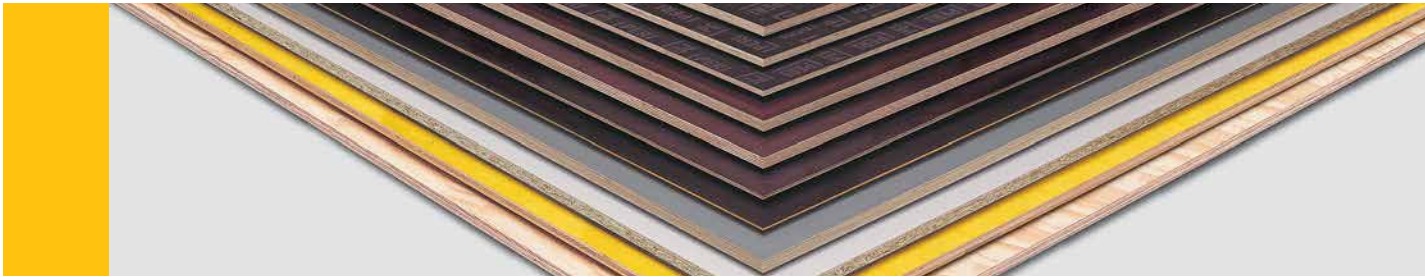


Plywood and panel products

The right panel for every requirement



PERI – Your partner

for plywood and panel products



For over 45 years, PERI is known as a family owned business for innovative formwork and scaffolding technology as well as for competent support for the customers in all project phases. With practical systems and a wide range of services, we support our customers around the world to realize their projects efficiently along with achieving excellent results.

An important, additional branch of our company is the division Panel Products. Our portfolio includes a wide variety of panel products - including formwork panels and wood-based materials for the construction industry, plywood for the packaging industry, plywood with smooth and abrasion-resistant coating for vehicle construction and a huge range of products for technical application in the industry. In order to meet the diverse customer requirements, we are active in the most important procurement markets all over the world. Our central organisation is located at the PERI headquarters in Weissenhorn in Southern Germany.

Our local sales engineers and panel sales staff in their respective subsidiaries and offices around the world are available to ensure competent advice for our customers. With their know-how they can find the appropriate solution also for your requirements.

We would be pleased to have the opportunity to discuss how PERI can help you with any requirements you have and ensure you are buying the best product at the right price.

A handwritten signature in black ink that reads "Gunnar Berg". The signature is written in a cursive, flowing style.

Gunnar Berg
Head of Panel Products PERI Group
PERI GmbH, Weissenhorn, Germany

PERI – Successfully active on the market for more than 45 years

International. Customer-oriented. Innovative.

PERI is one of the leading international manufacturers of formwork and scaffolding technology. Since company founding in 1969 we have continued to set new standards in the development and production of innovative products and systems.

Based in Southern Germany and with an international network of over 60 subsidiaries as well as more than 130 logistic and distribution points, we are never far away from our customers and their projects. Generating revenues in excess of 1.3 bil Euro in 2015 was possible due to the strong commitment and the dedication of our 7,700 employees.

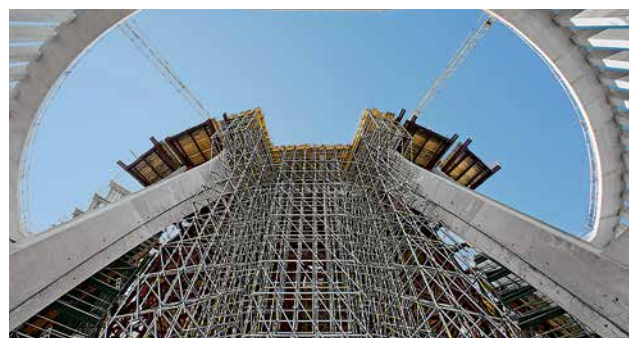
We see ourselves as a partner of our customers. Together with our clients, we develop the best and most economical formwork and scaffolding solution and we support them with their challenges and applications.

The portfolio of our important business division Panel Products not only focuses on formwork panels for all PERI formwork systems and all other construction site applications. In addition, we also offer suitable products for many other industries and applications – from precast to the packaging and the vehicle industry.



Formwork

PERI provides the most appropriate formwork system for every concrete structure and component. The portfolio fully complies with the global requirements of different construction methods and boundary conditions.



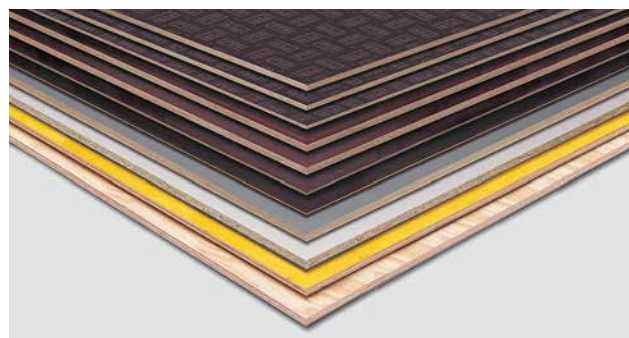
Scaffolding

PERI scaffolding provides a high level of safety and can be used for a broad range of applications. Regardless whether it is frame or modular scaffold – the great flexibility results in a high utilization of the material.



Engineering

For PERI, engineering is not just product development and application technology. In particular, PERI engineering also stands for the optimization of all processes related to formwork and scaffolding.



Plywood and panel products

PERI efficiently serves numerous target groups that have very different requirements. With our expertise and our global network, we provide the right product for every application.

The business unit PERI Panel Products

Competent. Versatile. Efficient.

In about 20 years of business, PERI has developed into one of the most successful international providers of plywood and panel products. Our product portfolio is tailored to meet our customers needs worldwide.

Expert advice service in every market

Worldwide our customers are cared for by experienced PERI sales staff and engineers. They provide expert advice and provide practical recommendations for a wide range of applications. As a local contact, they ensure quick and easy responses and processing of all enquires and orders. In addition our experienced staff provide information on use and maintenance of our products to maximize longevity of the product.

Versatile, market-driven product range

We offer our customers from various industries a comprehensive product portfolio. Our panel products can be used for nearly all core applications in the construction industry from building concrete foundations up to roofing structures. With our extensive product range, we can also serve different industry branches such as precast plants and precast block plants, vehicle construction and the packaging industry.

High-performance global network

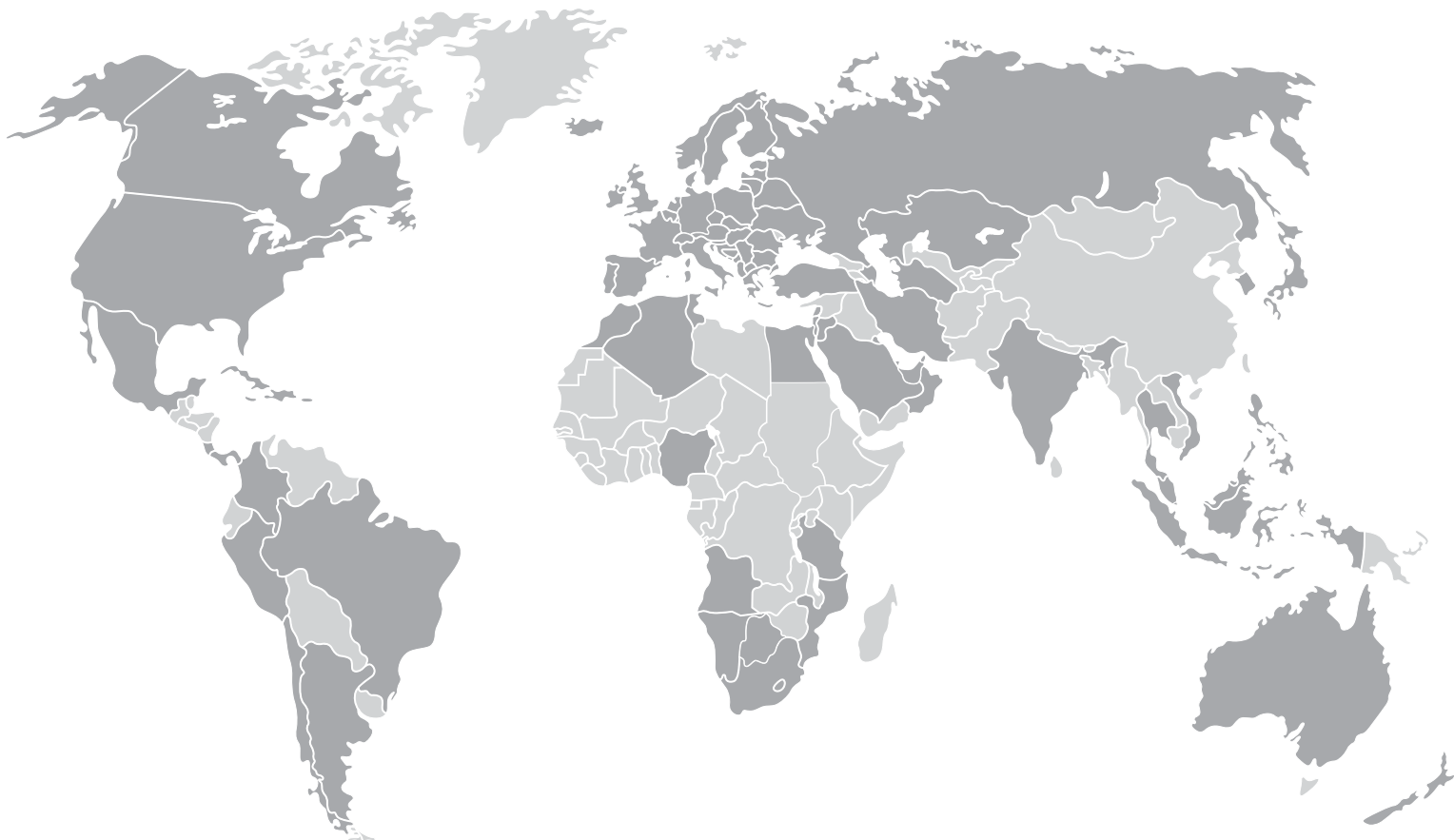
Through our close and comprehensive supplier partnerships with leading international manufacturers and with an annual consumption of around 6.000 containers, we are able to offer panel products at a competitive rate for our customers in each country. Through our extensive logistics and sales network supported by local stock, we ensure reliable and constant supply.



Since the company was founded in 1969, headquarters in Weissenhorn to the south of Ulm has been steadily expanded. The large majority of our PERI systems are still produced here today.



Our PERI engineers and sales staff provide expert advice worldwide, both in construction and in other industries. Our staff will ensure we source and supply the right product for our customers needs.



With more than 60 subsidiaries, a large number of branches and over 130 efficiently-run storage facilities, we are close to customers and projects worldwide. Our local sales engineers provide expert advice and assistance to our customers all around plywood and panel products.



With our strategically situated distribution centre we can offer our customers a just in time service. Smaller quantity deliveries are available from our local storage facilities.



For transportation to the customer by land and sea, we cooperate with reliable logistics partners. Our international logistics network results in an optimal delivery capability which is a huge benefit for our customers.



Plywood and panel products

Applications, requirements and PERI solutions

On-site concrete construction

For on-site concrete applications, the panels are exposed to a number of stresses. In addition to environmental influences, the handling and storage of the panel before and during use can have a decisive influence on the life and performance of the product. The number of formwork uses along with the demands regarding the concrete surface quality vary from project to project, and provide two important factors in choosing the right panel.

Through our vast experience, PERI is able to offer sound solutions in the construction industry with regard to the different surface finishes, wood type, thicknesses and panel sizes required to meet our clients demand.

All our formlining panels are characterized by a robust core panel for consistent dimensional stability, whilst maintaining a relatively low dead weight. In addition good workability and lifespan is ensured with the correct handling and use of our panels.

If required, a particularly abrasion-resistant and robust coating provides a high number of re-uses. In order to achieve large and joint-free surfaces, we offer special formlining sizes, so-called Maxi panels. But also for secondary operational purposes, our product range includes inexpensive alternatives.

The PERI solutions

- Coated plywood (film and MDO) available in a wide variation of sizes and thicknesses
- Uncoated plywood
- Plastic coated panels
- Composite panels

Formwork element with maxi-dimensions up to 7,500 mm x 2,700 mm facilitate the construction of large-sized joint-free architectural concrete surfaces.



Precast concrete industry

The production of precast concrete elements is manifold and ranges from constructive precast construction to the manufacture of single precast elements. Due to the wide variety of formwork panels PERI offers optimum support for any requirement in precast plants. Similar to on-site construction, the plywood for precast products features high stability as well as high-quality core with a hard-wearing and smooth surface.

This facilitates multiple utilization and makes a significant contribution to the final concrete finish.

For large, joint-free concrete elements PERI provides a full range of Maxi panels in different thicknesses and formats. For lower concrete surface requirements, we offer various large-sized panels with different thicknesses and formats. The easy workability of the panels allows to produce

individual precast forms in a short time at low cost. For support-structures, the high strength and dimensional stability of the panels is decisive. For this, a wide range of uncoated plywood products is available with various qualities, thicknesses and sizes.



The PERI solutions

- Coated plywood, also in maxi sizes
- Uncoated plywood
- Wood materials

Precast concrete paving block industry

Robust and durable production pallets are essential for the manufacture of concrete blocks. PERI Pave production pallets provide a flat surface during the production process and, due to the stable multiplex structure, a very high load-bearing capacity during the storage procedure for drying the blocks. In spite of its high stability, the pallet has a low dead-weight. The crosswise bonding of the individ-

ual veneers guarantees a high and uniform transfer of vibrations. This results in not only good concrete compaction but minimizes energy use at the same time. The PERI Pave production pallet is coated on both sides with a plastic laminate. This joint-free and easy-to-clean surface provides a smooth reverse side of the block and also allows problem-free use for the production of washed concrete

blocks. Furthermore, the coating prevents and leakage of the wood constituents and thus discoloration of the concrete blocks. Through customized CNC processing, PERI Pave can easily be adapted to all machine types.



The PERI solutions

- PERI Pave

Plywood and panel products

Applications, requirements and PERI solutions

Timber framed construction

In timber frame construction structural plywood and OSB panels are primarily used. Important characteristics are dimensional stability and exact, accurate tolerances of the utilized panel product.

Depending on the requirements, PERI also offers different surfaces. For constructional purposes, such as

walls, floors and roofs, PERI offers multiplex boards made from spruce and pine wood. Our wood panels offer versatility in application and are suitable for both constructive as well as decorative applications. They can be easily machined and are characterized by their low weight.

All PERI products that are used in this field of application are CE, FSC® or PEFC certified, and also comply with other country-specific standards.



The PERI solutions

- Uncoated plywood
- Wood materials

Vehicle industry

Plywood is used for various applications in vehicle finishing. The wire-mesh plywood with its non-slip surface is the right choice if good slip resistance and abrasive resistance is demanded. In addition PERI offers also different surface patterns. By gluing and coating with phenolic resin, PERI panel products are weather resistant, easy to clean and resistant to chemi-

icals. This prolongs the service life and reduces operating costs. PERI Maxi panels with structured surfaces allow the production of large, joint-free vehicle floors.

For vehicle sub-constructones, uncoated plywood from the PERI range is used. For the interiors, smooth, coated panels are ideally suited which

also provide optically high-quality surfaces. Customized produced panels with individual veneer layouts allow the manufacturer to take into account different constructive conditions of the chassis. The plywood panels used in vehicle construction are easy to process on CNC machines but at the same time are so robust that tongue and groove joints are possible as well.



The PERI solutions

- Plywood with non-slip and smooth coatings, also in Maxi sizes
- Uncoated plywood
- Plywood composite constructions

Packaging industry

Panels which are used as industrial packaging for valuable goods are most of all characterized by its high strength and low weight. Due to their construction, panels are ideally suited for packaging of any type. It is particularly light and, at the same time, meets the high requirements regarding strength and dimensional stability. In addition, it can be easily machined

and thus adapted to suit a wide range of packaging sizes.

In the packaging industry, mainly uncoated plywood is used. If the focus is on low weight, softwood panels made from coniferous wood are the best solution, such as Brazilian Elliotis Pine. If something is to be printed on the packaging or if a more sturdy

packaging is required, then hardwood plywood such as birch is recommended. Also in this field PERI offers a full range of panels.



The PERI solutions

- Hardwood and softwood plywood in different qualities, sizes and thicknesses
- Wood materials

Our commitment for a long-term cooperation

Best advice and support

provided by locally-based experienced specialists who find the right product to meet your requirements.

Worldwide supply

through a highly efficient logistics network with international ocean and land-based storage locations in close proximity to the customer.

Wide diversity of products for all applications

with the most suitable product for every requirement – in a full range of thicknesses, sizes and qualities and coatings.

Cost benefits for our customers

through consolidation of international volumes.

Reliable quality

through strict guidelines in the selection of our suppliers and regular supply chain audits.

Long-term orientation

through environmental, social and economical sustainable activities, e.g. FSC® and PEFC certification of PERI plywood and panel products.

Future developments

through continuous further progress and optimization of products and PERI services.

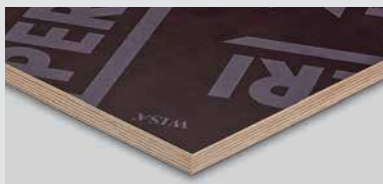


Plywood and panel products

Outtakes from the PERI product portfolio

PERI plywood and panel products are available in many qualities and standards. Especially panel thicknesses, sizes and coatings are adapted to suit local market requirements. On request, we offer CNC-machined and individually tailored solutions. Experts for panel products and wood materials in the different countries provide support for finding the appropriate product.

Coated plywood



With a smooth coating

Type of wood

Hardwood and softwood from worldwide origins (e.g. European, Asian, South American)

Coating

- Phenolic resin coating
- Melamine resin coating
- MDO coating



With a structured coating

Type of wood

Hardwood and softwood from worldwide origins (e.g. European, Asian, South American)

Coating

- Different non-slip patterns



With a special coating

Type of wood

Hardwood and softwood from worldwide origins (e.g. European, Asian, South American)

Coating

- Polypropylene (PP)
- Fibre-reinforced (GFRP)
- UCP coating

Uncoated plywood



Type of wood

Coniferous and deciduous woods from different countries of origin in different qualities

Wood materials



Types of panels

3-ply panels, OSB, chipboard, LVL, composite panels, MDF

Sustainability and compliance with due diligence during the procurement of our products

Sustainable management is a fundamental principle of PERI. As a result, we source our plywood and panel products from manufacturers that process timber only from legal sources and, as far as possible, from certified, sustainably managed forests.

The product chain (Chain of Custody) of PERI GmbH is certified according to the standards of the PEFC and FSC®. PEFC (Programme for the Endorsement of Forest Certification Schemes) and FSC® (Forest Stewardship Council) are non-governmental, non-profit organizations. They are committed to sustainable forest management and certified forests which are managed according to these criteria. Sustainability means that the forest management must not only be environmentally sound but also socially acceptable and economically viable. Many PERI subsidiaries are already certified or are currently going through the certification process.

Due diligence and regular, independent verification

Everyone like PERI, who sells products made of wood from certified growing regions may make this clear on the end product by attaching the PEFC or FSC® logos. The prerequisite is that a due diligence system is introduced that covers the entire product chain – from procurement and storage through to the sale. Compliance with the requirements is reviewed annually while certification is renewed every 5 years.

Thus, our customers can be sure that the wood for PERI products which carry the PEFC or FSC logo does actually come from sustainably managed forests.



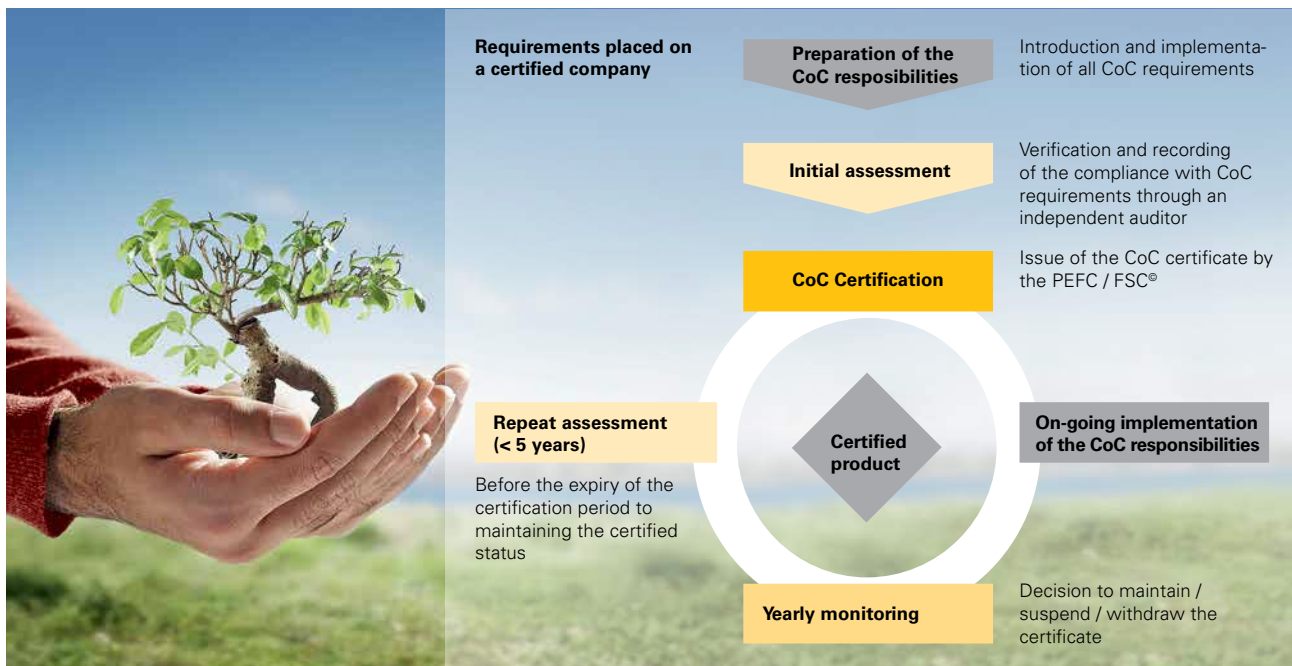
Das Zeichen für verantwortungsvolle Waldwirtschaft



Compliance with due diligence requirements within the framework of the EU Trade Regulation 995/2010

As an importer of panel products, PERI GmbH uses the due diligence system of the General Association of the German Timber Trade. This system is subject to technically-based monitoring and constant external supervision by the Federal Agency for Agriculture and Food (BLE) as a public authority. It is based on the minimum requirements of the European Timber Trade Federation (ETTF), which prescribes harmonized due diligence for the European timber trade federations.

PERI confirms that the traded goods have been subjected to due diligence according to the standards and in accordance with the requirements of EU Regulation 995/2010 (Timber Trade Regulation).





**Formwork
Scaffolding
Engineering**

www.peri.com



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The wood used to produce the paper for this PERI brochure comes from FSC®-certified forests. The FSC® label confirms that the entire processing and supply chain is completely certified.