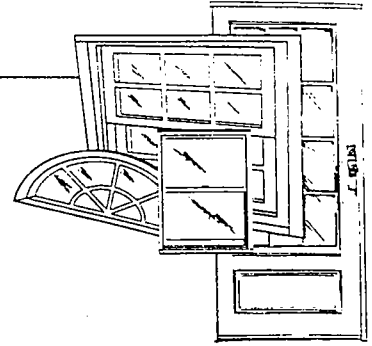


CERTIFIED TESTING LABORATORIES

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



P. 15

Report Number: CTLA-886W-3
Report Date: July 29, 2002

STRUCTURAL PERFORMANCE TEST REPORT

Client: SEASONSIELD INCORPORATED
355 CENTER COURT
VENICE, FLORIDA 34292

Product Type and Series: Series 7300 Vinyl Picture Window F-R35 (49" x 73")

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

Frame: The vinyl flange frame picture window main frame measured 48.75"x 72.75" overall. The main frame corners were mitered and secured by corner weld construction. Lite measured 42.50"x 66.50".

Ventilator: N/A
Weather Stripping: N/A
Hardware & Location: N/A

Glazing: 3/16" annealed glass, interior glazed with an adhesive backbedding compound and interior vinyl snap in glazing bead.

Sealant: A narrow joint seam sealant was used to secure specimen to wooden test buck and around interior of glass.

Weep System: Sill notched 4" from each end of sill. Notch is 1.000" wide x .125" high.

Muntins: N/A
Reinforcement: N/A

Additional Description: N/A

Installation: The test specimen was installed and secured into #2 SYP wood test buck with three (3) #8 x 1.50" PH., PH. screws located in head and sill 8" from each corner and at mid-span. Five (5) #8 x 1.50" PH., PH. screws located in each jamb 8" from each corner and 14" o.c. thereafter.

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.

Handwritten signature and date:
8/7/02

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 E283-91	.03 cfm/ft ²	.34 cfm/ft ²
The tested specimen meets or exceeds the performance levels specified in AAMA/ NWWDA 101/I.S.2-97. Results recorded in two (2) decimals at the clients request.				
2.1.3	Water Resistance @5.2 psf gph/ ft ² WTP= 12 psf	ASTM E547-93	No Entry	No Entry
2.1.4.2	Uniform Load Structural Permanent Deformation @52.5 psf positive @52.5 psf negative	ASTM E330-90	Neg. Neg.	.195" .195"
2.1.8	Forced Entry Resistance Test A Test B Test C Test D,E and F Test G	AAMA 1302.5-76	0" 0" 0" 0" 0"	1/2" 1/2" 1/2" 1/2" 1/2"
2.1.7	Welded Corner Test	AAMA/NWWDA 101/ I.S. 2-97		Passed

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8/2/02

Test Date: April 22, 2002

Test Completion Date: April 22, 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.

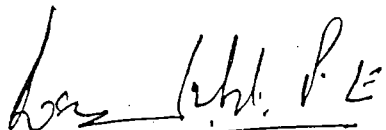
Certified Testing Laboratories assumes that all information provided by the client is accurate and that the physical and chemical properties of the components are as stated by the manufacturer.

Certified Testing Laboratories, Inc.



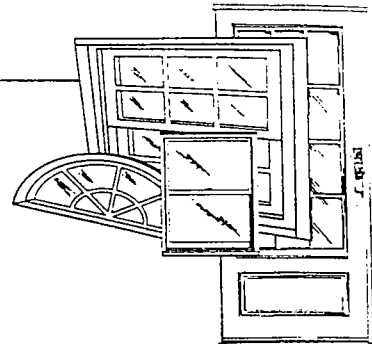
Walter Williams
Lab technician
Architectural Division

cc: Seasonshield Inc. (2)
A.L.I. (2)
Ramesh Patel, P.E. (1)
File (1)


Ramesh Patel P.E. 8/15/02
Florida Reg.#20224

CERTIFIED TESTING LABORATORIES

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E-mail: ctlarch.com



Report Number: CTLA-886W-2
Report Date: July 27, 2002

STRUCTURAL PERFORMANCE TEST REPORT

Client: SEASONSIELD INCORPORATED
355 CENTER COURT
VENICE, FLORIDA 34292

Product Type and Series: Series 7300 Vinyl Picture Window F-R50 (49" x 97")

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

Frame: The vinyl flange frame picture window main frame measured 49.25"x 97.25" overall. The main frame corners were mitered and secured by corner weld construction. Lite measured 43"x 91".

Ventilator: N/A
Weather Stripping: N/A
Hardware & Location: N/A

Glazing: 3/16" tempered glass, interior glazed with an adhesive backbedding compound and interior vinyl snap in glazing bead.

Sealant: A narrow joint seam sealant was used to secure specimen to wooden test buck and around interior of glass.

Weep System: Sill notched 4" from each end of sill. Notch is 1.000" wide x .125" high.

Muntins: N/A
Reinforcement: N/A

Additional Description: N/A

Installation: The test specimen was installed and secured into #2 SYP wood test buck with three (3) #8 x 1.50" PH., PH. screws located in head and sill 8" from each corner and at mid-span. Five (5) #8 x 1.50" PH., PH. screws located in each jamb 8" from each corner and 20" o.c. thereafter.

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.

Handwritten signature
8/7/02

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 E283-91	.01 cfm/ft ²	.34 cfm/ft ²
The tested specimen meets or exceeds the performance levels specified in AAMA/ NWWDA 101/I.S.2-97. Results recorded in two (2) decimals at the clients request.				
2.1.3	Water Resistance @5.2 psf gph/ ft ² WTP= 12 psf	ASTM E547-93	No Entry	No Entry
2.1.4.2	Uniform Load Structural Permanent Deformation @75 psf positive @75 psf negative	ASTM E330-90	Neg. Neg.	.197" .197"
2.1.8	Forced Entry Resistance Test A Test B Test C Test D,E and F Test G	AAMA 1302.5-76	0" 0" 0" 0" 0"	1/2" 1/2" 1/2" 1/2" 1/2"
2.1.7	Welded Corner Test	AAMA/NWWDA 101/ I.S. 2-97		Passed

Handwritten signature
8/7/02

Test Date: April 23, 2002

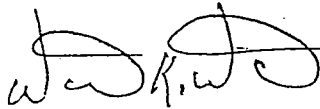
Test Completion Date: April 23, 2002

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.

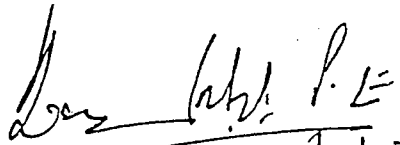
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Certified Testing Laboratories, Inc.



Walter Williams
Lab technician
Architectural Division

cc: Seasonshield Inc. (2)
A.L.I. (2)
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File (1)



Ramesh Patel P.E.
Florida Reg.#20224 8/7/02