

MULTICLEAR® 5X

MULTICLEAR® 5X is a range of extruded multiwall polycarbonate sheet specifically designed to offer increased stiffness allowing cost saving by using less glazing bars for installations hence increased light transmittance.

MULTICLEAR® 5X is transparent and translucent sheet with one or two sides UV protection.

Standard production available in thickness 10, 16, 20 and 25 mm in clear, opal and bronze colour.

Dust free knife cutting used in all formatting operations.

MULTICLEAR® 5X has a 10-year limited warranty against discolouration, loss of impact strength and light transmission due to weathering.

Excellent fire performance: 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. Classification B-s1, d0 according to EN 13501-1 (Fire classification of construction products and building elements – reaction to fire tests.)

ALSO AVAILABLE:

MULTICLEAR® HAMMER FINISH MULTICLEAR® SOLAR CONTROL

MULTICLEAR® 5X BENEFITS:

- · High light transmission
- Outstanding bending radius
- · Cross structure offering greater stiffness
- · Good thermal insulation

APPLICATION AREAS:

Building industry – roofing, cladding, sidewalls, conservatories, domes, skylights, sheds, car ports, smoke vents, swimming pool covers, suspended ceilings, glasshouses, shopping centre roofing, railway/metro station, stadia roofing and partitions.

Agriculture – greenhouses, lorry/tractor ports and farm/barn buildings.

Packaging – boxes for lamp optics, neon signs, pallet shields and protective covers for fragile items.

Advertising – illuminated signs and panels.

MULTICLEAR® 5X TECHNICAL SPECIFICATIONS

Multiclear® 5X	Thickness [mm]	Rib distance [mm]	Mass per unit area [g/m²]	U-value [W/m²*K]	Width [mm]				107-14-	Standard colours		
					2100	1250	1200	980	UV side option	Clear	Opal	Bronze
	10	10	1500	2,5	K	K	K	K	1(2)	K	K	>
			1600						1(2)			
			1700						1(2)			
	16	10	2400	2,0	V	V	V	V	1(2)	•	V	V
			2500						1(2)			
			2600						1(2)			
10 mm	20	10	2800	1,8	>	>	V	Y	1(2)			V
			3000						1(2)	•		•
	25	10	3200	1,6	>	>	V	Y	1(2)	Y	>	V
			3400						1(2)	>	•	

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 break	60 (70)	N/mm²	ISO 527	
Elongation at yield (at break)	6 (110)	%	ISO 527	
Elastic modulus	>2300	N/mm²	ISO 527	
Flexural modulus	>2300	N/mm²	ISO 178	
Charpy unnotched impact strength -40°C	NB	kJ/m²	ISO 179/1eU	
Charpy notched impact strength -30°C	11	kJ/m²	ISO 179/1eA	
Izod notched impact strength +23 °C	65	kJ/m²	ISO 180/A	
Izod notched impact strength -30 °C	10	kJ/m²	ISO 180/A	
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/mm²)	132	°C	ISO 75	
Heat deflection temperature, HDT B (0,45 N/mm²)	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	

Properties reported here are typical values for polycarbonate. Arla Plast 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.

