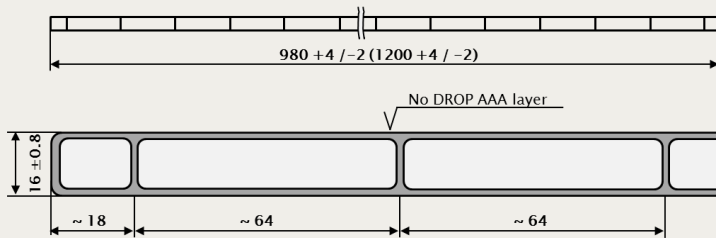


Technical Information

PLEXIGLAS® Resist

PLEXIGLAS® RESIST AAA SDP 16/980 (1200)-64



Section of PLEXIGLAS® Resist AAA SDP 16-64 (dimensions in mm)



PRODUCT

PLEXIGLAS® Resist AAA SDP 16-64 is a double-skin sheet of impact-modified acrylic (polymethyl-methacrylate, or PMMA). It is highly light-transmitting and durably weather-resistant, and inhibits algae growth.

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 16-64 possesses the following properties:

- Due to their webspace of 64mm they offer a transparency similar to glass.
- They reduce, among other things, the growth of algae and mosses on the sheet surface.
- They can significantly reduce cleaning cost.
- They are coated with a completely non-toxic and biologically neutral AntiAlgaeApplication.
- 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.

¹ Europ. Patent 733 754

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

APPLICATIONS

Due to these properties PLEXIGLAS® Resist AAA SDP 16-64 are suitable for the following applications

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

PROCESSING

For PLEXIGLAS® Alltop impact resist 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® Alltop impact resist SDP 16 is available in the following grades and sizes:

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

For details please refer to the PLEXIGLAS® sales handbook.

WIDE WEB SPACE

The very robust and stable structure of these PLEXIGLAS® muliwall sheet allows a wide web space of 64mm. This wide web space offers an appearance and transparency which is similar to glass.

ANTIALGENAPPLICATION (AAA)

Die 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, algae, mosses, pollen, and other forms of soiling lose the ability to adhere to the sheet, and may even be immediately and completely decomposed, by the action of natural UV radiation from the sun. 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 ANTIALGAEAPPLICATION

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.

³ EUROP. PATENT 149 182

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 and as part of a system with suitable glazing bars the PLEXIGLAS® Resist AAA SDP 16/980(1200)-64 double skin sheet requires support spacings 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 and a safety factor of 1,6. The support spacing should be reduced correspondingly for smaller rebate depths.

If the skin of a cut-to-size sheet is to protrude more than 15 mm beyond the last web, INFILL SECTION 16 has to be inserted into the cut edge.

Support spacing [m]

Load [N/m ²]	980 mm	1200 [mm]
680	No cross-members	5.6
750	6.0	5.1
850	5.4	4.7
1000	4.4	4.0
1250	3.6	3.4
1500	3.1	2.9
1750	2.7	2.5
2000	2.3	2.1
2250	2.0	1.8
2500	1.7	1.5
2750	1.4	1.2
3000	1.2	1.0

TECHNICAL DATA (TYPICAL VALUES)

Available length	2,000 to 7,000 mm
Light transmittance t_{655}	
Clear 0RS30 NO DROP AAA	Approx. 86%
Diffus 0RS09 D NO DROP AAA	Approx. 85%
White WRS30 NO DROP AAA	Approx. 74%
Grey 7RS30 NO DROP AAA	Approx. 45%
Total energy transmittance g	
Clear 0RS30 NO DROP AAA	Approx. 82%
Diffus 0RS09 D NO DROP AAA	Approx. 81%
White WRS30 NO DROP AAA	Approx. 73%
Grey 7RS30 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 °C
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	2,400 mm (150xsheet thickness)
Area weight	Approx. 4.5 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.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)

Disclaimer

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Ref.-No. 234-30

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