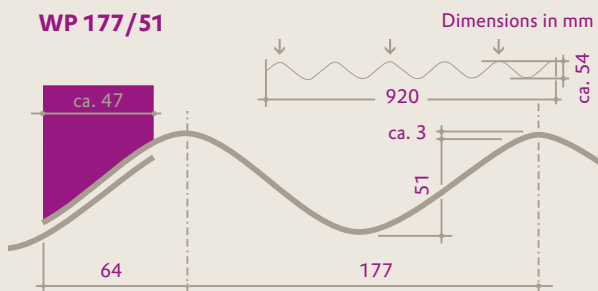
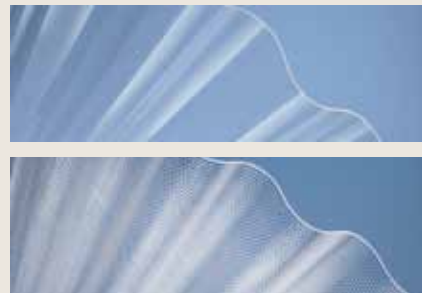


PLEXIGLAS® Resist WP 177/51

Product Description



Cross-section of PLEXIGLAS® Resist WP 177/51 (dimensions in mm)



Product and Benefits

PLEXIGLAS® Resist*) WP 177/51 is a highly light-transmitting and durably weather-resistant corrugated sheet made of impact-modified acrylic (polymethyl methacrylate, PMMA).

PLEXIGLAS® Resist WP 177/51 is suitable for

- patio roofs
- carports
- porches
- verandas
- façades
- windbreaks
- sight screens
- skylights for fiber cement roofs
- infill panels for balconies, stairs, etc.
- lampshades, decorative elements, store fixtures, exhibition booths etc.

Advantages of PLEXIGLAS® Resist WP 177/51

- The sheets are extremely UV-resistant, with a 30-year guarantee against yellowing.
- They offer excellent protection against harmful UV radiation.
- They are safe and easy to handle.
- They are guaranteed to be resistant for 10 years to hailstones with a kinetic energy of 1 joule.
- They are available in different colors and with different surface textures.
- They match the corrugated profiles of many types of fiber cement roofs.

Stability and Impact Strength

Owing to their special formulation, PLEXIGLAS® Resist WP 177/51 sheets are highly impact-resistant and are easy to machine using simple tools. They are also much thicker than many other corrugated sheets and therefore show high inherent rigidity and loadbearing capacity. This means that PLEXIGLAS® Resist corrugated sheets show much less deflection under snow load, making them safer and more attractive.

Surface Textures and Color

Due to their neutral color and surface textures (Smooth, Honeycomb), PLEXIGLAS® Resist WP 177/51 sheets lend themselves perfectly to different building styles. In addition to these benefits, the color impression and surface textures enable interesting design and lighting effects to be obtained.

Installation and Care Instructions

On roofs and façades, PLEXIGLAS® Resist WP 177/51 are fastened pointwise to an adequately sized supporting structure. The textured side of the sheet is installed facing downwards/inwards. Given correct installation, rain washes off any soiling, but we still recommend that the PLEXIGLAS® Resist corrugated sheets be cleaned once a year according to our care instructions, in order to conserve their full value.

*) European Patent 149 182



The sheet is completely protected against UV radiation by its Naturally UV-Stable Technology.



Technical Data (typical values)

Available lengths	2,000 to 7,000 mm
Light transmittance τ_{D65}	
Clear 0A001 Smooth	ca. 90 %
Clear 0A001 Honeycomb	ca. 81 %
Coefficient of linear thermal expansion α	0.08 mm/m °C
Possible expansion due to heat and moisture	ca. 6 mm/m
Maximum service temperature without load	70 °C

Support spacing

Load [N/m ²]	Support spacing [m]
200	2,40
400	2,00
600	1,65
800	1,35
1000	1,30
1200	1,20

Fire Behavior

- The fire behavior of PLEXIGLAS® is rated as European Class E to DIN EN 13501.
- PLEXIGLAS® burns almost entirely without smoke according to DIN 4102 and is easy to extinguish.
- The smoke gases produced by PLEXIGLAS® are neither acutely toxic according to DIN 53436, nor corrosive according to DIN VDE 0482-267.
- Roof surfaces glazed with PLEXIGLAS® open up by melting in the event of fire, allowing smoke and heat to escape.

Guarantee

The guarantee conditions for this and other products are available at www.plexiglas.net.

Loadbearing Capacity

Support spacing

According to the installation instructions for PLEXIGLAS® corrugated sheets with pointwise fastening, the PLEXIGLAS® Resist WP 177/51 corrugated sheets require cross-members at the spacings shown in the adjacent table.

* = registered trademark PLEXIGLAS is a registered trademark of Evonik Röhm GmbH, Darmstadt, Germany.

Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment)

Evonik Industries is a worldwide manufacturer of PMMA products sold under the PLEXIGLAS® trademark on the European, Asian, African and Australian continents and under the ACRYLITE® trademark in the Americas.

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