

STRUCTURAL SOLUTIONS, P.A.

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR STATIC PRESSURE EVALUATION REPORT

Garage Door No.:	IRC-1618-130-24-I		Test Date:	10/22-10/24/2013	Project No.:	11-068
Design Pressures:	+25.4 psf, -28.7 psf		Report Date:	11/10/2020	Model #	1600
Test Pressures:	+38.1 psf, -43.1 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	
	168 mph	152 mph	145 mph	138 mph	133 mph	

Reference Test Report and Drawing:

- American Test Lab, Inc. report number ATLNC-1022.01-13 dated 12/16/2013
- Amarr Garage Doors drawing number IRC-1618-130-24-I dated 12/15/2011

Description of Test Specimen:

Amarr Garage Door 18'-0"x7'-0" Model 1600, 27 ga steel garage door as shown in drawing IRC-1618-130-24-I.

Test Standards and Report Conclusion:

The above referenced Test Report states the following:

- The test was conducted in accordance with ASTM E330, E1886, E1996, F588; and ANSI / DASMA 108, 115
- The weight of the missile used for the Large Missile Impact Test was 9.3 lbs.
- 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)

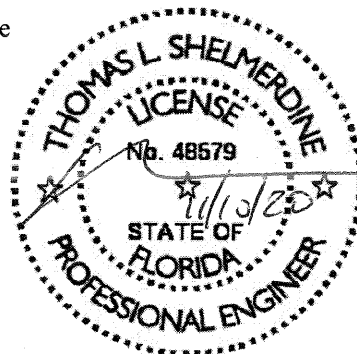
Summary:

The 18'-0"x7'-0" Model 1600 door as described on Drawing IRC-1618-130-24-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-1618-130-24-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 laminated glass minimum - 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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