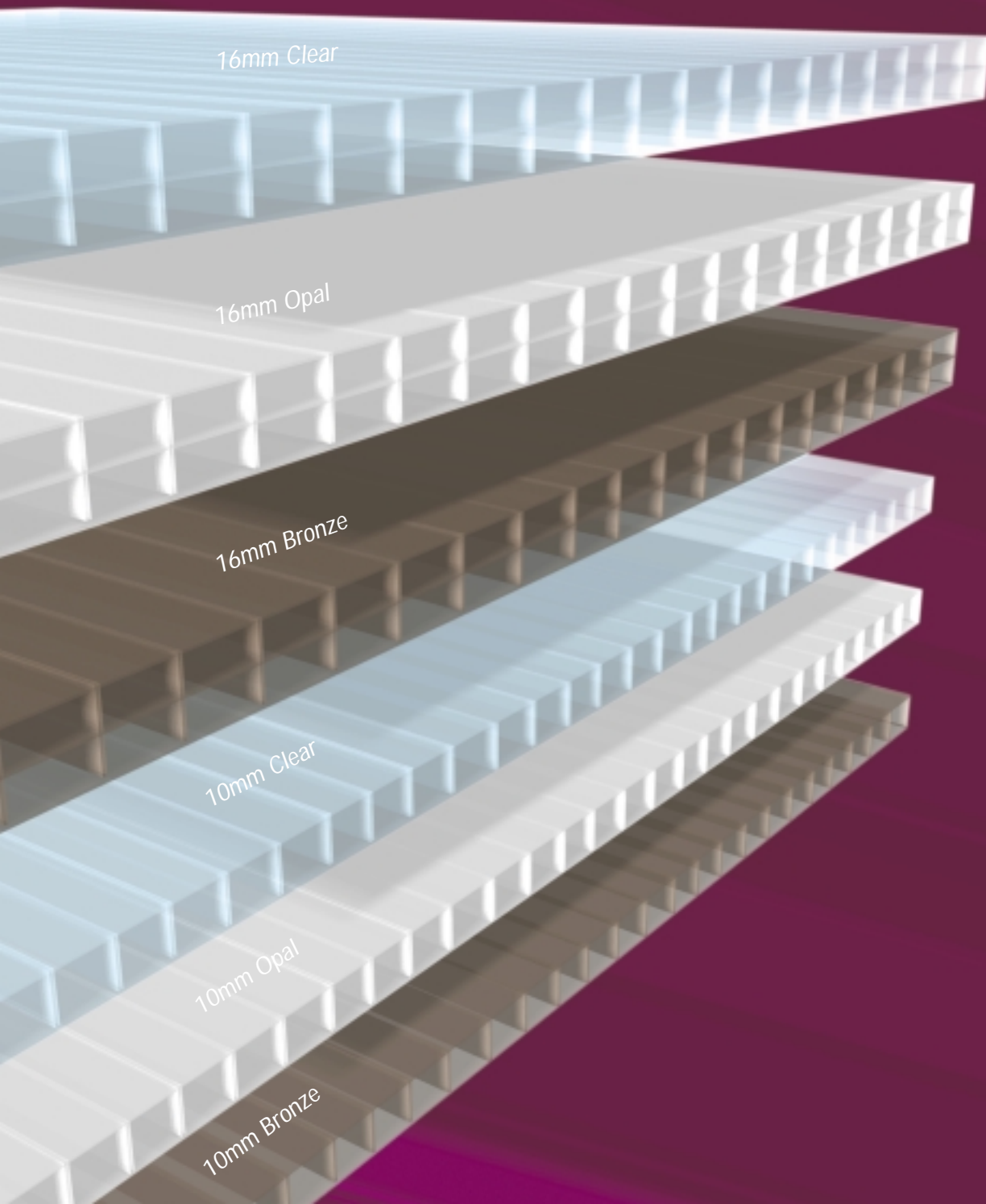




TWIN AND TRIPLE WALL
POLYCARBONATE SHEETS

LONGLIFE





Macrolux Longlife is a high performance polycarbonate sheet. During manufacture a layer of UV absorber is co-extruded onto the outer surface of the sheet, forming a barrier against UV radiation. This gives Macrolux Longlife exceptional resistance to ageing without effecting mechanical properties and impact strength.

Although light in weight, Macrolux Longlife is 200 times stronger than glass and virtually shatterproof.

► **LIGHT TRANSMISSION**

Macrolux Longlife sheets provide a wide variety of thicknesses with light transmissions ranging from 34% to 83%.

They have been independently tested by the TNO Centre, Netherlands, for changes in optical properties after a period of 10 years; no significant changes were found (Full test report available on request).

► **MACROLUX LONGLIFE PROPERTIES**

Profile	4mm	4.5mm	6mm	8mm	10mm	10mm	16mm
Structure	TW	TW	TW	TW	TW	TRW	TRW
Approximate weight g/m ²	800	1000	1300	1500	1700	2000	2700
Light Transmission %							
- Clear	83	83	82	81	77	76	72
- Bronze	70	70	70	50	45	34	40
- Opal	54	54	54	46	54	51	46
U-Value w/m ² K	4.0	3.9	3.6	3.3	3.2	3.0	2.3
Falling dart Gardiner impact at RT Nm	19.6	21.3	>27	>27	>27	>27	>27
Impact strength maintained over a temperature range from -40°C to + 120°C							
Coefficient of linear expansion 0.065mm/m°C Elasticity Modulus E-2300 N/mm ² Thermal conductivity 0.21 W/m ² K							

TW = TWIN-WALL TRW = TRIPLE-WALL

Available from

► **THERMAL INSULATION**

Because of their multi-walled construction, Macrolux Longlife Sheets provide excellent thermal insulation compared with glass and other glazing materials. Energy savings of over 50% can be achieved.

Relative U-values

Sheet Thickness mm	Macrolux Longlife	Single Glass	Double Glass
4	4.0	5.8	-
4.5	3.9	5.8	-
6	3.6	5.8	-
8	3.3	5.7	-
10 TW	3.2	5.7	3.0
10 TRW	3.0	5.7	3.0
16 TRW	2.6	5.5	3.0

► **STANDARD AVAILABILITY**

Macrolux Longlife is available in a full range of widths from 600 mm to 2100 mm with closed side edges and in lengths of up to 12 metres.

Standard widths for 16mm Triple-wall are 700mm, 980mm, 1050mm, 1200mm and 2100mm all of which are available from stock in a variety of lengths or cut to size shapes as required.

► **BENDING RADIUS**

When cold-curved the minimum radius should not be less than 150 times the thickness of the sheet.

► **FIRE PERFORMANCE**

Macrolux Longlife is classed as Self-Extinguishing and has been independently tested to all European standards including BS476 Part 7 and BS476 Part 6. It has a Class 1 surface spread of flame and can be recommended for use as a Class 'O' Building Material.

Under Approved Document B of the 1991 Building Regulations, most Macrolux Longlife sheets can be classified as TP(a) Rigid and regarded as having an AA designation, as specified in BS476 Part 3.

► **MACROLUX GUARANTEE**

Macrolux Longlife Polycarbonate Sheets carry a limited 10 year guarantee against discolouration, ageing and resistance to hailstones. Full details available on request.