

STRUCTURAL SOLUTIONS, P.A.*

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IBC-2509-104-11-R		Test Date:	1/18/2016		Project No.:	16-005			
Design Pressures:	+15.6 psf, -18.3 psf		Report Date:	10/29/2020		Model #	2500			
Test Pressures:	+23.4 psf, -27.5 psf		Test Location:	Entrematic, Winston-Salem, 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	
	135 mph		122 mph		116 mph		111 mph		106 mph	

Reference Test Report and Drawing:

- Structural Solutions, P.A.* Garage Door Static Pressure Test Report for IBC-2509-104-11-R dated 10/29/2020
- Entrematic Drawing number IBC-2509-104-11-R dated 8/19/2015

Description of Test Specimen:

9'-4"x8'-0" Model 2500, 25 ga steel garage door as shown in drawing IBC-2509-104-11-R.

Test Standards and Report Conclusion:

The above referenced Test Report states the following:

- The tests were conducted in accordance with ASTM E330-14 and DASMA 108-05.
- The test was witnessed and certified by Thomas L. Shelmerdine, PE (FL PE# 48579)
- The test facility at Entrematic is accredited by the American Association for Laboratory Accreditation, Certificate #2595.01.

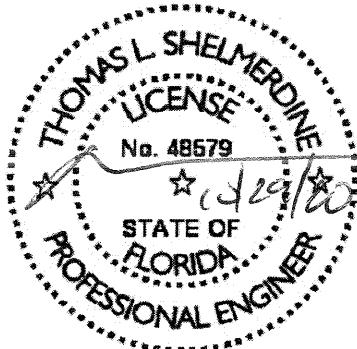
Summary:

The 9'-4"x8'-0" Model 2500 as described on drawing IBC-2509-104-11-R meets or exceeds the testing criteria as described above. By comparison to the construction of the 9'-4"x8'-0" Model 2500, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IBC-2509-104-11-R:

- Model 2400 doors (which are constructed of thicker 24 gauge steel in lieu of 25 gauge steel)
- Model 2000 doors (which are constructed of thicker 20 gauge steel in lieu of 25 gauge steel)
- Model 2500, 2400 and 2000 doors with widths up to 9'-4" and heights up to 10'-0"
- Amarr 2502, 2402, & 2002 (which are alternate names for Model 2500, 2400 & 2000 respectively)
- Amarr 2512, 2412 & 2012 (which are Model 2500, 2400 & 2000 doors with drop-in insulation)
- Amarr 2422 & 2022 (which are Model 2400 & 2000 doors with drop-in insulation and steel backing inserts over the insulation)
- 2 windows may be installed in 1 section (21 5/8" x 9 5/8" x 0.080" plexiglass, or 21 3/8" x 3 1/4" x 0.080" plexiglass)

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)

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