

# STRUCTURAL SOLUTIONS, P.A.\*

Structural Engineering ■ Investigations ■ Consulting

## GARAGE DOOR EVALUATION REPORT

|                        |                                                                         |  |                 |                               |                 |              |                 |  |                 |  |
|------------------------|-------------------------------------------------------------------------|--|-----------------|-------------------------------|-----------------|--------------|-----------------|--|-----------------|--|
| Garage Door No.:       | IRC-3118-110-15                                                         |  | Test Date:      | 1/10/2019                     |                 | Project No.: | 19-007          |  |                 |  |
| Design Pressures:      | +18.2 psf, -20.6 psf                                                    |  | Report Date:    | 10/13/2020                    |                 | Model #      | 3100            |  |                 |  |
| Test Pressures:        | +27.3 psf, -30.9 psf                                                    |  | Test Location:  | Entrematic, Winston-Salem, NC |                 |              |                 |  |                 |  |
| ASCE 7-16<br>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 |  |
|                        | 142 mph                                                                 |  | 129 mph         |                               | 123 mph         |              | 117 mph         |  | 112 mph         |  |

### Reference Test Report and Drawing:

- Structural Solutions, P.A.\* Garage Door Static Pressure Test Report for IRC-3118-110-15 dated 10/13/2020
- Entrematic Drawing number IRC-3118-110-15 dated 3/12/2019

### Description of Test Specimen:

18'-0"x7'-0" Model 3100, 27 ga steel garage door as shown in drawing IRC-3118-110-15.

### Test Standards and Report Conclusion:

The above referenced Test Report states the following:

- The tests were conducted in accordance with ASTM E330-14 and DASMA 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.

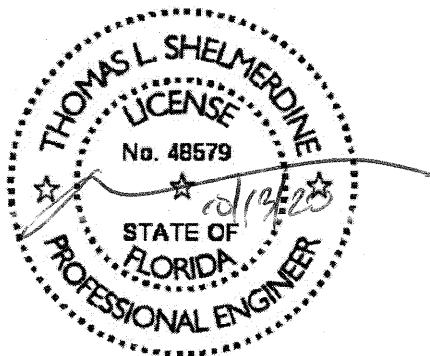
### Summary:

The 18'-0"x7'-0" Model 3100 as described on drawing IRC-3118-110-15 meets or exceeds the testing criteria as described above. By comparison to the construction of the 18'-0"x7'-0" Model 3100, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IRC-3118-110-15:

- 18' x 7' Model 3150 doors (which have different embossment patterns in the skin)
- 18' x 7' Model 1600 doors (which are 2" thick in lieu of 1 3/8" thick)
- 18' x 7' Model 1650 doors (which are 2" thick in lieu of 1 3/8" thick, and have different embossment patterns in the skin)
- 18' 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 18'-0" and heights up to 14'-0"
- 8 short panel (18-1/2" x 11") or 4 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)

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