

# Top 90 series

## Top 90 special shapes

### Dome rooflight special designs

**VELUX®**
**Commercial**


Flat roof dome rooflights – versatile for new construction and renovation  
Architectural accents in flat roofs, with increased fall-through protection and sun protection

#### Top 90 standard designs

- Perfect fit on all types of upstands and on almost all third-party upstands
- Ventable with additional ventilation frame and corresponding opening accessories
- Can be utilised as SHEV devices with the various FIREJET® opener fitting systems, tested and certified according to DIN EN 12101-2
- Standard in square or rectangular low dome shape; special shapes are pyramid, circular low dome and circular hemispherical shape

#### Thermal transfer coefficient

##### double-skinned

$U_{\text{value}} = 2,7 \text{ W/m}^2\text{K}$  according to DIN EN 1873:2006<sup>1</sup>/DIN 4108-4

$U_{\text{t}} = 3,0 \text{ W/m}^2\text{K}$  according to DIN EN 1873:2014<sup>2</sup>

$U_{\text{rc,ref300}} = 1,76 \text{ W/m}^2\text{K}$  according to DIN EN 1873:2014<sup>3</sup>

##### triple-skinned

$U_{\text{value}} = 1,8 \text{ W/m}^2\text{K}$  according to DIN EN 1873:2006<sup>1</sup>/DIN 4108-4

$U_{\text{t}} = 2,0 \text{ W/m}^2\text{K}$  according to DIN EN 1873:2014<sup>2</sup>

$U_{\text{rc,ref300}} = 1,39 \text{ W/m}^2\text{K}$  according to DIN EN 1873:2014<sup>3</sup>

##### four-skinned

$U_{\text{value}} = 1,5 \text{ W/m}^2\text{K}$  according to DIN EN 1873:2006<sup>1</sup>

$U_{\text{t}} = 1,5 \text{ W/m}^2\text{K}$  according to DIN EN 1873:2014<sup>2</sup>

$U_{\text{rc,ref300}} = 1,21 \text{ W/m}^2\text{K}$  according to DIN EN 1873:2014<sup>3</sup>

#### Light transmission $T_L$

double-skinned opal:  $\geq 80\%$ ; clear: 86%

triple-skinned opal:  $\geq 69\%$ ; clear: 81%

four-skinned opal:  $\geq 65\%$ ; clear: 75%

#### Top 90 special designs

##### Hailstop (glazing completely made from polycarbonate)

- Impact resistant glazing
- Hail resistance class HW4 (according to testing provision 10 VKF Classification No. 40089)
- Increased resistance against vandalism<sup>4</sup>
- Fire classification: B-s2, d0 flame retardant according to
- EN 13501-1

##### Super Top (polycarbonate exterior and PMMA glazing)

- Super Top (polycarbonate exterior and PMMA glazing)
- Impact resistant glazing
- Hail resistance class HW3 (according to testing provision 10 VKF Classification No. 40088)
- Increased resistance against vandalism<sup>4</sup>
- Fire classification: E, normal flammability according to EN 13501-1

##### HEATSTOP

- Sun protection via external skin made from PLEXIGLAS® HEATSTOP<sup>4</sup>
- Fire classification: E, normal flammability according to EN 13501-1

1) calculated according to EN ISO 6946

2)  $U_{\text{t}}$  according to DIN EN 1873:2014 for horizontal installation

3)  $U_{\text{rc,ref300}}$  = Reference value of the overall thermal transfer coefficient of a vented/SHEV Top 90 dome rooflight of the order size 120 x 120 cm with a upstand of height 300 mm (here Iso Therm EU upstand) according to DIN EN 1873:2014

4) also available in Top 90 Plus design

<b>1.1.2</b> Top 90 PLUS	<b>1.1.3</b> Top 90 sound reduction	<b>1.2.1</b> Dome rooflight upstands and roof connection systems	<b>1.4.1</b> Dome rooflight safety concept	<b>1.4.5</b> LK-DDS	<b>1.4.6</b> LK-DDN	<b>3.5.2</b> Top 90 comfort-S
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## Dome rooflights special designs

### PET-TOP made from polyethylene (PET-G)

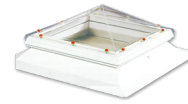
- B1 low flammability according to DIN 4102
- B-s2, d0 low flammability according to EN 13501-1

### BLACK-TOP darkening dome roof light

- Black PMMA external skin, as smoke and heat exhaustion device according to DIN 18232-7



Top 90 dome rooflights, round flat shape with opal glazing



Top 90 dome rooflights Pyramid shape with clear glazing



Top 90 dome rooflights, round hemispherical shape with clear glazing

### Safety at a glance

- Extremely high impact resistant, almost unbreakable
- Hail impact resistant (Hailstop, Super Top)
- Optional fall-through protection systems are available, certified according to GS-BAU-18 or tested according to EN 1873
- Increased resistance against vandalism
- Fire performance depending on product variant



High-impact resistance  
Increased resistance against vandalism



Hailstop, Super Top, PET-TOP

<p>VELUX A/S Ådalsvej 99 DK-2970 Hørsholm</p> <p>commercial.VELUX.com</p> <p>ITEM 09190081010</p> <p>VAS 455338-2024-04</p>	<p><b>Lichtkuppel</b> <b>Durchsturz-sicherung</b></p> <p><b>Dome rooflight</b> <b>Fall-through protection</b></p>
	<p><b>LK DDN</b></p>
	<p><b>Durchsturz-sicher</b> <b>Fall-through resistant</b></p>
	<p>Regelmäßige Wartung nach Herstellervorgabe erforderlich Regular maintenance according to manufacturer's specifications required</p>

Label of optional fall-through protection system LK DDN

## Top 90 – the tried and tested dome rooflights

### Ventilation possibilities

#### Manually actuated:

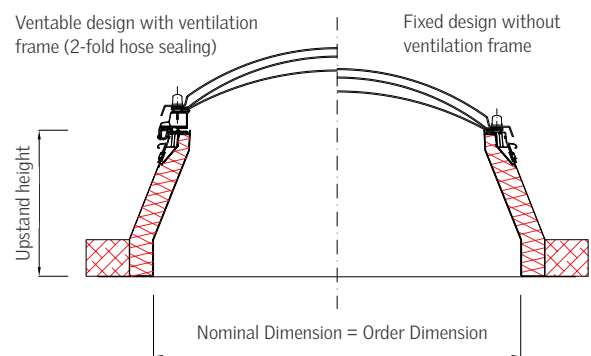
- With spindle opener, 300 mm lift and manual crank handle rod lengths of 1.5 m; 2.5 m and extendable 2.5 – 4.0 m

#### Electrically actuated (230V AC or 24V DC)

- Upon/under plaster double ventilation button for motorised opener with control lamp
- Motorised opener with push spindle approx. 300/500 mm lift (alternatively with chain motor) (other lift heights possible)
- Rain detector unit or wind/rain detector unit
- Central closing control system with timer

#### Pneumatically actuated

- Pneumatic lift cylinder 300/500/750/1000/1250 mm lift height
- Pneumatic manual control valve



Top 90 dome rooflight on Iso Therm AK upstand

Top 90 dome rooflights, both fixed and with ventilation frame, on upstand Iso Therm EU meet the requirements of DIN 18234-4.

## Pyramids, square

Order size	Top 90 pyramid		Super Top pyramid	
Lower clear opening width upstand cm x cm	double-skinned PMMA/ high-quality, UV resistant plastic opal/clear	triple-skinned PMMA/ high-quality, UV resistant plastic opal/clear/clear	double-skinned polycarbonate/ high-quality, UV resistant plastic clear/opal	triple-skinned polycarbonate/ high-quality, UV resistant plastic clear/clear/opal
60 x 60	•	-	-	-
70 x 70	•	•	•	•
80 x 80	•	•	•	•
90 x 90	•	•	•	•
100 x 100	•	•	•	•
110 x 110	•	•	•	•
120 x 120	•	•	•	•
140 x 140	•	•	•	•
150 x 150	•	•	•	•
180 x 180	•	•	•	•
200 x 200	•	•	•	•
220 x 220	•	•	•	•

## Round, flat shape

Order size	Top 90 dome rooflight	Super Top dome rooflight
Lower clear opening width upstand cm	double-/triple-/four-skinned PMMA/ high-quality UV resistant plastic opal/(clear)/(clear)/clear	double-/triple-/four-skinned polycarbonate/ high-quality UV resistant plastic clear/(clear)/(clear)/opal
60	•	•
80	•	•
90	•	•
100	•	•
110	•	•
120	•	•
150	•	•
180	•	•
200	•	•
220	•	•
240	•	•
250	•	-
270	•	-

**Note:** ventable up to order dimension 220 cm

## Round hemispherical shape

Order size	Top 90 dome rooflight		GFK upstand round		
Lower clear opening width upstand	Hemispherical shape PMMA/high-quality UV resistant plastic opal/(clear)/clear		Thermally insulated		
cm	double-skinned	triple-skinned	15 cm height	30 cm height	50 cm height
60	•	•	•	•	•
80	•	•	•	•	•
90	•	•	•	•	•
100	•	•	•	•	•
110	•	•	-	-	-
120	•	•	•	•	•
150	•	•	•	•	•
180	•	•	•	•	•
200	•	•	•	•	•
220	-	-	•	•	•

**Top 90 and Super Top dome rooflights and pyramids as rigid or ventable**

**Note:** (valid for all tables) Additional dimensions can be delivered on request

- = not deliverable • = deliverable

## Standard dimensions, fixed or vented

Order size	Top 90 dome rooflights	Super Top dome rooflight/ Hailstop dome rooflight <sup>1</sup>	HEATSTOP dome rooflight
Lower clear opening width upstand cm x cm	double-/triple-/four-skinned PMMA/high-quality UV resistant plastic opal/(clear)/(clear)/clear	double-/triple-/four-skinned polycarbonate/high-quality UV resistant plastic clear/(clear)/(clear)/opal	double-/triple-/four-skinned External skin PLEXIGLAS HEATSTOP®/ high-quality UV resistant plastic opal/(clear)/(clear)/clear
50 x 100	•	•	•
50 x 150	•	•	•
60 x 60	•	•	•
60 x 90	•	•	•
60 x 120	•	•	•
70 x 135	•	•	•
80 x 80	•	•	•
90 x 90	•	•	•
90 x 120	•	•	•
100 x 100	•	•	•
100 x 150	•	•	•
100 x 200	•	•	•
100 x 240	•	•	•
100 x 250	•	•	•
100 x 300	•	•	•
120 x 120	•	•	•
120 x 150	•	•	•
120 x 180	•	•	•
120 x 240	•	•	•
120 x 250	•	•	•
120 x 270	•	•	•
125 x 125	•	•	•
125 x 250	•	•	•
135 x 230	•	•	•
150 x 150	•	•	•
150 x 180	•	•	•
150 x 210	•	•	•
150 x 240	•	•	•
150 x 250	•	•	•
150 x 270	•	•	•
180 x 180	•	•	•
180 x 240	•	•	•
180 x 250	•	•	•
180 x 270	•	•	•
180 x 300	•	•	•
200 x 200	•	•	•
200 x 300	•	•	•
220 x 220	•	•	•

- = not deliverable • = deliverable

Note: Additional dimensions can be delivered on request. The selection of upstands is restricted (please enquire).

1) All skins made from PC (except opal)