

#### **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 HZ700MD Aluminum Louver**

APPROVAL DOCUMENT: Drawing No. 60-022569-00B, titled "HZ700MD / Wind-Driven Rain Resistant Louver', sheets 1 through 10 of 10, dated 10/30/2020, with revision A dated 03/19/2021, prepared by Ruskin Company, signed and sealed by Vahe M. Astourian, R.A., bearing the Miami-Dade County Product Control approval 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 or Juarez, Chihuahua C. P., Mexico, 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 consists of this page 1 and evidence page E-1 as well as approval document mentioned above. The submitted documentation was reviewed by Carlos M. Utrera, P.E.

MIAMI-DADE COUNTY APPROVED

NOA No. 20-1201.01 Expiration Date: May 13, 2026 Approval Date: May 13, 2021

Page 1

### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### A. DRAWINGS

1. Drawing No. **60-022569-00B**, titled "HZ700MD / Wind-Driven Rain Resistant Louver", sheets 1 through 10 of 10, dated 10/30/2020, with revision A dated 03/19/2021, prepared by Ruskin Company, signed and sealed by Vahe M. Astourian, R.A.

#### 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 HZ700MD Aluminum Fixed Louvers", prepared by National Certified Testing Laboratories, Test Report No.

NCTL-210-4189-02, dated 09/09/2020, signed and sealed by Douglas J. McDougall, P.E.

- 2. Test reports on 1) Test Method for Louvers Impacted by Wind Borne Debris, AMCA 540-13
  - 2) Large Missile Impact Test per FBC, TAS 201-94 (Missile Level E)
  - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of HZ700MD Horizontal Aluminum Stationary Louvers", prepared by Intertek, Report No. **K9061.01-801-44 R1**, dated 07/15/2020, with revision date 07/21/2020, signed and sealed by Tyler Westerling, P.E.

3. Test report on Wind Driven Rain Resistance per TAS 100(A)-95 and on High Wind Driven Rain Resistant Louvers per AMCA 550 09-15 of a HZ700 Horizontal Aluminum Louver, prepared by Intertek, Test Report No. **K3093.01-801-44 R0**, dated 02/14/2020, signed and sealed by Tyler Westerling, P.E.

#### C. CALCULATIONS

1. Wind load review prepared by Ruskin Company, dated 04/01/2021, signed and sealed by Vahe M. Astourian, P.E.

#### D. QUALITY ASSURANCE

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

#### E. MATERIAL CERTIFICATIONS

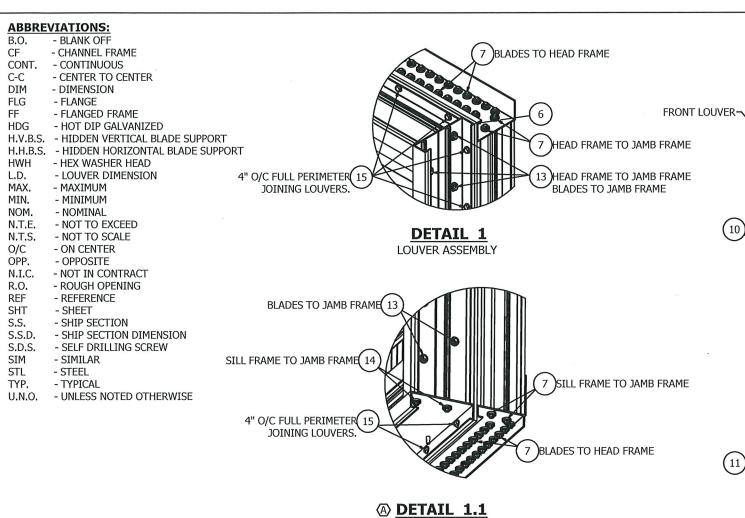
1. None.

#### F. STATEMENTS

- 1. Statement letter of code conformance to the 7<sup>th</sup> edition (2020) of the FBC, issued by Ted Ruskin Company, dated 04/01/2020, signed and sealed by Vahe M. Astourian, P.E.
- 2. Statement letter of no financial interest issued by Ruskin Company, dated 04/01/2021, signed and sealed by Vahe M. Astourian, P.E.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 20-1201.01 Expiration Date: May 13, 2026

Approval Date: May 13, 2021



LOUVER ASSEMBLY

## **NOTES:**

- THE HZ700MD HAS BEEN TESTED IN ACCORDANCE WITH & QUALIFIED TO FLORIDA PROTOCOLS TAS-201, 202, & 203 FOR LARGE MISSILE IMPACT, UNIFORM PRESSURE, CYCLIC WIND PRESSURE;
- (A) LEVEL E (ENHANCED PROTECTION) MISSILE IMPACT; & AMCA 550 FOR HIGH VELOCITY WIND DRIVEN RAIN.
- 2. QUALIFICATIONS TO **AMCA 550** ALLOWS THIS LOUVER TO BE INSTALLED IN A LOCATION WHERE THE ROOM BEHIND THE LOUVER IS NOT DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM & THE ROOM DOES NOT HOUSE WATER RESISTANT/PROOF EQUIPMENT, COMPONENTS, OR SUPPLIES.
- THIS LOUVER SYSTEM IS APPROVED FOR APPLICATIONS WITH DESIGN PRESSURES OF +/- 130 PSF
  OR LESS. THIS LOUVER SYSTEM IS NON-BEARING AND IS NOT DESIGNED TO WITHSTAND BUILDING
  DEAD LOADS.
- 4. SECTIONS OR ASSEMBLIES MAY BE STACKED VERTICALLY PROVIDING A SUITABLE STRUCTURAL MEMBER, DESIGNED & INSTALLED BY OTHERS, IS BETWEEN EACH STACKED LOUVER TO CARRY THE FULL LOAD OF THE UPPER LOUVER, SO THAT NO LOUVER TAKES THE LOAD OF THE OTHER.
- THIS LOUVER ATTACHES ONLY AT THE HEAD & SILL TO THE SUBSTRATE. NO ATTACMENT AT JAMBS. SEE SHEET-07 & -08 FOR INSTALLATION PARTS & DETAILS. REQUIREMENTS GIVEN IN "SUBSTRATE FASTENER TABLE" ARE AS NEEDED FOR ANCHORAGE ONLY AND (N.I.C).
- MAXIMUM SINGLE SECTION SIZE FOR RECTANGLES ARE 60" WIDE X 120" HIGH. UNLIMITED WIDTH CAN BE ACCOMPLISHED BY PLACING SINGLE SECTIONS SIDE-BY-SIDE.
- ALL WELDED ATTACHMENTS REQUIRE A MINIMUM FILLER OF 4043 ALUMINUM ALLOY WITH A MINIMUM TENSILE STRENGTH OF 24KSI.
- 8. EXTRUDED ALUMINUM H.H.B.S. CHANNEL IS FACTORY CUT TO FIT BETWEEN EACH BLADE. THE H.H.B.S. CHANNEL IS SCREWED TO EVERY 3RD BLADE AND AT BOTH JAMBS FRAMES. THE H.H.B.S. CHANNEL IS REQUIRED FOR ANY LOUVER ASSEMBLY EXCEEDING **60" HIGH** & EQUALLY SPACED BETWEEN HEAD & SILL FRAMES.
- 9. SQUARE BALLOONS INDICATE SHIP LOOSE PARTS.



N.T.S. (CF) 60"W X 120"H SHOWN

#### **DRAWING SHEET INDEX:**

**SHEET 01** - STANDARD LOUVER SPECIFICATIONS

SHEET 02 - MULTI-SECTION (CF) ASSEMBLY FRONT VIEW

SHEET 03 - MULTI-SECTION (CF) ASSEMBLY BACK VIEW

SHEET 04 - MULTI-SECTION (FF) ASSEMBLY FRONT VIEW

SHEET 05 - MULTI-SECTION (FF) ASSEMBLY BACK VIEW

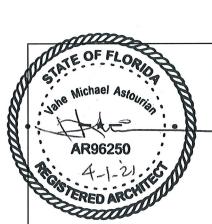
SHEET 06 - UNIVERSAL SLEEVE ASSEMBLY & INSTALLATION

SHEET 07 - LOUVER INSTALL / RETAINING SINGLE ANGLE

SHEET 08 - LOUVER INSTALL / RETAINING ZEE & DOUBLE ANGLE

**SHEET 09 - LOUVER FRAME PROFILES** 

**SHEET 10** - INSTALL PARTS PROFILES



PRODUCT APPROVED
as complying with the Florida
Building Code

NOA-No. 20-1201.01

Approval Date 05/13/2021

Miami-Dade Product Control

VAHE MICHAEL ASTOURIAN AR-96250

		Α		NOTE 1. AD		DETAIL 1.1 DPARTS LISTS	E-R	JDS	VMA		3/19/21
	- 1	AUTHOR	DKF	9/25/2020	-	DI 16			3900 Do		
	ı	CHECKED		9/28/2020		RUS		IV	PROP	iew, MO RIETARY	
		APPROVED	TCB	10/29/2020	,	AUTHORITY IN	AIR CON	TROL	COI	IFIDENT	TAL
Tolerances	— I	APPROVED	MMM	10/30/2020	PRODU	THZ700MD / WI	ND-DRIV	EN RAII	N RESIST	ANT LO	JVER
Unless Stated Otherwise Use WIQ-007, WIQ-008	3	MATERIAL EXTRU	DED ALUI		TITLE		RD LOUV	ER SPE	CIFICATIO	ONS	
Fractions ±1/° Two Decimals ±0.0 Three Decimals ±0.0	20				size B		DWG NO	60-02	2569-00	В	REV A
Angle Dimensions ±2	5.	ECN			SCALE	NONE	INVENTO	NO 0	HEET 1	n∈ 10	

PARTS LIST / REAR LOUVER (CF)

PARTS LIST / FRONT LOUVER (CF)

PARTS LIST / FRONT LOUVER (FF)

**INSTALLATION PARTS** 

**MATERIAL** 

EXT ALUM 6063-T6

NEOPRENE

410 SS/ZC

MATERIAL

EXT ALUM 6063-T6

EXT ALUM 6063-T6

EXT ALUM 6063-T6

EXT ALUM 6063-T6

EXT ALUM 6063-T5

410 SS/ZC

410 SS/ZC

410 SS/ZC

**MATERIAL** 

EXT ALUM 6063-T6

EXT ALUM 6063-T6

EXT ALUM 6063-T6

MATERIAL

EXT ALUM 6063-T6

(SEE SHEETS 07 & 08)

ALUM 5005-H34

ALUM 3003-H14

FORMED ALUM 5005-H34 FORMED ALUM 3003-H14

FORMED ALUM 3003-H14

ALUM 5005-H34

ALUM 5005-H34

DESCRIPTION

HEAD FRAME

SILL FRAME

JAMB FRAME

LOUVER BLADE

H.H.B.S.

GSK STP NEOP .25 X .50

SCR 8-18 X .75" HWH SW A/B

**DESCRIPTION** 

HEAD FRAME

SILL FRAME

JAMB FRAME

LOUVER BLADE

WATERSTOP

SCR 10-16 X2" HWH SW A/B

SCR 8-18 X .75" HWH SW A/B

SCR 10X.75" HWH TEK

**DESCRIPTION** 

FLANGED HEAD FRAME

FLANGED SILL FRAME

FLANGED JAMB FRAME

DESCRIPTION

SUBSTRATE FASTENER (N.I.C.)

SCR 1/4"-20 X 1-1/2" HWH TEK3

UNIVERSAL SLEEVE - MIN. 1/8" THK PLATE

SPL PLT LVR ALUM 2X4X.125

CONT. RETAINING ZEE - 1/4" THK PLT

CONT. RETAINING ANGLE - 1/4" X 2"

CONT. RETAINING ANGLE - 1/4" X 3" X 5"

CONT. STIFFENER PLT - 1/8" X 5"

CONT. STIFFENER PLT - 1/8" X 4"

CONT. RETAINING ANGLE 2" X 2" X 1/4"

ITEM

4

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ITEM

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ITEM

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**ITEM** 

19

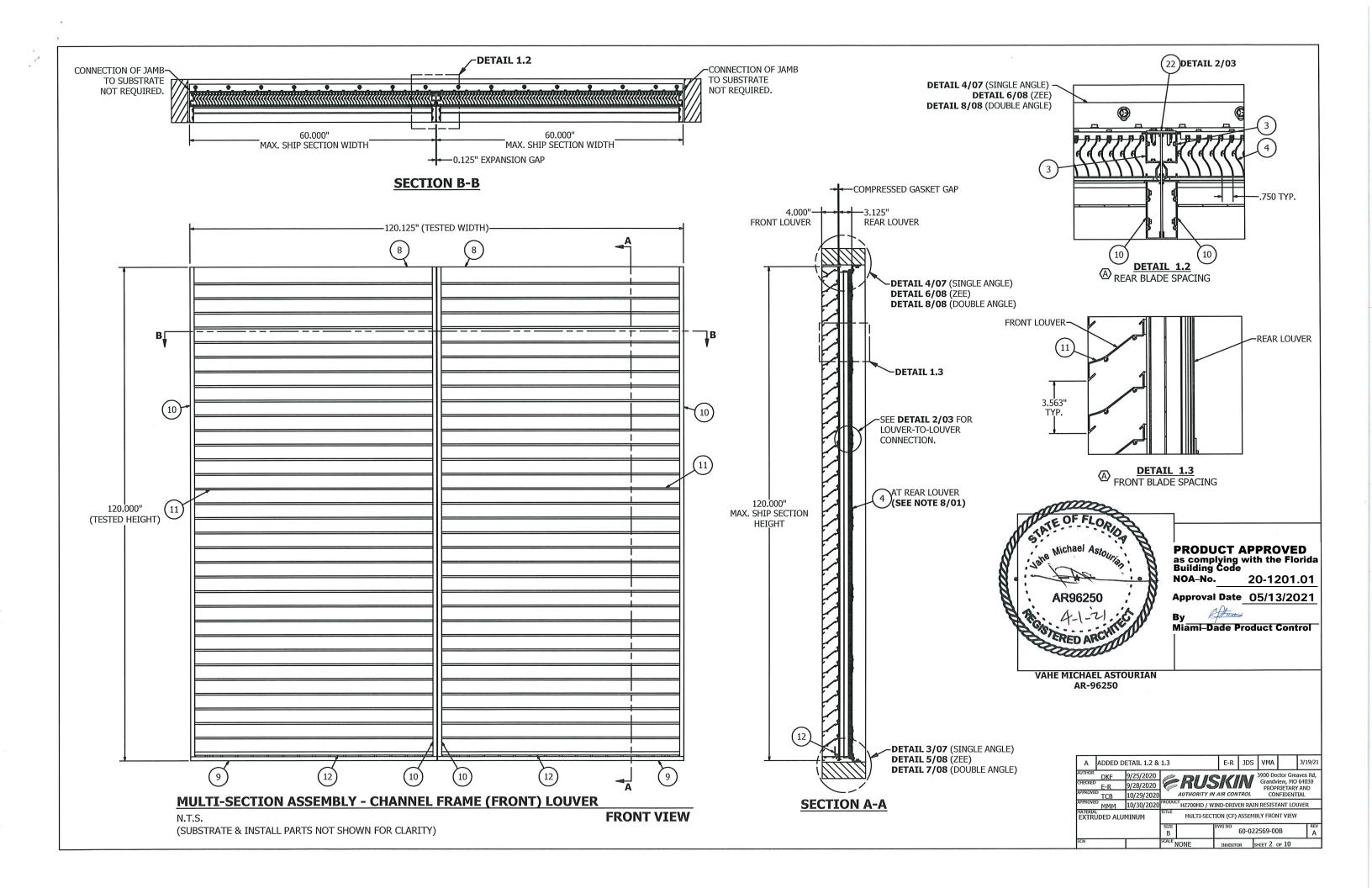
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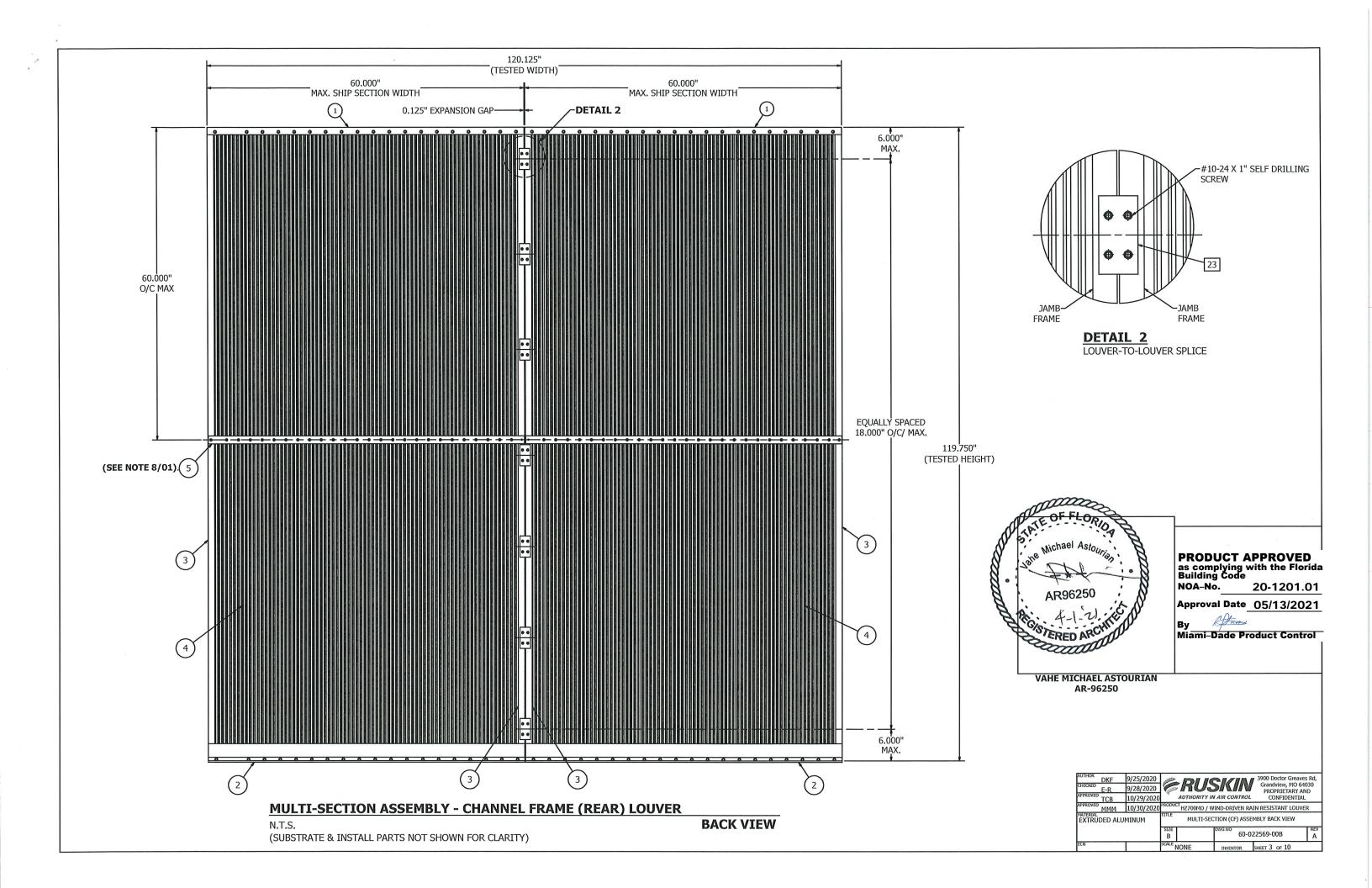
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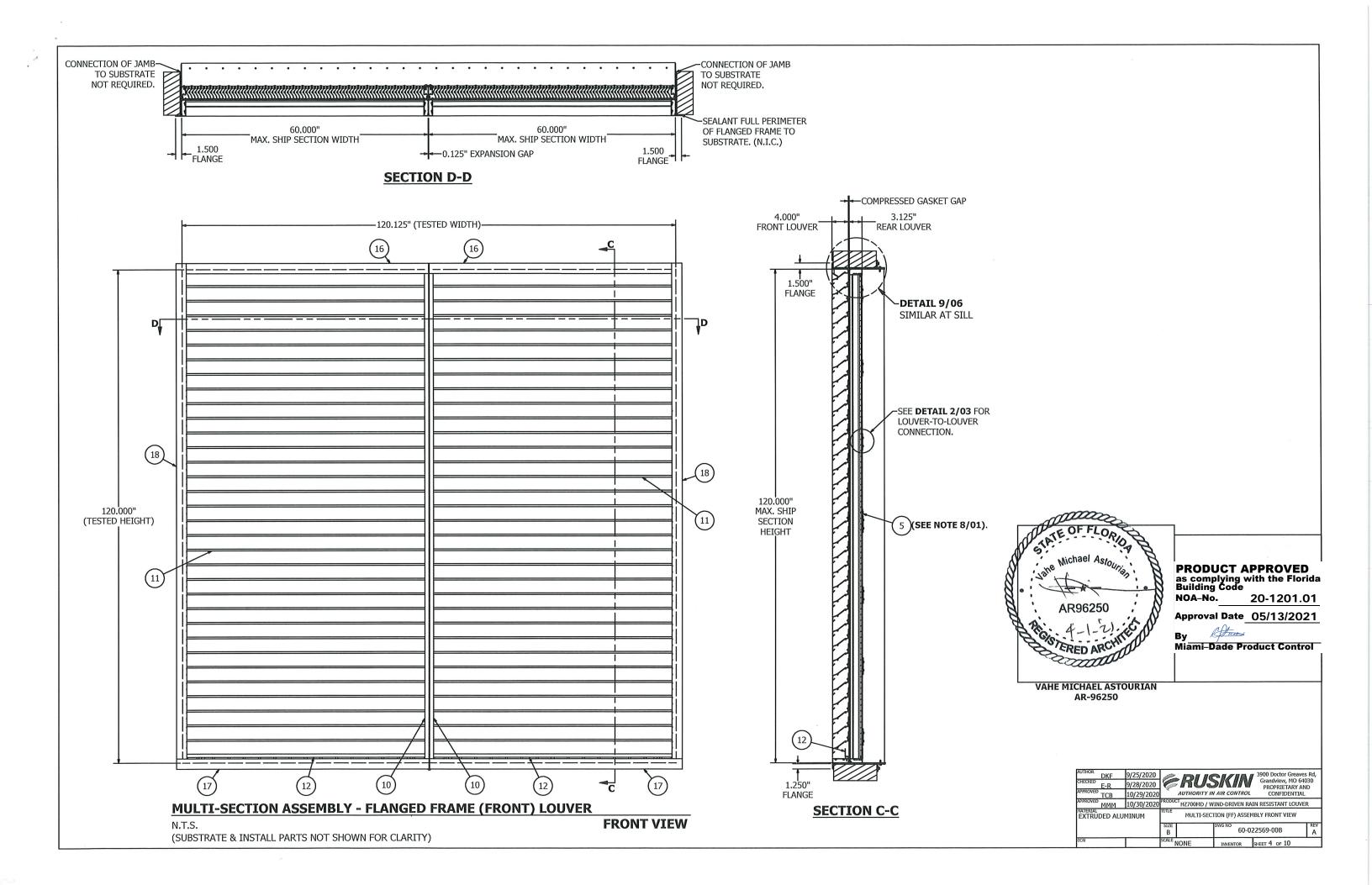
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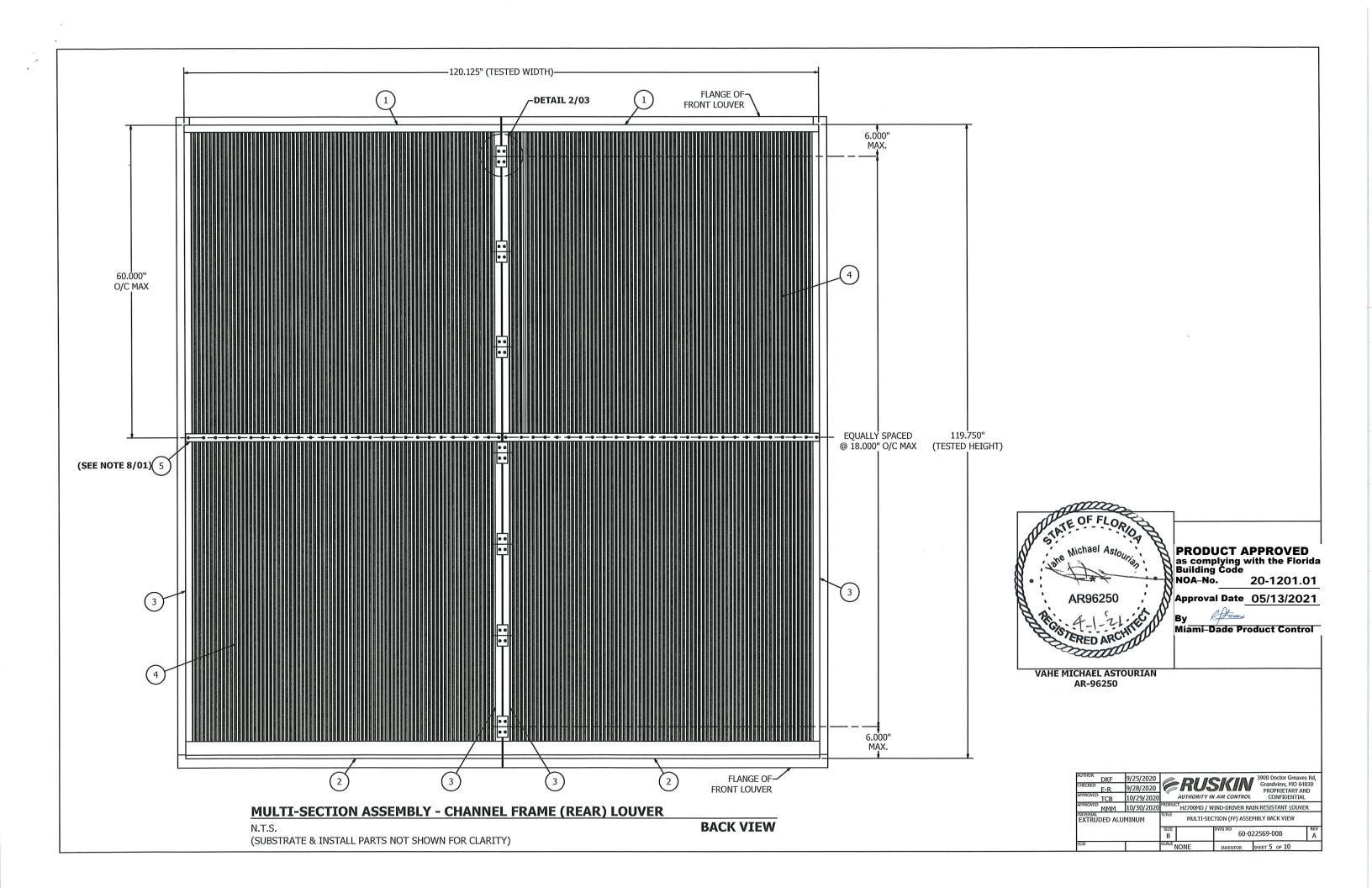
-REAR LOUVER

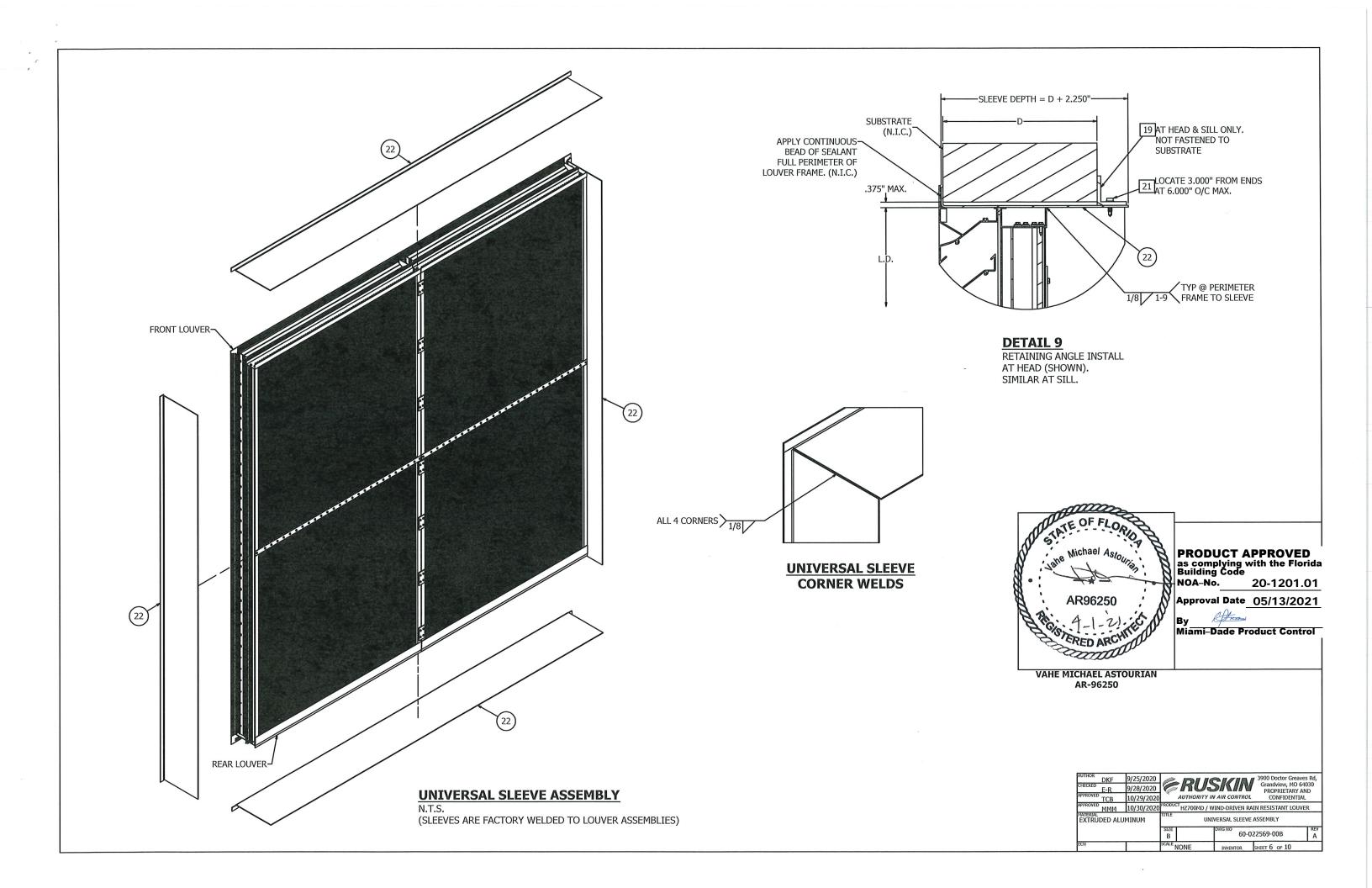
-DETAIL 1

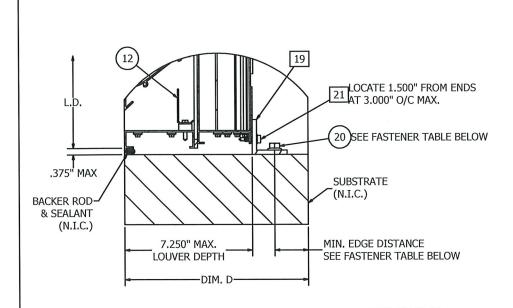


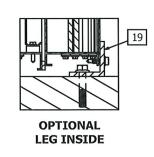


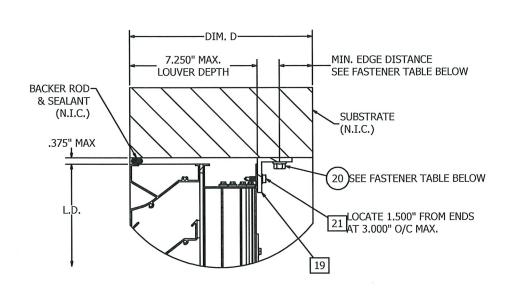


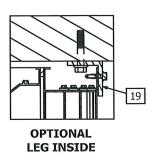






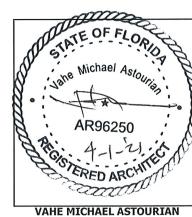






**DETAIL 3** ANGLE INSTALL AT SILL **DETAIL 4** ANGLE INSTALL AT HEAD

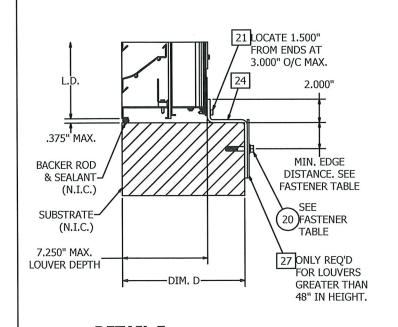
SUB	STRATE FASTENER TABLE	E (N.I.C.) / HZ700MD 130 PSF / SIN	IGLE ANGLE	INSTALLATION	
SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	FASTENER TYPE	MAX. C/C SPACING AT HEAD / SILL	MIN. EMBEDMENT	MIN. EDGE DISTANCE
WOOD	3" THICK, 0.42 SPECIFIC GRAVITY	3/8-16 BOLT W/NUT, MIN A307 GRADE A	6"	3 THREADS BEYOND NUT	1-1/2"
VVOOD	3 THION, 0.42 OF EOIL TO CINAVITY	3/8" DIA. LAG SCREW, 2 1/2" LONG, MIN. A307 GRADE A	6"	2-1/4"	1-1/2"
OTES	18 GA, 45 KSI TENSILE STRENGTH, 33KSI YIELD STRENGTH	1/4-20 BOLT W/NUT & WASHER MIN A307 GRADE A	6"	3 THREADS BEYOND NUT	1/2"
STEEL	12 GA, 45 KSI TENSILE STRENGTH, 33KSI YIELD STRENGTH	1/4-20 SELF-DRILLING SCREW W/ WASHER CARBON STEEL	3"	3 THREADS BEYOND SUBSTR. THICKNESS	1/2"
0.1.1.041511.154	0.125" THICK, 20 KSI TENSILE STRENGTH, 15 KSI YIELD STRENGTH	1/4-20 BOLT W/NUT & WASHER MIN A307 GRADE A	6"	3 THREADS BEYOND NUT	1/2"
ALUMINUM	0.1875" THICK, 20 KSI TENSILE STRENGTH, 15 KSI YIELD STRENGTH	1/4-20 SELF-DRILLING SCREW W/ WASHER CARBON STEEL	3"	3 THREADS BEYOND SUBSTR. THICKNESS	1/2"
		3/8" DIA. SIMPSON STRONG-TIE TITEN HD SCREW ANCHOR CARBON STEEL	6"	3-1/4"	3"
		3/8" DIA. DEWALT SCREW BOLT + SCREW ANCHOR CARBON STEEL	6"	3-1/4"	6"
CONCRETE	2500 PSI COMPRESSIVE STRENGTH	3/8" DIA. HILTI KWIK HUS-EZ SCREW ANCHOR CARBON STEEL	6"	3 1/4"	2 1/2"
		1/4" DIA. ELCO AGGRE-GATOR W/ WASHER 300 SERIES SS	3"	1-3/8"	1-1/2"
		3/8" DIA. SIMPSON STRONG-TIE TITEN HD SCREW ANCHOR CARBON STEEL	3"	2 -3/4"	4"
	ACTM C OO DI OOK 4500 DEI ODOUT	3/8" DIA. DEWALT SCREW BOLT + SCREW ANCHOR CARBON STEEL	6"	3 1/4"	2"
GROUT FILLED CMU	ASTM C-90 BLOCK, 1500 PSI GROUT COMPRESSIVE STRENGTH	3/8" DIA. HILTI KWIK HUS-EZ SCREW ANCHOR CARBON STEEL	6"	3-1/4"	4"
		1/4" DIA. ELCO AGGRE-GATOR W/ WASHER 300 SERIES SS	3"	2"	2"

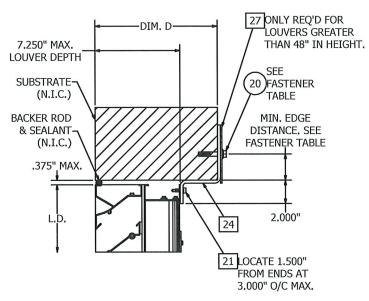


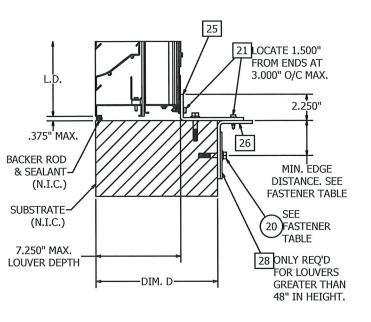
PRODUCT APPROVED as complying with the Florida Building Code NOA-No. 20-1201.01 Approval Date 05/13/2021 Miami-Dade Product Control

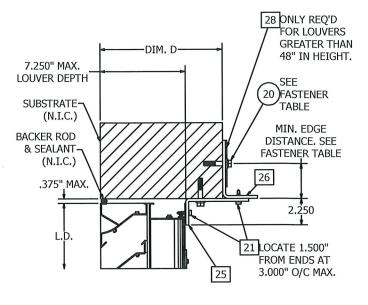
AR-96250

E	ECN			SCALE	NONE	INVENTOR	SHEET 7 OF 10	
-				SIZE B		60-0	22569-00B	REV A
P	EXTRUI	DED ALUI		TITLE		TALLATION DET	AILS & FASTENING	
	APPROVED	MMM	10/30/2020	PRODU	CT HZ700MD / W	IND-DRIVEN RA	IN RESISTANT LOUVE	₹
7	APPROVED	TCB	10/29/2020	~		AIR CONTROL	CONFIDENTIAL	
C	CHECKED	E-R	9/28/2020		RUS	SKIN	Grandview, MO 640 PROPRIETARY AN	
L	AUTHOR	DKF	9/25/2020	1	DI 16		3900 Doctor Greaves	









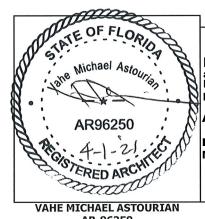
**DETAIL 5** RETAINING ZEE INSTALLED AT SILL

**DETAIL 6** RETAINING ZEE INSTALLED AT HEAD

**DETAIL 7** DOUBLE ANGLE INSTALLED AT SILL

**DETAIL 8** DOUBLE ANGLE INSTALLED AT HEAD

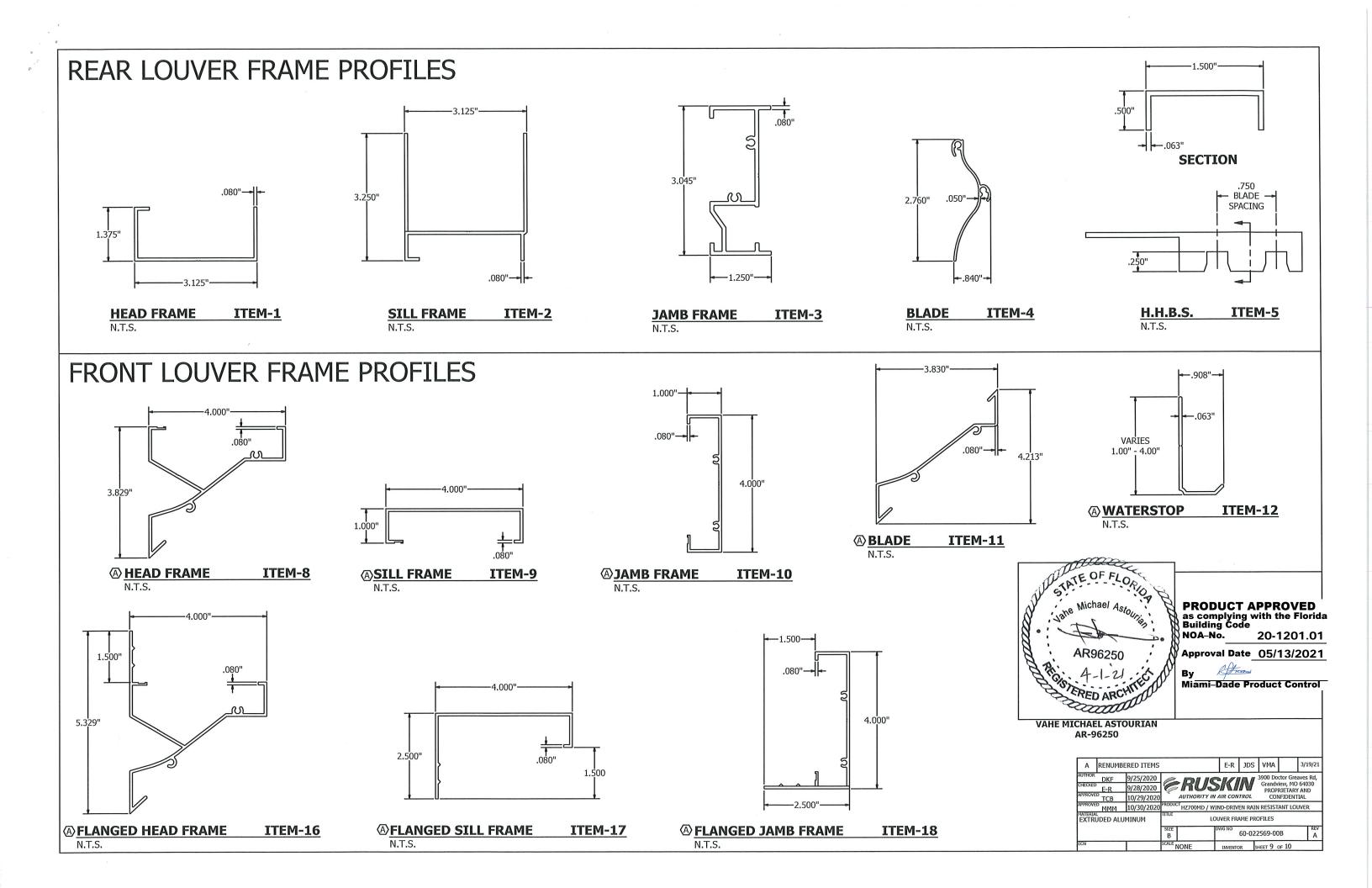
SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	FASTENER TYPE	MAX. C/C SPACING AT HEAD / SILL	MIN. EMBEDMENT	MIN. EDGE DISTANCE
WOOD	3" THICK, 0.42 SPECIFIC GRAVITY	3/8-16 BOLT W/NUT, MIN A307 GRADE A	(A) 8"	3 THREADS BEYOND NUT	1-1/2"
VVOOD	3 THICK, 0.42 OF LOTH TO GRAVITT	3/8" DIA. LAG SCREW, 2 1/2" LONG, MIN. A307 GRADE A	♠ 8"	2-1/4"	1-1/2"
STEEL	18 GA, 45 KSI TENSILE STRENGTH, 33KSI YIELD STRENGTH	1/4-20 BOLT W/NUT & WASHER MIN A307 GRADE A	6"	3 THREADS BEYOND NUT	1/2"
STEEL	12 GA, 45 KSI TENSILE STRENGTH, 33KSI YIELD STRENGTH	1/4-20 SELF-DRILLING SCREW W/ WASHER CARBON STEEL	6"	3 THREADS BEYOND SUBSTR. THICKNESS	1/2"
ALUMINUM	0.125" THICK, 20 KSI TENSILE STRENGTH, 15 KSI YIELD STRENGTH	1/4-20 BOLT W/NUT & WASHER MIN A307 GRADE A	(A) 8"	3 THREADS BEYOND NUT	1/2"
ALOMINOM	0.1875" THICK, 20 KSI TENSILE STRENGTH, 15 KSI YIELD STRENGTH	1/4-20 SELF-DRILLING SCREW W/ WASHER CARBON STEEL	3"	3 THREADS BEYOND SUBSTR. THICKNESS	1/2"
		3/8" DIA. SIMPSON STRONG-TIE TITEN HD SCREW ANCHOR CARBON STEEL	(A) 8"	3-1/4"	3"
		3/8" DIA. DEWALT SCREW BOLT + SCREW ANCHOR CARBON STEEL	6"	3-1/4"	4"
CONCRETE	2500 PSI COMPRESSIVE STRENGTH	3/8" DIA. HILTI KWIK HUS-EZ SCREW ANCHOR CARBON STEEL	(A) 8"	3 1/4"	2 1/2"
		1/4" DIA. ELCO AGGRE-GATOR W/ WASHER 300 SERIES SS	3"	1-3/8"	1-1/2"
		3/8" DIA. SIMPSON STRONG-TIE TITEN HD SCREW ANCHOR CARBON STEEL	6"	2 -3/4"	4"
	ASTMIC ON DEOCK 1500 DSLCDOUT	3/8" DIA. DEWALT SCREW BOLT + SCREW ANCHOR CARBON STEEL	(A) 8"	3 1/4"	2"
GROUT FILLED CMU	ASTM C-90 BLOCK, 1500 PSI GROUT COMPRESSIVE STRENGTH	3/8" DIA. HILTI KWIK HUS-EZ SCREW ANCHOR CARBON STEEL	(A) 8"	3-1/4"	4"
		1/4" DIA. ELCO AGGRE-GATOR W/ WASHER 300 SERIES SS	6"	2"	2"

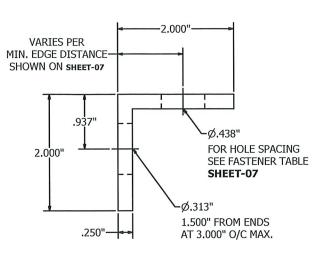


PRODUCT APPROVED as complying with the Florida Building Code NOA-No. 20-1201.01 Approval Date 05/13/2021 Miami-Dade Product Control

AR-96250

Α	REVISED	SUBSTRATE	FAST	ENER TABLE	E-R	JDS	AMV		3/19/	21
CHECKEE	DKF	9/25/2020 9/28/2020		RUS	SKI	M		iew, MO	64030	
APPROVE	TCB	10/29/2020	20000	AUTHORITY IN				RIETARY NFIDENT		
APPROVE	MMM	10/30/2020	PRODU	HZ700MD / W	IND-DRIV	en rain	RESIST	ANT LO	JVER	
EXTR	uded alui		TITLE	LOUVER INSTAL	L / RETAI	NING ZE	EE & DOI	UBLE AN		
			SIZE B		DWG NO	60-022	2569-00	В		ŒV Α
ECN			SCALE	NONE	INVENTO	OR S	неет 8	of 10		

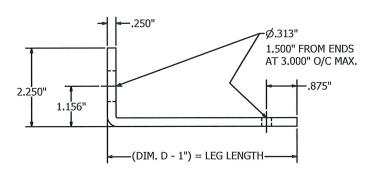


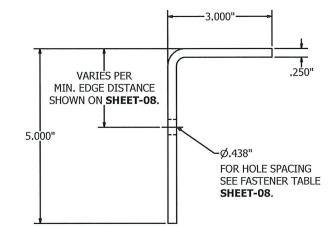


# -MIN. 0.125" 1.375" -MIN. = 7.500" / MAX. = 24.000"-

#### **A RETAINING ANGLE** ITEM-19 N.T.S.

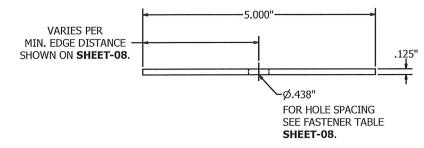
#### **(A) UNIVERSAL SLEEVE** ITEM-22 N.T.S.

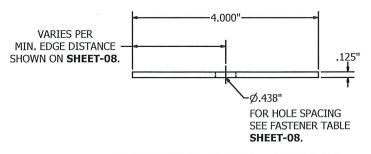




# **(A) RETAINING ANGLE ITEM-25**

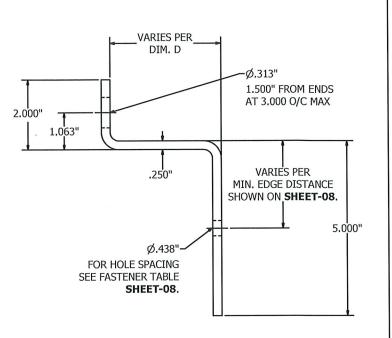
**A RETAINING ANGLE ITEM-26** 



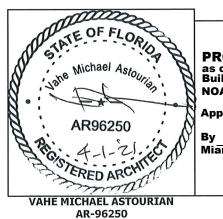


### (A) STIFFENER PLATE ITEM-27 N.T.S.





#### ITEM-24 **A RETAINING ZEE** N.T.S.



PRODUCT APPROVED as complying with the Florida Building Code NOA-No. 20-1201.01 Approval Date 05/13/2021

Miami-Dade Product Control

SHEET 10 OF 10

Α	RENUME	BERED ITEMS				E-R	JDS	AMV		3/19/21
AUTHOR	DKF	9/25/2020	0	- DIII	10	11/1	IA.			aves Rd,
CHECKED	E-R	9/28/2020		RU	0		IV		iew, MO RIETARY	
APPROVE	TCB	10/29/2020	٧.	AUTHORIT	Y IN A	IR CON	TROL		NFIDENT	
APPROVE	MMM <sup>D</sup>	10/30/2020	PRODU	HZ700MD	/ WIN	D-DRIV	EN RAIN	RESIST	ANT LO	UVER
MATERIA EXTRI	JDED AL		TITLE		INS	TALL PA	RTS PRO	OFILES		
			SIZE		DV	VG NO			10.00	REV