



PLEXIGLAS®
Solid Sheet

PLEXIGLAS® Soundstop GS

Product

PLEXIGLAS® Soundstop GS is a highly transparent grade of cast acrylic.

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 offers the following special features:

- It prevents drivers feeling they are driving through a “tunnel.”
- PLEXIGLAS® Soundstop GS 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 is available in transparent colors.

Applications

These properties make PLEXIGLAS® Soundstop GS especially suitable for

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

Machining

PLEXIGLAS® Soundstop GS 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-O6
Weighted sound reduction index DLR	30 dB at 15 mm	EN 1793-2/ZTV-Lsw-O6
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-O6
Weighted sound reduction index DLR	33 dB at 25 mm	EN 1793-2/ZTV-Lsw-O6
Light transmission of clear-transparent elements	min. 92 %	DIN 5036
Coefficient of expansion 0 to 50°	$70 \cdot 10^{-6}$ 1/K	DIN 53752-A
Max. permanent service temperature	70 °C	
Vicat softening temperature	110 °C	ISO 306-B50
Poisson's ratio	0.37	

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® = registered trademark

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