

FABBACK[®] SR (Scratch Resistant) Acrylic Mirrored Sheet Properties

PLASKOLITE

Scratch Resistant Mirror

FABBACK[®] SR acrylic mirror utilizes the industry's toughest protective back-coating to safeguard the sheet during fabrication. The mirrored surface is obtained through a vacuum metalising process with aluminum, which provides a superior reflecting surface. SR acrylic mirror sheets have a scratch resistant coating applied to the substrate surface for those demanding applications requiring abrasion, stain and solvent resistance. This proprietary hard coat provides these enhanced benefits associated with FABBACK and increases the versatility of the sheet.

In addition, the first surface (un-mirrored surface) of this sheet is protected with a scratch-resistant coating that provides additional chemical protection and anti-graffiti resistance in harsh environments.

Typical Properties

Physical	Test Method	Units	Values
Specific Gravity/Relative Density	ASTM D-792		1.19
Water Absorption	ASTM D-570		%
Pencil Hardness	ASTM D3363		>5H***
Abrasion Resistance - Change in Haze (100 cycles)	ASTM D1044	Haze %	5***
Mechanical	Test Method	Units	Values
Tensile Strength	ASTM D-638	psi	11,030**
Tensile Modulus of Elasticity	ASTM D-638	psi	490,000**
Flexural Strength	ASTM D-790	psi	17,000**
Izod Impact Strength - Notched	ASTM D-256	ft lb/in Notch	0.4**
Rockwell Hardness	ASTM D-785		M-95**
Thermal	Test Method	Units	Values
Maximum Recommended Continuous Service Temperature		°F	160
Deflecting Temperature @ 264 psi (1.8 MPa)	ASTM D-648	°F	203**
Deflecting Temperature @ 66 psi (0.45 MPa)	ASTM D-648	°F	207**
Coefficient of Thermal Expansion	ASTM D-696	in/(in-°F)	3.0 x 10 ⁻⁵ **
Flammability (Burning Rate)	ASTM D-635	In/minute	1.0**
Smoke Density Rating	ASTM D-2843	%	3.4**
Self-Ignition Temperature	ASTM D-1929	°F	833**

*Typical Properties are not intended for specification purposes

** Applicable to the acrylic substrate

*** Applicable to the hard coated first surface of the sheet

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.

FABBACK SR acrylic mirror is ideally suited for a variety of applications using standard plastic fabrication processes and techniques.

- ◆ Economical
- ◆ Does not shatter into sharp-edged pieces like glass
- ◆ More lightweight when compared to glass mirrors
- ◆ Made with OPTIX[®] Acrylic or Polycarbonate
- ◆ Can be custom made in clear in most size, thicknesses and 20 acrylic colours

Environmental Durability	Test Method	Result ***
High Humidity Testing	140°F / 95% RH / 168 HRS	Pass
Long Term Heat Resistance	104°F / 168 HRS	Pass
High Heat Resistance	140°F / 12 HRS	Pass
Long Term Low Temperature	-4°F / 168 HRS	Pass
Thermal Cycling	(-4°F / 12 HRS) + (140°F / 12 HRS) x 3 cycles	Pass

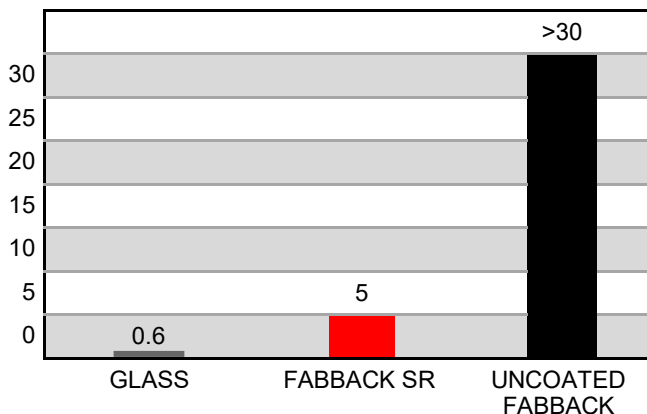
Solvent Exposure Result***	
Acetone	Good
Chlorine Bleach	
Fantastik [®] All purpose Cleaner	
Gasoline	
Methanol	
Methyl Ethyl Ketone	
Methylene Chloride	
10% Sodium Hydroxide	
40% Sulfuric Acid	
Windex [®] Glass Cleaner	

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Abrasion Resistance*



* Taber Abrasion per ASTM D1044, 100 cycles using CS-10F wheels at 500g load

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