

Alfa Roof

28/2,5

Structural mechanical properties

Alfa Roof 28/2,5 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 28/2,5 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

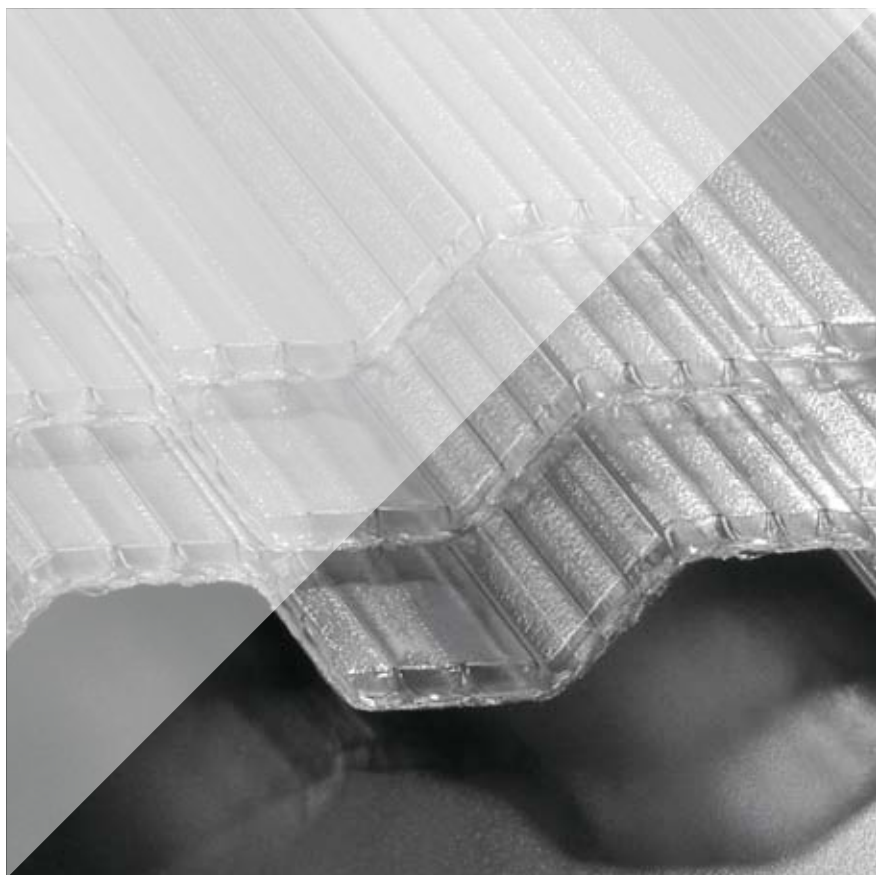
Heat insulation is a characteristic of primary importance to the building industry. With its multiwall structure, Alfa Roof 28/2,5 achieves very high heat insulation values for excellent energy savings and offers considerable sound insulation for greater occupant comfort.

Fire performance

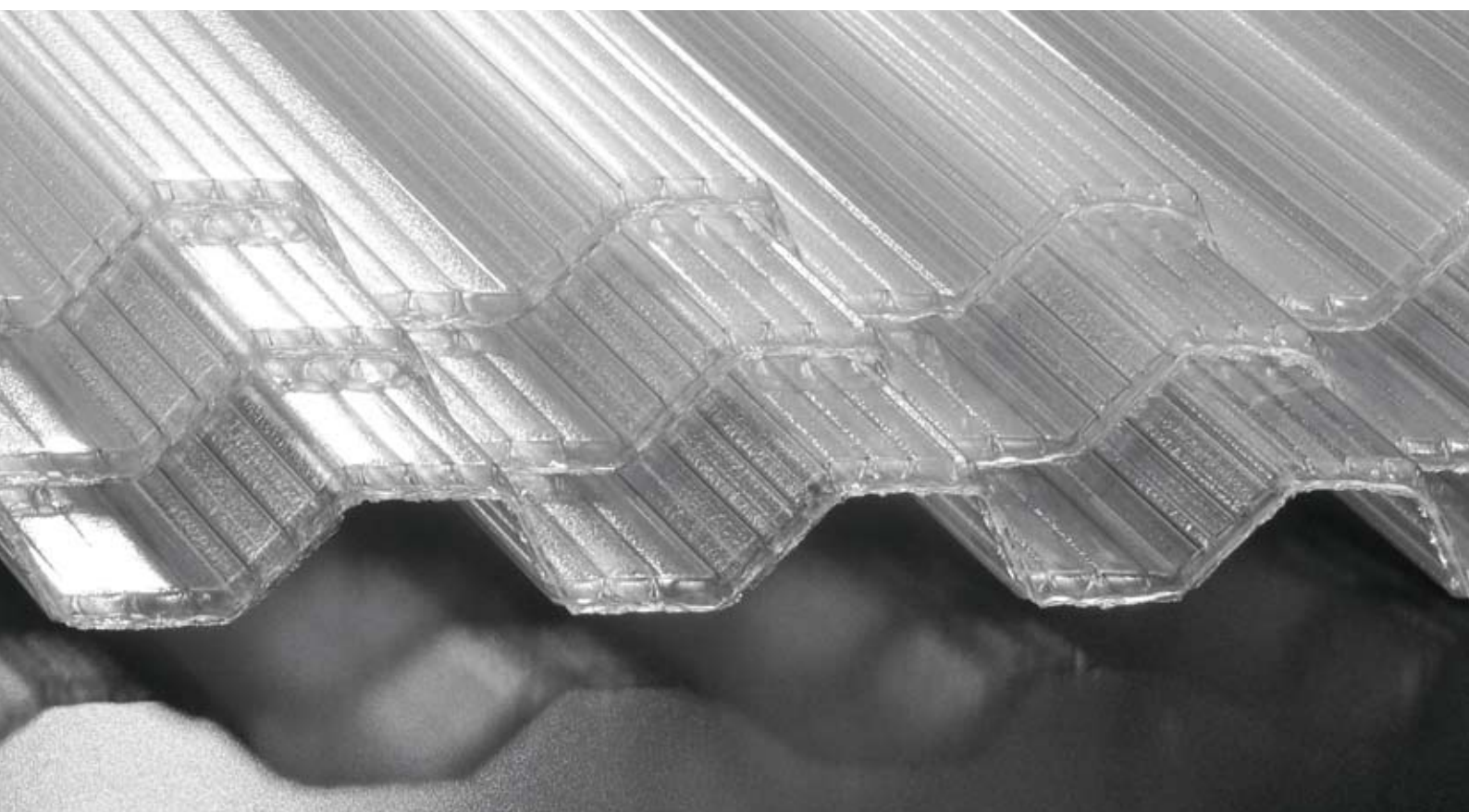
Fire safety is an essential requirement. Alfa Roof 28/2,5 has Euro class B s1 d0 certification issued by independent qualified laboratories. This means it does not contribute to flame spread and does not give off toxic fumes, in accordance with restrictive building regulations.

Behavior under environmental conditions

Alfa Roof 28/2,5 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 28/2,5 is a twinwall corrugated sheet designed for use in the industrial, light commercial and farm building sector. More specifically, the sheeting finds application in roofing in conjunction with steel or aluminium corrugated profiles and in fully glazed roofing. It can also be used for producing curved single-pane or continuous skylights and shed. Developed using the latest innovative co-extrusion technologies, Alfa Roof 28/2,5 comes in a 2.5mm-thick sheet with a 9-rib profile to suitably cater to various different types of application in the construction industry, where wide-ranging building needs mean it has a wide and varied field of application. Alfa Roof 28/2,5 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 28/2,5 is suitable for 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 used in new builds and in industrial and light commercial 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 28/2,5 is produced in a 2.5mm-thick sheet and 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 sheet's thickness means buildings can be produced with different solutions in terms of price, structural performance and efficiency to meet the numerous

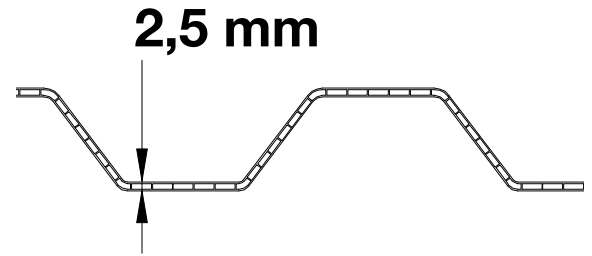
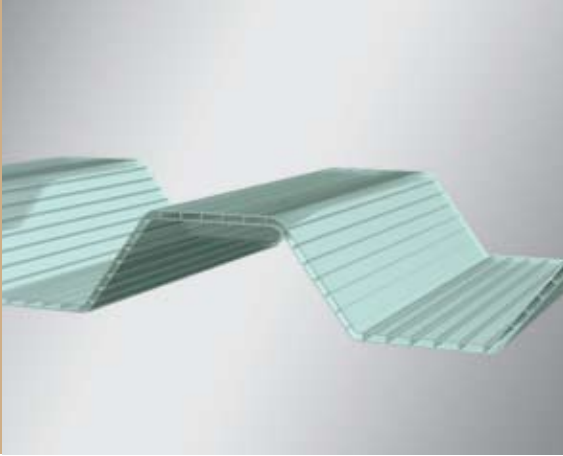
technical and environmental demands of each individual building project. Alfa Roof 28/2,5 sheeting delivers unbeatable performance, namely: excellent capacity to withstand distributed loads; functional heat insulation; effective weather resistance and, last but not least, quick and easy assembly. Sheets 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 dirt inside the cells. Alfa Roof 28/2,5 is certified in accordance with the latest European industry standards. Alfa Roof 28/2,5 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 28/2,5 product range makes it quick, easy and safe to use and install.

Technical Data

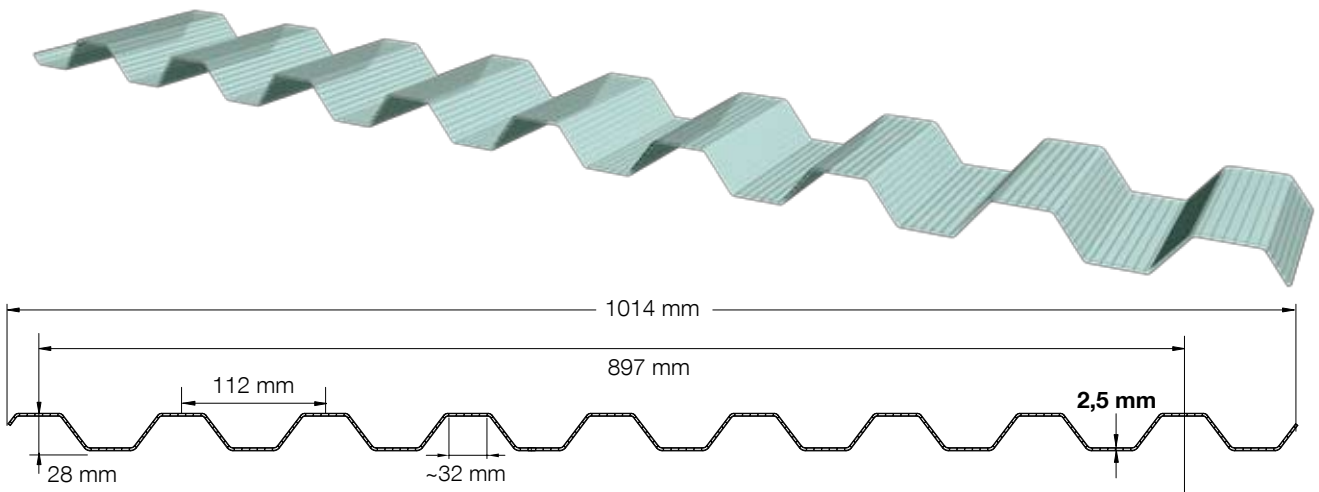


28/2,5
(112/28)

9 corrugations



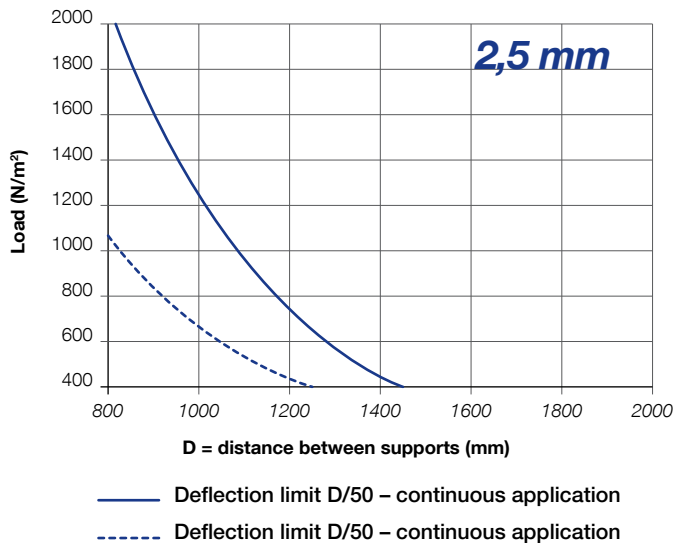
two walls (single chamber)



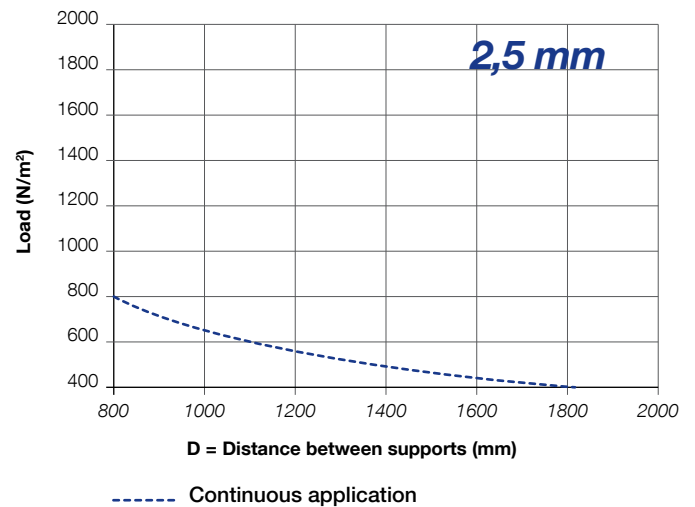
Flat Roof

Curved Roof

Alfa Roof 28/2,5 flat with 3 or more supports



Alfa Roof 28/2,5 curved with 3,5 m radius



Characteristics	Unit of measurement	Alfa Roof 28/2,5
Geometric characteristics		
<i>thickness</i>	mm	2,5
<i>structure</i>	type	two walls (single chamber)
<i>width</i>	mm	9 ribs: 1014 / net width 897
<i>sheet length</i>	mm	custom**
<i>corrugation pitch</i>	mm	112
<i>corrugation depth</i>	mm	28
Technical characteristics		
<i>thermal transmittance (U)</i>	W/m ² K	4,2
<i>service temperature range*</i>	°C	- 40 / + 120
<i>thermal expansion</i>	$\frac{\text{mm}}{\text{m } ^\circ\text{C}}$	0,065
<i>light transmission (LT) translucent clear</i>	%	80***
<i>light transmission (LT) translucent opal</i>	%	43***
<i>UV protection</i>	YES/NO	YES
<i>heat sealing</i>	YES/NO	YES
<i>warranty****</i>	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 28" corrugated sheeting.

Curved roofing and skylights produced with extruded polycarbonate multiwall "Alfa Roof 28" corrugated sheeting with 3500 and 6000 mm curve radius.

Thickness: 2,5 mm

Corrugation pitch: 112/28

UV Protection

Heat-sealed ends

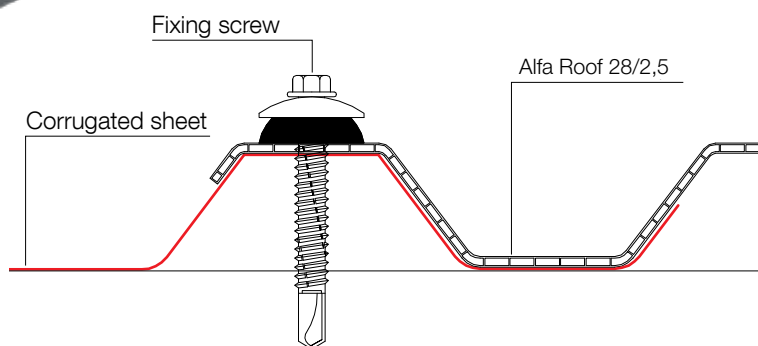
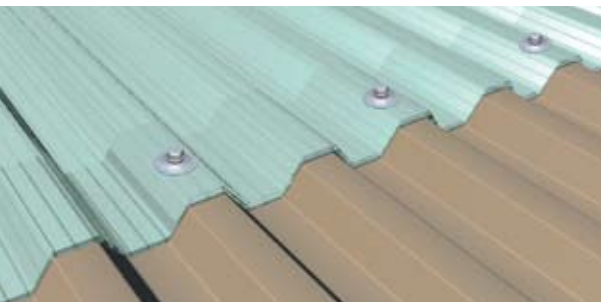
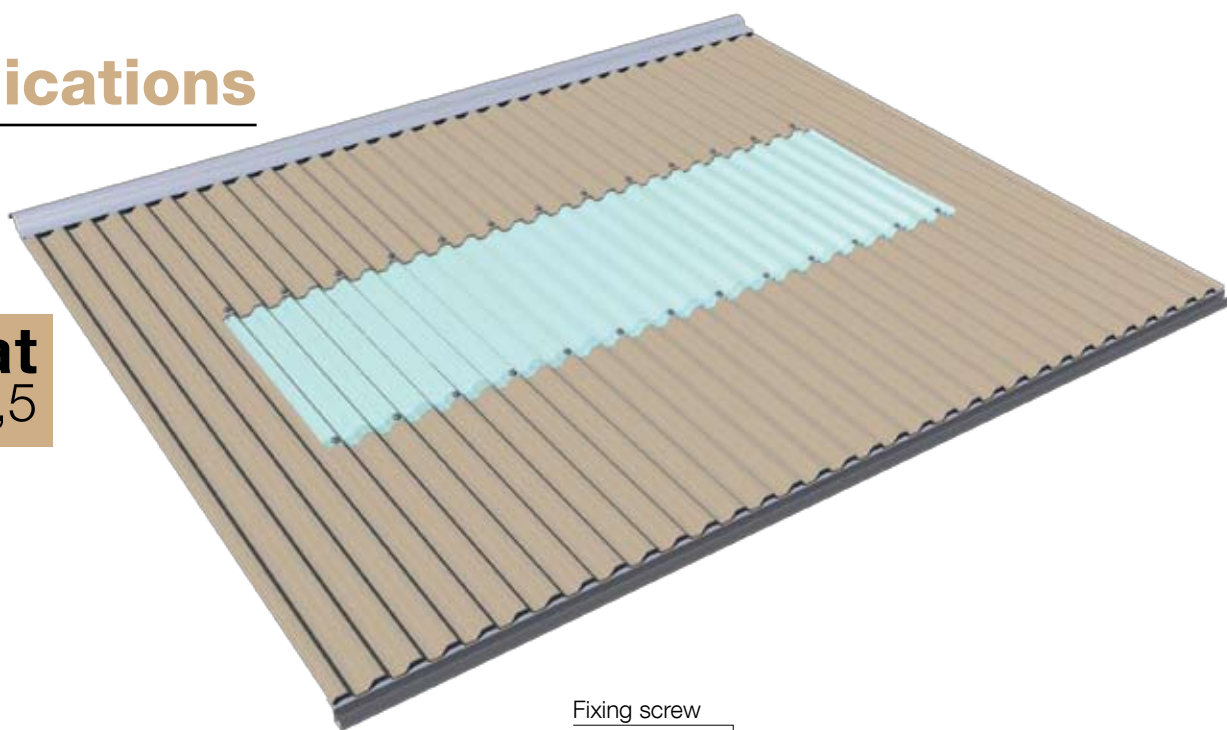
Clear or opal colour, with satin effect

U value: 4,2 W/m² K

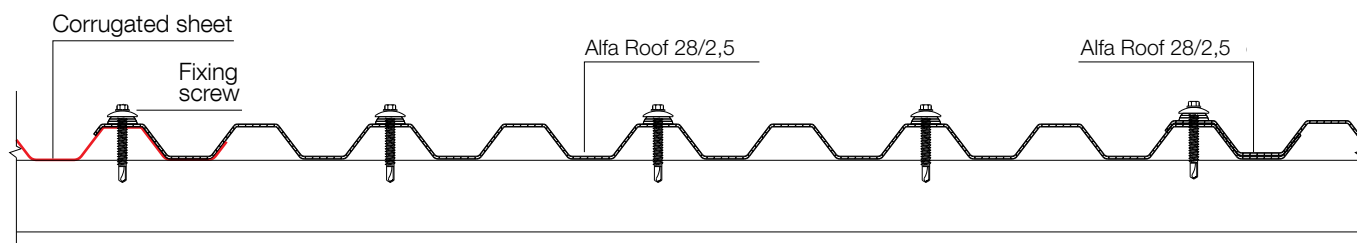
Fire performance: Euro class B s1 d0

Applications

Flat 28/2,5



Detail of fixing and side lap

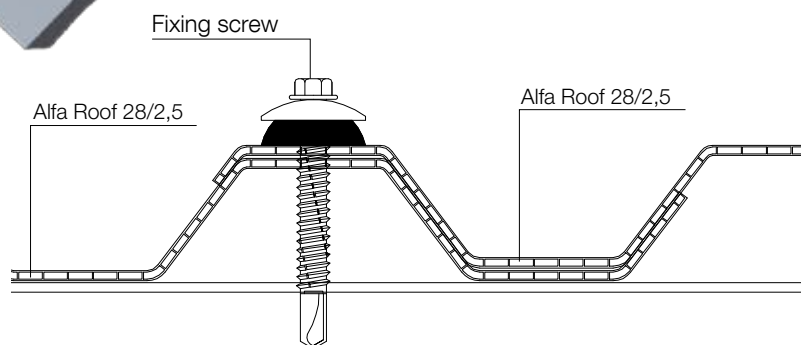
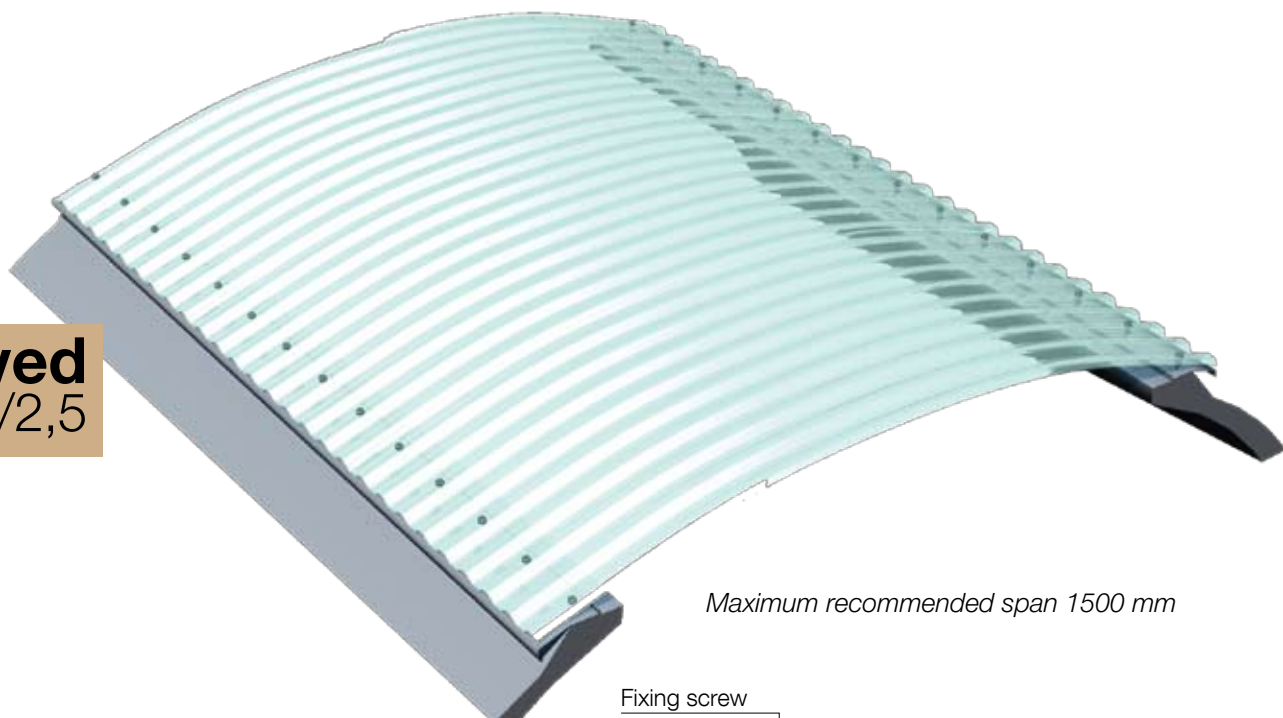


Accessories

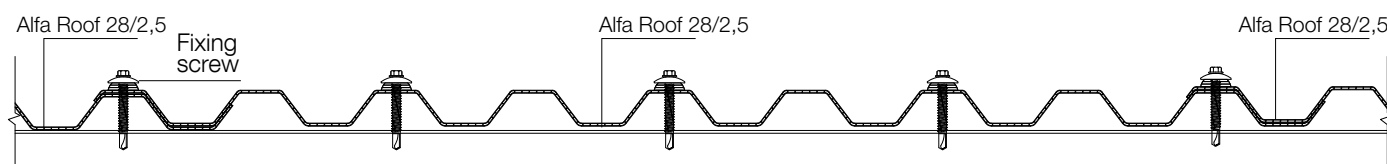


Screw for fixing
Alfa Roof 28/2,5:
6,3 x 60 mm

Curved 28/2,5



Detail of fixing and side lap



Accessories



Screw for fixing
Alfa Roof 28/2,5:
6,3 x 60 mm