

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

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

NOTICE OF ACCEPTANCE (NOA)

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 32 of 32, dated 03/23/2012, with revision J dated 03/12/2025, prepared by 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 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 # 24-0605.04** and consists of this page 1 and evidence pages E-1, E-2, E-3 and E-4, as well as approval document mentioned above.

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

MIAMI-DADE COUNTY
APPROVED

NOA No. 25-0408.03 Expiration Date: July 9, 2026 Approval Date: May 8, 2025

Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under previous NOAs

A. DRAWINGS "Submitted under NOA # 22-0809.01"

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.

B. TESTS "Submitted under NOA # 01-0328.04"

- 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.
- 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 "Submitted under NOA # 16-0519.10"

- 1. ELF6375DXD louver wind load review, prepared by Ruskin Company, dated 05/04/2016, signed and sealed by Daniel J. Rau, P.E.
- 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"

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 25-0408.03 Expiration Date: July 9, 2026

Ruskin Company

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 25-0408.03 Expiration Date: July 9, 2026

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. Evidence submitted under NOA # 24-0605.04

A. DRAWINGS

1. Drawing No. **60-022277-00B**, titled "ELF6375DXD Approval Drawings", sheets 1 through 29 of 29, dated 03/23/2012, with revision H dated 05/08/2024, prepared by Ruskin Company, signed and sealed by Jeffrey D. Smith, P.E.

B. TESTS

- 1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 2) Large Missile Impact Test per FBC, TAS 201-94
 - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94 along with marked-up drawings and installation diagram of ELF6375DXD Aluminum Louvers, prepared by Intertek, Report No. Q1195.01-801-18 R0, dated 09/08/2023, signed and sealed by Tyler Westerling, P.E.

C. CALCULATIONS

Louver wind load review prepared by Ruskin Company, dated 05/08/2024, signed and sealed by Jeffrey D. Smith, 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 8th edition (2023) of the FBC, issued by Ruskin Company, dated 05/07/2024, signed and sealed by Jeffrey D. Smith, P.E.
- 2. Statement letter of no financial interest, issued by Ruskin Company, dated 05/07/2024, signed and sealed by Jeffrey D. Smith, P.E.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 25-0408.03 Expiration Date: July 9, 2026

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. New evidence submitted

A. DRAWINGS

1. Drawing No. **60-022277-00B**, titled "ELF6375DXD Approval Drawings", sheets 1 through 32 of 32, dated 03/23/2012, with revision J dated 03/12/2025, prepared by Ruskin Company, signed and sealed by Jeffrey D. Smith, P.E.

B. TESTS

- 1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 2) Large Missile Impact Test per FBC, TAS 201-94
 - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94 along with marked-up drawings and installation diagram of ELF6375DXD Aluminum Louvers, prepared by Intertek, Report No. **S0188.01-801-18 r0**, dated 12/17/2024, signed and sealed by Tyler Westerling, P.E.

C. CALCULATIONS

1. Louver wind load review prepared by Ruskin Company, dated 03/14/2025, signed and sealed by Jeffrey D. Smith, P.E.

D. OUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

- 3. Statement letter of code conformance to the 8th edition (2023) of the FBC, issued by Ruskin Company, dated 03/14/2025, signed and sealed by Jeffrey D. Smith, P.E.
- 4. Statement letter of no financial interest, issued by Ruskin Company, dated 03/14/2025, signed and sealed by Jeffrey D. Smith, P.E.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 25-0408.03 Expiration Date: July 9, 2026

-	TABLE 01 - PARTS LIST FOR 100PSF JAMB ONLY ATTACHMENT							
ITEM #	DESCRIPTION	MATERIAL	ALLOY					
1	HEAD FRAME - JAMB ONLY	0.125" THK. EXTRUDED ALUM.	6063-T6					
2	SILL FRAME - JAMB ONLY	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	OFFSET TEE SUPPORT FOR BLADE	0.125" THK EXTRUDED ALUM.	6063-T6					
7	1/4-20 X 3/4" HHB W LOCK WASHER AND HEX NUT	300S	-					
8	SCREW #10-16 X 1" LG HWH TEK3	PLTD STL						

	TABLE 03 - MULTI-SECTION CONNECTION PARTS								
ITEM #	DESCRIPTION	MATERIAL	ALLOY						
9	MULLION ATTACHMENT ANGLE	0.125" THK EXTRUDED ALUM.	6063-T6						
10	2" SPLICE PLATE	EXTRUDED ALUM.	6063-T6						
11	FSNR KIT 3/8-16X3"LG W LOCKNUT	ZINC PLATED	-						

TABLE 04 THOTALLATION DARTS (GUID LOOSE) 400 DGE MITHEL OAD

TAB	LE 04 - INSTALLATION PARTS (SHIF	P LOOSE) - 100 PSF WI	INDLOAD
ITEM #	DESCRIPTION	MATERIAL	ALLOY
12	ATTACHMENT CLIP ANGLE, 2" LG.	0.250" THK EXTRUDED ALUM.	6063-T6
13	CONT. FORMED ANGLE - JAMBS	0.250" THK FORMED ALUM.	3003-H14
14	CONT. ATTACHMENT ANGLE - JAMBS	0.250" THK EXTRUDED ALUM.	6063-T6
15	ALTERNATE ATTACHMENT CLIP ANGLE, 6" LG.	0.250" THK EXTRUDED ALUM.	6063-T6
16	CLIP ANGLE - FORMED (CMU), 6" LG	0.250" THK FORMED ALUM.	3003-H14
17	STRUCTURAL ATTACHMENT ANGLE, 15" LG.	.375" EXTRUDED ALUM.	6063-T6
18	CLIP ANGLE - FORMED, 2" LG	0.250" THK FORMED ALUM.	3003-H14
19	ATTACHMENT ANGLE (CMU), 4" LG.	0.250" THK EXTRUDED ALUM.	6063-T6
20	REVERSE CLIP ANGLE - JAMBS	0.250" THK EXTRUDED ALUM.	6063-T6
21	REVERSE CLIP ANGLE - HEAD/SILL	0.250" THK EXTRUDED ALUM,	6063-T6
22	#10 - 16 x 1" LG TEK SCREW	410SS/ZC	-
23	SCREW #10-16 X 1.500" LG, HWH SDS	410SS/ZINC COATED	-
24	SCREW 1/4-20 X 1.000" LG. HWH SDS	410SS/ZINC COATED	
25	FSNR KIT 1/4-20X1.5"LG W LOCKNUT	ZINC PLATED	-
26	FSNR KIT 3/8-16X2"LG W LOCKNUT	ZINC PLATED	-
27	SUBSTRATE FASTENER (BY OTHERS)	REFER TABLES 08/05 & 09/10	

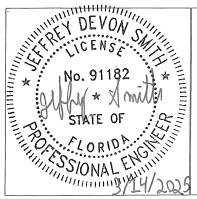
	TABLE 05 - UNIVERSAL SLEEVE PARTS									
ITEM #	DESCRIPTION	MATERIAL	ALLOY							
28	HEAD FRAME W/INTEGRAL FLANGE	0.125" THK. EXTRUDED ALUM.	6063-T6							
29	SILL FRAME W/INTEGRAL FLANGE	0.125" THK. EXTRUDED ALUM.	6063-T6							
30	JAMB FRAME W/INTEGRAL FLANGE	0.080" THK. EXTRUDED ALUM.	6063-T6							
31	FRONT FLANGE UNIVERSAL SLEEVE	0.250" THK FORMED ALUM.	3003-H14							
32	CONT. RETAINING ANGLE - 8" SPACING	0.250" THK EXTRUDED ALUM.	6063-T6							
33	CONT. RETAINING ANGLE - 18" SPACING	0.250" THK EXTRUDED ALUM.	6063-T6							
34	CONT. RETAINING ANGLE - 24" SPACING	0.250" THK EXTRUDED ALUM.	6063-T6							
35	US SUPPORT ATTACHMENT ANGLE, 5" LG.	0.250" THK EXTRUDED ALUM.	6063-T6							
36	FSNR KIT 1/2-13X3.5"LG W LOCKNUT	ZINC PLATED A307	-							
37	SCREW 1/4-20 X 1.000" LG. HWH SDS	410SS/ZINC COATED A307	-							

TABLE 06 - H.V.B.S. SUPPORTS OPTIONS BASED ON SECTION HEIGHT - JAMB ONLY ATTACHMENT

ITEM #	DESCRIPTION	LOUVER HEIGHT RANGE	MATERIAL	ALLOY	
38	3" HVBS DOUBLE FLANGED	UP TO 34" TALL	EXT. ALUMINIUM	6063-T6	
39	6" HVBS DOUBLE FLANGED	GREATER THAN 34" TO 49"	EXT. ALUMINIUM	6063-T6	
40	6" HVBS I SHAPE	GREATER THAN 49" TO 60"	EXT. ALUMINIUM	6063-T6	

TABLE 07 - H V B S / MULLION SUPPORTS OPTIONS BASED ON SECTION H	ETCHT - DEDIMETED ATTACHMENT

ITEM #	DESCRIPTION	LOUVER HEIGHT RANGE	MATERIAL	ALLOY
38	3" HVBS DOUBLE FLANGED	UP TO 34" TALL	EXT. ALUMINIUM	6063-T6
39	6" HVBS DOUBLE FLANGED	GREATER THAN 34" TO 49"	EXT. ALUMINIUM	6063-T6
40	6" HVBS I SHAPE	GREATER THAN 49" TO 65"	EXT. ALUMINIUM	6063-T6
41	2" X 4" X 1/8" THICK TUBE SUPPORT	GREATER THAN 65" TO 72"	EXT. ALUMINIUM	6063-T6
42	2" X 6" X 1/8" THICK TUBE SUPPORT	GREATER THAN 72" TO 90"	EXT. ALUMINIUM	6063-T6



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 25-0408.03

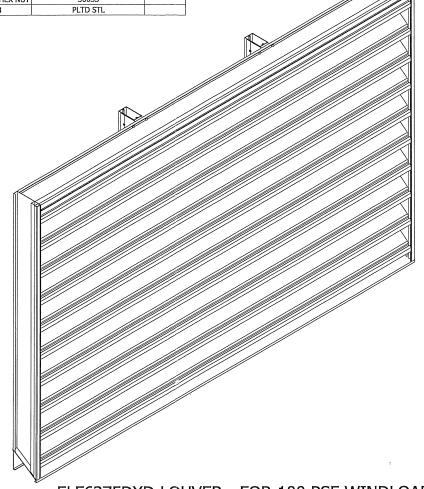
Expiration Date 07/09/2026

By Stuns

Miami-Dade Product Control

JEFFREY DEVON SMITH, P.E.





ELF6375DXD LOUVER - FOR 100 PSF WINDLOAD

NOTES

- 1. LOUVER SYSTEM WITH 100 PSF WINDLOAD HAS TWO TYPES OF ASSEMBLIES AS PER INSTALLATION 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 B/03** IS NOT THE RESPONSIBILITY OF RUSKIN AND HAVE TO BE DESIGNED AND SPECIFIED BY ENGINEER OF RECORD.
- 4. THIS LOUVER SYSTEM IS NON-BEARING AND IS NOT DESIGNED TO WITHSTAND BUILDING DEAD LOADS.
- 5. 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.
- 6. MAXIMUM SINGLE SECTION SIZE IS 120" WIDE X 90" HIGH.
- 7. MAXIMUM ASSEMBLED LOUVER SIZE: UNLIMITED WIDTH X 90" HEIGHT OR 96" WIDTH X UNLIMITED HEIGHT.
- 8. ASSSEMBLIES MAY BE STACKED VERTICALLY PROVIDED A SUITABLE STRUCTURAL SUPPORT IS DESIGNED AND INSTALLED BY OTHERS TO SUPPORT ALL LOADS TRANSFERRED FROM THE LOUVER.
- 9. 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.
- 10. 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.
- 11. PART NUMBERS WITH SQUARE BALLOONS ARE "SHIP LOOSE PARTS".

SHEET 26 - ASSEMBLY "D" & "E" - SINGLE SECTION ASSEMBLY - 150PSF

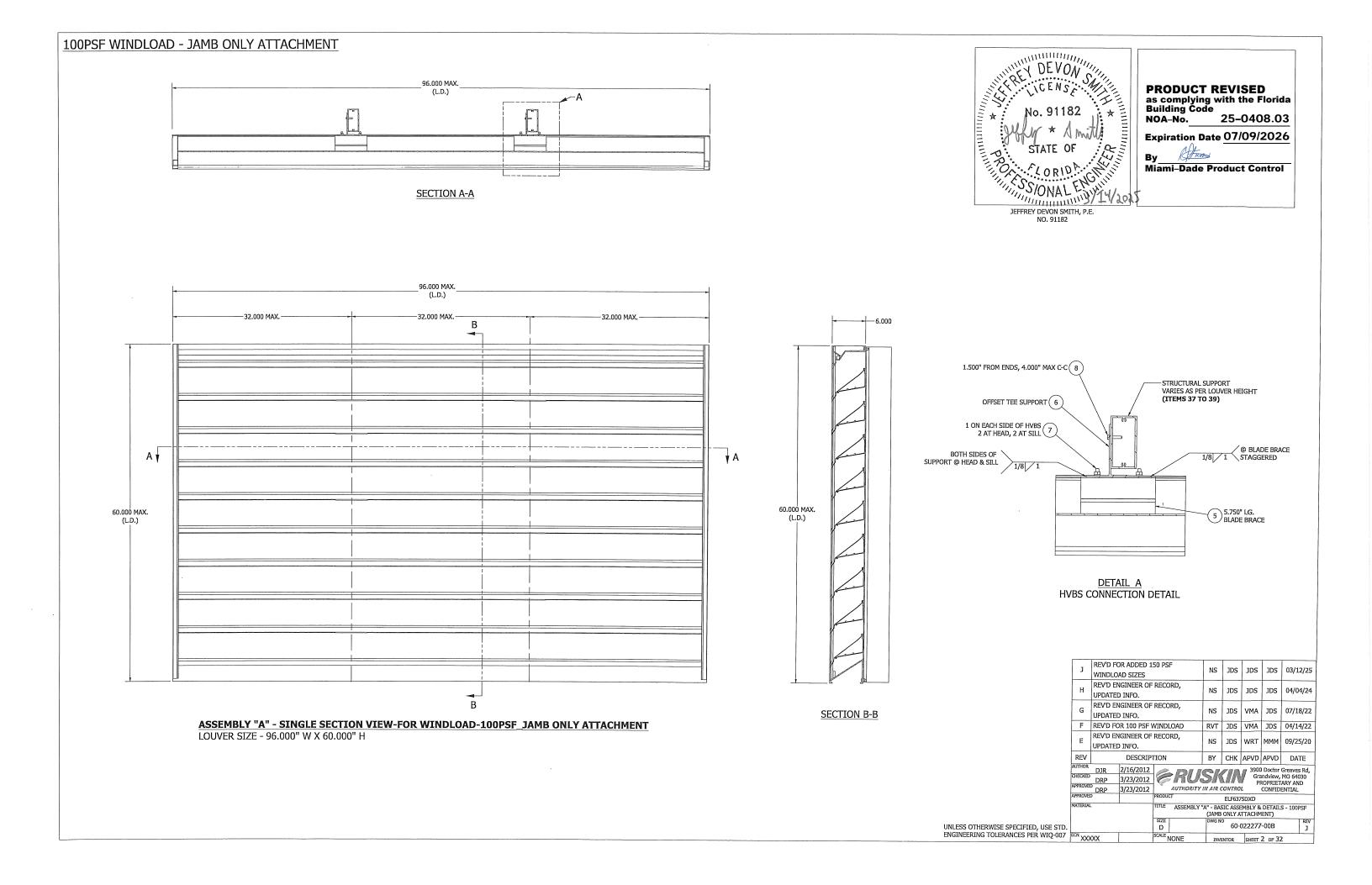
SHEET 27 - ASSEMBLY "D" & "E" - DETAILS - 150PSF

SHEET 28 - PARTS SHEET 29 - PARTS SHEET 30 - PARTS SHEET 31 - PARTS SHEET 32 - PARTS

12. ALL FASTENERS SHALL BE CORROSION RESISTANT.

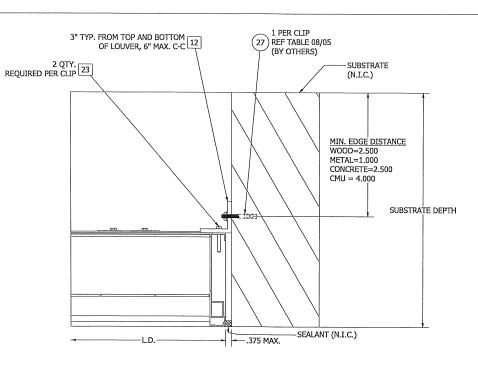
DRAWING SHEET INDEX: SHEET 01 - NOTES, PARTS LIST, DRAWING INDEX, ISO VIEW - 100 PSF SHEET 02 - ASSEMBLY "A" - BASIC ASSEMBLY & DETAILS - 100PSF (JAMB ONLY ATTACHMENT) SHEET 03 - ASSEMBLY "A" - MULTI SECTION ASSEMBLY - 100PSF (JAMB ONLY ATTACHMENT) SHEET 04 - ASSEMBLY "A" - INSTALLATION DETAILS SHEET 05 - ASSEMBLY "A" - UNIVERSAL SLEEVE INSTALL & WALL FASTENER TABLE SHEET 06 - ASSEMBLY "B" - BASIC ASSEMBLY - 100 PSF (PERIMETER ATTACHMENT) SHEET 07 - ASSEMBLY "B" - MULTI SECTION ASSEMBLY & DETAILS - 100 PSF (PERIMETER ATTACHMENT) SHEET 08 - ASSEMBLY "B" - CMU/NON CMU INSTALL SHEET 09 - ASSEMBLY "B" - UNIVERSAL SLEEVE INSTALL SHEET 10 - ASSEMBLY "B" - UNIVERSAL SLEEVE, ALTERNATE CLIP INSTALL & WALL FASTENER TABLE SHEET 11 - PARTS SHEET 12 - PARTS SHEET 13 - PARTS SHEET 14 - PARTS & WALL FASTENER TABLE SHEET 15 - NOTES, PARTS LIST, ISO VIEW - 150 PSF SHEET 16 - ASSEMBLY "C" - SINGLE SECTION ASSEMBLY - 150PSF SHEET 17 - ASSEMBLY "C" - MULTI SECTION ASSEMBLY - 150PSF SHEET 18 - STANDARD LOUVER BUILD DETAILS SHEET 19 - ASSEMBLY "C" - STANDARD INSTALLATION DETAILS SHEET 20 - ASSEMBLY "C" - ALTERNATE INSTALLATION DETAILS - REVERSED SHEET 21 - ASSEMBLY "C" - ALTERNATE INSTALLATION DETAILS (-6" CMU) SHEET 22 - ASSEMBLY "C" - ALTERNATE INSTALLATION DETAILS (6" CMU) SHEET 22 - ASSEMBLY "C" - ALTERNATE INSTALLATION DETAILS (6" CMU) SHEET 23 - WALL FASTENER TABLE SHEET 24 - UNIVERSAL SLEEVE ASSEMBLY SHEET 25 - UNIVERSAL SLEEVE INSTALLATION DETAILS

	J		OR ADDED 19 AD SIZES	50 PSF		NS	JDS	JDS	JDS	03/12/25
	Н	REV'D EN UPDATEI	IGINEER OF D INFO.	RECORD,		NS	JDS	JDS	JDS	04/04/24
	G	REV'D EN	IGINEER OF D INFO.	RECORD,		NS	JDS	VMA	JDS	07/18/22
	F	REV'D FO	R 100 PSF V	VINDLOAD)	RVT	JDS	VMA	JDS	04/14/22
	Е	rev'd en Updated	IGINEER OF INFO.	RECORD,		NS	JDS	WRT	ммм	09/25/20
	REV		DESCRIP	TION		BY	CHK	APVD	APVD	DATE
	AUTHOR CHECKED APPROVE	DRP	2/16/2012 3/23/2012 3/23/2012	ER AUT	PUS HORITY II	S/A	ONTRO	Gra PF	ndview,	Greaves Rd, MO 64030 ARY AND ENTIAL
	APPROVE			PRODUCT			ELF637	5DXD		
	MATERIAL	-		TITLE NOT	ES, PARTS	LIST,	DRAWIN	IG INDE	, ISO VI	EW-100PSF
UNLESS OTHERWISE SPECIFIED, USE STD.				D SIZE		DWG NO	60-0	022277	-00B	REV J
ENGINEERING TOLERANCES PER WIQ-007	ECN XXX	ΟXX		SCALE NON	Ε	INVE	ENTOR	SHEET	1 of 32	

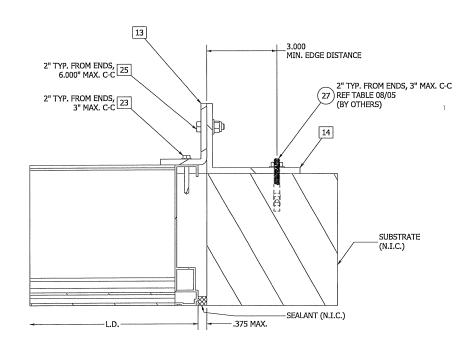


SUBSTRATE (N.I.C.) SEALANT (N.I.C.) 375 MAX. (S.S.D.) 7 1 ON EACH SIDE OF HVBS 2 AT HEAD, 2 AT SILL STRUCTURAL SUPPORT VARIES AS PER LOUVER HEIGHT (ITEMS 38 TO 40)

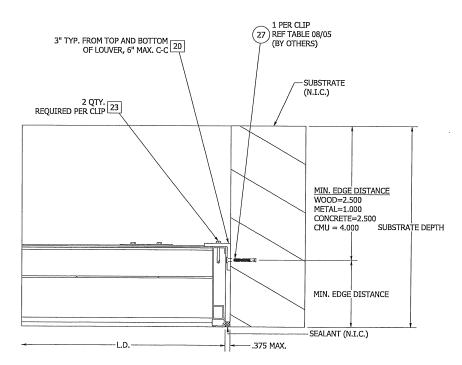
<u>DETAIL C</u> LOUVER HVBS SUPPORT ATTACHMENT AT HEAD (SILL SIMILAR)



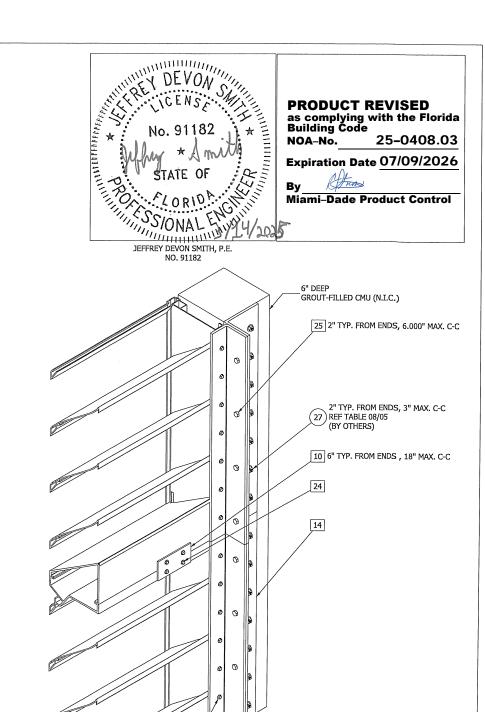
<u>DETAIL D</u>
ATTACHMENT CLIP ANGLE INSTALLATION @ JAMB FRAME

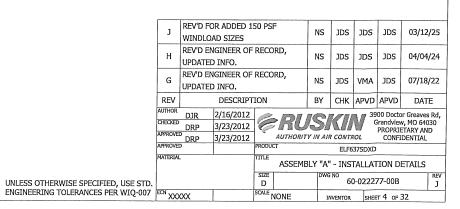


<u>DETAIL E</u>
ATTACHMENT CLIP ANGLE INSTALLATION @ JAMB FRAME
(GROUT-FILLED CMU, 6" CMU ONLY)



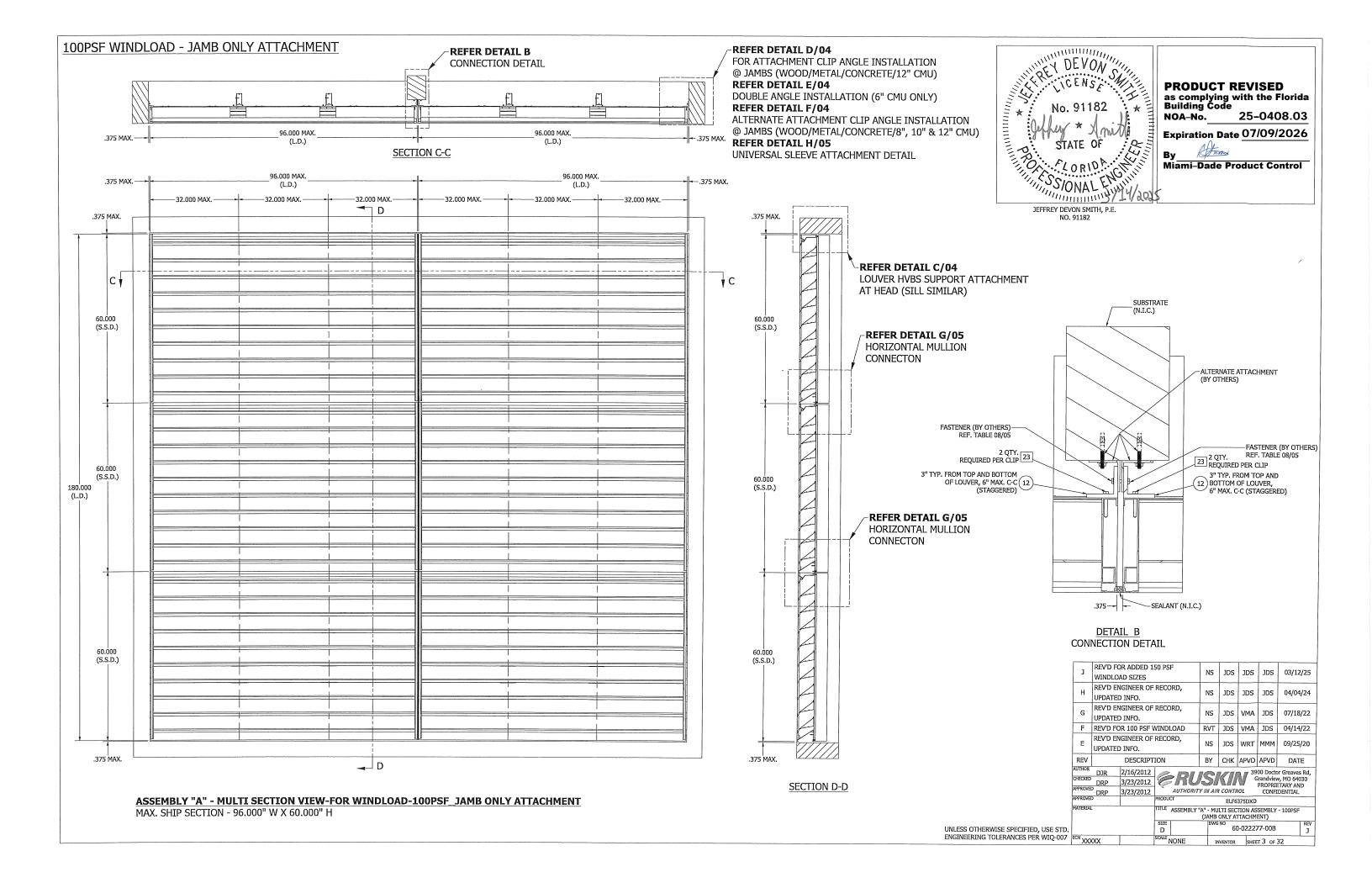
DETAIL F
ALTERNATE ATTACHMENT CLIP ANGLE INSTALLATION @ JAMB FRAME IN REVERSE DIRECTION (ALTERNATE CONNECTION)



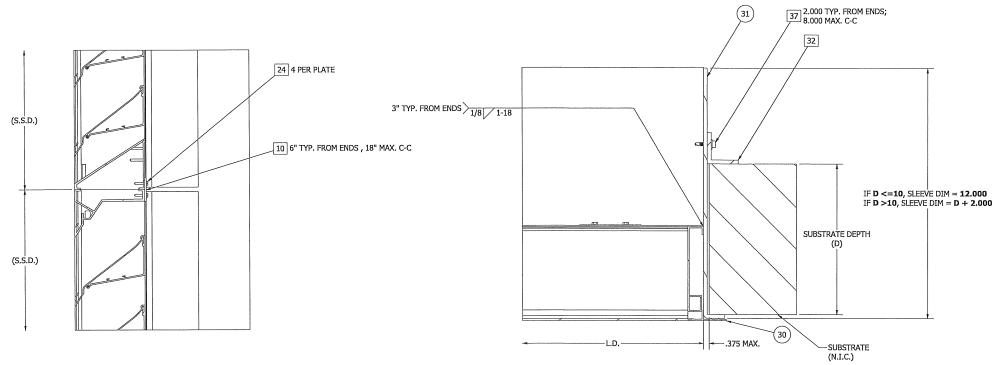


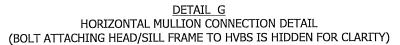
2" TYP. FROM ENDS, 23 13

CMU ATTACHMENT (6" DEEP)



100PSF WINDLOAD - JAMB ONLY ATTACHMENT





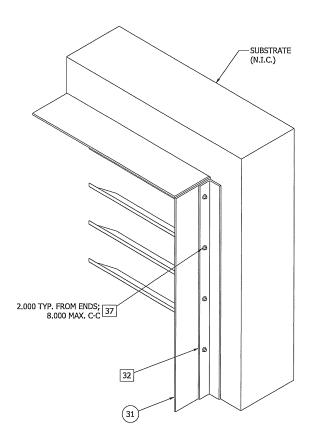
DETAIL H UNIVERSAL SLEEVE WELDMENT/CONNECTION DETAIL JAMBS

TABLE 08 -	TABLE 08 - ELF6375DXD - WALL FASTENER TABLE (N.I.C.) - FOR JAMB ONLY CONNECTION - 100PSF (ITEM 27)										
SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	SUBSTRATE REQUIREMENTS FASTENER TYPE MIN. EMBEDMENT									
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 (UNCRACKED)	1/4" Ø X 2 1/4" HILTI KWIK CON + W / WASHER**	1 3/4"	2 1/2"							
GROUT FILLED CMU (SINGLE ANGLE)	ASTM C-90 BLOCK, 1500 PSI GROUT COMP. STRENGTH. (UNCRACKED)	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. (UNCRACKED)	1/4" Ø X 1 1/4" HILTI KWIK CON + **	1"	3"							

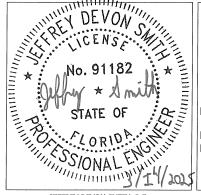
NOTES:

- 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 +. ALSO, WASHERS ARE NOT NEEDED FOR COUNTERSUNK VARIANTS.



UNIVERSAL SLEEVE ATTACHMENT



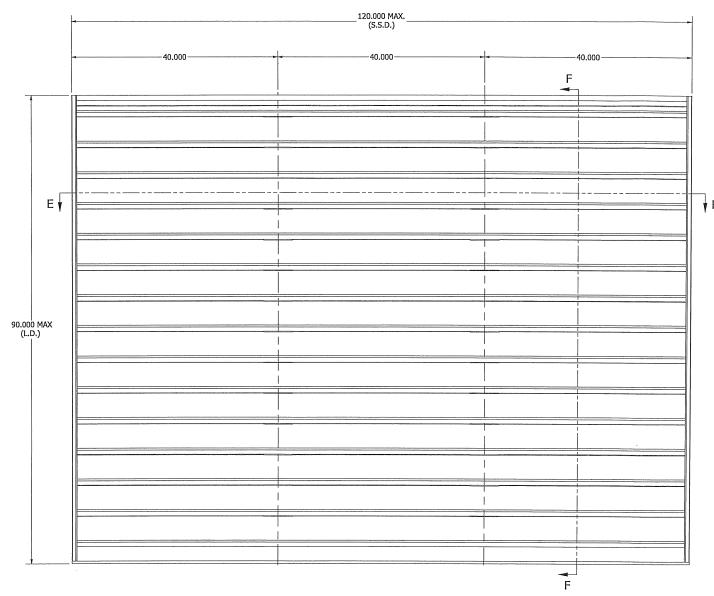
PRODUCT REVISED
as complying with the Florida
Building Code 25-0408.03 NOA-No. **Expiration Date** 07/09/2026

Miami-Dade Product Control

	1 - 4								
JEFFREY DEVON SMITH, P.E.	rr								
NO. 91182	1 3 1		OR ADDED 1	50 PSF	NS	JDS	JDS	JDS	03/12/25
	\	WINDLO	AD SIZES						
	H F	rev'd ei	NGINEER OF	RECORD,	NS	JDS	JDS	JDS	04/04/24
	'' t	UPDATED INFO.				303	100	1 303	01/01/21
	G	REV'D EI	NGINEER OF	RECORD,	NC	100	1044	1DC	07/10/22
	G	JPDATE	D INFO.		NS	JDS	VMA	JDS	07/18/22
	FF	REV'D FO	OR 100 PSF \	WINDLOAD	RVT	JDS	VMA	JDS	04/14/22
	REV		DESCRIPT	ION	BY	CHK	APVD	APVD	DATE
		DJR	2/16/2012	2 131	HO !				r Greaves Rd,
		DRP	3/23/2012	6KL	121				, MO 64030 TARY AND
	APPROVED	DRP	3/23/2012	AUTHORI	TY IN AII	R CONTI			DENTIAL
	APPROVED			PRODUCT		ELF6	375DXD		
	MATERIAL			TITLE ASSE			ERSAL S		ISTALL.
							STENER '	TABLE	
UNLESS OTHERWISE SPECIFIED, USE STD.				D	DWG		0-0222	77-00B	REV J
ENGINEERING TOLERANCES PER WIQ-007	ECN XXXX	X		SCALE NONE	I	NVENTOR	SHEE	T 5 of 3	32

120.000 MAX. (S.S.D.)

SECTION E-E

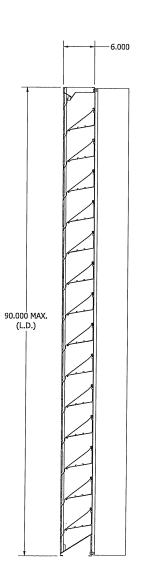


ASSEMBLY "B" - SINGLE SECTION VIEW-FOR WINDLOAD-100PSF_PERIMETER ATTACHMENT MAX. SHIP SECTION - 120.000" W X 90.000" H

NOTE:

THIS LOUVER SYSTEM IS APPROVED FOR PERIMETER ATTACHMENT AND APPLICATION WITH DESIGN PRESSURE +/-100PSF, MAXIMUM SINGLE SECTION SIZE IS 120"WIDE X 90"HIGH, UNLIMITED WIDTH X 90" HIGH

100PSF WINDLOAD - PERIMETER ATTACHMENT



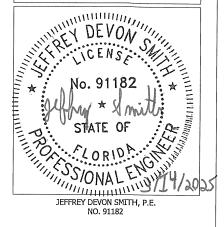
SECTION F-F

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 25-0408.03

Expiration Date <u>07/09/2026</u>

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Miami-Dade Product Control

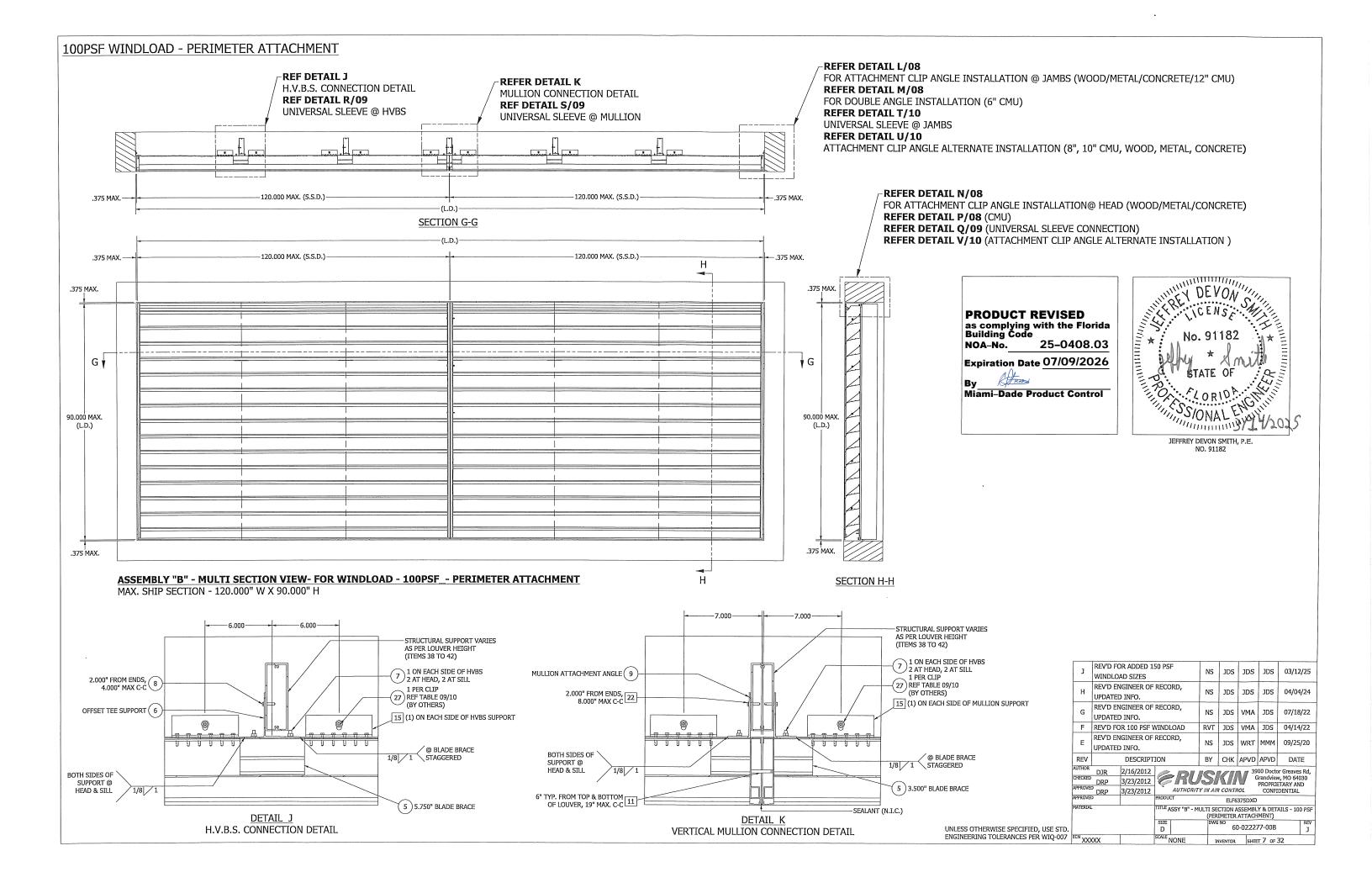


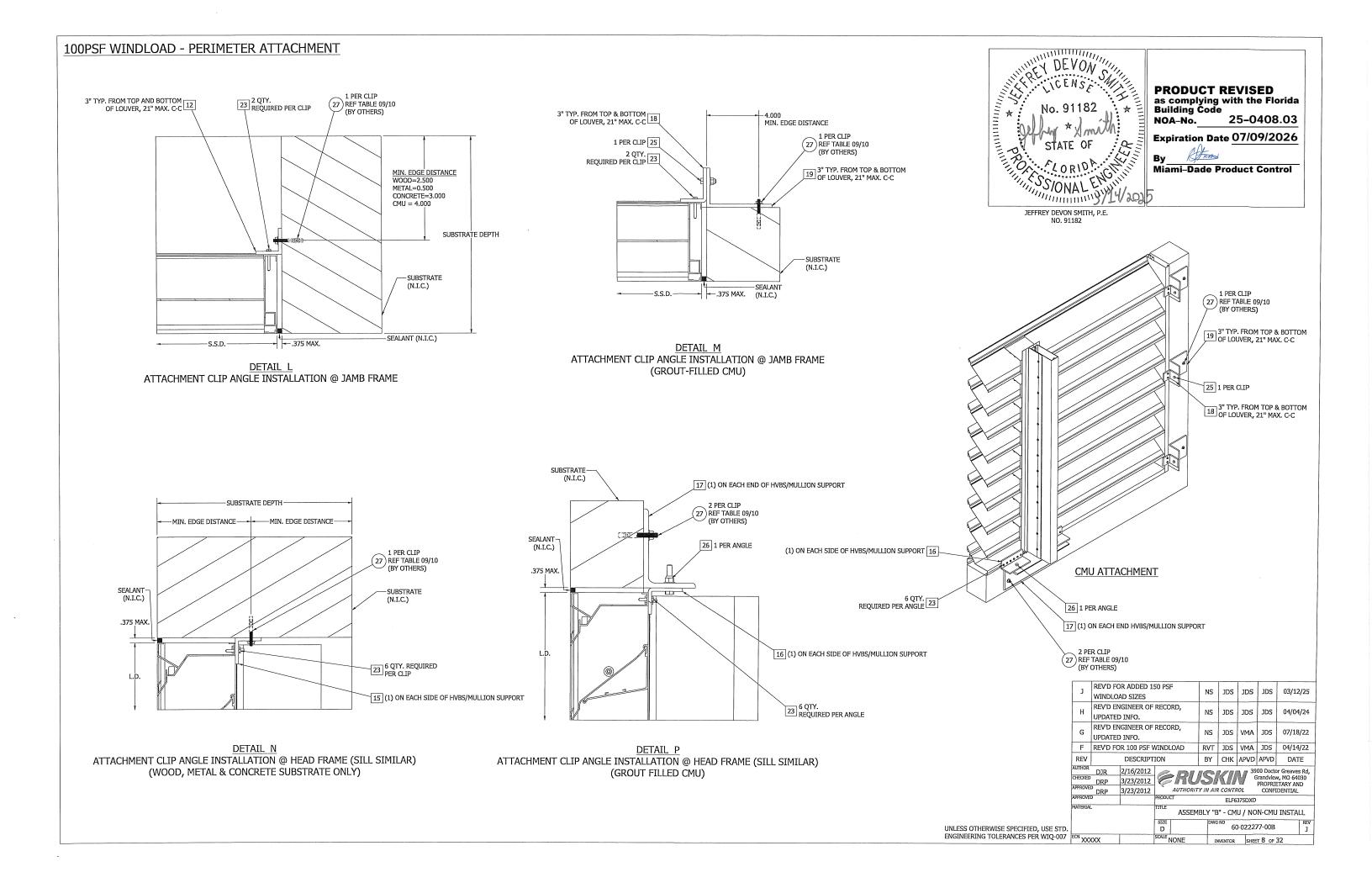
3	REV'D FO	OR ADDED 1	50 PSF	NS	JDS	JDS	JDS	03/12/25		
ر	WINDLO.	AD SIZES		I NO	פטנ	202	פטר	03/12/25		
н	REV'D EN	IGINEER OF	RECORD,	NS	JDS	IDS	JDS	04/04/24		
"	UPDATE	INFO.		INO	פטנ	בטנ	בטנ	04/04/24		
G	REV'D EN	IGINEER OF	NS	JDS	VMA	JDS	07/18/22			
b	UPDATED INFO.				JDS	VIMA	פטנ	07/18/22		
F	REV'D FO	R 100 PSF \	WINDLOAD	RVT	JDS	VMA	JDS	04/14/22		
Е	REV'D ENGINEER OF RECORD,			NS	JDS	WRT	ммм	09/25/20		
	UPDATE	INFO.		142	בטנ	WKI	141141141	03/23/20		
REV		DESCRIPT	ION	BY	CHK	APVD	APVD	DATE		
AUTHOR	DJR	2/16/2012	2 1911		1/7/11/1	39		or Greaves Rd,		
CHECKED						W G		v, MO 64030 ETARY AND		
APPROVED	DRP	3/23/2012	AUTHORIT	Y IN AIR	CONTR			DENTIAL		
APPROVED			PRODUCT		ELF6	375DXD				
MATERIAL			TITLE ASSE							

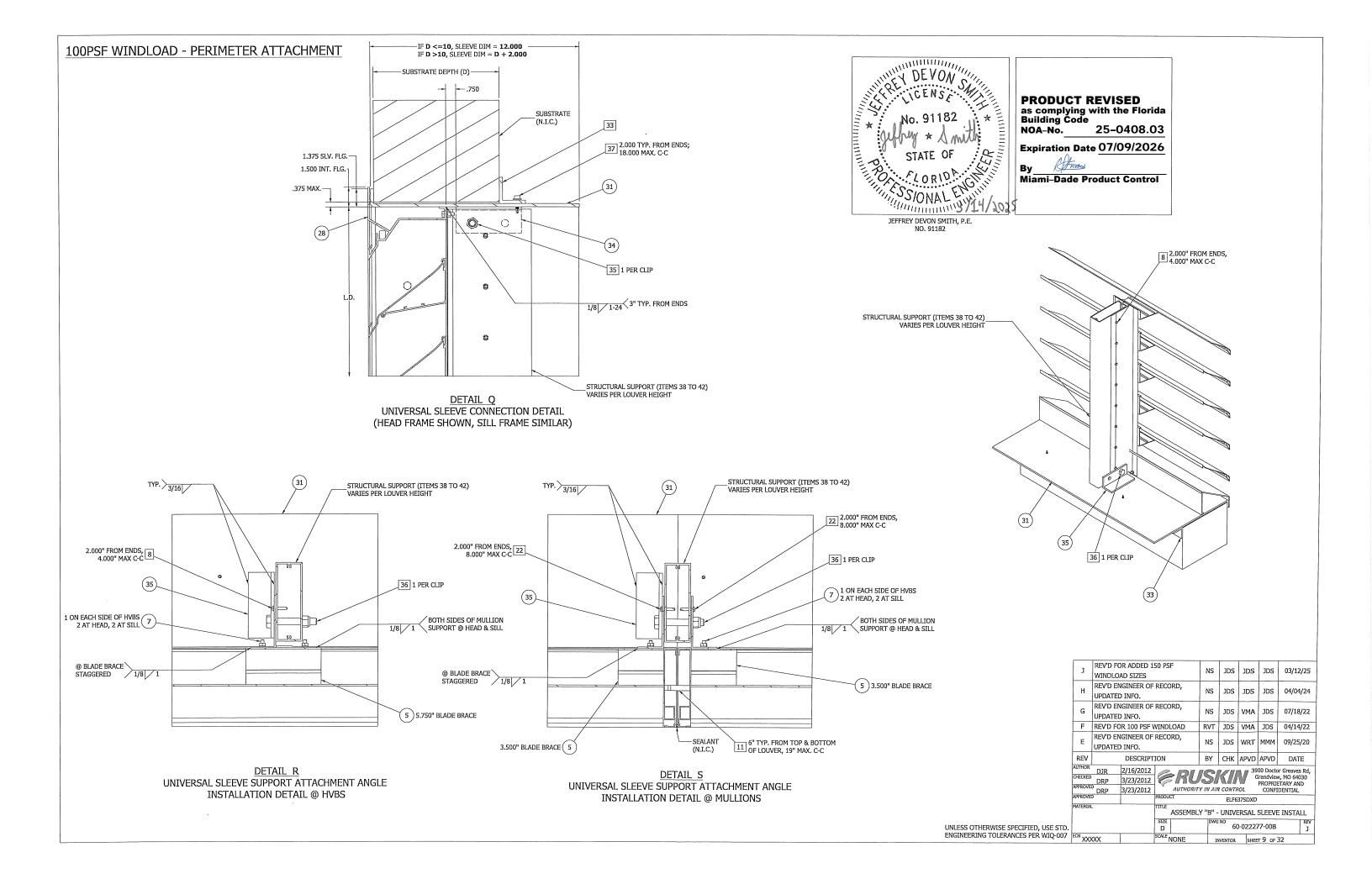
60-022277-00B

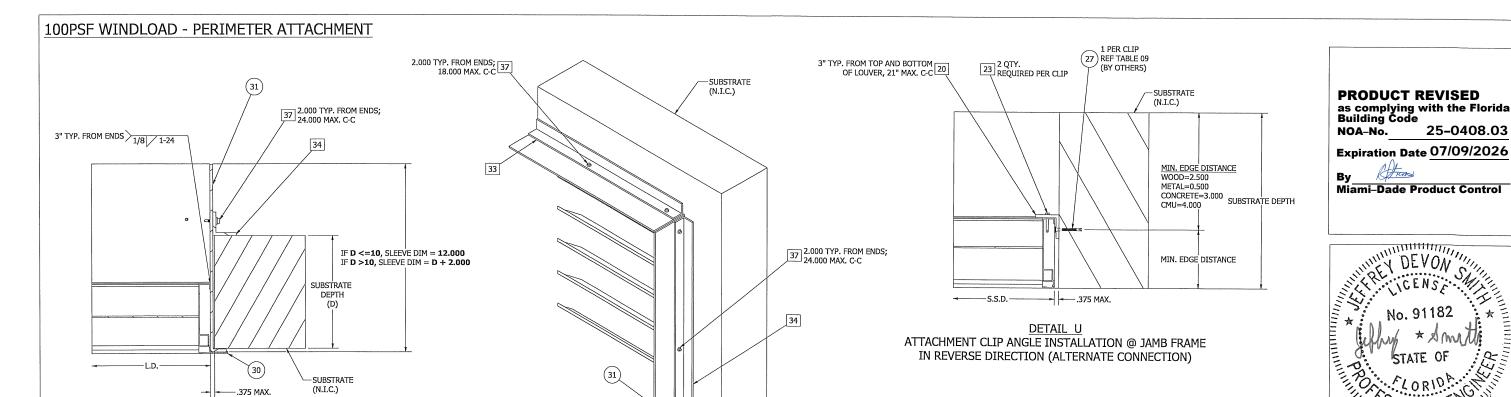
INVENTOR SHEET 6 OF 32

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









UNIVERSAL SLEEVE ATTACHMENT

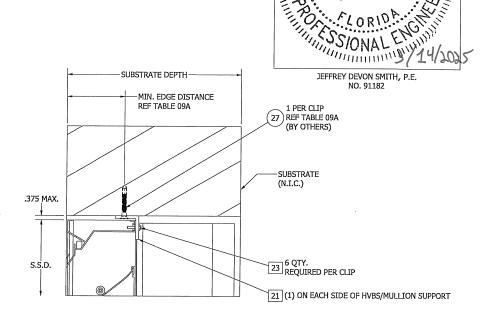
TABLE 09 - ELF6375DXD - WALL FASTENER TABLE (N.I.C.) - FOR PERIMETER ATTACHMENT-100 PSF - ITEM 27 MIN. EDGE DISTANCE SUBSTRATE TYPE MIN. SUBSTRATE REQUIREMENTS LOCATION **FASTENER TYPE** MIN. EMBEDMENT (STANDARD/REVERSE) JAMB 1/4" Ø BOLT, WASHER & LOCKNUT NA 2 1/2" WOOD SPECIFIC GRAVITY = 0.4 3/8" Ø A307 BOLT, WASHER & HEAD/SILL NA 2 1/2" LOCKNUT JAMB 1/4" Ø A307 BOLT OR TEK SCREW NA 1/2" STEEL & STEEL - MIN. 12 GA ALUMINUM ALUM. - MIN. 3/16" THICK 3/8" Ø A307 BOLT, LOCKNUT & HEAD/SILL NA 3/4" WASHER 3000 MIN. COMPRESSIVE STRENGTH 1/4" Ø X 2 1/4" HILTI KWIK BOLT 3 JAMB 2" 3" (UNCRACKED) W WASHER** CONCRETE 4000 MIN. COMPRESSIVE STRENGTH 1/2" Ø HILTI KWIK BOLT 3 HEAD/SILL 3 1/4" 4" (UNCRACKED) **EXPANSION ANCHORS** JAMB 1/4" Ø X 3" HILTI KWIK HUS EZ (SINGLE ANGLE) 2 1/2" 4" W/ WASHER** JAMB ASTM C-90 BLOCK, 1500 PSI GROUT **GROUT FILLED** 4" 1/4" Ø X 3" HILTI KWIK HUS EZ 2 1/2" (DOUBLE ANGLE) COMP. STRENGTH. (UNCRACKED) CMU HEAD/SILL 3/8" Ø HILTI KWIK HUS EZ 2 1/2" 4" (DOUBLE ANGLE) **SCREW ANCHORS**

- DOUBLE ANGLE SHOULD BE USED IF MIN. WALL DEPTHS FOR STANDARD & REVERSE ANGLE IS NOT MET.

DETAIL T

UNIVERSAL SLEEVE CONNECTION DETAIL @ JAMBS

- ** COUNTERSUNK VARIANT MAY BE USED FOR ONLY KWIK HUS EZ & HILITI KWIK CON II +. ALSO, WASHERS ARE NOT NEEDED FOR COUNTERSUNK VARIANTS.



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

UNLESS OTHERWISE SPECIFIED,

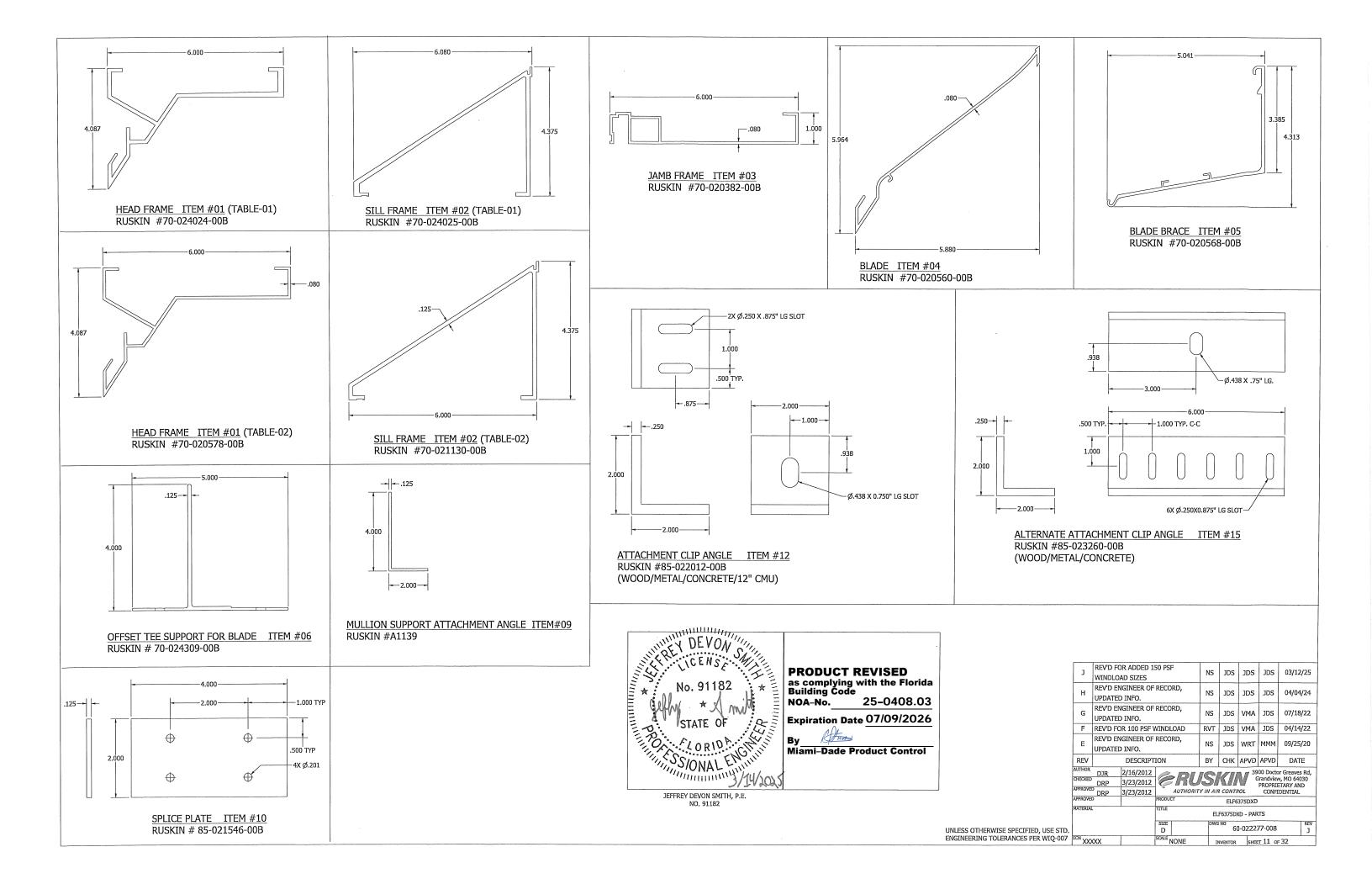
ENGINEERING TOLERANCES PER

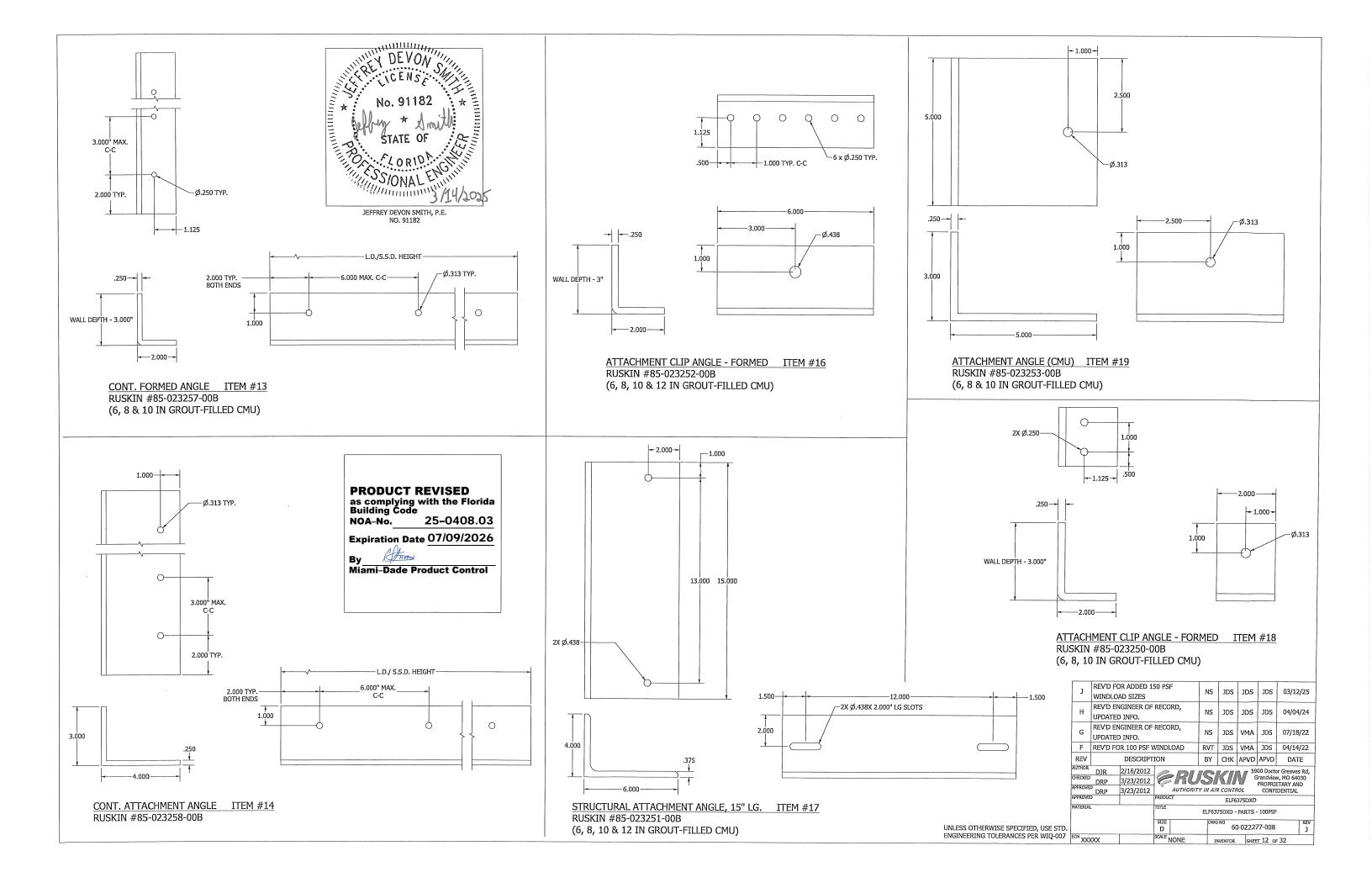
	J	REV'D FO	OR ADDED 1	50 PS	F	NS	IDC	ID.C	IDC.	02/12	/25
	,	WINDLO	INDLOAD SIZES				JDS	JDS	JDS	03/12	/25
	Н	REV'D EN	IGINEER OF	RECC	RD,					0.110.1	10.1
	п	UPDATE	O INFO.			NS	JDS	JDS	JDS	04/04	/24
		REV'D EN	IGINEER OF	RECC	RD,						
	G	UPDATE	PDATED INFO.			NS	JDS	VMA	JDS	07/18	/22
	F	REV'D FO	OR 100 PSF \	WIND	.OAD	RVT	JDS	VMA	JDS	04/14	/22
	F	REV'D EN	IGINEER OF	RECO	RD,	NS	S JDS	WRT	ммм	00/00	.
	-	UPDATE	INFO.							09/25	/20
	REV		DESCRIPT	ION		BY	CHK	APVD	APVD	DAT	E
	AUTHOR	DJR	2/16/2012				7 47 11 1	39	00 Docto	r Greaves	Rd,
	CHECKED	DRP	3/23/2012		RU	5				v, MO 640	
	APPROVED	DRP	3/23/2012	1 1	AUTHORIT	Y IN All	CONTR		PROPRIET CONFID		
	APPROVED)		PRODUC	T		ELF6	375DXD			
	MATERIAL		A	TITLE						ERNATE	
					CLI			ILL FAST	ENER TA	BLE	
USE STD.				SIZE		DWG		0-02227	77-00B		REV J
WIQ-007	ECN XXX	XX		SCALE N	ONE	11	VENTOR	SHEE	т 10 оғ	: 32	

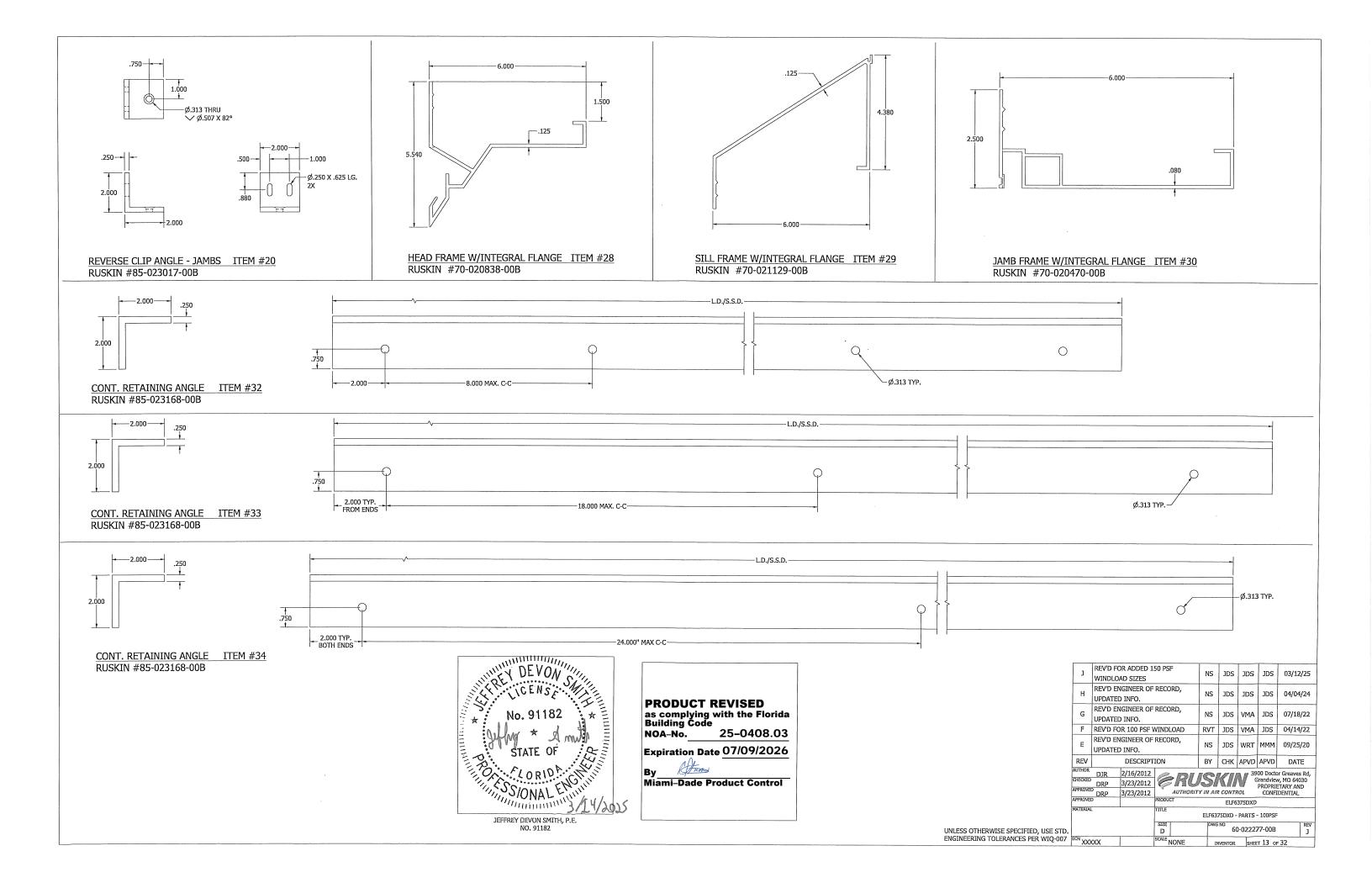
25-0408.03

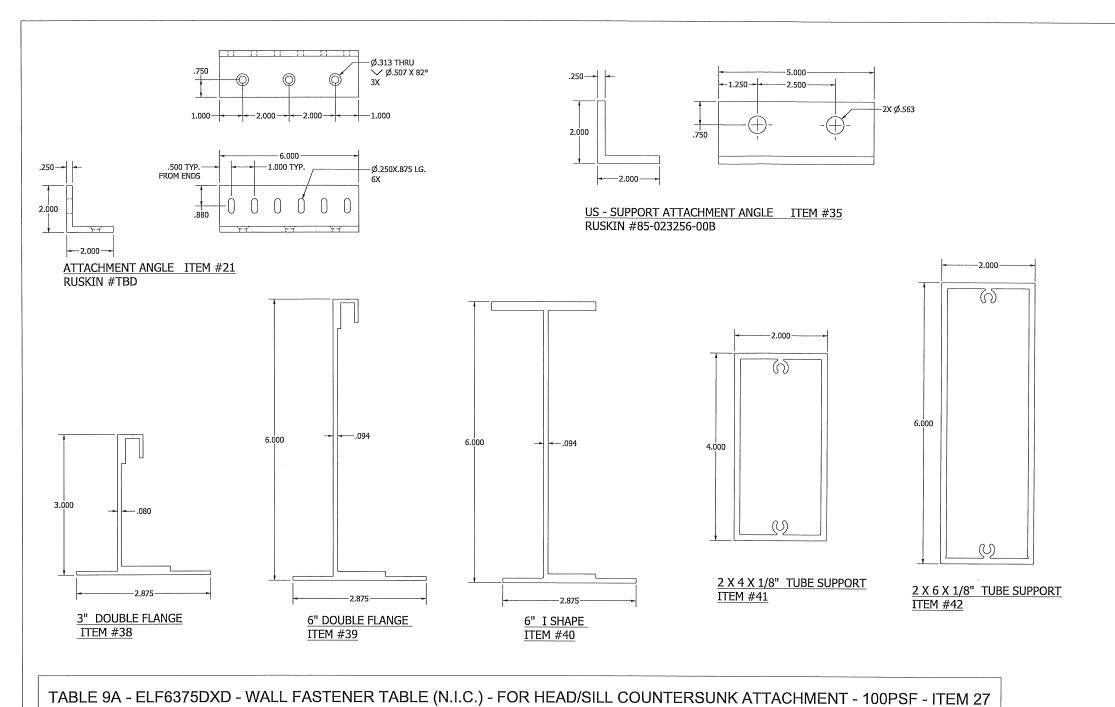
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No. 91182











PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 25-0408.03

Expiration Date 07/09/2026

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Miami-Dade Product Control

NO. 91182

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

IF D <=10, SLEEVE DIM = 12.000 IF D >10, SLEEVE DIM = D + 2.000

 $\frac{\text{FRONT FLANGE UNIVERSAL SLEEVE}}{\text{ITEM } \#31}$

SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	FASTENER TYPE	MIN. EMBEDMENT	MIN. EDGE DISTANCE	FASTENER QTY. PER 6" LG. ANGLE
0.7571	MIN 14 GA	1/4"-20 A307 GRADE A BOLT, W/WASHER & LOCKNUT	N/A	1/2"	3
STEEL	MIN 12 GA	1/4"-20 A307 GRADE A SCREW	N/A	1/2"	3
ALUMINUM	MIN 1/8" THICK	1/4"-20 A307 GRADE A BOLT, W/WASHER & LOCKNUT	N/A	1/2"	3
ALOMINOW	MIN 3/16" THICK	1/4"-20 A307 GRADE A SCREW	N/A	1/2"	3
CONCRETE	4000 PSI MIN. COMP. STRENGTH (UNCRACKED)	1/4" DIA HILTI KWIK BOLT 3 EXPANSION ANCHOR	1 1/2"	4"	2

	-									
J	REV'D FO	OR ADDED 1	50 PS	F	NS	JDS	JDS	JDS	03/12	/25
	WINDLO.	AD SIZES				103	כטנ	נטנ	03/12	., 23
Н	REV'D EN	IGINEER OF	RECC	RD,	NS	JDS	JDS	JDS	04/04	124
	UPDATE	INFO.			143	נטנ נו	303	כטנ	04/04/24	
G	REV'D EN	IGINEER OF	RECC	RD,	NS	JDS	1000	JDS	07/18	/22
G	UPDATED INFO.				142	JDS	VMA	בטנ	0//10	122
F	REV'D FO	OAD	RVT	JDS	VMA	JDS	04/14	/22		
Е	REV'D ENGINEER OF			RD,	NS	C 7DC	S WRT	ммм	09/25	/20
_	UPDATE	INFO.			142	JDS	WKI	IAIIAIIAI	09/25	/20
REV		DESCRIPT	ION		BY	СНК	APVD	APVD	DAT	E
AUTHOR	DJR	2/16/2012	100				39		r Greaves	
CHECKED	DRP	3/23/2012		:RU	2		W G	randviev PROPRTE	v, MO 640 TARY AN	30
APPROVED	DRP	3/23/2012		AUTHORIT	Y IN AII	CONTR			DENTIAL	١
APPROVED	PRODUCT PRODUCT					ELF6	375DXD			
AATERIAL	ELF6375D				D - PAR	TS & WA	LL FAST	ENER TA	BLE - 100	PSF
	SIZE D				DWG		0-02227	7-00B		REV J
CN XXX	ΟXX		SCALE	NONE	II	VENTOR	SHEE	т 14 оғ	: 32	

	TABLE 10 - PARTS LIST FOR 150PSF ELF6375DXD									
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	OFFSET TEE SUPPORT FOR BLADE	0.125" THK EXTRUDED ALUM.	6063-T6							
7	1/4-20 X 3/4" HHB W LOCK WASHER AND HEX NUT	PLTD STL								
8	SCREW 1/4"-14 X 1 1/2" LG HWH TEK3	410 SS/ZC								

	TABLE 11 - MULTI-SECTION	CONNECTION PARTS	
ITEM #	DESCRIPTION	MATERIAL	ALLOY
9	MULLION ATTACHMENT ANGLE	0.125" THK EXTRUDED ALUM.	6063-T6
[10]	FSNR KTT 3/8-16X3"LG W LOCKNUT	ZINC PLATED	-

TABLE 12 - INSTALLATION PARTS (SHIP LOOSE) - 150 PSF WINDLOAD

ITEM #	DESCRIPTION	MATERIAL	ALLOY
11	CLIP ANG 2 X 2 X 1/4 X 6" LG PUNCHED STD	.25" THK. EXTRUDED ALUM.	6063-T6
12	CLIP ANG 2 X 2 X 1/4 X 6" LG PUNCHED CNTRSNK	.25" THK. EXTRUDED ALUM.	6063-T6
13	CLIP ANG 2 X 2 X 1/4 X 2" LG PUNCHED	.25" THK. EXTRUDED ALUM.	6063-T6
14	CLIP ANG 2 X 2 X 1/4 X 2" LG CNTRSNK	.25" THK. EXTRUDED ALUM.	6063-T6
15	STRUCTURAL ATTACHMENT ANGLE - HEAD/SILL	.375" THK. EXTRUDED ALUM.	6063-T6
16	CMU ATTACHMENT ANGLE - HEAD/SILL	.25" THK. FORMED ALUM.	3003-H14
17	CLIP ANG 2 X 2 X 1/4 X 6" LG PUNCHED STD	.25" THK. EXTRUDED ALUM.	6063-T6
18	ATTACHMENT ANGLE - JAMB	.25" THK. EXTRUDED ALUM.	6063-T6
19	CMU ATTACHMENT ANGLE - JAMB	.25" THK. FORMED ALUM.	3003-H14
20	SCREW 1/4"-14 X 1 1/2" LG HWH TEK3	410 SS/ZC PLT	
21	SCREW 1/4"-14 X 1 1/4" LG HWH TEK3	410 SS/ZC PLT	
22	SCREW 1/4"-14 X 1" LG HWH TEK3	410 SS/ZC PLT	
23	FSNR KIT 3/8-16X2"LG HHB BOLT W LOCKNUT	ZINC PLT	
24	FSNR KIT 1/4-20X1.5"LG HHB BOLT W LOCKNUT	ZINC PLT	
25	SUBSTRATE FASTENER	REF TABLE 15/23 & 16/23	

TABLE 13 - PARTS - UNIVERSAL SLEEVE INSTALL

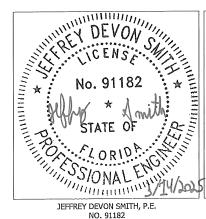
TABLE 15 TARTO STREET, TO STREET,								
ITEM#	DESCRIPTION	MATERIAL	ALLOY					
26	HEAD FRAME W INTEGRAL FLANGE (FF)	.125" THK. EXTRUDED ALUM.	6063-T6					
27	SILL FRAME W INTEGRAL FLANGE (FF)	.125" THK. EXTRUDED ALUM.	6063-T6					
28	JAMB FRAME W INTEGRAL FLANGE (FF)	.080" THK. EXTRUDED ALUM.	6063-T6					
29	UNIVERSAL SLEEVE	.190" THK. FORMED ALUM.	3003-H14					
30	CONT. RETAINING ANGLE - HEAD/SILL	.25" THK. EXTRUDED ALUM.	6063-T6					
31	CONT. RETAINING ANGLE - JAMBS	.25" THK. EXTRUDED ALUM.	6063-T6					
32	UNIVERSAL SLEEVE ATTACHMENT ANGLE	.25" THK. EXTRUDED ALUM.	6063-T6					
33	SCR 1/4X1 HWH TEK 410/ZC	410 SS/ZC PLT GR 2						
34	1/2-13 X 3.5" LG. SAE GRADE 5 HHB W/WASHER & LOCKNUT	ZINC PLT						

TABLE 14 - H.V.B.S. / MULLION SUPPORTS OPTIONS BASED ON SECTION HEIGHT

ITEM#	DESCRIPTION	LOUVER HEIGHT RANGE	MATERIAL	ALLOY
35	3" ALUM. H.V.B.S.	UP TO 33" TALL	EXT. ALUM.	6063-T6
36	6" ALUM. H.V.B.S.	GREATER THAN 33" TO 48"	EXT. ALUM.	6063-T6
37	6" ALUM. "I" H.V.B.S.	GREATER THAN 48" TO 63"	EXT. ALUM.	6063-T6
38	2X4 TUBE H.V.B.S.	GREATER THAN 63" TO 71"	EXT. ALUM.	6063-T6
39	2X6 TUBE H.V.B.S.	GREATER THAN 71" TO 94"	EXT. ALUM.	6063-T6
40	2X8 TUBE H.V.B.S.	GREATER THAN 94" TO 116"	EXT. ALUM.	6063-T6
41	2X8X1/4 TUBE H.V.B.S.	GREATER THAN 116" TO 144"	EXT. ALUM.	6063-T6

TABLE	15 -	PARTS -	ASSEMBLY	D &	Ε

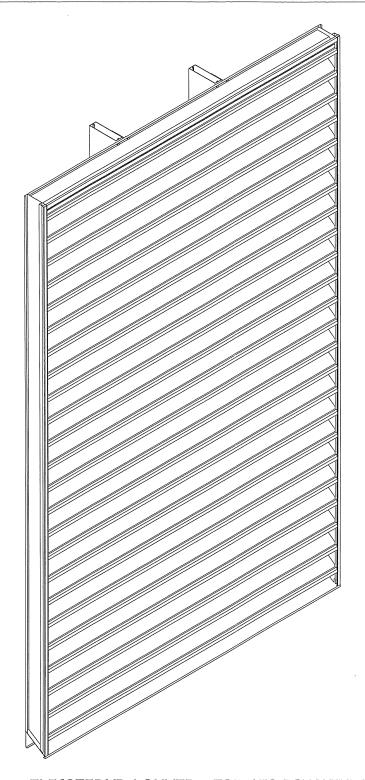
ITEM #	DESCRIPTION	MATERIAL	ALLOY
42	CLIP ANG 2 X 2 X 1/4 X 2" LG PUNCHED	.25" THK. EXTRUDED ALUM.	6063-T6
43	CLIP ANG 2 X 2 X 1/4 X CONT. (ASSEMBLY D)	.25" THK. EXTRUDED ALUM.	6063-T6
44	CLIP ANG 2 X 2 X 1/4 X CONT. (ASSEMBLY E)	.25" THK. EXTRUDED ALUM.	6063-T6
45	CLIP ANG 2 X 2 X 1/4 X CONT. X CNTRSNK (ASSEMBLY E)	.25" THK. EXTRUDED ALUM.	6063-T6
46	SCREW 1/4"-14 X 1 1/2" LG HWH TEK3	410 SS/ZC PLT	



PRODUCT REVISED as complying with the Florida Building Code NOA-No. 25-0408.03

Expiration Date 07/09/2026

Miami-Dade Product Control



ELF6375DXD LOUVER - FOR 150 PSF WINDLOAD

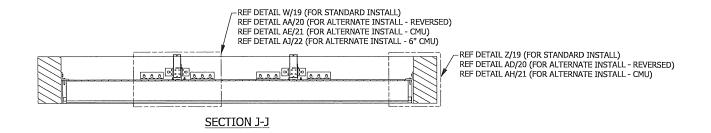
NOTES

- 1. THE ELF6375DXD HAS BEEN TESTED IN ACCORDANCE WITH FLORIDA PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT, UNIFORM PRESSURE AND CYCLIC WIND PRESSURE.
- 2. THIS LOUVER SYSTEM IS APPROVED FOR APPLICATIONS WITH DESIGN PRESSURES OF \pm 150 PSF or LESS.
- 3. THIS LOUVER SYSTEM IS NON-BEARING AND IS NOT DESIGNED TO WITHSTAND BUILDING DEAD LOADS.
- 4. 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.
- 5. MAXIMUM SINGLE SECTION SIZE IS 90" WIDE X 144" HIGH.
- 6. MAXIMUM ASSEMBLED LOUVER SIZE: UNLIMITED WIDE X 144" HIGH.
- 7. 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.
- 8. 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.
- 9. 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.
- 10. PART NUMBERS WITH SQUARE BALLOONS ARE "SHIP LOOSE PARTS".
- 11. ALL FASTENERS SHALL BE CORROSION RESISTANT.

١,	REV'D FO	OR ADDED 1	50 PS	F	NC		IDC	IDC.	JDS	02/12	/DE
J	WINDLO	AD SIZES			NS	'	JDS	JDS	פטנ	03/12	/25
н	REV'D EN	IGINEER OF	RECC	RD,	NS	.	JDS	JDS	JDS	04/04	124
	UPDATE	O INFO.			INS	כטנ כ	303	בטנ	04/04/24		
G	REV'D EN	IGINEER OF	RECC	RD,	NS		JDS	VMA	JDS	07/18	/22
_ d	UPDATE	INFO.			ING	13 303	VIVIA	303	07/10	122	
F	REV'D FOR 100 PSF WINDLOAD				RV	Г	JDS	VMA	JDS	04/14	/22
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	UPDATE	INFO.			143		בטנ	VVICI	1-11-11-1	05/25	720
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AUTHOR	DJR	2/16/2012		- 17311	u e	a g	A B	39		r Greaves	
CHECKED	DRP	3/23/2012		RU?	3			W		v, MO 640 ETARY AN	
APPROVE	DRP	3/23/2012		AUTHORIT	Y IN	4 <i>IR</i>	CONTR	OL	CONF	DENTIAL	
APPROVE	_	ा			ELF6	375DXD					
MATERIAL TITLE NOTES								k ISO \	/IEW -	150PSF	
			SIZE D		D	WG	00	0-0222	77-00B		REV J
ECN SCALE											

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

SCALE NONE INVENTOR SHEET 15 OF 32



90.000" MAX. SINGLE SECTION WIDTH 30.000 MAX. SUPPORT SPACING J 144.000 MAX. SINGLE SECTION HEIGHT

> ASSEMBLY "C" - SINGLE SECTION VIEW - FOR WINDLOAD - 150PSF - PERIMETER ATTACHMENT LOUVER SIZE - 90" W X 144" H

SECTION K-K

STATE OF

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STATE OF

SS/ONAL

FREY DEVON SMITH, P.E.

NO. 91182

PRODUCT REVISED as complying with the Florida Building Code 25-0408.03 NOA-No.

Expiration Date 07/09/2026

Ву

Miami-Dade Product Control

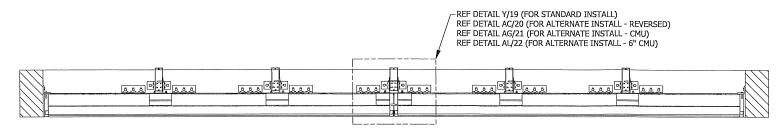
REF DETAIL X/19 (FOR STANDARD INSTALL)
REF DETAIL AB/20 (FOR ALTERNATE INSTALL - REVERSED)
REF DETAIL AF/21 (FOR ALTERNATE INSTALL - CMU)
REF DETAIL AK/22 (FOR ALTERNATE INSTALL - 6" CMU)

1	REV'D FO	OR ADDED 1	50 PS	F		IS	JDS	JDS	JDS	03/12	/75
	WINDLOAD SIZES				"	13	בטנ	בטנ	בטנ	03/12	123
Н	REV'D EN	NGINEER OF	RECC	RD,		ıs	JDS	JDS	JDS	04/04	1/24
l ''	UPDATE	DINFO.			1	13	בטנ	בטנ	בטנ	04/04	724
G	REV'D EN	NGINEER OF	RECC	RD,		ıs	JDS	1046	JDS	07/10	/22
l G	UPDATE	O INFO.			IN	15	בטנ	VMA	פחר	07/18	122
F	REV'D FOR 100 PSF WINDLOAD				R۱	/ Τ	JDS	VMA	JDS	04/14	/22
Е	REV'D ENGINEER OF RECORD,					s	IDC	WOT	ммм	00/25	/20
	UPDATE		l N	5	JDS	WRT	IAIIAIIAI	09/25	/20		
REV		DESCRIPT	ION		В	Υ	CHK	APVD	APVD	DAT	E
AUTHOR	DJR	2/16/2012		153/1	n a		147111	39		or Greaves	
CHECKED	DRP	3/23/2012		RU	12	DU		W G		v, MO 640 ETARY AN	
APPROVE	DRP	3/23/2012	146	AUTHORIT	Y IN	AIR	CONTR	POL		DENTIAL	
APPROVE	ED PRODUCT						ELF6	375DXD			
MATERIAL	AL TITLE ASSEMBLY					- SIN	IGLE SE	CTION A	SSEMBL'	Y - 150PS	F
			SIZE D			DWG)-02227	77-00B		REV J

INVENTOR SHEET 16 OF 32

SCALE NONE

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



SECTION L-L



ASSEMBLY "C" - MULTI SECTION VIEW- FOR WINDLOAD - 150PSF - PERIMETER ATTACHMENT MAX. SHIP SECTION - 90" W X 144" H

No. 91182 *

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STATE OF

SS/ONAL END SS/ONA

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as complying with the Florida
Building Code NOA-No. 25-0408.03

Expiration Date 07/09/2026

Miami-Dade Product Control

JEFFREY DEVON SMITH, P.E. NO. 91182

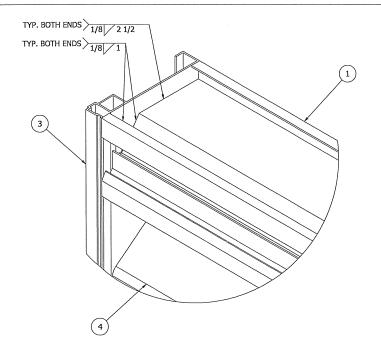
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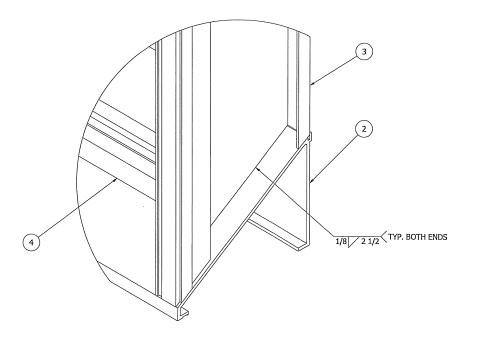
UNLESS OTHERWISE SPECIFIED, USE STD. ENGINEERING TOLERANCES PER WIQ-007

j	J REV'D FOR ADDED 15			F	NS	JDS	JDS	JDS	03/12/25
	WINDLO	DAD SIZES							· ·
Н	REV'D ENGINEER OF RECORD,				NS	IDS	IDS	JDS	04/04/24
	UPDATED INFO.					303	303	303	01/01/21
G	REV'D E	NGINEER OF	RECORD,		NS	JDS	VMA	JDS	07/18/22
	UPDATED INFO.				INO	פטנ	VMA	בטנ	07/10/22
F	REV'D FOR 100 PSF WINDLOAD					JDS	VMA	JDS	04/14/22
F	REV'D ENGINEER OF RECORD,				NS	JDS	WRT	ммм	09/25/20
	UPDATE	UPDATED INFO.					WKI	1*11*11*1	03/23/20
REV		DESCRIPT	ION		BY	CHK	APVD	APVD	DATE
AUTHOR	DJR	2/16/2012				1/2/11/1	39		or Greaves Rd,
CHECKED	DRP	3/23/2012		RU	3		W G		v, MO 64030 ETARY AND
APPROVE	DRP	3/23/2012	AUTHORITY IN AIR CONTROL CONFIDENTIAL						
APPROVE			PRODUCT ELF6375DXD						
MATERIAL TITLE ASSEMBLY "C" - MULTI SECTION ASSEMBLY - 150PSF								- 150PSF	
			SIZE		DWG	NO CO	0222	77 000	REV

INVENTOR SHEET 17 OF 32

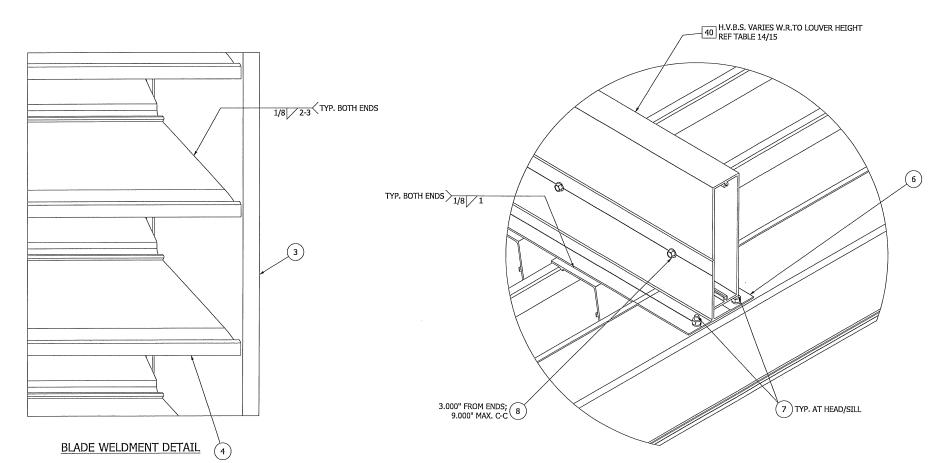
SCALE NONE



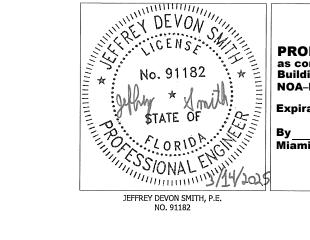


HEAD FRAME CONNECTION DETAIL





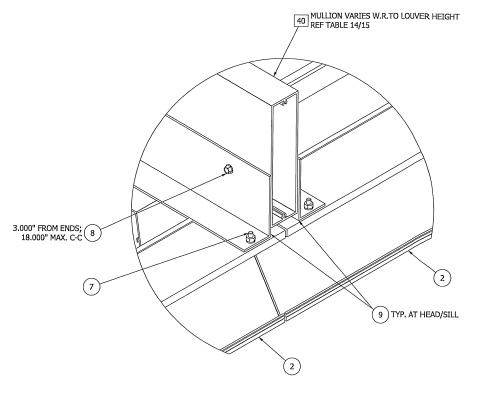
H.V.B.S. ATTACHMENT DETAIL



PRODUCT REVISED
as complying with the Florida
Building Code NOA-No. 25-0408.03

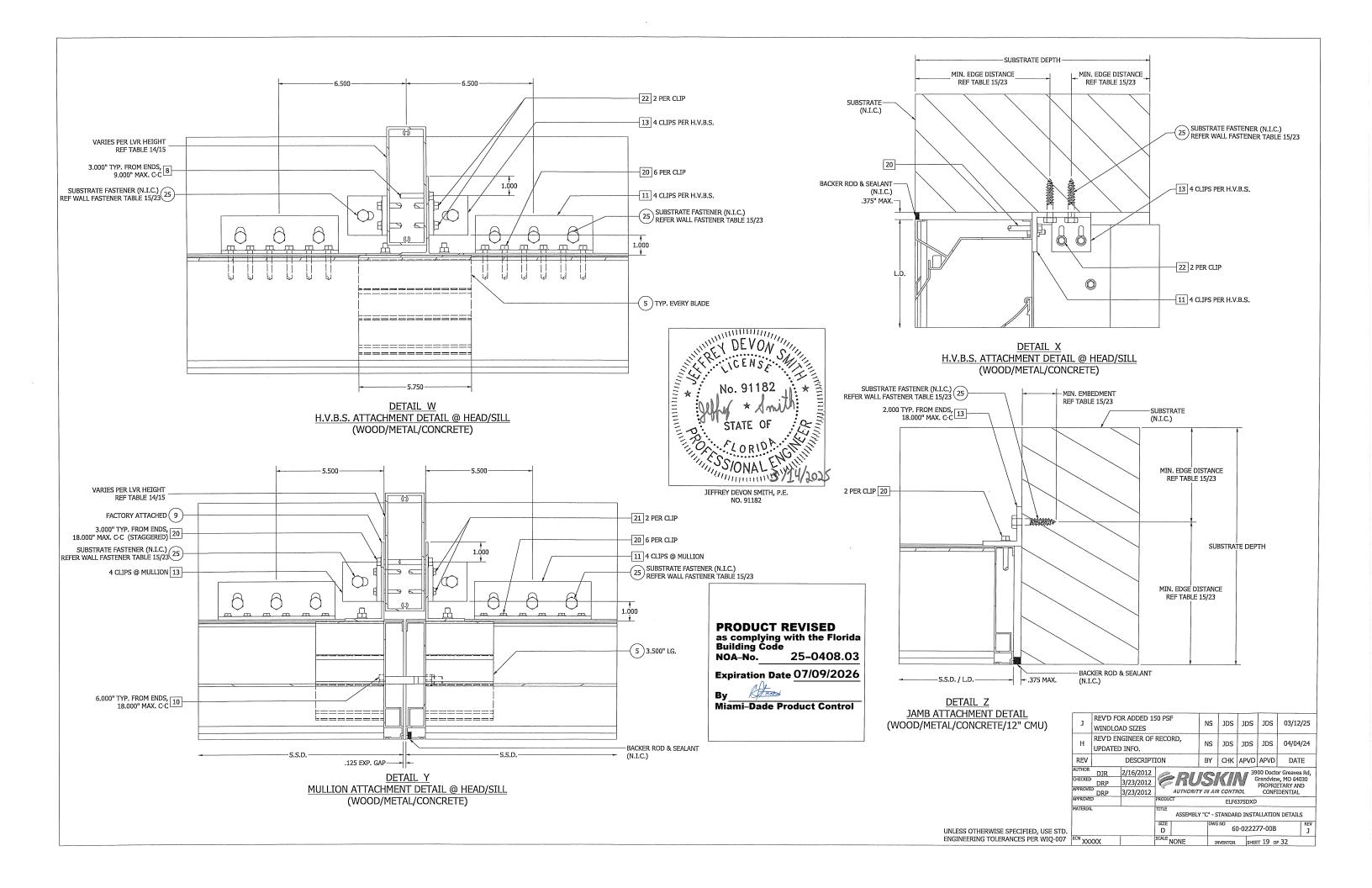
Expiration Date 07/09/2026

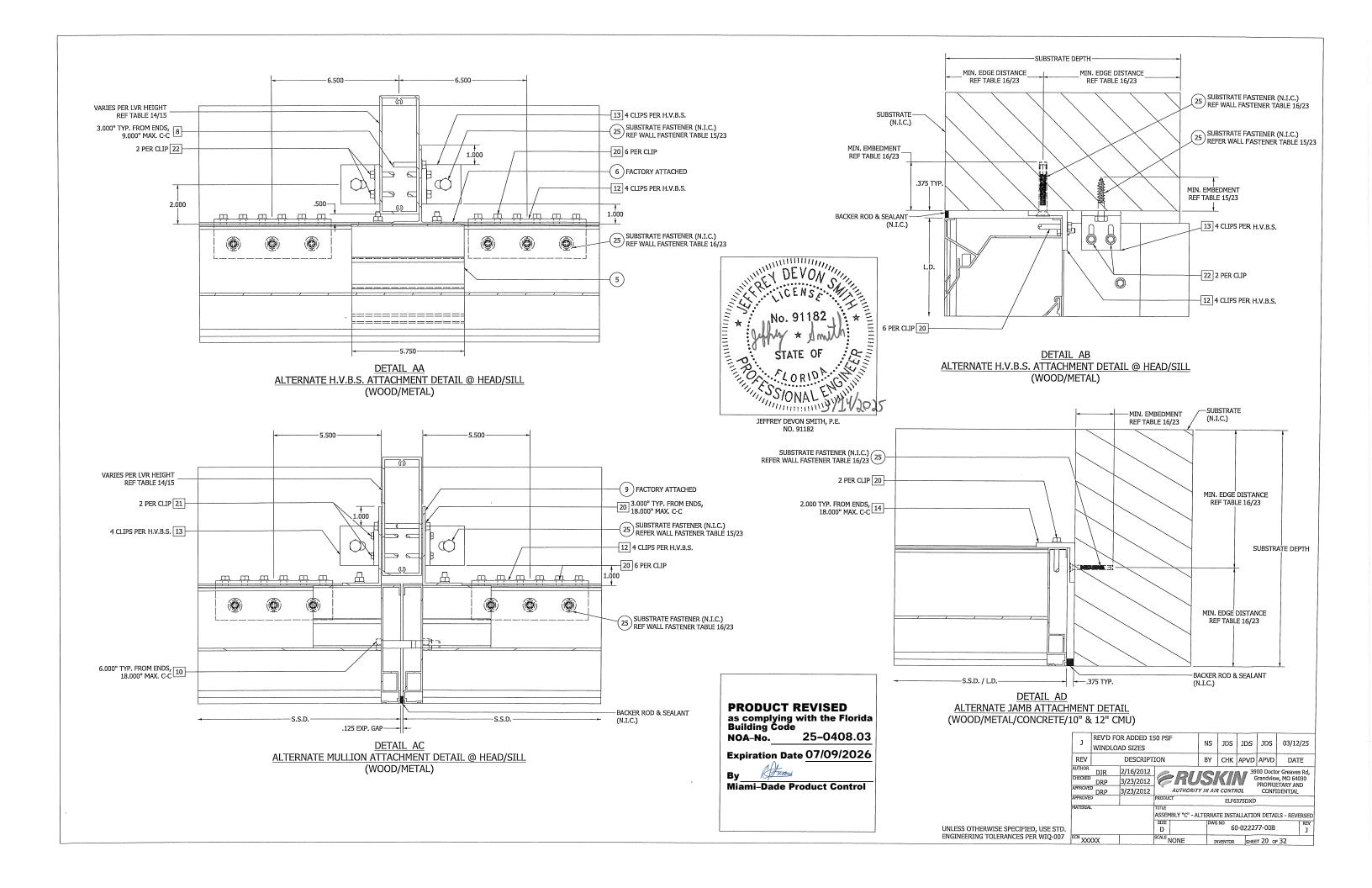
Miami-Dade Product Control

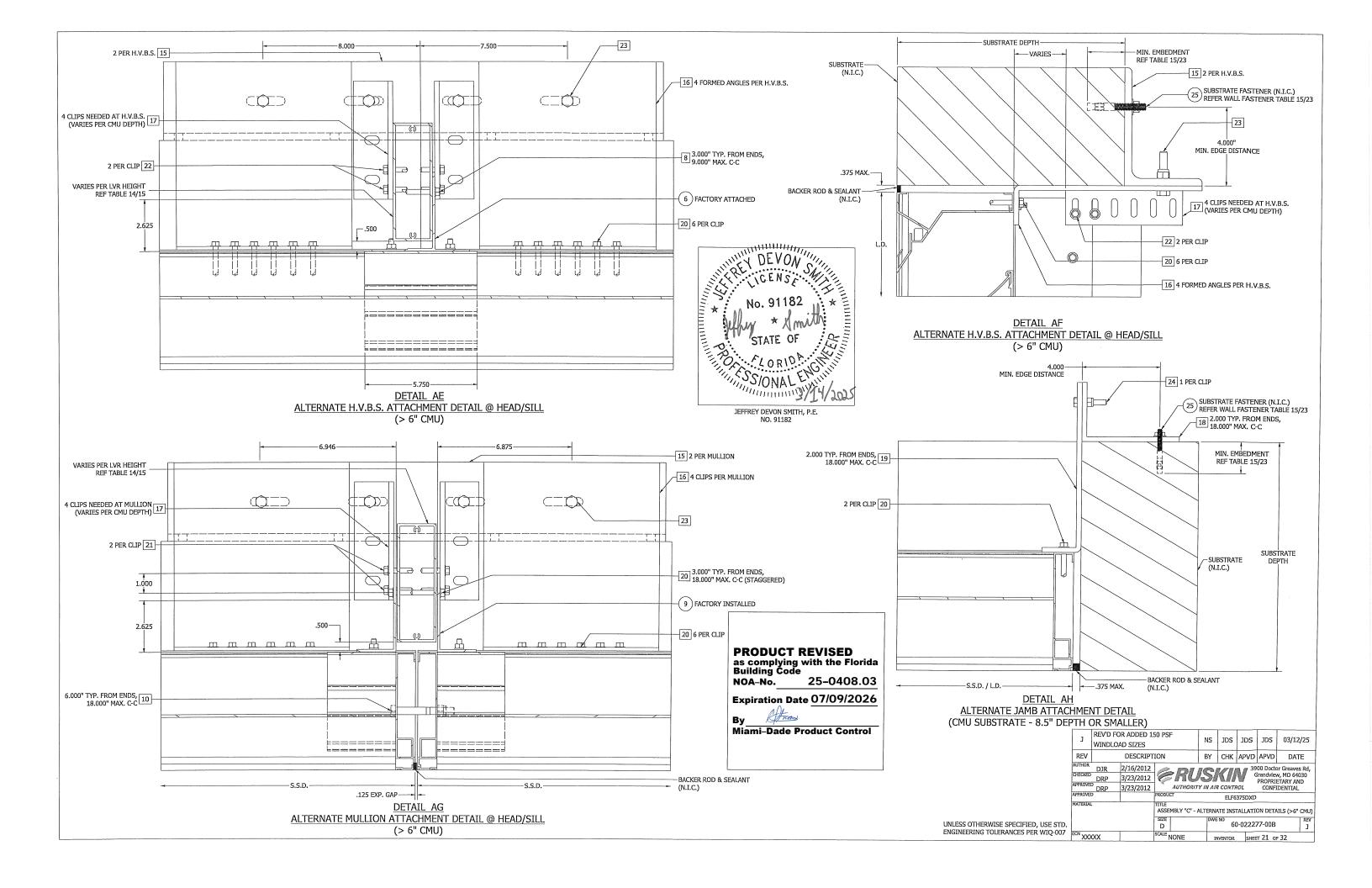


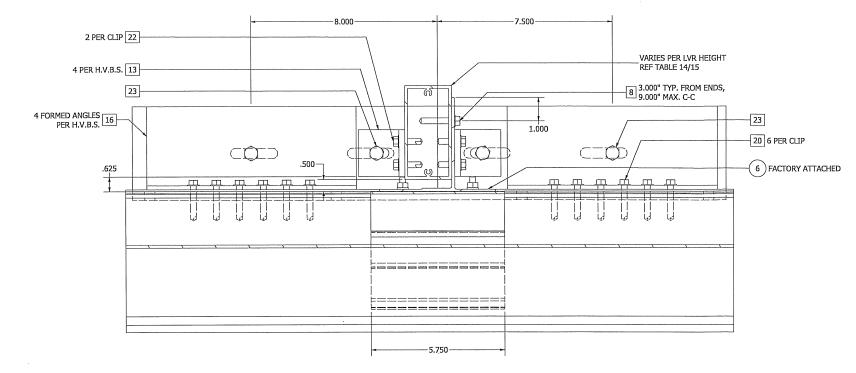
MULLION ATTACHMENT DETAIL

		,									
	١,	REV'D FO	OR ADDED 1	50 PSF		NS	JDS	JDS	JDS	03/12/	/ar
	'	WINDLO	AD SIZES		- 1	IN.5	פטנ	פטנ	פטנ	03/12/	25
	ш	H REV'D ENGINEER OF RE),	NC	700	IDC	700	04/04	12.4
	UPDATED INFO.				1	NS	JDS	JDS	JDS	04/04/	24
		REV'D ENGINEER OF R),				70.0	07/40/	
	G	G UPDATED INFO.				NS	JDS	VMA	JDS	07/18/	22
	F	REV'D FO	OR 100 PSF \	VINDLO	AD	RVT	JDS	VMA	JDS	04/14/	22
	_ REV'D ENGINEER OF RECORD,),	NG	200			00/05/		
	E UPDATED INFO.					NS	JDS	WRT	MMM	09/25/	20
	REV		DESCRIPT	ION		BY	СНК	APVD	APVD	DATE	
	AUTHOR	DJR	2/16/2012				1.07 11 11	39	00 Docto	r Greaves	Rd,
	CHECKED	DRP	3/23/2012		KU.	31				V, MO 6403	
	APPROVE	DRP	3/23/2012		JTHORITY	'IN AIR	CONTR			DENTIAL	,
	APPROVE		` `	PRODUCT		ELF6375DXD					
	MATERIAL			TITLE	STANDA	ARD LO	DUVER	BUILD	DETAI	S	
LIMITECS OTHERWISE SPECIFIED THE CED				SIZE		DWG		-02227	77-00B		REV
UNLESS OTHERWISE SPECIFIED, USE STD. ENGINEERING TOLERANCES PER WIO-007	FCN		T	D							J
ENGINEERING TOLERWINGS FER WIQ-007	ECN XXX	XX		SCALE NO	NE	IN	VENTOR	SHEE	г 18 ог	32	



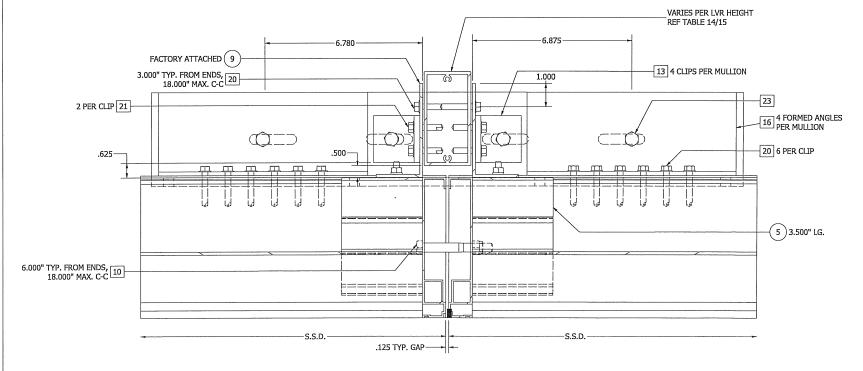






DETAIL AJ

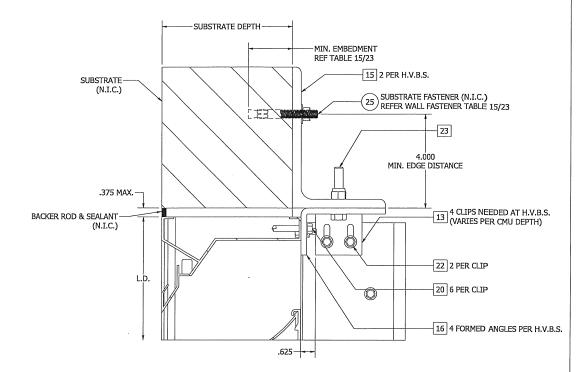
ALTERNATE H.V.B.S. ATTACHMENT DETAIL @ HEAD/SILL
(6" CMU)



DETAIL AL

ALTERNATE MULLION ATTACHMENT DETAIL @ HEAD/SILL

(6" CMU)



<u>DETAIL AK</u>
<u>ALTERNATE H.V.B.S. ATTACHMENT DETAIL @ HEAD/SILL</u>
(6" CMU)



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NOA-No. 25-0408.03

Expiration Date 07/09/2026

By Miami-Dade Product Control

NO. 91182										
	J REV'D FOR ADDED 150 PSF WINDLOAD SIZES			NS	JDS	JDS	JDS	03/12	/25	
	REV'D ENGINEER OF RECORD,			N.C	700	700	100	04/04	124	
	П	H UPDATED INFO.			NS	JDS	JDS	JDS	04/04/	/24
	REV		DESCRIPT	ION	BY	CHK	APVD	APVD	DAT	Έ
	AUTHOR		2/16/2012	@DI	10		39		r Greaves	
	CHECKED	DRP	3/23/2012	@RU		ΛH	W		v, MO 640 ETARY AN	
	APPROVE	DRP	3/23/2012	AUTHORI					DENTIAL	D
	APPROVE)		PRODUCT		ELF6	375DXD			
	MATERIAL TITLE									
				ASSEMBLY "C" - ALTERNATE INSTALLATION DETAILS (6" CMU)						
				SIZE	DW	G NO	2 2222	77 000		REV
UNLESS OTHERWISE SPECIFIED, USE STD.				D		60-022277-00B				J
ENGINEERING TOLERANCES PER WIQ-007	ECN XXX	ΟX		SCALE NONE	1	INVENTOR	SHEE	т 22 ог	: 32	

	TABL	E 15 - ELF6375D	XD - WALL FASTENER TABLE (N.I.C.) -	ITEM 25		
SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	LOCATION	FASTENER TYPE	MIN. EMBEDMENT	MIN. EDGE DISTANCE	FASTENER QTY
Моор		HVBS/MULLION	3/8" Ø A307 STEEL/STAINLESS STEEL BOLT, WASHER & LOCKNUT	3 THREADS BEYOND NUT	2 1/2"	2 PER 6" LG. ANGLE
	WOOD SPECIFIC GRAVITY = 0.4	SUPPORT	3/8" Ø X 2" LONG LAG SCREW, A307 STEEL/STAINLESS STEEL	1 3/4"	2 1/2"	3 PER 6" LG. ANGLE
WOOD	SPECIFIC GRAVITT - 0.4	JAMBS	1/4" Ø A307 STEEL/STAINLESS STEEL BOLT, WASHER & LOCKNUT	3 THREADS BEYOND NUT	2 1/2"	1 PER 2" LG. ANGLE
		o wile	3/8" Ø X 2" LONG LAG SCREW, A307 STEEL	1 3/4"	2 1/2"	1 PER 2" LG. ANGLE
		HVBS/MULLION	3/8" Ø A307 STEEL/STAINLESS STEEL BOLT, WASHER & LOCKNUT	3 THREADS BEYOND NUT	3/4"	2 PER 6" LG. ANGLE
STEEL & ALUMINUM	STEEL - MIN. 14 GA ALUMINUM - MIN. 3/16" THICK	SUPPORT	3/8" Ø SCREW, A307 STEEL/STAINLESS STEEL (THIS SCREW REQUIRES 12 GA STEEL)	3 THREADS BEYOND SUBSTRATE	3/4"	3 PER 6" LG. ANGLE
		JAMBS	5/16" Ø - 18 A307 STEEL/STAINLESS STEEL BOLT OR TEK SCREW	3 THREADS BEYOND NUT OR SUBSTRATE	1/2"	1 PER 2" LG. ANGLE
CONODETE	4000 PSI MIN. COMP. STRENGTH (UNCRACKED)	HVBS/MULLION SUPPORT	1/2" Ø HILTI KWIK BOLT 3 ANCHOR	3 1/4"	4"	1 PER 6" LG. ANGLE
CONCRETE	3000 PSI MIN. COMP. STRENGTH (UNCRACKED)	JAMBS	1/4" Ø X 2" HILTI KWIK BOLT 3 ANCHOR	2"	4 1/2"	1 PER 2" LG. ANGLE
	AOTALO CO DI COM AFOO DOI COOLIT	HVBS/MULLION SUPPORT	3/8" Ø X 3 1/2" HILTI KWIK HUS EZ SCREW ANCHOR	3 1/4"	4"	4 PER SUPPORT ANGLE (ITEM 15)
GROUT FILLED CMU	ASTM C-90 BLOCK, 1500 PSI GROUT COMP. STRENGTH (UNCRACKED)	JAMBS (SINGLE ANGLE)	1/4" Ø X 3" HILTI KWIK HUS EZ W/WASHER	2 1/2"	4"	1 PER 2" LG. ANGLE
	, ,	JAMBS (DOUBLE ANGLE)	1/4" Ø X 3" HILTI KWIK HUS EZ W/WASHER	2 1/2"	4"	1 PER ANGLE (ITEM 18)



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NOA-No. 25-0408.03 Expiration Date 07/09/2026 By Miami-Dade Product Control

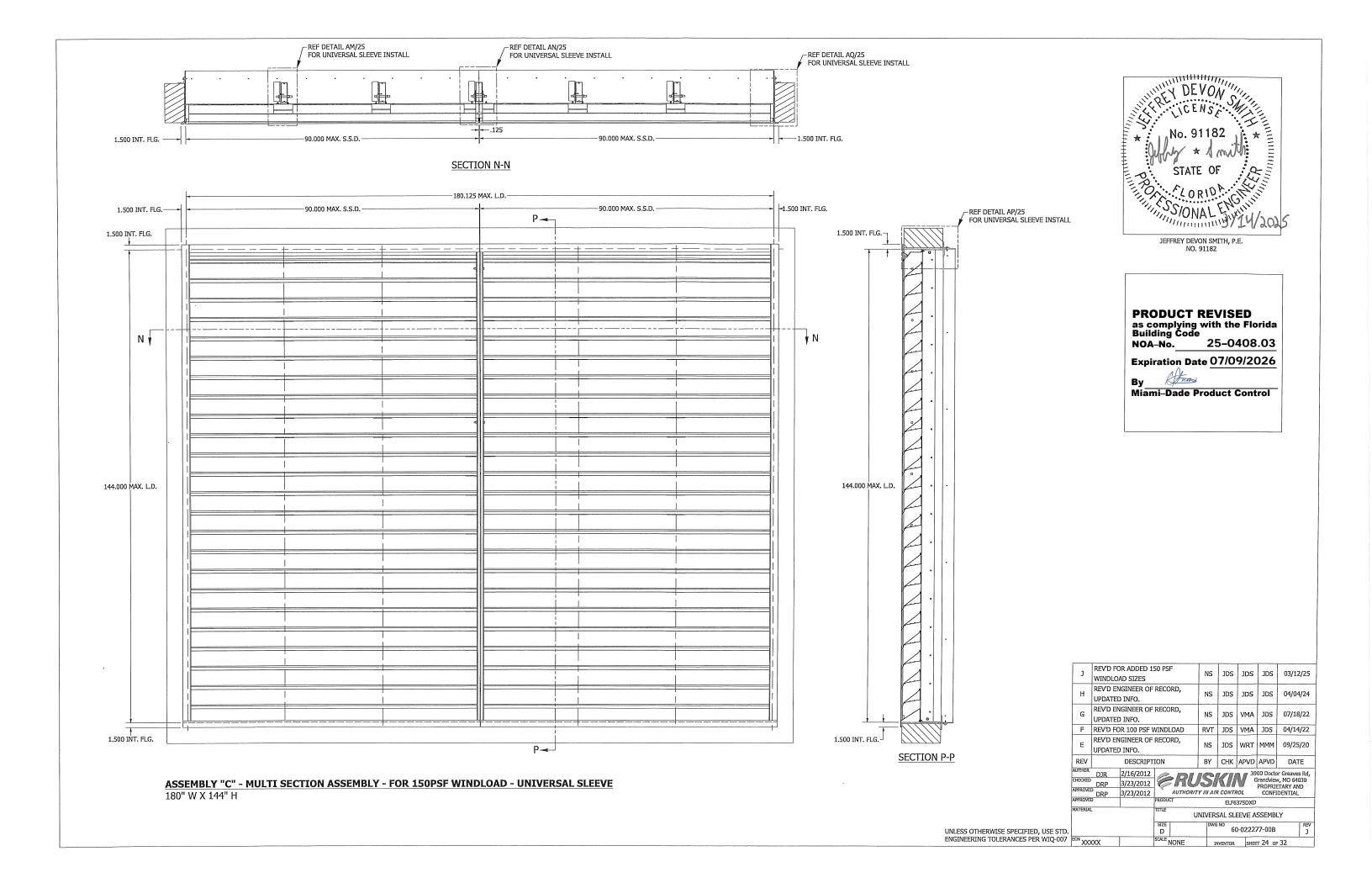
TABLE 16 - ELF6375DXD - COUNTERSUNK FASTENER TABLE (N.I.C.) - ITEM 25

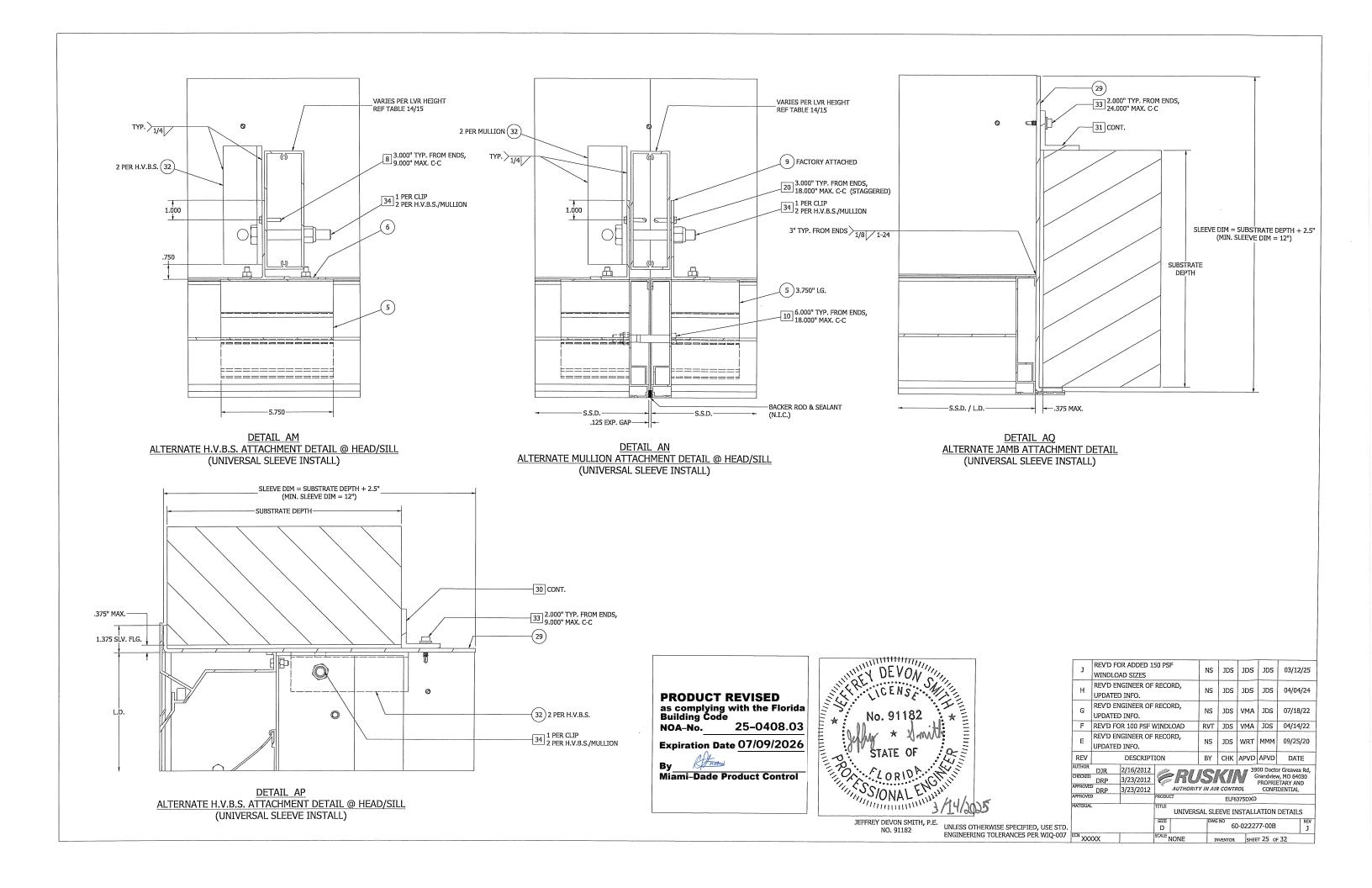
			T			
SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	FASTENER TYPE	MIN. EMBEDMENT	MIN. EDGE DISTANCE	FASTENER QTY. PER 6" LG. ANGLE	FASTENER QTY. PER 2" LG. ANGLE
	14GA, 45 KSI TENSILE STRENGTH, 33 KSI YIELD STRENGTH	1/4-20 BOLT, SAE GRADE / 5 STAINLESS STEEL	T, SAE GRADE / 5 STAINLESS STEEL 3 THREADS BEYOND NUT			
STEEL	10GA, 45 KSI TENSILE STRENGTH, 33 KSI YIELD STRENGTH	1/4-20 SD SCREW, SAE GRADE 5 / STAINLESS STEEL	3 THREADS BEYOND SUBSTRATE THICKNESS	1/2"	3	1
ALUMINUM	1/8" THICK, 20 KSI TENSILE STRENGTH, 15 KSI YIELD STRENGTH	1/4-20 BOLT, SAE GRADE 5 / STAINLESS STEEL	3 THREADS BEYOND NUT			_
	1/4" THICK, 20 KSI TENSILE STRENGTH, 15 KSI YIELD STRENGTH	1/4-20 SD SCREW, SAE GRADE 5 / STAINLESS STEEL	3 THREADS BEYOND SUBSTRATE THICKNESS	1/2"	3	7
CONCRETE	3000 PSI MIN. COMP. STRENGTH (UNCRACKED)	1/4" DIA HILTI KWIK BOLT 3 EXPANSION ANCHOR	2"	3"	N/A	1
GROUT FILLED CMU	ASTM C-90 BLOCK, 1500 PSI GROUT COMP. STRENGTH (UNCRACKED)	1/4" Ø X 3" HILTI KWIK HUS EZ W/WASHER	2 1/2"	4"	N/A	1

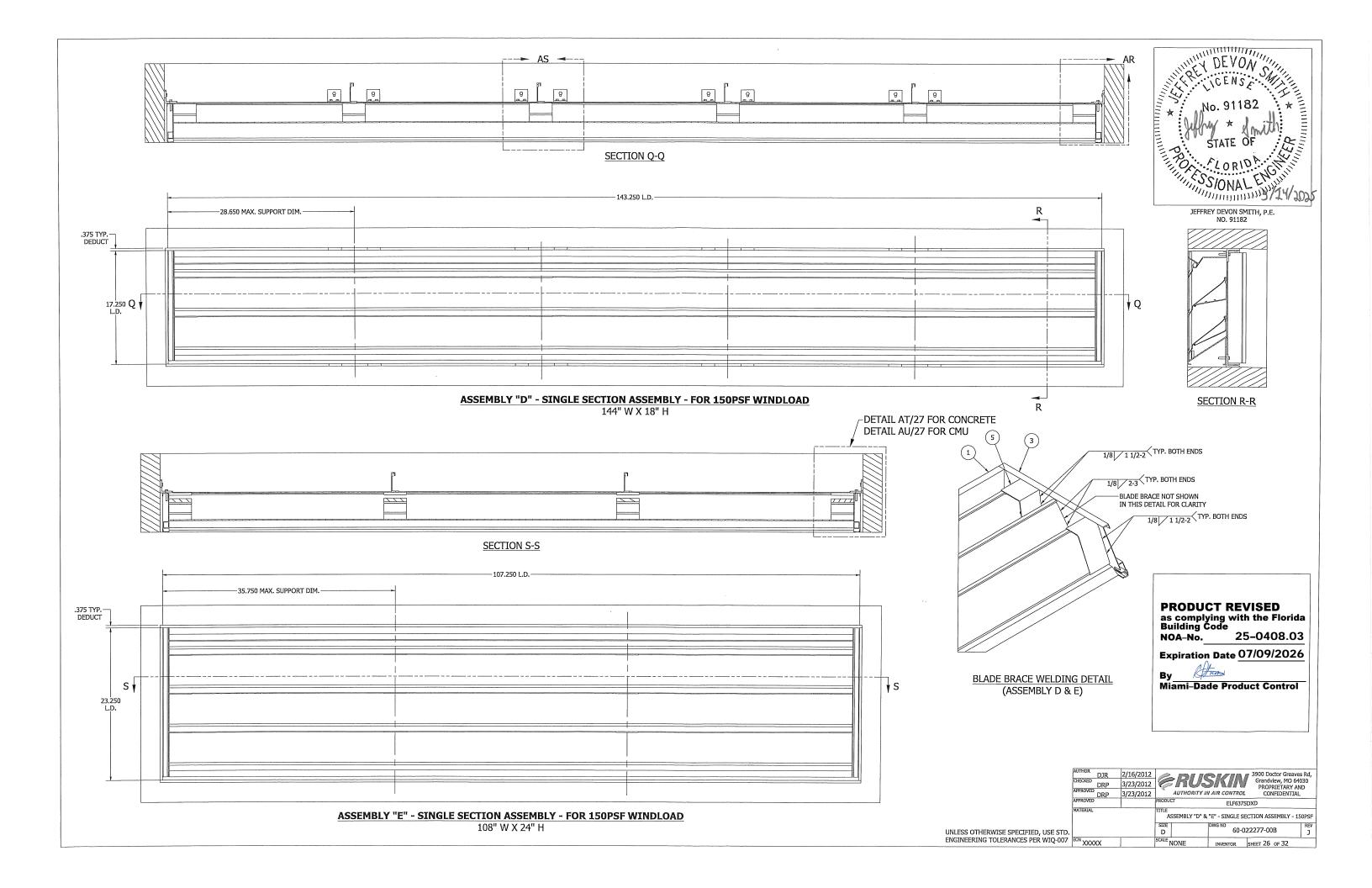
NOTE FOR COUNTERSUNK ATTACHMENT:
MULTIPLE ANCHORS ARE ONLY FOR HVBS / MULLION ATTACHMENT.

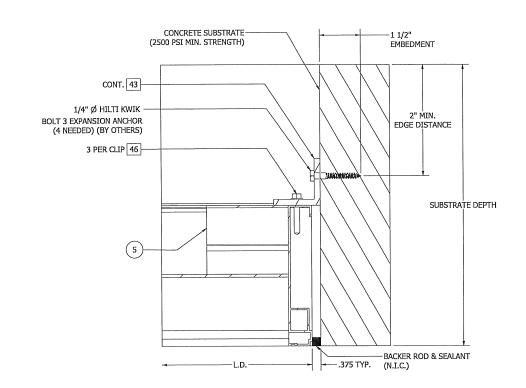
JAMB ATTACHMENT NEEDS ONLY ONE ANCHOR PER ANGLE BOLTS/SCREWS INTO JAMBS CAN BE A307 GR A

]	REV'D FOR ADDED 150 PSF				NS	JDS	3 70	\C	JDS	03/12	175
٠,	WINDLOAD SIZES				INS	יטנ	יור (בטנ	פטנ	03/12	2/25
ш	H REV'D ENGINEER OF UPDATED INFO.			RD,	NS	JDS	. 75	JDS	JDS	04/04	1/24
П						יטנ	ין י	25		04/04	1/24
G	REV'D ENGINEER OF			RD,	NS	JD9	. 1/2	40	JDS	07/18	/22
	UPDATED INFO.					100	ייי	VMA	702	07/10	1/22
F	REV'D FOR 100 PSF WINDLOAD					JDS	NV :	1A	JDS	04/14	/22
F	REV'D ENGINEER OF RECORD,					JDS	. VAII	WRT	ммм	09/25	/20
UPDATED INFO.		INFO.	_		NS	303	9 1	VVICI	[*][*][*]	05/23	720
REV		DESCRIPT	IÓN		BY	CH	(AP	۷D	APVD	DAT	Έ
AUTHOR	DJR	2/16/2012					T #13. #1			or Greave	
CHECKED	DRP	3/23/2012		RU	1		N			w, MO 640 ETARY AN	
APPROVE	DRP	3/23/2012		AUTHORIT	Y IN A	IR CON	TROL			IDENTIAL	
APPROVED			PRODUCT ELF6375DXD								
MATERIAL			WALL FASTENER TABLE								
				D DWG NO 60-022277-00B					3	REV J	
ECN XXX	XX		SCALE 1	NONE		INVENTO	R :	SHEE	т 23 с	of 32	





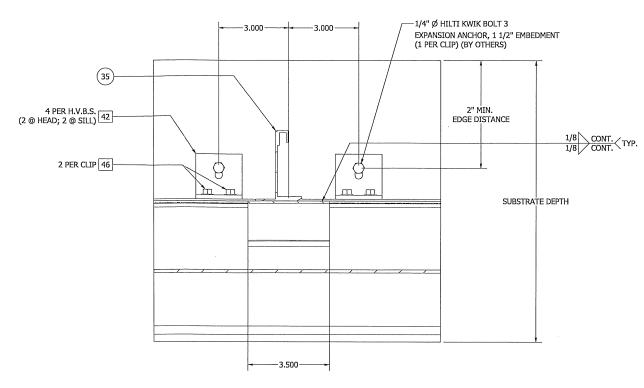




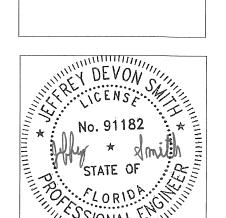
DETAIL AR

JAMB CLIPS INSTALL DETAIL

(ASSEMBLY D)



<u>DETAIL AS</u> H.V.B.S. CLIP ATTACHMENT DETAIL (ASSEMBLY D ONLY)



PRODUCT REVISED
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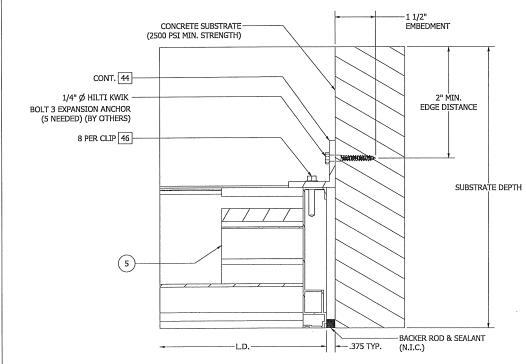
Expiration Date 07/09/2026

Miami-Dade Product Control

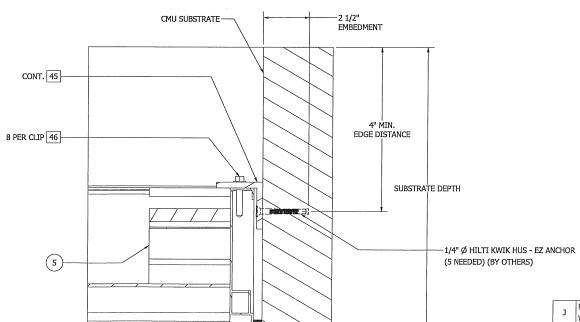
25-0408.03

NOA-No.

JEFFREY DEVON SMITH, P.E. NO. 91182



JAMB CLIPS INSTALL DETAIL - CONCRETE SUBSTRATE (ASSEMBLY E)



--.375 TYP. (N.I.C.)

-BACKER ROD & SEALANT

DETAIL AU

JAMB CLIPS INSTALL DETAIL - CMU SUBSTRATE
(ASSEMBLY E)

| STATE | STAT

