

STRUCTURAL SOLUTIONS, P.A.*

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IBC-2450-140-63		Test Date:	10/12/2016	Project No.:	16-084
Design Pressures:	+27.9 psf, -32.5 psf		Report Date:	10/29/2020	Model #	2400/3550
Test Pressures:	+41.9 psf, -48.8 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	
	181 mph	164 mph	156 mph	149 mph	143 mph	

Reference Test Report and Drawing:

- Structural Solutions, P.A.* Garage Door Static Pressure Test Report for IBC-2450-140-63 dated 10/29/2020
- Entrematic Drawing number IBC-2450-140-63 dated 12/6/2016

Description of Test Specimen:

10'-2"x8'-0" Model 2400/3550, 24ga steel garage door as shown in drawing IBC-2450-140-63.

Test Standards:

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.

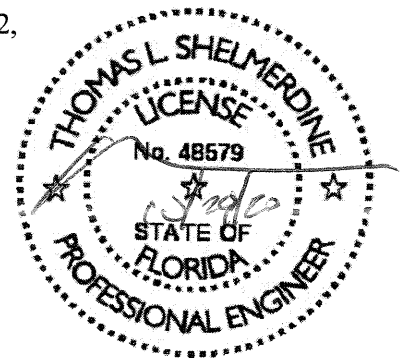
Summary:

The 10'-2"x8'-0" Model 2400/3550 as described on drawing IBC-2450-140-63 meets or exceeds the testing criteria as described above. By comparison to the construction of the 10'-2"x8'-0" Model 2400/3550, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IBC-2450-140-63:

- 10'-2" x 8'-0" Model 2000/3550 doors (which are constructed of thicker 20 gauge steel sections in lieu of 24 gauge steel sections)
- Amarr Model # 2402/3552 and 2002/3552 doors, which are alternate model numbers for the 2400/3550 and 2000/3550 doors
- Amarr Model # 2412/3552 and 2012/3552 doors, which are Model 2400/3550 and 2000/3550 doors with drop-in insulation
- Amarr Model # 2422/3552 and 2022/3552 doors, which are Model 2400/3550 and 2000/3550 doors with drop-in insulation and backer panels
- Model 2400/3550 and 2000/3550 doors, and Amarr Model # 2402/3552, 2412/3552, 2422/3552, 2002/3552, 2012/3552, and 2022/3552 doors, with widths up to 10'-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)

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