

# STRUCTURAL SOLUTIONS, P.A.\*

Structural Engineering ■ Investigations ■ Consulting

## GARAGE DOOR EVALUATION REPORT

|                        |                                                                           |  |                 |  |                               |              |                 |        |                 |  |
|------------------------|---------------------------------------------------------------------------|--|-----------------|--|-------------------------------|--------------|-----------------|--------|-----------------|--|
| Garage Door No.:       | IBC-2760-104-63                                                           |  | Test Date:      |  | 5/14/2015                     | Project No.: |                 | 15-059 |                 |  |
| Design Pressures:      | +14.7 psf, -16.5 psf                                                      |  | Report Date:    |  | 10/23/2020                    | Model #      | 2700/3550       |        |                 |  |
| Test Pressures:        | +22.1 psf, -24.8 psf                                                      |  | Test Location:  |  | Entrematic, Winston-Salem, NC |              |                 |        |                 |  |
| ASCE 7-16<br>Criteria: | Up to 5 Feet of Door Width in Zone 5; Roof Slope ≤ 10°; Enclosed Building |  |                 |  |                               |              |                 |        |                 |  |
|                        | Exp. B, 30' MRH                                                           |  | Exp. C, 15' MRH |  | Exp. C, 25' MRH               |              | Exp. D, 15' MRH |        | Exp. D, 25' MRH |  |
|                        | 135 mph                                                                   |  | 122 mph         |  | 116 mph                       |              | 111 mph         |        | 106 mph         |  |

### Reference Test Report and Drawing:

- Structural Solutions, P.A.\* Garage Door Static Pressure Test Report for IBC-2760-104-63 dated 10/23/2020
- Entrematic Drawing number IBC-2760-104-63 dated 6/17/2015

### Description of Test Specimen:

20'-2"x8'-0" Model 2700/3550, 27 ga steel and 0.050 in. aluminum garage door as shown in drawing IBC-2760-104-63.

### 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 108-05.
- 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.

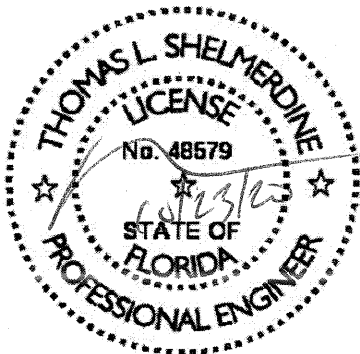
### Summary:

The 20'-2"x8'-0" Model 2700/3550 as described on drawing IBC-2760-104-63 meets or exceeds the testing criteria as described above. By comparison to the construction of the 20'-2"x8'-0" Model 2700/3550, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IBC-2760-104-63:

- 20'-2" x 8'-0" Amarr Model 2720/3550 doors (which have thicker 20ga steel sections in lieu of 27ga steel)
- Amarr Model 2700/3550 and 2720/3550 doors up to 20'-2" wide and up to 24'-0" high

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)

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