

# STRUCTURAL SOLUTIONS, P.A.\*

Structural Engineering ■ Investigations ■ Consulting

## GARAGE DOOR EVALUATION REPORT

|                        |                                                                         |  |                 |                                      |                 |              |                 |  |                 |  |
|------------------------|-------------------------------------------------------------------------|--|-----------------|--------------------------------------|-----------------|--------------|-----------------|--|-----------------|--|
| Garage Door No.:       | IRC-P509-155-15-I                                                       |  | Test Date:      | 12/11-12/12/2017                     |                 | Project No.: | 12-026          |  |                 |  |
| Design Pressures:      | +38 psf, -44.9 psf                                                      |  | Report Date:    | 10/29/2020                           |                 | Model #      | P500            |  |                 |  |
| Test Pressures:        | +57 psf, -67.4 psf                                                      |  | Test Location:  | American Test Lab, Inc., Brevard, 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 |  |
|                        | 200 mph                                                                 |  | 182 mph         |                                      | 173 mph         |              | 165 mph         |  | 158 mph         |  |

### Reference Test Report and Drawing:

- American Test Lab, Inc. report number ATLNC-1211.01-17 dated 2/13/2018
- Entrematic Drawing number IRC-P509-155-15-I dated 2/6/2018

### Description of Test Specimen:

9'-0"x7'-0" Model P500, 27 ga steel garage door as shown in drawing IRC-P509-155-15-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, 1656 Calvert Road, Brevard, NC (FL PE #00061915)
- American Test Lab is accredited by IAS, Certification #TL-423.

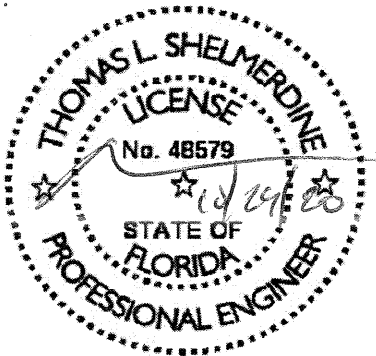
### Summary:

The 9'-0"x7'-0" Model P500 as described on drawing IRC-P509-155-15-I meets or exceeds the testing criteria as described above. By comparison to the construction of the 9'-0"x7'-0" Model P500, the following doors also meet or exceed the above testing criteria, when constructed in accordance with drawing IRC-P509-155-15-I:

- 9' x 7' Model D500 doors (which have a different embossment pattern).
- 9' x 7' Amarr Olympus 500 and Amarr Designers Choice DC-500 doors, which are alternate model numbers for P500 and D500.
- Model P500, D500, Olympus 500 and Designers Choice DC-500 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 (38-1/8" x 10-5/8") 1/4" polycarbonate windows 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:



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