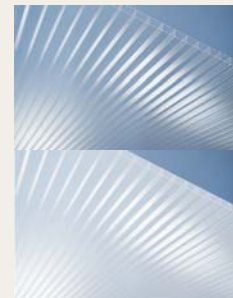
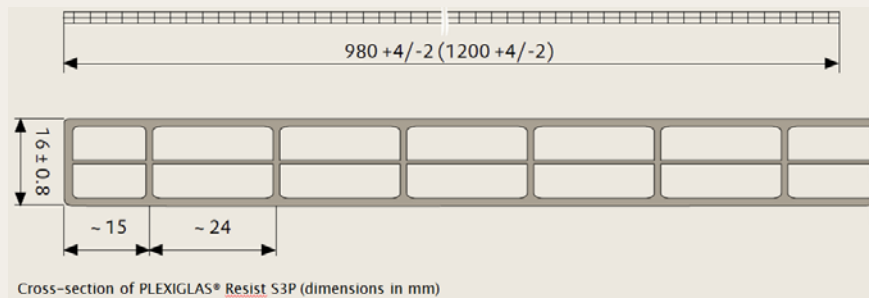


# PLEXIGLAS® Resist

## PLEXIGLAS® Resist S3P 16/980 (1200)-24



### Product

PLEXIGLAS® Resist<sup>1</sup> S3P 16 is a heat-insulating, highly light-transmitting and durably weather-resistant triple-skin sheet made of impact-modified acrylic (polymethyl methacrylate, 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 S3P 16 possesses the following properties:

- They offer extremely high resistance to UV light and come with a 30-year non-yellowing guarantee<sup>2</sup>.
- They offer excellent protection against an excess of harmful UV radiation.
- They are very safe during handling.
- They help to save energy and minimize CO<sub>2</sub> emissions.
- They are hail-resistant (to hailstones with an impact energy up to 1 joule).
- This comes with a 10-year guarantee.
- They are available in clear and white.

<sup>1</sup> European Patent 733 754

<sup>2</sup> Applies to clear-transparent PLEXIGLAS® multi-skin sheets as per guarantee statement

## Applications

Due to these properties PLEXIGLAS® Resist S3P 16 is suitable for the following applications

- Carports
- Conservatories
- Façades
- Greenhouses
- Patio roofs
- Porches
- Skylights
- Verandas

## Processing

For PLEXIGLAS® Resist S3P 16 the following processing guideline is available:

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

## Product range

PLEXIGLAS® Resist S3P 16 is available in the following grades and sizes:

- Length: 2,000 to 7,000 mm
- Width: 980 mm, 1200 mm
- Colors: Clear, White

For details please refer to the PLEXIGLAS® sales handbook.

## NO DROP coating

The water-dispersing NO DROP<sup>3</sup> coating applied to one side of the sheet causes any surface water to flow off as a thin, continuous film.

When the sheet is installed with the NO DROP coating on the outside of the roof, it supports natural cleaning by rainwater. Installed on the inside of the roof, the coating helps to prevent dripping from condensation and the damage this may cause.

The NO DROP coating is covered with a protective layer applied during the manufacturing process. This protective layer can be washed off with water and a sponge, or by hosing down the sheet. This activates the NO DROP coating.

## Load-bearing capacity

### Support spacing

Supported on all four sides, the PLEXIGLAS® Resist S3P 16/980 (1200) triple skin sheet need cross-members as stated in the table.

The load-bearing capacity is determined in line with ETAG 010 (Guideline for European Technical Approval for Self-supporting, Translucent Roof Kits), assuming a rebate depth of 20 mm for the multi-skin sheets in the glazing system. The support spacing should be reduced correspondingly for smaller rebate depths.

### Support spacing [m]

Load [N/m <sup>2</sup> ]	980 mm	1200 [mm]
400	4,0	3,5
600	3,5	3,0
800	2,5	2,2
1000	2,3	2,0
1200	2,0	1,8

<sup>3</sup> Europ. Patent 149 182

## Technical data (Typical values)

Available length	2,000 to 7,000 mm
<b>Light transmittance</b> $\tau_{D65}$	
Clear 0R004 (NO DROP)	approx. 80%
White WR011	approx. 76%
<b>Total energy transmittance</b> $g$	
Clear 0R004 (NO DROP)	approx. 76%
White WR011	approx. 72%
Heat transfer coefficient $k$	2,4 W/m <sup>2</sup> K
Coefficient of linear thermal expansion $\alpha$	0,09 mm/m °C
Possible expansion due to heat and moisture	approx. 6 mm/m
Max. service temperature without load	70 °C
Weighted sound reduction index	approx. 22 dB
Minimum permissible cold-curving radius	2,880mm
Area weight	approx. 2.9 kg/m <sup>2</sup>

## 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.net](http://www.plexiglas.net)

® = 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 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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