

STRUCTURAL SOLUTIONS, P.A.

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IRC-C509-120-11	Model #	C500	Report Date:	10/4/2023
Design Pressures:	+22.8 psf, -26.9 psf	Test Pressures:	+34.2 psf, -40.4 psf	Project No. 15-130	
Test Date:	11/4/2015	Test Location:	Amarr, 165 Carriage Ct., Winston-Salem, NC		
ASCE 7-22 Criteria:	Up to 5 Feet of Door Width in Zone 5; Any Roof Slope; Enclosed Building				
	Exp. B, 30' MRH	Exp. C, 15' MRH	Exp. C, 25' MRH	Exp. D, 15' MRH	Exp. D, 25' MRH
	155 mph	141 mph	134 mph	128 mph	122 mph

Reference Drawing and Test Report(s):

- Amarr Drawing number IRC-C509-120-11 dated 11/18/2015
- Structural Solutions, P.A. report for IRC-C509-120-11 dated 10/04/2023
 - Static Air Pressure Test witnessed by Thomas L. Shelmerdine, PE

Description of Test Specimen:

A 9'-0" wide x 7'-0" high x 2" thick sectional garage door, Model # C500. All sections were made of 27 ga exterior / 27 ga interior galvanized steel sheet. The test unit is further described on Drawing IRC-C509-120-11.

Test Standards and Report Conclusions:

The above referenced Test Report states the following:

- The tests were conducted in accordance with ANSI/DASMA 108-05; 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 9'-0"x7'-0" Model # C500 door as described on drawing IRC-C509-120-11 meets or exceeds the testing criteria as described above. By comparison to the construction of the 9'-0"x7'-0" Model # C500, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IRC-C509-120-11:

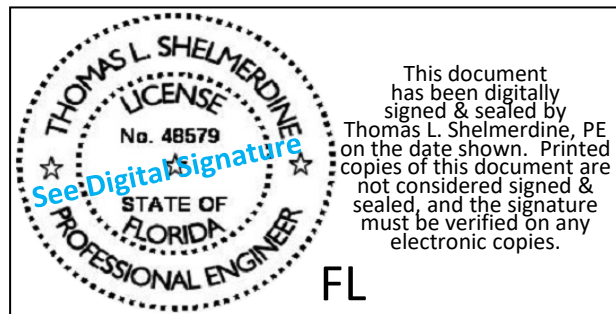
- 9' x 7' Amarr Olympus 3200 doors, which is an alternate name for Model C500
- 9' x 7' Amarr Designer's Choice 3200 doors, which have alternate embossment patterns in the skin
- Model C500, Amarr Olympus 3200 & Amarr Designer's Choice 3200 doors, with widths up to 9'-0" and heights up to 14'-0"
- Up to 4 short-panel windows (18 1/8" x 10 5/8") or 2 long-panel windows (38 1/8" x 10 5/8") using 3/32" SSB glass 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=North Carolina,
dnQualifier=A01410D000001856487A7B1
00125CE2, cn=Thomas L Shelmerdine
Date: 2023.10.04 09:52:11 -04'00'



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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