# CI System
# Rooflight Dome F100

Technical Information

# Technical Information

## CI System Rooflight Dome F100

Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com

Contents

Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com




**Product description:**

The CI System rooflight dome F100 is a component for use in flat and slightly inclined roofs. Depending on the model, the rooflight can perform the following functions:

1. **Lighting** of internal rooms by allowing daylight to pass through;

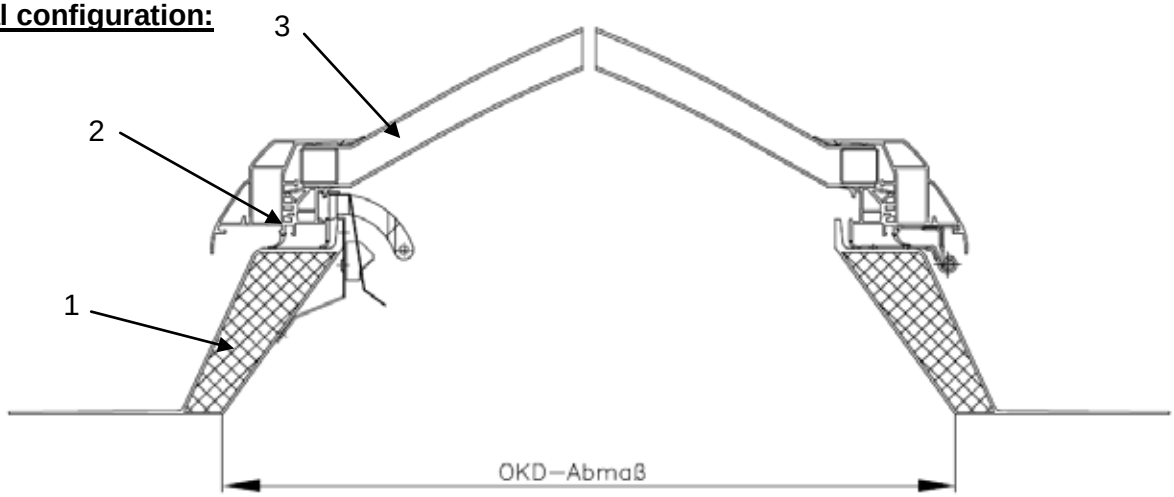
2. **Ventilation** of internal rooms with the help of various opening mechanisms; and

3. **Smoke and heat ventilation** in the event of fire, with the help of appropriate mechanisms.

Essentially, the product consists of an upstand for installation in a roof and a dome that is fixed on top of the upstand. The dome is supplied as a completely pre-assembled unit.

Different sizes, materials and model types are available to meet the specific requirements of each different project.

**General configuration:**




| | |
|---|---|
| 1 | Upstand, insulated |
| 2 | Border frame profile with seal |
| 3 | Glazing |

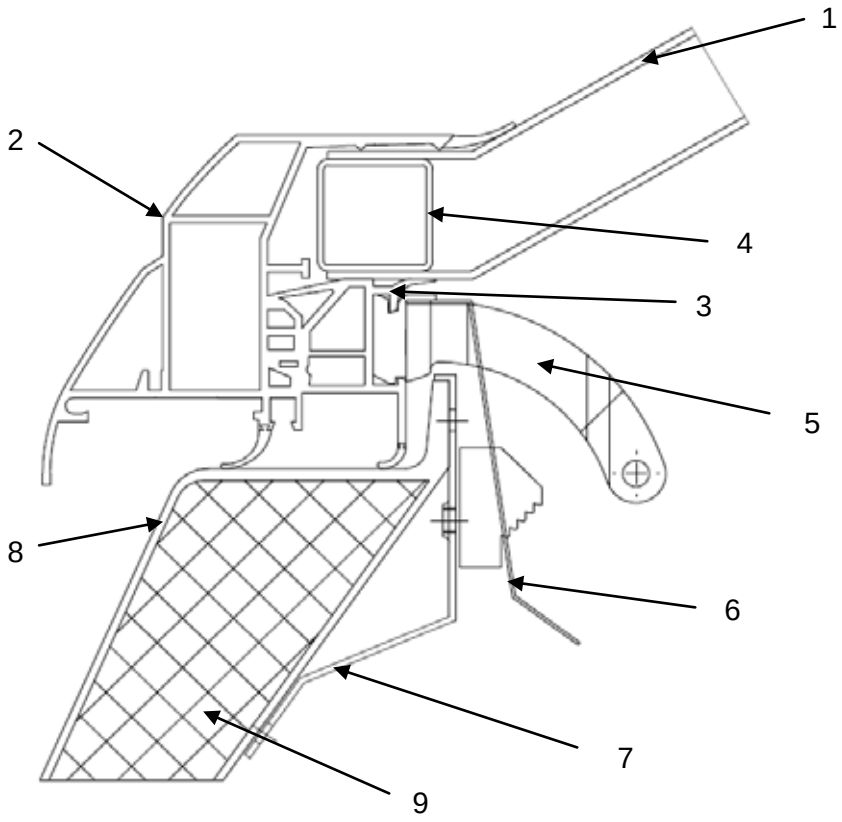
# Technical Information

## CI System Rooflight Dome F100

Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com

2.1. General information






| Number | Component | Material |
|---|---|---|
| 1 | Glazing | PMMA, PETG, GRP or PC |
| 2 | Border frame with seals | PVC-U, TPE (TPV) |
| 3 | Glazing bead with seal | PVC-U, TPE (TPV) |
| 4 | Spacer profile | PVC-U |
| 5 | Flap bracket | Z410 |
| 6 | Flat spring closure | V2A |
| 7 | Sheet bracket | V2A |
| 8 | Upstand | GRP |
| 9 | Insulation | PU |

# Technical Information

## CI System Rooflight Dome F100

Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com

2.2. Key data



| Upper roof edge in cm | Daylight area (m2) | Position of the ventilation device | Double, triple, or quadruple glazing in acrylic glass (PMMA) or PETG | or quadruple glazing in glass-fibre reinforced composite (GRP) | Upstand 15 cm | Upstand 30 cm | Upstand 40 cm | Upstand 50 cm | Special upstand, GRP Profile 5 corrugation 177/51 | Steel plate upstand, 40 cm, insulated/ not insulated | Aluminium upstand |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 50/100 | 0,26 |  | X | X | X | X | | | X | X | X |
| 50/150 | 0,42 |  | X | X | X | X | | X | X | X | X |
| 60/60 | 0,18 |  | X | X | X | X | X | X | X | X | X |
| 60/90 | 0,3 |  | X | X | X | X | X | X | X | X | X |
| 60/120 | 0,43 |  | X | X | X | X | | | X | X | X |
| 70/135 | 0,61 |  | X | X | X | | | X | X | X | X |
| 80/80 | 0,38 |  | X | X | X | X | X | X | X | X | X |
| 80/150 | 0,82 |  | X | X | X | X | X | X | X | X | X |
| 90/90 | 0,52 |  | X | X | X | X | X | X | X | X | X |
| 90/120 | 0,73 |  | X | X | X | X | X | X | X | X | X |
| 90/145 | 0.91/1.08*3 |  | X | X | X | | | | X | X | X |
| 100/100 | 0,67 |  | X | X | X | X | X | X | X | X | X |
| 100/150 | 1,08 |  | X | X | X | X | X | X | X | X | X |
| 100/200 | 1,49 |  | X | X | X | X | X | X | X | X | X |
| 100/240 | 1,82 |  | X | X | X | X | X | X | X | X | X |
| 100/250 | 1,9 |  | X | X | X | X | X | X | X | X | X |
| 100/300 | 2,31 |  | X | X | X | X | | X | | X | X |
| 100/400 | 3,13 | *2 | | X | X | | | | | X | X |
| 120/120 | 1,04 |  | X | X | X | X | X | X | X | X | X |
| 120/150 | 1,35 |  | X | X | X | X | X | X | X | X | X |
| 120/180 | 1,65 |  | X | X | X | X | X | X | X | X | X |
| 120/240 | 2,26 |  | X | X | X | X | X | X | X | X | X |
| 120/250 | 2,37 |  | X | X | | X | | X | X | X | X |
| 120/270 | 2,57 |  | X | X | X | X | | X | | X | X |
| 125/125 | 1,15 |  | X | X | X | X | X | X | X | X | X |
| 125/250 | 2,48 |  | X | X | X | X | X | X | X | X | X |
| 125/470 | 4,84 | *2 | | X | X | | | | | X | X |
| 135/230 | 2,48 |  | X | X | X | X | | | X | X | X |
| 140/140 | 1,49 |  | X | X | | X | X | | X | X | X |
| 150/150 | 1,74 |  | X | X | X | X | X | X | X | X | X |
| 150/180 | 2,14 |  | X | X | X | X | X | X | X | X | X |
| 150/200 | 2,4 |  | X | X | X | X | X | X | X | X | X |
| 150/210 | 2,53 |  | X | X | X | X | X | X | X | X | X |
| 150/240 | 2,93 |  | X | X | X | X | X | X | X | X | X |
| 150/250 | 3,06 |  | X | X | X | X | X | X | X | X | X |
| 150/270 | 3,33 |  | X | X | X | X | X | X | | X | X |
| 150/300 | 3.99*4 |  | X | X | | X | X | | | X | X |
| 180/180 | 2,62 |  | X | X | X | X | X | X | | X | X |
| 180/240 | 3,6 |  | X | X | X | X | X | X | | X | X |
| 180/250 | 3,75 |  | X | X | X | X | X | X | | X | X |
| 180/270 | 4,08 |  | X | X | X | X | X | X | | X | X |
| 180/320 | 4,89 | *2 | | X | X | X | | | | X | |
| 200/200 | 3,31 |  | X | X | X | X | X | X | | X | X |
| 200/250 | 4,22 |  | X | X | | X | | | | X | X |
| 225/225 | 4,28 |  | | X | | X | | X | | X | X |
| 300/300 | 7,95 | *2 | | X | | X | | | | X | X |

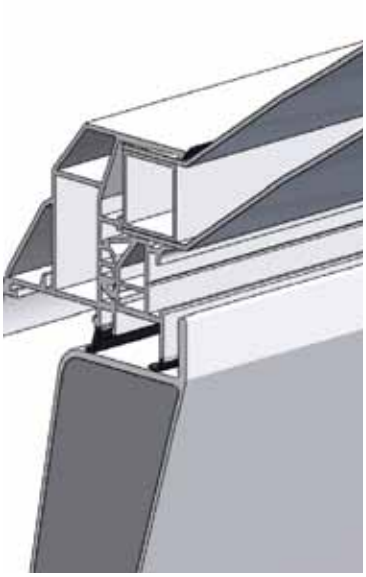
*2 not available as ventilation model (only as locked ventilation model) *3 As a special upstand model *4 As a steep upstand model

Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com



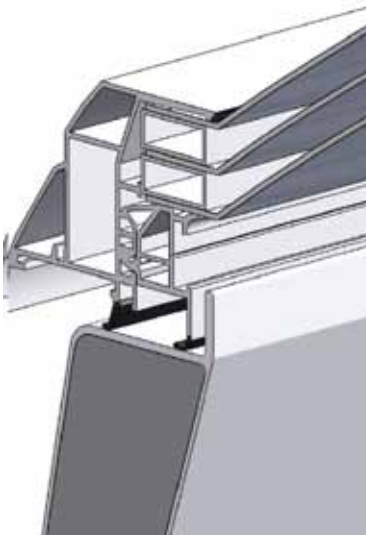

**Glazing options:**

Glazing layers made of PMMA (opal or transparent), PETG (opal or transparent), or GRP are available. They can be arranged as double, triple or quadruple glazing:



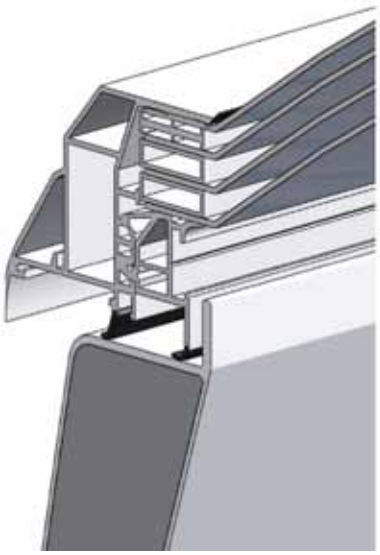
double-glazed

PMMA: Ug value = 2.7 W/(m²K)
PETG: Ug value = 2.6 W/(m²K)
GRP: Ug value = 2.6 W/(m²K)



triple-glazed

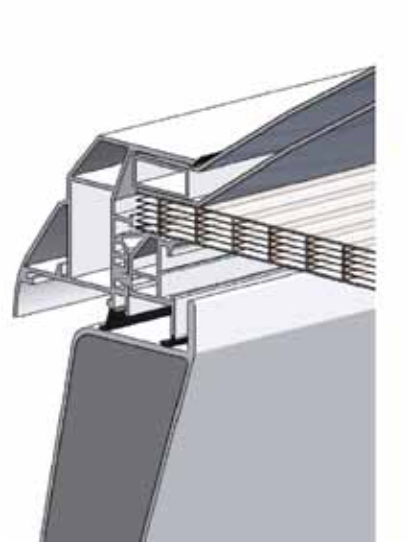
PMMA: Ug value = 1.9 W/(m²K)
PETG: Ug value = 2.0 W/(m²K)
GRP: Ug value = 1.9 W/(m²K)



quadruple-glazed

PMMA: Ug value = 1.6 W/(m²K)
PETG: Ug value = 1.7 W/(m²K)
GRP: Ug value = 1.6 W/(m²K)

The combination of two PMMA layers and one PC16 six-wall sheet:



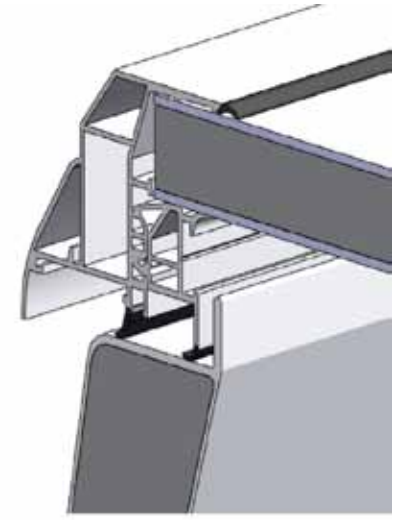
PMMA double glazing with PC16 six-wall sheet

Ug value = 1.4 W/(m²K)

Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com




The sandwich model can be used to create a version that allows no light to pass through:



Sandwich model

Ug value = 0.9 W/(m²K)

Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com


3.2. Technical data






| Standard models shaded in grey | | Material | outer layer | middle layer | Inner layer | Light transmission τ [%] | Total energy transmission g [%] | Sound index Rw, p [dB] | Heat transmittance Ug [W/m²K] | Building material class (DIN 4102-1) | Melt and drip without burning | Hard roofing (DIN 4102-7) | Fall-through safety (BG-Prüfung) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| double glazing | | PMMA | opal | - | opal | 73% | 73% | 24 | 2,7 | B2 | • | - | - |
| | | PMMA | opal | - | transparent | 79% | 79% | 24 | 2,7 | B2 | • | - | - |
| | | PMMA | transparent | - | transparent | 85% | 85% | 24 | 2,7 | B2 | • | - | - |
| | | PMMA | heat-stop | - | opal | 53% | 43% | 24 | 2,7 | B2 | • | - | - |
| | | PMMA | heat-stop | - | transparent | 56% | 45% | 24 | 2,7 | B2 | • | - | - |
| | | PETG | opal | - | opal | 50% | 50% | 24 | 2,6 | B2<br>B1 | •<br>- | - | during installation |
| | | PETG | opal | - | transparent | 62% | 62% | 24 | 2,6 | **B1** | • | - | during installation |
| | | PETG | transparent | - | transparent | 77% | 77% | 24 | 2,6 | **B1** | • | - | during installation |
| | | GRP | translucent | - | translucent | 66% | 66% | 24 | 2,6 | B2 | • | • | during installation |
| triple glazing | | PMMA | opal | opal | opal | 64% | 64% | 24 | 1,9 | B2 | • | - | - |
| | | PMMA | opal | transparent | opal | 69% | 69% | 24 | 1,9 | B2 | • | - | - |
| | | PMMA | opal | transparent | transparent | 74% | 74% | 24 | 1,9 | B2 | • | - | - |
| | | PMMA | transparent | transparent | transparent | 80% | 80% | 24 | 1,9 | B2 | • | - | - |
| | | PMMA | heat-stop | opal | opal | 47% | 30% | 24 | 1,9 | B2 | • | - | - |
| | | PMMA | heat-stop | transparent | opal | 50% | 31% | 24 | 1,9 | B2 | • | - | - |
| | | PMMA | heat-stop | transparent | transparent | 54% | 33% | 24 | 1,9 | B2 | • | - | - |
| | | PETG | opal | opal | opal | 36% | 36% | 24 | 2,0 | B2<br>B1 | •<br>- | - | during installation |
| | | PETG | opal | transparent | opal | 44% | 44% | 24 | 2,0 | B2<br>B1 | •<br>- | - | during installation |
| | | PETG | opal | transparent | transparent | 55% | 55% | 24 | 2,0 | B2<br>B1 | •<br>- | - | during installation |
| | | PETG | transparent | transparent | transparent | 68% | 68% | 24 | 2,0 | B2<br>B1 | •<br>- | - | during installation |
| | | GRP | nat.transp. | nat.transp. | nat.transp. | 55% | 58% | 24 | 1,9 | B2 | • | • | during installation |
| SW | | Sandwich standard | GRP | Styrodur | GRP | - | - | 22 | 0,9 | B2 | • | • | continuous |
| | | Sandwich noise insulation | GRP | Styrodur | GRP+UP+ steel | - | - | 32 | 0,9 | B2 | • | • | continuous |

Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com







| Standard models shaded in grey | | Material | outer layer | Middle layer I and II | Inner layer | Light transmission τ [%] | Total energy transmission g [%] | Sound index Rw, p [dB] | Heat transmittance Ug [W/m²K] | Building material class (DIN 4102-1) | Melt and drip without burning | Hard roofing (DIN 4102-7) | Fall-through safety (BG-Prüfung) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| quadruple glazing | | PMMA | opal | transp/transp | opal | 63% | 63% | 24 | 1.6 | B2 | • | - | - |
| | | PMMA | transparent | transp/transp | opal | 68% | 68% | 24 | 1.6 | B2 | • | - | - |
| | | PMMA | transparent | transp/transp | transparent | 73% | 73% | 24 | 1.6 | B2 | • | - | - |
| | | PMMA | heat-stop | transp/transp | opal | 46% | 29 | 24 | 1.6 | B2 | • | - | - |
| | | PMMA | heat-stop | transp/transp | transparent | 51% | 28% | 24 | 1.6 | B2 | • | - | - |
| | | PETG | opal | transp/transp | transparent | 39% | 39% | 24 | 1.6 | B2 | • | - | during installation |
| | | PETG | transparent | transp/transp | opal | 49% | 49% | 24 | 1.6 | B2 | • | - | during installation |
| | | PETG | transparent | transp/transp | transparent | 61% | 61% | 24 | 1.6 | B2 | • | - | during installation |
| | | GRP | translucent | 2xtranslucent | translucent | 44% | 44% | 24 | 1.6 | B2 | • | • | during installation |
| double glazing PMMA +PC16-x6 | | PMMA+PC16 | opal | transparent | opal | 39% | 39% | 24 | 1.3 | B2 | • | - | - |
| | | PMMA+PC16 | transparent | transparent | transparent | 51 | 51% | 24 | 1.3 | B2 | • | - | - |

Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com

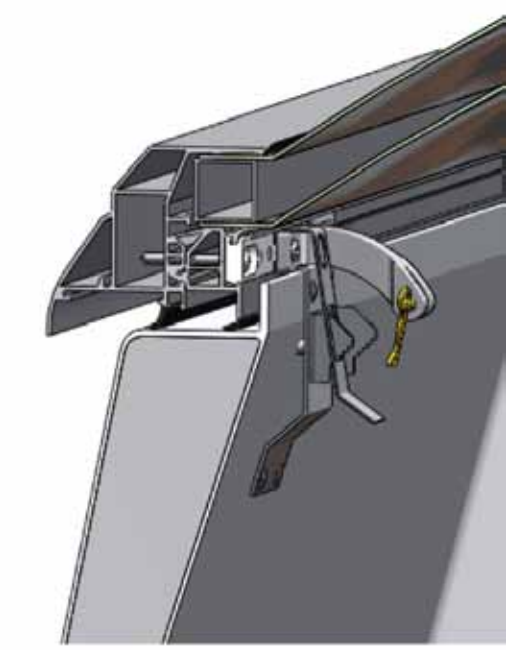


## Opening variants:

The rooflight can be installed as a locked ventilation model or a ventilation model.

### *Locked ventilation:*

With the locked ventilation model, the rooflight dome is permanently fixed to the upstand via a flat spring closure and can be opened from the outside and the inside in just a few easy steps.



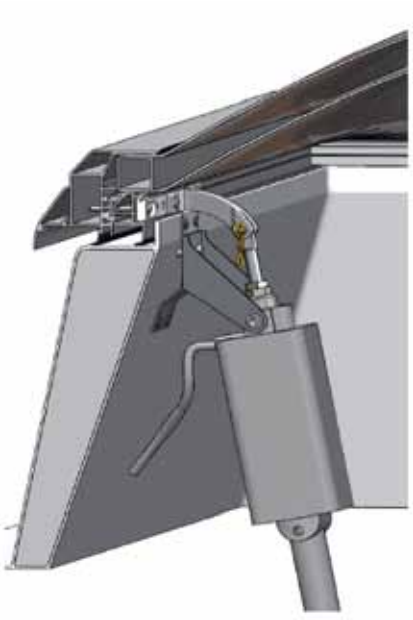
Flat spring closure

Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com

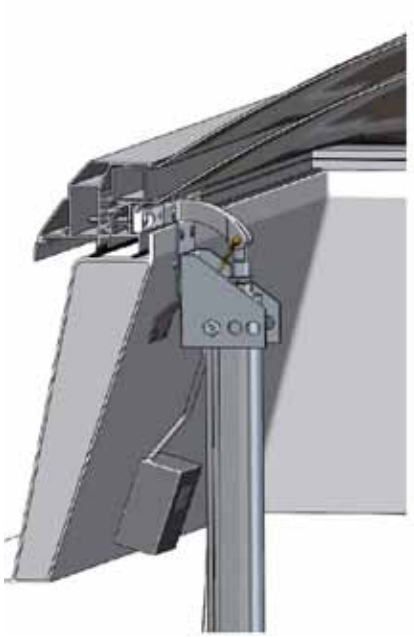



***Ventilation:***

There are various models available:

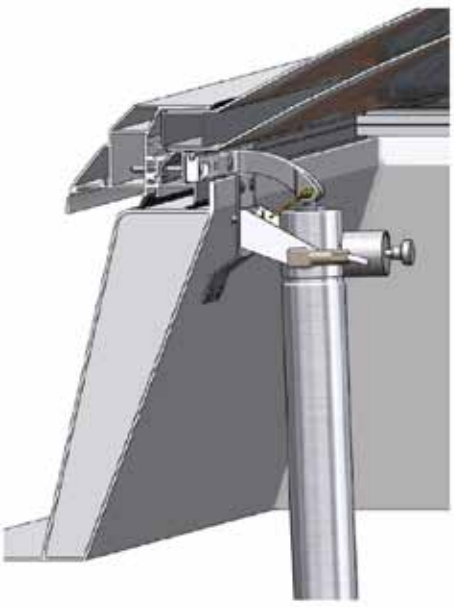


230V motor



24V motor

Manual opener



Pneumatic cylinder

# Technical Information

## CI System Rooflight Dome F100

Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com

4.1. Opening variants



**Rooflight dome F100 options**

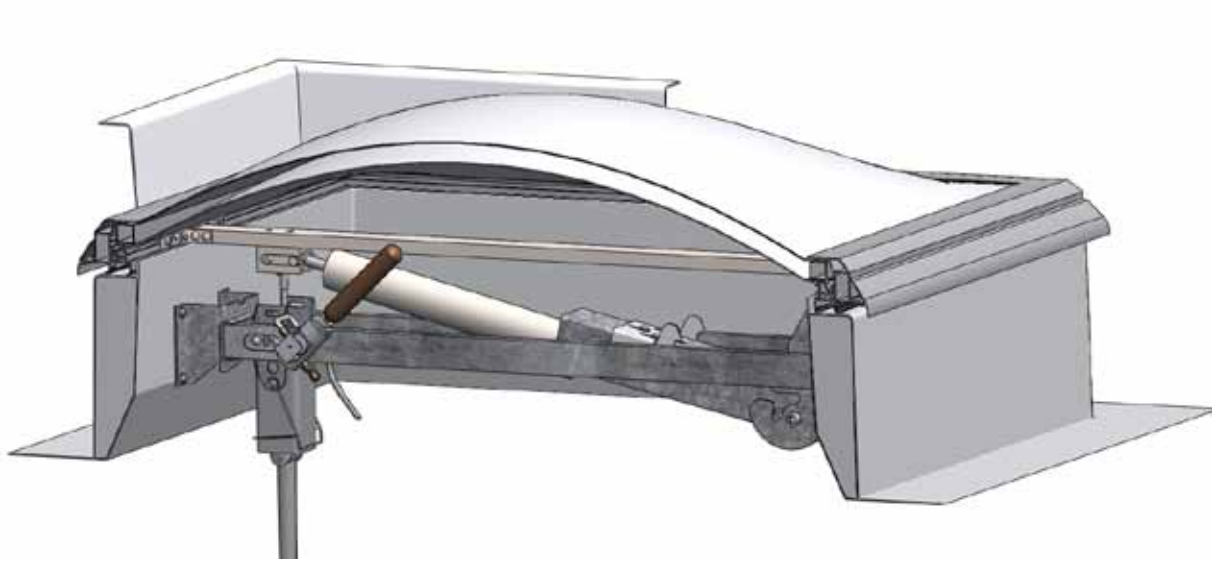
| Upper roof edge in cm | Hinge side | Opener side | Solo | Tandem | Ventilation | No ventilation | Slot-in hinge | Pin hinge |
|---|---|---|---|---|---|---|---|---|
| 50 x 100 | S | PVC | X | | X | | 2 | |
| 50 x 150 | S | PVC | X | | X | | 2 | |
| 60 x 60 | | PVC | X | | X | | 2 | |
| 60 x 90 | S | PVC | X | | X | | 2 | |
| 60 x 120 | S | PVC | X | | X | | 2 | |
| 70 x 135 | S | PVC | X | | X | | 2 | |
| 80 x 80 | | PVC | X | | X | | 2 | |
| 80 x 150 | S | PVC | X | | X | | 2 | |
| 90 x 90 | | PVC | X | | X | | 2 | |
| 90 x 120 | S | PVC | X | | X | | 2 | |
| 90 x 145 | S | PVC | X | | X | | 2 | |
| 100 x 100 | | PVC | X | | X | | 2 | |
| 100 x 150 | S | PVC | X | | X | | 2 | |
| 100 x 200 | S | PVC | X | | X | | | 2 |
| 100 x 240 | S | PVC | X | | X | | | 2 |
| 100 x 250 | S | PVC | X | | X | | | 2 |
| 100 x 300 | L | PVC-GRP | | X | X | | | 4 |
| 100 x 400 | L | PVC-GRP | | | | X | | 4 |
| 120 x 120 | | PVC | X | | X | | 2 | |
| 120 x 150 | S | PVC | X | | X | | 2 | |
| 120 x 180 | S | PVC | X | | X | | 2 | |
| 120 x 240 | S | PVC | X | | X | | | 2 |
| 120 x 250 | S | PVC | X | | X | | | 2 |
| 120 x 270 | S | PVC | X | | X | | | 2 |
| 125 x 125 | | PVC | X | | X | | 2 | |
| 125 x 250 | S | PVC | X | | X | | | 2 |
| 125 x 470 | L | PVC-GRP | | | | X | | 4 |
| 135 x 230 | S | PVC | X | | X | | | 2 |
| 140 x 140 | | PVC | X | | X | | 2 | |
| 150 x 150 | | PVC | X | | X | | 2 | |
| 150 x 180 | S | PVC | X | | X | | 2 | |
| 150 x 200 | S | PVC | X | | X | | | 2 |
| 150 x 210 | S | PVC | X | | X | | | 2 |
| 150 x 240 | S | PVC | X | | X | | | 2 |
| 150 x 250 | S | PVC | X | | X | | | 2 |
| 150 x 270 | L | PVC-GRP | | X | X | | | 4 |
| 150 x 300 | L | PVC-GRP | | X | X | | | 4 |
| 180 x 180 | | PVC-GRP | X | | X | | 2 | |
| 180 x 240 | L | PVC-GRP | | X | X | | | 4 |
| 180 x 250 | L | PVC-GRP | | X | X | | | 4 |
| 180 x 270 | L | PVC-GRP | | X | X | | | 4 |
| 180 x 320 | L | PVC-GRP | | | | X | | 4 |
| 200 x 200 | | PVC-GRP | | X | X | | | 4 |
| 200 x 250 | L | PVC-GRP | | X | X | | | 4 |
| 225 x 225 | | PVC-GRP | | X | X | | | 4 |
| 300 x 300 | | PVC-GRP | | | | X | | 4 |

**L = long side, S = short side, X = basic model**

Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com




**Smoke and heat ventilation systems:**

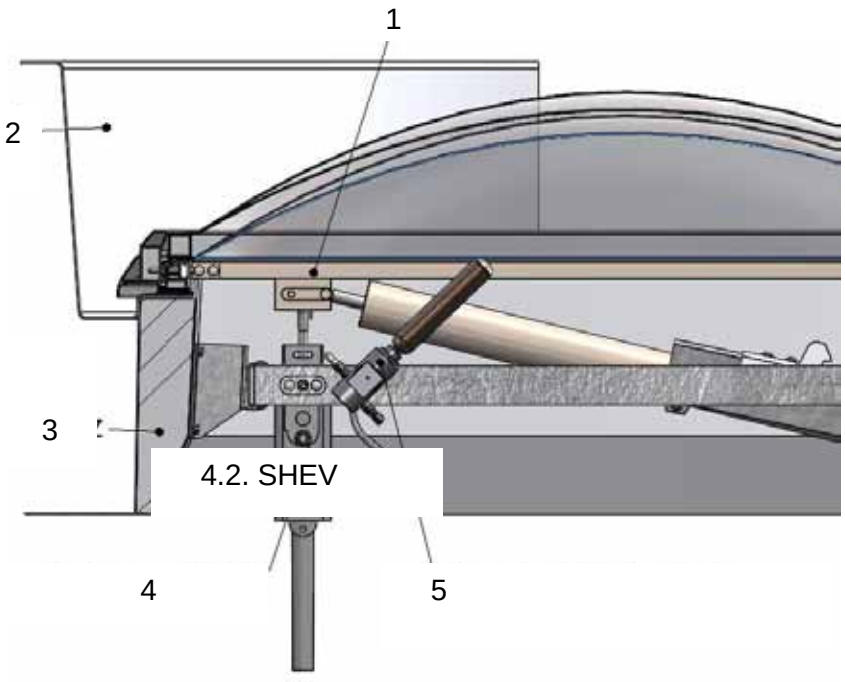


The smoke and heat ventilation system can be opened and closed with $CO_2$ (80g each, plus the volume in the $CO_2$ line) or, for functions testing, with compressed air at 6 to 8 bar. The system is activated electronically or by $CO_2$.

An additional "close" function can be provided as an optional extra, which allows you to close the SHEV system remotely, in the event of a false alarm or after a functions test, without having to climb onto the roof.

Rooflight domes with SHEV systems are also available as ventilation models.

| | |
|---|---|
| 1 | Tie-bar with opening device |
| 2 | Wind baffle |
| 3 | Steep upstand |
| 4 | Ventilation motor |
| 5 | Thermo release device |



Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com




**Drive options for rooflight dome F100 (SHEV)**

| | | | Pneumatic drives | | | Electrical drives | | |
|---|---|---|---|---|---|---|---|---|
| Upper roof edge in cm | Hinge side | Opener side | Solo | Tandem bolt | Tandem SHEV fitting | Solo | Tandem SHEV fitting | Pin hinge |
| 100 x 100 | | PVC | X | | | X | | 2 |
| 100 x 150 | L | PVC | X | | | X | | 2 |
| 100 x 200 | L | PVC-GRP | X | O | | X | | 4 |
| 100 x 240 | L | PVC-steel | X | O | | | X | 4 |
| 100 x 250 | L | PVC-steel | X | O | | | X | 4 |
| 100 x 300 | L | PVC-steel | | | X | | X | 4 |
| 120 x 120 | | PVC | X | | | X | | 2 |
| 120 x 150 | L | PVC | X | | | X | | 2 |
| 120 x 180 | L | PVC-GRP | X | O | | X | | 4 |
| 120 x 240 | L | PVC-steel | X | O | | | X | 4 |
| 120 x 300 | L | PVC-steel | | | X | | X | 4 |
| 125 x 125 | | PVC | X | | | X | | 2 |
| 125 x 250 | L | PVC-steel | X | O | | | X | 4 |
| 150 x 150 | | PVC | X | | | X | | 2 |
| 150 x 180 | L | PVC-GRP | X | O | | | X | 4 |
| 150 x 200 | L | PVC-GRP | X | O | | | X | 4 |
| 150 x 210 | L | PVC-steel | X | O | | | X | 4 |
| 150 x 240 | L | PVC-steel | X | O | | | X | 4 |
| 150 x 250 | L | PVC-steel | X | O | | | X | 4 |
| 150 x 300 | L | PVC-steel | | | X | | X | 4 |
| 180 x 180 | | PVC-GRP | X | O | | | | 4 |
| 180 x 240 | L | PVC-steel | X | O | | | | 4 |
| 180 x 250 | L | PVC-steel | X | O | | | | 4 |
| 180 x 270 | L | PVC-steel | | | X | | | 4 |
| 180 x 300 | L | PVC-steel | | | X | | | 4 |
| 200 x 200 | | PVC-GRP | X | O | | | | 4 |

**L = long side, S = short side, X = basic model, O = available as an optional extra**

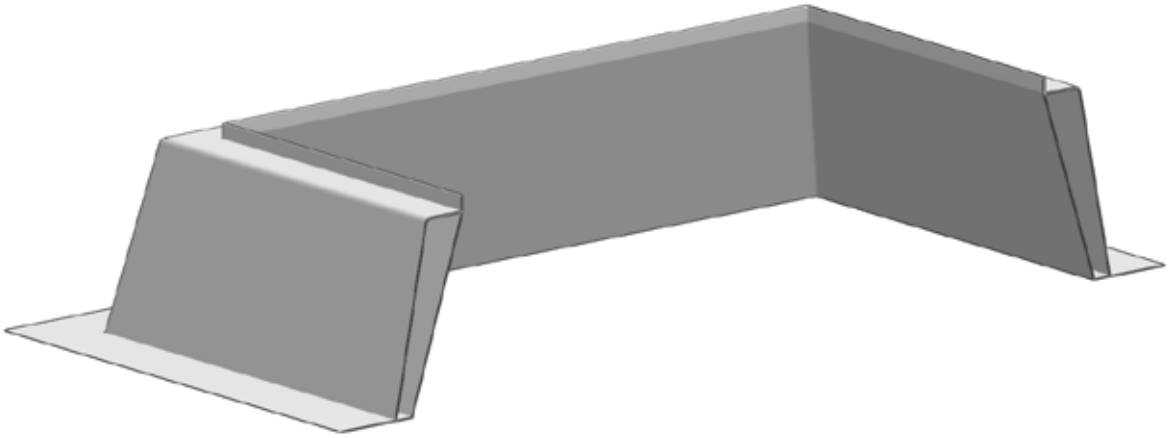
5.1. Standard GRP upstands

**GRP upstand:**

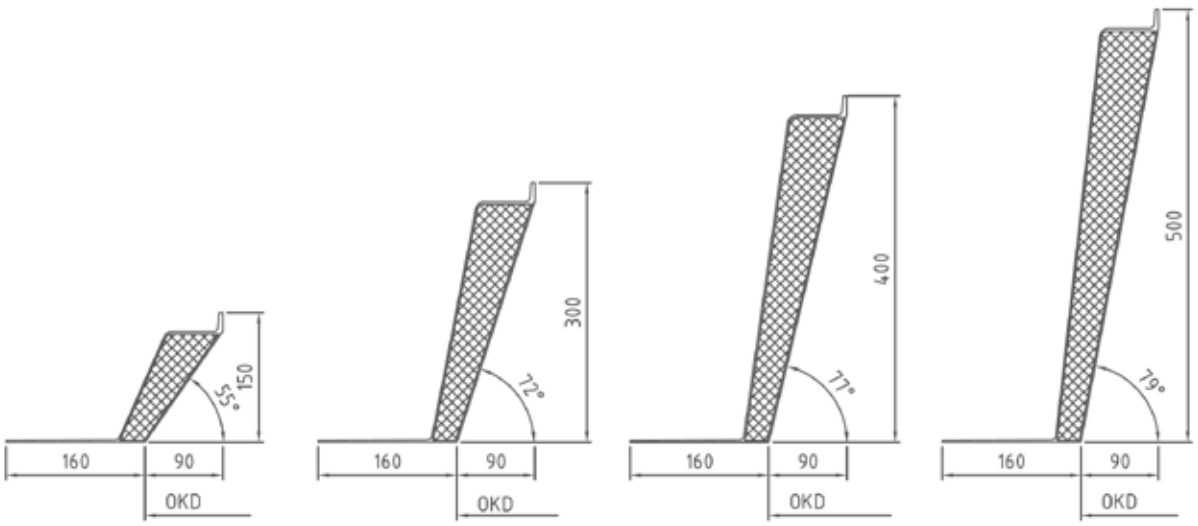
Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com




The composite upstand is used for installation in the roof. It is made of glass-fibre reinforced composite (GRP), pigmented white throughout (similar to RAL 9010) and is heat-insulated with rigid foam (polyurethane). The upstand is available in various heights between 15 cm and 50 cm.



Angled geometry:



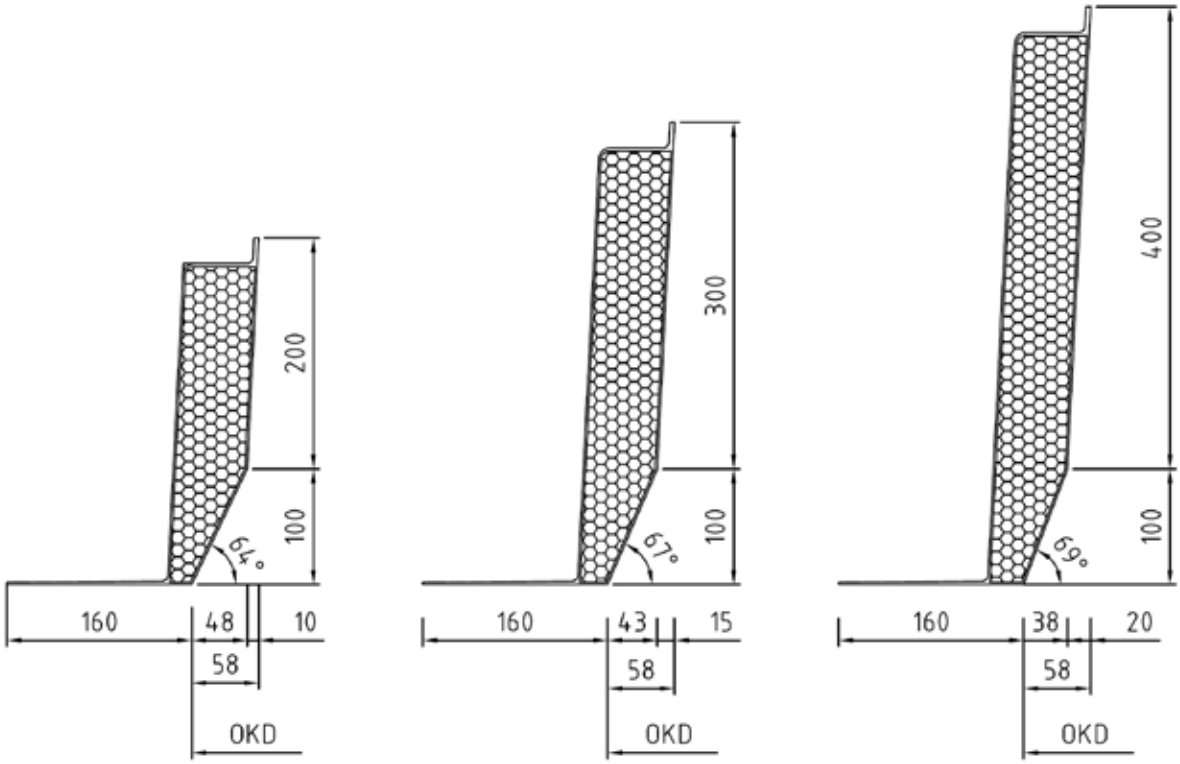

K15 K30 K40 K50

Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com



Angled (K30 to K50) or steep upstands are used for rooflight domes that have a SHEV system.

Steep geometry:




K30 steep K40 steep K50 steep

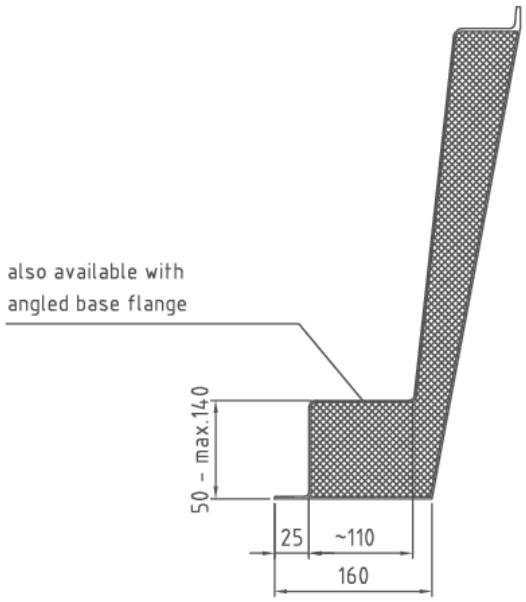
Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com

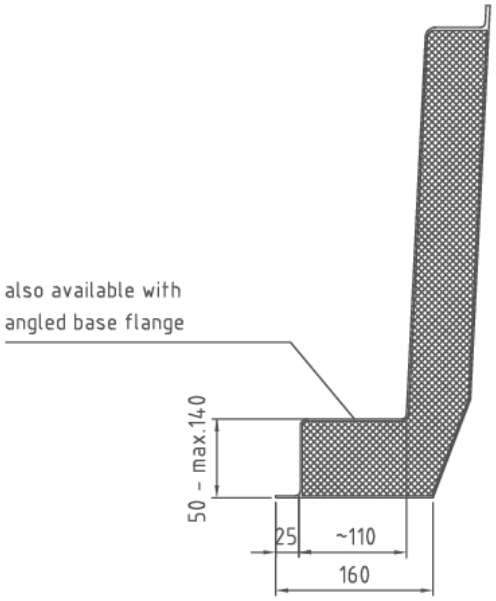


## Model types

### *Heat insulated base flange:*

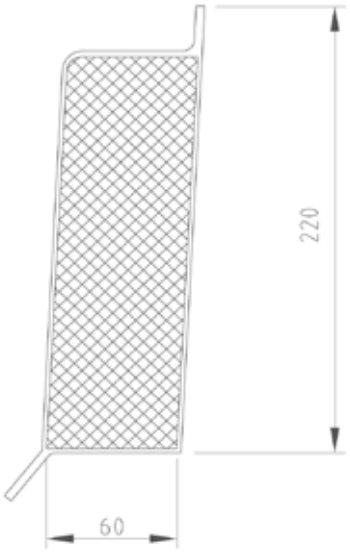
This model can be used with all angled and steep upstands.




### *Different heightening elements:*

Heightening elements can be mounted on different upstands making it possible to renovate the roof and add additional heat insulation layers without having to replace the existing upstand.

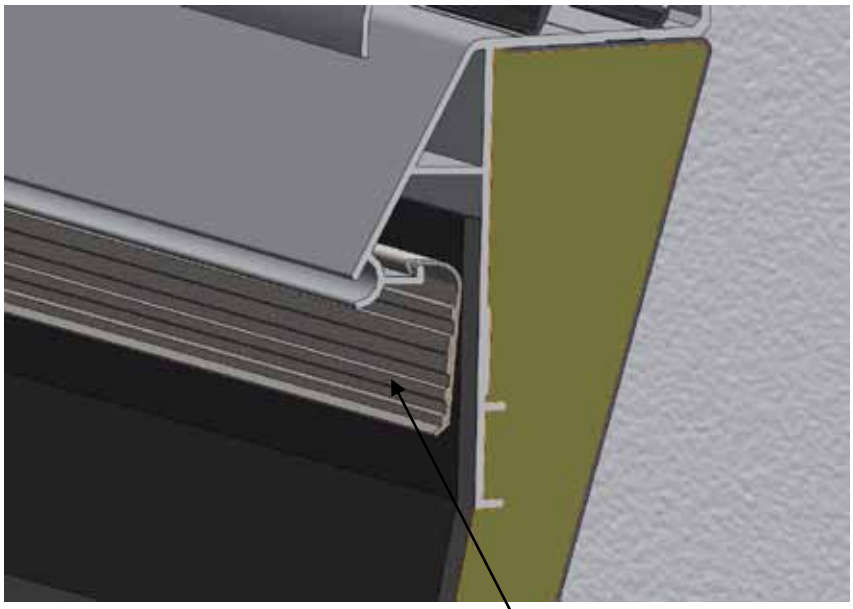


Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com



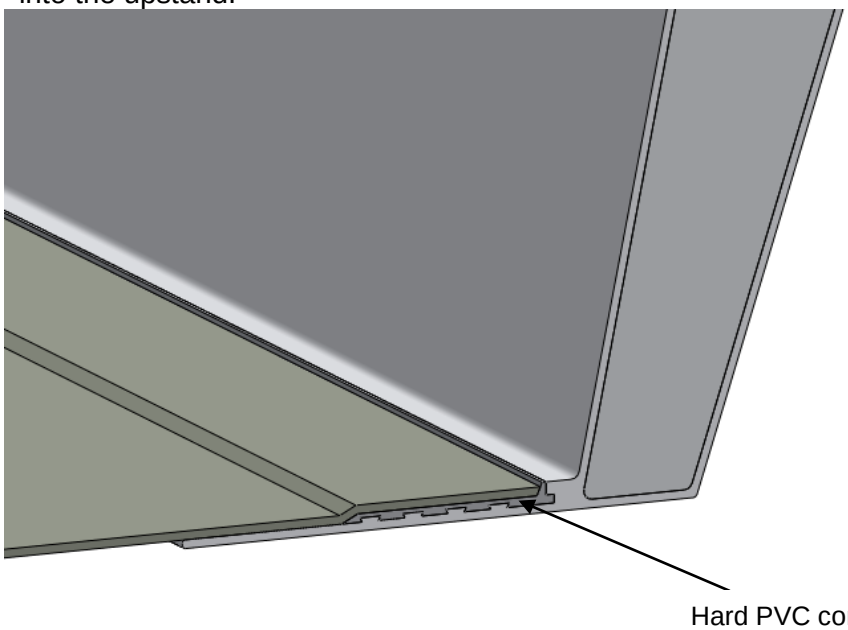
***Types of attachment:***

Foil connection:
The roof sheeting continues up the outer sides of the upstand and is fixed with an aluminium clamping strip.



Clamping strip for foil connection

Hard PVC connecting rail:
The roof sheeting is welded to the upstand. In this case, a PVC connecting rail is incorporated into the upstand.



Hard PVC connecting rail

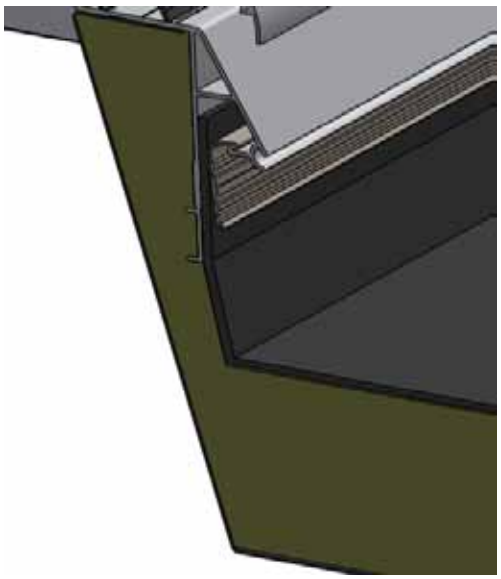
Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com



***Additional upstands:***

Steel sheet upstands:

Upstands can also be made of steel sheet. These upstands are fitted with a PVC top section to prevent thermal bridges.

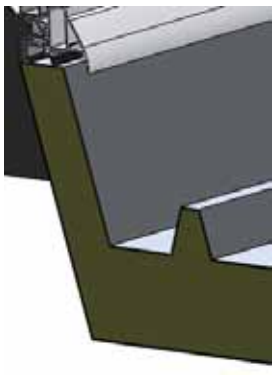


Steel sheet upstand with push-on connection system

Aluminium upstands:

We supply aluminium upstands to match your building and steel system. Profiled base flanges and profiled base flanges with heat insulation in the base flange area are possible (inner and outer shell joined and sealed by welding).

Aluminium upstands are suitable only for buildings with no heat insulation requirements. Condensation may form on the indoor surfaces.

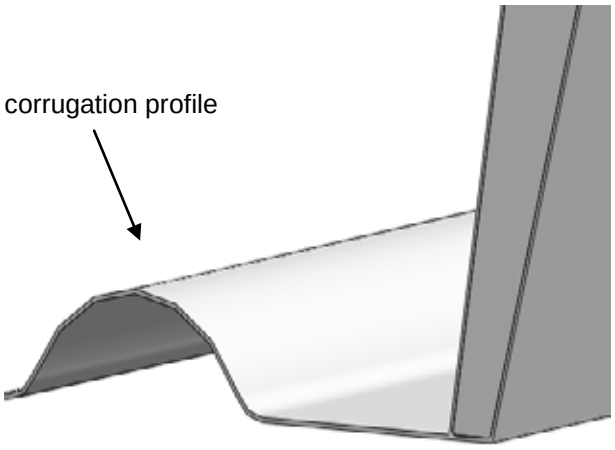


Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com

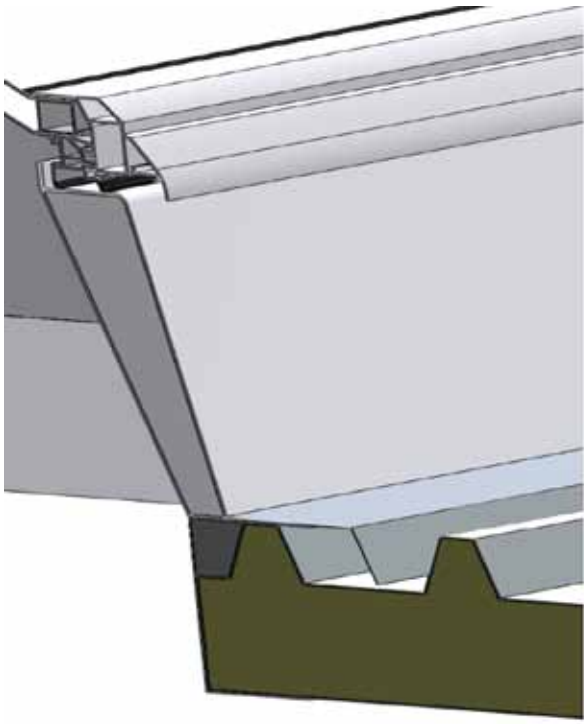



GRP upstand with corrugation profile:

A special GRP upstand is available for corrugated roofs. It has a corrugated shape that fits to the roof perfectly.




GRP upstand with angled base flange:



Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com

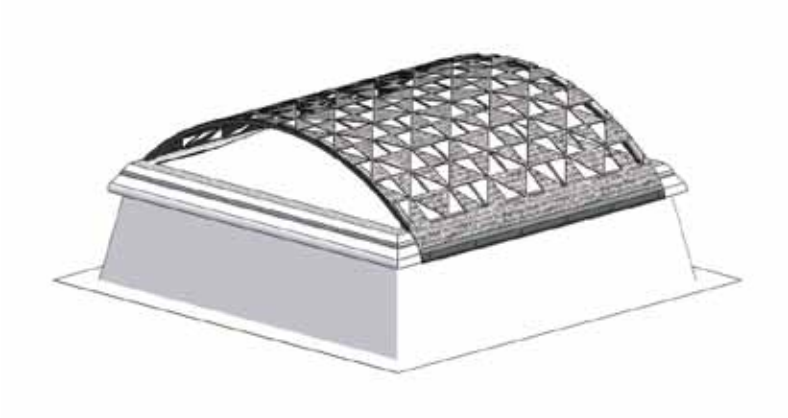


## Optional extras:

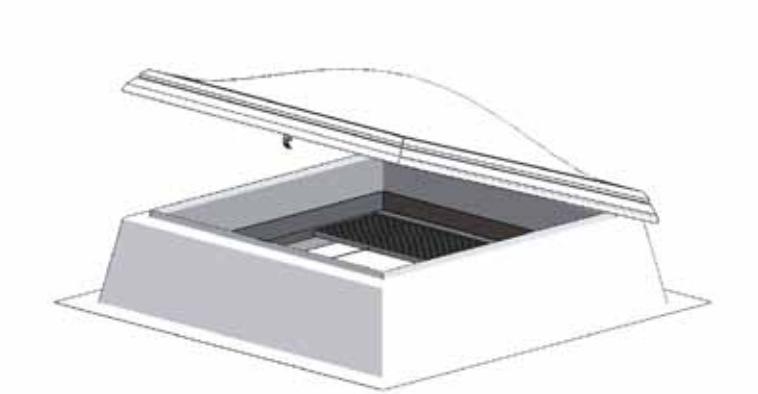
The following optional features are available:

### *1. Shade systems*

#### *a) Deciduous tree sheeting (fixed external shading)*



#### *b) Cosiflor (adjustable, internal shade systems)*

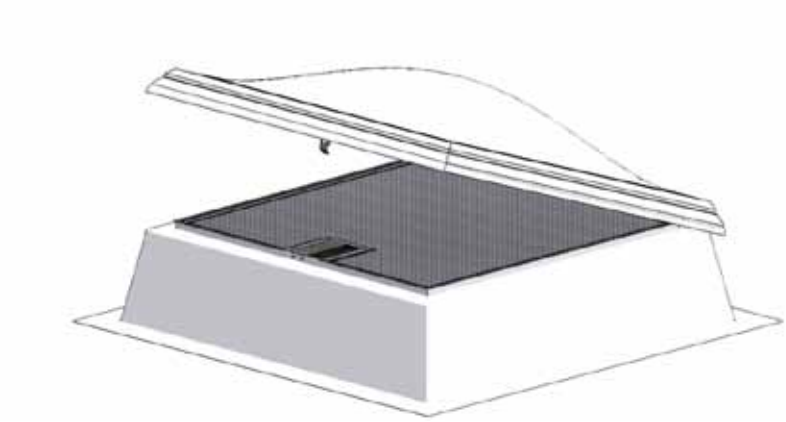


Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com



### *2. Fall through protection (protection against forced entry)*

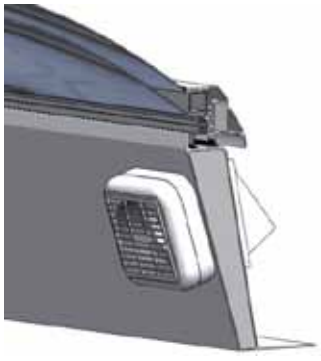
### *3. Insect protection*

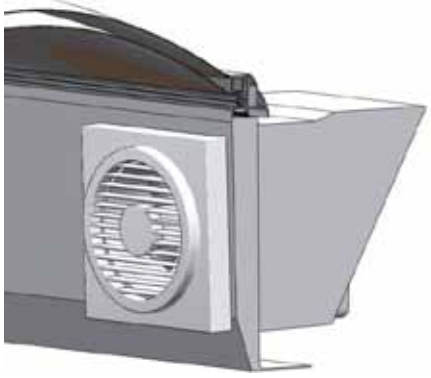


### *4. Ventilation*

#### *a) Ventilator / small space ventilation unit*

Upstands can be fitted with a small space ventilation unit (K30-K50)or a ventilator (K50) for ventilating internal rooms.





Heinrich Strunz GmbH
Zehstraße 2
95111 Rehau, Germany
Tel.: +49 (0) 9283/595-0 Fax.: -290
www.lamilux.com



### *5. Roof entry hatch / roof exit hatch:*

Special devices can be fitted to allow the dome to be opened from one side to allow access from or to the roof. The dome can be opened by approximately 90° with the manually operated device and by approximately 75° with the electronically operated device.

### *6. Wind/rain sensor*

All ventilation rooflight domes should be fitted with an automatic closing system that closes the dome in rainy and windy conditions.