

# Fenestration Testing Laboratory, Inc.

10235 8th Street • Rancho Cucamonga, CA 91730 • PH. (909) 477-4343 • FAX (909) 477-4348

Report No. : T13-004  
Date : January 15, 2013  
Page : Page 1 of 4

## TESTED FOR

**International Window Corp.**

A/P Dept.  
Fullerton, CA 92831

### 1.0 PURPOSE

The purpose of this report is to present the testing methods employed and the test results obtained during the performance testing of one (1) **Aluminum Side Hinged Door** described in paragraph 4.0 of this report.

### 2.0 TEST REFERENCES

#### 2.1 Standard/Specification for Windows, Doors, and Skylights:

AAMA/WDMA/CSA 101/LS.2/A440-08      **SHD – LC 50**    1829 x 2438 (72 x 96)

#### 2.2 AAMA 1304-02 Forced Entry Resistance of Side Hinged Door Systems

### 3.0 SUMMARY

The test results in paragraph 5.0 and 6.0 indicate that the test sample described in paragraph 4.0 of this report complied with the performance requirements of the above referenced test methods.

### 4.0 SAMPLE SUBMITTED

**SERIES:**                      **7000 HD**

**CONFIGURATION:**    **Double Door (Out-swing)**

**FRAME SIZE:**            1829 mm x 2438 mm (72" x 96")

**PANEL SIZE:**            914 mm x 2413 mm (36.00" x 95.00") **(Both Panels)**

**GLASS:**                      Each door panel was glazed with 0.94" overall insulated glass containing 0.18" tempered glass on both sides.

**INSULATED**

**GLASS SPACER:**        The spacer consisted of 0.58" A1-D aluminum air spacer.

**GLAZING:**

The IG unit was drop glazed from the outside with double sided adhesive tape measuring 0.38" x 0.13".

On the outside a snap-in aluminum stop was applied full perimeter.

The IG units were each set on 2.00" x 1.00" x 0.25" rubber setting blocks at the bottom corners.

**WEEPAGE:**

The bottom rail contained two (2) 1.00" x 0.13" notches at each panel under the glass.

The bottom glazing stop contained two (2) 1.25" x 0.13" notches at each panel.

The top of the sill contained a 0.250" x 1.00" notch at each end offset from the exterior weeps.

The exterior face of the sill contained a 0.25" x 1.75" weep with a plastic gated cover at each end.

**WEATHERING:**

The following contained a hollow bulb seal:

- (A) Each panel full perimeter facing in.
- (B) The frame full perimeter facing out.
- (C) A roll-in glazing vinyl gasket was wedged between the glass and the exterior glazing stops.

**HARDWARE:**

Each panel was supported in the frame with three (3) five (5) knuckle butt hinges located 6" from the bottom and top and 46" at mid span of the door jamb. Each hinge leaf was fastened to the jamb with four (4) #10 x 0.75" PFH screws. The leaf at the hinge stile was fastened with four (4) #10 x 0.75" PFH screws.

Each panel contained multi lock, latch lock and handle set. The door lock handle was located 37" from the bottom of the door panel. Each lock engaged its respective metal keeper fastened to the lock jamb with a pair of #4 x 0.85" PFH self-tapping screws.

The other two lock points consisted of the dead bolt and the latch bolt. The metal strike plate for the dead bolt and handle bolt was fastened to the jamb and sill with a #4 x 0.85" PFH self-tapping screw.

The lock handle set and dead bolt at the interior were fastened with three (3) # 10 x 2.50" PFH screws.

**CONSTRUCTION:**

All panel corners were mitered and keyed and mechanically fastened with #8 x 0.92" PPH self-tapping screws.

The frame corners were mechanically fastened with a pair of # 10 x 1.50" PPH screws.

The panels and frame were thermally broken with 0.75" wide isobar thermal break.

**CAULKING:**

The panel and frame corners were sealed full profile.

**ANCHORING:**

The door was mounted into a 2" x 6" wooden rough opening with #10 x 2.25" PFH screws through the frame at the sill, head and jamb every 16" on center.

**5.0 TEST PROCEDURES AND RESULTS**

5.1 All testing procedures were performed in accordance with the performance requirements of the test specifications referenced in paragraph 2.0 of this report.

**5.2 TEST RESULTS  
PARAGRAPH**

<u>TEST DESCRIPTION</u>	<u>MEASURED</u>	<u>ALLOWED</u>
5.3.1.2.1 Force to Latch	35.5 N (8.0 lbf)	Report only
5.3.1.2.2 Force to engage deadbolt	13.3 N (3.0 lbf)	Report only

**5.2 TEST RESULTS  
PARAGRAPH**

<u>TEST DESCRIPTION</u>	<u>MEASURED</u>	<u>ALLOWED</u>
5.3.2.1 Air Infiltration (ASTM E 283) 75 Pa (1.6 PSF) The tested specimen meets the performance levels specified in AAMA/WDMA/CSA 101/1.S.2/A440 for air leakage resistance.	1.0 L/s•m <sup>2</sup> (0.3 CFM/Ft <sup>2</sup> )	1.5 L/s•m <sup>2</sup> (0.3 CFM/Ft <sup>2</sup> )
5.3.3.2 Water Penetration (ASTM E 331) 180 Pa (3.75 PSF)	No Leakage	No Leakage
5.3.4.2 Uniform Load Deflection (ASTM E 330) 1200 Pa (25.0 PSF) POS 1200 Pa (25.0 PSF) NEG	5.30 mm (0.21") 4.60 mm (0.18")	Report only Report only
5.3.4.3 Uniform Load Structural (ASTM E 330) 1800 Pa (37.5 PSF) POS 1800Pa (37.5 PSF) NEG	0.25 mm (0.01") 0.00 mm (0.00")	9.65 mm (0.38" Set) 9.65 mm (0.38" Set)

**5.3**

<u>TEST DESCRIPTION</u>	<u>MEASURED</u>	<u>ALLOWED</u>
5.3.3.2 Water Penetration (ASTM E 331) 480 Pa (7.50 PSF)	No Leakage	No Leakage
5.3.4.2 Uniform Load Deflection (ASTM E 330) 2400 Pa (50.0 PSF) POS 2400 Pa (50.0 PSF) NEG	6.60 mm (0.26") 6.35 mm (0.25")	Report Only Report Only
5.3.4.3 Uniform Load Structural (ASTM E 330) 3600 Pa (75.0 PSF) POS 3600 Pa (75.0 PSF) NEG	1.02 mm (0.04") 0.51 mm (0.02")	9.65 mm (0.38" Set) 9.65 mm (0.38" Set)



6.0 5.3.5

**AAMA 1304-02 Forced Entry Resistance of Side Hinged Door Systems**

	<u>TEST</u>	<u>RESULTS</u>	<u>ALLOWED</u>
4.4	300# top of stile	Pass	No entry/No access
4.4	300# bottom of stile	Pass	No entry/No access
4.4	300# 3" above lock	Pass	No entry/No access

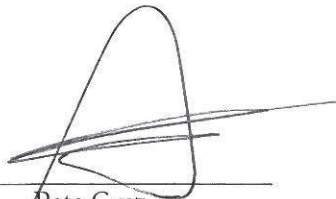
For a complete description of the tested sample refer to the attached fourteen (14) pages consisting of the bill of materials, cross section drawings, and individual part drawings.

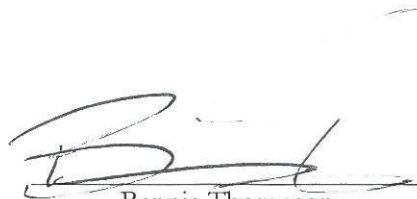
Cross section drawings and die drawings of frame members are on file and have been compared to the sample submitted. Test sample sections, drawings and a copy of this report will be retained at the test laboratory for four years.

This test report may not be modified in any way without the written consent of Fenestration Testing Laboratory.

The preceding test results relate only to the tested specimen and were obtained by using the applicable ASTM and AAMA test methods. This report does not constitute certification of this product. Certification can only be granted by an approved administrator and/or validator.

Testing Completed: January 15, 2013  
Report Completed: January 28, 2013

  
Pete Cruz  
Test Engineer

  
Bennie Thompson  
Testing Engineer