

TRANSPARENT NOISE BARRIERS

TRANSPARENT NOISE BARRIER PRODUCTS BLOCK HIGHWAY NOISE WHILE PRESERVING VISIBILITY AND LIGHT ALLOWANCE

PRODUCT DESCRIPTION

Durisol® transparent noise barrier panels are a specially formulated acrylic intended for long-term outdoor use. Backed by an industry best 30 Year Warranty, our panels are highly impact resistant and designed to perform for the long-term.

Our transparent panels may include embedded polyamide filaments for added safety when panels are installed on bridges or overpasses. In the event of vehicle impact, the embedded filaments will retain panel fragments, and eliminate falling fragments.



BENEFITS

Durisol transparent noise barrier panels offer the following sound & safety features:

- Increased safety & visibility for drivers & pedestrians,
- Excellent sound reduction rating (STC) of 32 dB or higher by ASTM E 90,
- Large panel sizes (up to 20' long and 8' wide) reduce the frequency of steel posts allowing for an ultra-light barrier system.



APPLICATIONS

These properties make Durisol® Transparent Noise Barriers especially suitable for:

- Noise control along roads and railways,
- Wind barriers on bridges,
- Impact resistant glazing for pedestrian bridges and trails / greenways.



DURISOL TRANSPARENT NOISE BARRIER MATERIAL PROPERTIES

Physical Properties	Test Method	Durisol Transparent
Mechanical		
Specific Gravity	ASTM D-792	1.19
Tensile Strength	ASTM D-638	>=10,000 psi (69 MPa)
Elongation at Break (%)		.>=3.5
Modulus of Elasticity		>=400,000 psi (2800 MPa)
Flexural Strength	ASTM D-790	>=16,500 psi (115 MPa)
Modulus of Elasticity		.>=475,000 psi (3300 MPa)
Compressive Strength (Yield)	ASTM 695/ISO 604	>=16,000 psi (114 MPa)
Rockwell Hardness	ASTM-785	M-95
Resistance Against Stone Projectiles (15mm)	EN1794-1	Pass
Small Missile Impact Test	ASTM E-1886/1996	Pass
Large Missile Impact Test	ASTM E-1886/1996	Pass
Optical (Colorless)		
Refractive Index	ASTM D-542	1.49
Light Transmission, Total	ASTM D-1003	92%
Weathered 10 years Outdoors		92%
Haze	ASTM D-1003	1%
Weathered 10 years Outdoors		1.5%
Yellowness Index	ASTM E-313	<1
Weathered 10 years Outdoors		1.5
Thermal Properties		
Resistance to Brushfire (15mm thickness)	EN 1794-2	Class 2
Deflection Temperature under load, 264 psi	ASTM D-648	>=119°F(93°C)
Co-efficient of Linear Expansion	ASTM D-696	0.000040 in/in/°F (0.072 mm/m°C)
Flammability, Burining Rate (15mm thickness)	ASTM D-635	0.8 in/min (20 mm/min)
Self-ignition Temperature	ASTM D-1929	910°F (490°C)
Smoke Density Rating (15mm thickness)	ASTM D-2843	20%
Service Temperature	-	< 180°F (82°C)
Sound Transmission Loss		
	ASTM E-90	15mm 32 dB 20mm 34 dB 25mm 36 dB
Weight per Square Foot		
	15mm Thickness	3.66 lb/ft 2 (17.9 kg/m2)
	20mm Thickness	4.86 lb/ft 2 (23.8 kg/m2)
	25mm Thickness	6.1 lb/ft 2 (29.8kg/m2)



Durisol Ltd. is the market leader in the noise barrier industry across North America.

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Typical values should not be used for specification purposes. Values shown are for 0.250" (6 mm) thickness unless noted otherwise. Drawings and product details are for information and/or illustrative purposes only, and may vary.