APPLICATIONS

FABRICATION CONSTRUCTION GLAZING PRINT & DISPLAY

marcryl

HIGH GLOSS ACRYLIC SHEET

Marcryl high gloss acrylic sheet offers a combination of excellent optical clarity and weatherability yet it is only half the weight of glass. The product is manufactured under stringent quality controls to ensure a highly consistent premium product. Its versatility, ease of fabrication and scratch resistance make Marcryl the ultimate choice for use in interior design, point of sale and display applications, fabrications and building industries. The option exists to flame polish Marcryl FS which creates a bright, shiny edge finish and is particularly effective on the silica green material.

OPTIONS

- Thicknesses: 2 - 10mm
- Colour: Clear
- Non Standard Tints: Opal & Silica Green - available with a green edge which looks like tempered glass

MAIN BENEFITS

- Up to 92% light transmission (3mm clear)
- Easy to fabricate and excellent thermoforming capabilities
- Easy to mount
- Good scratch resistance, polishing removes scratches easily
- UV stable
- Outstanding weatherability and resistance to high temperatures
- Weight savings over glass
- Inert to many corrosive materials
- Good thermal insulation
- High gloss finish
- Can be cold curved to certain minimum radii
- High break resistance
- Limited 10 year warranty

APPLICATIONS

Print & Display

- Illuminated & non-Illuminated signage
- Displays
- Point of Purchase/Sale
- Poster Covers
- Menu Boards
- Store Fixtures
- 3-Dimensional Signs & Displays

Fabrication

- Glazing
- Light Fittings
- Decoration
- Furniture
- Interior Design Projects
- Picture Framing
- High Traffic Acoustic Barriers

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STANDARD RANGE

COLOUR	SHEET SIZE (mm)	SHEET THICKNESS (mm)
Clear (S)	1250 x 2500	2, 3, 4, 5 & 6
	2050 x 3050	2, 3 ,4, 5, 6, 8 & 10

PHYSICAL PROPERTIES

PROPERTIES		TEST METHOD	VALUE	UNITS
Physical Properties	Density	DIN 53479	1.19	g/cm^3
	Water Absorption in Water Equilibrium, 23°C	DIN 53495:A	0.3	%
Mechanical Properties	Tensile Strength at Break	DIN 53455	>70	MPa
	Tensile Modulus	DIN 53457	3200	MPa
	Impact Strength @ 23°C (unnotched Charpy)	ISO 179 1/1eU	20	kJ/m^2
Optical Properties	Light Transmission Clear	DIN 5036	92	%
	Haze	ASTM D 1003	0.5	%
	Refractive Index (np)	ISO 489	1.491	%
Thermal Properties	Coefficient of Thermal Expansion	DIN 53752	70	$m/m.K \times 10^{-6}$
	Thermal Conductivity	DIN 52612	0.19	W/m.K
	Maximum Continuous Service Temperature		80	°C

FABRICATION

Marcryl is easily fabricated, it is similar to hardwood. It can be machined, sawn, cut and drilled. Excellent results can be achieved on Marcryl FS using both routing and engraving techniques. Marcryl can be bonded to itself and other material.

Die cutting and guillotining- Prior to die-cutting or guillotining Marcryl, sheets must be heated to between 100-140°C. When die-cutting or guillotining heated material, allow for expansion and contraction. Additional details on how to work with Marcryl is available on request.

INSTALLATION AND MAINTENANCE

Marcryl FS sheets are often mounted into frames; care must be taken to avoid breakage or distortion. The sheets have a high coefficient of thermal expansion and therefore sufficient space must be left for expansion, both of the sheet itself and any fixing holes needed.

Note: the edges of Marcryl FS sheets can be quite sharp and gloves should be worn when handling.

Marcryl can be easily cleaned with a soft cloth or sponge, using mild soap or detergent. Rinse and dry with a soft 100% cotton cloth or moist cellulose sponge to prevent water spotting.

THERMOFORMING

Methods of Thermoforming that can be easily used on Marcryl include:

Vacuum forming- A versatile method of forming, generally used for simple shapes.

Drape forming- Can be used to produce designs of greater depth than vacuum forming.

Mould forming- Uses two moulds, producing more accurate shapes.

Free forming- No mark-off is created with this method.

Please note: It is recommended that the protective film is removed before pre-drying or thermoformingas heating may result in it adhering to the sheet.

CHEMICAL RESISTANCE

Marcryl FS is highly resistant to attack from chemicals and from atmospheric pollutants. Contact with strong solvents, acids or alkalis must be avoided. See technical guide for full information details.

WEATHER & UV RESISTANCE

Marcryl FS has excellent weather resistance; acrylic is the most weather resistant of all plastics.

WARRANTY

BRETT MARTIN ACRYLIC 10 YEAR LIMITED WARRANTY

bsi. ISO 9001 Quality Management Q09125

7 OTHER

Non Toxic Complaint Heavy Metal Free

BRETT MARTIN Plastic Sheets

Tel +44 (0) 28 9084 9999
Fax +44 (0) 28 9083 6666
mail@brettmartin.com
www.brettmartin.com