Technical Information

PLEXIGLAS®

Multicolored acrylic sheets in an unlimited variety of colors

Product

Multicolored PLEXIGLAS® is a solid acrylic sheet material consisting of two or three layers. The individual layers can be transparent, translucent or opaquely colored. Combinations of these options are also possible.

Our special manufacturing process offers the following variations, among others:

- one surface with a piano lacquer effect
- smooth or satin surfaces
- a transparent intermediate layer
- a colored intermediate layer
- individual house colors

Properties

The multicolored PLEXIGLAS® grades naturally offer the proven properties of PLEXIGLAS®, such as:

- excellent light transmission and brilliance
- extremely high weather resistance
- ease of fabrication
- high surface hardness
- low weight – half the weight of glass
- 100% recyclability
- 11 times the impact strength of glass

Applications

- Kitchens (niche panels)
- Living rooms (wall design)
- Interior design in hotels, restaurants, offices….
- Exhibition booths, furniture, store fixtures
- Façade construction
- Displays
- Illuminated shelves

Machining

Multicolored PLEXIGLAS® can be machined just like standard PLEXIGLAS®.

The following Guidelines for Workshop Practice are available for PLEXIGLAS®:

- Machining PLEXIGLAS® (Ref. No. 311-1)
- Forming PLEXIGLAS® (Ref. No. 311-2)
- Joining PLEXIGLAS® (Ref. No. 311-3)
- Surface Treatment of PLEXIGLAS® (Ref. No. 311-4)
- Fabricating Tips for PLEXIGLAS® Solid Sheet (Ref. No. 311-5)

Physical form

The multicolored PLEXIGLAS® grades are available in standard sizes of 3,050 mm x 2,050 mm and in thicknesses of 3 – 10 mm. Greater lengths up to 12.5 m are possible in an extrusion width of 2,050 mm.

Scratch-resistant coating

Multicolored PLEXIGLAS® can also be provided with a scratch-resistant coating. Feel free to ask us for details!

For information on other typical values, please consult the Technical Information sheet on PLEXIGLAS® GS/XT (211-1). The typical values listed there also apply to multicolored PLEXIGLAS®.

Typical values

Mechanical properties	PLEXIGLAS® multicolored	Unit	Test standard
Density	1.19	g/cm³	ISO 1183
Charpy impact strength	15	kJ/m²	ISO 179/1fu
Tensile strength	72	MPa	DIN EN ISO 527
Elongation at break	4.5	%	DIN EN ISO 527
Modulus of elasticity	3300		DIN EN ISO 527
Min. permissible cold bending radius	330 x thickness		-
Ball indentation hardness H961/30	175 MPa		ISO 2039-1
Thermal properties			
Vicat softening temperature	103	°C	ISO 306, B50
Max. permanent service temperature	70	°C	-
Fire class		B2	DIN 4102
		E	DIN EN 13501
Behavior in water			
Water absorption (24 h, 23°C) compared to dry specimen 50 x 50 x 2 mm³	38	mg	ISO 62, method 1

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