

STRUCTURAL SOLUTIONS, P.A.*

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IBC-2414-145-24		Test Date:	12/18/2014		Project No.:	14-154			
Design Pressures:	+29.2 psf, -33.3 psf		Report Date:	10/30/2020		Model #	2400			
Test Pressures:	+43.8 psf, -50 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	
	187 mph		170 mph		161 mph		154 mph		148 mph	

Reference Test Report and Drawing:

- Structural Solutions, P.A.* Garage Door Static Pressure Test Report for IBC-2414-145-24 dated 10/30/2020
- Entrematic Drawing number IBC-2414-145-24 dated 1/22/2015

Description of Test Specimen:

14'-2"x8'-0" Model 2400, 24 ga steel garage door as shown in drawing IBC-2414-145-24.

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.

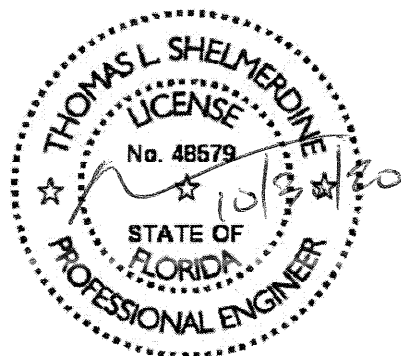
Summary:

The 14'-2"x8'-0" Model 2400 as described on drawing IBC-2414-145-24 meets or exceeds the testing criteria as described above. By comparison to the construction of the 14'-2"x8'-0" Model 2400, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IBC-2414-145-24:

- 14'-2" x 8'-0" Amarr Model 2000 doors (which are constructed of thicker 20 gauge steel in lieu of 24 gauge steel)
- Amarr Model 2000 and 2400 doors with widths up to 14'-2" and heights up to 24'-0"
- 4 windows may be installed in 1 section (21 5/8" x 9 5/8" x 0.080" plexiglass, 21 3/8" x 3 1/4" x 1/8" DSB, 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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