



PLEXIGLAS®
Solid Sheet

PLEXIGLAS® Soundstop GS CC

Product

PLEXIGLAS® Soundstop GS CC is a highly transparent grade of cast acrylic with embedded polyamide threads. In the event of breakage due to an accident, these threads retain any sheet fragments and prevent them from falling down.

Properties

In addition to the well-known and proven properties of PLEXIGLAS®, such as

- excellent light transmission and brilliance
- extremely high weather resistance
- ease of fabrication
- high surface hardness
- low weight – half the weight of glass
- 11times the impact strength of glass
- 100% recyclability,

PLEXIGLAS® Soundstop GS CC offers the following special features:

- PLEXIGLAS® Soundstop GS CC is used all over the world as a transparent noise control material on bridges, without additional metal netting.
- Birds can easily detect the integrated black polyamide threads.
- PLEXIGLAS® Soundstop GS CC is classed in the highest airborne sound reduction category (B3) of EN 1793-2, EN 1793-6, EN 16272-3-2, and also meets all requirements of EN 1794-1,2,3.
- Large noise barrier elements reduce the need for steel supporting structures and enhance the transparency of the noise barrier.
- PLEXIGLAS® Soundstop GS CC is used for noise barriers along the high-speed railway tracks of the Deutsche Bahn (German Rail), among others, and complies with RIL 804.5501.
- PLEXIGLAS® Soundstop GS CC is available in transparent colors.

Applications

These properties make PLEXIGLAS® Soundstop GS CC especially suitable for

- noise control along roads and railways
- wind barriers on bridges

Machining

PLEXIGLAS® Soundstop GS CC can be machined just like standard PLEXIGLAS®.

Physical Forms

PLEXIGLAS® Soundstop GS is available in the following sizes and thicknesses:

Physical Forms	
Standard size	3050 x 2030 mm, 4050 x 2030 mm, 5050 x 2030 mm, 3300 x 2380 mm
Thickness	12 – 15 – 20 – 25 mm



Technical Data		
Property	Value	Test standard
Density	1.19 g/cm ³	ISO 1183
Weight per unit area	17.8 kg/m ²	15 mm thick
Tensile strength	70 MPa	ISO 527-2/1B/5
Elongation at break	5 %	ISO 527-2/1B/5
Flexural strength	98 MPa	ISO 178
Modulus of elasticity	3300 MPa	ISO 527-2/1B/5
Weighted sound reduction index DLR	29 dB at 12 mm	EN 1793-2/ZTV-Lsw-06
Weighted sound reduction index DLR	30 dB at 15 mm	EN 1793-2/ZTV-Lsw-06
Weighted sound reduction index DLSI	34 dB at 15 mm	EN 1793-6
Weighted sound reduction index DLSI	35 dB at 15 mm	EN 16272-3-2
Weighted sound reduction index DLR	32 dB at 20 mm	EN 1793-2/ZTV-Lsw-06
Weighted sound reduction index DLR	33 dB at 25 mm	EN 1793-2/ZTV-Lsw-06
Light transmission of clear-transparent elements	min. 92 %	DIN 5036
Coefficient of expansion 0 to 50°	70 · 10 ⁻⁶ 1/K	DIN 53752-A
Max. permanent service temperature	70 °C	
Vicat softening temperature	110 °C	ISO 306-B50
Poisson's ratio	0,37	
Sliver retention	by means of embedded polyamide threads	EN 1794-2, Annex B

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® = registered trademark

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