Hammerglass®

POLYCARBONATE COLOURED SC sheet is developed for applications where heat or Solar Radiation is reflected or absorbed providing low heat build up, good light transmission and ambiance. The Solar control product provides heat build up protection hence used for applications to reduce air conditioning costs.

POLYCARBONATE COLOURED SC has a unique colour tint which allows the sheet to have outstanding transparency or clarity.

For outdoor application:
POLYCARBONATE COLOURED UV SC is needed, or coated surface, containing UV protection.

POLYCARBONATE COLOURED SC

BENEFITS:

- The sheet absorbs IR heat and creates a stable indoor climate
- More than 30 times the impact strength of PMMA
- Half the weight of glass
- Suitable for hard coating

APPLICATION AREAS:

In combination with UV co-ex, or hard coat: Building industry roofing, cladding, sidewalls, conservatories, domes, skylights, sheds, car ports, smoke vents, swimming pool covers, glasshouses, shopping center roofing, railway/metro station and stadia roofing. Agriculture greenhouses, lorry/tractor ports and farm/barn buildings.

DELIVERY PROGRAM:

Thickness: 12 mm

Colour: SG 74

Special sizes and thicknesses on request.

POLYCARBONATE COLOURED SC TYPICAL PROPERTY VALUES

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 h, 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			
Coefficient of linear 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	ISO 8302
Electrical properties			
Volume resistivity, dry	$>10^{14}$	Ω.m	IEC 62631
Surface resistivity, dry	10^{16}	Ω	IEC 62631
Dielectric strength, dry	30	kV/mm	IEC 60243
Dielectric constant, dry 50 Hz	3		IEC 62631
Dielectric constant, dry 1 MHz	2,9		IEC 62631
Dissipation factor (tan δ), dry 50 Hz	0,001		IEC 62631
Dissipation factor (tan δ), dry 1 MHz	0,01		IEC 62631
Spectral properties			
Light transmittance Tv			
3 mm SG 74	≥70	%	ASTM D1003
Total solar energy transmittance g			
3 mm Green SG 74	63	%	EN 14500