

## GENERAL DESCRIPTION

Acrylic sheeting is ideal for almost any fabrication or glazing application and exceeds industry standards for quality and safety and its impact-resistance will prohibit the sheet from shattering into sharp edged pieces like glass. Special UV stabilisation protects the sheet from yellowing and is backed by a 10 year limited warranty. Primary applications include fabrication, picture framing, skylights, displays, signage, lighting and point of purchase.

STRATUS Mirrored Acrylic is available in coloured, impact modified, green edged and patterned sheet. For fabricating convenience, the sheet can be ordered in custom sizes and thicknesses.

## PHYSICAL PROPERTIES

STRATUS Mirrored Acrylic is crystal clear, durable, weather-resistant and lightweight for easy transport and storage. It also offers the advantages of high molecular weight for ease of fabrication, low heat loss for economy and an attractive clear edge colour. It also comes available in a variety of colours; non-glare, patterned, translucent and transparent colours.

## SAFETY CONCERNS

STRATUS Mirrored Acrylic Sheeting will ignite and burn if placed in an open flame or in contact with any other source of ignition.

## SHEET TOLERANCES (On Line)

The sheet is produced with tolerances of  $\pm 1/16$ " length and width of sizes 42" and smaller. Sheet sizes greater than 42" up to 60" are produced to length and width tolerances of  $\pm 3/32$ ". All sheet sizes greater than 60" produced to length and width tolerances of  $\pm 1/8$ ".

## SHEET SQUARENESS (On Line)

STRATUS Mirrored Acrylic Sheeting is produced in squareness tolerances of  $\pm 1/8$ " on sizes 42" and smaller. Sheet sizes greater than 42" to 60" squareness is  $\pm 3/16$ " and sheet sizes greater than 60" squareness is  $\pm 1/4$ ".

## SHEET EDGES

Edges are supplied slit, hot sheered and saw cut.

## SHEET MASKING

The mirrored acrylic sheet is stocked with a 2mm Co-Ex masking, on 2 of the sides. Papermasking, TG paper replacement and 3mm formable film options are available upon request.

## MIRRORED ACRYLIC SHEET PROPERTIES

Physical Properties	ASTM Test Method	Units	Values
Specific Gravity	D-792		1.19
Optical Refractive Index	D-542		1.49
Light Transmittance	D-1003		
Total		%	92
Haze		%	2
Sound Transmission	E 90 E 413	db	27
Water Absorption	D-570	% by weight	0.40
Shrinkage	D-702	% shrinkage	<5%

Mechanical Properties	ASTM Test Method	Units	Values
Tensile Strength	D-638	psi	11,030
Tensile Elongation – max.		%	5.8
Tensile Modulus of Elasticity		psi	5.8
Flexural Strength – max.	D-790	psi	17,000
Flexural Modulus of Elasticity		psi	490,000
Izod Impact Strength – Molded Notch	D-256	ft-lb/in Notch	0.4
Izod Impact Strength – Milled Notch		ft-lb/in Notch	0.28
Tensile Impact Strength	D-1822	ft-lb/in <sup>2</sup>	20
Abrasion Resistance	D-1044		
Change in Haze			
0 cycles		Haze, %	0
10 cycles		Haze, %	11.2
50 cycles		Haze, %	24.0
200 cycles		Haze, %	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
Deflection Temperature	D-648		
264 psi		°F	203
66 psi		°F	207
Coefficient of Thermal Expansion -30 to 30°C	D-696	In/(in-°F) x10 <sup>-5</sup>	3.0
Thermal Conductivity	C-177	BTU-ft/(hr-ft <sup>2</sup> -°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	E-84		115
Smoke Developed Index			550

Chemical Properties	ASTM Test Method	Units	Values
Resistance to Stress – Critical Craze Stress to:	ARTC modification of MIL-P-6997		
Isopropyl Alcohol		psi	900
Lacquer Thinner		psi	500
Toluene		psi	1,300
Solvesso 100		psi	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.

## FREQUENTLY ASKED QUESTIONS

### What is Mirrored Acrylic?

Mirrored Acrylic is an acrylic sheet with a high quality mirror finish.

### What is Mirrored Acrylic used for?

Mirrored Acrylic is used for creating a mirrored effect room where glass is prohibited.

### What is the best thing about Mirrored Acrylic?

The best thing about Mirrored Acrylic is it can be fabricated easily.

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**Why should end users use STORM's Mirrored Acrylic instead of a competitors?**

End users should use STORM's Mirrored Acrylic instead of a competitors because it is easily accessible and STORM can offer a full fabrication service.

**Who are the type of customers that commonly use Mirrored Acrylic (which industries/sectors/job types)**

The type of customers to use this product would most likely be in the glazing industry.

**Where is Mirrored Acrylic most commonly installed?**

Mirrored Acrylic is most commonly installed in residential homes and educational facilities.

**When should Mirrored Acrylic be considered and installed?**

Mirrored Acrylic should be considered and installed during refurbishment.