



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 ELF6375DXD Aluminum Louver

APPROVAL DOCUMENT: Drawing No. **60-022277-00B**, titled "ELF6375DXD Approval Drawings", sheets 1 through 25 of 25, dated 03/23/2012, with revision G dated 07/18/2022, prepared by Ruskin Company, signed and sealed by Jeffrey D. Smith, P.E. on 10/11/2022, 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 and Juarez Mexico, 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 the room, and the room will house water resistant/waterproof 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 # 22-0809.01** 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 **Sifang Zhao, P.E.**



S.Z.
02/01/2024

NOA No. 23-1116.09
Expiration Date: July 9, 2026
Approval Date: February 01, 2024
Page 1

Ruskin Company

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **60-022277-00B**, titled “ELF6375DXD Approval Drawings”, sheets 1 through 25 of 25, dated 03/23/2012, with revision G dated 07/18/2022, prepared by Ruskin Company, signed and sealed by Jeffrey D. Smith, P.E. on 10/11/2022.
“Submitted under NOA # 22-0809.01”

B. TESTS

1. Test report on Large Missile Impact Test per PA 201, Cyclic wind Pressure Test per PA 203 and Uniform Static Air Pressure Test per PA 202 of “Open, Extruded Aluminum Louver Assembly,” prepared by Construction Research Laboratory Inc., Report No. **97-1124.22**, dated 08/04/2000 and revised on 12/18/2000, signed and sealed by N. S. Balsara, P.E.
“Submitted under NOA # 01-0328.04”
2. 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 ELF6375DXD Aluminum Louvers", prepared by National Certified Testing Laboratories, Report No. **210-3780-1**, dated 03/26/2012, signed and sealed by Gerard J. Ferrara, P.E.
“Submitted under NOA # 12-0601.22”
3. 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 ELF6375DXD Aluminum Louvers", prepared by National Certified Testing Laboratories, Report No. **NCTL-210-4234-01**, dated 01/10/2022, signed and sealed by Douglas J. McDougall, P.E.
“Submitted under NOA # 22-0809.01”

C. CALCULATIONS

1. ELF6375DXD louver wind load review, prepared by Ruskin Company, dated 05/04/2016, signed and sealed by Daniel J. Rau, P.E.
“Submitted under NOA # 16-0519.10”
2. ELF6375DXD clip angle installation Dade County wind load review, prepared by Ruskin Company, dated 08/06/2010, signed and sealed by Daniel J. Rau, P.E.
“Submitted under NOA # 11-0408.05”
3. Louver wind load review prepared by Ruskin Company, dated 07/19/2022, signed and sealed by Jeffrey D. Smith, P.E. *“Submitted under NOA # 22-0809.01”*



Sifang Zhao, P.E.
Product Control Examiner
NOA No. 23-1116.09
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D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Distributor agreement dated 09/22/2016. ***“Submitted under NOA # 16-0519.10”***
2. Statement letter of code conformance to the 5th edition (2014) FBC issued by Ruskin Company, dated 05/04/2016, signed and sealed by Daniel J. Rau, P.E. ***“Submitted under NOA # 16-0519.10”***
3. Statement letter of code conformance to 2010 FBC and no financial interest, issued by Ruskin Company, dated 04/26/2012, signed and sealed by Daniel J. Rau, P.E. ***“Submitted under NOA # 12-0601.22”***
4. Statement letter of code conformance to the 6th edition (2017) FBC issued by Ruskin Company, dated 10/09/2017, signed and sealed by Daniel J. Rau, P.E. ***“Submitted under NOA # 17-1025.02”***
5. Statement letter of code conformance to **7th Edition (2020)** of the **FBC** and of no financial interest, prepared by Ruskin Company, dated 03/08/2022, signed and sealed by Jeffrey D. Smith, P.E. ***“Submitted under NOA # 22-0809.01”***
6. Statement letter of code conformance to the **8th Edition (2023)** of the FBC and of no financial interest, issued by Ruskin Company, dated 10/30/2023, signed and sealed by Jeffrey Devon Smith, P.E.

G. OTHER

1. This NOA **revises NOA # 22-0809.01** for the 8th edition (2023) of the FBC update.



Sifang Zhao, P.E.
Product Control Examiner
NOA No. 23-1116.09
Expiration Date: July 9, 2026
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PARTS LIST			
ITEM #	DESCRIPTION	MATERIAL	ALLOY
1	HEAD FRAME	0.080" THK. EXTRUDED ALUM.	6063-T6
2	SILL FRAME	0.125" THK. EXTRUDED ALUM.	6063-T6
3	JAMB FRAME	0.080" THK. EXTRUDED ALUM.	6063-T6
4	DRAINABLE BLADE	0.080" THK. EXTRUDED ALUM.	6063-T6
5	BLADE BRACE	0.100" THK. EXTRUDED ALUM.	6063-T6
6	BLADE/MULLION SUPPORT ATTACHMENT ANGLE	0.125" THK. EXTRUDED ALUM.	6063-T6
7	3/8-16 X 1.500" LG A307 GRADE A HHB W/ WASHER & LOCKNUT	ZINC PLATED	-

INSTALLATION PARTS			
ITEM #	DESCRIPTION	MATERIAL	ALLOY
8	ATTACHMENT CLIP ANGLE	0.250" THK EXTRUDED ALUM.	6063-T6
9	ALTERNATE CLIP ANGLE - FORMED	0.250" THK FORMED ALUM.	3003-H14
10	STRUCTURAL ATTACHMENT ANGLE, 18" LG.	0.500" THK A36 STL	-
11	ATTACHMENT ANGLE (CMU)	0.250" THK EXTRUDED ALUM.	6063-T6
12	SUPPORT ATTACHMENT PLATE	0.250" THK. A36 STL	-
13	SUPPORT ATTACHMENT PLATE (WOOD)	0.250" THK. A36 STL	-
14	SCREW #10-16 X 1.500" LG. HWH SDS	410SS/ZINC COATED	-
15	3/8-16 X 3.000" LG A307 GRADE A HHB W/ WASHER & LOCKNUT	ZINC PLATED	-
16	1/4-20 X 1.500" LG A307 GRADE A HHB W/ WASHER & LOCKNUT	ZINC PLATED	-
17	3/8-16 X 2.000" LG A307 GRADE A HHB W/ WASHER & LOCKNUT	ZINC PLATED	-
18	SUBSTRATE FASTENER (BY OTHERS)	VARIES (REF TABLE 1/08 , 2/17 , 3/22)	-

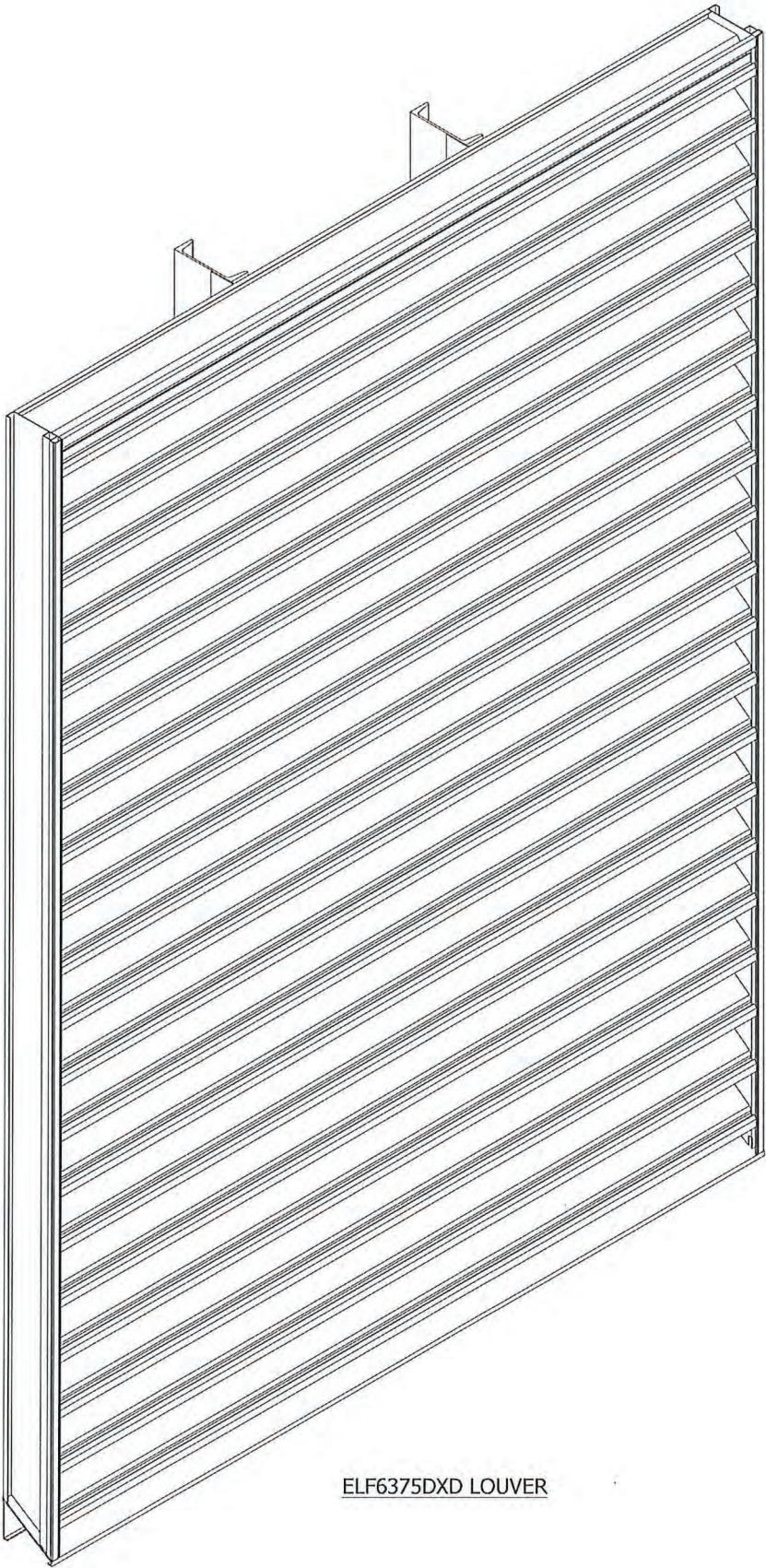
UNIVERSAL SLEEVE PARTS			
ITEM #	DESCRIPTION	MATERIAL	ALLOY
19	HEAD FRAME W/INTEGRAL FLANGE	0.125" THK. EXTRUDED ALUM.	6063-T6
20	SILL FRAME W/INTEGRAL FLANGE	0.125" THK. EXTRUDED ALUM.	6063-T6
21	JAMB FRAME W/INTEGRAL FLANGE	0.080" THK. EXTRUDED ALUM.	6063-T6
22	FRONT FLANGE UNIVERSAL SLEEVE	0.250" THK FORMED ALUM.	3003-H14
23	CONT. RETAINING ANGLE - HEAD/SILL/JAMBS	0.250" THK EXTRUDED ALUM.	6063-T6
24	CONT. RETAINING ANGLE - JAMBS	0.250" THK EXTRUDED ALUM.	6063-T6
25	US SUPPORT ATTACHMENT ANGLE, 5" LG.	0.250" THK EXTRUDED ALUM.	6063-T6
26	1/2-13 X 1.500" LG A307 GRADE A HHB W/ WASHER & LOCKNUT	ZINC PLATED	-
27	1/2-13 X 2.000" LG A307 GRADE A HHB W/ WASHER & LOCKNUT	ZINC PLATED	-
28	SCREW 1/4-20 X 1.000" LG. HWH SDS	410SS/ZINC COATED	-

H.V.B.S. / MULLION SUPPORTS OPTIONS BASED ON SECTION HEIGHT

ITEM #	DESCRIPTION	LOUVER HEIGHT RANGE	MATERIAL	ALLOY
29	ANG 2 X 2 X .25	UP TO 27" TALL	A36 STEEL	-
30	CHAN C3 X 4.1	GREATER THAN 27" TO 74"	A36 STEEL	-
31	CHAN C4 X 5.4	GREATER THAN 74" TO 86"	A36 STEEL	-
32	CHAN C5 X 6.7	GREATER THAN 86" TO 99"	A36 STEEL	-
33	CHAN C6 X 8.2	GREATER THAN 99" TO 111"	A36 STEEL	-
34	CHAN C7 X 9.8	GREATER THAN 111" TO 119.75"	A36 STEEL	-

NOTES

- THE ELF6375DXD 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 ± **148 PSF OR LESS**.
- THIS LOUVER SYSTEM IS NON-BEARING AND IS NOT DESIGNED TO WITHSTAND BUILDING DEAD LOADS.
- IT SHALL BE 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 IS **87 7/8" WIDE X 119 3/4" HIGH**.
- MAXIMUM ASSEMBLED LOUVER SIZE : **UNLIMITED WIDE X 119 3/4" HIGH**.
MAXIMUM MULLION SPACING IS **87 7/8"**.
- SECTIONS OR ASSSEMBLIES 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 LOCATIONS 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.
- ALL CMU BLOCKS MUST BE GROUT FILLED. MIN. PRISM STRENGTH OF 1500 PSI AT TIME OF INSTALLATION. CMU BLOCKS MUST BE MIN. TYPE 1, GRADE N, LIGHT, MEDIUM OR NORMAL WEIGHT PER ASTM C90. GROUT AND MORTAR MUST COMPLY WITH FLORIDA BUILDING CODE.
- PART NUMBERS WITH SQUARE BALLOONS ARE "**SHIP LOOSE PARTS**".
- ALL FASTENERS SHALL BE CORROSION RESISTANT.



ELF6375DXD LOUVER



JEFFREY DEVON SMITH,
P.E.
NO. 91182

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.09

Expiration Date 07/09/2026


By 
Miami-Dade Product Control

ABBREVIATIONS:

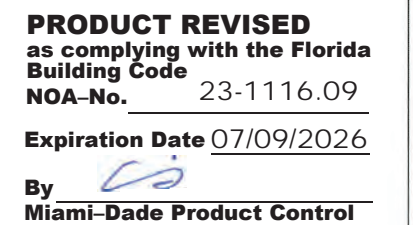
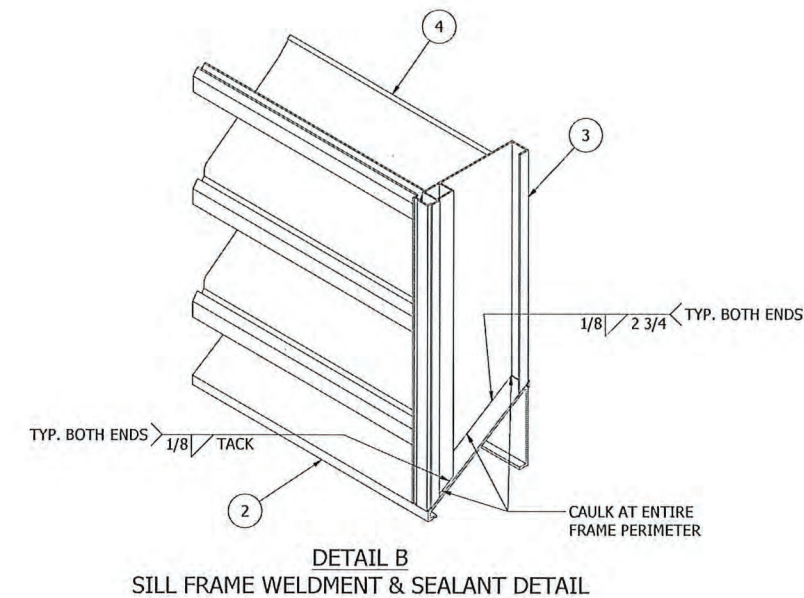
CONT. - CONTINUOUS
C-C - CENTER TO CENTER
D - SUBSTRATE DEPTH
DIM. - DIMENSION
FLG. - FLANGE
HDG - HOT DIPPED GALVANIZED
H.V.B.S. - HIDDEN VERTICLE BLADE SUPPORT
H.H.B.S. - HIDDEN HORIZONTAL BLADE SUPPORT
HWH - HEX WASHER HEAD
L.D. - LOUVER DIMENSION
MAX. - MAXIMUM
MIN. - MINIMUM
NOM. - NOMINAL
N.T.E. - NOT TO EXCEED
N.T.S. - NOT TO SCALE
O/C - ON CENTER
OPP. - OPPOSITE
R.O. - ROUGH OPENING
REF. - REFERENCE
S.S. - SHIP SECTION
S.S.D. - SHIP SECTION DIMENSION
S.D.S. - SELF DRILLING SCREW
SIM. - SIMILAR
STL - STEEL
SUB. - SUBSTRATE
TYP. - TYPICAL
U.N.O. - UNLESS NOTED OTHERWISE


DRAWING SHEET INDEX:

SHEET 01 - NOTES, PARTS LIST, DRAWING INDEX, ISO VIEW
SHEET 02 - ASSEMBLY "A" - BASIC ASSEMBLY & WELDMENT DETAILS
SHEET 03 - ASSEMBLY "A" - MULTI-SECTION 3X1
SHEET 04 - ASSEMBLY "A" - METAL & CONCRETE INSTALL
SHEET 05 - ASSEMBLY "A" - CMU INSTALL
SHEET 06 - ASSEMBLY "A" - UNIVERSAL SLEEVE INSTALL
SHEET 07 - ASSEMBLY "A" - INSTALLATION DETAILS @ JAMB
SHEET 08 - ASSEMBLY "A" - WOOD INSTALL, SUBSTRATE FASTENER TABLE
SHEET 09 - PARTS (ITEMS 1 THRU 6, 8 & 9)
SHEET 10 - PARTS (ITEMS 10 THRU 13, 19 THRU 21)
SHEET 11 - PARTS (ITEMS 22), SUPPPORT ATTACHMENT PLATE - WELDMENT DETAIL
SHEET 12 - PARTS (ITEMS 23 THRU 25, 29 THRU 34)
SHEET 13 - NOTES, PARTS LIST, DRAWING INDEX, ISO VIEW-100PSF
SHEET 14 - ASSEMBLY "B" - BASIC ASSEMBLY-100PSF (JAMB ONLY ATTACHMENT)
SHEET 15 - ASSEMBLY "B" - MULTI SECTIONS_96X60 (JAMB ONLY ATTACHMENT)
SHEET 16 - ASSEMBLY "B" - CMU/NON CMU INSTALL
SHEET 17 - ASSEMBLY "B" - UNIVERSAL SLEEVE INSTALL
SHEET 18 - ASSEMBLY "C" - BASIC ASSEMBLY-100 PSF (PERIMETER ATTACHMENT_ 120X90)
SHEET 19 - ASSEMBLY "C" - MULTI SECTIONS_120X90
SHEET 20 - ASSEMBLY "C" - CMU/NON CMU INSTALL
SHEET 21 - ASSEMBLY "C" - UNIVERSAL SLEEVE INSTAL
SHEET 22 - ASSEMBLY "C" - UNIVERSAL SLEEVE AND CMU/NON-CMU INSTALL
SHEET 23 - PARTS (ITEMS 35 THRU 39, 41 THRU 44)
SHEET 24 - PARTS (ITEMS 45 THRU 48, 51)
SHEET 25 - PARTS (ITEMS 50 THRU 60)

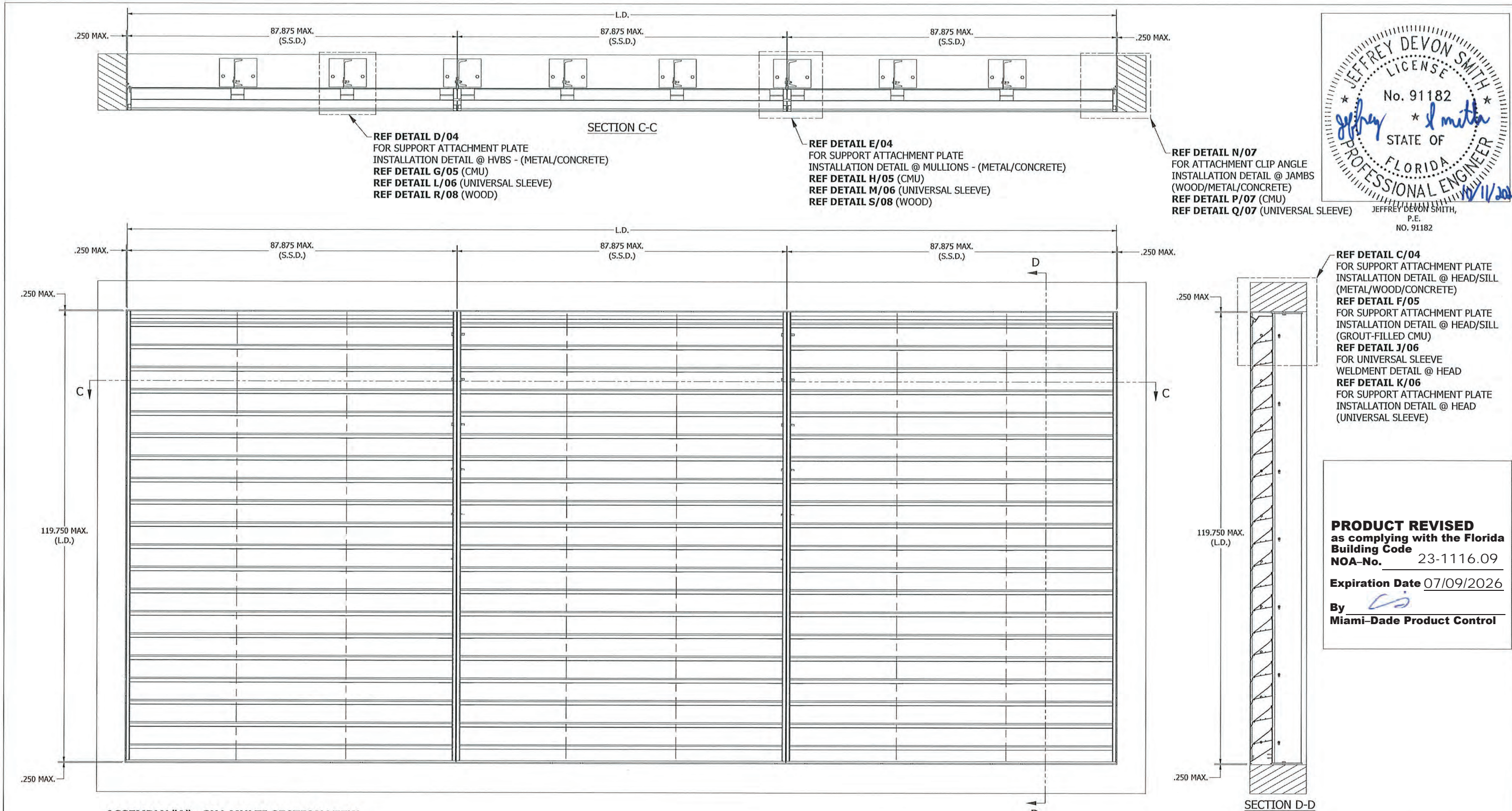
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F	REV'D FOR 100 PSF WINDLOAD		RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.		NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION		BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012	 3900 Doctor Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL				
CHECKED	DRP	3/23/2012					
APPROVED	DRP	3/23/2012					
APPROVED							
MATERIAL		PRODUCT ELF6375DXD					
		TITLE NOTES, PARTS LIST, DRAWING INDEX					
		SIZE D	DWG NO 60-022277-00B				REV G
ECN	12011	7/8/2022	SCALE NONE	INVENTOR		SHEET 1 of 25	

UNLESS OTHERWISE SPECIFIED, USE STD.
ENGINEERING TOLERANCES PER WIQ-007



G	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012	 RUSKIN 3900 Doctor Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL			
CHECKED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
APPROVED						
MATERIAL						
PRODUCT		ELF6375DXD				
TITLE		ASSEMBLY "A" - BASIC ASSEMBLY & DETAILS				
SIZE D		DWG NO			REV G	
		60-022277-00B				
ECH	12011	7/8/2022	SCALE		NONE	
		INVENTOR		SHEET 2 of 25		

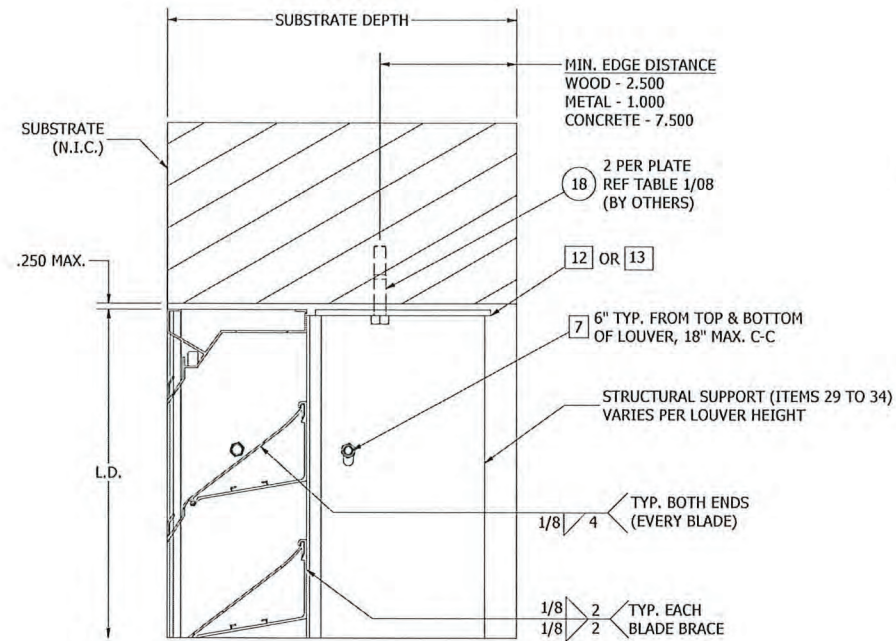
UNLESS OTHERWISE SPECIFIED, USE STD.
ENGINEERING TOLERANCES PER WIQ-007



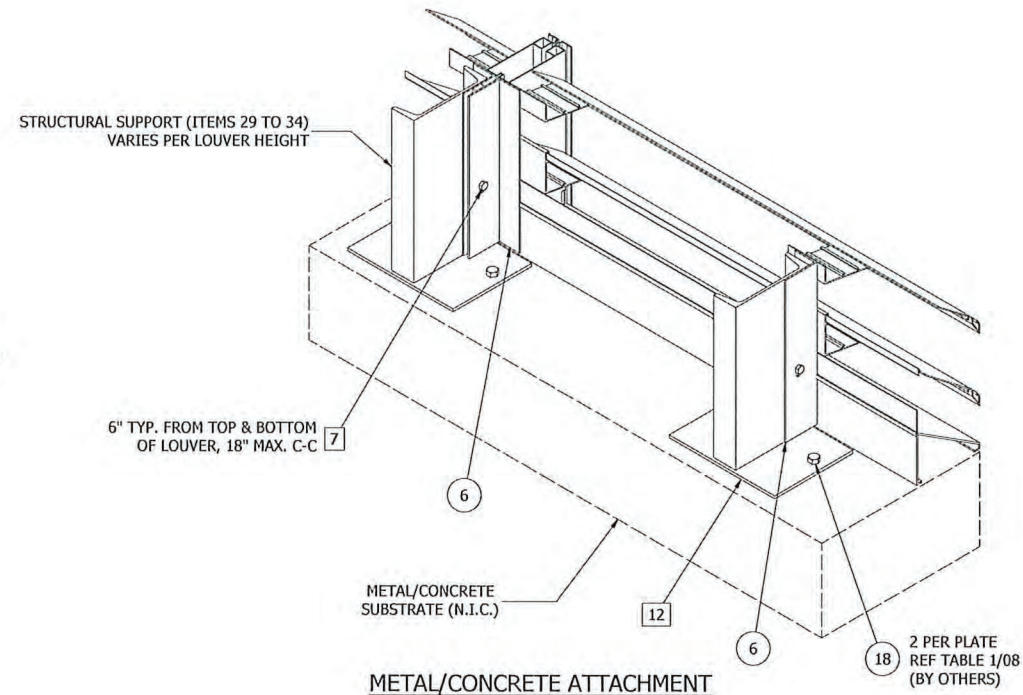
ASSEMBLY "A" - 3X1 MULTI SECTION VIEW
MAX. SHIP SECTION : 87.875" W X 119 3/4" H

UNLESS OTHERWISE SPECIFIED, USE STD.
ENGINEERING TOLERANCES PER WIQ-007

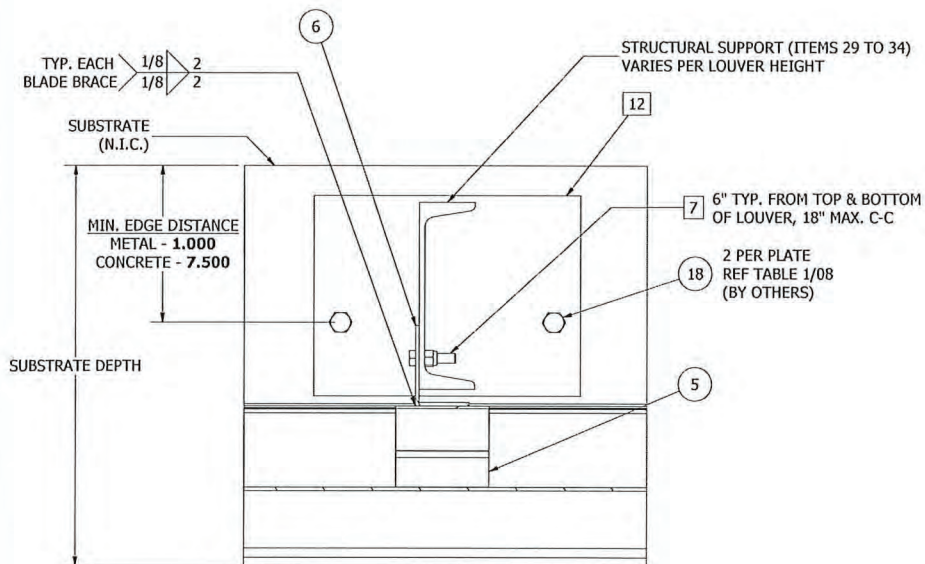
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F	REV'D FOR 100 PSF WINDLOAD	RV	JDS	VMA	JDS	04/14/22
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR 2/17/2012					
CHECKED	DRP 3/23/2012					
APPROVED	DRP 3/23/2012					
APPROVED						
MATERIAL						
PRODUCT	ELF6375DXD					
TITLE	ELF6375DXD - ASSEMBLY "A"					
SIZE	D	DWG NO	60-022277-00B	REV	G	
SCALE	NONE	INVENTOR		SHEET	3 OF 25	



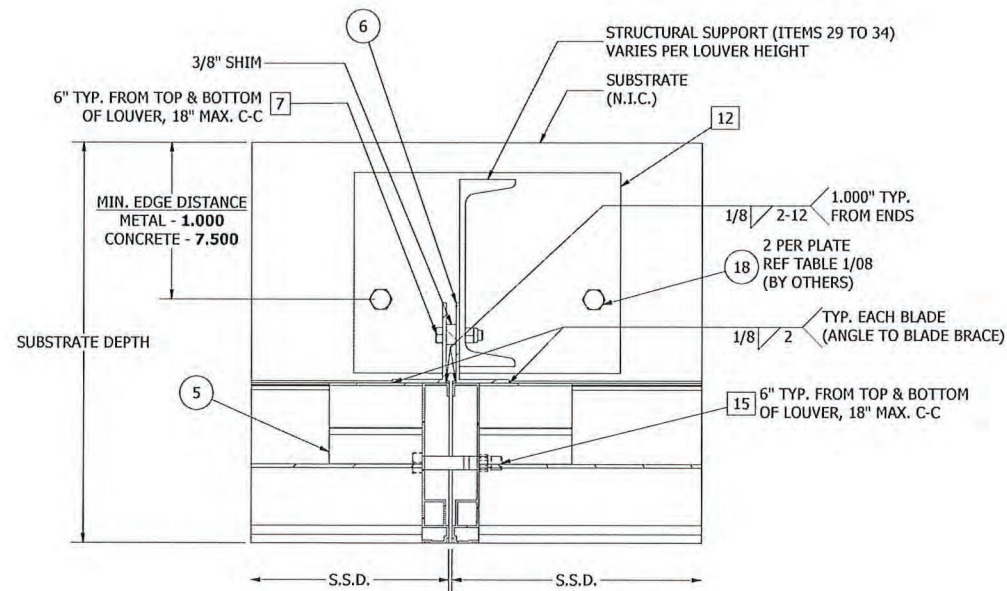
DETAIL C
SUPPORT ATTACHMENT PLATE INSTALLATION DETAIL @ HEAD (SILL SIM.)
(WOOD, METAL & CONCRETE SUBSTRATE ONLY)



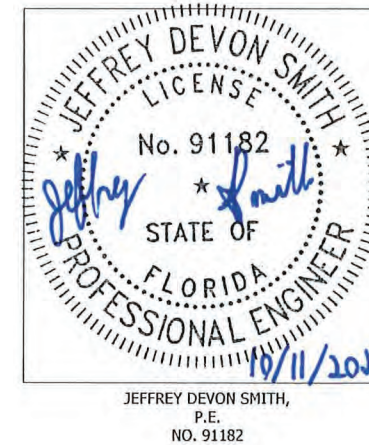
METAL/CONCRETE ATTACHMENT



DETAIL D
SUPPORT ATTACHMENT PLATE INSTALLATION DETAIL @ HVBS
(METAL & CONCRETE SUBSTRATE ONLY)



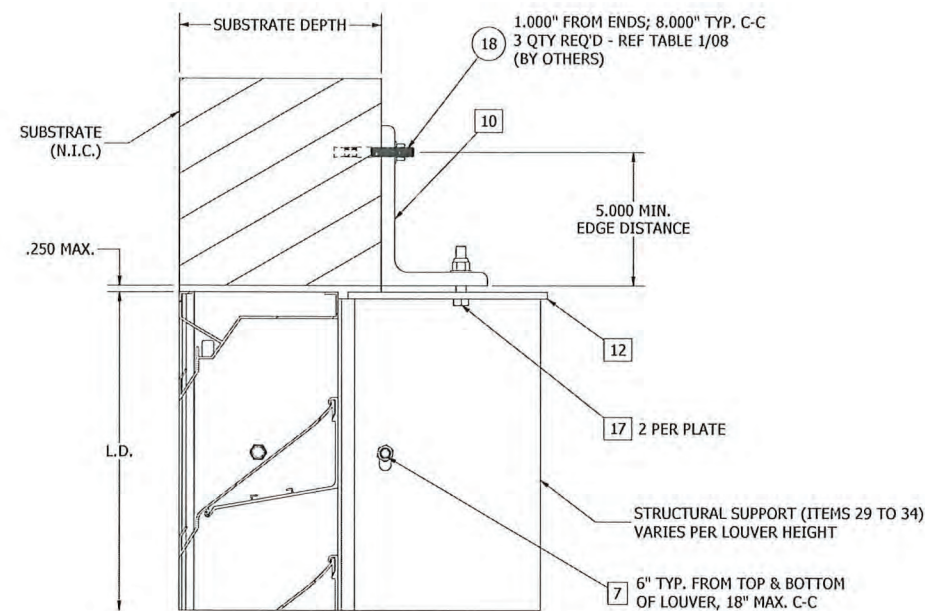
DETAIL E
SUPPORT ATTACHMENT PLATE INSTALLATION DETAIL @ MULLIONS
(METAL & CONCRETE SUBSTRATE ONLY)



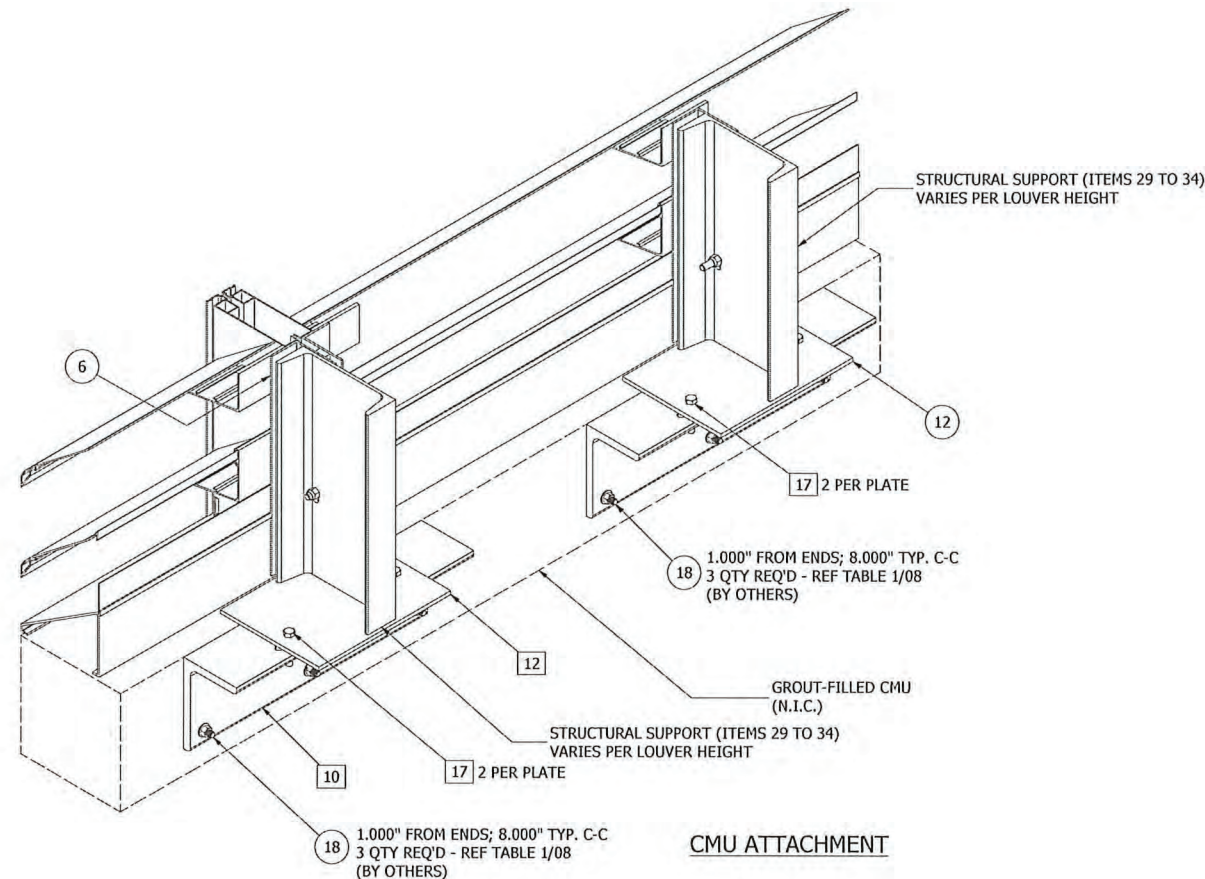
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.09
Expiration Date 07/09/2026
By *[Signature]*
Miami-Dade Product Control

G	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	VMA	JDS	07/18/22
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E	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012				
CHECKED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
APPROVED						
MATERIAL						
RUSKIN AUTHORITY IN AIR CONTROL 3900 Doctor Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL						
PRODUCT ELF6375DXD						
TITLE ASSEMBLY "A" (METAL, CONCRETE INSTALL)						
SIZE	D	DWG NO	60-022277-00B	REV	G	
SCALE	NONE	INVENTOR		SHEET	4	OF 25
ECN	12011	7/8/2022				

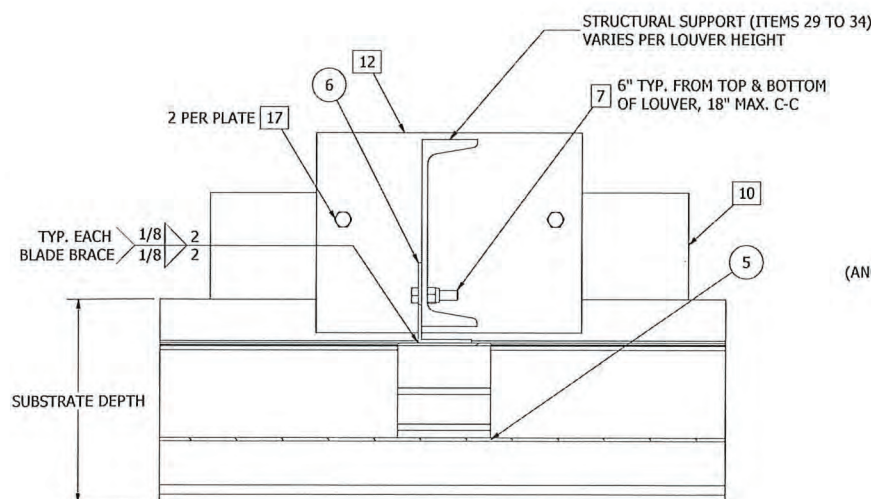
UNLESS OTHERWISE SPECIFIED, USE STD.
ENGINEERING TOLERANCES PER WIQ-007



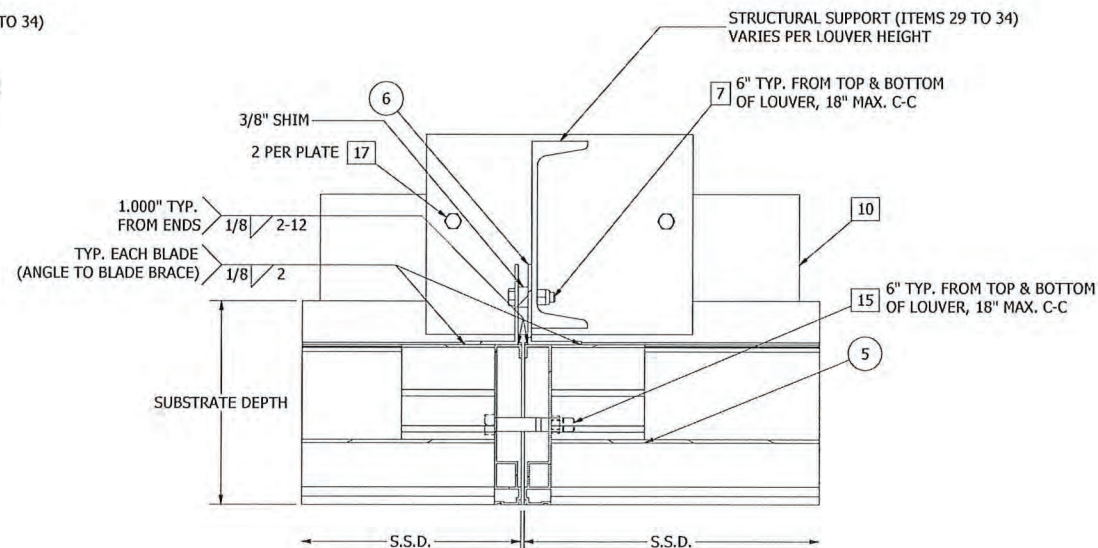
DETAIL F
SUPPORT ATTACHMENT PLATE INSTALLATION DETAIL @ HEAD (SILL SIM.)
(GROUT-FILLED CMU)



CMU ATTACHMENT



DETAIL G
SUPPORT ATTACHMENT PLATE INSTALLATION DETAIL @ HVBS
(GROUT-FILLED CMU)

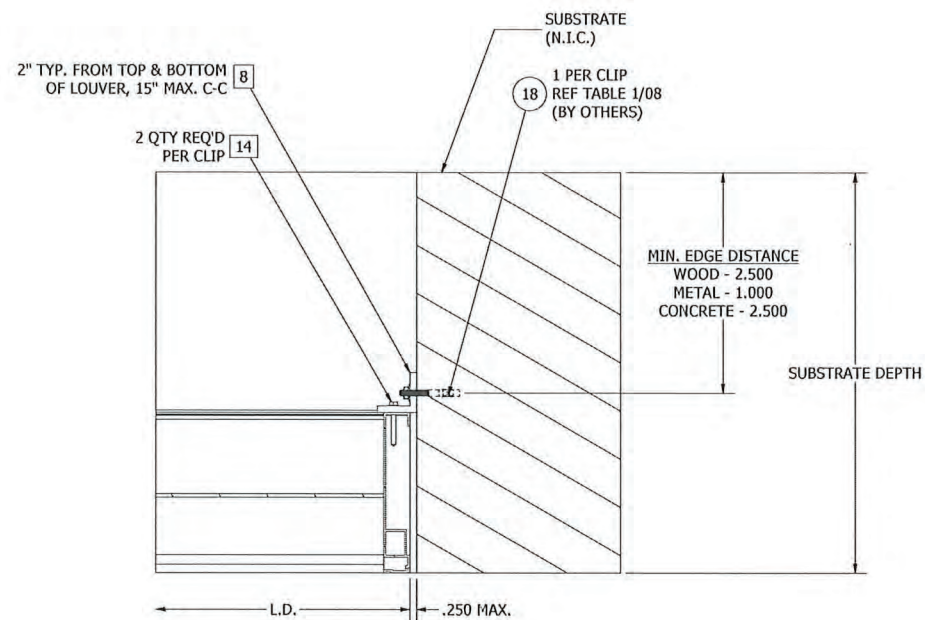


DETAIL H
SUPPORT ATTACHMENT PLATE INSTALLATION DETAIL @ MULLIONS
(GROUT-FILLED CMU)

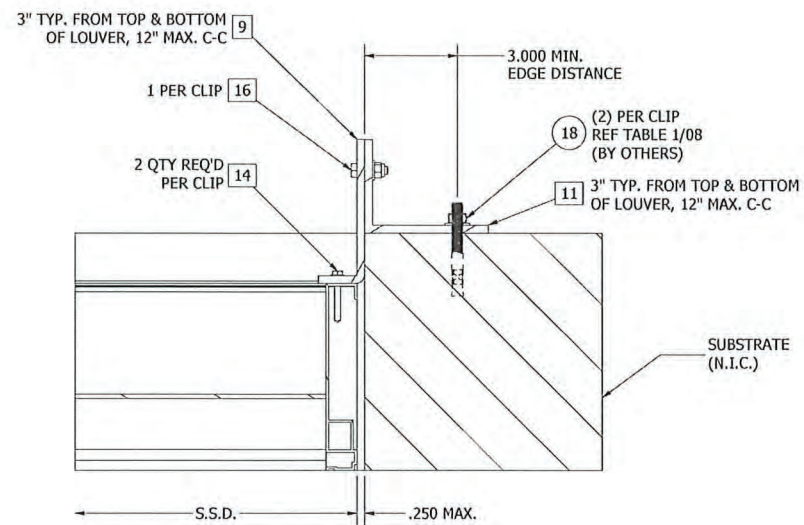


G	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012				
CHECKED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
APPROVED						
MATERIAL						
RUSKIN AUTHORITY IN AIR CONTROL 3900 Doctor Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL						
PRODUCT ELF6375DXD TITLE ASSEMBLY "A" - CMU INSTALL SIZE D DWG NO 60-022277-00B SCALE NONE INVENTOR SHEET 5 OF 25						
ECN	12011	7/8/2022				

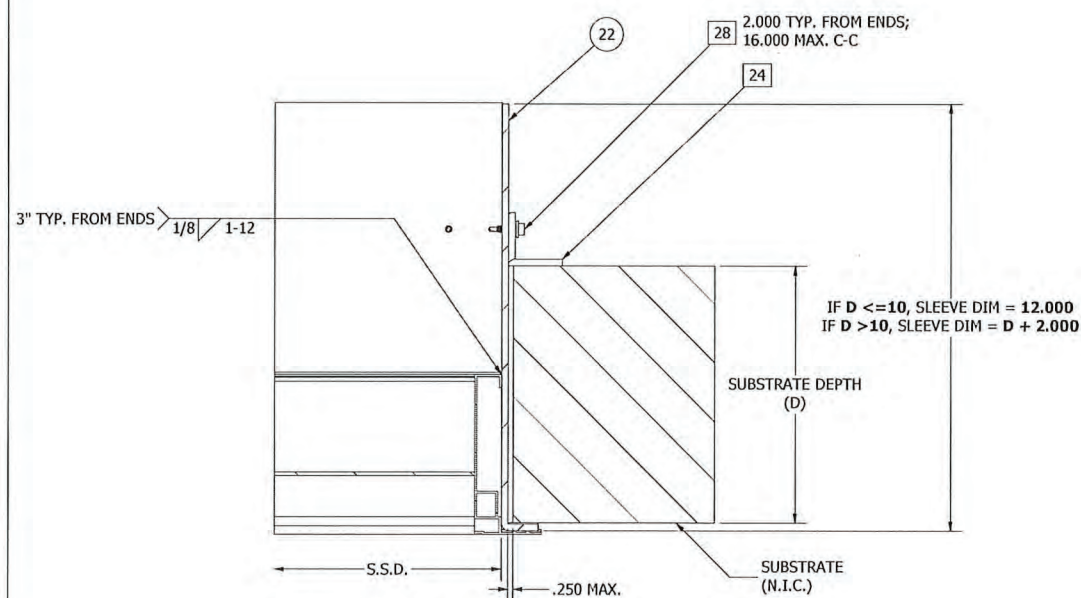
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ENGINEERING TOLERANCES PER WIQ-007



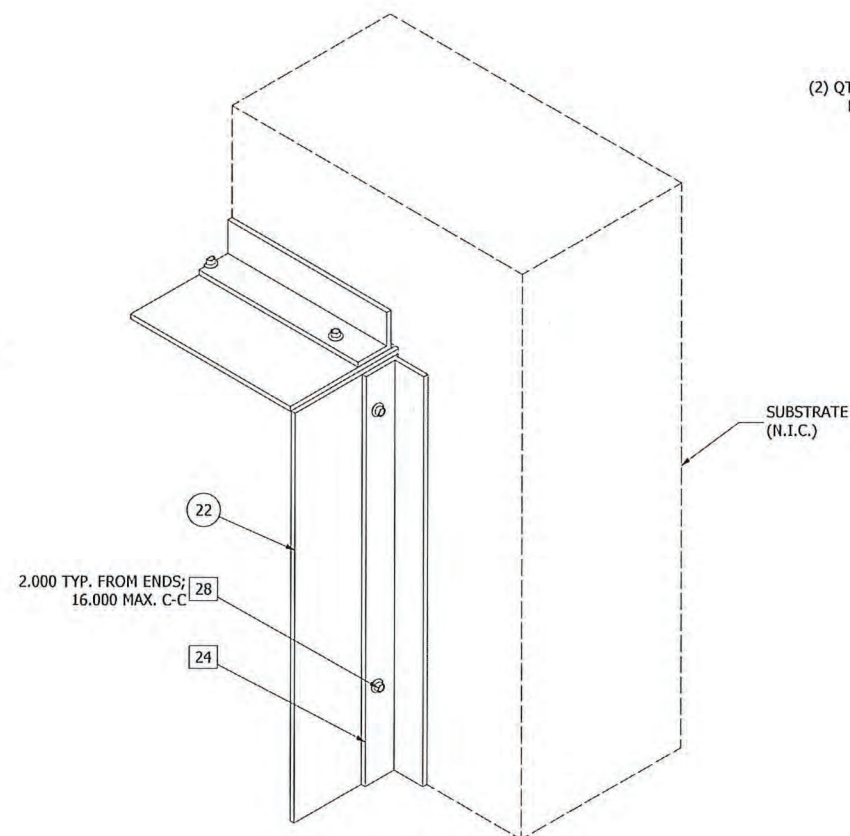
DETAIL N
ATTACHMENT CLIP ANGLE INSTALLATION @ JAMB FRAME
(WOOD, METAL & CONCRETE SUBSTRATE ONLY)



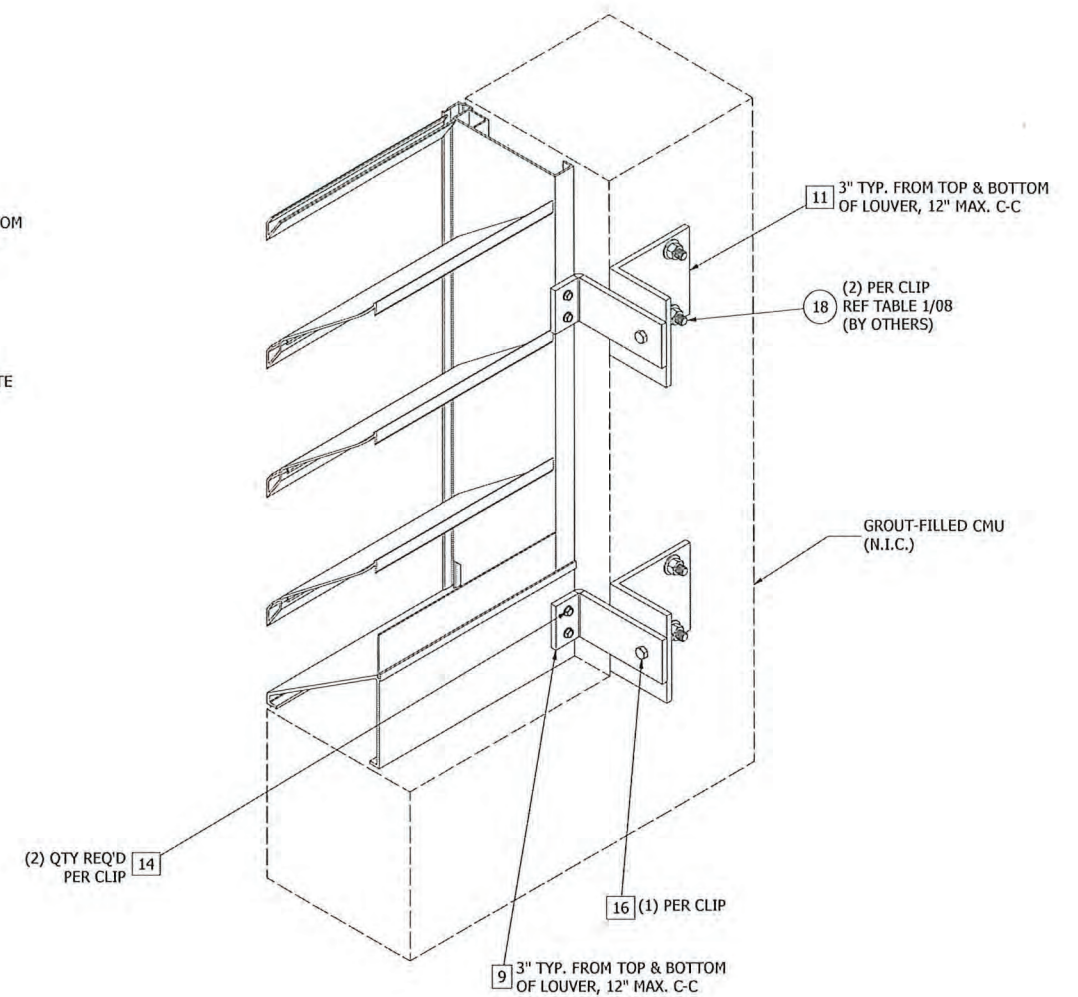
DETAIL P
ATTACHMENT CLIP ANGLE INSTALLATION @ JAMB FRAME
(GROUT-FILLED CMU)



DETAIL Q
UNIVERSAL SLEEVE WELDMENT/CONNECTION DETAIL
(JAMBS)



UNIVERSAL SLEEVE ATTACHMENT



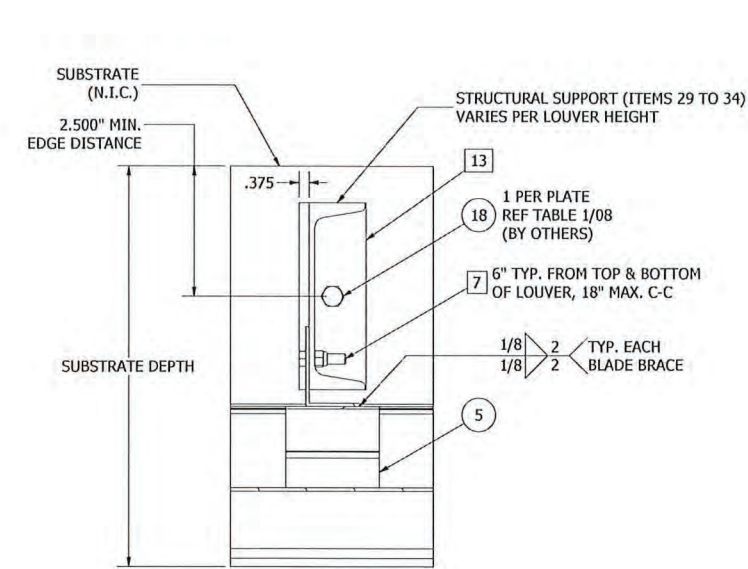
CMU ATTACHMENT

JEFFREY DEVON SMITH,
P.E.
NO. 91182

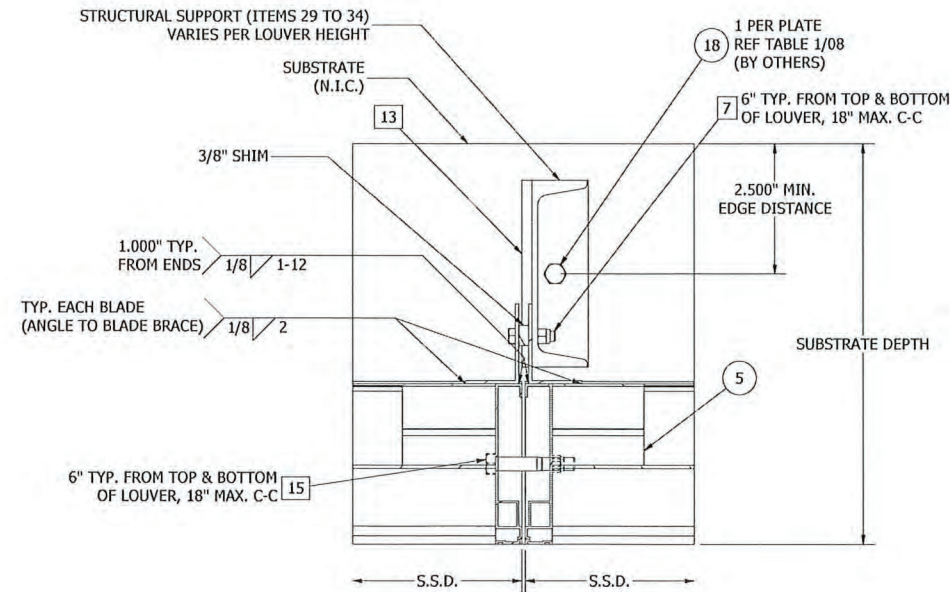
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.09
Expiration Date 07/09/2026
By *[Signature]*
Miami-Dade Product Control

G	REV'D ENGINEER OF RECORD, UPDATED INFO.		NS	JDS	VMA	JDS	07/18/22	
F	REV'D FOR 100 PSF WINDLOAD		RVT	JDS	VMA	JDS	04/14/22	
REV	DESCRIPTION		BY	CHK	APVD	APVD	DATE	
AUTHOR	DJR	2/17/2012	 RUSKIN AUTHORITY IN AIR CONTROL					3900 Doctor Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL
CHECKED	DRP	3/23/2012						
APPROVED	DRP	3/23/2012						
APPROVED								
MATERIAL			PRODUCT		ELF6375DXD			
			TITLE					
			BASIC INSTALLATION DETAILS @ JAMB FRAME					
			SIZE D		DWG NO		REV G	
					60-022277-00B			
ECN	12011	7/8/2022	SCALE NONE		INVENTOR		SHEET 7 OF 25	

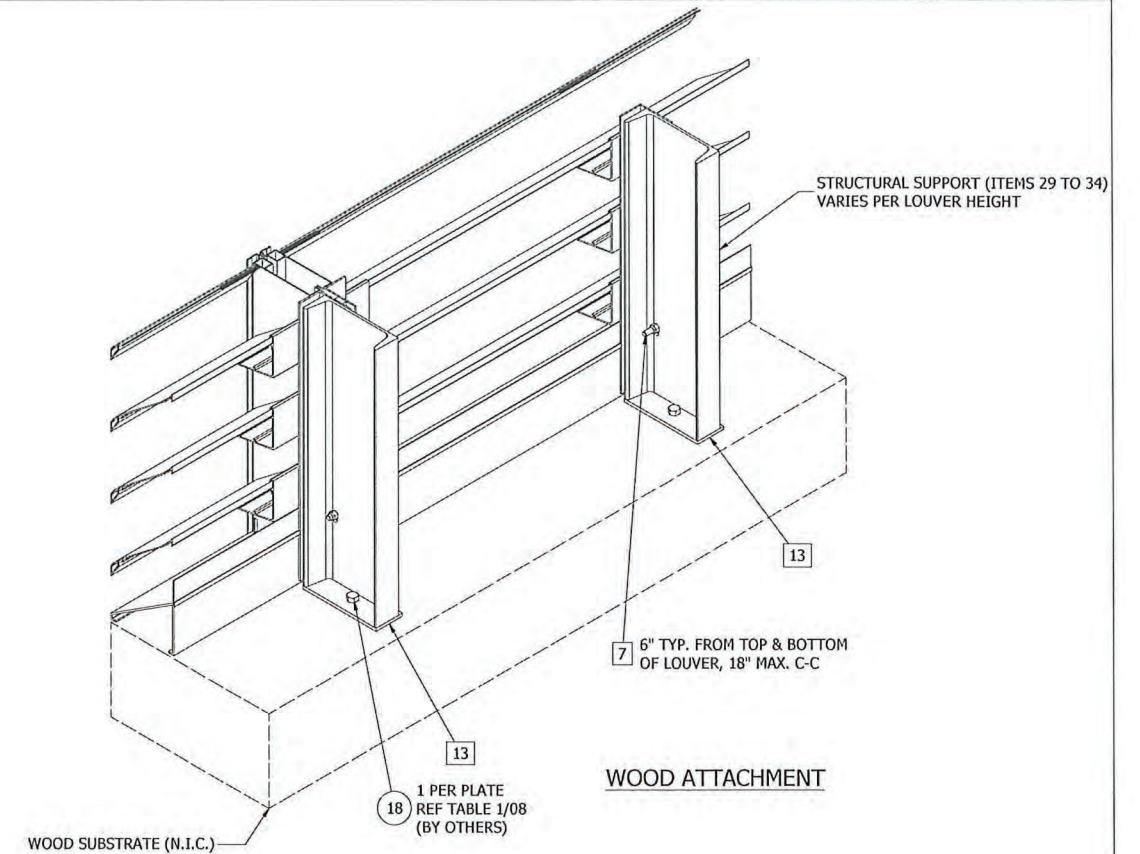
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DETAIL R
SUPPORT ATTACHMENT PLATE INSTALLATION DETAIL @ HVBS
(WOOD SUBSTRATE ONLY)



DETAIL S
SUPPORT ATTACHMENT PLATE INSTALLATION DETAIL @ MULLIONS
(WOOD SUBSTRATE ONLY)



WOOD ATTACHMENT

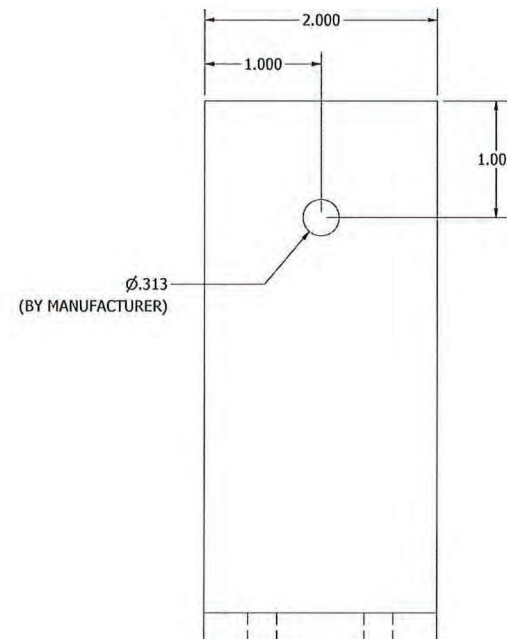
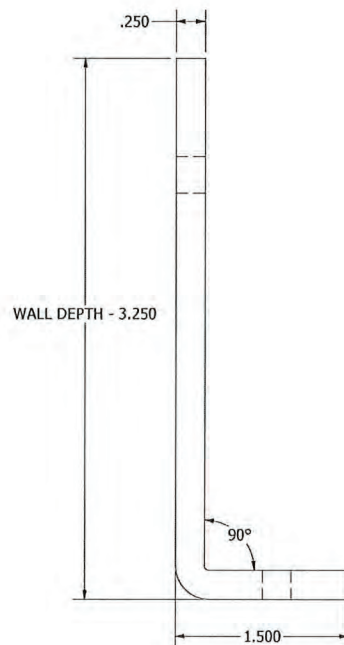
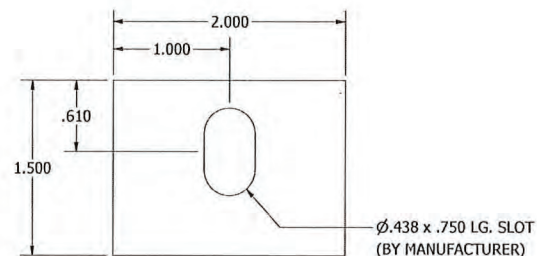
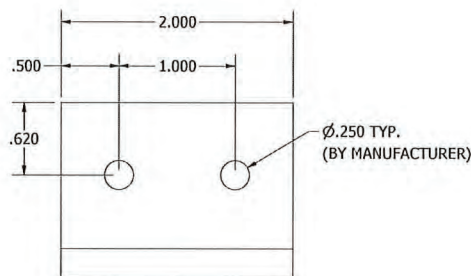
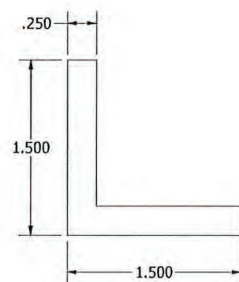
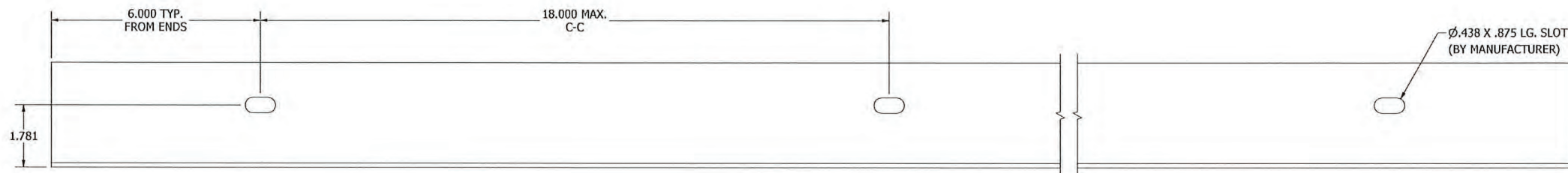
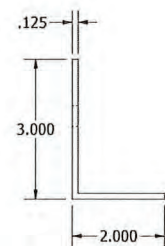
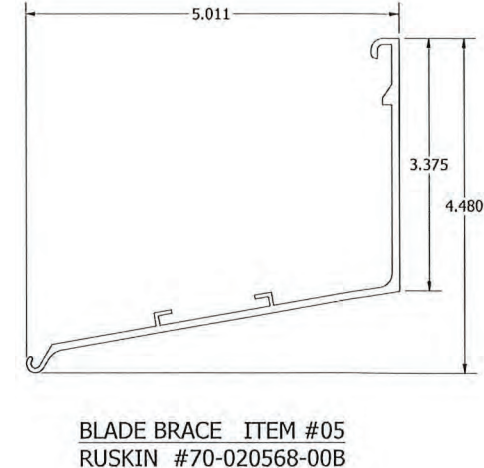
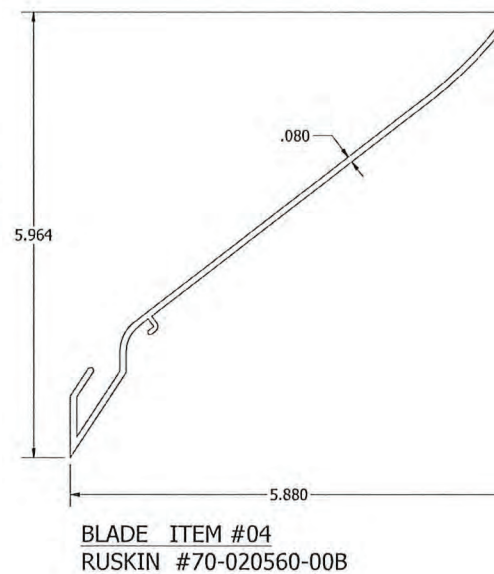
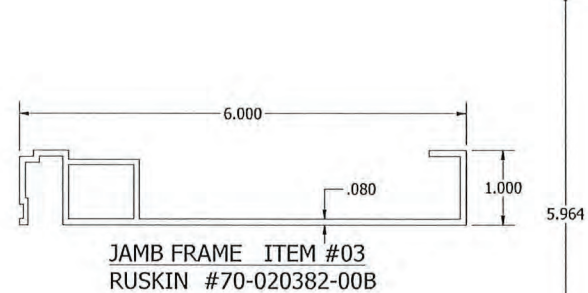
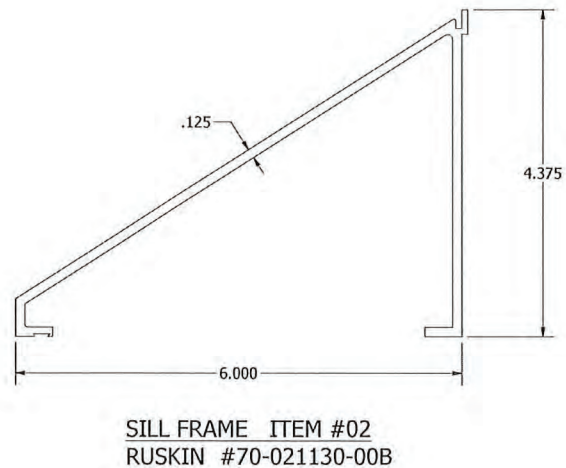
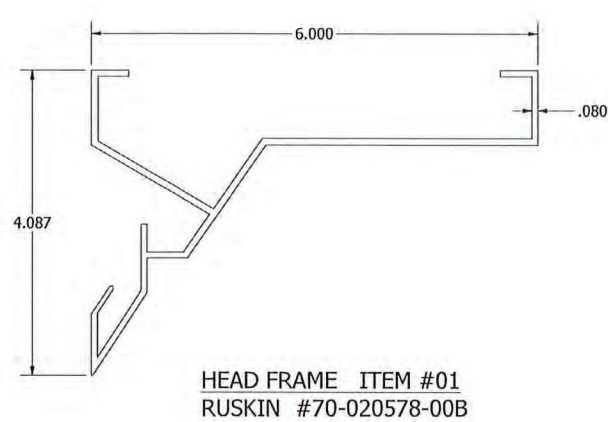
TABLE 01 - ELF6375DXD - WALL FASTENER TABLE (N.I.C.)

SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	LOCATION	FASTENER TYPE	MIN. EMBEDMENT	MIN. EDGE DISTANCE
WOOD	SPECIFIC GRAVITY = 0.4	JAMB	1/4" Ø BOLT, WASHER & LOCKNUT	NA	2 1/2"
		END PLATE	1/2" Ø A307 BOLT, WASHER & LOCKNUT	NA	2 1/2"
STEEL & ALUMINUM	STEEL - MIN. 14 GA ALUM. - MIN. 1/8" THICK	JAMB	1/4" Ø A307 BOLT OR TEK SCREW	NA	1"
		END PLATE	3/8" Ø A307 BOLT, LOCKNUT & WASHER	NA	1"
CONCRETE	3000 MIN. COMPRESSIVE STRENGTH	JAMB	1/4" Ø X 2 1/4" HILTI KWIK CON II+ W WASHER	1 3/4"	2 1/2"
		END PLATE	3/8" Ø HILTI KWIK BOLT TZ EXPANSION ANCHORS	2 1/2"	7 1/2"
GROUT FILLED CMU	ASTM C-90 BLOCK, 1500 PSI GROUT COMP. STRENGTH.	JAMB	1/4" Ø X 1 1/4" HILTI KWIK CON II+ (2) PER CLIP	1"	3"
		END PLATE	3/8" Ø HILTI KWIK BOLT III EXPANSION ANCHORS	2 1/2"	5"

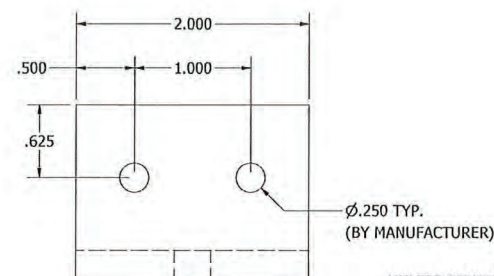


G	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012				
CHECKED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
APPROVED						
MATERIAL						
PRODUCT		ELF6375DXD				
TITLE		ASSEMBLY "A" (WOOD INSTALL), WALL FASTENER TABLE				
SIZE	D	DWG NO	60-022277-00B		REV	G
SCALE	12011	7/8/2022	NONE	INVENTOR	SHEET 8 OF 25	

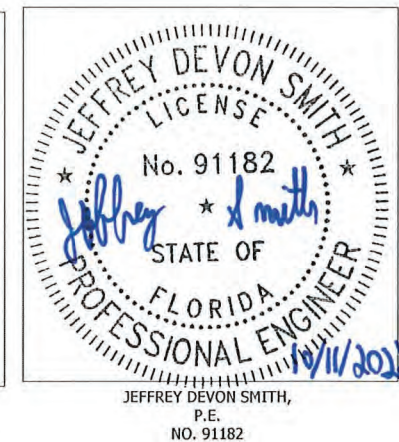
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ATTACHMENT CLIP ANGLE - FORMED ITEM #9
RUSKIN #85-022236-00B
(6, 8, 10 & 12 IN GROUT-FILLED CMU)

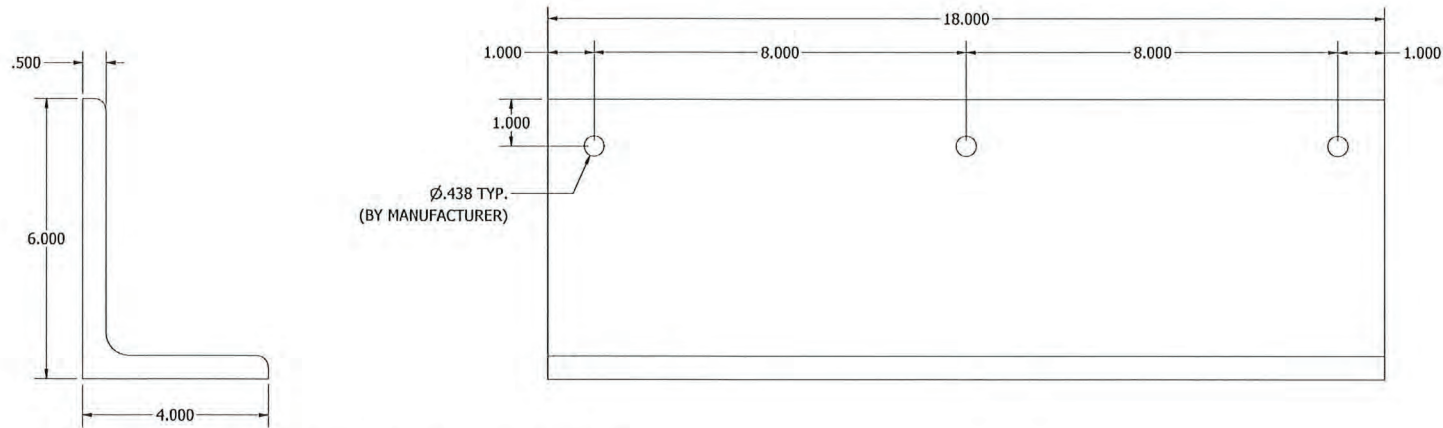


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NOA-No. 23-1116.09
Expiration Date 07/09/2026
By *[Signature]*
Miami-Dade Product Control

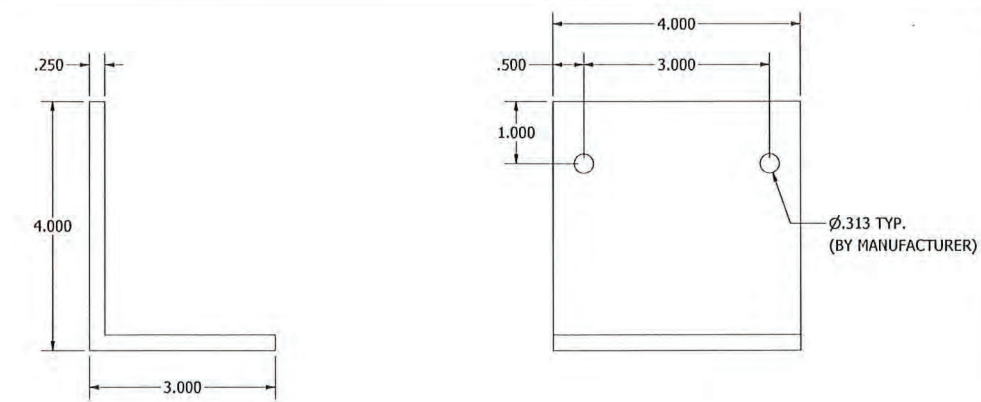


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F	REV'D FOR 100 PSF WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012				
CHECKED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
APPROVED						
MATERIAL						
PRODUCT		ELF6375DXD				
TITLE		ELF6375DXD - PARTS				
SIZE	D	DWG NO	60-022277-00B		REV	G
ECH	12011	7/8/2022	SCALE	NONE	INVENTOR	SHEET 9 OF 25

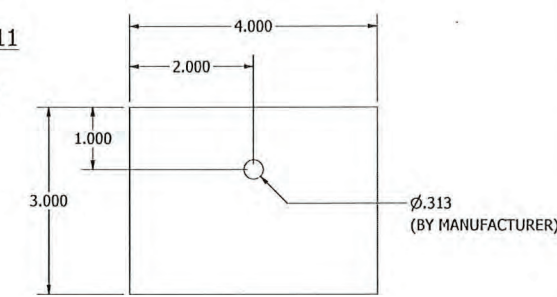
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STRUCTURAL ATTACHMENT ANGLE, 18" LG. ITEM #10
 RUSKIN #85-022234-00B
 (6, 8, 10 & 12 IN GROUT-FILLED CMU)

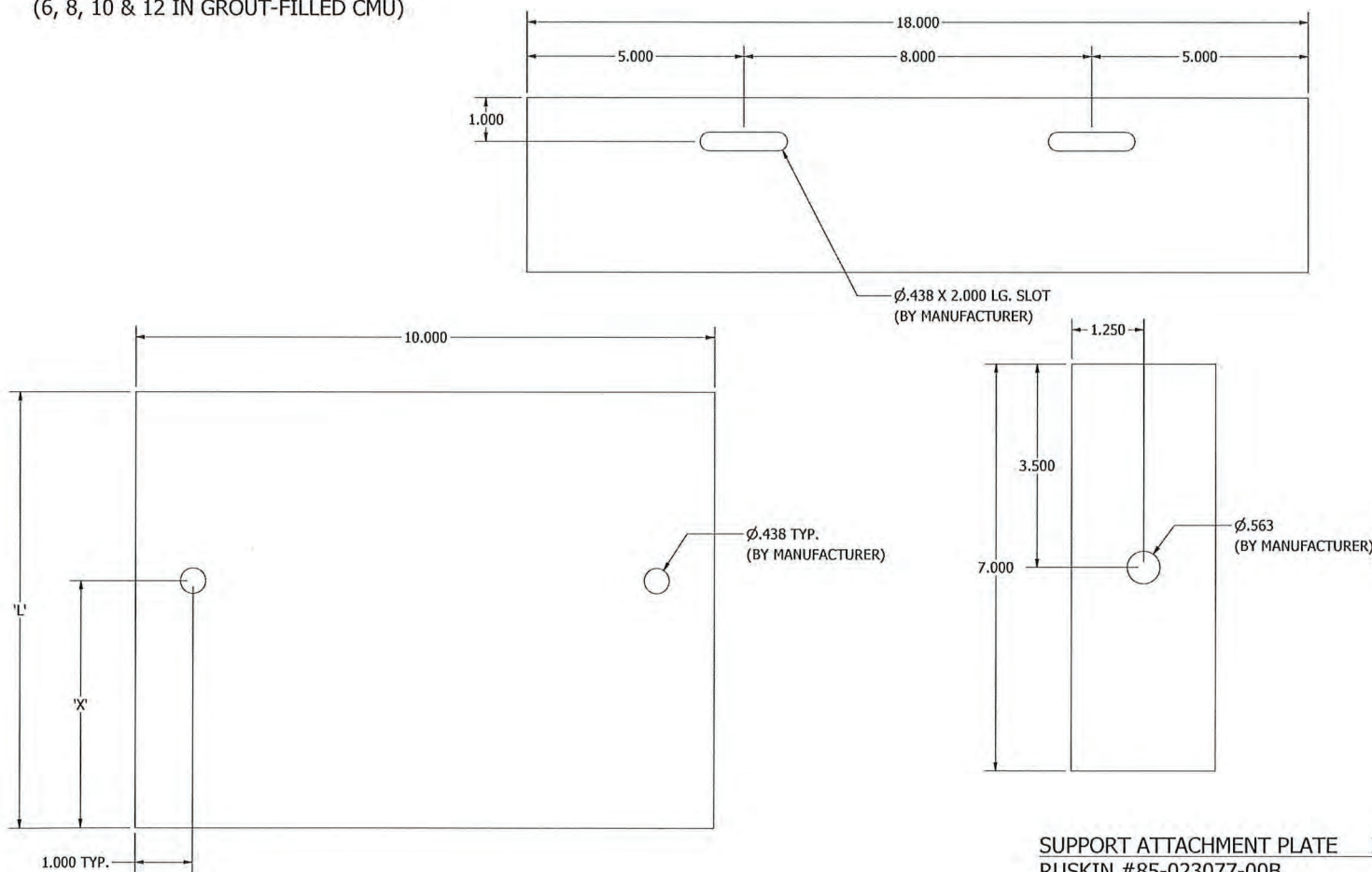


ATTACHMENT ANGLE (CMU) ITEM #11
 RUSKIN #85-022130-00B
 (6, 8, 10 & 12 IN GROUT-FILLED CMU)



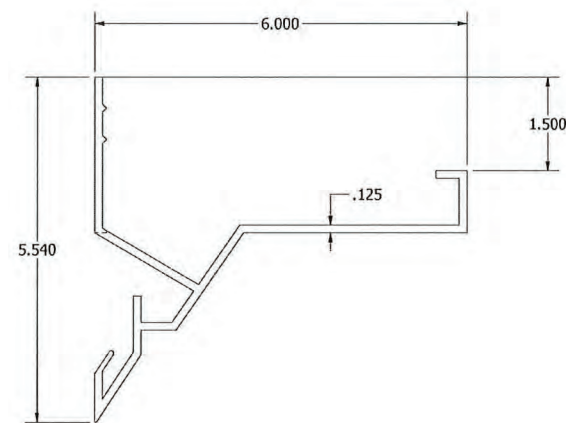
PRODUCT REVISED
 as complying with the Florida
 Building Code
NOA-No. 23-1116.09
Expiration Date 07/09/2026
 By *[Signature]*
Miami-Dade Product Control

JEFFREY DEVON SMITH
 LICENSE
 No. 91182
 STATE OF
 FLORIDA
 PROFESSIONAL ENGINEER
[Signature]
 10/11/2022
 JEFFREY DEVON SMITH,
 P.E.
 NO. 91182

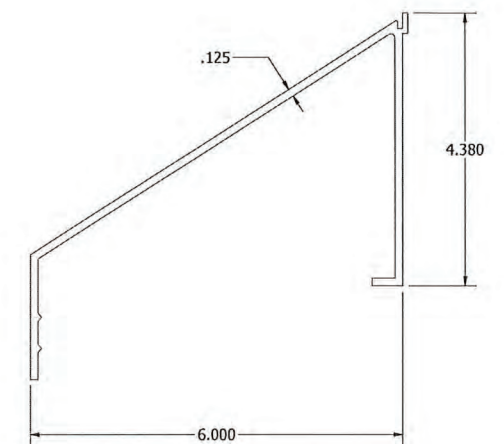


SUPPORT ATTACHMENT PLATE ITEM #12
 RUSKIN #85-022233-00B
 (METAL/CONCRETE/GROUT-FILLED CMU)

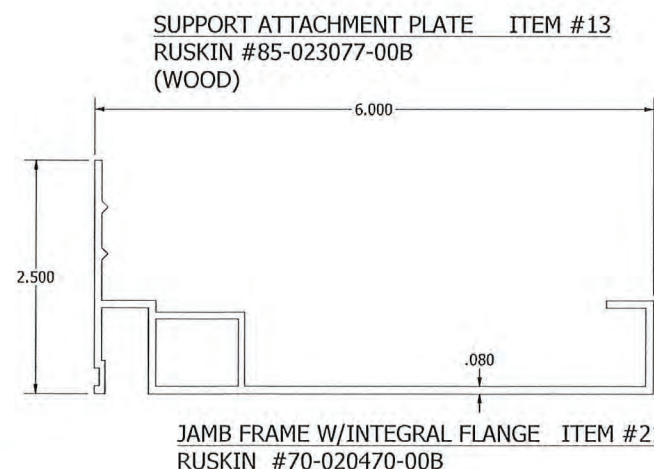
SUPPORT ATTACHMENT PLATE DIMENSION TABLE		
WALL TYPE	'L'	'X'
METAL/CONCRETE	7.500	2.750
6" CMU	7.500	2.250
8" CMU	7.500	4.250
10" CMU	7.500	6.250
12" CMU	9.500	8.250



HEAD FRAME W/INTEGRAL FLANGE ITEM #19
 RUSKIN #70-020838-00B



SILL FRAME W/INTEGRAL FLANGE ITEM #20
 RUSKIN #70-021129-00B

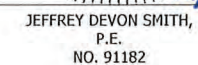


JAMB FRAME W/INTEGRAL FLANGE ITEM #21
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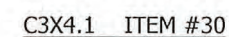
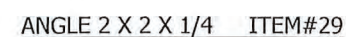
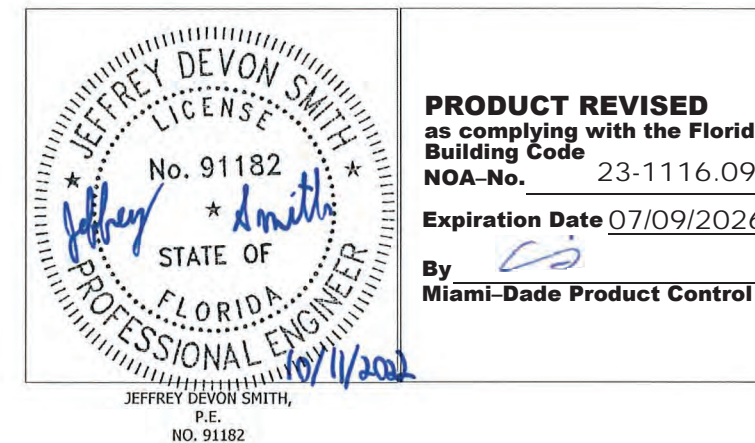
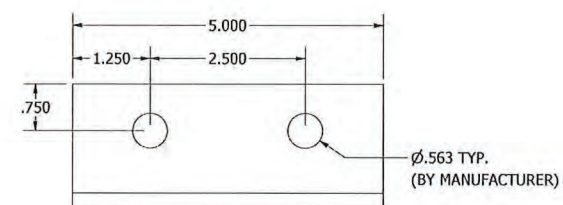
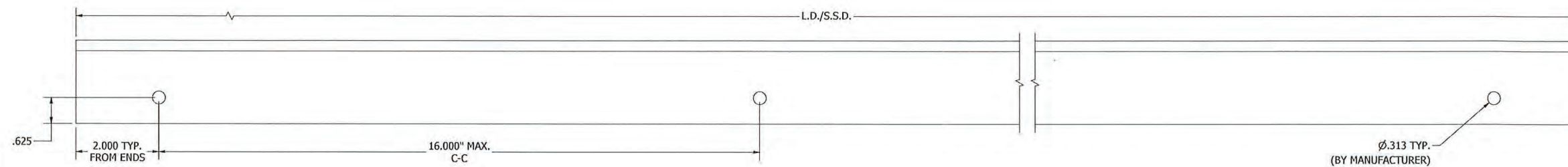
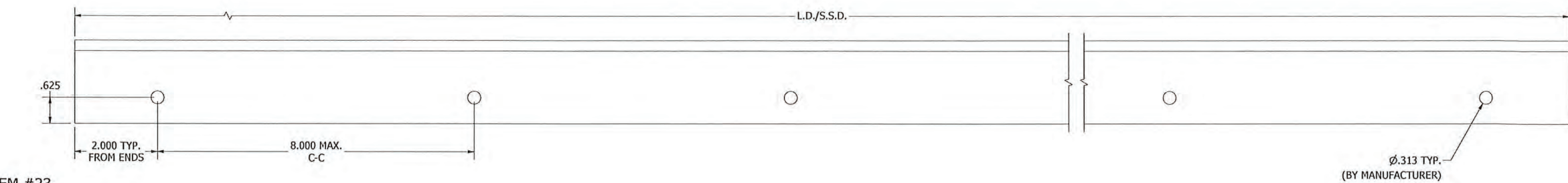
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G	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012				
CHECKED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
APPROVED						
MATERIAL						
PRODUCT						ELF6375DXD
TITLE						ELF6375DXD - PARTS
SIZE	D		DWG NO			60-022277-00B
SCALE						
ECN	12011	7/8/2022	SCALE	NONE	INVENTOR	SHEET 10 OF 25

RUSKIN
 AUTHORITY IN AIR CONTROL
 3900 Doctor Greaves Rd,
 Grandview, MO 64030
 PROPRIETARY AND
 CONFIDENTIAL



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G	REV'D ENGINEER OF RECORD, UPDATED INFO.		NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD		RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.		NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION		BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012	 RUSKIN AUTHORITY IN AIR CONTROL 3900 Doctor Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL				
CHECKED	DRP	3/23/2012					
APPROVED	DRP	3/23/2012					
APPROVED							
MATERIAL	PRODUCT		ELF6375DXD				
TITLE			ELF6375DXD - PARTS				
SIZE D			DWG NO			REV G	
			60-022277-00B				
ECH	12011	7/8/2022	SCALE	NONE			
			INVENTOR		SHEET 12 OF 25		

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ENGINEERING TOLERANCES PER WIQ-007

PARTS LIST FOR 100 PSF WINDLOAD			
ITEM #	DESCRIPTION	MATERIAL	ALLOY
35	HEAD FRAME (JAMB ONLY ATTACHMENT-100 PSF)	0.125" THK. EXTRUDED ALUM.	6063-T6
36	SILL FRAME (JAMB ONLY ATTACHMENT-100 PSF)	0.125" THK. EXTRUDED ALUM.	6063-T6
37	OFFSET TEE SUPPORT FOR BLADE	0.125" THK EXTRUDED ALUM.	6063-T6
38	MULLION ATTACHMENT ANGLE	0.125" THK EXTRUDED ALUM.	6063-T6
39	2" SPLICE PLATE	EXTRUDED ALUM.	6063-T6
40	1/4-20 X 1" HHB WITH WASHER AND LOCKNUT	300S	-

INSTALLATION PARTS FOR 100 PSF WINDLOAD			
ITEM #	DESCRIPTION	MATERIAL	ALLOY
41	ATTACHMENT CLIP ANGLE	0.250" THK EXTRUDED ALUM.	6063-T6
42	CLIP ANGLE - FORMED, 2" LG	0.250" THK FORMED ALUM.	3003-H14
43	ALTERNATE ATTACHMENT CLIP ANGLE	0.250" THK EXTRUDED ALUM.	6063-T6
44	STRUCTURAL ATTACHMENT ANGLE, 12" LG.	.375" EXTRUDED ALUM.	6063-T6
45	CLIP ANGLE - FORMED (CMU), 6" LG	0.250" THK FORMED ALUM.	3003-H14
46	ATTACHMENT ANGLE CMU	0.250" THK EXTRUDED ALUM.	6063-T6
47	CONT. FORMED ANGLE	0.250" THK FORMED ALUM.	3003-H14
48	CONT. ATTACHMENT ANGLE	0.250" THK EXTRUDED ALUM.	6063-T6
49	#10 - 16 x 1" LG TEK SCREW	410SS/ZC	6063-T6
50	REVERSE CLIP ANGLE - JAMBS	0.250" THK EXTRUDED ALUM.	6063-T6
51	REVERSE CLIP ANGLE - HEAD/SILL	0.250" THK EXTRUDED ALUM.	6063-T6

UNIVERSAL SLEEVE PARTS FOR 100 PSF WINDLOAD			
ITEM #	DESCRIPTION	MATERIAL	ALLOY
52	CONT. RETAINING ANGLE - JAMBS (PERIMETER ATTACHMENT)	0.250" THK EXTRUDED ALUM.	6063-T6
53	US SUPPORT ATTACHMENT ANGLE 5" LG	0.250" THK EXTRUDED ALUM.	6063-T6
54	3/8 -16 - 3.500" LG HHB GRADE A307 BOLT WITH WASHER AND LOCKNUT	ZINC PLATED	-

H.V.B.S. SUPPORTS OPTIONS BASED ON SECTION HEIGHT-JAMB ONLY ATTACHMENT - ASSEMBLY "B"				
ITEM #	DESCRIPTION	LOUVER HEIGHT RANGE	MATERIAL	ALLOY
55	2" HVBS DOUBLE FLANGED	UP TO 20" TALL	EXT. ALUMINIUM	6063-T6
56	3" HVBS DOUBLE FLANGED	GREATER THAN 20" TO 34"	EXT. ALUMINIUM	6063-T6
57	6" HVBS DOUBLE FLANGED	GREATER THAN 34" TO 49"	EXT. ALUMINIUM	6063-T6
58	6" HVBS I SHAPE	GREATER THAN 49" TO 60"	EXT. ALUMINIUM	6063-T6

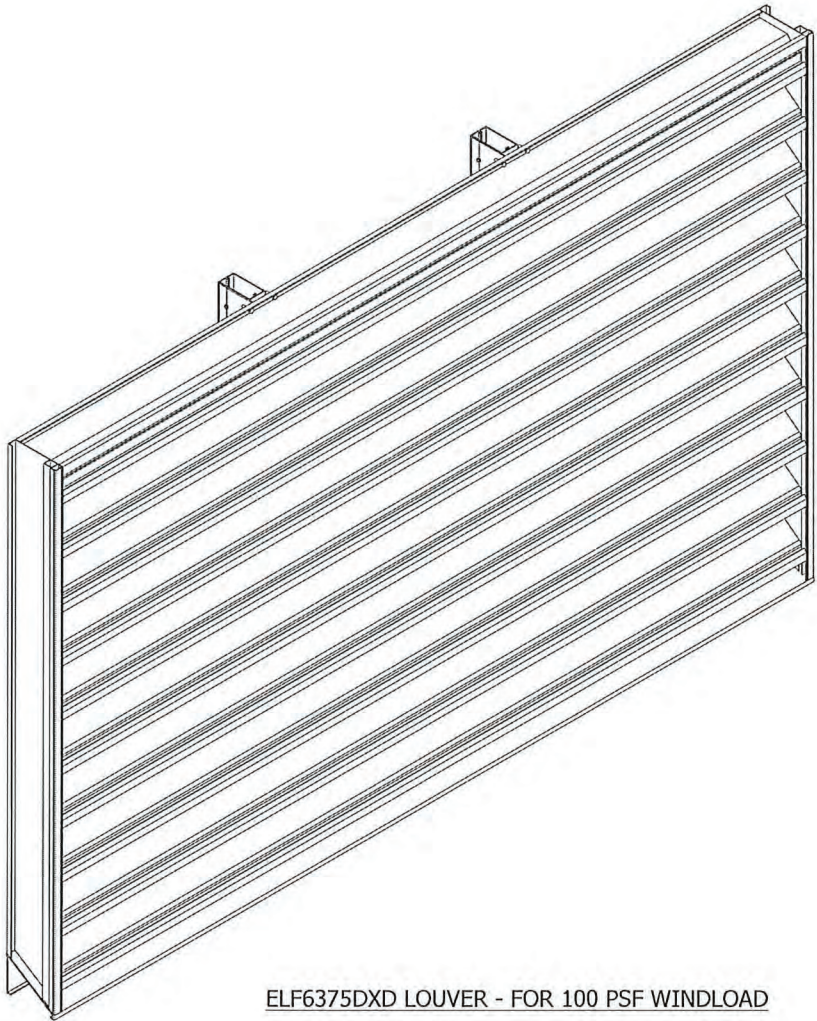
H.V.B.S./ MULLION SUPPORTS OPTIONS BASED ON SECTION HEIGHT-PERIMETER ATTACHMENT - ASSEMBLY "C"				
ITEM #	DESCRIPTION	LOUVER HEIGHT RANGE	MATERIAL	ALLOY
55	2" HVBS DOUBLE FLANGED	UP TO 20" TALL	EXT. ALUMINIUM	6063-T6
56	3" HVBS DOUBLE FLANGED	GREATER THAN 20" TO 34"	EXT. ALUMINIUM	6063-T6
57	6" HVBS DOUBLE FLANGED	GREATER THAN 34" TO 49"	EXT. ALUMINIUM	6063-T6
58	6" HVBS I SHAPE	GREATER THAN 49" TO 65"	EXT. ALUMINIUM	6063-T6
59	2" X 4" X 1/8" THICK TUBE SUPPORT	GREATER THAN 65" TO 72"	EXT. ALUMINIUM	6063-T6
60	2" X 6" X 1/8" THICK TUBE SUPPORT	GREATER THAN 72" TO 90"	EXT. ALUMINIUM	6063-T6

NOTE :

1. LOUVER SYSTEM WITH 100 PSF WINDLOAD HAS TWO TYPES OF ASSEMBLIES AS PER INSTALTION METHOD - **JAMB ONLY ATTACHMENT & PERIMETER ATTACHMENT.**

2. THIS LOUVER SYSTEM IS APPROVED FOR JAMB ONLY ATTACHMENT AND APPLICATION WITH DESIGN PRESSURE +/-**100PSF**, MAXIMUM SINGLE SECTION SIZE IS **96"WIDE X 60" HIGH, 96" WIDE X UNLIMITED HIGH**

3. **ALTERNATE ATTACHMENT** USED IN **DETAIL AA/15** IS NOT THE RESPONSIBILITY OF RUSKIN AND HAVE TO BE DESIGNED AND SPECIFIED BY ENGINEER OF RECORD.



ELF6375DXD LOUVER - FOR 100 PSF WINDLOAD



JEFFREY DEVON SMITH,
P.E.
NO. 91182

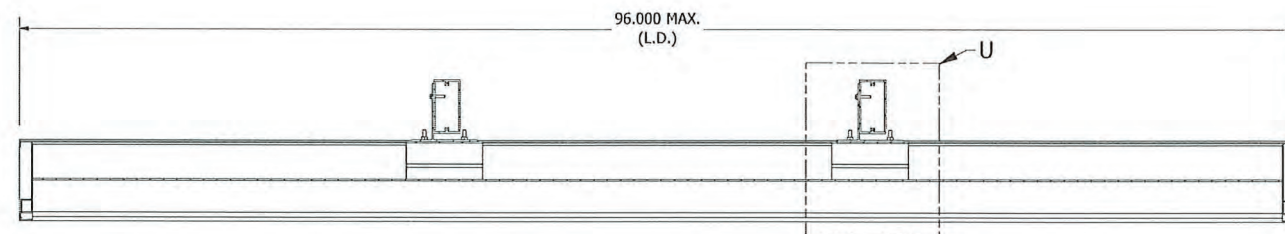
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.09

Expiration Date 07/09/2026

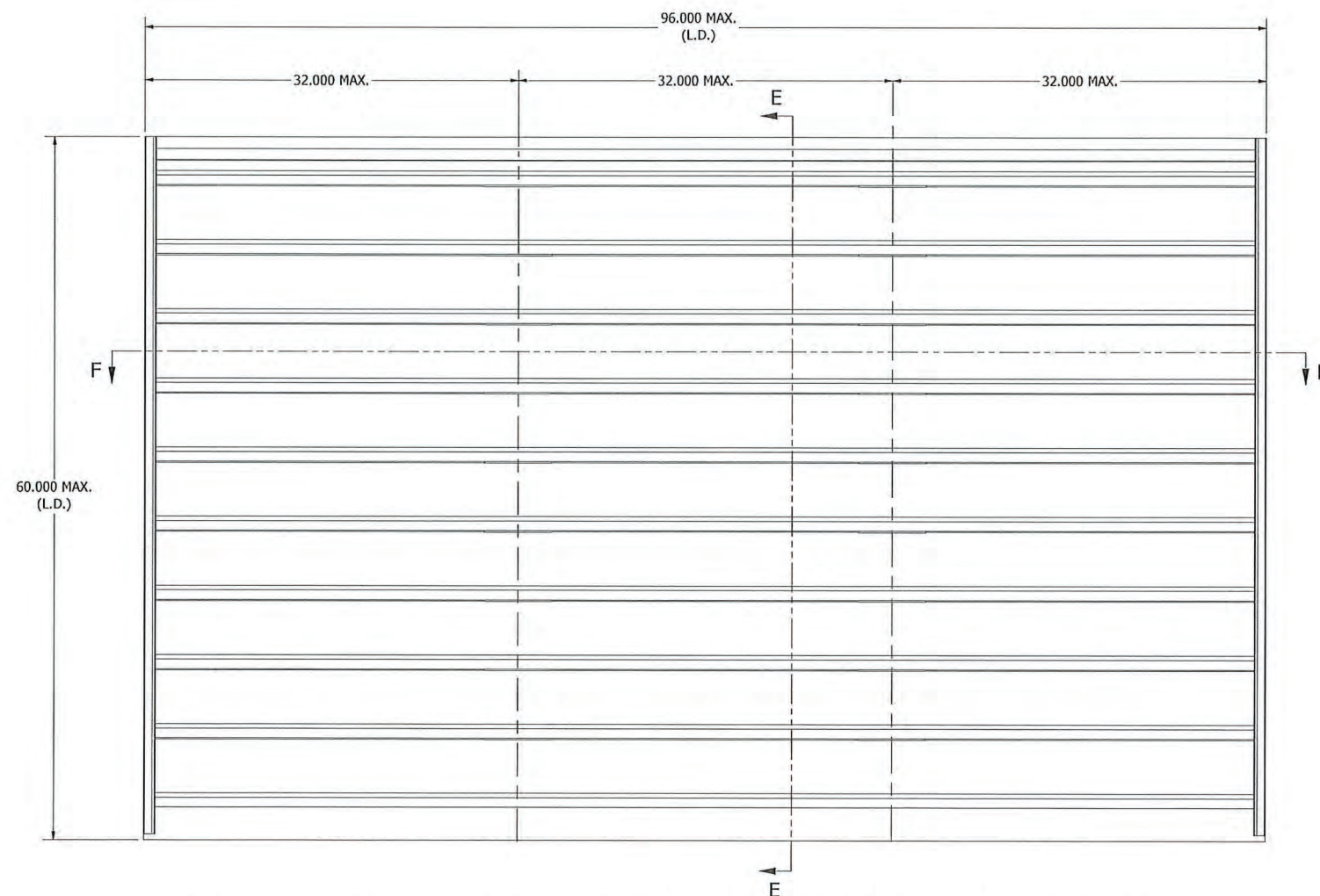
By 
Miami-Dade Product Control

G	REV'D ENGINEER OF RECORD, UPDATED INFO.		NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD		RVT	JDS	VMA	JDS	04/14/22
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REV	DESCRIPTION		BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012	 3900 Doctor Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL				
CHECKED	DRP	3/23/2012					
APPROVED	DRP	3/23/2012					
APPROVED							
MATERIAL		PRODUCT ELF6375DXD					
		TITLE NOTES, PARTS LIST, DRAWING INDEX, ISO VIEW-100PSF					
		SIZE D	DWG NO 60-022277-00B				REV G
ECN	12011	7/8/2022	SCALE NONE	INVENTOR		SHEET 13 OF 25	

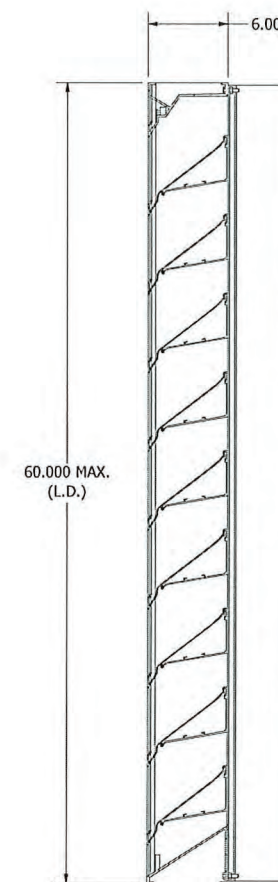
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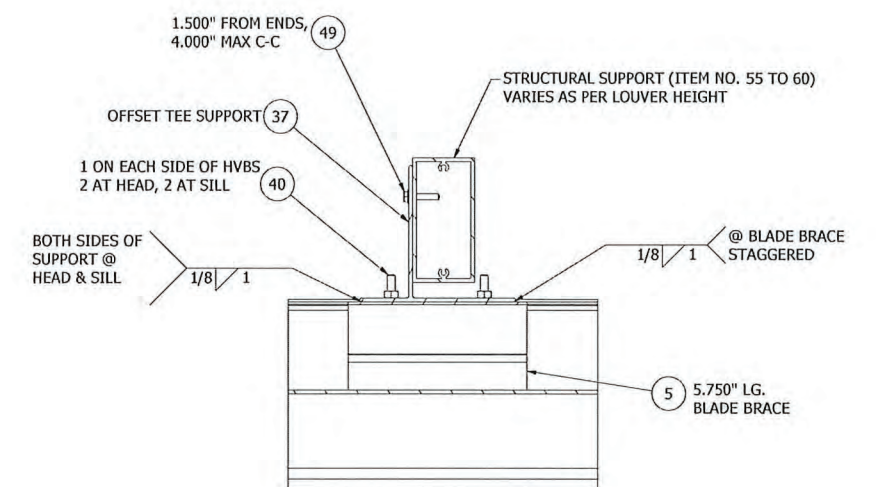
SECTION F-F



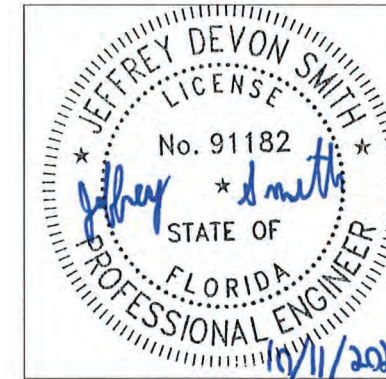
ASSEMBLY "B" - SINGLE SECTION VIEW-FOR WINDLOAD-100PSF JAMB ONLY ATTACHMENT
LOUVER SIZE - 96.000" W X 60.000" H



SECTION E-E



DETAIL U
HVBS CONNECTION DETAIL

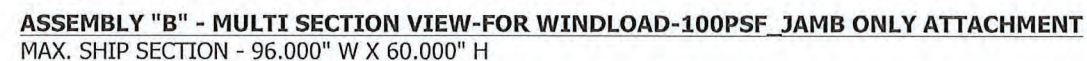


JEFFREY DEVON SMITH,
P.E.
NO. 91182

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.09
Expiration Date 07/09/2026
By *[Signature]*
Miami-Dade Product Control

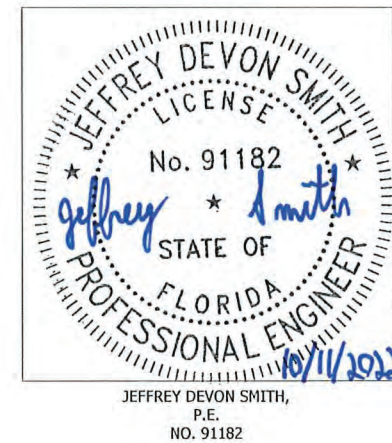
G	REV'D ENGINEER OF RECORD, UPDATED INFO.		NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD		RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.		NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION		BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012	 3900 Doctor Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL				
CHECKED	DRP	3/23/2012					
APPROVED	DRP	3/23/2012					
APPROVED							
MATERIAL			PRODUCT ELF6375DXD				
			TITLE ASSEMBLY "B" - BASIC ASSEMBLY & DETAILS-100PSF (JAMB ONLY ATTACHMENT)				
			SIZE D		DWG NO		REV G
					60-022277-00B		
ECN	12011	7/8/2022	SCALE NONE		SHEET 14 OF 25		

UNLESS OTHERWISE SPECIFIED, USE STD.
ENGINEERING TOLERANCES PER WIQ-007



REFER DETAIL AA
CONNECTION DETAIL

REFER DETAIL W/16
FOR ATTACHMENT CLIP ANGLE INSTALLATION
@ JAMBS (WOOD/METAL/CONCRETE/12" CMU)
REFER DETAIL Y/16
DOUBLE ANGLE INSTALLATION (6" CMU ONLY)
REFER DETAIL AB/16
ALTERNATE ATTACHMENT CLIP ANGLE INSTALLATION
@ JAMBS (WOOD/METAL/CONCRETE/8", 10" & 12" CMU)
REFER DETAIL AC/17
UNIVERSAL SLEEVE




PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.09

Expiration Date 07/09/2026

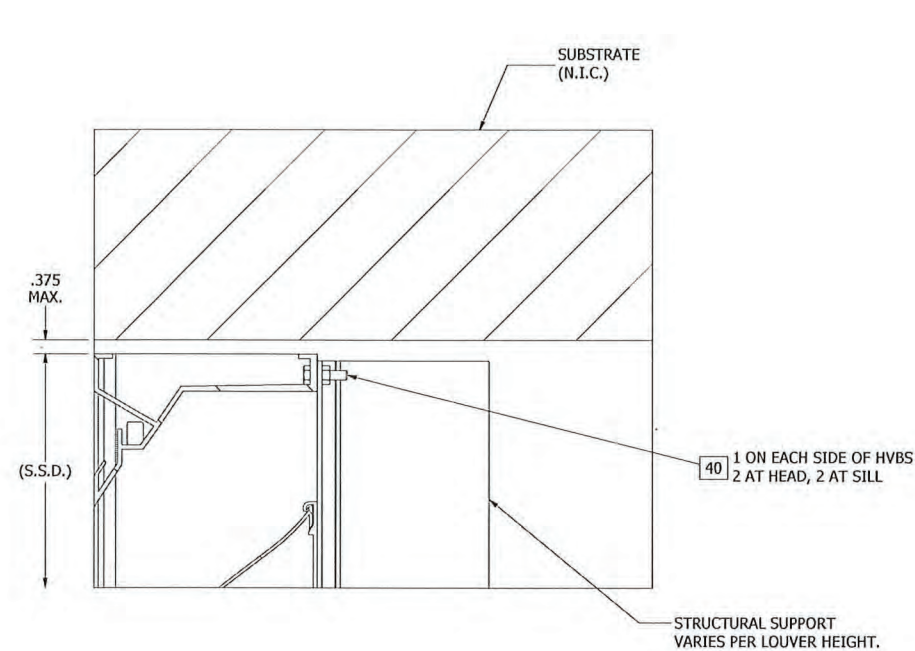
By _____
Miami-Dade Product Control



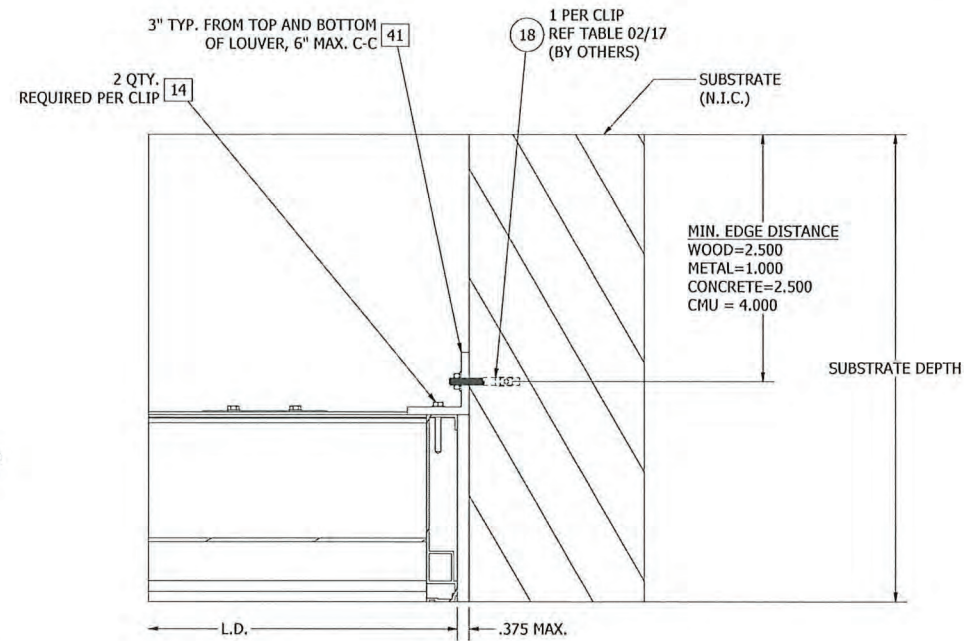
DETAIL AA
CONNECTION DETAIL

G	REV'D ENGINEER OF RECORD, UPDATED INFO.			NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD			RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.			NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION			BY	CHK	APD	APVD	DATE
AUTHOR	DJR	2/17/2012		 RUSKIN AUTHORITY IN AIR CONTROL		3900 Doctor Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL		
CHECKED	DRP	3/23/2012						
APPROVED	DRP	3/23/2012						
APPROVED								
MATERIAL				PRODUCT		ELF6375DXXD		
				TITLE				
				ELF6375DXXD - ASSEMBLY "B"				
		SIZE D		DWG NO			REV G	
				60-022277-00B				
ECN	12011	7/8/2022		SCALE		NONE		
				DATE		SHEET 15 OF 25		

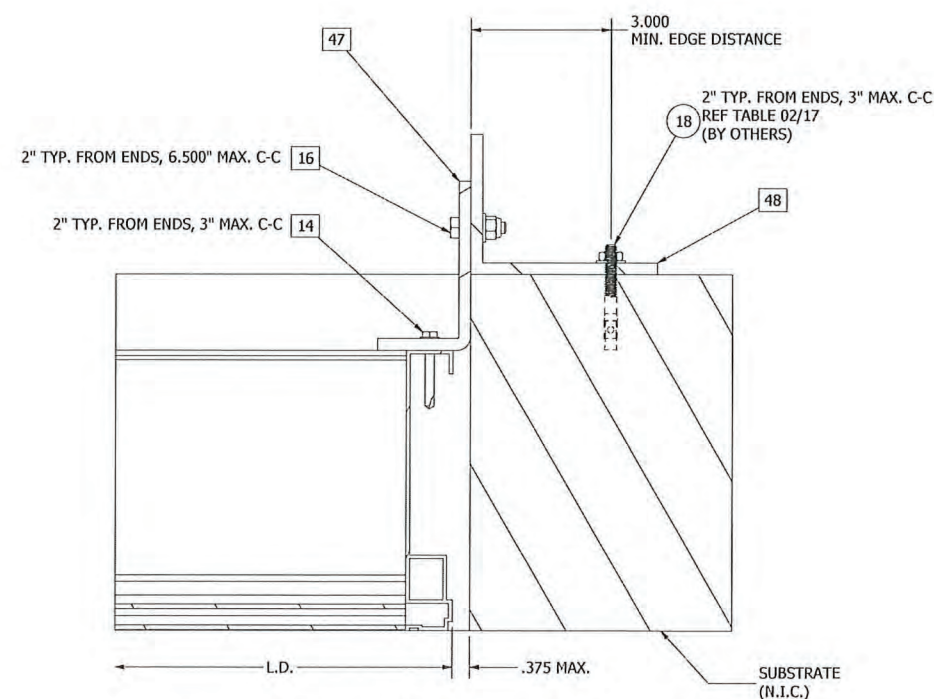
UNLESS OTHERWISE SPECIFIED, USE STD.
ENGINEERING TOLERANCES PER WIQ-007



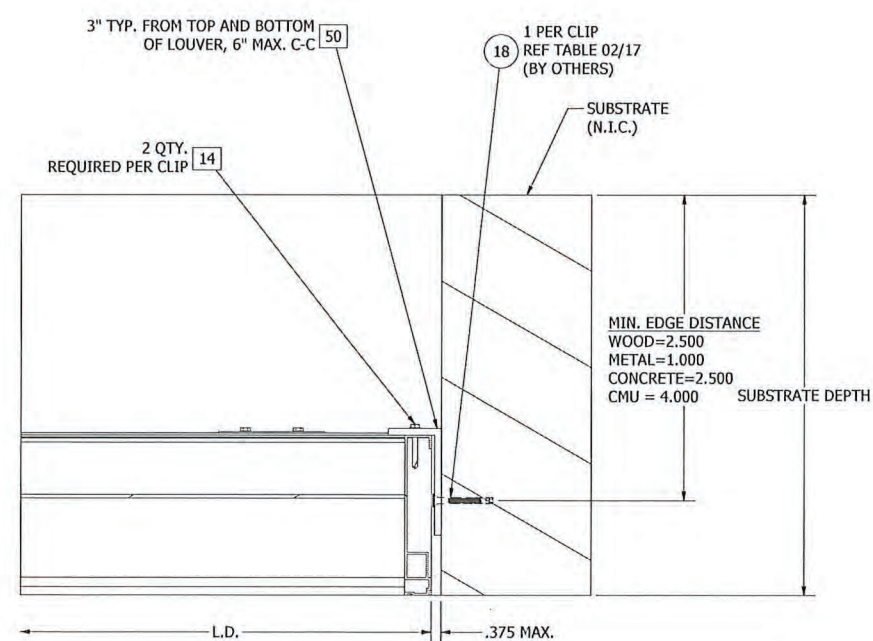
DETAIL V
LOUVER HVBS SUPPORT ATTACHMENT AT HEAD (SILL SIMILAR)



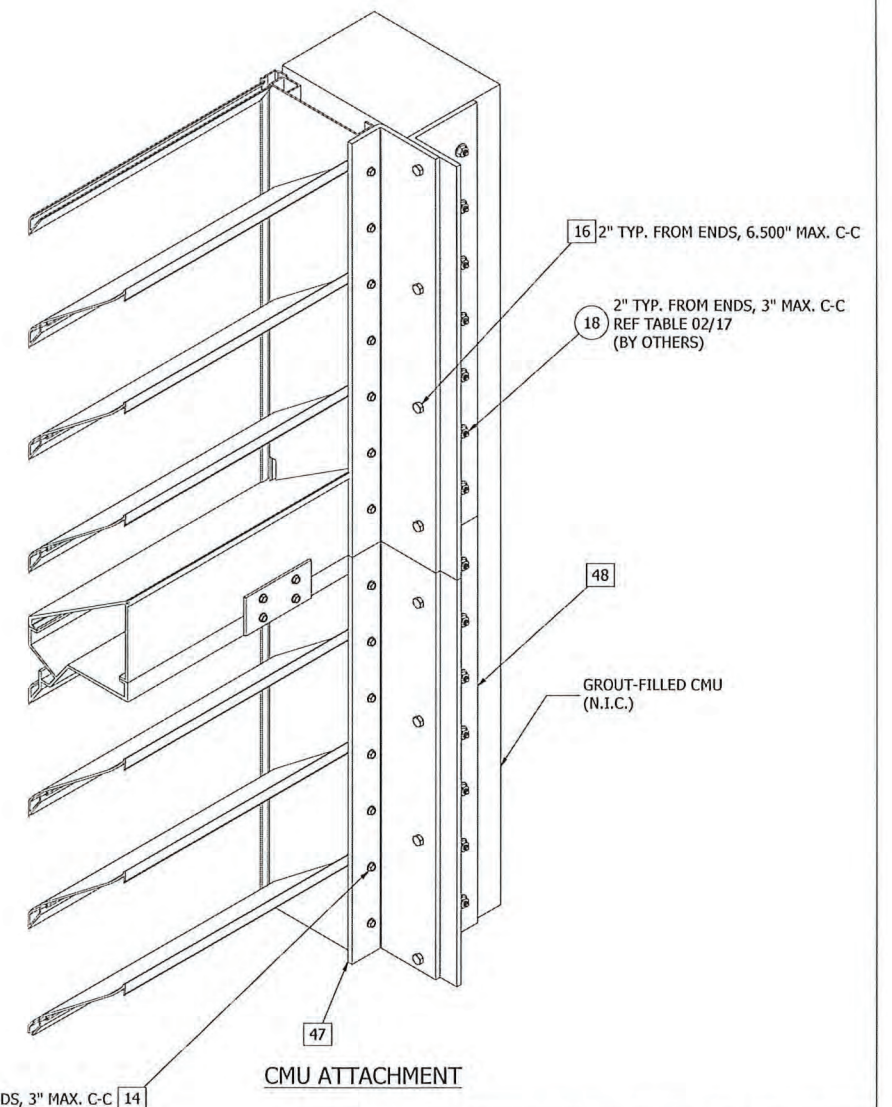
DETAIL W
ATTACHMENT CLIP ANGLE INSTALLATION @ JAMB FRAME



DETAIL Y
ATTACHMENT CLIP ANGLE INSTALLATION @ JAMB FRAME
(GROUT-FILLED CMU)



DETAIL AB
ALTERNATE ATTACHMENT CLIP ANGLE INSTALLATION @ JAMB FRAME
IN REVERSE DIRECTION (ALTERNATE CONNECTION)



CMU ATTACHMENT

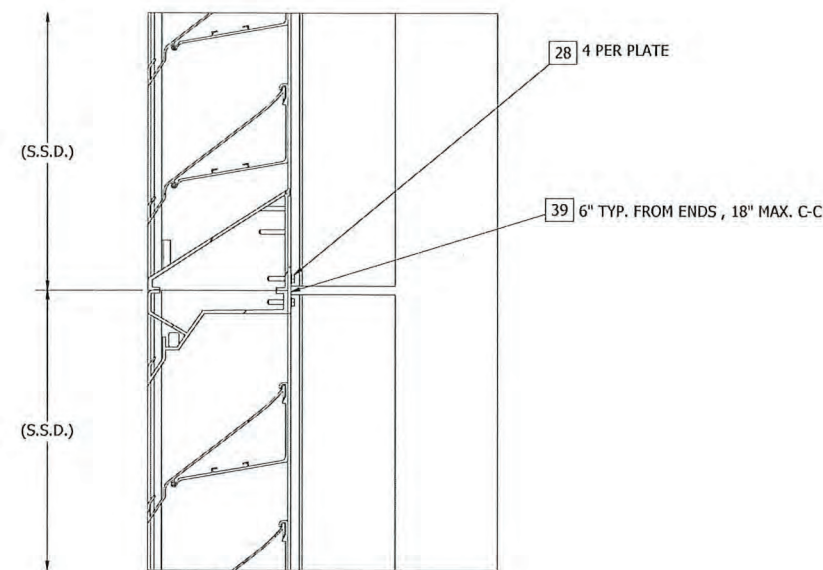
JEFFREY DEVON SMITH,
P.E.
NO. 91182

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.09
Expiration Date 07/09/2026
By
Miami-Dade Product Control

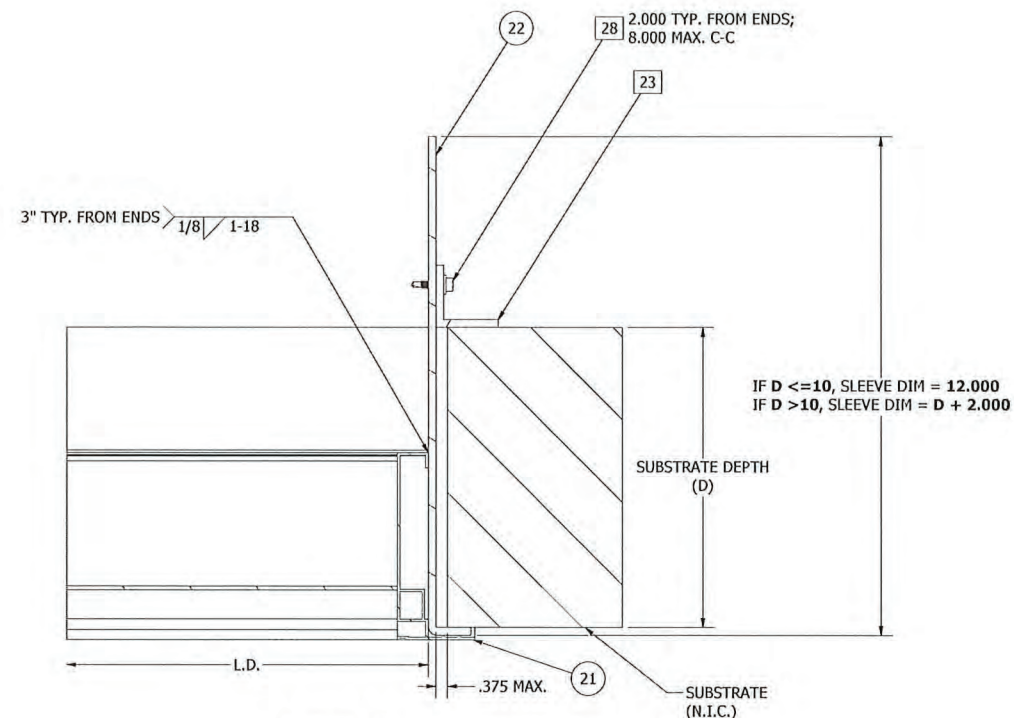
UNLESS OTHERWISE SPECIFIED, USE STD.
ENGINEERING TOLERANCES PER W1Q-007

G	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR 2/17/2012					
CHECKED	DRP 3/23/2012					
APPROVED	DRP 3/23/2012					
APPROVED	DRP 3/23/2012					
MATERIAL						
PRODUCT ELF6375DXD						
TITLE ASSEMBLY "B" - INSTALLATION DETAILS						
SIZE D						DWG NO 60-022277-00B
SCALE NONE						REV G
ECH 12011	7/8/2022					
INVENTOR						SHEET 16 OF 25

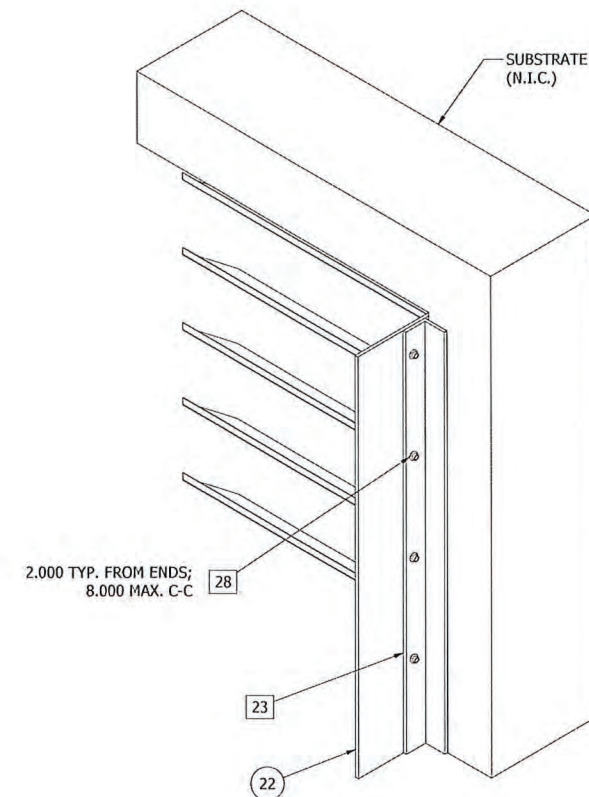
RUSKIN
AUTHORITY IN AIR CONTROL
3900 Doctor Greaves Rd,
Grandview, MO 64030
PROPRIETARY AND
CONFIDENTIAL



DETAIL Z
HORIZONTAL MULLION CONNECTION DETAIL
(BOLT ATTACHING HEAD/SILL FRAME TO HVBS IS HIDDEN FOR CLARITY)



DETAIL AC
UNIVERSAL SLEEVE WELDMENT/CONNECTION DETAIL
JAMBS



UNIVERSAL SLEEVE ATTACHMENT

TABLE 02 - ELF6375DXD - WALL FASTENER TABLE (N.I.C.) - FOR JAMB ONLY CONNECTION - 100PSF

SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	FASTENER TYPE	MIN. EMBEDMENT	MIN. EDGE DISTANCE (STANDARD/REVERSE)
WOOD	SPECIFIC GRAVITY = 0.4	1/4" Ø BOLT, A307 WASHER & LOCKNUT	NA	2 1/2"
STEEL & ALUMINUM	STEEL - MIN. 14 GA ALUM. - MIN. 1/8" THICK	1/4" Ø A307 BOLT OR TEK SCREW	NA	1"
CONCRETE	3000 PSI MIN. COMPRESSIVE STRENGTH	1/4" Ø X 2 1/4" HILTI KWIK CON II+ W / WASHER**	1 3/4"	2 1/2"
GROUT FILLED CMU (SINGLE ANGLE)	ASTM C-90 BLOCK, 1500 PSI GROUT COMP. STRENGTH.	1/4" Ø X 2 1/2" HILTI KWIK HUS EZ W / WASHER **	1 5/8"	4"
GROUT FILLED CMU (DOUBLE ANGLE)	ASTM C-90 BLOCK, 1500 PSI GROUT COMP. STRENGTH.	1/4" Ø X 1 1/4" HILTI KWIK CON II+ **	1"	3"

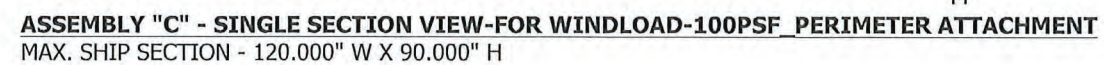
NOTES:
- DOUBLE ANGLE SHOULD BE USED IF MIN. WALL DEPTHS FOR STANDARD & REVERSE ANGLE IS NOT MET.
- ** COUNTERSUNK VARIANT MAY BE USED FOR ONLY KWIK HUS EZ & HILTI KWIK CON II +, ALSO, WASHERS ARE NOT NEEDED FOR COUNTERSUNK VARIANTS.



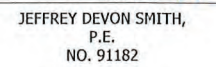
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.09
Expiration Date 07/09/2026
By *[Signature]*
Miami-Dade Product Control

G	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012				
CHECKED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
APPROVED						
MATERIAL						
TITLE	ASSEMBLY "B" - UNIVERSAL SLEEVE INSTALL					
SIZE	D		DWG NO	60-022277-00B	REV	G
ECH	12011	7/8/2022	SCALE	NONE	INVENTOR	SHEET 17 OF 25


UNLESS OTHERWISE SPECIFIED, USE STD.
ENGINEERING TOLERANCES PER W1Q-007

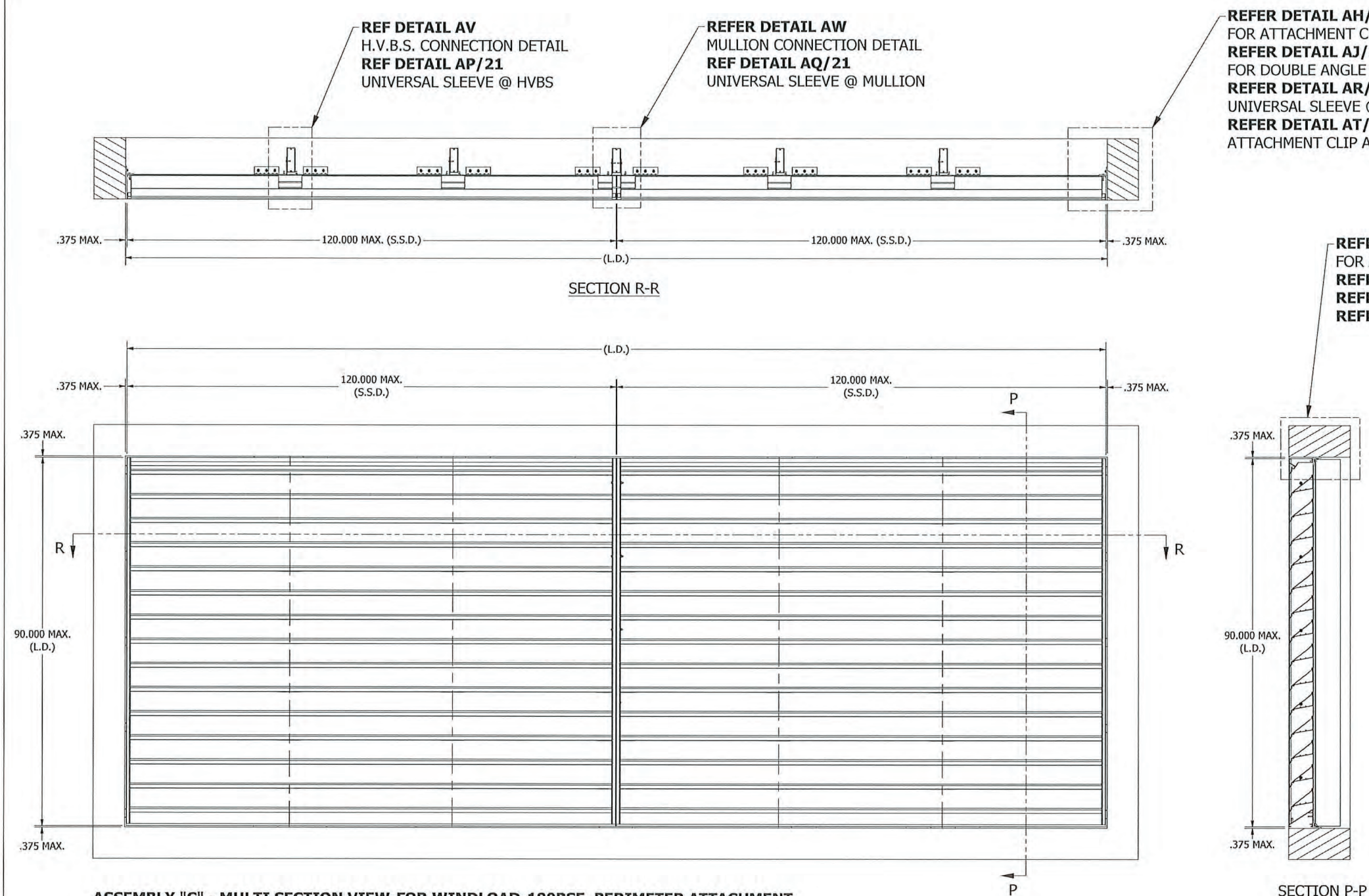


By
Miami-Dade Product Control



UNLESS OTHERWISE SPECIFIED, USE STD.
ENGINEERING TOLERANCES PER WIQ-007

G	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012	 3900 North Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL			
CHECKED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
APPROVED						
MATERIAL	PRODUCT		ELF6375DXD			
	TITLE		ASSEMBLY "C" - BASIC ASSEMBLY & DETAILS-100PSF (PERIMETER ATTACHMENT _120X90)			
	SIZE	DWG NO	60-022277-00B			REV G
ECH	12011	7/8/2022	SCALE	NONE		
		INVENTOR		SHEET 18 OF 25		



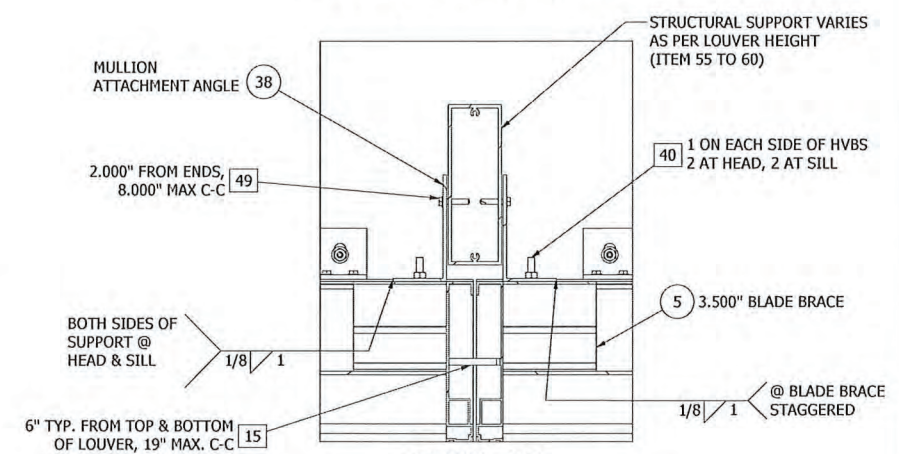
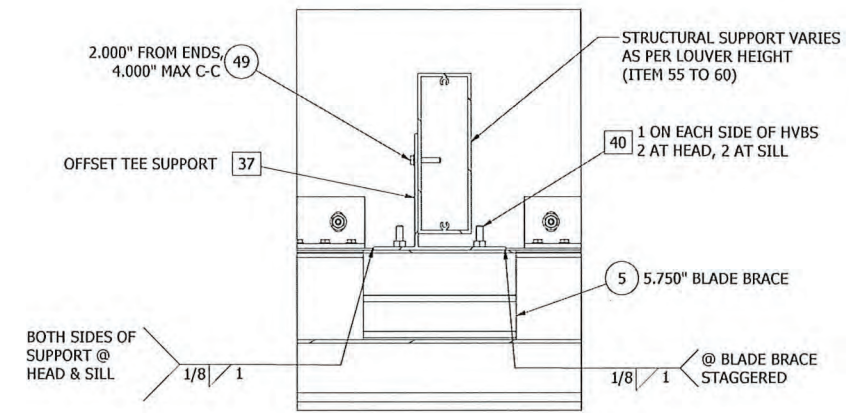
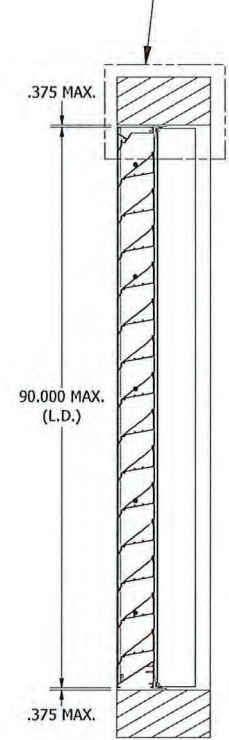
ASSEMBLY "C" - MULTI SECTION VIEW-FOR WINDLOAD-100PSF PERIMETER ATTACHMENT
MAX. SHIP SECTION - 120.000" W X 90.000" H

REFER DETAIL AV
H.V.B.S. CONNECTION DETAIL
REFER DETAIL AP/21
UNIVERSAL SLEEVE @ HVBS

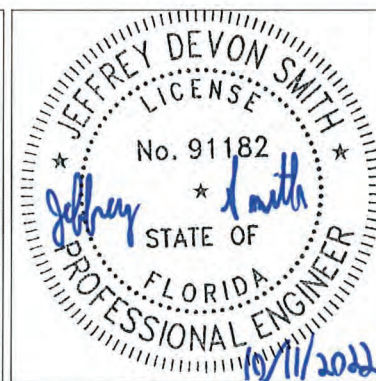
REFER DETAIL AW
MULLION CONNECTION DETAIL
REFER DETAIL AQ/21
UNIVERSAL SLEEVE @ MULLION

REFER DETAIL AH/20
FOR ATTACHMENT CLIP ANGLE INSTALLATION @ JAMBS (WOOD/METAL/CONCRETE/12" CMU)
REFER DETAIL AJ/20
FOR DOUBLE ANGLE INSTALLATION (6" CMU)
REFER DETAIL AR/22
UNIVERSAL SLEEVE @ JAMBS
REFER DETAIL AT/22
ATTACHMENT CLIP ANGLE ALTERNATE INSTALLATION (8", 10" CMU)

REFER DETAIL AK/20
FOR ATTACHMENT CLIP ANGLE INSTALLATION @ HEAD (WOOD/METAL/CONCRETE)
REFER DETAIL AL/20 (CMU)
REFER DETAIL AN/21 (UNIVERSAL SLEEVE CONNECTION)
REFER DETAIL AS/22 (ATTACHMENT CLIP ANGLE ALTERNATE INSTALLATION)



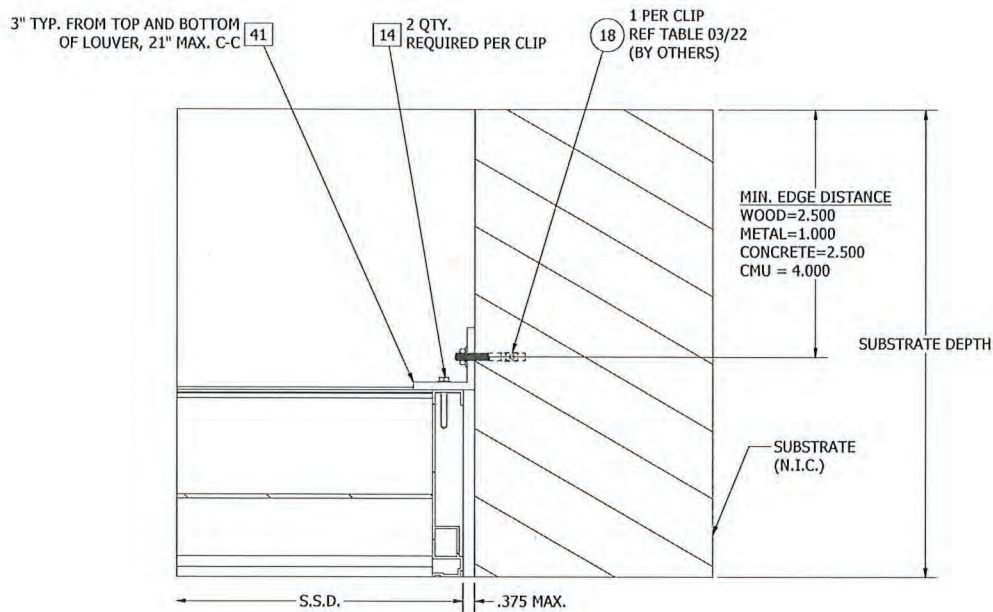
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.09
Expiration Date 07/09/2026
By *[Signature]*
Miami-Dade Product Control



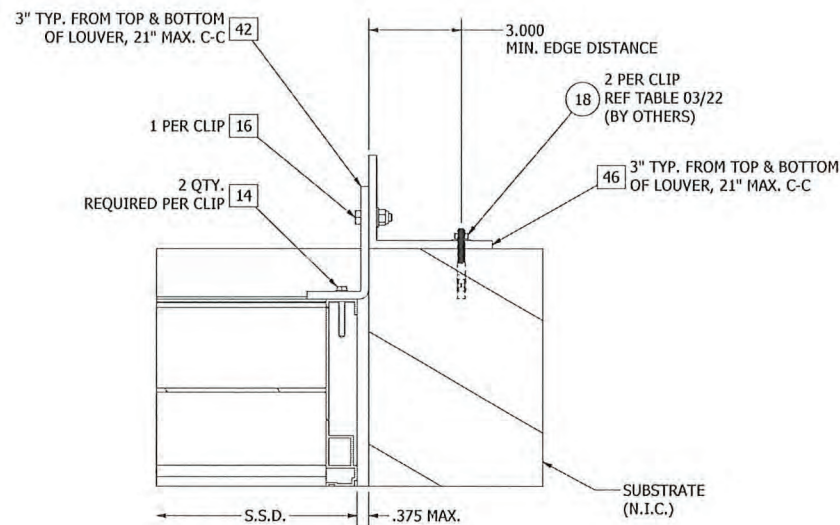
JEFFREY DEVON SMITH,
P.E.
NO. 91182

UNLESS OTHERWISE SPECIFIED, USE STD.
ENGINEERING TOLERANCES PER WIQ-007

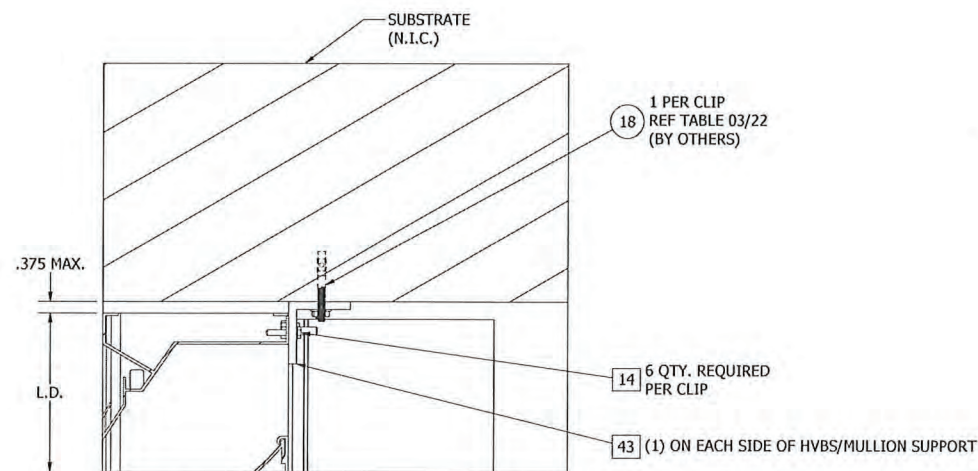
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F	REV'D FOR 100 PSF WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012				
CHECKED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
MATERIAL						
RUSKIN 3900 Doctor Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL						
PRODUCT ELF6375DXD TITLE ELF6375DXD - ASSEMBLY "C" - 90X120 - MULTI SIZE D DWG NO 60-022277-00B SCALE NONE INVENTOR SHEET 19 OF 25						
ECN	12011	7/8/2022				



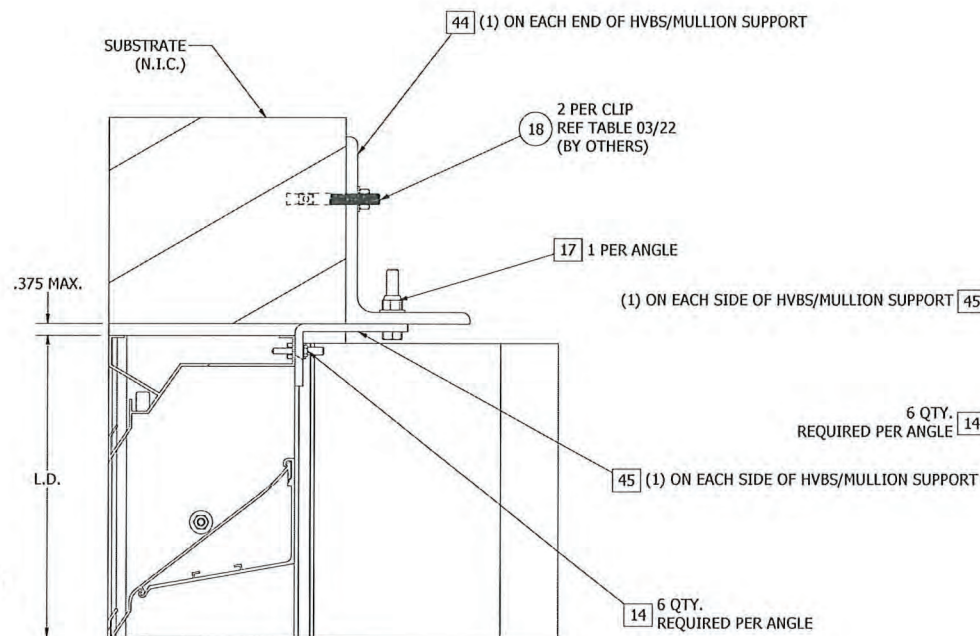
DETAIL AH
ATTACHMENT CLIP ANGLE INSTALLATION @ JAMB FRAME



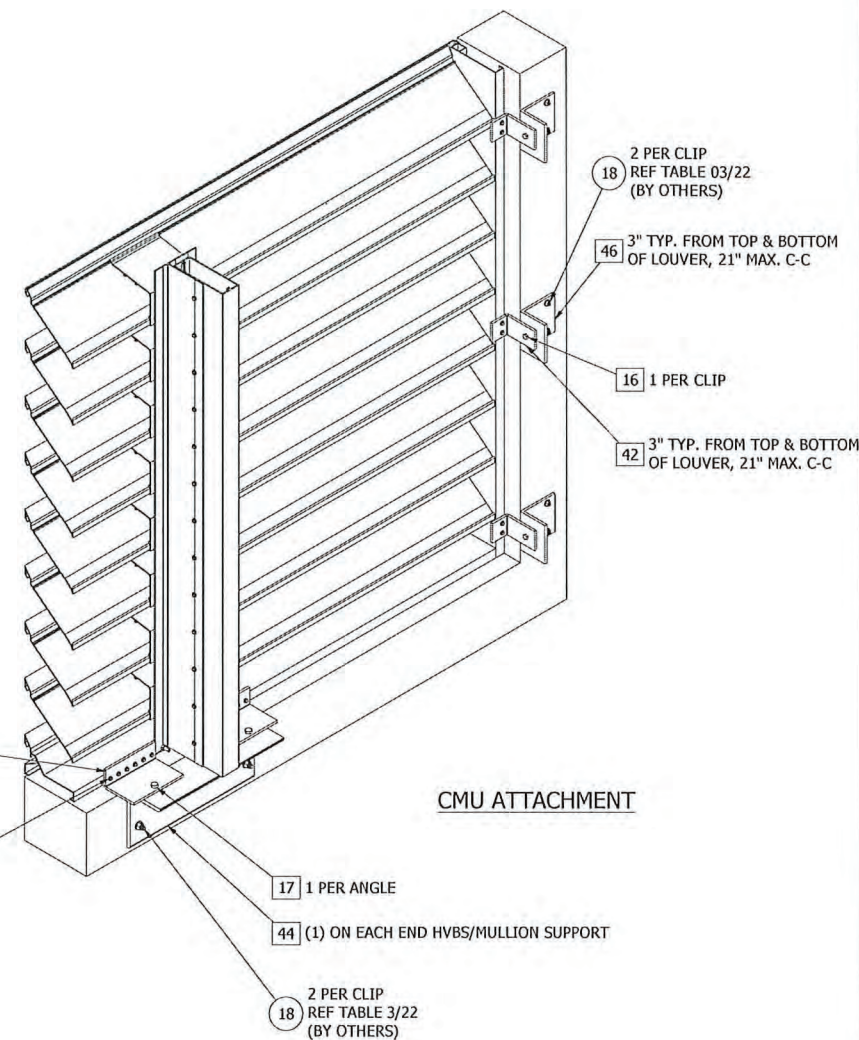
DETAIL AJ
ATTACHMENT CLIP ANGLE INSTALLATION @ JAMB FRAME
(GROUT-FILLED CMU)



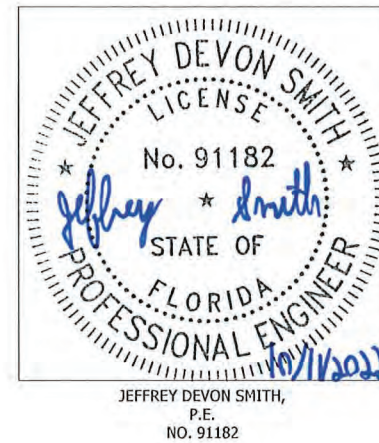
DETAIL AK
ATTACHMENT CLIP ANGLE INSTALLATION @ HEAD FRAME (SILL SIMILAR)
(WOOD, METAL & CONCRETE SUBSTRATE ONLY)



DETAIL AL
ATTACHMENT CLIP ANGLE INSTALLATION @ HEAD FRAME (SILL SIMILAR)
(GROUT FILLED CMU)



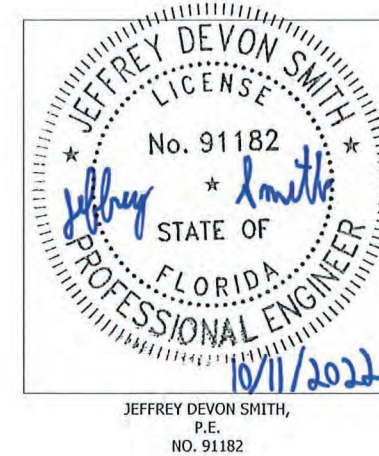
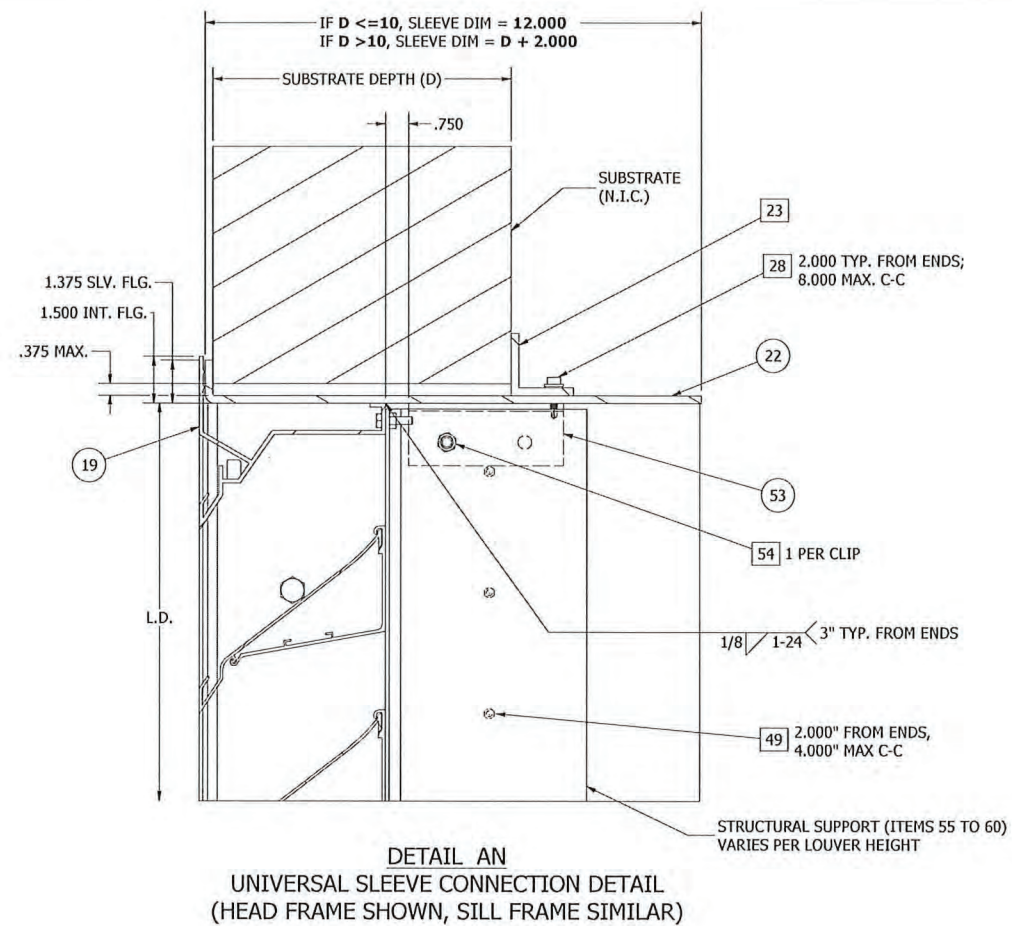
CMU ATTACHMENT



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.09
Expiration Date 07/09/2026
By *CS*
Miami-Dade Product Control

G	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR 2/17/2012					
CHECKED	DRP 3/23/2012					
APPROVED	DRP 3/23/2012					
APPROVED						
MATERIAL						
RUSKIN AUTHORITY IN AIR CONTROL 3900 Doctor Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL						
PRODUCT ELF6375DXD TITLE ASSEMBLY "C" - CMU / NON-CMU INSTALLATIONS SIZE D DWG NO 60-022277-00B SCALE NONE INVENTOR SHEET 20 OF 25						
ECN	12011	7/8/2022				

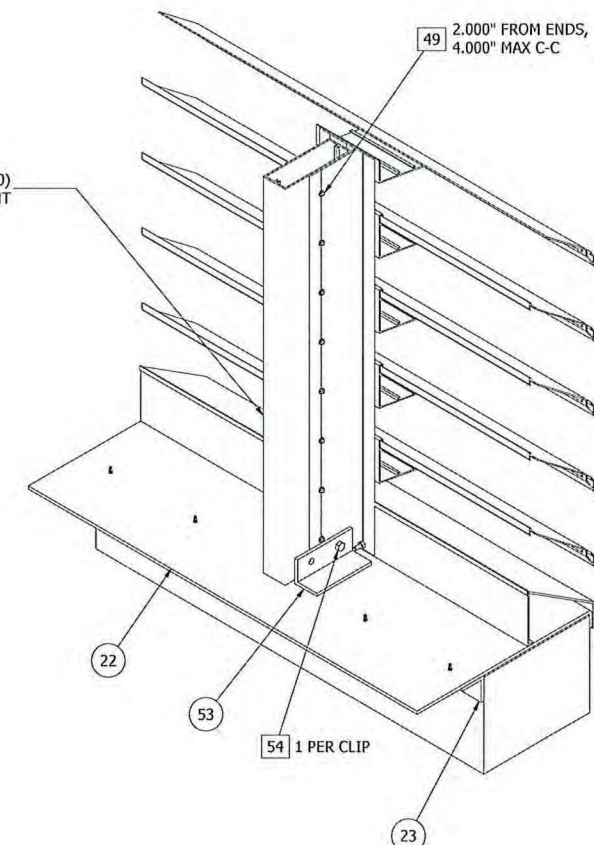
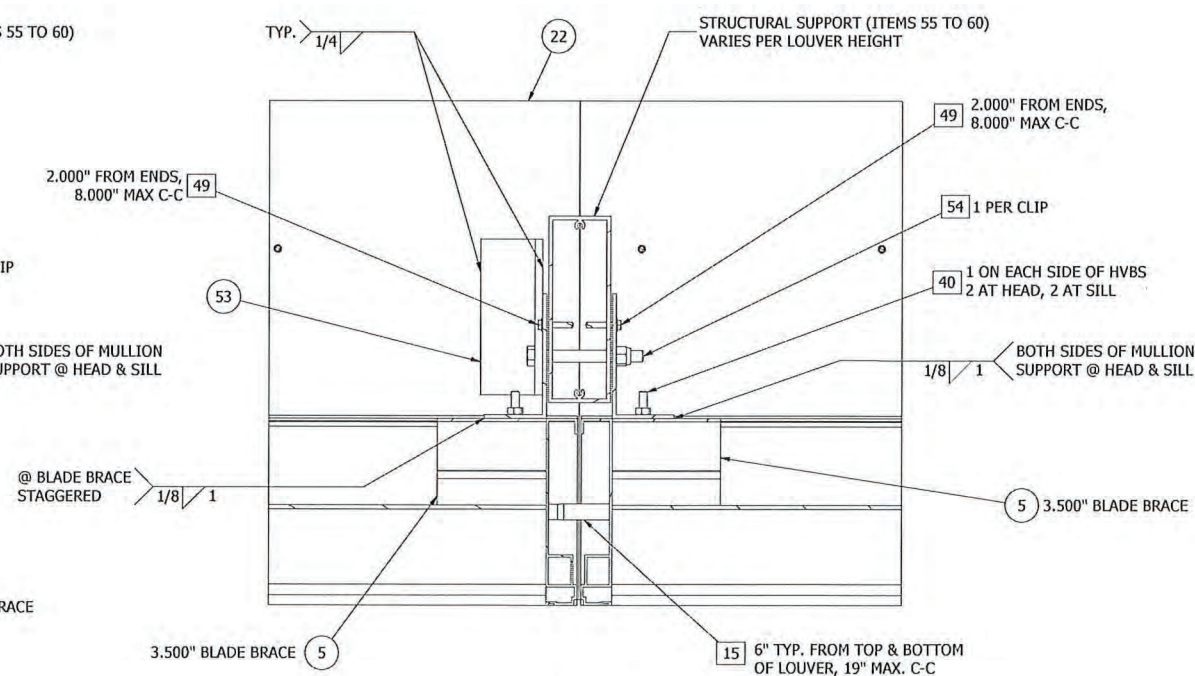
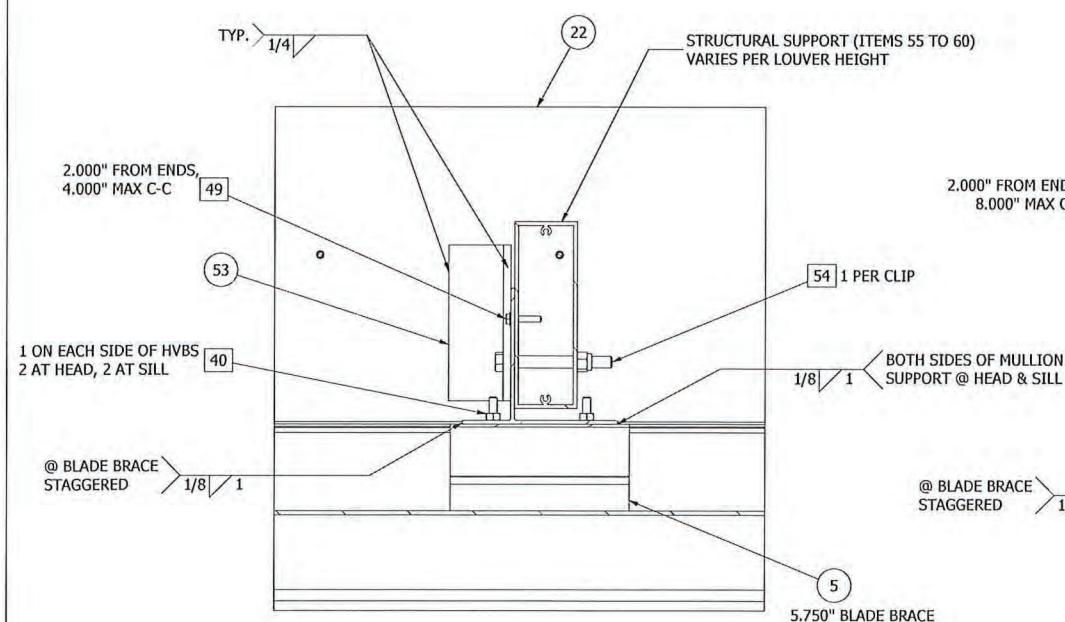
UNLESS OTHERWISE SPECIFIED, USE STD.
ENGINEERING TOLERANCES PER WIQ-007




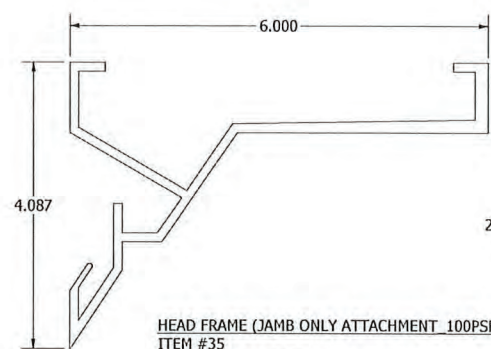
PRODUCT REVISED
as complying with the Florida
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NOA-No. 23-1116.09

Expiration Date 07/09/2026

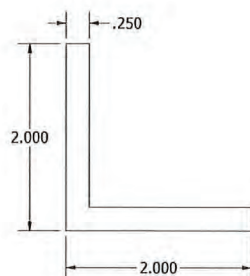
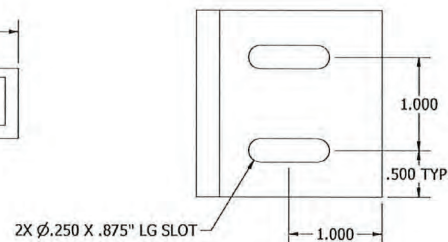
By _____
Miami-Dade Product Control



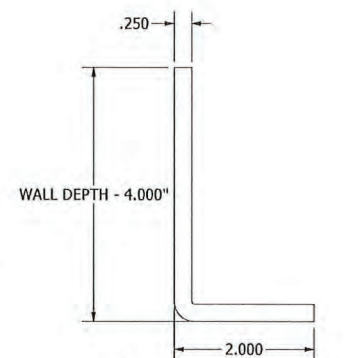
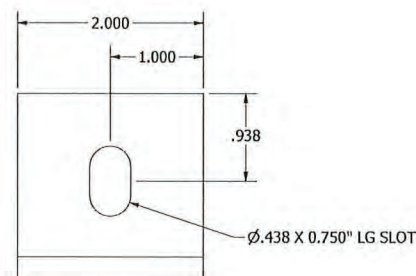
G	REV'D ENGINEER OF RECORD, UPDATED INFO.		NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD		RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.		NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION		BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012	 RUSKIN AUTHORITY IN AIR CONTROL		3900 Doctor Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL		
CHECKED	DRP	3/23/2012					
APPROVED	DRP	3/23/2012					
APPROVED							
MATERIAL			PRODUCT		ELF6375DXD		
			TITLE		ASSEMBLY "C" - UNIVERSAL SLEEVE INSTALL		
			SIZE D		DWG NO		REV G
					60-022277-00B		
ECH	12011	7/8/2022	SCALE NONE		SHEET 21 OF 25		



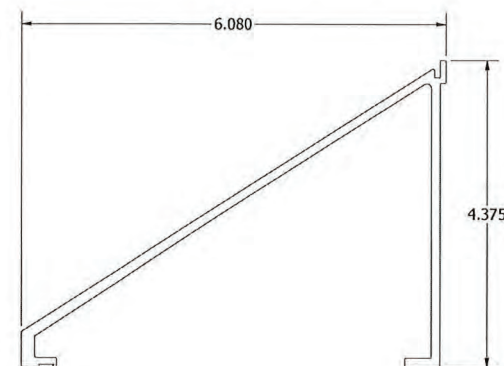
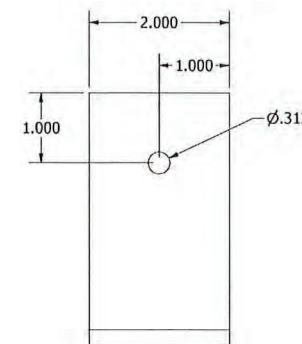
HEAD FRAME (JAMB ONLY ATTACHMENT 100PSF)
ITEM #35
RUSKIN #70-024024-00B



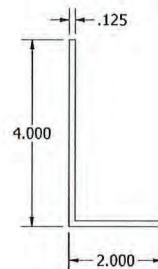
ATTACHMENT CLIP ANGLE ITEM #41
RUSKIN #85-022012-00B
(WOOD/METAL/CONCRETE/12" CMU)



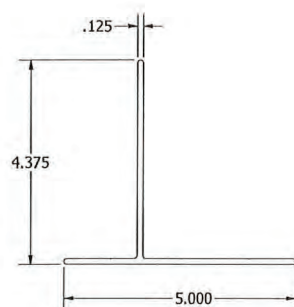
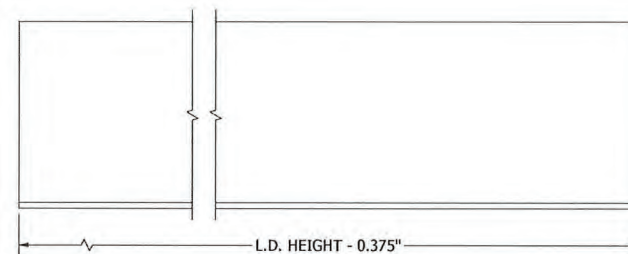
ATTACHMENT CLIP ANGLE - FORMED ITEM #42
RUSKIN #85-023250-00B
(6, 8, 10 IN GROUT-FILLED CMU)



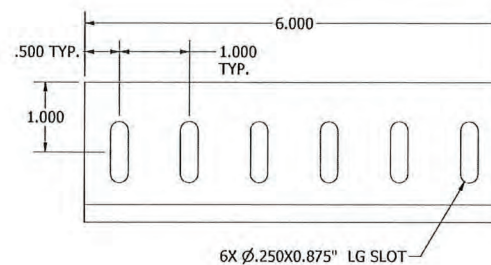
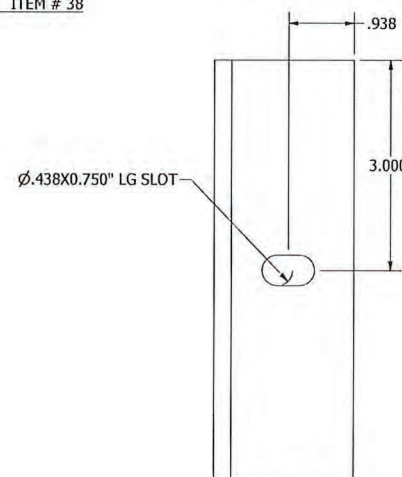
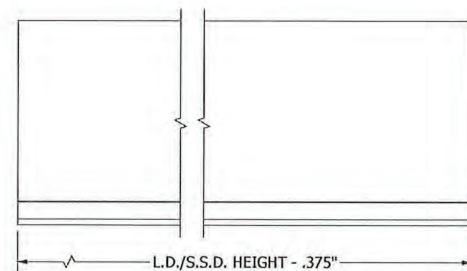
SILL FRAME (JAMB ONLY ATTACHMENT 100PSF)
ITEM #36
RUSKIN #70-024025-00B



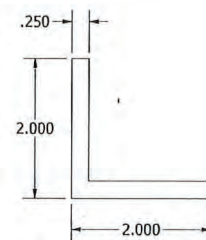
MULLION ATTACHMENT ANGLE ITEM #38
RUSKIN # A1141



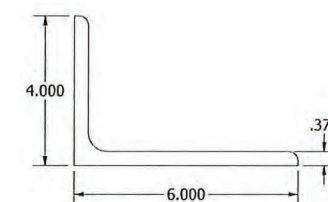
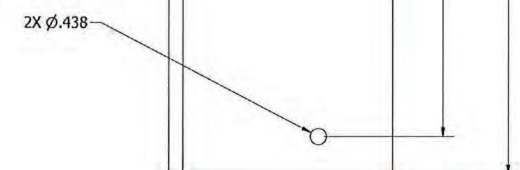
OFFSET TEE SUPPORT FOR BLADE ITEM #37
RUSKIN #70-022218-00B



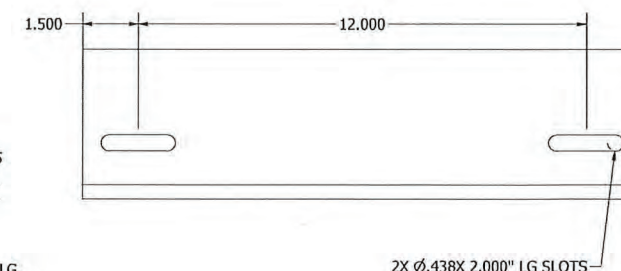
6X .250X0.875 LG SLOT



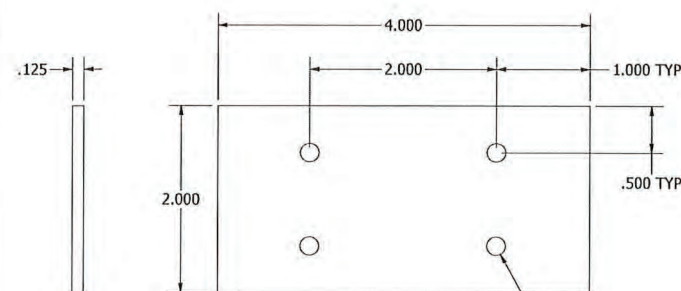
ALTERNATE ATTACHMENT CLIP ANGLE
ITEM #43
RUSKIN #85-023260-00B
(WOOD/METAL/CONCRETE)



STRUCTURAL ATTACHMENT ANGLE, 15" LG.
ITEM #44
RUSKIN #85-023251-00B
(6, 8, 10 & 12 IN GROUT-FILLED CMU)



2X .438X2.000 LG SLOTS



SPLICE PLATE ITEM #39
RUSKIN #85-021546-00B



JEFFREY DEVON SMITH,
P.E.
NO. 91182

PRODUCT REVISED
as complying with the Florida
Building Code

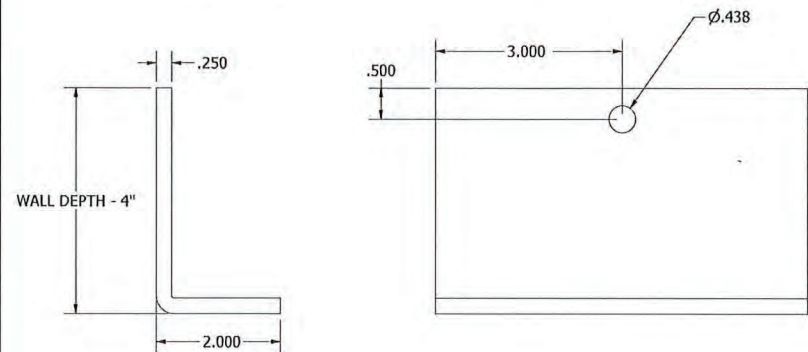
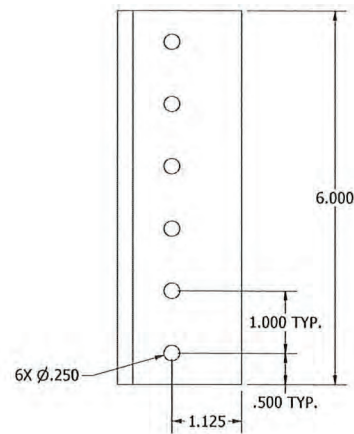
NOA-No. 23-1116.09

Expiration Date 07/09/2026

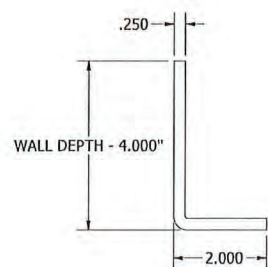
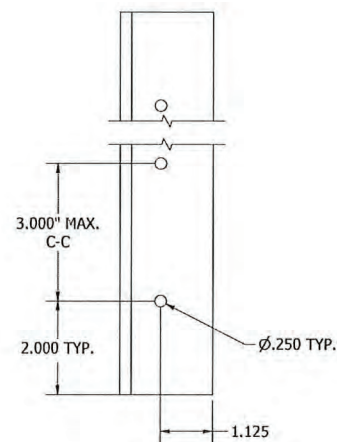
By *CS*
Miami-Dade Product Control

G	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012				
CHECKED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
APPROVED						
MATERIAL						
RUSKIN AUTHORITY IN AIR CONTROL 3900 Doctor Greaves Rd, Grandview, MO 64030 PROPRIETARY AND CONFIDENTIAL						
PRODUCT ELF6375DXD TITLE ELF6375DXD - PARTS - 100PSF SIZE D DWG NO 60-022277-00B SCALE NONE INVENTOR SHEET 23 OF 25						REV G
ECN	12011	7/8/2022				

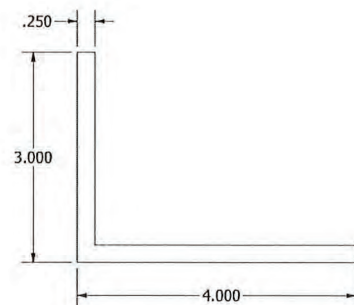
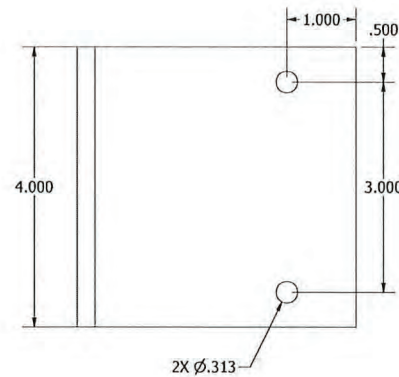
UNLESS OTHERWISE SPECIFIED, USE STD.
ENGINEERING TOLERANCES PER WIQ-007



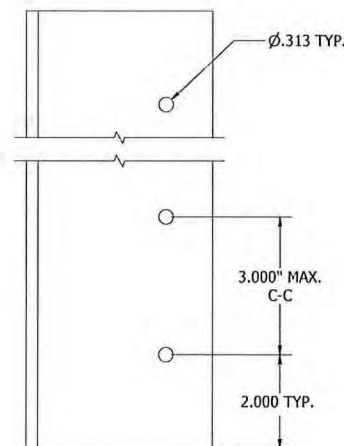
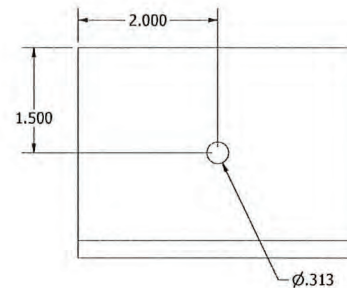
ATTACHMENT CLIP ANGLE - FORMED ITEM #45
RUSKIN #85-023252-00B
(6, 8, 10 & 12 IN GROUT-FILLED CMU)



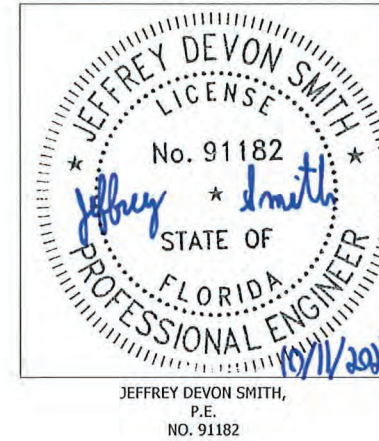
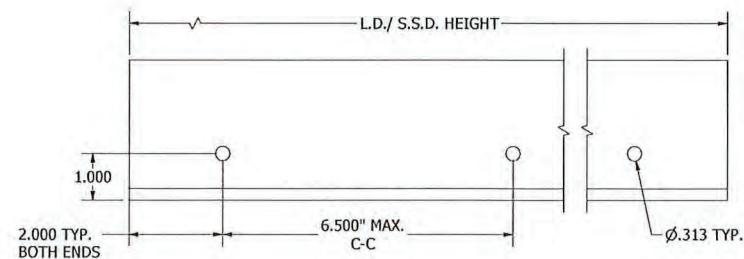
CONT. FORMED ANGLE ITEM #47
RUSKIN #85-023257-00B
(6, 8 & 10 IN GROUT-FILLED CMU)



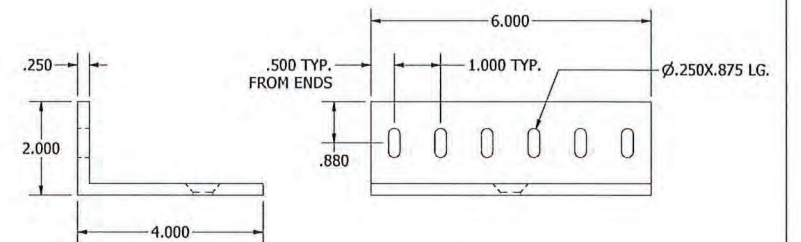
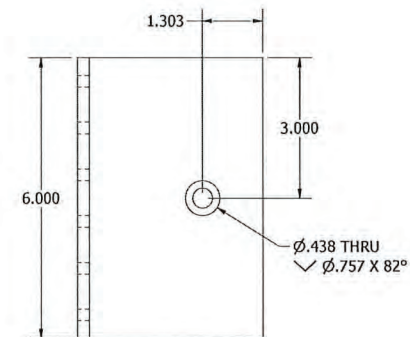
ATTACHMENT ANGLE (CMU) ITEM # 46
RUSKIN #85-023253-00B
(6, 8 & 10 IN GROUT-FILLED CMU)



CONT. ATTACHMENT ANGLE
ITEM #48
RUSKIN #85-023258-00B



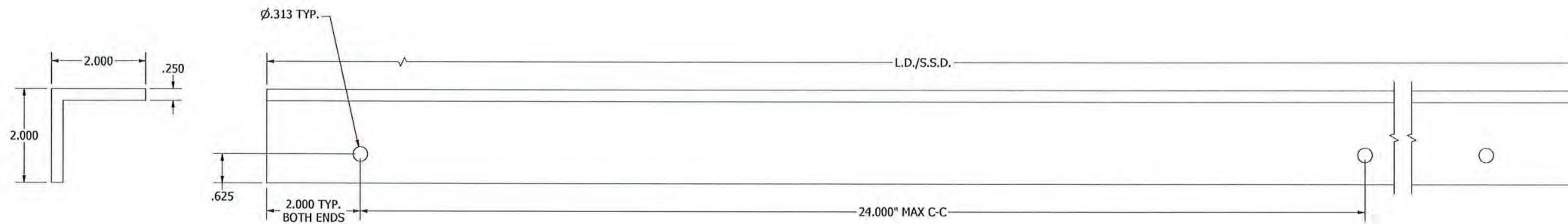
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.09
Expiration Date 07/09/2026
By *[Signature]*
Miami-Dade Product Control



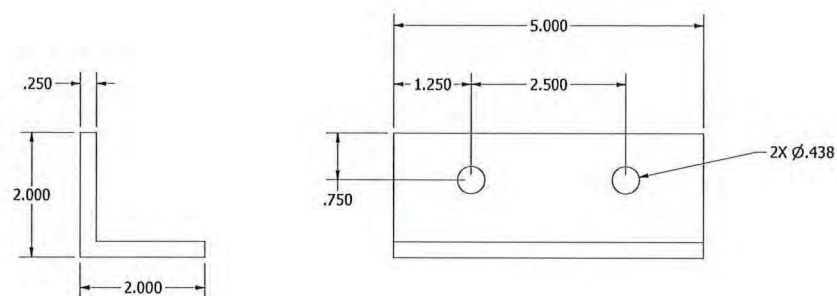
ATTACHMENT ANGLE (CMU) ITEM # 51
RUSKIN #85-023265-00B

G	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012				
CHECKED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
MATERIAL						
PRODUCT						ELF6375DXD
TITLE						ELF6375DXD - PARTS - 100PSF
SIZE	D	DWG NO	60-022277-00B	REV	G	
ECN	12011	7/8/2022	SCALE	NONE	INVENTOR	SHEET 24 OF 25

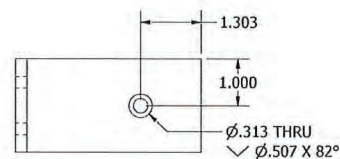
UNLESS OTHERWISE SPECIFIED, USE STD.
ENGINEERING TOLERANCES PER WIQ-007



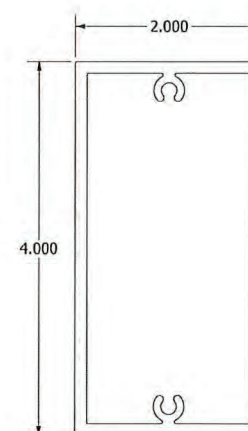
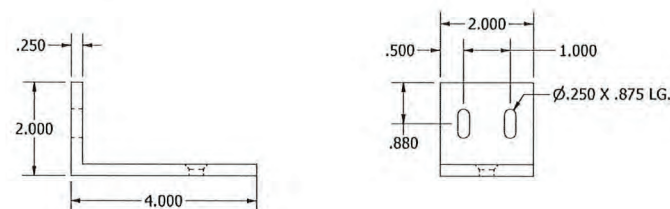
CONT. RETAINING ANGLE @ JAMB
(PERIMETER ATTACHMENT) ITEM #52
RUSKIN #85-023255-00B



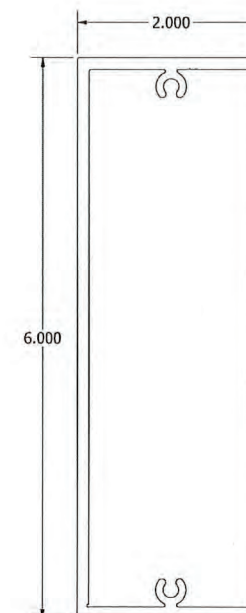
US - SUPPORT ATTACHMENT ANGLE
ITEM #53
RUSKIN #85-023256-00B



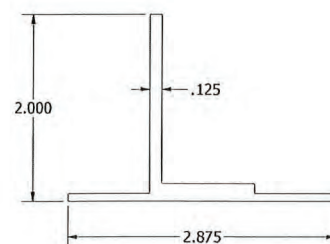
REVERSE CLIP ANGLE - JAMBS ITEM # 50
RUSKIN #85-023270-00B



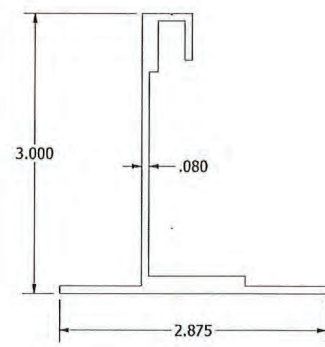
2 X 4 X 1/8" TUBE SUPPORT
ITEM #59



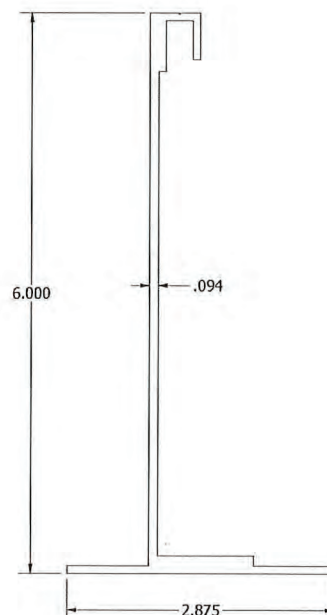
2 X 6 X 1/8" TUBE SUPPORT
ITEM #60



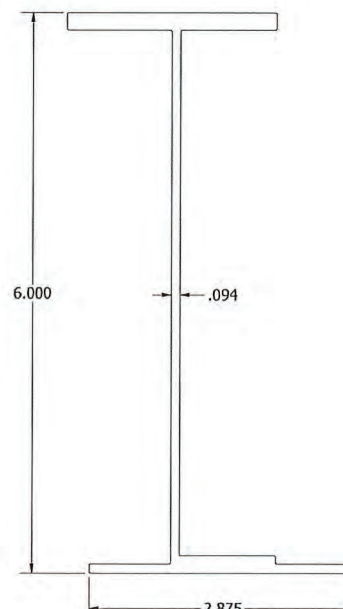
2" DOUBLE FLANGE
ITEM #55



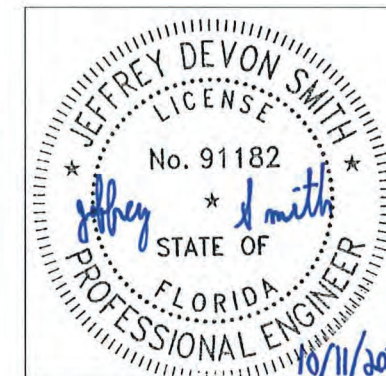
3" DOUBLE FLANGE
ITEM #56




6" DOUBLE FLANGE
ITEM #57



6" I SHAPE
ITEM #58



JEFFREY DEVON SMITH,
P.E.
NO. 91182

PRODUCT REVISED
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NOA-No. 23-1116.09
Expiration Date 07/09/2026
By 
Miami-Dade Product Control

G	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	VMA	JDS	07/18/22
F	REV'D FOR 100 PSF WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
E	REV'D ENGINEER OF RECORD, UPDATED INFO.	NS	JDS	WRT	MMM	09/25/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/17/2012				
CHECKED	DRP	3/23/2012				
APPROVED	DRP	3/23/2012				
APPROVED						
MATERIAL						
PRODUCT		ELF6375DXD				
TITLE		ELF6375DXD - PARTS - 100PSF				
SIZE	D	DWG NO	60-022277-00B		REV	G
SCALE	12011	7/8/2022	SCALE	NONE	INVENTOR	SHEET 25 OF 25

RUSKIN
AUTHORITY IN AIR CONTROL
3900 Doctor Greaves Rd,
Grandview, MO 64030
PROPRIETARY AND
CONFIDENTIAL

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