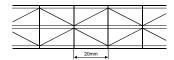


# MULTICLEAR® LIGHT



MULTICLEAR® LIGHT is an 8 wall extruded multiwall polycarbonate sheet. The product offers increased light transmission and light weight for an 8 layer product. MULTICLEAR® LIGHT also offers cost saving by using less electricity for lighting, excellent thermal insulation and lower weight per/kg. The product offers outstanding aesthetic quality replacing glass and other plastics in continuous glazing applications.

MULTICLEAR® LIGHT is transparent and translucent with one side UV protected sheet. Standard colours are clear, opal and bronze. Available in thicknesses 25, 32, 35 and 40 mm.

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

## **ALSO AVAILABLE:**

MULTICLEAR® HAMMER FINISH, MULTICLEAR® SOLAR CONTROL (UV protected), MULTICLEAR® RPC.

EXCELLENT FIRE PERFORMANCE complying requirements 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.

#### **MULTICLEAR® LIGHT BENEFITS:**

- Good light transmission
- · Excellent thermal insulation
- More than 10 times the impact strength of PMMA
- More than 4 times the impact strength of PVC
- Light weight simple handling and installation

### **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. Lighting/packaging—lamp optics and neon signs boxes, pallet shields, protective covers for fragile items. Advertising—illuminated signs and advertising panels. Agriculture—greenhouses, lorry/tractor ports and farm/barn buildings.

#### **MULTICLEAR® LIGHT TECHNICAL SPECIFICATIONS**

MULTICLEAR® LIGHT	Thickness mm	Step mm	Weight g/m²	K-Value W/m²K	Width mm		UV Side	Colour		
					2100	1250	1200		Opal	Bronze
	25	20	3400	1,5	$\checkmark$	$\checkmark$	$\checkmark$	1(2)	$\checkmark$	$\checkmark$
	32	20	3600	1,3	$\checkmark$	$\checkmark$	$\checkmark$	1(2)	$\checkmark$	$\checkmark$
	35	20	3800	1,2	$\checkmark$	$\checkmark$	$\checkmark$	1(2)	<b>√</b>	$\checkmark$
	40	20	4000	1,1	$\checkmark$	$\checkmark$	$\checkmark$	1(2)	$\checkmark$	$\checkmark$

Property	Value	Unit	Standard	
Physical properties				
Density	1,2	g/cm³	ISO 1183	
Refractive index	1,586		ISO 489	
Moisture absorption 24 hours, 23 °C, 50% RH	0,15	%		
Mechanical properties				
Tensile strength at yield (break)	63 (70)	N/mm²	ISO 527	
Tensile elongation at yield (break)	6 (110)	%	ISO 527	
Elastic modulus	2300	N/mm²	ISO 527	
Flexural modulus	2300	N/mm²	ISO 178	
Charpy unnotched impact strength +23 °C	NB	kJ/m²	ISO 179/2D	
Charpy unnotched impact strength -40 °C	NB	kJ/m²	ISO 179/2D	
Izod notched impact strength +23 °C	65	kJ/m²	ISO 180/1A	
Izod notched impact strength -30 °C	10	kJ/m²	ISO 180/1A	
Rockwell hardness	M70		ISO 2039-2	
Thermal properties				
Linear coefficient of thermal expansion (23-80 °C)	0,7	10 <sup>-4</sup> x K <sup>-1</sup>		
Vicat temperature VST/B 120	149	°C	ISO 306	
Vicat temperature VST/B 50	148	°C	ISO 306	
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	
Specific heat capacity, Cp	1,17	kJ/kg.K		
Thermal conductivity	0,21	W/m.K	DIN 52612	

Properties reported here are typical values. 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.

