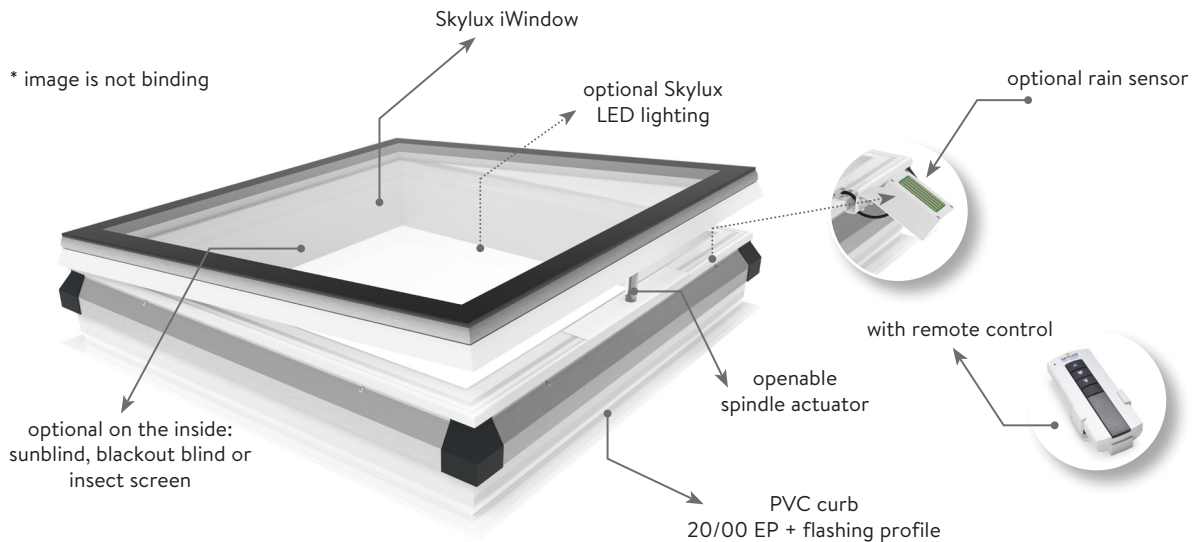


TECHNICAL FILE

Skylux[®] iWindow2[™] & iWindow3[™]

Openable glass skylight with remote control


Hello daylight!



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 is composed of a compact and insulating plastic 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 Skylux® iWindow 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.

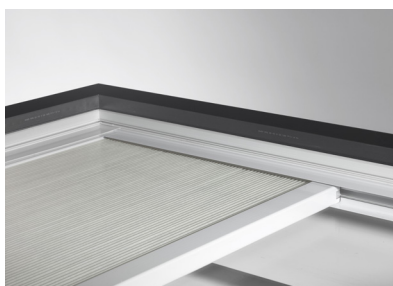
Possible options:

- 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® iWindow openable glass skylights are suitable for flat roofs and can be installed with a roof pitch between 4° and 25°. Installation with a slope of at least 5° is recommended to avoid dirt and water stagnation on the glass.

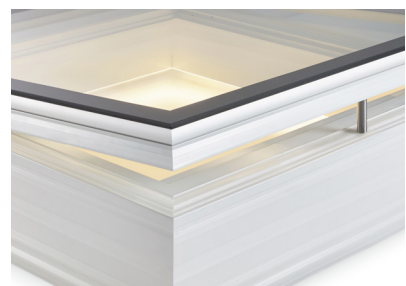
Different types:



(S) electric inner sunblind



(V) electric blackout blind



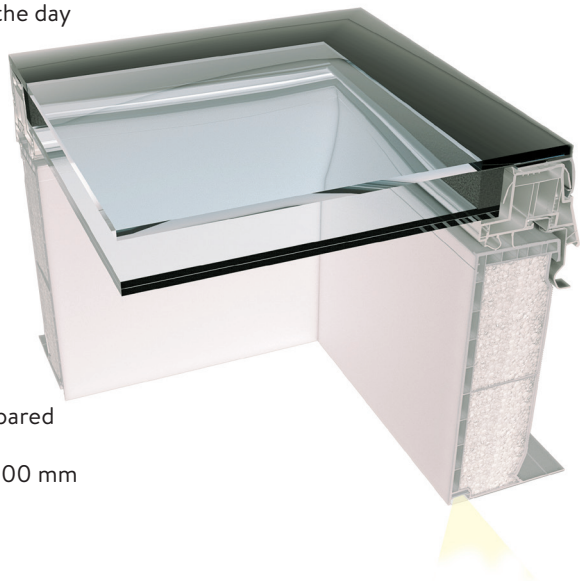
(L) built-in LED lights

	Rain sensor (R)	Build-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 $U_g = 0.50 \text{ W/m}^2\cdot\text{K}$)
- Good sound insulation
- Watertight and airtight
- Easy cleaning
- Sleek and elegant inside and outside finish
- Pre-mounted set
- Burglar-proof
- Easy to 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 are also available: including 1000x2000 mm
- Possible options: fixed outer sunblind
- Closes automatically in case of precipitation (optional pre-mounted rain sensor)
- Large range of available sizes; from small to large
- Opal glass also possible; or heat-reflective glass



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/m ³
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 to 44 kg/m ²	± 55 to 60 kg/m ²
Light transmission according to EN 410	clear...opal...heat-refl. 75%...72%...53%	clear...opal...heat-refl. 63%...61%...46%
Solar factor g (ZTA) according to EN 410	0.52...0.50...0.40	0.42...0.41...0.33
Sound insulation Rw 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) type P4A (44.4) for 1000x3000 mm	min. type P2A (44.2)

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/m ² .K (insulation EPS separate with λ = 0.035 W/m ² .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 ³ (insulation EPS: 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	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	$\geq 40,000$ h
At the bottom of the PVC curb 20/00 EP	
Power	7 W/m

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

	Skylux iWindow2™		Skylux iWindow3™	
	20/00EP+	20/00EP+	20/00EP+	20/00EP+
	20/00EP	20/00EP-S	20/00EP	20/00EP-S
Urc*** value (W/m ² .K)	0.93	0.84	0.63	0.62
Arc(*) surface (m ²)	3.09	4.14	2.96	4.17

*** 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 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.

Specific characteristics: Skylux rain sensor - optional

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 (m ²)	Daylight size (cm) iWindow2	Weight (kg)	Daylight size (cm) iWindow3	Weight (kg)	Weight of the pallet (kg)
Square 	0,16	40 x 40	↑ ± 21	40 x 40	↑ ± 25	± 26
	0,25	50 x 50	↑ ± 26	50 x 50	↑ ± 30	± 26
	0,30	55 x 55	↑ ± 29	-	-	± 26
	0,36	60 x 60	↑ ± 33	60 x 60	↑ ± 38	± 26
	0,49	70 x 70	↑ ± 40	70 x 70	↑ ± 47	± 27
	0,56	75 x 75	↑ ± 43	-	-	± 28
	0,64	80 x 80	↑ ± 47	80 x 80	↑ ± 56	± 28
	0,72	85 x 85	↑ ± 52	-	-	± 30
	0,81	90 x 90	↑ ± 56	90 x 90	↑ ± 66	± 30
	1,00	100 x 100	↑ ± 65	100 x 100	↑ ± 84	± 30
	1,10	105 x 105	↑ ± 70	105 x 105	↑ ± 90	± 32
	1,21	110 x 110	↑ ± 75	110 x 110	↑ ± 97	± 32
	1,44	120 x 120	↑ ± 95	120 x 120	↑ ± 127	± 34
	1,69	130 x 130	↑↑ ± 107	-	-	± 37
	1,96	140 x 140	↑↑↑ ± 123	-	-	± 40
2,25	150 x 150	↑↑↑ ± 138	-	-	± 43	
Rectangular 	0,28	40 x 70	↑ ± 29	40 x 70	↑ ± 33	± 23
	0,40	40 x 100	↑ ± 36	-	-	± 32
	0,52	40 x 130	↑ ± 45	-	-	± 48
	0,56	40 x 140	↑ ± 47	-	-	± 48
	0,64	40 x 160	↑ ± 52	-	-	± 42
	0,76	40 x 190	↑↑ ± 63	-	-	± 45
	0,88	40 x 220	↑↑ ± 77	-	-	± 49
	1,12	40 x 280	↑↑ ± 89	-	-	± 59
	0,47	45 x 105	↑ ± 40	-	-	± 32
	0,35	50 x 70	↑ ± 32	-	-	± 27
	0,40	50 x 80	↑ ± 35	-	-	± 30
	0,50	50 x 100	↑ ± 41	-	-	± 33
	0,55	50 x 110	↑ ± 44	-	-	± 32
	0,70	50 x 140	↑ ± 53	-	-	± 48
	0,85	50 x 170	↑ ± 62	-	-	± 42
	1,00	50 x 200	↑↑ ± 74	-	-	± 45
	1,15	50 x 230	↑↑ ± 90	-	-	± 49
	0,48	60 x 80	↑ ± 39	-	-	± 30
	0,54	60 x 90	↑ ± 43	60 x 90	↑ ± 50	± 30
	0,72	60 x 120	↑ ± 53	-	-	± 31
	0,78	60 x 130	↑ ± 56	-	-	± 31
	0,90	60 x 150	↑ ± 63	-	-	± 48
	1,08	60 x 180	↑ ± 73	-	-	± 33
	1,20	60 x 200	↑↑ ± 90	-	-	± 56

	Light surface (m ²)	Daylight size (cm) iWindow2	Weight (kg)	Daylight size (cm) iWindow3	Weight (kg)	Weight of the pallet (kg)
Rectangular 	0,70	70 x 100 ↑	± 51	70 x 100 ↑	± 60	± 33
	0,91	70 x 130 ↑	± 62	-	-	± 31
	1,05	70 x 150 ↑	± 69	-	-	± 36
	1,12	70 x 160 ↑	± 73	-	-	± 33
	1,40	70 x 200 ↑↑	± 91	-	-	± 56
	1,54	70 x 220 ↑↑	± 98	-	-	± 60
	0,79	75 x 105 ↑	± 55	-	-	± 31
	0,94	75 x 125 ↑	± 63	-	-	± 31
	1,24	75 x 165 ↑	± 79	-	-	± 33
	1,31	75 x 175 ↑	± 82	-	-	± 33
	1,69	75 x 225 ↑↑	± 115	-	-	± 60
	0,88	80 x 110 ↑	± 60	-	-	± 33
	1,04	80 x 130 ↑	± 68	80 x 130 ↑	± 93	± 33
	1,12	80 x 140 ↑	± 72	-	-	± 35
	1,28	80 x 160 ↑	± 80	-	-	± 33
	1,36	80 x 170 ↑	± 84	-	-	± 33
	1,44	80 x 180 ↑	± 88	80 x 180 ↑	± 122	± 33
	1,60	80 x 200 ↑↑	± 109	-	-	± 37
	1,76	80 x 220 ↑↑	± 118	-	-	± 60
	1,84	80 x 230 ↑↑	± 122	-	-	± 60
	2,00	80 x 250 ↑↑	± 146	-	-	± 47
	2,24	80 x 280 ↑↑	± 162	-	-	± 65
	1,08	90 x 120 ↑	± 69	90 x 120 ↑	± 95	± 31
	1,35	90 x 150 ↑	± 83	-	-	± 35
	1,62	90 x 180 ↑	± 96	-	-	± 37
	± 1,89	90 x 210 ↑↑	± 112	-	-	± 60
	± 1,30	100 x 130 ↑	± 80	100 x 130 ↑	± 110	± 33
	± 1,50	100 x 150 ↑	± 89	100 x 150 ↑	± 132	± 35
	± 1,60	100 x 160 ↑	± 104	-	-	± 37
	± 1,80	100 x 180 ↑	± 115	-	-	± 37
	± 2,00	100 x 200 ↑↑	± 128	-	-	± 37
	± 2,20	100 x 220 ↑↑	± 141	-	-	± 45
	± 2,30	100 x 230 ↑↑	± 147	-	-	± 45
	± 2,50	100 x 250 ↑↑	± 173	-	-	± 65
	± 2,80	100 x 280 ↑↑	± 192	-	-	± 65
	± 3,00	100 x 300 ↑↑	± 204	-	-	± 72
	± 1,73	105 x 165 ↑	± 110	-	-	± 38
	± 2,36	105 x 225 ↑↑	± 150	-	-	± 60
	± 1,54	110 x 140 ↑	± 105	-	-	± 38
	± 1,87	110 x 170 ↑	± 124	-	-	± 37
	± 2,53	110 x 230 ↑↑	± 158	-	-	± 60
	± 1,68	120 x 140 ↑	± 113	-	-	± 40
	± 1,80	120 x 150 ↑	± 119	-	-	± 37
	± 2,16	120 x 180 ↑↑	± 129	-	-	± 49
	± 2,52	120 x 210 ↑↑	± 148	-	-	± 56
± 2,08	130 x 160 ↑↑	± 132	-	-	± 48	

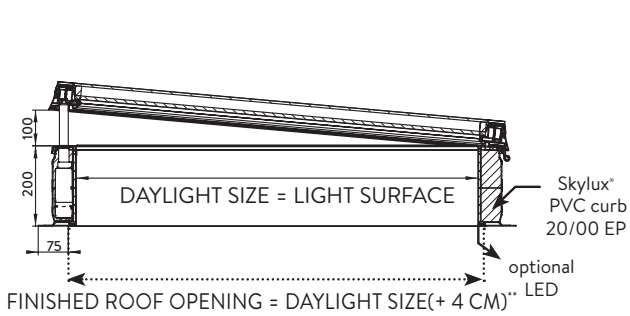
↑ version with 1 spindle actuator, actuator is provided on the long side by default
 ↑↑ version with 2 spindle actuators, actuator is provided on the long side by default
 These pre-mounted glass skylights are always packed on a pallet.
 Weight (±5%) = weight of the product (without packaging)

Please note

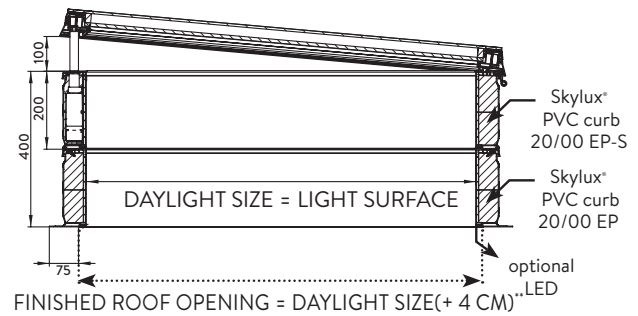
Depending on the size and weight of the glass skylight, we recommend using appropriate lifting equipment for transport and installation.

Drawings openable models (O)

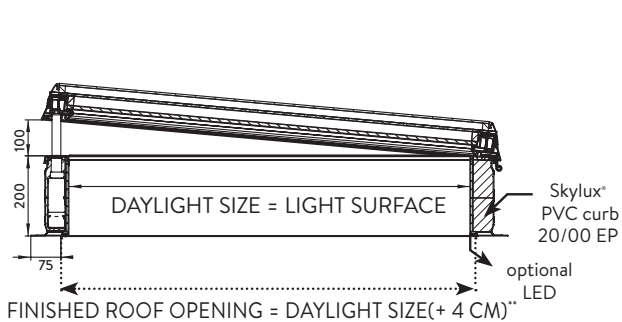
with Skylux iWindow2™



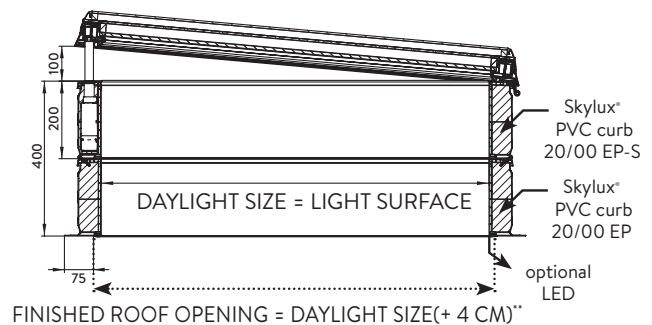
with Skylux iWindow2™



with Skylux iWindow3™

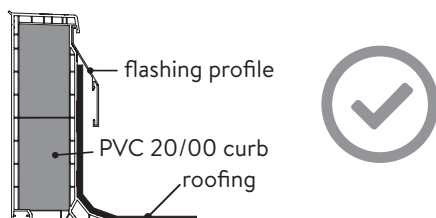


with Skylux iWindow3™



** 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 $\leq 100 \times 300$ cm, the residual load-bearing capacity after breakage remains valid according to the DIN 18008-6 certificate (tests were executed on the largest sizes, intermediate dimensions are determined by interpolation)
- According to performances of EN 1873:2014+A1:2016, but no CE, as there is no specific norm for glass skylights.

BIM-ready
files on
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Hello daylight!