

# 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

United Enertech Holdings, LLC 3005 South Hickory Street Chattanooga, TN 37407

#### 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 D-HV-9 Aluminum Louver System**

**APPROVAL DOCUMENT:** Drawing No. **20-263**, titled "Model D-HV-9 Horizontal Louver System (EL-4) as front decorative cover to approved Model WDV-130 Vertical (L.M.I.) Aluminum Louver System", sheets 1 through 11 of 11, dated 12/09/2020, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E. on 02/01/2021, bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

# MISSILE IMPACT RATING: Large and Small Missile Impact Resistant.

**LABELING:** A permanent label with the manufacturer's name or logo, Chattanooga, TN or Hartford, AL, model/series, and following statement: "Miami-Dade County Product Control Approved", is to be located on each unit.

**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.



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NOA No. 21-0216.02 Expiration Date: May 6, 2026 Approval Date: May 6, 2021

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#### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### A. DRAWINGS

Drawing No. **20-263**, titled "Model D-HV-9 Horizontal Louver System (EL-4) as front decorative cover to approved Model WDV-130 Vertical (L.M.I.) Aluminum Louver System", sheets 1 through 11 of 11, dated 12/09/2020, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E. on 02/01/2021.

#### B. TESTS

- 1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
  2) Cyclic Wind Pressure Loading per FBC, TAS 203-94
  along with marked-up drawings and installation diagram of Model D-HV-9 Aluminum Louver Systems, prepared by Intertek, Test Report No. L4545.01-550-18 R1, dated 01/04/2021, with revision dated 01/15/2021, signed and sealed by Vinu J. Abraham, P.E.
  - "Submitted under NOA # 20-0109.02"
- 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 (Level "E", 80 fps)
  - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of Model WDV-130 Vertical Aluminum Louver Systems, prepared by PRI Construction Materials Technologies LLC, Test Report No. **1697T0001.01.01**, dated 11/20/2019, signed and sealed by Zachary Priest, P.E. on 01/27/2020.

3. Test Report on High Velocity Wind Driven Rain Resistance Test per ANSI/AMCA 550-15 of a Model WDV-130 Vertical Aluminum Louver System, prepared by PRI Construction Materials Technologies LLC, Report No. 1697T0001.02, dated 10/16/2019, signed and sealed by Zachary Priest, P.E.

#### C. CALCULATIONS

1. Structural analysis and anchor calculations, prepared by Tilteco, Inc, dated 02/01/2021, signed and sealed by Walter A. Tillit Jr., P.E.

#### "Submitted under NOA # 20-0109.02"

2. Structural analysis and anchor calculations, prepared by Tilteco, Inc, dated 09/30/2019, signed and sealed by Walter A. Tillit Jr., P.E.

#### D. QUALITY ASSURANCE

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

### E. MATERIAL CERTIFICATIONS "Submitted under NOA # 20-0109.02"

1. Test Report on Large Missile Impact (Level "E", 80 fps) Test per ANSI/AMCA 540-13 and Cyclic Wind Pressure Loading per FBC, TAS 203-94 of Model WDV-130 Vertical Aluminum Louver Systems, prepared by PRI Construction Materials Technologies LLC, Report No. 1697T0001.03, dated 11/20/2019, signed and sealed by Zachary Priest, P.E.

#### F. STATEMENTS

- 1. Statement letter of code conformance to the 7<sup>th</sup> edition (2020) of the FBC issued by Tilteco, Inc. on 01/13/2021, signed and sealed by Walter A. Tillit Jr., P.E.
- 2. Statement letter of no financial interest letter issued by Tilteco, Inc., dated 01/13/2021, signed and sealed by Walter A. Tillit Jr., P.E.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 21-0216.02 Expiration Date: May 6, 2026

Expiration Date: May 6, 2026 Approval Date: May 6, 2021

# MODEL D-HV-9 CONSISTING OF THE INSTALLATION OF HORIZONTAL LOUVER SYSTEM (EL-4) AS FRONT DECORATIVE COVER TO REAR APPROVED MODEL WDV-130 VERTICAL LARGE MISSILE IMPACT RESISTANT ALUM. LOUVER SYSTEM

## GENERAL NOTES

1. MODEL D-HV-9 CONSISTING OF THE INSTALLATION OF HORIZONTAL LOUVER SYSTEM (EL-4) AS FRONT DECORATIVE OVER TO REAR APPROVED MODEL WDV-130 VERTICAL LARGE MISSILE IMPACT RESISTANT ALUM. LOUVER SYSTEM SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2020 (7th EDITION) OF THE FLORIDA BUILDING CODE. THIS ALUMINUM LOUVER SYSTEM MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES (H.V.H.Z).

DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION **1620** OF THE ABOVE MENTIONED CODE, USING **ASCE 7-16** AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATING INDICATED ON THIS SHEET.

IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-16 SHALL BE FIRST REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY 0.6 IN ORDER TO COMPARE THESE W/ MAX. (A.S.D.) DESIGN PRESSURE RATING INDICATED ON THIS SHEET.

MODEL D-HV-9 CONSISTING OF THE INSTALLATION OF HORIZONTAL LOUVER SYSTEM (EL-4) AS FRONT DECORATIVE COVER TO REAR APPROVED MODEL WDV-130 VERTICAL LARGE MISSILE IMPACT RESISTANT ALUM. LOUVER SYSTEM ADEQUACY FOR WIND AND FATIGUE DUE TO WING RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION **1626** OF THE ABOVE MENTIONED CODE AS PER INTERTEK TESTING LAB REPORT # L4545.01-550-18R0, AS PER TAS-202, TAS-203 FOR (EL-4) SYSTEM & AS PER TAS 201, 202, 203 AND AMCA 540 FOR WDV-130 REAR APPROVED SYSTEM UNDER SEPARATE NOA.

- 2. ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T5 ALLOY AS PER BILL OF MATERIALS ON SHEET 2.
- 3. ALL SCREWS TO BE STAINLESS STEEL 304 OR 316 SERIES WITH 50 ksi YIELD STRENGTH AND 90 ksi TENSILE STRENGTH OR CORROSION RESISTANT CARBON STEEL AS PER DIN 50018 AND SHALL COMPLY W/ FLORIDA BUILDING CODE SECTION 2411.3.3.4.
- 4. ANCHOR 10 USED FOR CONNECTION TO EXISTING STRUCTURE SHALL BE AS FOLLOWS (SEE SHEETS 6 THRU 9 FOR DETAILS).

ANCHOR SHALL BE INSTALLED FOLLOWING ALL THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHORS MANUFACTURER. E.D. IS BEYOND ANY WALL FINISH. LAG SCREWS SHALL COMPLY WITH 2018 NDS.

	7.	. IT SHALL BE RESPONSIBILITY OF THE CONTRACTO	R TO VERIFY THE SOUNDNESS OF THE STRUCTURE
ı		WHERE LOUVER SYSTEM IS TO BE ATTACHED TO	INSURE PROPER ANCHORAGE.

- 8. (A). THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.A.D.
  - (B). CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT, BASED ON THIS P.A.D., PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.

    CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.
  - (C). THIS PRODUCT APPROVAL DOCUMENT WILL BE CONSIDERED INVALID IF MODIFIED.
  - (D). SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.A.D.
  - (E). ORIGINAL P.A.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER THAT PREPARED IT.
- PRODUCT MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT PRODUCT IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABELING TO COMPLY WITH SECTION 1709.9.2 OF THE FLORIDA BUILDING CODE.

A.S.D. DESIGN PRESSURE RATING: +150, -150 psf.

THIS DRAWING SHALL ONLY BE USED TO OBTAIN PERMITS IN THE STATE OF FLORIDA

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		DIAMETER OR GAGE	MIN. EMBEDMENT				MIN. EDGE DISTANCE (E.D)		
ANCHOR TYPE	MANUFACTURER		TO CONCRETE (f'c=3.000 psi) MIN.	TO CONCRETE BLOCK ASTM (C-90 UNIT) (f'c=1.5 ksi) GROUTED	1/4" MIN. (Fy=36ksi) GALY. STEEL	<u>TO WOOD</u> (G ≥ 0.55)	CONCRETE OR GROUTED CONCRETE BLOCK	STEEL	WOOD
SCREW-BOLT	DEWALT	3/8"	3 1/4"	3 1/4"	N/A	N/A	1 1/2"	N/A	N/A
LAG SCREW	_	3/8"	N/A	N/A	N/A	1 1/2"	N/A	N/A	1 1/2'
TAP-FLEX	ELCO CONST.	3/8"	N/A	N/A	FULLY EMB. PLUS 3 THREADS BEYOND.	N/A	N/A	3/4"	N/A

- 5. MODEL D-HV-9 CONSISTING OF THE INSTALLATION OF HORIZONTAL LOUVER SYSTEM (EL-4) AS FRONT DECORATIVE COVER TO REAR APPROVED MODEL WDV-130 VERTICAL LARGE MISSILE IMPACT RESISTANT ALUM. LOUVER SYSTEM MAY BE INSTALLED IN LOCATIONS WHERE THE ROOM BEHIND IS NOT DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM, OR THE ROOM WILL HOUSE NON-WATER RESISTANT EQUIPMENT. COMPONENTS OR SUPPLIES INSTALLATION ON LOUVER IS LIMITED TO 40 FT. IN HEIGHT ACCORDING TO TABLE 3 OF TAS 100(A)-95.
- 6. ALUMINUM MEMBERS IN CONTACT WITH DISSIMILAR MATERIALS SHALL COMPLY WIH SECTION III-6 OF THE 2015 ALUMINUM DESIGN MANUAL.

PRODUCT APPROVED
as complying with the Florida
Building Code
NOA-No. 21-0216.02

Approval Date 05/06/2021

MIAMI DADE COUNTY

-263

# BILL OF MATERIALS

OMPONENT	DESCRIPTION	MATERIAL	NOTES		MODEL
#		The state of the s	110120	REAR	FRONT
1	HEAD	6063-T5 ALUMINUM ALLOY/TEMPER	CONTINUOUS	WDV-130	-
2	SILL	6063-T5 ALUMINUM ALLOY/TEMPER	CONTINUOUS USE W/8	WDV-130	-
3	SIDE JAMB	6063-T5 ALUMINUM ALLOY/TEMPER	CONTINUOUS	WDV-130	
4	BIRD SCREEN FRAME	6063-T5 ALUMINUM ALLOY/TEMPER	OPTIONAL	WDV-130	-
(5)	BLADE	6063-T5 ALUMINUM ALLOY/TEMPER	<u>-</u>	WDV-130	-
6	BLADE BRACE	6063-T5 ALUMINUM ALLOY/TEMPER	2" LONG	WDV-130	_
<b>6A</b>	BLADE BRACE STRIP	6063-T5 ALUMINUM ALLOY/TEMPER	CONTINUOUS ACROSS UNIT	WDV-130	EL-4
7	OPTIONAL BIRD SCREEN	3/4" x 0.051" FLATTENED ALUMINUM	OPTIONAL	WDV-130	-
8	SILL BAFFLE	3003 H14 ALUMINUM ALLOY/HARDNESS	CONTINUOUS USE W/2	WDV-130	-
( - )	FLANGE	6063-T5 ALUMINUM ALLOY/TEMPER	OPTIONAL	WDV-130	_
10	ANCHOR	3/8 ø (SEE NOTE 4/1)	SEE DETAILS (SHEETS 6 THRU 9)	WDV-130	-
11	HEAD/SILL MOUNTING ANGLE, JAMB BLANK-OFF	6061-T6 ALUMINUM ALLOY/TEMPER	CONTINUOUS	WDV-130	-
12	#8 x 1-1/2" HEX HEAD, ZINC PLATED S.M.S.	MIN. Fy=90 ksi	USE AT FRAME ASSEMBLY (SILL/JAMB & HEADER/JAMB	WDV-130	EL-4
13	#10 x 1-1/2" HEX HEAD, ZINC PLATED S.M.S.	<u>-</u>	USE (2) FOR BLADE (5) ATTACHMENT EA. END TO (1) & (2)	WDV-130	_
14	1/4 -14 x 1-1/2" HEX HEAD, ZINC PLATED TEK SCREW		ANGLE CLIP ATTACHMENT TO HEAD & SILL	WDV-130	-
15	#10 x 3/4" HEX HEAD, ZINC PLATED TEK SCREW	_	BLADE BRACE ATTACHMENT & 1 ATTACHMENT	WDV-130	-
16	4" HEAD	6063-T5 ALUMINUM ALLOY/TEMPER	_	-	EL-4
17	4" SILL	6063-T5 ALUMINUM ALLOY/TEMPER	_	•	EL-4
18	4" SIDE JAMB (EXTERIOR)	6063-T5 ALUMINUM ALLOY/TEMPER	_	-	EL-4
19	4" BLADE	6063-T5 ALUMINUM ALLOY/TEMPER		_	EL-4
20	4" LONG BLADE BRACE	6063-T5 ALUMINUM ALLOY/TEMPER		-	EL-4
21)	#8 X 1-1/2" HEX HEAD, S.M.S.	ZINC PLATED	USE (2) FOR BLADE (19) ATTACHMENT EACH ENDS TO (18), USE (3) FOR (16) CONNECTION TO (18) & USE (2) FOR (7) CONNECTION TO (18)	-	EL-4
22	WALL EXTENSION ANGLE	ASTM A36 STEEL, GALVANIZED OR RED/BLACK OXIDE PAINTED	4" X 4" X 1/4" ANGLE	WDV-130	-
23	#10 X 1" HEX HEAD ZINC PLATED, S.M.S.	MIN. Fy=90 ksi STEEL	USE AT JAMBS CONNECTIONS (18) & (3) TO CREATE D-HV-9 SYSTEM	WDV-130	EL-4

PRODUCT APPROVED
as complying with the Florida
Building Code
NOA-No. 21-0216.02

Approval Date 05/06/2021

By Miami-Dade Product Control

E (HIGH VELOCITY HURRICANE ZONE)
--HV-9 HORIZONTAL LOUVER SYSTEM (EL-4) AS
CORATIVE COVER TO APPROVED MODEL WDV-130
-- LM. IMPACT RESISTANT ALUM. LOUVER SYSTEM FLORIDA BUILDING CODE

MODEL D-I

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MIAMI DADE COUNTY

P.E.

















