

## Technical Note

### Em-Dome - polycarbonate dome sheets

#### General product description:

The Em-Dome sheets consist of extruded polycarbonate plastic sheets. They can be single-walled, double-walled and triple-walled.

The Em-Dome 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 steel ball of 250 gr falling from a height of 1 m. (hard body impact test according to NBN EN 13964.2007) SB 1200 (soft body impact test according to NBN EN 13964.2007)
Dimensions	Sheet thickness: varies between 3 and 5 mm (according to sheet dimensions) Sheet dimensions : list of dimensions on request
Density	1200 kg/m <sup>3</sup>

U-value (W/m<sup>2</sup>K), sound insulation (dB), light transmission (LT %) and solar heat gain factor (g %) :

	SINGLE WALLED		DOUBLE WALLED				TRIPLE WALLED				
COLOUR	A	D*	AA*	AD*	AH	AO	AAA*	AAD*	AHH	AOO	AOD*
u-value	5,36	5,36	2,68	2,68	2,68	2,68	1,70	1,70	1,70	1,70	1,70
dB	12	12	20	20	20	20	22	22	22	22	22
LT	88%	58%	77%	51%	79%	73%	68%	45%	71%	61%	42%
g-value	83%	60%	69%	50%	72%	63%	57%	41%	63%	48%	38%

A = Clear sheet polycarbonate

H = Clear sheet acrylic

D = Opal sheet polycarbonate

O = Opal sheet acrylic

\* = non standard execution

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 13964 : 2007)

Fire report polycarbonate

B, s<sub>1</sub>,d<sub>0</sub>

M2

Class 1Y (BS 476)