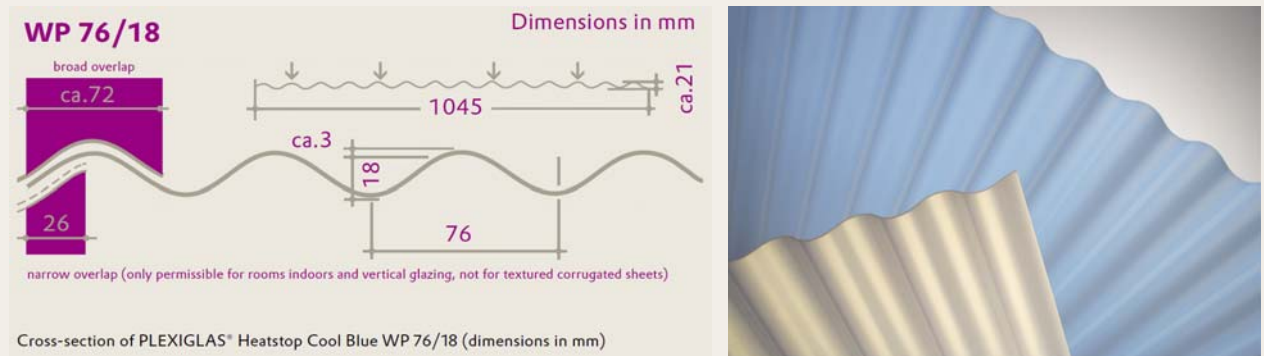


# PLEXIGLAS® Heatstop

## PLEXIGLAS® Heatstop Cool Blue WP 76/18



### Product

PLEXIGLAS® Heatstop Cool Blue 76/18 is a corrugated sheet made of impact-modified acrylic (polymethylmethacrylate, PMMA). It reflects infrared (IR) light and is highly weather-resistant. The Heatstop Cool Blue coating is evenly integrated into the sheet and permanently fused with the sheet material.

### 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 WP 76/18 possesses the following properties:

- Incident solar radiation is significantly reduced.
- The color impression beneath the glazing is pleasantly cool.
- The sheets prevent glare by their very uniform diffusion of daylight.
- They offer excellent protection against excessive amounts of harmful UV radiation.
- They are safe and easy to handle.
- They are hail-resistant, with a 10-year guarantee for withstanding hailstones with an energy of 1 joule.

## Applications

Due to these properties PLEXIGLAS® Heatstop Cool Blue WP 76/18 are suitable for the following applications

- Patio roofs
- Carports
- Porches
- Verandas
- Facades
- Windbreaks
- Sight Screens
- Infill panels for balconies, stairs, etc.
- Lampshades, decorative elements, store fixtures, exhibition booths

## Processing

For PLEXIGLAS® Heatstop Cool Blue WP 76/18 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 WP 76/18 is available in the following grades and sizes:

- Length: 2,000 to 7,000 mm
- Width: 1045mm
- Colors: White (bluish-golden)

For details please refer to the PLEXIGLAS® sales handbook.

## Stability and Impact Strength

Owing to their special formulation, PLEXIGLAS® Heatstop Cool Blue WP 76/18 sheets are highly impact-resistant and are easy to machine using simple tools. They are also much thicker than many other corrugated sheets and therefore show high inherent rigidity and loadbearing capacity. This means that PLEXIGLAS® Heatstop Cool Blue WP 76/18 sheets show much less deflection under snow load, making them safer and more attractive.

## Heatstop Effect and Color

PLEXIGLAS® Heatstop Cool Blue WP 76/18 sheets use a special technology for effectively reducing solar heat radiation. This effect is reinforced by a specially chosen color that people associate with pleasant temperatures, thus enhancing their well-being. The Heatstop Cool Blue coating gives the sheets an attractive golden surface sheen. Viewed from below, they have a pleasantly cool bluish tinge, as befits their function. This color has an iridescent effect. The color impression may vary depending on the viewing angle and lighting conditions. In addition to these benefits, the Heatstop Cool Blue coating makes it possible to achieve interesting design and lighting effects in many applications.

## Installation and Care Instructions

On roofs and façades, PLEXIGLAS® Heatstop Cool Blue WP 76/18 sheets are fastened pointwise to an adequately sized supporting structure. Both sides of the sheet can be installed facing outwards. Given correct installation, rain washes off soiling, but we still recommend that the PLEXIGLAS® Heatstop Cool Blue corrugated sheets shall be cleaned once a year according to our care instructions, in order to conserve their full value.

## Load-bearing capacity

### Support spacing

According to the installation instructions for PLEXIGLAS® corrugated sheets with pointwise fastening, the PLEXIGLAS® Heatstop WP 76/18 corrugated sheets require cross-members at the spacings shown in the adjacent table.

### Support spacing [m]

| Load [N/m²] | Support spacing [m] |
|-------------|---------------------|
| 200         | 1.70                |
| 400         | 1.20                |
| 600         | 1.00                |
| 800         | 0.80                |
| 1000        | 0.75                |
| 1200        | 0.65                |

## Technical data (Typical values)

|  |                               |
|--|-------------------------------|
| Available length                                 | 2,000 to 7,000 mm             |
| <b>Light transmittance</b> $\tau_{D65}$          |                               |
| Heatstop Cool Blue WZ006                         | approx. 22%                   |
| Coefficient of linear thermal expansion $\alpha$ | 0.08 mm/m °C                  |
| Possible expansion due to heat and moisture      | approx. 6 mm/m                |
| Max. service temperature without load            | 70 °C                         |
| Area weight                                      | approx. 3.6 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.

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.

### Evonik Performance Materials GmbH

Acrylic Polymers

Kirschenallee, 64293 Darmstadt, Germany

[info@plexiglas.net](mailto:info@plexiglas.net) [www.plexiglas.net](http://www.plexiglas.net) [www.evonik.com](http://www.evonik.com)

Ref. No. 233-5 July 2015