PLASKOLITE, INC.

MORE LIGHT
LESS HEAT

OPTIX® IRB
INFRARED BLOCKING

Infrared Blocking Acrylic Sheet

- Helps reduce energy costs
- Blocks infrared heat while allowing high level of light to pass through
- Excellent for skylights, covered walkways, conservatories, sun porches and other building applications
- Green tint: The additive is in the polymer, and thus permanent (unlike coating)

PLASKOLITE, INC.
P.O. Box 1497 • Columbus, Ohio 43216
614-294-3281 • Fax: 877-538-0754
E-mail: plaskolite@plaskolite.com • www.plaskolite.com

OPTIX® IRB — Acrylic Sheet Properties

Property	ASTM	Units	Values
Physical			
Specific Gravity	D-792		1.19
Sound Transmission	E 90 E 413	db	27
Water Absorption	D-570	% By wt	0.4
Shrinkage	D-702	%	<5%
Mechanical			
Tensile Strength Tensile Elongation – Max. Tensile Modulus of Elasticity	D-638	psi % psi	11,030 5.8 490,000
Flexural Strength Flexural Modulus of Elasticity	D-790	psi psi	17,000 490,000
Izod Impact Strength – Molded Notch Izod Impact Strength – Milled Notch	D-256	ft-lb/in Notch ft-lb/in Notch	0.4 0.28
Tensile Impact Strength	D-1822	ft-lb/in^2	20
Abrasion Resistance Change in Haze 0 cycles 10 cycles 50 cycles 200 cycles	D-1044	Haze, %	 0 11.2 24.0 24.9
Rockwell Hardness	D-785		M-95
Chemical			
Resistance to Stress – Critical Crazing 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.

Property	ASTM	Units	Values
Thermal			
Maximum Recommended Continuous Service Temperature		°F	170-190
Softening Temperature		°F	210-220
Melting Temperature		°F	300-315
Deflection Temperature 264 psi 66 psi	D-648	°F	 203 207
Coefficient of Thermal Expansion – 30 to 30° C	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
Optical			
Optical Refractive Index	D-542		1.49
Light Transmittance IRB6 IRB7 Haze	D-1003	%	 63 74 2
Solar Transmittance IRB6 IRB7		%	 47 49
Light to Solar Gain Ratio IRB6 IRB7			 1.22 1.35
Shading Coefficient IRB6 IRB7			 0.54 0.56

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