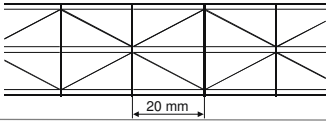


# MULTICLEAR<sup>®</sup> LIGHT 16 & 20 mm



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

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

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

#### ALSO AVAILABLE:

MULTICLEAR<sup>®</sup> (hammer finish), MULTICLEAR<sup>®</sup> SOLAR CONTROL (heat reducing), MULTICLEAR<sup>®</sup> 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.

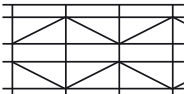
#### MULTICLEAR<sup>®</sup> LIGHT BENEFITS:

- 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/package 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 16 & 20 MM TECHNICAL SPECIFICATIONS

MULTICLEAR® LIGHT 8 Wall	Thickness mm	Step mm	Weight g/m <sup>2</sup>	U-Value W/m <sup>2</sup> K	Width mm			UV Side	Colour	
					1250	1200	980		Opal	Bronze
	16	16	2700	1,8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1(2)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	20	16	3000	1,6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1(2)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### MULTICLEAR® LIGHT – LIGHT TRANSMISSION

%

Thickness mm	Clear	Opal
16	63	45

### MULTICLEAR® LIGHT 8 WALL

### LIGHT 16 mm

### LIGHT 20 mm

Width of the sheet mm	600	625	980	1250	600	625	980	1250
Load N/m <sup>2</sup>	Length of the sheets mm							
500	>6000	>6000	>6000	2700	>6000	>6000	>6000	3200
750	>6000	>6000	2800	2000	>6000	>6000	3600	2300
900	>6000	>6000	2300	1800	>6000	>6000	2775	2050
1200	>6000	>6000	1950	1650	>6000	>6000	2150	1775
1500	4600	3800	1700	1425	>6000	>6000	1950	1575
2000	2500	2300	1500	1300	3200	2800	1600	1250

### Minimum Bending Radius

LIGHT 16 mm: 2800 min.

LIGHT 20 mm: 3500 min.

Property	Value	Unit	Standard
<b>Physical properties</b>			
Density	1,2	g/cm <sup>3</sup>	ISO 1183
Refractive index (20 °C)	1,586		ISO 489
Moisture absorption 24 hours, 23 °C, 50% RH	0,15	%	
<b>Mechanical properties</b>			
Tensile strength at yield (at break)	63 (70)	N/mm <sup>2</sup>	ISO 527
Elongation at yield (at break)	6 (110)	%	ISO 527
Elastic modulus	2300	N/mm <sup>2</sup>	ISO 527
Flexural modulus	2300	N/mm <sup>2</sup>	ISO 178
Charpy unnotched impact strength +23 °C	NB	kJ/m <sup>2</sup>	ISO 179/2D
Charpy unnotched impact strength -40 °C	NB	kJ/m <sup>2</sup>	ISO 179/2D
Izod notched impact strength +23 °C	65	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength -30 °C	10	kJ/m <sup>2</sup>	ISO 180/1A
Rockwell hardness	M70		ISO 2039-2
<b>Thermal properties</b>			
Linear coefficient of thermal expansion (23-80 °C)	0,7	10 <sup>-4</sup> x K <sup>-1</sup>	
Heat deflection temperature, HDT A (1,80 N/mm <sup>2</sup> )	132	°C	ISO 75
Heat deflection temperature, HDT B (0,45 N/mm <sup>2</sup> )	142	°C	ISO 75
Vicat temperature VST/B 120	149	°C	ISO 306
Vicat temperature VST/B 50	148	°C	ISO 306
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.