



**TEST REPORT**

**Report No.:** E6827.01-602-47

**Rendered to:**

AD SKYLIGHTS, INC.  
Algonquin, Illinois

**PRODUCT TYPE:** Fixed Curb Mount Skylight  
**SERIES/MODEL:** AD Skylight with guard  
AD Skylight without Guard

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

**Test Date:** 04/13/15  
**Report Date:** 04/16/15  
**Test Record Retention Date:** 04/13/19

**1.0 Report Issued To:** AD Skylights, Inc.  
206 Berg  
Algonquin, Illinois 60102

**2.0 Test Laboratory:** Architectural Testing, Inc.  
An Intertek Company ("Intertek - ATI")  
5906 Saxon Avenue  
Schofield, Wisconsin 54476  
715-241-8624

### 3.0 Project Summary:

**3.1 Product Type:** Fixed Curb Mount Skylight

**3.2 Series/Model:** AD Skylight With Guard / AD Skylight without guard

**3.3 Compliance Statement:** Results obtained are tested values and were secured by using the designated test method.

**3.4 Test Date:** 04/13/2015

**3.5 Test Location:** AD Skylights, Inc. manufacturing facility in Algonquin, Illinois.

**3.6 Test Sample Source:** The test specimen was provided by the client. The sample remained in the custody of the client after testing.

**3.7 Drawing Reference:** The test specimen drawings have been reviewed by Architectural Testing and are representative of the test specimens reported herein. Test specimen construction was verified by Intertek - ATI 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>
Jerzy Depczyk	AD Skylights, Inc.
Dominik Depczyk	AD Skylights, Inc.
John Bordagaray	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).

A 250 lbf weight, fabricated from a bag filled with sand, was placed on the center of the skylight for a minimum of 60 seconds. The bag was removed and the test unit was inspected for any signs of damage or failure. The bag was then dropped from heights above the skylight at 2', 3' and 4'.

#### 5.0 Test Specimen Description:

##### 5.1 Product Sizes:

Overall Area: 35.75 ft <sup>2</sup>	Width (inches)	Height (inches)
Overall frame size	52	99
Curb size	51	98
Cap	53	100
(unit #4) Guard	53	100

##### 5.2 Frame Construction:

Frame Member	Material	Description
Frame	Aluminum	Thermally Extruded
Cap	Aluminum	Extruded
Guard	Aluminum	3/16" x 1" Extruded Bar

	Joinery Type	Detail
All frame and cap corners	Mitered	Welded
Guard	Lap	secured to the cap with 3/16" aluminum rivets at each end and two tack welds at each cross members at every intersection

**5.3 Weatherstripping:** No weatherstripping was utilized.

**5.4 Glazing:** The units were exterior glazed, set on a 1/8" x 1/2" closed cell foam tape with 2 sheets of acrylic separated by open cell foam tape and secured with an extruded aluminum cap with butyl tape against the outer acrylic sheet. The aluminum cap was secured to the frame with #8 x 3/4" long TEK screws, located 2-1/2" from corners and spaced 10" - 12" on center around the perimeter.

## 5.0 Test Specimen Description: (Continued)

### 5.4 Glazing: (Continued)

- Unit #1:**    **Outboard lite:** 1/4" thick Lucite L continuous cast acrylic  
**Inboard Lite:** 1/8" thick Lucite L continuous cast acrylic
- Unit #2:**    **Outboard Lite:** 1/4" thick Duraplex SG05 Impact Modified acrylic  
**Inboard Lite:** 1/8" thick Duraplex SG05 Impact Modified acrylic
- Unit #3:**    **Outboard Lite:** 3/16" thick Duraplex SG05 Impact Modified acrylic  
**Inboard Lite:** 1/8" thick Duraplex SG05 Impact Modified acrylic
- Unit #4:**    **Outboard lite:** 1/4" thick Lucite L continuous cast acrylic  
**Inboard Lite:** 1/8" thick Lucite L continuous cast acrylic  
**Guard:** 3/16" x 1" welded aluminum cage

## 6.0 Installation:

The skylight was installed onto a Spruce-Pine-Fir wood curb with #14 x 1-1/2" long Hex head screws, located 5" from corners and spaced 12" - 16" on center through pre-drilled holes. The test frame was placed and leveled prior to testing.

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

### 7.1 OSHA Safety Test

Test unit	Test	Load Location	Results
#1	250 lbf at rest	Center of dome	No visible damage
#2	250 lbf at rest	Center of dome	No visible damage
#3	250 lbf at rest	Center of dome	No visible damage
#4	250 lbf at rest	Center of guard	Guard deflected 7/8"

*Note: The 250 lbf weight was gently applied perpendicular to the center of each dome. After 60 seconds of rest time, there was no visible damage to skylights or guard.*

## 7.0 Test Results: (Continued)

### 7.2 OSHA Safety Drop Test

#### *Unit #1, #2, #3*

Test Method	Load Location	Results
500 lbf-ft. (2' drop height)	Center of dome	No visible damage
750 lbf-ft. (3' drop height)	Center of dome	No visible damage
1000 lbf-ft. (4' drop height)	Center of dome	No visible damage

*Note: At the end of testing the skylights remained intact with no apparent damage.*

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 specimens 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 specimens tested. This report may not be reproduced, except in full, without the written approval of Intertek – ATI

For ARCHITECTURAL TESTING, Inc.

---

John R. Bordagaray  
Director - Regional Operations

---

Jeffrey M. Zibton  
Project Manager

JRB:jmz/asm

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

Appendix-A: Photographs (4)

Appendix-B: Drawing (1)

This report produced from controlled document template ATI 00514, issued 02/28/11.

**Appendix A**  
**Photographs**



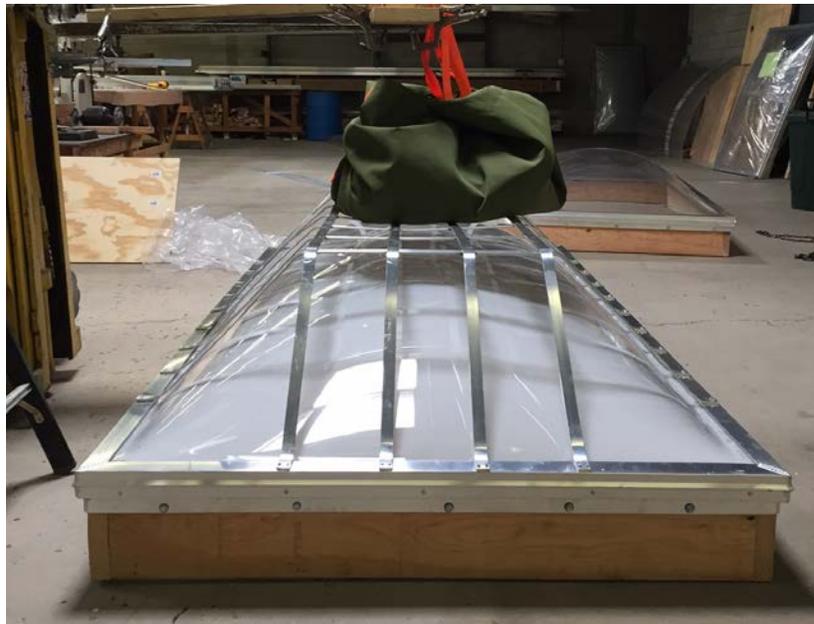
**Photo No. 1**  
**1/4" x 1/8" Lucite L (250 lbs at rest)**



**Photo No. 2**  
**1/4" x 1/8" Lucite L (after 4' drop)**



**Photo No. 3**  
**3/16" X 1/8" Duraplex SG05 (250 lbs at rest)**



**Photo No. 4**  
**Guard (250 lbs at rest)**

## **Appendix B**

### **Drawing**

sample complies with these details

Deviations are noted

Report # E6827:01-602-47

Date: 4/14/2015

Tech

JRE

# AD SKYLIGHTS

FLYER NO.2

## CURB SECTION OF STANDARD TR THERMALY BROKEN CURB MOUNTED UNIT



Building **Better Together.**

Test sample complies with these details

Deviations are noted

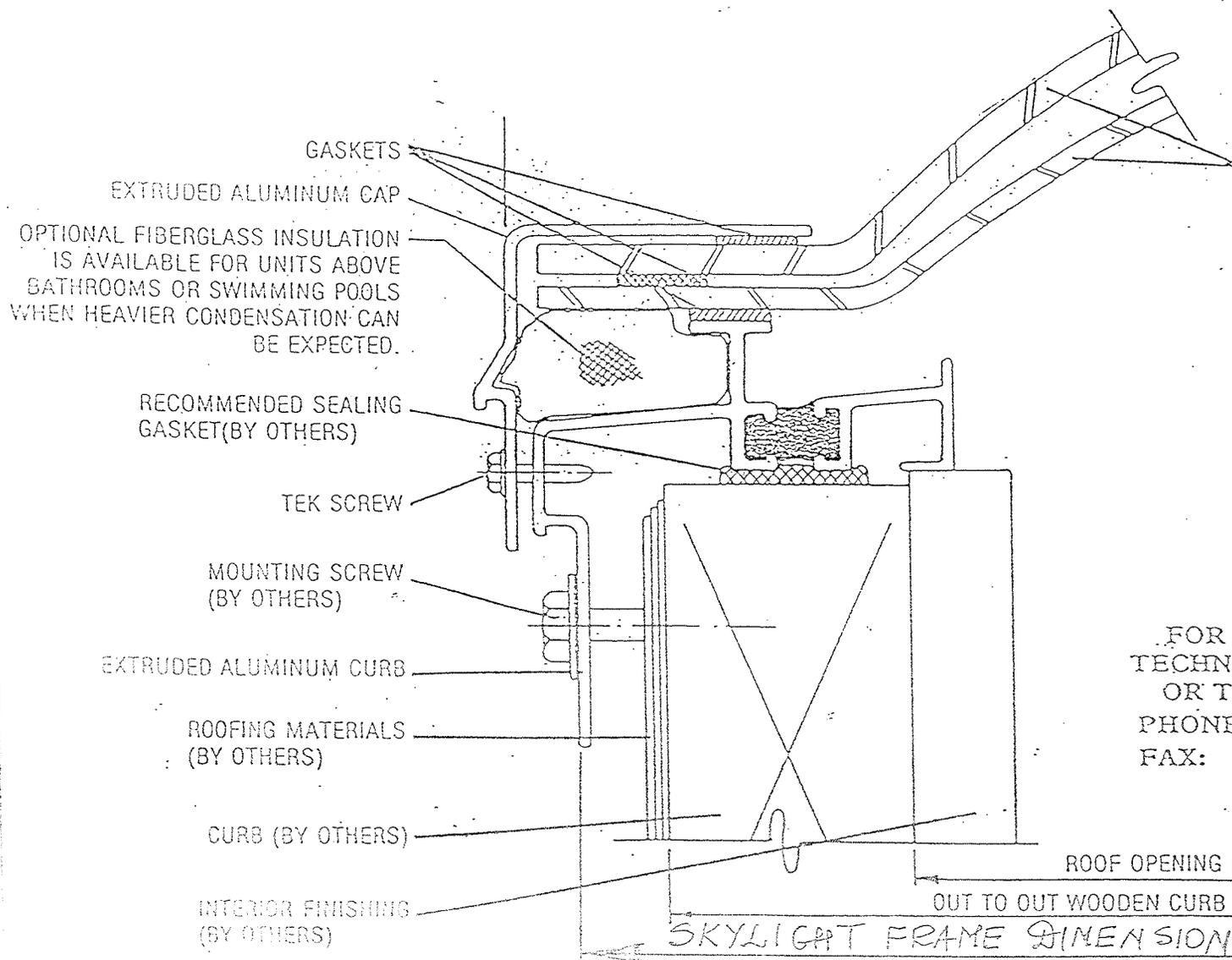
Report # E6827.01-602-47

Date: 4/14/2015

Tech

JRE

Copyright Reserved by John D. Berggren



ACRYLIC GLAZING:  
 IN PLASTIC SINGLE, DOUBLE OR  
 EVEN TRIPLE DOMES OR  
 PYRAMIDS, OR COMBINATION  
 OF THEM ARE AVAILABLE.  
 GLASS UNITS ARE ALSO AVAILABLE.

FRAMING-THERMALY BROKEN  
 EXTRUDED ALUMINUM FRAME  
 AVAILABLE IN MILL, ANODIZED OR  
 PAINTED FINISH.

SIZES:  
 FOR STANDARD SIZES SEE TABLE 1.1.  
 ALL OTHER SIZES ARE AVAILABLE AS  
 WELL ON REQUEST.

FOR INFORMATION,  
 TECHNICAL ASSISTANCE  
 OR TO ORDER CALL:

PHONE: 1-847-854-2900

FAX: 1-847-854-2902