-15-06		DATE 5/26/06		DATE 5/26/06		DATE	
DRAWN BY DJR		CHK'D BY DLC		APPR'D BY DLC		DATE	
DATE 3-15-06		DATE 5/26/06		DATE 5/26/06		DATE	
TITLE SHEET 1 OF 5		SCALE NONE		ECH. 3747		DATE	
PROJECT NO. 60-021902-01D		SHEET NO. ELF375DXD LOUVER SPECS, ASSY. & NOTES		DATE		DATE	

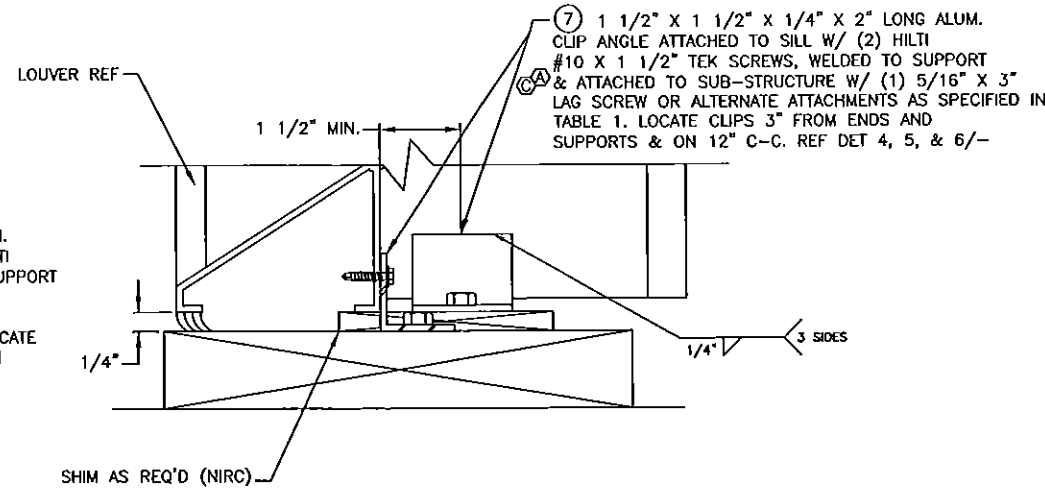
NOTE: SCREEN NOT SHOWN FOR CLARITY.



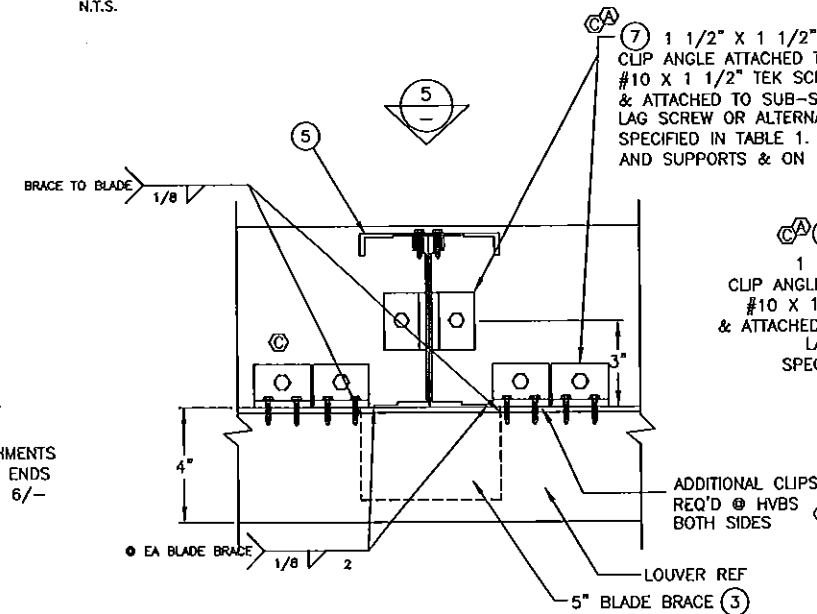
1 LOUVER DETAIL @ HEAD & SILL
01D N.T.S.



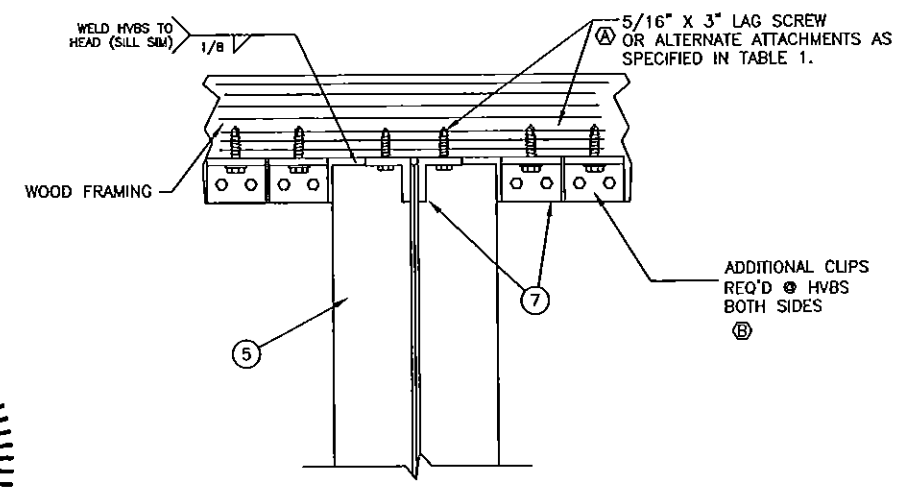
2 LOUVER @ JAMB DETAIL
01D N.T.S.



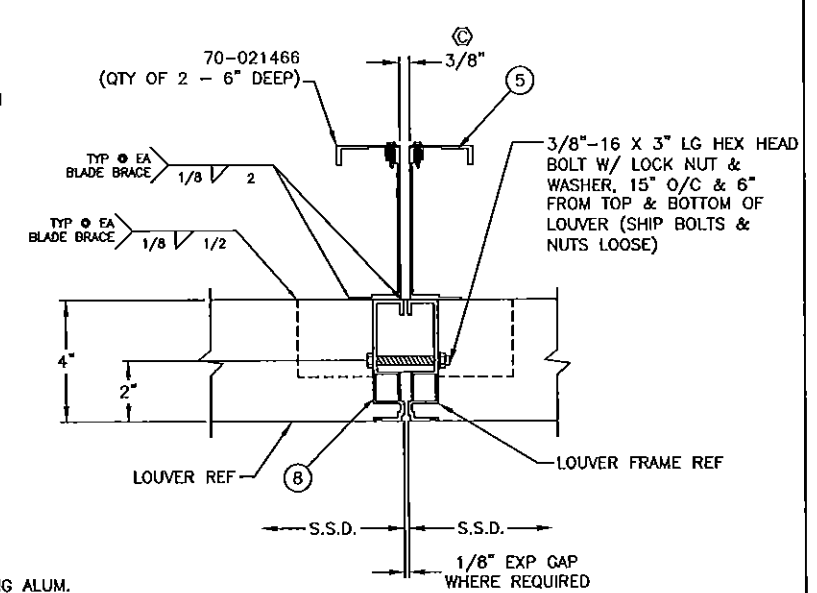
4 HVBS DETAIL
01D N.T.S.



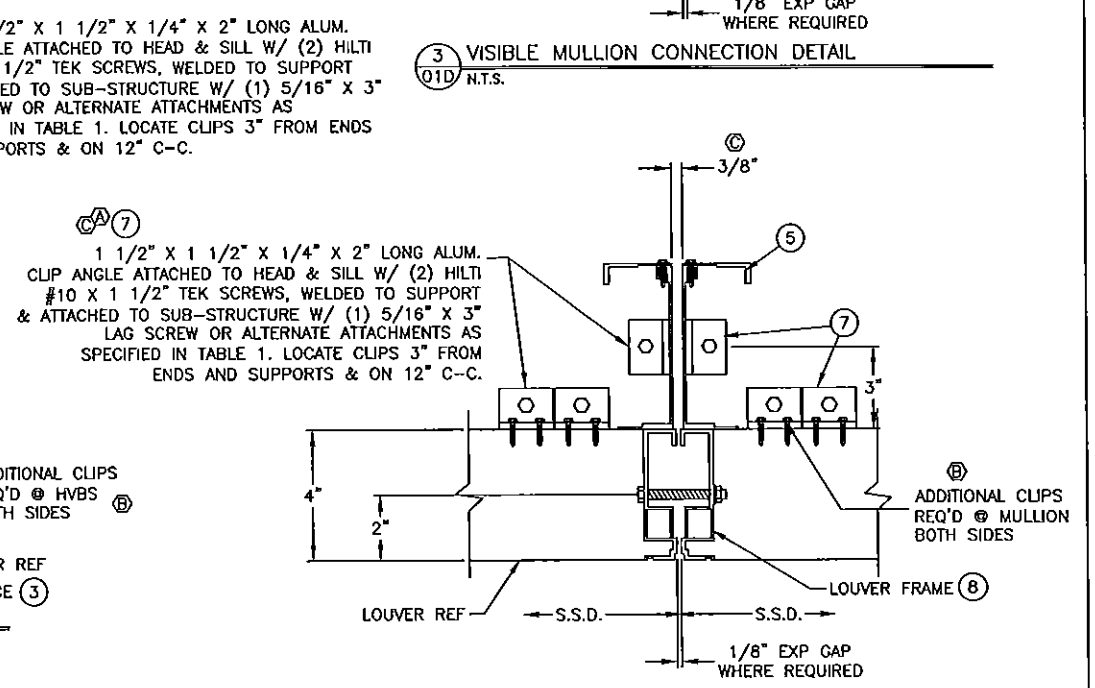
5 HVBS HEAD DETAIL @ WOOD FRAME (SILL SIM)
01D N.T.S.



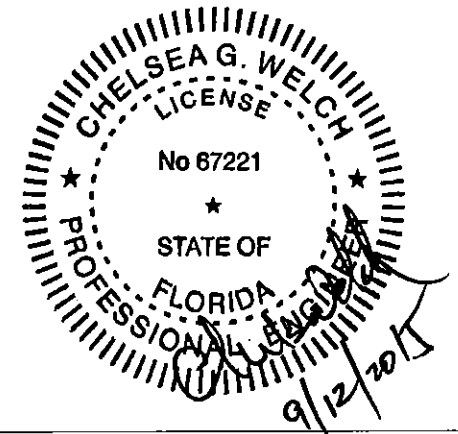
5 HVBS HEAD DETAIL @ WOOD FRAME (SILL SIM)
01D N.T.S.



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



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



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PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 15-0723.05
Expiration Date 01/03/2016

By *[Signature]*
Miami District Product Control

ENGINEER OF RECORD CHELSEA G. WELCH ENGINEERING DISCIPLINE CIVIL/STRUCTURAL REGISTRATION NUMBER FL #67221	(C) REVISED ENGINEER OF RECORD & NOTES, ADDED DEL. (B) ADDED CLIP ANGLES PER CALCULATION REQUIREMENTS (A) REVISED DETAILS	KLR NLT CGW DWS VMA DJR GKJ	09/11/15 11/20/07
DATE: 3-20-2004 DWG: 5/26/6 DATE: 5/26/6	REVISION DESCRIPTION RUSKIN SWARTWOUT 3800 DL. BREWERS RD. CHANDLER, AZ 8400 PROJECT: 1710000	SHEET NO. 3747	PLOT SCALE NONE ECR: 3747
SHEET 2 OF 5		ELF3750XD LOUVER DETAILS	
		60-021902-02D	

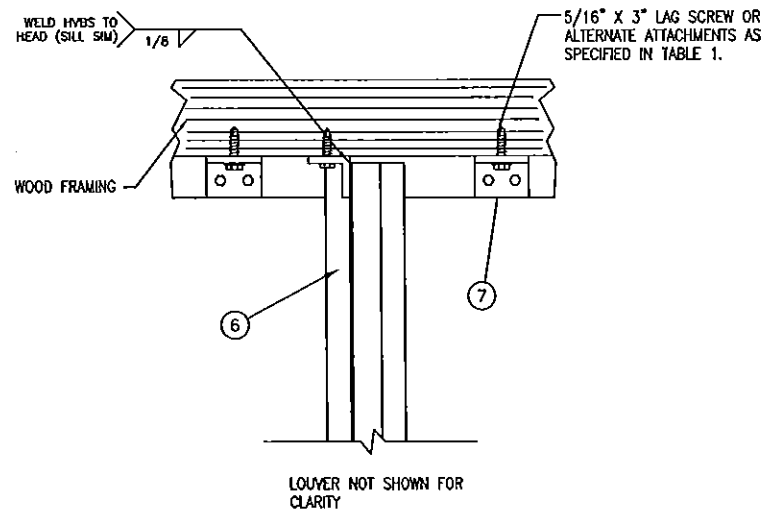
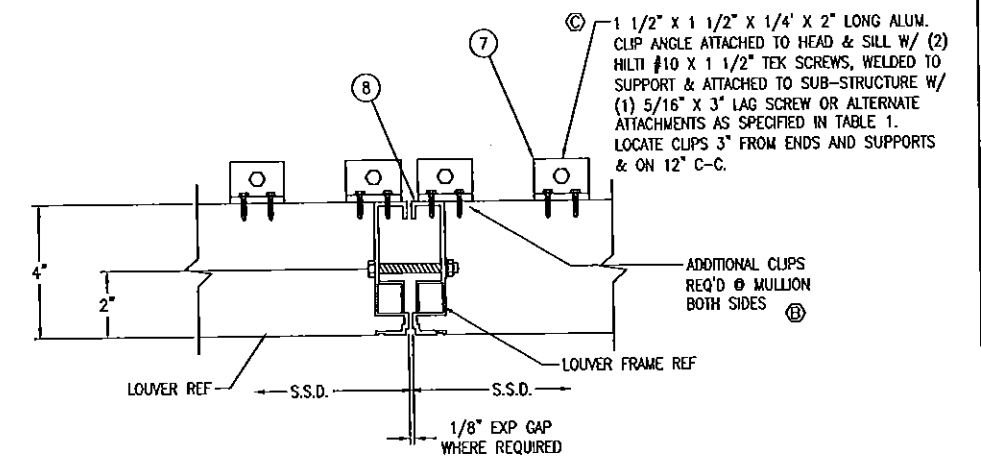
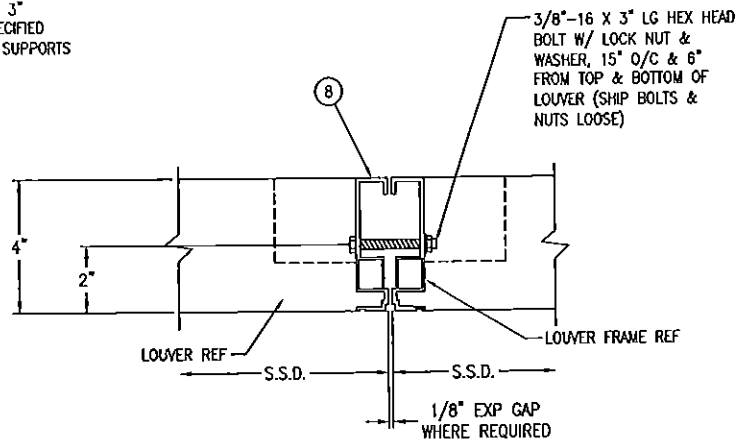
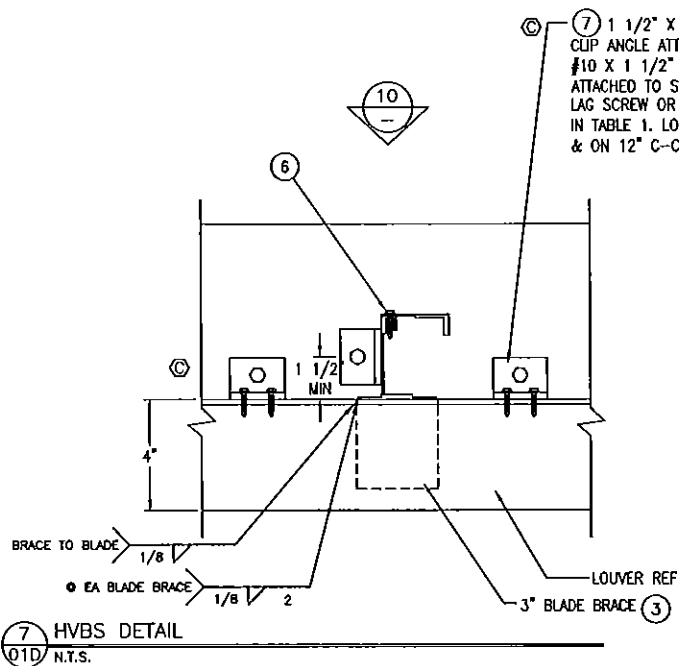


TABLE #1: ALTERNATE APPROVED ATTACHMENTS

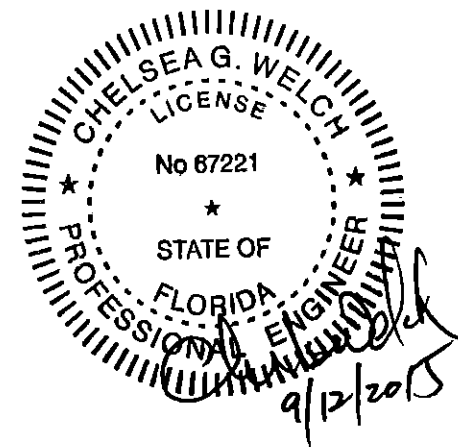
BASE MATERIAL	DESCRIPTION	INSTRUCTIONS
CONCRETE 3000 MIN PSI	5/16 DIA TAPCON (ITW OR EQUAL)	1 3/4" EMBED., 2 IN MIN EDGE
CONCRETE 2000 MIN PSI	5/16 DIA EXPANSION ANCHOR (HILTI OR EQUAL)	2 1/2" EMBED., 5 IN MIN EDGE
GROUT FILLED BLOCK (NOTE 9)	5/16 DIA TAPCON (ITW OR EQUAL)	1 3/4" EMBED., 4 IN MIN EDGE
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/MIAMI-DADE COUNTY APPROVED INSTALLATION INSTRUCTIONS

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

TABLE #2: DRAWING CROSS REFERENCE

ITEM	DRAWING	MATERIAL	DESCRIPTION	RUSKIN #
1	60-021902-04B	6063-T6 AL	HEAD FRAME	70-020574-00B
2	60-021902-04B	6063-T6 AL	BLADE	70-021524-00B
3	60-021902-04B	6063-T6 AL	BLADE BRACE	70-021526-00B
4	60-021902-04B	6063-T6 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	6063-T6 AL	CLIP ANGLE	-
8	60-021902-05B	6063-T6 AL	JAMB FRAME	70-020374-00B

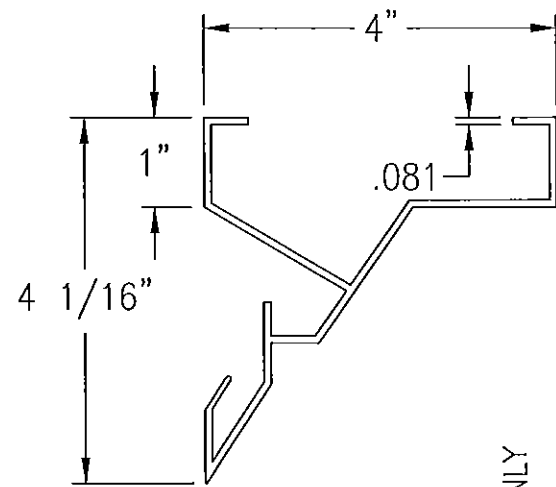


FOR OFFICE USE ONLY

PRODUCT REVISED as complying with the Florida Building Code Acceptance No 15-0923.05 Expiration Date 01/03/2018

By: [Signature] Miami Trade Product Control

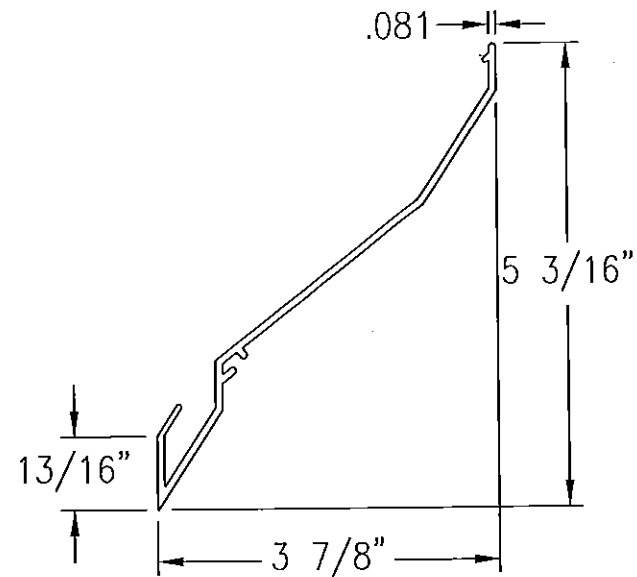
ENGINEER OF RECORD	CHELSEA G. WELCH	REVISION	NO.	DESCRIPTION	DATE
ENGINEERING DISCIPLINE	CIVIL/STRUCTURAL	(C)	REVISD ENGINEER OF RECORD, NOTES AND TABLES 1 & 2	KLR NLT CGW	08/11/15
REGISTRATION NUMBER	FL #67221	(B)	ADDED CLIP ANGLES TO DETAIL 9 PER CALCULATIONS.	DWS DJR DJR	11/20/07
FL #67221		(A)	REVISED TABLE & DETAILS	GKJ	
DATE	5/19/08	DATE	5/28/08	DATE	5/28/08
SCALE	AS SHOWN	SCALE	AS SHOWN	SCALE	AS SHOWN
SHEET	3 OF 5	TITLE	ELF375DXD LOUVER DETAILS	PROJECT NO.	60-021902-03D



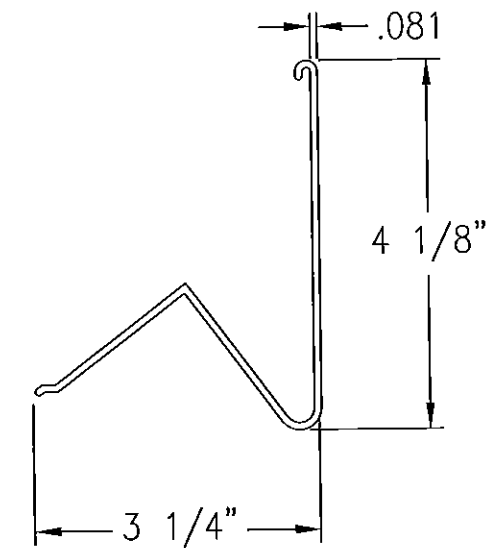
ITEM 1 - HEAD FRAME
RUSKIN# 70-020574-00B

FOR OFFICE USE ONLY

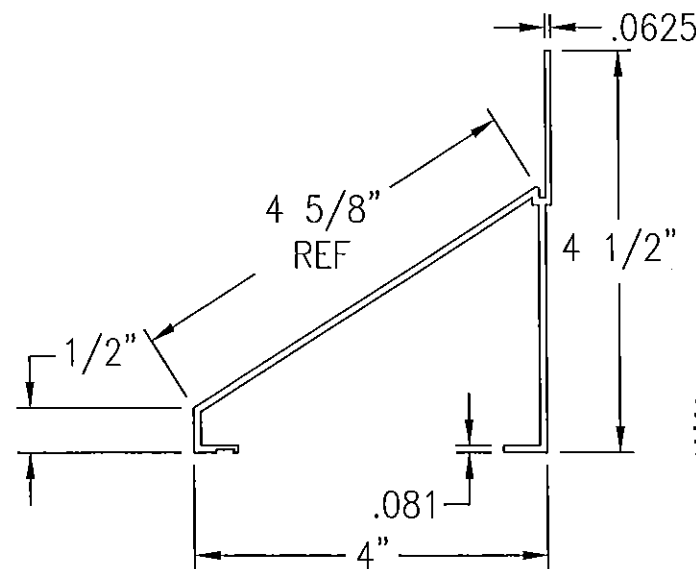
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0923.05
Expiration Date 01/03/2018
By *[Signature]*
Miami/Dade Product Control



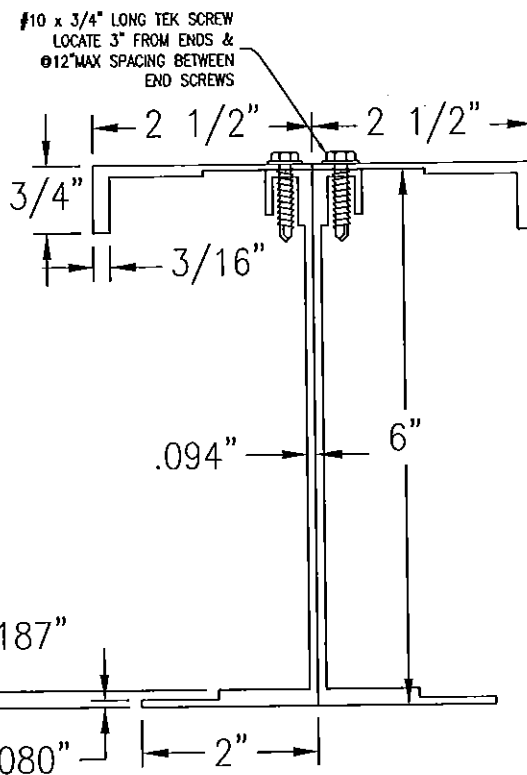
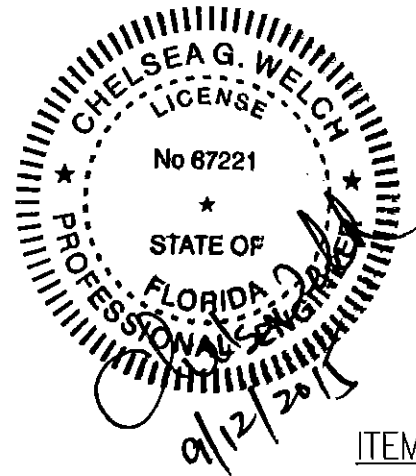
ITEM 2 - BLADE
RUSKIN# 70-021524-00B



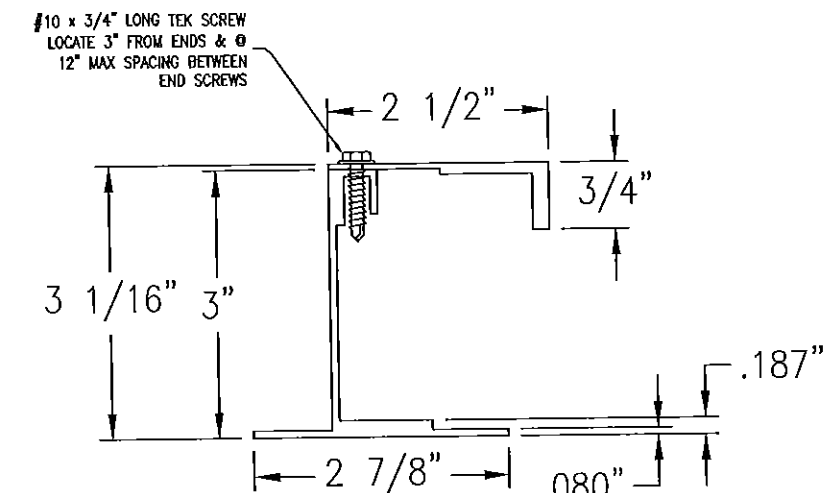
ITEM 3 - BLADE BRACE
RUSKIN# 70-021526-00B



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

Ⓒ	REVISED ENGINEER OF RECORD & ITEM 6	KLR	NLT	CGW		09/11/15
Ⓐ	REVISED MATERIAL THICKNESS	GKJ	DJR	DJR		11/20/07
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE

ENGINEER OF RECORD CHELSEA G. WELCH
ENGINEERING DISCIPLINE CIVIL/STRUCTURAL
REGISTRATION NUMBER FL #67221

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX ±.010
2 PLACE .XX ±.020
FRACTION DIMENSIONS: ± 1/16
ANGLE DIMENSIONS: ± 2'
USE WIC-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:

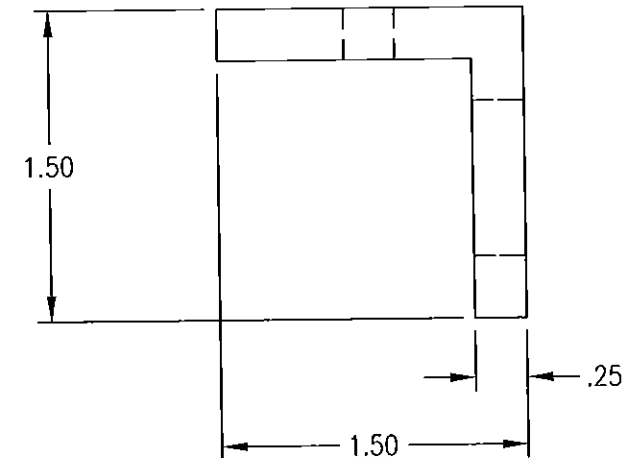
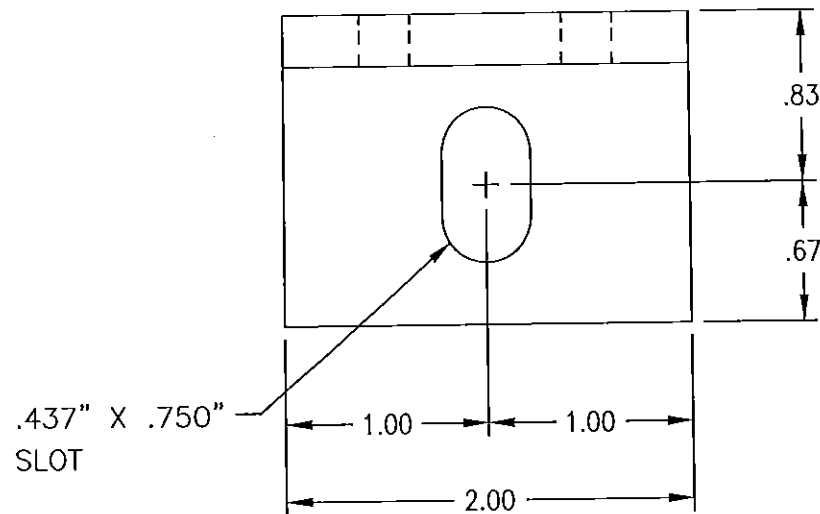
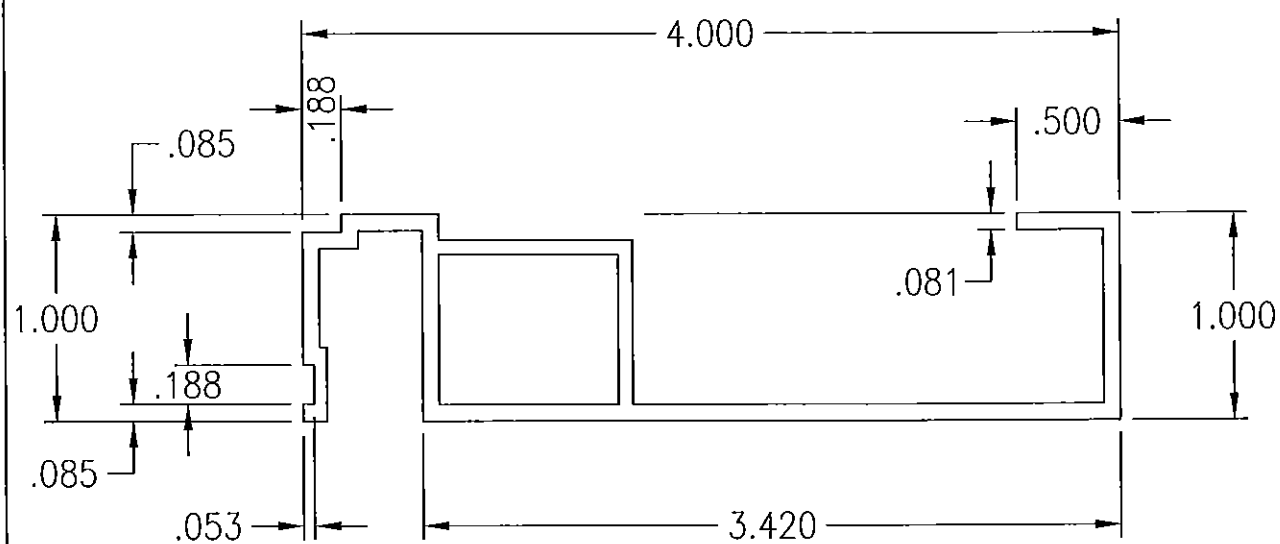
SHEET 4 OF 5

RUSKIN 3900 DR. GREAVES RD
GRANDVIEW, MO 64030
SWARTWOUT PROPRIETARY INFORMATION

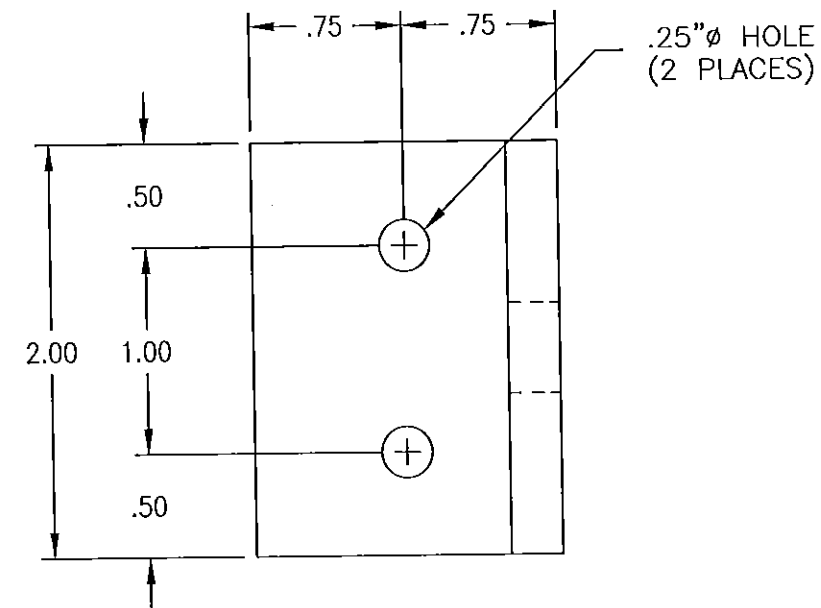
TITLE
ELF375DXD LOUVER
PART DETAILS

PLOT SCALE
NONE
ECN: 3747

DWG. NO.
60-021902-04B



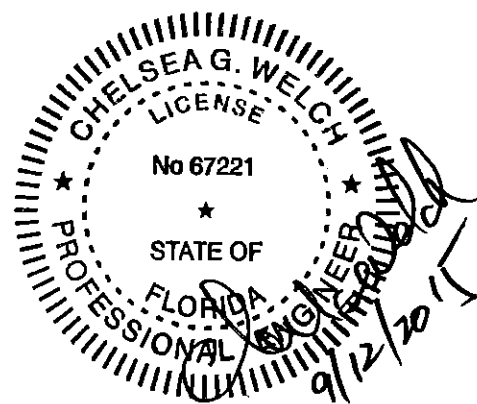
Ⓒ ITEM 7 - CLIP ANGLE



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

FOR OFFICE USE ONLY

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0723-05
Expiration Date 01/03/2016
By *[Signature]*
Miami Code Product Control



Ⓒ	REVISED ENGINEER OF RECORD, DELETED ITEM 7 PART NO.	KLR	NLT	CGW		09/11/15
Ⓐ	REVISED LABELS	GKJ	DJR	DJR		11/20/07
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE

ENGINEER OF RECORD
CHELSEA G. WELCH
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL #67221

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

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

SHEET 5 OF 5

RUSKIN
SWARTWOUT
3900 DR. GREAVES RD
GRANDVIEW, MO 64030
PROPRIETARY INFORMATION

TITLE
ELF375DXD LOUVER
PART DETAILS

PLOT SCALE
NONE
ECN: 3747

DWG. NO.
60-021902-05B