



PLEXIGLAS SOUNDSTOP[®] XT BIRD GUARD

PLEXIGLAS SOUNDSTOP® XT BIRD GUARD



Large-size, highly transparent extruded noise barrier sheets with integrated bird protection.

Transparent acoustic screens as well as glass facades on buildings or other transparent surfaces can be calamitous for birds, which cannot recognize the obstacle. Investigations of European institutes showed the necessity of applying protection to avoid bird impact. This can be achieved by marking the whole surface, which will reduce transparency of the panel drastically.

PLEXIGLAS SOUNDSTOP® XT BIRD GUARD is a transparent acrylic sheet for noise barriers with printed 2 mm wide black stripes in a distance of 30 mm which are protected by a top layer made of PLEXIGLAS®. As these stripes are applied inside the material, they cannot be washed off by cleaning agents or graffiti removal procedures.

These stripes are visible obstacles for birds while assuring the maximum transparency of the element.

The design of PLEXIGLAS SOUNDSTOP® XT BIRD GUARD is very similar to PLEXIGLAS SOUNDSTOP® GS CC with embedded polyamide filaments for integrated fragment retention.

The effectiveness of the design of PLEXIGLAS SOUNDSTOP® GSCC against bird impact has been confirmed in reports of recognized test facilities of the Biological Station Hohenau-Ringeldorf and the University of Applied Science Vienna, Austria.*

PLEXIGLAS SOUNDSTOP® XT BIRD GUARD is a unique solution for highest quality and maximum safety for bird life and liberty in design.

PLEXIGLAS SOUNDSTOP® XT BIRD GUARD complies with ZTV-LSW 06, EN 1793 and EN 1794.



* http://wua-wien.at/home/images/stories/naturschutz_stadtoekologie/vogelschlagstudie-2007.pdf

Mechanical characteristics		PLEXIGLAS SOUNDSTOP® XT	Standard
Tensile strength		min. 70 MPa	ISO 527-2/1B/5
Elongation at break		5 %	ISO 527-2/1B/5
Bending strength		min. 98 MPa	ISO 178
Module of elasticity		min. 3100 MPa	ISO 527-2/1B/5
Apparent density		1.19 g/cm ³	ISO 1183
Tolerance of thickness	15 mm	± 5 %	ISO 7823-2 (XT)
	20 mm	± 5 %	ISO 7823-2 (XT)
	25 mm	± 5 %	ISO 7823-2 (XT)
Coefficient of elongation for 0 to 50 °C		70·10 ⁻⁶ 1/K	DIN 53752-A
Max. performance temperature		70 °C	—
Vicat temperature, process B		102 °C	ISO 306/B50
Light transmission for clear material		min. 90 %	DIN 5036
Weighted sound reduction DL_R	15 mm	30 dB	EN 1793-2
	20 mm	32 dB	EN 1793-2
	25 mm	33 dB	EN 1793-2
Sound reduction index L_{STR}	15 mm	30 dB	ZTV-Lsw 06
	20 mm	32 dB	ZTV-Lsw 06
	25 mm	33 dB	ZTV-Lsw 06



BIRD GUARD Specification of Pattern

The film is 1830 mm wide and laminated centric on the extrusion width of 2000 mm. Black stripes are 2 mm \pm 0,5 mm wide and the distance between two stripes is 30 \pm 8 mm.

Stripes are parallel to the edge of the sheet. Maximum tolerance of parallelism is 15 mm measured along the whole sheet. Stripes are available either in the extrusion width (max. 1830 mm) or in extrusion length. Maximum distance from the sheet edge to first stripe 85 mm.

Guarantees

PLEXIGLAS SOUNDSTOP® XT BIRD GUARD meets the requirements of ZTV LSW 06 and EN 1793 and EN 1794.

Load bearing Capacity

The load bearing capacity of the sheets is determined by the modulus of elasticity, measured according to ISO 527. The value upon delivery is at least 3100 Mpa and at least 2800 Mpa after 10 years.

Strength

This is proven by the tensile strength of the sheets, measured according to ISO 527. The value upon delivery is at least 65 Mpa and at least 60 Mpa after 10 years.

Light Transmission

PLEXIGLAS SOUNDSTOP® XT BIRD GUARD retains its excellent light transmission for many years. This is proven by measurement according to DIN 5036 part 3 Illuminant C. The value upon delivery for clear material is at least 90 % and at least 88 % after 30 years. (acc. to the conditions of the guarantee)



**PLEXIGLAS SOUNDSTOP® XT
BIRD GUARD**

- Effective bird life protection
- compliance with ZTV LSW 06, EN 1793, EN 1794
- extremely resistant against weathering and aging
- UV-absorbing
- with two high-gloss sides
- 30 years guarantee (according to guarantee conditions)
- easy to form and fabricate
- light weight
- available in clear and seven transparent colours
- can be returned to us and recycled

Grade	
Colorless	Clear
Shades of blue	Midnight Blue
	Steel Blue
	Sky Blue
Shades of green	Forest Green
	Sea Green
	Spring Green
Shade of brown	Smoky Brown

Size	width:	2,000 mm
	length:	up to 6,000 mm
	on request:	width 2,050 mm, length of more than 6,000 mm
	Pattern for bird life protection	1,830 mm width

Thickness	15 mm
	20 mm
	25 mm
	other thicknesses upon request

On request	<ul style="list-style-type: none"> ▪ other transparent colors ▪ PLEXIGLAS SOUNDSTOP® sheets can be provided with various functional surfaces for specific applications.
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Processing	<ul style="list-style-type: none"> ▪ rectangular and non-rectangular cuts, hole drilling ▪ full size thermoforming and line bendings on request ▪ non-rectangular cuts of oversized sheets on request
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® = registered trademark

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Certified to: DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment).

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