

STRUCTURAL SOLUTIONS, P.A.

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR STATIC PRESSURE EVALUATION REPORT

Garage Door No.:	IRC-6016-133-17-I		Test Date:		3/17-3/19/2014		Project No.:		14-016	
Design Pressures:	+27.4 psf, -30.5 psf		Report Date:		11/3/2020		Model #		600	
Test Pressures:	+41.1 psf, -45.8 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	
	172 mph		156 mph		148 mph		142 mph		136 mph	

Reference Test Report and Drawing:

- American Test Lab, Inc. report number ATLNC-0317.01-14 dated 4/28/2014
- Amarr Garage Doors drawing number IRC-6016-133-17-I dated 3/3/2014

Description of Test Specimen:

Amarr Garage Door 16'-0"x7'-0" Model 600, 25 ga steel garage door as shown in drawing IRC-6016-133-17-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 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)

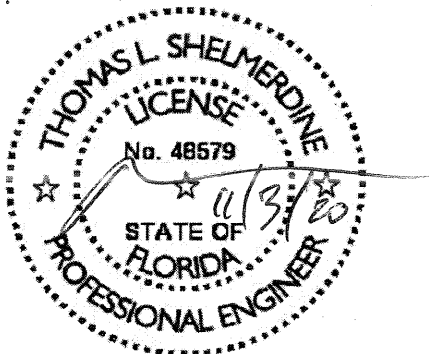
Summary:

The 16'-0"x7'-0" Model 600 door as described on Drawing IRC-6016-133-17-I meets the testing criteria as described above. By comparison to the construction of the 16'-0"x7'-0" Model 600, the following doors also meet the above testing criteria, when constructed in accordance with Drawing IRC-6016-133-17-I:

- 16' x 7' Model 950 doors (which are constructed of thicker 24 gauge steel in lieu of 25 gauge steel)
- 16' x 7' Model 650 doors (which have the "Oak Summit" embossment pattern in the skin)
- Model 600, 650 and 950 doors with widths up to 16'-0" and heights up to 14'-0"
- Short, Long, Flush, and Oak Summit Panels, which are alternate embossment patterns in the skin
- 8 short panel windows (19" x 10-5/8" x 5/16" annealed laminated glass minimum - meets ASTM E1300-04) 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)

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