

TECHNICAL FILE

Skylux[®] PC Heatstop Skylight





General product description

The outer dome sheet is made of an extruded polycarbonate plastic shell with a heat resistant effect, which stops the infra-red rays and reduces the warming-up under the shell. The skylight shell has an opal-pearl tint. The skylight is available in a single-walled or, combined with other sheets in double-, triple- and four-walled execution. Several types of shells can be combined during the assembly of the skylight. The polycarbonate shells are protected from UV on both sides to maintain their optical and mechanical characteristics.

Specific characteristics

Mechanical characteristics	- impact resistance: 250 times stronger than glass of equal thickness - no damage on shocks similar to an impact of a steel ball of 250 g falling from a height of 1 m - Charpy (3 mm) DIN 53453 > 30 kJ/m ² - cold bending with minimal radius of 150 x thickness (mm)
Thermal characteristics	U _t value* single wall: 5.17 W/m ² K temperature resistance from -100°C to 120°C
Heat reflexion	41.2 % reflection of total solar energy
Optical characteristics	49.0 % light transmission
Sizes	sheet thickness: between 2 and 5 mm (according to sheet sizes) sheet sizes: list of dimensions on request
Density	1200 kg/m ³

Specific characteristics in function of the combinations

Type	Single-walled	Double-walled			3-walled			4-walled	
	T	TH	TO	TA**	THH	THO	TAA**	THHH	THOH
U _t * value	5.17	2.90	2.90	2.90	1.70	1.70	1.70	1.28	1.28
dB value***	12	20	20	20	22	22	22	23	23
Light transmission LT according to EN ISO 13468	49%	44%	41%	43%	40%	37%	38%	35%	32%
Solar factor g value	59%	51%	45%	49%	44%	39%	41%	37%	32%

T heatstop shell polycarbonate translucent opal pearl (1)

H clear shell acrylic

A clear polycarbonate

O opal shell acrylic

D opal polycarbonate

Since the outermost dome wall is always opal/pearlescent, the Heatstop skylight will always be opal and not clear!

The reflection of the visible light is measured as following 100-LT (%)

The reflection of the total solar energy is measured as following 100-g (%)

* U_t : U value (transparent) or insulation value of the Skylux skylight according to EN 1873:2014+A1:2016 determined by:
U values for single- and double-walled skylights according to calculation method EN ISO 6946:1997
U values for triple- and quadruple-walled skylights according to test method EN ISO 12567-2

** not standard

*** dB values according to EN ISO 140-3 (report P902622-B)

(1) Polycarbonate heatstop in large size can bring on dilatation noise. This phenomenon does not influence the quality nor the performances.

Attestations and certificates

- CE according to EN 1873:2014+A1:2016
- 1200 Joule certificate Cebtp D313.9.823.1/2 and SB 1200 (EN 1873:2014+A1:2016)

Fire reports

- Polycarbonate sheet M2 (NF P. 92.507)
- Polycarbonate sheet Class 1Y (BS 476)
- Polycarbonate sheet B, S1-d0

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