

STRUCTURAL SOLUTIONS, P.A.*

Structural Engineering ■ Investigations ■ Consulting

GARAGE DOOR EVALUATION REPORT

Garage Door No.:	IRC-3109-140-15		Test Date:	12/13/2018	Project No.:	18-155
Design Pressures:	+31 psf, -35.1 psf		Report Date:	10/12/2020	Model #	3100
Test Pressures:	+46.5 psf, -52.7 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	
	177 mph	161 mph	153 mph	146 mph	140 mph	

Reference Test Report and Drawing:

- Structural Solutions, P.A.* Garage Door Static Pressure Test Report for IRC-3109-140-15 dated 10/12/2020
- Entrematic Drawing number IRC-3109-140-15 dated 1/5/2019

Description of Test Specimen:

9'-0"x7'-0" Model 3100, 27 ga steel garage door as shown in drawing IRC-3109-140-15.

Test Standards and Report Conclusion:

The above referenced Test Report states the following:

- The tests were conducted in accordance with ASTM E330-14 and DASTMA 108-12.
- 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.

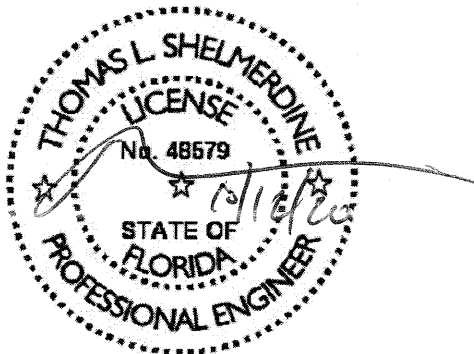
Summary:

The 9'-0"x7'-0" Model 3100 as described on drawing IRC-3109-140-15 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-3109-140-15:

- 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 (18-1/2" x 11") or 2 long panel (38-1/2" x 11") windows (3/32" SSB - meets ASTM E1300-04) 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)

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