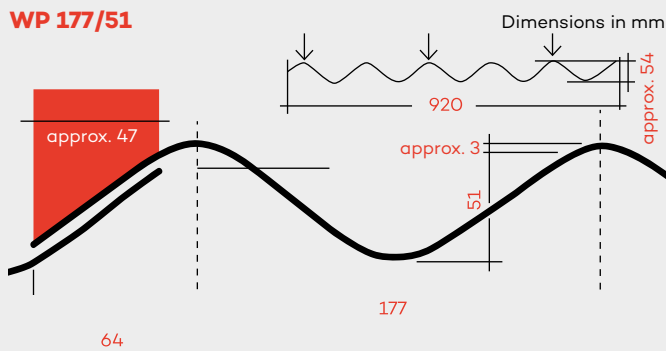


PLEXIGLAS®
Corrugated Sheet

PLEXIGLAS® Resist WP177/51 Clear OA001



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

Product

PLEXIGLAS® Resist¹ WP 177/51 is a highly light-transmitting and durably weather-resistant corrugated sheet made of impact-modified acrylic (polymethylmethacrylate, PMMA).

Properties

Besides the general properties of PLEXIGLAS® like

- Excellent light transmission and brilliance
- Outstanding weather resistance
- 100% recycling ability
- Easy to fabricate
- High surface hardness

PLEXIGLAS® Resist WP 177/51 possesses the following properties:

- They are extraordinarily UV-resistant and come with a 30-year guarantee against yellowing
- They offer excellent protection against excessive amounts of harmful UV radiation
- They are safe and easy to handle
- They are hail-resistant, with a 10-year guarantee for withstanding hailstones with an energy of 1 joule
- They are available in different colors and with different surface textures.

¹ Europ. Patent 149 182



Applications

Due to these properties PLEXIGLAS® Resist WP 177/51 are suitable for the following applications

- Patio roofs
- Carports
- Porches
- Verandas
- Facades
- Windbreaks
- Sight Screens
- Skylights for fiber cement roofs
- Infill panels for balconies, stairs, etc.
- Lampshades, decorative elements, store fixtures, exhibition booths

Processing

For PLEXIGLAS® Resist WP 177/51 the following processing guideline is available:

- Instructions for Installing PLEXIGLAS® Multi-Skin, Corrugated- and Solid Sheets (Ref-No. 311-8)

Product range

PLEXIGLAS® Resist WP 177/51 is available in the following grades and sizes:

- Length: 2000 to 7000 mm
- Width: 920 mm
- Colors: Clear

For details please refer to the PLEXIGLAS® sales handbook.

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.

Load-bearing 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.

SUPPORT SPACING [m]

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

PLEXIGLAS® Corrugated Sheet

Technical data (Typical values)

Available length	2000 to 7000 mm
Light transmittance T_{D65}	
Clear OAO01 Smooth	Up to 92%
Clear OAO01 Honeycomb	Up to 92%
Coefficient of linear thermal expansion α	0,08 mm/m ² K
Possible expansion due to heat and moisture	approx. 6 mm/m
Max. service temperature without load	70 °C
Area weight	approx. 3,8 kg/m ²

Fire behavior

- PLEXIGLAS® is rated as European Class E in accordance with DIN EN 13501.
- PLEXIGLAS® burns almost entirely without smoke in accordance with DIN 4102 and is easily extinguished.
- The smoke gases formed by PLEXIGLAS® are neither acutely toxic in accordance with 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

You can find the guarantee statements on this and other products at www.plexiglas.de

Röhm GmbH
Acrylic Products

Riedbahnstraße 70
64331 Weiterstadt
Germany

www.plexiglas.de
www.roehm.com

® = registered trademark

PLEXIGLAS is a registered trademark of Röhm GmbH, Darmstadt, Germany.
Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment)

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments.

The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.