

MULTICLEAR®

11Wall

MULTICLEAR® 11Wall is an 11 wall extruded multiwall polycarbonate sheet which offers increased light transmission with acceptable light weight for an 11 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® 11Wall is a transparent and translucent sheet with one or two sides UV protection.

Standard production available in thickness 25 and 32 mm in clear, opal and bronze color.

MULTICLEAR® 11Wall has a 10 year limited warranty against discoloration, 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® 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

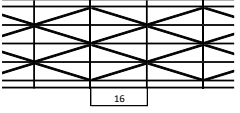
APPLICATION AREAS:

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

Agriculture - greenhouses, farm/barn buildings

Advertising – illuminated signs and panels

MULTICLEAR® 11Wall TECHNICAL SPECIFICATIONS:

| Multiclear® 11Wall | Thickness [mm] | Rib distance [mm] | Mass per unit area [g/m ²] | U-value [W/m ² *K] | Width [mm] | | | | UV side option | Standard colours | | |
|--|----------------|-------------------|--|-------------------------------|------------|------|------|-----|----------------|------------------|------|--------|
| | | | | | 2100 | 1250 | 1200 | 980 | | Clear | Opal | Bronze |
|  | 25 | 16 | 3200 | 1,4 | ☑ | ☑ | ☑ | ☑ | 1(2) | ☑ | ☑ | ☑ |
| | | | 3400 | | | | | | 1(2) | | | |
| | 32 | 16 | 3600 | 1,2 | ☑ | ☑ | ☑ | ☑ | 1(2) | ☑ | ☑ | ☑ |
| | | | 3700 | | | | | | 1(2) | | | |

| Property | Value | Unit | Standard |
|--|---------|------------------------------------|------------|
| Physical properties | | | |
| Density | 1,2 | g/cm ³ | 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/mm ² | ISO 527 |
| Tensile elongation at yield (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 +23 °C | NB | kJ/m ² | ISO 179/2D |
| Charpy unnotched impact strength -40 °C | NB | kJ/m ² | ISO 179/2D |
| 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 |
| Rockwell hardness | M70 | | ISO 2039-2 |
| Thermal properties | | | |
| Linear coefficient of thermal expansion (23-80 °C) | 0,7 | 10 ⁻⁴ x K ⁻¹ | |
| 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/mm ²) | 132 | °C | ISO 75 |
| Heat deflection temperature, HDT B (0,45 N/mm ²) | 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 give. 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.

