

STRUCTURAL SOLUTIONS, P.A.

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IBC-4220-130-24-I		Amarr	2442	Report Date:	8/8/2025
Design Pressures:	+22.9 psf, -27 psf		Test Pressures:	+34.4 psf, -40.5 psf		Project No. 24-077
Test Date:	9/5/2024	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
	168 mph	152 mph	145 mph		138 mph	133 mph

Reference Drawing and Test Report(s):

- Amarr Drawing number IBC-4220-130-24-I dated 08/05/2025
- Structural Solutions, P.A. report for IBC-4220-130-24-I dated 08/08/2025
 - Static Air Pressure Test witnessed by Thomas L. Shelmerdine, PE

Description of Test Specimen:

A 20'-2" wide x 8'-0" high x 2" thick sectional garage door, Amarr 2442. All sections were made of ?? ga galvanized steel sheet. The test unit is further described on Drawing IBC-4220-130-24-I.

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 20'-2"x8'-0" Amarr 2442 door as described on drawing IBC-4220-130-24-I meets or exceeds the testing criteria as described above. By comparison to the construction of the 20'-2"x8'-0" Amarr 2442, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IBC-4220-130-24-I:

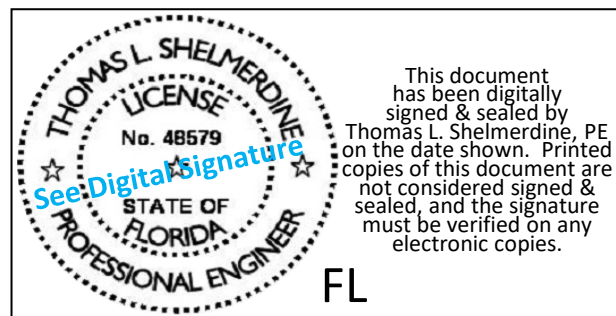
- 20'-2" x 8' Amarr 2042 doors, which have thicker 20ga steel skin
- Amarr 2442 and Amarr 2042 doors with widths up to 20'-2" and heights up to 24'-0"
- Up to 6 windows (21-3/8" x 3 1/4" x 0.080 Plexiglas or 23-3/8" x 10 3/16" x 0.080 Plexiglas or 21-5/8" x 9 5/8" x 1/8" DSB) may be installed in one 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:

Thomas L
Shelmerdine

Digitally signed by Thomas L
Shelmerdine
DN: c=US, o=Unaffiliated,
dnQualifier=A01410D000001938E1ECCE
A0007AC7B, cn=Thomas L Shelmerdine
Date: 2025.08.08 13:01:52 -04'00'



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