The Fascinating World of
PLEXIGLAS®
PLEXIGLAS®

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You meet PLEXIGLAS® every day, all your life. It provides a clear view, lends shape and brilliance to a variety of objects, protects against rain, hail and stormy weather, withstands extreme pressure and heat, is break-resistant and faithfully reflects the world in all its color.

Besides these properties, it is environmentally friendly and can be recycled after careful separation from other materials. Thanks to its high functionality and many special grades, PLEXIGLAS® is surprisingly adaptable to new applications that call for novel properties.

PLEXIGLAS® has made a name for itself in items that make life easier and safer, more varied and exciting, and that need to meet very stringent requirements.

The Plexiglas Business Unit of Degussa AG is a leading global supplier of acrylics. Our wide range and high quality standards are a reliable basis for our business and that of our customers. With our large number of specialties, developments and customer partnerships, we shape tomorrow’s markets.

Customer proximity, every day and everywhere
Our products and know-how are available all over the world, whether directly, via our global distribution network, regional distributors or skilled fabricators.

From aircraft construction and aircraft cabin windows to monitors and displays, as structural glazing, in noise barriers or in advertising, PLEXIGLAS® offers the tailormade, durably brilliant solution you are looking for.

Feel free to contact us!
PLEXIGLAS® is one of the world’s most precious and versatile plastics.

It can be manufactured with many different functional properties and surfaces, offering high light transmission, light diffusion, sight screening, heat reflection, graffiti repellence, heat insulation, sound reflection, and so on ...

The choice of PLEXIGLAS® for building the roof of the Olympic stadium in Munich was a dream come true, not just for designers, and the embodiment of safety. Only specific types of safety glazing are allowed for overhead glazing. PLEXIGLAS® sheets meet these requirements. PLEXIGLAS® is much more break-resistant than glass, as well as being safer, lighter in weight, more transparent and formable.

Weather resistance and transparency ensure a long service life for PLEXIGLAS® in many applications. It is therefore the ideal material for all outdoor projects. Whereas other plastics soon shows signs of wear, PLEXIGLAS® stays as clear as on the very first day, for years and decades.

PLEXIGLAS® is characterized by elegance, brilliance and color consistency. With these attributes, it draws attention to all indoor items, messages and designer objects. Foams, films and fibers perform manifold decorative, structural and protective tasks in the wide world of technical applications.

Products from the Plexiglas Business Unit are provided in many forms, as solid sheet, multi-skin sheet, corrugated sheet, foams, fibers, films, tubes and rods.
The world is full of emotions. While we may argue on a rational level, our decisions are increasingly based on feelings.

Successful design often plays a crucial role. Can there be any better solution than PLEXIGLAS®?

Creative and design professionals from the spheres of advertising, shopfitting and exhibition booth construction, interior design and furniture-making know the score. PLEXIGLAS® objects catch the eye and retain interest, whether in transparent form, translucent and light-diffusing, edge-lit or brilliant grades. That applies to exhibition booths, advertising displays, elegant shelves and accessories alike.

PLEXIGLAS® plays with light in illuminated signs, luminous walls and lamps. Items with a maximum "Wow!" factor are made from PLEXIGLAS® blocks that refract the light.

However, the material can also have the appearance of stone. In that case, its name is PLEXICOR®, and it is just as easy to saw, drill, mill and form as PLEXIGLAS®.
PLEXIGLAS® corrugated sheet
PLEXIGLAS truLED®
PLEXIGLAS SATINICE® SC/DC
PLEXIGLAS® MULTICOLOR
PLEXIGLAS Gallery®
ACRIFIX® adhesive systems
PLEXICOR®
PARAPAN®
PLEXIGLAS® textured sheet
PLEXIGLAS® tubes and rods
PLEXIGLAS® multi-skin sheet
PLEXIGLAS® RP
PLEXIGLAS® films
PLEXIGLAS® GS 1002
PLEXIGLAS SUPERCLEAR®
PLEXIGLAS® blocks
PLEXIGLAS® Fluorescent
PLEXIGLAS RESIST®
Come storms or hail, frost or heatwaves, PLEXIGLAS® defies any weather and makes for a cozy atmosphere. And doesn’t your home deserve the best you can get?

The same applies to safety. Used as break-resistant roof glazing, it removes the risk of slivers raining down, and reliably bears wind pressure and snow loads.

What’s more, it looks brilliant for many years and decades.

Are you particularly interested in protection from the summer heat? Or hail resistance in inclement weather? Is a warm, cozy atmosphere in winter your top priority? Or are you more interested in light transmission? Sight screening? High transparency?

PLEXIGLAS® offers you all these – take your pick!

It’s up to you whether you want to enhance your home with a patio roof, carport or conservatory, add an attractive parapet to your balcony or banister to your stairs, or just install injury-proof door glazing.

Make Your Home a Haven

Private Construction
PLEXIGLAS® gives concrete shape and long life to roofs, structural glazing, interior design and decorative items of modern and daring design. PLEXIGLAS® meets design requirements with the greatest of ease and almost unlimited formability.

- PLEXIGLAS® multi-skin sheet
- PLEXIGLAS® corrugated sheet
- PLEXIGLAS RESIST®
- PLEXIGLAS® standard sheet
- PLEXIGLAS SATINICE®
- PLEXICOR®
- ProStyle® assembly systems
- PLEXIGLAS® blocks
- PLEXIGLAS® textured sheet
- PLEXIGLAS® rods and tubes

Gracefulness and Safety Go Hand in Hand

Where many people are employed or on the move, safety has the highest priority. PLEXIGLAS® is approved for overhead glazing, passes tests for glazing offering protection against falling, and remains brilliant and highly transparent for a very long time.

As laminating film, PLEXIGLAS® protects other, less weather-resistant materials against fading and surface erosion. The heavy-duty, solid-surface material PLEXICOR® makes for design paired with hygiene wherever cleanliness has top priority.

In the event of fire, PLEXIGLAS® can save lives and property because it burns almost without smoke and gives off no toxic smoke gases. Fire-fighting teams can get to the seat of fire quicker, and escape routes remain more visible.
PLEXIGLAS® can take a lot. It is eleven times more break-resistant than glass, and simply absorbs UV radiation. That preserves the value of pictures and art objects.

In ice-hockey stadiums, PLEXIGLAS® protects spectators from being hit by pucks, and in public or large aquariums, thick PLEXIGLAS® blocks guarantee that people and sharks both keep their distance, in their mutual interest.

For tougher applications, PLEXIGLAS RESIST® offers even greater strength, like when it comes to combating vandalism, or protecting people from injury by machines and conveyors. PLEXIGLAS RESIST® proves its worth every day in demanding environments. It offers an ideal combination of impact strength and UV resistance.

Electrically conductive PLEXIGLAS® makes production safer in highly sensitive, ultraclean processes.

In shopfitting and exhibition booth construction, PLEXIGLAS® excels thanks to its excellent formability, surface hardness, hygiene and appearance.

A Tough Customer for Demanding Applications
People travel, goods have to be delivered to their destination on time. Speed, comfort and safety are the order of the day. This engenders noise, and entails energy generation and consumption. Environmental protection is a must. The allrounders from the Plexiglas Business Unit play essential roles in these contexts.

### Inspiring Ideas

**Mobility & Energy**

In aircraft, ships and vehicles, the core material ROHACELL® and SOLIMIDE® foam stand for stability and fire resistance. Highly UV-resistant PLEXIGLAS® gives us a clear view of the earth from an aircraft cabin window. Colored EUROPLEX® and PLEXIGLAS® decorative films create a pleasant, friendly atmosphere in planes and cars.

ROHACELL® makes light work of generating wind energy. It gives the rotor blades maximum strength at low weight. In industrial hot gas scrubbers, DOLANIT®, PROCON® and P84® fibers make sure the air we breathe is always clean.

Along highways and railroad tracks, highly transparent PLEXIGLAS SOUNDSTOP® intercepts noise without stealing the view, so that we can live and sleep peacefully.

For more information, go to: [www.plexiglas.de](http://www.plexiglas.de)
Light puts color into our lives. It makes sure we feel good and stay informed. Light influences our mood.

PLEXIGLAS® shows its strengths particularly in combination with light. Its unsurpassed transparency and brilliance make PLEXIGLAS® an indispensable material for optical and technical applications.

The unlimited choice of colors offers a kaleidoscope of scintillating hues and effects and creates soft, pleasant lighting in combination with light-diffusing, velvety surfaces. PLEXIGLAS® guides light wherever you want it, completely and without light loss. PLEXIGLAS® guarantees professional rear projection at trade shows, conferences and in modern offices, as well as providing a clear view in monitors and cell phone displays.

PLEXIGLAS® also shows its toughness and transparency to best advantage in equipment construction and displays, which remain perfectly legible for a long time to come.

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**Light without Shade**

- PLEXIGLAS® RP
- PLEXIGLAS SATINICE® DF
- PLEXIGLAS® GS 1002
- PLEXIGLAS® standard sheet
- PLEXIGLAS SUPERCLEAR®
- PLEXIGLAS® and EUROPLEX® films
- PLEXIGLAS® tubes and rods
Wellness, beauty, leisure activities. Our body demands rest phases, a modicum of maintenance and exercise to offset our sedentary occupations. Sometimes, we just feel in need of a little pampering.

Today, many people find relaxation in baths and solariums. Sport is a healthy way of unwinding.

PLEXIGLAS® is indispensable in these areas. It feels pleasantly warm to the touch, has an easy-care surface, and is excellently suited for use in bathtubs, shower bases and partitions. PLEXICOR®, which looks like stone yet exudes an aura of warmth, makes using washbasins and consoles a stylish, tactile experience.

In tanning bed canopies, PLEXIGLAS® ensures that only the rays responsible for bronzing are transmitted, and protects us from harmful UV radiation. PLEXIGLAS® films add a modern décor to sports equipment, and ROHACELL® provides a strong yet lightweight frame.

Doctors rely on hygienic sterilizable instrument trays and containers made from EUROPLEX®.
## PLEXIGLAS® SOUNDPSTOP®

**Properties:**
- sound-reflecting, break-resistant, highly transparent
- extruded or cast transparent grades
- cast non-transparent grade
- in Clear, seven transparent and five non-transparent colors
- available with embedded polyamide threads for sliver retention
- various functional surfaces available

**Physical forms:**
- solid sheets in 15, 20 and 25 mm (transparent elements) or 12 mm thickness (non-transparent elements)
- standard sizes:
  - extruded version: 2,000 mm width, up to 6,000 mm length
  - cast version: 2,000 mm width, lengths: 2,500, 3,000, 4,200, 5,000 mm
- special sizes on request

## PLEXICOR®

**Properties:**
- for worktops and items in furniture-making, tradeshow booth construction and shopfitting
- cast, mineral-filled acrylic
- perfectly smooth, homogenous, food-compliant, resistant to abrasion and chemicals, machinable, thermoformable, bondable like PLEXIGLAS®

**Physical forms:**
- in five ranges with 45 plain or patterned colors
- size: 3,070 x 760 mm, width up to max. 1,250 mm on request, thicknesses: 6, 8, 10, 13 and 19 mm
- both surfaces polished, one service side with satin matte finish (polishable)

## PLEXIGLAS® Tubes and Rods

**Properties:**
- large range for model-making and laboratory applications, furniture-making and luminares, shopfitting and tradeshow booth construction ...
- high-gloss or polished or matte (DF) surfaces
- easy to machine and polish, controlled thermoforming or forming
- special grades are easy to produce

**Physical forms:**
- PLEXIGLAS® XT tubes: 30 diameters from 5 to 300 mm
- SATINICE® DF in 8 diameters from 50 to 200 mm
- PLEXIGLAS® GS tubes: 300, 457 and 650 mm diameter
- PLEXIGLAS® XT round rods: 14 diameters from 2 to 50 mm
- PLEXIGLAS® GS round rods: 14 diameters from 15 to 100 mm
- PLEXIGLAS® GS square rods: 8 thicknesses/widths from 10/10 to 50/50 mm

## PLEXIGLAS® GS and XT Solid Sheets

**Properties:**
- unsurpassed resistance to aging and weathering
- highly transparent (Clear: 92% light transmission)
- brilliant and break-resistant
- easy to machine

**Physical forms:**
- approx. 50 (GS) or 30 (XT) standard colors in stock
- thicknesses: 2.5 to 120 mm (GS) and 1.5 to 25 mm (XT)
- sizes GS: 3,050 (3,000) x 2,030 (2,000) mm
- sizes XT: 3,050 x 2,050 mm

## PLEXIGLAS® Corrugated Sheet

**Properties:**
- tough, easy to machine, easy to install due to impact-modified acrylic
- flexural strength: ideal for paneling/glazing/roofing
- unsurpassed aging and weather resistance

**Physical forms:**
- width 1,045 mm, length up to 7,000 mm
- approx. 3mm thick
- Clear and Brown transparent
- heat-shield variants in Opal and Grey transparent
- surface smooth or with two textures
- other colors on request

## PLEXIGLAS® SUNACTIVE®

**Properties:**
- UV-absorbing for aggressive UV spectrum
- highly transparent (transmission 92%) or colored
- for tanning bed canopies

**Physical forms:**
- thicknesses: 3-8 mm
- customer-specific sizes
- Clear and transparent colors
ROHACELL®

Properties:
- rigid foam based on PMI
- for structural cores in sandwich structures
- can be processed with ease by all methods used for manufacturing composite components
- PMI has the best specific properties of all commercially available foams (resistance to high and low temperatures, fatigue strength, creep compression resistance)

Physical forms:
- sizes 2,500 x 1,250 mm
- thicknesses 1-140 mm
- 10 different densities from 30 – 200 kg/m³

PLEXIGLAS® Textured Sheet

Properties:
- sheet range with surface texture on one or both sides for balcony glazing, panels, partitions, shower partitions, furniture items...
- approved as safety glazing
- unsurpassed resistance to aging and weathering
- lightweight and break-resistant
- easy to machine and install

Physical forms:
- 6 colors
- 11 textures: Classic in 8 textures, Trend in 3 textures
- sizes: depending on grade, e.g. 3,050 x 2,050 or 2,050 x 1,650 mm
- thickness: depending on grade, 3, 4, 6, 8 mm
- other sizes, thicknesses and colors on request

PLEXIGLAS® Multi-Skin Sheet

Properties:
- tough, easy to machine, easy to install due to impact-modified PLEXIGLAS®
- flexural strength at low weight optimized loadbearing capacity for roofing...
- ... but also advantageous for creative interior applications, partitions, furniture...
- unsurpassed resistance to aging and weathering

Physical forms:
- double- and quadruple-skin sheets
- in 8, 16 and 32 mm thickness
- lengths up to 7,000 mm
- widths 980, 1,200 and 1,220 mm
- Clear, C texture
- heat-shield variants in Opal and Grey transparent

PARAPAN®

Properties:
- high-gloss solid acrylic sheets for furniture fronts in store fixtures, kitchens, surgeries, hotels
- unsurpassed colorfastness, UV-resistant, resistant to aging and weathering
- easy to saw, drill, mill, polish and thermoform

Physical forms:
- 20 colors
- thicknesses: 18 mm for solid applications, 4 mm for installation in profiles
- sizes: as agreed

PLEXIGLAS® Blocks

Properties:
- clear, distortion-free view of authentic colors
- extremely high component strength and break resistance
- very good machining and thermoforming properties
- homogenous, monolithic material with optimum permanent service properties

Physical forms:
- sizes up to 6,000 x 3,000 mm
- thicknesses up to 250 mm
- clear and colored blocks
- blocks with special properties
- certified for applications under water and under pressure
Properties & Physical Forms

**SOLIMIDE®**

**Properties:**
- foam for use in marine, aerospace and rail vehicle applications
- as fire protection, heat and sound insulation, used alone or as a sandwich system
- very low inherent weight, utilizable in a wide temperature range
- complies with FAA fire regulation FAR 25.856(a) and requirements for all Airbus models

**PLEXIGLAS® GS 1002**

**Properties:**
- for ultrathin displays and illuminated signs
- light fed in via the sheet edge
- uniform light distribution
- minimum light loss and highest transparency (> 91%)
- neutral color
- UV-resistant

**PLEXIGLAS Gallery®**

**Properties:**
- group of clear sheet grades with highest UV protection for glazing pictures, art objects and exhibits
- protection from fading and yellowing
- only half the weight of silicate picture glass, but up to 11 times more break-resistant
- easy and safe to machine and install

**PLEXIGLAS® RP**

**Properties:**
- sheets for rear projection screens in salesrooms, at exhibitions and trade shows
- high luminosity and excellent contrast at wide viewing angles
- glare-free and insensitive to abrasion
- easy to machine and install, being lightweight

**PLEXIGLAS® / EUROPLEX® Films**

**Properties:**
- printable
- abrasion-resistant
- UV-resistant and high weather resistance
- excellent fabrication properties (laser cutting, CNC routing, die cutting, thermoforming etc.)

**PLEXIGLAS SATINICE®**

**Properties:**
- complete range of satin (matte) sheets with manifold properties
- wide range of colors and thicknesses
- applications: furniture, shop fittings, tradeshow booths, luminaires and lighting engineering, displays and dispensers

**DOLANIT®, PROCON®, P84® Fibers**

**Properties:**
- high heat stability and very good insulating properties
- for insulating protective clothing
- effective filter material for smoke gas purification, for coal-fired power plants, cement works and the chemical industry

**PLEXIGLAS® GS 1002**

**Physical forms:**
- sheet size 3,050 x 2,030 mm
- sheet thicknesses 6, 8, 10 and 12 mm
- special thicknesses and cut-to-size sections on request

**PLEXIGLAS Gallery®**

**Physical forms:**
- grade UV 90: sizes up to 4,050 x 2,050 mm in 1.5 to 25 mm thickness
- grade UV 100: sizes up to 3,050 x 2,050 mm in 1.5, 2 and 3 mm thickness
- grade UV 100 AR (=antireflective surface): sizes 3,050 x 2,050 mm in 1.5, 2 and 3 mm thickness

**PLEXIGLAS® RP**

**Physical forms:**
- size: up to 3,050 x 2,050 mm
- thickness: 3 mm

**PLEXIGLAS® / EUROPLEX® Films**

**Physical forms:**
- cut-to-size sections or rolls
- 30 µm to 1 mm

**PLEXIGLAS SATINICE®**

**Physical forms:**
- PLEXIGLAS SATINICE® DF: standard size 3,050 x 2,050 mm, thicknesses 2-5 mm
- PLEXIGLAS SATINICE® SC and DC: in 3-20 mm thickness in standard size 3,050 x 2,030 mm, from 25mm thickness in size 3,000 x 2,000 mm
PLEXIGLAS SUPERCLEAR®

Properties:
• excellent surface quality
• extremely narrow thickness tolerance
• no haze
• excellent laser-cutting and routing properties
• highest optical transparency

Physical forms:
• sizes: 1,850 x 1,250 mm, 2,230 x 2,050 mm and 2,800 x 2,050 mm
• thicknesses: 0.8; 1.2 and 2 mm
• special thicknesses and cut-to-size sections on request
• also available with abrasion-resistant coating

PLEXIGLAS® Fluorescent

Properties:
• brilliant, luminous edges with high optical transparency
• harmonious combination of trendy colors
• brilliant, glossy surfaces
• excellent fabricating properties
• UV-resistant

Physical forms:
• sheet size 3,050 x 2,030 mm
• sheet thicknesses 3 and 6 mm
• special thicknesses and colors on request

PLEXIGLAS RESIST®

Properties:
• complete range of impact-modified PLEXIGLAS®
• unites the UV and weather resistance of PLEXIGLAS® with high/highest impact strength
• applications: protective glazing (machine guards, ice hockey stadiums), vehicle glazing (windshields), signage (protection against vandalism)

Physical forms:
• 5 grades with different degrees of impact strength
• variety of individual colors
• thicknesses up to 25 mm
• standard sizes 2,050 x 3,050 mm

PLEXIGLAS® / EUROPLEX® Aircraft Materials

Properties of EUROPLEX® aircraft material:
• opaque, translucent, transparent or GF-reinforced
• high impact strength
• easy to form
• meets the fire specifications of FAR 25.853 and ABD 0031
• EUROPLEX® PPSU also passes the heat release test

Properties of PLEXIGLAS® GS aircraft material:
• highest optical quality
• very good aging resistance
• highly transparent
• high UV resistance

EUROPLEX® Engineering Plastics

Properties:
• high heat deflection temperature up to 200°C
• excellent mechanical properties
• excellent chemical resistance
• resistant to hydrolysis and sterilization
• flame-retarded (UL94 VO)

Physical forms:
• sheet size 3,000 x 1,250 mm
• sheet thicknesses 0.5 x 7.0 mm
• modifications on request

EUROPLEX® EC

Properties:
• antistatic, transparent, abrasion-resistant, high impact strength and very good chemical resistance
• specially developed for glazing in production areas for components at risk of static charging, in clean rooms and explosion-proof areas such as the chemical industry, mining industry, mills and industrial bakeries

Physical forms:
• clear sheets: thickness: 1.0 to 8.0 mm
• size: 2,500 x 1,250 mm
• special range: also available in White, Yellow and Bronze
Degussa
Plexiglas Business Unit

Röhm GmbH & Co. KG
Certified to DIN EN ISO 9001 (quality)
and DIN EN ISO 14001 (environment)

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® = registered trademark

PLEXIGLAS,
PLEXIGLAS SATINICE,
PLEXIGLAS RESIST,
PLEXIGLAS HEATSTOP,
PLEXIGLAS ALLTOP,
PLEXIGLAS Gallery,
PLEXIGLAS SOUNDSTOP,
PLEXIGLAS SUNACTIVE,
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