

STRUCTURAL SOLUTIONS, P.A.*

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IBC-2416-150-26-I		Test Date:	4/26-4/28/2016		Project No.:	16-021			
Design Pressures:	+31.2 psf, -35.3 psf			Report Date:	10/26/2020		Model #	2400		
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-0426.01-16 dated 6/13/2016
- Entrematic Drawing number IBC-2416-150-26-I dated 5/31/2016

Description of Test Specimen:

16'-2"x8'-0" Model 2400, 24 ga steel garage door as shown in drawing IBC-2416-150-26-I.

Test Standards and Report Conclusion:

The above referenced Test Report states the following:

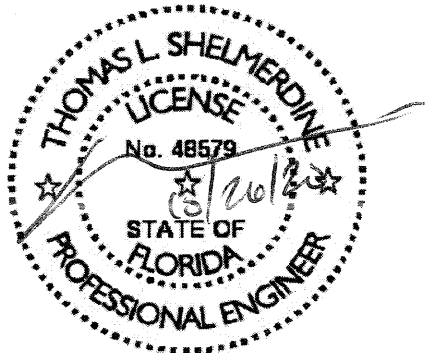
- The tests were conducted in accordance with ASTM E1886-05, E1996-09, F588-07; and ANSI / DASMA 115-2005.
- The weight of the missile used for the Large Missile Impact Test was 9.5 lbs.
- All tests were conducted with no deviations.
- The test was witnessed and certified by David Johnson, PE, 1656 Calvert Road, Brevard, NC (FL PE #00061915)
- American Test Lab is accredited by IAS, Certification #TL-423.

Summary:

The 16'-2"x8'-0" Model 2400 as described on drawing IBC-2416-150-26-I meets or exceeds the testing criteria as described above. By comparison to the construction of the 16'-2"x8'-0" Model 2400, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IBC-2416-150-26-I:

- Model 2000 doors (which are constructed of thicker 20 gauge steel in lieu of 24 gauge steel)
- Amarr # 2402 and 2002 doors which are alternate model numbers for Models 2400 and 2000 respectively
- Amarr # 2412 and 2012 doors which are Models 2400 and 2000 with drop-in insulation
- Amarr # 2422 and 2022 doors which are Models 2400 and 2000 with drop-in insulation & steel backing inserts
- Model 2400, 2000, Amarr # 2402, 2412, 2422, 2002, 2012, 2022 doors with widths up to 16'-2" and heights up to 24'-0"

Submitted By:



STRUCTURAL SOLUTIONS, P.A.* (*Florida: dba Structural Solutions of North Carolina, Inc., Firm #29412)

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