



PLEXIGLAS®
Solid Sheet

PLEXIGLAS® Soundstop XT BirdGuard

Product

PLEXIGLAS® Soundstop XT BirdGuard is a highly transparent grade of extruded acrylic that helps to prevent bird collisions.

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 XT BirdGuard offers the following special features:

- It prevents drivers feeling they are driving through a “tunnel.”
- PLEXIGLAS® Soundstop XT BirdGuard 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 XT BirdGuard is available in transparent colors.
- The embedded black stripes reduce the likelihood of bird collisions.

Applications

These properties make PLEXIGLAS® Soundstop XT BirdGuard especially suitable for

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

Machining

PLEXIGLAS® Soundstop XT BirdGuard can be machined just like standard PLEXIGLAS®.

Physical Forms

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

Physical Forms	
Length	up to 6000 mm
Width	2000 mm
Thickness	12 – 15 – 20 – 25 mm

Other lengths and thicknesses are available on request.
Stripe specification on request.



Technical Data			
Property	PLEXIGLAS® Soundstop XT BirdGuard	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	4	%	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 at 12 mm	dB	EN 1793-2/ZTV-Lsw-O6
Weighted sound reduction index DLR	30 at 15 mm	dB	EN 1793-2/ZTV-Lsw-O6
Weighted sound reduction index DLSI	34 at 15 mm	dB	EN 1793-6
Weighted sound reduction index DLSI	35 at 15 mm	dB	EN 16272-3-2
Weighted sound reduction index DLR	32 at 20 mm	dB	EN 1793-2/ZTV-Lsw-O6
Weighted sound reduction index DLR	33 at 25 mm	dB	EN 1793-2/ZTV-Lsw-O6
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	102	°C	ISO 306-B50
Poisson's ratio	0.37	-	-
Protection against bird collision	by means of embedded black stripes	-	-

POLYVANTIS GmbH

Riedbahnstraße 70
64331 Weiterstadt
Germany

www.plexiglas.de
www.polyvantis.com

® = registered trademark

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