# John E. Scates, Professional Engineer

August 11, 2023

Janus International 135 Janus International Blvd Temple, GA 30179

Re: FL 21450 (750/1100)

**Evaluation Report for Janus Series 750 and 1100 Rolling Doors** 

#### To Whom It May Concern:

At the request of Janus International, I have reviewed the drawings and tests listed below. The tests were conducted by Intertek and Underwriters Laboratories according to ANSI/DASMA 108 and ASTM E-330 test procedures. The pressure listed on the drawings are the direct result of these tests or conservative engineering rational analysis from the actual tests. I have concluded that the construction shown on these drawings comply with the structural requirements of the 8th Edition (2023) Florida Building Code. I certify that I meet the requirements of "independence" as detailed in Florida Statutes.

## **Drawings**

T1000-RevG	Series 750 Rolling Curtain Door up to 3'-0" wide,	+35.0 / -45.0 PSF
T1001-RevG	Series 750 Rolling Curtain Door up to 6'-0" wide,	+19.9 / -24.4 PSF
T1002-RevH	Series 750 Rolling Curtain Door up to 8'-8" wide,	+24.4 / -27.0 PSF
T1003-RevH	Series 750 Rolling Curtain Door up to 10'-0" wide,	+19.4 / -22.7 PSF
T1012-RevF	Series 1100 Rolling Curtain Door up to 8'-8" wide,	+24.4 / -27.0 PSF
T1013-RevF	Series 1100 Rolling Curtain Door up to 10'-0" wide,	+19.4 / -22.7 PSF

# **Test Reports**

<b>Drawing</b>	<b>UL Test Report</b>	Test Date
T1000-RevE	SV30743-20161010-Report 1	09-26-2016
T1000-RevF	K6917.01-550-774 (wood jambs)	12-12-2019
T1001-RevE	SV30743-20161010-Report 2	09-26-2016
T1001-RevF	K6917.02-550-774 (wood jambs)	12-12-2019
T1002-RevE, T1012-RevC	SV30743-20161010-Report 3	09-26-2016
T1002-RevF	K6917.03-550-774 (wood jambs)	12-12-2019
T1003-RevE, T1013-RevC	SV30743-20161010-Report 4	09-26-2016
T1002-RevF	K6917.04-550-774 (wood jambs)	12-12-2019

The UL LLC test facility was located at:

750 Anthony Trail Northbrook, IL 60062

The Intertek test facility was located at:

1701 Westfork Dr, Suite 106 Lithia Springs, GA 30122

The test reports were signed by an authorized representative of the Labs, which were accredited independent laboratories.

Testing was conducted in a manner that complied with **DASMA 108-2017**, and with ASTM **E330-14**.

#### **Calculations**

The loads applied to the jambs by the door via direct pressure and end-tension catenary forces were computed using industry standard methods. These results are shown as "Vx" and "Vy" on sheet 2 of each drawing. In some instances, the catenary load was zero and thus Vx does not appear on these drawings.

For locations requiring Impact:

- Doors less than the tested width are allowed but carry the same psf rating as the tested product.
- Doors wider than tested width are not approved in locations requiring impact.

For locations not requiring Impact:

 Doors other than tested width may have a higher or lower psf rating based on rational analysis using industry-standard calculation methods. The psf rating was determined wherein the end tension, jamb loads, and curtain bending stress are limited to the values computed for the tested width and pressure. A table on the drawing lists these additional widths.

#### **Installation Instructions**

#### **Anchorage Requirements:**

The door drawing includes means to attach the door to Steel or Concrete building structure as detailed on Sheet 2.

This Evaluation Report does not address design of the wall/jambs themselves, but provides the anticipated jamb loads that will be generated by this product, Vx and Vy, also illustrated on Sheet 2.

# **Model Descriptions**

This Evaluation is for Series 750 and 1100 Rolling Doors by Janus International.

All doors consist of a corrugated steel sheet curtain suspended from a drum roller. The curtain on all models is suspended from a drum roller. Coiling around the drum raises the curtain. The sides of the curtain are constrained from lateral movement along their vertical edges by steel guides that are attached to the door jambs. This constraint provides resistance to wind forces. Various guide configurations are used for the different door styles included in this report. The wind forces are transferred from the curtain to the guides and then through the attachment elements to the door jamb.

## Series 750 (Mini Door)

Door curtains have a thickness of 26 gage (min. 0.017 in.) and are made of ASTM A653 structural steel, grade 80, pre-painted, galvanized steel with a full coat of primer and baked siliconized polyester finish coat. The corrugated sheets are interlocked mechanically to form the curtain. Lap splices are at approximately 20 inches on center vertically in the installed door. The corrugation height is approximately 5/8 inches, and the corrugation pitch is 3.25 inches. Style variations include door width, windlocks, and wind load rating.

#### Series 1100

Series 1100 is the same as the Series 750 in windload features. It is the commercial variant.

Various door widths are described in detail on drawings T1000 (3'-0" wide), T1001 (6'-0" wide), T1002/T1012 (8'-8" wide), and T1003/T1013 (10'-0" wide).

Doors 3'-0" wide are constructed according to drawing T1000.

Doors greater than 3'-0" wide up to 6'-0" wide are constructed according to drawing T1001. A chart on this drawing shows the allowable pressure ratings based on various door widths.

Doors greater than 6'-0" wide up to 10'-0" wide may constructed per drawings T1002, T1012, T1003, and T1013. Widths not specifically listed carry the same design wind pressure as the next larger documented width provided all other requirements on the larger width door drawing remain unchanged.

Doors shown on drawings T1000 and T1001 do not have windlocks. Doors shown on drawings T1002, T1012, T1003, and T1013 have windlocks.

## **Additional Limitations**

The drawings cited above are an explicit part of this evaluation report. The text of this report does not attempt to address all design details but relies upon the illustrations and text of these drawings and instructions as well.

Each door should be chosen based on the "psf" requirement determined for a specific installation or locale.

The maximum opening width approved with this report is 10'.

The maximum door height for Series 750 is 12' nominal.

The maximum door height for Series 1100 is 14' nominal.

Doors narrower than tested width are allowed but carry the same psf as the tested product. Exception: Drawing T1001 has a chart for widths less than tested that may be used.

The user of this product is reminded that rolling doors can generate substantial catenary forces at the jambs ("Vx"). The building jambs must be designed to withstand these loads in combinations of Vx with Vy(+), and Vx with Vy(-) shown on sheet 2 of the drawings.

These doors have not been evaluated for impact.

These doors have not been evaluated for use in the Florida High Velocity Hurricane Zone (HVHZ).

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