

STRUCTURAL SOLUTIONS, P.A.*

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IBC-2410-169-21-I		Test Date:	10/17-10/20/2016		Project No.:	16-102			
Design Pressures:	+40.7 psf, -47.3 psf		Report Date:	10/29/2020		Model #	2400			
Test Pressures:	+61.1 psf, -71 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	
	218 mph		198 mph		188 mph		180 mph		173 mph	

Reference Test Report and Drawing:

- American Test Lab, Inc. report number ATLNC-1017.02-16 dated 12/13/2016
- Entrematic Drawing number IBC-2410-169-21-I dated 12/5/2016

Description of Test Specimen:

10'-2"x8'-0" Model 2400, 24 ga steel garage door as shown in drawing IBC-2410-169-21-I.

Test Standards and Report Conclusion:

The above referenced Test Report states the following:

- The tests were conducted in accordance with FBC TAS 201, 202, 203; ASTM E330-02, E1886-05, E1996-09, E8-04, F588-04; and ANSI / DASMA 108-2005, 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.

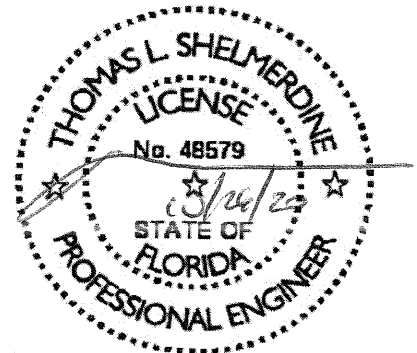
Summary:

The 10'-2"x8'-0" Model 2400 as described on drawing IBC-2410-169-21-I meets or exceeds the testing criteria as described above. By comparison to the construction of the 10'-2"x8'-0" Model 2400, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IBC-2410-169-21-I:

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

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