

FENESTRATION
TESTING
LABORATORY

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LETTER OF AUTHORIZATION

FROM:	Karl Hatrak (Hy-Lite Block Windows)
TO:	Fenestration Testing Laboratory

I have reviewed the entire AAMA/NWWDA 101/I.S.2-97 test report, **V99F-139** prepared by **Fenestration Testing Laboratory** on **September 28, 1999**.

I am completely satisfied with the contents of the report and take the responsibility for the accuracy of all the information provided to the laboratory.

I approve and authorize **Fenestration Testing Laboratory** to issue this report to the Inspection Agency.

Name of Inspection Agency:	Associated Laboratories, Inc.
Contact:	

Karl Hatrak
Signature

Product Development
Title

10-25-99
Date

* Please fax this authorization letter to **Fenestration Testing Laboratory**. Our fax number is (909) 923-6262, in order for our laboratory to send your report to the Inspection Agency.

Thank You

TESTED FOR

HY-LITE BLOCK WINDOWS
 101 California Avenue
 Beaumont, CA 92223

Report No. : V99F-139
 Date : September 28, 1999
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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) **PVC Fixed Window with Acrylic Blocks** described in paragraph 4.0 of this report.

2.0 TEST REFERENCES

- 2.1 Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows & Glass Doors:
 AAMA/NWWDA 101/I.S.2-97: F - C 35 79 x 79
- 2.2 CAWM 301 - 90 Forced Entry Resistance Tests for Windows.

3.0 SUMMARY

The test results in paragraphs 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 specifications.

4.0 SAMPLE SUBMITTED**SERIES:****PRESTIGE****CONFIGURATION:**

One fixed block lite, composed of 9 columns and 9 rows of individual block lites, installed in an aluminum thermally broken frame to form a panel. Panel was installed into a PVC frame to form the complete window.

FRAME SIZE:

79.00" x 78.88"

DAYLIGHT OPENING:

72.00" x 72.00"

GLAZING MATERIAL:

8" x 8" x 2" thick translucent acrylic blocks with a sealed air space.

**GLAZING OF BLOCKS
TO INSERT FRAME:**

The perimeter of the composite block lite was wet glazed to the thermally broken aluminum insert frame from the interior and exterior with a thermal plastic sealant. In addition, the individual block lites were sealed to each other from the interior and exterior with a thermal plastic sealant.

**GLAZING OF PANEL
TO FRAME:**

The panel was glazed from the interior to the PVC frame with double-sided adhesive foam tape. PVC snap-in glazing beads were applied full perimeter over the interior of the panel.

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WEEPAGE: None.

WEATHERING: None.

HARDWARE: None.

CONSTRUCTION: Individual block lites were stacked together, vertically and horizontally, to form the overall composite size. When stacking, the blocks were mechanically fastened together, at each inside and outside corner, with an I-shaped plastic key that fit into built-in slots at each block corner.

The perimeter of the composite block lite fit into the thermally broken aluminum insert frame such that the inner leg served as a stop for the composite block lite. In addition, the blocks along the jambs contained their respective I-shaped keys at the corners that protruded into the channels created by the most outer and inner legs of the thermally broken aluminum insert frame.

The thermally broken aluminum insert frame corners were sealed full profile and fastened with a pair of screws.

The PVC frame corners of the window were welded full profile.

CAULKING: The fixed lite in the aluminum frame was sealed full perimeter to the PVC from the outside.

ANCHORING: The frame was sealed and anchored to a 2" x 8" wooden buck with #6 x 1" PPII screws every 16 inches and wood furring was applied over the nail-on fins and fastened to the wooden buck.

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>
2.1.2 Air Infiltration (ASTM E 283) 1.57 PSF The tested specimen exceed the performance requirements specified in AAMA/NWWDA 101/LS.2 97 for Air Infiltration.	0.0 CFM/Ft ²	0.3 CFM/ Ft ²
2.1.3 Water Penetration (ASTM E 547) 4.50 PSF	No Leakage	No Leakage
2.1.4 Uniform Load Structural (ASTM E 330) 45.0 PSF POS 45.0 PSF NEG	No Damage No Damage	No Damage No Damage
2.1.7 Welded Corner Test	Passed	Break Shall Not Extend Along Entire Weld Line

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5.3 OPTIONAL PERFORMANCE GRADES

<u>PARAGRAPH</u>	<u>TEST DESCRIPTION</u>	<u>MEASURED</u>	<u>ALLOWED</u>
4.3	Water Penetration (ASTM E 547) 12.00 PSF	No Leakage	No Leakage
4.4.2	Uniform Load Structural (ASTM E 330) 52.5 PSF POS 52.5 PSF NEG	No Damage No Damage	No Damage No Damage

6.0 2.1.8 CAWM 301 - 900 FORCED ENTRY TEST RESULTS

2.4.5 Type "V" Window

	<u>TEST</u>	<u>RESULTS</u>	<u>DESCRIPTION</u>
5.4.1	A	Passed	Disassembly Test.
5.4.2	B	Passed	Hand and Tool Manipulation.

For a complete description of the tested sample refer to the attached cross section drawings.

Assembly 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 were obtained by using the applicable ASTM and CAWM 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: September 24, 1999

Report Completed: September 28, 1999

 Pete Cruz
 Test Engineer

 Reginaldo Espinoza
 Test Technician