

STRUCTURAL SOLUTIONS, P.A.

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR STATIC PRESSURE EVALUATION REPORT

Garage Door No.:	IRC-1618-155-26-I	Test Date:	2/17-2/20/2014	Project No.:	14-043
Design Pressures:	+36.1 psf, -40.8 psf	Report Date:	11/3/2020	Model #	1600
Test Pressures:	+54.2 psf, -61.2 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-0218.01-14 dated 4/30/2014
- Amarr Garage Doors drawing number IRC-1618-155-26-I dated 2/24/2014

Description of Test Specimen:

Amarr Garage Door 18'-0"x7'-0" Model 1600, 27 ga steel garage door as shown in drawing IRC-1618-155-26-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)

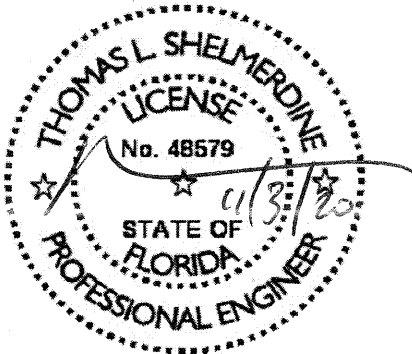
Summary:

The 18'-0"x7'-0" Model 1600 door as described on Drawing IRC-1618-155-26-I meets the testing criteria as described above. By comparison to the construction of the 18'-0"x7'-0" Model 1600, the following doors also meet the above testing criteria, when constructed in accordance with Drawing IRC-1618-155-26-I:

- 18' x 7' Model 1650 doors (which have alternate embossment patterns in the skin)
- Model 1600 and 1650 doors with widths up to 18'-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
- 8 short panel windows (18-1/8" x 10-5/8" x 5/16" annealed glass - meets ASTM E1300-04)
or 4 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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