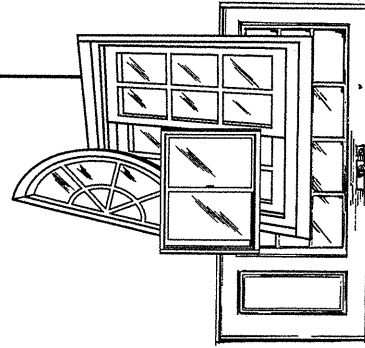


# CERTIFIED TESTING LABORATORIES

Architectural Division • 7252 Narcoossee Rd. • Orlando, FL 32822  
(407) 384-7744 • Fax (407) 384-7751  
Web Site: www.ctlarch.com  
E-mail: ctlarch.com



**Report Number:** CTLA-844W  
**Report Date:** April 19, 2002

## STRUCTURAL PERFORMANCE TEST REPORT

**Client:** Energy Saving Products of Florida, Inc.  
P. O. Box 1119  
Jasper, Florida 32052

**Product Type and Series:** Vinyl Flange Frame Picture Window F-C45 (74" x 63")

**Test Specification:** AAMA/NWWDA 101/I.S. 2-97, "Voluntary Specification for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors".

**Frame:** The vinyl flange frame measured 72.50" x 61.5" overall. Each corner was mitered and secured by corner weld construction.

**Configuration:** Fixed lite

**Panels:** N/A

**Weatherstripping:** N/A

**Hardware & Location:** N/A

**Glazing:** 3/4" Annealed insulated laminated glass consisting of two (2) lites of .125" annealed glass with .500" air space and swiggle spacer. Exterior glazed with a silicone backbedding compound. A rigid snap in vinyl bead secured with a silicone bead around interior of glass.

**Sealant:** A silicone type sealant was used to secure the specimen to the wooden test buck both interior and exterior.

**Weepsystem:** Two (2) weep holes in sill measuring 1"x .275" and 4.50" from each corner. A PVC stainer cap covered each hole.

**Reinforcements:** N/A

**Additional Description:** N/A

**Screen:** N/A

**Installation:** Twenty-four (24) 1.25" P.H., P.H., fasteners were used to secure the specimen to the wooden test buck. Seven (7) in the head and sill measuring from left jamb 4.25", 15", 26", 36.5", 47.5", 58" and 68.5". Five (5) in each jamb measuring from head 3.5", 17", 31", 44" and 58".

*L. H. P. E.*  
*5/21/02*

**Surface Finish:** White

**Comment:** Nominal 2 mil polyethylene film was used to seal against air leakage during structural loads. The film was used in a manner that did not influence the test results.

**Performance Test Results**

<u>Paragraph No.</u>	<u>Title of Test</u>	<u>Method</u>	<u>Measured</u>	<u>Allowed</u>
2.1.2	Air Infiltration @ 1.57 psf	ASTM E 283-91	0.0 cfm/ft <sup>2</sup>	.34 cfm/ft <sup>2</sup>
The specimen tested exceeds the performance levels specified in AAMA/NWWDA 101/I.S. 2-97				
2.1.3/4.3	Water Resistance 5.0 gph/ft <sup>2</sup> WTP=9 psf	ASTM E 547-93 Four (4) five minute cycles ASTM E 331-93 Fifteen (15) minute duration	No Entry No Entry	No Entry No Entry
2.1.4.2/4.4.2	Uniform Load Structural  Permanent Deformation @67.5 psf Positive @67.5 psf Negative	ASTM E 330-90  Ten (10) second duration	  Neg. Neg.	  Neg. Neg.
2.1.8	Forced Entry Resistance Test D Window Assemblies	ASTM E 588-97		

This specimen as tested complies to a grade 10-T<sup>1</sup>=5 minutes  
Tools used: A spatula (10.1.1.1) and a piece of stiff wire (10.1.3.2)

*Handwritten signature*  
5/21/02

**Test Date:** March 25, 2002

**Test Completion Date:** March 25, 2002

**Remarks:** Detailed drawings were available for laboratory records and comparison to the test specimen at the time of this report. A copy of this report along with representative sections of the test specimen will be retained by CTL for a period of four (4) years. The results obtained apply only to the specimen tested.

This test report does not constitute certification of this product, but only that the above test results were obtained using the designated test methods and they indicate compliance with the performance requirements (paragraphs as listed) of the above referenced specifications.

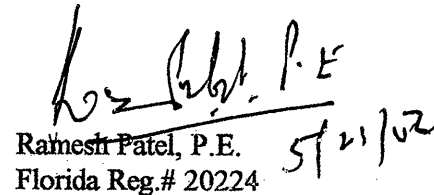
Certified Testing Laboratories assumes that all information provided by the client is accurate and that the physical and chemical properties of the components are as stated by the manufacturer.

Certified Testing Laboratories, Inc.



Walter Williams  
Lab Technician  
Architectural Division

cc: Energy Savings Products (2)  
A.L.I. (2)  
Ramesh Patel, P.E (1)  
File (1)



Ramesh Patel, P.E.  
Florida Reg.# 20224