

STRUCTURAL SOLUTIONS, P.A.*

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IRC-3109-155-15-I		Test Date:	1/22-1/24/2019		Project No.:	18-157			
Design Pressures:	+38 psf, -45 psf		Report Date:	10/13/2020		Model #	3100			
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-0122.01-19 dated 4/2/2019
- Entrematic Drawing number IRC-3109-155-15-I dated 3/19/2019

Description of Test Specimen:

9'-0"x7'-0" Model 3100, 27 ga steel garage door as shown in drawing IRC-3109-155-15-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 115-2012.
- 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, 1122 Calvert Road, Brevard, NC (FL PE #00061915)
- American Test Lab is accredited by IAS, Certification #TL-423.

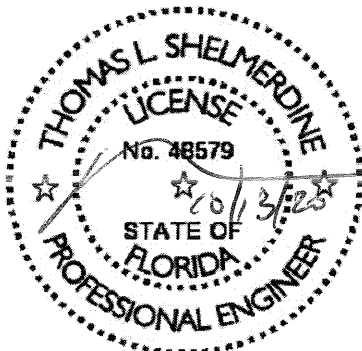
Summary:

The 9'-0"x7'-0" Model 3100 as described on drawing IRC-3109-155-15-I meets or exceeds the testing criteria as described above. By comparison to the construction of the 9'-0"x7'-0" Model 3100, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IRC-3109-155-15-I:

- 9' x 7' Model 3150 doors (which have different embossment patterns in the skin)
- 9' x 7' Model 1600 doors (which are 2" thick in lieu of 1 3/8" thick)
- 9' x 7' Model 1650 doors (which are 2" thick in lieu of 1 3/8" thick, and have different embossment patterns in the skin)
- 9' x 7' Amarr Lincoln 3138, Hillcrest 3138, Lincoln 3000, and Hillcrest 3000 doors, which are alternate model numbers for Models 3100, 3150, 1600 & 1650
- Model 3100, 3150, 1600, 1650, Amarr Lincoln 3138, Hillcrest 3138, Lincoln 3000, and Hillcrest 3000 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 (38-1/16" x 10-5/8") windows (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 ■ www.sspa.biz ■ NC Firm #C-1096