



**SOLATUBE**<sup>®</sup>

How It Works

# Easy Reference Guide

Hotline: (888) SOLATUBE  
765-2882



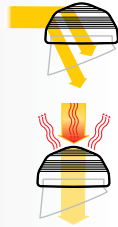
## Breakthrough Technology

## for Higher Performance

## Solatube® Daylighting System

**1 Raybender® 3000 Technology**

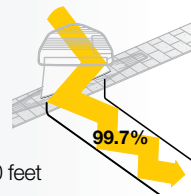
- Patented daylight-capturing dome lens
- Redirects low-angle sunlight
- Rejects overpowering summer midday sunlight
- Consistent daylighting throughout the day

**2 LightTracker™ Reflector**

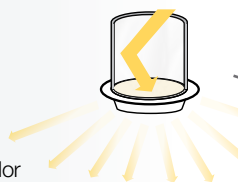
- Patented in-dome reflector
- Redirects low-angle winter sunlight
- Increases light input for increased light output
- Unsurpassed year-round performance

**3 Spectralight® Infinity**

- World's most reflective tubing
- 99.7% spectral reflectivity
- Purest color rendition possible
- Allows for amazing run lengths of more than 30 feet

**4 Dual Lens Array Technology**

- Combines two lenses to provide complete daylighting customization
- The Diffuser Lens controls the light diffusion
- The Effect Lens adjusts the light and offers choices to soften or warm the light color



At the heart and soul of every Solatube product, you'll discover an array of innovative technologies that defy conventional thinking. Technology in the dome nearly doubles the Effective Daylight Capture Surface (EDCS) compared to a clear dome used by a typical "tubular skylight." Our proprietary reflective tubing uses a revolutionary multi-layer polymer surface to reflect more light than physicists thought possible. In fact, it is the most reflective material in the world without using environmentally harmful metals. Optical lenses give you the ability to capture daylight like never before. That's a Solatube Daylighting System.

**Capture Zone**

Sunlight is captured by the dome and directed down into the tube.

1

2

**Transfer Zone**

Sunlight is directed downward through the attic.

3

4

**Delivery Zone**

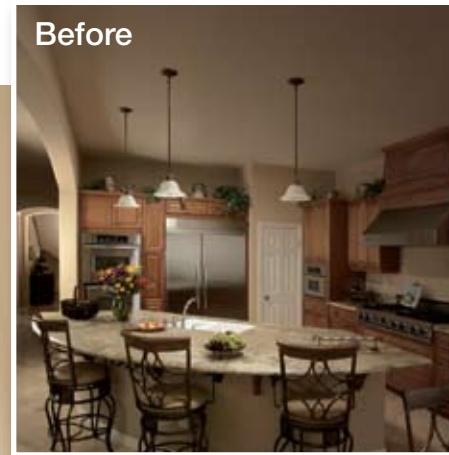
Sunlight is distributed throughout the room.

# The Right Light for Every Room

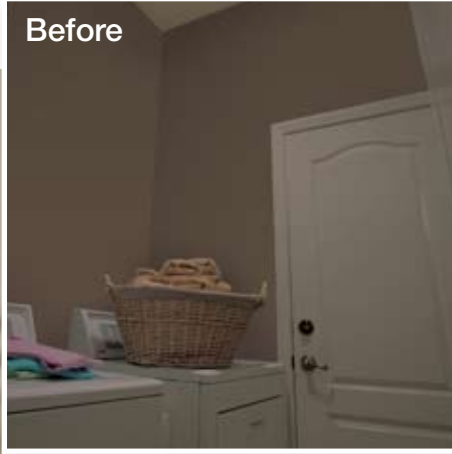
The Brighten Up® Series transforms difficult to light and often forgotten rooms into extraordinary spaces filled with pure, natural daylight. Highly effective and simple to install, these models can transform dark interior rooms and light more expansive spaces when used in multiples, creating a unique architectural effect.



- Ideal for:**
- Bathrooms
  - Hallways
  - Closets
  - Laundry Rooms
  - Kitchens
  - Living Rooms
  - Dining Rooms
  - Home Offices



Before



# Brighten Up® Series

## Solatube 160 DS Daylighting System

(approximately 10 in/250 mm in diameter)

## Solatube 290 DS Daylighting System

(approximately 14 in/350 mm in diameter)

### Brighten Up® Series

Model	Tube Size (diameter)	EDCS*	Light Coverage Area (residential)	Potential Tube Length
<b>Solatube 160 DS</b>	≈ 10 in (250 mm)	160 in <sup>2</sup> (1032 cm <sup>2</sup> )	150-200 ft <sup>2</sup> (14-19 m <sup>2</sup> )	20 ft+ (6 m+)
<b>Solatube 290 DS</b>	≈ 14 in (350 mm)	290 in <sup>2</sup> (1871 cm <sup>2</sup> )	250-300 ft <sup>2</sup> (23-28 m <sup>2</sup> )	30 ft+ (9 m+)

\*EDCS (Effective Daylight Capture Surface) represents the surface area of the dome that collects and redirects sunlight. For comparison, a clear dome with no lens on a 10 inch tube system has an EDCS of 78.5 square inches.



## Solatube® Designer Touches

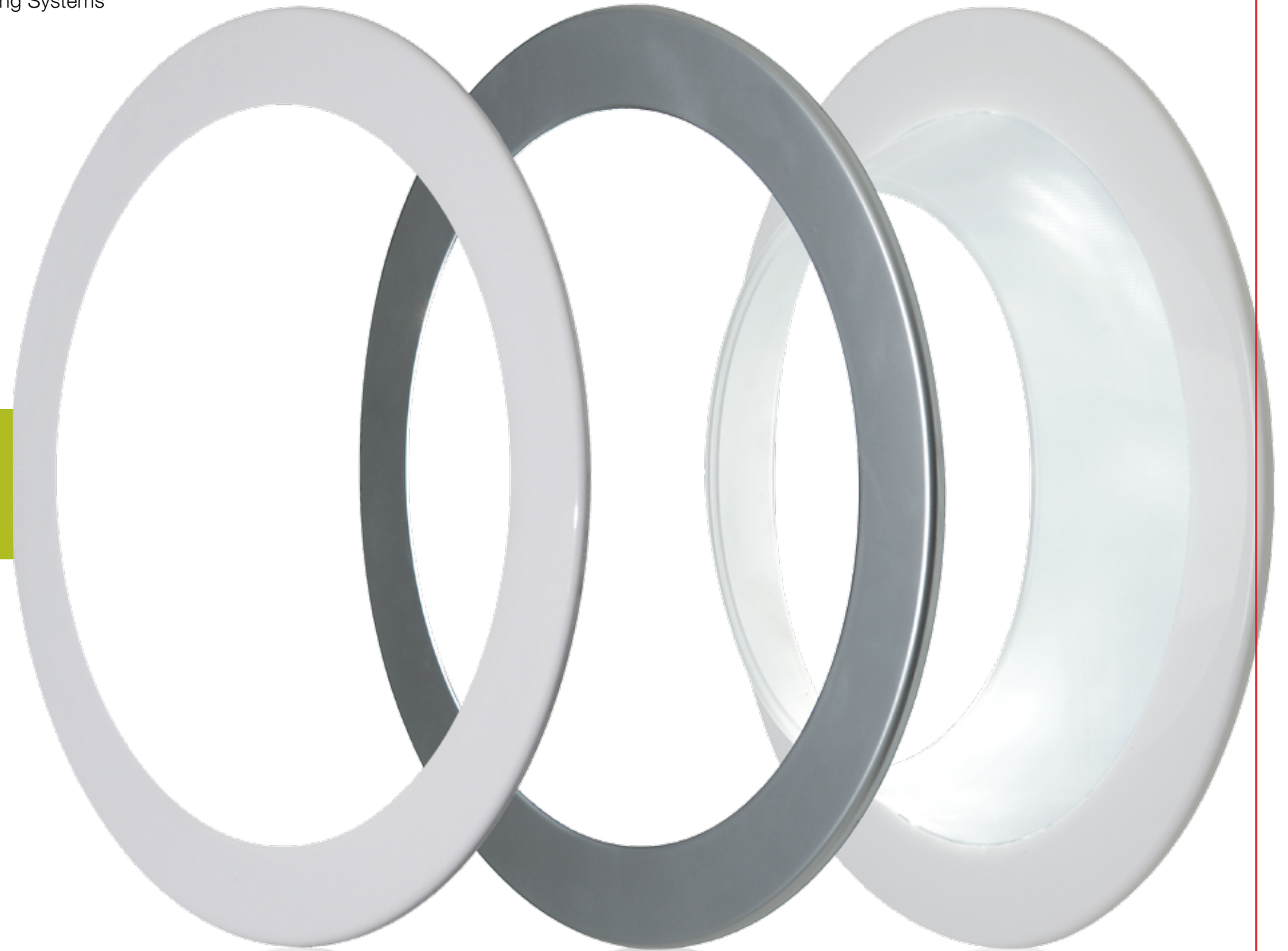
For Brighten Up® Series Daylighting Systems

1 2 3 4

# Choose Your Style

With three different trim styles,  
it's easier than ever to create a  
look to fit your décor.

Designer Touches



### ■ White Trim

The standard dress ring comes in the ever-popular low-profile white color to blend with the ceiling.

### ■ Stainless-Tone Trim

The Stainless-Tone Trim is designed to complement metal finishes and is a great choice for modern designs.

### ■ Frosted Shade

The Frosted Shade with White Trim provides a clean contemporary look to any Solatube Daylighting System.

**Solatube® Designer Touches**  
For Brighten Up® Series Daylighting Systems

1 2 3 4

# Choose Your Diffuser

Choose the Diffuser Lens  
you want to fill your room  
with bright sunlight.

■ **OptiView® Diffuser**

Considered the ultimate in diffuser design, the OptiView Diffuser uses a Fresnel lens to deliver crystal clear daylight and a unique view of the sky.



■ **Vusion™ Diffuser**

The fresh design harmonizes with most décors, and provides the radiance of natural light.



**Solatube® Designer Touches**  
For Brighten Up® Series Daylighting Systems

1 2 3 4

# Select Your Effect

Use an Effect Lens  
to design your own  
daylighting experience.



## Natural

Provides brilliant white  
natural daylight. This lens  
comes standard.

## Warm

Enhances natural daylight  
by warming the light  
creating a color comparable  
to incandescent bulbs.

## Softening

Creates a subtle, softer  
natural lighting effect.

## Warm Softening

Similar to the Warm  
Effect Lens, but a softer  
glowing effect.

**Solatube® Designer Touches**  
For Brighten Up® Series Daylighting Systems

1 2 3 4

# Add More Function

Take daylighting to the next level by upgrading your Solatube Daylighting System to include lighting, dimming, and ventilation.



■ **Universal Light Add-On Kit with Medium Screw Base**

The Light Add-On Kit provides the convenience of a switched light for night time use. Compact Fluorescent Light Add-On Kit is also available.



■ **Ventilation Add-On Kit**

The Solatube 160 DS is available with an optional Ventilation Add-On Kit. When combined with this innovative accessory, the 2-in-1 ceiling fixture minimizes ceiling penetrations for a more attractive look.

■ **Daylight Dimmer\***

Our proprietary variable butterfly baffle easily controls the amount of light entering a room with the convenience of a switch.

\*Patent #7,082,726

















# Flashing Options

Flashing kits are available for fast and easy installations on nearly all roof types and pitches. The flashing kits provide complete protection and create an attractive appearance on your roof. They're fabricated as a single, seamless piece to ensure leak-proof performance. Pitched flashings provide the optimal position for the tube to capture daylight on sloped roofs.



No Pitch	Pitched	Universal Tile	Curb Mounted Cap
 0:12 - 3:12	 4:12 - 12:12		
 Flat	 Shingle	 Tile*	 Standard Curb Cap
<ul style="list-style-type: none"> <li>• Use on low pitch or flat roofs. Available in 4 in/100 mm or 6 in/150 mm high.</li> <li>• Use 6 in/150 mm for heavy snow loads</li> </ul>	 Shake/Slate	 Flat Tile	 Metal Curb Cap
	 Metal* <small>*Order Metal Roof Kit.</small>	<ul style="list-style-type: none"> <li>• Pitched or non-pitched models are available.</li> <li>• Use standard pitch or standard no pitch flashings as a base.</li> </ul>	

\*Patent #7,168,211

## Turret Extensions

- Used to raise the height of the dome on a roof to avoid snow, water, or shading from roof obstructions.
- Available in 2 in/50 mm, 4 in/100 mm, 12 in/300 mm, 24 in/600 mm, 36 in/900 mm and 48 in/1200 mm sizes.



2 in/50 mm Turret Extension installed on tile roof



# Solatube® Accessories



## Shock Inner Dome

High Velocity Hurricane Zone areas such as South Florida require the Solatube Shock Inner Dome. This highly impact-resistant inner dome can also be added to any installation for extra protection from extreme environmental forces.



## Optional Ventilation Roof Cap

For use with the Ventilation Add-On Kit (if no vent exists). Comes with gravity damper to prevent back flow.



## Dome Edge Protection Band

This is required for fire rated roofs.

## Flashing Insulator

This insulating material helps to reduce flashing condensation in cold climates when flashing is exposed to humid interior space.



Flashing Insulator

## Spectralight® Infinity Extension Tubes

Extension tubes can be added in increments of 16 in/400 mm or 24 in/600 mm for long runs without sacrificing performance. The secret is the unrivaled reflectivity of Spectralight® Infinity in the tube, making it possible to create up to 90 degree angles and have long tube runs.



0-90 Degree Extension Tube



Extension Tube

### Extension Tube Reference Guide

This chart is for use with kits containing 2 extension tubes. For installations over 43 in /109 cm, use the following chart to determine the number of additional tubes needed.

*Attic Height		Additional Ext. Tubes Needed 24 in/61cm
(inches)	(cm)	Tube Qty
Up to 43 in	109 cm	0
65 in	165 cm	1
87 in	221 cm	2
109 in	277 cm	3
131 in	333 cm	4
153 in	389 cm	5
175 in	445 cm	6
197 in	500 cm	7
219 in	556 cm	8
241 in	612 cm	9
263 in	668 cm	10

\*Distance is measured from ceiling hole to roof hole.

## Codes and Approvals

Rest assured that the Solatube Daylighting System can be used in your project without any hassles. Solatube Daylighting Systems have been approved by all major building product approval agencies:

- A440-05 (AAMA/WDMA/CSA)
- ICC
- Florida Building Code/High Velocity Hurricane Zone
- City of Los Angeles
- Texas Department of Insurance
- Energy Star®/NFRC
- Federal OSHA Fall Protection
- California OSHA Fall Protection



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