

TUFFAK MIRROR POLYCARBONATE SHEET

TUFFAK Mirror is a virtually unbreakable mirror improving safety and eliminating the hazards associated with broken glass. The high optical quality polycarbonate substrate provides clear mirror images and outstanding strength and impact resistance. The product is lightweight (half the weight of mirrored glass) and a durable coating protects the mirrored second surface, making it easy to fabricate and install. TUFFAK Mirror polycarbonate sheet has a five (5) year Limited Product Warranty against breakage. The terms of the warranty are available on request.

APPLICATIONS

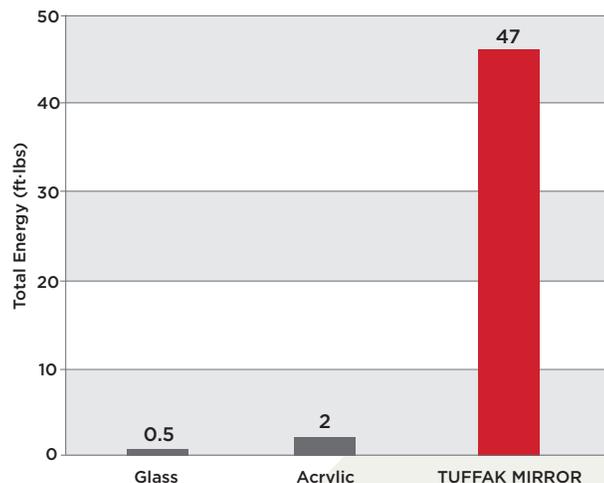
High traffic and abusive environments, jails, detention centers, gyms, hospitals, amusement parks, casinos, toys

Typical Properties*

Property	Test Method	Units	Values
PHYSICAL			
Specific Gravity	ASTM D792	-	1.2
Poisson's Ratio	ASTM E132	-	0.38
MECHANICAL			
Tensile Strength, Ultimate	ASTM D638	psi	9,500
Tensile Strength, Yield	ASTM D638	psi	9,000
Tensile Modulus	ASTM D638	psi	340,000
Elongation	ASTM D638	%	110
Flexural Strength	ASTM D790	psi	13,500
Flexural Modulus	ASTM D790	psi	345,000
Compressive Strength	ASTM D695	psi	12,500
Compressive Modulus	ASTM D695	psi	345,000
Shear Strength, Ultimate	ASTM D732	psi	10,000
Shear Strength, Yield	ASTM D732	psi	6,000
Shear Modulus	ASTM D732	psi	114,000
Instrumented Impact @ 0.118"	ASTM D256	ft-lbs/in	47
THERMAL			
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	3.75 x 10 ⁻⁵
Coefficient of Thermal Conductivity	ASTM C177	BTU-in/hr-ft ² -°F	1.35
Heat Deflection Temperature @ 264 psi	ASTM D648	°F	270
Heat Deflection Temperature @ 66 psi	ASTM D648	°F	280
Brittleness Temperature	ASTM D746	°F	-200
FLAMMABILITY			
Horizontal Burn, AEB	ASTM D635	in	<1
Ignition Temperature, Self	ASTM D1929	°F	1022
Ignition Temperature, Flash	ASTM D1929	°F	824

*Typical properties are not intended for specification purposes

Impact Resistance*



*Instrumented Impact per ASTM D3763, sample thickness is 0.125" nominal

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 determines the suitability of our materials and suggestions before adopting them on a commercial scale.