

STRUCTURAL SOLUTIONS, P.A.

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR STATIC PRESSURE EVALUATION REPORT

Garage Door No.:	IRC-1609-155-15-I		Test Date:	2/10-2/11/2014		Project No.:	14-040			
Design Pressures:	+38 psf, -45 psf		Report Date:	11/3/2020		Model #	1600			
Test Pressures:	+57 psf, -67.5 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	
	200 mph		182 mph		173 mph		165 mph		158 mph	

Reference Test Report and Drawing:

- American Test Lab, Inc. report number ATLNC-0210.01-14 dated 4/28/2014
- Amarr Garage Doors drawing number IRC-1609-155-15-I dated 2/6/2014

Description of Test Specimen:

Amarr Garage Door 9'-0"x7'-0" Model 1600, 27 ga steel garage door as shown in drawing IRC-1609-155-15-I.

Test Standards and Report Conclusion:

The above referenced Test Report states the following:

- The weight of the missile used for the Large Missile Impact Test was 9.3 lbs.
- The test was conducted in accordance with 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)

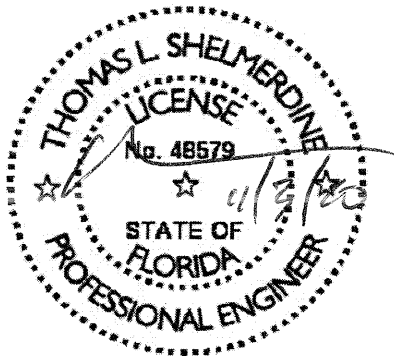
Summary:

The 9'-0"x7'-0" Model 1600 door as described on Drawing IRC-1609-155-15-I meets the testing criteria as described above. By comparison to the construction of the 9'-0"x7'-0" Model 1600, the following doors also meet the above testing criteria, when constructed in accordance with Drawing IRC-1609-155-15-I:

- 9' x 7' Model 1650 doors (which have alternate embossment patterns in the skin)
- Model 1600 and 1650 doors with widths up to 9'-0" and heights up to 14'-0"
- Lincoln 3000 and Hillcrest 3000 doors (which are Models 1600 and 1650 respectively)
- Short, Long, Flush, and Hillcrest Panels, which are alternate embossment patterns in the skin
- 4 short panel windows (18-1/8" x 10-5/8" x 5/16" laminated glass - meets ASTM E1300-04)
or 2 long panel windows (38-1/16" x 10-5/8" x 1/4" polycarbonate) may be installed in 1 section

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)

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