

## Structured-Core Panels

Tell us your application needs – we'll find the solution!

Amazingly versatile, TRIPLEX structured-core panels offer a unique combination of high physical strength and surprisingly light weight. Made from rugged high-impact polypropylene, they provide decisive advantages in many different fields and can be supplied in tailor-made designs adapted to your specific requirements, however challenging they may be.



## TRIPLEX Structured-Core Panels – Let's Talk Applications!

TRIPLEX Kunststoffe GmbH, located in Haiterbach in Germany's beautiful Black Forest, has been manufacturing structured-core panels since 2003 for enthusiastic users all over the world. Inventive imagination and "Made in Germany" engineering have powered their success over the years as a supplier of highly innovative and versatile products. Maintaining close contact with customers, TRIPLEX welcomes the challenges of special applications and custom-engineered solutions. Prototype products conceived by TRIPLEX normally can be taken directly into series production without need for modifications. The product development resources and expertise of the TRIPLEX team are yours to benefit from. Tell us your specific needs and we will meet them using the unique capabilities of TRIPLEX structured-core panels. Together we will find optimum solutions for your intended product and application field.

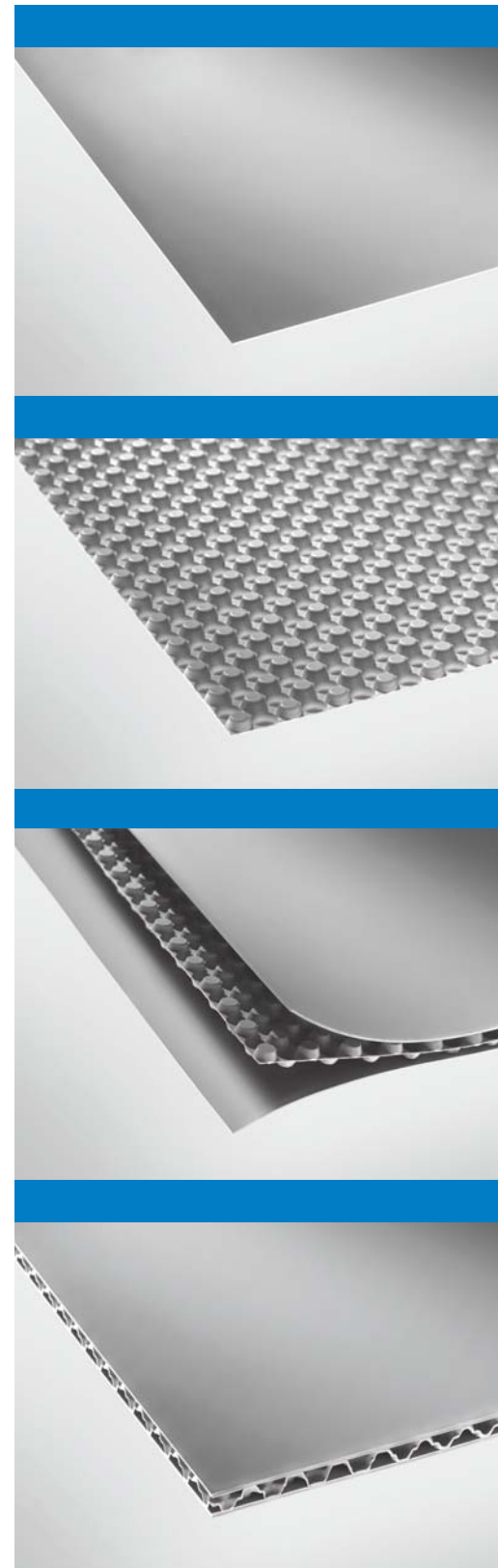
For more information on TRIPLEX®  
structured-core technologies, visit our  
website at [www.triplex-gmbh.de](http://www.triplex-gmbh.de)

## Structured-Core Panels – Advantages at a Glance:

- extremely lightweight
- outstanding compressive strength, impact strength, thermal insulation
- smooth, level surfaces
- rot-resistant and unaffected by moisture
- fully approved for use in foods applications
- superb resistance to a wide range of chemical substances
- easy to process to finished products
- suitable for printing with a variety of processes
- compatible for lamination with a wide range of TRIPLEX CoverTec surfacing options including foams, sheets, nonwoven fabrics and coloured surfaces
- can be cut to size in accordance with customer requirements
- 100 % recyclable, by means of the TRIPLEX Next Loop! Service, combining environmental responsibility and cost efficiency.

## Structured-Core Panels – Secrets of Their Technology

TRIPLEX is an innovative polypropylene panel made up of three layers welded together to a solid composite structure. The dimpled inner layer is sandwiched between two outer layers in an expertly engineered configuration which is unique and different from conventional hollow core panels. The dimples extend to both sides and are low in overall height, ensuring uniform thickness distribution and excellent compressive strength. This ingenious design guarantees an outstanding welding bond between the dimpled inner layer and the rugged outer layers. The air gap provided by the symmetric dimple pattern accounts for the extremely light weight of TRIPLEX structured-core panels.





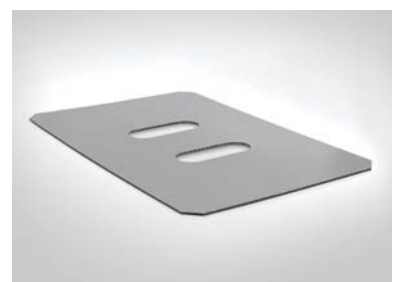
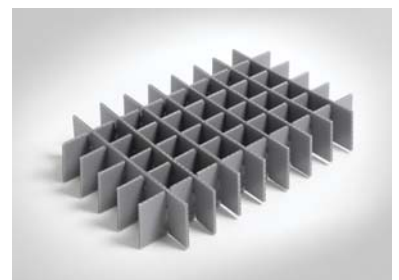
## TRIPLEX 3

TRIPLEX 3 panels, approx. 3 mm in overall thickness, are the thinnest and most lightweight product in the TRIPLEX family, yet surprisingly strong and rugged. The combination of rigidity and extremely light weight make TRIPLEX 3 the perfect solution for a broad spectrum of special applications.

One example: TRIPLEX 3 panels can be used as components of cages for small animals. Due to their outstanding weathering resistance the cages are ideally suited for outdoor use and easy to clean and assemble.

TRIPLEX 3 panels can also be used as lightweight container partitions or horizontal dividers to protect and separate products in transport. They offer big advantages including significantly higher strength and moisture resistance as compared to cardboard and other conventional materials.

TRIPLEX 3 is also ideal for fabrication of contoured part trays which can be precreased and folded to form lightweight, flexible boxes which cradle and enclose the transported products.



## Product Programme

Area weight, approx.	Thickness, approx.
1000 g/m <sup>2</sup>	3.6 mm
1500 g/m <sup>2</sup>	4.0 mm
2000 g/m <sup>2</sup>	4.4 mm



## TRIPLEX 5



With its higher thickness TRIPLEX 5 opens the door to more technically demanding applications. Its compact yet sturdy design is ideal for use in wall panels or compartments in machine construction and water filter units.



Gone are the days of heavy metal or wooden automotive interiors: TRIPLEX 5 is lighter in weight and saves fuel. Its outstanding properties such as superb compressive strength and impact strength, lamination capability with foams, sheets, nonwoven fabrics and coloured surfaces, excellent moisture resistance and approvals for foods applications all open up new application worlds.

TRIPLEX 5 is also an ideal material for tailor-made, reusable transport packaging for medium-weight or heavyweight products.



## Product Programme

Area weight, approx.	Thickness, approx.
1000 g/m <sup>2</sup>	5.1 mm
1500 g/m <sup>2</sup>	5.6 mm
2000 g/m <sup>2</sup>	6.1 mm
2500 g/m <sup>2</sup>	6.5 mm



## TRIPLEX 10

The higher the TRIPLEX number – here TRIPLEX 10 – the more heavy-duty are its applications. Featuring an impressive portfolio of properties including excellent compressive and impact strength, superb rot and moisture resistance and suitability for personalized I.D. printing, TRIPLEX 10 is used in enclosing walls for construction sites, dust protection partitions for indoor construction as well as boxes and cubicles of various types and sizes. The application fields are amazingly diverse. Whether in the outdoor or leisure activity sectors, vehicle construction or transport packaging, the possibilities for outstanding products with tailor-made dimensions and performance are limitless.

In the environmental sector, in addition to the capability of recycling and CO<sub>2</sub> conservation, black TRIPLEX 10 panels can be used for as regenerative solar energy cells. The system is simple and cost-efficient – cold water is sent through the hollow core of the panels and from there to a heat pump.



## Product Programme

Area weight, approx.	Thickness, approx.
2000 g/m <sup>2</sup>	9.6 mm
2500 g/m <sup>2</sup>	10.1 mm
3000 g/m <sup>2</sup>	10.6 mm
3500 g/m <sup>2</sup>	11.1 mm
4000 g/m <sup>2</sup>	11.7 mm





## Whatever Your Product or Application, TRIPLEX Structured-Core Panels Get The Job Done!

The unique technology incorporated in TRIPLEX structured-core panels maximizes ease of processing in finished-product fabrication. Their symmetric construction, outstanding strength, ultra-light weight, wide range of thicknesses and options such as UV stabilization, electrical conductivity and talcum additives for outstanding high-temperature strength provide wide-ranging possibilities for optimized product design. Eye-pleasing colours and various types of surface texturing are available as additional options. TRIPLEX structured-core panels offer users excellent value for the purchase price invested along with benefits in the areas of environmental and resource conservation provided by our TRIPLEX Next-Loop! Service.

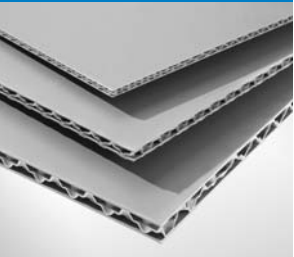
If we can't propose an existing design which is right for your specific application, e.g.

- boxes, cartons, crates, containers
- collapsible boxes, containers, pallet sleeves
- container compartments, horizontal dividers, contoured inserts, carrying case inserts
- other types of disposable or reusable packaging
- reinforcing components and structural inserts
- display compartments, portable partitioning walls, promotional displays
- laminated or non-laminated decorative panels, liners, machine housings
- thermally moulded parts of various types
- lightweight roof, floor and side panels
- solar energy utilization systems for roofs
- various applications in building construction and civil engineering,

talk to us and – together with you – we will develop the product you need. We promise.



Send us details on your product or application  
to [info@triplex-gmbh.de](mailto:info@triplex-gmbh.de) or from our website  
at [www.triplex-gmbh.de](http://www.triplex-gmbh.de)



## Our Promise

At TRIPLEX, we focus on coming up with new, surprising ideas – today we're thinking about your requirements for tomorrow. In looking for new ways to solve your problems, we are not afraid to take unconventional paths, relying on imagination for uncommon solutions along with courage to travel uncommon routes. By keeping our eyes open and constantly learning more, we break through barriers and set new standards. True to our roots as a family-owned company, we listen exactly to what you have to say and attach utmost importance to fairness in our business relationships. At TRIPLEX, our employees, customers and suppliers are fully committed with their hearts and their minds and work together as partners.

DIN EN ISO 9001:2000

Certified



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