



Product Evaluation

CWSF60 | 0518

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: CWSF-60

Effective Date: May 1, 2018

Re-evaluation Date: December 2021

Product Name: "N" Series Commercial Steel Storefront System, Impact Resistant

Manufacturer: Mesker Door, Inc.
3440 Stanwood Blvd.
Huntsville, AL 35811
(844) 463-7537

General Description:

The "N" Series storefront system is a steel storefront system used for commercial installations. This evaluation report includes the following storefront assemblies:

- Single Outswing Steel Door with Transom
- Single Outswing Steel Door with Sidelites
- Single Outswing Door with Sidelites and Transom

Doors: Doors referenced in this product evaluation report and in the approved drawings are Mesker Door, Inc. door products. The Mesker Door, Inc. doors used with these assemblies must be listed in separate TDI product evaluation reports.

Product Identification:

A Mesker Door Inc. label will be affixed to the storefront assembly. The label includes the manufacturer's name (Mesker Door, Inc.); the product name ("N" Series Commercial Storefront System); that the design pressure and size are per drawing MDI009; and that the assembly complies with TAS 201, TAS-202, and TAS-203, Large Missile Impact.

Limitations:**Design Drawings:**

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

- Drawing No. MDI009 titled "N Series Commercial Outswing Steel Door," Sheets 1 thru 16 of 16, dated February 6, 2017, signed and sealed by Hermes Norero, P.E on March 8, 2017. This evaluation report refers to the stated drawings as the approved drawings.

Fabrication and Assembly: Mesker Door, Inc. storefront systems are fabricated in the factory. The steel storefront systems are assembled and glazed at the jobsite. The approved drawings referenced in this evaluation report indicate the options for the glazing construction.

Design pressure (DP):

- The allowable design pressure rating for the storefront system is specified on the design drawing. The maximum allowable design pressure rating is +65 / -65 psf.
- If the storefront system is used with doors, then the design pressure rating of the complete assembly will be the lesser of the allowable design pressure rating for the doors and the storefront system in this evaluation report.

Impact Resistance:

- The storefront assemblies satisfy TDI's criteria for protection from windborne debris in both the **Inland I** and **Seaward** zones. These 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.

Acceptance of Assemblies:

- The approved drawings specify the limitations on overall width.
- Assemblies must not exceed the heights shown on the approved drawings.
- Assemblies must not exceed the Daylight Opening Sizes (DLO) specified on the approved drawings.
- Doors used with these assemblies must be listed in separate TDI product evaluation reports.

Installation Instructions:

General: Prepare and install the assembly in accordance with the 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 storefront 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 and the approved drawings available at the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.