



TEST REPORT

Report No.: G2784.01-109-44

Rendered to:

VELUX America LLC
Greenwood, South Carolina

PRODUCT TYPE: Fixed Curb-Mount Skylight
SERIES/MODEL: "SoCal" Dynamic Polycarbonate Dome (0.118")
[Product Code: CDS 48xx 3P200S]

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

Test Date(s): 09/28/16

Revision 1: 10/13/16

Report Date: 10/04/16

Test Record Retention End Date: 09/28/20

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: "SoCal" Dynamic Polycarbonate Dome (0.118") [Product Code: CDS 48xx 3P200S]

3.3 Compliance Statement: Results obtained are tested values and were secured by using test method(s) intended to address the designated performance specifications.

3.4 Test Date(s): 09/28/16

3.5 Test Record Retention End Date: All test records for this report will be retained until September 28, 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
Joel Chronister	Intertek-ATI

4.0 Test Method (intended to address listed 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: 36.6 ft ²	Width (inches)	Length (inches)
Overall size	52-1/2	100-7/16

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: No weatherstripping was utilized

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
0.117" dynamic polycarbonate	The glazing was set from the exterior onto 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 to the frame using #10 x 5/8" screws located 1-3/4" from the corners and 12" on center on all four sides.

Location	Quantity	Daylight Opening (inches)	Glazing Bite (inches)
Dome	1	48-7/8 x 96-7/8	11/16

6.0 Installation: The specimen was installed into a Spruce-Pine-Fir wood buck.

Location	Anchor Description	Anchor Location
Aluminum frame	#10 x 1-1/2" pan head screw	8-1/4" from corners and 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: The 400 lb. weight was applied perpendicular to the center of each dome. After 60 seconds of rest time, there was no visible damage to the exterior 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
601 lb. at rest	Center of dome	No visible damage
703 lb. at rest	Center of dome	No visible damage
807 lb. at rest	Center of dome	No visible damage
909 lb. at rest	Center of dome	No visible damage
1011 lb. at rest	Center of dome	No visible damage
1112 lb. at rest	Center of dome	No visible damage
1213 lb. at rest	Center of dome	No visible damage
1314 lb. at rest	Center of dome	No visible damage
1414 lb. at rest	Center of dome	No visible damage
1516 lb. at rest	Center of dome	No visible damage
1617 lb. at rest	Center of dome	No visible damage
1719 lb. at rest	Center of dome	No visible damage
1819 lb. at rest	Center of dome	No visible damage
1920 lb. at rest	Center of dome	No visible damage
2022 lb. at rest	Center of dome	No visible damage
2124 lb. at rest	Center of dome	No visible damage
2224 lb. at rest	Center of dome	No visible damage
2327 lb. at rest	Center of dome	No visible damage
2429 lb. at rest	Center of dome	No visible damage
2529 lb. at rest	Center of dome	See Note #1

Note #1: After 2529 lbs., test was stopped.

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.

Joel Chronister
Technician

Timothy J. McGill
Manager – Product Testing

JC:asm

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.

Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
1	10/13/16	Pages 1, 2, and 4	Changed "acrylic" to "polycarbonate"

This report produced from controlled document template ATI 00514, revised 06/26/14.

Appendix A
Photograph(s)



Photo No. 1
View of Test Specimen



Photo No. 2
Test Specimen with 400 lb. Weight Applied

Appendix B

Drawing(s)

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