



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY  
AFFAIRS (PERA)  
BOARD AND CODE ADMINISTRATION DIVISION

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

**NOTICE OF ACCEPTANCE (NOA)**

[www.miamidade.gov/pera/](http://www.miamidade.gov/pera/)

**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 PERA -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. PERA 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 EME6625D Aluminum Louver with optional CD-50 Damper**

**APPROVAL DOCUMENT:** Drawing No. 60-021563-00D/01D, 02B-04B, 05D-08D, 09B-27B, 28D-37D, titled "EME6625D & CD50", sheets 1 through 38 of 38, prepared by Ruskin Company, dated 03/16/1998, 11/22/1996, 04/13/1998, 10/15/1998, 03/02/2007 and 06/04/2010, with last revision H dated 12/08/2011, signed and sealed by William J. Mossie, 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, city, state, model/series, 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 renews NOA # 10-1104.05 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

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



*[Signature]*  
03/01/2012

NOA No. 11-1229.04  
Expiration Date: January 28, 2017  
Approval Date: March 8, 2012  
Page 1

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

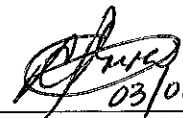
1. Manufacturer's die drawings and sections.
2. Drawing No. **60-021563-00D/01D, 02B-04B, 05D-08D, 09B-27B, 28D-37D**, titled "EME6625D & CD50", sheets 1 through 38 of 38, prepared by Ruskin Company, dated 03/16/1998, 11/22/1996, 04/13/1998, 10/15/1998, 03/02/2007 and 06/04/2010, with last revision H dated 12/08/2011, signed and sealed by William J. Mossie, P.E.

**B. TESTS "Submitted under NOA # 06-1205.08"**

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 Model EME6625D 6" Aluminum Louvers, prepared by National Certified Testing Laboratories, Report No. **210-3359-1**, dated 11/27/2006, signed and sealed by Gerald J. Ferrara, P.E.
2. Test Report on Wind Driven Rain Resistance per TAS 100(A)-95 of a vertical blade louver Model EME6625D with CD50 Damper, prepared by Architectural Testing Report No. **64940.01-109-44**, dated 06/23/2006, signed and sealed by Steven M. Urich, P.E.
3. Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test "Aluminum Louver Assemblies with Damper", prepared by Construction Research Laboratories, Inc., Test Report No. **6496**, dated 05/13/1998, signed and sealed by N.S. Balsara, P.E.
4. Test Report on Large Missile Impact Test, Cyclic Wind Pressure Test "Aluminum Louver Assembly with Damper", prepared by Construction Research Laboratories, Inc., Test Report No. **6550**, dated 12/09/1998, signed and sealed by N.S. Balsara, P.E.

**C. CALCULATIONS "Submitted under NOA # 06-1205.08"**

1. EME6625D alternate attachment method, prepared by Ruskin Company, dated 10/18/2010, signed and sealed by Daniel J. Rau, P.E.
2. Louver/Damper Blade & Mullion Calculations, dated 05/11/1998, pages 1 to 7 of 7 with appendix A, prepared by R. E. Beason II, signed and sealed by E. P. Hutson Jr., P.E.
3. Louver/Damper Blade & Mullion Calculations, dated 10/20/1998, pages 1 to 7 of 7, with appendix A, prepared by R. E. Beason II, signed and sealed by E. P. Hutson Jr., P.E.

  
03/01/2012

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Carlos M. Utrera, P.E.  
Product Control Examiner  
NOA No. 11-1229.04  
Expiration Date: January 28, 2017  
Approval Date: March 8, 2012

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**D. QUALITY ASSURANCE**

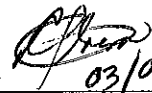
1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA)

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS**

1. Statement letter of code conformance to 2010 FBC issued by Ruskin Company, dated 02/29/2012, signed and sealed by William J. Mossie, P.E.
2. Statement letter of no financial interest issued by Ruskin Company, dated 12/15/2011, signed and sealed by William J. Mossie, P.E.

  
03/01/2012

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Carlos M. Utrera, P.E.

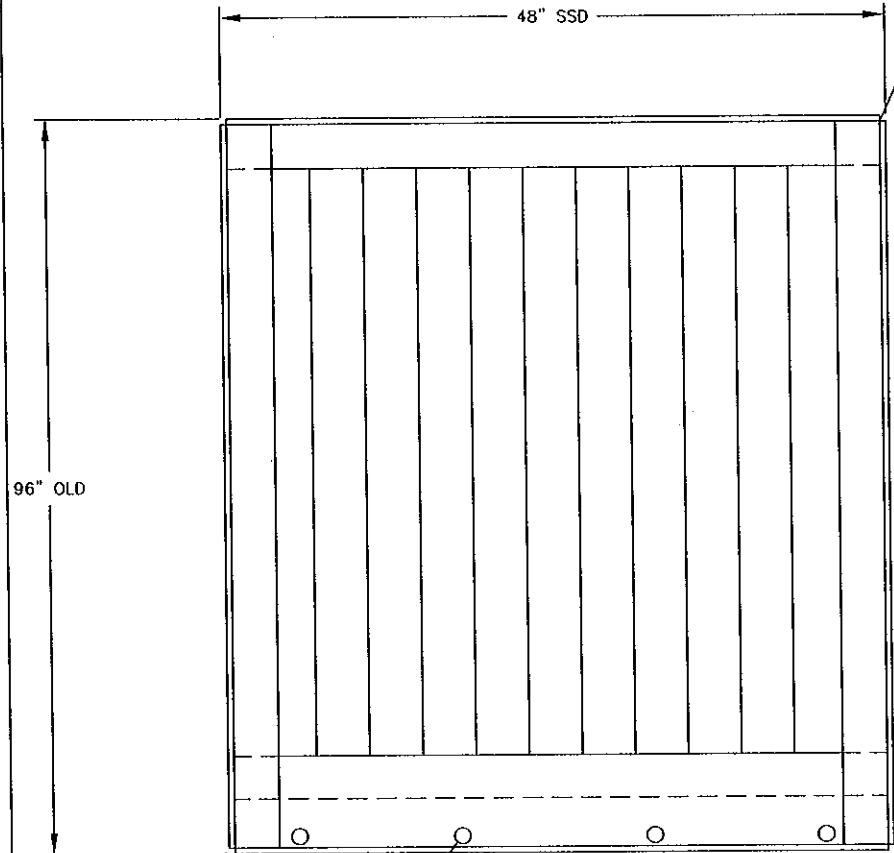
Product Control Examiner

NOA No. 11-1229.04

Expiration Date: January 28, 2017

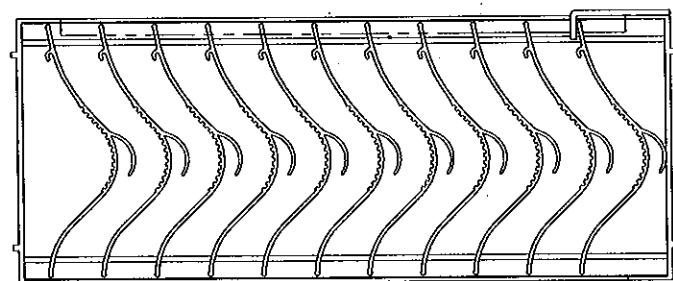
Approval Date: March 8, 2012



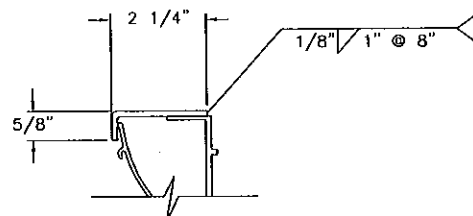


1/2" DIA WEEP HOLES  
@ 8" O/C & 2" FROM  
ENDS @ FRONT OF LOUVER  
SILL ONLY.

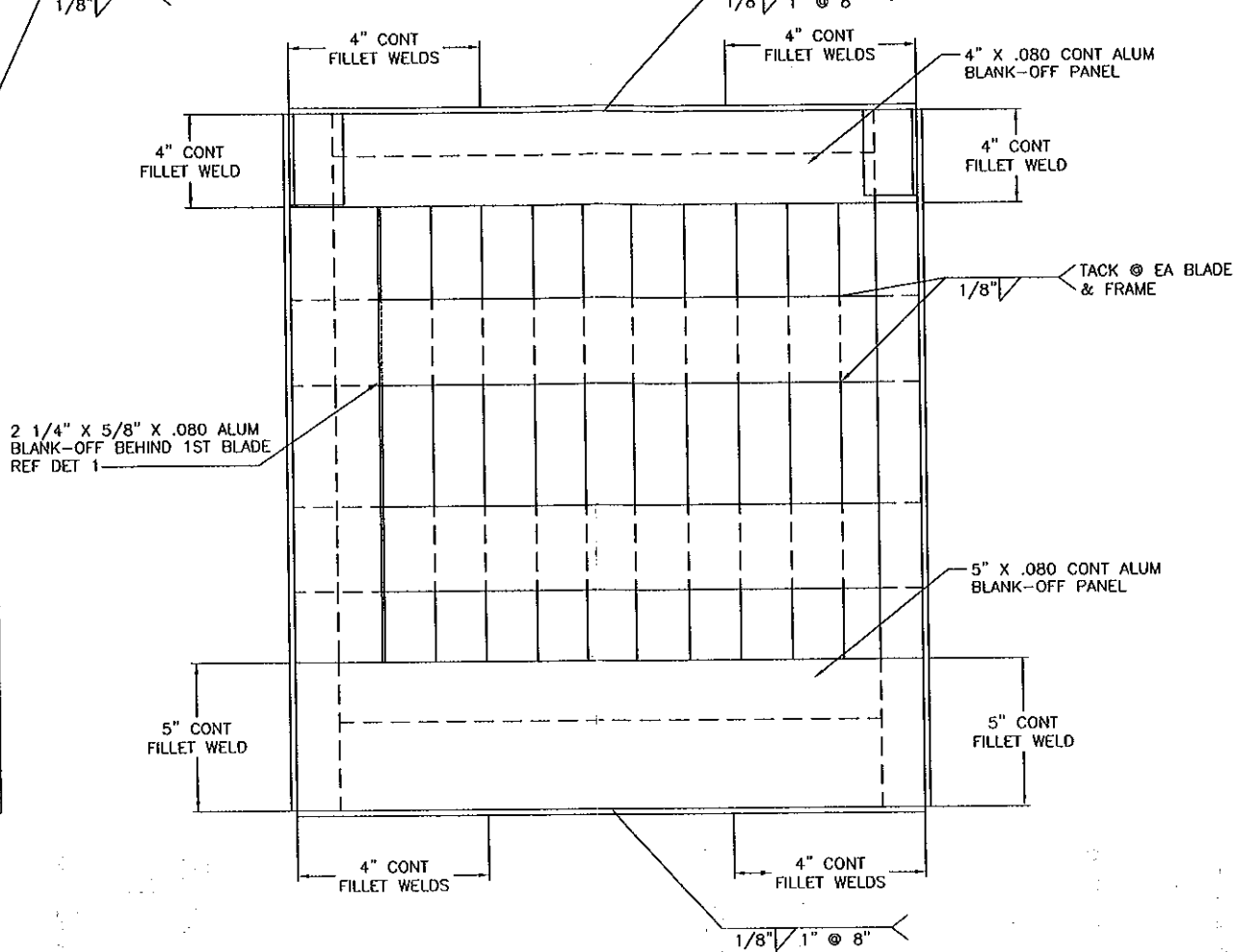
FRONT ELEVATION VIEW (PER SHIP SECTION)



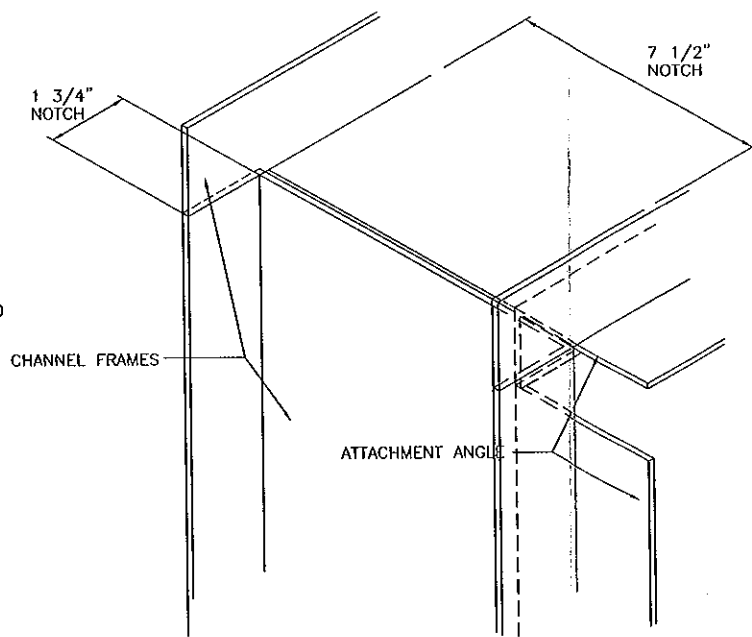
SECTION PLANVIEW



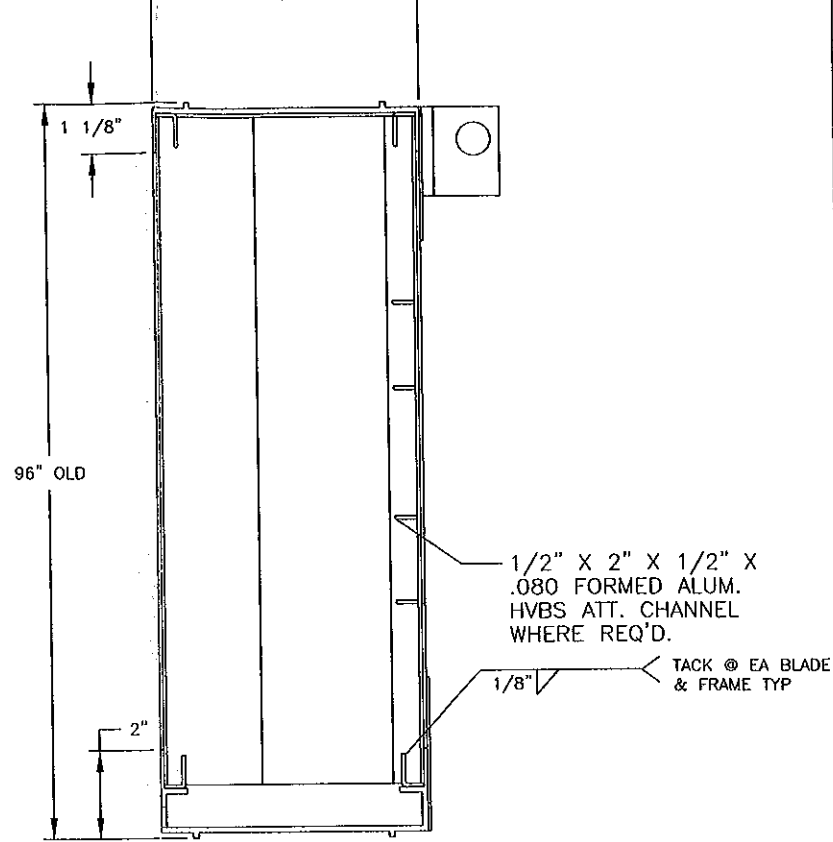
1 1ST BLADE JAMB BLANKOFF DETAIL  
N.T.S.  
MAT'L: .080 CONT FORMED ALUMINUM



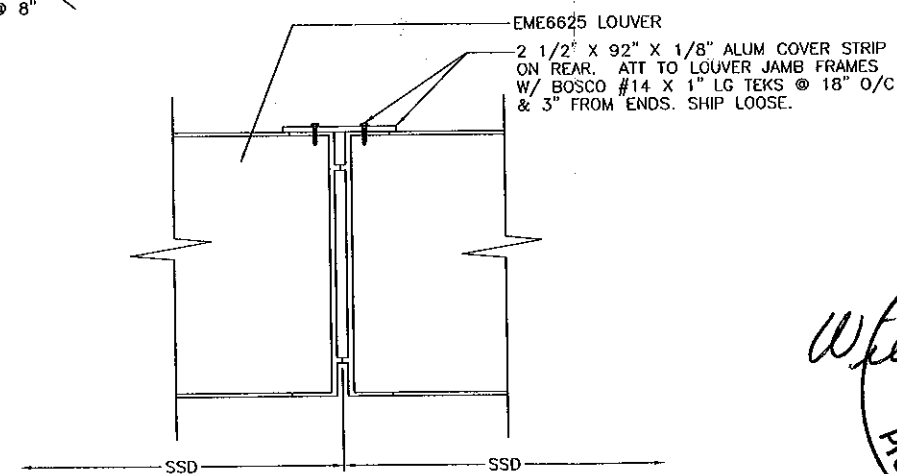
REAR ELEVATION VIEW



2 ISOMETRIC NOTCHING DETAIL  
N.T.S.



EME6625 SECTION



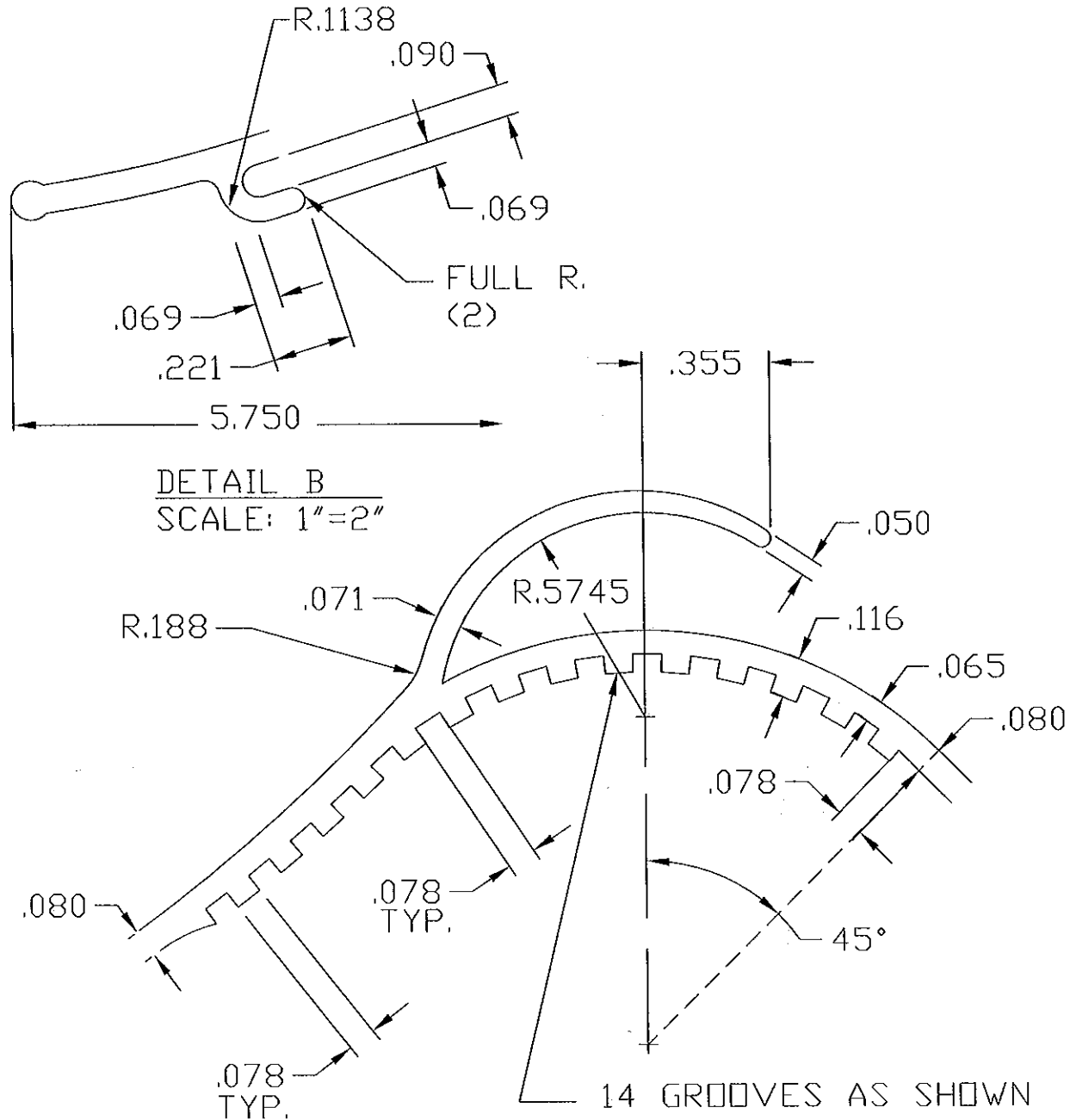
3 MULLION SPLICE DETAIL  
N.T.S.

12/09/2011  
 William J. Mossie  
 Registered Professional Engineer  
 PE #71909  
 State of Florida

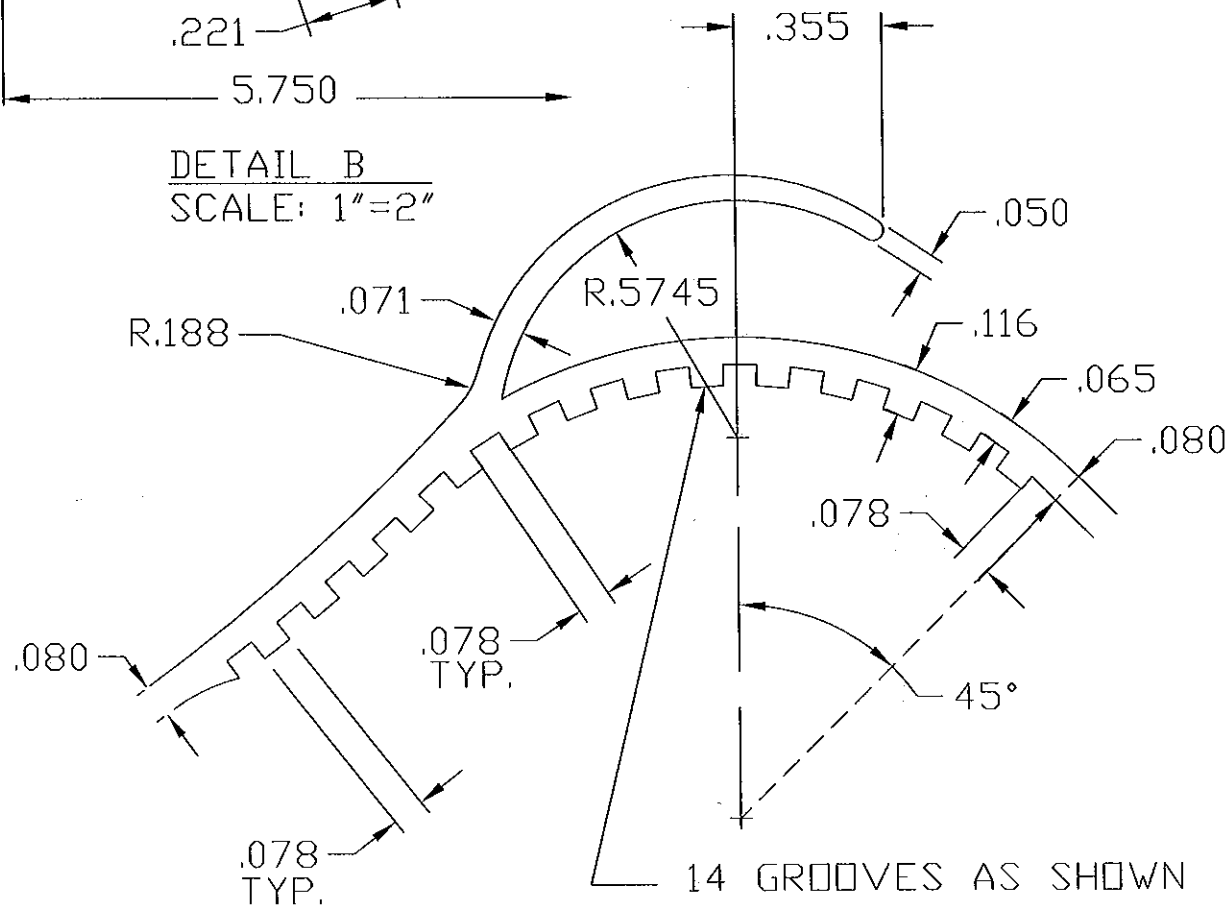
FOR OFFICE USE ONLY

PRODUCT RENEWED  
 as complying with the Florida  
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 Expiration Date 01/28/2017  
 By *[Signature]*  
 Miami Dade Product Control

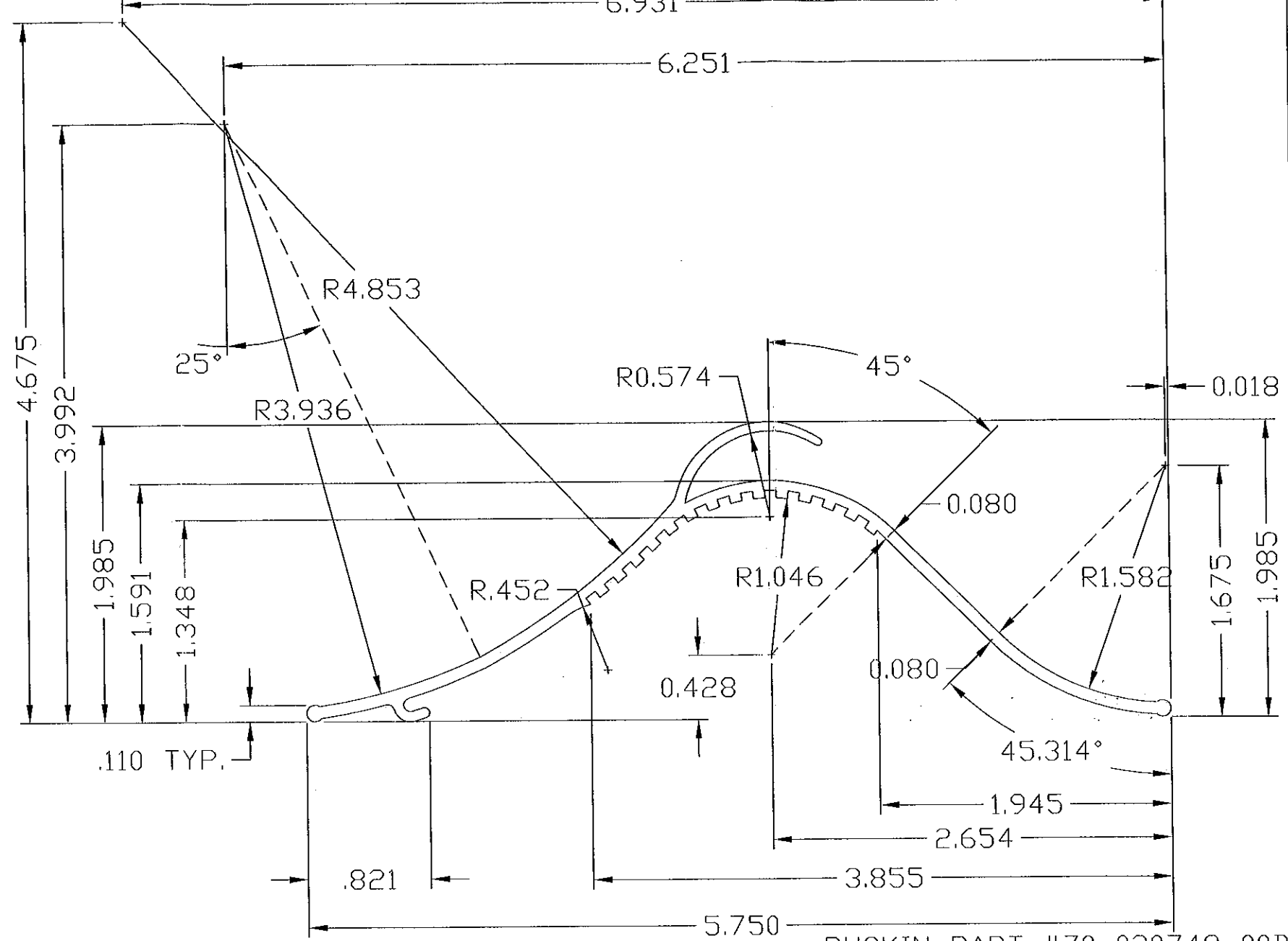
ENGINEER OF RECORD AND SHEET NUMBER	WJM			12/09/11
ADDED SHEET NUMBER	DLC	DJR	DJR	5/23/7
REVISED BLADE SPACING PER RETEST	DJR	VMA		7/11/06
DADE CO. COMMENTS	RM	VMA		7-31-98
REV'D DETAILS & ELEV.	GSL	VMA		5-7-98
REV'D DETAILS & ADDED DETAILS 2 & 3	GSL	VMA		5-1-98
REMOVED ENGINEERING DATA	JAL	VMA		4-17-98
CHANGE LETTER	REVISION DESCRIPTION	ENR. BY:	CHK'D. BY:	APPR'D. BY:
OWN. BY: GSL	CHK. BY: VMA	APPROV. BY: [Signature]	DATE: 3-13-98	DATE: 3-16-98
STATE OF FLORIDA #71909		RUSKIN Mig 3900 DR. Greaves RD Grandview, MO 64030		PLAT SCALE: NONE
LOUVER DAMPER ASSY		EME6625D & C050		60-021563-01D
DADE CITY, FLORIDA		ASSEMBLIES & SECTIONS		SHEET 2 OF 38



DETAIL B  
SCALE: 1"=2"



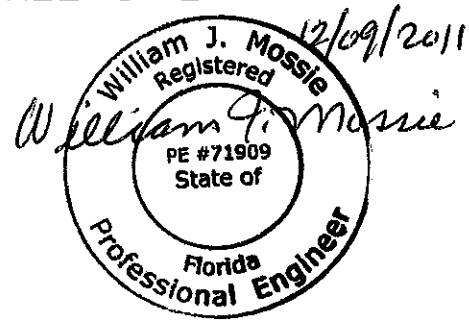
DETAIL A  
SCALE: 1"=2"



RUSKIN PART #70-020748-00B

AREA= .673  
PERIMETER= 17.839  
WT. PER. FT.= .792

- NOTES:
1. ALUMINUM ASSOCIATION TOLLERANCES APPLY UNLESS OTHERWISE SPECIFIED.
  2. 0.010" RADIUS AT ALL CORNERS UNLESS OTHERWISE SPECIFIED.
  3. ALL DIMENSIONS ARE GIVEN IN INCHES.
  4. INVENTORY NUMBER. 10790

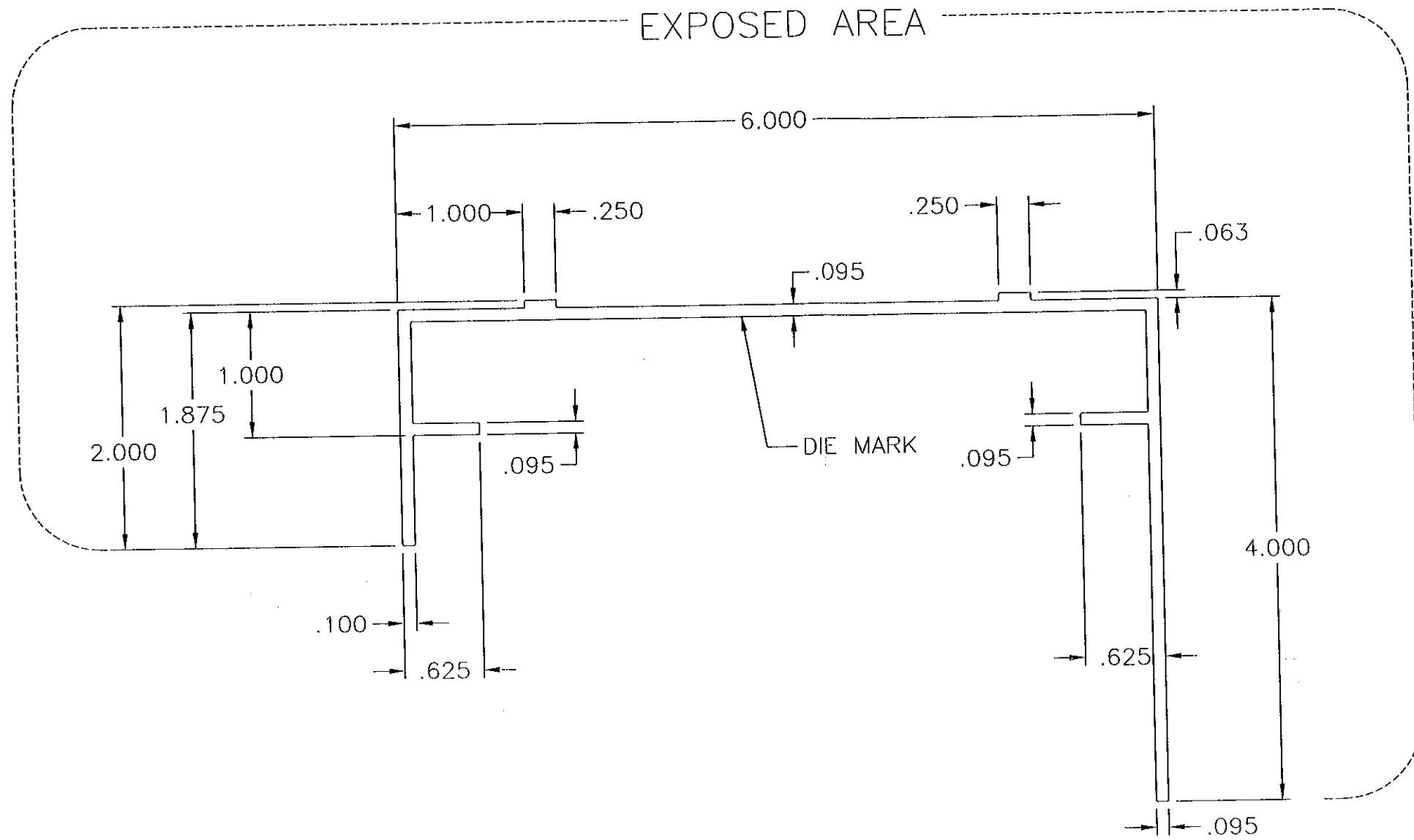


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Expiration Date 01/28/2017  
By *[Signature]*  
Miami Dade Product Control

ENGINEER OF RECORD William J. Mossie, PE (H)	DWN. BY: JKS DATE: 3-13-98	CHK. BY:	APPV'D. BY:	APPV'D. BY:
ENGINEERING DISCIPLINE CIVIL ENGINEER	MATERIAL: 6063T5 EXTRUDED ALUMINUM. NOM. WALL THICKNESS = .080			
REGISTRATION NUMBER STATE OF FLORIDA #71909				

(H)	ENGINEER OF RECORD AND SHEET NUMBER	WJM				12/08/11
(G)	ADDED SHEET NUMBER	DLC	DJR	DJR		5/23/7
(A)	REMOVED ENGINEERING DATA	JAL				
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
	RUSKIN Mfg 3900 DR. Greaves RD. Grandview, MD 64030					
TITLE	EME6625D MOISTURE BLADE	PLBT SCALE	1"=1"			
		DWG. CERTIFIED	BY: _____ DATE: _____			
		DWG. NO.	60-021563-02B SHEET 3 OF 38			

FOR OFFICE USE ONLY



RUSKIN PART #70-021995-00B

AREA= 1.250 SQ. IN.  
 PERIMETER= 26.12 IN.  
 EST. WEIGHT= 1.470 LBS/FT.

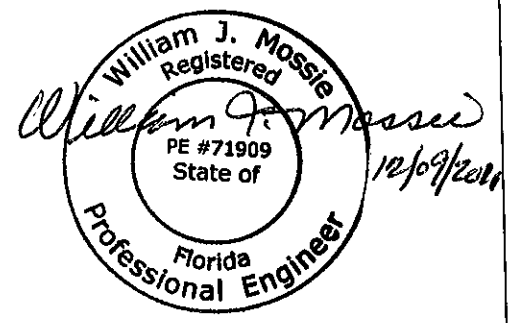
- NOTES:
1. ALUMINUM ASSOCIATION TOLERANCES APPLY UNLESS OTHERWISE SPECIFIED.
  2. 0.010" RADIUS AT ALL CORNERS UNLESS OTHERWISE SPECIFIED.
  3. ALL DIMENSIONS ARE GIVEN IN INCHES.
  4. INVENTORY NUMBER= 10820

ENGINEER OF RECORD William J. Mossie, PE			
ENGINEERING DISCIPLINE CIVIL ENGINEER			
REGISTRATION NUMBER STATE OF FLORIDA #71909			
DWN. BY: JKS	CHK. BY: VMA	APPV'D. BY: G.L.	APPV'D. BY:
DATE: 11/20/96	DATE: 11/22/96	DATE: 11/22/96	DATE:
MATERIAL: 6063T6 EXTRUDED ALUMINUM NOM WALL THICKNESS = .095"			

CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
	<i>RUSKIN Mfg. Grandview, MD</i>	PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____		
	PROPRIETARY INFORMATION	DWG. NO. 60-021563-03B SHEET 4 OF 38				

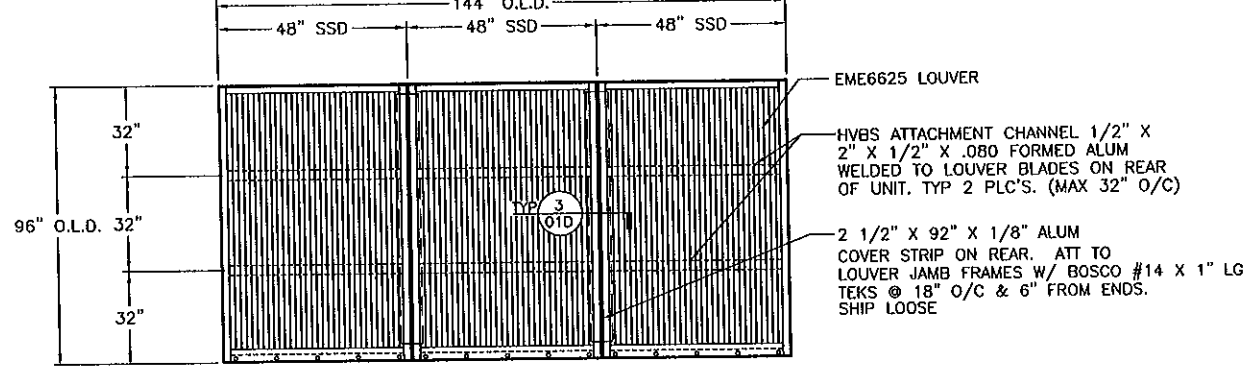
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 Expiration Date 01/28/2017  
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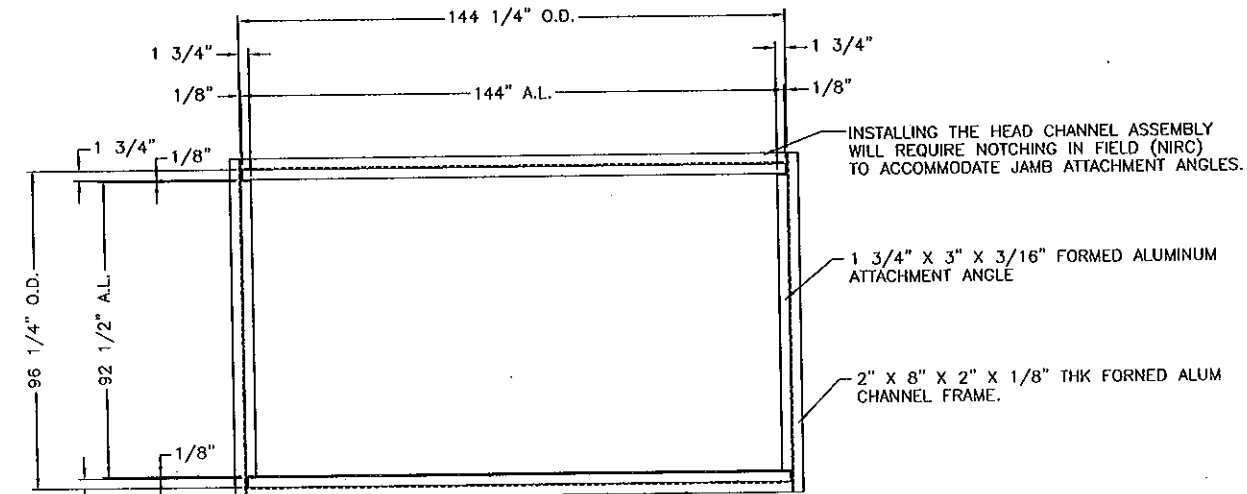




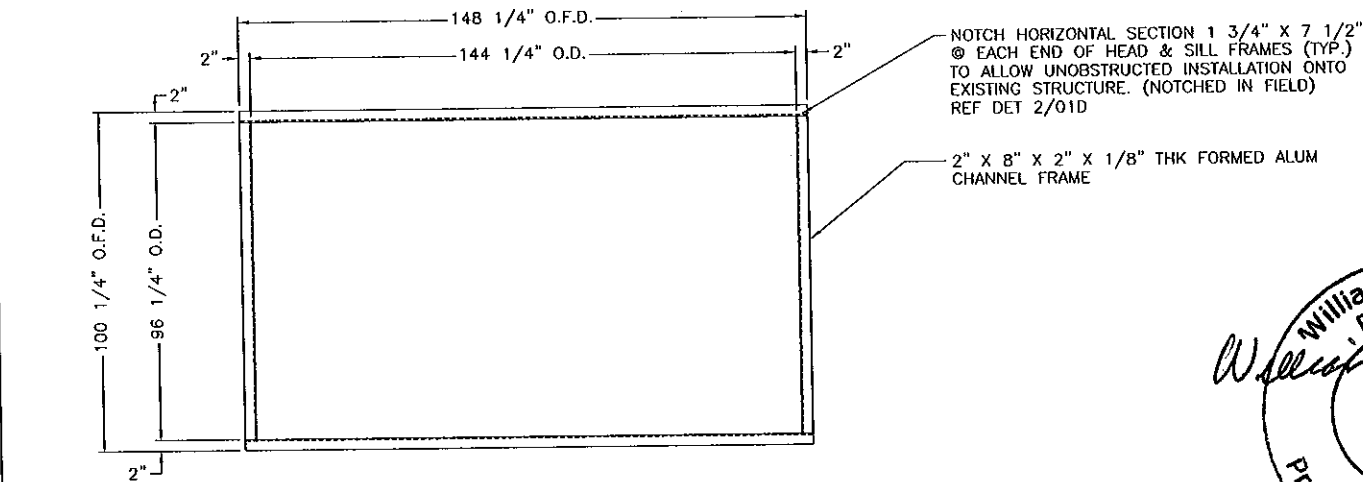




EME6625 LOUVER ASSEMBLY "B"  
 NTS DESIGN PRESSURE RATING: +160/ -140 PSF FRONT VIEW  
 SEE SECTION DETAILS FOR APPLICABILITY



CHANNEL FRAME & ATT ANGLE ELEVATION  
 REAR VIEW

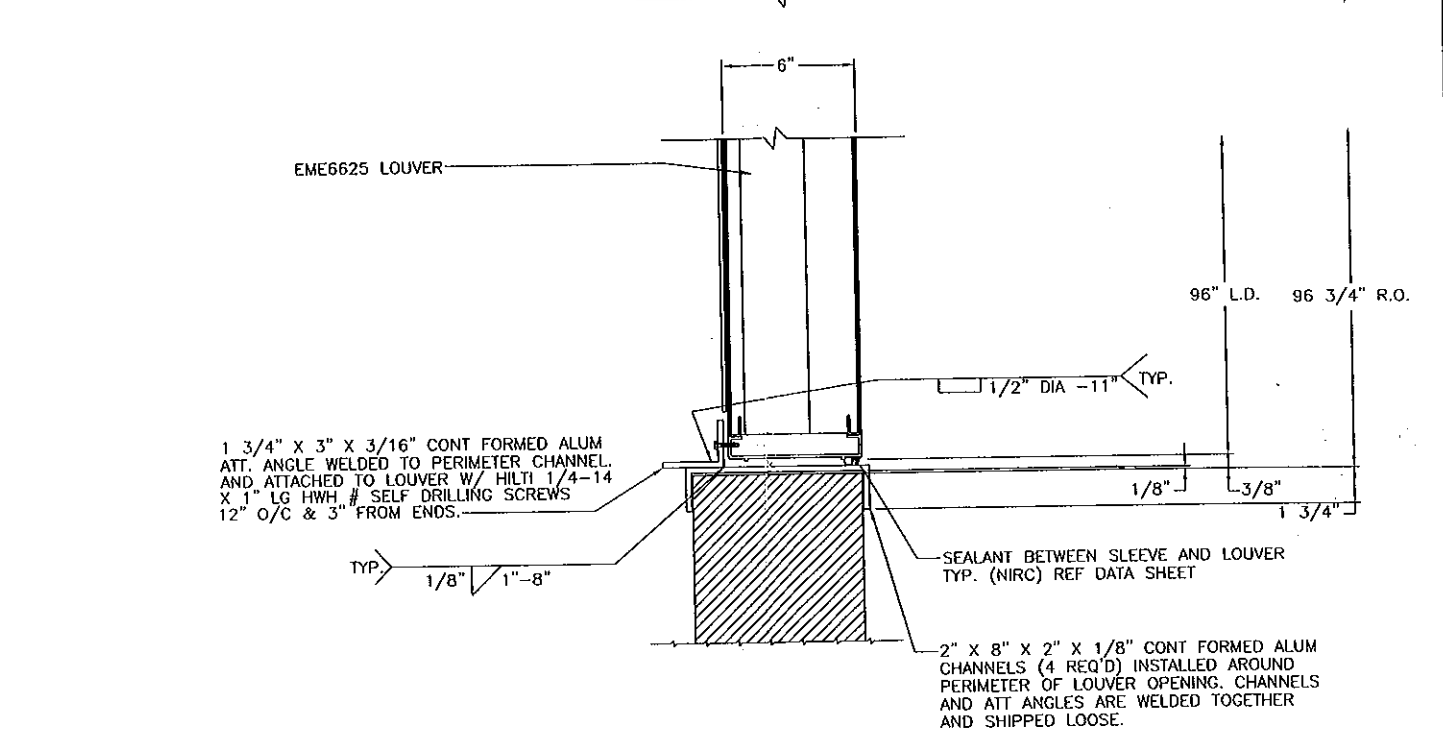
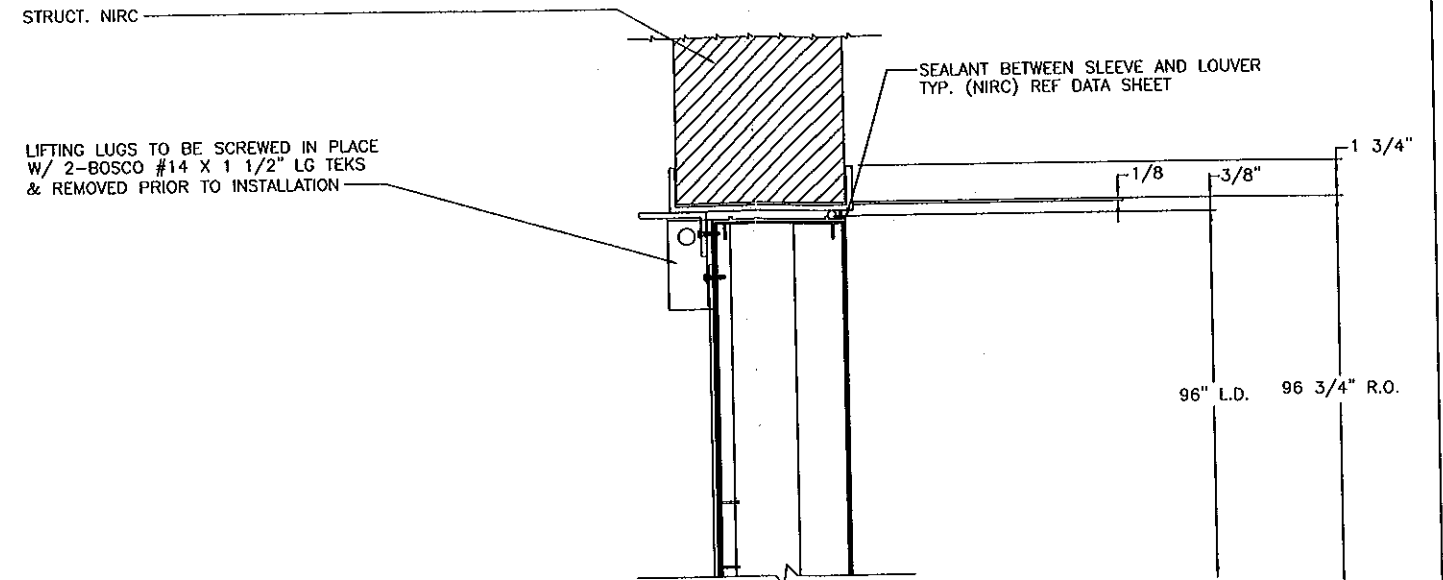


CHANNEL FRAME ELEVATION  
 FRONT VIEW

REAR & FRONT ELEVATIONS VIEW OF CHANNEL FRAME & ATT. ANGLE  
 N.T.S.

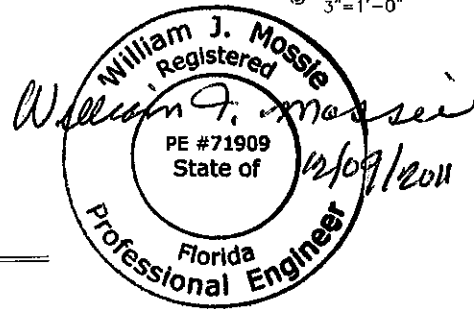
**LEGEND:**  
 O.F.D. = OUTSIDE FRAME DIM.    SSD = SHIP SECTION DIM.  
 R.O. = ROUGH OPENING        L.D. = LOUVER DIM.  
 A.L. = ANGLE LENGTH        DIM. = DIMENSION  
 O.D. = OPENING DIM.        SIM = SIMILAR  
 N.T.S. = NOT TO SCALE

**NOTES:**  
 - THE STRUCTURAL SUBSTRATE THAT HOLDS THE LOUVER IN PLACE, IS ASSUMED TO BE STRUCTURALLY SOUND AND STABLE TO TAKE THE LOADS DISPERSED BY THE LOUVER.  
 - LOUVER IS NONBEARING AND IS NOT DESIGNED TO WITHSTAND BUILDING DEADLOADS.



EME6625/CD50 SLEEVED SECTION (JAMB SIM TO HEAD)  
 3"=1'-0"

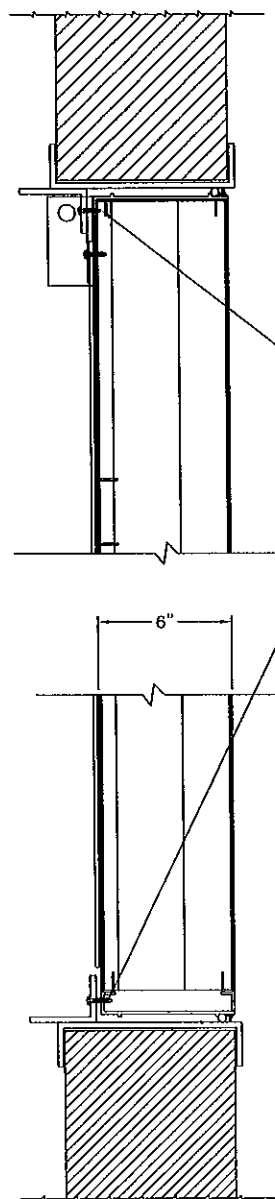
FOR FASTENER LOADS REF.  
 DWG. 60-021563-06D



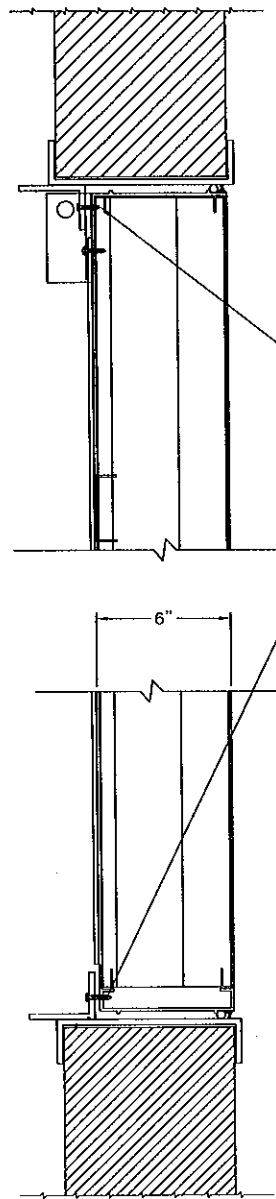
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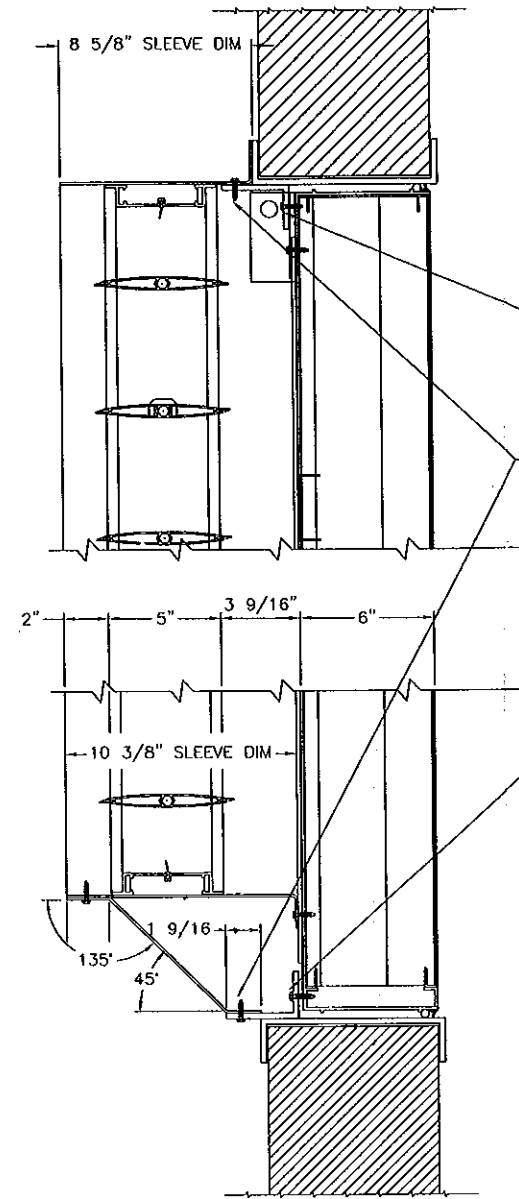
ENGINEER OF RECORD AND SHEET NUMBER	WJM			12/09/11
ADDED SHEET NUMBER	DLC	DJR	DJR	5/23/7
DADE CO. COMMENTS	RM	VMA		10/15/98
DADE CO. COMMENTS	RM	VMA		7-31-98
REV'D DETAILS & ELEVATIONS ADDED NOTES	GSL	VMA		5-7-98
REV'D DETAILS & ELEVATIONS	JAL	VMA		5-1-98
REMOVED ENGINEERING DATA	JAL	VMA		4-17-98
CHANGE LETTER	REVISION DESCRIPTION	CHG. BY	CHK'D BY	APPR'D. BY
STATE OF FLORIDA #71909				
OWNER: DADE CITY, FLORIDA	DESIGNER: RUSKIN Mfg 3900 Dr. Greaves Rd Grandview, MO 64030	PLANT SCALE	DWG. CERTIFIED	
	PROPRIETARY INFORMATION	NONE	BY: DATE:	
	TITLE: EME6625D & CD50 ASSEMBLIES & SECTIONS	DWG. NO.		
		60-021563-05D		
		SHEET 6 OF 38		



42 FASTENERS USED  
TENSILE LOAD ON EACH  
FASTENER ATTACHING  
LOUVER TO SUBFRAME  
IS 320 LBS.



24 FASTENERS USED  
TENSILE LOAD ON EACH  
FASTENER ATTACHING  
LOUVER TO SUBFRAME  
IS 187 LBS.



42 FASTENERS USED  
TENSILE LOAD ON EACH  
FASTENER ATTACHING LOUVER  
TO SUBFRAME IS 320 LBS.

42 FASTENERS USED  
SHEAR LOAD ON EACH  
FASTENER ATTACHING SLEEVE  
TO SUBFRAME IS 345 LBS.

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Expiration Date 01/28/2017  
By [Signature]  
Miami Dade Product Control

**LOUVER ONLY ASSEMBLIES "B" (+160/-140 PSF)**  
N.T.S.

The EME6625D louver can be installed in locations where space behind the louver is not designed to drain or accept water if ductwork is attached to the rear of the louver. The ductwork must be designed to manage the 7.68 oz. of water penetration allowed during the TAS-100(A) Wind Driven Rain Test. This application is Rated For Water. If no ductwork is to be installed to the louver, the louver must be installed in locations where the area behind is designed to drain or accept water. This application is Not Rated For Water.

**LOUVER ONLY ASSEMBLIES "C" (+160/-140 PSF)**  
N.T.S.

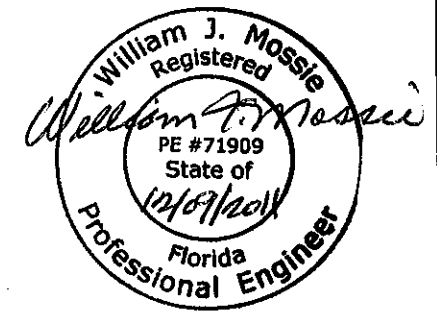
The EME6625D louver can be installed in locations where space behind the louver is not designed to drain or accept water if ductwork is attached to the rear of the louver. The ductwork must be designed to manage the 7.68 oz. of water penetration allowed during the TAS-100(A) Wind Driven Rain Test. This application is Rated For Water. If no ductwork is to be installed to the louver, the louver must be installed in locations where the area behind is designed to drain or accept water. This application is Not Rated For Water.

**LOUVER/DAMPER ASS'Y "A" (+160/-140PSF)**  
N.T.S.

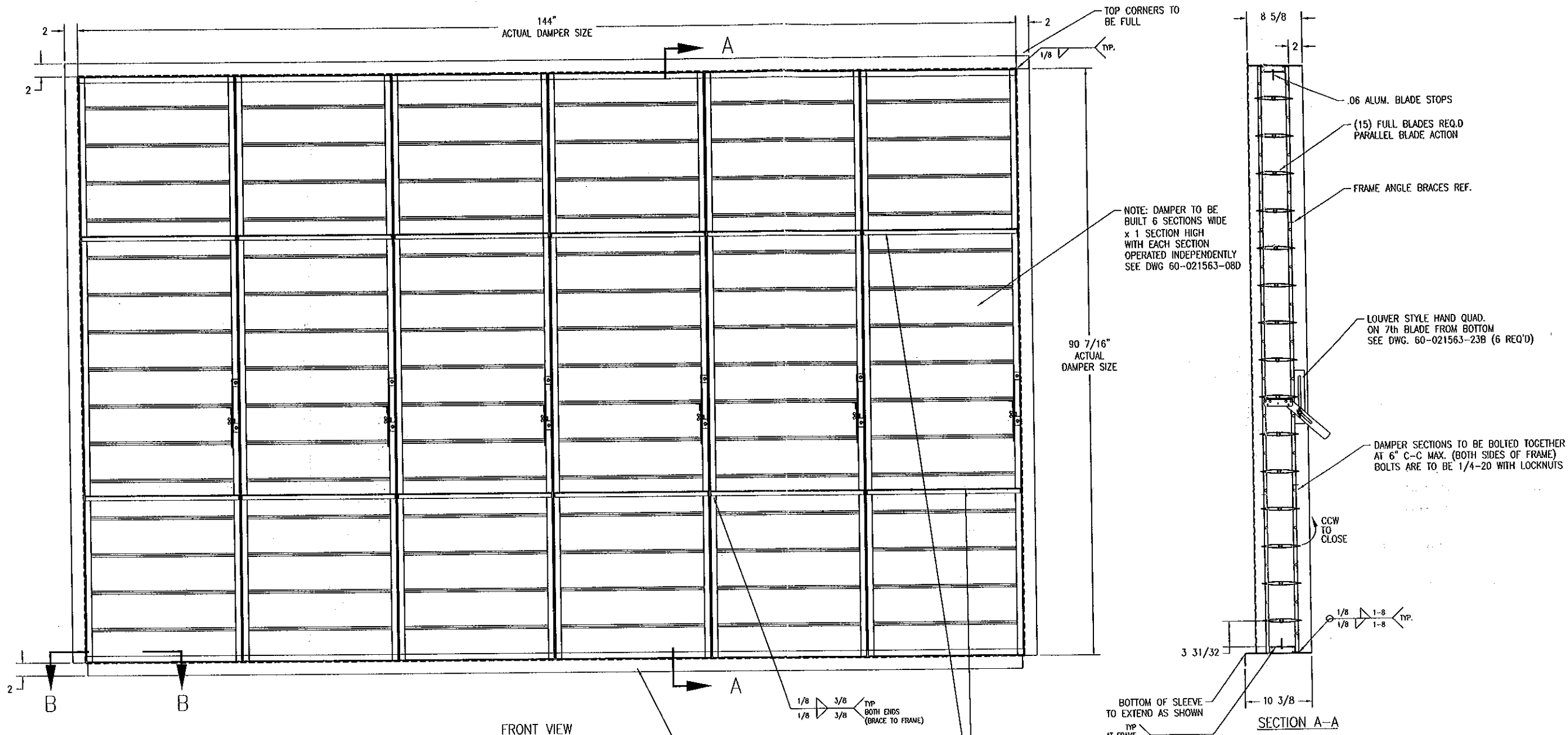
CAN BE INSTALLED IN LOCATIONS WHERE SPACE BEHIND LOUVER IS NOT DESIGNED TO ACCEPT WATER.  
MEETS WATER REQUIREMENTS

ULTIMATE PULL OUT VALUES FOR 1/4-14 SELF-TAPPING FASTENERS IN 1/8" ALUMINUM IS 825 LBS.(SAFETY FACTOR OF 3.) ALLOWABLE SHEAR LOAD IS 405 LBS., SEE HILTI PRODUCT TECHNICAL GUIDE 8/'96, P136.

THE EME6625 AND THE EME6625 WITH CD50 DAMPER, FURNISHED BY RUSKIN MANUFACTURING, CONFORM TO THE CURRENT FLORIDA BUILDING CODE INCLUSIVE OF CHAPTER 16.



(H)	ENGINEER OF RECORD AND SHEET NUMBER	WJM			12/09/11
(G)	ADDED SHEET NUMBER REV'D APPLICATION INFO	DLC	DJR	DJR	5/23/7
(F)	REV'D PER DADE COUNTY COMMENTS	DJR	VMA		7/11/06
(E)	REV'D DETAILS	GSL	VMA		10-15-98
(D)	REV'D DETAILS & ADDED ENG DATA	GSL	VMA		5-1-98
(A)	REMOVED ENGINEERING DATA	JAL	VMA		4-17-98
CHANGE LETTER	REVISION DESCRIPTION	DATE	CHK'D BY	APP'D BY	DATE
DRW. BY	GSL	DATE	3-13-98	DRW. BY	VMA
DATE	3-13-98	DATE	3-16-98	DATE	
DRW. NO.		DRW. NO.		DRW. NO.	
TITLE	LOUVER DAMPER ASSY DADE CIV. FLORIDA		TITLE	EME6625D & CD50 FASTENER LOADS	
PROJECT	RUSKIN Mfg 3900 DR. Greenway RD Grandview, FL 34439		PROJECT	NONE	
PROPRIETARY INFORMATION			PROPRIETARY INFORMATION		
PLAT SCALE	NONE		PLAT SCALE	NONE	
DATE			DATE		
DRG. NO.	60-021563-06D		DRG. NO.	60-021563-06D	
	SHEET 7 OF 38			SHEET 7 OF 38	



NOTE: DAMPER TO BE BUILT 6 SECTIONS WIDE x 1 SECTION HIGH WITH EACH SECTION OPERATED INDEPENDENTLY SEE DWG 60-021563-08D

90 7/16" ACTUAL DAMPER SIZE

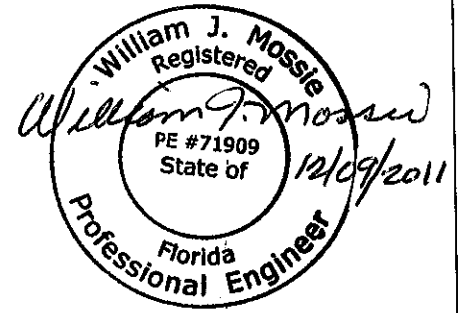
BOTTOM OF SLEEVE TO EXTEND AS SHOWN

TYP AT FRAME CORNERS

FRAMES TO BE WELDED TOGETHER AT CORNERS IN ADDITION TO USING CORNER CLIPS.

FRAME ANGLE BRACES: 3/4" x 3/4" x 1/8" ALUM. TOTAL OF (4) PER DAMPER SECTION (2 ON EACH SIDE) LOCATE NEAR POSITION SHOWN AND SO THAT NO INTERFERENCE TAKES PLACE WHEN BLADES ROTATE.

SLEEVE: 1/8" ALUM. WITH 2" FLANGE. NOTE THAT BOTTOM SLEEVE LENGTH IS LONGER THAN TOP & SIDES



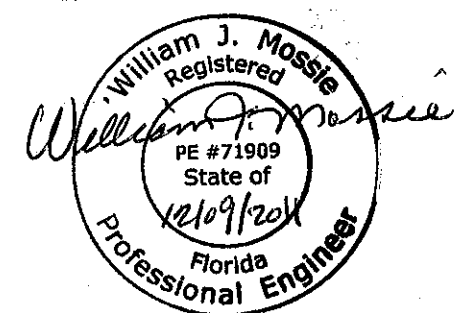
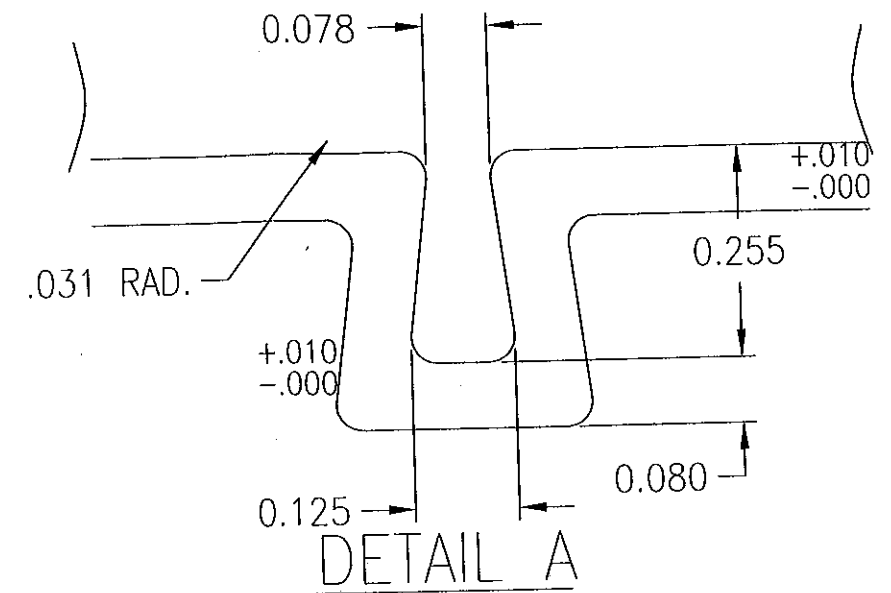
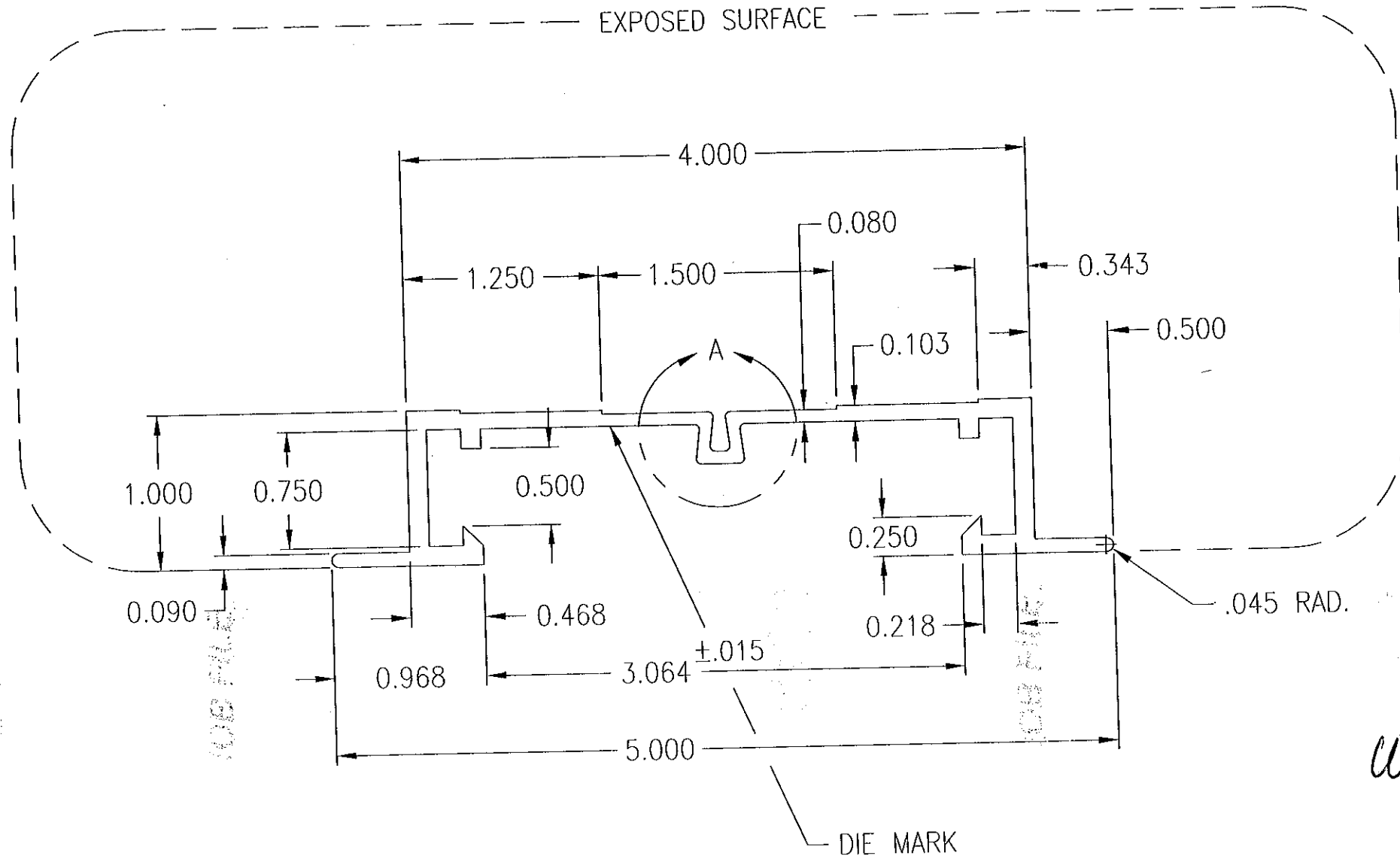
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**PRODUCT RENEWED**  
 as complying with the Florida Building Code  
 Acceptance No 11-1229.04  
 Expiration Date 2/28/2017  
 By *[Signature]*  
 Miami Dade Product Control

UNLESS OTHERWISE SPECIFIED USE STANDARD ENGINEERING TOLERANCES

ENGINEER OF RECORD AND SHEET NUMBER	WJM			12/09/11
ADDED SHEET NUMBER	DLC	DJR	DJR	5/23/7
REMOVED ENGINEERING DATA	JAL	VMA		5-1-98
REMOVED ENGINEERING DATA	JAL	VMA		4-17-98
STATE OF FLORIDA #71909	CHANGE LISTED	REVISION DESCRIPTION	CHK'D BY	APPR'D BY
DATE: 4/2/98	BY: DDM	DATE: 4/13/98	BY: JSB	DATE: 4/13/97
PROJECT: RUSKIN Mfg. Grandview, MD	PROPRIETARY INFORMATION	PLAT SCALE: NONE	DATE: _____	DATE: _____
TITLE: LOUVER DAMPER ASSEMBLY DADE COUNTY, FLORIDA	DWG. NO.: 60-021563-07D	SHEET: 8 OF 38		





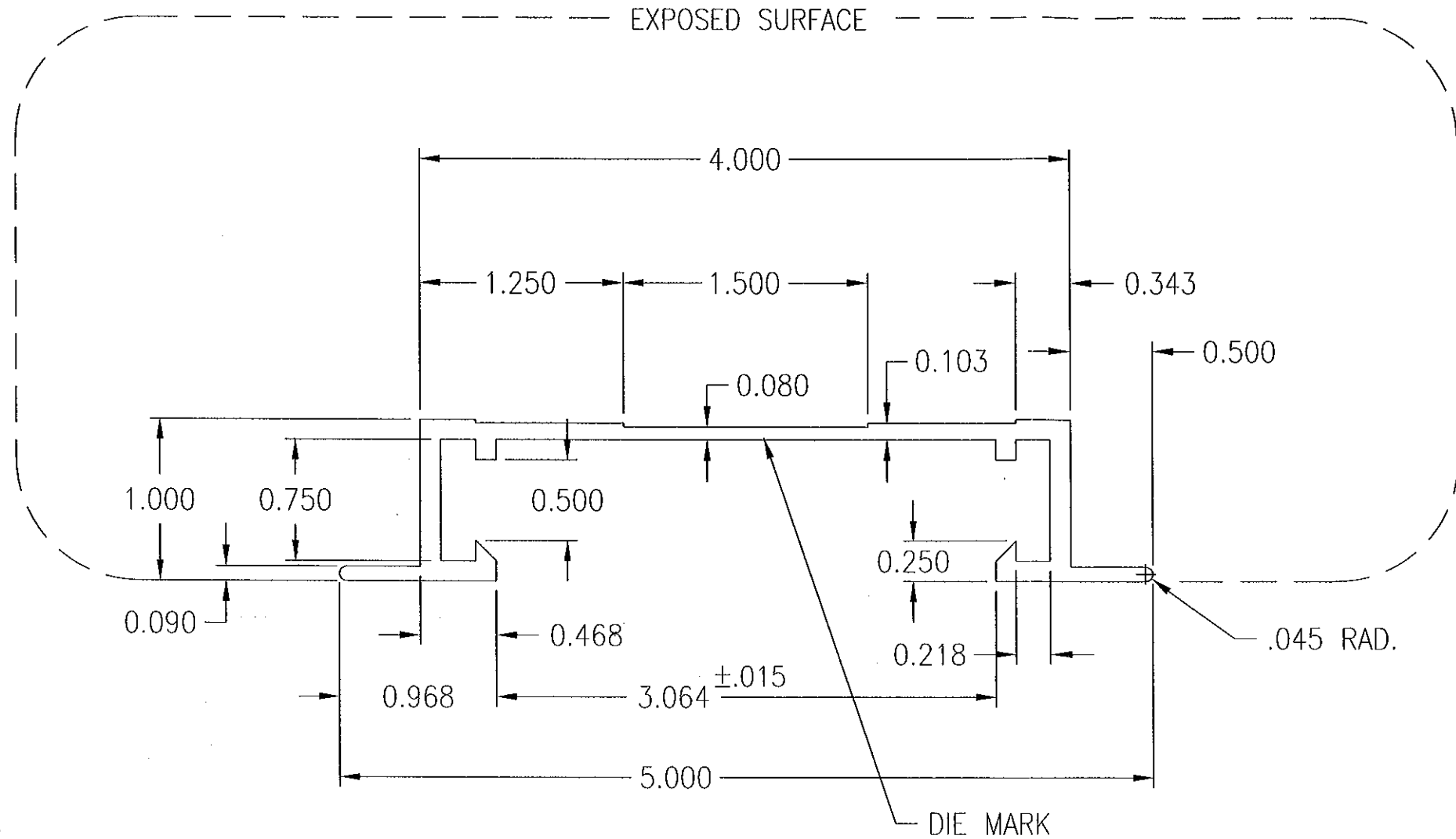
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 Building Code  
 Acceptance No 11-1229-02  
 Expiration Date 01/28/2017  
 By [Signature]  
 Miami Dade Product Control

NOTES:

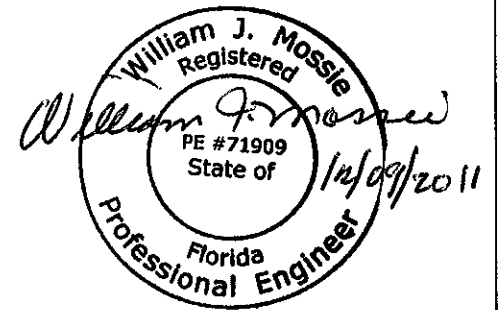
1. ALUMINUM ASSOC. TOLERANCES APPLY UNLESS NOTED OTHERWISE
2. MAX. RISE AT CORNERS OF 4" WEB TO BE NO GREATER THAN .020

ENGINEER OF RECORD William J. Mossie, PE (H)				(H) ENGINEER OF RECORD AND SHEET NUMBER		WJM				12/08/11
ENGINEERING DISCIPLINE CIVIL ENGINEER				(G) ADDED SHEET NUMBER		DLC	DJR	DJR		5/23/7
REGISTRATION NUMBER STATE OF FLORIDA #71909				(A) REMOVED ENGINEERING DATA		JAL				
DWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:							
MAT'L. 6063-T52 EXTRUDED ALUMINUM TYP. WALL THK. .125 UNLESS NOTED				RUSKIN Mfg. air handling specialties 3900 DR. GREAVES RD. GRANDVIEW MD 64030		PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____		
				TITLE CD-50 TOP AND BOTTOM FRAME		DWG. NO. 60-021563-09B SHEET 10 OF 38				



NOTES:

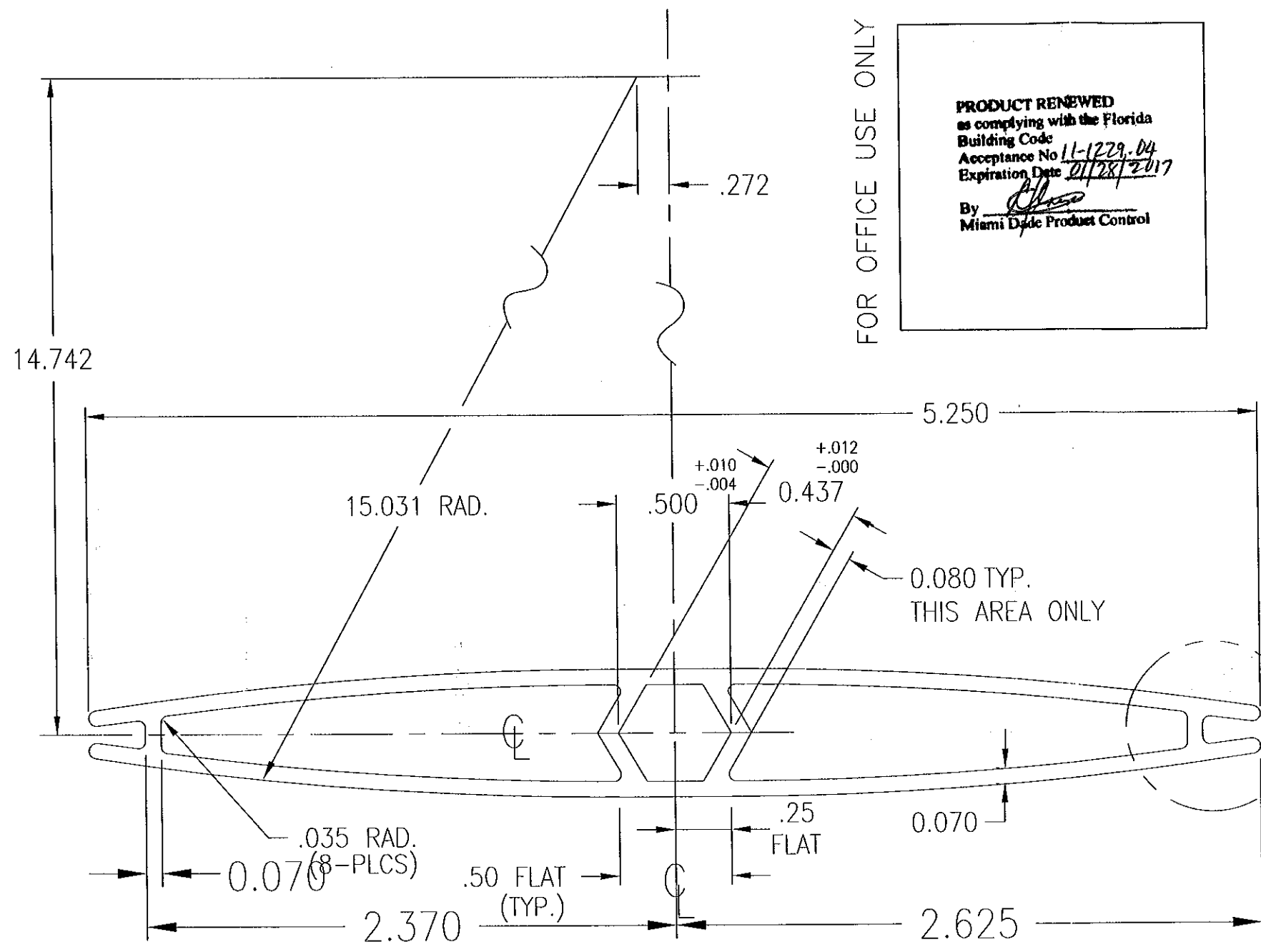
1. ALUMINUM ASSOC. TOLERANCES APPLY UNLESS NOTED OTHERWISE
2. MAX. RISE AT CORNERS OF 4" WEB TO BE NO GREATER THAN .020



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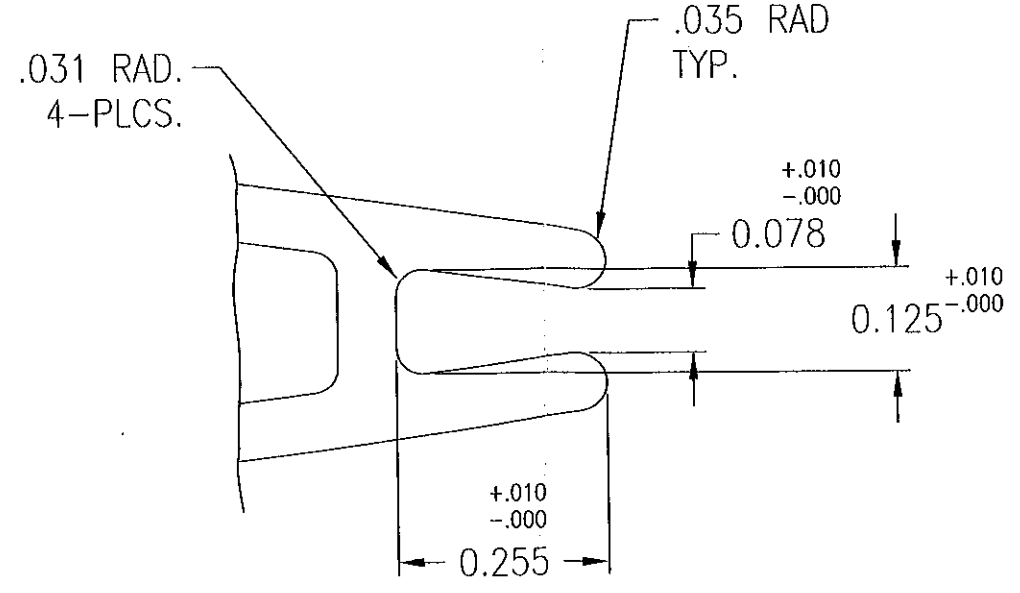
**PRODUCT RENEWED**  
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 Acceptance No. 11-1229.04  
 Expiration Date 01/28/2017  
 By [Signature]  
 Miami Code Product Control

ENGINEER OF RECORD William J. Mossie, PE <span style="float: right;">(H)</span>		(H)	ENGINEER OF RECORD AND SHEET NUMBER	WJM				12/08/11		
ENGINEERING DISCIPLINE CIVIL ENGINEER		(G)	ADDED SHEET NUMBER	DLC	DJR	DJR		5/23/7		
REGISTRATION NUMBER STATE OF FLORIDA #71909		(A)	REMOVED ENGINEERING DATA	JAL						
BWN: DDM    CHK: JSB    APPV'D: DVC    APPV'D: BY: DATE: 4/2/98    DATE: 4/6/98    DATE: 4/13/98    DATE:		CHANGE LETTER		REVISION DESCRIPTION		DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
MAT'L. 6063-T52 EXTRUDED ALUMINUM TYP. WALL THK. .125 UNLESS NOTED		<b>RUSKIN Mfg.</b> air handling specialties 3900 DR. GREAVES RD. GRANDVIEW MD 64030		PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____				
		TITLE CD-50 SIDE FRAME		DWG. NO. 60-021563-10B		SHEET 11 OF 38				

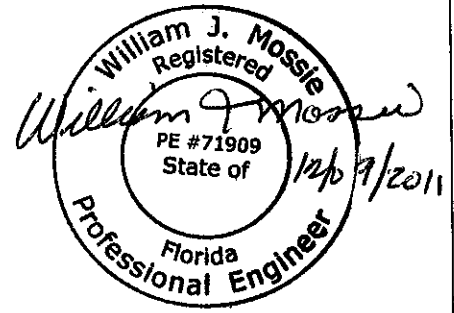
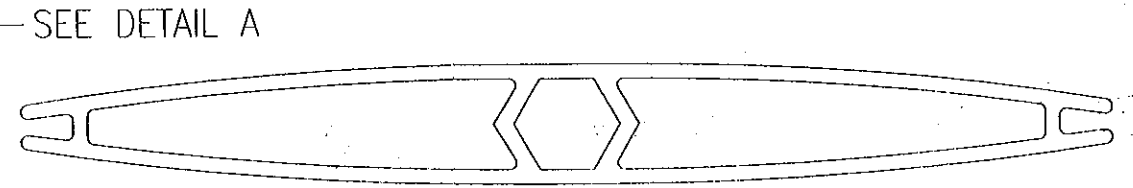


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DETAIL A  
 SCALE: 4X

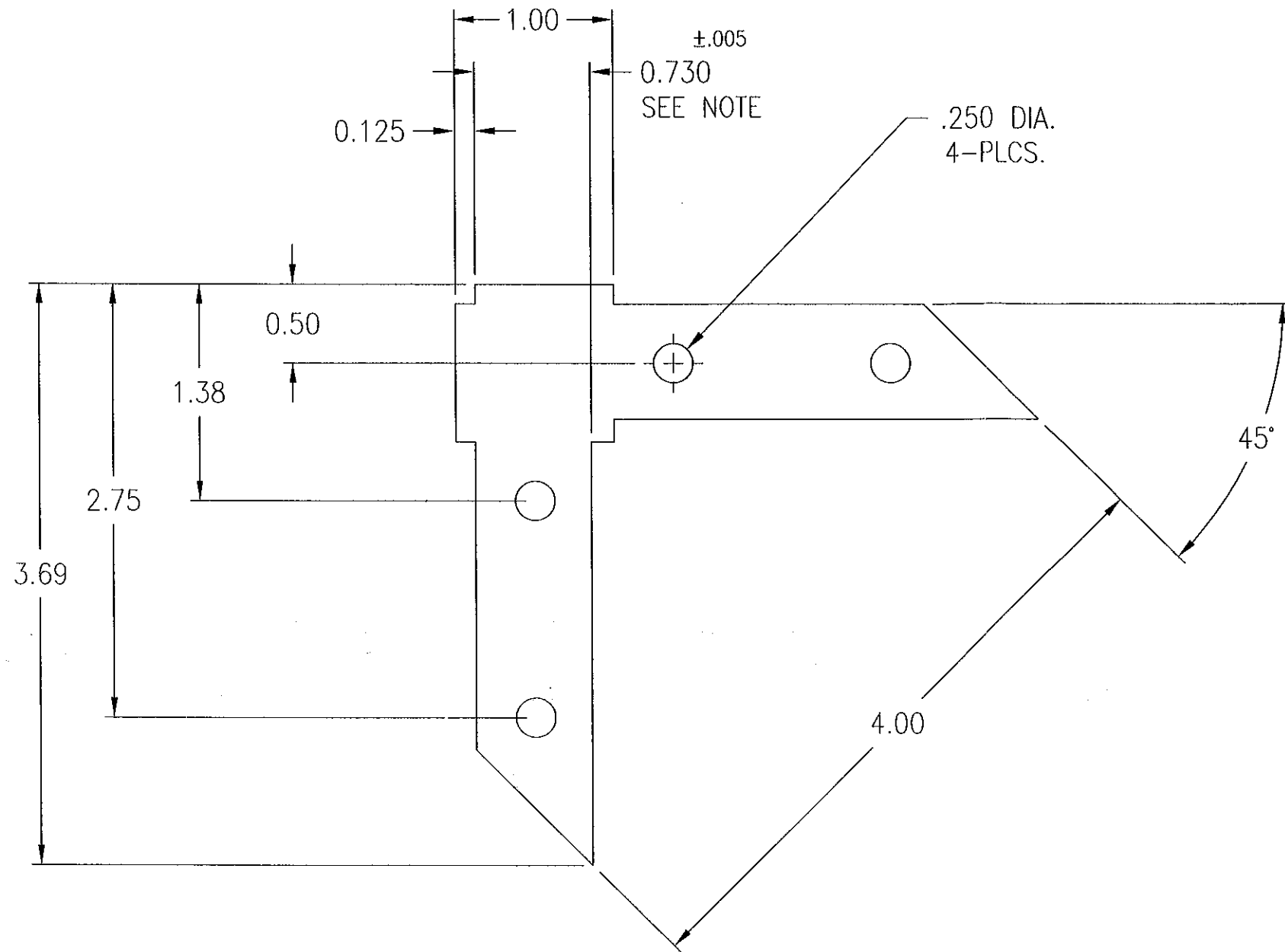


SCALE: 1.5X

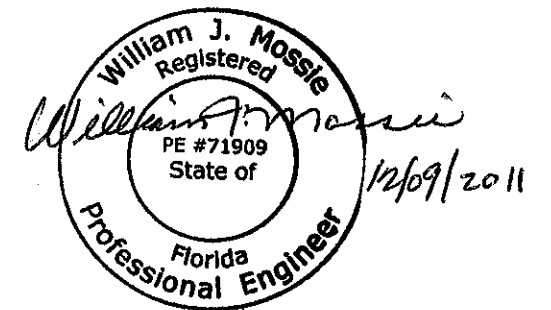
NOTE:  
 1. USE STANDARD ALUMINUM ASSOCIATION TOLERANCES WILL  
 APPLY UNLESS OTHERWISE SPECIFIED.

TOLERANCES:  
 UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS:  
 WITH 2 DECIMAL PLACES, ±.020  
 WITH 3 DECIMAL PLACES, ±.010  
 FRACTION DIMENSIONS AS MARKED.

ENGINEER OF RECORD William J. Mossie, PE		[H]		ENGINEER OF RECORD AND SHEET NUMBER		WJM				12/08/11
ENGINEERING DISCIPLINE CIVIL ENGINEER		[H]		ADDED SHEET NUMBER		DLC	DJR	DJR		5/23/7
REGISTRATION NUMBER STATE OF FLORIDA #71909		[A]		REMOVED ENGINEERING DATA		JAL				
DWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:		<b>RUSKIN Mfg.</b> Grandview, MO					
MAT'L. 6063-T5 EXTRUDED ALUMINUM				PROPRIETARY INFORMATION		PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____		
				TITLE CD-50 BLADE		DWG. NO. 60-021563-11B SHEET 12 OF 38				



NOTE:  
1. .730 DIMENSION IS CRITICAL.



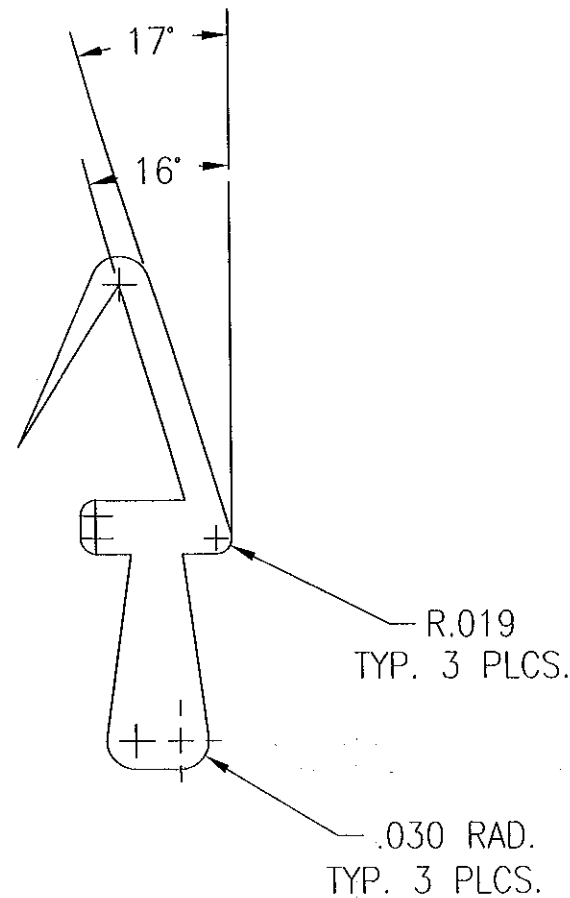
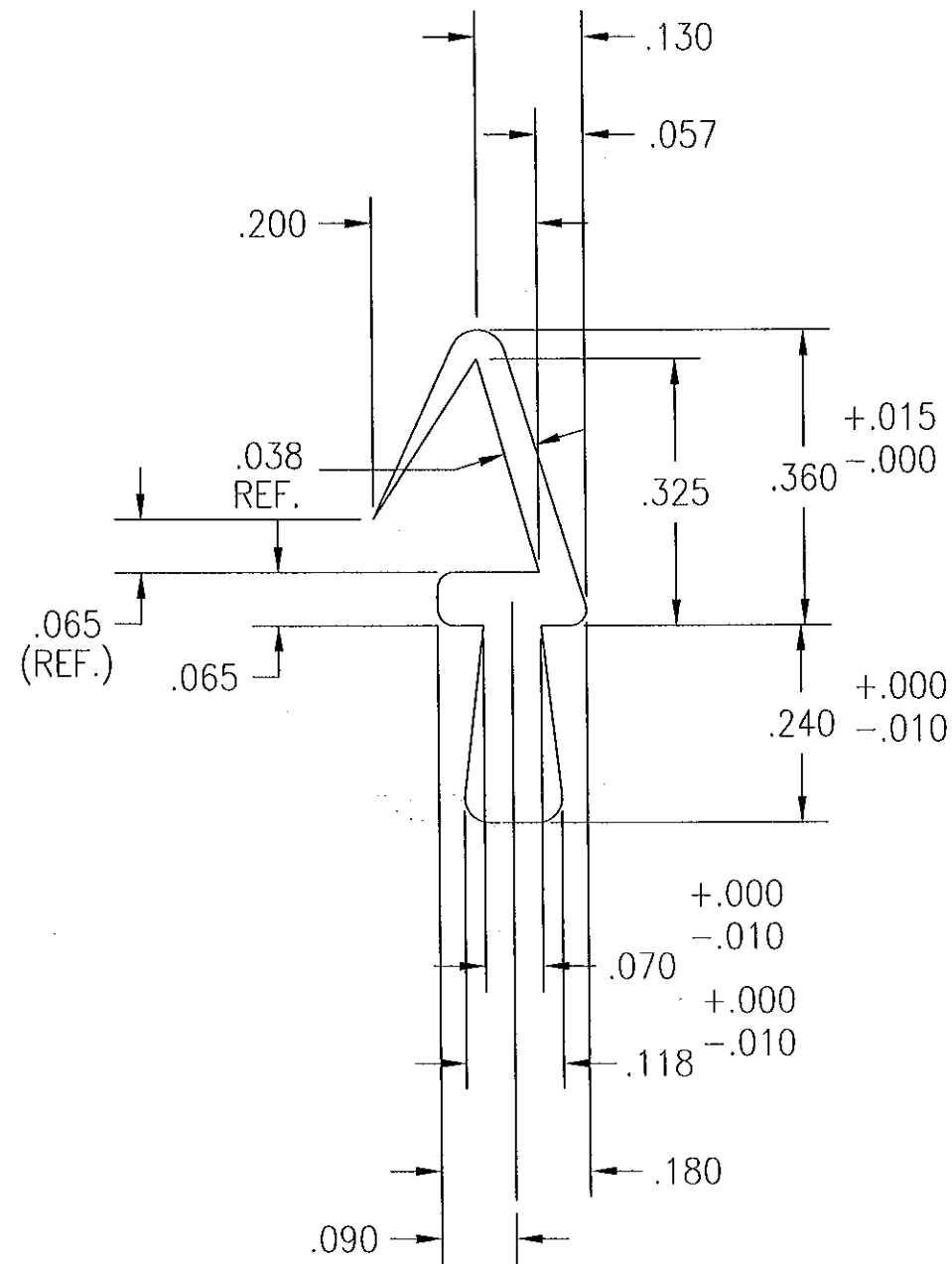
ENGINEER OF RECORD William J. Mossie, PE		(H)	ENGINEER OF RECORD AND SHEET NUMBER	WJM				12/08/11			
ENGINEERING DISCIPLINE CIVIL ENGINEER		(G)	ADDED SHEET NUMBER	DLC	DJR	DJR		5/23/7			
REGISTRATION NUMBER STATE OF FLORIDA #71909		(A)	REMOVED ENGINEERING DATA	JAL							
DWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER	REVISION DESCRIPTION		DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:		RUSKIN Mfg. Grandview, MD						
MAT'L. .208 THK. ALUMINUM 6063-T52				TITLE ALUM. FRAME CORNER CLIP		PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____			
						DWG. NO. 60-021563-12B		SHEET 13 OF 38			

TOLERANCES:  
UNLESS OTHERWISE SPECIFIED  
DIMENSIONS:  
WITH 2 DECIMAL PLACES, ±.020  
WITH 3 DECIMAL PLACES, ±.010  
FRACTION DIMENSIONS AS MARKED.

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Miami Trade Product Control

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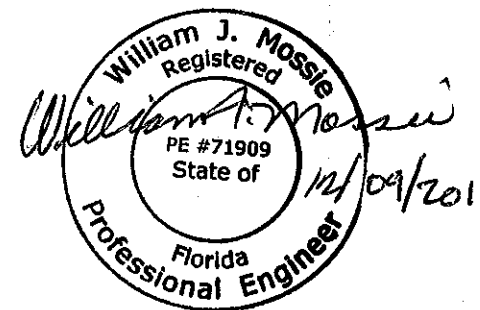




↑  
ACTUAL SIZE

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4 x SIZE

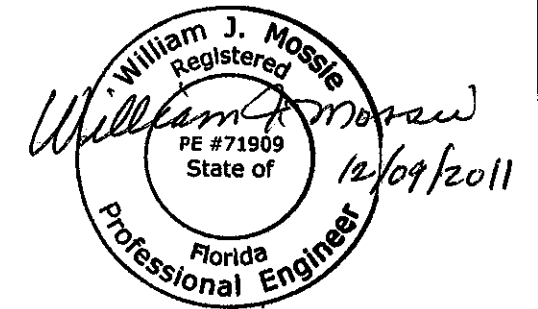
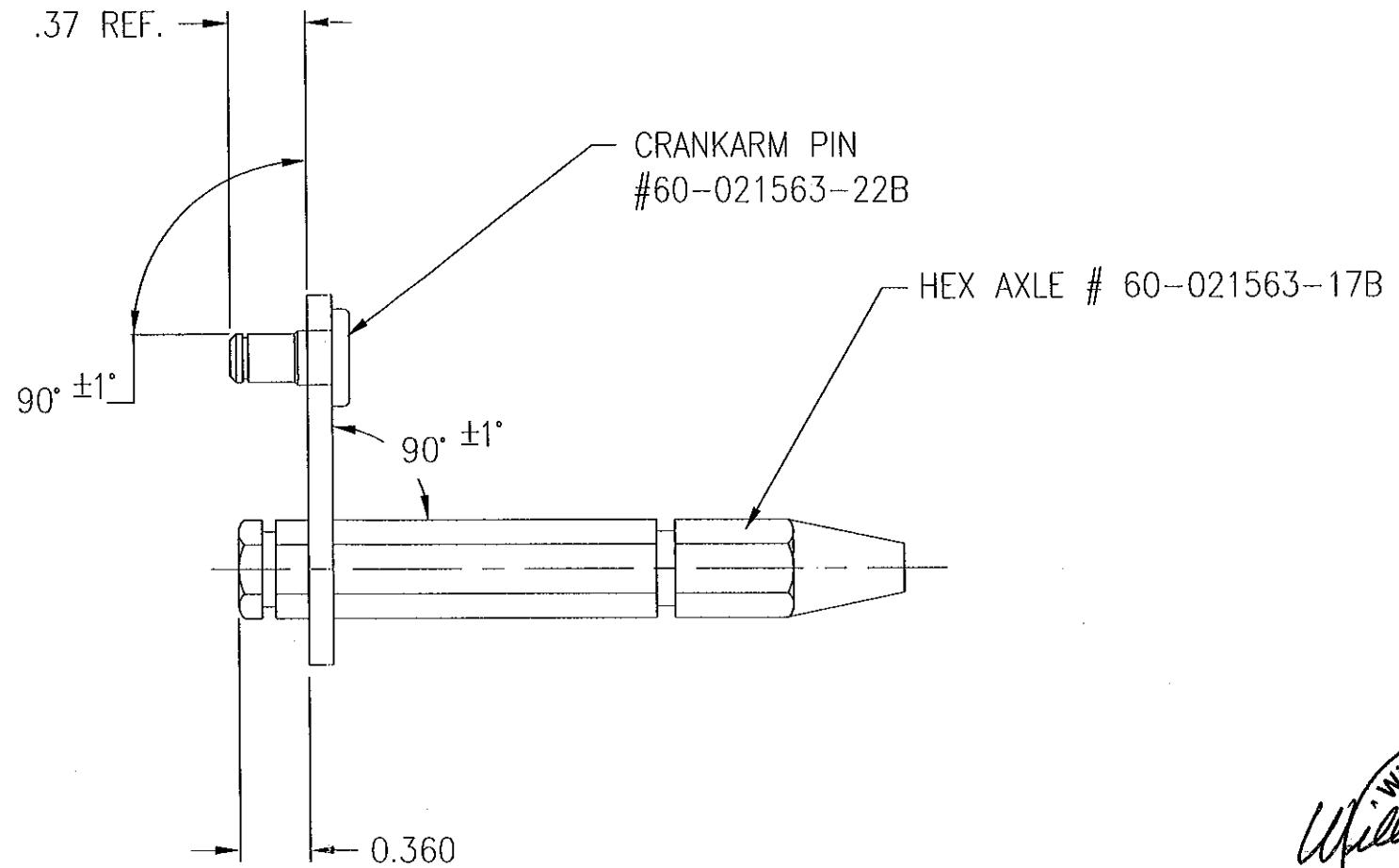
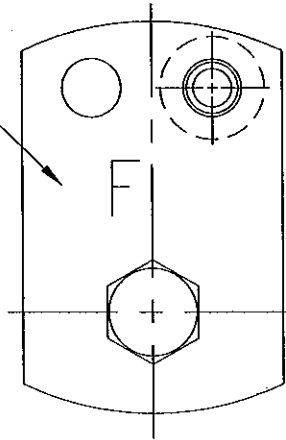
NOTE: 1. BLADE SEAL IS TO BE USED ON: CD-40, 403, 50 AND 504 DAMPERS.

TOLERANCES:  
UNLESS OTHERWISE SPECIFIED  
DIMENSIONS:  
WITH 2 DECIMAL PLACES, ±.020  
WITH 3 DECIMAL PLACES, ±.010  
FRACTION DIMENSIONS AS MARKED.

ENGINEER OF RECORD William J. Mossie, PE				[H]		ENGINEER OF RECORD AND SHEET NUMBER		WJM				12/08/11	
ENGINEERING DISCIPLINE CIVIL ENGINEER				[H]		ADDED SHEET NUMBER		DLC	DJR	DJR		5/23/7	
REGISTRATION NUMBER STATE OF FLORIDA #71909				[A]		REMOVED ENGINEERING DATA		JAL					
DWN. BY: DDM				CHK. BY: JSB		APPV'D. BY: DVC		APPV'D. BY:		DATE			
DATE: 4/2/98				DATE: 4/6/98		DATE: 4/13/98		DATE:					
MATERIAL: SANTOPRENE (65 DURO) REED MATERIAL XSA65-591				[H]		CHANGE LETTER		REVISION DESCRIPTION		DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:
						RUSKIN Mfg. Grandview, MD PROPRIETARY INFORMATION		PLOT SCALE		DWG. CERTIFIED			
								NONE		BY: _____ DATE: _____			
						TITLE CONTROL DAMPER BLADE SEAL		DWG. NO.		60-021563-13B SHEET 14 OF 38			



CRANKARM PLATE  
#60-021563-16B



NOTE:

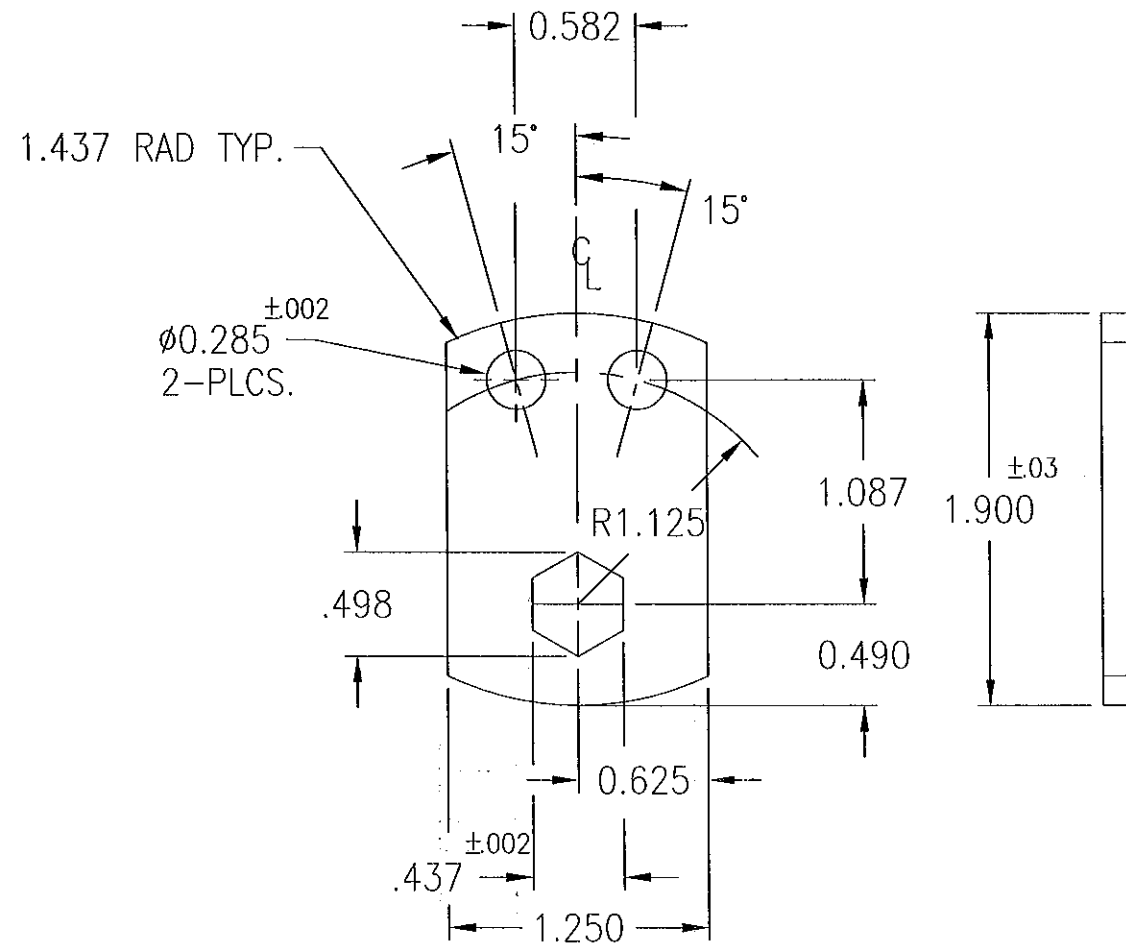
1. "F" INDICATES PIN IS IN RIGHT HAND HOLE.

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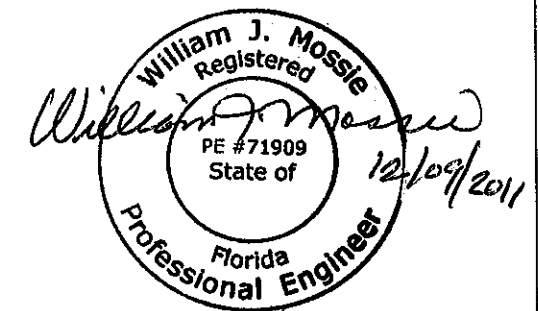
**PRODUCT RENEWED**  
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Expiration Date 01/28/2017  
By [Signature]  
Miami Dade Product Control

TOLERANCES:  
UNLESS OTHERWISE SPECIFIED  
DIMENSIONS:  
WITH 2 DECIMAL PLACES, ±.020  
WITH 3 DECIMAL PLACES, ±.010  
FRACTION DIMENSIONS AS MARKED.

ENGINEER OF RECORD William J. Mossie, PE		(H)	ENGINEER OF RECORD AND SHEET NUMBER	WJM				12/08/11		
ENGINEERING DISCIPLINE CIVIL ENGINEER		(G)	ADDED SHEET NUMBER	DLC	DJR	DJR		5/23/7		
REGISTRATION NUMBER STATE OF FLORIDA #71909		(A)	REMOVED ENGINEERING DATA	JAL						
DWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:	RUSKIN Mfg. Grandview, MD PROPRIETARY INFORMATION		PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____		
PLTD. STL.		TITLE "F" SIDE LINKAGE CRANK-ARM ASSY		DWG. NO. 60-021563-15B SHEET 16 OF 38						



NOTE: HEX ROTATION ALIGNMENT  
± 1/2° WITH PLATE EDGE.

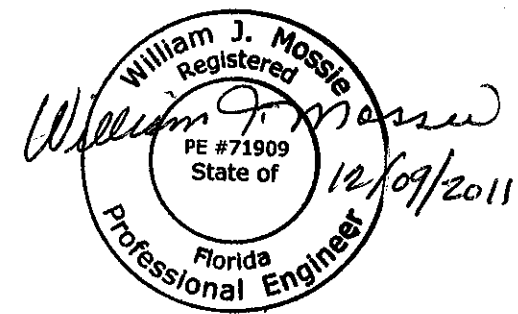
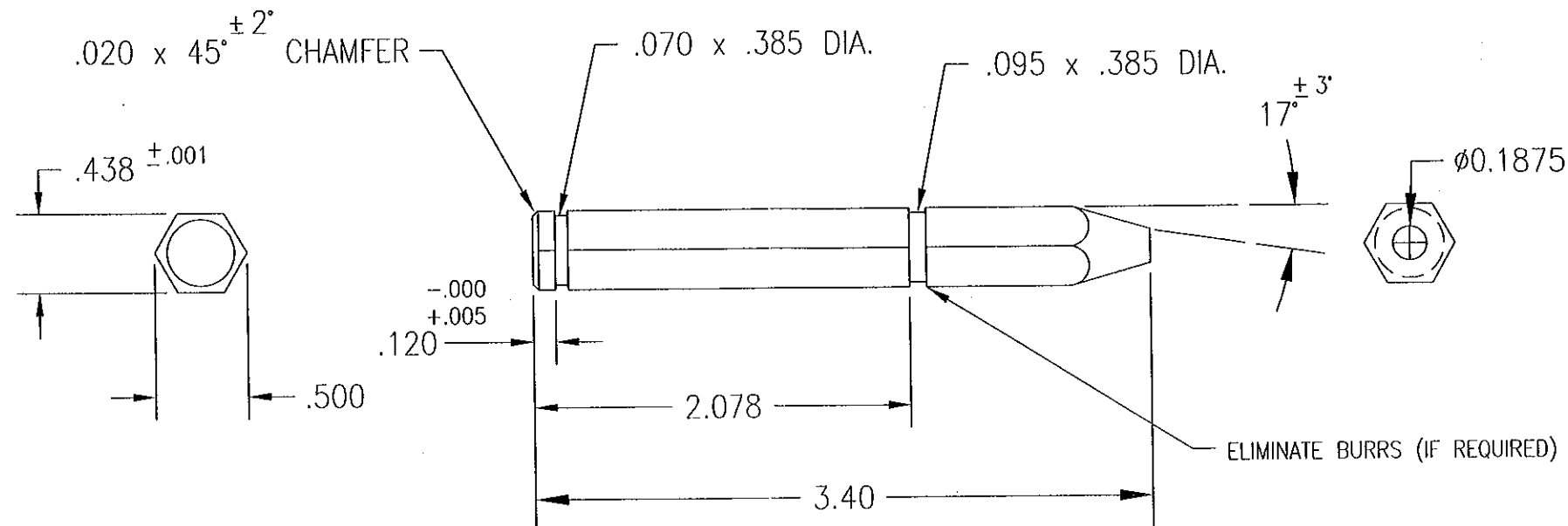


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Expiration Date 01/28/2017  
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Miami Dade Product Control

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UNLESS OTHERWISE SPECIFIED  
DIMENSIONS:  
WITH 2 DECIMAL PLACES, ±.020  
WITH 3 DECIMAL PLACES, ±.010  
FRACTION DIMENSIONS AS MARKED.

ENGINEER OF RECORD William J. Mossie, PE				[H] ENGINEER OF RECORD AND SHEET NUMBER		WJM				12/08/11
ENGINEERING DISCIPLINE CIVIL ENGINEER				[G] ADDED SHEET NUMBER		DLC	DJR	DJR		5/23/7
REGISTRATION NUMBER STATE OF FLORIDA #71909				[A] REMOVED ENGINEERING DATA		JAL				
CHANGE LETTER	REVISION DESCRIPTION				DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE	
	DWN. BY: DDM				CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	PLOT SCALE		DWG. CERTIFIED
	DATE: 4/2/98				DATE: 4/6/98	DATE: 4/13/98	DATE:	NONE		BY: _____
10 GA. GALV.				TITLE CONCEALED LINKAGE PLATE		DWG. NO.		60-021563-16B SHEET 17 OF 38		
				RUSKIN Mfg. Grandview, MI PROPRIETARY INFORMATION						

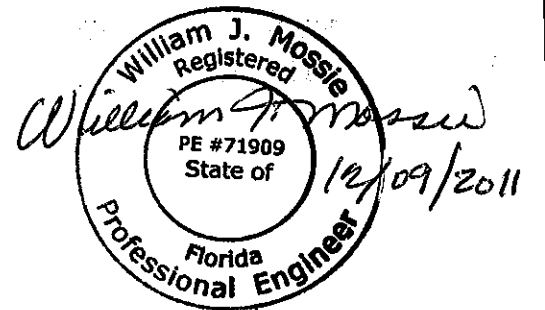
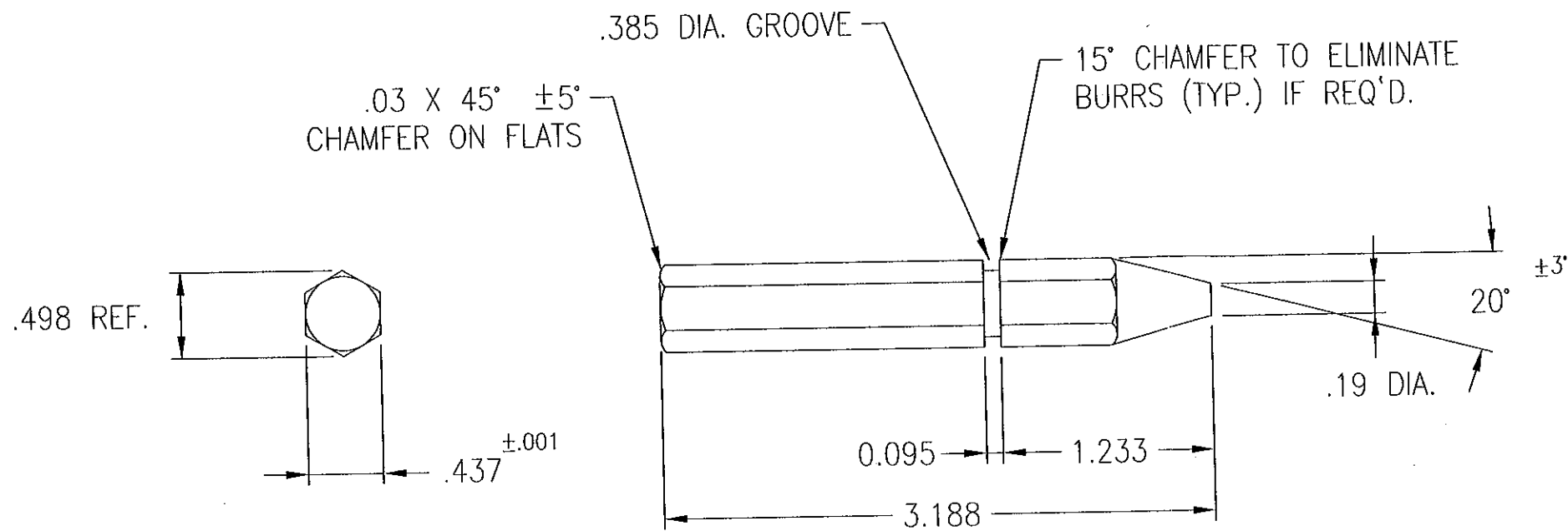


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 DIMENSIONS:  
 WITH 2 DECIMAL PLACES, ±.020  
 WITH 3 DECIMAL PLACES, ±.010  
 FRACTION DIMENSIONS AS MARKED.

ENGINEER OF RECORD				Ⓜ ENGINEER OF RECORD AND SHEET NUMBER		WJM				12/08/11
William J. Mossie, PE				Ⓜ						
ENGINEERING DISCIPLINE				Ⓜ ADDED SHEET NUMBER		DLC	DJR	DJR		5/23/7
CIVIL ENGINEER				Ⓜ REMOVED ENGINEERING DATA		JAL				
REGISTRATION NUMBER				CHANGE LETTER		DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
STATE OF FLORIDA #71909										
DWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	RUSKIN Mfg. Grandview, MD		PLOT SCALE		DWG. CERTIFIED		
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:	PROPRIETARY INFORMATION		NONE		BY: _____		
7/16" HEX STL. ZINC PLTD				TITLE		DWG. NO.		DATE: _____		
				7/6" HEX AXLE		60-021563-17B		SHEET 18 OF 38		

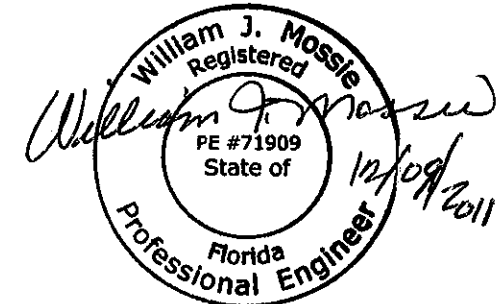
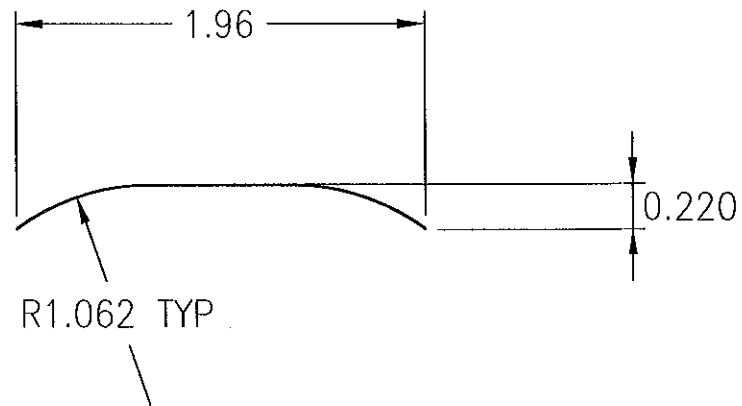


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 UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS:  
 WITH 2 DECIMAL PLACES, ±.020  
 WITH 3 DECIMAL PLACES, ±.010  
 FRACTION DIMENSIONS AS MARKED.

ENGINEER OF RECORD William J. Mossie, PE (H)		(H)	ENGINEER OF RECORD AND SHEET NUMBER	WJM				12/08/11				
ENGINEERING DISCIPLINE CIVIL ENGINEER		(G)	ADDED SHEET NUMBER	DLC	DJR	DJR		5/23/7				
REGISTRATION NUMBER STATE OF FLORIDA #71909		(A)	REMOVED ENGINEERING DATA	JAL								
DWN. BY: DDM	CHK. BY: JBS	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER	REVISION DESCRIPTION			DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:	RUSKIN Mfg. Grandview, MD		PLOT SCALE		DWG. CERTIFIED				
7/16" HEX STL. ZINC PLTD				PROPRIETARY INFORMATION				NONE			BY: _____	
				TITLE				DATE: _____			DWG. NO.	
				7/16" HEX IDLER AXLE				60-021563-18B			SHEET 19 OF 38	

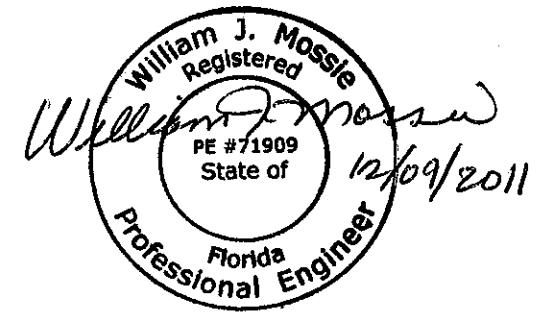
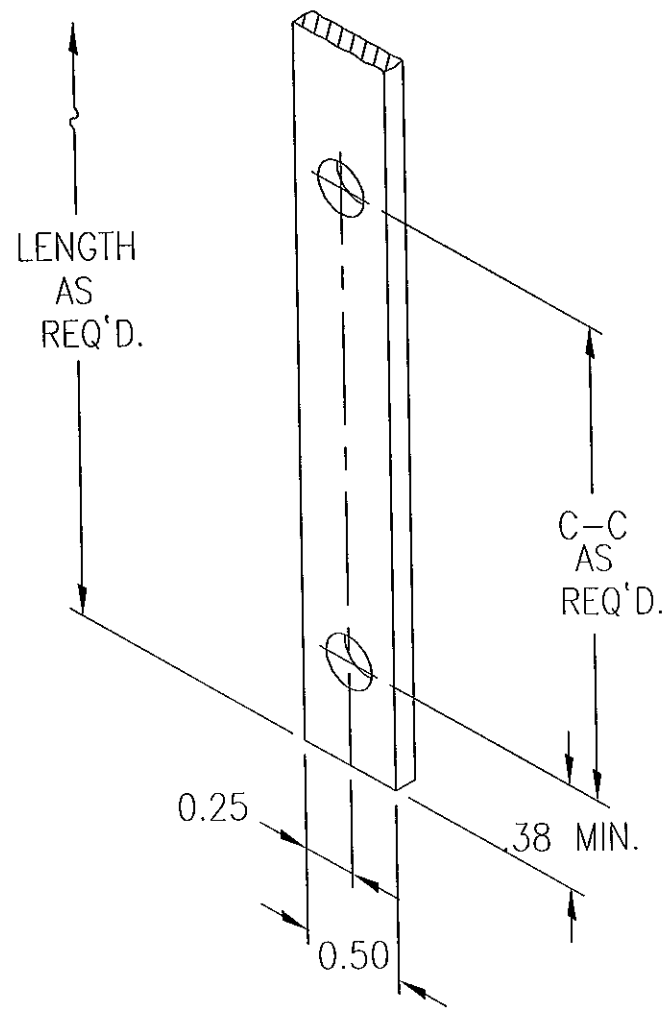


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 DIMENSIONS:  
 WITH 2 DECIMAL PLACES, ±.020  
 WITH 3 DECIMAL PLACES, ±.010  
 FRACTION DIMENSIONS AS MARKED.

ENGINEER OF RECORD William J. Mossie, PE (H)		(H)	ENGINEER OF RECORD AND SHEET NUMBER	WJM				12/08/11		
ENGINEERING DISCIPLINE CIVIL ENGINEER		(G)	ADDED SHEET NUMBER	DLC	DJR	DJR		5/23/7		
REGISTRATION NUMBER STATE OF FLORIDA #71909		(A)	REMOVED ENGINEERING DATA	JAL						
DWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
DATE: 4/2/97	DATE: 4/6/98	DATE: 4/13/98	DATE:		<b>RUSKIN Mfg.</b> Grandview, MD PROPRIETARY INFORMATION					
MAT'L. .007" THK. TYPE 301 STN. STL. SPRING		TITLE JAMB SEAL		PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____		DWG. NO. 60-021563-19B SHEET 20 OF 38		



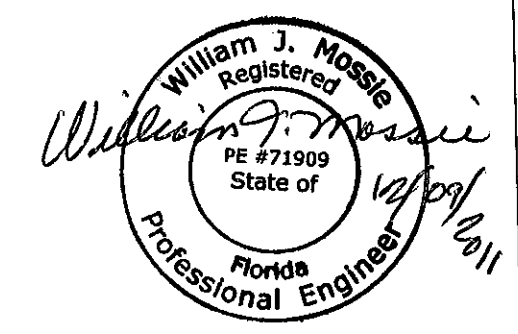
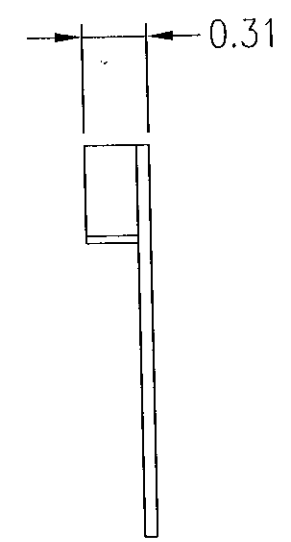
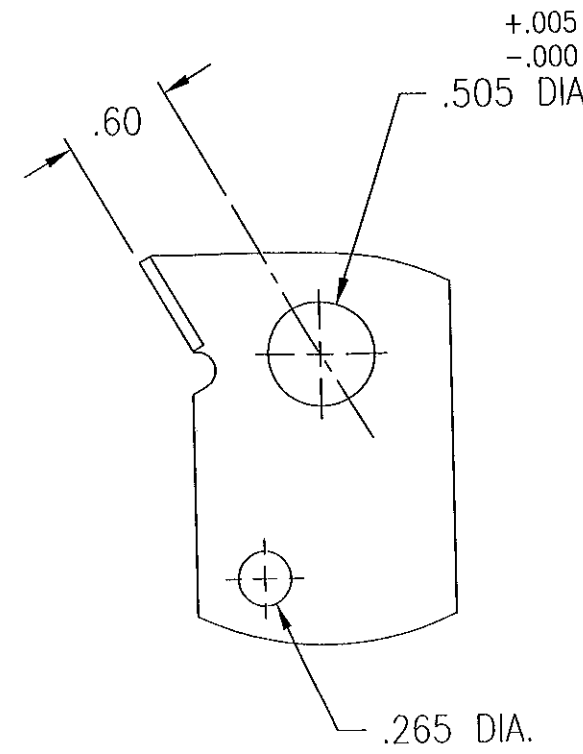
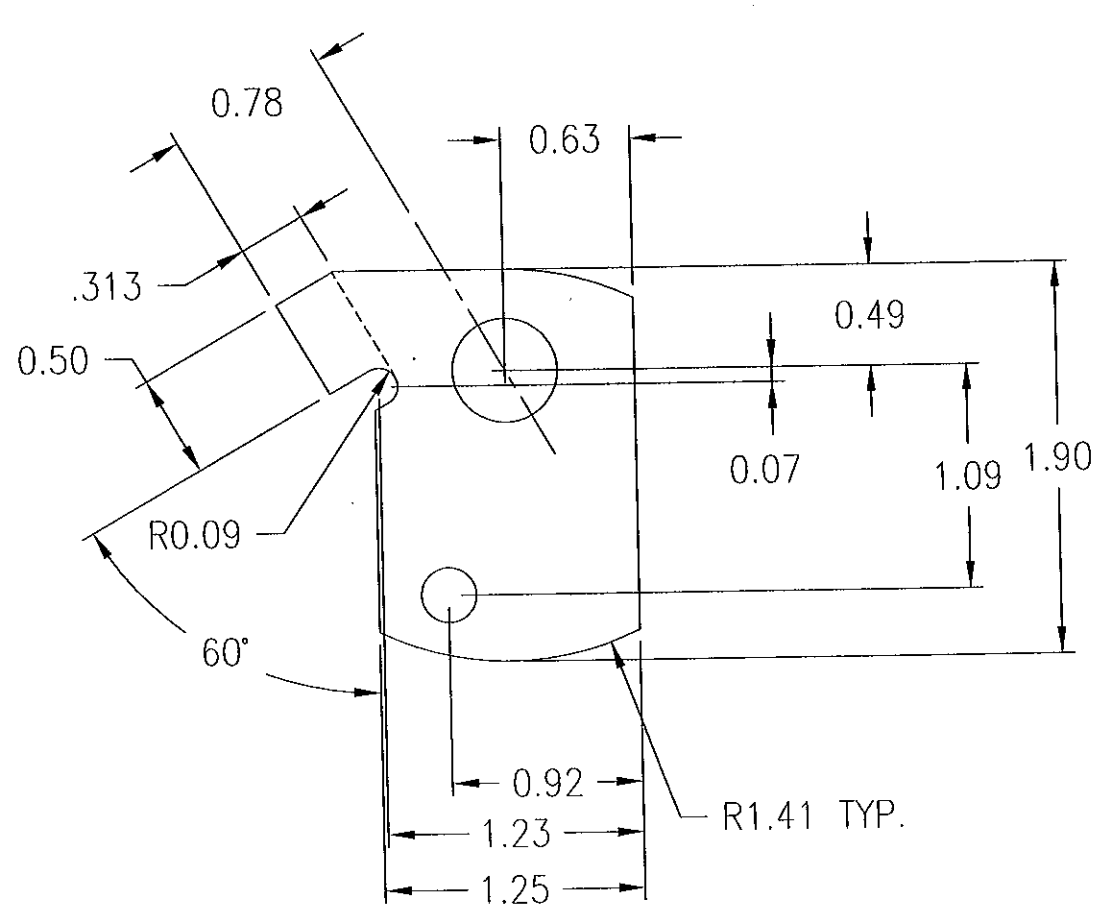
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TOLERANCES:  
 UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS:  
 WITH 2 DECIMAL PLACES, ±.020  
 WITH 3 DECIMAL PLACES, ±.010  
 FRACTION DIMENSIONS AS MARKED.

ENGINEER OF RECORD William J. Mossie, PE (H)		(H)	ENGINEER OF RECORD AND SHEET NUMBER	WJM					12/8/11		
ENGINEERING DISCIPLINE CIVIL ENGINEER		(G)	ADDED SHEET NUMBER	DLC	DJR	DJR			5/23/7		
REGISTRATION NUMBER STATE OF FLORIDA #71909		(A)	REMOVED ENGINEERING DATA	JAL							
DWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER	REVISION DESCRIPTION		DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:	RUSKIN Mfg. Grandview, MO PROPRIETARY INFORMATION		PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____			
MATL: 12 GA GALV.		TITLE LINKAGE TIEBAR		DWG. NO. 60-021563-20B SHEET 21 OF 38							



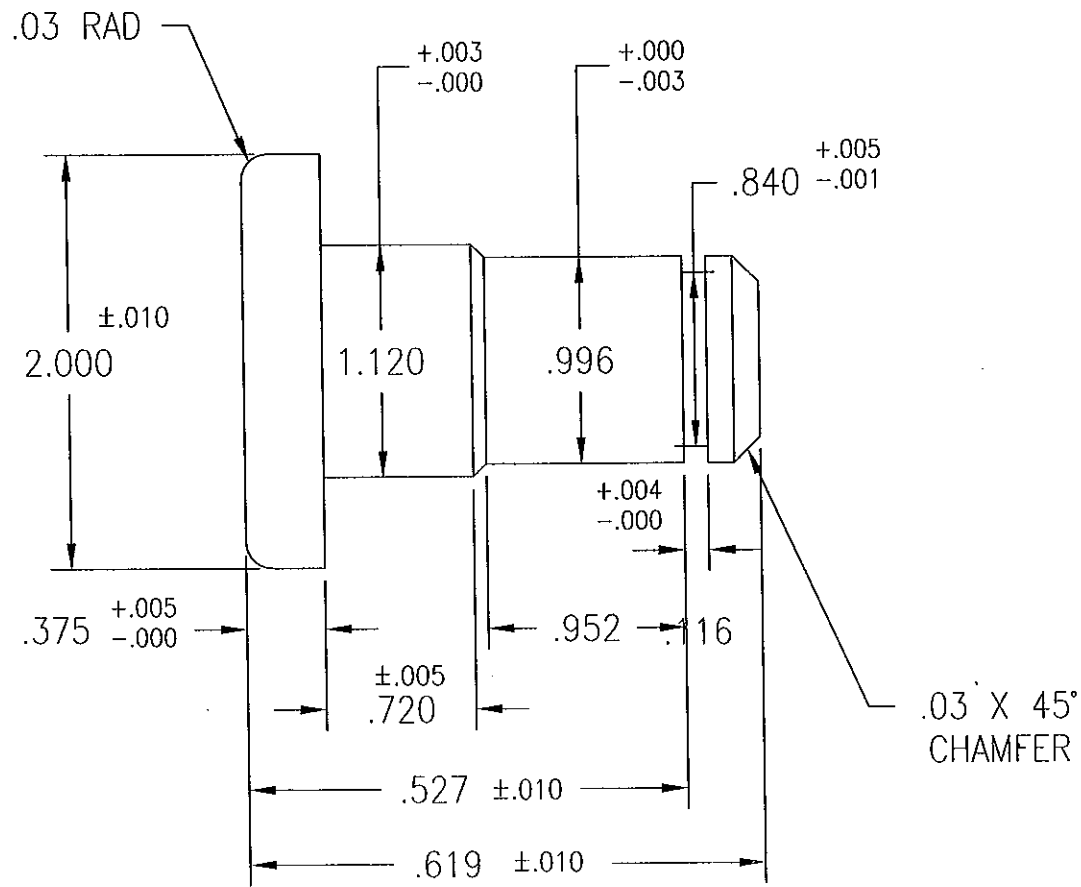


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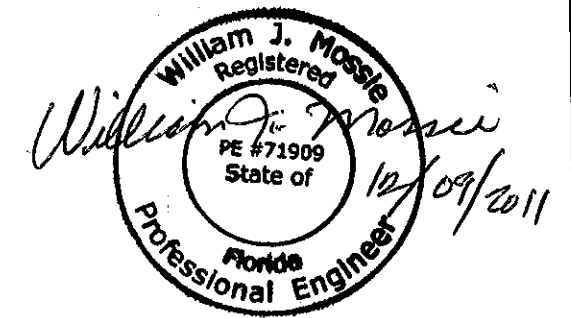
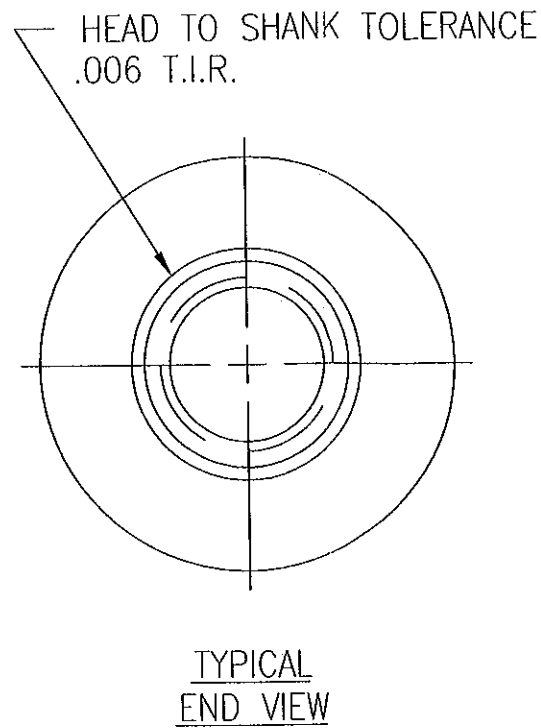
**PRODUCT RENEWED**  
 as complying with the Florida  
 Building Code  
 Acceptance No. 11-1229.04  
 Expiration Date 21/28/2017  
 By [Signature]  
 Miami Trade Product Control

TOLERANCES:  
 UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS:  
 WITH 2 DECIMAL PLACES, ±.020  
 WITH 3 DECIMAL PLACES, ±.010  
 FRACTION DIMENSIONS AS MARKED.

ENGINEER OF RECORD William J. Mossie, PE (H)		(H)	ENGINEER OF RECORD AND SHEET NUMBER	WJM				12/8/11
ENGINEERING DISCIPLINE CIVIL ENGINEER		(G)	ADDED SHEET NUMBER	DLC	DJR	DJR		5/23/7
REGISTRATION NUMBER STATE OF FLORIDA #71909		(A)	REMOVED ENGINEERING DATA	JAL				
DWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER		REVISION DESCRIPTION		DWN. BY:
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:	RUSKIN Mfg. Grandview, MD		PLOT SCALE		DWG. CERTIFIED
MAT'L. 16 GA. GALV.			PROPRIETARY INFORMATION		NONE		BY: _____	
			TITLE CONCEALED LINKAGE OVER-TRAVEL STOP		DWG. NO.		DATE: _____	
					60-021563-21B		SHEET 22 OF 38	



PIN FOR 10 GA. THK  
LINKAGE ARM

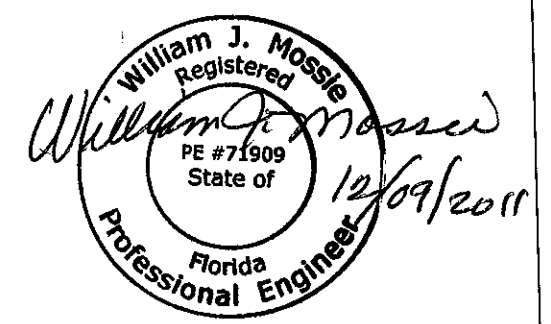
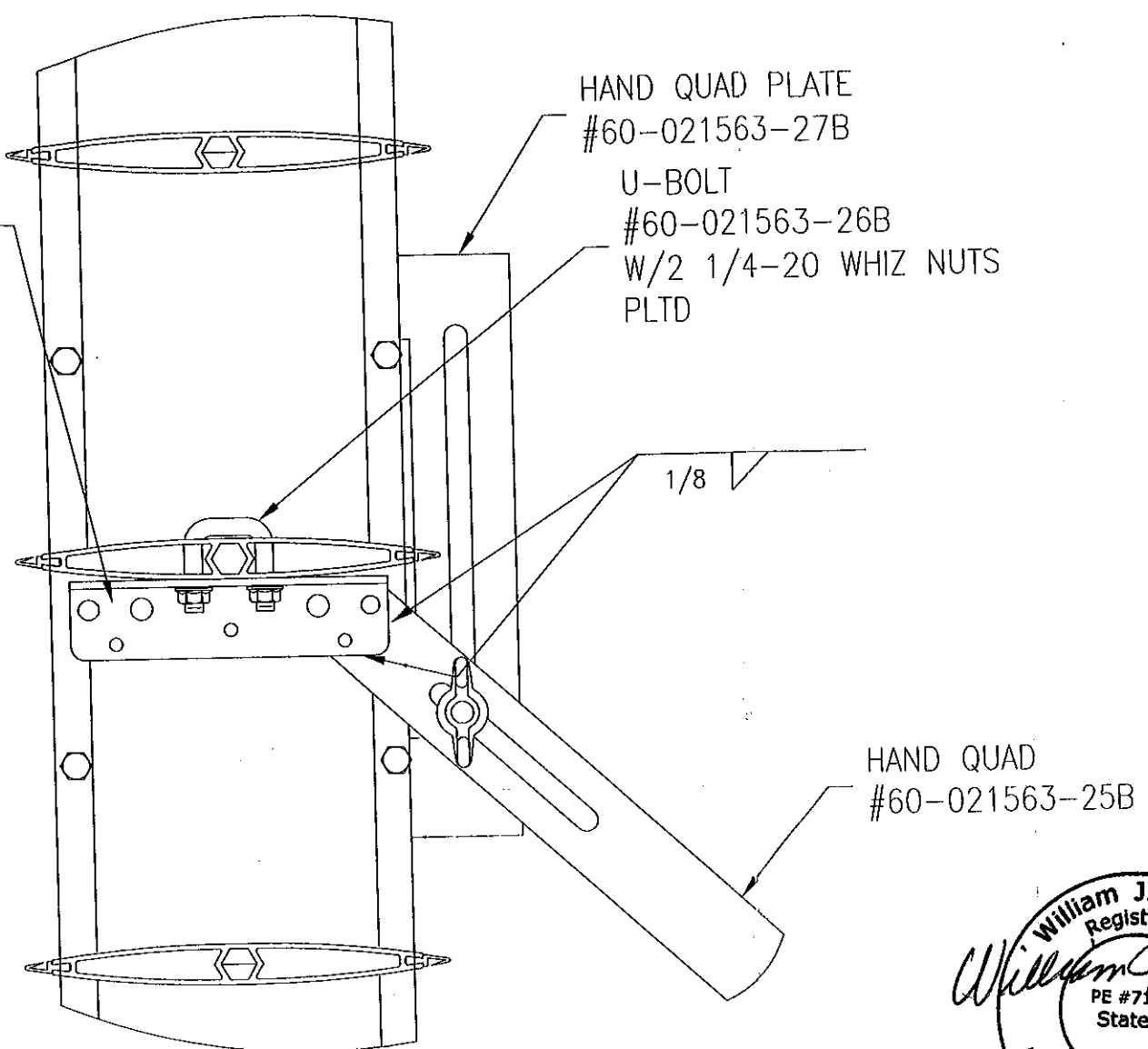
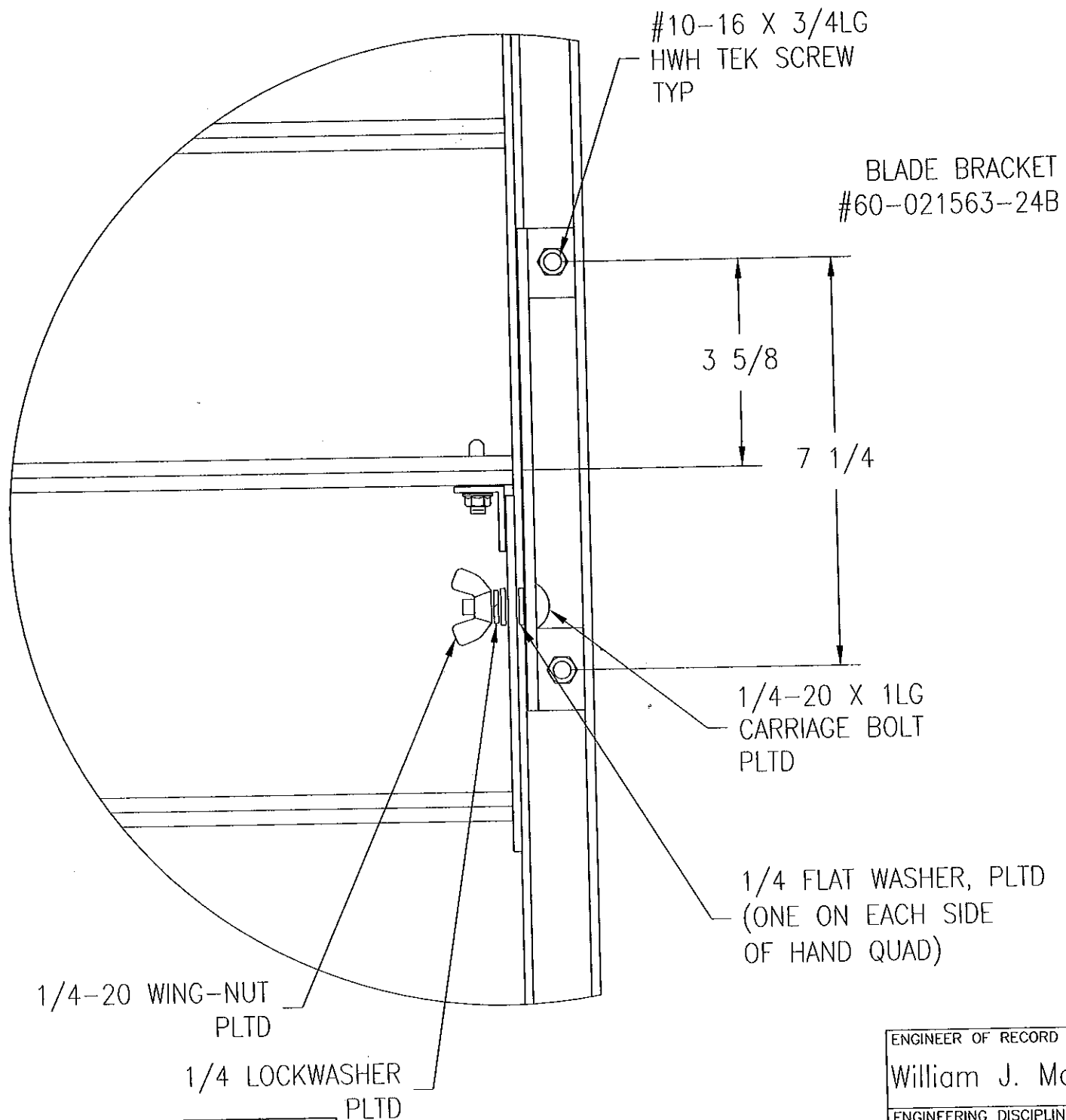


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as complying with the Florida  
Building Code  
Acceptance No. 11-1229.04  
Expiration Date 01/28/2017  
By: *[Signature]*  
Miami/Dade Product Control

TOLERANCES:  
UNLESS OTHERWISE SPECIFIED  
DIMENSIONS:  
WITH 2 DECIMAL PLACES, ±.020  
WITH 3 DECIMAL PLACES, ±.010  
FRACTION DIMENSIONS AS MARKED.

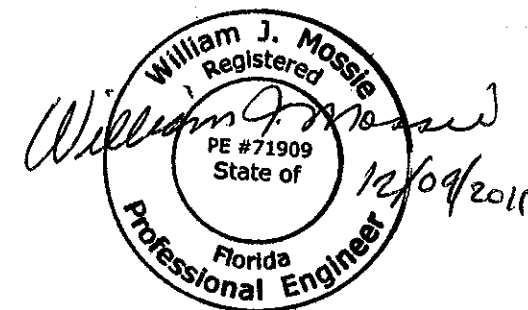
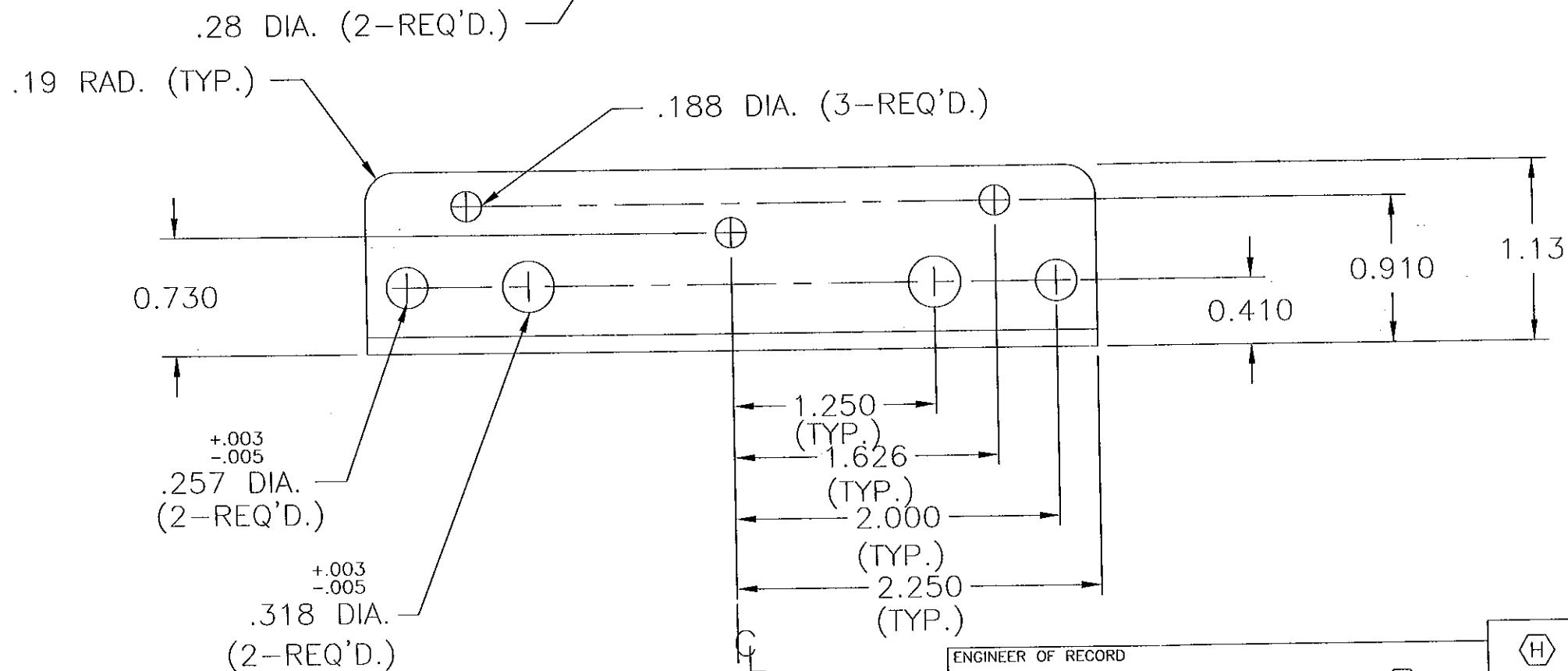
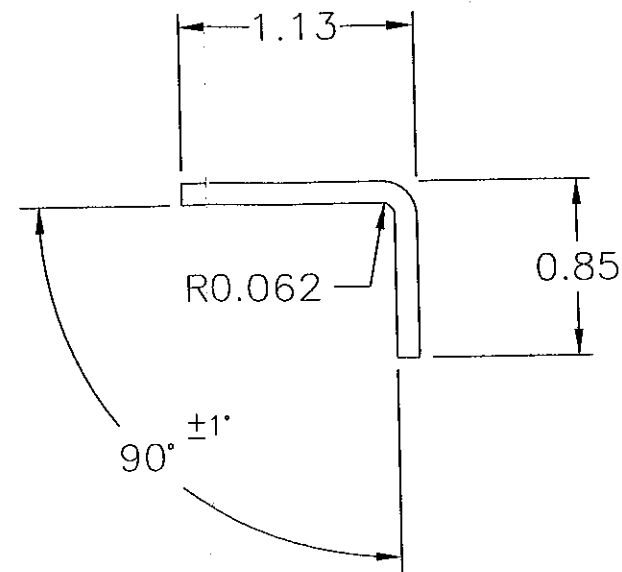
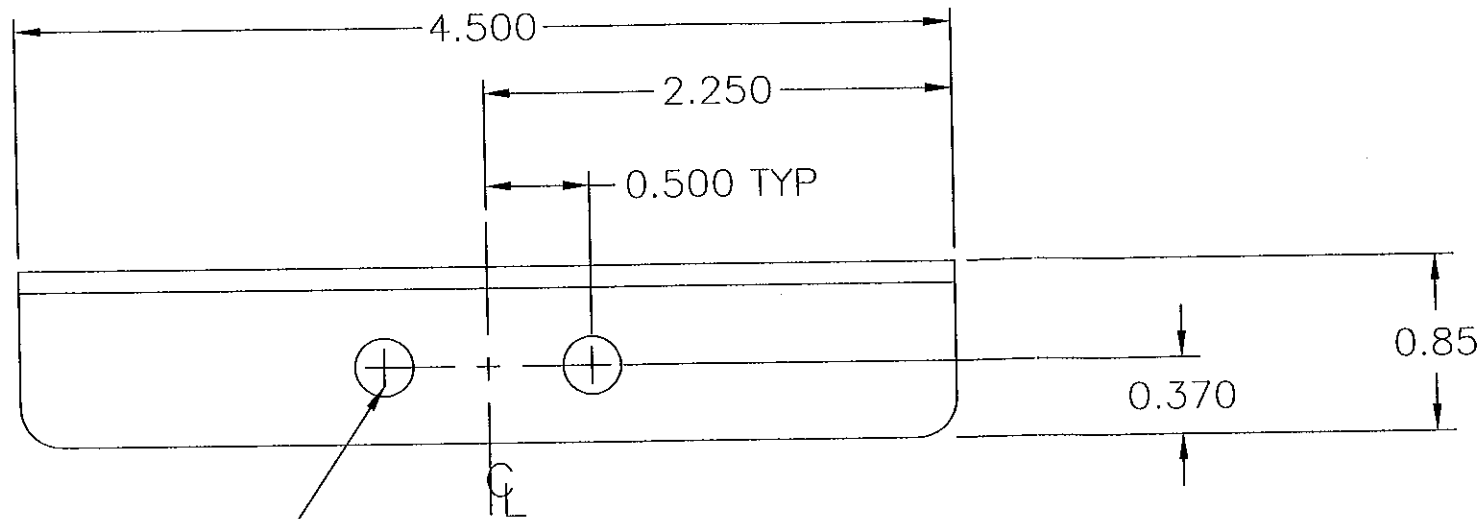
ENGINEER OF RECORD William J. Mossie, PE (H)		(H)	ENGINEER OF RECORD AND SHEET NUMBER	WJM				12/8/11				
ENGINEERING DISCIPLINE CIVIL ENGINEER		(G)	ADDED SHEET NUMBER	DLC	DJR	DJR		5/23/7				
REGISTRATION NUMBER STATE OF FLORIDA #71909		(A)	REMOVED ENGINEERING DATA	JAL								
DWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER	REVISION DESCRIPTION			DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:	RUSKIN Mfg. Grandview, MD PROPRIETARY INFORMATION			PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____			
MATERIAL: 305 SS				TITLE CRANK PIN				DWG. NO. 60-021563-22B SHEET 23 OF 38				



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Building Code  
Acceptance No 11-1229-04  
Expiration Date 07/28/2017  
By [Signature]  
Miami/Dade Product Control

ENGINEER OF RECORD William J. Mossie, PE (H)		(H)	ENGINEER OF RECORD AND SHEET NUMBER	WJM				12/8/11				
ENGINEERING DISCIPLINE CIVIL ENGINEER		(G)	ADDED SHEET NUMBER	DLC	DJR	DJR		5/23/7				
REGISTRATION NUMBER STATE OF FLORIDA #71909		(A)	REMOVED ENGINEERS DATA	JAL	VMA			4-17-98				
DWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER	REVISION DESCRIPTION			DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:	RUSKIN Mfg. Grandview, MD PROPRIETARY INFORMATION			PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____			
				TITLE HAND QUAD CD-50 DAMPER			DWG. NO. 60-021563-23B SHEET 24 OF 38					

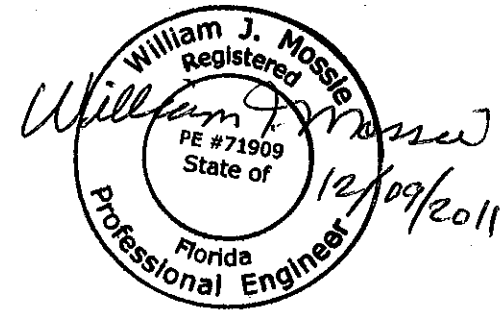
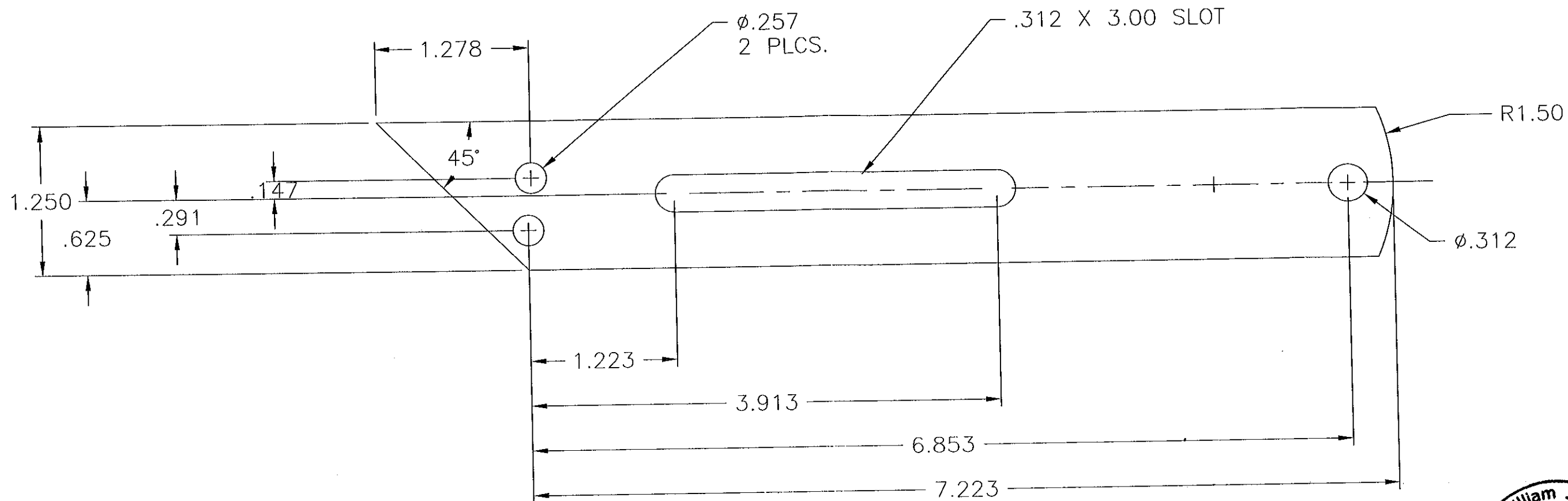


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 Acceptance No. 11-1239.04  
 Expiration Date 01/28/2017  
 By [Signature]  
 Miami Dade Product Control

TOLERANCES:  
 UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS:  
 WITH 2 DECIMAL PLACES, ±.020  
 WITH 3 DECIMAL PLACES, ±.010  
 FRACTION DIMENSIONS AS MARKED.

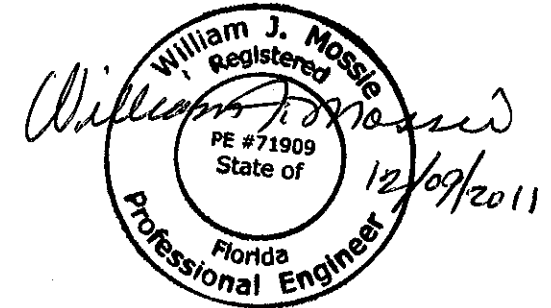
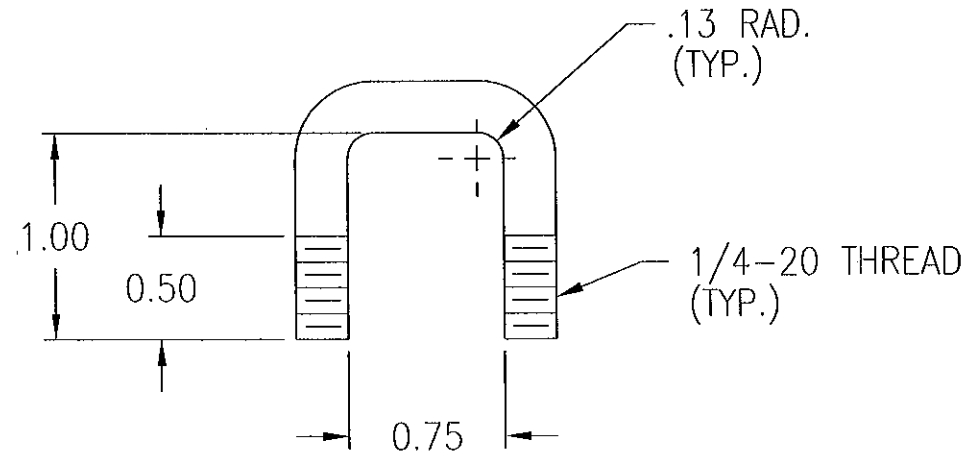
ENGINEER OF RECORD William J. Mossie, PE $\text{\textcircled{H}}$		$\text{\textcircled{H}}$	ENGINEER OF RECORD AND SHEET NUMBER	WJM				12/8/11		
ENGINEERING DISCIPLINE CIVIL ENGINEER		$\text{\textcircled{G}}$	ADDED SHEET NUMBER	DLC	DJR	DJR		5/23/7		
REGISTRATION NUMBER STATE OF FLORIDA #71909		$\text{\textcircled{A}}$	REMOVED ENGINEERS DATA	JAL						
DWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE:
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:		<b>RUSKIN Mfg.</b> Grandview, MD PROPRIETARY INFORMATION					
MATL: 12 GA. GALV.		TITLE AIRFOIL BLADE BRKT		PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____		DWG. NO. 60-021563-24B SHEET 25 OF 38		



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 Building Code  
 Acceptance No 11-1229.04  
 Expiration Date 01/28/2017  
 By [Signature]  
 Miami Trade Product Control

ENGINEER OF RECORD William J. Mossie, PE <span style="border: 1px solid black; padding: 2px;">H</span>		<span style="border: 1px solid black; padding: 2px;">H</span>	ENGINEER OF RECORD AND SHEET NUMBER	WJM					12/8/11			
ENGINEERING DISCIPLINE CIVIL ENGINEER		<span style="border: 1px solid black; padding: 2px;">G</span>	ADDED SHEET NUMBER	DLC	DJR	DJR			5/23/7			
REGISTRATION NUMBER STATE OF FLORIDA #71909		<span style="border: 1px solid black; padding: 2px;">A</span>	REMOVED ENGINEERS DATA	JAL								
DWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER		REVISION DESCRIPTION		DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:	RUSKIN Mfg. Grandview, MD		PROPRIETARY INFORMATION		PLOT SCALE	DWG. CERTIFIED			
10 GA GALV STL				TITLE		HAND QUAD ARM		NONE	BY: _____ DATE: _____			
								DWG. NO.		60-021563-25B SHEET 26 OF 38		

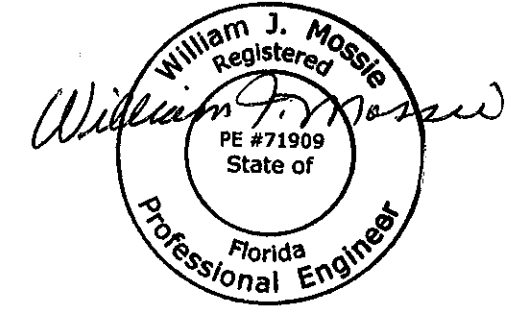
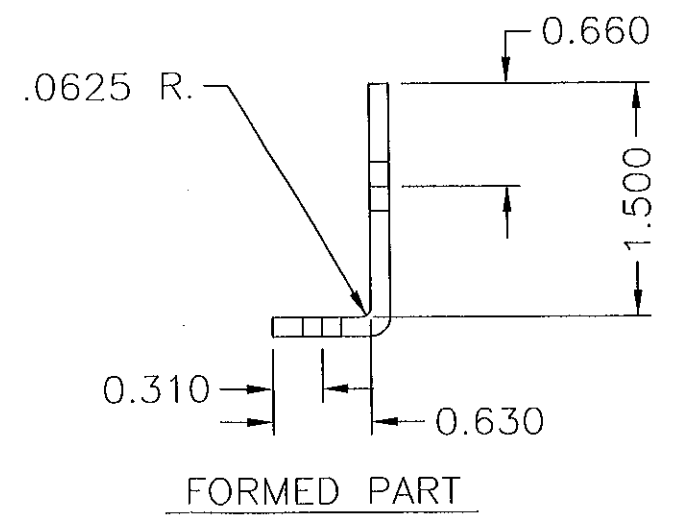
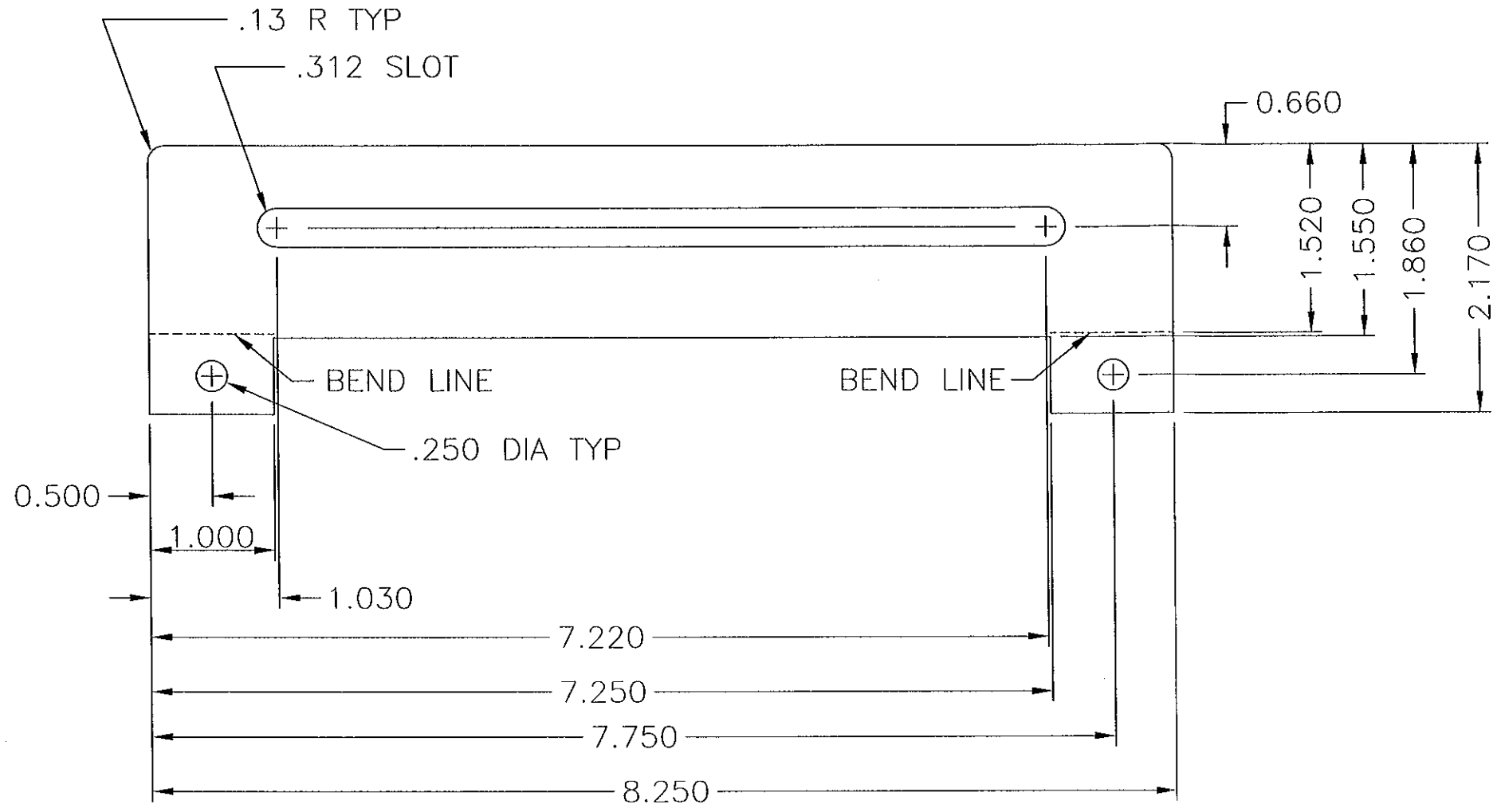


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 Building Code  
 Acceptance No. 11-1279-04  
 Expiration Date 01/28/2017  
 By [Signature]  
 Miami Date Product Control

TOLERANCES:  
 UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS:  
 WITH 2 DECIMAL PLACES, ±.020  
 WITH 3 DECIMAL PLACES, ±.010  
 FRACTION DIMENSIONS AS MARKED.

ENGINEER OF RECORD William J. Mossie, PE		(H)	ENGINEER OF RECORD AND SHEET NUMBER	WJM				12/8/11		
ENGINEERING DISCIPLINE CIVIL ENGINEER		(G)	ADDED SHEET NUMBER	DLC	DJR	DJR		5/23/7		
REGISTRATION NUMBER STATE OF FLORIDA #71909		(A)	REMOVED ENGINEERS DATA	JAL						
OWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:	RUSKIN Mfg. Grandview, MO PROPRIETARY INFORMATION		PLOT SCALE NONE		DWG. CERTIFIED BY: _____ DATE: _____		
1/4" DIA. PLTD. STL.				TITLE U-BOLT		DWG. NO. 60-021563-26B SHEET 27 OF 38				

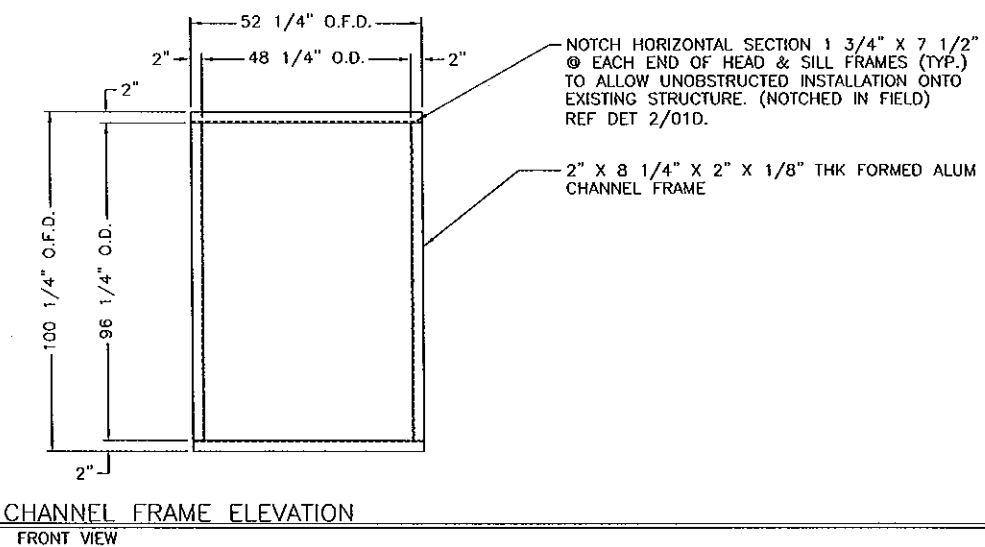
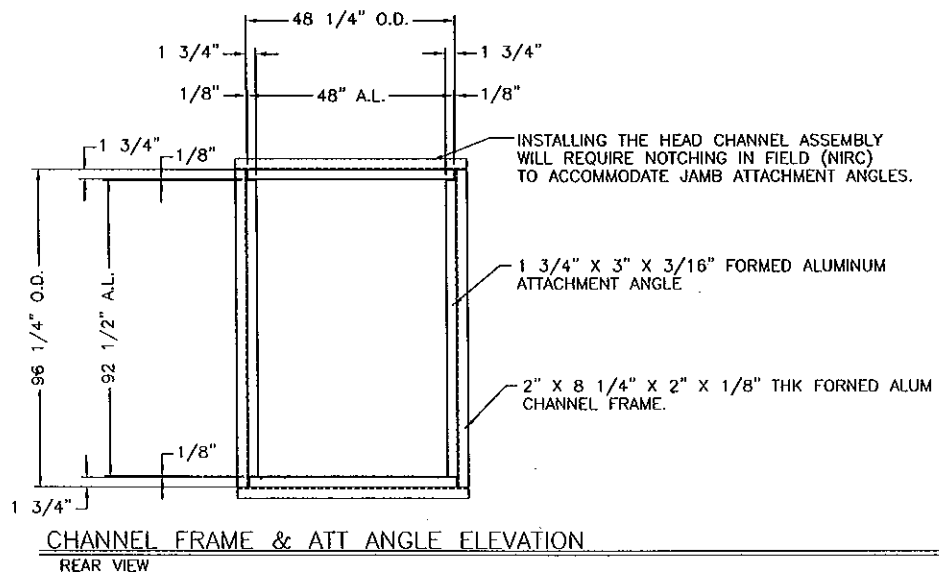
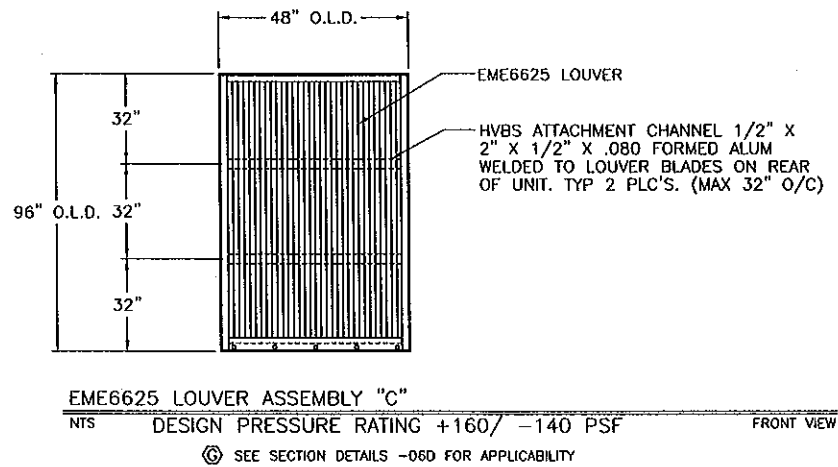


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 Building Code  
 Acceptance No 11-1229-04  
 Expiration Date 01/28/2017  
 By [Signature]  
 Miami Dade Product Control

TOLERANCES:  
 UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS:  
 WITH 2 DECIMAL PLACES, ±.020  
 WITH 3 DECIMAL PLACES, ±.010  
 FRACTION DIMENSIONS AS MARKED.

ENGINEER OF RECORD William J. Mossie, PE <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">H</span>		<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">H</span> ENGINEER OF RECORD AND SHEET NUMBER	WJM				12/8/11
ENGINEERING DISCIPLINE CIVIL ENGINEER		<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">G</span> ADDED SHEET NUMBER	DLC	DJR	DJR		5/23/7
REGISTRATION NUMBER STATE OF FLORIDA #71909		<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">A</span> REMOVED ENGINEERS DATA	JAL				
DWN. BY: DDM	CHK. BY: JSB	APPV'D. BY: DVC	APPV'D. BY:	CHANGE LETTER		REVISION DESCRIPTION	
DATE: 4/2/98	DATE: 4/6/98	DATE: 4/13/98	DATE:	RUSKIN Mfg. Grandview, MD		DWN. BY:	CHK'D. BY:
MAT'L 12 GA GALV. STEEL				PROPRIETARY INFORMATION		APPV'D. BY:	APPV'D. BY:
				TITLE HAND QUADRANT PLATE		DATE:	DATE:
				PLOT SCALE 3/4=1		DWG. CERTIFIED	
				DWG. NO. 60-021563-27B		BY: _____	
						DATE: _____	
						SHEET 28 OF 38	



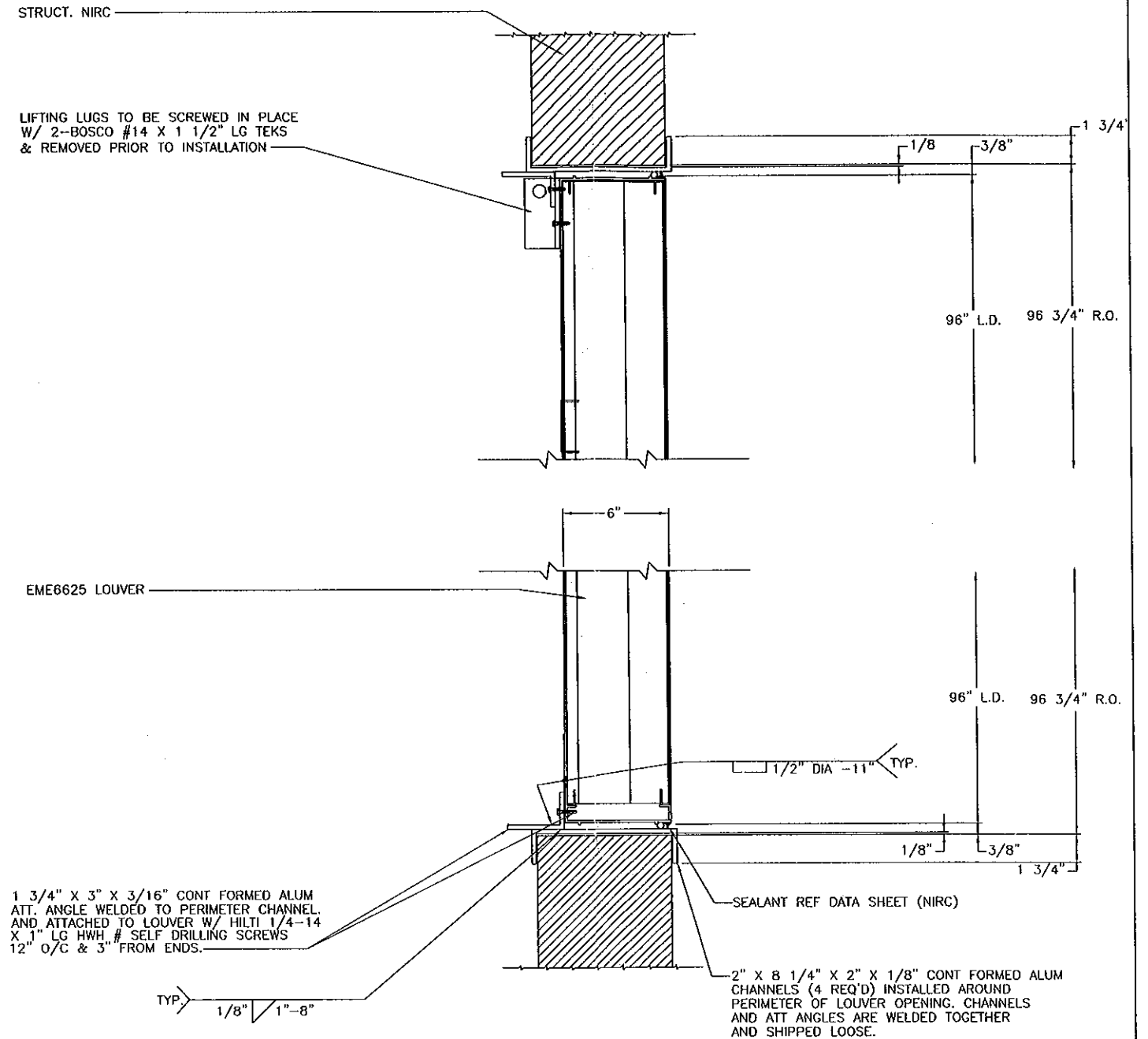
1 REAR & FRONT ELEVATION VIEW OF CHANNEL FRAME & ATT. ANGLE  
 N.T.S.

LEGEND:

- O.F.D. = OUTSIDE FRAME DIM.
- R.O. = ROUGH OPENING
- A.L. = ANGLE LENGTH
- O.D. = OPENING DIM.
- N.T.S. = NOT TO SCALE
- NIRC = NOT IN RUSKIN CONTRACT
- HVBS = HIDDEN VERTICAL BLADE SUPPORT.
- SSD = SHIP SECTION DIM.
- L.D. = LOUVER DIM.
- DIM. = DIMENSION
- SIM = SIMILAR

NOTES:

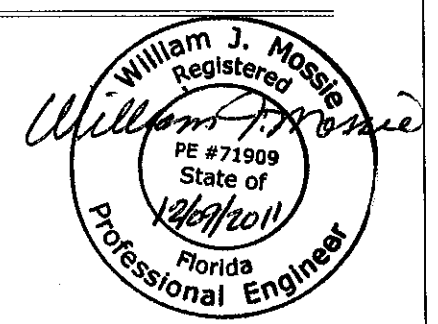
- THE STRUCTURAL SUBSTRATE THAT HOLDS THE LOUVER IN PLACE, IS ASSUMED TO BE STRUCTURALLY SOUND AND STABLE TO TAKE THE LOADS DISPERSED BY THE LOUVER.
- LOUVER IS NONBEARING AND IS NOT DESIGNED TO WITHSTAND BUILDING DEADLOADS.



EME6625 SECTION (JAMB SIM TO HEAD)  
 3"=1'-0"

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 Expiration Date 01/28/2017  
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 Miami Dade Product Control

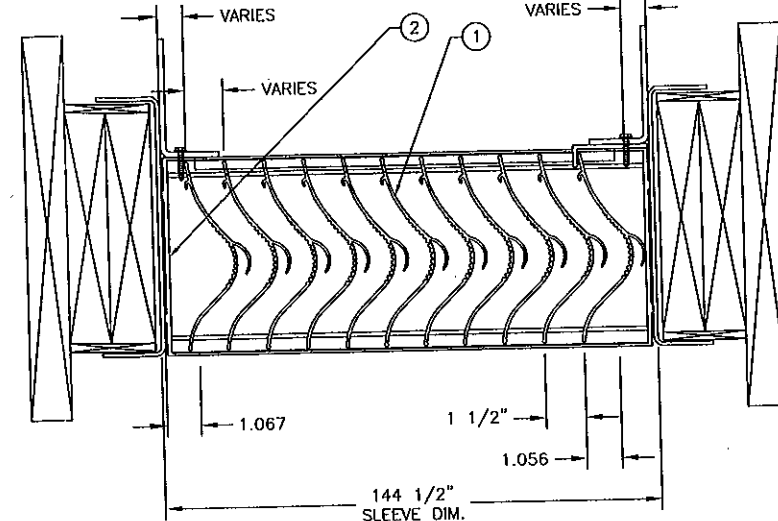
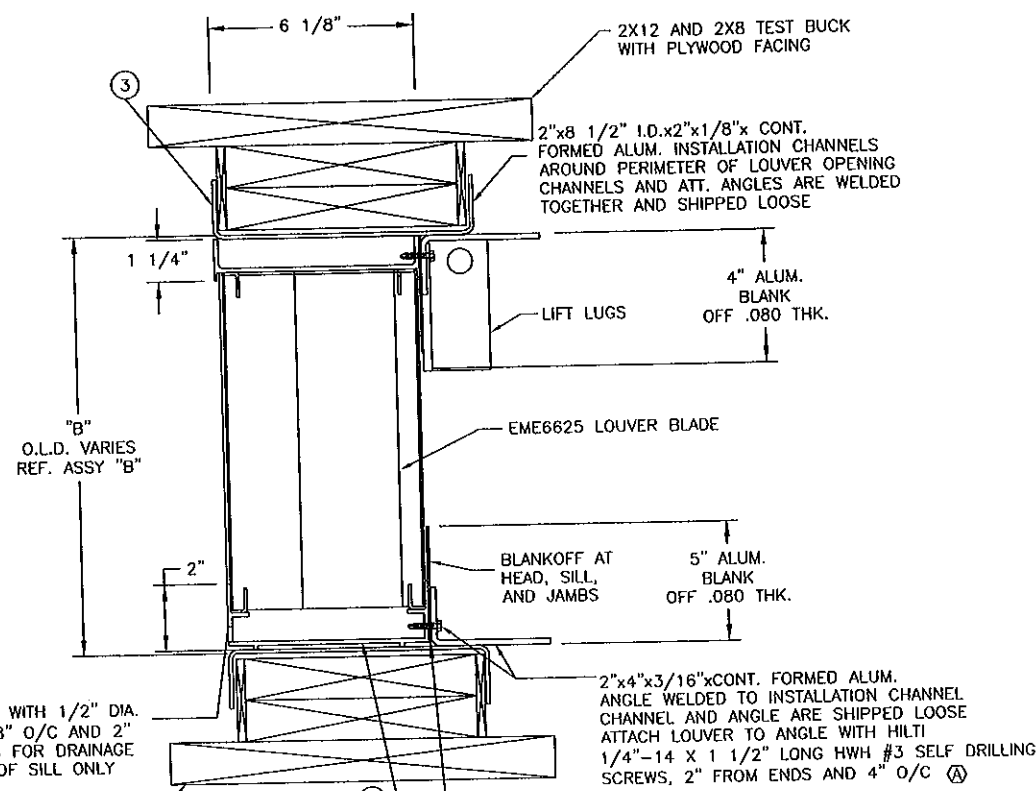


OWNER OF RECORD William J. Mossie, PE	ENGINEER OF RECORD AND SHEET NUMBER WJM	DATE 12/8/11
DESIGNING ORGANIZATION CIVIL ENGINEER	ADDED SHEET NUMBER DLC DJR DJR	DATE 5/23/17
REGISTRATION NUMBER STATE OF FLORIDA #71909	REVISION DESCRIPTION RUSKIN Mig 3900 DR. Greaves RD Grandview, NJ 04030	DATE 10-13-98 10-15-98
DATE 10-13-98 10-15-98	PROPRIETARY INFORMATION NONE	DATE
LOUVER DAMPER ASSY DADE CITY, FLORIDA	TITLE EME6625 LOUVER ASSEMBLIES & SECTIONS	DATE
		60-021563-28D SHEET 29 OF 38

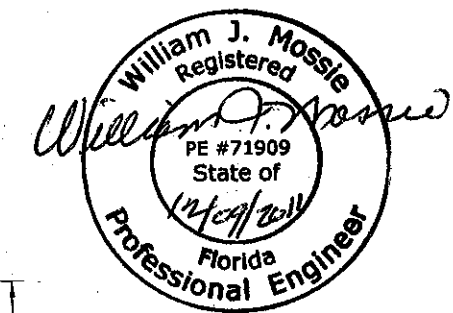
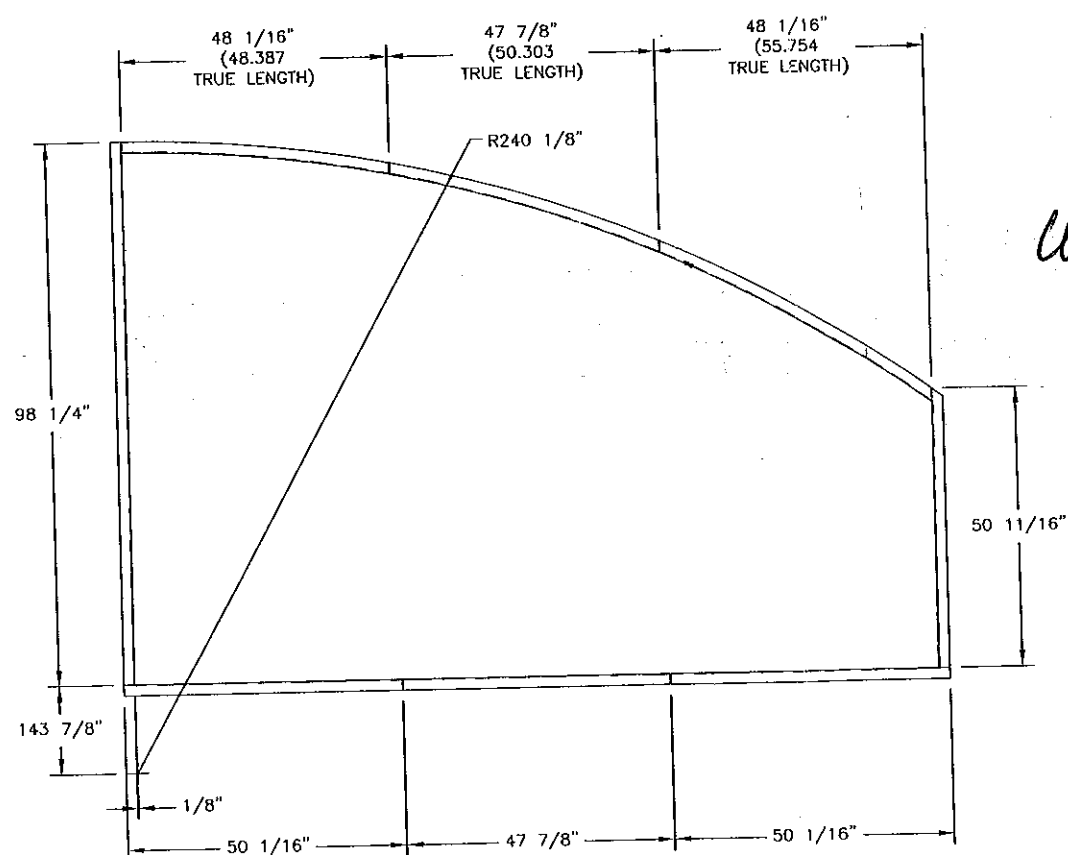
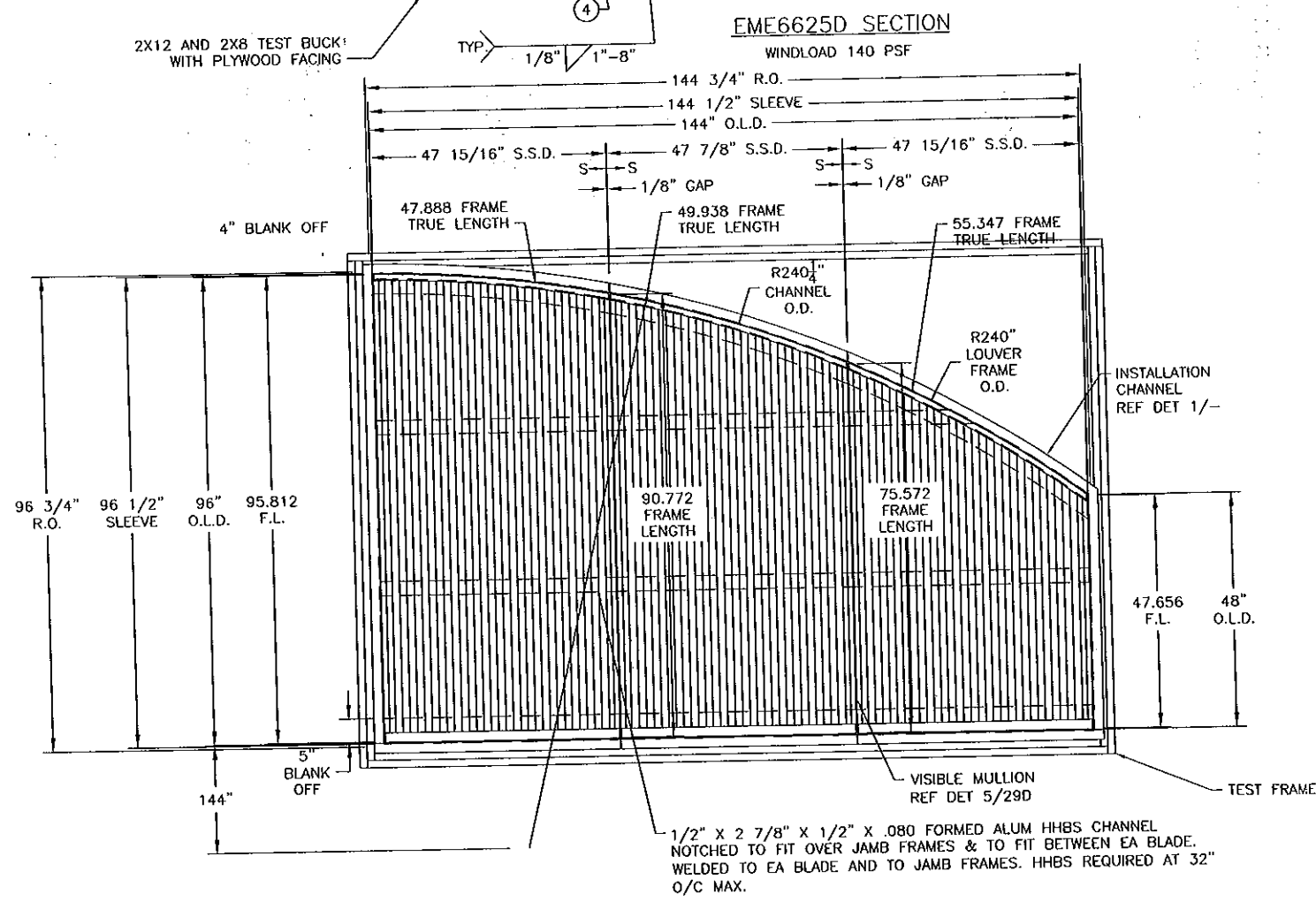
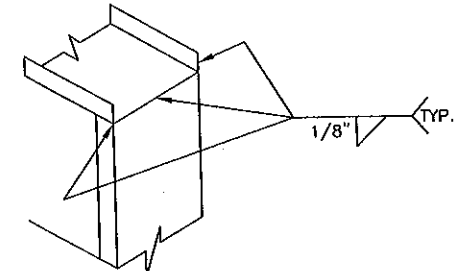




<b>FRAME</b>	
6063-T5 extruded aluminum with .125 nominal wall thickness.	
Flange frame is same material and thickness as above.	
<b>BLADES</b>	
6063-T5 extruded aluminum with .091 nominal wall thickness. (Blades are mounted vertically)	
<b>SCREEN</b>	
5/8" x .040" expanded flat-temed aluminum bird screen.	
1/2" mesh x .063" aluminum bird screen.	
18-16 mesh al. insect screen.	
No Screen	
<b>FINISH</b>	
Mill.	
Kynar (opt).	
Baked enamel (modified fluoropolymer, 50% Kynar, opt).	
Color anodize (opt).	
Clear anodize (opt).	
Color: Ref. Note 15	
<b>INSTALLATION CHANNELS</b>	
Instoll. channel 1/8" formed alum.	
Installation angles, 3/16" formed alum.	
<b>ACCESSORIES (opt)</b>	
Clip angles.	
Blankoff panel.	



ITEM	DESCRIPTION	MATERIAL
1	BLADE	6063-T5
2	JAMB FRAME	6063-T5
3	HEAD FRAME	6063-T5
4	SILL FRAME	6063-T5



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 Expiration Date 01/28/2017  
 By: [Signature]  
 Miami Dade Product Control

**ASSEMBLY "E"**  
 N.T.S.  
 QTY: 3 REQUIRED W/ 3 SHIP SECTIONS EACH

① INSTALLATION CHANNEL DETAIL  
 N.T.S.

**TESTS PERFORMED**  
 TAS-201 LARGE MISSILE IMPACT  
 TAS-202 UNIFORM STATIC AIR PRESSURE TEST  
 TAS-203 CYCLIC WIND PRESSURE TEST  
 DESIGN PRESSURE RATING +160 PSF POS., -140 PSF NEG.

CHANGED BY	REVISION DESCRIPTION	DATE	CHKD. BY	DATE	APP'D. BY	DATE

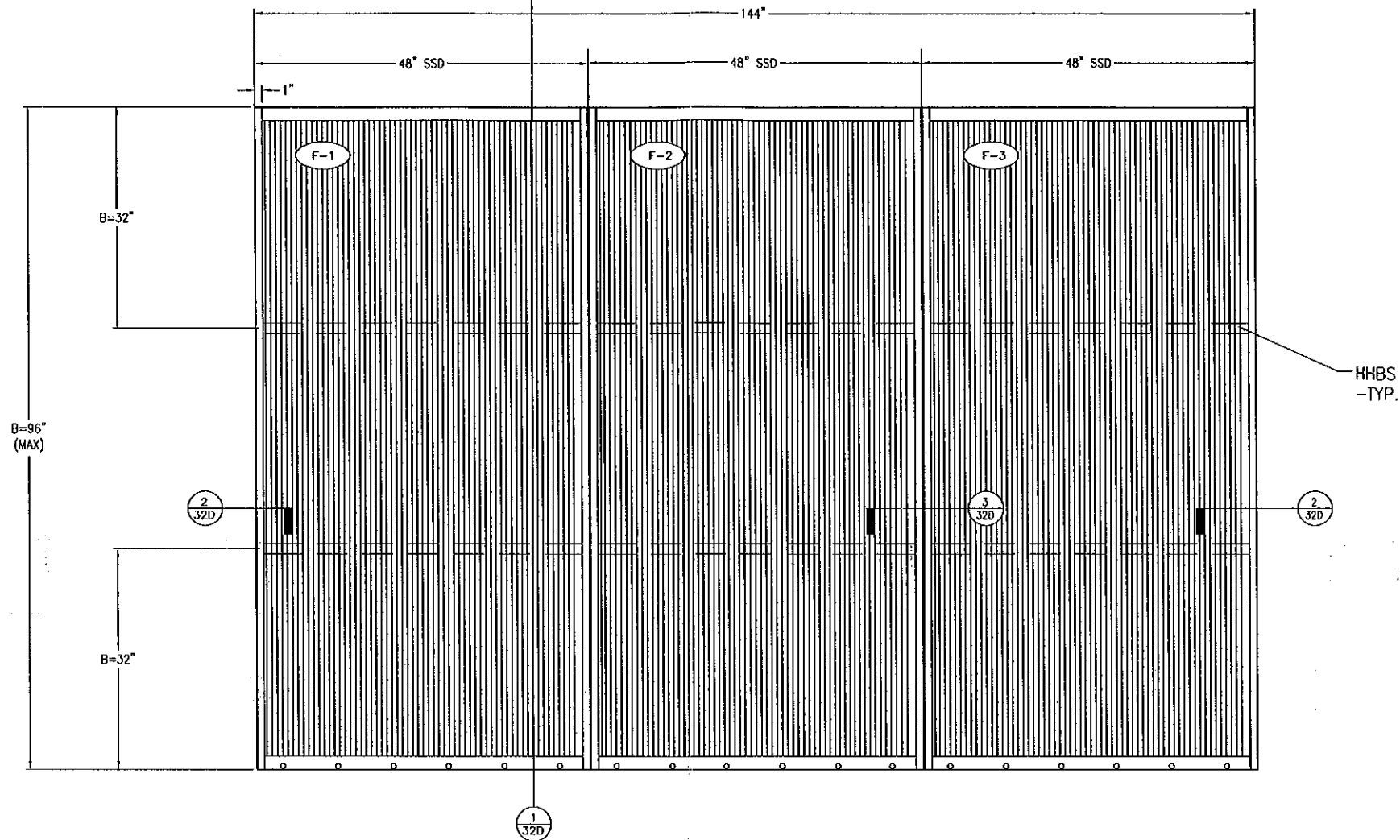
STATE OF FLORIDA #71909  
 WILLIAM J. MOSSIE, PE  
 CIVIL ENGINEER  
 10/2/06 DATE  
 3/2/07 DATE  
 3/2/07 DATE

ADDED SHEET NUMBER	REVISED TITLE	DATE
WJM		12/8/11
DLC	DJR	5/23/7
DWG	DJR	4/12/07

**RUSKIN SWARTWOUT**  
 3900 DR. CREAVES RD  
 GRANDVIEW, MO 64039  
 PROPRIETARY INFORMATION

EME6625D TEST LOUVERS ROUND SHAPES  
 60-021563-30D SHEET 31 OF 38

<b>FRAME</b>	
6063-T6 extruded aluminum with .095" nominal wall thickness.	<input checked="" type="checkbox"/>
Flange frame is same material and thickness as above.	<input checked="" type="checkbox"/>
<b>BLADES</b>	
6063-T6 extruded aluminum with .080" nominal wall thickness.	<input checked="" type="checkbox"/>
<b>SCREEN</b>	
5/8" x .040" expanded flat-tened aluminum bird screen.	<input checked="" type="checkbox"/>
1/2" mesh x .063" aluminum bird screen.	<input checked="" type="checkbox"/>
18-16 mesh alum insect screen.	<input checked="" type="checkbox"/>
No screen.	<input type="checkbox"/>
<b>FINISH</b>	
Mill.	<input checked="" type="checkbox"/>
Kynor (opt).	<input type="checkbox"/>
Baked enamel (modified fluoropolymer, 50% Kynor, opt).	<input type="checkbox"/>
Color Anodize (opt).	<input type="checkbox"/>
Clear Anodize (opt).	<input type="checkbox"/>
Color:	<input type="checkbox"/>

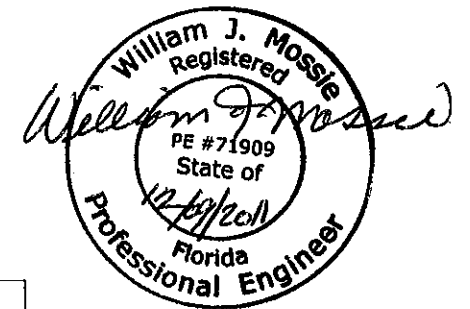


**NOTES:**

- 1) THE EME6625 HAS BEEN TESTED IN ACCORDANCE WITH MIAMI-DADE COUNTY PROTOCOLS TAS100(A), TAS-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 +160/-140 PSF OR LESS.
- 3) THIS LOUVER SYSTEM IS NON-BEARING AND IS NOT DESIGNED TO WITHSTAND BUILDING DEAD OR LIVE 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: 48" WIDE X 96" HIGH.
- 7) MAXIMUM ASSEMBLED LOUVER SIZE: UNLIMITED WIDE X 96" HIGH. MAX. MULLION SPACING IS 48".
- 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.

**ASSEMBLY 'F' - PERIMETER ANGLE INSTALLATION METHOD**  
 N.T.S.  
 3-ASSEMBLIES REQ'D W/ 3-SHIP SECTIONS EACH. FRONT VIEW

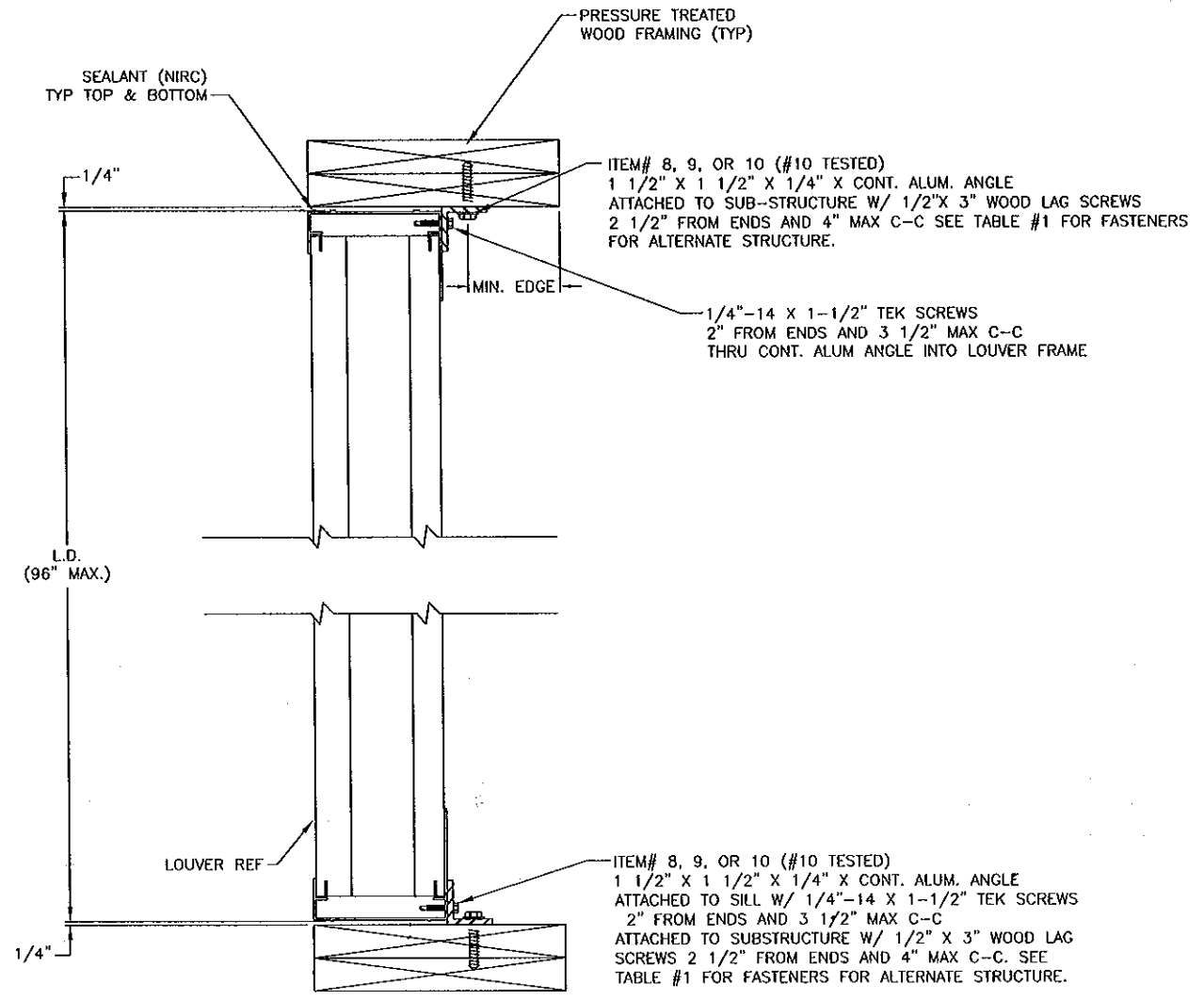
**TESTS PERFORMED:**  
 TAS-100a WATER PERFORMANCE TEST  
 TAS-201 LARGE MISSILE IMPACT  
 TAS-202 UNIFORM STATIC AIR PRESSURE TEST  
 TAS-203 CYCLIC WIND PRESSURE TEST  
 DESIGN PRESSURE RATING +160/-140 PSF



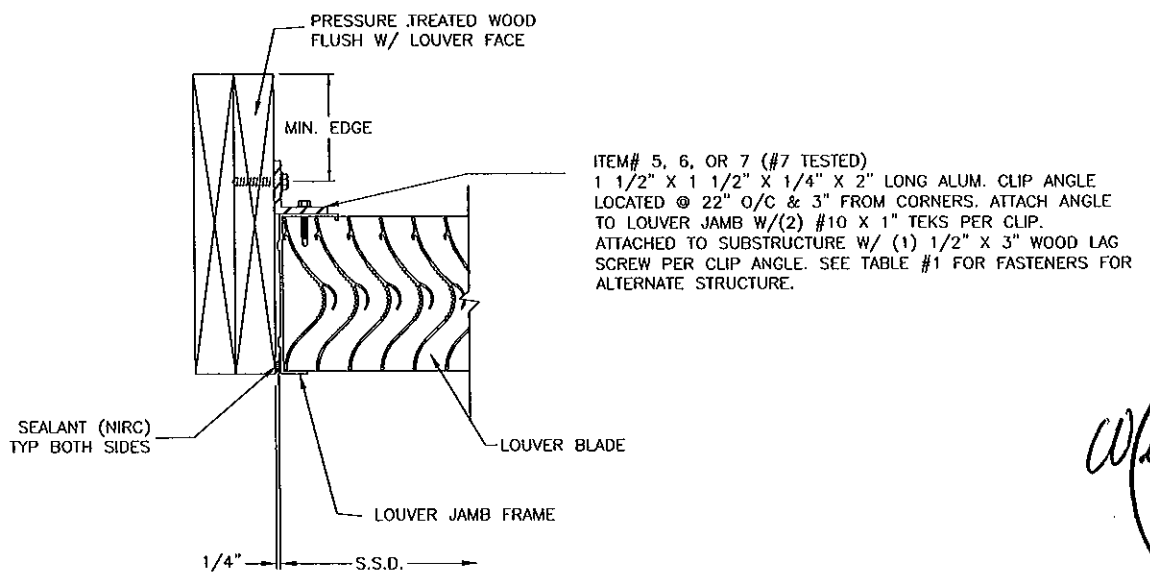
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**PRODUCT RENEWED**  
 as complying with the Florida Building Code  
 Acceptance No 11-1229-04  
 Expiration Date 01/28/2017  
 By *[Signature]*  
 Miami Dade Product Control

ENGINEER OF RECORD William J. Mossie, PE		ENGINEERING DISCIPLINE CIVIL ENGINEER		REGISTRATION NUMBER STATE OF FLORIDA #71909	
CHANGE LETTER	REVISION DESCRIPTION	CHKD. BY:	CHKD. BY:	APPR'D. BY:	DATE
	RUSKIN 3200 OR GREATER RO GRANVIEW, MO 64300 PROPRIETARY INFORMATION				
DATE: 6/9/09	DATE: 6/14/10	DATE: 6/14/10	DATE:	DATE:	DATE:
TITLE EME6625D LOUVER, SPEC, ASSY & NOTES CLIP ANGLE INSTALLATION				ENG. NO. 60-021563-31D SHEET 32 OF 38	

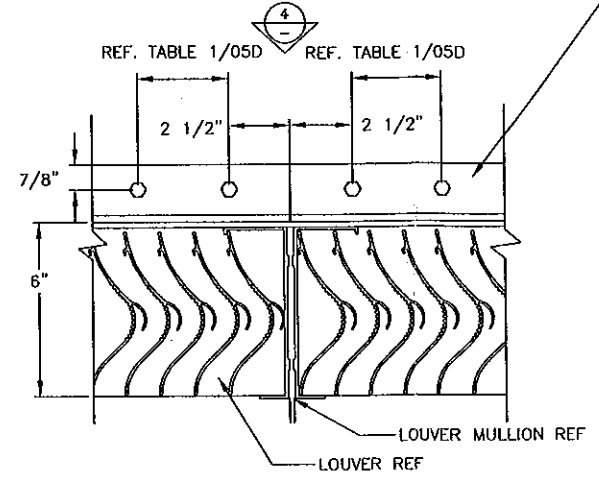


1 HEAD & SILL DETAIL: METHOD 1 - AS TESTED - WOOD FRAME  
 31D N.T.S.  
 ALTERNATE STRUCTURE - CONCRETE, STEEL FRAME

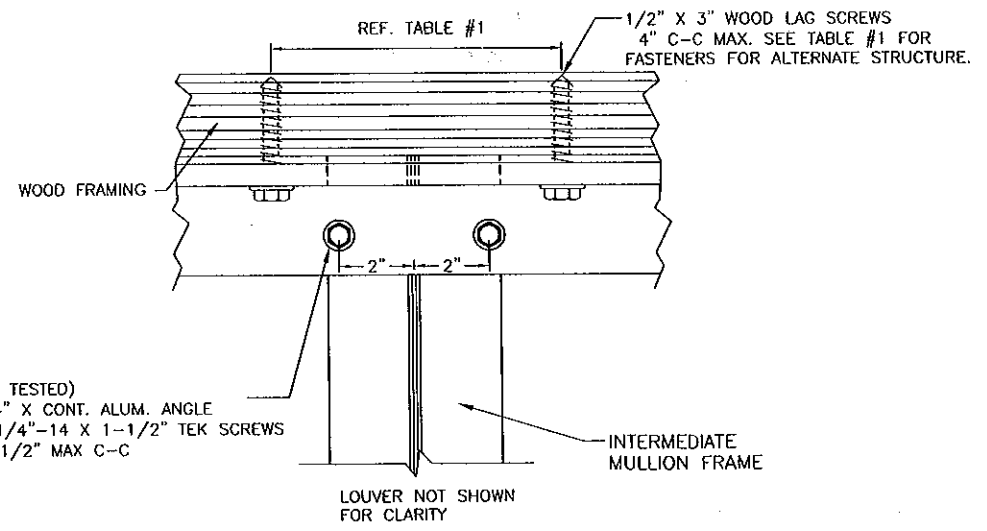


2 JAMB DETAIL: METHOD 1 - AS TESTED - WOOD FRAME  
 31D N.T.S.  
 ALTERNATE STRUCTURE - CONCRETE, STEEL FRAME

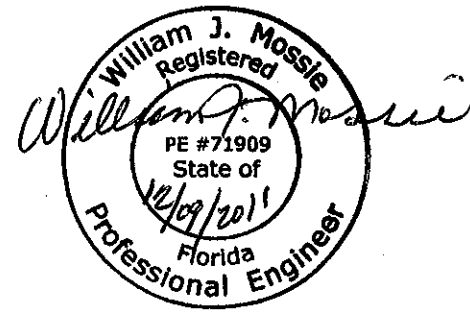
ITEM# 8, 9, OR 10 (#10 TESTED)  
 1 1/2" X 1 1/2" X 1/4" X CONT. ALUM. ANGLE  
 ATTACHED TO SUB-STRUCTURE W/ 1/2" X 3" WOOD LAG SCREWS  
 2 1/2" FROM ENDS AND 4" MAX C-C SEE TABLE #1 FOR FASTENERS  
 FOR ALTERNATE STRUCTURE.



3 MULLION DETAIL: METHOD 1 - AS TESTED - WOOD FRAME  
 31D N.T.S.  
 ALTERNATE STRUCTURE - CONCRETE, STEEL FRAME



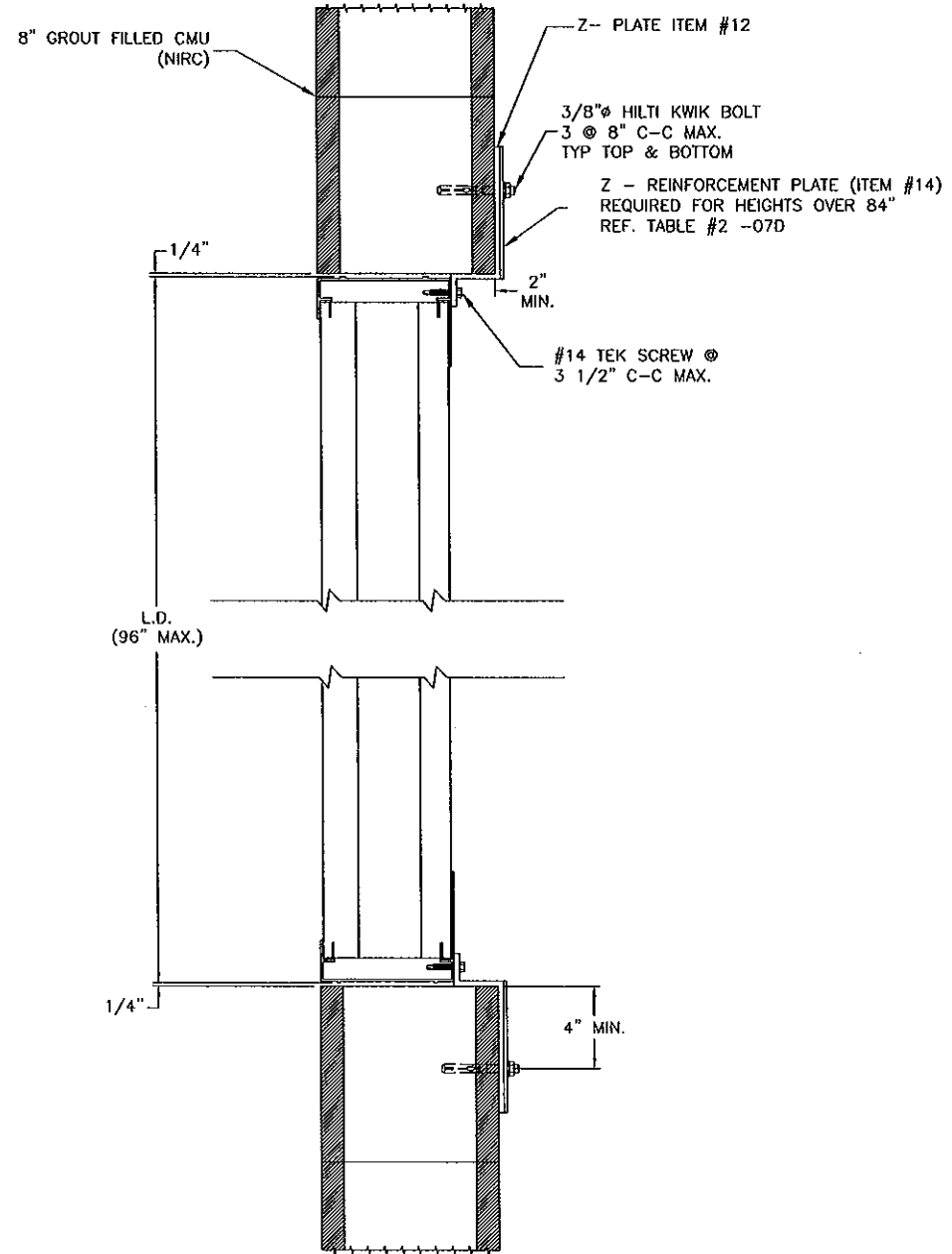
4 MULLION HEAD DETAIL @ STRUCTURE (SILL SIM): METHOD 1 - AS TESTED - WOOD FRAME  
 31D N.T.S.  
 ALTERNATE STRUCTURE - CONCRETE, STEEL FRAME



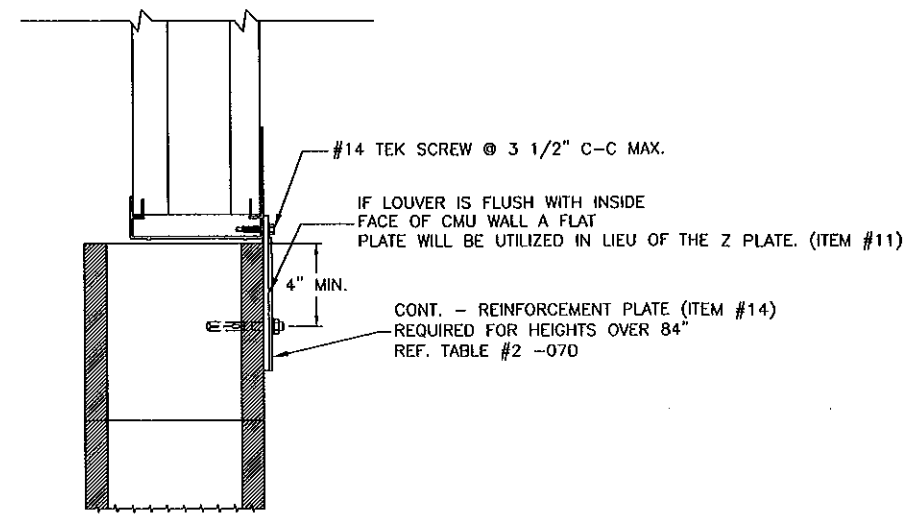
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 By *[Signature]*  
 Miami Dade Product Control

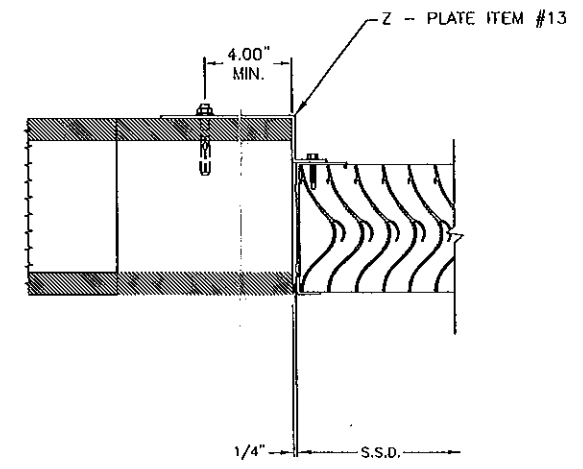
ENGINEER OF RECORD William J. Mossie, PE		CHANGE LETTER		DATE
ENGINEERING DISCIPLINE CIVIL ENGINEER		DATE	DATE	DATE
REGISTRATION NUMBER STATE OF FLORIDA #71909		DATE	DATE	DATE
DATE: 9/14/10	DATE: 9/14/10	DATE: 9/14/10	DATE: 9/14/10	DATE: 9/14/10
TITLE EMEG625D LOUVER CLIP ANGLE INSTALLATION DETAILS		DRAWING NO. 60-021563-32D		SHEET 33 OF 38



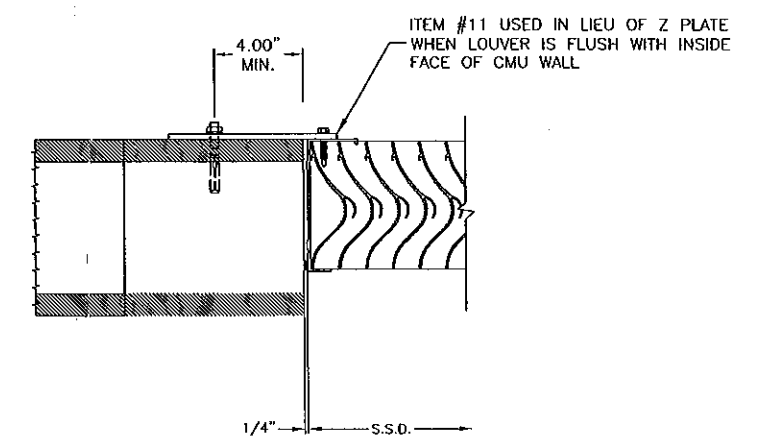
1A HEAD & SILL DETAIL METHOD 2 - GROUT FILLED CMU  
31D N.T.S.



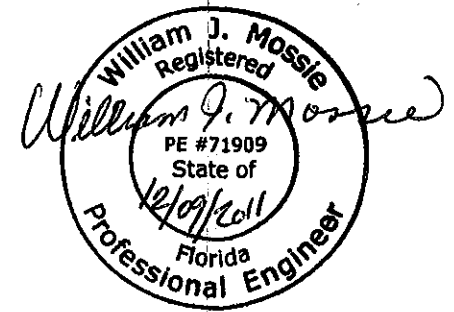
1B HEAD & SILL DETAIL: METHOD 2 - GROUT FILLED CMU  
31D N.T.S.



2A JAMB DETAIL METHOD 2 - GROUT FILLED CMU  
31D N.T.S.



2B JAMB DETAIL METHOD 2 - GROUT FILLED CMU  
31D N.T.S.



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Expiration Date 01/28/2017  
By *[Signature]*  
Miami Date Product Control

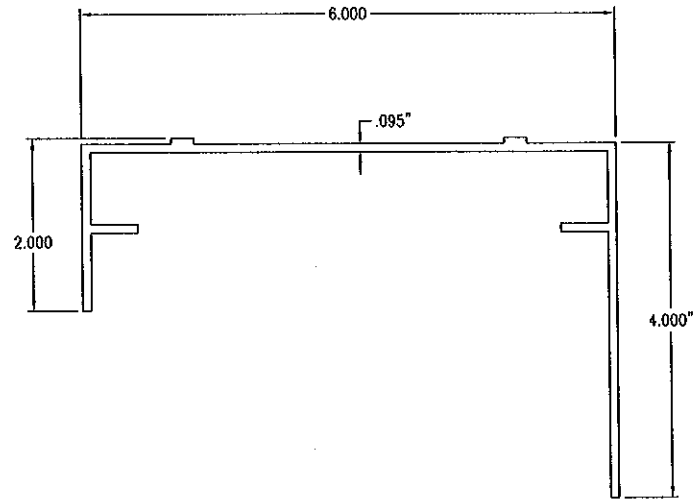
ENGINEER OF RECORD William J. Mossie, PE	
ENGINEERING DISCIPLINE CIVIL ENGINEER	
REGISTRATION NUMBER STATE OF FLORIDA #71909	
DATE: 9/14/10	DATE: 9/14/10
DATE: 5/14/10	DATE: 5/14/10

CHANGE LETTER	REVISION DESCRIPTION	DWG. NO.	DATE

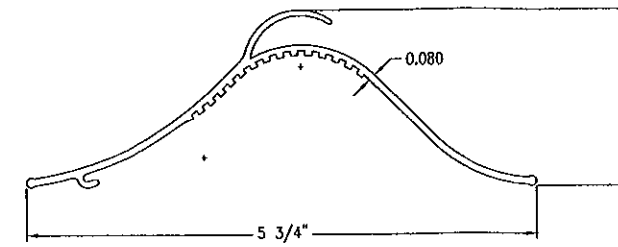
DRAWN BY: VMA	CHECKED BY: DJR	DATE: 9/14/10	DATE: 9/14/10
DATE: 9/14/10	DATE: 9/14/10	DATE: 5/14/10	DATE: 5/14/10

TITLE EME6625D LOUVER CLIP ANGLE INSTALLATION DETAILS	DWG. NO. 60-021563-33D
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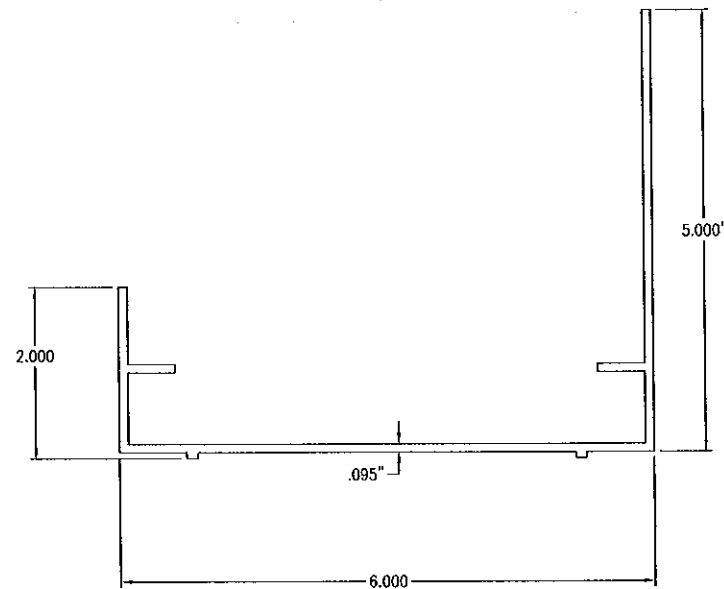




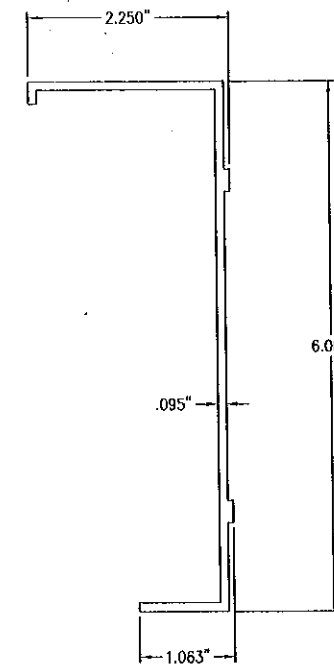
ITEM 1 - HEAD FRAME  
RUSKIN# 70-021995-00B



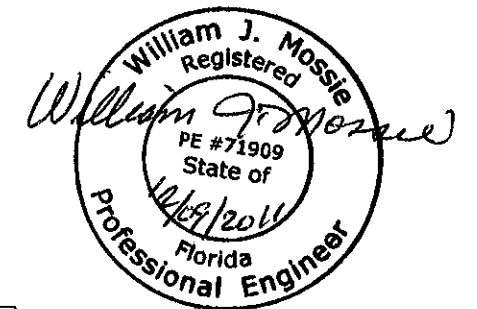
ITEM 2 - LOUVER BLADE  
RUSKIN# 70-020748-00B



ITEM 3 - SILL FRAME  
RUSKIN# 70-022226-00B



ITEM 4 - JAMB FRAME  
RUSKIN# 70-022227-00B



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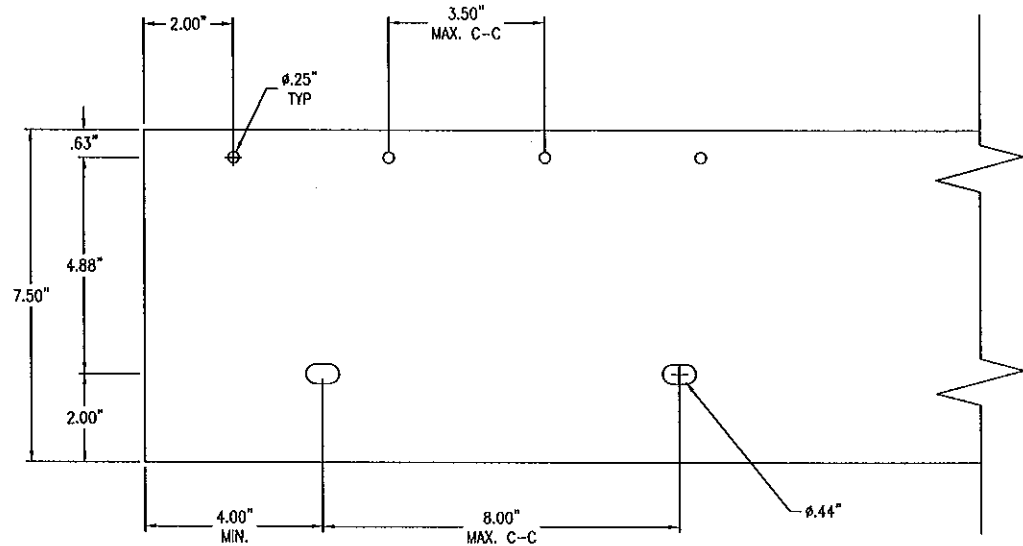
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as complying with the Florida  
Building Code  
Acceptance No 11-1229-04  
Expiration Date 01/28/2017  
By [Signature]  
Miami Dade Product Control

ENGINEER OF RECORD William J. Mossie, PE	
ENGINEERING DISCIPLINE CIVIL ENGINEER	
REGISTRATION NUMBER STATE OF FLORIDA #71909	
DATE: 9/14/10	DATE: 9/14/10
DATE: 9/14/10	DATE: 9/14/10

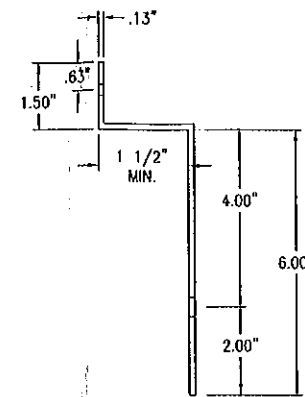
CHANGE LETTER	REVISION DESCRIPTION	ORIG. BY:	CHKD. BY:	APPRD. BY:	DATE
	RUSKIN 3000 DR. CREATES B3 GRANITE, NO 64030 PROPRIETARY INFORMATION				
	SWARTWOUT				
TITLE EME6625D LOUVER ALTERNATE ATTACHMENT TABLES		PLOT SCALE NONE		DATE	
DWG. NO. 60-021563-35D		SHEET 36 OF 38			



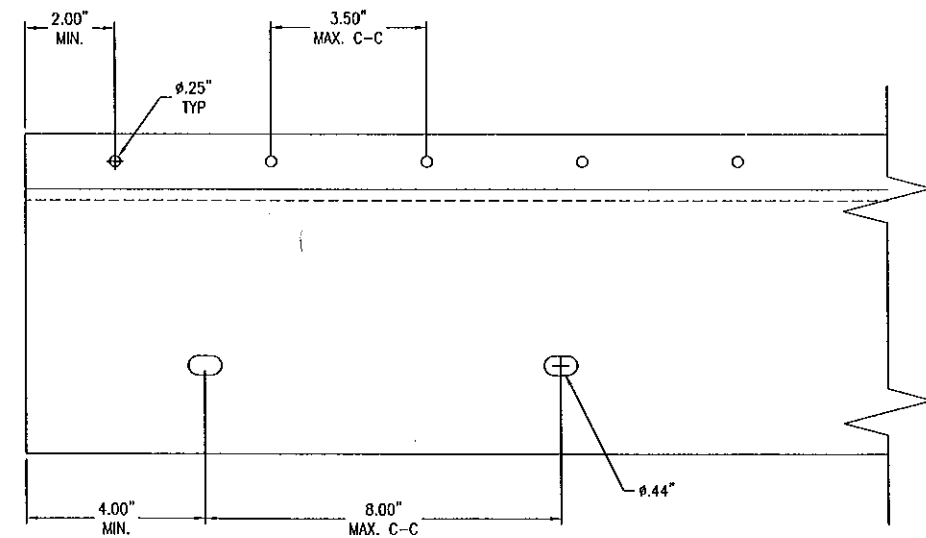
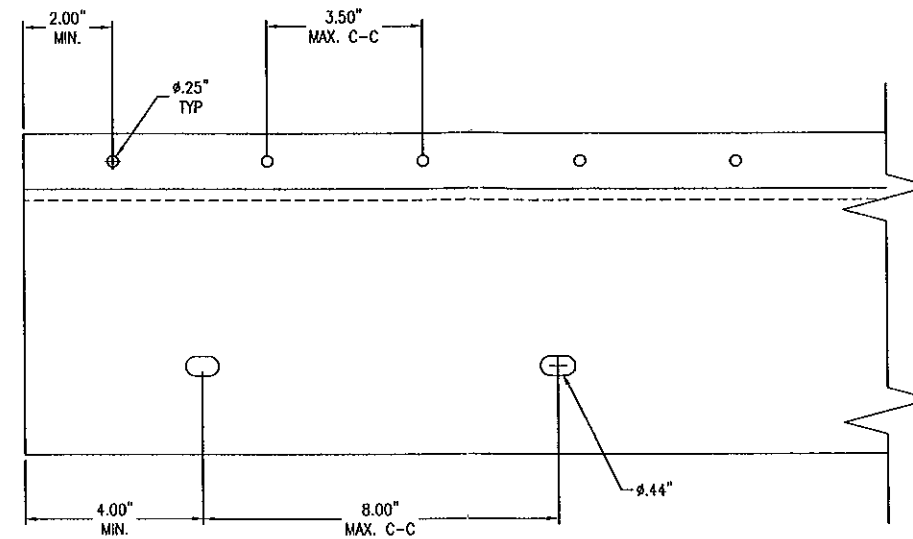




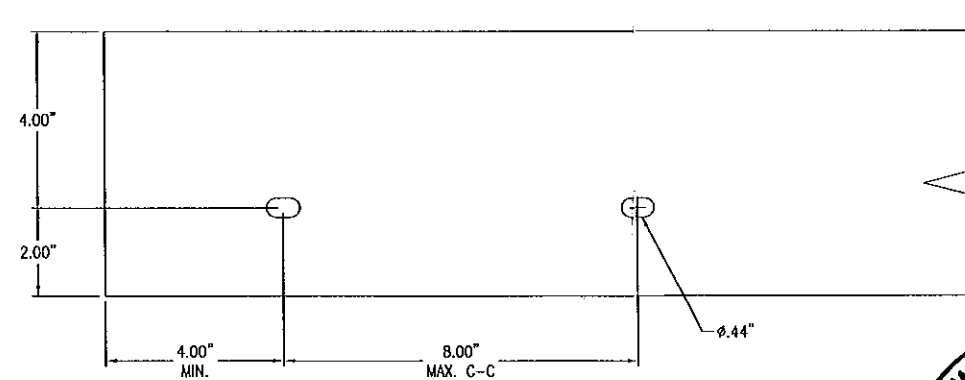
ITEM 11 - CONT. FLAT PLATE  
 .25 THICK - 5052-H32 AL  
 REQUIRES ITEM #14 FOR LOUVERS OVER 84" IN HEIGHT



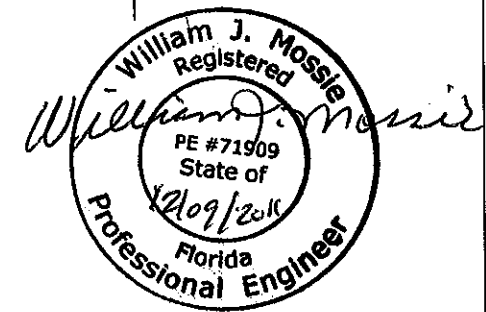
ITEM 13 - JAMB CONT. Z SHAPE PLATE  
 .125 THICK - 3003-H14 AL



ITEM 12 - HEAD/SILL CONT. Z SHAPE PLATE  
 5052-H32 AL



ITEM 14 - CONT. - REINFORCEMENT PLATE  
 .125" THICK - 3003-H14 AL



LOUVER HEIGHT	ITEM #12 Z PLATE THICKNESS	MATERIAL	NOTE
6" - 21"	.125"	3003-H14 AL	-
21" - 84"	.25"	5052-H32 AL	-
84" - 120"	.25"	5052-H32 AL	NEED ITEM #14

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 Miami Dade Product Control

ENGINEER OF RECORD  
 WILLIAM J. MOSSIE, PE  
 ENGINEERING DISCIPLINE  
 CIVIL ENGINEER  
 REGISTRATION NUMBER  
 STATE OF FLORIDA #71909

DATE: 9/14/10  
 DATE: 9/14/10  
 DATE: 9/14/10

SHEET 38 OF 38

CHANGE LETTER	REVISION DESCRIPTION	DRP	DATE
			12/9/11
TITLE		PLT SCALE	DATE
EME6625D LOUVER ALTERNATE ATTACHMENT TABLES		NONE	
DWG. NO.		DATE	
60-021563-37D			