

STRUCTURAL SOLUTIONS, P.A.

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IBC-2412-104-11-M		Amarr	2402	Report Date:	10/17/2023
Design Pressures:	+15.3 psf, -17.6 psf		Test Pressures:	+22.9 psf, -26.4 psf		Project No. 23-030
Test Date:	5/23/2023	Test Location:		Amarr, 165 Carriage Ct., Winston-Salem, NC		
ASCE 7-22 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	107 mph

Reference Drawing and Test Report(s):

- Amarr Drawing number IBC-2412-104-11-M dated 05/23/2023
- Structural Solutions, P.A. report for IBC-2412-104-11-M dated 10/17/2023
 - Static Air Pressure Test witnessed by Thomas L. Shelmerdine, PE

Description of Test Specimen:

A 12'-4" wide x 8'-0" high x 2" thick sectional garage door, Amarr 2402. All sections were made of 24 ga galvanized steel sheet. The test unit is further described on Drawing IBC-2412-104-11-M.

Test Standards and Report Conclusions:

The above referenced Test Report states the following:

- The tests were conducted in accordance with ANSI/DASMA 108-17; ASTM E330-14
- The tests were witnessed and certified by: Thomas L. Shelmerdine, PE
- All tests passed the referenced Test Standards.
- The Amarr test facility is accredited by the American Association for Laboratory Accreditation, Cert. #2595.01.

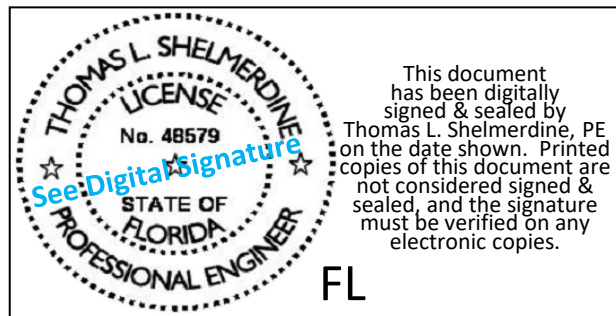
Summary:

The 12'-4"x8'-0" Amarr 2402 door as described on drawing IBC-2412-104-11-M meets or exceeds the testing criteria as described above. By comparison to the construction of the 12'-4"x8'-0" Amarr 2402, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IBC-2412-104-11-M:

- 12'-4" x 8'-0" Amarr 2002 doors (which are constructed of thicker 20 ga steel in lieu of 24 ga)
- 12'-4" x 8'-0" Amarr 2412 & 2012 doors (which are Amarr 2402 & 2002 with drop-in insulation)
- 12'-4" x 8'-0" Amarr 2422 & 2022 doors (which are Amarr 2402 & 2002 with drop-in insulation & steel backing inserts)
- Amarr 2402, 2412, 2422, 2002, 2012, & 2022 doors with widths up to 12'-4" and heights up to 24'-0"
- Up to 3 windows (3-1/4" x 21-3/8" x 1/8" DSB, or 9-5/8" x 21-8/8" x 0.080 plexiglass) may be installed in each section in any combination (except the bottom section)
- Windows are not required to be installed in any section.

To the best of my knowledge, the above garage door conforms to the requirements of the Florida Building Code 8th Edition (2023). I certify that I have no financial interest in the testing lab(s) that performed the tests, nor in Amarr Garage Doors.

Submitted By:



STRUCTURAL SOLUTIONS, P.A.

Thomas L. Shelmerdine, PE (Florida PE #0048579) (dba Structural Solutions of North Carolina, Inc., Florida Firm #29412)

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