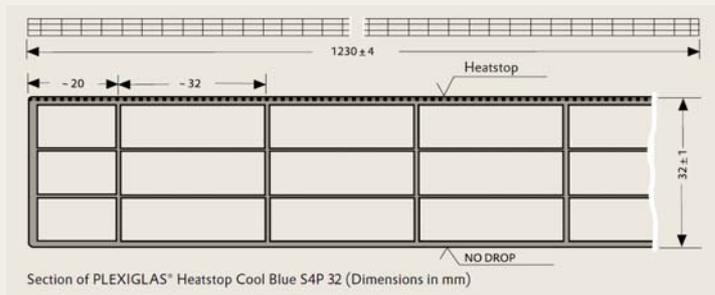


## PLEXIGLAS® Heatstop

### PLEXIGLAS® Heatstop Cool Blue S4P 32/1230-32



#### Product

PLEXIGLAS® Heatstop Cool Blue S4P 32 is a quadruple-skin sheet of impact-modified acrylic (polymethylmethacrylate, or PMMA). It is IR (infrared)-reflecting, highly heat-insulating, and durably weather-resistant. The coextruded Heatstop coating is homogeneously fused with the sheet material and, in outdoor applications, must be installed facing upward or outward.

#### 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 S4P 32 possesses the following properties:

- Incident solar energy is reduced by as much as 78 %.
- 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 highly 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 S4P 32 is suitable for the following applications:

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

## Processing

For PLEXIGLAS® Heatstop Cool Blue S4P 32 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 S4P 32 is available in the following grades and sizes:

- Length: 2000 bis 7000 mm
- Width: 1230 mm
- Colors: White (bluish-golden)

For details please refer to the PLEXIGLAS® sales handbook.

## Heatstop Cool Blue Effect

PLEXIGLAS® Heatstop Cool Blue multi-skin sheet uses 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, with an iridescent effect. The color impression may vary depending on viewing angle and lighting conditions.

## Heat insulation

With its excellent U-value, the sheet meets the requirements of the German Energy Conservation Regulation (EnEV). It is therefore suitable for highly heat-insulating glazing in private construction as well as factory units and sports halls.

## NO DROP coating

The sheet is installed with the side bearing the water-dispersing NO DROP<sup>1</sup> coating facing downwards/inwards. This offers the advantage that any condensation flows off as a continuous film, preventing uncontrolled dripping and letting more light into the glazed area. The NO DROP coating is covered by a protective layer applied during manufacture. If not automatically washed off by condensation, the protective layer can also be removed manually with water and a sponge or by using a hose. This activates the NO DROP coating.

## 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® Heatstop Cool Blue S4P 32/1230 quadruple skin sheet requires no additional cross-members at a load of up to 1,000 N/m<sup>2</sup>. The spacing stated in the table applies to greater loads. The load-bearing capacity of PLEXIGLAS® Heatstop Cool Blue S4P 32/1230 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.

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

## Support spacing

Load [N/m <sup>2</sup> ]	Support spacing [m]
750	no cross members
1000	no cross members
1250	5.7
1500	4.2
1750	3.7
2000	3.3
2250	3.1
2500	2.9
2750	2.7
3000	2.6

## Technical data (Typical values)

Available length	2,000 to 7,000 mm
<b>Light transmittance</b> $\tau_{0.65}$	
White WZ008 NO DROP	approx. 20 %
<b>Total energy transmittance</b> <b>g</b>	
White WZ008 NO DROP	approx. 22 %
Heat transfer coefficient k	1.6 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	approx. 24 dB
Area weight	approx. 5.6 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)

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### 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)

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