

Product Evaluation

LVR29 | 0521

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: LVR-29

Effective Date: May 1, 2021

Re-evaluation Date: May 2025

Product Name: Model 1605WDVM Aluminum Louvers, Impact Resistant

Manufacturer: Nailor Industries, Inc.
4714 Winfield Road
Houston, TX 77039
(281) 590-1172

General Description:

The Model 1605WDVM is a large missile impact rated louver product with a 5" depth that can stay operational during a hurricane event.

Design Drawings:

"1605WDVM Louver;" Drawing No 1605WDVM; manufactured by Nailor Industries, Inc.; Sheets 1–11 of 11; dated November 2, 2020; signed, sealed, and dated November 2, 2020, by Byron Buell Hagan, P.E. The stated drawings will be referred to as approved drawings in this evaluation report. A copy of the approved drawings must be available at the job site

Limitations:

Configurations:

- Single units.
- Multiple units stacked horizontally.

Wall Construction: The louvers may be mounted to the following types of wall framing:

- Structural concrete, minimum 6" thickness, minimum compressive strength $f'_c = 4,000$ psi, minimum fastener requirements per fastener schedule listed on sheet 11 of 11 in the approved drawings.
- Wood frame, minimum SPF (SG = 0.42), minimum fastener requirements per the fastener schedule listed on sheet 11 of 11 in the approved drawings.
- Concrete Masonry Units, minimum 6" units, Grand N, Type II Light, Medium, or Normal weight units, Type N mortar, solid grouted with minimum $f'_c = 4,747$ psi grout, minimum fastener requirements per the fastener scheduled listed on sheet 11 of 11 in the approved drawings.
- Steel, A36 ($F_y = 36$ ksi), minimum 1/4" thickness, minimum fastener requirements per the fastener schedule listed on sheet 11 of 11 in the referenced drawings.

Allowable Design Pressure: The allowable design pressure is a function of mullion construction, mullion spacing, mullion span, mullion connections, and substrate. The maximum allowable design pressure is +/-130.0 psf. Refer to the approved drawings for the allowable design pressure for a specific installation condition.

Maximum Width:

- When spanning horizontally, the maximum module width is 120". There is no limit to the number of modules. Refer to the approved drawings.
- When spanning vertically, the maximum module width is 72". There is no limit to the number of modules. Refer to the approved drawings.

Maximum Height:

- When spanning horizontally, the maximum module height is 72". Refer to the approved drawings.
- When spanning vertically, the maximum module height is 120". Refer to the approved drawings.

Product Identification: The louvers must have a manufacturer-produced label that indicates the manufacturer: "Nailor Industries, Inc.", the name of the product: "1675WDVM", the missile Level: Large Missile, and compliance with TAS-201, TAS-202, and TAS-203.

Impact Resistance: This louver assembly satisfies the Texas Department of Insurance's criteria for protection from windborne debris. The assembly has passed a missile test equivalent to Missile Level E specified in ASTM E 1996-14a. The assembly may be installed at any height on the structure as long as the design pressure rating for the assembly is not exceeded.

Installation:

General Installation Requirements: The louvers must be installed in accordance with the manufacturer's installation instructions, the approved drawings, and this product evaluation report. A copy of the approved drawings must be available on the jobsite during inspection of the louver assembly.

Anchorage: The louver must be anchored to the structure in accordance with the approved drawings. Anchorage of the louvers to concrete, grout-filled concrete masonry units (CMU), wood wall framing, and steel wall framing must follow the mounting conditions, fastener options, and fastener placement specified on the approved drawings. The modules may be stacked vertically or horizontally and requires a structural support frame installed and designed by others to support the product.

Note: Keep the manufacturer's installation instructions and the approved drawings referenced in this evaluation report available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.