VELUX®

Product information

Sun tunnels TCF and TCR
for flat roofs and roofing felt materials

TCF

TCR

Product description

- VELUX sun tunnels are complete installation kits with all necessary components for both exterior and interior connections

- Exterior rooflight module with
  - transparent protective dome
  - PVC frame
  - sash

- Two tunnel types
  - TC**F** - with **f**lexible tunnel
  - TC**R** - with **r**igid tunnel

- Interior light diffuser unit with
  - frosted, two-layer light diffuser with EdgeGlow (removable inner pane for easy cleaning)
  - integrated ceiling trim ring

- For information on VELUX sun tunnels
  - TLF/TLR for pitched roofs and flat roofing materials
  - TWF/TWR for pitched roofs and profiled roofing materials
  see separate Product information sheets

Roof pitch

- Can be installed in roof pitches between 0° and 15°

Materials

- Acrylic or polycarbonate, dome
- PVC, frame
- Plastic, sash
- Fibreglass yarn or aluminium with reflective coating, tunnels
- Polyethylene (PE) foil, vapour barrier collar
- Polycarbonate, interior light diffuser
- Plastic, integrated ceiling ring

Downloads

For installation instructions and CAD drawings, please visit velux.nn.
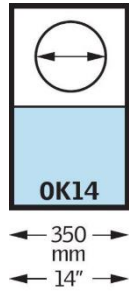
Certifications

5 YEARS GUARANTEE

The VELUX product factories guarantee quality systems implementation process and environmental management systems through appropriate accreditations ISO 9001 and ISO 14001

EUTR In compliance with the EU Timber Regulation (EUTR), EU regulation 995/2010

REACH We are aware of the REACH regulation and acknowledge the obligations. No products are obliged to be registered in accordance to REACH and none of our products contain any Substances of Very High Concern.
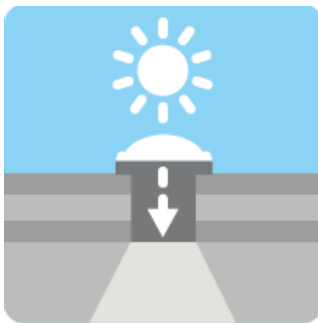
Available sizes

VELUX sun tunnels TCF/TCR are available in size 0K14 only

Measurements are tunnel diagonals.

About VELUX sun tunnels

VELUX sun tunnels **direct the natural light** captured from the sky, through the loft space and into rooms and corridors where installation of traditional VELUX roof windows is either not possible or not appropriate.
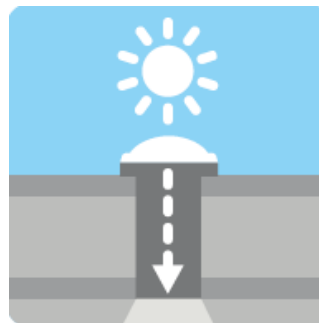
VELUX sun tunnels can **transform even the darkest places** that would normally have to do with artificial lighting **into bright and welcoming living areas**.

The reflective tunnel, flexible or rigid, leads the natural daylight from the rooflight module into the building. The design of the tunnel ensures an **exceptional reflection of the incoming daylight**, so that the tunnel even on a cloudy winter day generates as much light as a traditional 60W electric bulb.

The **flexible** tunnel is ideal for distances between roof and ceiling from 0.2 to 0.9 m.
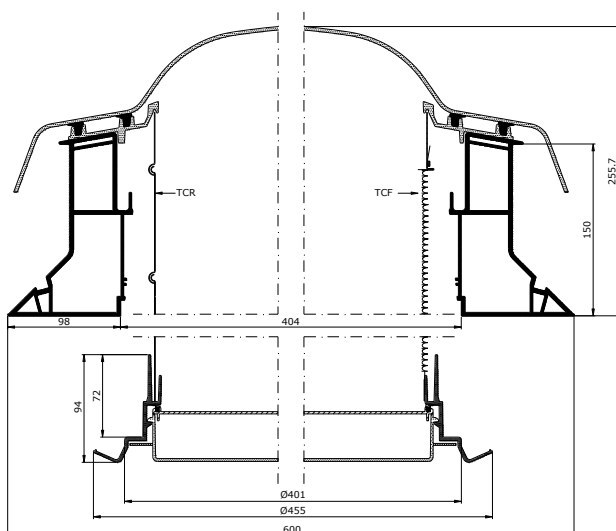
- flexible fibreglass
- high reflective coating
- tunnel diameter 350 mm

The **rigid** tunnel is ideal for distances between roof and ceiling from 0.9 to 1.7 m - with extension sections up to 6 m.

- extension sections 620/1240 mm
- rigid aluminium
- super high reflective coating
- tunnel diameter 350 mm
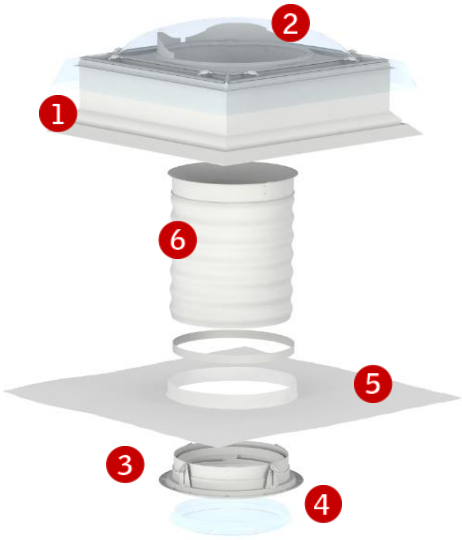- Easy to assemble with Flexi Loc™

Section

Technical values

	TCF	TCR
U_w [W/m²K]	2.6	2.8
Including ZTB kit [W/m²K]	1.7	1.8
Dn,e,w (C;Ctr) [dB]	54 (-5; -8)	54 (-5; -8)
Water tightness [class]	9A (600 Pa)	9A (600a)
Air permeability [class]	4	4

Variants and sizes

	TCF	TCR	TLF	TLR	TWF	TWR
Sizes	0K14	0K14	0K14	0K10 0K14	0K14	0K10 0K14
Roof pitch	0°-15°		15°-60°		15°-60°	
Roofing material	Roofing felt materials		Flat roofing materials - slates, shingles, roofing felt		Profiled roofing materials	
Exterior rooflight module	• PVC frame, white • plastic sash • protective dome, acrylic or polycarbonate		• Lacquered aluminium frame with integral flashing, dark grey • removable sash • 4 mm toughened glass • easy-to-clean coating (outside)		• Polyurethane frame with integral flashing, black • removable sash • 4 mm toughened glass • easy-to-clean coating (outside)	
Tube	• **Flexible** tube • fibreglass • high reflective coating	• **Rigid** tube • 2 straight sections plus 2 adjustable elbows • aluminium • super reflective coating • 98% internal reflection rate	• **Flexible** tube • fibreglass • high reflective coating	• **Rigid** tube • 2 straight sections plus 2 adjustable elbows • aluminium • super reflective coating • 98% internal reflection rate	• **Flexible** tube • fibreglass • high reflective coating	• **Rigid** tube • 2 straight sections plus 2 adjustable elbows • aluminium • super reflective coating • 98% internal reflection rate
Standard tunnel length	0.9 m	1.7 m	Up to 2.0 m	1.7 m	Up to 2.0 m	1.7 m
Length including tunnel extension sections ZTR	-	Up to 6.0 m	-	Up to 6.0 m	-	Up to 6.0 m
Interior light diffuser unit	• frosted, two-layer polycarbonate light diffuser • integrated ceiling ring, white		• frosted, two-layer polycarbonate light diffuser • integrated ceiling ring, white		• frosted, two-layer polycarbonate light diffuser • integrated ceiling ring, white	

TCF

TCR

1 Rooflight module

The square rooflight module is installed in the roof and flashed with the same roofing felt material as the rest of the roof.
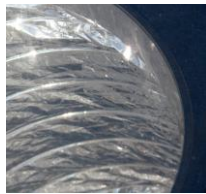
2 Protective dome

The protective dome is made of acrylic or polycarbonate. It is fixed to the frame with special bolts.

3 Ceiling ring

Seen from the inside, the sun tunnel ends in a frosted light diffuser discretely framed by a white ceiling ring.

4 Light diffuser with EdgeGlow

The discreet light diffuser is designed with EdgeGlow, a new ring of clear glass around the edge of the light diffuser that spreads the light better in the room and offers unique light effects.
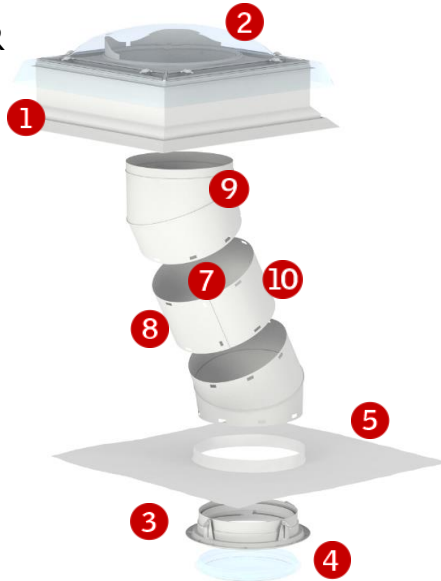
5 Vapour barrier collar

Vapour barrier collar BBX is supplied with the sun tunnel to ensure a tight connection between the sun tunnel and the existing vapour barrier of the house.

6 Flexible tunnel

A high reflective coating along the interior of the flexible tunnel provides an excellent reflection rate.
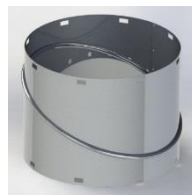
7 Super reflective coating

A super reflective coating along the interior of the rigid tunnel provides a 98% internal reflection rate - ensuring that almost all natural light reaching the exterior pane is transferred to the room below.

8 Rigid tunnel - with Flexi Loc™

The rigid tunnel and tunnel extension sections ZTR feature Flexi Loc™ clip system for easy and fast tunnel assembly.
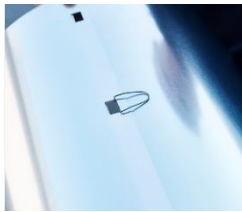
9 Rigid tunnel - elbow

Rigid elbow section - adjustable 0°-45°

10 Rigid tunnel - straight section

Accessories

Extension section ZTR for rigid tunnel

Extension section ZTR is used to extend rigid sun tunnel TWR when the distance from roof to interior ceiling level exceeds 1.70 m. The rigid tunnel can be extended with sections of ZTR up to a maximum of 6.0 m.

Extension section ZTR
- features Flexi Loc™ clip system for easy and fast tunnel assembly
- is available in lengths of 620 mm/1240 mm

Light kit ZTL

Light kit ZTL turns the sun tunnel into a lamp when it is dark outside.
Low energy LED technology provides dependable light for many years and slim line design minimises shadows on the diffuser pane.

Light kit ZTL
- can easily be fitted in both new and already installed sun tunnels
- is supplied with a 4W LED light bulb (corresponds to a 40W incandescent bulb)
- fits both rigid and flexible sun tunnels

Blackout blind ZTK

Blackout blind ZTK fits both rigid and flexible sun tunnels - and is ideal for blackout in sleeping areas such as children's rooms or siesta areas. During the day, ZTK is easily fitted/removed with the rod supplied. Magnets hold the blind in place.

Blackout blind ZTK
- is made from durable, lightweight material to prevent risk of personal injury
- is available in black
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Low U-value kit ZTB

Low U-value kit ZTB 0K14 2002 lowers the U-value in a standard installation.
When fitted, there is no visible difference between a sun tunnel with or without the low U-value kit. The same, discrete interior design is maintained.

Low U-value kit ZTB
- is very easily fitted - together with or after installation of the sun tunnel
- consists of two layers of acrylic glass and a gasket

Note

We reserve the right to make technical changes.

For more information on sun tunnels TCF and TCR and other VELUX products, please visit velux.nn.