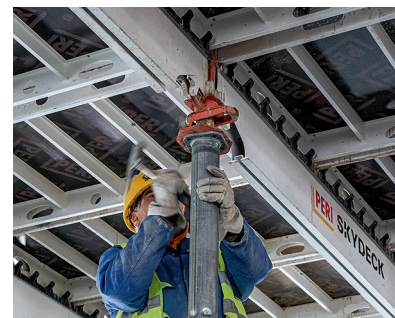


# SKYDECK Panelised Slab Formwork

## The proven aluminium panelized slab formwork with fast shuttering times

Product Brochure – Issue 05/2025



# Content

<b>In the focus</b>	<b>System overview</b>	<b>Project examples</b>
2 The main system components	16 SKYDECK at a glance	22 Reference projects with SKYDECK
<b>System advantages</b>	<b>Standard applications</b>	
4 The proven aluminium panelized slab formwork with fast shuttering times	18 Propheads for SKYDECK	
6 Effortless working	19 Compensations	
8 Fast forming	20 Shuttering of columns	
10 Low on-site material requirements	21 Logistics accessories	
12 Easy cleaning		
13 Highest product quality		
14 High level of safety on all sides		

Edition 05 | 2025

#### Publisher

**PERI UK**  
**Formwork Scaffolding Engineering**  
Market Harborough Road  
Clifton upon Dunsmore  
Rugby  
CV23 0AN  
+44 (0)1788 861600  
info@peri.ltd.uk  
www.peri.ltd.uk

#### Important information

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

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

In addition, computer graphics are used which are to be understood as system representations. For ensuring a better understanding, these and the

detailed illustrations shown have been partially reduced to certain aspects. The safety installations which have possibly not been shown in these detailed descriptions must nevertheless still 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.

## The main system components

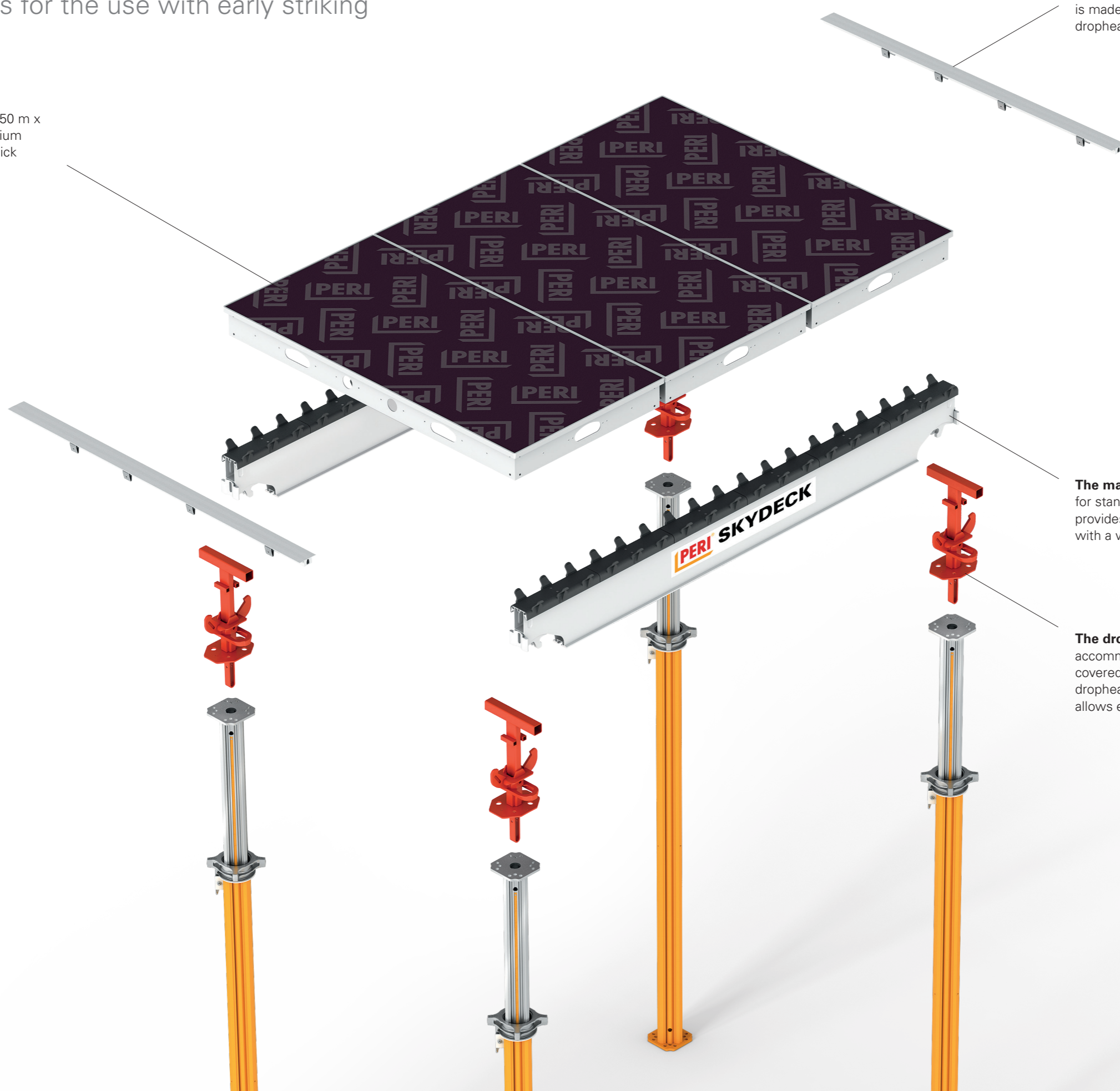
Only 4 elements for the use with early striking

### The SKYDECK Panel

for standard fields measures 1.50 m x 0.75 m. The lightweight aluminium frame is covered with 9 mm thick formlining.

### The cover strip

is made of plastic and is used with the drophead system.



### The main beam

for standard fields is 2.25 m long. It provides the support for 3 panels each with a width of 75 cm.

### The drophead

accommodates the main beam and is covered by the cover strip. The drophead can be lowered by 6 cm and allows early striking to take place.

## SKYDECK Panelized Slab Formwork

The proven aluminium panelized slab formwork with very fast shuttering times

**SKYDECK panelized slab formwork allows fast as well as safe forming operations with a systematic assembly sequence. The low weight of the panels, compact dimensions and practical design of the system components facilitate non-tiring and ergonomic working operations.**

SKYDECK has been designed for standard use in constructing slabs with thicknesses up to 43 cm. With the small panel span (75 cm) and, if required, a middle support under the main beam, slabs up to 109 cm thick can be formed. SKYDECK's range of applications extends from residential construction through to industrial construction projects.

The systematic assembly sequence and lightweight system components made of aluminium accelerate working operations. In addition, the possibility of early striking with the drophead system reduces on-site material requirements.

With SKYDECK, infill areas are reduced to an absolute minimum. Furthermore, the system makes a convincing case with an extensive range of safety and logistical accessories.

A further advantage is the easy horizontal transportation of formwork materials as the small prop requirements ensure more freedom of movement under the slab formwork.

### Effortless working

with lightweight and easy to handle components

### Fast forming

with a simple, systematic assembly sequence and fewer slab props

### Low on-site material requirements

due to early striking with the drophead and fast deployment of the panels and beams in the next storey

### Easy cleaning

through powder-coated elements, components made of plastic, and undercut panel edges



## Effortless working

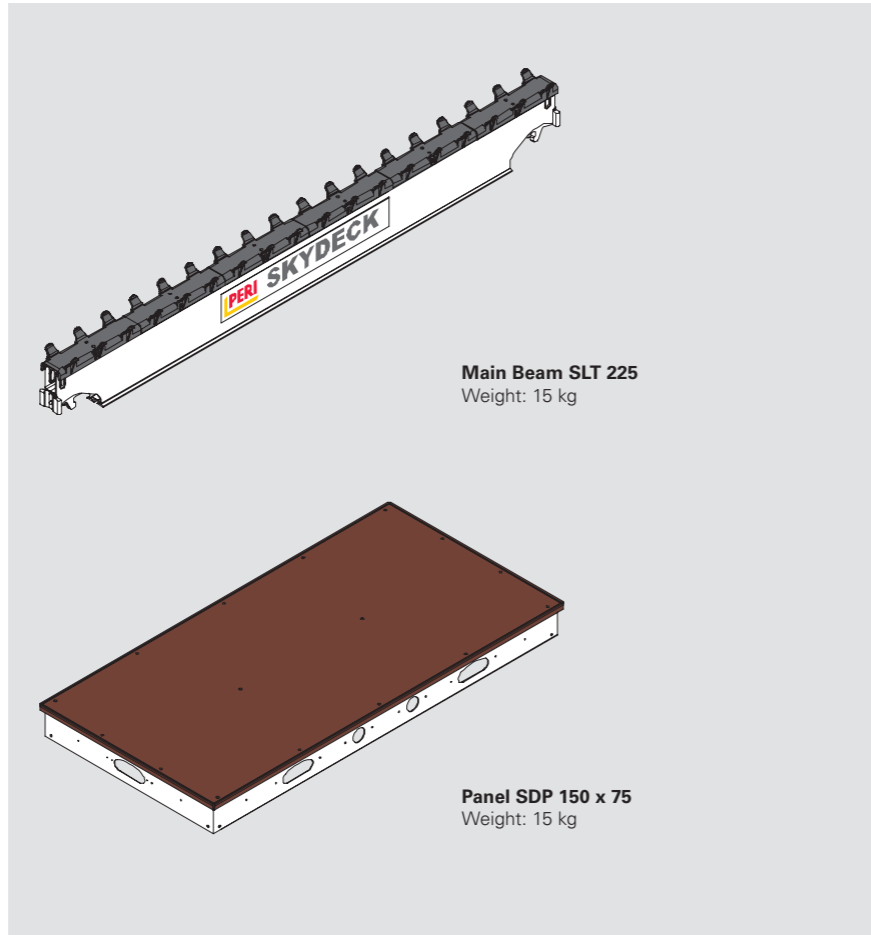
Very light and easy-to-handle components

**Low individual weights and practical dimensions are distinct advantages in daily formwork operations with SKYDECK. The low weight clearly makes a noticeable difference, among other things, in the work performance.**

The heaviest SKYDECK system component for the standard configuration is the 15 kg main beam. As a result, all SKYDECK components can be moved by just one person.

With dimensions of only 150 cm x 75 cm, the panels can easily be transported on the construction site – e.g. also through door openings. When carrying the panels, the immediate working area is always in view which greatly reduces the risk of tripping over.

Last but not least, as safety levels are enhanced when working with SKYDECK, site personnel do not tire so quickly.

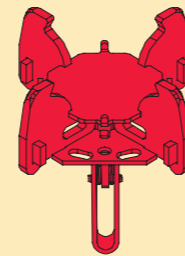


**SKYDECK heads are equipped with a self-locking coupling. Therefore, they can be connected very quickly and securely to the slab props – no time-consuming use of screws, bolts or wedges is required.**

Removal is simply a matter of releasing the coupling and then taking the head off. To accommodate different supporting heights, the props can therefore be changed extremely quickly.



The self-locking coupling: drophead, prop and combi heads are securely mounted by simply inserting and locking in place. The heads fit all standard slab props with 40 mm hole diameters.



The SKYDECK Prop Head is an alternative if early striking is not required. It serves to support panels, main and edge beams as well as filler timbers.



Through the low individual weights and practical dimensions, easy and simple handling by just one person is possible. The grip openings make it easier to carry the panels.

## Fast forming

Simple, systematic assembly sequence with minimum slab prop requirements

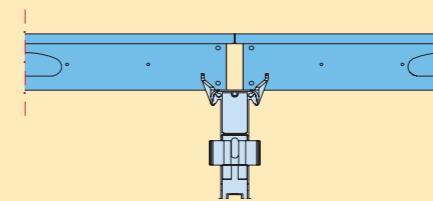
**SKYDECK offers a simple, systematic assembly sequence and high degree of installation safety. The recurring procedures accelerate work procedures and handling is quickly mastered even by personnel unfamiliar with the system.**

Forming of standard fields is extremely simple with SKYDECK: after mounting the main beams in the drophead or prop head, the prop is positioned vertically and the panel is then inserted.

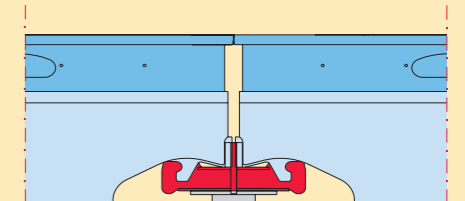
The panel is secured in position during assembly by the outwardly projecting teeth of the main beams, this means that the SKYDECK system provides a high level of working safety also during installation.



The outward projecting teeth on the main beam secure the panel against moving out of position both longitudinally and transversely. At the same time, they align the beams. This ensures fast forming operations including a high level of safety.



Cross-section through the main beam shows: the teeth on the main beams secure the position of the panels.

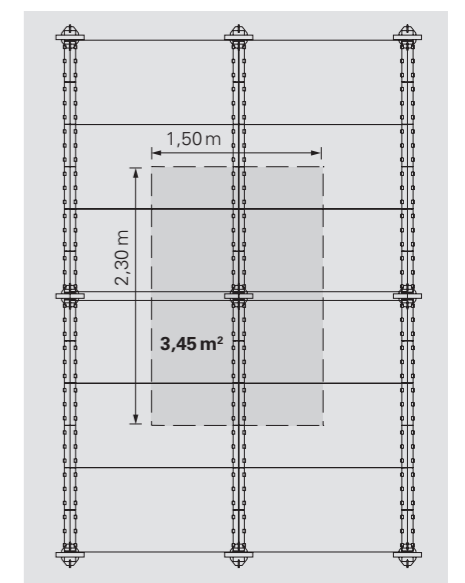
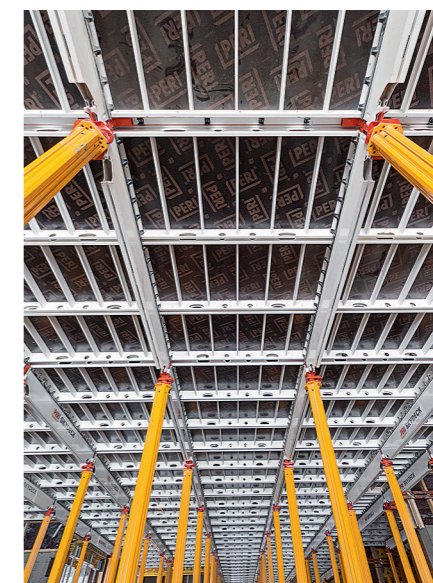


View of the main beam: the main beam is mounted rigidly on the drophead or prop head and cannot tilt.

**Thanks to the SKYDECK main beam, only 0.29 slab props per m<sup>2</sup> of slab area are required for standard applications.**

With the SKYDECK system, one slab prop supports a field size of up to 3.45 m<sup>2</sup>. This saves on both materials and working time.

In addition, the large prop spacing provides a comfortably-spaced working area under the slab formwork. This facilitates the transport of formwork materials as well as the storage of construction materials.



## Low on-site material requirements

Early striking with the drophead and fast deployment of the panels and beams in the next storey

**The drophead facilitates early striking so that panels and main beams are quickly made available for subsequent concreting sections.**

Depending on the slab thickness and strength of the concrete, striking can partly be carried out after only one day. One blow of the hammer releases the drophead and, in the process, the formwork is lowered by 6 cm. Main beams and panels can then be struck. In the field area, only the props remain in position together with the dropheads and cover strips. The props in the edge or compensation areas can however be removed.

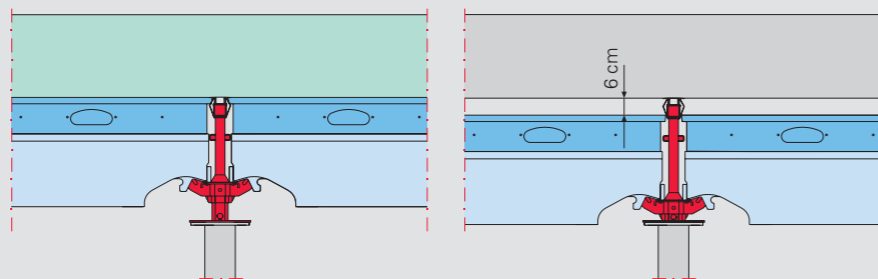
Early striking minimizes on-site material requirements because many system components can be used earlier for the next cycle. In addition, work on the construction site can also be better compensated; for example, through early striking in bad weather or when there is spare capacity.



Easy and simple early striking: the formwork is lowered by 6 cm with just one blow of the hammer. After lowering the dropheads, the central panel is removed first followed by the neighbouring panels.



After early striking is finished, only the props with dropheads and cover strips remain in place. SKYDECK panels and beams are available for use in the next cycle.

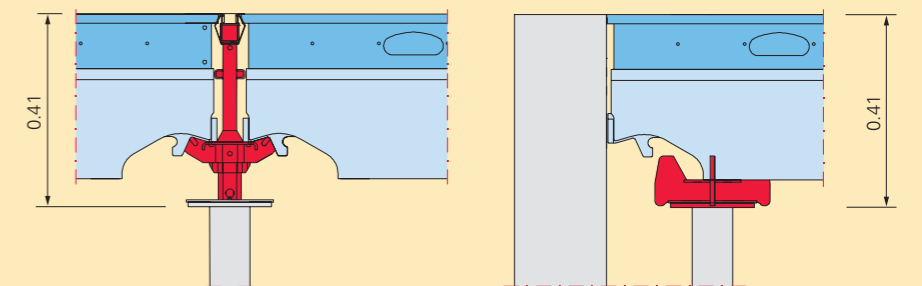


View of the main beam after shuttering has taken place: the panels and cover strips form the underside of the concrete.

View of the main beam with lowered drophead: the cover strips and dropheads remain in position while panels and beams are struck.

### An important application benefit

The extended length of the prop remains the same regardless of whether working in the standard field with the drophead, or at the wall junction with inset prop head.



The formwork assembly at the position of the drophead in the standard field.

The formwork assembly at the position of the inset prop head on the wall junction.

## Easy cleaning

Powder-coated elements, components made of plastic, and undercut panel edges

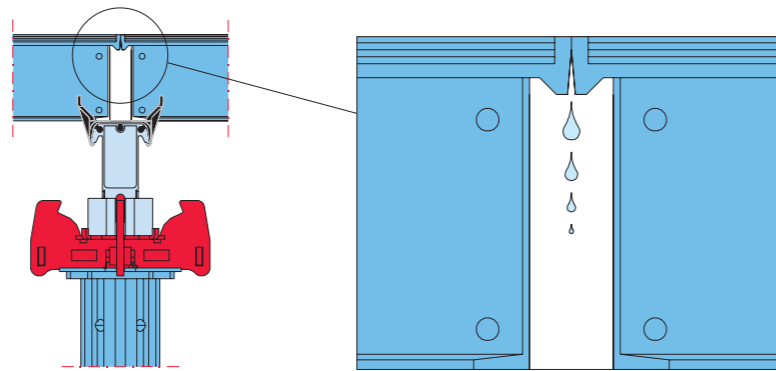
**The SKYDECK slab formwork system has been designed in all respects to ensure that only a minimum of cleaning effort is required. This guarantees additional time-savings.**

SKYDECK panels and main beams have self-draining edges as well as undercut panel edges. As a result, the side areas of the panels remain significantly cleaner than in other systems whereby the panels lie next to each other over the complete frame profile height.

In particular, if the drophead system is used and early striking takes place, cleaning requirements are kept to an absolute minimum. Because at this stage the concrete hardly adheres to the system components at all. In addition, the main beam is powder-coated and the rack is made of plastic. This also ensures that any concrete residue is prevented from remaining on the elements and then hardening.



The SKYDECK main beam is powder-coated and the rack is made of plastic. This prevents adhesion of the concrete and minimizes cleaning requirements.



During concreting operations, the SKYDECK main beam lies protected under the SKYDECK panels.

Panels and main beams have self-draining edges. This guarantees only a minimum of soiling on the side areas of the panels.

## Highest product quality

For exceptional durability

**The high PERI production quality ensures the robustness of the components as well as a long service life. All processes from purchasing through to delivery are subject to continuous quality assurance procedures.**

At PERI, this already begins with the careful selection of materials and the procurement process. For the production of PERI system components, specially-trained personnel manufacture system components of the highest quality using state-of-the-art production equipment.

PERI has long-term experience especially in aluminium processing and powder coating. All this ensures excellent production results and robust system components that can stand up extremely well to the tough conditions encountered on the jobsite.



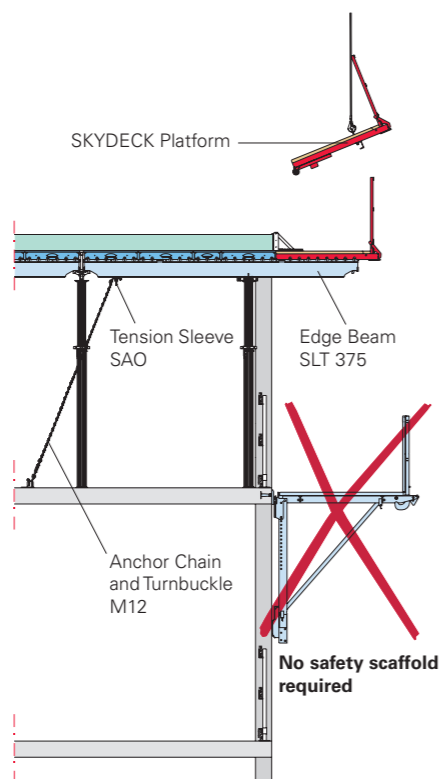
## High level of safety on all sides

Safe and fast working in all situations



The SKYDECK Platform ensures safe working conditions on unsecured building edges. After a simple positioning procedure, it is immediately fixed against tipping or moving.

The foldable platform has been designed for a load of 150 kg/m<sup>2</sup>. The Edge Beam SLT 375 serves as a support for the platform; the cantilevered beam is secured and tensioned by means of a chain. A very special benefit: at the edge of the building, the use of the SKYDECK Platform means no safety scaffold is required in the storey below.



Only one day after concreting the slab, the SKYDECK Platform serves as safety scaffold for working on structural columns and parapets – this saves on materials, workload and construction time.

No safety scaffold required

For assembling guardrails at the casting segment, the SKYDECK portfolio includes guardrail units which are mounted transversely on the main beams.

The SKYDECK End Guardrails with 75 cm or 150 cm widths prevent falling from the front side of the SKYDECK. The guardrail units can be easily attached to the main beam – without requiring any additional fastening means. Due to a cleverly-devised mechanism, the guardrail locks in position automatically.



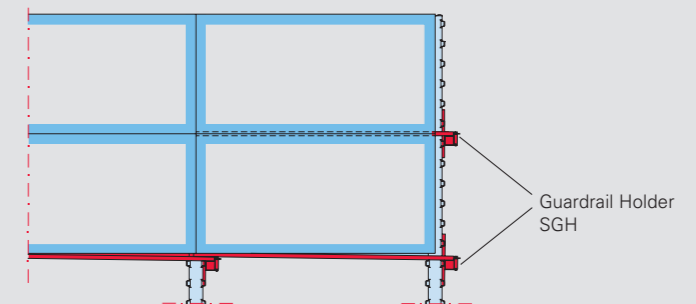
The complete guardrail unit can be mounted quickly and safely with one hand – no additional components or tools are required.

Alternatively, the leading edge on a casting segment can be secured with guardrails and guardrail posts.

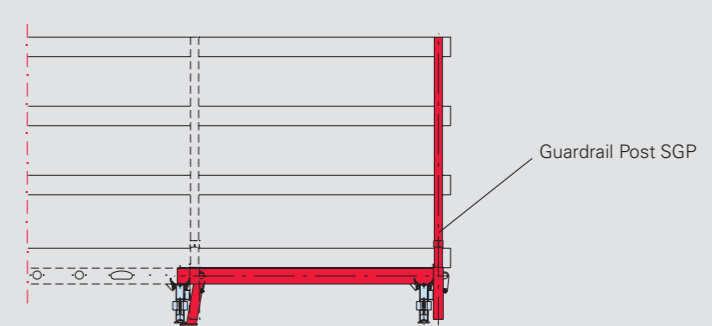
The guardrail holder can be continuously mounted between the panels. Supplemented by guardrail posts and side protection boards, protection against falling on cycle joints can be realized.



Side protection at cycle joints in the ground plan

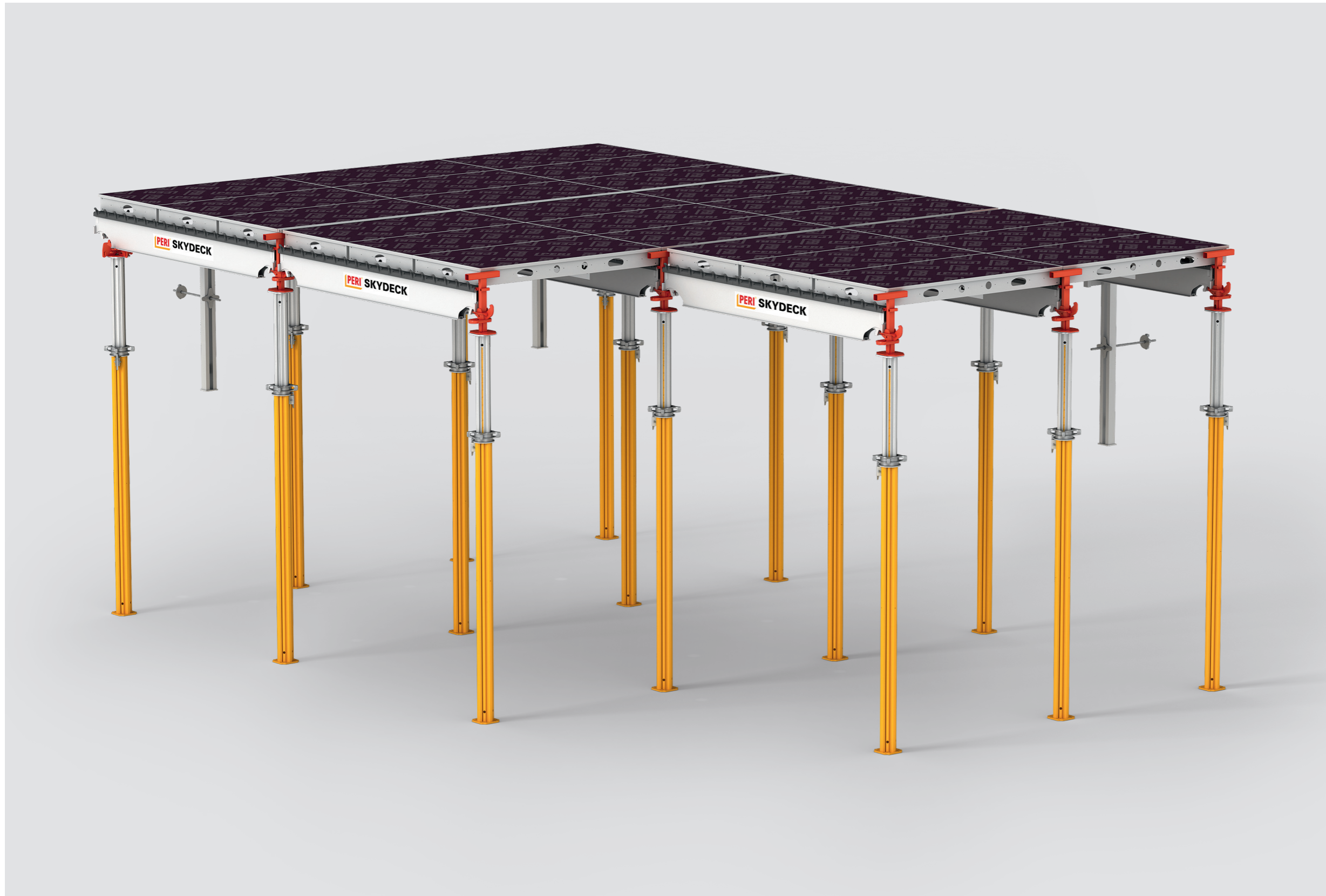


Side view of the side protection at cycle joints



## SKYDECK at a glance

Standard applications, execution details and logistics accessories



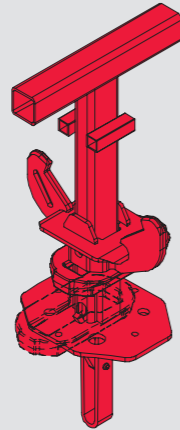
**The SKYDECK slab formwork system provides efficient solutions for all required standard applications.**

Regardless whether there are straight or oblique residual areas to be closed within the slab area or if columns have to be shuttered – SKYDECK offers a practical and fast solution for every situation requiring only a minimum number of supplementary system components. If necessary, the installation direction of the panels can also be turned by 90°. In addition, the system includes the necessary accessories for guaranteeing safe working in all situations. Last but not least, suitable pallets ensure space-saving storage and safe transportation.

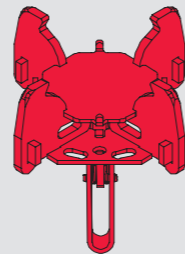
# Propheads for SKYDECK, closing of residual areas

## Standard propheads

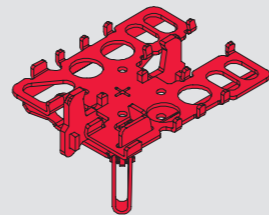
For SKYDECK, 3 propheads are available for different applications: apart from the drophead, there is a simple prophead and a combihead. All heads have the practical self-locking coupling.



The drophead supports the main beam and cover strip as well as the formlining. The head can be lowered by 6 cm which allows early striking to take place.



The prophead is used in order to directly support main beams, edge beams and filler timber.



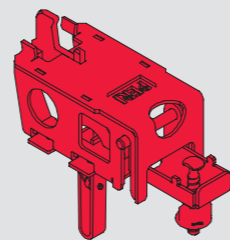
The Combihead SCK supports main beams, panels, edge beams and filler timber. It is used for longitudinal and lateral compensations up to 25 cm.

## Propheads for changes in direction of the main beams and panels

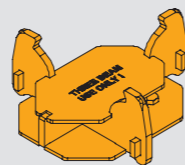
For changing the direction of the main beams, the programme includes two additional propheads. With these heads, the direction of the panels can be changed by 90°. This provides more flexibility for adapting the slab formwork to match more complex layouts.



The directional change provided by the drophead allows the direction of the main beam to be changed in the standard system.



The directional change provided by the prophead allows vertical changes in direction of the main beams in the standard system with propheads.



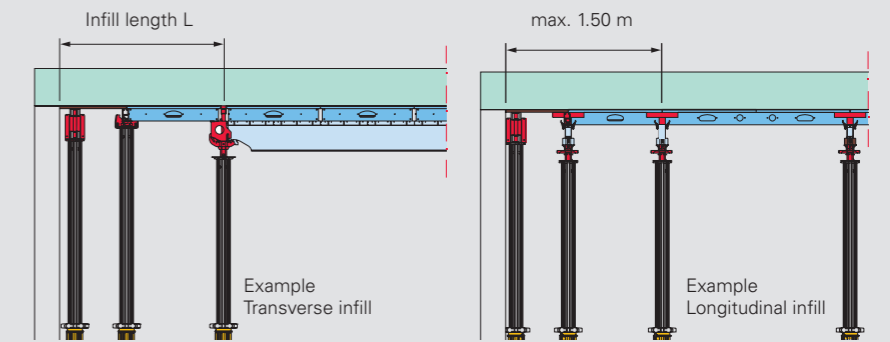
## Length and width compensations in front of rising walls

Using SKYDECK results in a straight formwork line which simplifies edge adjustment. Both straight and inclined infill areas at the slab edges as well as areas with columns can be quickly closed.

Length and width adjustments are carried out using system components where possible. The remaining small compensation areas are closed using filler plates.

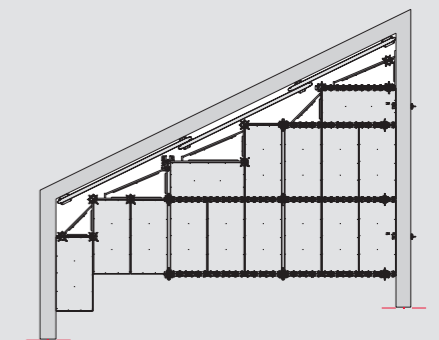


The end support is attached to the drophead and is the appropriate solution for the transition to the infill area.



## Compensation for inclined walls

For compensation against inclined walls, triangular frames are available with different dimensions. These are supported on main beams, propheads or combiheads as well as end supports. A direct support is positioned on the wall side whereby the area is subsequently closed by means of a filler plate.



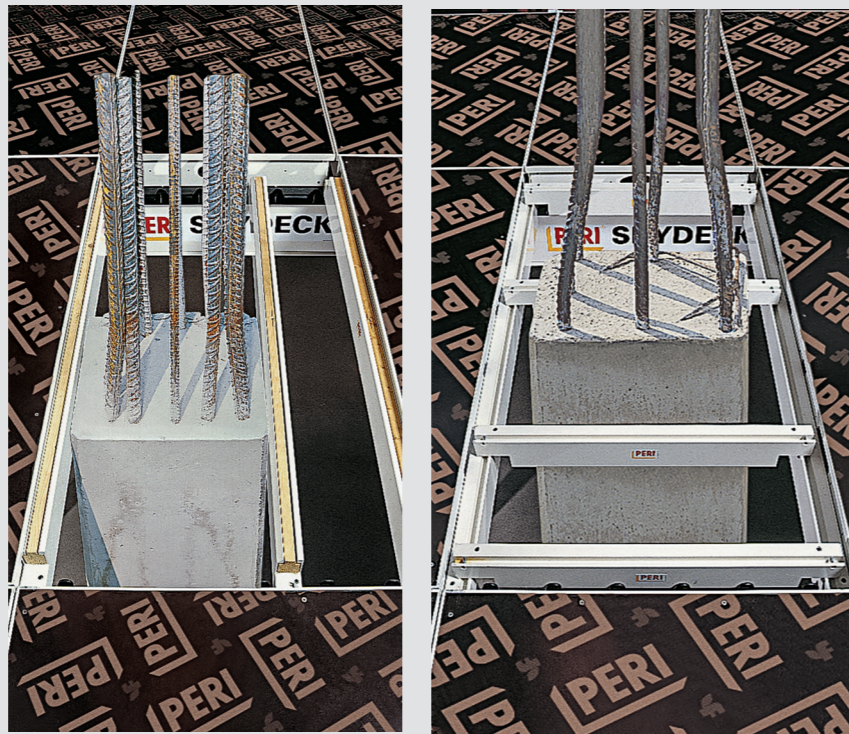
## Shuttering of columns, logistics accessories

### Shuttering of columns

In order to shutter columns under construction, panels can be recessed. For closing residual areas, edge beams and filler timber are used.

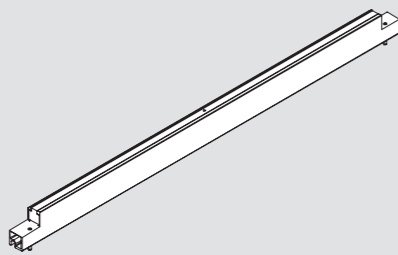
If an individual panel is recessed, the maximum column dimension is 55 cm x 138 cm. Edge beams with lengths of 150 cm and 75 cm respectively can then be positioned longitudinally or transversely to the adjacent panel and can be installed anywhere within a panel field.

For bigger column dimensions of up to 138 cm x 142 cm, a maximum of 3 panels can be recessed and closed with system components and filler timber.



For shuttering of columns under construction, SKYDECK Edge Beam SRT 150 or SRT 75 is used.

If the edge beams are used longitudinally as well as transversely, they must be installed upside down.



SKYDECK edge beams are used for longitudinal and transverse compensations and for shuttering of columns. These are covered by means of 21 mm thick formlining.

### SKYDECK logistics accessories

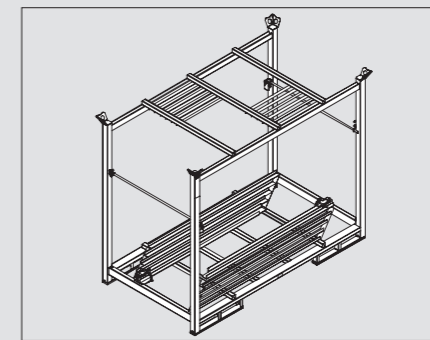
The SKYDECK pallets ensure well-organized storage as well as the simple and, above all, safe transportation of slab panels. They can be moved with the crane or moved using a pallet lifting truck; in addition, they are suitable for use with a forklift truck. For further space savings, the pallets can be stacked. Hot-dip galvanizing makes the pallets particularly robust for dealing with tough everyday usage on the jobsite.



In the large pallets, 48 SKYDECK panels can be stacked and transported very compactly; this corresponds to an area of 54 m<sup>2</sup>.



14 panels with 150 cm x 75 cm dimensions can be stacked in the SKYDECK pallets. The pallet lifting truck is used for moving operations.



Stackable pallets are available for the SKYDECK guardrail units – these provide space for 10 guardrails.



Suitably-sized pallets are also available for PERI slab props, e.g. 25 MULTIPROP props can be stored in a single pallet.

## SKYDECK in use

Reference projects with the panelized slab formwork



### MainTor Porta, Frankfurt am Main, Germany

The MainTor Porta connects the banking district and the old town in close proximity to the Main, with offices and roof terraces offering impressive views. The confined space of the inner city location brought with it special logistical challenges in the actual construction while, in addition, hospital capacity was extremely limited. In order to ensure fast upward construction, it was possible to regulate the building process by means of suitable PERI climbing technology with the CB 240 Climbing System and the TRIO panel formwork. Subsequently, the SKYDECK panelized slab formwork guaranteed fast shuttering times for the realization of the storey slabs.

For many years now, SKYDECK has proved itself on countless construction sites. Both in residential construction and high-rise structures as well as industrial buildings, the system stands out due to its very low shuttering times.

## SKYDECK in use

### Reference projects with the panelized slab formwork



Saving time with MAXIMO and SKYDECK



High level of safety at the slab edges



Elliptical slab area with standard components



200,000 m<sup>2</sup> floor slabs brought into shape



SKYDECK and MAXIMO set a fast pace



Efficient complete solution with competent service

#### Residential and office building at the Nordbahnhof, Vienna, Austria

On the site of the former Vienna Nordbahnhof, two eight-storey residential buildings with a total of 91 residential units were realized. Increased architectural concrete requirements were to be met for the walls and undersides of the balconies; in addition, the 10-month construction schedule for the structural work was extremely tight.

Through the use of MAXIMO Panel Formwork and SKYDECK Panelized Slab Formwork, the walls and slabs could be formed much faster which meant, in conjunction with the well thought-out cycle planning, on-site material requirements remained manageable. When forming the floor slabs with SKYDECK, the recurring assembly sequence and easy handling in particular accelerated shuttering and striking procedures.

#### De Rotterdam, Rotterdam, Netherlands

The 150 m high multi-storey ensemble consists of three complex-designed office, hotel and residential towers standing side by side and connected to each other. At the halfway point, the Rotterdam-based architect, Rem Koolhaas, provided the structure with a horizontal offset to the west and north. As a result, the storeys cantilever in part almost 9 m at a height of 86 m.

With SKYDECK, the floor slabs could be formed without the need of a crane; striking manually in particular supported fast working operations. The construction team only required eight days for one complete standard floor. For the floors in the base section, a high degree of safety was ensured using cantilevered main beams and SKYDECK platforms, also at the slab edges. For the large supporting heights reaching over several storeys, the construction crew combined SKYDECK with the MULTIPROP shoring system.

#### Warsaw Spire, Warsaw, Poland

The 220 m high, waist-like office tower with an elliptical ground plan is flanked by a 55 m high building on each side. The PERI formwork solution took into account both the challenges of the complex building form as well as making it possible to comply with the strictly defined construction phase.

SKYDECK Panelized Slab Formwork was used for constructing the floor slabs of the office tower which could be easily adapted to suit the elliptical shape using standard components. In addition, through the drophead and possibility of early striking, on-site requirements of panels and main beams were clearly reduced.

#### Sasol Administration Building, Johannesburg, South Africa

The new headquarters of the internationally operating oil and chemical company, Sasol, has a total of 17 storeys which provides 200,000 m<sup>2</sup> of usable floor space. An extraordinary glass facade encloses the futuristic-looking building.

The around 200,000 m<sup>2</sup> slab area could be concreted in fast cycle sequences with the SKYDECK Panelized Slab Formwork. Furthermore, both time and costs could be saved through the systematic assembly sequence and lightweight elements also when dealing with the challenging building geometry. In addition, SKYDECK platforms ensured safe working conditions at the slab edges. Even the infill areas on the partly inclined props were closed with system components. In the area of the building's acute-angled corners, project-specific slab tables were used to great effect.

#### "villanova" residential complex, Vienna-Schwechat, Austria

The name "villanova" embodies the Italian approach to life, a message conveyed by the new residential complex at the Alanovaplatz which is situated close to the town centre. Four modern residential blocks, each with 5 floors, accommodate a total of around 100 apartments. Using the MAXIMO Panelized Formwork System and SKYDECK Slab Formwork, the shell construction was completed in only 12 months.

MAXIMO Panel Formwork was used for realizing most of the walls. The single-sided MX Tie Technology along with the reduced number of anchor points and simultaneous elimination of spacer tubes and cones saved valuable construction time from the beginning onwards. Consistent with the rapid progress through the use of MAXIMO, all storey slabs were systematically and efficiently formed with the help of SKYDECK. In particular, the logical and clearly specified assembly sequence as well as the simple handling due to the lightweight components reduced shuttering times.

#### ADAC headquarters, Munich, Germany

The ADAC – Europe's largest automobile association – moved to new headquarters in Munich. The impressive building complex consists of a five-storey, undulating curved base construction along with a large courtyard. Above the base is an office tower with 18 floors featuring rounded corners. TRIO Panel Formwork was used for the up to 14 m high walls.

The floor slabs of the base construction were formed with modular and customised tables as well as the MULTIFLEX Girder Slab Formwork. For the tower, SKYDECK Panelized Slab Formwork was selected – with protection provided by the RCS Climbing Protection Panel which securely and reliably enclosed the topmost three floors under construction. MULTIPROP Aluminium Slab Props served as temporary support. Due to the high load-bearing capacity of the MULTIPROP, fewer props were required. This, in connection with the low weight, led to enormous time-savings.

**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**



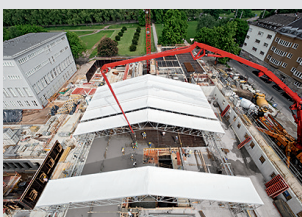
**Facade Scaffold**



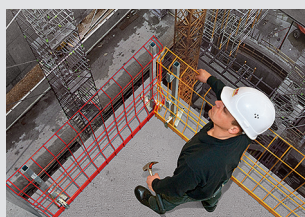
**Industrial Scaffold**



**Access**



**Protection Scaffold**



**Safety Systems**



**System-Independent  
Accessories**



**Services**



**PERI UK**  
**Formwork Scaffolding Engineering**  
 Market Harborough Road  
 Clifton upon Dunsmore  
 Rugby  
 CV23 0AN  
 +44 (0)1788 861600  
 info@peri.ltd.uk  
 www.peri.ltd.uk