### GLAZING

# Polycarbonate in daily life

Plastics play a big role in everyday life. However, not all plastics are the same, nor are they used for the same products. The choice depends on the specific characteristics of each plastic and also on the price.

Far from being a cheap and commodity-like plastic, polycarbonate is a high-performance engineering plastic used in particular applications for its durability, robustness, transparency, lightweight and heat resistance.

As a result, it can be found where needed in specific indoor and outdoor applications: from the small LEDs in mobile phones to substantial transparent roofs to critical medical applications such as dialysers.





## More natural light reaching inside buildings thanks to polycarbonate

Bringing more natural light into everyday life is so important that several scholars and architects dedicate their lives to such research and implementable solutions. Some estimates stress that proper use of natural lighting could reduce energy consumption up to 40%.

Regardless of the percentage in savings, the potential that natural light in buildings presents for energy efficiency is widely known and acknowledged. Other positive effects are a bit less known, such as prevention of fungi, molds and insects. Most importantly maybe, natural light improves human well-being and overall health, not just at home but also in workspaces, hospitals and learning facilities.

Building designers select polycarbonate allowing the use of natural light in a variety of spaces without safety limitations.

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### Why is polycarbonate used in building and construction?

Being transparent like glass, polycarbonate allows the entering of light from the outside. Compared to glass polycarbonate is extremely light weight. Far less material is therefore needed for the supporting parts, which translates into savings in energy intensive construction raw materials, such as steel or cement.

Moreover, less power is needed to transport and install these transparent structures, which again results in further energy savings. Polycarbonate is also extremely robust and can withstand direct impact withouth breaking or shattering. This allows its use for transparent surfaces in places where this was otherwise just not possible for safety reasons. For example, transparent football stadium roofs would be impossible without polycarbonate.

Finally, polycarbonate presents inherent flame retardancy features, thus fulfilling the critical fire safety standards and regulations regarding safety of buildings. Thanks to polycarbonate, natural light can enter spaces to which it previously had no access, in an energy efficent and safety protecting manner.













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