



American Test Lab of South Florida
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ATL Report # 0122.01-01

Date: 2/22/01

ATL Certification # 98-0213.05

Test Dates: 1/22, 1/23/01

Test Requested By - Film Technologies International, Inc. 2544 Terminal Drive South, St. Petersburg, Florida 33712. Phone (727) 327-2544 Fax (727) 327-0062

Tests Conducted: Tested to Dade County protocols DCBCCD PA 201-94, PA 202-94, PA 203-94

Design Pressures - + 50.0 psf, - 50.0 psf

(1) DESCRIPTION OF UNIT:

Model Designation - Glass/Gard 800 C90 PS SCR

Overall Size - 48-1/2" wide x 78-1/4" high

Configuration - Extruded aluminum fixed window in a wood test buck.

(2) MATERIAL CHARACTERISTICS:

Frame Material - Extruded aluminum 6063-T5 alloy and temper.

Frame Construction - Head, jambs and sill consisted of an extruded aluminum section (Vistawall FG1103) (4" x 1-3/4") with butt joint corners. Head and sill ran thru. Head and sill were fastened to jambs with (2) 1/4" x 1" pan head phillips screws at each corner. No mechanical fasteners were used to attach the fixed window to the wood test buck. The Vistawall storefront section was held in place in the wood test buck with 2 x 4 wood stops, continuously around interior and exterior of the frame.

Glazing:

Glazing Material - 3/16" tempered glass with 2 ply 8 mill film. The film consisted of a clear laminating pressure sensitive adhesive / 400 gauge clear polyester film / clear laminating adhesive / 400 gauge clear polyester film / clear scratch resistant coating (SCR)

Glazing Method - Pocket glazed with Dow Corning 995 silicone, against the film and an EPDM extruded vinyl gasket against the glass. The silicone was slopped from the face of the extrusion to the laminate 0.280" high. Overall silicone bite 0.685". Silicone was wrapped underneath the glass into glazing pocket.

Daylight Opening - 44-3/4" wide x 74-1/2" high

Weather-stripping - N/A

Hardware - N/A

Weepholes - N/A

Muntins - N/A

Reinforcement - N/A

Sealant - On Specimen "D", Dow Corning 995 silicone sealant was used at frame joints and between the frame and wood test buck

Additional Description -

Specimens A, B, C were installed in wood bucks, and tested per the Impact and Cycle requirements of DCBCCD protocols PA 201 / 203 - 94.

Specimen D was installed in a wood buck, and tested per the Air Infiltration Water Infiltration and Static Air requirements of DCBCCD protocol PA 202 - 94.

(3) INSTALLATION:

Screws and Method of Attachment -

Sill: N/A
Header: N/A
Jambs: N/A

AIR INFILTRATION

Air Infiltration Tests were conducted in accordance with DCBCCD PA 202 - 94

Air at 1.57 psf	Measured	Allowable
Specimen D	0.01 CFM/FT	0.33 CFM/FT
	Wit by WRM	

STATIC AIR PRESSURE TESTS

Static Tests were conducted in accordance with DCBCCD PA 202 - 94

Design Loads + 50.0 psf, - 50.0 psf. Specimen D (WRM)

Positive loads	time (sec.)	psf load
1/2 Test	30	37.5
Design	30	50.0
Negative loads		
1/2 Test	30	37.5
Design	30	50.0

Results:Passed

WATER INFILTRATION TEST

Water Infiltration Test was conducted in accordance with DCBCCD PA 202 - 94

Specimen D wit by WRM

Water @ 7.5 psf load for 15 minutes

Result: Passed

No water penetration over sill

STATIC AIR PRESSURE TESTS

Static Tests were conducted in accordance with DCBCCD PA 202 - 94

Design Loads + 50.0 psf, - 50.0 psf. **Specimen D (WRM)**

<u>Positive loads</u>	<u>time (sec.)</u>	<u>psf load</u>
Test	30	75.0

<u>Negative loads</u>		
Test	30	75.0

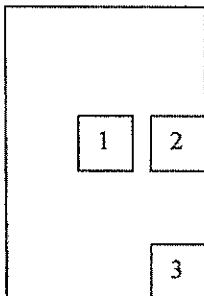
Results passed

IMPACT TEST - SMALL MISSILE

Impact tests were conducted in accordance with DCBCCD PA 201-94

WRM
2/22/05

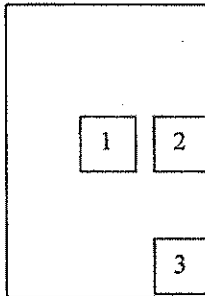
Specimen A



SPEED FT/SEC

1). 131.8 2). 131.2 3). 131.7

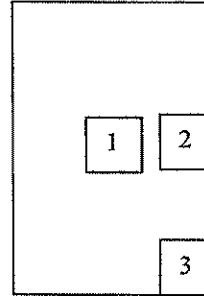
Specimen B



SPEED FT/SEC

1).131.4 2). 131.0 3). 141.7

Specimen C



SPEED FT/SEC

1). 131.2 2). 141.6 3). 141.3

Type and weight of missile: (10) 5/16" ss ball bearings, 2 grams each

Description of specimens after impact test:

Specimen A: The first impact was made in the center of the fixed window. The second impact was a field shot made right of center of the fixed window. The third impact was made in the lower right corner of the fixed window. There was no penetration of the film or separation of glass.

Result Passed

Specimen B: The first impact was made in the center of the fixed window. The second impact was a field shot made right of center of the fixed window. The third impact was made in the lower right corner of the fixed window. There was no penetration of the film or separation of glass.
Result Passed

Specimen C: The first impact was made in the center of the fixed window. The second impact was a field shot made right of center of the fixed window. The third impact was made in the lower right corner of the fixed window. There was no penetration of the film or separation of glass.
Result Passed

CYCLE TEST

Cycle tests were conducted in accordance DCBCCD PA 203-94

Design Loads	+ 50.0 psf and - 50.0 psf		# of cycles	Specimens A, B, C		
				A	B	C
Range of test	actual load psf			cycles/min		
Positive loads						
+ .2 - .5	10	25	3500	32	32	32
+ .0 - .6	0	30	300	30	30	30
+ .5 - .8	25	40	600	35	35	35
+ .3 - 1.0	15	50	100	33	33	33
Negative Loads						
- .3 - 1.0	15	50	50	17	17	17
- .5 - .8	25	40	1050	42	42	42
- .0 - .6	0	30	50	50	50	50
- .2 - .5	10	25	3350	45	45	45

WZ
2/22/01

9000 cycles completed

Description of specimens after cycle test:

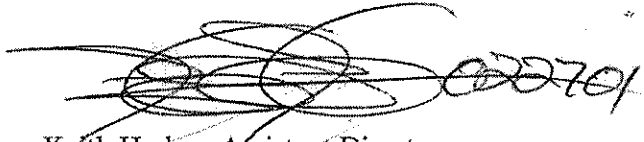
A, B, C. Specimens showed no resultant failure or duress after cycle test. No separation of glass from the aluminum frame.

2 mill polyethylene film was used on the cycle tests and it is the opinion of the undersigned that they had no influence on the results of these tests.

Observers - 1/22, 1/23/01

William R. Mehner - PE

Keith Harker, Mike Fox - ATLSF

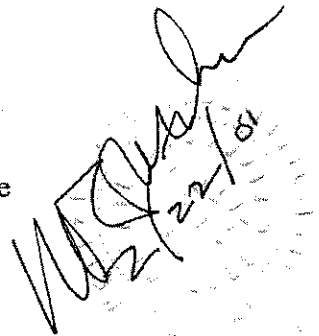


Keith Harker, Assistant Director
American Test Lab of South Florida

All Tests Certified and Witnessed by:

William R. Mehner
6795 N. W. 17 Avenue
Fort Lauderdale, FL 33309
State of Florida:
Registered Engineer P.E. #7496

Engineer Seal & Signature



Disclaimer: This test report was prepared by American Test Lab of South Florida (ATLSF), for the exclusive use of the above named client, it does not constitute certification of this product. The results are for that particular specimen tested and does not imply the quality of similar or identical products manufactured or installed from specifications identical to the tested product. ATLSF is a testing lab and assumes that all information provided by the client is accurate and does not guarantee or warranty any product tested or installed.