

OPTIX[®]-NB

NOISE BARRIER

Peace and quiet never sounded so good.



Noise Barrier Acrylic sheet

- Optically clear
- UV stable and weather resistant
- Lightweight
- Easy to form and fabricate
- Meets requirements of ZTV-LSW 06, EN 1793 and EN 1794
- Available in widths up to 100" (2540 mm)
- Thicknesses available up to 1" (25 mm)
- Available in clear, colors and Frost
- Custom color matching available
- Surface treatments, including hard coating, also available
- Made in the USA
- Post-consumer recyclable* item

* Recycling programs for this product may not exist in your area

OPTIX[®] NB — Acrylic Sheet Properties

Physical Properties	ASTM Test Method	Units	Values
Specific Gravity	D-792		1.19
Optical Refractive Index	D-542	nD	1.49
Light Transmittance Total Haze	D-1003	%	>91 <3
Sound Insulation	E-90 E-413	db	>30
Water Absorption	D-570	% By wt	0.3
Shrinkage	D-702	%	<5%
Molding Shrinkage	D-955	In./in.	.003-.006

Mechanical Properties			
Tensile Strength		psi	10,100
Tensile Elongation – Max.	D-638	%	5.8
Tensile Modulus of Elasticity		psi	479,000
Flexural Strength		psi	14,600
Flexural Modulus of Elasticity	D-790	psi	490,000
Izod Impact Strength – Molded Notch		ft-lb/in Notch	0.4
Izod Impact Strength – Milled Notch	D-256	ft-lb/in Notch	0.28
Tensile Impact Strength	D-1822	ft-lb/in ²	20
Abrasion Resistance Change in Haze			
0 cycles		Haze, %	0
10 cycles	D-1044		11.2
50 cycles			24.0
200 cycles			24.9
Rockwell Hardness	D-785		M-95

Thermal Properties	ASTM Test Method	Units	Values
Maximum Recommended Continuous Service Temperature		°F	170-190
Softening Temperature		°F	210-220
Melting Temperature		°F	300-315
Melt Flow Rate	D-1238	g/10 min.	1.5
Deflection Temperature 264 psi	D-648	°F	>190
Coefficient of Thermal Expansion (0-100°F Average)	D-696	in/(in·°F) x 10 ⁻⁵	3.0
Thermal Conductivity	C-177	BTU-ft/(hr-ft ² ·°F)	0.075
Flammability (Burning Rate)	D-635	In/minute	1.019
Smoke Density Rating	D-2843	%	3.4
Self-Ignition Temperature	D-1929	°F	833
Flame Spread Index Smoke Developed Index	E-84		115 550

Chemical			
Resistance to Stress – Critical Craze Stress to: Isopropyl Alcohol Lacquer Thinner Toluene Solvesso 100	ARTC modification of MIL-P- 6997	psi psi psi psi	900 500 1,300 1,600

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale.