Alfa Roof

80/10

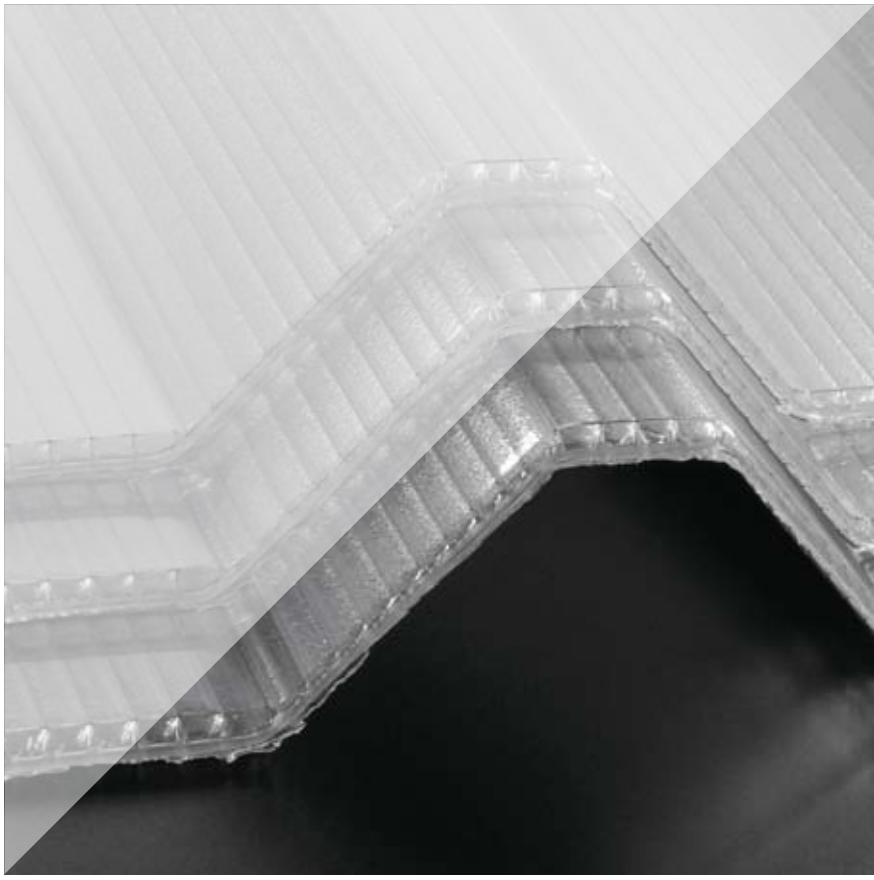
Structural mechanical properties
Alfa Roof 80/10 sheeting comes in excellent, practical shapes and sizes, designed to meet the specific roofing application needs of industrial buildings. The structure of each individual sheet has been designed to give superior load bearing properties and provide ideal performance regardless of the application. The complementary accessories, recommended for a properly finished end result, incorporate the system's functional qualities.

Optical properties
Alfa Roof 80/10 sheeting owes its optical properties to the carefully selected raw materials it is made with. The monitored and certified quality production process is designed to ensure lasting light performance to the highest standard.

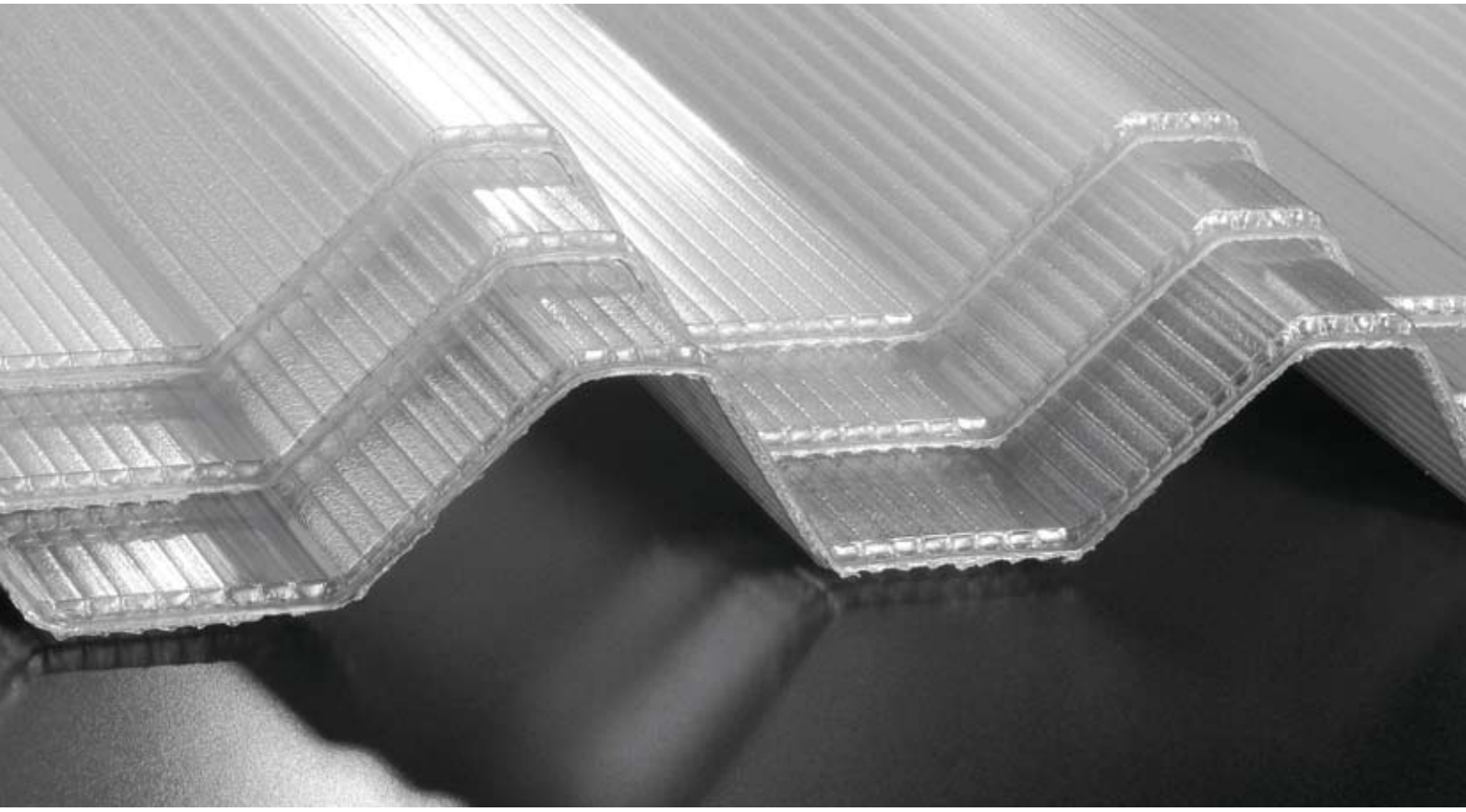
Heat and sound insulation
Heat insulation is a characteristic of primary importance to the building industry. With its multiwall structure, Alfa Roof 80/10 achieves very high heat insulation values for excellent energy savings and offers considerable sound insulation for greater occupant comfort.

Fire performance
Fire safety is an essential requirement. Alfa Roof 80/10 has Euro class B s1 d0 certification issued by independent qualified laboratories. This means it does not contribute to flame spread and does not give off toxic fumes, in accordance with restrictive building regulations.

Behavior under environmental conditions
Alfa Roof 80/10 sheeting is protected against the harmful effects of UV rays. This protection is provided by means of the co-extruded application of a special treatment designed to ensure lasting optical, mechanical and performance qualities. With the cells sealed by heat sealing the ends of the sheet with hi-tech instruments, there is less chance of condensation and impurities building up inside the cells.



Alfa Roof 80/10 is a multiwall corrugated sheet designed for use in the industrial building sector. More specifically, the sheeting finds application in fully glazed roofing, in conjunction with polyurethane insulating panels and metal corrugated profiles. They can also be used for producing curved single-pane or continuous skylights. Developed using the latest innovative co-extrusion technologies, Alfa Roof 80/10 comes in a 10mm-thick sheet and caters to the most common types of application in the industrial construction field, where wide-ranging building needs mean it has a wide and diversified field of application. Alfa Roof 80/10 brings out the best of polycarbonate's mechanical and physical qualities, delivering high standards of application, which are essential in particularly innovative designs.



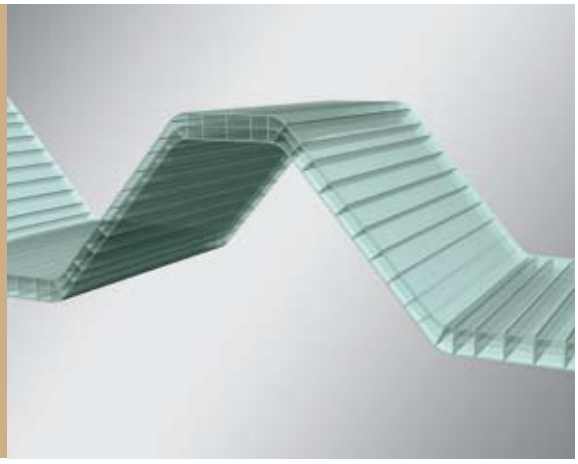
Alfa Roof 80/10 is used in roofing applications in conjunction with polyurethane insulating panels and metal corrugated profiles where areas are to be created with a single or multiple source of daylight. It is suitable for use in new buildings incorporating the latest design concepts and in industrial refurbishments, as well as for creating rooflights in ridge-to-eaves applications, curved skylights (single, partial or continuous application) and large glazed surfaces. Alfa Roof 80/10 comes in flat and curved versions (radius 3500 mm and 6000 mm) making very long slope lengths possible by end lapping, as well as wide areas of glazing by exploiting the side lapping option. The triplewall 10mm-thick structure means buildings can be produced with practical solutions in terms of price, structural performance and adaptability to suit the different design opportunities constantly presented by building projects.

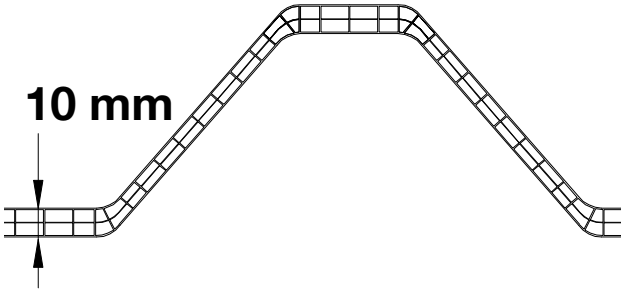
Alfa Roof 80/10 offers an excellent combination of performance properties, such as: high capacity to withstand evenly distributed loads; functional heat insulation; effective resistance to critical weather conditions and, last but not least, quick and easy installation. Sheets can be laid on top of each other, making materials cheap to transport. The product comes with its ends heat sealed to reduce the condensation effect and build-up of impurities inside the cells. Alfa Roof 80/10 is certified in accordance with the latest European industry standards. Alfa Roof sheeting can be side and end lapped, meaning even very long runs can be produced. The series of optional accessories that complete the Alfa Roof 80/10 product range makes it quick, easy and safe to use and install.

Technical Data

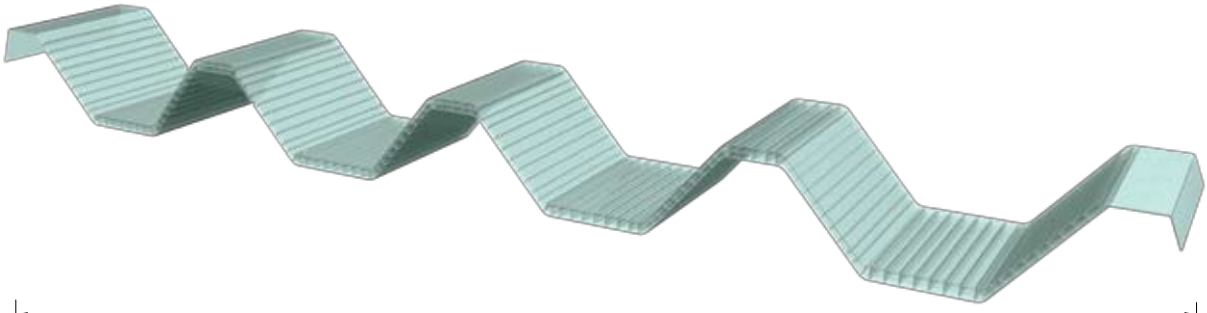
80/10
(250/80)

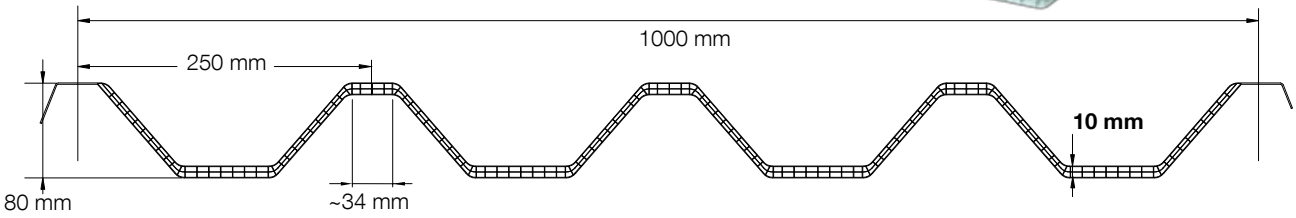
5 corrugations





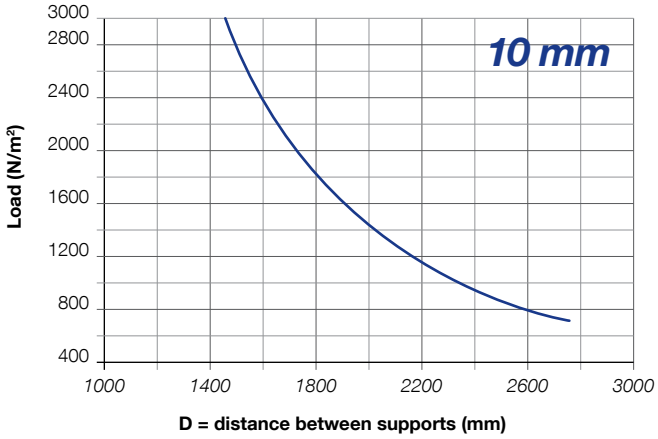
three walls (twin chamber)





Flat Roof

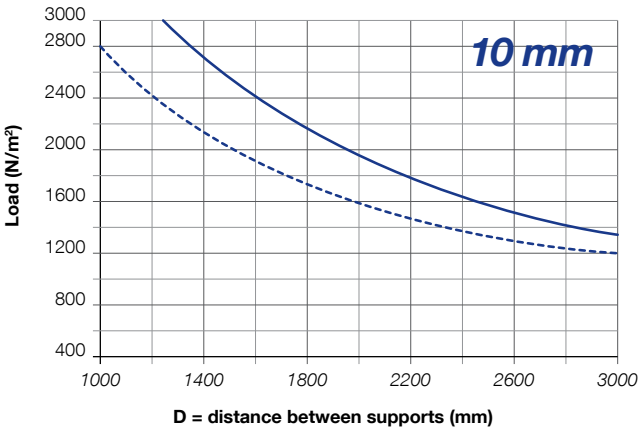
Alfa Roof 80/10 flat with 3 or more supports



Deflection limit D/50 – single application

Curved Roof

*Alfa Roof 80/10 curved with **3,5 m radius***



Deflection limit D/50 – single application

Deflection limit D/50 – continuous application

Characteristics	Unit of measurement	Alfa Roof 80/10
Geometric characteristics		
thickness	mm	10
structure	type	three walls (twin chamber)
width	mm	1000
sheet length	mm	custom**
corrugation length	mm	250
corrugation height	mm	80
Technical characteristics		
thermal transmittance (U)	W/m^2K	2,7
*service temperature range**	°C	- 40 / + 120
thermal expansion	$\frac{mm}{m\ °C}$	0,065
light transmission (LT) translucent clear	%	66***
light transmission (LT) translucent opal	%	49***
UV protection	YES/NO	YES
heat sealing	YES/NO	YES
*warranty****	years	10

* *The maximum service temperature is based on the RTI (Relative Thermal Index) according to UL 746B - typical value of high molecular weight polycarbonate -*

** *Maximum recommended length: 6 metres*

*** *Values tested in-house*

**** *See Koscon Industrial SA warranty terms in detail*

Specifications

Flat roofing and skylights produced with extruded polycarbonate multiwall “Alfa Roof 80” corrugated sheeting.

Curved roofing and skylights produced with extruded polycarbonate multiwall “Alfa Roof 80” corrugated sheeting with 3500 and 6000 mm curve radius.

Thickness: 10 mm

Corrugation pitch: 250/80

UV Protection

Heat-sealed ends

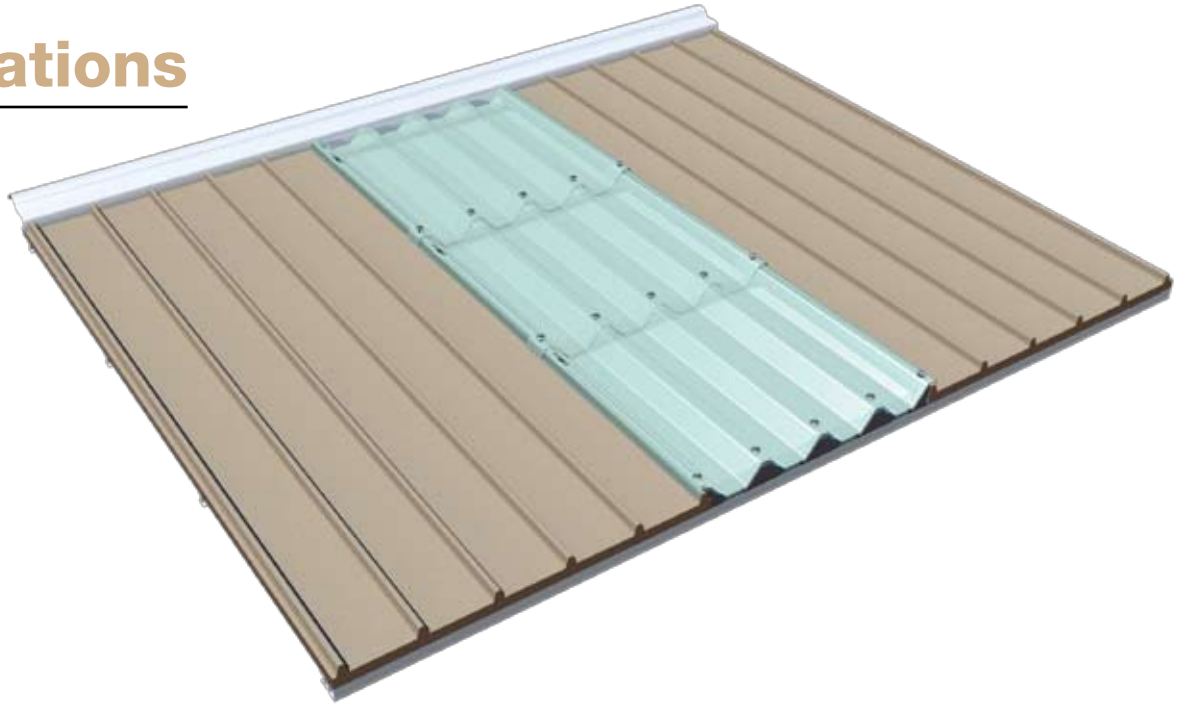
Clear or opal colour, with satin effect

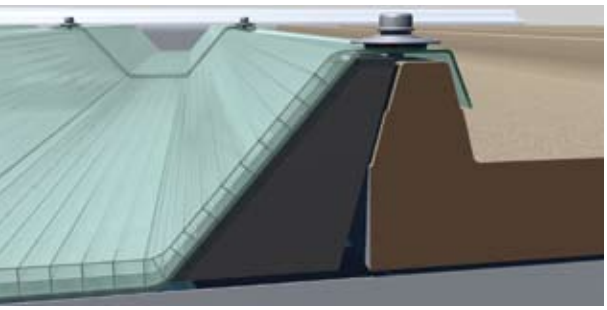
U Value: 2,7 W/m² K

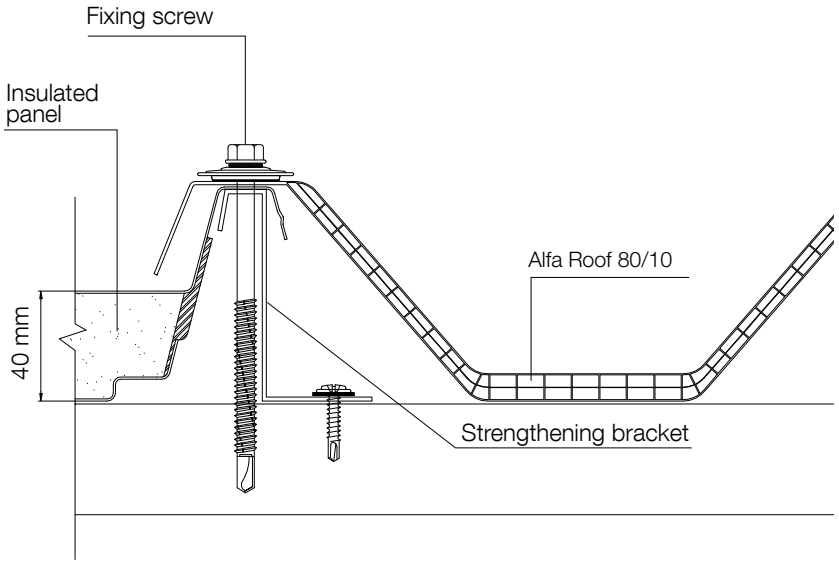
Fire performance: Euro class B s1 d0

Applications

Flat
80/10





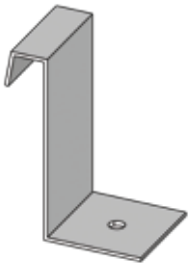


Detail of fixing and side lap

Accessories

Ridge cap

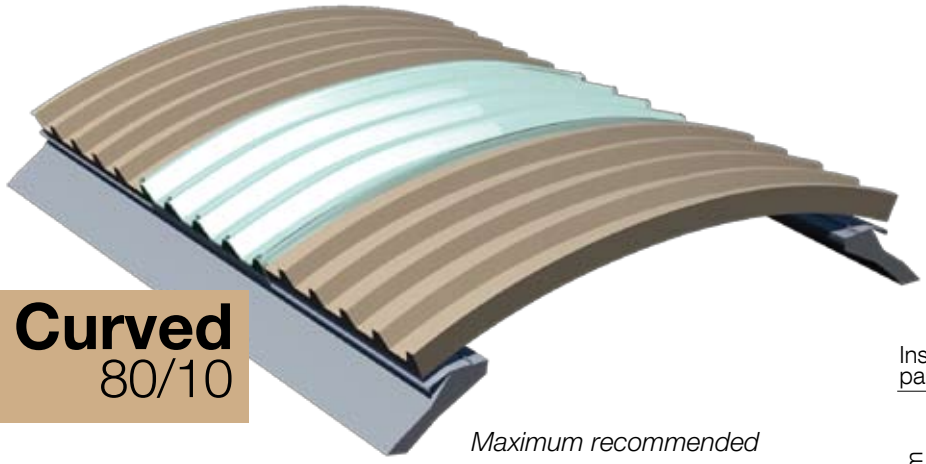
Bottom corrugated filler



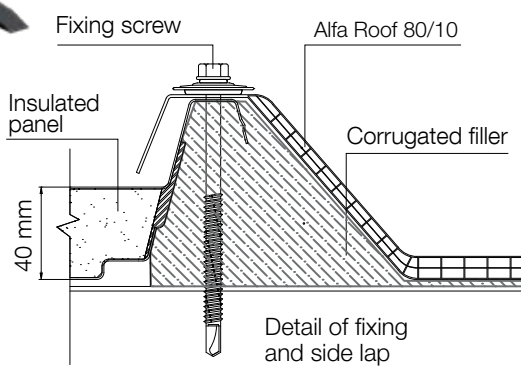
Bracket

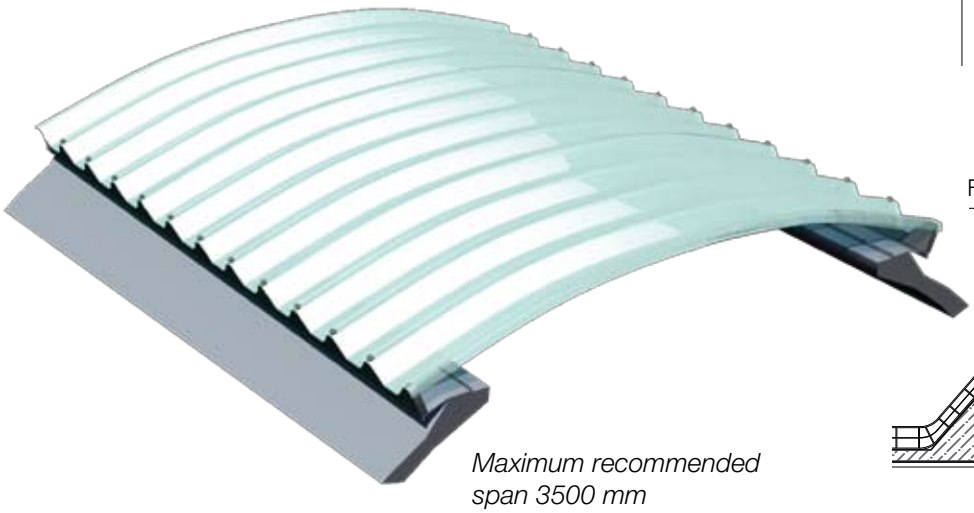
Screw for fixing Alfa Roof 80/10: 6,3 x 120 mm

Curved 80/10

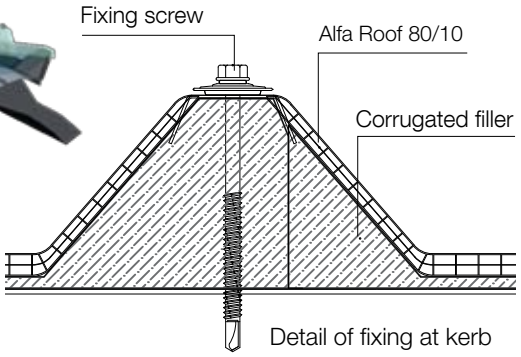


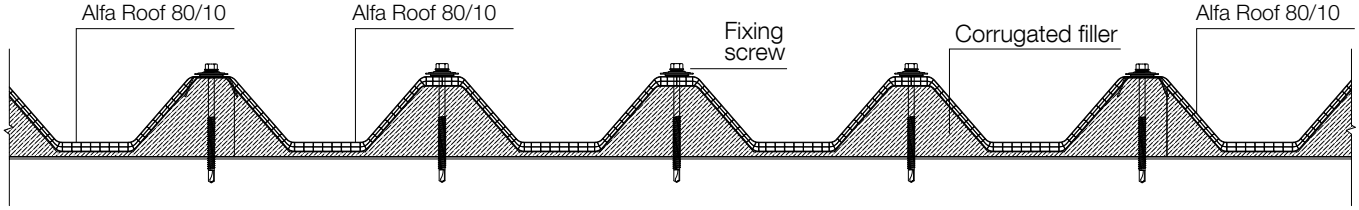
Maximum recommended span 4000 mm

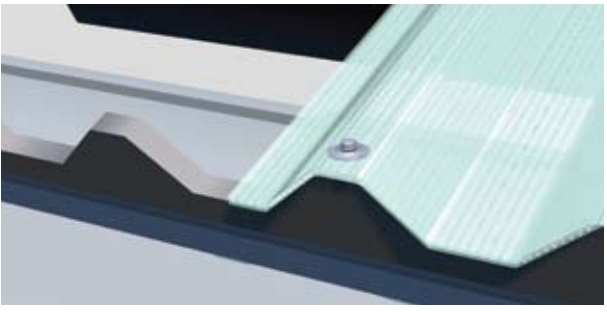




Maximum recommended span 3500 mm







Accessories

Bottom corrugated filler

Screw for fixing Alfa Roof 80/10: 6,3 x 120 mm