

October 12, 2020 (revised 12/17/24)

Evaluation Report for Clopay Corporation Sectional Garage Doors: 904/Avante AX aluminum frame doors – Impact Resistant

I have evaluated the wind load door designs as shown on the drawings listed below. I have reviewed the test reports, which were generated by accredited laboratories as required by the relevant Florida Administrative Rule, the engineering rational analysis, and the product drawings. The test reports are listed below. Assembly testing was conducted by American Test Lab North Carolina.

For the doors listed in Table 1, Static Pressure Tests were conducted in accordance with TAS 202-1994, ASTM-E330-2002 and ANSI/DASMA 108-2005. Missile Impact and Cyclic Pressure Tests were conducted in accordance with TAS 201-1994 and TAS 203-1994 and ASTM E1886-2005 and ASTM E1996-2009 and ANSI/DASMA 115-2005. The pressures listed on the drawings are either direct results of these tests or results obtained through engineering rational analysis based on actual tests. I have concluded that the door designs listed below in Table 1 are in compliance with these High Velocity Hurricane Zone test requirements of the Florida Building Code and therefore are qualified as impact-resistant assemblies (large missile impact).

TABLE 1: Drawings for doors with Manufacturing Product Code (MPC) C-AL2-1F499:

Drawing	Maximum Width	Maximum Height	Design Loads (PSF)	Florida Product Approval
105611-Rev00	9'2"	20'0"	+52/-58	34540.001
105608-Rev00	12'2"	20'0"	+52/-58	34540.002
105609-Rev00	16'2"	20'0"	+46/-52	34540.003
105827-Rev02	18'2"	20'0"	+36/-40	34540.004

Test Reports:

The following test reports are based on testing conducted by American Test Lab at their North Carolina Facility: 0512.01-20 (7/29/20), 0714.01-20 (9/16/20), 0609.01-21 (06/29/22), 0916.01-24 (10/22/24).

Product Description for doors with MPC C-AL2-1F499:

These doors consist of 2" (nominal) thick aluminum frame sections with laminated impact resistant glazed panels. The aluminum frames are as detailed on the approval drawings. The maximum section height is 24". The following models are at least structurally equivalent to the tested door: 904, 904U, C4AL, A4ALU, AX, AXU. Not all models may be shown on a given drawing.

Laminated Impact Resistant Glazing:

Cardinal 9.4 Seastorm glazing with Kuraray Trisifol® PVB interlayer is used for all doors. Kuraray Trisifol is approved for use in Dade County on NOA 19-0305.02.

EVALUATION REPORT FOR CLOPAY CORPORATION SECTIONAL GARAGE DOORS:
904/AVANTE AX ALUMINUM FRAME DOORS – IMPACT RESISTANT

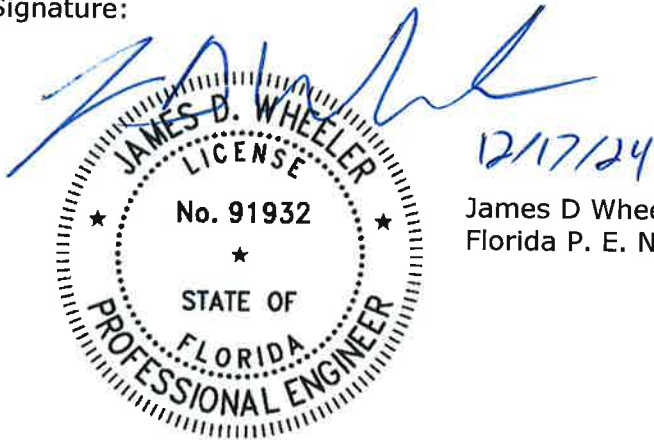
Limitations:

The drawing(s) cited above are an explicit part of this evaluation report. The text of this report does not attempt to address all design details and relies on the illustrations and text of these drawings as well.

Jambs, lintels, sills or other structural elements required to prepare openings are not covered. The design of the supporting structural elements shall be the responsibility of the professional of record for the building or structure and in accordance with current building codes for the loads listed on the drawing(s) referenced above.

Installation requirements per the relevant Florida Administrative Rule, including attachments, are detailed on the drawing(s) listed above. Installation must be in accordance with manufacturer's installation Instructions and must be as shown on the drawing(s) listed above. The manufacturer's licensed design professional listed on the drawing(s) has reviewed the attachment details and installation requirements.

Signature:

A handwritten signature in blue ink is written over a circular professional engineer seal. The seal contains the text "JAMES D. WHEELER", "LICENSE", "No. 91932", "STATE OF FLORIDA", and "PROFESSIONAL ENGINEER". To the right of the seal, the date "12/17/24" is handwritten in blue ink.

James D Wheeler, P. E.
Florida P. E. No. 91932