

## Product Evaluation

GDR141 | 0221

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-141

**Effective Date:** February 1, 2021

**Re-evaluation Date:** February 2025

**Product Name:** Series 400IM and 600IM Commercial Steel Roll-up Doors, Impact Resistant

**Manufacturer:** ASTA Door Corporation  
638 Cassville White Road NW  
Cartersville, GA 30121  
(770) 974-2600

### General Description:

**General:** The Model 424IM, 422IM, 420IM, and 418IM doors are commercial steel rolling doors that consist of the following components:

**Slats:** 24, 22, 20, or 18-gauge galvanized cold roll steel formed in continuous lengths. The slats span between the guides located on each side of the opening. The slats are manufactured from ASTM A653 G40 zinc coated steel and are finished with a baked epoxy primer and/or baked polyester topcoat.

**Guides:** The guides are structural steel. The guide assembly consists of four (4) steel angles: A wall angle (3.00" x 3.00" x 0.25"); an inner angle (3.00" x 3.50" x 0.25"); a service cutout (3.00" x 3.50" x 0.25"); and an outer angle (2.00" x 3.00" x 0.1875"). A guide assembly is required on each side of the door. The guide assembly is continuous from the bottom to the top of the door.

**Windlocks:** The cast iron windlock clips are secured to every other slat beginning at the bottom slat. The windlock clips are secured to the slats with steel zinc plated rivets.

**Bottom Bar:** Consists of two (2) steel angles (each 2.00" x 2.00" x 0.125") with a continuous vinyl bulb astragal. The bottom bar assembly extends the full width of the opening.

**Models:** 624IM, 622IM, 620IM, and 618IM are the same products, but use double-skin insulated slats. Interior slat cover is 24-gauge or 22-gauge.

**Limitations:**

**Maximum Door Width:** 24'-0". Refer to the approved drawings for specific requirements.

**Maximum Door Height:** 30'-0"

**Glazing:** Not permitted.

**Allowable Design Pressure Rating:** Maximum +55 / -60 psf. Refer to the approved drawings for specific design pressure requirements.

**Product Identification:** The rolling door assemblies have a label affixed to the door that identifies the manufacturer (ASTA America); the model number (400 IM & 600IM Series – Impact Rated); the design pressure rating; the test standards (ANSI/DASMA 108-17 / ANSI/DASMA 115-17; the missile level (Missile Level D); and the drawing Number (400-IM-WL-C).

**Impact Resistance:** The rolling steel doors have been tested for windborne debris resistance. The door assemblies passed Missile Level D as 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 "Certified Wind Load and Impact Rated 400/600 Series Angle Guides Roll-Up Door Assembly F8265 Slat;" Drawing 400-IM-WL-C; Sheets 1 through 2; issued August 2, 2019; Rev D dated November 18, 2020; signed and sealed November 18, 2020, by John E. Scates, 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:**

**Wall Construction:** The door is mounted to the following types of wall construction. Mounting is detailed on Sheet 2 of the approved drawing.

- Concrete, minimum 3000 psi compressive strength
- CMU, filled with minimum 2500 psi grout
- Steel; minimum 3/16" thick; Fy=36 ksi

**Installation:** The rolling doors must be anchored to the structure in accordance with the approved drawings. Anchorage of the rolling doors to concrete, steel, and grout-filled CMU must follow the mounting details on the approved drawings and the fasteners specified in the mounting details. Minimum edge distances and minimum embedment depths for all fasteners that penetrate into the structure 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.