STRUCTURAL SOLUTIONS, P.A.

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GARAGE DOOR EVALUATION REPORT

Garage Door No.:	**IRC-C509-100-00**	Model #	C500	Report Date:	10/4/2023
Design Pressures:	**+15.8 psf, -18.7 psf**	Test Pressures:	**+23.7 psf, -28 psf**		Project No. 15-077
Test Date:	**6/30/2015**	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**
	129 mph	**117 mph**	**111 mph**	**106 mph**	**102 mph**

Reference Drawing and Test Report(s):

- Amarr Drawing number IRC-C509-100-00 dated 08/07/2015
- Structural Solutions, P.A. report for IRC-C509-100-00 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-C509-100-00.

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-C509-100-00 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-C509-100-00:

- 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=A01410D000001856487A7B100125CE2, cn=Thomas L Shelmerdine
Date: 2023.10.04 09:51:07 -04'00'

THOMAS L. SHELMERDINE
LICENSE
No. 48579
STATE OF FLORIDA
PROFESSIONAL ENGINEER
See Digital Signature

This document has been digitally signed & sealed by Thomas L. Shelmerdine, PE on the date shown. Printed copies of this document are not considered signed & sealed, and the signature must be verified on any electronic copies.

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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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