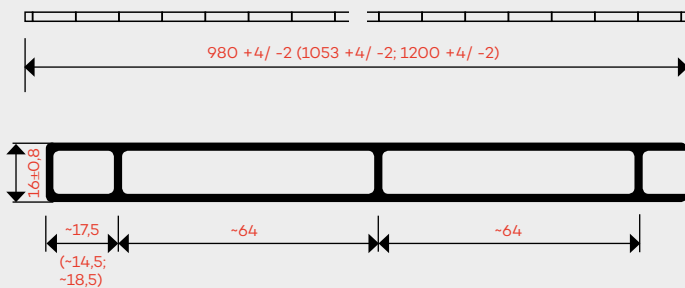


PLEXIGLAS®
Double-skin sheet

PLEXIGLAS® Alltop impact resist SDP 16/980 (/1053, /1200) - 64



Section of PLEXIGLAS® ALLTOP SDP 16 (Dimensions in mm)



Product

The PLEXIGLAS® Alltop impact resist SDP 16 double-skin sheet is a resist light-transmitting, heat-insulating and very weather-resistant sheet made from acrylic (poly-methyl-methacrylate, PMMA). It was designed with a particularly wide web spacing of 64 mm for private or factory glazing and greenhouses which require a degree of transparency that is above the normal for double-skin sheets and which only need a minimum of supporting structure at the same time. As opposed to multi-skin sheets type NO DROP¹, which carry the proven water-dispersing coating on one side only, Alltop² sheets are coated on both sides and within the cavities.

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® Alltop impact resist SDP 16 possesses the following properties:

- Increased light transmission of about 87 %, compared with 75 to 86 % for conventional double glazing.
- Absence of fogging, i.e. the physically unavoidable condensation remains practically invisible, both within and on the sheets.
- No drop formation, i.e. no uncontrolled dripping inside the room. Moreover, the outer surface is more effectively cleaned by rain, so that the glazing as a whole appears particularly clean and clear-transparent.
- Increased energy saving, because more solar energy is transmitted. Therefore heating costs can be reduced.

¹ Europ. Patent 149 182

² Europ. Patent 530 617

PLEXIGLAS®

Double-skin sheet

- Further promotion of plant growth because of the extra amount of light and UV-radiation that passes through the sheets ((PLEXIGLAS® Alltop impact resist clear ORS01).
- They can significantly reduce cleaning cost
- They are extraordinarily UV-resistant and come with a 30-year guarantee against yellowing and for retaining a high level of light transmission
- They help to save energy and minimize CO² emissions.

Applications

Due to these properties PLEXIGLAS® Alltop impact resist SDP 16 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, 1053mm, 1200mm
- Colors: Clear

For details please refer to the PLEXIGLAS® sales handbook.

(All side) NO DROP coating

The water-dispersing No DROP coating applied to all surfaces of the sheet causes any surface water to flow off as a thin, continuous film. When the sheet is installed the NO DROP coating on the outside of the roof, supports natural cleaning by rainwater. 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.

PLEXIGLAS®

Double-skin sheet

Technical data (Typical values)

Available length	2000 to 7000 mm
Light transmittance τ_{D65}	
Clear ORS01 (UV-transmitting)	~ 87%
Clear ORS15 (UV-transmitting)	~ 87%
UV-transmission	
Clear ORS01 (UV-transmitting)	- 80%
Clear ORS15 (UV-transmitting)	< 1 %
Total energy transmittance g	
Clear ORS01	~ 80%
Clear ORS15	- 80%
Heat transfer coefficient k (Test report 13-901399/P2/Fi, FMPA Stuttgart)	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	ca. 6 mm/m
Max. service temperature without load	70 °C
Weighted sound reduction index	ca. 24 dB
Area weight	ca. 5,0 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.

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.