



# Polycarbonate

PC, Polycarb

## Description and Overview

Polycarbonate is a shatter resistant thermoplastic that features higher impact resistance and better light transmission versus many types of glass.

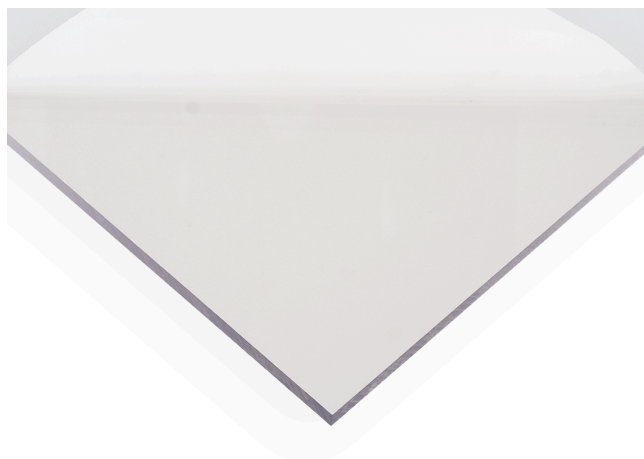
Polycarbonate is a safe, durable and lightweight plastic that features many specialty grades.

Polycarbonate is easily worked, molded and thermoformed. It can undergo large deformations without cracking or breaking.

## Applications and Uses

Polycarbonate sheet is cost-effective in a wide range of industrial glazing, design and structural applications, as well as thermoformed and fabricated components.

- Bullet-resistant enclosures
- Flat and curved glazing
- Sound walls
- Indoor and outdoor signage
- Safety and security glazing
- Machine guards
- Glass replacement
- Skylights
- Mass-transit windows
- Operator enclosures
- Construction equipment (cab glazing & guards)



Polycarbonate is available in machine, twinwall, multi-wall & specialty grade.

Full sheet: 48" x 96" (.060" through 1.5" thick)  
Full Twinwall Sheet: 48"x288", 48"x 192", 48"x96"  
Rod: (0.25" through 4.0" diameter)

## Properties and Specifications

Property	Polycarbonate
Specific Gravity	1.20
Water Absorption @ 24 hrs.	0.15%
Tensile Strength @ Yield (psi)	9000
Tensile modulus (psi)	345,000 psi
Elongation at break	110%
Flexural modulus	345,000 psi
Hardness, Rockwell	M70/R118
Shear modulus (psi)	114,000
Izod Impact Strength (ft-lbs/in.)	12-16
Heat Deflection Temperature @264 psi	270°F
Affixable Properties	Chem / Mech

Properties are typical.  
Chem is an abbreviation for chemically affixed with glues, chemicals, or adhesive.  
Mech is an abbreviation for mechanically affixed bonding.  
Field testing is recommended for any application.

