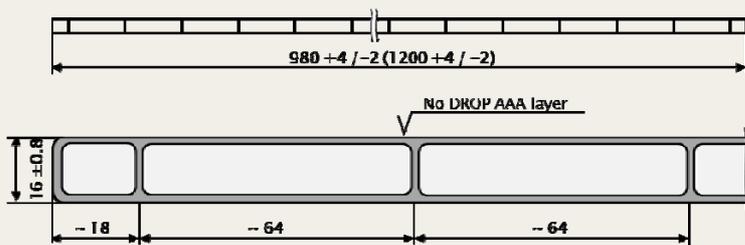


# PLEXIGLAS® Heatstop

## PLEXIGLAS® Heatstop Cool Blue AAA SDP 16/980 (/1200)-64



Section of PLEXIGLAS® Heatstop Cool Blue AAA SDP 16-64 (dimensions in mm)



### Product

PLEXIGLAS® Heatstop Cool Blue SDP 16-64 is an infrared (IR)-reflecting, heat-insulating and extremely weather-resistant double-skin sheet made of impact-modified acrylic (polymethyl methacrylate, PMMA). The Heatstop coating is uniformly and permanently fused with the sheet material and is equally effective on the upper and lower side of the sheet.

### 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® Heatstop Cool Blue SDP 16-64 possesses the following properties:

- Incident solar energy is reduced by as much as 75 %.
- The color impression beneath the glazing is very pleasant and cool.
- The sheets offer excellent protection against an excess of harmful UV radiation.
- They are impact-resistant during transport, handling and installation.
- They are heat-insulating.
- 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.

## Applications

Due to these properties PLEXIGLAS® Heatstop Cool Blue SDP 16–64 is suitable for the following applications:

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

## Processing

For PLEXIGLAS® Heatstop Cool Blue SDP 16–64 the following processing guideline is available:

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

## Product range

PLEXIGLAS® Heatstop Cool Blue SDP 16–64 is available in the following grades and sizes:

- Length: 2000 to 7000 mm
- Width: 980 mm, 1200mm
- Colors: White (bluish–golden)

For details please refer to the PLEXIGLAS® sales handbook.

## Heatstop Cool Blue Effect

The PLEXIGLAS® Heatstop Cool Blue multi-skin sheet very effectively reduces solar heat radiation by means of special technology. This effect is supported by its specific color, which also has a favorable influence on the perceived temperature, a factor that is very important for human well-being. The Heatstop Cool Blue coating gives the sheets an attractive golden surface gloss. Seen from below, the sheets have a cool, bluish look, as befits their function. This color has an iridescent effect. The color impression varies depending on the viewing angle and lighting conditions.

## AntiAlgaeApplication (AAA)

The AAA coating, based on advanced nanotechnology, is a further development of the

successful NO DROP<sup>1</sup> 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.

## 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® Heatstop Cool Blue 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, **INFILLSECTION 16** has to be inserted into the cut edge.

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<sup>1</sup> Europ. Patent 149 182

## Support spacing [m]

Load [N/m <sup>2</sup> ]	980 mm	1200 [mm]
680	No cross-members	5,6
750	6	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

## 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.

## Technical data (Typical values)

Available length	2,000 to 7,000 mm
<b>Light transmittance</b> <small>T<sub>065</sub></small>	
White WZ030	approx.20 %
<b>Total energy transmittance g</b>	
White WZ030	approx.25 %
Heat transfer coefficient k	2.5 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 (estim.)	24 dB
Minimum permissible cold-curving radius	2,400 mm (150xsheet thickness)
Area weight	approx. 4.5 kg/m <sup>2</sup>

## 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)

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