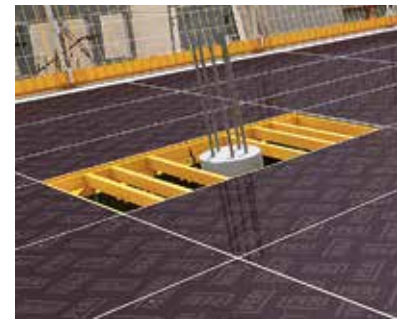
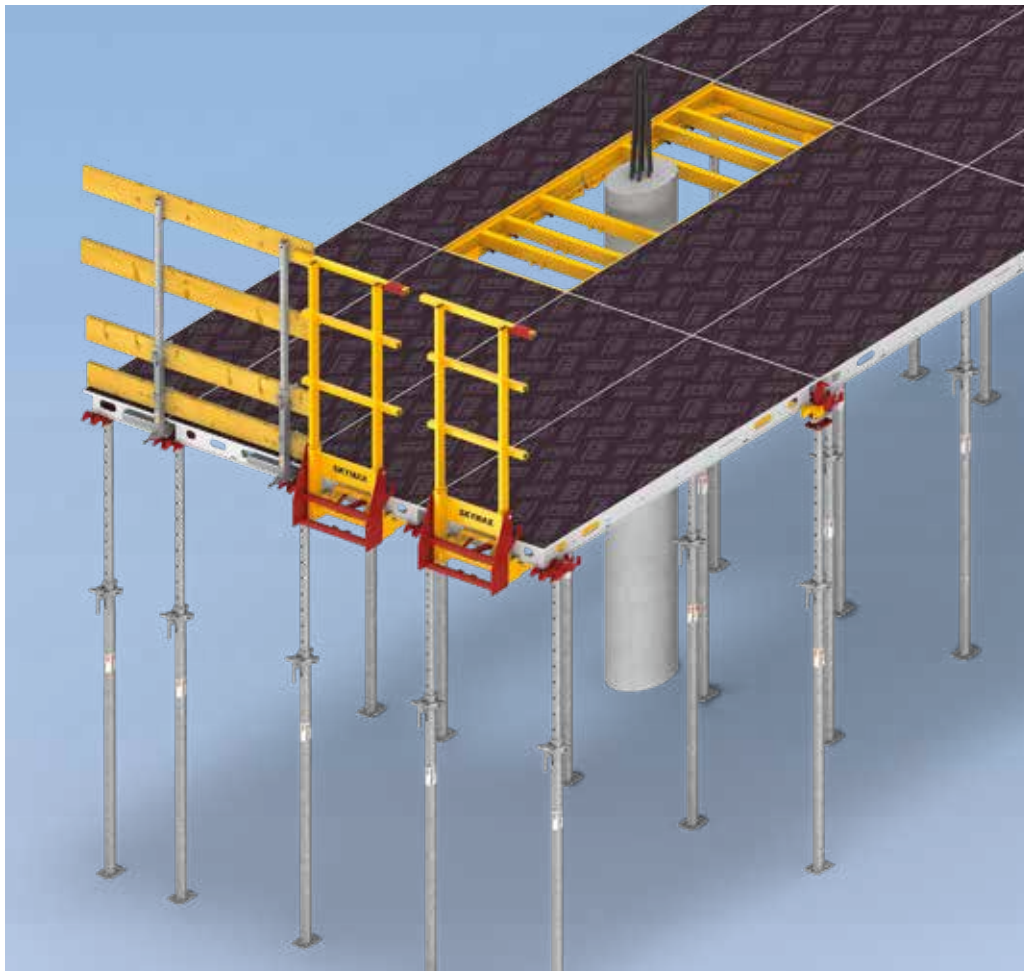


SKYMAX – Large Panel Slab Formwork

Future-proof forming: quick – simple – safe

Product Brochure – Issue 10/2019



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Important notes

All current safety regulations and guidelines applicable in those countries where our products are used must be observed.

The photos shown in this brochure feature construction sites in progress. For this reason, safety and anchor details in particular cannot always be considered conclusive or final. These are subject to the risk assessment carried out by the contractor.

In addition, the computer graphics used are to be regarded as system representations. To facilitate understanding, these and the detailed illustrations shown have been partially reduced to certain

aspects. The safety installations that are not shown in these detailed descriptions must nevertheless be available. The systems or items shown might not be available in every country.

Safety instructions and load specifications are to be strictly observed at all times. Separate structural calculations are required for any deviations from the standard design data.

The information contained herein is subject to technical changes in the interests of progress. Errors and typographical mistakes reserved.

SKYMAX – Large Panel Slab Formwork

Future-proof forming: quick – simple – safe

The ability to install the SKYMAX slab formwork from the next level down allows for a particularly high level of safety at your construction site. From a technical and economic point of view, the slab formwork is also a highly flexible system on account of the aluminium and polymer components used and is extremely straightforward to assemble.

The multifunctional, aluminium and polymer-based SKYMAX slab formwork system offers a wide range of adaptable combination options. You will be able to combine panels, support heads and other system components in many different ways or join them together to form slab tables. This will significantly reduce your labour and material costs.

Our large-scale panels, the minimal variation between components and the straightforward installation process will also improve the cost-efficiency of your construction site.

What's more, the SKYMAX system is extremely safe: The components are pivoted upwards from a safe position on the level below. Using the support head or patented lowering head, the panels can be supported at any given position.

Future-proof assembly

and a high degree of cost-efficiency thanks to safe handling, innovative system components and the use of RFID technology as standard

Simplicity of the system

based on the low number of system components and a self-explanatory functionality

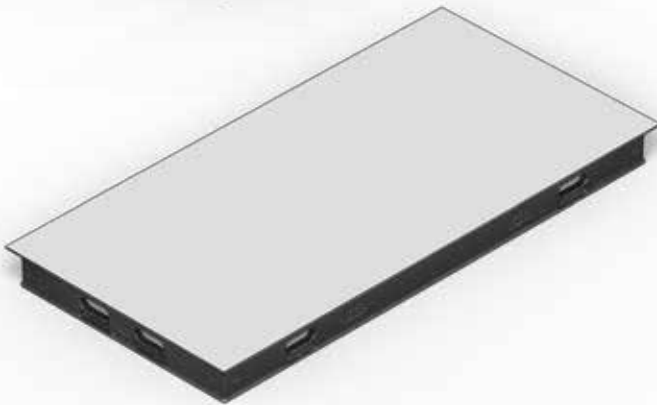
Fast shuttering and striking

due to the low weight of components, early striking with patented lowering head

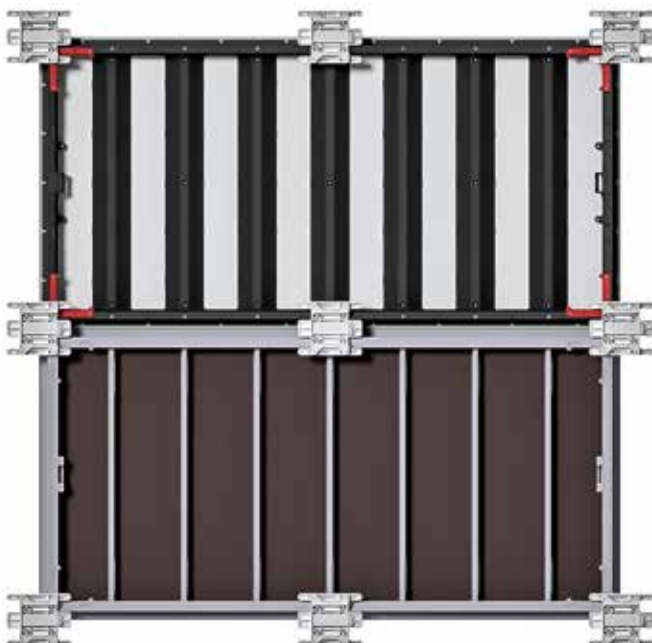




Our aluminium SKYMAX panels will provide you with the highest degree of systematic flexibility. The panels come in dimensions of 2.00 m x 1.00 m or 2.00 m x 0.67 m, are extremely easy to handle and only weigh 32 kg or 26 kg. These features will reduce the amount of time and level of effort required for the installation process and lessen the burden placed on your personnel. You also have the option of assembling the aluminium panels to form large slab tables with minimal effort.



The polymer-based SKYMAX panels only weigh 30 kg or less than 25 kg and have the same dimensions as the aluminium panels. In addition, these panels have reinforcements on the frame and on the formlining. Not only are they highly appealing due to their excellent value for money, they also ease the strain on personnel and financial resources in equal measure. You also have the option of combining them with aluminium components, thus optimising the overall functional performance.



The aluminium and polymer panels can be combined in a way that meets your specific requirements.

Future-proof assembly

Safe handling and high degree of economic efficiency

The SKYMAX system is innovative and sustainable and adheres to the most recent safety standards in force at your construction site. What's more, additional system components and the use of RFID and NFC as standard ensure a high degree of efficiency.

The safety requirements imposed on slab-forming procedures are becoming an increasingly significant issue. By opting for SKYMAX large panel slab formwork, not only will you be meeting the latest requirements, you will be well-equipped for the future. The slab panels are slipped into the head from a safe position on the installation surface below and pivoted upwards. This reduces the amount of work and level of effort required significantly, thus ensuring a high level of efficiency throughout the forming process.



The latest generation of RFID technology

By installing dual-frequency RFID transponders (RFID = RADIO Frequency Identification) in each SKYMAX system as standard, PERI has ensured that SKYMAX is optimally equipped for the future. This technology enables you to detect and clearly identify the SKYMAX panels from significant distances and en masse using a scanner.

In line with the motto "All the information in your pocket", not only can you retrieve specific component information and assembly instructions digitally using a conventional NFC-compatible (NFC = Near Field Communication) smartphone and the PERI Material Scan App thanks to this special RFID tag, you can also optimise logistical processes according to the track & trace principle. In future,

it will also be possible to integrate elements into 3D models in real time (BIM) and even handle construction site processes.

This versatile package will be continuously refined on the basis of regular feedback from users and their user behaviour.



Detection en masse.

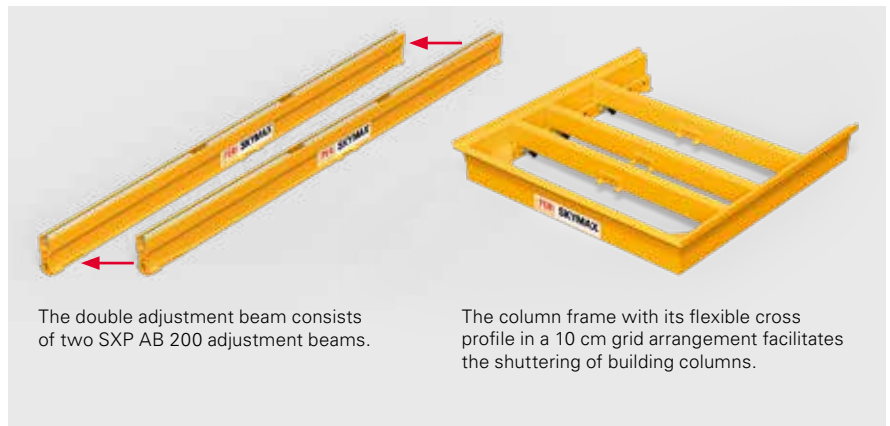
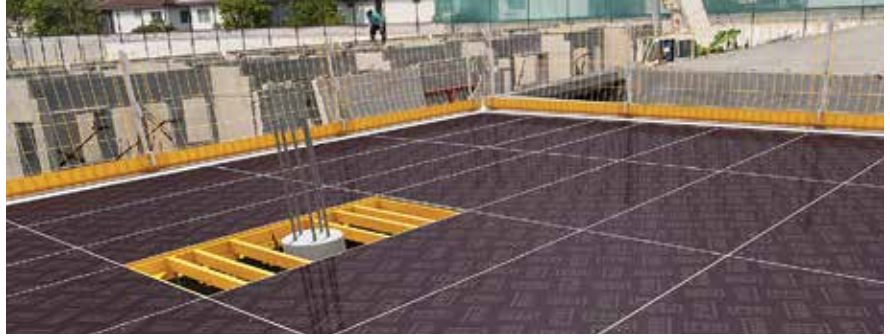


Retrieval of component information and assembly instructions.



Easy closure of mating surfaces

Additional system components such as column frames and adjustment beams make it safe and easy to close mating surfaces. You will be able to position the cross profiles of the column frame in a small grid, thus removing the need for time and material-intensive construction site solutions. To create openings at a later date, you can take individual panels of a unit out of the bracing, for example from directly behind the concrete joint. Also, double adjustment beams allow for the safe assembly of large filler areas.



The double adjustment beam consists of two SXP AB 200 adjustment beams.

The column frame with its flexible cross profile in a 10 cm grid arrangement facilitates the shuttering of building columns.

Anti-fall protection provided by guardrail units that can be pivoted upwards from below

The presence of the guardrail unit means that it is safe to work at the slab edges. It consists of a plug guardrail, a frame and a traverse that is mounted to the panel.

The assembly process is quick and easy: The first step is to attach the frame to the traverse. Next, the entire guardrail unit is pivoted upwards using the shuttering aid until it engages automatically. This process is repeated until the entire edge of the structure is safeguarded.



The guardrail unit ensures the safety of personnel and is easy to assemble. You can walk on the SKYMAX system as soon as the anti-fall protection has been assembled.

Simplicity of the system

Low number of system components and self-explanatory functionality

Working with the SKYMAX system is remarkably simple due to the low number of system components. The system of combining the panels and heads is self-explanatory. As such, the assembly process can be learned without the need for extensive training.

You will only need a single head for the entire shuttering and striking process as the head can be deployed flexibly in all directions, even in the edge areas and if there is a change in the direction of panels. You can choose between three variants to meet your specific requirements: the support head, made of either steel or polymer, or the lowering head which is made of steel.

The process of assembling the light-weight and ergonomic SKYMAX system components is self-explanatory: even inexperienced personnel can quickly learn how to handle the system. Considering the fact that only two workers are required for the shuttering and striking process, using the SKYMAX system also leads to a reduction in the personnel required.



Combining the panel and head

Using either the support head or the lowering head, the panels can be supported at any given position. The well-thought-out geometry of the heads and panels means that they can be deployed in an adaptable, simple and time-saving manner.

The teeth on the support heads and lowering heads make it exceptionally easy to insert the panels. The panels are fed, via the patented guide openings retaining teeth, onto the head where they are automatically secured in place and cannot be lifted out. This significantly increases the level of safety on the construction site.



On account of the teeth on the support head and lowering heads, once the panels have been installed, they are automatically secured in place and cannot be lifted out.

Minimal training required

The straightforward logic of the system and the low number of components used mean that users can learn how to work with the SKYMAX system in a particularly swift and intuitive manner. As such, even unexperienced personnel can quickly learn how to handle the system. This leads to a significant reduction in the number of application errors on the construction site.



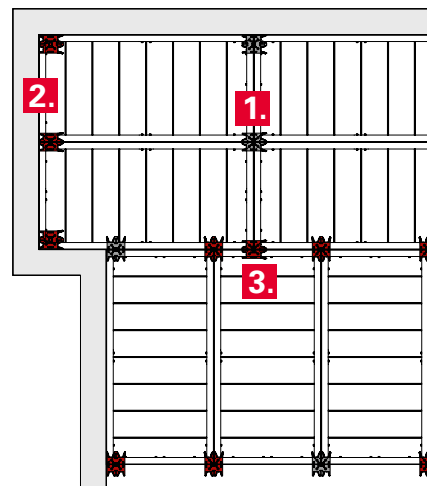
The installation process for the SKYMAX system is self-explanatory. This keeps the amount of training required by personnel to a minimum.

Support head variants

A robust steel version and a more cost-effective polymer version of the support head are available. It can be mounted on the props using a simple quick fastener.

1. It fits in the slab area at the intersections of four panels.
2. It can be mounted in front of a rising wall in the panel corner or reaching over two panels.
3. If there is a change of direction, you can mount it in any position you choose.

The support head can also be used with a middle support across two adjacent panels.



Polymer support head



Steel support head

Fast shuttering and striking

Low weight and patented lowering mechanism speed up processes

Speed up processes on your construction site with the SKYMAX system. This is made possible first of all by large-scale yet lightweight panels that facilitate swift, resource-friendly forming processes. The shuttering and striking process is expedited further still by the innovative starter beam while the lowering head reduces shuttering times.

In addition, you can procure other components that will enable you to make more efficient use of the SKYMAX system at your construction site. For example, with the shuttering aid you can achieve room heights of at least 3.80 m quickly and safely. It is even possible to achieve room heights of up to 6.00 m if a shuttering carriage is used as an auxiliary aid.

Generally speaking, it is possible to achieve slab thicknesses of up to 55 cm (with centre support, line 7) and slab thicknesses of 35 cm or 40 cm (without centre support, line 7 or line 6) with the SKYMAX system.

PERI can supply you with a bracing beam able to transfer 15 kN of tension anchor force. In comparison with conventional bracing systems, you will save time, cut installation costs and improve the efficiency of your construction site.



With the shuttering aid you can safely form room heights of at least 3.80 m.

Ergonomic work processes

Our lightweight, large-scale panels will allow your employees to work in an ergonomic manner while conserving energy. None of our formwork elements weigh more than 32 kg. As such, each person in a two-person team would be required to handle a maximum of 16 kg per panel. Moreover, the handle strips in the lateral and longitudinal profiles make the panels easier and more ergonomic to handle.



On account of the low weight and the ergonomic handling features, no more than two persons are required for the SKYMAX installation process.

Early striking thanks to lowering head

Using a lowering head keeps the shuttering time to a minimum and paves the way for swift and partial early striking. This will also allow you to reduce your on-site materials, thus cutting your costs. The lowering head can be used in all directions and even for changes in the panel direction. It also features a quick fastener.



With the aid of the lowering head, you will be able to strike the panels after only a short period of time and then use them together with the heads for the next section.

Starter beam

The starter beam enables you to start the process quickly and easily, thus speeding up the straightforward shuttering and striking procedure. The starter beam is available in the lengths 66.5 cm, 100 cm and 300 cm. In addition to the reduced workload at the outset, using the starter beam also means that fewer tripods are required for the forming process. It is no longer necessary to go through the time-consuming process of measuring the exact position of the individual props.



The starter beam speeds up the shuttering and striking procedure to the extent that it is no longer necessary to go through the time-consuming process of measuring the props.

The SKYMAX modular principle

Customised and future-proof slab formwork solutions

The SKYMAX modular principle will provide you with a high degree of cost-effective and technical flexibility when forming slabs while simultaneously ensuring maximum safety in the system.

The panel slab formwork option will provide you with entirely new ways of adapting your forming concept to your specific requirements. You will even have the option of assembling the components for use as a table solution.

SKYMAX will provide you with a huge range of application options and will enable you to combine the system

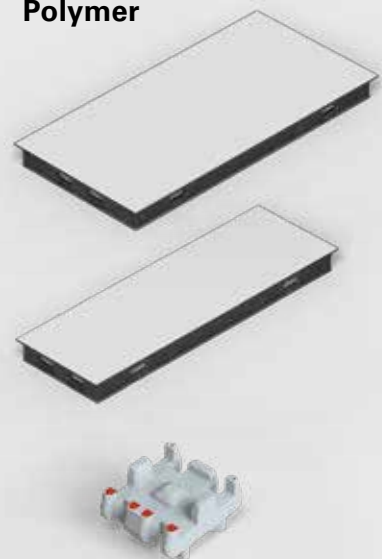
components in a number of different ways. Numerous components are available both in polymer and aluminium versions. Not only will you benefit from the respective advantages of these materials, but also from the fact that you can combine components within each material type and also with the other material type.

SKYMAX modular system – Components

Aluminium



Polymer



High technical and economical flexibility

- Flexible integrated options for the aluminium and polymer components
- System solutions for filler areas, changing direction of panels and early striking
- Customisable solution as panel slab formwork or table solution

Future-proof assembly

- Compliance with the latest safety standards on the construction site
- Comprehensive safety throughout all shuttering steps and striking procedure

SKYMAX modular system – Applications

SKYMAX – Large panel slab formwork

SKYMAX panel slab formwork can be used with panels made of aluminium or with polymer panels. In addition to a polymer support head, you can also use a support head made of steel. You will be able to combine panels, support heads and other system components in many different ways to suit your needs, which will enable you to achieve the greatest possible flexibility at your construction site.

The aluminium panels are available in the dimensions 2.00 m x 1.00 m and 2.00 m x 0.67 m. The same applies to the polymer panels.



SKYMAX slab table solution

The SKYMAX slab table solution consists largely of panel slab formwork components and PERI portfolio components. This minimises the number of different components required on site, simplifies the handling of the system and enables users to learn the system to greater effect. In addition to saving valuable time, you will also reduce your training, logistics and storage costs.

The SKYMAX panels can be assembled at the construction site to produce 2.00 m x 4.00 m slab tables up to 4.00 m x 6.00 m slab tables including safety equipment. This allows for cost-effective forming processes across the entire slab area. Additional panels can be mounted directly onto the slab table solution in order to expand it. This makes the modular principle even more adaptable.

The SKYMAX slab table solution will be available from the end of 2020 onwards.



Reconstruction of the “Dossenberger Gymnasium” school in Günzburg, Germany

During the reconstruction of the “Dossenberger Gymnasium” school in Günzburg, the shuttering process for the slabs was carried out using the SKYMAX large panel slab formwork with lowering head. The four-metre high ceiling of the basement floor consisted of a formwork area totalling approx. 145 m². In addition to SKYMAX panels with dimensions

of 2.0 m x 1.0 m and 2.0 m x 0.67 m, the construction team also made use of PEP ERGO slab props from PERI. Other SKYMAX components were used in addition to the panels: Starter beam, adjustment beam, support head, wall holder and column frame. By using a starter beam, it was possible to increase the degree of efficiency on

the construction site significantly throughout the shuttering process: Only two specialists were required to quickly fit the starter beam at a height of four metres using the shuttering aid. This saved valuable time, reduced personnel costs and also allowed the personnel to conserve energy while working in a safe environment.



Thanks to the shuttering aid, it was possible to fit the three-metre long starter beam quickly, easily and safely. It sufficed to bring the two centre props into contact with the starter beam once it had been fitted. The one-metre gap between two panels was generated automatically by the starter beam. The panels were fed

through the patented guide openings where they were automatically secured in place so they could not be lifted out. The heads made it possible to change the direction of the panels.

The props were installed using the lowering head once the panels had been pivoted upwards with the shuttering aid.

The position of the props could be freely selected. The straightforward systematics of SKYMAX paved the way for a swift installation process: It was not necessary to go through the time-consuming process of measuring the exact position of the props.



**The optimal System
for every Project and
every Requirement**



Wall Formwork



Column Formwork



Slab Formwork



Climbing Systems



Bridge Formwork



Tunnel Formwork



Shoring Systems



Construction Scaffold



Facade Scaffold



Industrial Scaffold



Access



Protection Scaffold



Safety Systems



**System-Independent
Accessories**



Services



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