

PO Box 12030 | Austin, TX 78711 | 800-578-4677 | tdi.texas.gov

Product Evaluation

GDR41 | 0622

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-41

Effective Date:June 1, 2022Re-evaluation Date:June 2026

Product Name: Series 3100 and Series 3100-IM Steel Roll-Up Doors, Non-Impact Resistant and Impact Resistant

Manufacturer: Janus International Group 135 Janus International Blvd Temple, GA 30179 (866) 562-2580

General Description:

This evaluation report is for the Series 3100 and Series 3100-IM steel roll-up doors. The Series 3100 doors are non-impact resistant. The Series 3100-IM are impact resistant.

The steel roll-up doors consist of a corrugated steel curtain that is suspended from a barrel. Coil springs, located within the barrel, raise and lower the curtain, which wraps around the barrel. The steel curtain is raised by push-up, hand chain, or electric operation. The sides of the curtain are constrained from lateral movement along their vertical edges by steel guides that are attached to the structure.

This evaluation report includes the following doors listed in Table 1 and Table 2:

System	Description	Maximum Width	Maximum Height	Drawing
1	26-Gauge Series 3100 Roll-Up Doors; Single Curtain; Windlocks	16'-0"	20'-0"	T1004
2	26-Gauge Series 3100 Roll-Up Doors; Single Curtain; Windlocks	18'-0"	20'-0"	T1015TX
3	26-Gauge Series 3100 Roll-Up Doors; Single Curtain; Windlocks	20'-0"	20'-0"	T1016TX

 Table 1. Series 3100 Doors- Non-Impact Resistant

Table 2. Series 3100-IM Doors-Impact Resistant

System	Description	Maximum Width	Maximum Height
4	26-Gauge Series 3100 IM Roll-Up Doors; Single Curtain; Windlocks	14'-0"	20'-0"
5	26-Gauge Series 3100 IM Roll-Up Doors; Single Curtain; Windlocks	16'-0"	20'-0"

The steel roll-up doors specified in this evaluation report consist of the following components:

Curtain: 26-gauge corrugated steel that is roll-formed from ASTM A 653 grade 80 steel. The corrugated sheets are galvanized and pre-painted with silicone polyester paint. The corrugated sheets are interlocked mechanically to form the curtain. Lap splices are at approximately 20" on center vertically in the installed door.

Guides:

Galvanized steel roll-formed from ASTM A 653 steel. The dimensions of the guide are $2" \times 4" \times 0.097"$ min/0.102" nom x full length.

Wind Bar:

System 1: Galvanized steel roll-formed from ASTM A 653 steel. The dimensions of the guide are 1.188" x 0.984" x 0.188" x 0.105" x full length of guide.

Systems 2, 3, 4, 5: Galvanized steel roll-formed from ASTM A 653 steel. The dimensions of the guide are 1.188" x 0.984" x 0.188" x 0.097"/0.102" nom x full length of guide.

Bottom Bar:

System 1: One 24-gauge galvanized steel bottom bar full length of curtain. One roll-formed steel angle, 2" x 1-1/2" x 0.097" x full length of curtain. The steel angle is attached to the steel bottom bar with 1/4" diameter thru bolts and lock nuts. Two (2) bolts are located at each end and two (2) bolts are located at the center. One bolt is located 12" on center. A continuous vinyl bulb astragal is attached to the bottom of the steel bottom bar.

Systems 2, 3, 4, 5: One 24-gauge galvanized steel bottom bar full length of curtain. Two rollformed steel angles, 2" x 1-1/2" x 0.97" x full length of curtain. Along the vertical leg, the steel angles are attached to the steel bottom bar with 1/4" diameter thru bolts and lock nuts. Two (2) bolts are located at each end and two (2) bolts are located at the center. One bolt is located 12" on center. Along the horizontal leg, the steel angles are attached to each other with 1/4" diameter thru bolts and lock nuts. Two bolts (2) are located at the center. One (1) bolt is located 12" from the double bolts and one (1) bolt is located 24" on center thereafter. A single bolt is located inboard of the step plate. A continuous vinyl bulb astragal is attached to the bottom of the bottom bar.

Windlocks:

System 1: Galvanized steel. The dimensions of the windlock are 1.130" x 3.040" x 0.120". The windlock is attached to each side of the curtain at every other corrugation. Each windlock is attached to the curtain with three (3) 3/16" diameter zinc coated rivets.

Systems 2, 4: Galvanized steel. The dimensions of the windlock are 1.130" x 3.040" x 0.120". The windlock is attached to each side of the curtain at every other corrugation. Each windlock is attached to the curtain with three (3) 3/16" diameter zinc coated rivets.

Systems 3, 5: Galvanized steel. The dimensions of the windlock are 1.130" x 3.040" x 0.120". The windlock is attached to each side of the curtain at every other corrugation. Each windlock is attached to the curtain with three (3) 3/16" diameter zinc coated rivets.

Hardware: None.

Limitations:

Maximum Opening Width:

System 1: The maximum opening width is 16'-0". Refer to Table 3 for specific requirements.

System 2: The maximum opening width is 18'-0". Refer to Table 4 for specific requirements.

System 3: The maximum opening width is 20'-0". Refer to Table 5 for specific requirements.

System 4: The maximum opening width is 14'-0". Refer to Table 6 for specific requirements.

System 5: The maximum opening width is 16'-0". Refer to Table 7 for specific requirements.

Maximum Opening Height: The maximum opening height is 20'-0". Refer to Tables 3 thru 7 and the approved drawings for specific requirements

Glazing: Not permitted.

Allowable Design Pressure Rating: Refer to Tables 3 thru 7 and the approved drawings for specific design pressure requirements.

Product Identification:

System 1: The rolling door assemblies have a label that identifies the manufacturer (Janus International Group, LLC); the Model No. (3100); the DP is per the referenced drawing; the test standards (ASTM E 330-14, ANSI/DASMA 108-17); and the drawing number (T1004).

System 2: The rolling door assemblies have a label that identifies the manufacturer (Janus International Group, LLC); the Model No. (3100); the DP is per the referenced drawing; the test standards (ASTM E 330-14, ANSI/DASMA 108-2012); and the drawing number (T1015TX).

System 3: The rolling door assemblies have a label that identifies the manufacturer (Janus International Group, LLC); the Model No. (3100); the DP is per the referenced drawing; the test standards (ASTM E 330-14, ANSI/DASMA 108-17); and the drawing number (T1016TX).

System 4: The rolling door assemblies have a label that identifies the manufacturer (Janus International Group, LLC); the Model No. (3100 IM); the DP is per the referenced drawing; the test standards (ANSI/DASMA 108-17, ANSI/DASMA 115-17); and the drawing number (T1015TX).

System 5: The rolling door assemblies have a label that identifies the manufacturer (Janus International Group, LLC); the Model No. (3100 IM); the DP is per the referenced drawing; the test standards (ANSI/DASMA 108-17, ANSI/DASMA 115-17); and the drawing number (T1016TX).

Impact Resistance:

Systems 1, 2, 3: The Series 3100 rolling doors have not been tested for windborne debris resistance for windborne debris.

Systems 4, 5: The Series 3100-IM rolling doors have been tested for windborne debris resistance.

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 always be available 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: **Non-Impact Resistant Doors (3100):**

System 1:

Janus International Corporation; Certified Wind Load Rated 26 GA Series 3100 Door Assembly Max Size 16'-0" x 20'-0"; Drawing T1004; Rev. H; Sheets 1 through 2; issued January 31, 2003; Revision H, dated November 11, 2021; signed and sealed February 24, 2022, 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.

System 2:

Janus International Group, LLC; Certified Wind Load Rated 26 GA Series 3100/3100-IM Door Assembly;" Drawing T1015TX; Sheets 1 through 2; issued April 24, 2018; Revision D, dated November 11, 2021; signed and sealed February 24, 2022, 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.

System 3:

Janus International Group, LLC; Certified Wind Load Rated 26 GA Series 3100/3100-IM Door Assembly;" Drawing T1016TX; Sheets 1 through 2; issued July 30, 2019; Revision C, dated November 11, 2021; signed and sealed February 24, 2022, 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.

Impact Resistant Doors (3100 IM):

System 4:

Janus International Group, LLC; Certified Wind Load Rated 26 GA Series 3100/3100-IM Door Assembly;" Drawing T1015TX; Sheets 1 through 2; issued April 24, 2018; Revision D, dated November 11, 2021; signed and sealed February 24, 2022, 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.

System 5:

Janus International Group, LLC; Certified Wind Load Rated 26 GA Series 3100/3100-IM Door Assembly;" Drawing T1016TX; Sheets 1 through 2; issued July 30, 2019; Revision C, dated November 11, 2021; signed and sealed February 24, 2022, 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: 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 structure must be as specified on the design drawings and the manufacture's installation instructions.

Table 3
System 1
Non-Impact Doors (Model 3100)

Model	Maximum Width	Maximum Height	Drawing	Design Pressure Rating (psf)
	8'-0"			+53.1; -60.5
	9'-0"			+47.4; -54.0
	10'-0"			+42.8; -48.8
	11'-0"			+39.0; -44.5
3100	12'-0"	20'-0"	T1004 Rev H	+36.0; -41.0
	13'-0"			+31.0; -35.4
	14'-0"			+27.3; -31.1
	15'-0"			+24.2; -27.6
	16'-0"			+21.6; -24.7

Table 4 System 2 Non-Impact Doors (Model 3100)

Model	Maximum Width	Maximum Height	Drawing	Design Pressure Rating (psf)	
	10'-0"			+55.3; -55.3	
	11'-0"			+50.5; -50.5	
	12'-0"			+46.4; -46.4	
	13'-0"			+42.9, -42.9	
3100	14'-0"	20'-0"	T1015TX Rev D	+40.0, -40.0	
	15'-0"			+35.6; -35.6	
	16'-0"			+32.0; -32.0	
	17'-0"			+29.0; -29.0	
	18'-0"			+26.4; -26.4	

Table 5
System 3
Non-Impact Doors (Model 3100)

Model	Maximum Width	Maximum Height	Drawing	Design Pressure Rating (psf)
	12'-0"			+55.7; -59.0
	13'-0"			+51.9; -55.0
	14'-0"			+48.1; -51.0
	15'-0"			+44.3, -47.0
3100	16'-0"	20'-0"	T1016TX Rev C	+42.5, -45.0
	17'-0"			+38.5; -40.8
	18'-0"			+35.2; -37.3
	19'-0"			+32.3; -34.3
	20'-0"			+29.8; -31.6

	Table 6					
	System 4					
_	Impact Doors (Model 3100-IM)					
	Model	Maximum	Maximum	Drawing	Design Pressure	
		Width	Height		Rating (psf)	
	3100-IM	14'-0"	20'-0"	T1015TX Rev D	+40.0; -40.0	

Table 7 System 5 Impact Doors (Model 3100-IM)

Model	Maximum Width	Maximum Height	Drawing	Design Pressure Rating (psf)
3100-IM	16'-0"	20'-0"	T1016TX Rev C	+42.5; -45.0

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