

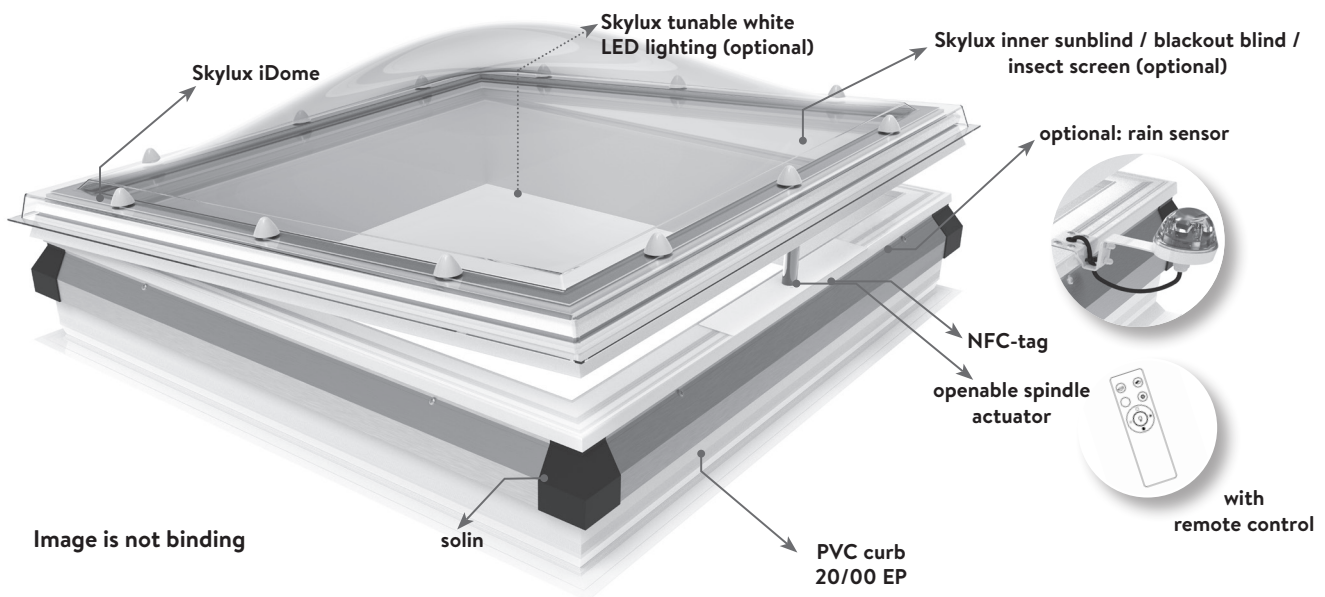


TECHNICAL FILE

# Skylux<sup>®</sup> iDome<sup>™</sup>

Openable hybrid skylight with DuoControl





## General product description

The Skylux® iDome™ is a hybrid skylight. It is composed of a compact and insulating PVC frame with super insulating double layered safety glazing HR++ (double tempered glass) and a Skylux® iDome™ of your choice.

The Skylux iDome™ is pre-mounted on a Skylux PVC 20/00 EP (+20/00 EP-S) curb and forms an **openable (O) unit**. The PVC curb has a built-in detection unit to be operated with remote control (RF-Radio frequency technology) or with a smart home application compatible with Matter (DuoControl). This also allows you to operate the system with your smartphone or tablet.

Depending on the choice of roofing, the flashing profile and corner profiles can be used to finish the roofing properly up to the 20/00 curb. The openable model (O) has a built-in spindle actuator and is suited for ventilation. It can be equipped with an optional rain sensor.

Possible options:

- rain sensor (R);
- built-in and remote controlled LED lights (L), adjustable in light intensity and colour temperature; the LED lights are built-in in the groove underneath the PVC curb 20/00 EP, and are covered by an opal polycarbonate cover profile;
- electric and remote controlled inner sunblind (S): a pre-mounted electric inner sunblind mounted on the top side of the curb that keeps out strong sunlight and solar heat;
- or electric and remote controlled blackout blind (V): a pre-mounted electric blackout blind on the inside of the curb that blocks the sunlight;
- or electric and remote controlled insect screen (I): a pre-mounted electric insect screen on the inside of the curb.

The desired options must be chosen during purchase. The Skylux iDome™ openable hybrid skylight is suitable for flat roofs and can be installed with a roof pitch between 0° and 25°.

**Different types:**



(S) electric inner sunblind



(O) openable with spindle actuator



(L) integrated LED lighting, adjustable in light intensity and colour temperature

	Rain sensor (R)	Built-in LED lights (L)	Pre-mounted electric sunblind (S)	Pre-mounted electric blackout blind (V)	Pre-mounted electric insect screen (I)
<b>O-R</b>	x	-	-	-	-
<b>O-LR</b>	x	x	-	-	-
<b>O-S</b>	-	-	x	-	-
<b>O-SR</b>	x	-	x	-	-
<b>O-LS</b>	-	x	x	-	-
<b>O-LSR</b>	x	x	x	-	-
<b>O-V</b>	-	-	-	x	-
<b>O-VR</b>	x	-	-	x	-
<b>O-I</b>	-	-	-	-	x
<b>O-IR</b>	x	-	-	-	x
<b>O-LV</b>	-	x	-	x	-
<b>O-LVR</b>	x	x	-	x	-
<b>O-LI</b>	-	x	-	-	x
<b>O-LIR</b>	x	x	-	-	x

## Features

- Openable skylight for fresh air ventilation
- Complete roof light product at any moment of the day
- Maximum light spread equal to the daylight size
- Built-in LED lighting in option (L), adjustable in light intensity and colour temperature
- Exceptional insulation values (up to  $U_t^* = 0.50 \text{ W/m}^2\cdot\text{K}$ )
- Good sound insulation
- Watertight and airtight
- Easy cleaning: the inside can be cleaned as a window, the outside benefits from the self-cleaning aspect of the Skylux skylight
- Sleek and elegant inside finish
- Pre-mounted set
- Burglar-proof
- Optional electric inner sunblind or blackout blind or insect screen
- Closes automatically in case of precipitation (optional pre-mounted rain sensor)
- Large sizes are also available; from small to large (e.g. 100 x 200 cm)
- DuoControl operation:
  - Integration possible in existing smart home apps (e.g. Google Home and Apple Home)
  - Easy operation with the included remote control

## Specific characteristics: Skylux iDome PVC frame

Mechanical characteristics ..... shock resistant PVC of frame quality type Benvic S white  
 Density according to ISO 1183 ..... 1450 kg/m<sup>3</sup>  
 Fire class according to EN 13501-1 ..... E

## Specific characteristics: Skylux iDome glass

Mechanical characteristics	HR++ (double insulated glazing)
Type	layered (inner pane) + tempered (outer pane)
Thickness	± 28 mm
Weight	± 30 kg/m <sup>2</sup>
Light transmission according to EN 410	75%
Solar factor g (ZTA) according to EN 410	0.53
Sound insulation Rw according to EN 717-1	37 (-2, -6) dB
U <sub>g</sub> value according to EN 673	1.1 W/m <sup>2</sup> K
Safety glazing NBN EN 356	min. type P2A (44.2)

((as from 1-03-2021, a new version with tempered layered glass is available for fall-through safety certificate DIN 18008-6)

## Specific characteristics: Skylux® skylight

Characteristics ..... see technical file of the chosen Skylux® skylight

\* U<sub>t</sub>: U value of the translucent part (glass and skylight) determined according to EN 1873:2014+A1:2016, according to EN 673

## Specific characteristics: Skylux PVC curb 20/00 EP (+ 20/00 EP-S)

Mechanical characteristics	PVC type Benvic S white
Thermal characteristics	PVC with insulation
EN 10077-2:2012	U <sub>up</sub> * value 0.61 W/m <sup>2</sup> .K (insulation EPS separate with λ = 0.035 W/m <sup>2</sup> .K)
Dimensions	Thickness: 62 mm (with bottom flange: 95 mm) Height: 20 cm (20/00 EP) / 40 cm (20/00 EP + 20/00 EP-S) Finished roof opening = daylight size (+ 4 mm) (only with built-in LED lights)
Density	PVC: 1500 kg/m <sup>3</sup> (insulation EPS: 28 kg/m <sup>3</sup> )

\* U<sub>up</sub>: U value (curb) or insulation value of the curb according to EN 1873:2014+A1:2016 and determined with EN 10077-2:2012

## Specific characteristics: Skylux electric inner sunblind (S) - optional

	inner sunblind (S)	blackout blind (V)	insect screen (I)
Functioning	24 V DC		
Functioning temperature	0°C to +60°C		
Colour inside	white	light grey	white
Colour outside	white	light grey	white
Sunblind material	100% polyester	polyester with aluminium foil on the inside	100% polyethylene
Light transmission **	± 30% (transmission)	± 0,5% (transmission)**	± 90% (transmission)
Type	multi-layered (honeycomb) pleated fabric	multi-layered (honeycomb) pleated fabric	multi-layered (honeycomb) mesh

\*\* There is always some stray light on the sides of the blackout blind



## Specific characteristics: Skylux LED lighting (L) - optional

Functioning	24 V DC
Functioning temperature	-5°C to +50°C*
Adjustable colour temperature	2200 - 6500K (extra warm white - cold white)
LED distance	364 LEDs/m
Adjustable light intensity	10 - 860 lumen/m
Lifespan	≥ 50.000 h
At the bottom of the PVC curb 20/00 EP	
Power	9 W/m
CRI (colour rendering index)	>90 Ra

\* the LED lights switch off automatically when the control unit becomes warmer than 70°C

## Specific characteristics: assembled unit Skylux iDome on PVC curb 20/00 EP (+ 20/00 EP-S)

Curb/ skylight	single- walled	2- walled	3- walled	4- walled	5- walled	EP 10 mm
<b>PVC 20/00 EP</b>						
Urc <sup>***</sup> (W/m <sup>2</sup> .K)	0.92	0.85	0.79	0.75	0.72	0.75
Arc <sup>(*)</sup> (m <sup>2</sup> )				3.04		
<b>PVC 20/00 EP + 20/00 EP-S</b>						
Urc <sup>***</sup> (W/m <sup>2</sup> .K)	0.84	0.79	0.75	0.72	0.69	0.71
Arc <sup>(*)</sup> (m <sup>2</sup> )				4.09		

<sup>\*\*\*</sup> Urc = U value of the set (glass, frame and curb) and is determined for daylight size 120x120 cm, according to EN 1873:2014+A1:2016

<sup>(\*)</sup> Arc = surface of the skylight with curb, determined for daylight size 120x120 cm, according to EN 1873:2014+A1:2016

## Specific characteristics: Skylux built-in spindle actuator (O)

Opening height	± 10 cm
Power	24 V DC
Power/actuator	2.3 A
Ambient temperature	-20°C to +70°C
Engine force opening	1000 N
closing	300 N
retention force	1500 N
Durability	10.000 open/close cycles
Functioning cycle	10%, max. 2min./18min.

## Specific characteristics: DuoControl

### REMOTE CONTROL

RF frequency	433 MHz
Dimensions	121 x 36 x 10 mm
Batterie	3 V CR2032
Colour	Black
Use	Indoors
Max. number of remote control / product	10



### SMART HOME CONTROL


Application	Matter
Network protocol	Thread (IEEE 802.15.4)
Type of device	Sleepy end device
System requirements iOS	iOS 16.1 or newer
System requirements Android	Android 8.1 or newer

## Specific characteristics: Skylux rain sensor

Power .....	24 V DC
Relay contact load-bearing capacity .....	8 A
Casing dimensions .....	71 x 56 x 150 mm
Colour .....	Transparent/grey
Operating temperature .....	-40°C to +60°C

## Available daylight sizes

	Light surface (m <sup>2</sup> )	Daylight surface (cm) iDome	Weight kg
Square 	0,16	40 x 40 ↑	18
	0,25	50 x 50 ↑	22
	0,30	55 x 55 ↑	25
	0,36	60 x 60 ↑	28
	0,49	70 x 70 ↑	34
	0,56	75 x 75 ↑	37
	0,64	80 x 80 ↑	40
	0,72	85 x 85 ↑	44
	0,81	90 x 90 ↑	47
	1,00	100 x 100 ↑	55
	1,10	105 x 105 ↑	59
	1,21	110 x 110 ↑	64
	1,44	120 x 120 ↑	73
	1,69	130 x 130 ↑	82
1,96	140 x 140 ↑↑	95	
2,25	150 x 150 ↑↑↑	106	
Rectangular 	0,28	40 x 70 ↑	24
	0,40	40 x 100 ↑	31
	0,52	40 x 130 ↑	38
	0,56	40 x 140 ↑	40
	0,64	40 x 160 ↑	44
	0,76	40 x 190 ↑↑	53
	0,88	40 x 220 ↑↑	60
	1,12	40 x 280 ↑↑	68
	0,47	45 x 105 ↑	34
	0,35	50 x 70 ↑	27
	0,40	50 x 80 ↑	30
	0,50	50 x 100 ↑	35
	0,55	50 x 110 ↑	38
	0,70	50 x 140 ↑	45
	0,85	50 x 170 ↑	52
	1,00	50 x 200 ↑↑	63
	1,15	50 x 230 ↑↑	70
	0,48	60 x 80 ↑	33
	0,54	60 x 90 ↑	36
	0,72	60 x 120 ↑	45
0,78	60 x 130 ↑	47	

	Light surface (m <sup>2</sup> )	Daylight surface (cm) iDome	Weight kg
Rectangular	0,90	60 x 150 ↑	53
	1,08	60 x 180 ↑	62
	1,20	60 x 200 ↑↑	70
	0,70	70 x 100 ↑	43
	0,91	70 x 130 ↑	52
	1,05	70 x 150 ↑	59
	1,12	70 x 160 ↑	62
	1,40	70 x 200 ↑↑	77
	1,54	70 x 220 ↑↑	83
	0,79	75 x 105 ↑	47
	0,94	75 x 125 ↑	53
	1,24	75 x 165 ↑	66
	1,31	75 x 175 ↑	70
	1,69	75 x 225 ↑↑	89
	0,88	80 x 110 ↑	51
	1,04	80 x 130 ↑	57
	1,12	80 x 140 ↑	61
	1,28	80 x 160 ↑	68
	1,36	80 x 170 ↑	71
	1,44	80 x 180 ↑	75
	1,60	80 x 200 ↑↑	84
	1,76	80 x 220 ↑↑	91
	1,84	80 x 230 ↑↑	94
	2,00	80 x 250 ↑↑	103
	2,24	80 x 280 ↑↑	115
	1,08	90 x 120 ↑	59
	1,35	90 x 150 ↑	70
	1,62	90 x 180 ↑	81
	1,89	90 x 210 ↑↑	95
	1,30	100 x 130 ↑	67
	1,50	100 x 150 ↑	75
	1,60	100 x 160 ↑	79
	1,80	100 x 180 ↑	88
	2,00	100 x 200 ↑↑	98
	2,20	100 x 220 ↑↑	109
	2,30	100 x 230 ↑↑	113
	2,50	100 x 250 ↑↑	122
	2,80	100 x 280 ↑↑	136
	3,00	100 x 300 ↑↑	145
	1,73	105 x 165 ↑	85
	2,36	105 x 225 ↑↑	107
	1,54	110 x 140 ↑	77
	1,87	110 x 170 ↑	96
	2,53	110 x 230 ↑↑	122
	1,68	120 x 140 ↑	82
	1,80	120 x 150 ↑	87
	2,16	120 x 180 ↑↑	98
	2,52	120 x 210 ↑↑	134
	2,08	130 x 160 ↑↑	95

↑ version with 1 spindle actuator

↑↑ version with 2 spindle actuators

Actuator is provided on the long side by default.

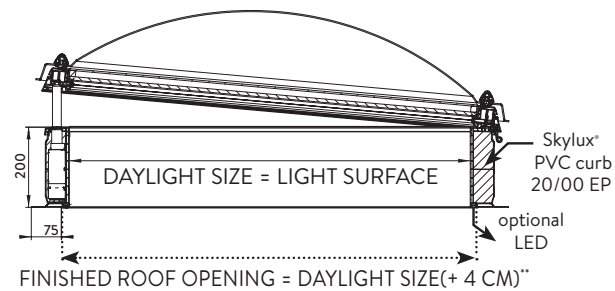
These pre-mounted glass skylights are always packed on a pallet.

Weight ( ±5%) = weight of the product (without packaging)

## Please note

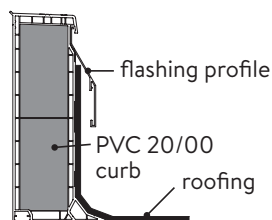
Depending on the size and weight of the glass skylight, we recommend using appropriate lifting equipment for transport and installation. To avoid heat build-up under the transparent skylight (plastic, hybrid, glass) and therefore possible deformation or damage to the PVC curb, frame, skylight dome or electrical components, it is recommended that no closed surface (e.g. black closed attic hatch) is installed under the skylights. A reflective (e.g. white) surface and/or ventilation is recommended.

## Drawings openable models (O)



\*\* only with built-in LED lights

## Drawing finished 20/00 with flashing profile



## Attestations, certificates and documentation

- Fall-through safety certificate DIN 18008-6 for Skylux iDome with tempered glass, in combination with all Skylux PVC curbs or all polyester curbs. Additionally, residual load-bearing capacity after breakage is also valid for sizes  $\leq 120 \times 120$  cm and  $\leq 100 \times 300$  cm, according to the DIN 18008-6 certificate (tests were executed on the largest sizes, intermediate dimensions are determined by interpolation).
- GS BAU 18 certificate for Skylux iDome with polycarbonate or Heatstop skylight in combination with all Skylux PVC curbs or all polyester curbs.
- CE according to EN 1873:2014+A1:2016
- DoP on [www.skylux.eu](http://www.skylux.eu)
- Zertifikat - DGUV Test



BIM-ready  
files via  
[skylux.eu](http://skylux.eu)

EN 1873:2014+A1:2016

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