

STRUCTURAL SOLUTIONS, P.A.*

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IRC-C518-155-26-I		Test Date:	10/6-10/8/2015		Project No.:	15-074			
Design Pressures:	+37 psf, -40.6 psf		Report Date:	10/28/2020		Model #	C500			
Test Pressures:	+55.5 psf, -60.9 psf		Test Location:	American Test Lab, Inc., Brevard, 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	
	200 mph		181 mph		172 mph		165 mph		158 mph	

Reference Test Report and Drawing:

- American Test Lab, Inc. report number ATLNC-1006.01-15 dated 2/17/2016
- Entrematic Drawing number IRC-C518-155-26-I dated 1/19/2016

Description of Test Specimen:

18'-0"x7'-0" Model C500, 27 ga steel garage door as shown in drawing IRC-C518-155-26-I.

Test Standards and Report Conclusion:

The above referenced Test Report states the following:

- The tests were conducted in accordance with ASTM E1886-05, E1996-09, F588-07; and ANSI / DASMA 108-2005, 115-2005.
- The weight of the missile used for the Large Missile Impact Test was 9.3 lbs.
- All tests were conducted with no deviations.
- The test was witnessed and certified by David Johnson, PE, 1656 Calvert Road, Brevard, NC (FL PE #00061915)
- American Test Lab is accredited by IAS, Certification #TL-423.

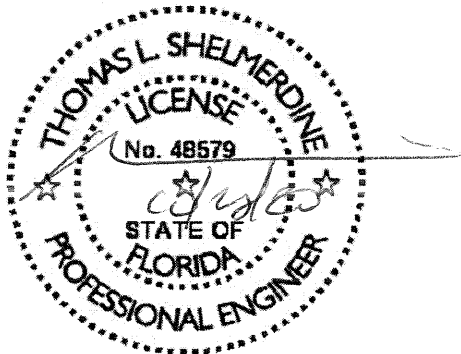
Summary:

The 18'-0"x7'-0" Model C500 as described on drawing IRC-C518-155-26-I meets or exceeds the testing criteria as described above. By comparison to the construction of the 18'-0"x7'-0" Model C500, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IRC-C518-155-26-I:

- 18' x 7' Amarr Olympus doors, which is an alternate name for model C500
- Model C500 and Amarr Olympus doors up to 18'-0" wide and up to 14'-0" high
- 8 short panel windows (18-1/8" x 10-5/8" x 1/4" polycarbonate) or 4 long panel windows (38-1/16" x 10-5/8" x 1/4" polycarbonate) 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)

5921-G West Friendly Avenue ■ Greensboro, North Carolina 27410 ■ (336) 856-2686 ■ Fax (336) 856-2687 ■ NC Firm #C-1096