

STRUCTURAL SOLUTIONS, P.A.

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR STATIC PRESSURE EVALUATION REPORT

Garage Door No.:	IRC-9516-169-26-G		Test Date:	3/20-3/22/2013		Project No.:	03-022			
Design Pressures:	+45.8 psf, -49.3 psf		Report Date:	11/3/2020		Model #	950			
Test Pressures:	+68.7 psf, -74 psf		Test Location:	American Test Lab, Inc., Brevard, NC						
ASCE 7-16 Criteria:	Up to 5 Feet of Door Width in Zone 5; Any Roof Slope; Enclosed Building									
	Exp. B, 30' MRH		Exp. C, 15' MRH		Exp. C, 25' MRH		Exp. D, 15' MRH		Exp. D, 25' MRH	
	218 mph		198 mph		188 mph		180 mph		173 mph	

Reference Test Report and Drawing:

- American Test Lab, Inc. report number ATLNC-0320.01-13 dated 5/1/2013, and Addendum dated 7/16/2013
- Amarr Garage Doors drawing number IRC-9516-169-26-G dated 3/12/2013
- Architectural Testing, Inc. report number A7420.01-106-18 dated 4/12/2011

Description of Test Specimen:

Amarr Garage Door 16'-0"x7'-0" Model 950, 24 ga steel garage door as shown in drawing IRC-9516-169-26-G.

Test Standards and Report Conclusion:

The above referenced Test Report by American Test Lab, Inc. states the following:

- The test was conducted in accordance with FBC TAS 201, 202, 203; ASTM E330, E1886, E1996, F588; and ANSI / DASMA 108, 115
- The door was operable before and after test
- The test was witnessed and certified by David Johnson, P.E. of Brevard, NC (FL PE #00061915)

The above referenced Test Report by Architectural Testing, Inc. states the following:

- The test was conducted in accordance with ASTM B117-09 and D1654-08.
- The coated steel door skin panels exhibited rust creepage ratings of 0 while the G-90 coated steel control samples displayed rust creepage ratings of 6.

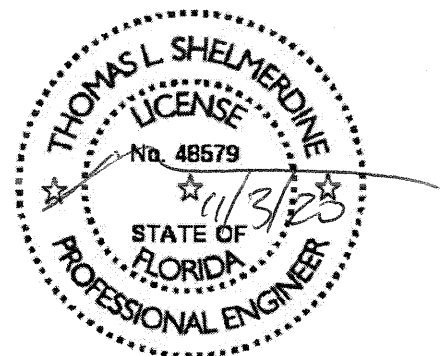
Summary:

The 16'-0"x7'-0" Model 950 door as described on Drawing IRC-9516-169-26-G meets the testing criteria as described above. By comparison to the construction of the 16'-0"x7'-0" Model 950, the following doors also meet the above testing criteria, when constructed in accordance with Drawing IRC-9516-169-26-G:

- 16' x 7' Model 655 doors (which have the "Oak Summit" embossment pattern)
- 16' x 7' Model 950i and 655i doors (which have drop-in insulation)
- Model 950, 950i, 655 and 655i doors with widths of up to 16' and heights of up to 14'.
- Short, Long, Flush, and Oak Summit Panels, which are alternate embossment patterns in the skin.
- 8 short panel (18-1/8" x 10-5/8") windows (5/16" annealed laminated glass minimum - meets ASTM E1300-04) may be installed in 1 section
- Drop-In insulation (when used) shall be Expanded Polystyrene that meets ASTM E-84 with a flame spread index of 75 or less.

To the best of my knowledge, the above garage door conforms to the requirements of the Florida Building Code 7th Edition (2020).

Submitted By:



STRUCTURAL SOLUTIONS, P.A. (Florida: dba Structural Solutions of North Carolina, Inc., Firm #29412)

Thomas L. Shelmerdine, PE (NC PE #14654; Florida PE #0048579)

5921-G West Friendly Avenue ■ Greensboro, North Carolina 27410 ■ (336) 856-2686 ■ Fax (336) 856-2687 ■ NC Firm #C-1096