SKYLIGHTS



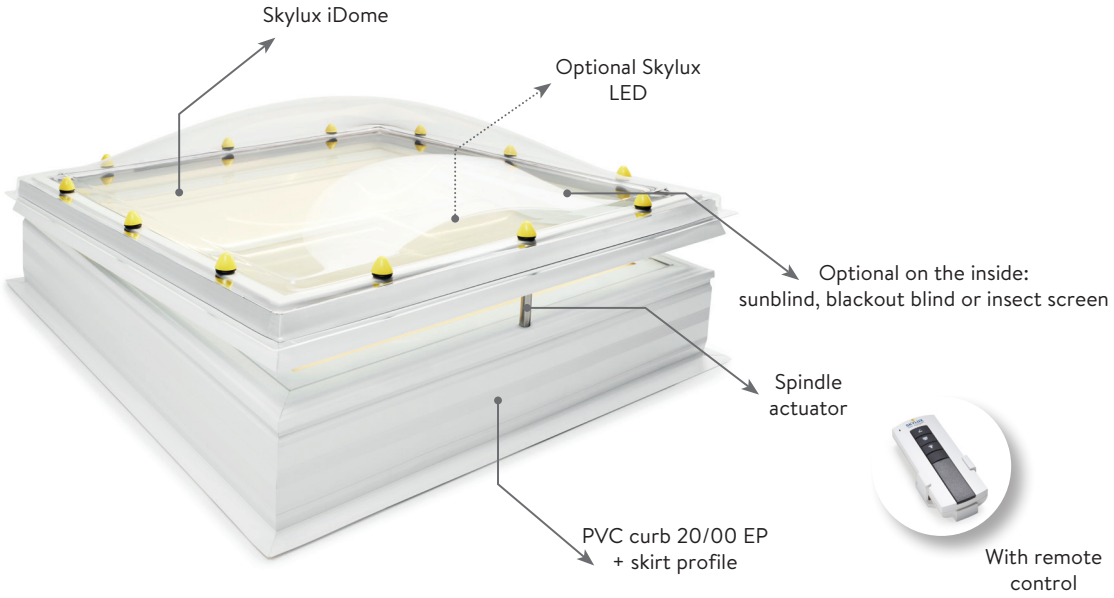
TECHNICAL FILE

Skylux® iDome™

Openable hybrid skylight

SKYLUX®
Hello daylight!

19-08-2021



General product description

The Skylux® iDome™ is a hybrid skylight. It's 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 finished iDome™ as hybrid dome in **openable (O) model** is premounted on a Skylux PVC curb 20/00 EP (+ 20/00 EP-S). The PVC curb has a built-in detection unit with remote control. 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. Optionally you can also opt for a rain detector.

Possible options:

- the built-in LED lights with remote control(L):
  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
- premounted electric inner sunblind with remote control (S): a premounted electric inner sunblinds keeps sunlight and sun warmth outside.
- or an electric and remote controlled blackout blind (V): an optional pre-mounted electric blackout blind on the inside of the curb that blocks the sunlight.
- or an electric an remote controlled insect screen (I): optional pre-mounted electric insect screen on the inside of the curb.

These options must be purchased when ordering the frame. The built-in detection unit also has open contacts to connect fixed push-buttons, or to allow the functioning upon a domotic system. The Skylux iDome™ openable hybrid skylight is suitable for flat roofs and for gradients between 0° and 25°. Installation under 5° is recommended to avoid the glass getting dirty and water stagnation.

Different types:


(S) electric inner sunblind


(O) openable with spindle actuator


(L) built-in LED lights

Openable model (O)	Openable spindle actuator (O)	Built-in LED lights (L)	Pre-mounted electric inner sun blind (S)	Pre-mounted electric blackout blind (V)	Pre-mounted electric insect screen (I)
O	x	-	-	-	-
OL	x	x	-	-	-
OS	x	-	x	-	-
OLS	x	x	x	-	-
OV	x	-	-	x	-
OLV	x	x	-	x	-
OI	x	-	-	-	x
OLI	x	x	-	-	x

Features

- Openable skylights 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 lights in option(L)
- Exceptional insulation values (up to U_t* = 0,50 W/m².K)
- Good sound insulation
- Water and air tight
- Easy cleaning : the inside has to be cleaned as a window
  and on the outside you have the self-cleaning aspect of the Skylux skylight
- Sleek and elegant inside finish
- premounted set
- Burglar proof
- Easy in use thanks to the remote control
- Optional electric inner sunblind or blackout blind or insect screen
- Also large dimensions: including 1000 x 2000 mm

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/m³
Fire class according to EN 13501-1	E

Specific characteristics: Skylux iDome glass

Mechanical characteristics	HR++ double glazing
Type	Layered (inner pane) + tempered (outer pane)
Thickness	± 28 mm
Weight	± 30 kg/m²
Light transmission according to EN 410	77,4 %
Solar factor according to EN 410	0,57
Sound insulation according to EN 717-1	37 (-2, -6) dB
U_g value according to EN 673	1,1 W/m²K
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_t : U value of the translucent part (glass and skylight) determined according EN 1873:2014+A1:2016, according to EN 673*

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

Mechanical characteristics	PVC of the type Benvic S white
Thermal characteristics	PVC with insulation
EN 10077-2:2012	U_{up}*-value 0,61 W/m².K (insulation EPS separate with λ = 0,035 W/m².K)
Sizes	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/m³ (EPS insulation : 28 kg/m³)

** U_{up}: 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	24V 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% (Transmitting)	± 0,5% (Transmitting)**	± 90% (Transmitting)
Type	multi-layered (honeycomb) pleated fabric	multi-layered (honeycomb) pleated fabric	multi-layered (honeycomb) mesh

*** There's always some stray light on the sides of the blackout blind.*

Specific characteristics:
Skylux LED lighting (L) optional

Functioning	24V DC
Functioning temperature	-10°C to +60°C
Colour	warm white ± 3000K
LED distance	120 LEDS/m
Flux	≥ 2400 lumen/5m
Durability	≥ 40.000 h

At the bottom of the pvc curb 20/00 EP

Specific characteristics: assembled system 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 10mm
PVC 20/00 EP						
Urc*** ($W/m^2.K$)	0,92	0,85	0,79	0,75	0,72	0,75
Arc(*) (m^2)				3,01		
PVC 20/00 EP + 20/00 EP-S						
Urc*** ($W/m^2.K$)	0,84	0,79	0,75	0,72	0,69	0,71
Arc(*) (m^2)				4,09		

*** *Urc = U value of the set (glass, frame and curb) and is determined for daylight size 120x120 according to EN 1873:2014+A1:2016*
(*) *Arc = surface of the skylight with curb, determined for daylight size 120x120 according EN 1873:2014+A1:2016*

Specific characteristics:
Skylux integrated spindle actuator (O)

Opening height	± 10 cm
Tension	24V DC
Current	3A
Consumption	85W (of 0,5W in standby)
Ambient temperature	-20°C to +70°C
Engine force opening	1500N
closing	100N
retention force	1500N
Durability	10.000 open/dicht cycli
Functioning cycle	10%, max. 2min./18min.

Available daylight sizes:

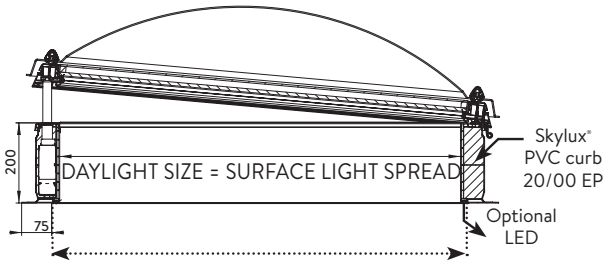
	Surface light (m^2)	Daylight size (cm) iDome	Weight kg	Weight Pallet kg
Square	0,36	60 x 60 ↑	± 33	±26
	0,49	70 x 70 ↑	± 39	± 27
	0,64	80 x 80 ↑	± 46	± 28
	0,81	90 x 90 ↑	± 55	± 27
	1,00	100 x 100 ↑	± 60	± 30
	1,21	110 x 110 ↑	± 70	± 32
	1,44	120 x 120 ↑	± 70	± 34
	1,69	130 x 130 ↑	± 70	± 37
	1,96	140 x 140 ↑↑	± 70	± 40
	2,25	150 x 150 ↑↑	± 70	± 43
Rectangular	0,28	40 x 70 ↑	± 29	± 23
	0,54	60 x 90 ↑	± 41	± 30
	0,70	70 x 100 ↑	± 48	± 33
	1,04	80 x 130 ↑	± 63	± 31
	1,44	80 x 180 ↑	± 82	± 33
	1,08	90 x 120 ↑	± 65	± 31
	1,30	100 x 130 ↑	± 73	± 33
	1,50	100 x 150 ↑	± 82	± 35
	2,00	100 x 200 ↑↑	± 112	± 37

↑ 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.

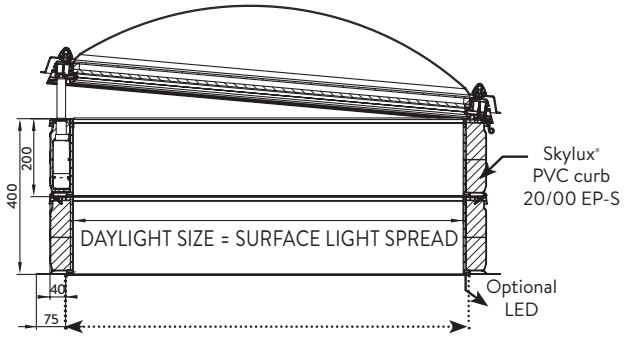
Please note

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):



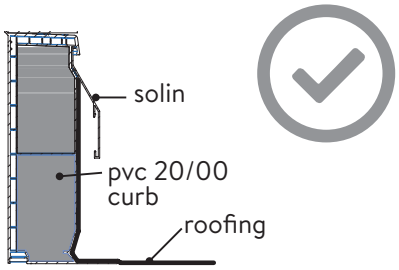
FINISHED ROOF OPENING = DAYLIGHT SIZE (+ 4CM)**



FINISHED ROOF OPENING = DAYLIGHT SIZE (+ 4CM)**

** Only with built-in LED lights

Drawing: finished 20/00 with flashing profile:

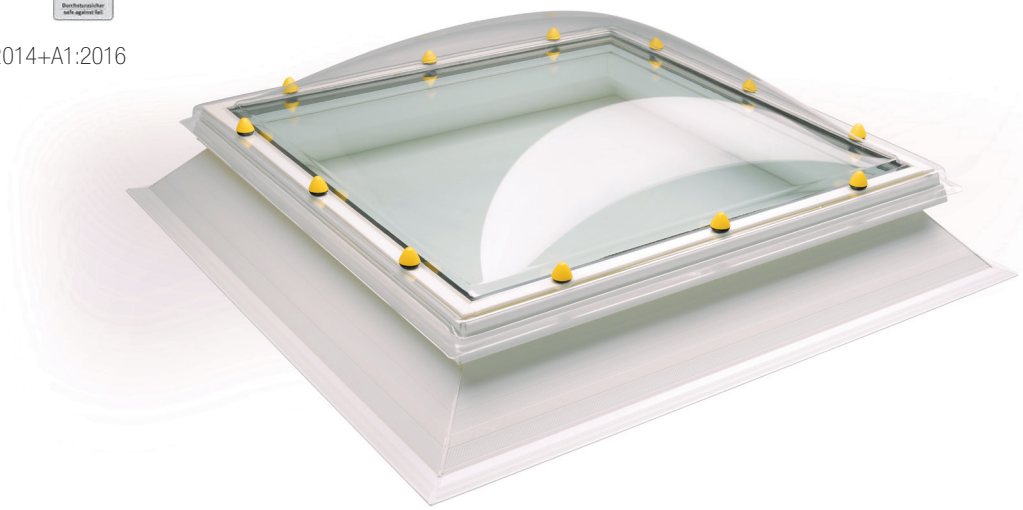


Attestations, certificates and documentation:

- 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 ≤ 120 x 120 cm and ≤ 100 x 200 cm, according to the DIN 18008-6 certificate.
- 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.be
- Zertifikat - DGUV Test

BIM files ready on skylux.be

EN 1873:2014+A1:2016



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