

Technical file

Skylux® - polycarbonate dome sheets

General product description:

The Skylux dome consists of extruded polycarbonate plastic sheets. They can be single walled, double walled, triple walled and four walled. On the mounting of the dome, different types of sheets can be combined. The Skylux polycarbonate dome has the **CE** label according to EN 1873.

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 gr falling from a height of 1 m. (hard body impact test according to NBN EN 1873) SB 1200 (soft body impact test according to NBN EN 1873:2007)
Dimensions	Sheet thickness: fluctuate between 3 and 5 mm (according to sheet dimensions) Sheet dimensions: list of dimensions on request
Density	1200 kg/m ³

U-value (W/m²K), sound insulation (dB), light transmission (LT %) and solar heat gain factor (g %) :

	SINGLE WALLED	DOUBLE WALLED				TRIPLE WALLED			FOUR WALLED	
COLOR	A	AA	AD	AH	AO	AHH	AOO	AAA*	AHHA	AHOA
u-value	5,36	2,68	2,68	2,68	2,68	1,70	1,70	1,70	1,24	1,24
dB	12	20	20	20	20	22	22	23	23	23
LT	88%	77%	51%	79%	73%	71%	61%	68%	63%	58%
g-value	83%	69%	50%	72%	63%	63%	48%	57%	52%	46%

A = Clear shell polycarbonate

H = Clear shell acrylic

D = Opal shell polycarbonate

O = Opal shell acrylic

* non-standard combination

The reflection of the visible light can be calculated as 100 -LT (%)

The reflection of the total solar energy can be calculated as 100 -g (%)

U values for single and double walled skylights according to the calculation method EN ISO 6946 : 1997

U values for triple walled skylights according to the test method EN ISO 12567-2

Attestations and certificates:

- CE according to EN 1873
- U-values according to EN EN6946 (single and double walled)
EN 12567-2 (triple walled)
- Light transmission according to EN ISO 13468
- dB values according to EN ISO 140-3 (report P902622-B)
- 1200 Joule certificate Cebtp D313.9.823.1/2 and SB 1200 (NBN EN 1873)
- Fire report
- E (EN 13501-1) acrylic sheet
- M2 polycarbonate sheet
- Class 1Y (BS 476) polycarbonate sheet
- B S1-d0 polycarbonate sheet