

# DATASHEET

## MULTIWALL POLYCARBONATE

Multiwall polycarbonate allows combinations of different colours in one sheet and adds a multi-layer technological edge to the already wide range of products. Multiwall polycarbonate products provide the benefits of solar energy treatment, delivering cool, natural light without sacrificing the interior. Multiwall polycarbonate adds new attractive dimension to any conservatory, and may also appeal to architects, who would appreciate this creative element when designing structures.

### Applications

- Architectural Building Cladding, Roofing & Glazing
- Skylights & Sidelights
- Conservatory Roofing
- Covered Walkways
- Sunrooms, Patio & Pergola Roofing
- Illuminated Signage & Backdrops
- Decorative Partitions
- Greenhouse Panels

### Benefits

- High thermal insulation
- Lighter weight than solid panels
- Excellent rigidity and impact resistance
- Available with a variety of colour and light transmission options
- Superior structural ability
- Weather & UV resistant
- Blocks virtually all UV radiation
- Easy to handle and install
- High performance fire rating

### Typical Properties

| General Properties                              | Conditions   | Units             | Value       |
|---|--------------|-------------------|-------------|
| Density (D-792)                                 |              | g/cm <sup>3</sup> | 1.2         |
| Heat Deflection Temperature (D-648)             | Load 1.82 MP | °C                | 130         |
| Short Term Service Temperature Range            |              | °C                | -50 to +120 |
| Long Term Service Temperature Range             |              | °C                | -50 to +100 |
| Coefficient of Linear Thermal Expansion (D-696) |              | 10(-5)/°C         | 6.5         |
| Tensile Strength at Yield (D-638)               | 10mm/min     | MPa               | 62          |
| Elongation at Break (D-638)                     | 10mm/min     | %                 | >80         |
| Impact Falling Dart (ISO 6603/1)                |              | J                 | 40 – 400    |
| Thermal Expansion / Contraction Range           |              | Mm/m              | 3           |

### Flammability

| Method     | Classification |
|------------|----------------|
| BS 476/7   | Class 1        |
| DIN 4102   | B-1            |
| NSP 92501  | M-1, M-2       |
| ASTM D-635 | CC-1           |
| ASTM E-84  | Class A        |