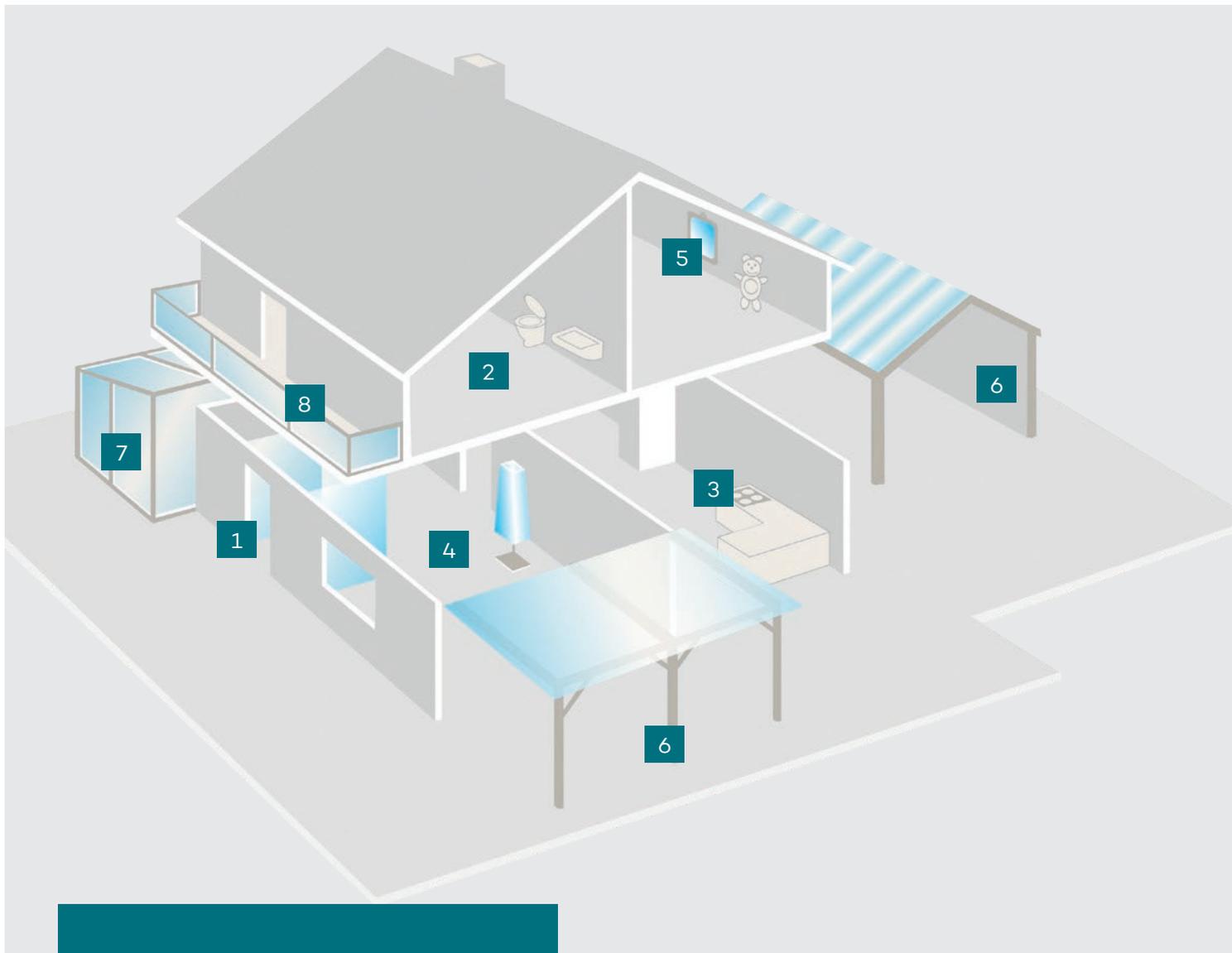


PLEXIGLAS®

PLEXIGLAS®
for Home and Garden





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Live how you like

When you open the door to a house or apartment, you enter a different world every time. Some like it perfect in every detail or with lavish appointments. Others prefer a simpler or more countrified decor. Homes should be cozy, practical in daily use and as stylish as possible. Homes can be cozy, practical and stylish while reflecting our personal tastes.

Creative people give free rein to their ideas when designing their own four walls with PLEXIGLAS®. This acrylic comes in a convincing and boundless variety of shapes and colors. At the same time, it is highly functional.

Inspiring materials for interior design not only look good, they are also easy to clean and hard-wearing. That applies in particular to areas exposed to humidity, wind and weather, such as bathrooms, kitchens, gardens, balconies, patios, decks and carports.

We at POLYVANTIS are among the world's leading suppliers of PMMA and acrylic products, which were invented in 1933 by Dr. Otto Röhm and his team. The products we market under the PLEXIGLAS® brand (and under the ACRYLITE® brand in the Americas), as well as our know-how, are available everywhere, either directly via our global distribution network, via regional distributors or qualified fabricators.

Let us help you create your own personal universe at home!



A specialized material
that is reliable and durable



PLEXIGLAS® is one of the world's highest-quality and most versatile plastics. It can be manufactured with many different functional properties and surfaces: highly light-transmitting, light-diffusing, light-focusing, sight-screening, heat-reflective, heat-insulating, noise-reflecting, insensitive to traces of wear and easy to clean.

Being available in a vast range of colors, the material offers designers broad scope for realizing their wishes. In its original form, PLEXIGLAS® is absolutely colorless and can therefore be colored at will. This provides a magical variety of hues that is underlined by the interplay of light and different surfaces, from high-gloss to textured.

Another benefit is that the material can take rough handling and is easy to work with. PLEXIGLAS® can be cold-formed or thermoformed to provide new, surprising effects and shapes for indoors and, thanks to its excellent weather resistance, also for outdoors. Owing to its chemical structure, this trademarked acrylic offers permanent UV resistance and also withstands all winds and weathers. It shows no yellowing or embrittlement. Our clear-transparent PLEXIGLAS® solid sheets, multi-skin and corrugated sheets, blocks, tubes and rods come with a 30-year non-yellowing guarantee.

If PLEXIGLAS® does have to be replaced one day, it can be completely recycled, either by chemical conversion to its starting materials, or by direct reuse. These aspects, together with environmentally sound production, contribute to the material's sustainability.

To offer proof of this sustainability, we have performed an extensive life cycle assessment of the material from cradle to grave.

From production to recycling, the different environmental impacts of PLEXIGLAS®, including its greenhouse gas reduction effect due to the material's longevity, were determined and confirmed in this Life Cycle Assessment (LCA) in accordance with DIN ISO 14040ff.

PLEXIGLAS® also makes an essential contribution to reducing the burden on the environment during manufacture.

PLEXIGLAS® is also a good choice in terms of safety. It burns with almost no smoke, forms no acutely toxic smoke gases and can be easily extinguished with water.

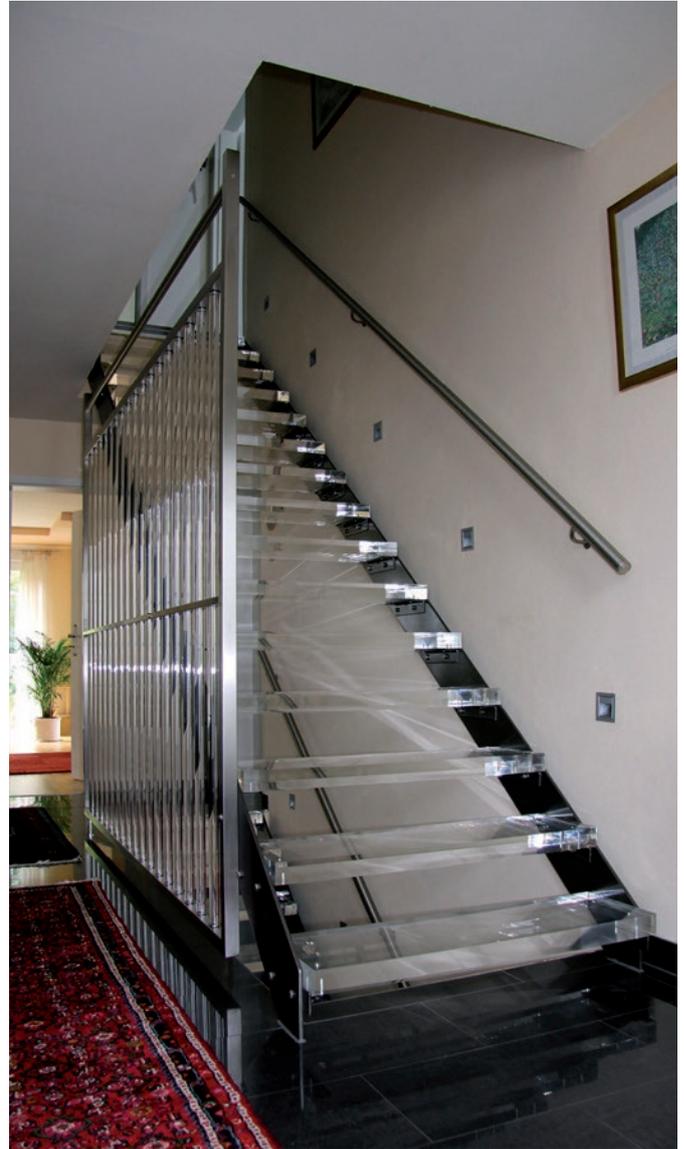
- ▶ PLEXIGLAS® Hi-Gloss
- ▶ PLEXIGLAS® Satinice
- ▶ PLEXIGLAS® Textures
- ▶ PLEXIGLAS® GS and XT
- ▶ PLEXIGLAS® Optical
- ▶ PLEXIGLAS® LED

PLEXIGLAS® always welcoming

It's the first impression that counts. When the door to a house or apartment opens, the entrance area determines how visitors perceive that home. Elegance and class or stylish colors? PLEXIGLAS® offers endless variety for individual designs.

In its original form, PLEXIGLAS® is absolutely colorless and can be colored at will. Surface textures range from high-gloss with a special deep-view effect to velvet grades. PLEXIGLAS® provides a play of colors that can be shown off to excellent effect in various items, from coat stands to staircases through to wall paneling.

The entrance to a home has to do more than just look good – it has to put up with tough treatment in everyday use.



Coats are hung up there, umbrellas folded, pumps exchanged for slippers.

All these processes can have an impact on materials. PLEXIGLAS® Satinice and PLEXIGLAS® Optical HC, for instance, are insensitive to scratching and traces of wear.

PLEXIGLAS® can be cut, routed, drilled and polished with excellent results. It can also be cold-formed or thermo-formed to obtain the required shape.

It makes for safety when used as stairs, infill panels or banisters. Owing to their structural stability, PLEXIGLAS® elements stay in shape for decades.



- ▶ **PLEXIGLAS® Hi-Gloss**
- ▶ **PLEXIGLAS® Satinice**
- ▶ **PLEXIGLAS® Textures**
- ▶ **PLEXIGLAS® GS and XT**
- ▶ **PLEXIGLAS® Optical**

PLEXIGLAS® a haven of well-being

The first step in the morning is the bathroom. A soft rain shower or a powerful jet from a massaging shower head makes us wide awake. We start the day with renewed vigor. To make sure this remains a pleasant experience, bathrooms make high demands in terms of hygiene. Cleanliness and easy-care materials are a must. PLEXIGLAS® is ideal for such applications.

Acrylic has a perfectly smooth surface, making this material especially easy-care, easy to clean and moisture-resistant. Since its surfaces do not swell, the material remains hygienic and easy-care even in permanent use. An example is PLEXIGLAS® Hi-Gloss as a substitute for tiles and for walls.

In addition to its functionality, PLEXIGLAS® offers a variety of brilliant colors, individual shapes and a choice of surface textures. Whether PLEXIGLAS® Hi-Gloss with a convincing deep-view effect, or PLEXIGLAS® Satinice with a velvety surface: the same material adorns walls, can be processed into toothbrush beakers, shelves or other accessories.

- PLEXIGLAS® Hi-Gloss
- PLEXIGLAS® Satinice
- PLEXIGLAS® Textures
- PLEXIGLAS® GS and XT
- PLEXIGLAS® Optical

PLEXIGLAS® an appetizing sight

The kitchen is the heart of the home. It is a popular place for the family to meet and share time together. And, of course, to cook. Kitchen materials need to make a good optical impression, but also have to be extremely hard-wearing and easy to clean. Cupboards keep being opened, work surfaces and walls require constant wiping and must withstand thorough cleaning.

As demands on kitchen design continue to grow, PLEXIGLAS® offers a large number of options. It comes in a huge variety of colors, is tough and easy to fabricate and machine, and can be thermoformed into any desired shape. The range of possible applications is enormous. With its unusual deep-view effect, PLEXIGLAS® Hi-Gloss offers a convincing and brilliant alternative to mirror tiles. Those who prefer a more subdued effect can choose the PLEXIGLAS® Satinice matte-satin grade.



The trademarked acrylic meets high demands in terms of design, for a long time to come. It is unaffected by sunlight and neither yellows nor becomes brittle. That is why our clear-transparent materials come with a 30-year non-yellowing guarantee, and our colored materials are guaranteed to remain colorfast for 10 years.



- ▶ PLEXIGLAS® Hi-Gloss
- ▶ PLEXIGLAS® Reflections
- ▶ PLEXIGLAS® Satinice
- ▶ PLEXIGLAS® Textures
- ▶ PLEXIGLAS® GS and XT
- ▶ PLEXIGLAS® Optical
- ▶ PLEXIGLAS® LED

PLEXIGLAS® a cozy experience all round

A long working day draws to a close. Time to head home and chill out. In a setting that may be high-class and stylish, lavishly or functionally equipped. Modern interior design sets store by individuality and is meant to reflect the personality of its inhabitants.

A back-lit wall element provides mood lighting; partitions and furniture are harmoniously matched. PLEXIGLAS® offers choice and individuality.

It is available with high-gloss or matte surfaces (some of them with a scratch-resistant coating). Combined with wood, concrete or metal, it gives rise to completely new ideas for sideboards, shelves, chairs, armchairs and tables.

- ▶ PLEXIGLAS® Reflections
- ▶ PLEXIGLAS® Satinice
- ▶ PLEXIGLAS® Textures
- ▶ PLEXIGLAS® GS and XT
- ▶ PLEXIGLAS® LED

PLEXIGLAS® glowing design



Spotlights in the reading corner, area lighting above the dining area, ambient lighting that creates the right mood – PLEXIGLAS® offers a variety of lighting properties and design options. It can be backlit over large areas, and enables super-slim luminaires when edge-lit. The material bathes living rooms in the right light, to suit your individual preferences.



PLEXIGLAS® invisible protection

Living rooms need to be bright, but the sun's UV radiation damages many materials and makes them turn yellow or fade. PLEXIGLAS® protects against rapid color loss. As picture glazing or in showcases, it protects artworks from harmful influences. It offers UV protection and stops pictures from fading.

The material withstands impacts that would damage float glass.

PLEXIGLAS® Optical with a scratch-resistant and chemical-resistant coating also meets stringent requirements for hard-wearing surfaces.



PLEXIGLAS®
more living space



- ▶ **PLEXIGLAS® Alltop**
- ▶ **PLEXIGLAS® Heatstop**
- ▶ **PLEXIGLAS® Resist**
- ▶ **PLEXIGLAS® Textures**
- ▶ **PLEXIGLAS® GS und XT**

Enjoy fresh air after work, even when it rains. Roofs over patios, seating areas in the garden or on the balcony allow us to do just that. Many people see these areas as an extension of their living space, which is to be just as attractive and comfortable as the house or apartment itself.

PLEXIGLAS® enables even large structures to be built. All multi-skin and corrugated sheets are available in lengths up to seven meters as part of the standard range. Their weight poses no problem, since they are much lighter than glass. That means the supporting structure can be much more delicate, yet provides comparable stability, saving time and money during installation.

In the course of time, rain, hail, winds and weathers can all take their toll on a roof, for example if it has to bear heavy snow loads. With thin-walled multi-skin and corrugated sheets, there is a risk that the material will buckle or even break. That is both dangerous and unsightly.

PLEXIGLAS® multi-skin and corrugated sheets have thick walls and are therefore extremely stable even in storms and blizzards. Not even hail can damage the material.

As an added benefit, the thick walls of PLEXIGLAS® multi-skin and corrugated sheets provide good sound insulation.

They significantly reduce rain noise. No need to cut a pleasant evening short because of rain drumming down on the roof.

PLEXIGLAS® offers protection for people, as well as for cars, bicycles and motorcycles under a carport with a PLEXIGLAS® roof.

Keeping a clear view

Roofed patios and the adjacent living space should be flooded with light. But the sun's UV radiation attacks many plastics and makes them turn yellow and brittle. Thanks to its special chemical composition, PLEXIGLAS® is protected against these effects. The material is UV-resistant through and through, without any additional protective coating. With their high transparency and light transmission, PLEXIGLAS® multi-skin and corrugated sheets offer a maximum of light, even after many years of service. We guarantee that clear-transparent PLEXIGLAS® will show no yellowing for 30 years.

Thanks to PLEXIGLAS®, roofing remains attractive in the long term, with no yellowing or embrittlement. But one of the main causes for unsightly patios, carports and so forth is quite different – it is due to the growth of algae and moss. A special grade of material with an Anti-Adhesion-Application (PLEXIGLAS® Resist AAA) based on nanotechnology prevents this type of soiling from adhering to the roof. Soiling is almost completely washed off by the next rainfall.

Thanks to PLEXIGLAS®, there are no more streaks of rain to spoil the view either. The NO DROP coating makes water drops flow off as an invisible film. That is especially important in conservatories, which encourage people to use them all year round, and are supposed to stay comfortably warm even in rain and snow. With its very good heat insulation properties, PLEXIGLAS® is the ideal material to meet these requirements. The 32 mm thick multi-skin sheets, for example, meet the requirements of the German energy saving ordinance. Warmed air stays where it should. That saves money and reduces the burden on the environment.

Staying healthy and feeling good

Natural sunlight contains UV radiation, which is healthy in moderation but may cause health problems given extreme exposure. Depending on the product grade, PLEXIGLAS® solid, multi-skin or corrugated sheets can completely block out UV radiation. The protection it offers from skin damage, for example beneath a patio roof, is comparable to a sun protection factor of SPF50.

The air beneath roofs heats up quickly due to solar heat. PLEXIGLAS® Heatstop offers a particularly effective heat shield.

It reflects heat rays, with the effect that the air below the roof heats up much less than with conventional glazing. Even inside the car, it is a lot cooler under a carport of this type.





PLEXIGLAS® Alltop

PLEXIGLAS® Resist

PLEXIGLAS® makes plants flourish

Flowering plants and fresh vegetables even in winter – we have greenhouses to thank for this, even if rain and snow determine the weather. High light transmission is a crucial factor for greenhouses.

This makes crops grow faster, and a high proportion of UV light makes flowers bloom in more vivid colors.

Greenhouses made of PLEXIGLAS® Alltop always supply plants with the right mixture of sunlight and UV radiation. The patented No Drop technology prevents condensation from forming inside the cells and reducing light transmission.

Hardly any energy is lost, thanks to the material's good heat insulation. That cuts heating costs, and reduces the environmental burden too. What makes professional greenhouses more economical also holds true for amateur horticulturalists. PLEXIGLAS® multi-skin sheets are the ideal choice, and come with a 30-year non-yellowing guarantee.

To find out more about greenhouses, read the brochure PLEXIGLAS® for Greenhouses.





- ▶ PLEXIGLAS® GS und XT
- ▶ PLEXIGLAS® Resist
- ▶ PLEXIGLAS® Satinice
- ▶ PLEXIGLAS® Textures
- ▶ PLEXIGLAS® Optical

PLEXIGLAS® for sight screening and protection

Balconies offer a holiday feeling on workdays. Basking in the sun and relaxing, not in some faraway place or in the park, but in your own apartment – how good is that? Balcony parapets, like sight screens in the garden, offer protection from curious glances and do a lot to determine a building's appearance. PLEXIGLAS® offers the right color, shape and surface texture for every taste.

In its original form, the material is completely colorless and can therefore be precisely colored to meet individual wishes, whether transparent or opaque. It is available with high-gloss surfaces that have a spectacular deep-view effect, or in satin or textured grades.

Vertical glazing made of PLEXIGLAS® not only looks good, it offers protection from falling. PLEXIGLAS® is 11 times more impact-resistant than glass and forms much fewer slivers.

It complies with requirements for fall arrest systems in accordance with DIN EN 12600.

Products, properties and applications

Product	Home				
	Floor/Hall	Bath	Kitchen	Living-room	
PLEXIGLAS®				•	
PLEXIGLAS® Alltop				•	
PLEXIGLAS® Heatstop				•	
PLEXIGLAS® Hi-Gloss	•	•	•	•	
PLEXIGLAS® Optical	•	•	•	•	
PLEXIGLAS® Reflections				•	
PLEXIGLAS® Resist					
PLEXIGLAS® Satinice	•	•	•	•	
PLEXIGLAS® Textures	•	•	•	•	

Garden

	Roofing for patio, balcony, conservatory, bike racks, entrance, carports	Domestic Greenhouse	Horizontal glazing for balconies, doors, windows, blinds
	•		
	•	•	
	•	•	
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POLYVANTIS GmbH

Riedbahnstraße 70
64331 Weiterstadt
Germany

www.plexiglas.de
www.polyvantis.com

® = registered trademark

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Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment)

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