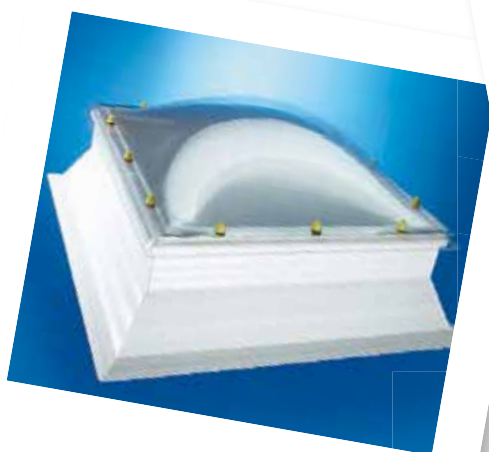




Luminous ideas with skylights



more than 1.000.000 sa



tisfied Skylux®-customers





Light creates enthusiasm. Light is life ...

The modern architecture highlights the aspect of natural light. Natural daylight deserves this attention as it is part of the concept and of the aesthetics of a building. The result depends entirely from the incidence of light. To integrate daylight properly into your wishes, special building components have been developed to conciliate all technical and aesthetical aspects. Rooflight is 3 times more efficient than the same surface in windows or front glazing.

Without light: no flowering, no growth, no life.

In this era of high technology, people show a renewed interest in original values: clean air, pure water, natural light. Contemporary architects are most conscious of this change. They bring light inside and let it play its part: light lives and lets live, it makes people enthusiastic.

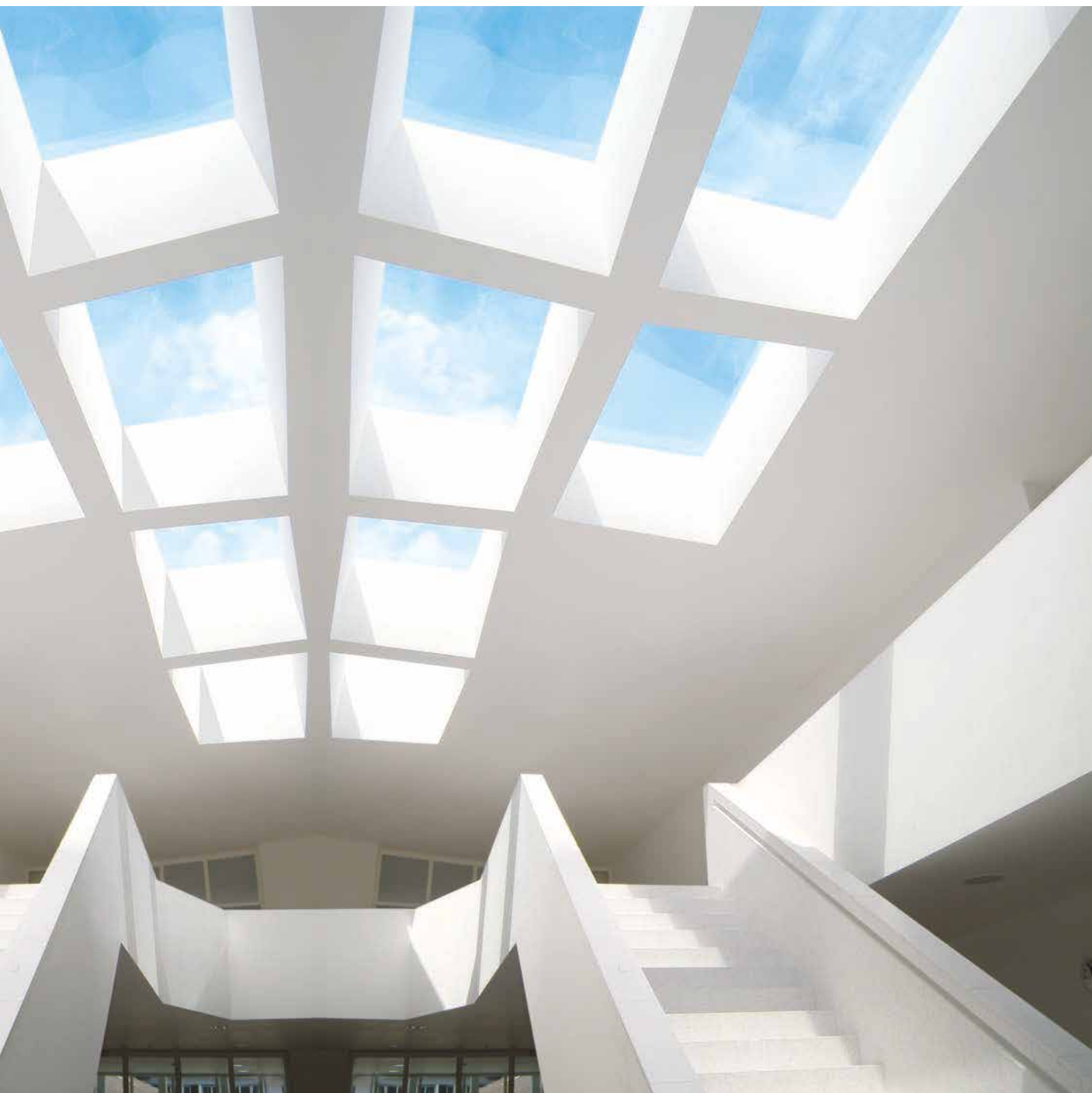


Kitchen - Amsterdam - NL

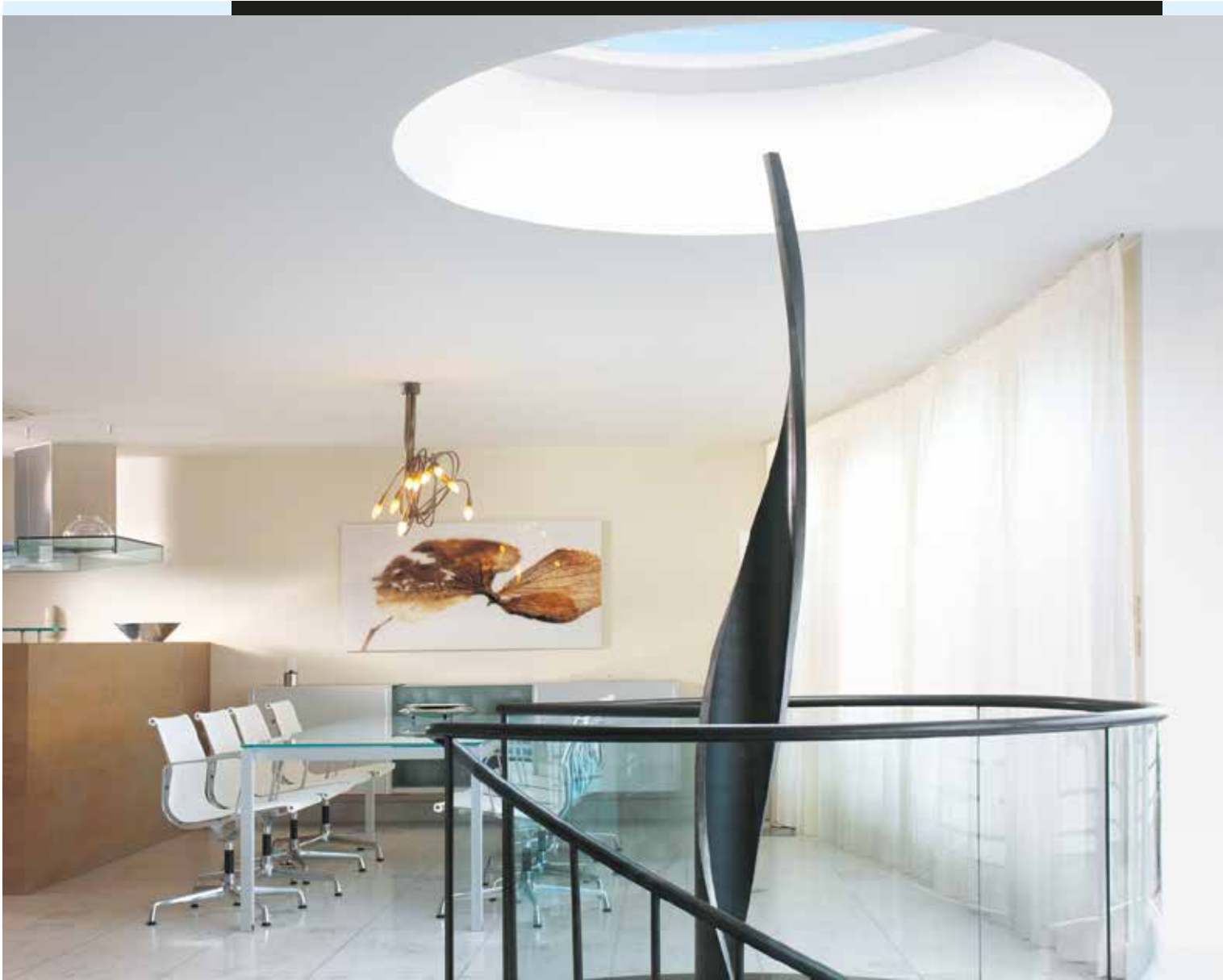


Light is life





Academy - Triesen - CH



Refurbishment - Antwerp - B



Creating a pleasant environment

Many living and working areas are dark and grey, do not stimulate creativity or arouse enthusiasm. Rooflights create a free and open atmosphere and brighten up the room. In the long run a skylight is also the most economical:

a skylight will pay itself back after 4 to 6 years by saving on artificial lighting. Contemporary architects make optimal use of the advantages and apply more and more skylights.



Skylights:

- bring light precisely where it is needed.
- diffuse the natural daylight optimally.
- provide amazingly warm light. Opal domes, in particular, diffuse natural light in an excellent way.
- can provide, if wished:
 - good natural ventilation
 - smoke extraction in case of fire
 - access to the roof



Academy - Ede - NL



Penthouse - Ostend - B



Luminous ideas throughout the years ...



Siemens - Zug - CH



New-construction project - Poperinge - B

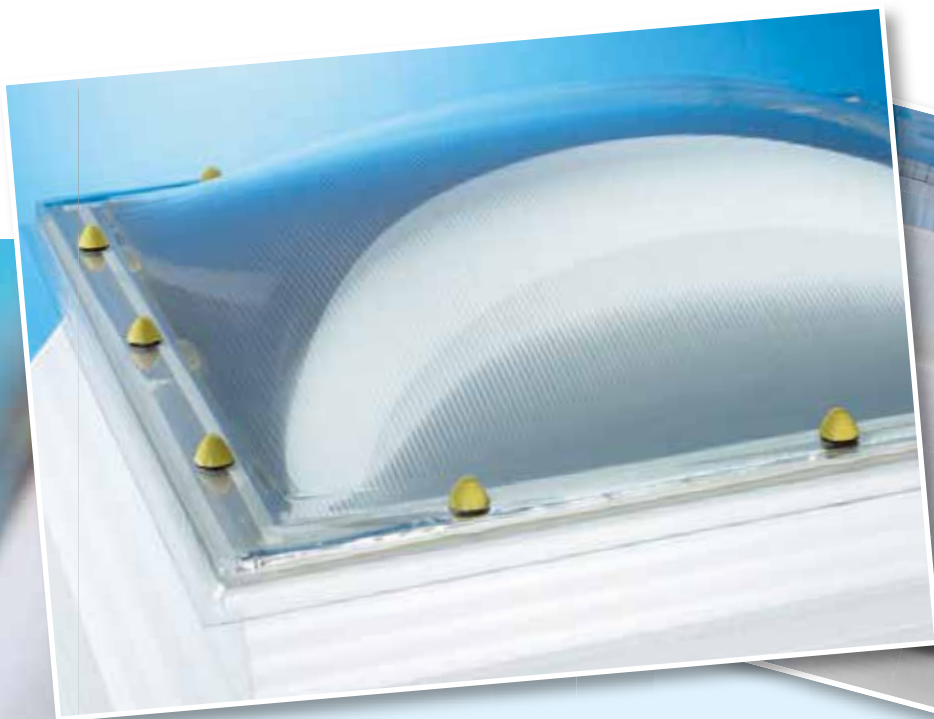




Dress store Roll's - Kortrijk - B



Refurbishment - Zonnebeke - B



Skylux® EP Energy Profit

CE
EN 1873

- Excellent insulation:
The Skylux®-EP 10 skylight has a **Ug value of 1,2 W/m².K**
The Skylux®-EP 16 skylight has a **Ug value of 1,0 W/m².K**
- Extended range: 17 possibilities
- Optimal watertightness and windproof
- Fixing material in stainless steel
- Secure packing and detailed installation instructions
- Ingenious patented domecap system
- Meets the CE norm EN 1873



Light is all around, what a feeling !



The world's largest choice in skylights

The product range of Skylux® skylights is extensive with more than 10.000 possibilities: no less than 180 different sizes, in acrylic or polycarbonate. Single-, double-, triple- or quadruple glazed domes or even 6- or 9-walled superinsulating EP domes. Spherical or pyramidal shaped, clear, opal and heatstop.



SKYLIGHT WITH SUPER-INSULATING GLAZING

The Skylux Window fits into every new or existing project. The Skylux Window can be combined with all skylights and curbs of the Skylux® range : from single-walled tot quadruple-walled or even to the super-insulating Energy-Profit skylight. This way, you determine yourself the U-value. The Skylux Window is available in a fixed version and an electrical openable version with built-in motor. The oversleeve curb 35/30 can be placed immediately over an existing curb and brings, by consequence, extra insulation without any demolition work. This curb is unbeatable in time and money in case of refurbishment.



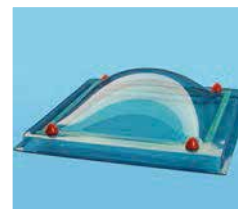
SUPERINSULATING SKYLUX-EP® SKYLIGHT

Skylux-EP® stands for “Energy Profit”. This six-walled Skylux EP® skylight has a Ug-value of 1,2 W/m².K and the nine-walled Skylux EP® skylight has a Ug-value of 1,0 W/m².K . These domes are a full insulating element in your roof construction. Skylux-EP® skylights are often used in the roofs of passive houses.



HEATSTOP® PC SKYLIGHT

Heatstop is a high technological product which selectively holds heat rays of the sunlight. This way, 68% of the heat radiation is reflected and the heat build-up is clearly decreased. An opal skylight reflects approximately 36% of the heat rays. A clear skylight is practically permeable to all heat rays. The heatstop layer does not disappear by aging or weathering.



ARMOURED SKYLIGHT

The raw material ‘polycarbonate’ or PC is extremely weather resistant, has a durable optical quality and extreme impact resistance. All sheets are solid and at least 3mm thick. The impact resistance of polycarbonate is remarkable: almost 250 times higher than glass, so practically unbreakable. The Skylux® armour dome is fully burglarproof. It is impossible to unscrew the “one-way screw” thanks to its unique burglar proof concept.



ACRYLIC SKYLIGHT

Clear acrylic, often called PMMA (polymethylmetacrylic), is an ultra transparent and shock resistant plastic. A Skylux® acrylic dome is fully resistant against UV light. There is no discoloration or loss of light transmission.

The resistance of acrylic is 10 times higher than glass of a similar thickness. The acrylic dome is standard equipped with the yellow cap which gives an additional protection against burglary.

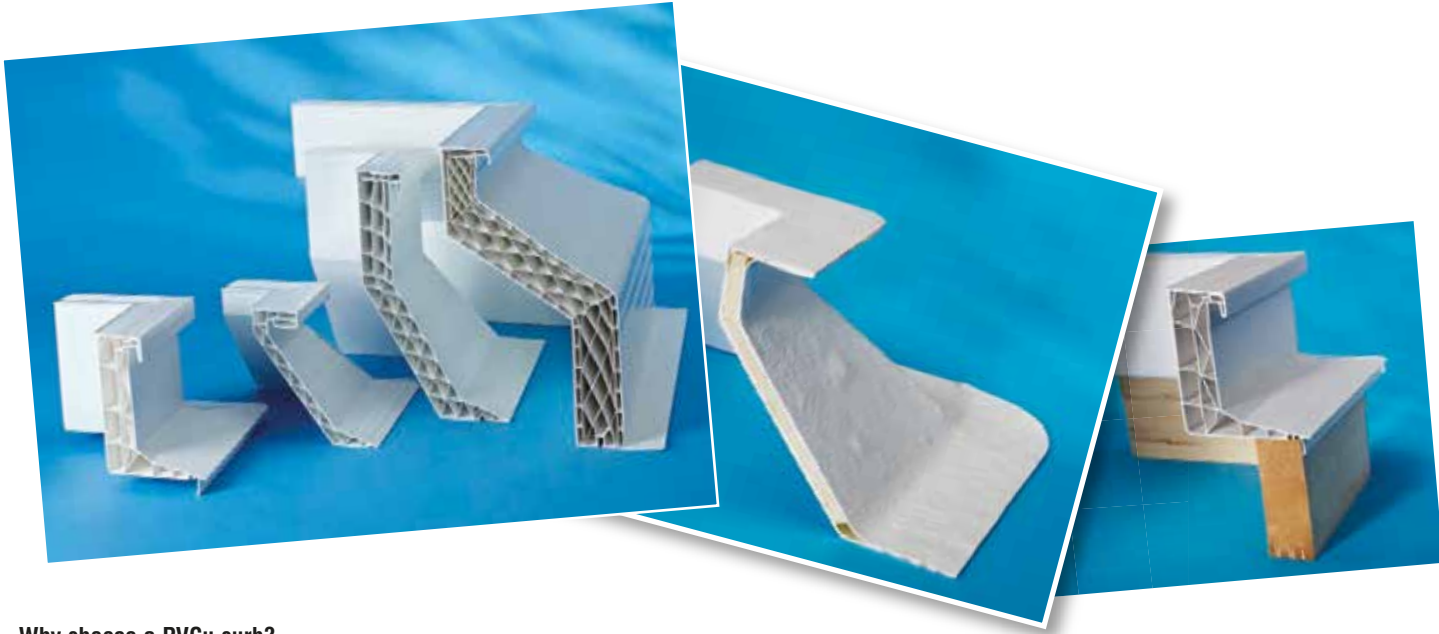


Double-walled opal domes are standard produced in two acrylic opal sheets.

The execution of triple-walled domes is as follows: outer sheet in opal acrylic / middle sheet in clear acrylic / inner sheet in opal acrylic. Other versions on request.

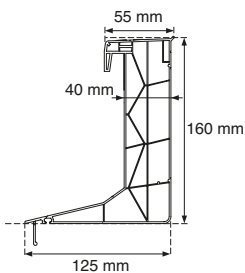


Curbs

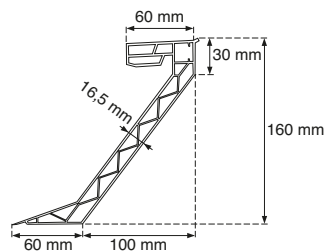


Why choose a PVCu curb?

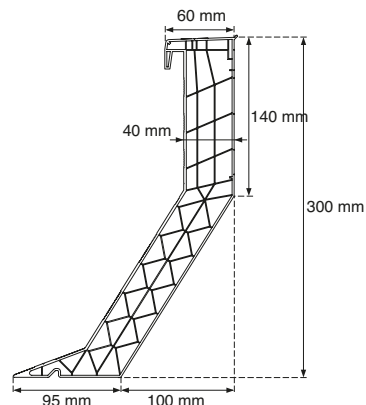
PVCu curbs are insulating, light and do not require any inner finish. Bitumen roofs, rubber roofs, PVCu and other plastics can smoothly be combined with the Skylux® PVCu curbs.



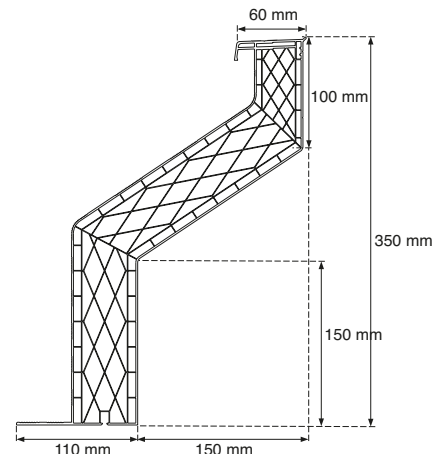
PVCu curb 16/00



PVCu curb 16/20



PVCu curb 30/20



PVCu curb 35/30

Why choose a polyester curb?

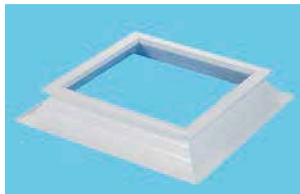
Polyester curbs are insulating and very solid thanks to their glass fibre reinforcement.

PVCu curbs

A PVCu curb is the most economical way of mounting your skylight on the roof. The inside chamber construction of the curb (see picture page 14) offers good thermal stability and an excellent insulation value. Different opening systems can easily be combined with PVCu curbs.



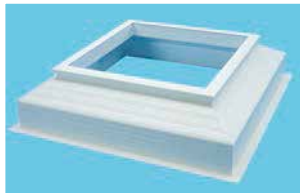
PVCu curb 16/00



PVCu curb 16/20



PVCu curb 30/20



PVCu curb 35/30

Special executions

Skylux® also offers a polyester curb provided with a ventilator. The ideal curb for rooms where ventilation is most welcome: meeting rooms, garages, club rooms... . Other special curbs can be obtained on request: north facing curb, corrugated sheet curb.



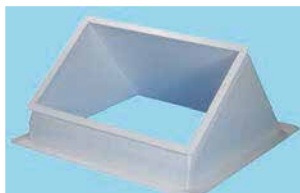
polyester curb with ventilator



polyester ventilation curb



polyester curb for corrugated sheets



polyester north facing curb



polyester curb



round polyester curb



polyester curb D50



polyester curb square/round

Glass fibre reinforced polyester

For years glass fibre reinforced polyester has been the obvious material for the use of curbs on traditional roofing membranes. Polyester curbs are stable, retain their shape and are solid. The installation of opening mechanisms is not a problem either.



metal curb M50



round metal curb



burglarproof grid



polyester or PVCu daylight cylinder for finishing

Metal curb and polyester or PVCu daylight cylinder finishing

These curbs are made of galvanized steel and intended for industrial purposes. The rectangular curbs are already foreseen with an insulation layer which may be asphalted. All metal curbs can be obtained with a burglar proof grid. The daylight cylinder gives a jointless finishing between your inner ceiling and the round curb.

Quick assembly



To ensure an easy and quick installation of an openable dome, Skylux® has designed a “quick assembly” unit. The skylight is premounted on an insulated PVCu frame that is attached to the curb with rustproof hinges. No more drilling of holes, no fitting and measuring, and a perfect seal between curb and dome in addition to an aesthetically sound design. The operating system is also premounted: a manual spindle or an electric spindle (for hard to reach places or for more comfort).

Accessories

SKYLUX® RADIOGUIDED CHAIN MOTOR 230 V

The new chain motor is compact and elegant. The course is easy to set and allows you to determine the opening angle yourself. The Skylux® chain motor is soundless and maintenance free.



SKYLUX® INSECT SCREEN

The Skylux® insect screen is completely integrated in the PVCu skylight frame. This way, the insect screen is invisible when the dome is closed and you continue to enjoy fully the light capacity of the skylight. The Skylux® insect screen has a hook and loop fastener (type Velcro) that can easily be fixed or removed e.g. for cleaning.



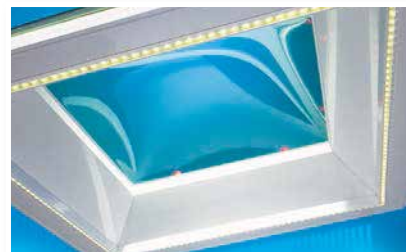
SKYLUX® INNER SUNBLIND

The Skylux® inner sunblind consists of a metallized plissé screen, which can be opened by a span mechanism and put in front of the skylight opening. The sunblind can be fixed in or under the daylight size. It can be opened by a rod or a handle. The Skylux® inner sunblind is discrete and efficient.



SKYLUX® LED LIGHTS

The Skylux® LED lights come in an energy saving light strip, which is fixed at the bottom of the PVCu curb by means of a PVCu auxiliary profile. This way, you enjoy economical and indirect light in the evening or at night.



Maintenance

Acrylic is self cleaning and is almost maintenance free. Be careful with detergents and solvents. A wrong use can damage the skylight. The Skylux® cleaner is an adapted product to clean acrylic skylights. There is a Skylux® PVCu cleaner for PVCu frames and PVCu curbs.



Smoke and Heat Extraction (SHE) in conformity with NBN S21-208-1 and 3 or EN 12101.2



Skylux® developed various SHE-dome systems (Smoke and Heat Extraction). These SHE-domes are most important in case of a fire alarm. They open automatically, creating smoke-free zones. Being a safety device, these Skylux® smoke hatches also provide free, natural light. German fire studies show that skydomes reduce high temperature increases under the roof by about 300°C (600°C instead of 900°C) and, as such, diminish the pressure on the roof structure substantially. Skylux® offers different SHE-systems each of them characterized by high operational safety.

• Skylux® 160° CE



Why choose a Skylux® 160° CE?

The Skylux® 160° CE is an electrically operated SHE skylight and meets the European norm EN 12101.2. This smoke and heat extraction skylight is available with a rotation motor (RM) and with a linear motor (LM).

The Skylux® 160° CE consists of:

- a double-walled Skylux® skylight with both shells in polycarbonate or acrylic
- a PVCu curb 30/20
- a fixed PVCu frame with hook-into-hinges
- an opening mechanism RM or LM
- 1 support sheet (RM) or 2 support sheets (LM)



• Skymax® CE

Why choose a Skymax® CE?

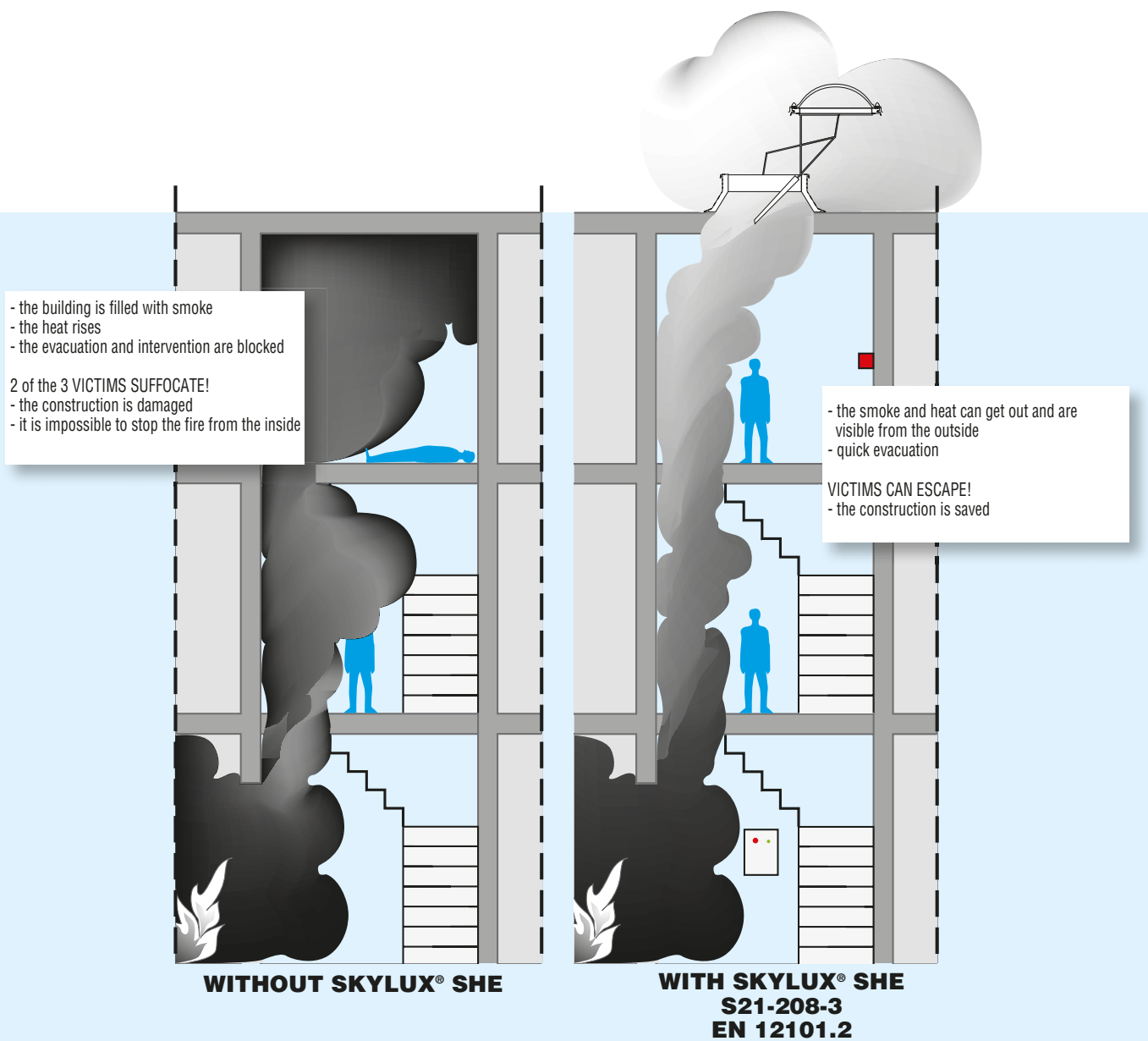
The Skymax® is a recent development, in conformity with the Belgian norm NBN S21-208-3 for staircases. The size 100x100cm is also in accordance with the European norm EN 12101.2.

Positive safety

The Skymax® SHE skylight consists of:

- a double-walled Skylux® skylight
- a multi-walled PVCu curb 30/20 (a metal curb is possible too)
- a PVCu frame
- an opening system with 24 Volt motor, thermal security and gas pressure spring.





• Central detection unit

This central detection unit distinguishes itself specially by its easy installation and operation. All operation buttons and control functions are put on the front panel. Thanks to its special concept, the unit cannot be damaged because of e.g. wrong connections. Errors in the system are mentioned on the front panel.



Skycom®



Skycom® EFS fail safe



Skylux® 160° CE

Light tunnel



It is difficult to bring in light through flat or pitched roofs with a lost attic. However the Skybeam® offers you the possibility to overcome this problem. A dome is fixed on the roof and conducts the natural light through a reflective flexitube to the wished place.



• Pitched roof

- a skylight in clear PMMA resistant to UV light
- a premounted roof conduct in steel
- a reflective flexitube of 3m
- a reflective stainless steel ring
- a ceiling frame in white ABS
- a light diffuser in prismatic PMMA
- a set of screws & tape
- a packaging with installation instructions

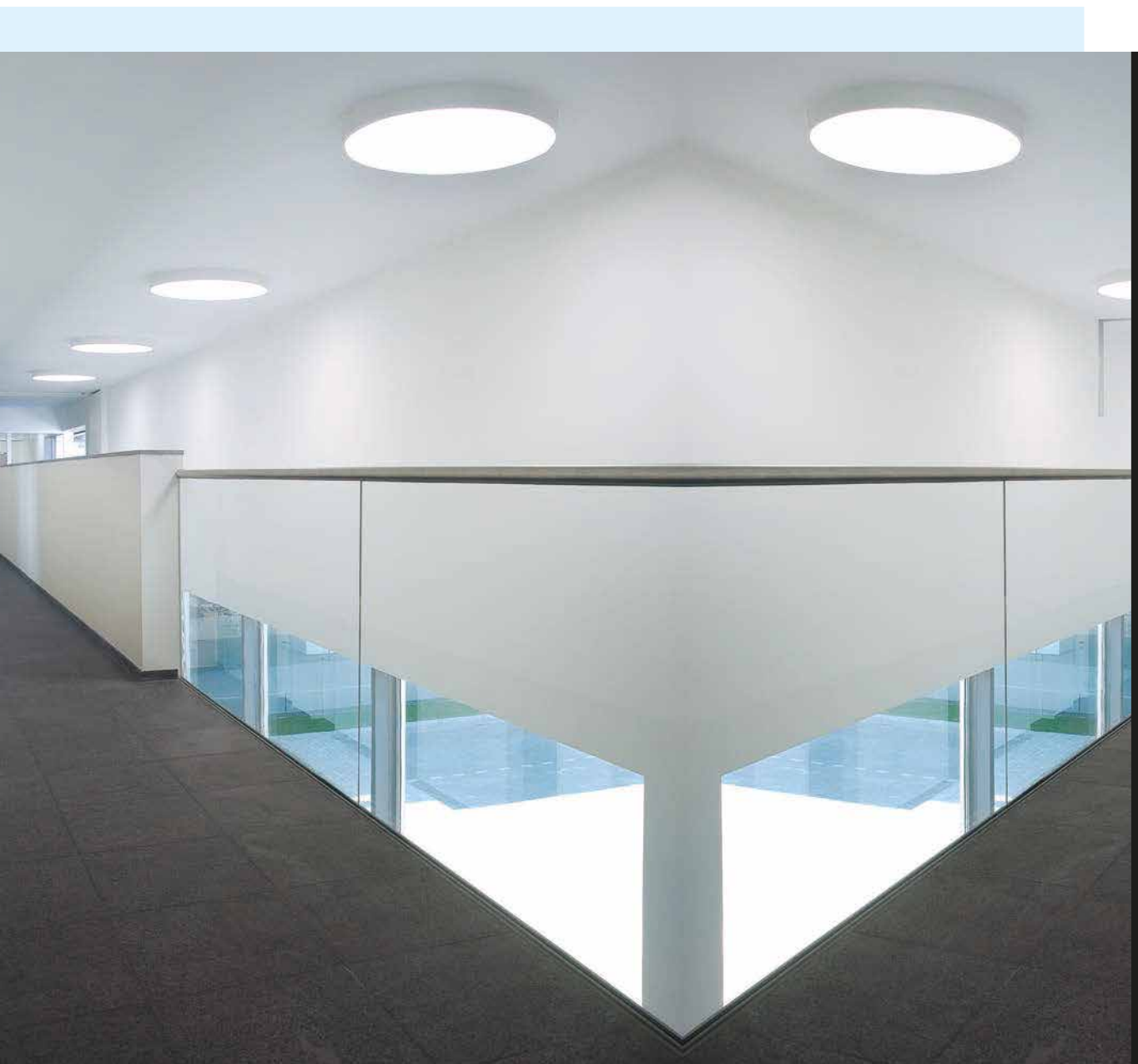


• Flat roof

- a double-walled dome in clear PMMA resistant to UV light
- a double-walled insulated GRP curb
- a reflective flexitube of 3m
- a reflective stainless steel ring
- a ceiling frame in white ABS
- a light diffuser in prismatic PMMA
- a set of screws & tape
- a packaging with installation instructions

CE
EN 1873





Opening systems

In many cases, a skylight is used for ventilation:

- either through the curb (ventilated curb or a curb with an air inlet);
- or with a frame made of aluminium or PVCu (incl. operating system), to be installed between the skylight and the curb.

• Manual spindle

The ventilation frame is foreseen with fixing brackets allowing an easy installation of the spindle. It is operated by a 1.5-, 2-, 3- or 4m long winding rod. For frames with one side longer than 130cm, the hinges will be installed on the long side. These large frames are equipped with two interrelated spindles (tandem spindle).



manual chain spindle



spindle with eye



spindle with tube

• Electric spindle

For inaccessible places or for more comfort, it is recommended to install an electric spindle. The motor opens the dome 30 cm and is operated by a built-in or built-on switch with or without indicator light. Larger domes will need twin motors.



radio guided chain motor 230V



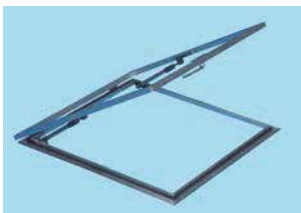
electric spindle 230V



electric chain motor 230V

• Roof access hatches

An openable Skylux® dome may also be installed to access the roof or to function as emergency exit.



manual aluminium roof access frame



manual PVCu roof access frame



electric roof access





- Electric roof access hatches

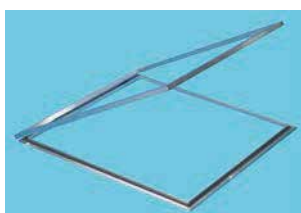
An openable Skylux® dome may also be installed to access the roof or to function as emergency exit.



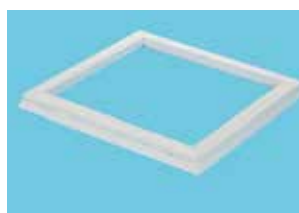
- Alu- or PVCu frame

Aluminium frames can be used as escape hatch if they are equipped with a handle. The frame is fixed by fastening the 2 telescopic conductors. A round aluminium frame can be used for round domes.

PVCu frames have the important advantage of good thermal characteristics. Thanks to the PVCu frame, the risk of condensation decreases considerably.



aluminium frame



PVCu frame

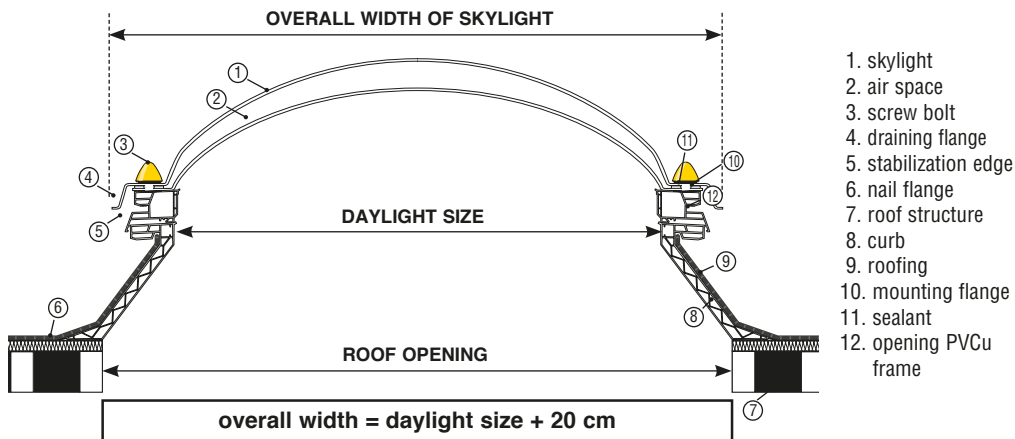


polyester frame

The Skylux® CE concept

The most innovative aspect of the Skylux® system is the Skylux® dome cap: an ingenious screw system with patent which offers many important advantages.

- The inner and outer shell of the dome are extremely solid and permanently joined together (fig 1). They cannot come loose!
- The screw bolt is made of polyacetal and is frostfree.
- On installation of the dome, a universal screw is put into the screw bolt, which never is in direct contact with the dome shell, which guarantees an easy installation.
- The dome caps prevent water infiltration and protect from burglary.
- Armoured skylights have an in-built burglarproof safety by means of the metal dome caps and the universal one-way screw (fig 2).

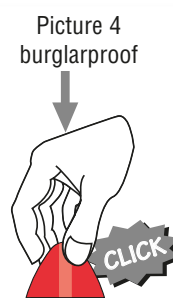
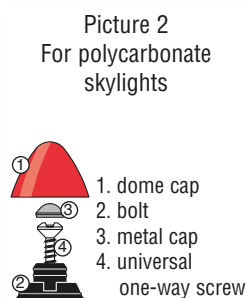
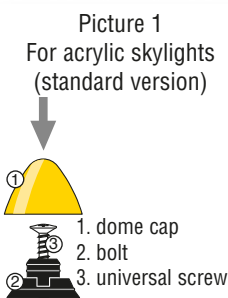


The Skylux® dome cap gives the Skylux® skylight a recognisable “look”. This refined dome cap offers huge advantages regarding installation and increases considerably the security for each type of Skylux® skylight. The universal screws and dome caps are packed in the cardboard corner of the skylight.

The bolt is made of shock resistant plastic and is equipped with grip points and a push-ring to create a watertight and permanent sealing. The dome cap is developed to put it in the “rain proof” position or to click it in its definitive position both for the standard version (picture 1) as for the polycarbonate skylight (picture 2), in order to increase the safety against burglary or vandalism. For armoured skylights the one-way screw with metal cap makes it hard for burglars to get into the building.

The shells of the skylight are joined together with bolt and nut when installing the skylight. The plastics (polyacetal) used for this bolt and nut are extremely resistant against frost and shocks. The dome cap is packed in the cardboard protection corner during storage and transport. At the building site you fix the dome on the frame or curb.

The choice is yours: you put the cap into the watertight position or you click it in the definitive burglarproof position. To put the cap into the watertight position (picture 3) you only need to make a quarter turn and to push the cap downwards till the cap is fixed. Should you wish to click the cap in its definitive position (picture 4) push hard on the cap till you hear a click.



STANDARD SHEET COMBINATIONS

	Acrylic dome	Armoured dome	Heatstop dome
Single walled (SW)	clear acrylic or opal acrylic	clear PC	clear Heatstop PC
Double walled (DW)	clear acrylic / clear acrylic opal acrylic / opal acrylic	clear PC/clear acrylic clear PC/opal acrylic	clear Heatstop PC/ clear acrylic clear Heatstop PC/opal acrylic
Triple walled (3 W)	clear acrylic/clear acrylic/clear acrylic opal acrylic/clear acrylic/opal acrylic	clear PC/clear acrylic/clear acrylic clear PC/opal acrylic/opal acrylic	- -
EP 10 -dome (6W)	clear acrylic/PC canal sheet/opal acrylic	clear PC/PC canal sheet/opal PC	-
EP 16 -dome (8W)	clear acrylic/PC canal sheet/opal acrylic	clear PC/PC canal sheet/opal PC	-

For non-standard sheet combinations, there is a supplement in price of 4,5%

LIGHT TRANSMISSION AND G-VALUE

Material		Light transmission (EN ISO 13.468)		g-value *
Acrylic dome	SW	Clear (C)	90%	87%
		Opal (O)	83%	76%
	DW	Clear (C/C)	81%	75%
		Opal (O/O)	69%	58%
	3 W	Clear (C/C/C)	73%	65%
		Opal (O/C/O)	63%	51%
Armoured dome	SW	Clear(C)	88%	83%
		Clear(C/C)	79%	72%
		Opal (C/O)	73%	63%
	3 W	Clear (C/C/C)	71%	63%
		Opal (C/O/O)	61%	48%
		Clear (C/C/C/C)	66%	57%
Heatstop armoured-dome	SW	Heatstop clear (T)	56%	46%
		Clear (T/C)	50%	40%
		Opal (T/O)	46%	35%
	3W	Clear (T/C/C)	45%	35%
		Opal (T/O/O)	39%	27%
		Clear (T/C/C/C)	45%	35%
EP10 dome PMMA	6 W	Opal (C/EP10/O)	51%	43%
EP10 dome PC	6 W	Opal (C/EP10/O)	35%	32%
EP16 dome PMMA	6 W	Opal (C/EP16/O)	45%	40%
EP16 dome PC	6 W	Opal (C/EP16/O)	31%	30%

C : clear O : opal T : Heatstop clear EP10 : 4-walled SPC canal sheet EP16 : 6-walled SPC canal sheet EP : energy profit

* g-value : total transmission of solar energy

U-VALUE AND SOUND INSULATION

Dome		Ut (W/m²K)	Ug (W/m²K)	Rw (dB)
Single walled	SW	2,48*	5,36*	-
Double walled	DW	1,53*	2,68*	20
Heatstop double	DW	1,53*	2,68*	20
Triple walled	3 W	1,18*	1,70**	22
Four walled	4 W	1,06*	1,37*	23
EP10 -dome	6 W	1,01*	1,23*	21
EP16 -dome	8 W	0,94*	1,03*	22

Curbs		Uf (W/m²K)
PVCu 16/20		2,2*
PVCu 16/00		1,0**
PVCu 30/20		1,0**
PVCu 35/30		0,89*
Polyester H15		2,05*
Polyester D15 - D30 - D50		1,29*
Metal M15-M20-M25-M30-M40-M50 (insulated)		1,0*
Metal M15-M20-M25-M30-M40-M50 (not insulated)		> 100* (round curbs are not insulated)

Ug : U(glass) value or insulation value of the skylight according to EN ISO 6946* or EN ISO 12567-2**

Uf : U(frame) value or insulation value of the curb according to EN ISO 6946* or EN ISO 12567-2**

Ut : U(total) or average insulation value of the skylight with PVCu 35/30 curb for daylight size (B) 100 x 100 cm

This value is indicative and improves after the installation of insulation and roof membrane.

Rw : Sound insulation (dB)



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AG.Plastics supports

A.L.S. ligue • Make a Wish • King Baudouin Foundation • Special Olympics • Red Cross • Belgian anti-cancer association • Education Trust

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