PERFORMANCE TEST REPORT

Rendered to:

SOLATUBE INTERNATIONAL, INC.

Report No.: 84491.01-301-47
Test Date: 06/11/08
Report Date: 07/15/08
Revision 1 Date: 08/29/13
Record Retention End Date: 06/11/12

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PERFORMANCE TEST REPORT

Rendered to:

SOLATUBE INTERNATIONAL, INC.
2210 Oak Ridge Way
Vista, California 92081

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Project Summary: Solatube International contracted Architectural Testing, Inc. to witness Impact testing at their facility on two 21" Tubular Daylight Devices (TDD). One 330 DS TDD (Photo No.1) and one 750DS TDD (Photo No.2) was tested in accordance with Federal OSHA Fall Protection Standard 1926.502(c) Safety Net Systems, 1926.502(b)(5) Screens, 1926.502(i) Covers, 1910.23(e)(8) Skylight Screens, and California State OSHA Fall Protection Code of Regulations, Title 8, Section 3212 (e)(1)(Skylight Screens). The domes tested met the performance requirements as listed in the body of this report.

Test Methods: The impact tests were conducted in accordance with the following:

1. Federal OSHA Fall Protection Standard 1926.502 (c) Safety Net Systems.

2. California State OSHA Fall Protection Code of Regulations, Title 8, Section 3212 (e)(1) (Skylight Screens)

Test Equipment: The equipment used to conduct these tests meets the requirements of the Federal Standard Fall Protection and California OSHA Standard Fall Protection. The 400 lbs. bag consisted of several sandbags bundled in a tarp and tied together with rope, measuring a total of 30" diameter. (See Photograph No.3) The actual weight of the bag (430 lbs.) was measured with a GSE Model 450 scale S/N 413955 and last calibrated 02-09-08.

Test Procedures: Federal OSHA Fall Protection: Standard 1926.502(c) Safety Net Systems, and the California State OSHA Fall Protection Code of Regulations, Title 8, Section 3212 (e)(1) Skylight Screens. The 400 lb. (180 kg) bag of sand 30 inches (76 cm) in diameter was elevated 42 inches above the roof deck then dropped, without restraint (Photo No. 4), onto the top of each dome. (See Photos No. 5 and 6) The dome and flashing assembly was then inspected for failure.
Test Specimen Description:

<table>
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<tr>
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<th>21&quot;</th>
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<tbody>
<tr>
<td><strong>Series/Model</strong></td>
<td>330DS-O</td>
<td>750DS-O</td>
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<tr>
<td><strong>Dome Size</strong></td>
<td>22-5/8&quot;</td>
<td>23-7/8&quot;</td>
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<tr>
<td><strong>Dome Height</strong></td>
<td>9-1/4&quot;</td>
<td>13-1/4&quot;</td>
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<tr>
<td><strong>Dome Weight</strong></td>
<td>68 oz</td>
<td>96 oz</td>
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<tr>
<td><strong>Dome Thickness</strong></td>
<td>0.168&quot;</td>
<td>0.210&quot;</td>
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<td><strong>Dome Material</strong></td>
<td>Cyro</td>
<td>Cyro</td>
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<tr>
<td><strong>Dome</strong></td>
<td>Part # 509100</td>
<td>Part # 401930</td>
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<tr>
<td><strong>Flashing</strong></td>
<td>New - 11&quot; Part # 200860</td>
<td>New - 11&quot; Part # 200860</td>
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<tr>
<td><strong>Dome Ring</strong></td>
<td>Part # 400785</td>
<td>Part # 400785</td>
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**Dome Rings / Dome**: Dome rings were employed to secure the dome. The acrylic domes were mechanically attached to the dome ring / flashing with three #8 x 1-5/8" Phillips washer head sheet metal screws and plastic spacers equally spaced on the perimeter.

**Flashing Construction**: The flashing was made of formed steel and had conical sides to create a curb and a circular flange. The 21" TDD curb height was 11".

**Test Results:**

<table>
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<tr>
<th>Test Samples</th>
<th>Test</th>
<th>Results</th>
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<tbody>
<tr>
<td>750DS (See Photograph No.6)</td>
<td>400 lb. impact</td>
<td>No failure</td>
</tr>
<tr>
<td>330DS (See Photograph No.7)</td>
<td>400 lb. impact</td>
<td>No failure</td>
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</table>
Test Conducted by:

Dan State  
Solatube International
Joshua Rillie  
Solatube International

Test Witnessed by:

Leaton Kirk  
Architectural Testing, Inc.

Detailed drawings, data sheets, representative samples of test specimens, a copy of this report, or other pertinent project documentation will be retained by Architectural Testing, Inc. for a period of four years from the original test date. At the end of this retention period, such materials shall be discarded without notice and the service life of this report will expire.

Results obtained are tested values and were secured by using the designated test methods. 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 Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC.

Kenny White  
Laboratory Manager

Leaton Kirk  
Director – Regional Operations

Attachments (pages): This report is complete only when all attachments listed are included.
Appendix-A: Drawings (2)
Appendix-B: Photographs (7)
## Revision Log

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<td>Correction of Expiration Date to Record Retention Date.</td>
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Appendix A

Drawings
Appendix B

Photographs
Photo No. 1
330 DS TDD
Photo No. 2
750 DS TDD
Photo No. 3
30" Diameter Sand Bag
Photo No. 4
Sand bag at drop height
Photo No. 5
330 DS at impact
Photo No. 6
750 DS at impact
Photo No. 7
330 DS prior to impact