

# Commercial Sun Tunnel Skylights

Capturing daylight for the workplace



# Why VELUX?

VELUX is the global leader in harnessing the benefits of the sun. For over 75 years VELUX has been designing, manufacturing, and delivering the world's best skylights for applications where people live, work, and play. VELUX is one of the strongest brands in the global building materials and home improvement industry. VELUX has 17 strategically located production sites in 9 different countries, and 40 sales organizations all working to ensure global unit skylight demands are met in a manner that exceeds expectations.



# Where to Install VELUX Commercial Sun Tunnel Skylights

VELUX Commercial Sun Tunnel Skylights should be installed anywhere there is a need for daylight, that is, daylight without a view to the outside. Sun Tunnel Skylights provide a maintenance free and cost-effective daylighting solution that quickly transforms spaces. The Commercial Sun Tunnel can be installed in both open and closed ceiling applications. When compared to traditional on-site constructed light shaft solutions, the VELUX Sun Tunnel

skylight provides increasing cost savings benefits as the length of the light shaft increases. VELUX Sun Tunnel skylights provide an economical means to bring daylight into any interior space.

Ideal applications for VELUX Commercial Sun Tunnel Skylights include schools, retail spaces, medical facilities, warehouses, and anywhere excellent light quality is needed.

# Take it from the top... VELUX SunCurve



This highly transmissive, light capturing VELUX SunCurve comes standard on every 22" Commercial Sun Tunnel Skylight.

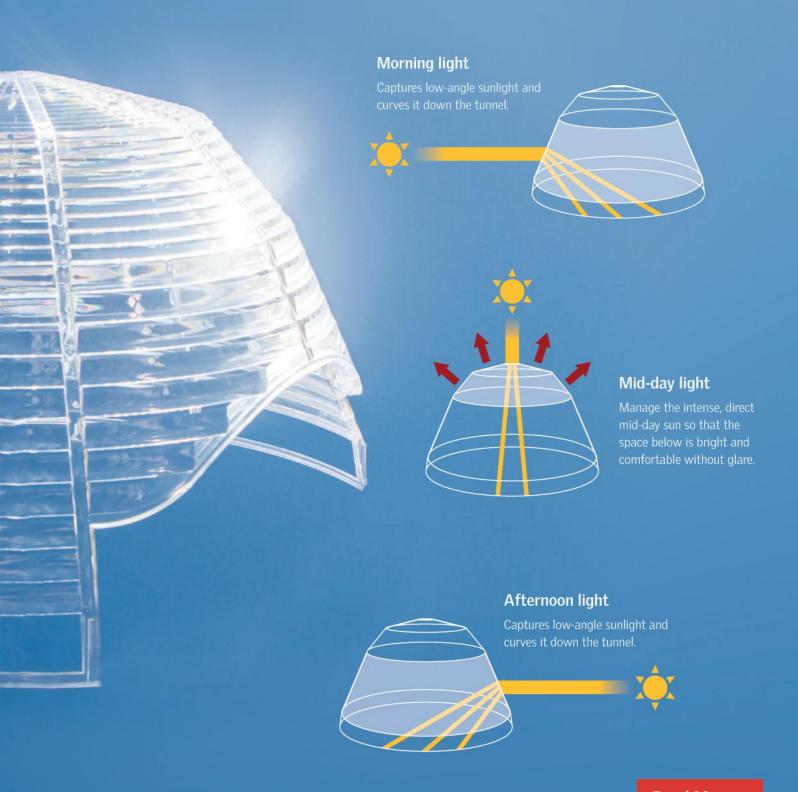
Designed to capture sunrays that would normally pass through the dome, and instead directs them down the tunnel.



22" kit includes outer dome and VELUX SunCurve



# What makes the VELUX SunCurve better?



Read More >

## Flashing & Dome Types

Choose the right flashing type for your installation from the choices below.

### Self flashed model (TGC)





#### TGC 014 0000

Impact Modified Acrylic Dome

#### TGC 014 1000

Impact Polycarbonate Dome

- · Lower profile dome
- · Low profile pan flashing
- Flexi Loc™ tunnel system
- · 16" tunnel extension
- Roof pitch 0°-60°







### TGC 022 3000

Impact Modified Acrylic Dome

#### TGC 022 5000

Impact Polycarbonate Dome

- · High profile SunCurve
- · Low profile pan flashing
- Flexi Loc<sup>™</sup> tunnel system
- 16" tunnel extension
- Roof pitch 0°-60°



### Curb mounted model (TCC)





### TCC 014 0000

Impact Modified Acrylic Dome

### TCC 014 1000

Impact Polycarbonate Dome

- · Lower profile dome
- · Low profile curb mount flashing
- Flexi Loc<sup>™</sup> tunnel system
- · 16" tunnel extension
- · Roof pitch 0°-60°







#### TCC 022 3000

Impact Modified Acrylic Dome

### TCC 022 5000

Impact Polycarbonate Dome

- · High profile SunCurve
- · Low profile curb mount flashing
- Flexi Loc<sup>™</sup> tunnel system
- 16" tunnel extension
- · Roof pitch 0°-60°



### Pitched self flashed model (TMC)





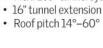
### TMC 014 0000

Impact Modified Acrylic Dome

### TMC 014 1000

Impact Polycarbonate Dome

- · Lower profile dome
- · 20° pitched pan flashing
- Flexi Loc<sup>™</sup> tunnel system





### For questions or ordering assistance:

Call our toll-free Commercial Customer Service Hotline:

1-888-878-3589

Contact Customer Service by email:

commercialteam@velux.com

Hours of operation: Monday - Friday, 8:00 a.m. - 7:00 p.m. (ET)

# Diffuser Options

Choose from a variety of ceiling options to meet all your application needs. All are available in 14" and 22" sizes.

### Diffuser assembly type



THC Hard ceiling 22" for drywall



THC Hard ceiling 14" for drywall



TTC Round to square assembly for suspended ceiling



**THC** Open ceiling

### Diffuser material



**Frosted** Frosted diffusers offer a combination of performance and aesthetics.

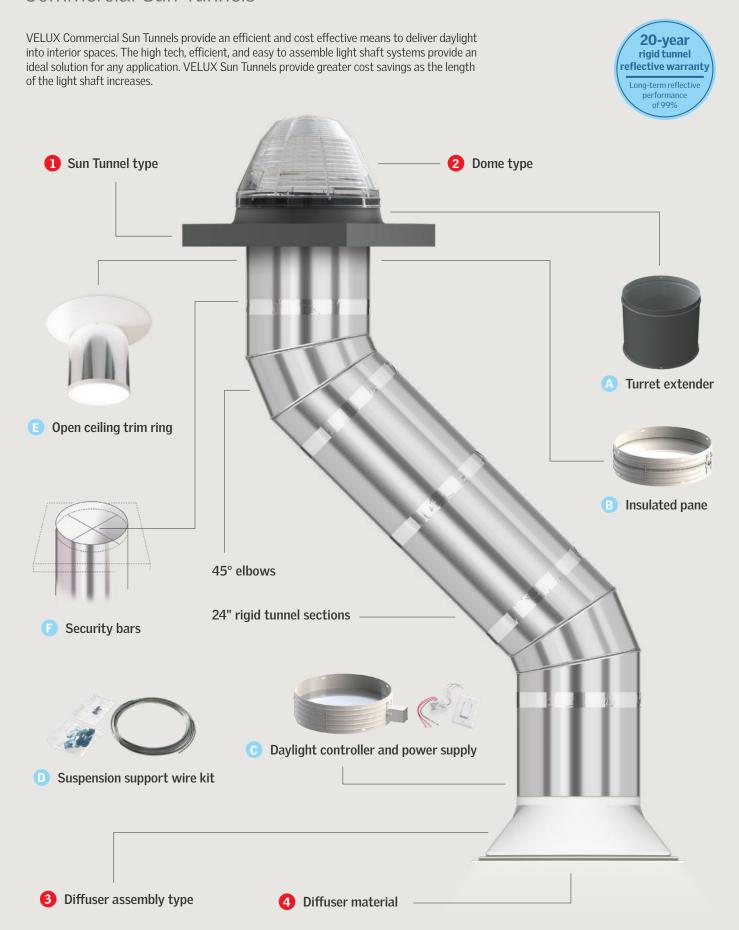


**Prismatic** The industry standard prismatic diffusers provide good light distribution with the look and feel to match existing architectural design.



**Fresnel** Fresnel diffusers utilize a concentric pattern of parabolic prisms that provide superior light diffusion.

# Commercial Sun Tunnels



## Components

### **Main Components**

### Sun Tunnel type

**TGC** = Self flashed

**TCC** = Curb mounted

**TMC** = Pitched self flashed











Dome type

3 = Acrylic impact modified tall dome and VELUX SunCurve for 22"

**5** = Polycarbonate impact tall dome and VELUX SunCurve for 22"

**0** = Acrylic low profile dome for 14" and 22"

1 = Acrylic impact modified low profile dome for 14"







Outer tall dome and inner SunCurve dome 22" size only

Low profile dome 

### 3 Diffuser assembly type

**TTC** = Round to square suspended ceiling diffuser assembly

**TOC** = Round open ceiling diffuser assembly

**THC** = Round hard ceiling diffuser assembly for drywall applications







Diffuser material

0 = Frosted

2 = Prismatic

3 = Fresnel







### Accessories

### Turret extender

Recommended with flat roof TGC applications

**ZTA 014 0012** = 12" high 14" diameter flashing extender for TGCs **ZTA 014 0036** = 36" high 14" diameter flashing extender for TGCs **ZTA 022 0012** = 12" high 22" diameter flashing extender for TGCs **ZTA 022 0036** = 36" high 22" diameter flashing extender for TGCs

### B Insulated pane – thermal break

**ZTC 022 0401** = 22" PVC thermal break with dual thermal acrylic panes **ZTC 014 0401** = 14" PVC thermal break with dual thermal acrylic panes

### Daylight controller and power supply

**ZTP 022** = 22" PVC thermal break with reflective damper

**ZTP 014** = 14" PVC thermal break with reflective damper

**ZZZ 232** = Power supply for light controller; one can provide power for up to 10 ZTP daylight controllers

### Suspension support wire kit

Recommended

**ZTZ 203** = 50' of wire with attachment hardware

### Open ceiling trim ring

Recommended to cover rough opening cuts

**ZTJ 0022** = 22" diameter trim ring **ZTJ 0014** = 14" diameter trim ring

### Security bars

**ZTQ 022 0001** = Single 22" security bar **ZTQ 022** = Double 22" maximum security bars **ZTQ 014 0001** = Single 14" security bar **ZTQ 014** = Double 14" maximum security bars

#### **Exterior Fire Band**

Provide dome edge protection – for Class B and C rated roofs

**ZZZ 192 0014** = 14" fire band **ZZZ 192 0022** = 22" fire band

### **Rotating Coupler**

Enables quick tunnel connections and a rotating joint

**ZTZ 211 0014** = 14" coupler **ZTZ 211 0022** = 22" coupler

#### **Tunnel Tape Roll**

2" wide aluminum backed moisture and flame resistant 60 yard roll of tape suitable for extreme temperatures

**ZTZ 204** = 2" x 60 yard roll

## How to Order

### Configurable Kits in 3 Easy Steps or Bulk Purchasing for Large Projects

## **Configurable kits** – Time-saving and easy-to-order

1 Select your size, dome type and flashing















2 Select your tunnel components









Elbows

3 Select your diffuser and assembly type









THC





Frosted Prismatic

Hard ceiling

Suspended ceiling

Open ceiling



For value engineered quotes or assistance with custom configurations, call 1-888-878-3589.

# Testing Data

## Commercial Sun Tunnel Skylights Technical Information

Size	14"			22"	
Model	TCC Curb	TGC Self	TMC Pitched	TCC Curb	TGC Self
<b>Air infiltration/exfiltration*</b> [max. @ 75 Pa (1.57 lbs/ft²) differential pressure]					
l/s/m²	1.4 (A2)			1.5 (A2)	
cfm/ft²	0.28			0.30	
Water resistance @ 3.4 L/m²/min (5 USgal/ft²/hr)* [max. tested differential pressure with no leakage]					
Pascals	720			720	
lbs/ft²	15			15	
	Thermal performance (complete unit ratings - from physical testing)  VELUX Sun Tunnel Skylights are rated with certifiable U-Factor with insulation as indicated,  SHGC, and VT ratings, as listed in the NFRC Certified Products Directory [VEL-N-26]				
Diffuser type	U-factor: Btu/[hr*ft²*F°] (and W/[m²* K°])				
TOC only	2.00 (11.36)			1.52 (8.63)	
TOC with Energy Kit	0.51 (2.90)			0.40 (2.27)	
TTC only	1.69 (9.60)		1.46 (8.29)		
TTC with Energy Kit	0.50 (2.84)		0.40 (2.27)		
THC only	n.r.			0.44 (2.50)	
THC with Energy Kit	0.37 (2.10)			0.30 (1.70)	
Diffuser type	SHGC/VT: US (and Canada)				
TOC only	0.47 / 0.45		0.33 / 0.55		
TOC with Energy Kit	0.33 / 0.33		0.27 / 0.42		
TTC only	0.61 / 0.52		0.33 / 0.53		
TTC with Energy Kit	0.34 / 0.36		0.26 / 0.41		
THC only	n.r.			0.28 / 0.43	
THC with Energy Kit	0.26 (0.33) / 0.27 (0.30)		0.25 (0.37) / 0.28 (0.43)		
Structural Performance*  Performance Grades or DP in psf: NAFS-11 (NAFS-08) [Note: 1 psf = 47.88 Pa]					
Dome type **	Uplift (negative)				
Acrylic or Polycarbonate	145 (110)			130 (100)	
Dome type **	Download (positive)				
Acrylic or Polycarbonate	300 (200)			300 (200)	
* Tested and certified in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-11 (NAFS 2011)  VELUX® Sun Tunnel Skylights are WDMA Hallmark certified as indicated above and below  (See www.wdma.com, Hallmark Nos. 426-H-707 and 708)					
** Products with Polycarbonate domes are tested for Wind-Borne debris impact and pressure cycling in accordance with ASTM E 1886-05 and ASTM E 1996-05 Rated for Wind Zone 3, Missile Level C, Cycle Pressure +50/-50					

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Bringing light to life.

