Building and Construction

Maximize natural light without compromising material strength, energy savings or design possibilities with plastics in building applications.

Applications

- Commercial, institutional and residential greenhouses
- Entryway canopies
- Bus shelters, specialty enclosures
- Carports
- Sloped and curved glazing
- Skylights
- Security windows, hurricane glazing and shutters
- Sound barriers
- Interior partitions, room dividers
- Lighting lenses, tubes and louvers
- Mirrors
- Furniture, benches and tables
- Corner guards and run rails
- Barrier, protective and reflective films
- Caulking and sealants
- Piping
- Wiring jacketing
- Bearing pads

Advantages May Include

- Lightweight for faster and safer installation
- High impact strength
- Hailstone and hurricane resistant
- Lighter than glass
- Lower freight costs than heavier materials
- High strength-to-weight ratio
- Easy to fabricate, including onsite fabrication
- Building code approved
- Fire resistant; does not give off toxic gasses
- UV resistant
- Transparent/high light transmission

Did you know?

Polycarbonate has an impact strength that is 100 times stronger than glass and 20 times stronger than acrylic.

Materials

- Acrylic (PMMA)
- Chlorinated Polyvinyl Chloride (CPVC)
- Ethylene Tetrafluoroethylene (ETFE)
- Fiber-Reinforced Plastic (FRP)
- Polycarbonate (PC), including multiwall polycarbonate
- Polyethylene Terephthalate (PETG)
- Polyvinyl Chloride (PVC)
- PVC/Acrylic Alloy (PMMA)
- Polyolefin Alloy (PO)
- Polypropylene (PP)
- Polystyrene (PS)
- Recycled Plastic Lumber
- Polyethylene (PE)
- Polyvinyl Chloride (PVC)
- Polytetrafluoroethylene (PTFE)
- Perfluoroalkoxy (PFA)
- Silicone (SI)

Environmental and Safety

Considering the total carbon footprint, including costs of raw materials, manufacture, transport, fabricate, install, maintain, plastics compare favorably with more traditional materials. Also, plastics are safer to handle and install. When you consider that most plastics are readily recyclable, they can become the most environmentally responsible and safest choice for many demanding building and construction applications.