

Product Evaluation

GDR147 | 0621

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: GDR-147

Effective Date: June 1, 2021

Re-evaluation Date: June 2025

Product Name: 20-Gauge Steel Insulated and Non-Insulated Slat Roll-up Doors, Impact Resistant

Manufacturer: Metro Door LLC
821 Industrial Drive
Lewisburg, TN 37091
(833) 969-3667

General Description:

Curtain: The curtain is constructed of interlocking steel slats. Slats are 3/4" deep and 3" high and fabricated from steel meeting the requirements of ASTM A 653 Grade 45, G60, galvanized steel with a yield strength of 45 ksi. The insulated slats have a steel backer slat. Refer to General Note 7.2 on Sheet 1 of the design drawing for more details.

Windlocks: Windlocks are ASTM A1011 Grade 60 with ASTM A123 G60 galvanized steel. Yield strength of 60 ksi/

Bottom Bar: One of the following:

Steel Bottom Bar: Constructed of two 2" x 2" x 1/8" full width steel angles attached to the bottom slat with 1/4"-20 x 1-1/4" carriage bolts at 24" on center. Refer to the design drawings for details.

Aluminum Bottom Bar: Constructed of one extruded aluminum section. 6063-T6 alloy. 3" wide by 2-1/2" high overall. 0.158" overall thickness. Attached to the flat slat at the top.

Guides: The guides are constructed of three (3) structural steel angles bolted together to form either a "Z" or "E" shape. 1/2" x 1/2" steel windlock bars are attached to one angle with 3/16" fillet welds. Refer to the design drawings for details.

Limitations:

Maximum Door Width: 18'-1". Refer to the approved drawings for specific requirements.

Maximum Door Height: 24'-0".

Glazing: Not permitted.

Allowable Design Pressure Rating: Maximum ± 70 psf. Refer to the approved drawings for specific design pressure requirements.

Product Identification: The rolling door assemblies have a label that identifies the manufacturer (Metro Door LLC), the door model (18-1 Max Wide 20 Gage Slat Roll-Up Door), the test standards (TAS 201-94, TAS 202-94, and TAS 203-94), the missile Level (Large Missile Impact Rated); and the drawing number (20-288).

Compliance: The doors comply with ASTM E 330-14, ASTM E 1886-13a, and ASTM E 1996-14a.

Impact Resistance: The rolling steel doors have been tested for windborne debris resistance. The doors have passed a missile level equivalent to Missile Level D specified in ASTM E 1996-14a.

Acceptance of Smaller Assemblies: Door assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

Installation:

General: Install these doors in accordance with the manufacturer's published installation instructions, the approved drawings, and this product evaluation report. A copy of the approved drawings and the manufacturer's installation instructions must be available at all times at the job site during installation. The information within this evaluation report governs if there are any conflicts between the manufacturer's instructions and this evaluation report.

Design Drawings: The rolling doors must be installed in accordance with the following:

- "18'-1" Maximum Wide, 20-Gage Slat Roll-Up Door Type "D" Missile Impact Resistant;" drawing 20-288; Sheets 1 through 7; dated October 13, 2020; Revision 1, dated April 7, 2021; signed and sealed April 8, 2021, by Walter A. Tillit, PE. The stated drawings will be referred to as approved drawings in this report. A copy of the approved drawings must be available at the job site.

Anchorage: The rolling doors must be anchored to the structure in accordance with the approved drawings. Minimum edge distances and minimum embedment depths for all fasteners that penetrate into the substrate must be as specified on the design drawings and the manufacturer's installation instructions.

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