

STRUCTURAL SOLUTIONS, P.A.*

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IRC-1509-155-15-I		Test Date:	8/15-8/18/2016		Project No.:	15-079			
Design Pressures:	+38 psf, -45 psf		Report Date:	10/29/2020		Model #	1500			
Test Pressures:	+57 psf, -67.5 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		182 mph		173 mph		165 mph		158 mph	

Reference Test Report and Drawing:

- American Test Lab, Inc. report number ATLNC-0815.02-16 dated 12/13/2016
- Entrematic Drawing number IRC-1509-155-15-I dated 10/10/2016

Description of Test Specimen:

9'-0"x7'-0" Model 1500, 27 ga steel garage door as shown in drawing IRC-1509-155-15-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 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.

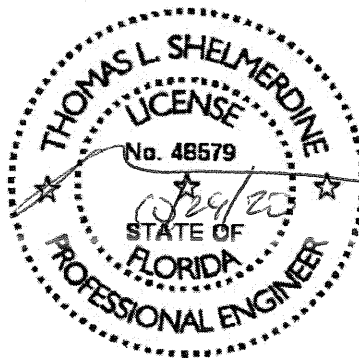
Summary:

The 9'-0"x7'-0" Model 1500 as described on drawing IRC-1509-155-15-I meets or exceeds the testing criteria as described above. By comparison to the construction of the 9'-0"x7'-0" Model 1500, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IRC-1509-155-15-I:

- 9' x 7' Model 1200 doors (which are constructed of thicker 24 gauge exterior steel in lieu of 27 gauge steel)
- 9' x 7' Model 1550 doors (which have alternate embossment patterns in the skin)
- Model 1500, 1200 and 1550 doors with widths up to 9'-0" and heights up to 14'-0"
- Heritage 3000, Stratford 3000, and Oak Summit 3000 doors (which are Models 1200, 1500 and 1550 respectively)
- Short, Long, Flush, and Oak Summit Panels, which are alternate embossment patterns in the skin
- 4 short panel (18-1/8" x 10-5/8") or 2 long panel (38-1/8" x 10-5/8") windows (1/4" Makrolon 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