

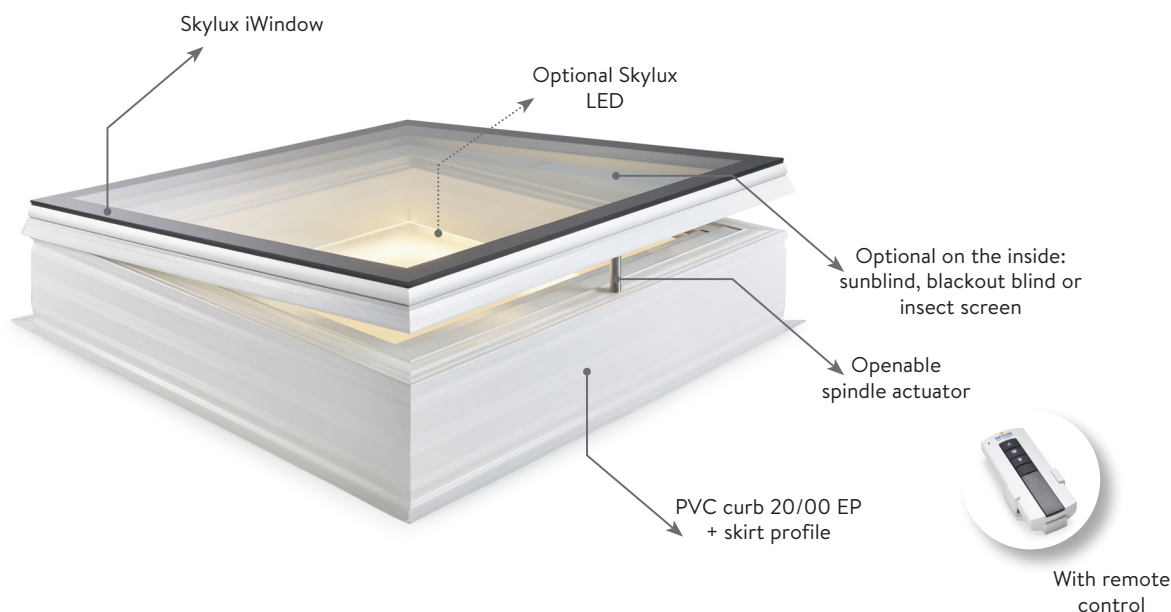


TECHNICAL FILE

Skylux® iWindow2™ & iWindow3™

Openable glass skylight





General product description

The Skylux® iWindow **openable (O)** is a super insulating flat glass skylight with a sleek design, excellent U-values and an optimal light spread for applications in flat roofs. It's composed of a compact and insulating PVC frame with super insulating safety glass (iWindow2 with double safety glazing HR++/iWindow3 with triple safety glazing HR+++), and a sleek anodised aluminium frame. The glass is tempered and has a ceramic rim to obtain an aesthetic and smooth visual integration into the roof.

The finished iWindow2 or iWindow3 as glass 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.

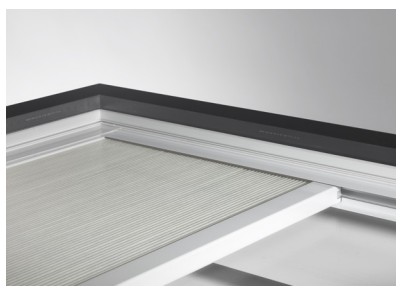
Possible options are:

- 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 sunblind s 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 iWindow openable glass skylight is suitable for flat roofs and for gradients between min. 4° and 25°. Installation under 5° is recommended to avoid the glass getting dirty and water stagnation.

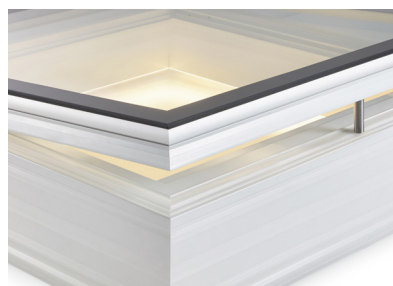
Different types:



(S) electric inner sunblind



(O) openable with spindle actuator



(L) built-in LED lights

	Openable 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)
Openable model (O)	O	x	-	-	-
	OL	x	x	-	-
	OS	x	-	x	-
	OLS	x	x	-	-
	OV	x	-	x	-
	OLV	x	x	x	-
	OI	x	-	-	x
	OLI	x	x	-	x

Features

- openable model for fresh air ventilation
- complete rooflight 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 $U_g = 0,50 \text{ W/m}^2\cdot\text{K}$)
- good sound insulation
- air and water tight
- easy cleaning
- sleek and elegant inside and outside finish
- premounted set
- burglar proof
- easy in use thanks to the remote control
- optional electric inner sunblind or blackout blind or insect screen
- iWindow has a small thermal waste surface compared to the light spread surface
- large sizes possible: e.g. 1000x2000 mm
- options possible: fixed outer sunblind



Specific characteristics: Skylux iWindow2 & iWindow3 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 iWindow2 & iWindow3 glass

	Skylux iWindow2™	Skylux iWindow3™
Mechanical characteristics	HR++ double glazing	HR+++ triple glazing
Type	layered (inner pane) tempered (outer pane)	layered (inner pane) tempered (outer and middle pane)
Thickness	± 39 mm	± 61 mm
Weight	± 35 à 44 kg/m ²	± 55 à 60 kg/m ²
Light transmission according to EN 410	66,9 %	68,3 %
Solar factor according to EN 410	0,42	0,49
Sound insulation according to EN 717-1	39 (-3, -7) dB	41 (-2, -5) dB
U _g value according to EN 673	1,0 W/m ² K	0,5 W/m ² K
Safety glazing NBN EN 356	min. type P2A (44.2)	min. type P2A (44.2)

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

Mechanical characteristics	PVC of the type Benvic S white
Thermal characteristics	pvc with insulation
EN 10077-2:2012	U _{up} *-value 0,61 W/m ² .K (insulation EPS separate with λ = 0,035 W/m ² .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 cm) (Only with built-in LED lights)
Density	PVC: 1500 kg/m ³ (EPS insulation: 28 kg/m ³)

* 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 iWindow on PVC curb 20/00 EP (+ 20/00 EP-S)



	Skylux iWindow2™		Skylux iWindow3™	
	20/00EP+		20/00EP+	
	20/00EP	20/00EP-S	20/00EP	20/00EP-S
U _{rc} ***-value (W/m².K)	0,93	0,84	0,63	0,62
Arc(*) surface (m²)	3,09	4,14	2,96	4,17

^(*) Arc = surface of the skylight with curb, determined for daylight size 120x120 according to 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	1000N
closing	300N
retention force	1500N
Durability	10.000 open/close cycles
Functioning cycle	10%, max. 2min./18min.

Available daylight sizes:

	Surface light (m ²)	Daylight size (cm) iWindow2	Weight (kg)	Daylight size (cm) iWindow3	Weight (kg)	Weight of the pallet (kg)
Square 	0,36	60 x 60 ↑	± 39	60 x 60 ↑	± 42	± 26
	0,49	70 x 70 ↑	± 46	70 x 70 ↑	± 50	± 27
	0,64	80 x 80 ↑	± 54	80 x 80 ↑	± 59	± 28
	0,81	90 x 90 ↑	± 65	90 x 90 ↑	± 72	± 27
	1,00	100 x 100 ↑	± 72	100 x 100 ↑	± 92	± 30
	1,21	110 x 110 ↑	± 82	110 x 110 ↑	± 101	± 32
	1,44	120 x 120 ↑	± 101	120 x 120 ↑	± 123	± 34
	1,69	130 x 130 ↑	± 114	-	-	± 37
	1,96	140 x 140 ↑↑	± 135	-	-	± 40
	2,25	150 x 150 ↑↑	± 149	-	-	± 43
Rectangular 	0,28	40 x 70 ↑	± 33	40 x 70 ↑	± 36	± 23
	0,54	60 x 90 ↑	± 49	60 x 90 ↑	± 54	± 30
	0,70	70 x 100 ↑	± 57	70 x 100 ↑	± 67	± 33
	1,04	80 x 130 ↑	± 74	80 x 130 ↑	± 96	± 31
	1,44	80 x 180 ↑	± 97	80 x 180 ↑	± 126	± 33
	1,08	90 x 120 ↑	± 77	90 x 120 ↑	± 98	± 31
	1,30	100 x 130 ↑	± 88	100 x 130 ↑	± 113	± 33
	1,50	100 x 150 ↑	± 96	100 x 150 ↑	± 137	± 35
	2,00	100 x 200 ↑↑	± 128	-	-	± 37

↑ version with 1 spindle actuator, actuator is provided on the long side by default.

↑↑ version with 2 spindle actuators, actuator is provided on the long side by default.

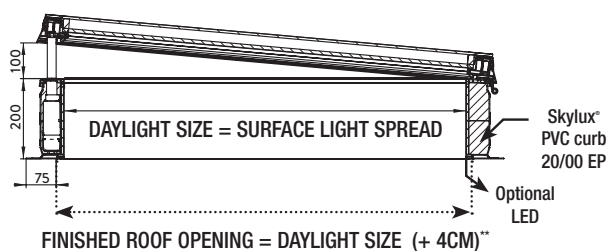
These pre-mounted glass skylights are always packed on a pallet.

Remark:

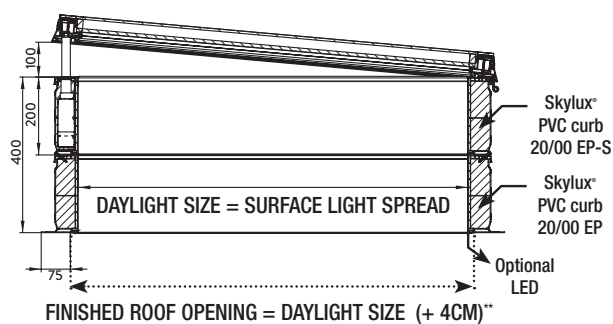
Depending on the size and weight of the glass skylight, we recommend to use appropriate lifting equipment for transport and installation.

Drawings openable models (O):

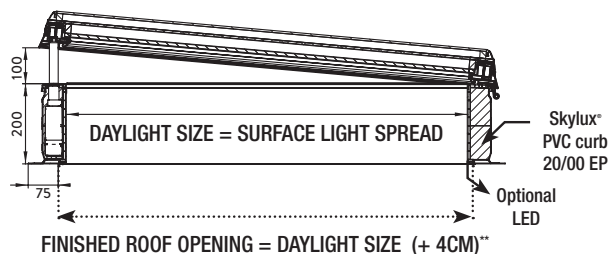
with Skylux iWindow2™



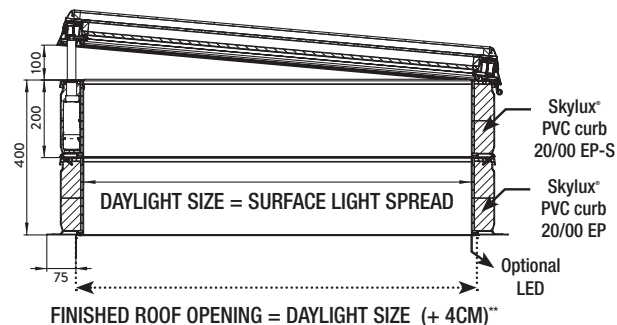
with Skylux iWindow2™



with Skylux iWindow3™

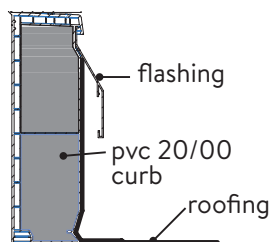


with Skylux iWindow3™



** 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 iWindow2 or iWindow3, namely for all dimensions. For sizes $\leq 120 \times 120$ cm and $\leq 100 \times 200$ cm, the residual load-bearing capacity after breakage remains valid according to the DIN 18008-6 certificate.
- According to performances of EN 1873:2014+A1:2016, but no CE, as there is no specific norm for glass skylight

**BIM-ready
files upon
skylux.be**

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