

STRUCTURAL SOLUTIONS, P.A.*

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IBC-1016-150-26-I		Test Date:	10/17-10/20/2016	Project No.:	16-067
Design Pressures:	+31.2 psf, -35.3 psf		Report Date:	10/29/2020	Model #	1000
Test Pressures:	+46.8 psf, -53 psf		Test Location:	American Test Lab, Inc., Brevard, NC		
ASCE 7-16 Criteria:	Up to 5 Feet of Door Width in Zone 5; Roof Slope ≤ 10°; Enclosed Building					
	Exp. B, 30' MRH	Exp. C, 15' MRH	Exp. C, 25' MRH	Exp. D, 15' MRH	Exp. D, 25' MRH	
	194 mph	176 mph	168 mph	160 mph	154 mph	

Reference Test Report and Drawing:

- American Test Lab, Inc. report number ATLNC-1018.02-16 dated 12/13/2016
- Entrematic Drawing number IBC-1016-150-26-I dated 11/18/2016

Description of Test Specimen:

16'-2"x8'-0" Model 1000, 24 ga exterior & 27 ga interior steel garage door as shown in drawing IBC-1016-150-26-I.

Test Standards and Report Conclusion:

The above referenced Test Report states the following:

- The tests were conducted in accordance with ASTM E1886-05, E1996-09, F588-07; and ANSI / DASMA 115-2005.
- The weight of the missile used for the Large Missile Impact Test was 9.3 lbs.
- All tests were conducted with no deviations.
- The test was witnessed and certified by David Johnson, PE, 1656 Calvert Road, Brevard, NC (FL PE #00061915)
- American Test Lab is accredited by IAS, Certification #TL-423.

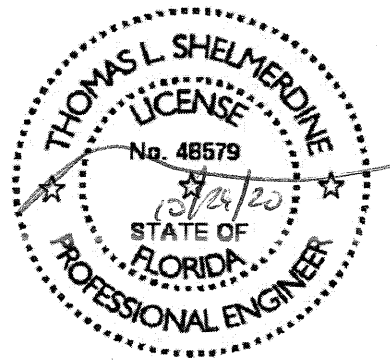
Summary:

The 16'-2"x8'-0" Model 1000 as described on drawing IBC-1016-150-26-I meets or exceeds the testing criteria as described above. By comparison to the construction of the 16'-2"x8'-0" Model 1000, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IBC-1016-150-26-I:

- 16'-2"x8'-0" Amarr Model # 2432 doors, which is an alternate model number for Model 1000
- Model 1000 and Amarr model 2432 doors with widths up to 16'-2" and heights up to 24'-0"
- 4 windows (38-1/8" x 10-5/8" x 1/4" Makrolon 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)

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