

Product Data Sheet - See Through Acrylic Mirror Sheet



SCRATCH RESISTANT MIRROR

See Through Acrylic Mirror utilizes the industry's toughest protective back-coating to safeguard the sheet during fabrication. The mirrored surface is obtained through a vacuum metalizing process with aluminum, which provides a superior reflecting surface.

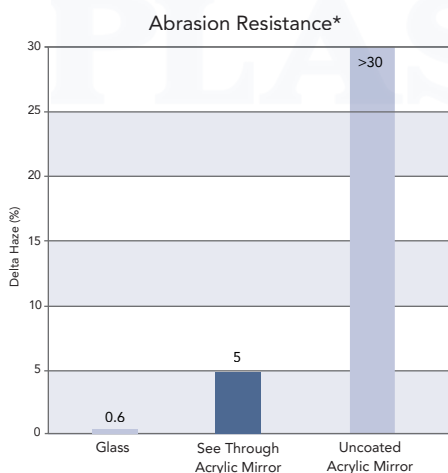
In addition, the first surface (unmirrored surface) of this sheet is protected with a scratch-resistant coating that provides additional chemical protection and anti-graffiti resistance in harsh environments.

This proprietary hardcoat provides these enhanced benefits while maintaining the optical benefits associated with See Through 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 as compared to than glass mirrors

APPLICATIONS

POP Displays, security mirrors, artwork, home furnishing, novelty, license plates, retail displays, table tops, door panels, scheduling boards, restaurant menu applications



*Taber Abrasion per ASTM D 1044, 100 cycles using CS-10F wheels at 500 g load

TYPICAL PROPERTIES*

Property	Test Method	Units	Values
PHYSICAL			
Specific Gravity/Relative Density	ASTM D792		1.19
Water Absorption	ASTM D570	%	0.4
Pencil Hardness	ASTM D3363		>5H***
Abrasion Resistance	-	-	-
Change in Haze (100 cycles)	ASTM D1044	Haze, %	5***
MECHANICAL			
Tensile Strength	ASTM D638	psi (MPa)	11,030**
Tensile Modulus of Elasticity	ASTM D638	psi (MPa)	490,000**
Flexural Strength	ASTM D790	psi (MPa)	17,000**
Izod Impact Strength – Notched	ASTM D256	ft-lb/in Notch	0.4** M-
Rockwell Hardness (M Scale)	ASTM D785	-	95**
THERMAL			
Maximum Recommended Continuous Service Temperature	-	°F	160
Deflection Temperature @ 1.8 MPa	ASTM D648	°F	203**
Deflection Temperature @ 0.45 MPa	ASTM D648	°F	207**
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	3.0x10 ⁻⁵ **
Flammability (Burning Rate)	ASTM D635	in/minute	1.0**
Smoke Density Rating	ASTM D2843	%	3.4**
Self-Ignition Temperature	ASTM D1929	°F	833**

* Typical Properties are not intended for specification purposes

** Applicable to the acrylic substrate

*** Applicable to the hardcoated first surface of the sheet

Environmental Durability	Test Method	Result***
High Humidity Testing	140°F / 95% RH / 168 HRS	Pass
Long Term Heat Resistance High	104°F / 168 HRS	Pass
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	

These data are presented only as typical properties of the base resins which, to our best knowledge, are true and accurate. However, since conditions of use are beyond our control, all recommendations or suggestions are presented without guaranty or responsibility on our part. We disclaim all liability in connection with the use of information contained herein or otherwise. All risks of such use are assumed by the user. Furthermore, nothing contained herein shall be construed as an inducement or recommendation to use any process or to manufacture or use any product in conflict with existing or future patents.