PolyColour XT Sheet Materials

TRANSPARENT TINTED POLYCARBONATE SHEET

- Wide range of transparent colours
- 10 times the impact strength of hi-impact PMMA
- Shatter-proof, idea in playground environments
- Easy to machine and thermoform
- Half the weight of glass
- No heavy metals
- No Phthalates

SHEET SIZES AND THICKNESS

Typical Sheets size: 1250mm x 2450mm
Available Thickness: 3mm
Texture: None, smooth clear

APPLICATIONS

For glazing, signs, displays, machine protection and in other applications where a high impact strength and good aesthetics are needed.

PolyColor XT offers a wide range of extruded transparent coloured polycarbonate sheet. The product is produced with vast knowledge of our production team experienced in producing mono, co and tri-extrusion.
The product is virtually unbreakable with extremely high impact resistance and offers high temperature performance too.

PolyColor XT provides designers, specifiers and architects with possibilities to use transparent coloured polycarbonate sheets in applications where high clarity and optical performance is required.

Fahr offers a range of 4 standard coloured tints but other colours are available subject to minimum order quantities.

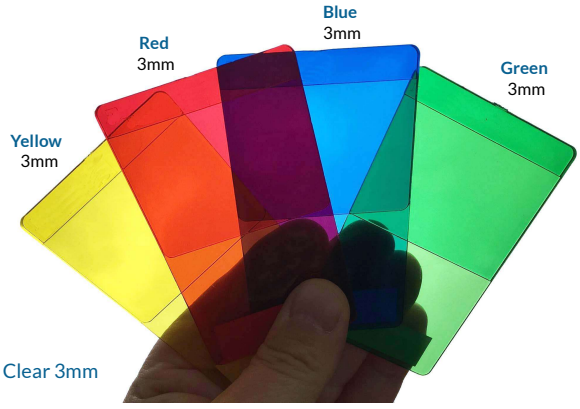
SHEET TYPE: Extruded polycarbonate

SHEET DIMENSIONS: 1250mm x 2450mm

SHEET THICKNESS: 3mm from stock, other thickness' available to order, subject to a minimum order quantity of 3000 Kg.

STOCK COLOURS: Red, Yellow, Blue and Green from stock, other colours are available subject to a minimum order quantity of 3000 Kg dependant on colour required.

FIRE PERFORMANCE: Complies to EN 13501-1 (EUROPEAN BUILDING STD). In case of fire, the sheet will melt and allow venting where heat and smoke will be let out and therefore reduce the growth of fire by flame spread.



Also available in Clear 3mm

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PolyColour XT Technical Spec

TRANSPARENT TINTED POLYCARBONATE SHEET

PROPERTY	VALUE	UNIT	STANDARD
PHYSICAL PROPERTIES			
Density	1,2	g/cm^3	ISO 1183
Refractive index (20 °C)	1,586		ISO 489
Moisture absorption 24 hours, 23 °C, 50% RH	0,15	%	ISO 62
MECHANICAL PROPERTIES			
Tensile strength at yield (at break)	60 (70)	N/mm^2	ISO 527
Elongation at yield (at break)	6 (110)	%	ISO 527
Elastic modulus	>2300	N/mm^2	ISO 527
Flexural modulus	>2300	N/mm^2	ISO 178
Charpy unnotched impact strength -40 °C	NB	kJ/m^2	ISO 179/1eU
Charpy notched impact strength -30 °C	11	kJ/m^2	ISO 179/1eA
Izod notched impact strength +23 °C	65	kJ/m^2	ISO 180/1A
Izod notched impact strength -30 °C	10	kJ/m^2	ISO 180/1A
THERMAL PROPERTIES			
Linear coefficient of thermal expansion (20-70 °C)	$65x10^{-6}$	K^{-1}	ISO 11359-2
Heat deflection temperature, HDT A (1,80 N/mm^2)	132	°C	ISO 75
Heat deflection temperature, HDT B (0,45 N/mm^2)	142	°C	ISO 75
Vicat temperature VST/B 120	149	°C	ISO 306
Vicat temperature VST/B 50	148	°C	ISO 306
Thermal conductivity	0,20	W/m.K	DIN 8302
ELECTRICAL PROPERTIES			
Volume resistivity, dry	$>10^{14}$	Ω . m	IEC 60093
Surface resistivity, dry	10^{16}	Ω	IEC 60093
Dielectric strength, dry	30	kV/mm	IEC 60243
Dielectric constant, dry 50 Hz	3		IEC 60250
Dielectric constant, dry 1 MHz	2,9		IEC 60250
Dissipation factor (tan δ), dry 50 Hz	0,001		IEC 60250
Dissipation factor (tan δ), dry 1 MHz	0,01		IEC 60250

Properties reported here are typical values. Fahr makes no representation that the material in any particular shipment will conform exactly to the values given. The above information is based upon experience and given in good faith. Due to many factors which are outside our knowledge and control, no warranty is given or is to be implied with respect to such information. Detailed product specification and technical manual/information is available on request.

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