

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION
SK-16

Effective August 1, 2005

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation 3 years after the effective date.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code and the Texas Engineering Practice Act.

Solatube SoloMaster® Series and Brighten Up® Series Tubular Daylight Devices, Impact Resistant, Manufactured by:

**Solatube International, Inc.
2210 Oak Ridge Way
Vista, CA 92081-8341
(800) 966-7652**

Will be acceptable in the designated catastrophe zones along the Texas Gulf Coast when installed in accordance manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The Solatube SoloMaster® Series and Brighten Up® Series Tubular Daylight Devices are impact resistant tubular skylights consisting of a dome, flashing, tunnel section, and diffuser assemblies. SoloMaster® Series and Brighten Up® Series Tubular Daylight Devices can be used in residential and commercial applications.

This report includes individual, impact-resistant skylights based on the following tested configurations:

SoloMaster® Series 21" (Polycarbonate Dome) Tubular Daylight Devise (SP-110 (21) diameter)

The SoloMaster® Series 21" Tubular Daylight Devise may be installed on curb-mounted and self-flashed configurations. The Series 21" is suitable for mounting on either flat or sloped roofs. This series is available with a standard 0.143" injection molded acrylic dome or an optional 0.125 polycarbonate dome.

Configuration: O

Glazed Dome Construction: Polycarbonate domes consist of manufacturer brands Atoglas Tuffak or GE Lexan. The domes are mechanically fastened to the curb mount flashing with six (6) #8 by $\frac{3}{4}$ " long truss head sheet metal screws (equally spaced) over a dense EPDM rubber grommet. The holes in the dome and flashing are pre-punched.

Glazed Dome Dimensions: Outside Diameter: $22\frac{9}{16}$ "; Height: $9\frac{1}{4}$ "; Thickness: 0.143"

Glazing Method: The dome is mechanically fastened to the flashing using six (6) #8 x $\frac{3}{4}$ " long truss head SMS and a dense EPDM rubber grommet equally spaced on the perimeter. The holes in the dome are pre-punched.

Brighten Up® Series 14" & Series 10" (Polycarbonate Dome) Tubular Daylight Devices (SP-110 (14) diameter)

The Brighten Up® Series 14" & Series 10" Tubular Daylight Devices are available in self-flashed configurations. The Series 14" & Series 10" are suitable for mounting on either flat or sloped roofs. This series is available with a standard 0.120" injection molded acrylic dome or an optional 0.080" polycarbonate dome.

Configuration: O

Glazed Dome Construction: Polycarbonate domes consist of manufacturer brands Atoglas Tuffak or GE Lexan. The domes are mechanically fastened to the curb mount flashing with four (4) #8 by $\frac{3}{4}$ " long truss head sheet metal screws (equally spaced) over a dense EPDM rubber grommet. The holes in the dome and flashing are pre-punched.

Glazed Dome Dimensions: Outside Diameter: 14 $\frac{1}{2}$ "; Height: 5 $\frac{7}{8}$ "; Thickness: $\frac{1}{16}$ "

Glazing Method: The dome is mechanically fastened to the top curb extension flashing using four (4) #8 x $\frac{3}{4}$ " long truss head SMS and a dense EPDM rubber grommet equally spaced on the perimeter. The holes in the dome and flashing are pre-punched.

The following applies to all skylights:

Product Identification: A label will be attached to the skylight. The label includes the manufacturer's name, model number, and diameter of the unit.

LIMITATIONS

Design Pressures:

Model	Glazing Material	Type	Diameter	Design Pressure
SoloMaster® Series 21"	Polycarbonate	Curb-Mount	21"	± 110 psf
SoloMaster® Series 21"	Polycarbonate	Self-Flashed	21"	± 110 psf
Brighten Up® Series 14"	Polycarbonate	Self-Flashed	14"	± 110 psf
Brighten Up® Series 10"	Polycarbonate	Self-Flashed	10"	± 110 psf

Roof Slope: Solatube Tubular Daylight Devices are available with a variety of flashing configurations and installation options. Solatube Tubular Daylight Devices can be installed on flat, built-up roofs or sloped, composition shingle and tile roofs. Flashing configuration should be selected in accordance with the manufacturer's recommendations.

Impact Resistance: These skylight assemblies satisfy the Texas Department of Insurance criteria for protection from windborne debris. The skylight passed an impact standard equivalent to Missile Level C specified in ASTM E1996-01. The skylight assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded. These skylight assemblies will not need to be protected with an impact protective system.

Acceptance of Smaller Assemblies: Skylight assemblies with width and height dimensions equal to or smaller than those specified in this evaluation report are acceptable within the limitations specified.

INSTALLATION INSTRUCTIONS

General: The skylight shall be installed in accordance with the manufacturer's installation instructions.

Installation:

SoloMaster® Series 21" (curb-mounted) The metal curb is attached to the wood curb using eight (8) #10 by 2" long truss head sheet metal screws. The screws are located through pre-drilled holes in the metal curb.

SoloMaster® Series 21" (self-flashed) The metal curb flashing flange is attached to the plywood deck using sixteen (16) #10 x 2" long truss head sheet metal screws spaced approximately 6" on center. The screws were located through pre-drilled holes in the flashing.

Brighten Up® Series 14" (self-flashed) The metal pitched curb flashing flange is attached to the plywood deck using eight (8) truss head sheet metal screws (#10 by 2") approximately 8" apart. The screws are located through pre-drilled holes in the flashing.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC) and the International Building Code (IBC).