

STRUCTURAL SOLUTIONS, P.A.*

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IRC-C509-120-11		Test Date:	11/4/2015		Project No.:	15-130			
Design Pressures:	+22.8 psf, -26.9 psf		Report Date:	10/29/2020		Model #	C500			
Test Pressures:	+34.2 psf, -40.4 psf		Test Location:	Entrematic, Winston-Salem, NC						
ASCE 7-16 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 Test Report and Drawing:

- Structural Solutions, P.A.* Garage Door Static Pressure Test Report for IRC-C509-120-11 dated 10/29/2020
- Entrematic Drawing number IRC-C509-120-11 dated 11/18/2015

Description of Test Specimen:

9'-0"x7'-0" Model C500, 27 ga steel garage door as shown in drawing IRC-C509-120-11.

Test Standards and Report Conclusion:

The above referenced Test Report states the following:

- The tests were conducted in accordance with ASTM E330-14 and DASMA 108-05.
- The test was witnessed and certified by Thomas L. Shelmerdine, PE (FL PE# 48579)
- The test facility at Entrematic is accredited by the American Association for Laboratory Accreditation, Certificate #2595.01.

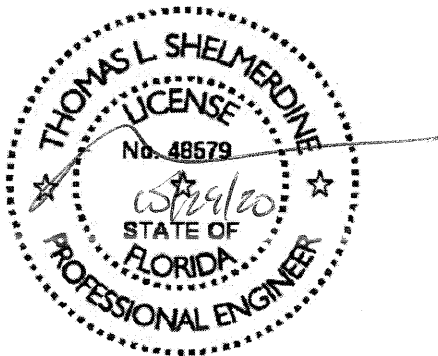
Summary:

The 9'-0"x7'-0" Model C500 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 doors, which is an alternate name for Model C500
- Model C500 and Amarr Olympus doors with widths up to 9'-0" and heights up to 14'-0"
- 4 short panel (18-1/8" x 10-5/8") or 2 long panel (38-1/8" x 10-5/8") windows (3/32" SSD glass minimum) may be installed in 1 section

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)

Thomas L. Shelmerdine, PE (NC PE #14654; Florida PE #0048579)

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