

STRUCTURAL SOLUTIONS, P.A.*

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IBC-2516-150-26-I		Test Date:	3/23-3/25/2015		Project No.:	15-010			
Design Pressures:	+31.4 psf, -35.5 psf		Report Date:	10/30/2020		Model #	2500			
Test Pressures:	+47.1 psf, -53.3 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	
	195 mph		177 mph		168 mph		161 mph		154 mph	

Reference Test Report and Drawing:

- American Test Lab, Inc. report number ATLNC-0323.03-15 dated 4/20/2015
- Entrematic Drawing number IBC-2516-150-26-I dated 2/10/2015

Description of Test Specimen:

16'-2"x8'-0" Amarr Model 2500, 25 ga steel garage door as shown in drawing IBC-2516-150-26-I.

Test Standards and Report Conclusion:

The above referenced Test Report states the following:

- The tests were conducted in accordance with ASTM E1886-05, E1996-05, F588-07; and ANSI / DASMA 108-2005, 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.

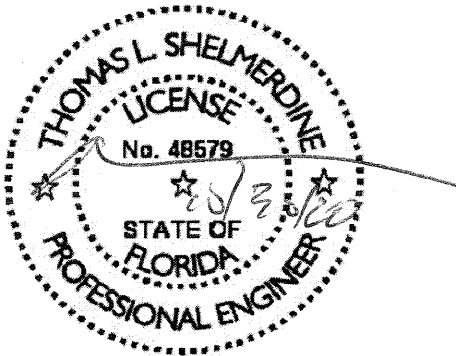
Summary:

The 16'-2"x8'-0" Amarr Model 2500 as described on drawing IBC-2516-150-26-I meets or exceeds the testing criteria as described above. By comparison to the construction of the 16'-2"x8'-0" Amarr Model 2500, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IBC-2516-150-26-I:

- Amarr Model 2400 doors (which are constructed of thicker 24 gauge steel in lieu of 25 gauge steel)
- Amarr Model 2000 doors (which are constructed of thicker 20 gauge steel in lieu of 25 gauge steel)
- Amarr Model 2500, 2400 and 2000 doors with widths up to 16'-2" and heights up to 24'-0"

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