

# Engineering Evaluation Report

Joshua Royce, P.E.  
3 Indian Springs Rd  
Red Lion, PA 17356

**Report: 100119rev1**

**Manufacturer:** Special-Lite, Inc.  
860 South Williams Street  
Decatur, Michigan 49045

**Product:** Series SL-XX Aluminum Out-Swing Door

## Description of Product:

The frame is constructed of 6063-T5 aluminum. The vertical frame member ran through while the horizontal member was square cut and butted to it. Horizontal members are secured using an aluminum frame clip and mechanically fastened using two #10-16 x ¾". The vertical members are attached to the clip using three #10-16 x ¾". Head was reinforced with a 14" aluminum block.

Door Panel: Stile and rail components are cut with a 45° miter cut. The corners clip is used to hold the stiles and rails together. The exterior face sheet is made from FRP, with options of the face sheet being made from 6063-T5 aluminum, Amp Colonial, Amp wood grain, FRP Sandstone or Stainless Steel. The stiles, rails and face sheets are fitted together and held in place using a 3/8" diameter steel tie rod. Urethane foam is injected into the door and bonds all components together.

## Submitted Technical Documentation:

1. Test report 74375.01-201-18 dated 08/27/2007, signed and sealed by Joseph Reed, P.E. (FL P.E. 58920) of Architectural Testing, Inc. located in St. Paul, Minnesota.  
TAS 201-94: Passed Large Missile Impact  
TAS 202-94: Design Pressure: +/- 65.00 psf  
Passed Forced Entry  
Air Infiltration: 6.24 psf  
Water Infiltration: 0.00 psf  
TAS 203-94: Design Pressure: +/- 65.00 psf
2. Test report 0132-0523-00 and 0132-0805-00 dated 2/28/2002, signed and sealed by Vinu Abraham, P.E. (FL P.E. 53820) of Hurricane Test Laboratory, LLC. located in Lithia Springs, GA.  
TAS 201-94: Passed Large Missile Impact  
TAS 202-94: Design Pressure: + 60.0 /- 53.00 psf  
Passed Forced Entry  
Air Infiltration: 6.24 psf  
Water Infiltration: 9.00 psf  
TAS 203-94: Design Pressure: + 60.0 /- 53.0 psf

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## Submitted Technical Documentation (Continued):

3. Test report 0132-1008-00 and 0132-1109-99 dated 2/28/2002, signed and sealed by Vinu Abraham, P.E. (FL P.E. 53820) of Hurricane Test Laboratory, LLC. located in Lithia Springs, GA.

### *Flush Door without Vision Kit:*

- TAS 201-94: Passed Large Missile Impact
- TAS 202-94: Design Pressure: +/- 70.0 psf  
Passed Forced Entry  
Air Infiltration: 6.24 psf  
Water Infiltration: 9.00 psf
- TAS 203-94: Design Pressure: +/- 70.0 psf

### *Flush Door with Vision Kit:*

- TAS 201-94: Passed Large Missile Impact
  - TAS 202-94: Design Pressure: + 70.0 /- 90.0 psf  
Passed Forced Entry  
Air Infiltration: 6.24 psf  
Water Infiltration: 10.5 psf
  - TAS 203-94: Design Pressure: + 70.0 /- 90.0 psf
4. Installation Drawings report number 100119D signed and sealed by Joshua Royce P.E.
  5. Anchor Calculation report number 100119A signed and sealed by Joshua Royce P.E.

**Door Hardware:** Door hardware consists of one of five options depending on the style of door. Hardware options are detailed in the drawing package 100119D.

## Limitations of Use:

1. Maximum product design pressure of +70.0 /- 90.0 psf, design pressure is dependant on door style and hardware type.
2. Maximum overall single door size of 46" wide by 92" high.
3. Maximum overall double door size of 80" wide by 92" high.
4. Maximum door panel size of 37-9/16" wide by 89-1/2" high.
5. Maximum glazing size of 22" wide by 32" high.
6. Not rated for use in the High Velocity Hurricane Zone (HVHZ).
7. Product is impact resistant and will not require the use of an impact protection system if installed in the Wind Borne Debris Region.
8. Door comes with the option of a water resistant threshold (Part # 568 Zero Threshold) or a regular threshold (Part # THRS-4 Threshold).
9. As per ASTM E1300, if glazing is present it must consist of a 5/16" Oldcastle StormGlass™ consisting of two sheets of 1/8" annealed glass separated by a 0.070" thick PVB interlayer manufactured by Oldcastle.
10. Not approved for use where water infiltration resistance is required by the door, unless units are installed in a non-habitable area where the unit and the area are designed to accept water infiltration. Units shall be installed only at locations protected by a canopy or overhang such that the angle between the edge of the canopy or overhang to the sill is less than 45 degrees.
11. Units must be installed as per the installation documented in drawing 100119D.

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## **Compliance:**

The above listed products have been shown to demonstrate compliance with the Florida Building Code and with the Florida Department of Community Affairs for Statewide Product Approval as per Rule 9N-3.005 method 1(d).

## **Certificate of Independence:**

In accordance with Rule 9N-3.009, I do not have, nor do I ever intend to acquire, any financial interest in any manufacturing company associated with this evaluation report. I also do not have any financial interest in the manufacturing company or any company associated with the manufacturing company.