

## TECHNICAL INFORMATION SHEET

## SunWave™ Light Channel

Item Description

**Tubular Daylight Device** 

Item Number Custom



### **Product Information**

#### **Description:**

Tubular daylighting device designed for suspended ceiling applications.

### Method of Application:

- 1. Install in accordance with current Firestone specifications, details, and workmanship requirements.
- 2. Fasteners packaged with SunWave Daylights include #12 x 1½" (38 mm) 300 series stainless steel screws with neoprene/stainless steel bonded washers.
- 3. Substrates must be clean, dry, smooth, and free of sharp edges, fins, loose or foreign materials, oil, and grease.

### Storage:

- Store products in manufacturer's unopened packaging until ready for installation.
- Store materials in a dry area, protected from freezing, staining, contamination or damage.

### **Cleaning Lenses:**

Frequency of cleaning is determined by site conditions. When cleaning acrylic lenses, use only water or water with a mild soap. Use a soft rag to minimize scratching the acrylic. A pressure washer is acceptable to use as well.

Never use ammonia, aromatic or petroleum based products to clean acrylic lenses. This will cause deterioration and cracking of the lens and will void the warranty.

#### **LEED® Information:**

Post Consumer Recycled Content: 50% Post Industrial Recycled Content: 25%

Manufacturing Location: Sacramento, CA \*NOTE: LEED® is a registered trademark of the U.S. Green Building Council.



#### **Compliance Information:**

- High Velocity Hurricane Zone Approved FBP-1650
- National Fenestration Rating Council (NFRC)
- Florida Building Code: FL #14199
- Tested in accordance to AAMA/WDMA/CSA101/I.S.2/A440-08: North American Fenestration Standard/Specification for windows, doors, and skylights.

**FM Approved** Skylights shall be glazed using CLEAR ARMOR® Clear Polycarbonate Prismatic over CLEAR ARMOUR® High White Polycarbonate Prismatic lens, Class A Rated, FM Approved.

**FM Approved** Skylights shall be tested and approved under Factory Mutual #4431 testing method for fixed skylights. Class A flame rating. Standard size units up to 5080.

**AAMA Listed** Standard size units up to 5080 are tested and certified to AAMA/WDMA/CSA101/I.S.2/A440 to comply with 800MD frame section 2405.5 of the International Building Code.

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TIS # 1822 02/21/2018

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Florida Building Code Test Protocols for HVHZ protocol TAS 201, TAS 202 and TAS 203 applies to High Velocity Hurricane Zone skylights. The samples tested met the performance requirements set forth in the protocols for a ±60.0 psf design pressure rating. Size units up to 5080 with 800 MD frame are tested and listed for HVHZ.

**OSHA Regulation Section 1926.502(i)(2)** applies to skylight covers being placed in the openings in a roof at the time of installation. This regulation states "All [other] covers shall be capable of supporting, without failure, at least twice the weight of employees, equipment, and materials that may be imposed on the cover at any one time." An independent third-party testing laboratory performed a 400-pound drop test on a SunWave unit which resulted in no damage after impact and five minutes of continued exposure. Therefore, when properly installed on a building architecturally designed for, and supportive of skylights, SunWave Daylights are considered compliant with this OSHA requirement.

**NOTE:** No plastic skylight of any kind is immune to degradation over time and any skylight would be unlikely to continue to meet the OSHA 1926.502 requirements after having been exposed to 10 to 20 years of UV radiation. It is imperative building owners, contractors, designers, and architects comply with OSHA section 1910.23(a)(4) and install an appropriate guard or screen to prevent injuries to third parties.

**OSHA Section 1910.23(a)(4)** establishes the requirements for all skylight roof openings. This regulation states, "Every skylight floor opening, and hole shall be guarded by a standard skylight screen or a fixed standard railing on all exposed sides." To ensure that our products comply with this OSHA regulation, all Firestone SunWave Curbs include standard integrated fall protection screens. These screens come factory-installed in our curbs, ensuring that all our curb installations meet the regulation. Therefore, when properly installed to a building architecturally designed for, and supportive of skylights, SunWave Daylights are considered compliant with this OSHA requirement. However, please note that Firestone Building Products Company, LLC is not responsible for the installation or architectural designs required for proper use of Firestone SunWave products. Use of a certified installer and consultation with an architect before using Firestone SunWave products is advised.

#### **Product Information:**

SunWave Light Tunnel Prismatic Skylight frame shall be fabricated from 6063-T5 aluminum, finish to be natural mill. Frames shall have integral condensation and weepage gutters which drain interior moisture to the outside. Corners shall be mitered and welded. The acrylic glazing shall be separated from the skylight frame with a Silicon Seal. The integral curb shall be fabricated from .063" sheet aluminum on the exterior, corners heliarc welded, and include a rigid insulation. The -21" (533 mm) diameter light well shall be fabricated from 98% reflective MIRO-SILVER® with greater than 99% specular quality. Round to square transition fabricated from 98% reflective MIRO-SILVER® with greater than 99% specular quality with integrated diffuser door frame. Multiple lens options available with differentiating luminous patterns and designs.

CONTROLS: The SunWave Light Tunnel is available both nLight®-enabled system, allowing integration of daylight and electric lighting.

Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate lenses. Refer to the compatibility tables for suitable uses on our website.

Skylights not for use in Harsh, Corrosive, Marine and high-humidity Environmental Conditions such as Marina, Greenhouses, Petrol-Chemical facilities or other chemicals where the skylights may be exposed to such conditions.

Туре	U-Value	SHGC
Acrylic/Acrylic	.40	.24
Poly/Acrylic	.40	.24
Poly/Poly	.40	.24

Roof Curb	Aluminum
Outside Dimensions	25" (635 mm) x 25" (635 mm)
Inside Dimensions	22" (559 mm) x 22" (559 mm)
Height	8" (203 mm) and 14" (356 mm)

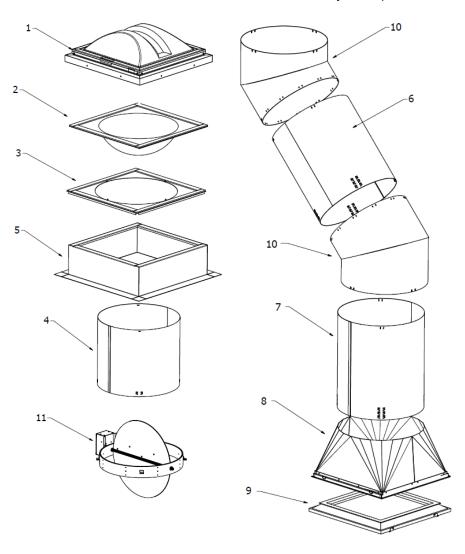
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**NOTE:** To select the Light Well Length, determine the length from the top of the selected curb (8" or 14"), to the suspended ceiling. - If the determined length falls between shaft lengths, select the longer length available.

- Additional tubes may be required when using elbows and avoiding obstructions.



Item	Description	
Standard Kit Items		
1	SunWave Skylight	
2	Optic Sphere	
3	Curb Transition	
4	18" (406 mm) Roof Curb Top Tube	
5	Curb	
6	24" (610 mm) Light Well Tube #1	
7	24" (610 mm) Light Well Tube #2	
8	Round-To-Square Transition	
9	Diffuser	
OPTIONAL ITEMS (Non-Standard Kit Items.		
Please specify in order logic.)		
10	Adjustable Elbow	
11	Single-Blade Louver	
Quantity of tube sections is determined by curb		
to suspended ceiling distance.		

Please contact Firestone Technical Services Department at 1-800-428-4511 for further information.

This sheet is meant to highlight Firestone products and specifications and is subject to change without notice. Firestone takes responsibility for furnishing quality materials which meet published Firestone product specifications or other technical documents, subject to normal roof manufacturing tolerances. Neither Firestone nor its representatives practice architecture. Firestone offers no opinion on and expressly disclaims any responsibility for the soundness of any structure. Firestone accepts no liability for structural failure or resultant damages. Consult a competent structural engineer prior to installation if the structural soundness or structural ability to properly support a planned installation is in question. No Firestone representative is authorized to vary this disclaimer.