

TEST REPORT

Report No.: B1669.01-801-44

Rendered to:

V-TECH INDUSTRIES, L.P. Houston, Texas

PRODUCT TYPE: 4 x 4 CMC Hurricane **SERIES/MODEL**: Skylight with Polyurethane Frame

AAMA/WDMA/CSA 101/I.S.2/A440-05, Standard/Specification for Windows, Doors, and Unit Skylights.

Title	Summary of Results
Primary Product Designator	SKG-C70 1302 x 1302 (51 x 51)
Design Pressure	±3360 Pa (±70.18 psf)

Test Completion Date: 07/18/2011

Reference must be made to Report No. B1669.01-801-44, dated 07/21/11 for complete test specimen description and detailed test results. Reference Architectural Testing, Inc. Report No. 92239.01-801-18, dated 09/03/09 for complete *Gateway* test specimen description and test results.



1.0	Report Issued To:	V Tech Industries 5534 Harvey Wilson Drive Houston, Texas 77020
2.0	Test Laboratory:	Architectural Testing, Inc. 2865 Market Loop Southlake, Texas 76092 817-410-7202

3.0 Project Summary:

- **3.1 Product Type**: Skylight with Polyurethane Frame
- **3.2 Series/Model**: 4 x 4 CMC Hurricane
- **3.3 Compliance Statement**: Results obtained are tested values and were secured by using the designated test method(s). The specimen tested successfully met the performance requirements for a SKG-C70 1302 x 1302 (51 x 51) rating. Reference Architectural Testing, Inc. Report No. 92239.01-801-18, dated 09/03/09 for complete *Gateway* test specimen description and test results.
- **3.4 Test Date**: 07/18/2011
- **3.5 Test Location**: Architectural Testing, Inc. test facility in Southlake, Texas.
- **3.6 Test Sample Source**: The test specimens were provided by the client. Representative samples of the test specimens will be retained by Architectural Testing for a minimum of four years from the test completion date.
- **3.7 Drawing Reference**: The test specimen drawings have been reviewed by Architectural Testing and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Architectural Testing per the drawings located in Appendix B. Any deviations are documented herein or on the drawings.

3.8 List of Official Observers:

<u>Name</u>	<u>Company</u>
Clint Barnett	Architectural Testing, Inc.
Chris Longoria	Architectural Testing, Inc.
Rudy Valenzuela	V Tech Industries



4.0 Test Specification(s):

AAMA/WDMA/CSA 101/I.S.2/A440-05, *Standard/Specification for Windows, Doors, and Unit Skylights.*

5.0 Test Specimen Description:

5.1 Product Sizes:

Test Specimen #1:

Overall Area :	Wie	dth	Hei	ight		
1.7 m ² (18 ft ²)	millimeters inches millimeters inch					
Overall size	1302	51-1/4	1302	51-1/4		

The following descriptions apply to all specimens.

5.2 Frame Construction:

Frame Member	Material	Description
All members	Black polyurethane	One piece molded polyurethane

5.3 Weatherstripping: No weatherstripping was utilized.

5.4 Glazing:

Glass Type	Spacer Type	Interior Lite	Exterior Lite	Glazing Method
3/4" IG	1/4" Aluminum Spacer	2 pieces of 3/32" annealed with 0.030" PVB Interlayer	7/32" tempered	Polyurethane molded over glazing

Location Quant		Dayligh	t Opening	Class Pita
Location	Quantity	millimeters	inches	GIASS DILE
Skylight	1	1140 x 1140	44-7/8 x 44-7/8	2-1/2"



5.0 Test Specimen Description: (Continued)

- **5.5 Drainage**: No drainage was utilized.
- **5.6 Hardware**: No hardware was utilized.
- **5.7 Reinforcement**: No reinforcement was utilized.

6.0 Installation:

The specimen was installed into a #2 yellow pine $2 \ge 10$ curb. The outer dimensions of the curb were $50-1/4" \ge 50-1/4"$. Wooden shims measuring 3/16" thick were placed on the sides, between the unit and the curb. Sealant was applied between the skylight and the curb.

Location	Anchor Description	Anchor Location
Sides of	#10 x 1-1/2"	E 7/9" from outside corners and on 12" maging
skylight	bugle head screws	5-776 from outside corners and on 12 spacing

7.0 Test Results: The temperature during testing was 27°C (80°F). The results are tabulated as follows:

0	ptional Performance		
Uniform Load Deflection,			
per ASTM E 330			
taken on face of frame between			
fasteners			
+3360 Pa (+70.18 psf)	< 1 mm (<0.01")		
-3360 Pa (-70.18 psf)	< 1 mm (<0.01")	Report Only	1, 2, 3
Uniform Load Structural,			
per ASTM E 330			
taken on face of frame between			
fasteners			
+6720 Pa (+140.35 psf)	< 1 mm (< 0.01")	1 mm (0.05") max.	
-6720 Pa (-140.35 psf)	< 1 mm (< 0.01")	1 mm (0.05") max.	2, 3



7.0 Test Results: (Continued)

Note 1: The deflections reported are not limited by AAMA/WDMA/CSA 101/I.S.2/A440 for this product designation. The deflection data is recorded in this report for special code compliance and information only.

Note 2: Loads were held for 60 seconds.

Note 3: Tape and film were used to seal against air leakage during structural testing. In our opinion, the tape and film did not influence the results of the test.

The service life of this report will expire on the stated Test Record Retention End Date, at which time such materials as drawings, data sheets, samples of test specimens, copies of this report, and any other pertinent project documentation, shall be discarded without notice.



If test specimen contains glazing, no conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimen(s) can be made. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen(s) tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, Inc.

Clint Barnett Test Technician John H. Waskow, P.E. Director – Regional Operations

Shawn G. Collins, P.E. Laboratory Support Engineer

CB:hd

Attachments (pages): This report is complete only when all attachments listed are included. Appendix-A: Alteration Addendum (1) Appendix-B: Drawings (4) complete drawings packet on file with Architectural Testing, Inc.

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Appendix A

Alteration Addendum

Note: *No alterations were required.*

Appendix B

Drawings

Note: Complete drawings packet on file with Architectural Testing, Inc.

BILL OF MATERIAL uma BILL OF MATERIALS uma BILL OF MATERIALS <	PHYSICAL AD CHEM PHYSICAL AD CHEM FORM: COLOUR: COLOUR: COLOUR: COLOUR: COLOUR: COLOUR: COLOUR: COLOUR: COLOUR: COLOUR: COLONITION: FLASH POINT: FLASH POINT: FLA	-SOLIDS CONTENT:	 SOLVENT CONTENT: ORGANC SOLVENTS: 	 SOLUBILITY IN / MISCIBILITY WITH WATER; 	UPPER: - VAPOUR PRESSURE AT 20°C - DENSITY AT 20°C:	- DANGER OF EXPLOSION; - EXPLOSION LIMITS: LOWER:	- FLASH POINT: - JONITION TEMPERATURE: - SELF-JGNITION:	- CHANGE UN CONDITION	COLOUR	PHYSICAL AND CH - GENERAL INFORMATION FORM
$\frac{ \mathbf{E} $	NICAL PROPERTIES FOR "EFBOND DW 645" (6) LIQUID CLEAR ALCOHOL-LIKE E: -114.5°C 78°C 13°C -13°C -13°C -13°C -13°C -13°C -13°C -13°C -13°C -14°S -10°C -13°C -14°S -10°C -13°C -14°S -10°C -13°C -14°S -10°C -13°C -14°S -10°C -13°C -14°S -14°	31.00%	69.00%	NOT MISCIBLE OR DIFFICULT TO MA	11.5 VOL% 135 0.8Pa 0.950 g/m ³	PRODUCT IS NOT EXPLOSACE. HOWEVER, FORMATION OF EXPLOSAVE AND VAPOUR MOTURES ARE POSSIBLE 18 VOLM.	4°C 376.0°C PRODUCT IS NOT SELFICNITING	KOE UNDERTERMINED E: 79'C	BLACK	ENICAL PROPERTIES FOR "EFBOND DV 930" (5)
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