



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](http://www.miamidade.gov/economy)

**Reliable Products a div. of Ruskin Company**  
**1300 Enterprise Road (PO Box 580)**  
**Geneva, AL 36340**

**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 5DDWRDC Aluminum Louver**

**APPROVAL DOCUMENT:** Drawing No. **60-022270-00B**, titled "5DDWRDC", sheets 1 through 19 of 19, dated 08/02/2012, with revision E dated 03/02/2023, prepared by Reliable Products a div. of Ruskin Company, signed and sealed by Jeffrey D. Smith, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

**MISSILE IMPACT RATING: Large and Small Missile Impact Resistant**

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

**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 # **20-1015.05** and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

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



  
02/07/24

NOA No. 23-1116.17  
Expiration Date: February 23, 2026  
Approval Date: February 15, 2024  
Page 1

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's**

**A. DRAWINGS “Submitted under NOA # 16-0217.04”**

1. Drawing No. **60-022270-00B**, titled “5DDWRDC”, sheets 1 through 21 of 21, dated 08/02/2012, with revision B dated 01/25/2016, prepared by Reliable Products, signed and sealed by Chelsea GQ. Welch, P.E.

**B. TESTS “Submitted under NOA # 12-0816.01”**

1. Test report 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 EME520MD (Assembly A) Aluminum Louvers, prepared by National Certified Testing Laboratories, Report No. **210-3792-2**, dated 05/23/2012, signed and sealed by Gerald J. Ferrara, P.E.
2. Test report 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 EME520MD (Assembly B) Aluminum Louvers, prepared by National Certified Testing Laboratories, Report No. **210-3782-2**, dated 05/23/2012, signed and sealed by Gerald J. Ferrara, P.E.
3. Test report 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 EME520MD (Assembly C) Aluminum Louvers, prepared by National Certified Testing Laboratories, Report No. **210-3784-2**, dated 05/23/2012, signed and sealed by Gerald J. Ferrara, P.E.
4. Test report 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 EME520MD (Assembly D) Aluminum Louvers, prepared by National Certified Testing Laboratories, Report No. **210-3790-2**, dated 05/23/2012, signed and sealed by Gerald J. Ferrara, P.E.
5. Test report 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 EME520MD (Assembly E) Aluminum Louvers, prepared by National Certified Testing Laboratories, Report No. **210-3785-2**, dated 05/23/2012, signed and sealed by Gerald J. Ferrara, P.E.



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**Carlos M. Utrera, P.E.**  
**Product Control Examiner**  
**NOA No. 23-1116.17**  
**Expiration Date: February 23, 2026**  
**Approval Date: February 15, 2024**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**B. TESTS (Continued)**

6. Test report 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 EME520MD (Assembly F) Aluminum Louvers, prepared by National Certified Testing Laboratories, Report No. **210-3784-4**, dated 05/23/2012, signed and sealed by Gerald J. Ferrara, P.E.  
  
***“Submitted under NOA # 05-0812.07”***
7. Test report on Large Missile Impact Test per FBC, TAS 201-94, Cyclic Wind Pressure Test per FBC, TAS 203-94, and Uniform Static Air Pressure Test per FBC, TAS 202-94 of Series EME520MD aluminum louvers mulled together, prepared by Fenestration Testing Laboratory, Inc, Test Report No. **4525**, dated 04/22/2005, signed and sealed by E. J. Largaespada, P.E.

**C. CALCULATIONS “Submitted under NOA # 16-0112.02”**

1. Louver wind load review prepared by Ruskin Company, dated 12/22/2015, signed and sealed by Chelsea GQ. Welch, P.E.  
  
***“Submitted under NOA # 12-0816.01”***
2. Louver wind load review prepared by Ruskin Company, dated 07/25/2012, signed and sealed by Daniel J. Rau, P.E.  
  
***“Submitted under NOA # 05-0812.07”***
3. Calculations prepared by Ruskin Company, dated 08/10/2005, pages 1 through 13, signed and sealed by E. P. Hutson, P.E.

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS “Submitted under NOA # 16-0217.04”**

1. Statement letter of code conformance to the 5<sup>th</sup> edition (2014) FBC issued by Ruskin Company, dated 02/02/2016, signed and sealed by Chelsea GQ. Welch, P.E.
2. No financial interest letter issued by Ruskin Company, dated 02/02/2016, signed and sealed by Chelsea GQ. Welch, P.E.
3. Private label agreement dated 02/02/2016.



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**Carlos M. Utrera, P.E.**  
**Product Control Examiner**  
**NOA No. 23-1116.17**  
**Expiration Date: February 23, 2026**  
**Approval Date: February 15, 2024**

**Reliable Products a div. of Ruskin Company**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**2. EVIDENCE SUBMITTED UNDER NOA # 20-1015.05 AND NEW**

**A. DRAWINGS**

1. Drawing No. **60-022270-00B**, titled “5DDWRDC”, sheets 1 through 19 of 19, dated 08/02/2012, with revision E dated 03/02/2023, prepared by Reliable Products a div. of Ruskin Company, signed and sealed by Jeffrey D. Smith, P.E.

**B. TESTS**

1. None.

**C. CALCULATIONS “Submitted under NOA # 20-1015.05”**

1. Louver wind load review prepared by Ruskin Company, dated 09/04/2020, signed and sealed by Melissa M. Massar, P.E.

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS**

1. Statement letter of code conformance to the 8<sup>th</sup> edition (2023) of the FBC, prepared by Reliable Products a div. of Ruskin Company, dated 11/01/2023, signed and sealed by Jeffrey D. Smith, P.E.  
  
**“Submitted under NOA # 20-1015.05”**
2. Statement letter of code conformance to 7<sup>th</sup> edition (2020) of the FBC, prepared by Ruskin Company, dated 09/14/2020, signed and sealed by Melissa M. Massar, P.E.



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**Carlos M. Utrera, P.E.**  
**Product Control Examiner**  
**NOA No. 23-1116.17**  
**Expiration Date: February 23, 2026**  
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PARTS LIST FOR STANDARD CONSTRUCTION			
ITEM #	DESCRIPTION	MATERIAL	ALLOY
1	HEAD FRAME	0.094" THK. EXTRUDED ALUM.	6063-T6
2	SILL FRAME	0.080" THK. EXTRUDED ALUM.	6063-T6
3	JAMB FRAME	0.080" THK. EXTRUDED ALUM.	6063-T6
4	BLADE	0.060" THK. EXTRUDED ALUM.	6063-T6
5	BLADE BRACE	0.070" THK. EXTRUDED ALUM.	6063-T6
6	H.V.B.S STRAP	0.125" THK. EXTRUDED ALUM.	6063-T6
7	SCR 8-18 X 3.00 HWH AB W/SEAL WASHER	410 SS/ZINC COATED	-
8	SCR 10-16 X 3.00 HWH AB W/SEAL WASHER	410 SS/ZINC COATED	-

MULTI SECTION CONNECTION PARTS			
ITEM #	DESCRIPTION	MATERIAL	ALLOY
9	MULLION SUPPORT ANGLE	0.125" THK EXTRUDED ALUM	6063-T6

INSTALLATION PARTS			
ITEM #	DESCRIPTION	MATERIAL	ALLOY
10	ATTACHMENT CLIP ANGLE, 2" LG.	0.250" THK EXTRUDED ALUM.	6063-T6
11	CLIP ANGLE - FORMED, 2" LG.	0.250" THK FORMED ALUM.	3003-H14
12	CLIP ANGLE - FORMED, 4" LG.	0.250" THK FORMED ALUM.	3003-H14
13	ATTACHMENT CLIP ANGLE, CONT.	0.250" THK EXTRUDED ALUM.	6063-T6
14	CLIP ANGLE - FORMED, CONT.	0.250" THK FORMED ALUM.	3003-H14
15	STRUCTURAL ATTACHMENT ANGLE, CONT.	0.500" THK A36 STL	-
16	STRUCTURAL ATTACHMENT ANGLE, 28" LG.	0.625" THK A36 STL	-
17	MULLION SUPPORT ATTACHMENT PLATE	.250" THK A36 STL	-
18	SCREW #10-16 X 1.500" LG. HWH SDS	410SS/ZINC COATED	-
19	3/8-16 X 1.500" LG A307 GRADE A HHB W/ WASHER & LOCKNUT	ZINC PLATED	-
20	3/8-16 X 2.000" LG A307 GRADE A HHB W/ WASHER & LOCKNUT	ZINC PLATED	-
21	3/8-16 X 2.500" LG A307 GRADE A HHB W/ WASHER & LOCKNUT	ZINC PLATED	-
22	5/8-11 X 2.000" LG A307 GRADE A HHB W/ WASHER & LOCKNUT	ZINC PLATED	-
23	SUBSTRATE FASTENER (BY OTHERS)	VARIES (REF TABLE 02/15)	-

UNIVERSAL SLEEVE PARTS			
ITEM #	DESCRIPTION	MATERIAL	ALLOY
24	HEAD FRAME W/INTEGRAL FLANGE	.094" THK EXTRUDED ALUM.	6063-T6
25	SILL FRAME W/INTEGRAL FLANGE	.080" THK EXTRUDED ALUM.	6063-T6
26	JAMB FRAME W/INTEGRAL FLANGE	.080" THK EXTRUDED ALUM.	6063-T6
27	FRONT FLANGE UNIVERSAL SLEEVE	.188" THK FORMED ALUM.	3003-H14
28	CONT. RETAINING ANGLE	.250" THK EXTRUDED ALUM.	6063-T6
29	US MULLION ATTACHMENT ANGLE, 6" LG.	.250" THK EXTRUDED ALUM.	6063-T6
30	1/2-13 X 2.500" LG A307 GRADE 5 HHB W/ WASHER & LOCKNUT	ZINC PLATED	-
31	SCREW 1/4-20 X 1.000" LG. HWH SDS	410SS/ZINC COATED	-

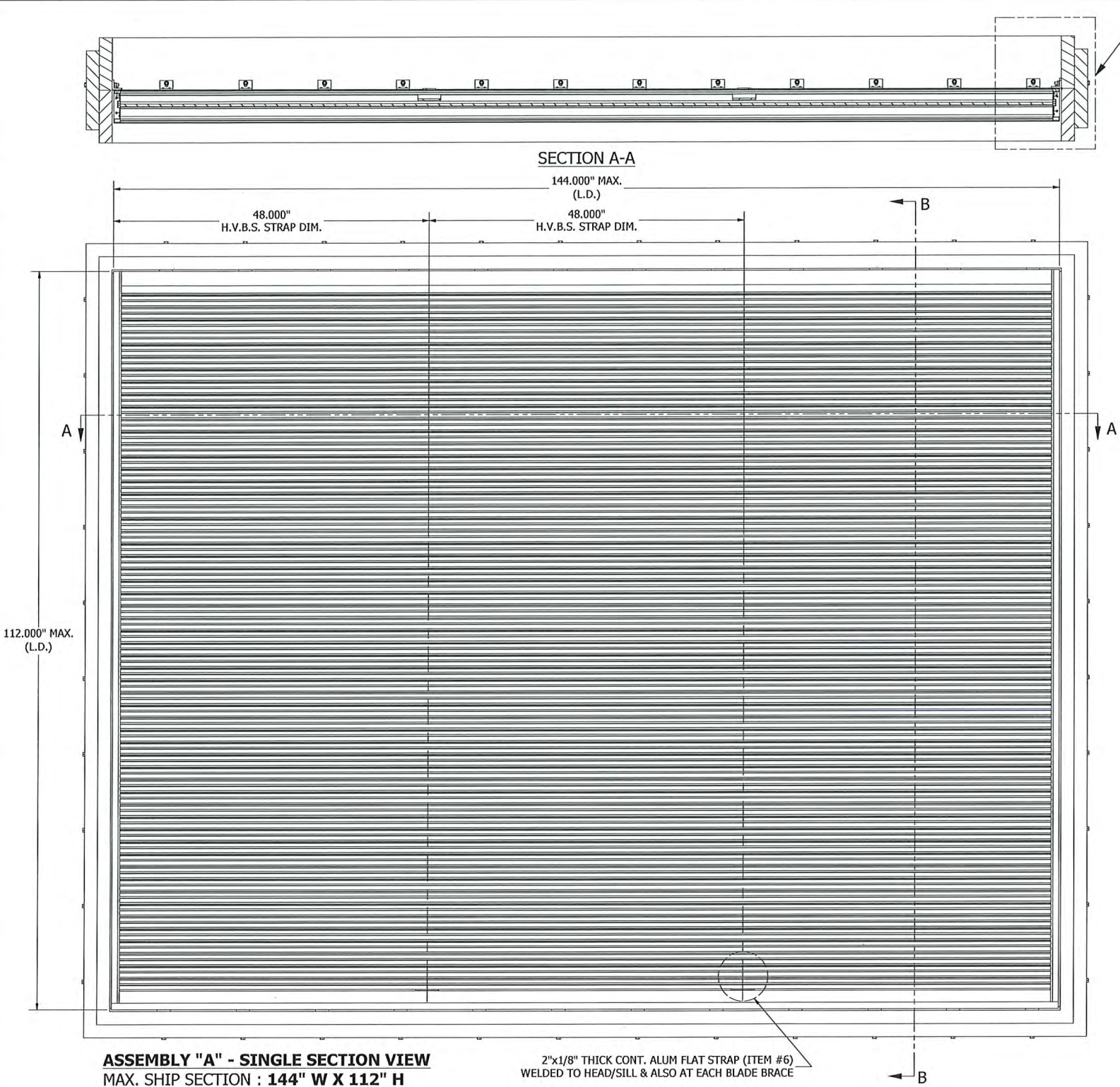
MULLION SUPPORT OPTIONS BASED ON SECTION HEIGHT				
ITEM #	DESCRIPTION	LOUVER HEIGHT RANGE	MATERIAL	ALLOY
32	CHAN C3 X 4.1 X 20'	GREATER THAN 12" TO 103"	A36 CARBON STEEL	-
33	CHAN C4 X 5.4 X 20'	GREATER THAN 103" TO 116"	A36 CARBON STEEL	-
34	CHAN C5 X 6.7 X 20'	GREATER THAN 116" TO 133"	A36 CARBON STEEL	-
35	CHAN C6 X 8.2 X 20'	GREATER THAN 133" TO 144"	A36 CARBON STEEL	-

CIRCULAR SHAPE LOUVER PARTS/INSTALLTIONS			
ITEM #	DESCRIPTION	MATERIAL	ALLOY
36	1 SHAPE FRAME	0.080" THK. EXTRUDED ALUMINIUM	6063-T4
37	6" ATTACHMENT ANGLE	0.250" THK. EXTRUDED ALUMINIUM	6063-T6
38	6" REINFORCING ANGLE	0.125" THK FORMED ALUMINIUM	5005-H34
39	2" ATTACHMENT ANGLE	0.250" THK. EXTRUDED ALUMINIUM	6063-T6
40	2" REINFORCING ANGLE	0.125" THK FORMED ALUMINIUM	5005-H34
41	STRAP SPLICE PLATE	0.125" THK FORMED ALUMINIUM	5005-H34

REVERSE ANGLE INSTALLTION OPTIONS			
ITEM#	DESCRIPTION	MATERIAL	ALLOY
42	ATTACHMENT ANGLE,2" LG.,REVERSE DIR.	.250" THK.EXT. ALUM	6063-T6
43	CONTINUOUS ATTACHMENT ANGLE,REVERSE DIR.	.250" THK.EXT. ALUM	6063-T6
44	ATTACHMENT ANGLE 6" LONG,REVERSE DIR.	.250" THK.EXT. ALUM	6063-T6
45	ALTERNATE ATTACHMENT ANGLE 2" LONG,REVERSE DIR.	.250" THK.EXT. ALUM	6063-T6
46	SUBSTRATE FASTENER_REVERSE ANGLE - BY OTHERS	REF TABLE 01/11	-

#### NOTES

- THE 5DDWRDC 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 **± 120 PSF OR LESS**.
- 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.
- THIS LOUVER SYSTEM IS NON-BEARING AND IS NOT DESIGNED TO WITHSTAND BUILDING DEAD LOADS.
- IT SHALL BE THE RESPONSIBILITY OF PERMIT HOLDER/BUILDING DESIGN ENGINEER OF RECORD TO VERIFY THE STRUCTURAL INTEGRITY OF THE STRUCTURE TO SUPPORT THE LOADS IMPOSED BY THIS LOUVER SYSTEM.
- MAXIMUM SINGLE SECTION SIZE : **87 15/16" WIDE X 144" HIGH OR 144" WIDE X 112" HIGH**.
- MAXIMUM ASSEMBLED LOUVER SIZE : **UNLIMITED WIDE X 144" HIGH** W/SECTION MULLIONS AT **87 7/8"** (TRAPEZOIDS ALLOWED)
- SECTIONS OR ASSEMBLIES MAY BE STACKED VERTICALLY PROVIDED SUITABLE STRUCTURAL SUPPORT IS DESIGNED AND INSTALLED BY OTHERS TO SUPPORT ALL LOADS TRANSFERRED FROM THE LOUVER.
- 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 **"SHIPPED LOOSE PARTS"**.
- ALL FASTENERS SHALL BE CORROSION RESISTANT.



**ASSEMBLY "A" - SINGLE SECTION VIEW**  
MAX. SHIP SECTION : **144" W X 112" H**

#### DRAWING SHEET INDEX:

**SHEET 01** - NOTES, PARTS LIST, DRAWING INDEX, ASSEMBLY "A"  
**SHEET 02** - ASSEMBLY "A" - HEAD/SILL INSTALL (ALL SUBSTRATES)  
**SHEET 03** - ASSEMBLY "A", "B" & "C" - JAMB INSTALL (ALL SUBSTRATES)  
**SHEET 04** - ASSEMBLY "A", "B" & "C" - REVERSE ANGLE INSTALL (ALL SUBSTRATES)  
**SHEET 05** - ASSEMBLY "B" - BASIC ASSEMBLY  
**SHEET 06** - ASSEMBLY "C" - BASIC ASSEMBLY  
**SHEET 07** - ASSEMBLY "B" & "C" - MULLION SUPPORT CONNECTION @ HEAD/SILL  
**SHEET 08** - ASSEMBLY "B" & "C" - VISIBLE MULLION CONNECTION (ALL SUBSTRATES)  
**SHEET 09** - ASSEMBLY "D"  
**SHEET 10** - ASSEMBLY "D" INSTALL  
**SHEET 11** - ASSEMBLY "D" REVERSE ANGLE INSTALL (ALL SUBSTRATES)  
**SHEET 12** - ASSEMBLY "E" & "F"  
**SHEET 13** - ASSEMBLY "E" & "F" INSTALL  
**SHEET 14** - ASSEMBLY "E" & "F" REVERSE ANGLE INSTALL (ALL SUBSTRATES)  
**SHEET 15** - SUBSTRATE FASTENER TABLE, PARTS (ITEMS 1 THRU 6)  
**SHEET 16** - PARTS (ITEMS 9 THRU 15)  
**SHEET 17** - PARTS ITEMS 16 & 17, 24 THRU 28)  
**SHEET 18** - PARTS (ITEMS 29, 32 THRU 41)  
**SHEET 19** - PARTS (ITEMS 42 THRU 45)

**PRODUCT REVISED**  
**as complying with the Florida**  
**Building Code**

**NOA-No.** 23-1116.17

**Expiration Date** 02/23/2026

By   
**Miami-Dade Product Control**

**REF DETAIL F/03**  
FOR JAMB CONNECTION DETAIL (WOOD)  
**REF DETAIL G/03**  
FOR JAMB CONNECTION DETAIL (STEEL)  
**REF DETAIL H/03**  
FOR JAMB CONNECTION DETAIL (CONCRETE)  
**REF DETAIL J/03**  
FOR JAMB CONNECTION DETAIL (CMU)  
**REF DETAIL K/03**  
FOR JAMB CONNECTION DETAIL (UNIVERSAL SLEEVE)  
**REF DETAIL P,Q,R/04**  
FOR JAMB CONNECTION DETAIL  
IN REVERSE DIRECTION  
(WOOD,STEEL,CONCRETE)


**REF DETAIL A/02**  
FOR HEAD/SILL CONNECTION DETAIL (WOOD)  
**REF DETAIL B/02**  
FOR HEAD/SILL CONNECTION DETAIL (STEEL)  
**REF DETAIL C/02**  
FOR HEAD/SILL CONNECTION DETAIL (CONCRETE)  
**REF DETAIL D/02**  
FOR HEAD/SILL CONNECTION DETAIL (CMU)  
**REF DETAIL E/02**  
FOR HEAD/SILL CONNECTION DETAIL  
(UNIVERSAL SLEEVE)  
**REF DETAIL L,M,N/04**  
FOR HEAD/SILL CONNECTION DETAIL  
IN REVERSE DIRECTION  
(WOOD,STEEL,CONCRETE)

#### ABBREVIATIONS:

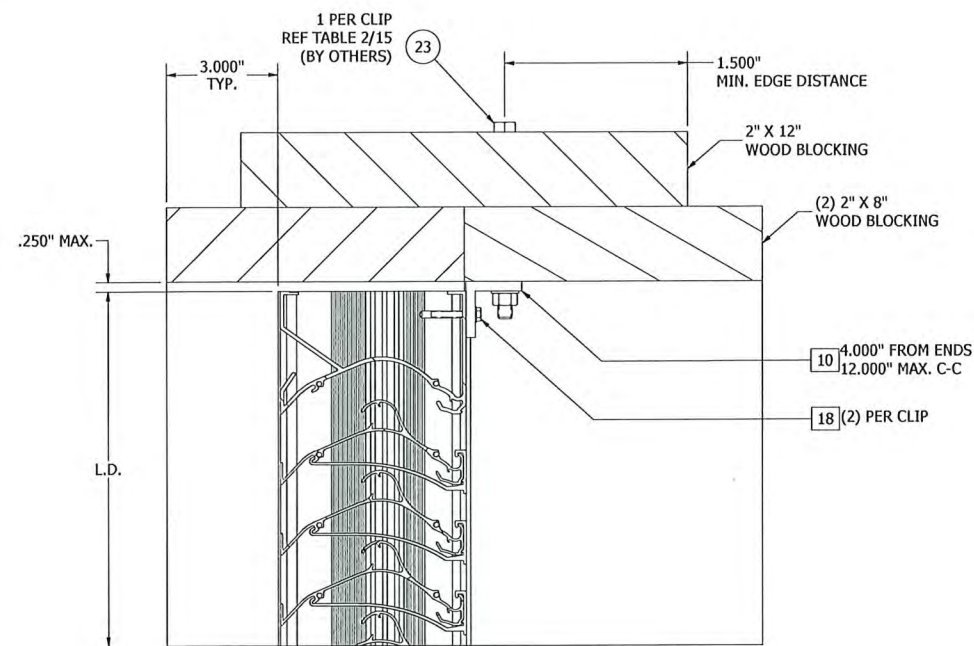
CONT. - CONTINUOUS  
C-C - CENTER TO CENTER  
D - SUBSTRATE DEPTH  
DIM. - DIMENSION  
FLG. - FLANGE  
HDG - HOT DIPPED GALVANIZED  
H.V.B.S. - HIDDEN VERTICLE BLADE SUPPORT  
H.H.B.S. - HIDDEN HORIZONTAL BLADE  
SUPPORT  
HWH -HEX WASHER HEAD  
L.D. - LOUVER DIMENSION  
MAX. - MAXIMUM  
MIN. - MINIMUM  
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



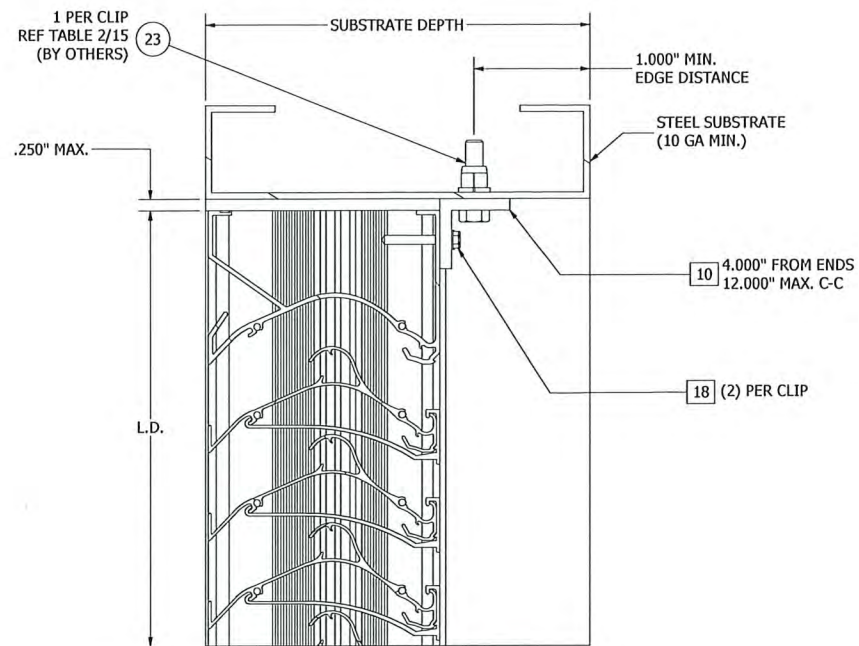
JEFFREY D. SMITH, P.E.  
NO. 91182

E	ADDED DETAILS OF CIRCULAR SHAPE LVR,REVERSE ANGLE,UNI. SLEEVE THK.		RVT	JDS	-	JDS	03/02/23		
D	REV'D ENGINEER OF RECORD, UPDATED INFO.		SSK/ NS	JDS	WRT	MMM	09/10/20		
REV	DESCRIPTION		BY	CHK	APVD	APVD	DATE		
AUTHOR	DRP	5/16/12	<div><div>1300 Enterprise Road, Generv, Alabama 36340 PROPRIETARY AND CONFIDENTIAL</div></div>						
CHECKED	DJR	8/2/12							
APPROVED	DJR	8/2/12							
MATERIAL			PRODUCT					5DDWRDC	
			TITLE					NOTES, PARTS LIST, DRAWING INDEX, ASSEMBLY 'A'	
			SIZE	DWG NO				60-022270-00B	REV
			D						E
ECH	12426	SCALE		NONE	INVENTOR		SHEET 1 OF 19		

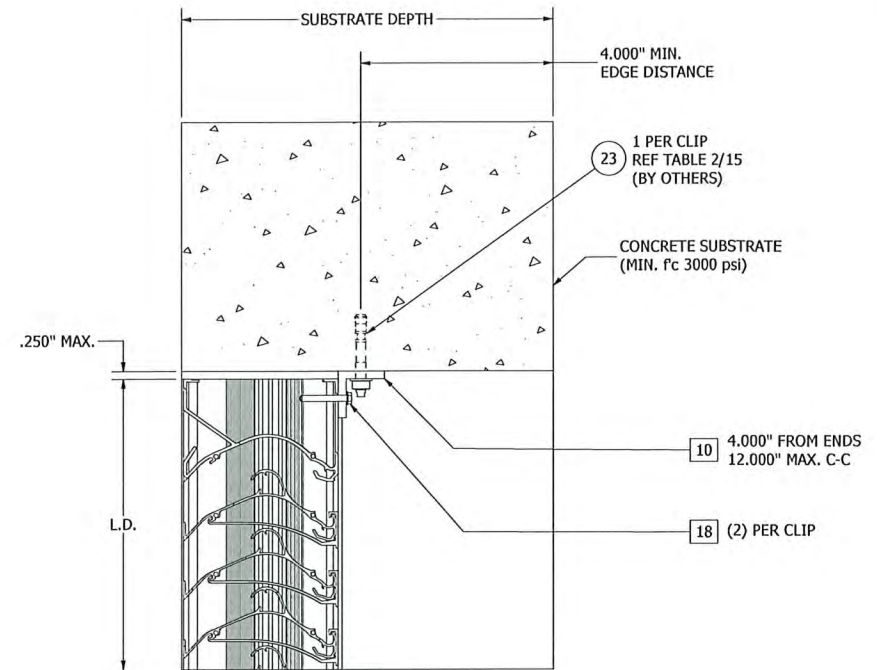




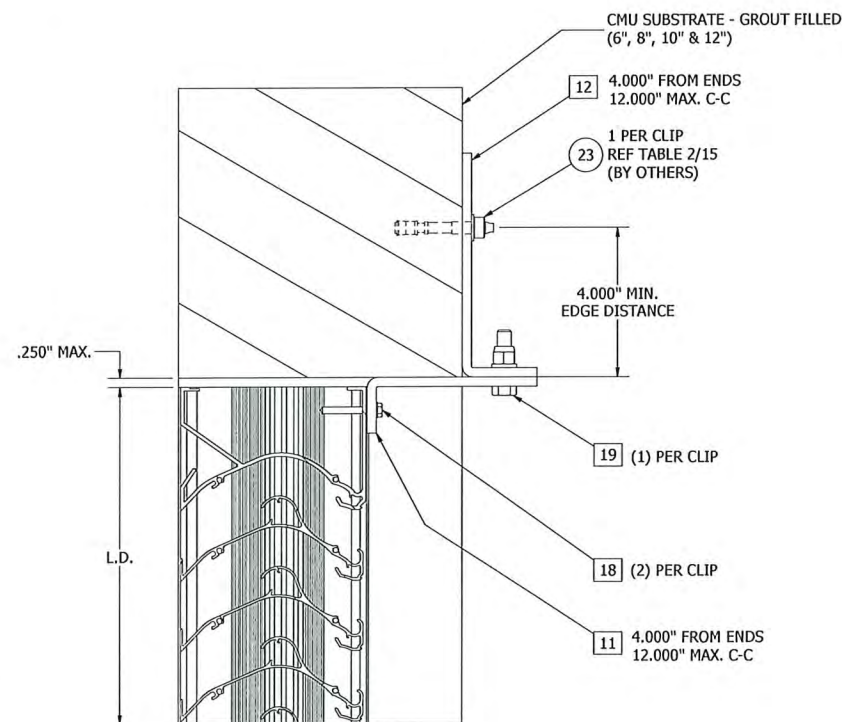
**DETAIL A**  
ASSEMBLY 'A' - HEAD/SILL CONNECTION  
(WOOD SUBSTRATE)



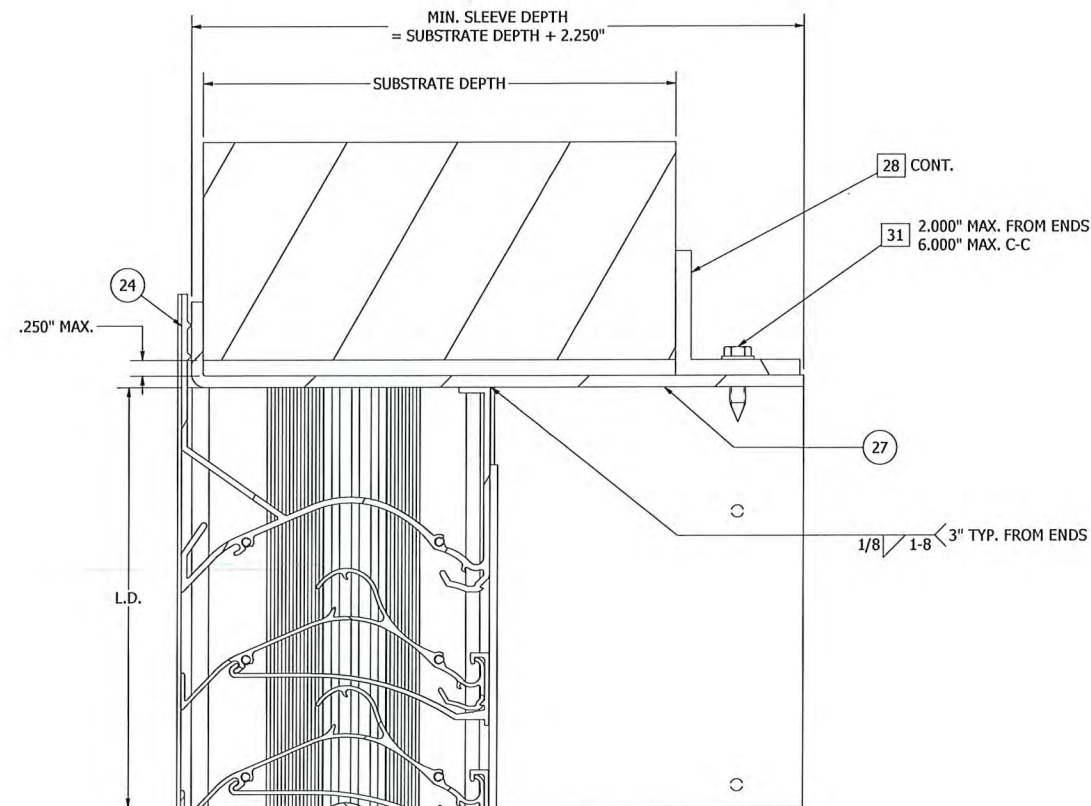
**DETAIL B**  
ASSEMBLY 'A' - HEAD/SILL CONNECTION  
(STEEL SUBSTRATE)



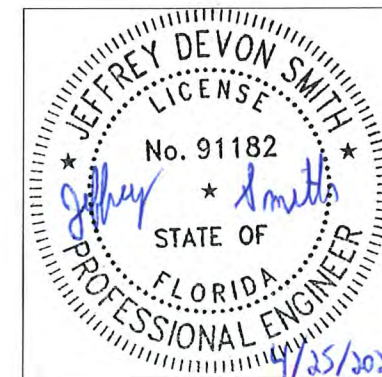
**DETAIL C**  
ASSEMBLY 'A' - HEAD/SILL CONNECTION  
(CONCRETE SUBSTRATE)



**DETAIL D**  
ASSEMBLY 'A' - HEAD/SILL CONNECTION  
(CMU SUBSTRATE)



**DETAIL E**  
ASSEMBLY 'A' - HEAD/SILL CONNECTION  
(UNIVERSAL SLEEVE)



JEFFREY D. SMITH, P.E.  
NO. 91182

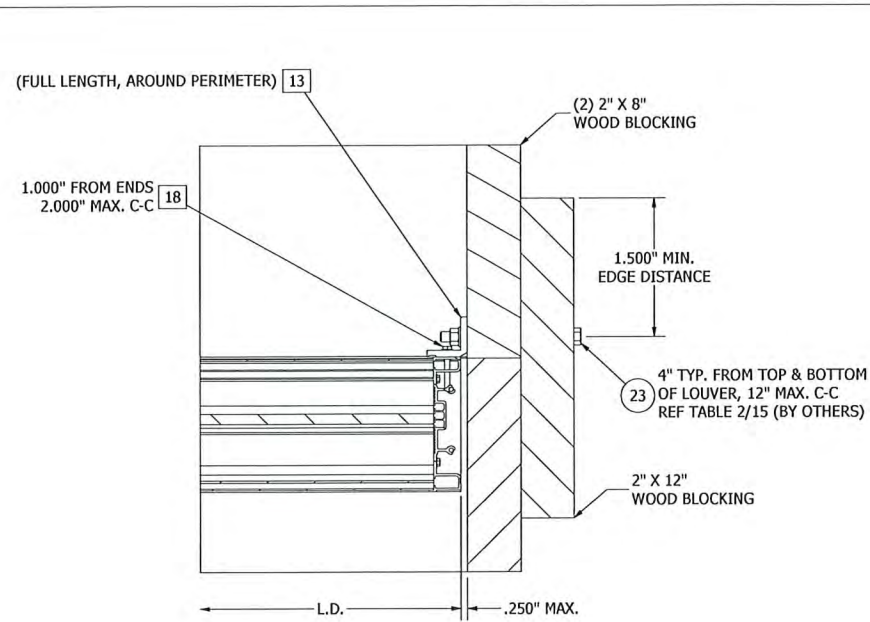
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1116.17  
Expiration Date 02/23/2026  
By *[Signature]*  
Miami-Dade Product Control

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.	RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.	SSK/NS	JDS	WRT	MMM	09/10/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DRP	5/16/12				
CHECKED	DJR	8/2/12				
APPROVED	DJR	8/2/12				
MATERIAL						
PRODUCT	SDDWRDC					
TITLE	ASSEMBLY "A" - HEAD/SILL INSTALL DETAILS					
SIZE	D		DWG NO	60-022270-00B	REV	E
ECN	12426	SCALE	NONE	INVENTOR	SHEET 2 OF 19	

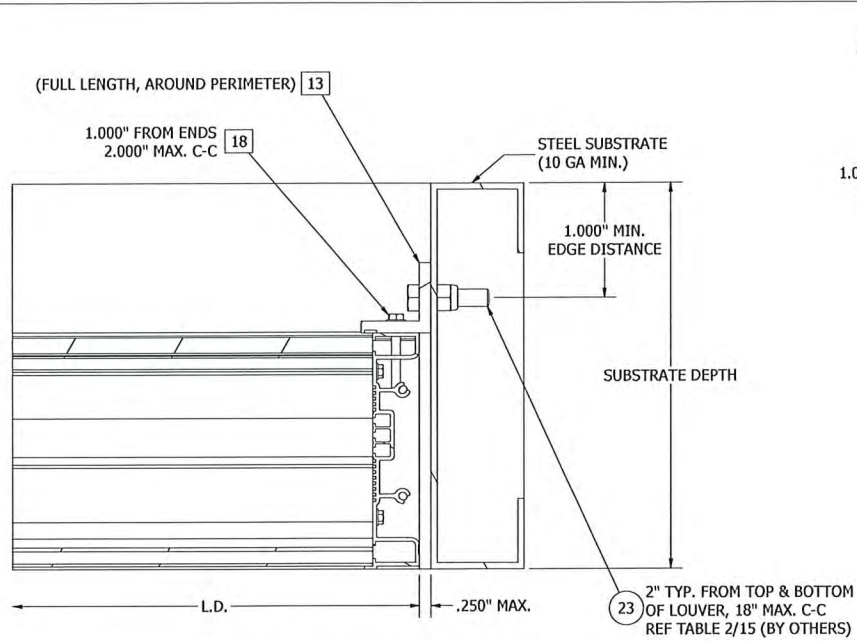
**RELIABLE**  
ARCHITECTURAL PRODUCTS  
COUNTERS • TERRAZZO WALLS • SURFACES

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Geneva, Alabama 36540  
PROPRIETARY AND  
CONFIDENTIAL

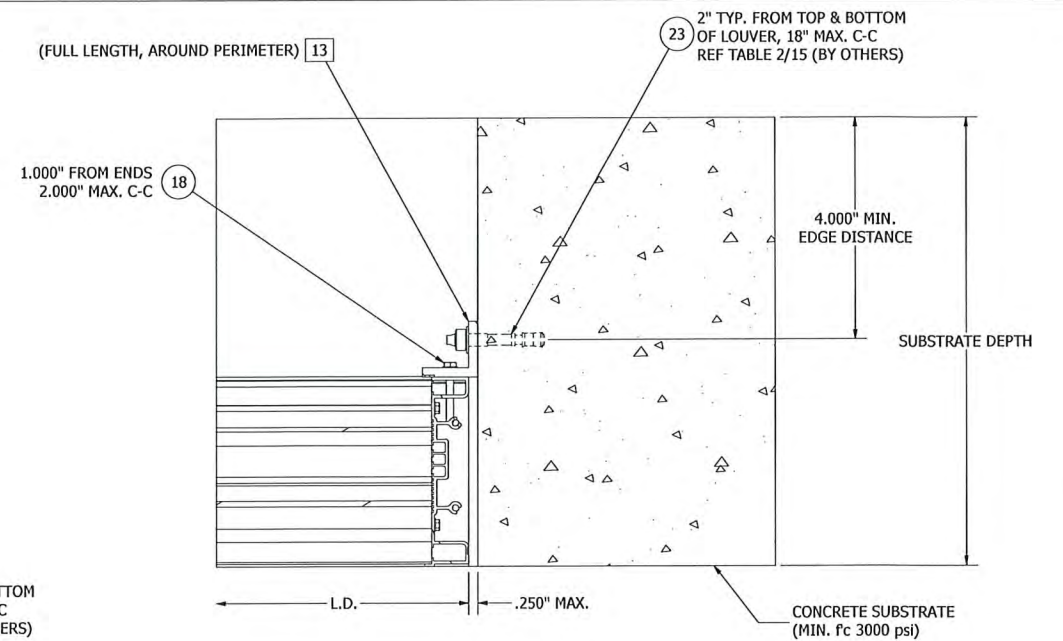




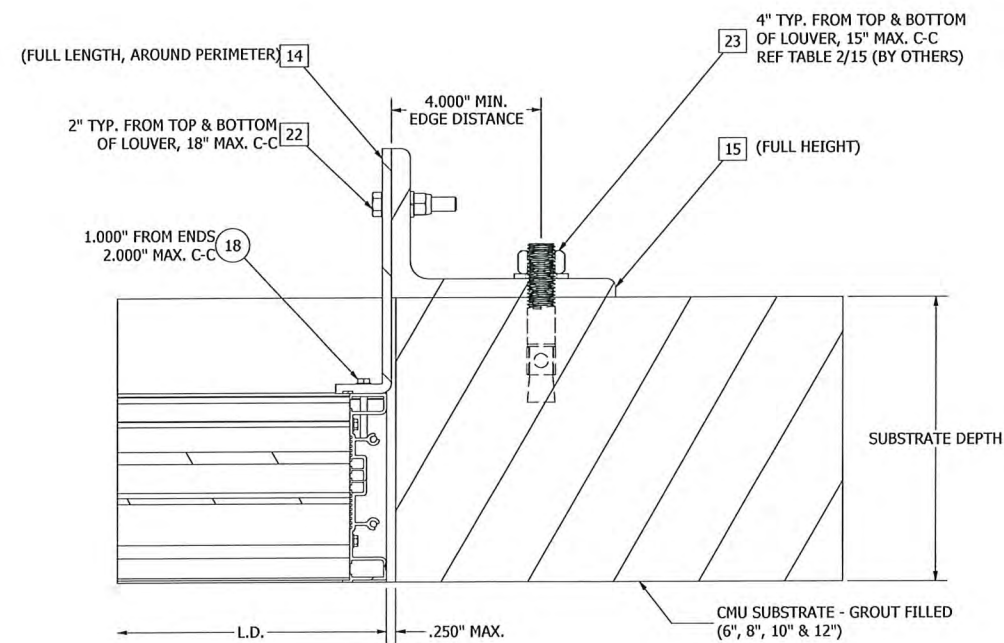
**DETAIL F**  
ASSEMBLY 'A', 'B' & 'C' - JAMB CONNECTION  
(WOOD SUBSTRATE)



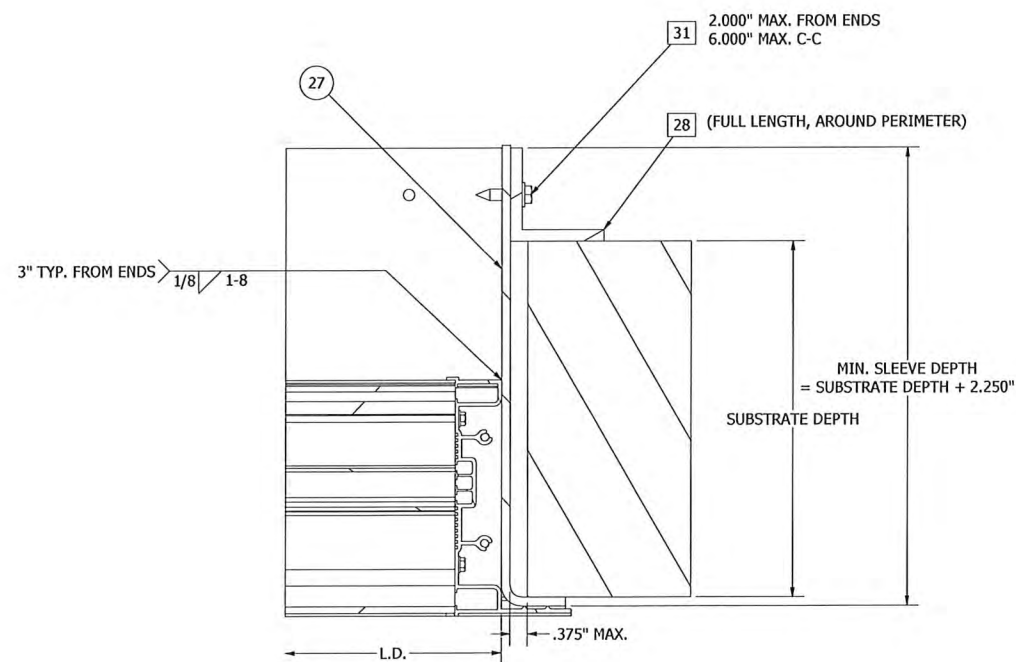
**DETAIL G**  
ASSEMBLY 'A', 'B' & 'C' - JAMB CONNECTION  
(STEEL SUBSTRATE)



**DETAIL H**  
ASSEMBLY 'A', 'B' & 'C' - JAMB CONNECTION  
(CONCRETE SUBSTRATE)



**DETAIL J**  
ASSEMBLY 'A', 'B' & 'C' - JAMB CONNECTION  
(CMU SUBSTRATE)



**DETAIL K**  
ASSEMBLY 'A', 'B' & 'C' - JAMB CONNECTION  
(UNIVERSAL SLEEVE)



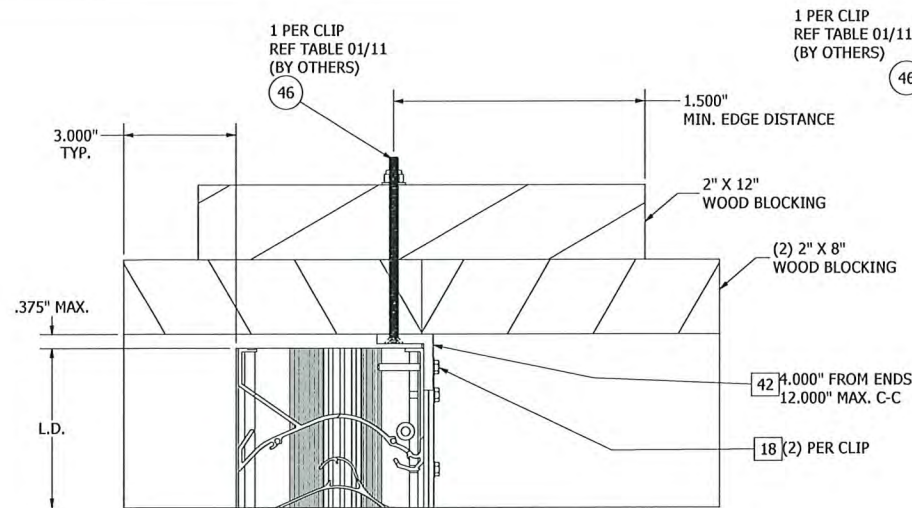
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
**NOA-No.** 23-1116.17  
**Expiration Date** 02/23/2026  
**By** *[Signature]*  
**Miami-Dade Product Control**

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.	RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.	SSK/NS	JDS	WRT	MMM	09/10/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DRP	5/16/12				
CHECKED	DJR	8/2/12				
APPROVED	DJR	8/2/12				
MATERIAL						
	PRODUCT	5DDWRDC				
	TITLE	ASSEMBLY "A", "B" & "C" - JAMB INSTALL DETAILS				
	SIZE D		DWG NO	60-022270-00B		REV E
ECN 12426	SCALE	NONE	INVENTOR	SHEET 3 OF 19		

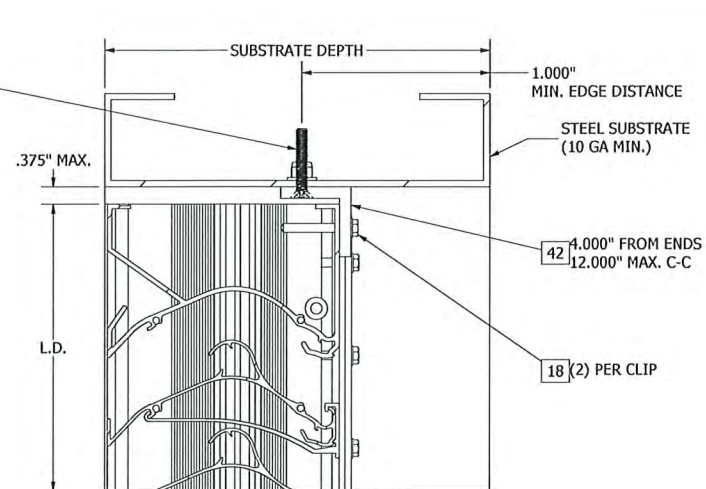


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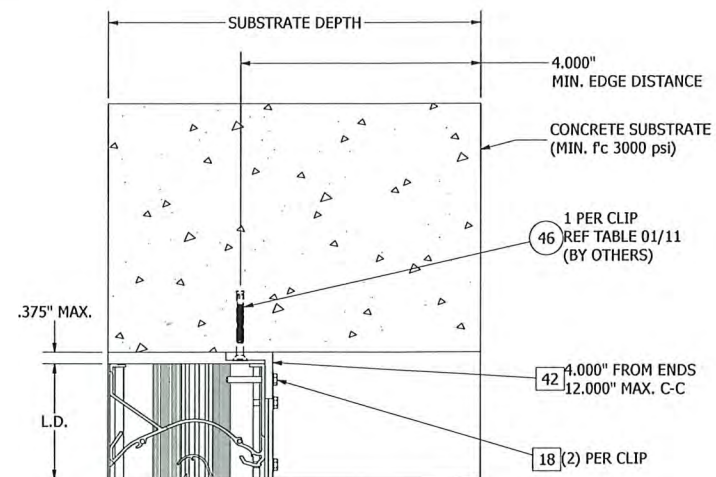




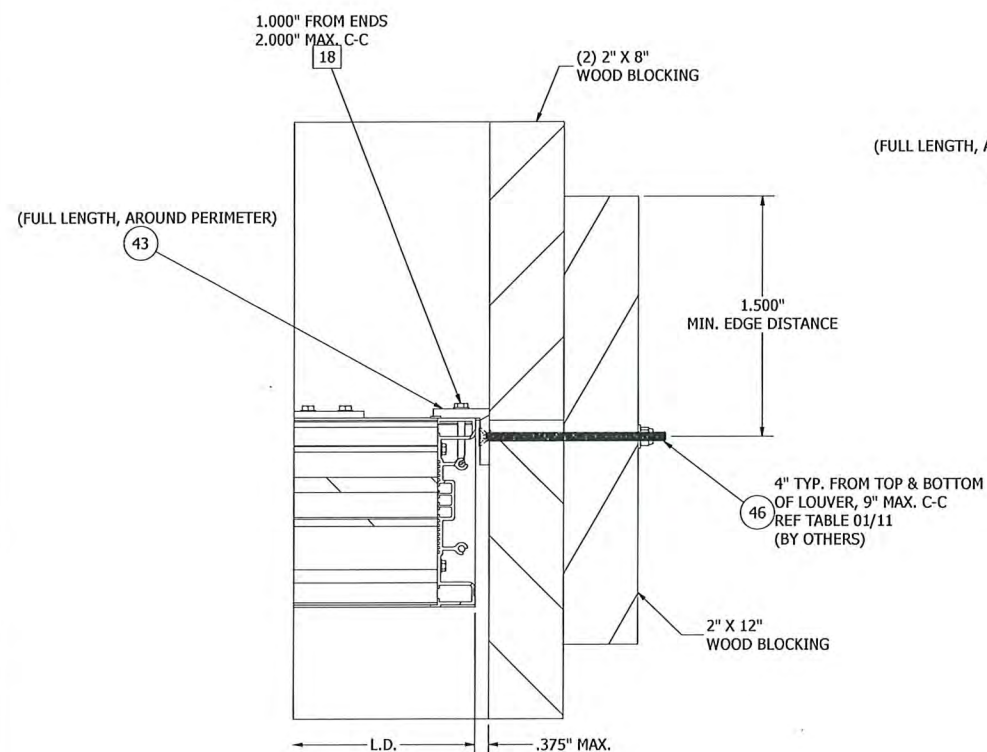
**DETAIL L**  
ASSEMBLY 'A' - HEAD/SILL CONNECTION  
IN REVERSE DIRECTION  
(WOOD SUBSTRATE)



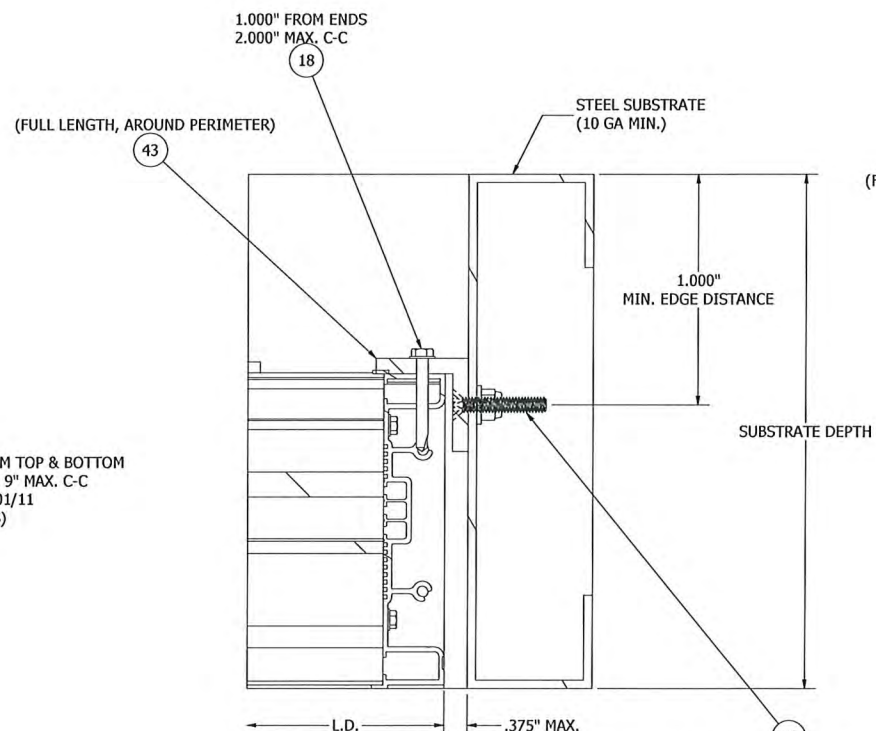
**DETAIL M**  
ASSEMBLY 'A' - HEAD/SILL CONNECTION  
IN REVERSE DIRECTION  
(STEEL SUBSTRATE)



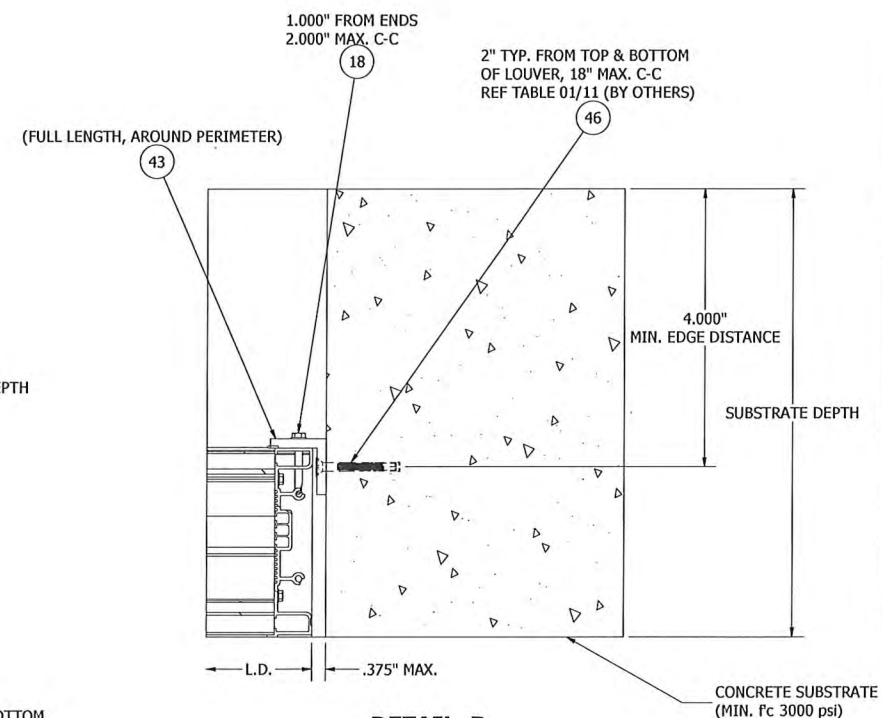
**DETAIL N**  
ASSEMBLY 'A' - HEAD/SILL CONNECTION  
IN REVERSE DIRECTION  
(CONCRETE SUBSTRATE)



**DETAIL P**  
ASSEMBLY 'A', 'B' & 'C' - JAMB CONNECTION  
IN REVERSE DIRECTION  
(WOOD SUBSTRATE)



**DETAIL Q**  
ASSEMBLY 'A', 'B' & 'C' - JAMB CONNECTION  
IN REVERSE DIRECTION  
(STEEL SUBSTRATE)



**DETAIL R**  
ASSEMBLY 'A', 'B' & 'C' - JAMB CONNECTION  
IN REVERSE DIRECTION  
(CONCRETE SUBSTRATE)



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NO. 91182

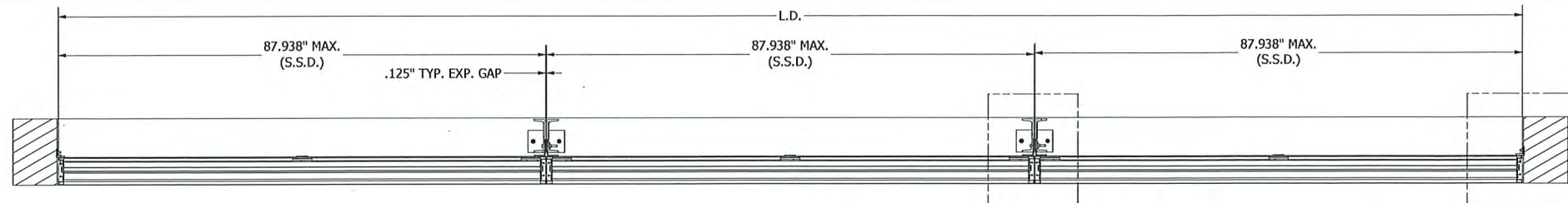
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
**NOA-No.** 23-1116.17

**Expiration Date** 02/23/2026

By *[Signature]*  
**Miami-Dade Product Control**

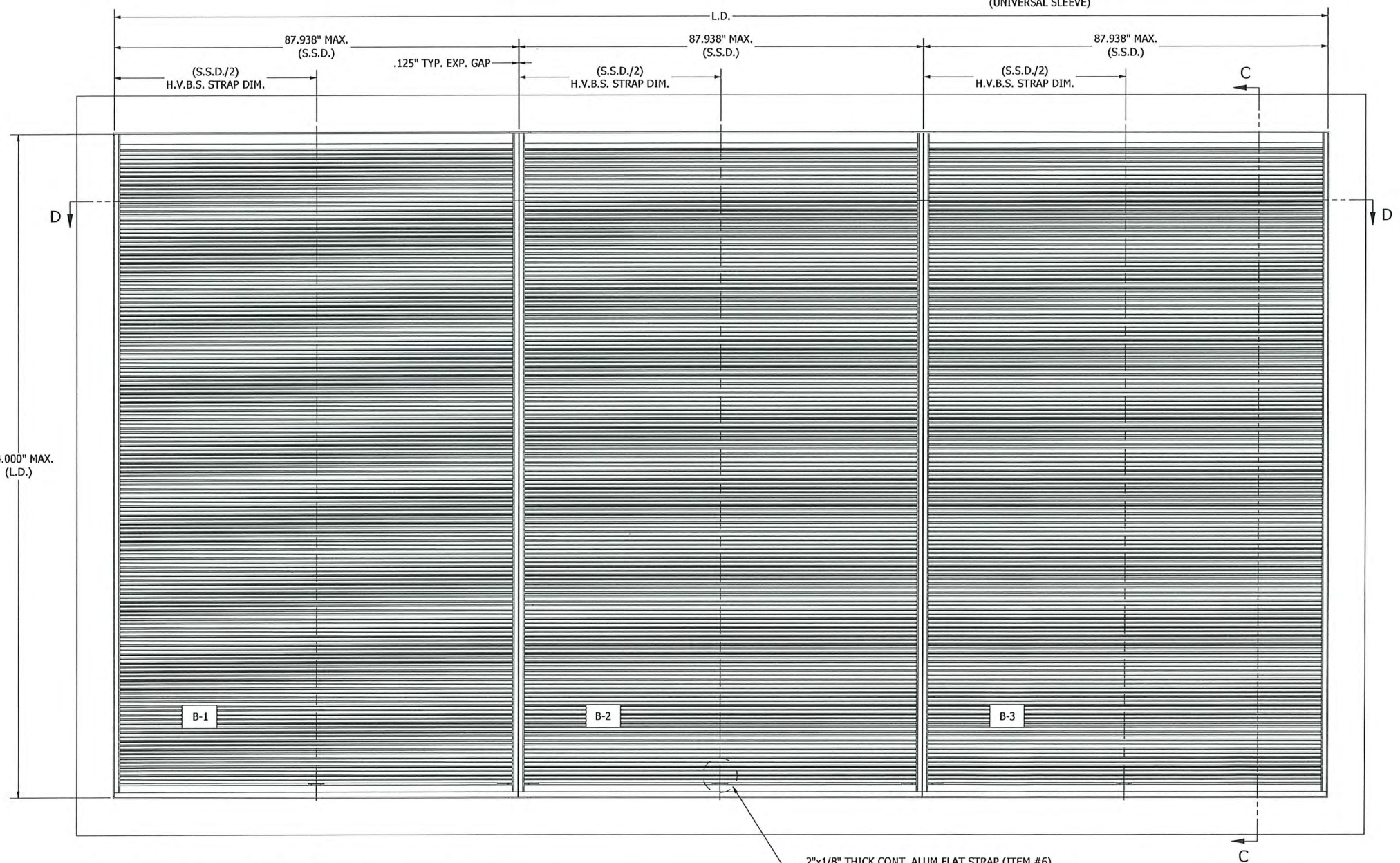
E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.		RVT	JDS	-	JDS	03/02/23		
D	REV'D ENGINEER OF RECORD, UPDATED INFO.		SSK/NS	JDS	WRT	MMM	09/10/20		
AUTHOR	DRP	5/16/12	<div>RELIABLE</div> <div>ARCHITECTURAL PRODUCTS</div> <div>1300 Enterprise Road, Geneva, Alabama 36340 PROPRIETARY AND CONFIDENTIAL</div> <div>LOGO FILES - SCREEN WALLS - SUBSTITUTIONS</div>						
CHECKED	DJR	8/2/12							
APPROVED	DJR	8/2/12							
MATERIAL									
PRODUCT			SDDWRDC						
TITLE			ASSEMBLY "A", "B" & "C" - REVERSE ANGLE INSTALL DETAILS						
SIZE			D		DWG NO		60-022270-00B	REV	E
ECN	12426	SCALE		NONE		INVENTOR		SHEET 4 OF 19	





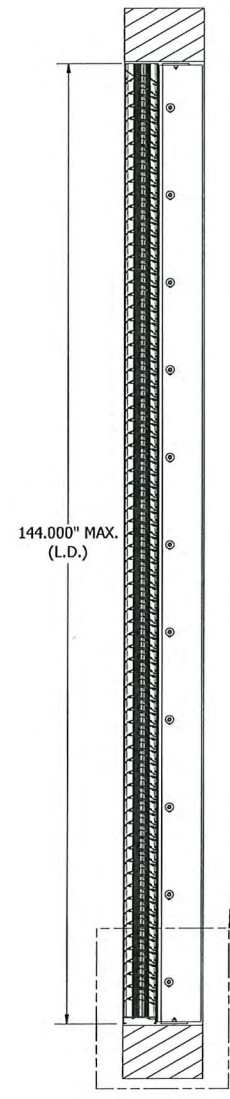
REF DETAIL F/03  
FOR JAMB CONNECTION DETAIL (WOOD)  
REF DETAIL G/03  
FOR JAMB CONNECTION DETAIL (STEEL)  
REF DETAIL H/03  
FOR JAMB CONNECTION DETAIL (CONCRETE)  
REF DETAIL J/03  
FOR JAMB CONNECTION DETAIL (CMU)  
REF DETAIL K/03  
FOR JAMB CONNECTION DETAIL (UNIVERSAL SLEEVE)

REF DETAIL Y/08  
FOR VISIBLE MULLION SUPPORT CONNECTION  
(WOOD/STEEL/CONCRETE)  
REF DETAIL Z/08, AA/08  
FOR VISIBLE MULLION SUPPORT CONNECTION (CMU)  
REF DETAIL AB/08  
FOR VISIBLE MULLION SUPPORT BRACKET CONNECTION  
(UNIVERSAL SLEEVE)



**ASSEMBLY "B" - 3X1 MULTI SECTION VIEW**  
MAX. SHIP SECTION : 87.938" W X 144" H

2"x1/8" THICK CONT. ALUM FLAT STRAP (ITEM #6)  
WELDED TO HEAD/SILL & ALSO AT EACH BLADE BRACE



REF DETAIL S/07  
FOR MULLION SUPPORT ATTACHMENT  
PLATE INSTALLATION DETAIL @ SILL (WOOD)  
REF DETAIL T/07  
FOR MULLION SUPPORT ATTACHMENT  
PLATE INSTALLATION DETAIL @ SILL (STEEL)  
REF DETAIL U/07  
FOR MULLION SUPPORT ATTACHMENT  
PLATE INSTALLATION DETAIL @ SILL (CONCRETE)  
REF DETAIL V/07  
FOR MULLION SUPPORT ATTACHMENT  
PLATE INSTALLATION DETAIL @ SILL (CMU)  
REF DETAIL W/07  
FOR MULLION SUPPORT ATTACHMENT  
PLATE INSTALLATION DETAIL @ SILL (UNIVERSAL SLEEVE)


**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1116.17  
Expiration Date 02/23/2026  
By *[Signature]*  
Miami-Dade Product Control

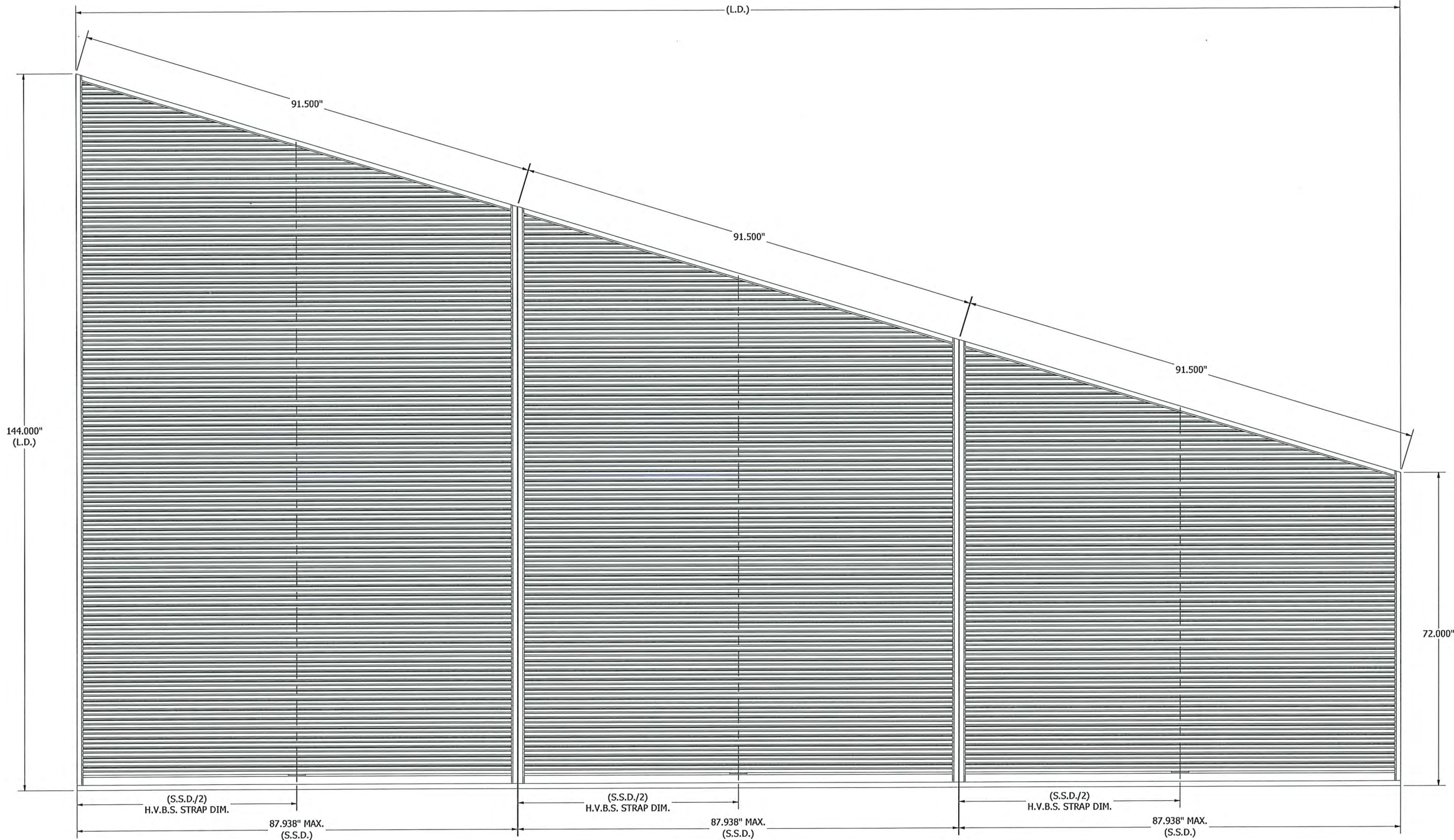
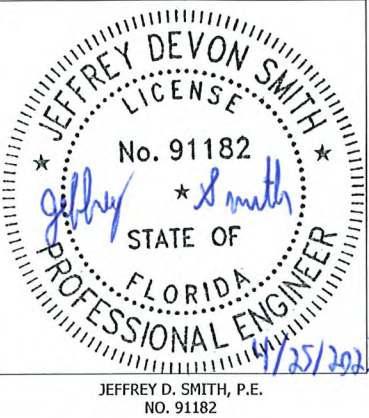


**SECTION C-C**

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.		RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.		SSK/ NS	JDS	WRT	MMM	09/10/20
REV	DESCRIPTION		BY	CHK	APVD	APVD	DATE
AUTHOR	DRP	5/16/12	<div><div>RELIABLE</div><div>ARCHITECTURAL PRODUCTS</div><div>1300 Enterprise Road, Geneva, Alabama 36540 PROPRIETARY AND CONFIDENTIAL</div></div>				
CHECKED	DJR	8/2/12					
APPROVED	DJR	8/2/12					
MATERIAL			PRODUCT	SDDWRDC			
			TITLE	SDDWRDC ASSEMBLY "B"			
			SIZE D	DWG NO 60-022270-00B			REV E
ECN	12426		SCALE NONE	INVENTOR		SHEET 5 OF 19	



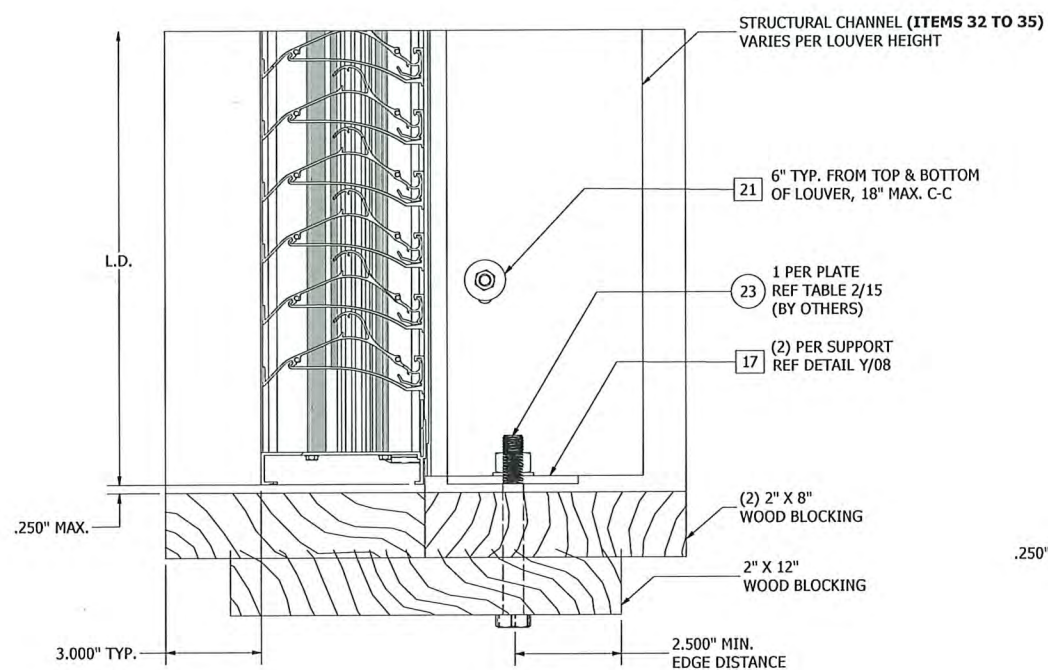
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1116.17  
Expiration Date 02/23/2026  
By   
Miami-Dade Product Control



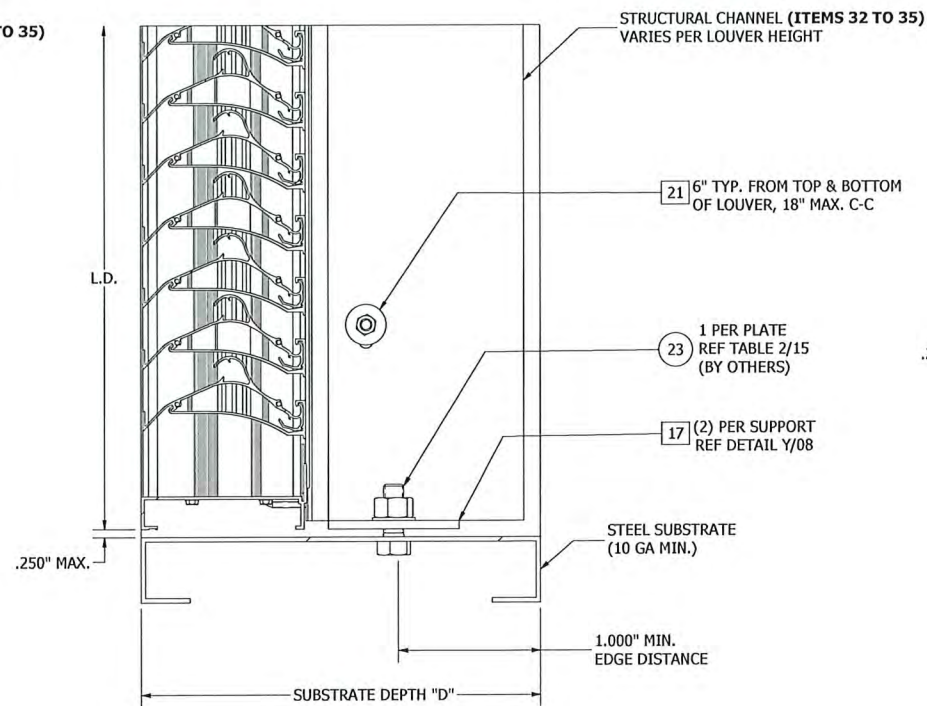
**ASSEMBLY "C" - 3X1 MULTI SECTION VIEW**  
MAX. SHIP SECTION : 87.938" W X 144" H

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.	RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.	SSK/NS	JDS	WRT	MMM	09/10/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DRP	5/16/12				
CHECKED	DJR	8/2/12				
APPROVED	DJR	8/2/12				
MATERIAL						
PRODUCT	5DDWRDC					
TITLE	5DDWRDC ASSEMBLY "C"					
SIZE D		DWG NO	60-022270-00B		REV	E
ECN	12426	SCALE	NONE	INVENTOR	SHEET 6 OF 19	

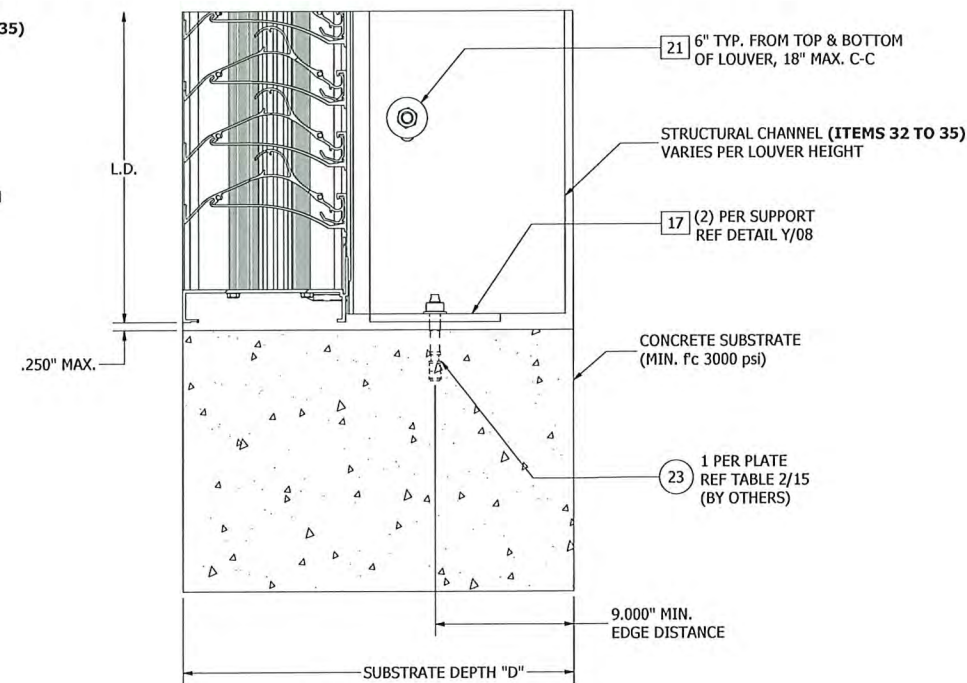




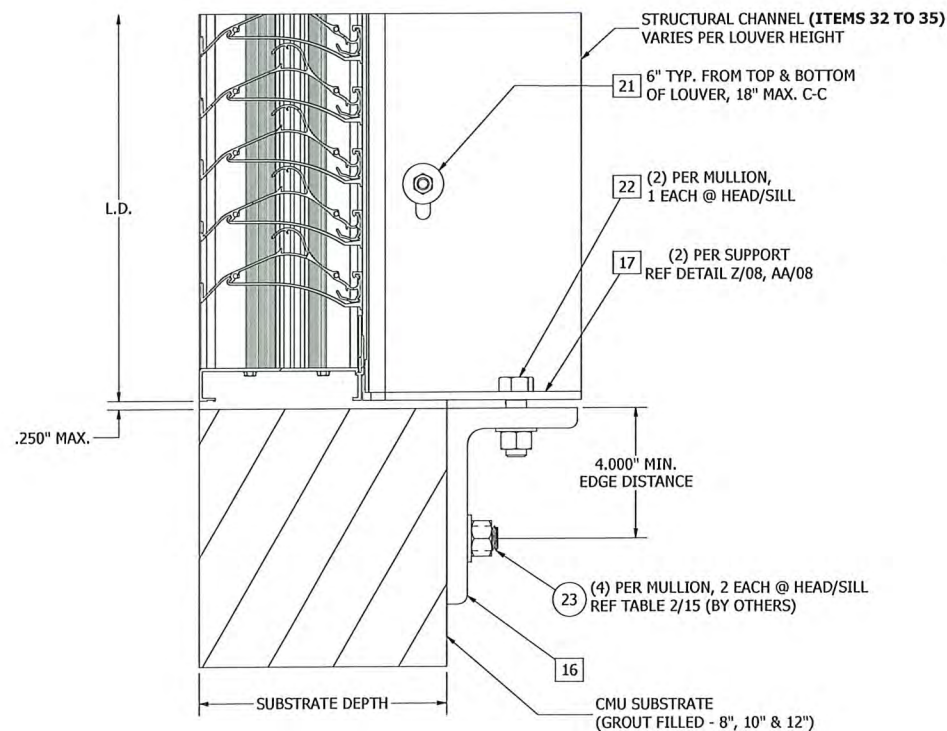
**DETAIL S**  
ASSEMBLY 'B' & 'C' - MULLION SUPPORT ATTACHMENT PLATE  
INSTALLATION @ HEAD/SILL (WOOD SUBSTRATE ONLY)



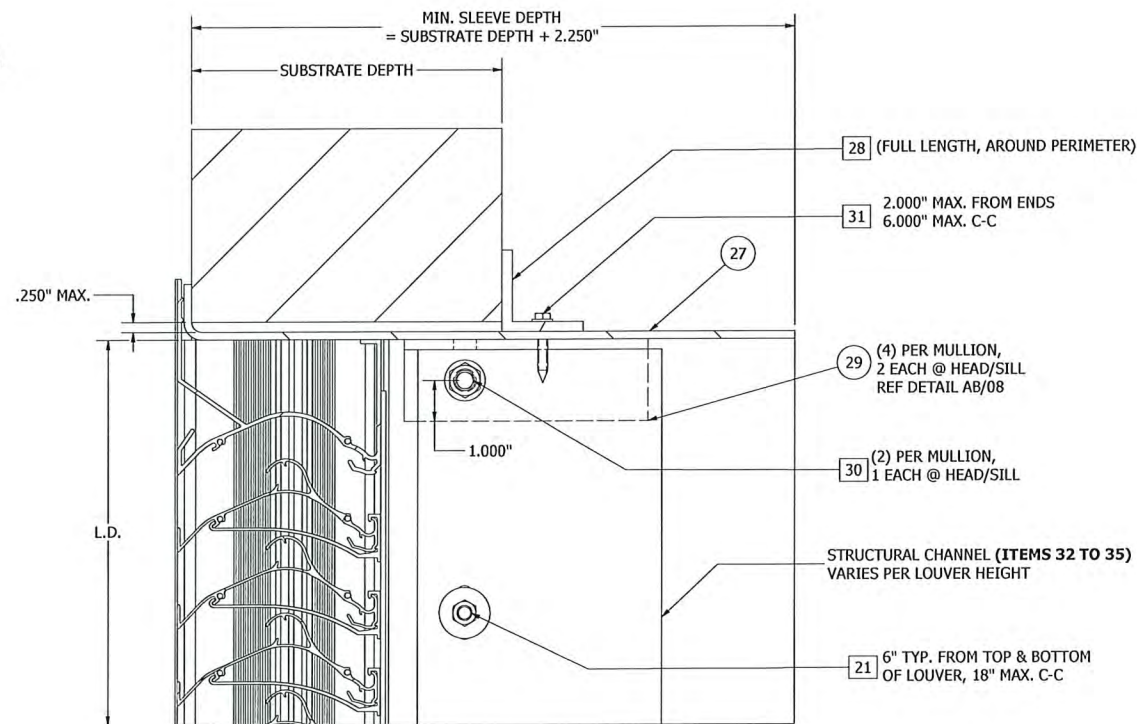
**DETAIL T**  
ASSEMBLY 'B' & 'C' - MULLION SUPPORT ATTACHMENT PLATE  
INSTALLATION @ HEAD/SILL (STEEL SUBSTRATE ONLY)



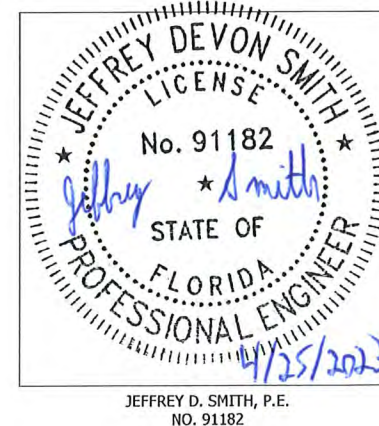
**DETAIL U**  
ASSEMBLY 'B' & 'C' - MULLION SUPPORT ATTACHMENT PLATE  
INSTALLATION @ HEAD/SILL (CONCRETE SUBSTRATE ONLY)



**DETAIL V**  
ASSEMBLY 'B' & 'C' - MULLION SUPPORT ATTACHMENT PLATE  
INSTALLATION @ HEAD/SILL (CMU SUBSTRATE ONLY)



**DETAIL W**  
ASSEMBLY 'B' & 'C' - UNIVERSAL SLEEVE CONNECTION DETAIL  
(TYP. @ PERIMETER)



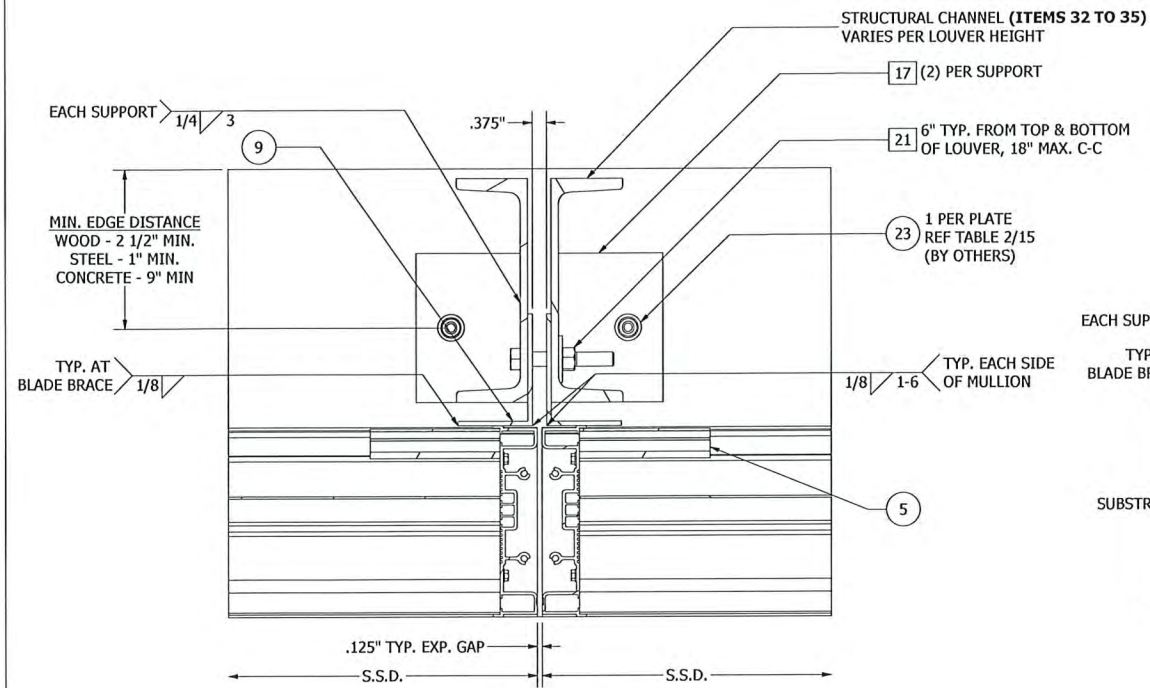
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1116.17  
Expiration Date 02/23/2026  
By *[Signature]*  
Miami-Dade Product Control

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.	RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.	SSK/NS	JDS	WRT	MMM	09/10/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DRP	5/16/12				
CHECKED	DJR	8/2/12				
APPROVED	DJR	8/2/12				
MATERIAL						
PRODUCT	SDDWRDC					
TITLE	ASSEMBLY "B" & "C" - MULLION SUPPORT CONNECTION @ HEAD/SILL DETAILS					
SIZE	D	DWG NO	60-022270-00B	REV	E	
ECN	12426	SCALE	NONE	INVENTOR	SHEET 7 OF 19	

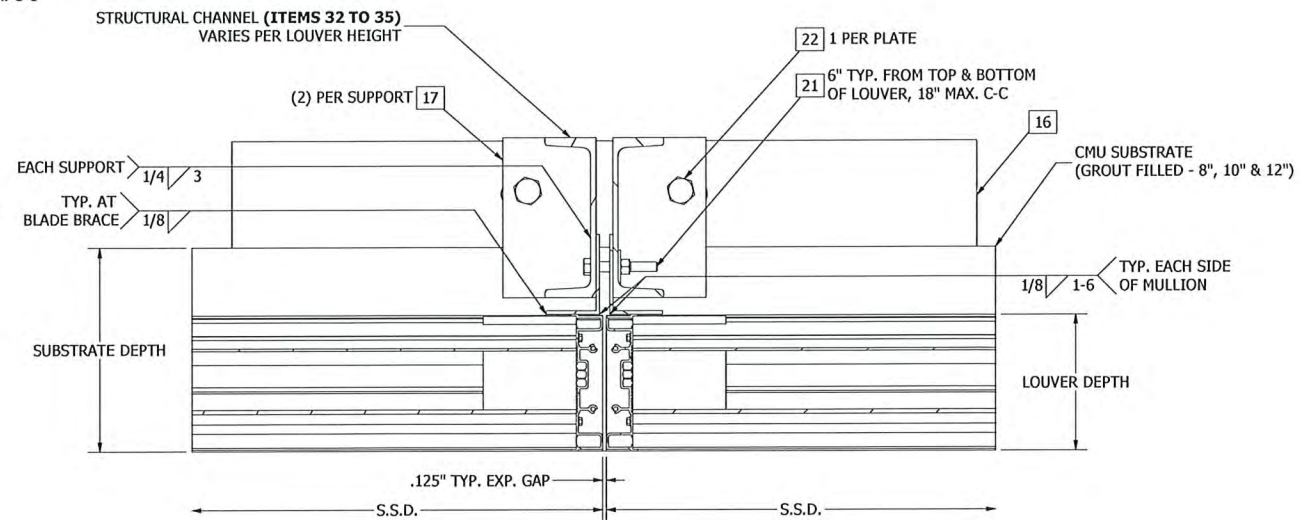
**RELIABLE**  
ALUMINUM PRODUCTS  
LOUVERS • SCREEN WALLS • VENTILATORS

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Geneva, Alabama 36540  
PROPRIETARY AND  
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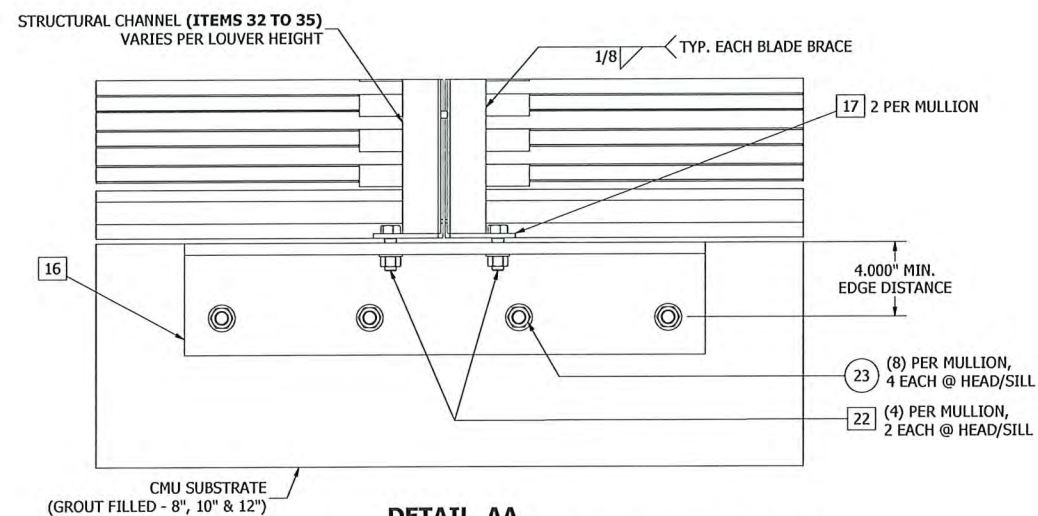




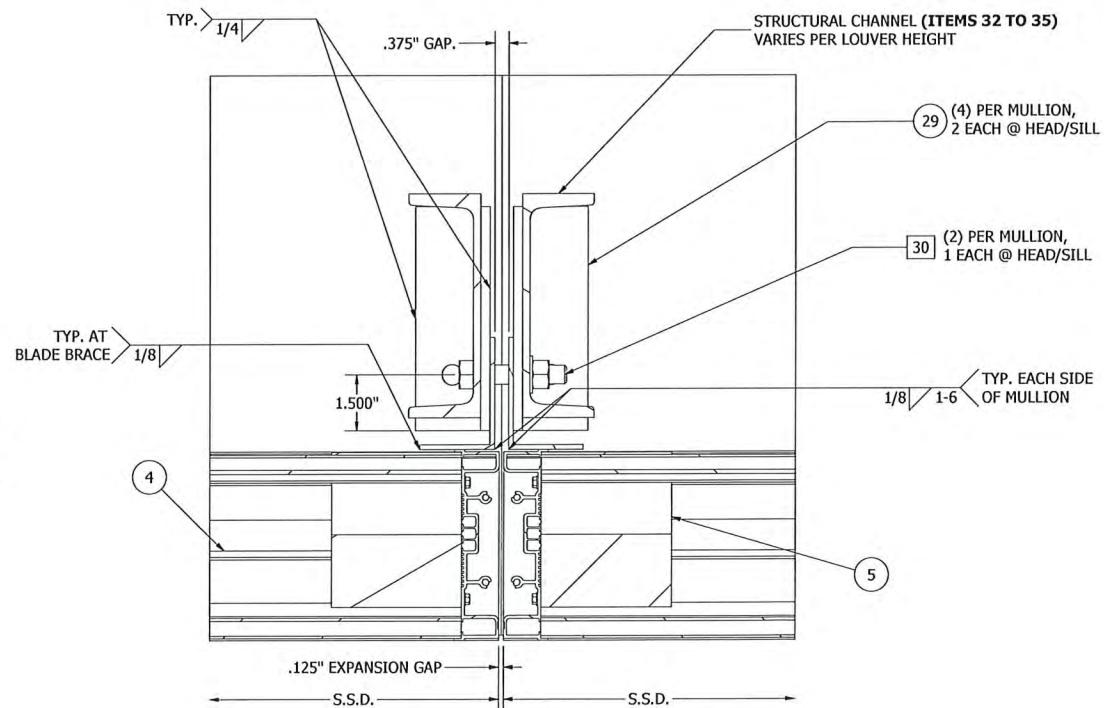
**DETAIL Y**  
ASSEMBLY 'B' & 'C' - VISIBLE MULLION SUPPORT CONNECTION DETAIL  
(WOOD, STEEL, CONCRETE SUBSTRATE ONLY)



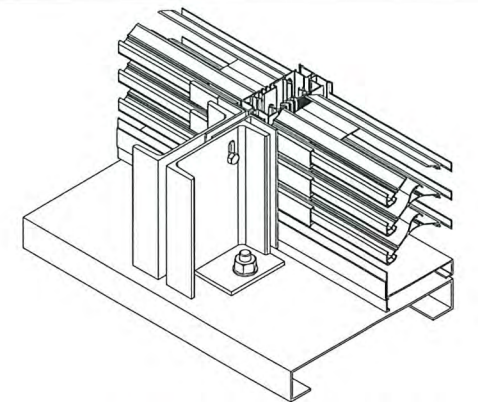
**DETAIL Z**  
ASSEMBLY 'B' & 'C' - VISIBLE MULLION SUPPORT CONNECTION DETAIL  
(CMU SUBSTRATE ONLY)



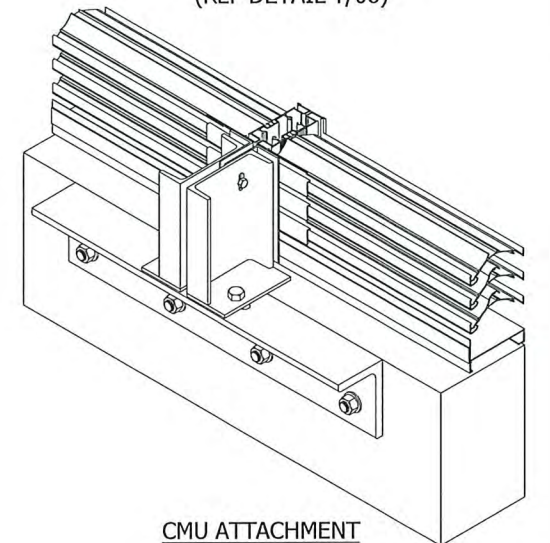
**DETAIL AA**  
ASSEMBLY 'B' & 'C' - VISIBLE MULLION SUPPORT CONNECTION DETAIL  
(CMU SUBSTRATE ONLY)



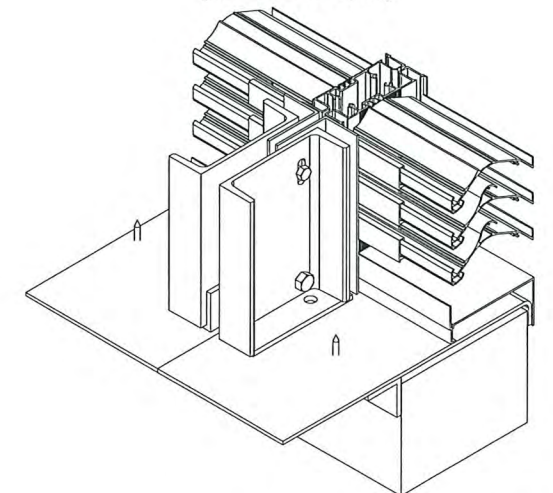
**DETAIL AB**  
ASSEMBLY 'B' & 'C' - VISIBLE MULLION SUPPORT BRACKET ATTACHMENT DETAIL  
(UNIVERSAL SLEEVE ONLY)



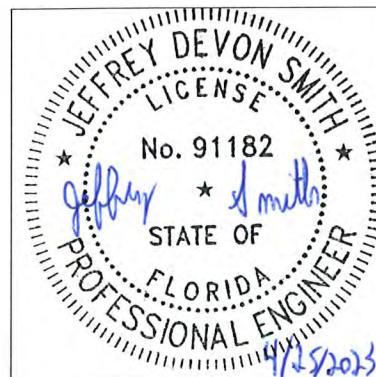
**STEEL (SHOWN) ATTACHMENT**  
(WOOD, CONCRETE SIM.)  
(REF DETAIL Y/08)



**CMU ATTACHMENT**  
(REF DETAIL Z/08)



**UNIVERSAL SLEEVE ATTACHMENT**  
(REF DETAIL AB/08)

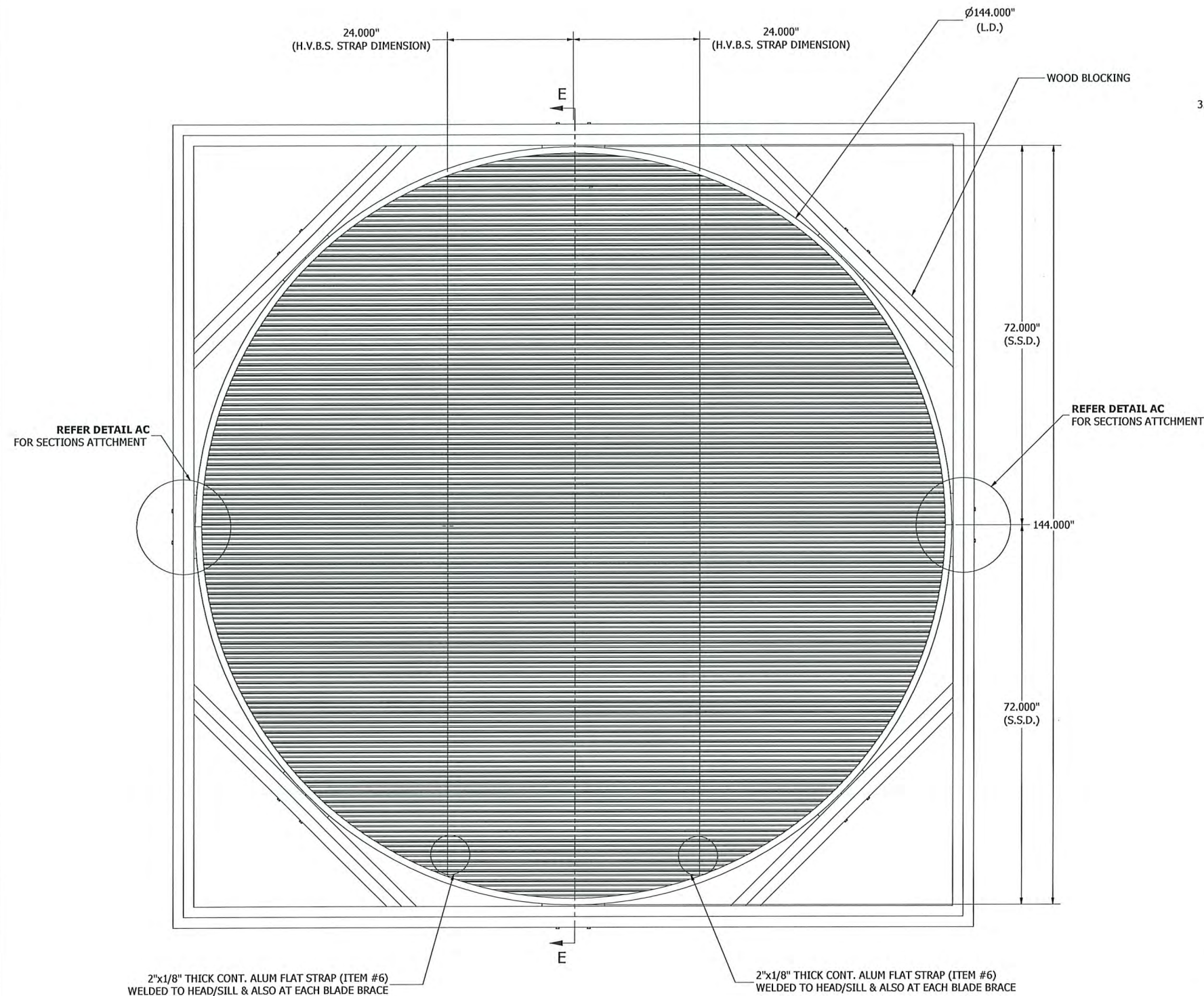


JEFFREY D. SMITH, P.E.  
NO. 91182

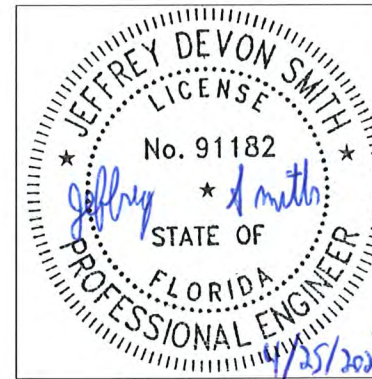
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1116.17  
Expiration Date 02/23/2026  
By *[Signature]*  
Miami-Dade Product Control

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.	RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.	SSK/NS	JDS	WRT	MMM	09/10/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DRP	5/16/12				
CHECKED	DJR	8/2/12				
APPROVED	DJR	8/2/12				
MATERIAL	<div> <div> <b>RELIABLE</b>  <small>ARCHITECTURAL PRODUCTS</small> </div> <div> 1300 Enterprise Road,  Geneva, Alabama 36340  <small>PROPRIETARY AND CONFIDENTIAL</small> </div> </div>					
	PRODUCT	SDDWRDC				
	TITLE	ASSEMBLY "B" & "C" - VISIBLE MULLION SUPPORT CONNECTION DETAILS				
	SIZE	D	DWG NO	60-022270-00B	REV	E
ECN	12426	SCALE	NONE	INVENTOR	SHEET 8 OF 19	



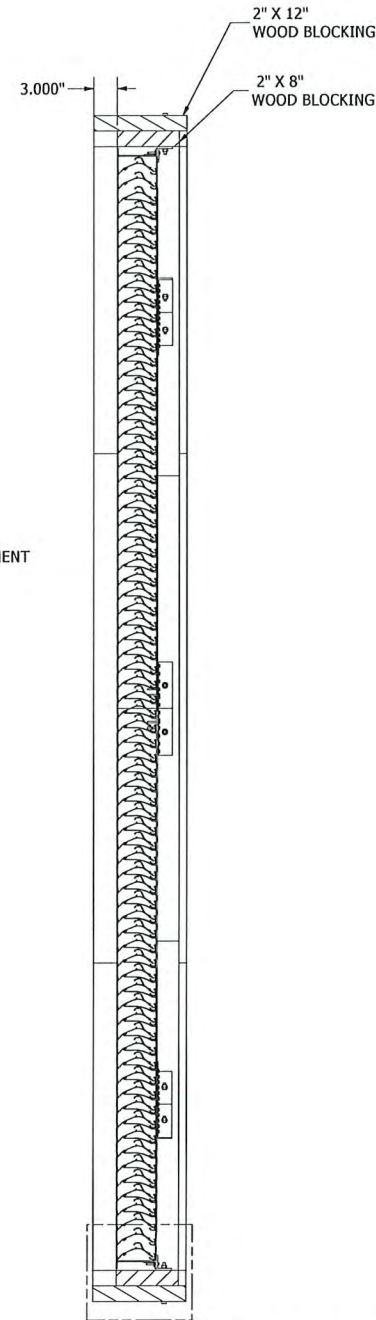


**ASSEMBLY "D" - 1X2 MULTI SECTION VIEW**  
 MAX. SHIP SECTION : 144" W X 72" H



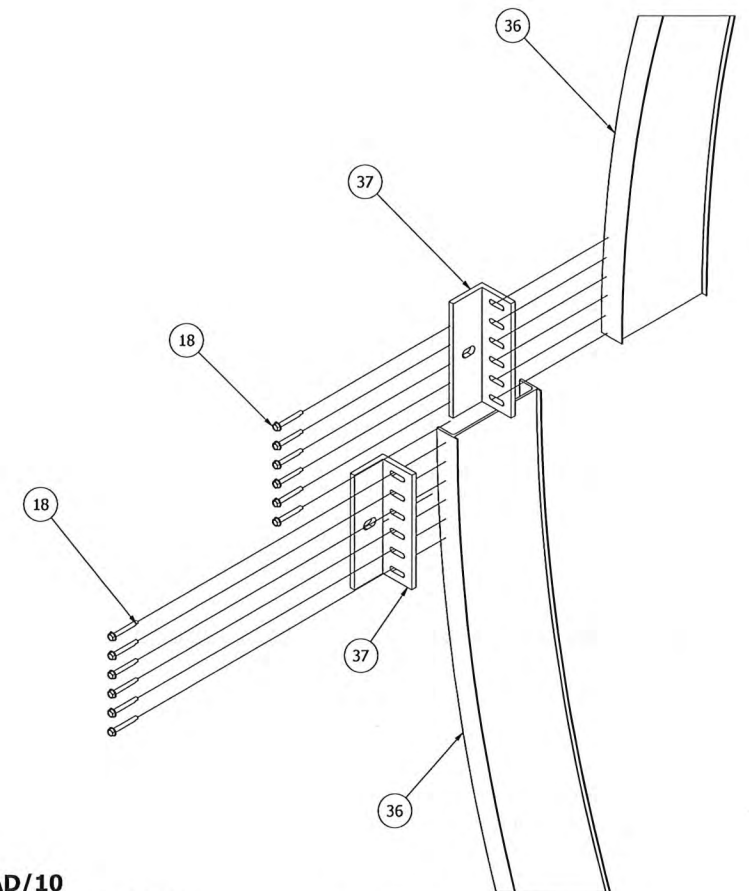
JEFFREY D. SMITH, P.E.  
 NO. 91182

**PRODUCT REVISED**  
 as complying with the Florida Building Code  
**NOA-No.** 23-1116.17  
**Expiration Date** 02/23/2026  
 By *[Signature]*  
**Miami-Dade Product Control**



**SECTION E-E**

**REFER DETAIL AD/10**  
 FOR CONNECTION DETAIL (WOOD)  
**REFER DETAIL AE/10**  
 FOR CONNECTION DETAIL (STEEL)  
**REFER DETAIL AF/10**  
 FOR CONNECTION DETAIL (CONCRETE)  
**REFER DETAIL AH,AJ,AK/11**  
 FOR CONNECTION DETAIL  
 IN REVERSE DIRECTION  
 (WOOD,STEEL,CONCRETE)



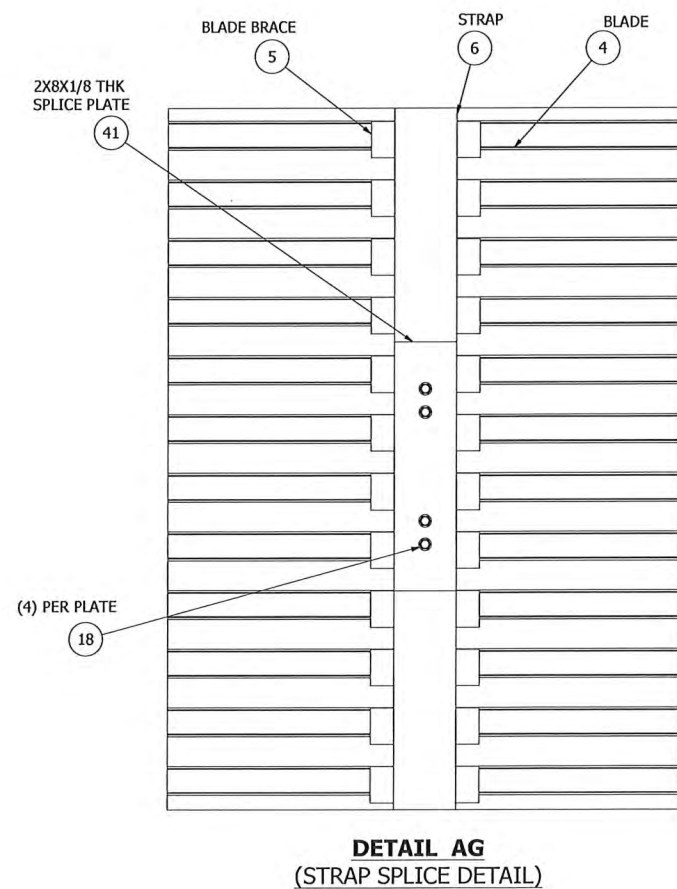
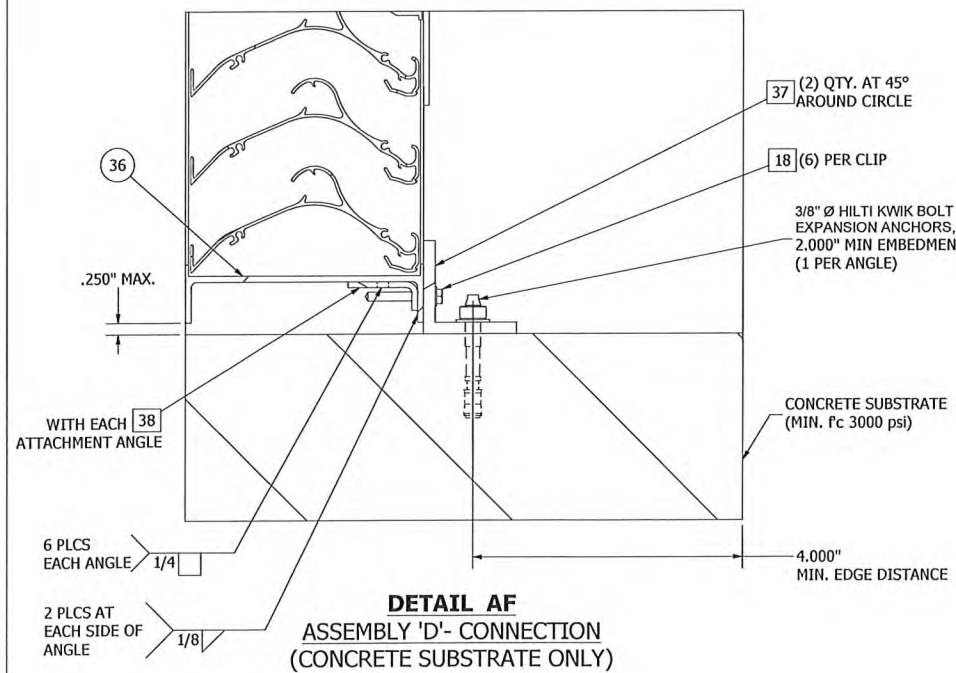
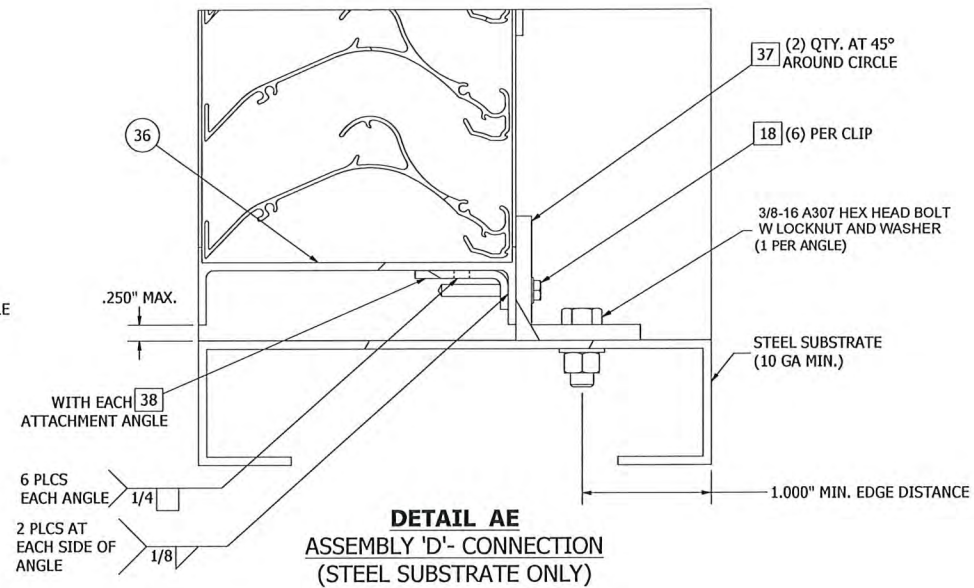
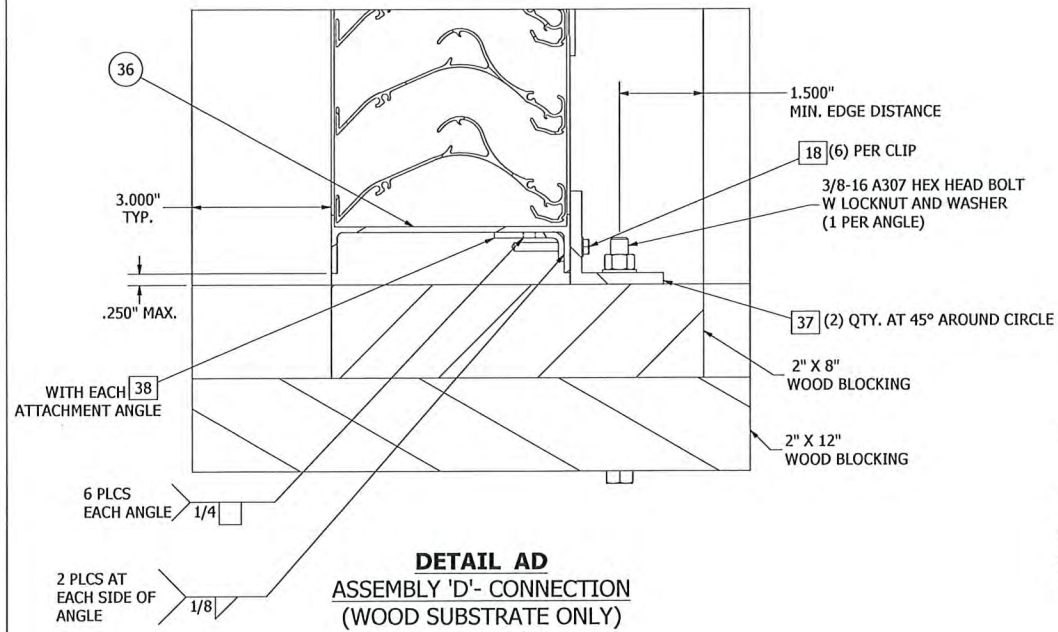
**DETAIL AC**

**CIRCULAR SHAPE LOUVER ATTACHMENT ANGLE OPTIONS**

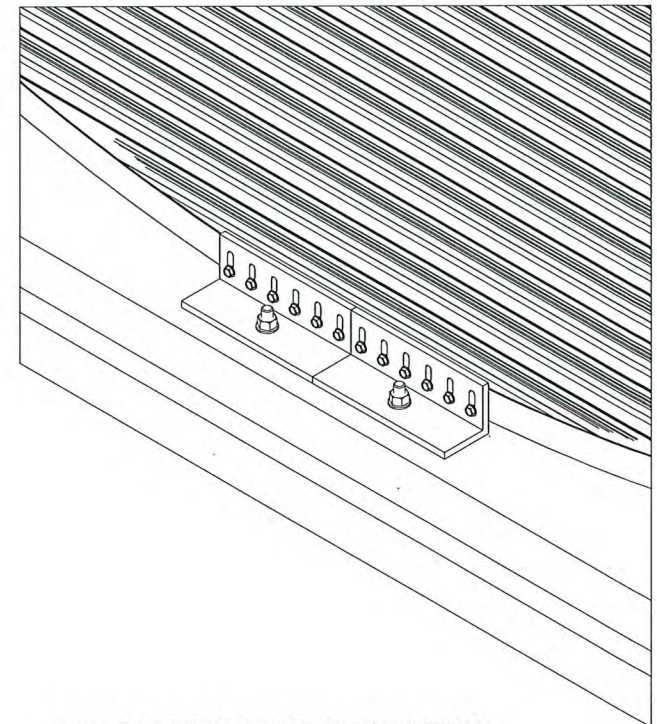
DIAMETER	ATTACHMENT ANGLE	ATTACHMENT ANGLE IN REVERSE DIRECTION	QTY.
GREATER THAN 104" TO 144"	ITEM NO. 37 (6" LONG)	ITEM NO. 44 (6" LONG)	2 ANGLES AT EACH 45-DEGREE AROUND CIRCLE
GREATER THAN 60" TO 104"	ITEM NO. 37 (6" LONG)	ITEM NO. 44 (6" LONG)	1 ANGLE AT EACH 45-DEGREE AROUND CIRCLE
12" TO 60"	ITEM NO. 39 (2" LONG)	ITEM NO. 45 (2" LONG)	1 ANGLE AT EACH 45-DEGREE AROUND CIRCLE

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.		RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.		SSK/NS	JDS	WRT	MMM	09/10/20
AUTHOR	DRP	5/16/12	<div>1300 Enterprise Road, Geneva, Alabama 36340 PROPRIETARY AND CONFIDENTIAL</div>				
CHECKED	DJR	8/2/12					
APPROVED	DJR	8/2/12					
MATERIAL	<div>PRODUCT5DDWRDC</div> <div>TITLE5DDWRDC ASSEMBLY "D"</div> <div>SIZE DWG NO. REV</div> <div>D 60-022270-00B E</div>						
ECN	12426	SCALE	NONE	INVENTOR	SHEET 9 OF 19		





**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1116.17  
Expiration Date 02/23/2026  
By *[Signature]*  
Miami-Dade Product Control



**ATTACHMENT ANGLES INSTALLTION**  
(ASSEMBLY D)

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.		RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.		SSK/NS	JDS	WRT	MMM	09/10/20
AUTHOR	DRP	5/16/12	<div>1300 Enterprise Road, Geneva, Alabama 36340 PROPRIETARY AND CONFIDENTIAL</div>				
CHECKED	DJR	8/2/12					
APPROVED	DJR	8/2/12					
MATERIAL			PRODUCT 5DDWRDC				
			TITLE ASSEMBLY "D" INSTALL DETAILS				
			SIZE D	DWG NO 60-022270-00B			REV E
ECN 12426			SCALE NONE	INVENTOR		SHEET 10 OF 19	



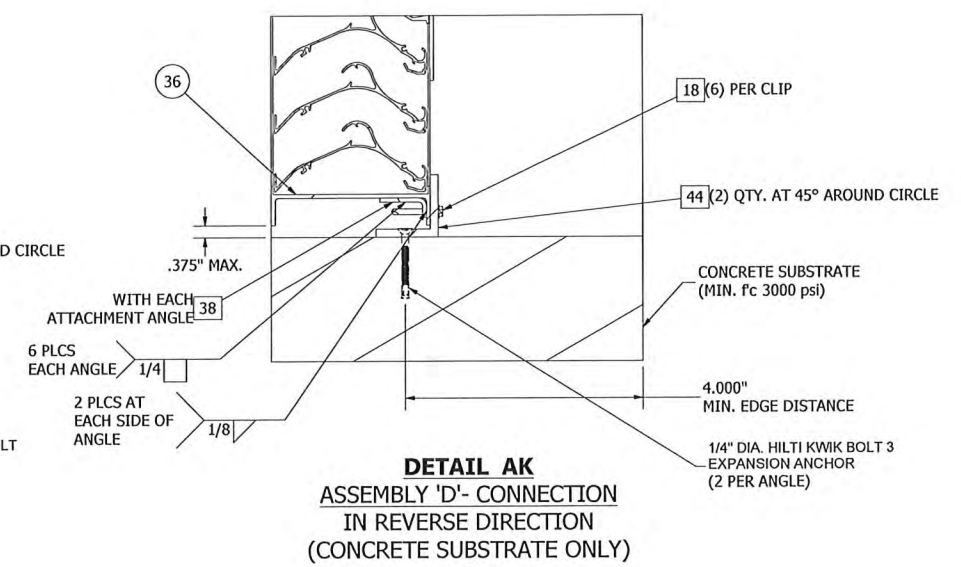
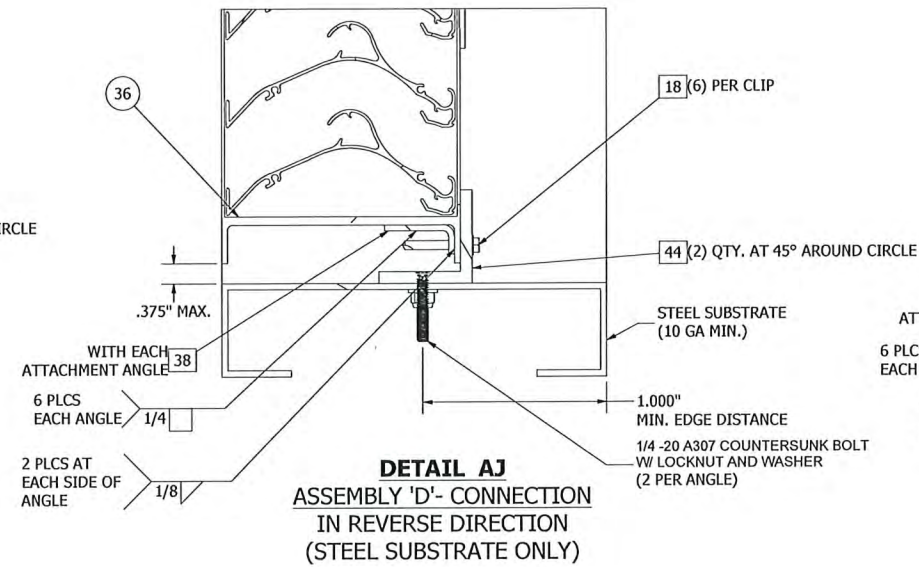
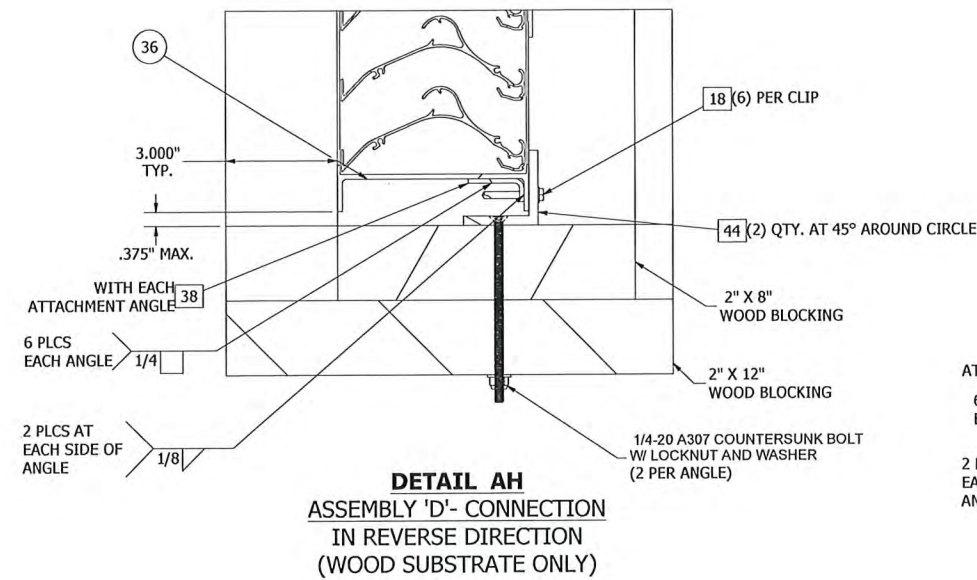
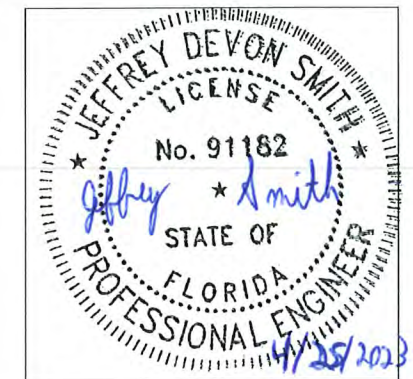



TABLE 01 - 5DDWRDC - COUNTERSUNK WALL FASTENER TABLE (N.I.C.)

SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	LOCATION	FASTENER TYPE	MIN. EMBEDMENT	MIN. EDGE DISTANCE	SPACING
WOOD	SPECIFIC GRAVITY = 0.42	HEAD/SILL	1/4-20 A307 COUNTERSUNK BOLT W/ LOCKNUT AND WASHER	NA	1 1/2"	12" MAX.O.C. (TO MATCH CLIP SPACING)
		JAMBS	1/4 -20 A307 COUNTERSUNK BOLT W/ LOCKNUT AND WASHER	NA	1 1/2"	9" O.C.
STEEL	STEEL - MIN. 10 GA	HEAD/SILL	1/4 -20 A307 COUNTERSUNK BOLT W/ LOCKNUT AND WASHER	NA	1"	12" MAX.O.C. (TO MATCH CLIP SPACING)
		JAMBS	1/4 -20 A307 COUNTERSUNK BOLT W/ LOCKNUT AND WASHER	NA	1"	9" O.C.
CONCRETE	3000 PSI MIN. COMP. STRENGTH	HEAD/SILL	1/4" DIA. HILTI KWIK BOLT 3 EXPANSION ANCHOR	1 1/2 "	4"	12" MAX.O.C. (TO MATCH CLIP SPACING)
		JAMBS	1/4" DIA. HILTI KWIK BOLT 3 EXPANSION ANCHOR	1 1/2 "	4"	18" O.C.



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NO. 91182

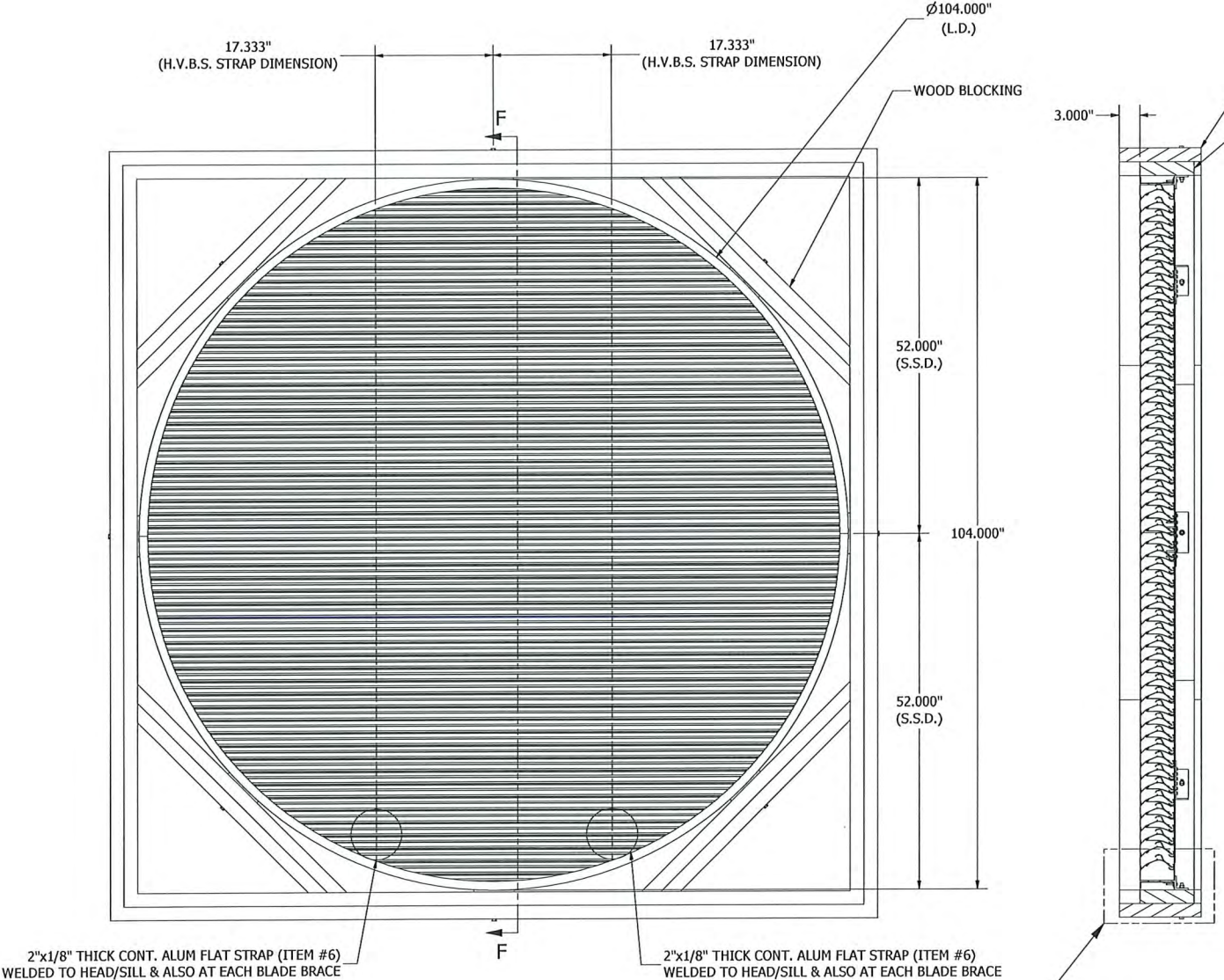
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
**NOA-No.** 23-1116.17  
**Expiration Date** 02/23/2026  
**By** [Signature]  
**Miami-Dade Product Control**

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.		RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.		SSK/NS	JDS	WRT	MMM	09/10/20
AUTHOR	DRP	5/16/12			1300 Enterprise Road, Genova, Alabama 36340 PROPRIETARY AND CONFIDENTIAL		
CHECKED	DJR	8/2/12					
APPROVED	DJR	8/2/12					
MATERIAL			PRODUCT		5DDWRDC		
			TITLE		ASSEMBLY "D" REVERSE ANGLE INSTALL DETAILS		
			SIZE D	DWG NO		60-022270-00B	
							REV E
ECN	12426		SCALE	NONE		INVENTOR	
					SHEET 11 OF 19		





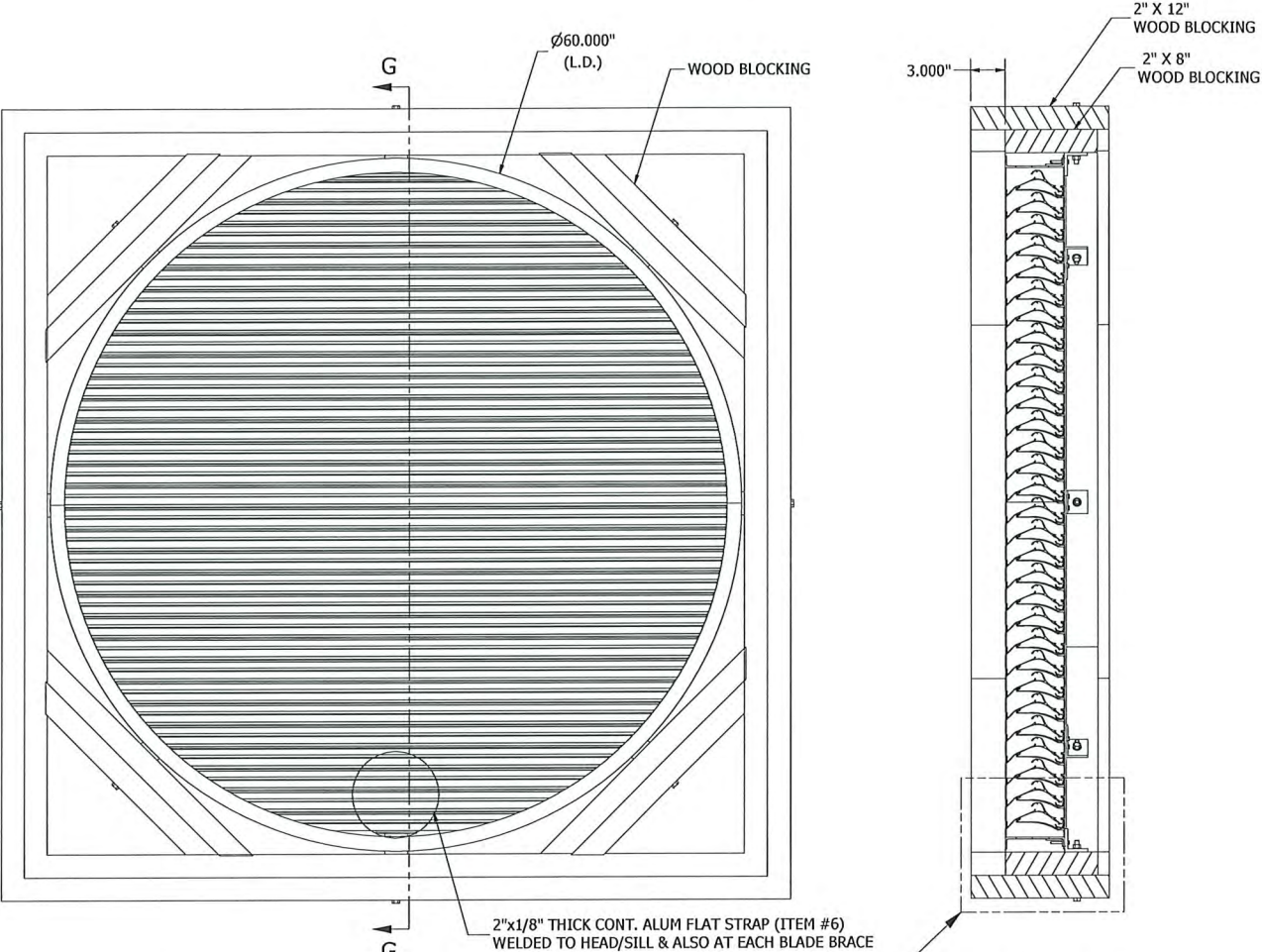
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1116.17  
Expiration Date 02/23/2026  
By *[Signature]*  
Miami-Dade Product Control



**ASSEMBLY "E" - MULTI SECTION VIEW**  
SIZE - 104" DIAMETER

REFER DETAIL AL/13  
FOR CONNECTION DETAIL (WOOD)  
REFER DETAIL AM/13  
FOR CONNECTION DETAIL (CONCRETE)  
REFER DETAIL AN/13  
FOR CONNECTION DETAIL (STEEL)  
REFER DETAIL AS,AT,AU/14  
FOR CONNECTION DETAIL  
IN REVERSE DIRECTION  
(WOOD,CONCRETE,STEEL)

**SECTION F-F**



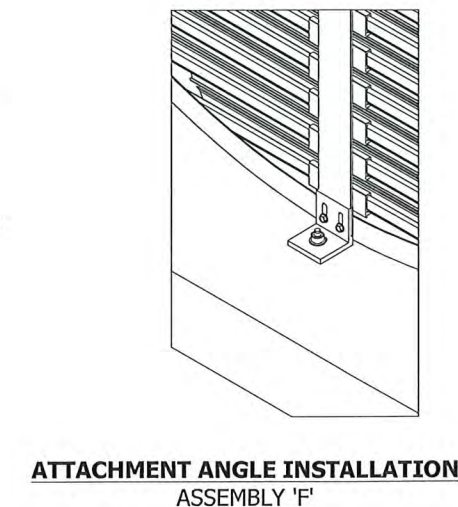
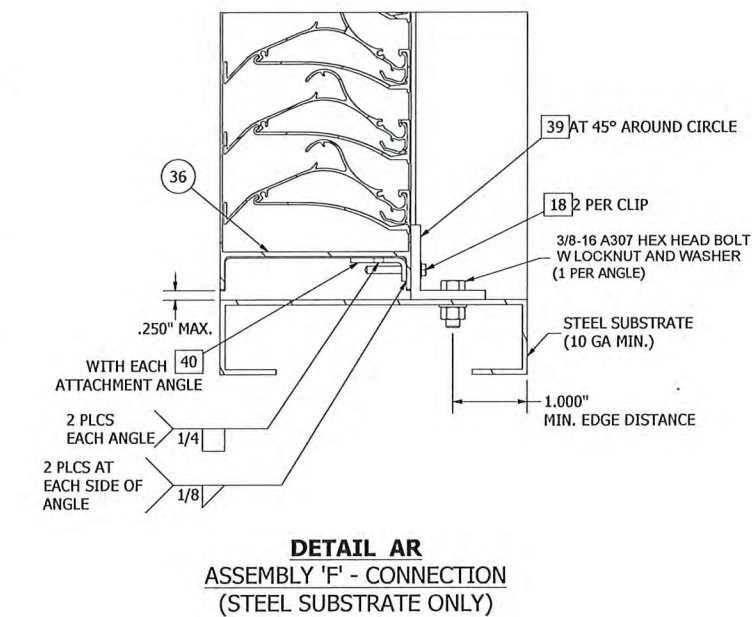
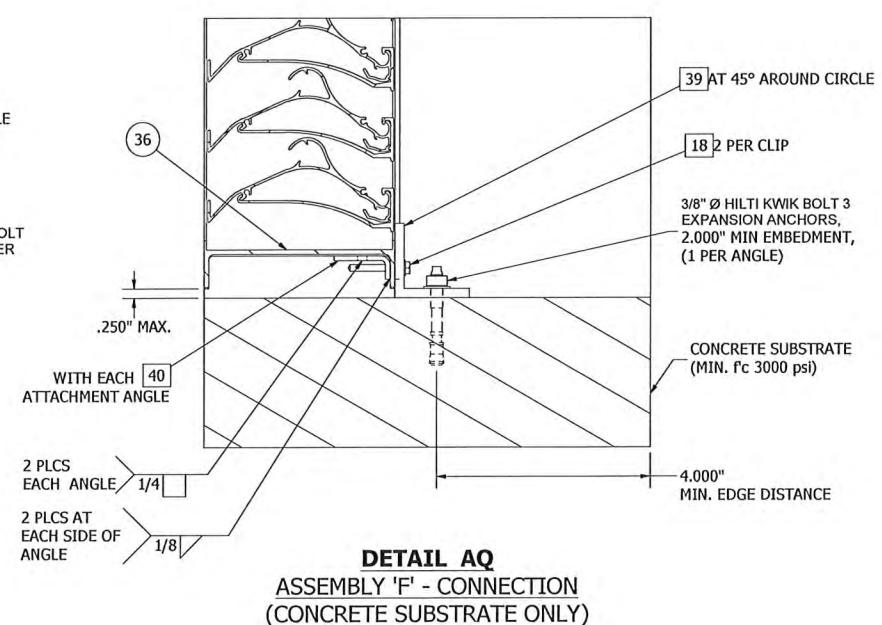
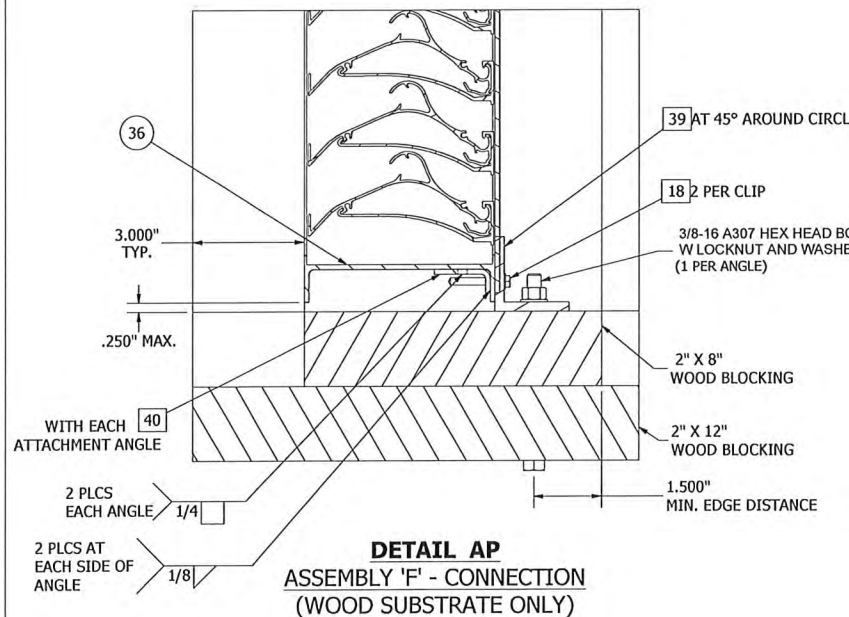
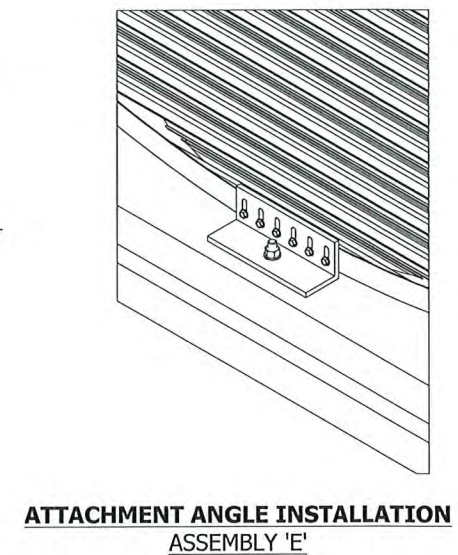
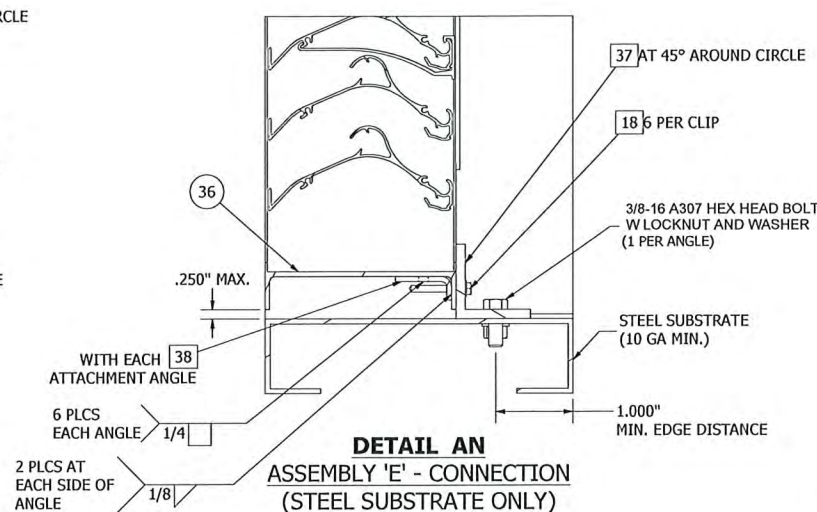
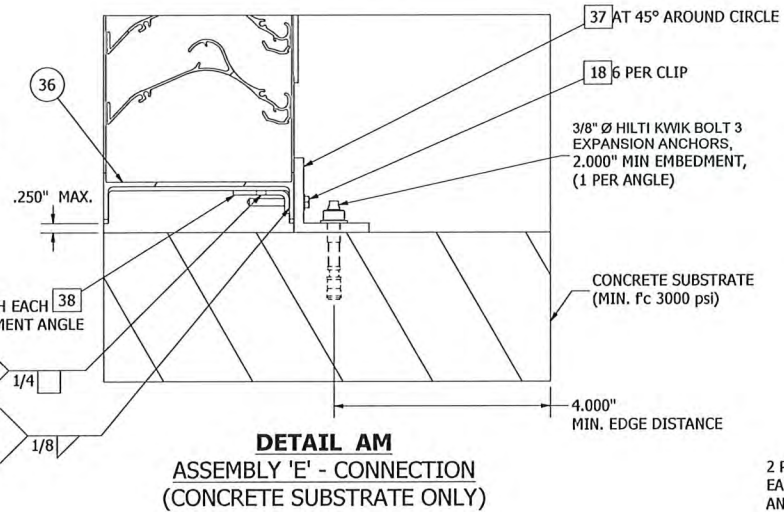
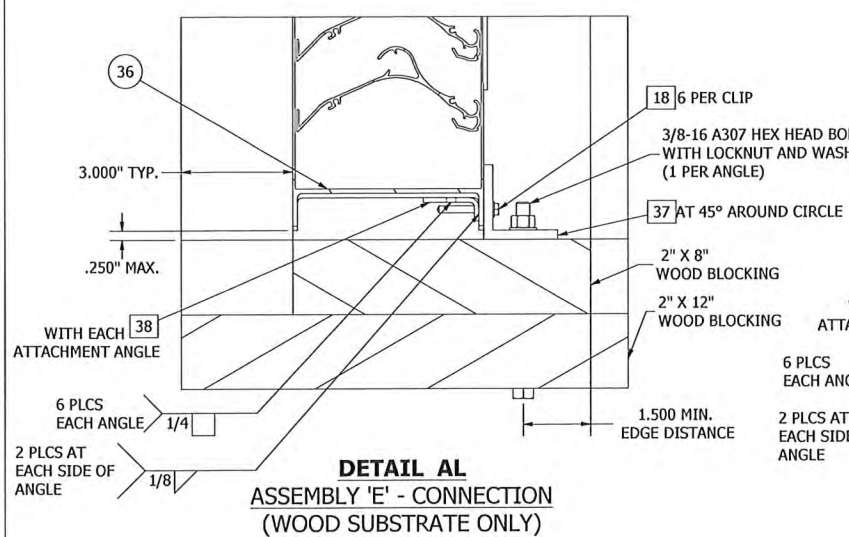
**ASSEMBLY "F" - SINGLE SECTION VIEW**  
SIZE - 60" DIAMETER

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FOR CONNECTION DETAIL (WOOD)  
REFER DETAIL AQ/13  
FOR CONNECTION DETAIL (CONCRETE)  
REFER DETAIL AR/13  
FOR CONNECTION DETAIL (STEEL)  
REFER DETAIL AV,AW,AY/14  
FOR CONNECTION DETAIL  
IN REVERSE DIRECTION  
(WOOD,CONCRETE,STEEL)


**SECTION G-G**

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.	RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.	SSK/ NS	JDS	WRT	MMM	09/10/20
AUTHOR	DRP 5/16/12	<b>RELIABLE</b> ACCIDENT PREVENTION 1300 Enterprise Road, Geneva, Alabama 36340 PROPRIETARY AND CONFIDENTIAL				
CHECKED	DJR 8/2/12					
APPROVED	DJR 8/2/12					
MATERIAL		PRODUCT SDDWRDC				
		TITLE SDDWRDC ASSEMBLY "E" AND "F"				
SIZE D		DWG NO	60-022270-00B		REV	E
ECN	12426	SCALE	NONE	INVENTOR	SHEET 12 OF 19	

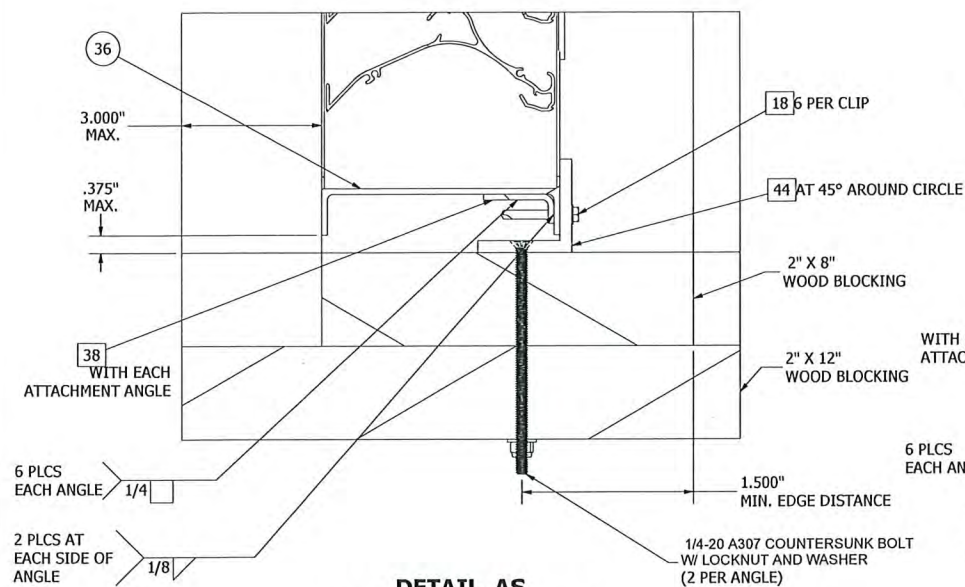




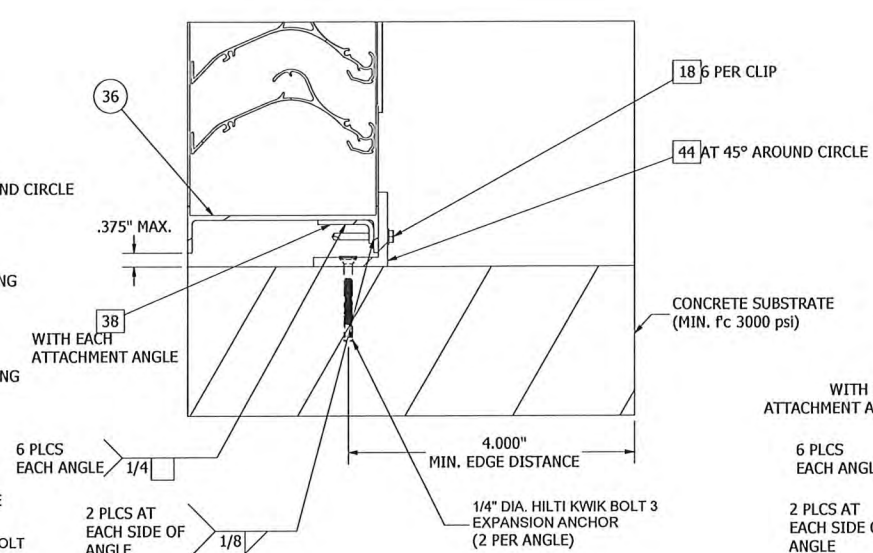
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1116.17  
Expiration Date 02/23/2026  
By *[Signature]*  
Miami-Dade Product Control

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.		RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.		SSK/NS	JDS	WRT	MMM	09/10/20
AUTHOR	DRP	5/16/12	 1300 Enterprise Road, Geneva, Alabama 36340 PROPRIETARY AND CONFIDENTIAL				
CHECKED	DJR	8/2/12					
APPROVED	DJR	8/2/12					
MATERIAL			PRODUCT 5DDWRDC				
			TITLE ASSEMBLY "E" AND "F" INSTALL				
			SIZE D		DWG NO 60-022270-00B		REV E
ECN 12426			SCALE NONE		INVENTOR		SHEET 13 OF 19

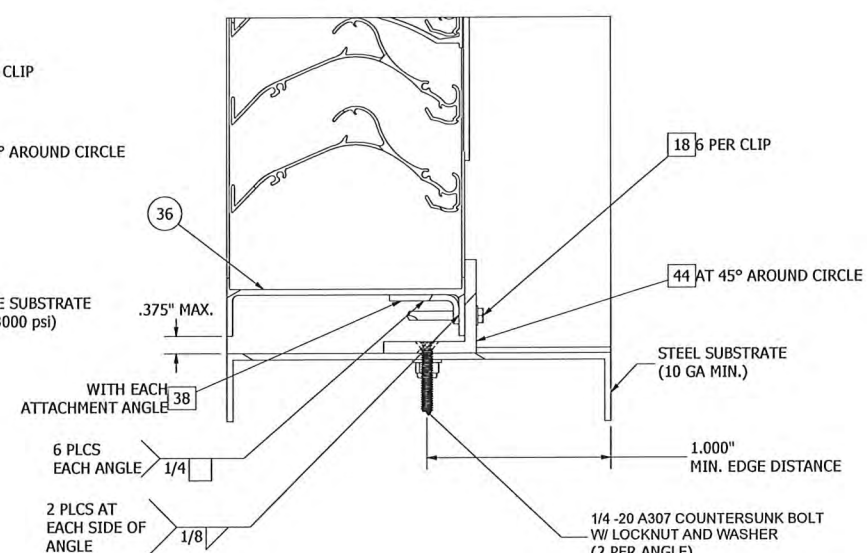




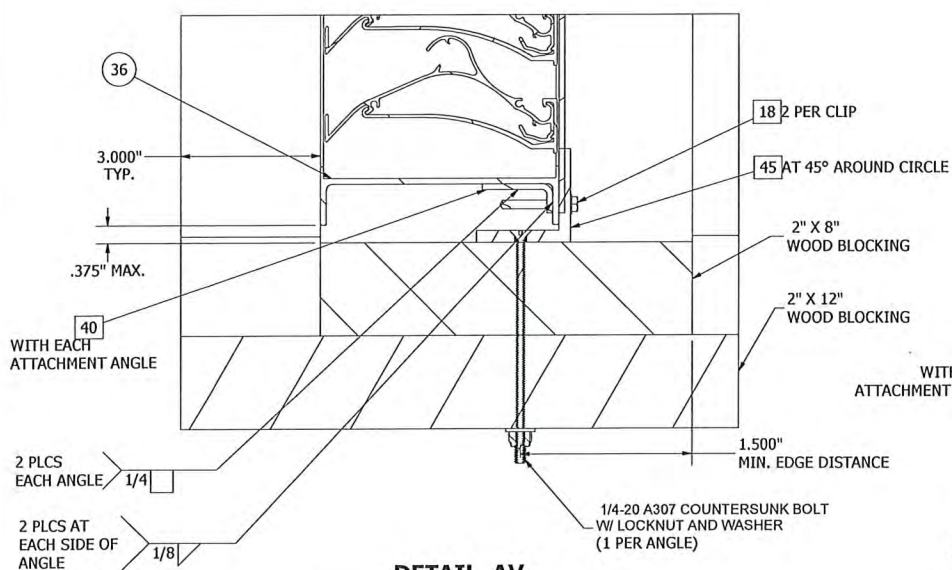
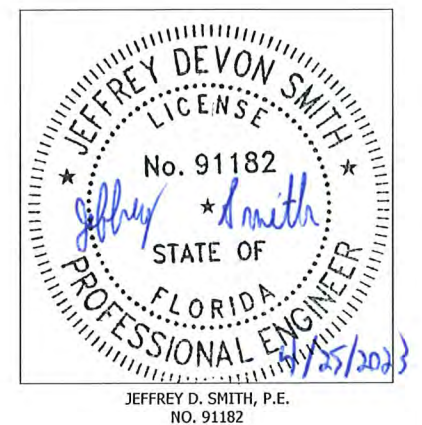
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IN REVERSE DIRECTION  
(WOOD SUBSTRATE ONLY)



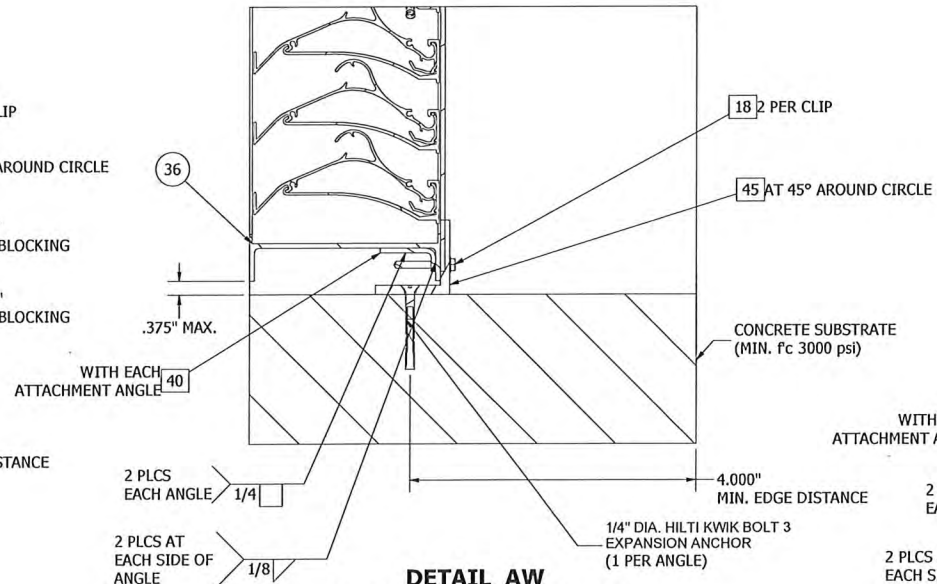
**DETAIL AT**  
ASSEMBLY 'E' - CONNECTION  
IN REVERSE DIRECTION  
(CONCRETE SUBSTRATE ONLY)



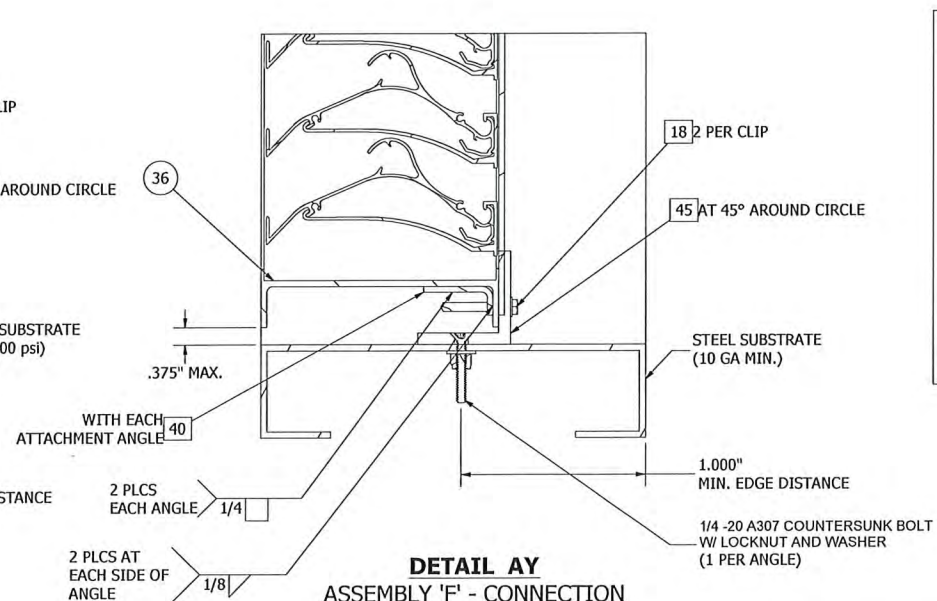
**DETAIL AU**  
ASSEMBLY 'E' - CONNECTION  
IN REVERSE DIRECTION  
(STEEL SUBSTRATE ONLY)



**DETAIL AV**  
ASSEMBLY 'F' - CONNECTION  
IN REVERSE DIRECTION  
(WOOD SUBSTRATE ONLY)



**DETAIL AW**  
ASSEMBLY 'F' - CONNECTION  
IN REVERSE DIRECTION  
(CONCRETE SUBSTRATE ONLY)



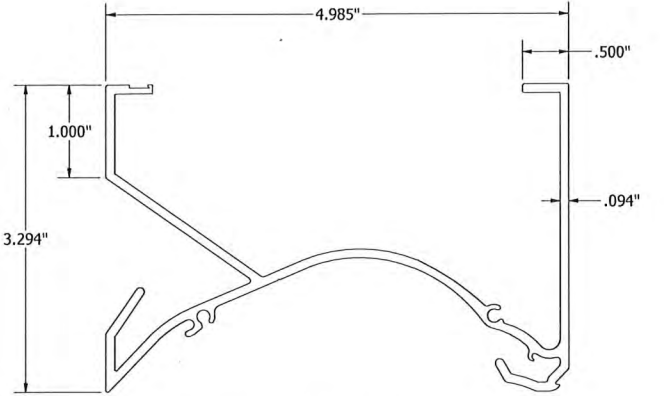
**DETAIL AY**  
ASSEMBLY 'F' - CONNECTION  
IN REVERSE DIRECTION  
(STEEL SUBSTRATE ONLY)

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1116.17  
Expiration Date 02/23/2026  
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Miami-Dade Product Control

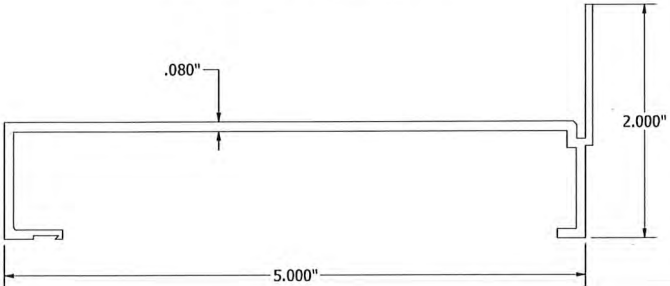
E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.		RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.		SSK/ NS	JDS	WRT	MMM	09/10/20
AUTHOR	DRP	5/16/12	<div><b>RELIABLE</b></div> <div>ARCHITECTURAL PRODUCTS</div> <div>LOUNERS • SCREENS WALLS • SHEDGATES</div> <div>1300 Enterprise Road, Geneva, Alabama 36540 PROPRIETARY AND CONFIDENTIAL</div>				
CHECKED	DJR	8/2/12					
APPROVED	DJR	8/2/12					
MATERIAL			PRODUCT	SDDWRDC			
			TITLE	ASSEMBLY "E" AND "F" REVERSE ANGLE INSTALL			
			SIZE D	DWG NO		REV E	
			60-022270-00B				
ECN	12426		SCALE	NONE	INVENTOR	SHEET 14 OF 19	



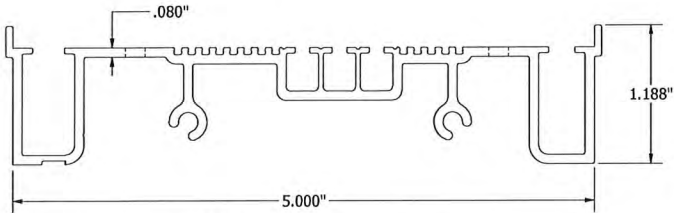
TABLE 02 - 5DDWRDC - WALL FASTENER TABLE (N.I.C.)					
SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	LOCATION	FASTENER TYPE	MIN. EMBEDMENT	MIN. EDGE DISTANCE
WOOD	SPECIFIC GRAVITY = 0.4	HEAD/SILL	3/8-16 A307 HEX HEAD BOLT W LOCKNUT AND WASHER (UNDER BOLT HEAD & LOCKNUT)	NA	1 1/2"
		JAMBS	3/8-16 A307 HEX HEAD BOLT W LOCKNUT AND WASHER (UNDER BOLT HEAD & LOCKNUT)	NA	1 1/2"
		MULLION SUPPORT (END PLATE)	5/8-11 A307 HEX HEAD BOLT W NUT AND WASHER	NA	2 1/2"
STEEL	STEEL - MIN. 10 GA	HEAD/SILL	3/8-16 A307 HEX HEAD BOLT W LOCKNUT AND WASHER	NA	1"
		JAMBS	3/8-16 A307 HEX HEAD BOLT W LOCKNUT AND WASHER	NA	1"
		MULLION SUPPORT (END PLATE)	5/8-11 A307 HEX HEAD BOLT W NUT AND WASHER	NA	1"
CONCRETE	3000 PSI MIN. COMP. STRENGTH	HEAD/SILL	3/8" Ø HILTI KWIK BOLT III EXPANSION ANCHORS	2"	4"
		JAMBS	3/8" Ø HILTI KWIK BOLT III EXPANSION ANCHORS	2"	4"
		MULLION SUPPORT (END PLATE)	5/8" Ø HILTI KWIK BOLT III EXPANSION ANCHORS	4"	9"
GROUT FILLED CMU (6", 8", 10" & 12")	ASTM C-90 BLOCK, 1500 PSI GROUT COMP. STRENGTH	HEAD/SILL	1/4" Ø HILTI KWIK HUS EZ SCREW ANCHOR (1 PER CELL, 1 3/8" MIN. FROM VERTICAL MORTAR JOINT)	1 5/8"	4"
		JAMBS	5/8" Ø HILTI KWIK HUS EZ SCREW ANCHOR (1 PER CELL)	3 1/4"	4"
		MULLION SUPPORT (END PLATE)	3/4" Ø HILTI HIT-HY 270 ANCHOR (1 PER CELL, 1" MIN. FROM VERTICAL MORTAR JOINT)	6 3/4"	4"



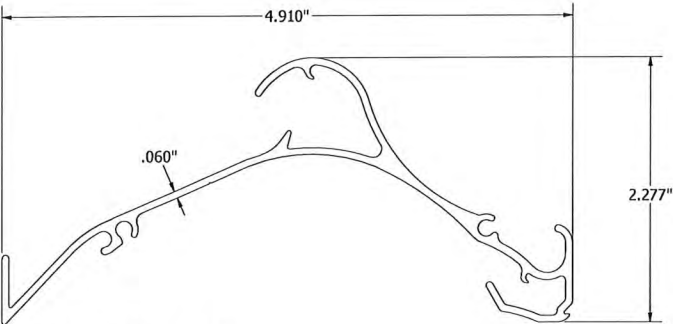
HEAD FRAME ITEM #01  
RELIABLE #70-022497-00B



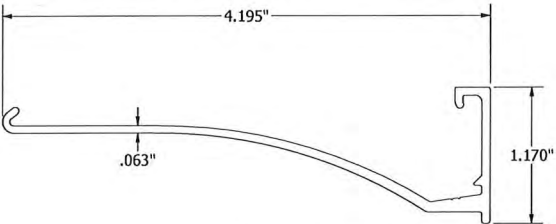
SILL FRAME ITEM #02  
RELIABLE #70-022498-00B



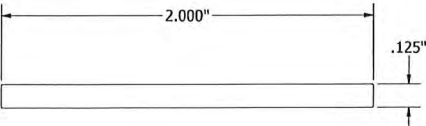
JAMB FRAME ITEM #03  
RELIABLE #70-022508-00B



BLADE ITEM #04  
RELIABLE #70-022496-00B



BLADE BRACE ITEM #05  
RELIABLE #70-023870-00B



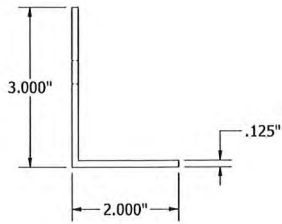
H.V.B.S STRAP ITEM #06  
RELIABLE #85-021658-00B

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1116.17  
Expiration Date 02/23/2026  
By *[Signature]*  
Miami-Dade Product Control

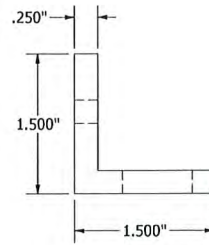


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NO. 91182

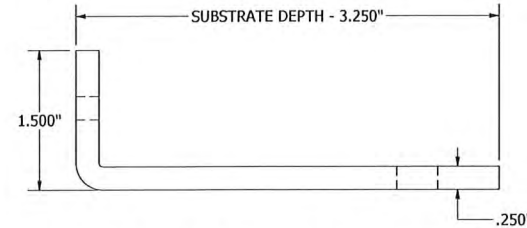
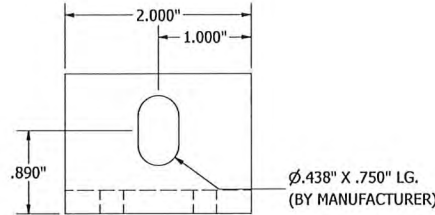
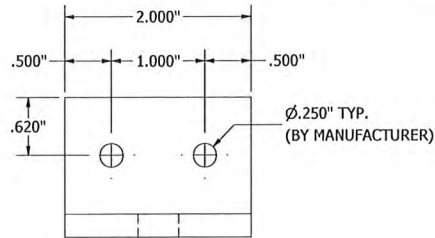
E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK. REV'D ENGINEER OF RECORD, UPDATED INFO.	RVT	JDS	JDS	03/02/23
D		SSK/NS	JDS	WRT	MM
REV	DESCRIPTION	BY	CHK	APVD	DATE
AUTHOR	DRP	5/16/12			
CHECKED	DJR	8/2/12			
APPROVED	DJR	8/2/12			
MATERIAL	PRODUCT 5DDWRDC TITLE SUBSTRATE WALL FASTENER TABLE 5DDWRDC PARTS				
SIZE	D	DWG NO	60-022270-00B	REV	E
ECN	12426	SCALE	NONE	INVENTOR	SHEET 15 OF 19



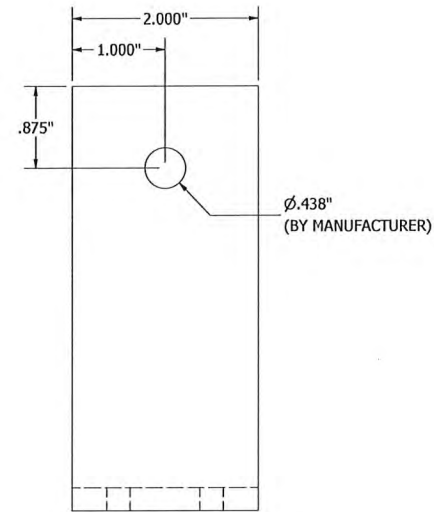
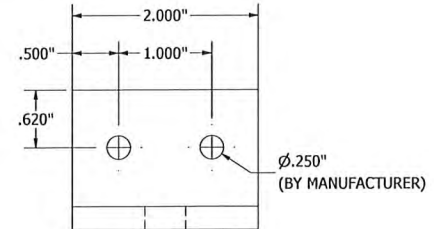
MULLION SUPPORT ANGLE ITEM#09  
RELIABLE #A1139



ATTACHMENT CLIP ANGLE, 2" LG. ITEM#10  
RELIABLE #85-021637-00B



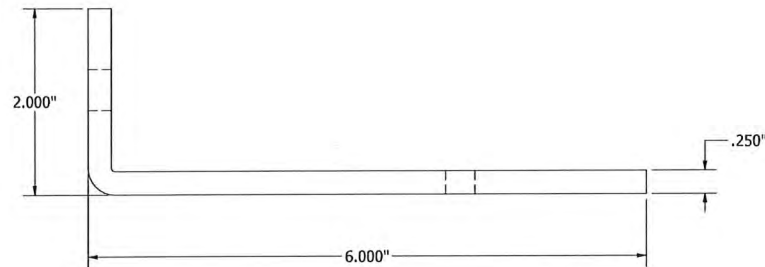
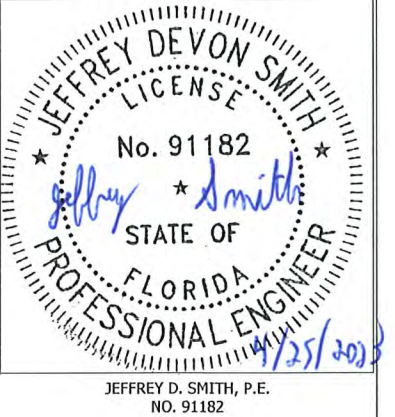
CLIP ANGLE - FORMED, 2" LG. ITEM#11  
RELIABLE #N/A



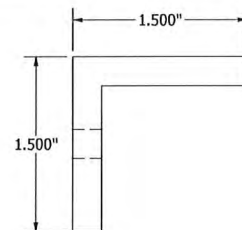
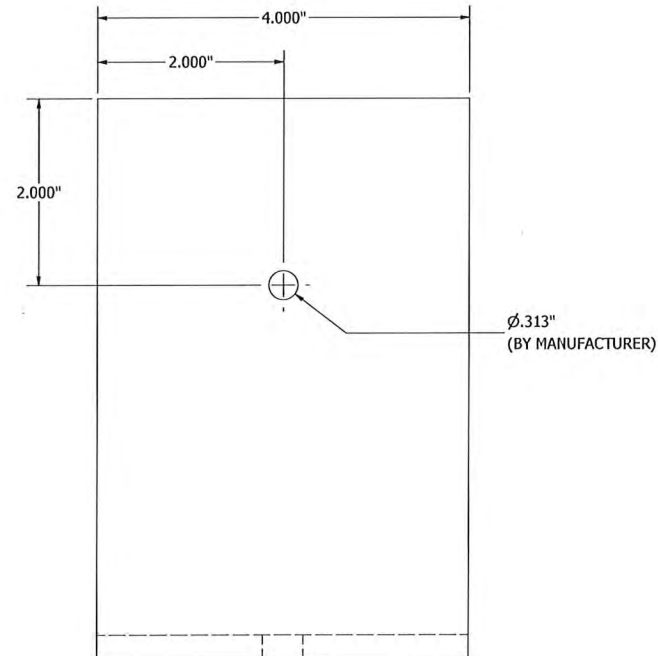
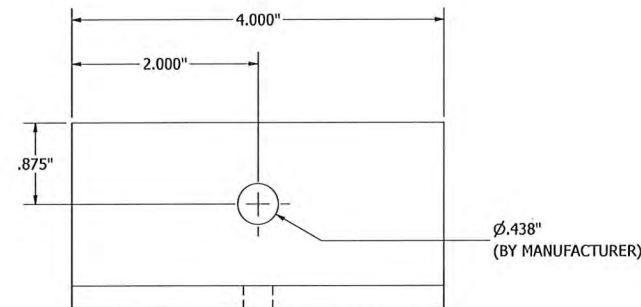
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1116.17

Expiration Date 02/23/2026

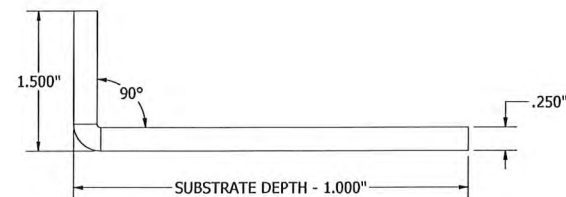
By *[Signature]*  
Miami-Dade Product Control



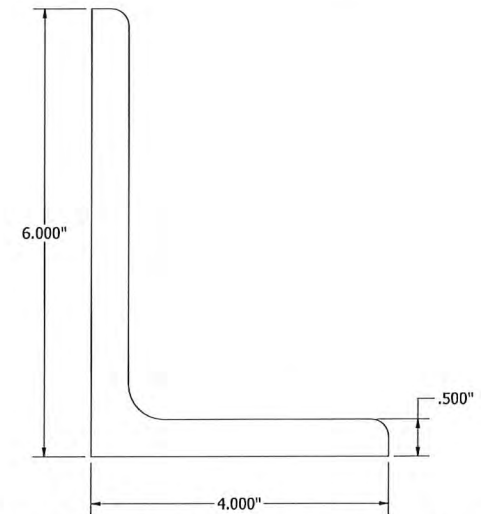
CLIP ANGLE - FORMED, 4" LG. ITEM#12  
RELIABLE #N/A



ATTACHMENT ANGLE, CONT. ITEM #13  
RELIABLE #85-023099-00B



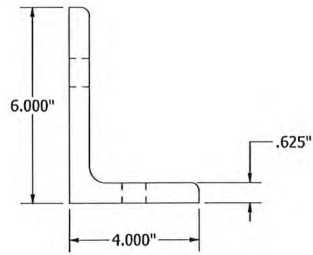
CLIP ANGLE - FORMED, CONT. ITEM #14  
RELIABLE #85-023100-00B



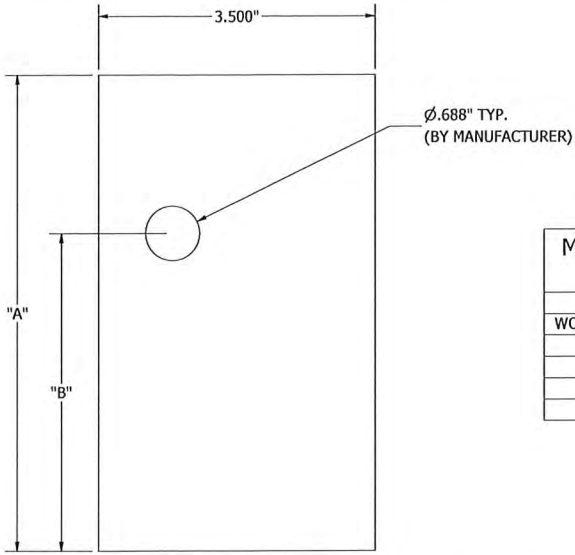
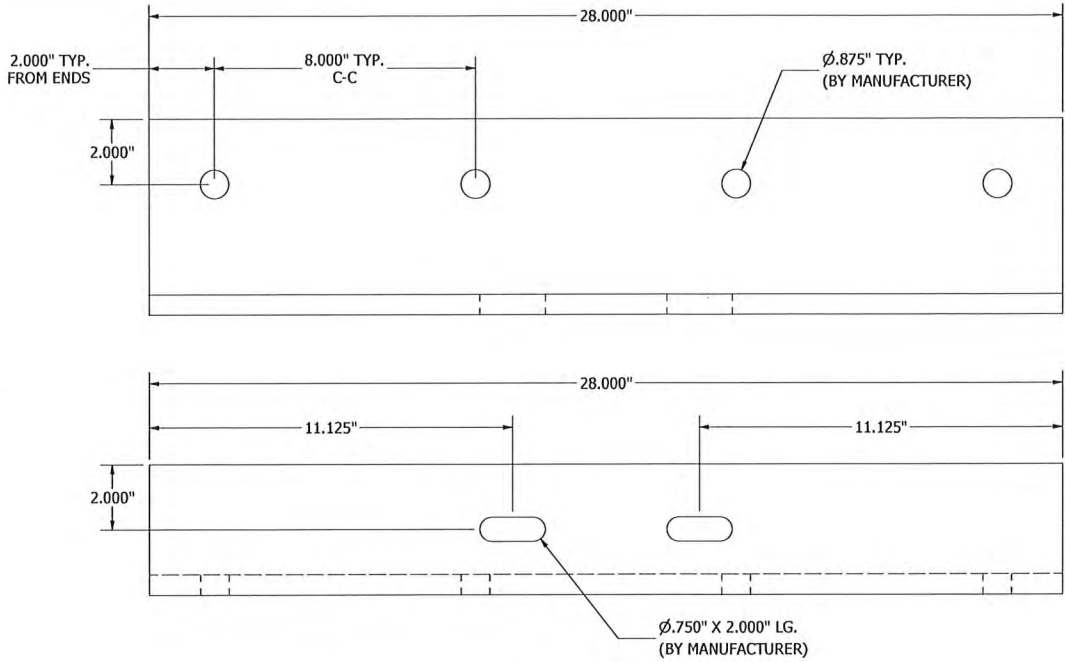
STRUCTURAL ATTACHMENT ANGLE, CONT. ITEM #15  
RELIABLE #85-023122-00B

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK. REV'D ENGINEER OF RECORD, UPDATED INFO.	RVT	JDS	-	JDS	03/02/23
D		SSK/NS	JDS	WRT	MMM	09/10/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DRP	5/16/12				
CHECKED	DJR	8/2/12				
APPROVED	DJR	8/2/12				
MATERIAL						
PRODUCT	5DDWRDC					
TITLE	5DDWRDC - PARTS					
SIZE	D	DWG NO	60-022270-00B			
ECN	12426	SCALE	NONE	INVENTOR	SHEET 16 OF 19	



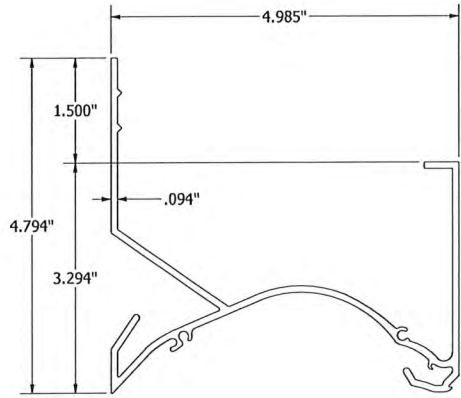


STRUCTURAL ATTACHMENT ANGLE, 28" LG. ITEM #16  
RELIABLE #85-023102-00B

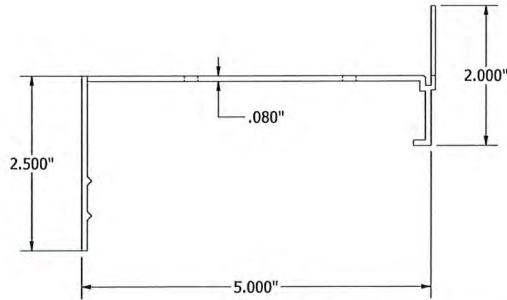


MULLION SUPPORT ATTACHMENT PLATE DIMENSION TABLE		
WALL TYPE	"A"	"B"
WOOD/STEEL/CONCRETE	3.500	1.750
6" CMU	4.000	2.000
8" CMU	6.000	4.000
10" CMU	8.000	6.000
12" CMU	10.000	8.000

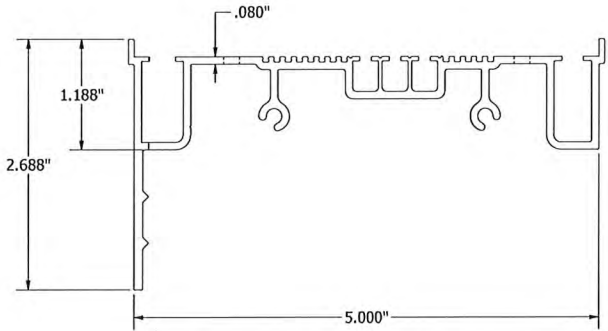
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RELIABLE #85-023103-00B



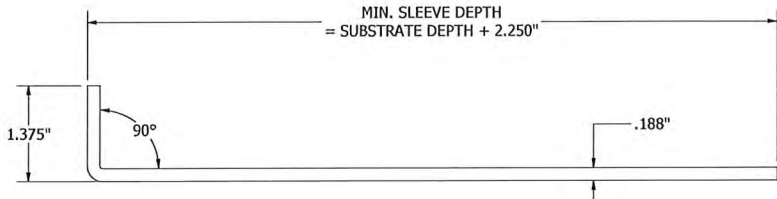
HEAD FRAME W/INTEGRAL FLANGE ITEM #24  
RELIABLE #70-022499-00B



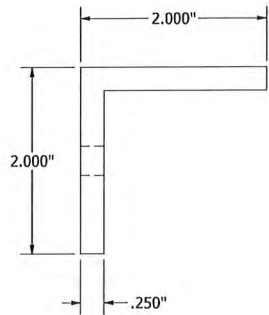
SILL FRAME W/INTEGRAL FLANGE ITEM #25  
RELIABLE #70-020969-00B



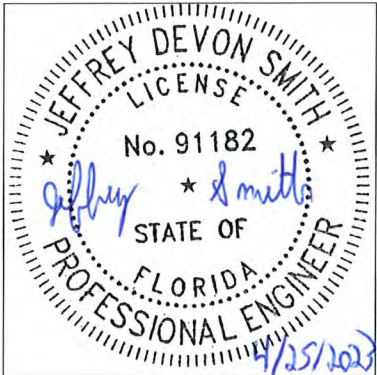
JAMB FRAME W/INTEGRAL FLANGE ITEM #26  
RELIABLE #70-022509-00B



FRONT FLANGE UNIVERSAL SLEEVE ITEM #27



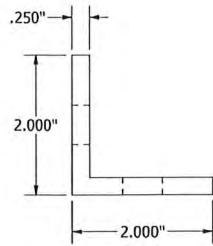
CONT. RETAINING ANGLE ITEM #28  
RELIABLE #85-023107-00B



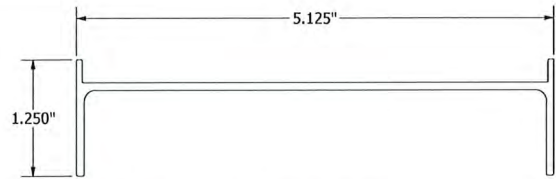
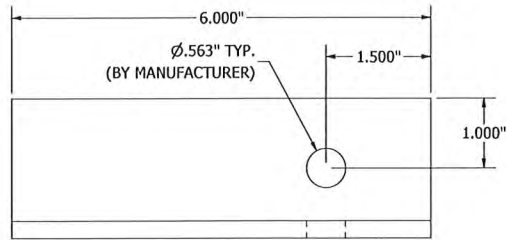
JEFFREY D. SMITH, P.E.  
NO. 91182

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1116.17  
Expiration Date 02/23/2026  
By *[Signature]*  
Miami-Dade Product Control

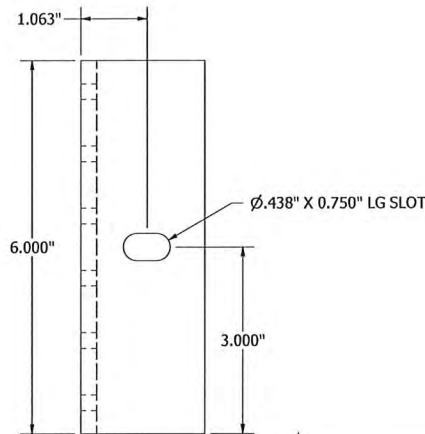
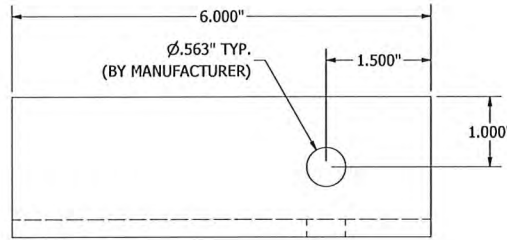
E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.	RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.	SSK/ NS	JDS	WRT	MMM	09/10/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DRP	5/16/12				
CHECKED	DJR	8/2/12				
APPROVED	DJR	8/2/12				
MATERIAL	PRODUCT	SDDWRDC				
	TITLE	SDDWRDC - PARTS				
	SIZE	D	DWG NO	60-022270-00B	REV	E
ECN	12426	SCALE	NONE	INVENTOR	SHEET 17 OF 19	



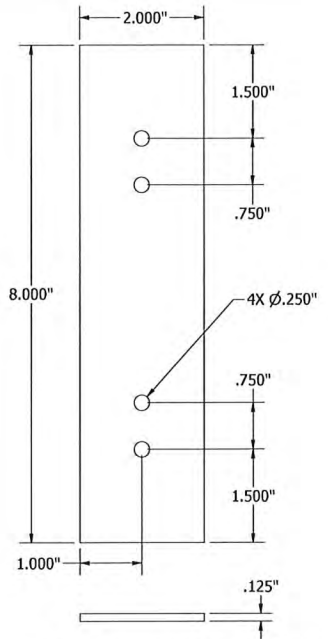
UNIVERSAL SLEEVE - MULLION SUPPORT ATTACHMENT ANGLE   ITEM #29  
RELIABLE #85-023108-00B



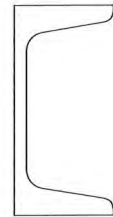
I SHAPE FRAME - CIRCULAR SHAPE LOUVER  
ITEM #36  
RELIABLE #70-022492-00B



6" ATTACHMENT ANGLE - CIRCULAR SHAPE LOUVER  
ITEM #37  
RELIABLE # 85-023293-00B



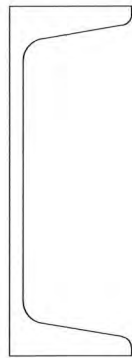
SPLICE PLATE - CIRCULAR SHAPE LOUVER  
ITEM #41  
RELIABLE # 85-023281-00B



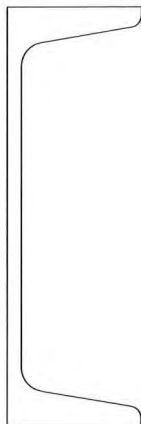
C3X4.1   ITEM #32



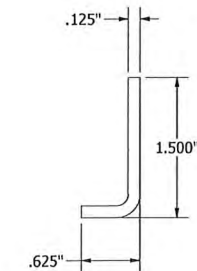
C4X5.4   ITEM #33



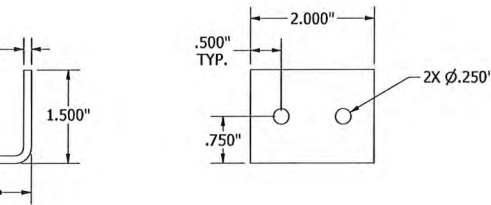
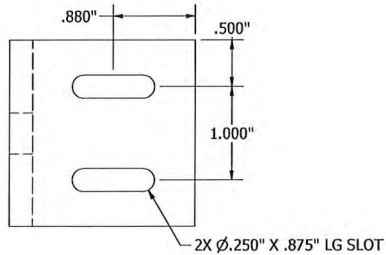
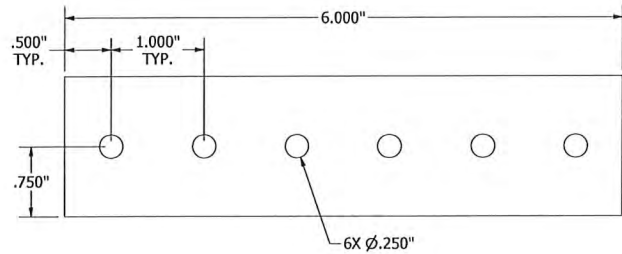
C5X6.7   ITEM #34



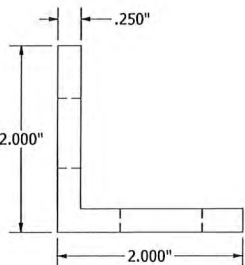
C6X8.7   ITEM #35



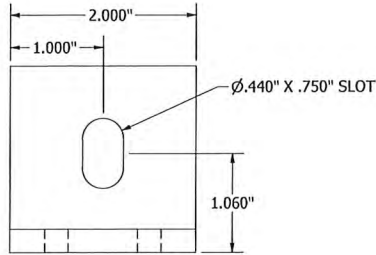
6" REINFORCING ANGLE - CIRCULAR SHAPE LOUVER  
ITEM #38  
RELIABLE # 85-023280-00B



2" REINFORCING ANGLE - CIRCULAR SHAPE LOUVER  
ITEM #40  
RELIABLE # 85-023279-00B



2" ATTACHMENT ANGLE - CIRCULAR SHAPE LOUVER  
ITEM #39  
RELIABLE # 85-022012-00B



JEFFREY D. SMITH, P.E.  
NO. 91182

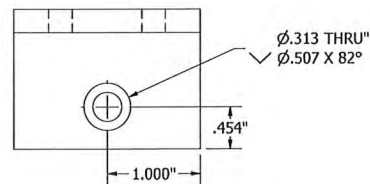
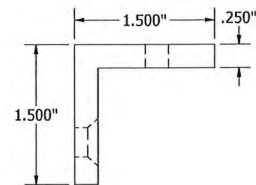
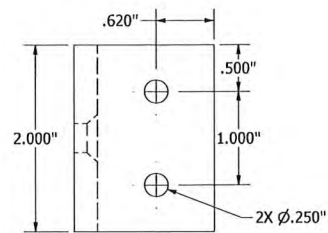
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 23-1116.17

Expiration Date 02/23/2026

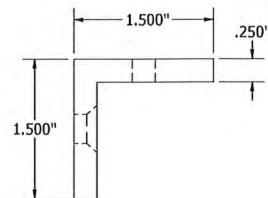
By *[Signature]*  
Miami-Dade Product Control

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.	RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.	SSK/NS	JDS	WRT	MMM	09/10/20
REV	DESCRIPTION	BY	CHK	APVD	APVD	DATE
AUTHOR	DRP	5/16/12				
CHECKED	DJR	8/2/12				
APPROVED	DJR	8/2/12				
MATERIAL						
PRODUCT	5DDWRDC					
TITLE	5DDWRDC - PARTS					
SIZE	D	DWG NO	60-022270-00B		REV	E
ECN	12426	SCALE	NONE	INVENTOR	SHEET 18 OF 19	





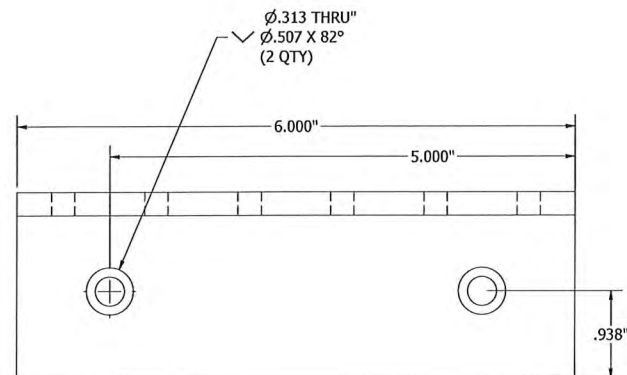
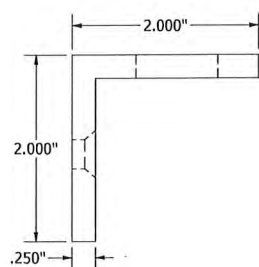
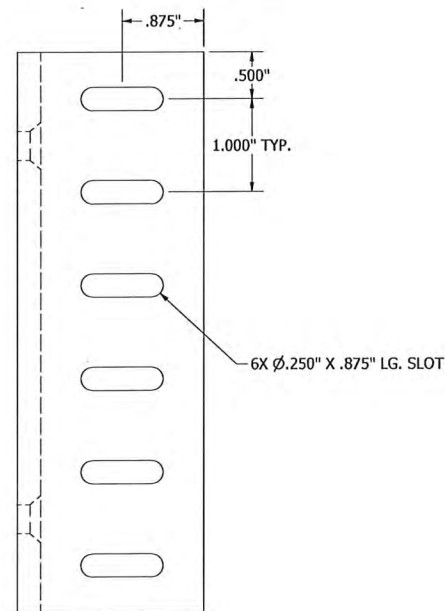
ATTACHMENT ANGLE, 2" LG., REVERSE DIRECTION ITEM #42  
RELIABLE # 85-023294-00B



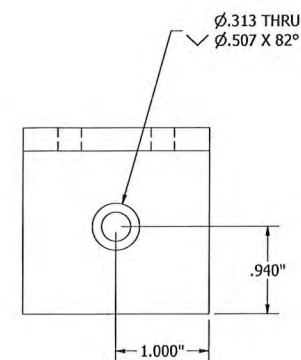
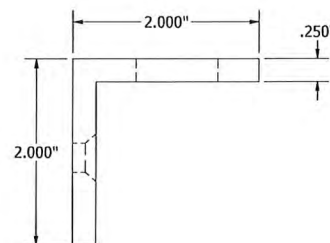
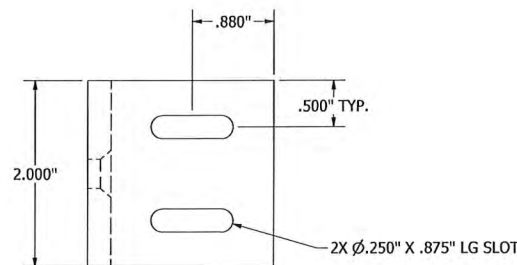
ATTACHMENT ANGLE, CONT. REVERSE DIRECTION ITEM #43  
RELIABLE # 85-023295-00B




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NOA-No. 23-1116.17  
Expiration Date 02/23/2026  
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6" ATTACHMENT ANGLE, REVERSE DIRECTION - CIRCULAR SHAPE LOUVER  
ITEM #44  
RELIABLE # 85-023296-00B



2" ATTACHMENT ANGLE, REVERSE DIRECTION - CIRCULAR SHAPE LOUVER  
ITEM #45  
RELIABLE # 85-023297-00B

E	ADDED DETAILS OF CIRCULAR SHAPE LVR, REVERSE ANGLE, UNI. SLEEVE THK.		RVT	JDS	-	JDS	03/02/23
D	REV'D ENGINEER OF RECORD, UPDATED INFO.		SSK/NS	JDS	WRT	MMM	09/10/20
AUTHOR	DRP	5/16/12			1300 Enterprise Road, Geneva, Alabama 36340 PROPRIETARY AND CONFIDENTIAL		
CHECKED	DJR	8/2/12					
APPROVED	DJR	8/2/12					
MATERIAL			PRODUCT				
			TITLE				
			SDDWRDC				
			SDDWRDC - PARTS				
			SIZE D		DWG NO		REV E
					60-022270-00B		
ECN	12426		SCALE		NONE		
			INVENTOR		SHEET 19 OF 19		