



**TEST REPORT**

**Report No.:** G2786.01-109-44

**Rendered to:**

VELUX America LLC  
Greenwood, South Carolina

**PRODUCT TYPE:** Fixed Curb Mount Skylight

**SERIES/MODEL:** "Specials" Single Dome Skylight Acrylic Smooth (5' x 8') (0.150 thickness)

**SPECIFICATION:** Occupational Safety and Health Administration/U.S. Department of Labor  
Regulations (Standards- 29 CFR) - 1910.23(e) (8)

California Code of Regulations, Title 8, Section 3212

**Test Date(s):** 09/14/16

**Report Date:** 10/04/16

**Test Record Retention Date:** 09/14/20

- 1.0 Report Issued To:** VELUX America LLC  
1418 Evans Pond Road  
P.O. Box 5001  
Greenwood, South Carolina 29648-5001
- 2.0 Test Laboratory:** Architectural Testing, Inc., an Intertek company ("Intertek-ATI")  
130 Derry Court  
York, Pennsylvania 17406-8405  
717-764-7700

### 3.0 Project Summary:

- 3.1 Product Type:** Fixed Curb Mount Skylight
- 3.2 Series/Model:** "Specials" Single Dome Skylight Acrylic Smooth (5' x 8') (0.150 thickness)
- 3.3 Compliance Statement:** Results obtained are tested values and were secured by using the designated test method(s).
- 3.4 Test Date(s):** 09/14/16
- 3.5 Test Record Retention End Date:** All test records for this report will be retained until September 14, 2020.
- 3.6 Test Location:** Intertek-ATI test facility in York, Pennsylvania.
- 3.7 Test Specimen Source:** The test specimen(s) was provided by the client. Representative samples of the test specimen(s) will be retained by Intertek-ATI for a minimum of two years from the test completion date.
- 3.8 Drawing Reference:** The test specimen drawings have been reviewed by Intertek-ATI and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Intertek-ATI per the drawings on file with Intertek-ATI. Any deviations are documented herein or on the drawings.
- 3.9 List of Official Observers:**

<u>Name</u>	<u>Company</u>
Timothy J. McGill	Intertek-ATI
Richard E. Hartman III	Intertek-ATI

#### 4.0 Test Specification(s):

Occupational Safety and Health Administration/U.S. Department of Labor Regulations (Standards- 29 CFR) - 1910.23(e) (8)

California Code of Regulations, Title 8, Section 3212

A 400 lb. weight, fabricated from a bag filled with lead shot, was placed on the center of the glazing for a minimum of 60 seconds. The bag was removed and the test unit was inspected for any signs of damage or failure.

Additional Loading:

The specimen was taken to failure using sandbags placed on the center of the glazing for a minimum of 60 seconds. The highest load causing penetration or damage was recorded.

#### 5.0 Test Specimen Description:

##### 5.1 Product Sizes:

Overall Area: 46.5 ft <sup>2</sup>	Width (inches)	Length (inches)
Overall size	65-3/4	101-3/4

##### 5.2 Frame Construction:

Frame Member	Material	Description
Inner frame	Aluminum	Extruded
Dome clamp cover	Aluminum	Extruded

	Joinery Type	Detail
All corners	Mitered	Miter cut and welded

**5.3 Reinforcement:** No reinforcement was utilized

##### 5.4 Weatherstripping:

Description	Quantity	Location
Custom shaped gasket	1 row	Located around the interior perimeter of the inner frame

## 5.0 Test Specimen Description: (Continued)

**5.5 Glazing:** *No conclusions of any kind regarding the adequacy or inadequacy of the glazing in any glazed test specimen(s) can be made.*

Glazing Type	Glazing Method
5/32" acrylic smooth	The glazing was set from the exterior onto a custom shaped gasket against the extruded aluminum frame. The glazing was secured using an aluminum extruded dome clamp cover with a bead of sealant on the glazing. The dome clamp cover was secured using #10 x 5/8" screws located 2" from the corners and one at midspan of the length sides.

Location	Quantity	Daylight Opening (inches)	Glazing Bite (inches)
Dome	1	60-3/4 by 96-3/4	1

## 5.6 Drainage:

Drainage Method	Size	Quantity	Location
Weepslot with wick	1" long by 1/4" wide	1 per corner	Located in each corner of the low profile gasket

## 5.7 Hardware:

Description	Location
Spring clip	Pressed into the shoulder of the inner frame extrusion above each predrilled installation hole

## 6.0 Installation:

The specimen was installed into a Spruce-Pine-Fir wood curb. The curb was sized to be tight-fitting to the frame, eliminating the need for shimming.

Location	Anchor Description	Anchor Location
Aluminum frame	#10 x 1-1/2" pan head screw	9" from each corner, 12" on center

**7.0 Test Results:** The results are tabulated as follows:

**7.1 California (and OSHA) minimum loading:**

Test Load	Load Location	Results
400 lb.	Center of dome	No visible damage

**Note:** Interior glazing was cut out prior to testing. The 400 lb. weight was applied perpendicular to the center of the dome. After 60 seconds of rest time, there was no visible damage to the glazing.

**7.2 Additional loading (applied on the same unit in the listed order):**

Test Load	Load Location	Results
500 lb. at rest	Center of dome	No visible damage
600 lb. at rest	Center of dome	No visible damage
700 lb. at rest	Center of dome	See Note #1
800 lb. at rest	Center of dome	See Note #1
900 lb. at rest	Center of dome	See Note #2

**Note #1:** Glazing cracked under the dome clamp cover.

**Note #2:** At 900 lbs., the test load shattered the glazing.

Intertek-ATI will service this report for the entire test record retention period. Test records such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained by Intertek-ATI for the entire test record retention period.

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 Intertek-ATI.

For ARCHITECTURAL TESTING, Inc.

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Richard E. Hartman III  
Technician

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Timothy J. McGill  
Manager – Product Testing

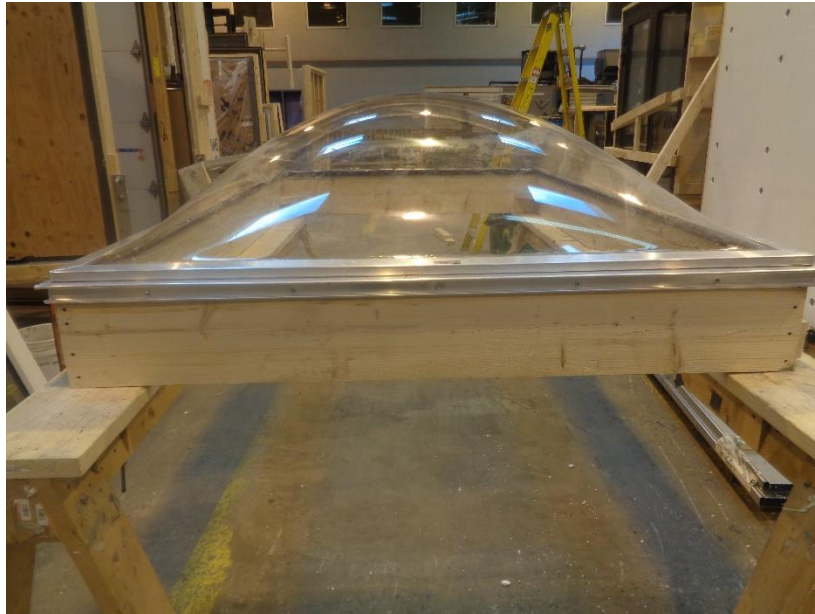
REH:asm/cmd

Attachments (pages): This report is complete only when all attachments listed are included.

Appendix-A: Photograph(s) (1)

Appendix-B: Drawing(s) (0) Complete drawings packet on file with Intertek-ATI.

**Appendix A**  
**Photograph(s)**



**Photo No. 1**  
**Tested Specimen**



**Photo No. 2**  
**Tested Specimen with 400 lb. Load Applied**

**Appendix B**

**Drawing(s)**

**Note:** Complete drawings packet on file with Intertek-ATI.