



# Product Evaluation

GDR102 | 0215

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-102 **Effective Date:** February 1, 2015  
**Re-evaluation Date:** February 2019

**Product Name:** Models 422, 420, and 418 Flat Slat Steel Roll-up Door, Non-Impact Resistant

**Manufacturer:** ASTA Door Corporation  
4255 McEver Industrial Drive  
Acworth, GA 30101  
(770) 974-2600  
[www.astadoor.com](http://www.astadoor.com)

## General Description:

**General:** Models 422, 420 and 418 are flat slat certified windload rated rolling steel service doors that consist of the following components:

- **Slats:** The slats are available in 22, 20, and 18-gauge galvanized steel cold roll formed into continuous lengths. The slats are galvanized in accordance with ASTM A653-G90 and finished with a baked epoxy primer and baked polyester topcoat.
- **Guides:** The guides are constructed of minimum 3/16" thick steel angle with minimum yield strength of 36 ksi.
- **Windlocks:** The windlocks are attached to every other slat beginning at the bottom slat. The windlocks are attached using two (2); 1/4" x 0.46875" steel, zinc plated rivets.
- **Bottom Bar:** The steel curtain is reinforced with a bottom bar. The bottom bar is constructed of two (2); 2" x 2" x 1/8" structural steel angles with a PVC bulb astragal.

**Product Identification:** A label will be affixed to the steel roll up door. The label must include the manufacturer's name, series number of door, the allowable design pressure rating, and the design drawing number.

**Limitations:**

**Design Drawings:** Install the doors in accordance with the following drawing: "400 Series Flat Slat Certified Windload Rated Rolling Steel Service Door," drawing #607-6CMU-400FM, sheets 1 through 3 of 3, dated December 3, 2014, signed and sealed by Joseph H. Dixon, P.E. on December 3, 2014. This report will refer to as approved drawings as the stated drawings. Keep a copy of the approved drawings available at the job site.

**Wall Construction:** Mount the doors to the following types of wall construction:

- cast-in-place concrete (minimum 3,000 psi)
- CMU grout filled jamb (minimum 3,000 psi grout)
- steel, minimum 3/16" thick, A36.

**Maximum Door Width:** 18'-0"

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

**Glazing:** Not permitted.

**Allowable Design Pressure Rating:** The allowable design pressure varies as a function of door width. The allowable design pressures range from  $\pm 30.6$  psf for 18' wide doors to  $\pm 81$  psf for 8' wide doors. Refer to the approved drawings for the appropriate allowable design pressure.

**Product Identification:** A label will be affixed to the door. The label shall include the manufacturer name; the model number of the door; the design pressure rating for the door; and compliance with either ASTM E 330-02 or ANSI/DASMA 108-05.

**Impact Resistance:** The doors listed in this report do not satisfy TDI's criteria for protection from windborne. Provide an impact protective system when installing the product in areas that require windborne debris protection.

**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 Instructions:**

**General Installation Requirements:** Install the doors in accordance with the manufacturer's installation instructions, the approved drawings, and this product evaluation report.

**Wall Construction:** Mount the doors to the following types of wall construction:

- cast-in-place concrete (minimum 3,000 psi)
- CMU grout filled jamb (minimum 3,000 psi grout)
- steel, minimum 3/16" thick, A36

**Anchorage:** Anchor the doors to the structure in accordance with the approved drawings. Mount the rollup doors to either concrete or steel substrates. Follow the mounting details on the approved drawings and the fasteners specified in the mounting details. The design drawings specify the minimum embedment depths for all fasteners that penetrate into the concrete.

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