

Clear Polycarbonate Sheets (PC sheets)

Our Clear Solid Polycarbonate Sheets are crafted from prime quality virgin raw materials sourced from top-tier suppliers in Europe and Saudi Arabia.

Ranges of Polycarbonate sheets

- Solid Polycarbonate Sheet
- Embossed/Textured polycarbonate Sheet
- Crystal Polycarbonate Sheet
- Polycarbonate antiglare (AG Sheet)
- All of the above are available in an extensive range of colors. Custom colors are possible based on meeting our MOQ levels

Applications of Polycarbonate sheets

1. Construction Industry

- Partition walls
- Door glazing
- Roofing
- Skylights for caravans
- Solariums
- Sound barrier walls
- Sunshade for stadiums and bus stations, gazebo, carport, canopy for corridors and subway entries
- Flashing for roofs, bank ATMs and gateways
- Agricultural greenhouse roofing and walls
- Soundproof partitions, Glazing windows and gates

2. Advertisement and Signage industry

- Moulded letters
- Store displays
- Shop fittings
- Illuminated graphic panels
- Lettering templates
- Photo quality flatbed printing

3. Engineering Components

- Machine housing
- Machine safety covers
- Other Applications

Features of Polycarbonate sheets

- Impact strength: The impact strength of solid PC sheets is 200 times that of glass
- Lightweight: The weight of a solid PC sheet is only about half of the glass
- Transparency: The light transmission of the PC sheet is 80-90 % (clear), for different thicknesses
- UV-protection: Our PC sheets are manufactured using UV-stabilized PC resin that keeps the PC sheet from discoloring. Our state-of-the-art machines can co-extrude up to 50 microns of UV coating on both sides of our Polycarbonate sheets to further enhance its UV-resistant properties
- Resistance to weather: A PC sheet has resistance to bad weather and maintains excellent properties in a wide temperature range (from -40 to 120°C)

- Thermal insulation: The K-value of glass is 1.2 times that of a solid PC sheet. So PC Sheets have much lesser heat conductivity than glass and are very useful for insulation.
- Easy installation: A PC sheet can be bent while hot or cold and used on curved roofs, domes, and windows. The minimum radius of curvature of a PC sheet is 175 times its thickness.

| Description | Thickness (mm) | Width(mm) X Length(mm) |
|---------------------|----------------|---|
| PC solid sheet | 1 -1.5 | 1220 (max) |
| PC solid sheet | 1.5 - 12.0 | 2100(max) |
| PC embossed sheet | 1.7- 12.0 | 2100(max) |
| PC crystal sheet | 2.5 - 12.0 | 2100 (max) |
| PC antiglare sheet | 1.5 - 12.0 | 2100(max) |
| PC prismatic sheet | 2.8 – 4.0 | 1220 (max) < 2.8mm; >2.8mm - 2050 (max) |
| PC Rolls (coreless) | 1.0 – 4.0 | 1220 (max) <1.5mm; >1.5mm – 2050 (max) Max length 30 Mtr |

Properties

| Property | Standard | Unit | Value |
|---------------------------------------|------------|------------|----------|
| Physical | | | |
| Density | ASTM D792 | g/cm | 1.2 |
| Water Absorption, Equilibrium, 24 Hrs | ASTM D570 | % | 0.15 |
| Refractive Index | ASTM D542 | | 1.59 |
| Light Transmission | ASTM D1003 | % | 88 |
| Mechanical | | | |
| Rockwell Hardness | ASTM D785 | | 95 |
| Izod Impact Strength (Notched) | ASTM D256 | kg -cm/cm | 88 |
| Tensile Strength | ASTM D638 | kg/cm 2 | 620 |
| Tensile Modulus | ASTM D638 | Mpa | 2400 |
| Flexural Strength | ASTM D790 | kg/cm 2 | 850 -950 |
| Flexural Modulus | ASTM D790 | Mpa | 2400 |
| Elongtional break | ASTM D638 | % | 110 |
| Thermal | | | |
| Co-efficient of expansion | ASTM D696 | cm/cm – oC | 6.8x10-5 |
| Heat deflection temp @264psi | ASTM D648 | oC | 125 |
| Vicat Softening Point | ASTM D1525 | oC | 149 |