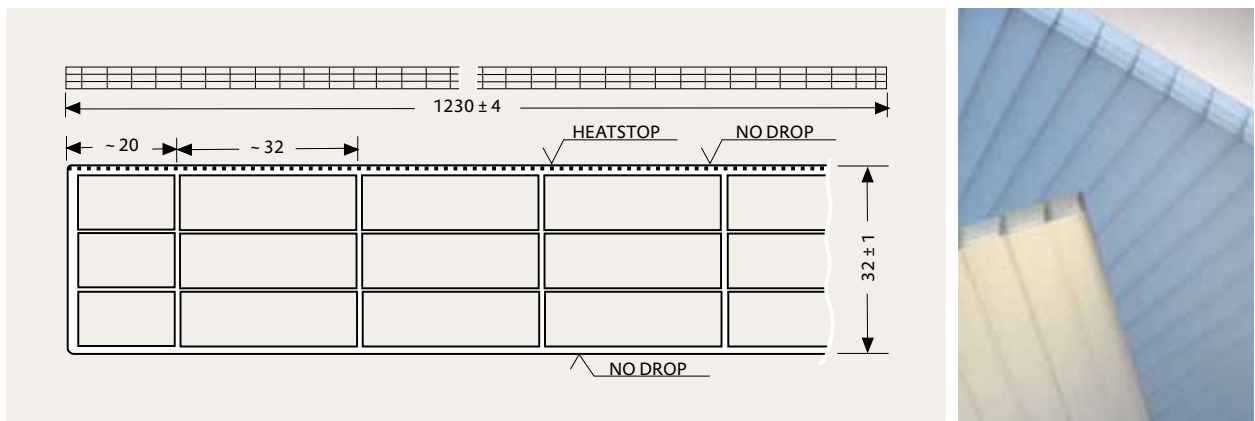


PLEXIGLAS HEATSTOP®

Cool Blue S4P 32/1230-32 Product Description

Technical Information



Cross-section of PLEXIGLAS HEATSTOP® Cool Blue S4P 32 (dimensions in mm)

Product and Benefits

PLEXIGLAS HEATSTOP®*) Cool Blue S4P 32 is a quadruple-skin sheet of impact-modified acrylic (polymethyl methacrylate, 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.

PLEXIGLAS HEATSTOP® Cool Blue S4P 32 glazing offers the following major advantages:

- reduces incident solar energy by up to 78 percent,
- gives a pleasantly cool impression with its blue color under the glazing,
- is impact-resistant during shipping, handling, and installation,
- is highly heat-insulating, and
- is hail-resistant, with a 10-year guarantee for withstanding hailstones with a kinetic energy of 1 joule.

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.

Loadbearing Capacity

Owing to its high rigidity, this sheet can be used for large spans. Few supports are required- and no cross-members at all for loads of up to 1,000 N/m²- which produces fewer shadows indoors and reduces construction costs.

NO DROP Coating

The water-dispersing NO DROP®) coating is applied only on one side of the sheet. When the sheet is installed with the coating facing inward, the coating causes any condensed water to form a continuous thin film. When the NO DROP coating is on the outside of the roof, it can support the natural cleaning of the roof by rainwater. When on the inside, it helps to prevent any condensed water from forming drops and thus averts damage caused by dripping.

The NO DROP coating is covered by a protective layer applied during manufacture. The protective layer can be washed off by sponging or hosing down with water; this activates the NO DROP coating.

*) European Patent 149 182



The sheet is protected from UV radiation by Naturally UV-Stable technology.

Technical Data (Typical Values)

Available lengths	2,000 to 7,000 mm	
Light transmittance τ_{D65}	White WZ008	ca 20 %
Total energy transmittance g		ca 22 %
Heat transfer coefficient k	1.6 W/m ² K	
Coefficient of linear thermal expansion α	0.09 mm/m°C	
Possible expansion due to heat and moisture	ca 6 mm/m	
Max. permanent service temperature without load	70 °C	
Weighted sound reduction index (estimated)	ca 24 dB	

Fire Behavior

- The fire behavior of PLEXIGLAS® is rated as European Class E according to DIN EN 13501.
- PLEXIGLAS® burns almost entirely without smoke according to DIN 4102 and is easily extinguished.
- The smoke gases produced by PLEXIGLAS® are neither acutely toxic according to 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

The guarantee conditions for this and other products are available at www.plexiglas.net.

Loadbearing Capacity

Support spacing

For loads of up to 1,000 N/m², PLEXIGLAS HEATSTOP® Cool Blue S4P 32 quadruple-skin sheet supported evenly on all four sides requires no additional cross-members.

For higher loads, the spacings shown in the table apply. The loadbearing capacity of PLEXIGLAS HEATSTOP® Cool Blue S4P 32 is determined in accordance with ETAG 010 (the European Technical Approval Guidelines for self-supporting translucent roof kits), with a clamping depth of 20 mm being assumed for the sheet in the glazing system.

For lower clamping depths the spacing of the supports is to be reduced accordingly.

Load [N/m ²]	Support spacing [m]
750	No cross-members
1,000	No cross-members
1,250	5.7
1,500	4.2
1,750	3.7
2,000	3.3
2,250	3.1
2,500	2.9
2,750	2.7
3,000	2.6

® = registered trademark

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Evonik Röhm GmbH is certified to DIN EN ISO 9001 for quality management and to DIN EN ISO 14001 for environmental management.

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