

Product Evaluation

DR902 | 0722

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: DR-902

Effective Date: July 1, 2022

Re-evaluation Date: July 2026

Product Name: "NVS" Series Commercial Steel Opaque Outswing Side Hinged Doors, Impact Resistant

Manufacturer: Mesker Door, a division of dormakaba USA, Inc.
3440 Stanwood Blvd.
Huntsville, AL 35811
(256) 851-6670

General Description:

The "NVS" Series Hinged Doors are steel frame and steel panel opaque side hinged outswing doors used for commercial installations. This evaluation report includes the following door assemblies:

- Double Doors (XX)
- Single Doors (X)

Product Identification:

A Mesker Door Inc. label will be affixed to the door assembly. The label includes the manufacturer's name (Mesker); the product name ("N" Series and NVS Commercial Outswing Steel Door); that the design pressure and size are per drawing MDI011; and that the product complies with TAS 201, TAS 202, and TAS 203, Large Missile Impact.

Limitations:**Design Drawings:**

Door assemblies must comply and be installed in accordance with the following design drawing:

- Drawing No. MDI011, "'NVS' Series Commercial Outswing Steel Door," Sheets 1 thru 14 of 14, dated February 7, 2017, revised May 24, 2022, signed and sealed by Hermes F. Norero, P.E on May 30, 2022. This evaluation report refers to the stated drawings as the approved drawings.

Design Pressure (DP):

The door assemblies have a maximum design pressure rating of +65 psf / -65 psf. Refer to approved drawing for specific design pressure requirements.

Hardware: Hardware requirements are specified on the approved drawings.

Impact Resistance:

These door assemblies passed an impact criteria equivalent to Missile Level D specified in ASTM E 1996. Install these assemblies at any height on the structure that does not exceed the assembly's design pressure rating. These assemblies do not require protection with an impact protective system when installed in areas that require windborne debris protection. For essential facilities, the assembly may not be installed below a height of 30 feet in Wind Zone 3 and may be installed at all heights in Wind Zone 2 as defined in ASTM E 1996-14a.

Installation Instructions:

General: Prepare and install the assembly in accordance with Mesker Door, Inc. installation instructions and the approved drawings specified in this evaluation report. Detailed installation instructions are available from Mesker Door, Inc.

Installation:

Wall Framing Construction: The door assemblies may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- concrete (minimum compressive strength: 3,000 psi)
- grout filled concrete block
- hollow concrete block
- steel ((minimum 1/8", Fy = 36 ksi)
- Aluminum (minimum 1/8" thick, 6063-T6)
- Wood (Spruce-Pine-Fir, minimum S.G. = 0.42)

Fastener Requirements:

- Refer to the approved drawings for the anchor layout and notes.
- Refer to the approved drawings for the minimum embedment depths for the fasteners and the minimum edge distances (minimum distance fastener must be from the edge of the substrate material) for the fasteners.

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