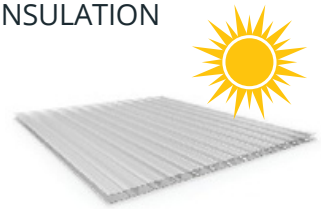
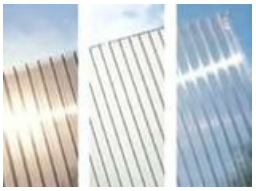
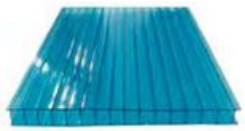
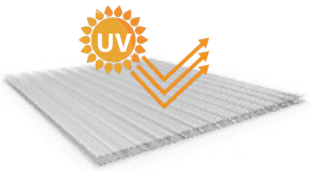
NATURAL LIGHTING: SKYLIGHTS AND LIGHT PANELS

Using materials that allow the passage of light is a very popular way to create naturally lit spaces and, at the same time, protect the building and its occupants from environmental conditions.

There are many different types of materials available on the market to provide natural lighting, including tempered glass, domes and polycarbonate panels. domes and polycarbonate panels.

The latter are the most versatile due to their technical properties, so they can be installed in a variety spaces and designs.

TECHNICAL PROPERTIES

RIGIDITY AND THERMAL INSULATION 	LIGHTWEIGHT 	LIGHT TRANSMISSION 	LOW FLAMMABILITY 
FLEXIBLE AND EASY TO INSTALL 	IMPACT RESISTANT 	ENVIRONMENTALLY FRIENDLY 	WEATHER RESISTANT / UV CONTROL 

Polycarbonate panels offer several advantages that make them the ideal solution for lighting up and protecting indoor spaces:

- Impact resistant and practically unbreakable
- Transparent: up to 90% light transmission
- Weather and UV radiation resistant
- Blocks harmful UV rays
- Lightweight - less than half the weight of glass
- Good flame retardant properties
- Malleable and easy to install using common tools

Technical specifications vary according to panel thickness.
Most common thicknesses are 8 mm, 10 mm and 16 mm.

POLYCARBONATE SPECIFICATIONS

MAX. WIDTH	LENGTH	THICKNESS
2.1 m	Up to 11.8 mm	8 mm, 10 mm, 16 mm

Light transmission	8 mm	10mm	16 mm
Clear	74%	74%	77%
Bronze	21%	20%	18%
Opal	39%	34%	42%
Min. bending radius	1.2 m 2.8	1.5 m 2.5	2.8 m 1.9
U-value	W/m2 °K	W/m2 °K	W/m2 °K

POLYCARBONATE SKYLIGHTS

Skylights are one of the most common roofing elements used to ensure the passage of natural light into a building.

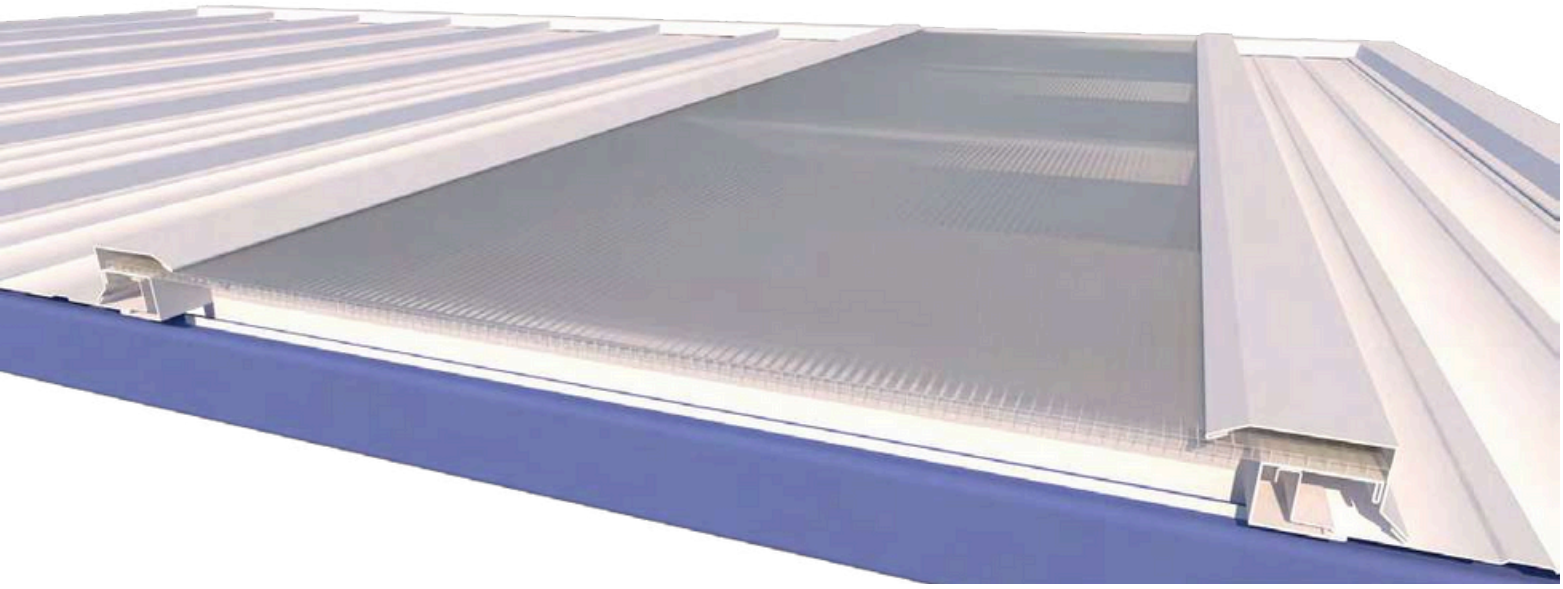
Cielo Vivo's skylight system is designed to provide natural lighting while keeping a neat architectural look and guaranteeing weathertightness.

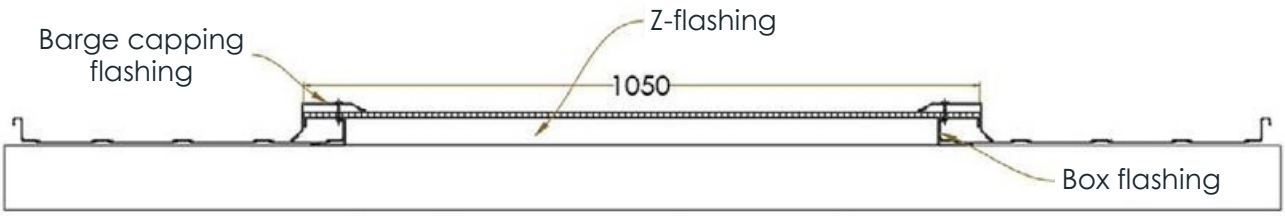
Although skylights are a common solution for gene- rating bright and open spaces, they can pose challenges.

Proper installation will ensure watertightness and minimize damages to the skylight itself by limiting the traffic of repairpersons needed to fix any water leaks. Skylights are usually installed from the roof ridge to the gutter to avoid leaks. They create indoor strips of light that brighten indoor spaces and make them pleasant.

Polycarbonate skylight installation details: At Cielo Vivo, we have developed a skylight installation technique that includes functional and aesthetic details to create watertight, leak-free roofs.

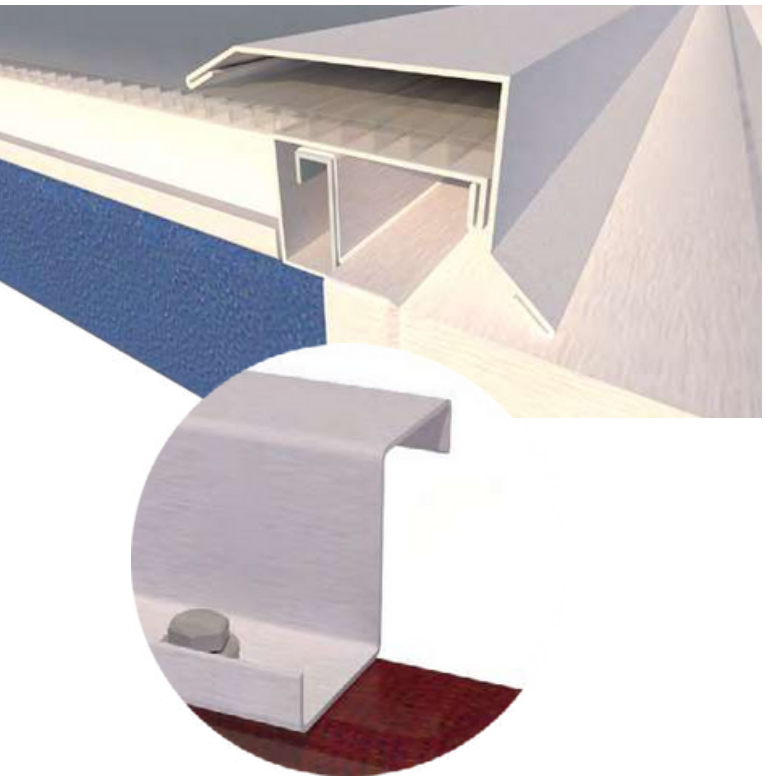
Polycarbonate skylight installation:

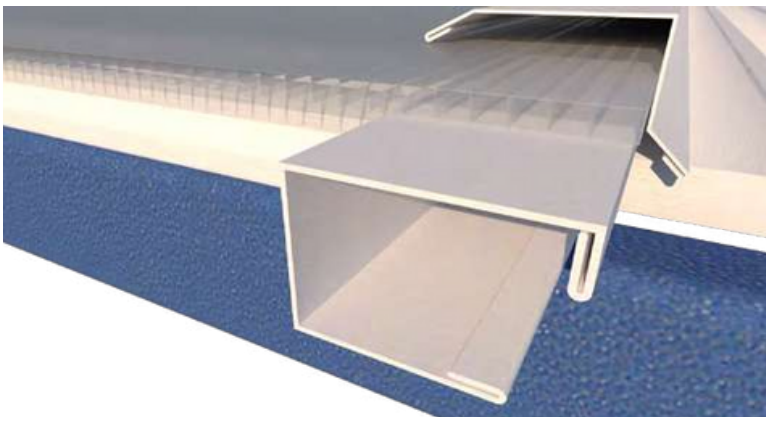


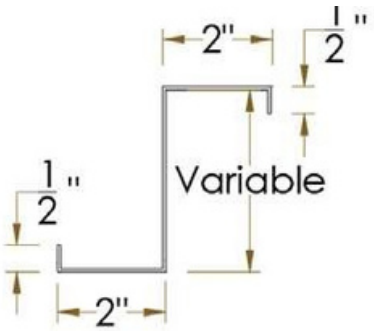


Multiwall polycarbonate skylight

Skylight system trim and flashing:

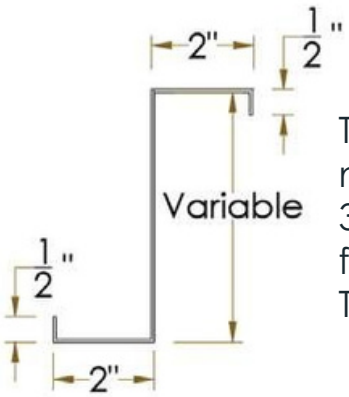






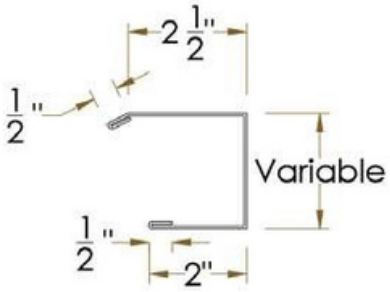
The variable measurement is:
1 ½" for TL-20
2" for TL-18
2 ½" for TL-18B

Z-flashing for skylight
Total Lock Single-Layer Panel



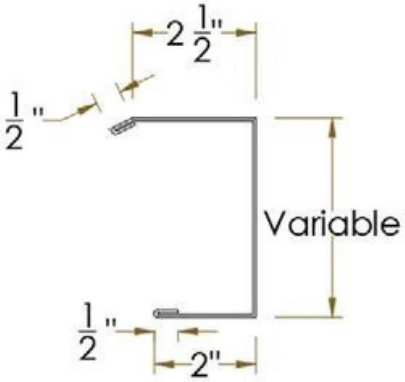
The variable measurement is:
3" for TL-20 4" for TL-18 5" for TL-18B

Z-flashing for skylight
Total Lock Composite Panel



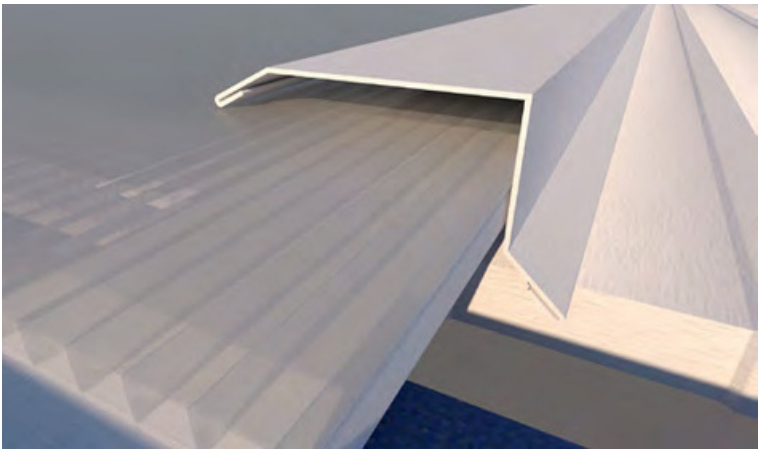
The variable measurement is:
1 ½" for TL-20
2" for TL-18
2 ½" for TL-18B

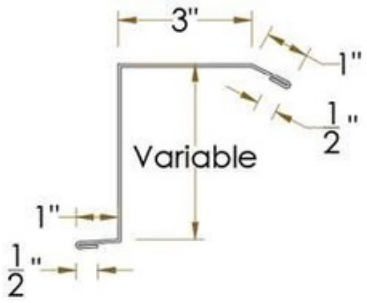
Box flashing for skylight
Total Lock Single-Layer Panel



The variable measurement is:
3" for TL-20 4" for TL-18 5" for TL-18B

Box flashing for skylight
Total Lock Composite Panel





The variable measurement is:
1 ½" for TL-20
2" for TL-18
2 ½" for TL-18B
+ polycarbonate sheet thickness

Barge capping flashing for skylight

DOMES

Domes are acrylic, polycarbonate or solid polycarbo- nate flexible panels that have been molded or ther- moformed into various shapes and offer good wea- ther resistance.

Although they are not a frequent customer choice, at Cielo Vivo we have experience installing domes that meet your aesthetic and functional needs.