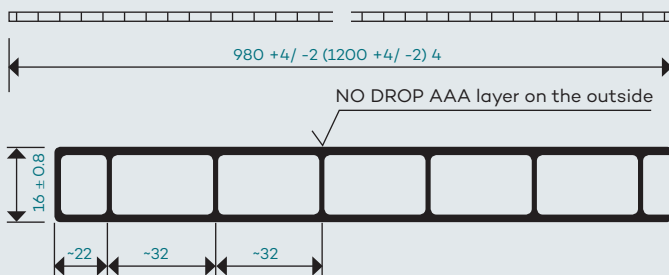


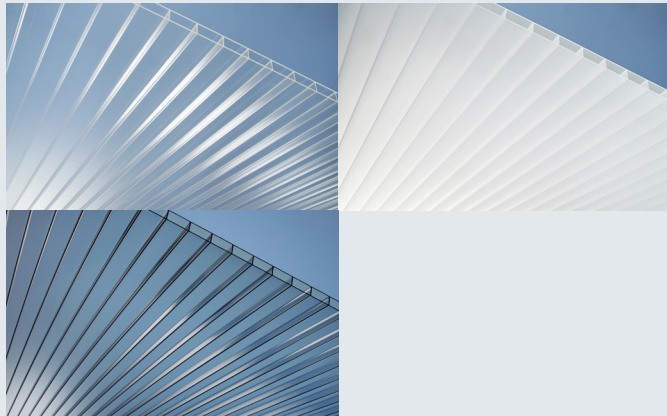


PLEXIGLAS® Double-skin Sheet

PLEXIGLAS® Resist AAA SDP 16/980 (1200)-32



Section of PLEXIGLAS® Resist AAA SDP 16/980 (Dimensions in mm)



Produkt

PLEXIGLAS® Resist¹ AAA SDP 16 is a double-skin sheet of impact-modified acrylic (polymethyl-methacrylate, or PMMA). It is highly light-transmitting, durably weather-resistant and adhesion-reducing.

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 AAA SDP 16 possesses the following properties:

- They can reduce the adhesion of dirt created by the likes of dust, pollen, moss and algae on the sheet surface
- They can significantly reduce cleaning cost
- They are coated with a completely non-toxic and biologically neutral Anti-Adhesion-Application
- They are extraordinarily UV-resistant and come with a 30-year guarantee against yellowing²
- They offer excellent protection against excessive amounts of harmful UV radiation
- They are safe and easy to handle
- They help to save energy and minimize CO₂ emissions
- They are hail-resistant, with a 10-year guarantee for withstanding hailstones with an energy of 1 joule
- They are available in a range of colors.

Applications

Due to these properties PLEXIGLAS® Resist AAA SDP 16 are suitable for the following applications

- Patio roofs
- Carports
- Porch roofs
- Balconies
- Greenhouses
- Conservatories
- Skylights
- Facades

¹ Europ. Patent 733 754

² Applies for clear PLEXIGLAS® multi-skin sheeting as in the guarantee declaration

Processing

For PLEXIGLAS® Resist AAA SDP 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 AAA SDP 16 is available in the following grades and sizes:

- Length: 2000 – 7000 mm
- Width: 980 mm, 1200 mm
- Colors: Clear, White, Grey

For details please refer to the PLEXIGLAS® sales range.

Anti-Adhesion-Application (AAA)

The AAA coating, based on advanced nanotechnology, is a further development of the successful NO DROP³ coating, which has proven its worth over many years. It is directly applied to the sheet in an additional process during production. Due to the coating, the sun's natural UV radiation causes dirt created by the likes of dust, pollen, moss and algae to lose the ability to adhere to the sheet or to decompose entirely. In combination with the well-known NO DROP effect, the next rainfall can almost completely rinse away the residues of the decomposed soiling.

Activation of the Anti-Adhesion-Application

The new NO DROP AAA coating is covered by a protective layer. This is washed away by condensation or rain water, thus activating the NO DROP AAA coating. Alternatively, the coating may be activated manually by sponging or hosing down with water.

Efficacy and Care Instructions

The NO DROP AAA coating works in conjunction with the sun's natural UV radiation. To allow as much UV light as possible to reach the sheet surface unhindered so as to obtain the maximum possible efficacy, we recommend cleaning the PLEXIGLAS® roofing once a year in accordance with our care instructions. Under especially unfavorable climatic conditions, algae growth may occur despite the AAA coating, but will be significantly reduced.

Load-bearing capacity Support spacing

Thanks to their high rigidity, these sheets allow large spans, which reduce shadows inside the room and cuts construction costs.

Supported on all four sides, the PLEXIGLAS® Resist AAA SDP 16/980 double skin sheet requires no additional cross-members at a load of up to 1,000 N/m². The spacing stated in the table applies to greater loads. 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/m²]	980 mm	1200 mm
750	No cross-members	No cross-members
1000	No cross-members	4.0
1250	4.2	3.1
1500	3.4	2.8
1750	3.1	2.6
2000	2.9	2.5
2250	2.7	2.4
2500	2.5	2.2
2750	2.4	2.1
3000	2.3	2.0

³ Europ. Patent 149 182



PLEXIGLAS®

Double-skin Sheet

Technical data (Typical values)

Available length	2000 – 7000 mm
Light transmittance τ_{D65}	
Clear ORS22 NO DROP AAA	approx. 86%
White WRS22 NO DROP AAA	approx. 74%
Grey 7RS22 NO DROP AAA	approx. 45%
Total energy transmittance g	
Clear ORS22 NO DROP AAA	approx. 82%
White WRS22 NO DROP AAA	approx. 73%
Grey 7RS22 NO DROP AAA	approx. 60%
Heat transfer coefficient k	2.5 W/m ² K
Coefficient of linear thermal expansion α	0.09 mm/m ² K
Possible expansion due to heat and moisture	approx. 6 mm/m
Max. service temperature without load	70 °C
Weighted sound reduction index	approx. 24 dB
Minimum permissible cold-curving radius	2400mm (150xPlattendicke)
Area weight	approx. 4.0 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

POLYVANTIS GmbH

Riedbahnstraße 70
64331 Weiterstadt
Germany

www.plexiglas.de

www.polyvantis.com

® = registered trademark

Semi-finished polymethyl methacrylate (PMMA) products from POLYVANTIS are sold on the European, Asian, African and Australian continents under the registered trademark PLEXIGLAS®, in the Americas under the registered trademark ACRYLITE®, both owned by Röhm GmbH, Darmstadt, or its affiliates. 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.