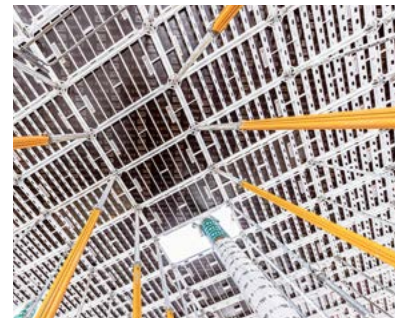
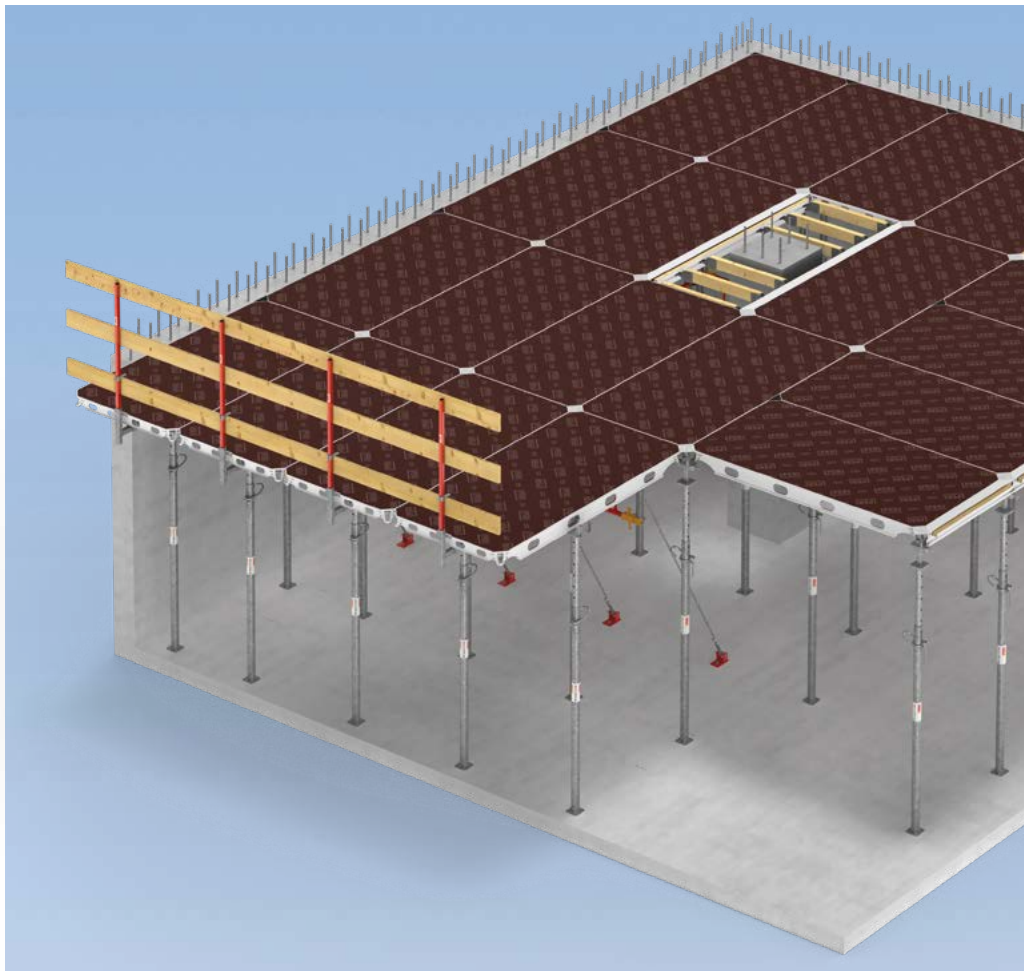


# ALPHADECK Panel Slab Formwork

The intuitive slab formwork with fast cycle times and low material requirements

Product Brochure – Issue 10/2022



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<p><b>Issue 10/2022</b></p> <p><b>Publisher</b></p> <p><b>PERI SE</b> <b>Formwork Scaffolding Engineering</b> Rudolf-Diesel-Strasse 19 89264 Weissenhorn Germany info@peri.com www.peri.com</p>		<p><b>Important notes</b></p> <p>All current regulations and guidelines applicable in countries where our products are used must be observed.</p> <p>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.</p> <p>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 as-</p> <p>pects. The safety equipments that are not shown in these detailed descriptions must nevertheless be available. The systems or items shown might not be available in every country.</p> <p>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.</p> <p>The information contained herein is subject to technical changes in the interests of progress. Errors and typographical mistakes reserved.</p>

## ALPHADECK Panel Slab Formwork

The intuitive slab formwork with fast cycle times and low material requirements

**ALPHADECK Panel Formwork is the preferred choice for customers looking to switch to system formwork. Particularly in the case of flat slabs with large spans, ALPHADECK is the ideal solution for completing concreting sections as quickly as possible. Compared to conventional formwork methods, less timber is required because of the reusable aluminium panels with PERI quality standards.**

The highly intuitive assembly sequence with standard panels in the sizes 240 cm x 120 cm and 180 cm x 120 cm makes it possible to form large areas particularly quickly. Assembly takes place in just a few steps from the safe level below and can be carried out in several directions at the same time.

What's more, ALPHADECK stands out due to its particularly efficient material management characteristics. Given that it consists of only three basic parts – panel, head and prop – material requirements on the construction site are significantly reduced. Different positions do not require different heads. In addition, thanks to the large-format panels, you will only need few props and will be able to do without cover strips, tripods

and other accessories altogether. This also makes the assembly sequence particularly efficient.

The ingenious drophead system allows for early striking and reduces material requirements further still, as the panels are quickly available for the next concreting section. ALPHADECK thus ensures considerable time and cost savings on your construction site.

The large-format panels are easy to handle and their weight allows for movement without a crane. By combining only three basic components, ALPHADECK has intuitive handling characteristics and can be used efficiently and safely even by inexperienced site personnel.

### Technical benefits at a glance

- Standard panels in sizes 240 cm x 120 cm and 180 cm x 120 cm
- Low-weight aluminium panels with only 17 kg/m<sup>2</sup>
- For slab thicknesses up to 55 cm
- Time-tested PERI Birch formlining with long service life
- Only one prop per 2.88 m<sup>2</sup> of slab area
- Straightforward closure of infill areas by use of the filler beam and plywood.
- Compatible with the entire PERI prop portfolio



▶ Video



**Swift shuttering of large areas** through easy-to-understand work processes carried out from the level below



**Efficient material management** thanks to lean and practical portfolio with only three basic parts



**Intuitive handling** enables correct application with minimal training

## Swift shuttering of large areas

With large panels in both directions

**ALPHADECK panels are available in standard sizes of 240 cm x 120 cm and 180 cm x 120 cm. This enables you to form large slab areas very quickly with as little material as possible. To do this, you only need a few easy-to-use components. The ingenious drophead system allows for early striking.**

When using ALPHADECK panel slab formwork, you only need one prop per 2.88 m<sup>2</sup> of slab area. Shuttering is carried out from the level below with the shuttering aid. Up to a height of around 4 m, no further aids are required.

In addition, the low material requirements in terms of panels ensures that work processes are efficient. After all, the large panels allow you to cover large areas efficiently with a minimum of formwork material. The system solution requires hardly any additional parts. Loose components such as tripods, connecting parts and screws are largely dispensed with. This also minimises the number of time-consuming additional steps, for example for the installation of cover strips.



### Minimal planning effort

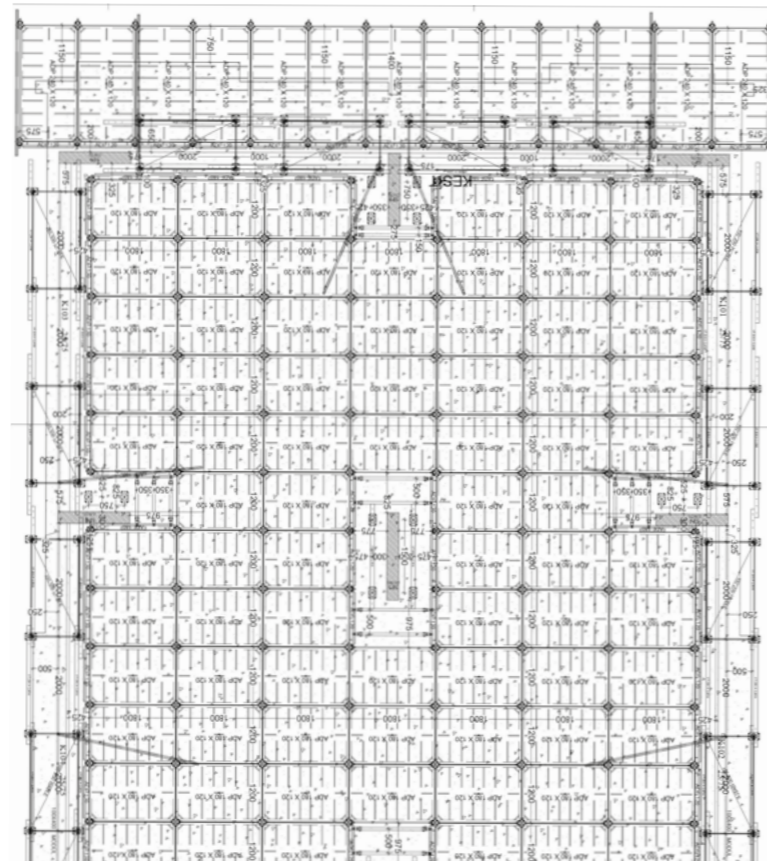
The planning process for the slab is particularly efficient thanks to the low number of smartly designed components.

Layout: Pine Village project, Antalya, Turkey



### Efficient transportation of materials

To use the ALPHADECK system, only two workers are required. The panels are easy to grasp thanks to the ergonomic grip holes in the braces. This facilitates transport of the panels by hand. Alternatively, they can be moved by crane.



### Fast concreting cycles thanks to early striking

ALPHADECK's ingenious drophead system enables early striking, which reduces material requirements even further. Because after just a few days, the panels are ready for the next concreting section. This ensures considerable time and cost savings on the construction site. You only need to have one set of panels.

### Early striking at a glance:

- First, release the drophead with a single hammer blow. This lowers the panel by 12 cm.
- You can then remove the panel. The props remain in place until the concrete has hardened sufficiently.
- After cleaning, the panels are ready to be used immediately in the next section.



### High flexibility when shuttering

With ALPHADECK Slab Formwork, starting the shuttering process is particularly efficient. Thanks to the braces, the shuttering process can be started at any position. The braces provide a high degree of stability. This means that you do not necessarily need a wall to start with, as ALPHADECK does not require wall holders and tripods.



The ability to form the large panels in several directions at the same time speeds up your work processes considerably. You are not limited to one direction and will be able to construct large slab areas faster than usual.

## Efficient material management

Lean and practical portfolio with only three basic parts.



**With its streamlined and practical portfolio, ALPHADECK Panel Slab Formwork is the ideal choice for customers looking to make the switch to system formwork. You only need three basic parts – panel, head and prop.**

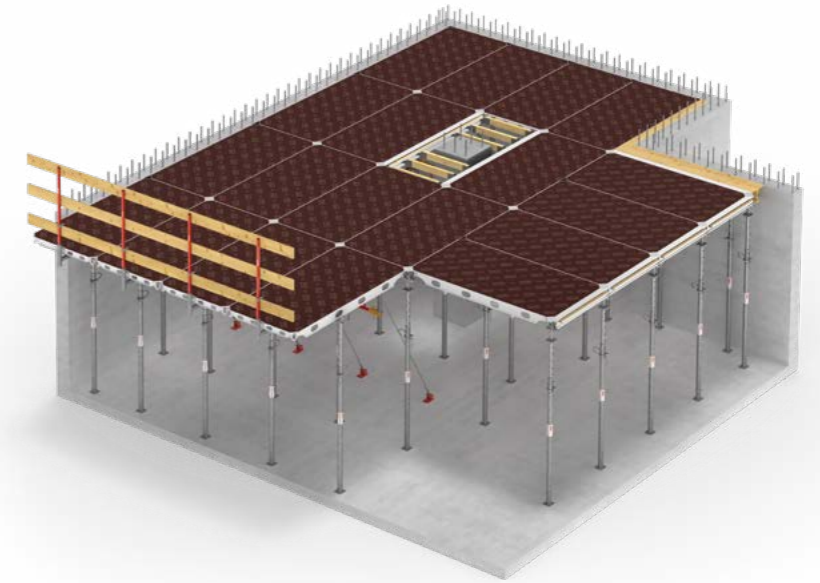
This ensures all-round efficient material management and minimises material requirements on your construction site. Compared to traditional formwork methods, less timber is required in the ALPHADECK standard application because of the reusable aluminium panels with PERI quality standards. In addition, ALPHADECK is characterised by its particularly low number of props, components and additional parts. The portfolio is particularly lean and easy to plan and handle.



**Freedom of movement**  
The particularly large panels and the small number of props ensure a spacious working and storage area beneath the slab.



With only three basic parts, ALPHADECK Slab Formwork requires little additional components and consequently only few working steps during assembly. This saves you valuable time and money.



**The ALPHADECK Panel Slab Formwork is compatible with the entire PERI prop portfolio and many commercially available props.**

For permissible prop loads, please refer to the current Instructions for Assembly and Use.



## Intuitive handling

Correct application with minimal training

**ALPHADECK consists of only three basic parts that are easy to assemble – panel, drophead and prop. This way, you will benefit from intuitive handling and simple assembly logic right from the start.**

The ALPHADECK Panel Slab Formwork is constructed from the safe working level below. The assembly sequence consists of only a few repetitive steps: Lift the panels from a safe position on the level below, hook them into the drophead and swivel them upwards with the shuttering aid. The drop-head works in all directions, making shuttering much easier.



### Minimal training

The ALPHADECK system can be assembled efficiently and safely even by inexperienced site personnel without the need for extensive training. Thanks to the large hooking holes and the long pins, you can connect the panels easily and safely to the dropheads, thus preventing them from falling out.



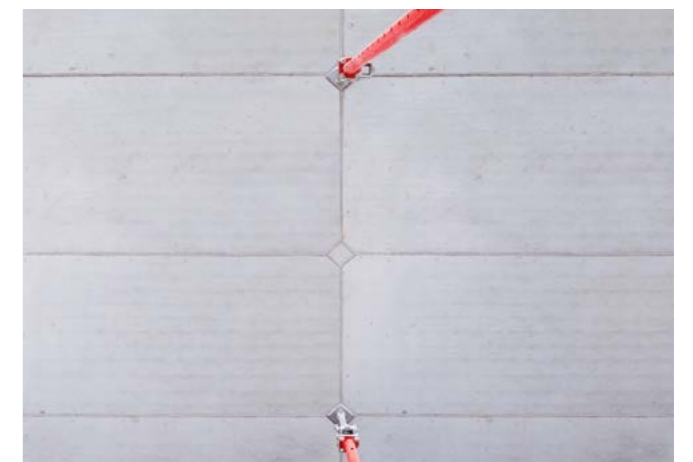
### Simple start to the formwork assembly using braces

Braces allow you to start the shuttering process at any position and you do not need a starter beam. To ensure the formwork is secure, fit a bay of braces every six panels in the short direction and every three panels in the longer direction. Installation is easy with a hammer blow, no screw connections are required.



### Safe installation of the panels

You can swivel your ALPHADECK panels up safely from below using the head of the shuttering aid. The panel and shuttering aid are designed in such a way that the panels do not slip or fall down when lifted.



### High concreting quality

The simple assembly logic minimises the error rate. This steady workflow enables you to reduce costs and achieve a particularly high quality of results.

## Secure closure of infill areas

Quick adaptation to individual geometries

**When the slab formwork has to be adapted to suit any project-specific geometries, ALPHADECK offers practical and quick solutions.**

The ALPHADECK filler beam allows you to create compensation areas as quickly and easily as usual. To do this, use the filler beam in combination with plywood between 12 mm and 18 mm thick. The filler beam is installed on the drophead quickly and easily without the need for any additional accessories. It allows for a seamless transition to the conventional MULTIFLEX system.



## Simple and resource-saving maintenance

High efficiency and tried-and-tested PERI product quality

**ALPHADECK panels with the quality standards expected of PERI are particularly robust and are designed in such a way that only minimal cleaning effort is required.**

The powder coating and the undercut panel edges prevent concrete residues from sticking. This also saves you valuable time and money between formwork cycles.

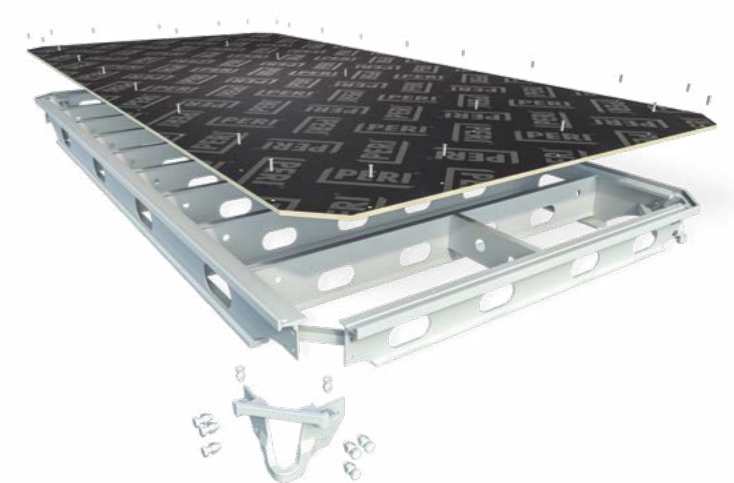


### Resource-saving use of materials

ALPHADECK system formwork also impresses with its particularly high recycling value on account of the large, reusable and high-quality aluminium panels.

The panels are supplied with an integrated, long-lasting formlining. The phenolic coating ensures high durability of the formlining for many repeated uses.

In addition, ALPHADECK panels have corners made of high-quality steel. You can replace the corners easily and efficiently when needed – without investing in a completely new panel.



## ALPHADECK in use

At home on the construction sites of the world



### New hotel building, Agrigento, Sicily, Italy

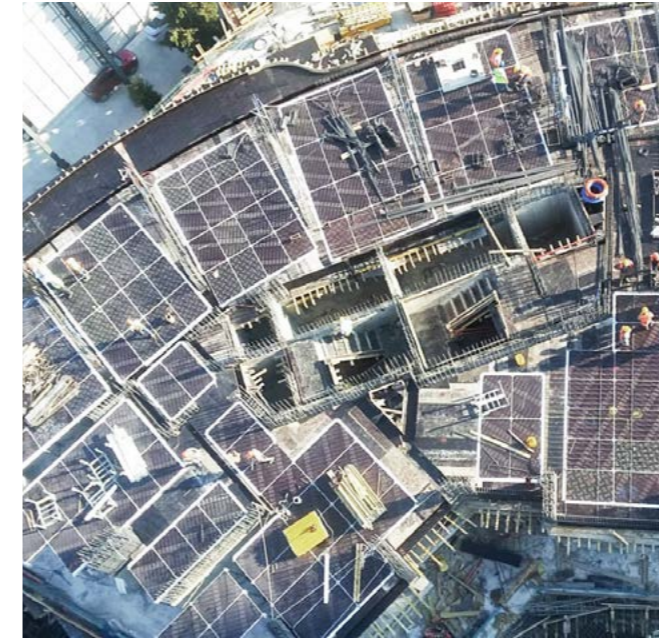
The new Adler Spa Resort in Agrigento, Sicily, is a hotel made up of single-storey buildings with green roofs, blending perfectly into the surroundings thanks to its ecologically sustainable architecture and the use of natural and local materials.

For this construction project, the customer opted for an efficient and optimally coordinated PERI system solution consisting of 500 m<sup>2</sup> of ALPHADECK Slab

Formwork, 300 m<sup>2</sup> of HANDSET Alpha as well as a further 300 m<sup>2</sup> of DOMINO Panel Formwork.

Despite having a very small number of workers available, the simple assembly logic of the ALPHADECK and HANDSET Alpha formwork systems made it possible to work quickly and thus achieve a high level of productivity during shuttering and striking.

Particularly impressive from the customer's point of view was the construction of a 500 m<sup>2</sup> slab area in just two days and with only four workers. Compared to other common slab formwork systems, ALPHADECK does not require any cover strips, so it is both quicker and easier to install the panels. Assembly occurred in two directions – lengthwise and crosswise – at the same time. In addition, the drophead system accelerated the work on the construction site significantly.



### Folkart Vega, Izmir, Turkey

For the construction of three towers with a total slab area of 20,000 m<sup>2</sup>, ALPHADECK Slab Formwork was the preferred choice to meet the customer's requirements. That's because the slab formwork system had to be quick, practical and cost-efficient. With ALPHADECK, PERI was able to offer a system that required only one formwork set instead of two. This gave the customer the desired material advantage. In addition, the system also convinced the customer and the site personnel in terms of cost and ease of use. Only a few workers were needed for assembly and disassembly, which was reflected in reduced personnel costs.

Despite initial reservations and a lack of experience in handling system formwork on the part of the site personnel, the first assignment involving ALPHADECK was a resounding success. After only a short on-site training session conducted by PERI, the team was able to carry out the shuttering and striking work with ALPHADECK on its own and stressed how convenient the formwork is to use compared to conventional formwork methods using timber. Not a single formlining replacement was required for the entire 37-storey building.



### Mohammed VI Polytechnic University, Rabat, Morocco

PERI assisted with the construction of the new campus of the Mohammed VI Polytechnic University (UM6P) in Rabat, Morocco with a comprehensive overall solution from a single source including the ALPHADECK and HANDSET Alpha Panel Formwork.

The systems were instrumental in enabling the team to adhere to the tight construction schedule of only nine months and the strict safety standards. A total of 2,000 m<sup>2</sup> of ALPHADECK Slab Formwork was used in Morocco to form the 120,000 m<sup>2</sup> of slab area. ALPHADECK is characterised by its particularly easy handling, involving only a few system components. It was possible to increase the level of safety on the construction site by systematically shuttering and striking the formwork from the level below.

ALPHADECK also made a significant contribution in terms of efficiency: the drophead system enabled early striking and rapid cycle times, meaning that the panels were soon ready for the next section.



Video



Video

#### Hakan Kaya | Project Manager

"The ALPHADECK Slab Formwork saved us a lot of time on the construction site thanks to the simple and fast assembly processes – we were able to strike the formwork after just 36 hours."





#### Atana Office and Residential Building, Sofia, Bulgaria

In Sofia, Bulgaria, a new building complex was built on an area of about 1,440 m<sup>2</sup>, featuring three residential wings and an office wing, as well as a restaurant, retail shops, facilities for sports and other activities and entertainment.

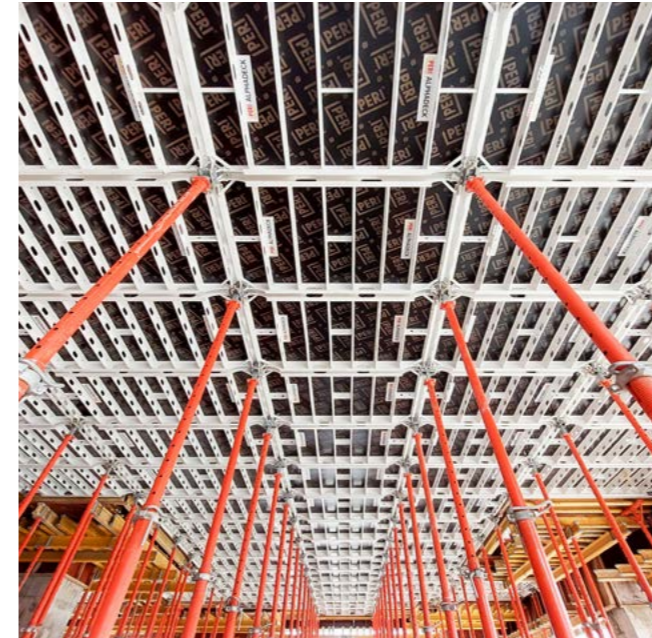
The customer opted for ALPHADECK Slab Formwork because this formwork made it possible to meet the high safety and speed requirements. The team from PERI Bulgaria developed a technical solution for the three buildings. Two buildings were shuttered at the same time with ALPHADECK, which resulted in considerable time savings. Coupled with the PROKIT Guardrail at the open slab edge and a PERI UP scaffolding solution, the maximum possible level of safety was ensured for the site personnel.



#### Trovador Avery, Zaragoza, Spain

To construct the total slab area of 24,000 m<sup>2</sup> of a residential complex comprising a total of 144 flats, the client opted for 800 m<sup>2</sup> of ALPHADECK Slab Formwork. After all, compared to girder formwork, the shuttering process could be carried out more quickly and safely with ALPHADECK. Every week, 600 m<sup>2</sup> of slab surface was installed by just three people.

The customer was particularly impressed by the small amount of materials required and the resulting reduction in manpower requirements. As the panels are swivelled upwards from the level below, safety levels for site personnel increased – there was no need for safety nets beneath the slab, something that is usually required in Spain.



#### Prestige Tech Park, Bangalore, India

For the project in Bangalore, India, PERI supplied a comprehensive solution with a total of 4,000 m<sup>2</sup> of ALPHADECK Slab Formwork to construct the 20-cm-thick slab. Thanks to its lean component portfolio, ALPHADECK optimised operational efficiency on the construction site. Only one prop was required for every 2.88 m<sup>2</sup> of slab area thanks to the large, reusable and high-quality aluminium panel. With PERI solutions, it was possible to keep to the schedule in an efficient manner and to achieve excellent concrete quality.

Modular and lightweight system formwork was required to complete the project on time due to ever-increasing challenges such as labour shortages and the need for labour efficiency.



#### New school building, Sjenica, Serbia

ALPHADECK Slab Formwork was used in the construction of a new primary school in Serbia. With a total of 600 m<sup>2</sup> of formwork materials, the customer was able to make rapid progress on the construction site.

Only one formwork set was required thanks to the early striking option. This meant that the formwork could be struck after just 36 hours. The panels were available for the next concreting section in no time. An area of 1,200 m<sup>2</sup> was constructed within only three days with the ALPHADECK Panels.

**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**



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**PERI SE**  
**Formwork Scaffolding Engineering**  
 Rudolf-Diesel-Strasse 19  
 89264 Weissenhorn  
 Germany  
 Tel. +49 (0)7309.950-0  
 Fax +49 (0)7309.951-0  
 info@peri.com  
 www.peri.com

