



# Polycarbonate

*Features outstanding impact strength, superior dimensional stability, high temperature resistance, and high clarity*

### Applications

- Industrial glazing
- Machine guards
- Structural parts
- Thermoformed and fabricated components
- Medical components
- Equipment housing

### Benefits

- Impact resistance
- Durability
- Machinability
- Formability
- Transparent
- Easily cleaned
- Scratches easily removed
- Temperature range
- UV stable
- High dielectric strength

| Property                 |                        | Polycarbonate                    | Acrylic                          | Glass                           |
|--------------------------|------------------------|----------------------------------|----------------------------------|---------------------------------|
| Impact Resistance        | Drop Ball Test, 0.5 lb | No Break                         | 1.75 ft-lbs                      | 0.7 ft-lbs                      |
| Cold Bend                | Bend Radius            | 100x material thickness          | 180x material thickness          | Not possible                    |
| Sheet Weight             | 0.125"                 | 0.78 lb/ft <sup>2</sup>          | 0.75 lb/ft <sup>2</sup>          | 1.60 lbs/ft <sup>2</sup>        |
| Thermal Expansion Rate   | -                      | 3.75 x 10 <sup>-5</sup> in/in/°F | 4.10 x 10 <sup>-5</sup> in/in/°F | 5.0 x 10 <sup>-5</sup> in/in °F |
| Shading Coefficient      | 0.236" clear sheet     | 0.97                             | 1.01                             | 1.03                            |
| U Factor – Summer        | 0.236"                 | 0.85 BTU/hr-ft <sup>2</sup> °F   | 0.83 BTU/hr-ft <sup>2</sup> °F   | 0.92 BTU/hr-ft <sup>2</sup> °F  |
| U Factor – Winter        |                        | 0.92 BTU/hr-ft <sup>2</sup> °F   | 0.91 BTU/hr-ft <sup>2</sup> °F   | 1.02 BTU/hr-ft <sup>2</sup> °F  |
| Sound Transmission Class | 0.236"                 | 29                               | 30                               | 27                              |