TECHNICAL FILE

Skylux® iDome™

Openable hybrid skylight with remote control

SKYLUX®

Hello daylight!

19-01-2023

Skylux iDome

optional Skylux
LED lighting

optional rain sensor

* image is not binding

with remote control

openable
spindle actuator

optional on the inside:
sunblind, blackout blind or
insect screen

PVC curb
20/00 EP + flashing profile
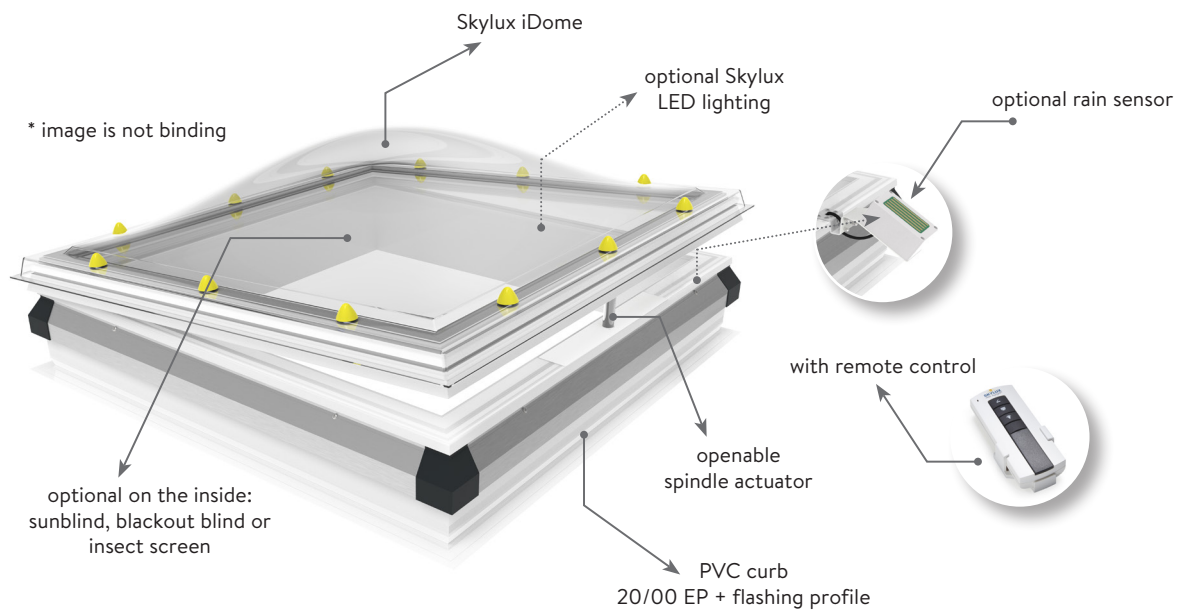
General product description

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 with remote control (RF-Radio frequency technology). 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
- built-in and remote controlled LED lights (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;
- 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 built-in detection unit also has open contacts to connect fixed push buttons, or to allow the functioning with a house automation system.
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) built-in LED lights

	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)
O-R	x	-	-	-	-
O-LR	x	x	-	-	-
O-S	-	-	x	-	-
O-SR	x	-	x	-	-
O-LS	-	x	x	-	-
O-LSR	x	x	x	-	-
O-V	-	-	-	x	-
O-VR	x	-	-	x	-
O-I	-	-	-	-	x
O-IR	x	-	-	-	x
O-LV	-	x	-	x	-
O-LVR	x	x	-	x	-
O-LI	-	x	-	-	x
O-LIR	x	x	-	-	x

Openable model (O)

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)
- Exceptional insulation values (up to Ut* = 0.50 W/m².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
- Easy to use thanks to the remote control
- Optional electric inner sunblind or blackout blind or insect screen
- Large sizes are also available: including 1000x2000 mm
- Closes automatically in case of precipitation (optional pre-mounted rain sensor)
- Large range of available sizes; from small to large

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

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Specific characteristics: Skylux iDome glass

Mechanical characteristics	HR++ (double insulated glazing)
Type	layered (inner pane) + tempered (outer pane)
Thickness	± 28 mm
Weight	± 30 kg/m²
Light transmission according to EN 410	75%
Solar factor g (ZTA) according to EN 410	0.53
Sound insulation Rw accoridng 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 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_{up^*} value 0.61 W/m².K (insulation EPS separate with λ = 0.035 W/m².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/m³ (insulation EPS: 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	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	-10°C to +60°C
Colour	warm white ± 3000 K
LED distance	120 LEDS/m
Flux	≥ 2400 lumen/5 m
Lifespan	≥ 40,000 h
At the bottom of the PVC curb 20/00 EP	
Power	7 W/m

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
PVC 20/00 EP						
Urc***(W/m².K)	0.92	0.85	0.79	0.75	0.72	0.75
Arc(*) (m²)			3.04			
PVC 20/00 EP + 20/00 EP-S						
Urc***(W/m².K)	0.84	0.79	0.75	0.72	0.69	0.71
Arc(*) (m²)			4.09			

*** 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
(*) 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
Current		3 A
Consumption		85 W (or 0.5 W in standby)
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.

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Specific characteristics:
Skylux rain sensor

Power	24 V DC
Relay contact load-bearing capacity	8 A
Casing dimensions	248 x 55 x 80 mm
Protection class electronics	IP56
Colour	white/grey

Available daylight sizes

	Light surface (m²)	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 (m²)	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
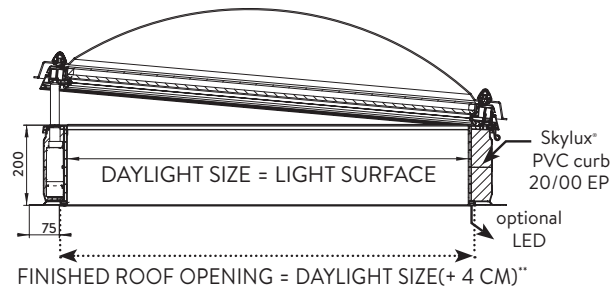Actuator is provided on the long side by default.
These pre-mounted glass skylights are always packed on a pallet.
Weight (±5%) = weight of the product (without packaging)
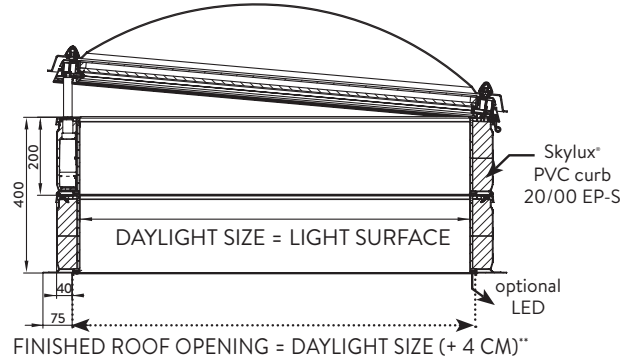
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Please note

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.
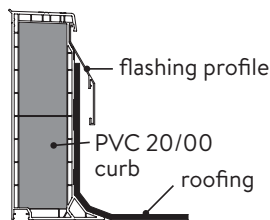
Drawings openable models (O)

DAYLIGHT SIZE = LIGHT SURFACE

200
75

Skylux® PVC curb 20/00 EP

optional LED

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

** only with built-in LED lights

DAYLIGHT SIZE = LIGHT SURFACE

400
200
40
75

Skylux® PVC curb 20/00 EP-S

optional LED

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

Drawing finished 20/00 with flashing profile

flashing profile

PVC 20/00 curb

roofing

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 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
- Zertifikat - DGUV Test

EN 1873:2014+A1:2016

BIM-ready files via skylux.eu

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