

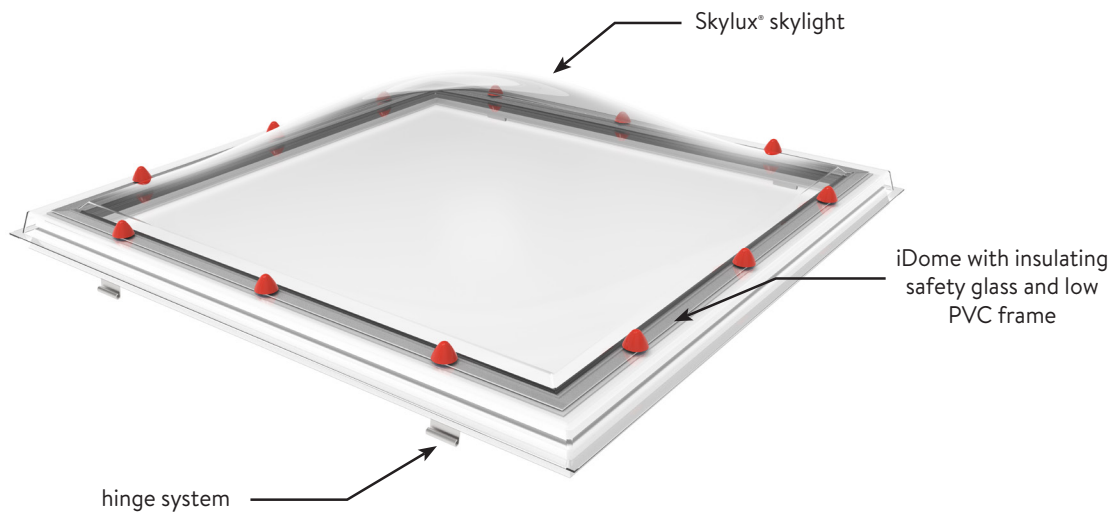


TECHNICAL FILE

Skylux[®] iDome[™]

Fixed hybrid skylight:
for partial renovation - installation on polyester,
metal and PVC curbs


SKYLUX[®]
Hello daylight!



General product description

The Skylux® iDome™ is a hybrid skylight, composed of a compact and insulating PVC frame where super insulating safety glass HR++ (double tempered glass) is combined with a Skylux® dome of your choice. The completely finished frame can easily be mounted with a hinge system on a **curb of choice**; like e.g. a (existing) polyester, metal or PVC curb (*). This also makes the skylight suited for **partial renovation**.

Additionally, the hinge system provides a burglarproof feature.

The Skylux® iDome™ can be used in flat roofs with a roof inclination between 0° and 25°.

Available variants :

* Fixed model also available with high PVC frame.

* Openable model Flex 2.0 for ventilation; with high PVC frame, hinges and built-in chain actuator.

Features

- Maximal surface lightfall equal to the daylight size
- Exceptional insulation values (up to $U_t^* = 0.50 \text{ W/m}^2\text{K}$)
- Can be combined with a curb of choice (*): (existing) polyester, metal or PVC curb
- Easy and quick installation with hinge system for fixed model
- Openable model possible : see technical file iDome Flex2.0
- Sleek and elegant inside finish
- Easy cleaning
- Good sound insulation
- Good air and water tightness
- Large sizes also available: e.g. 1000x2000 mm and 1000x3000 mm
- Possible options: electric inner sunblind or blackout blind
- Many dimensions available; ranging from small to large

* U_t = value of the translucent part (= glass), determined according to EN 1873:2014+A1:2016

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 ³
Fire class according to EN 13501-1	E

Specific characteristics: Skylux® iDome™ glass

Mechanical characteristics	HR++ (double glazing, tempered and laminated glass)
Type	layered (inner pane) tempered (outer pane)
Thickness	± 28 mm
Weight	± 30 kg/m ²
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 _g value according to EN 673	1,1 W/m ² K
Safety glass NBN EN 356	min. type P2A (44.2)

Specific characteristics: Skylux® dome

Characteristics	See technical file of the chosen Skylux® dome
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Specific characteristics: assembled system

Light transmission according to EN 410	Glass: 75 % of the light transmission of the dome of your choice (see technical file dome)
Solar factor g (ZTA)	in function of the chosen dome
Impact resistance according to EN 1873:2014+A1:2016	SB 1200
Air permeability to EN 1873:2014+A1:2016	Ap 1
Sound insulation Rw according to EN 717-1	38 - 40 dB
Rain noise according to ISO140-18 L _{1A}	38 dB

Dome type	U _t value (W/m ² K)					Energy profit 10 mm
	single-walled	double-walled	3-walled	4-walled	5-walled	
U _t value with glass	0.93	0.79	0.69	0.61	0.55	0.60

U_t = U value of the translucent part (= glass and dome), determined according to the new EN 1873:2014+A1:2016, in accordance with EN 673

Dome type / Curb type	U _{rc} value Skylux® iDome™ with skylight and curb (W/m ² K)					Energy profit 10 mm
	single-walled	double-walled	3-walled	4-walled	5-walled	
PO 15/20	1.00	0.93	0.88	0.83	0.80	0.83
M15	1.01	0.94	0.89	0.85	0.82	0.84
M15EP	0.91	0.84	0.79	0.75	0.72	0.74

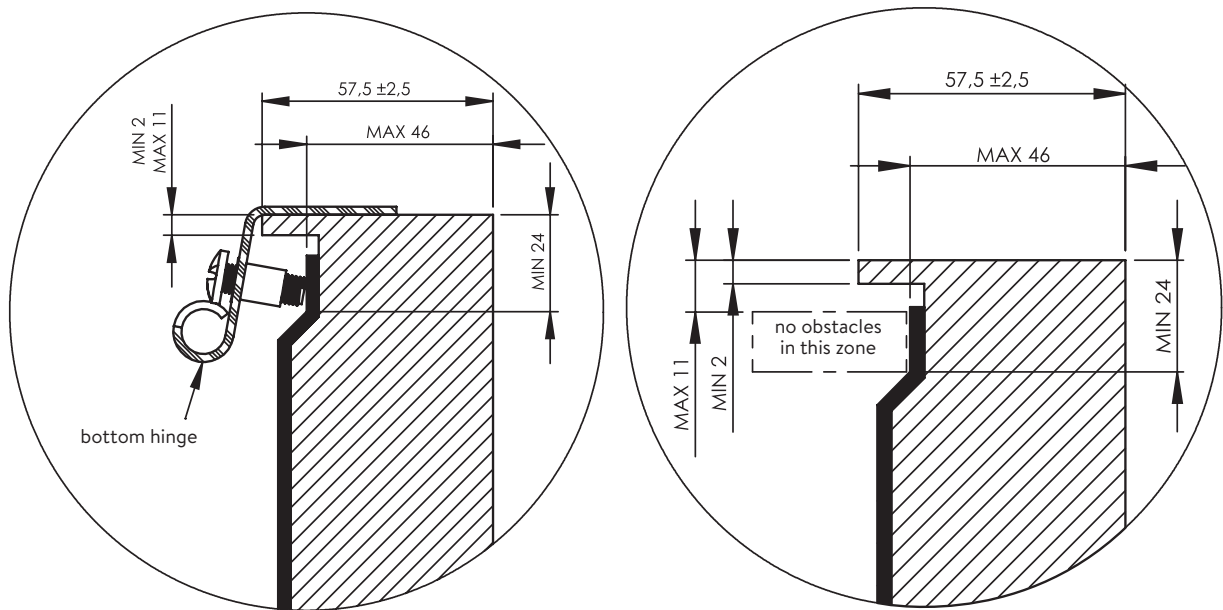
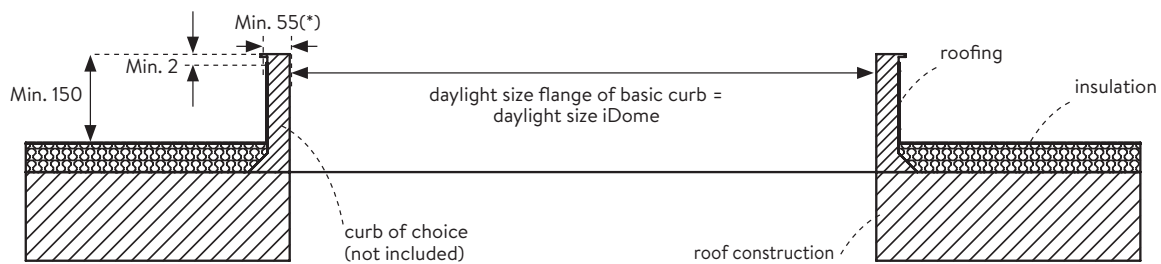
Dome type / Curb type	A _{rc} value Skylux® iDome™ with skylight and curb (W/m ² K)					Energy profit 10 mm
	single-walled	double-walled	3-walled	4-walled	5-walled	
PO 15/20	2.16	2.16	2.16	2.16	2.16	2.16
M15	2.17	2.17	2.17	2.17	2.17	2.17
M15EP	2.18	2.18	2.18	2.18	2.18	2.18

U_{rc} = U value of the assembled system (= glass, frame and curb), determined for daylight size 100 x 100 cm, according to EN 1873:2014+A1:2016

Please notice: the U_{rc} value depends, among other things, on the insulation value of the existing / non-Skylux curb.

Suited for installation on curbs with the following characteristics (*)

- top surface is situated at least 15 cm above the roofing
- daylight size of upper flange of curb = daylight size of glass skylight
- width of upper flange of curb: min. 55 mm and max. 60 mm around (57.5 ± 2.5 mm)
- thickness of upper flange of curb: min. 2 mm and sufficiently strong over the complete width of min. 55 mm (and max. 11 mm thick on the most extreme point)
- No obstacles allowed in the indicated zone for installation of the bottom hinges (or max. 46 mm width of the curb above at 24 mm from the top) - see also detail drawings.
- The whole curb sufficiently strong to carry the weight of the glass skylight**.






Please note: for certain PVC curbs (e.g. PVC 20/00 EP), this hinge system will not be compatible for fixation. For installation on Skylux PVC curbs (e.g. PVC 20/00 EP), we recommend to use the standard installation technique with clips.

Installation system

The pre-mounted top hinges on the glass frame are on the two opposite long sides of the glass skylight. The bottom hinges must be attached to the chosen curb (*). The glass frame is placed in the hinges and briefly fixed with a burglarproof one-way screw.

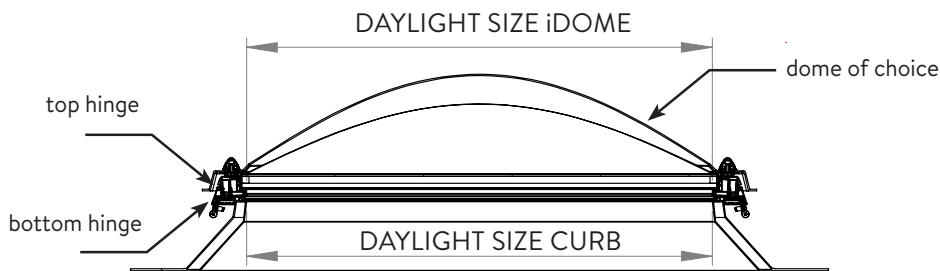
Available daylight sizes

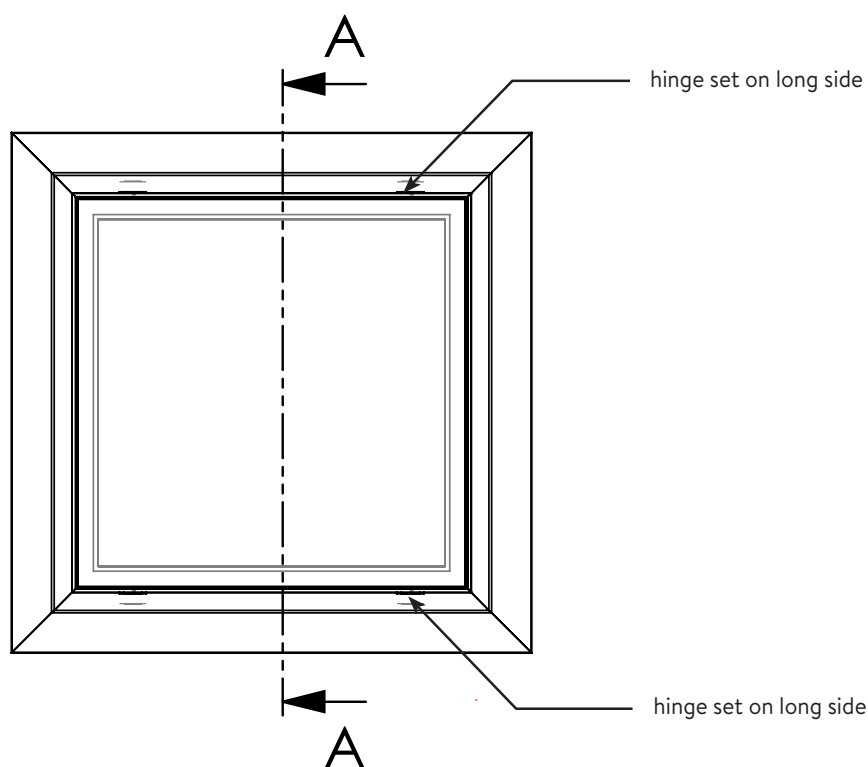
	Light incidence surface (m ²)	Daylight size (cm)	Weight iDome (kg)
Square 	0.16	40 x 40	8
	0.25	50 x 50	12
	0.30	55 x 55	14
	0.36	60 x 60	16
	0.49	70 x 70	21
	0.56	75 x 75	23
	0.64	80 x 80	26
	0.72	85 x 85	29
	0.81	90 x 90	32
	1.00	100 x 100	39
	1.10	105 x 105	42
	1.21	110 x 110	46
	1.44	120 x 120	54
	1.69	130 x 130	63
1.96	140 x 140	72	
2.25	150 x 150	81	
Rectangular 	0.28	40 x 70	13
	0.40	40 x 100	18
	0.52	40 x 130	23
	0.56	40 x 140	25
	0.64	40 x 160	28
	0.76	40 x 190	33
	0.88	40 x 220	38
	1.12	40 x 280	48
	0.47	45 x 105	21
	0.35	50 x 70	16
	0.40	50 x 80	18
	0.50	50 x 100	21
	0.55	50 x 110	24
	0.70	50 x 140	29
	0.85	50 x 170	35
	1.00	50 x 200	41
	1.15	50 x 230	47
	0.48	60 x 80	21
	0.54	60 x 90	23
	0.72	60 x 120	30
	0.78	60 x 130	32
	0.90	60 x 150	36
	1.08	60 x 180	43
	1.20	60 x 200	48
	0.70	70 x 100	28
	0.91	70 x 130	36
	1.05	70 x 150	41
	1.12	70 x 160	44
	1.40	70 x 200	54
	1.54	70 x 220	59
	0.79	75 x 105	31
0.94	75 x 125	37	
1.24	75 x 165	48	
1.31	75 x 175	50	
1.69	75 x 225	64	

	Light incidence surface (m ²)	Daylight size (cm)	Weight iDome kg
Rectangular	0.88	80 x 110	35
	1.04	80 x 130	41
	1.12	80 x 140	43
	1.28	80 x 160	49
	1.36	80 x 170	52
	1.44	80 x 180	55
	1.60	80 x 200	61
	1.76	80 x 220	66
	1.84	80 x 230	69
	2.00	80 x 250	82
	2.24	80 x 280	92
	1.08	90 x 120	42
	1.35	90 x 150	51
	1.62	90 x 180	61
	1.89	90 x 210	70
	1.30	100 x 130	49
	1.50	100 x 150	56
	1.60	100 x 160	60
	1.80	100 x 180	67
	2.00	100 x 200	74
	2.20	100 x 220	88
	2.30	100 x 230	92
	2.50	100 x 250	100
	2.80	100 x 280	112
	3.00	100 x 300	119
	1.73	105 x 165	64
	2.36	105 x 165	86
	1.54	110 x 140	58
	1.87	110 x 170	75
	2.53	110 x 230	101
	1.68	120 x 140	62
1.80	120 x 150	66	
2.16	120 x 180	79	
2.52	120 x 210	113	
2.08	130 x 160	76	

Hinge set always on long side
 Weight (± 5%) = weight of the product, without packaging

Technical drawings





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.

** In the curb is not sufficiently strong, the curb can be deformed and/or damaged by the weight of the glass skylight.

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 performed on the largest dimensions, intermediate dimensions are determined by interpolation).
- Certificate GS BAU 18 for Skylux iDome with polycarbonate or Heatstop dome in combination with all Skylux PVC curbs or all polyester curbs.
- CE according to EN 1873:2014+A1:2016
- DoP on www.skylux.eu
- Certificate - DGUV Test



EN 1873:2014+A1:2016

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