

## RAPID

# The Column Formwork for flawless Architectural Concrete



Edition 05/2011

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**Important Notes:**

Without exception, all current safety regulations must be observed in those countries where our products are used.

The illustrations in this brochure are photographs of real site situations. Safety or formwork anchor details are therefore not to be taken as a definitive guide to the way the equipment is to be used.

Safety precautions and allowable loads 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.

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# RAPID Column Formwork

## For high requirements on concrete finish

### Flawless Architectural Concrete

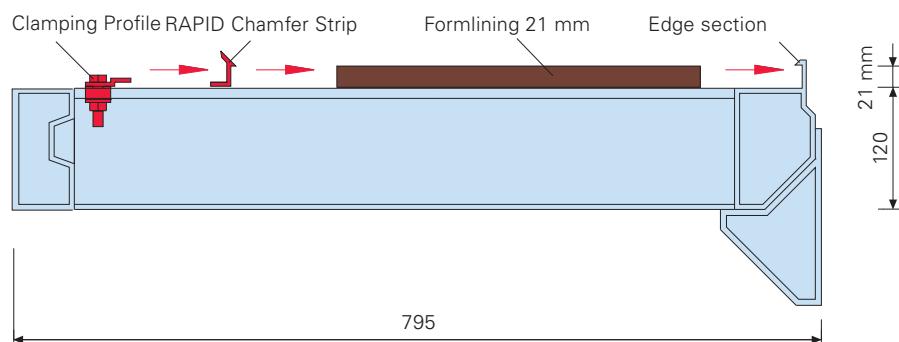
The unique PERI RAPID formlining clamping principle eliminates the problems of conventional fixing with nails or screws. The use of formlinings that cover the whole surface in one piece produces concrete surfaces satisfying the most stringent requirements; free from the impressions of screws, nails, formlining points or plugged tie holes.

### RAPID Chamfer Strip with the easiest assembly

The clamping principle ensures that the RAPID Chamfer Strip is securely fixed during basic assembly. Without nails!

### RAPID corner detail – sealed even with high fresh concrete pressure

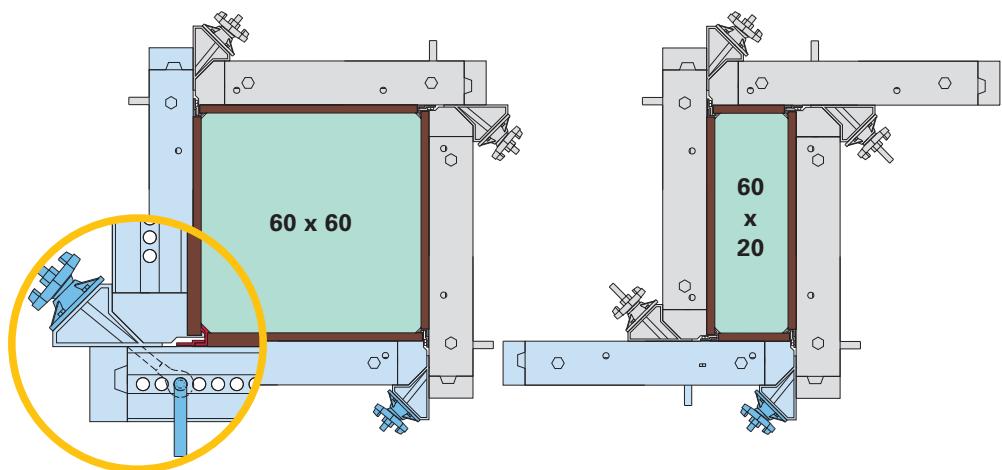
The captive Chamfer Strip reliably seals the corners. This guarantees a good fairface quality. Honeycombing at the corners is practically eliminated.



The clamping principle of RAPID Column Formwork

### Column cross-sections

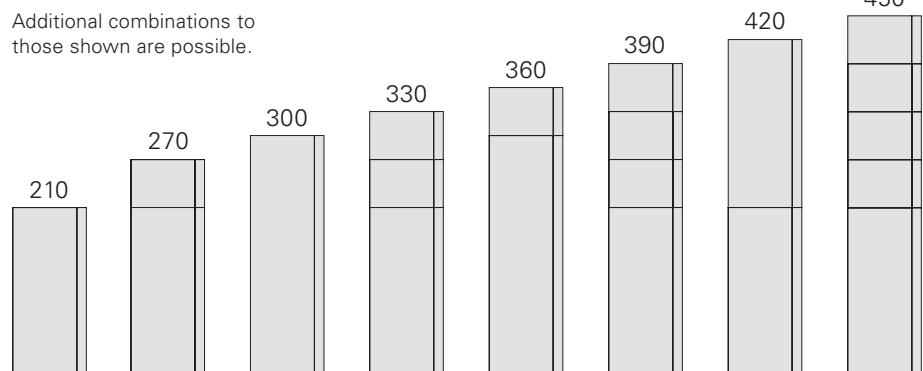
Continuously adjustable square or rectangular cross-sections of up to 60 x 60 cm are possible.



### 30 cm height increments

The three frame heights of 3.00 m, 2.10 m and 0.60 m, provide ideal height adjustments. The frames are easily connected to each other.

Additional combinations to those shown are possible.





#### **Permissible fresh concrete pressure**

The RAPID column has been designed for a very high fresh concrete pressure of 120 kN/m<sup>2</sup>. This allows fast concreting to take place.

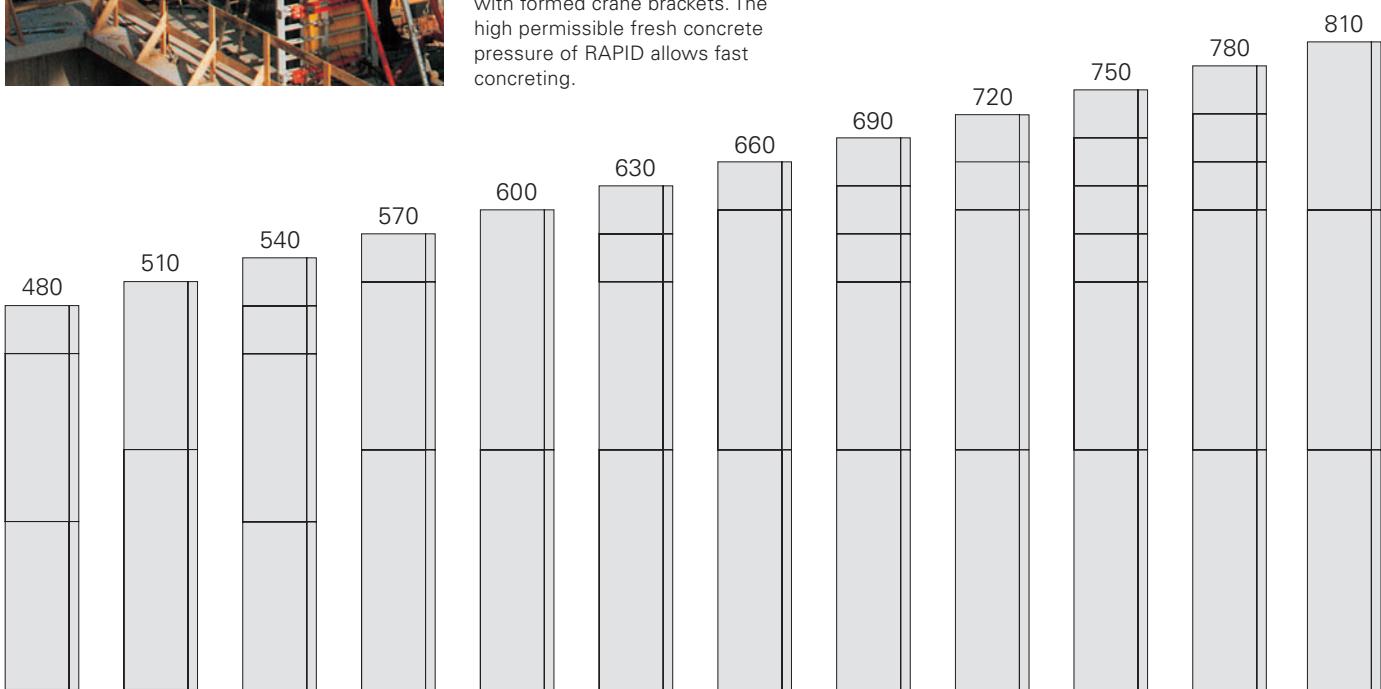
#### **Easy to clean**

ECC powder coating guarantees that cleaning is kept to a minimum.

#### **Durable**

The robust, practical closed construction of the column frames, allows the PERI RAPID Column Formwork to withstand rough handling.

14 m high, oversize columns with formed crane brackets. The high permissible fresh concrete pressure of RAPID allows fast concreting.

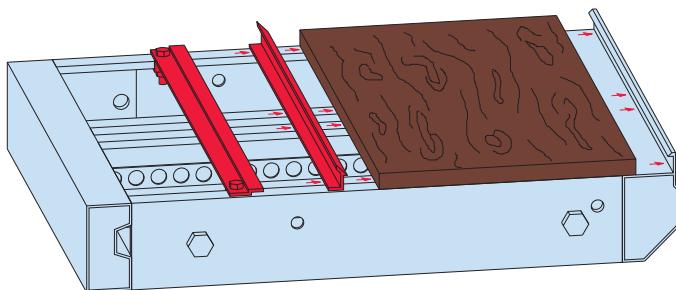


# RAPID Column Formwork

## Fast and easy in any application

### The unique PERI RAPID clamping principle

The formlining is clamped onto the frame with a captive chamfer strip and the clamping profile. Basic assembly or replacement of formlining with different sizes is carried out from above, without having to turn the column frame over and without damaging the formlining.



**You can have the PERI RAPID Column Formwork delivered ready assembled if you wish.**

### PERI RAPID, few components and everything captive.

#### Time-savings with every use

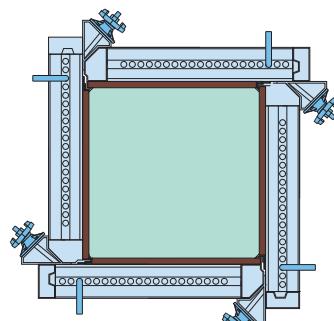
PERI RAPID has no loose components for erection and striking. The formwork is tightened or separated with only a few simple movements. This saves time!

Complete RAPID Column formwork with concreting scaffold and ladder access as well as push-pull props during transportation on site.



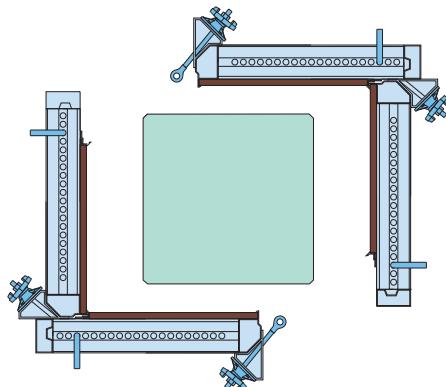
#### Erected

The column frames are delivered complete with clamping profile, column tie yoke, locking pin and spherical nut. There are no small or loose parts to go astray.



#### Struck

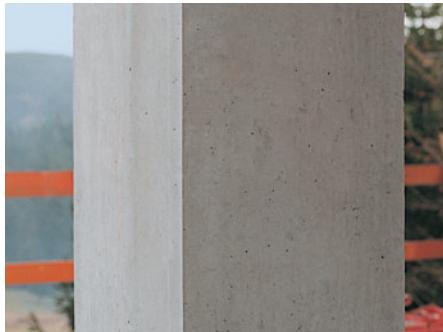
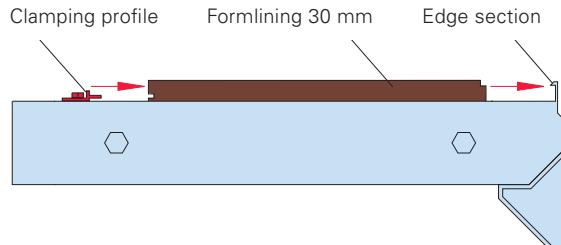
The corner ties remain on each of the associated column frames when transporting to the next point of use. No individual components have to be transported to the next location.



# Sharp and oversize column cross-sections

## Sharp column cross-sections

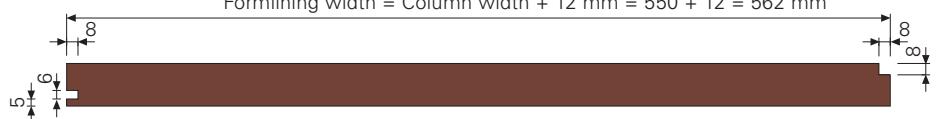
Even columns without a chamfer strip, repeatedly demanded, can be easily formed with PERI RAPID.



**Detail of formlining routing**  
30 mm thick formlining, that is routed according to the detail drawing here, can be assembled on the column frames without a chamfer strip.

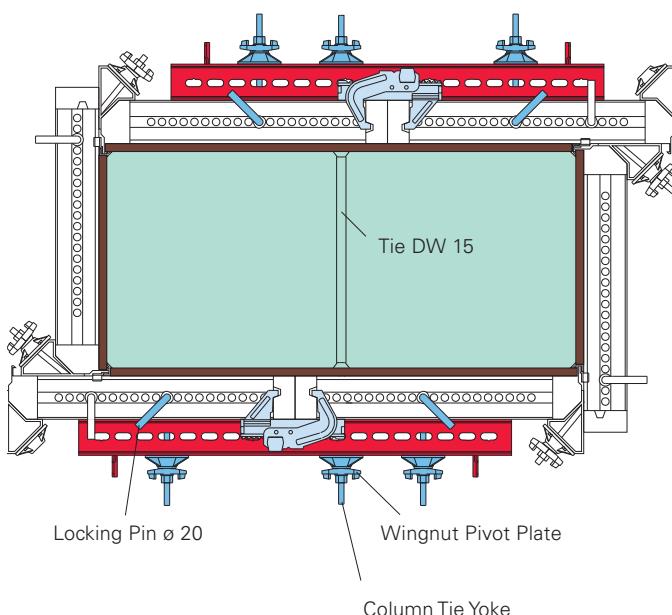
### Example 550 mm x 550 mm

Formlining width = Column width + 12 mm = 550 + 12 = 562 mm



## Oversized column cross-sections

Cross-sections from 850 x 850 mm to max. 1300 x 1300 mm. The connection of two column frames is made with the TRIO Alignment Coupler BFD. A waling with column tie yokes is clamped on to stiffen the formwork.



### Alignment Coupler BFD

5 per Column Frame 300  
4 per Column Frame 210  
1 per Column Frame 60

### Steel Waler SRZ 120/U100

4 per Column Frame 300  
3 per Column Frame 210  
1 per Column Frame 60



Oversized RAPID Column Formwork stiffened with steel waler SRZ.

# RAPID Column Formwork

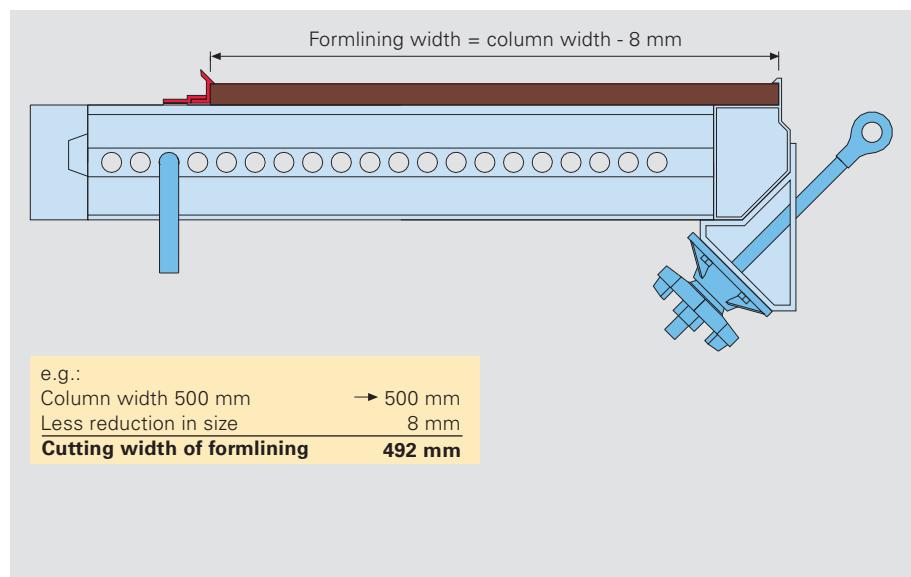
## Basic assembly and hints for the user

### Cutting formlining to size

Use a 21 or 22 mm thick formlining of appropriately high quality with the main load-bearing direction placed vertically. Horizontal joints in the formlining must be positioned on frame cross-struts.

### Crane-free basic assembly

The light weight of the PERI RAPID Column formwork enables basic assembly to be carried out by hand.



### Basic assembly is simple

1

Everything is assembled from above, without having to turn the frame over. Place the required column frames on assembly trestles and couple lengthwise with 2 M20 x 50 bolts fitted to each column frame. (Spanner size SW 30)

2

Place the cut-to-size formlining and the RAPID chamfer strip on the column frame and tighten together with G clamps. Tighten the clamping rail bolts with SW 17 socket spanner. Secure the formlining with a nail through a hole in the lip of the frame.

3

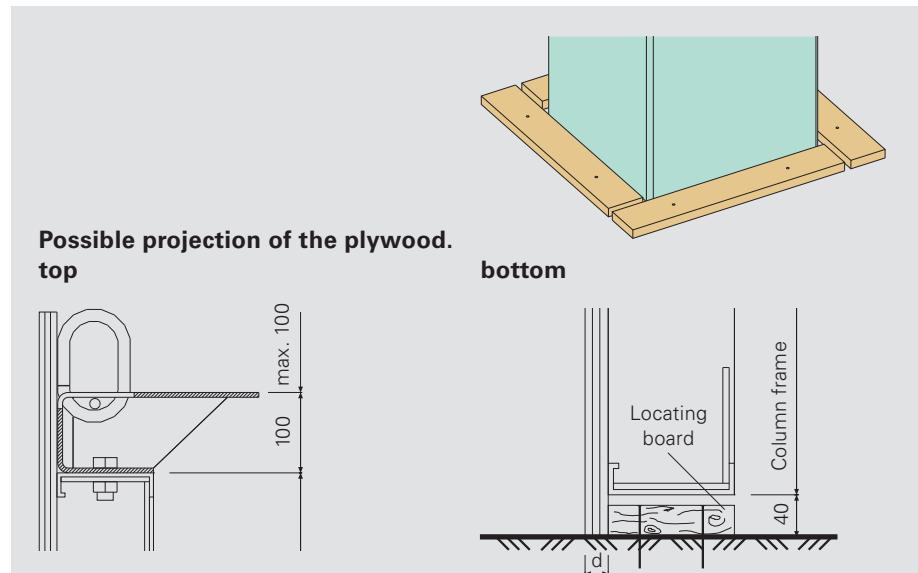
Pre-assemble the second frame in the same way. Then place one pre-assembled frame on top of the other and connect with the column tie yokes and spherical nuts to form one half of the formwork.



**Hint for the user**

To position the formwork exactly on the slab, we recommend fixing locating boards, set back by the thickness of the formlining "d".

The formlining projects about 40 mm beyond the frames at the bottom.



4

Mount PERI RAPID Lifting Unit-2, Item-no. 037320 or Concreting Platform, complete, Item-no. 037400 at the top. These parts also serve to protect the formwork against concrete spills.



The concreting platform is assembled on column halves whilst in a lying position.

The Lifting Unit-2 protects the RAPID against concrete spills.

# RAPID Column Formwork

## Ladder access and concreting platform

**Safe work in any height. RAPID Ladder access and concreting platforms for your safety.**

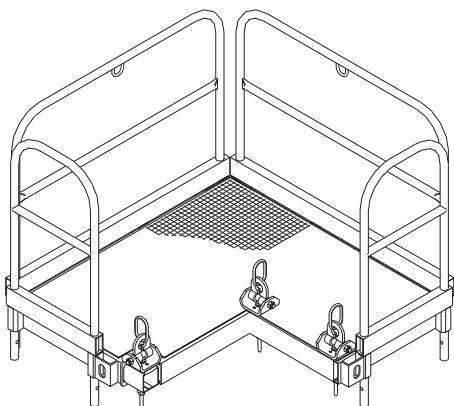
**The PERI concreting platform is delivered to site ready for use:**

- No individual components to be lost, no complicated assembly of individual scaffold brackets, planks and hand-rails, etc. There are no interrupting struts below either.
- The concreting platform fits any cross-section up to 600 x 600 mm.
- The concreting platform is light enough in weight to be easily assembled by hand.
- The connections of the PERI concreting platform also serve as the crane hooks.

### **Concreting Platform, complete,**

Item-no.: 037400.

Permiss. loading 150 kg/m<sup>2</sup>.



11.70 m high RAPID column. The high permissible fresh concrete pressure makes fast concreting possible.

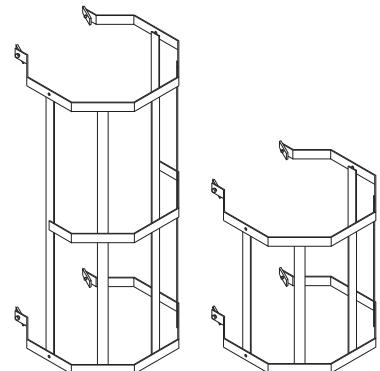


PERI RAPID Column Formwork  
complete with ladder access and  
Concreting Platform.

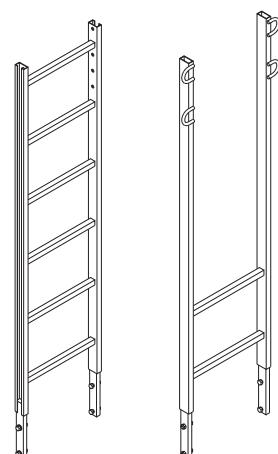


#### Ladder access for PERI RAPID Column Formwork

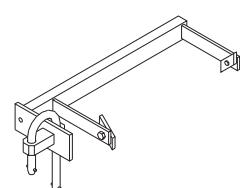
Ladder Cage 150, Item-no.: 051450  
Ladder Cage 75, Item-no.: 104132



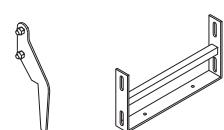
Ladder 180/6, Item.-no.: 051410  
Access Ladder 180/2, Item-no.: 103724



Ladder Connector RAPID, Item-no.: 103369



Ladder Hook, Item-no.: 103718  
Ladder Base, Item-no.: 051460



# RAPID Column Formwork

**PERI**

Item no. Weight kg

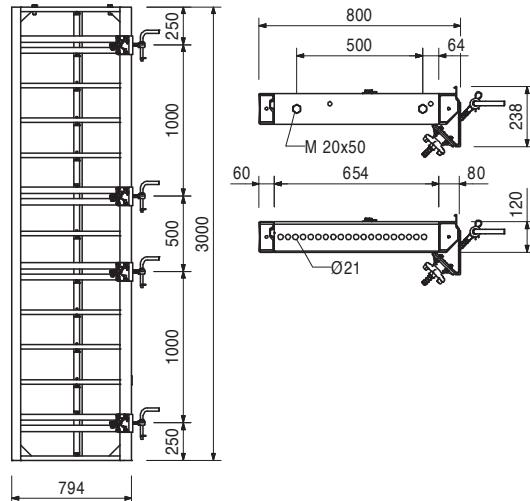
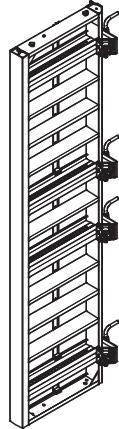
037250 61,800

## Column Frame RAPID 300, Alu

Column frames for continuously adjustable cross-sections up to 60 x 60. 21 mm plywood thickness. With clamping profile for fixing the plywood without screws or nails.

## Complete with

- 4 pc. 037160 Bolt Ø 20 x 205, galv.
- 4 pc. 037150 Tie Yoke DW 15
- 4 pc. 030440 Spherical Nut DW 15, galv.
- 2 pc. 780357 Bolt ISO 4017 M20 x 50-8.8, galv.
- 2 pc. 710334 Nut ISO 4032 M20-8, galv.



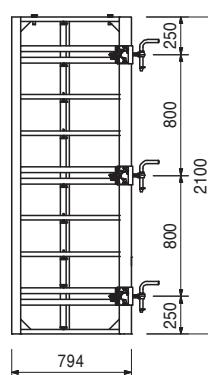
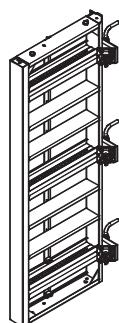
037260 45,200

## Column Frame RAPID 210, Alu

Column frames for continuously adjustable cross-sections up to 60 x 60. 21 mm plywood thickness. With clamping profile for fixing the plywood without screws or nails.

## Complete with

- 3 pc. 037160 Bolt Ø 20 x 205, galv.
- 3 pc. 037150 Tie Yoke DW 15
- 3 pc. 030440 Spherical Nut DW 15, galv.
- 2 pc. 780357 Bolt ISO 4017 M20 x 50-8.8, galv.
- 2 pc. 710334 Nut ISO 4032 M20-8, galv.



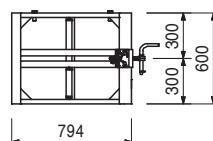
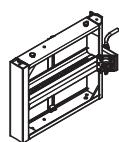
037270 16,800

## Column Frame RAPID 60, Alu

Column frames for continuously adjustable cross-sections up to 60 x 60. 21 mm plywood thickness. With clamping profile for fixing the plywood without screws or nails.

## Complete with

- 1 pc. 037160 Bolt Ø 20 x 205, galv.
- 1 pc. 037150 Tie Yoke DW 15
- 1 pc. 030440 Spherical Nut DW 15, galv.
- 2 pc. 780357 Bolt ISO 4017 M20 x 50-8.8, galv.
- 2 pc. 710334 Nut ISO 4032 M20-8, galv.



# RAPID Column Formwork

**PERI**

Item no.	Weight kg
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037150	0,641
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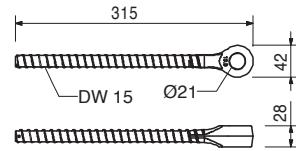
## Tie Yoke DW 15

For corner tying of the RAPID Column Frames.



## Technical Data

Permissible load 90 kN.



## Accessories

105400	0,330
104477	0,300
781053	0,065
018060	0,030

**Bolt Ø 20 x 140, galv.**

**Bolt ISO 4014 M20 x 120-8.8, galv.**

**Nut ISO 7042 M20-8, galv.**

**Cotter Pin 4/1, galv.**

037160	0,736
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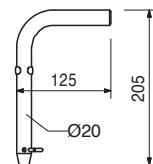
## Bolt Ø 20 x 205, galv.

For corner tying of the RAPID Column Frames.



## Complete with

1 pc. 018060 Cotter Pin 4/1, galv.



030440	0,686
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## Spherical Nut DW 15, galv.

For corner tying of RAPID with DW 15.

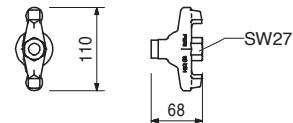


## Note

Wrench size SW 27.

## Technical Data

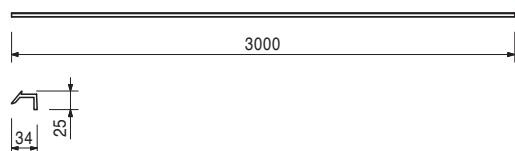
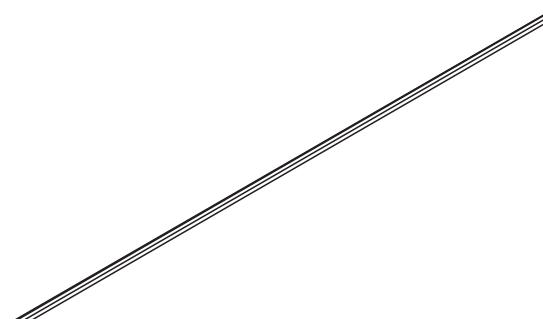
Permissible load 90 kN.



037210	0,320
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## Chamfer Strip RAPID I = 3,0 m

For installing the plywood formlining on the RAPID column frame.



# RAPID Column Formwork

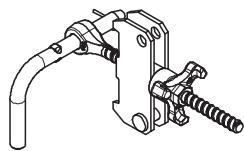
PERI

Item no.	Weight kg
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037190 3,010

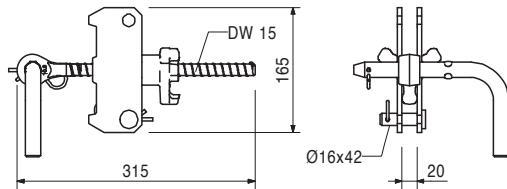
## Brace Connector-3 RAPID, galv.

For connecting push-pull props and kicker braces to the RAPID column frame.



## Complete with

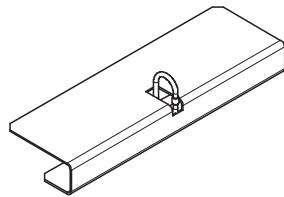
- 1 pc. 037160 Bolt Ø 20 x 205, galv.
- 1 pc. 027170 Bolt Ø 16 x 42, galv.
- 2 pc. 018060 Cotter Pin 4/1, galv.



037320 16,200

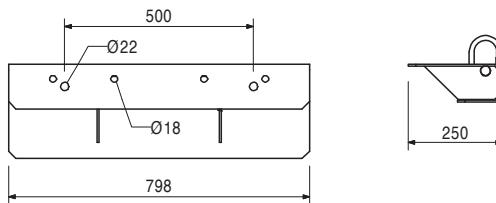
## Crane Lifting Unit-2 RAPID

For moving RAPID coulmn formwork.



## Safety Instructions

Load-bearing point: capacity 0.5 t.



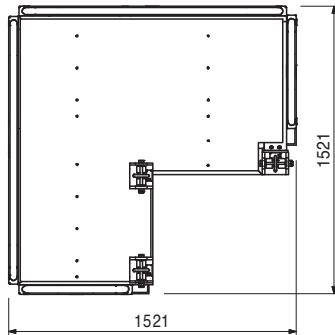
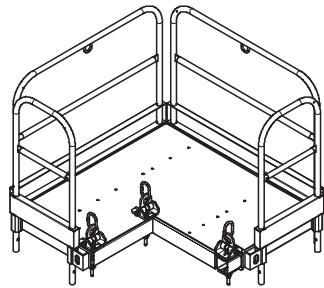
037400 123,000

## Concreting Platform, compl.

Working and concreting platform for TRIO, RAPID and QUATTRO Column Formwork.

## Complete with

- 1 pc. 037410 Concreting Landing, Alu
- 2 pc. 037420 Platform Guardrail 52, galv.
- 2 pc. 037430 Platform Guardrail 134, galv.
- 3 pc. 037440 Crane Hook Concreting Platform



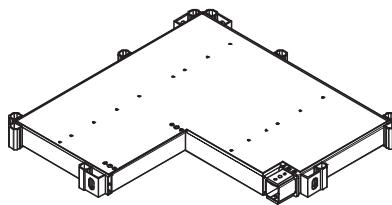
# RAPID Column Formwork

PERI

Item no.	Weight kg
037410	51,400

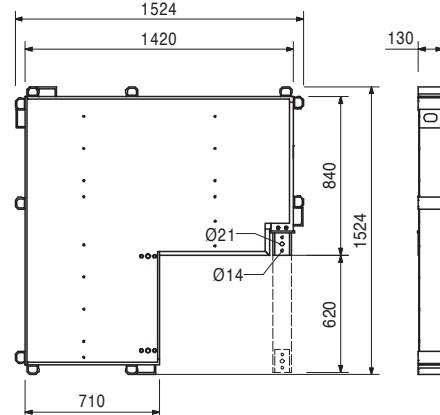
## Concreting Landing, Alu

Continuously adjusts to all column cross-sections up to max. 60 x 60 cm. Attachment is carried out using the crane eye of the concreting platform.



## Technical Data

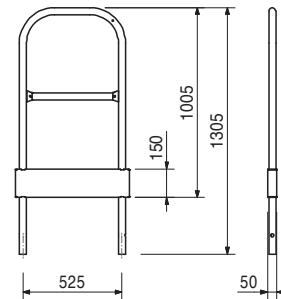
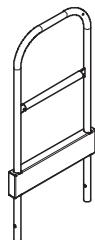
Permissible load 150 kg/m<sup>2</sup>.



037420	10,200
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## Platform Guardrail 52, galv.

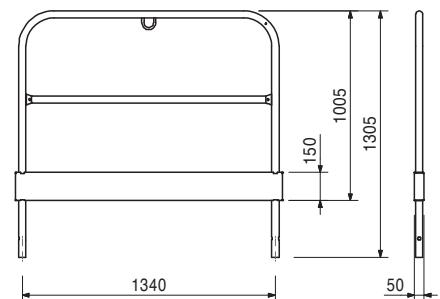
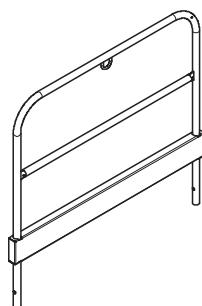
As guardrail for PERI Concreting Platforms. Locks in place automatically.



037430	17,100
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## Platform Guardrail 134, galv.

As guardrail for PERI Concreting Platforms. Locks in place automatically.



# RAPID Column Formwork

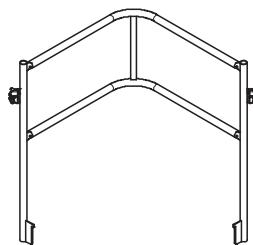
**PERI**

Item no. Weight kg

115352 15,100

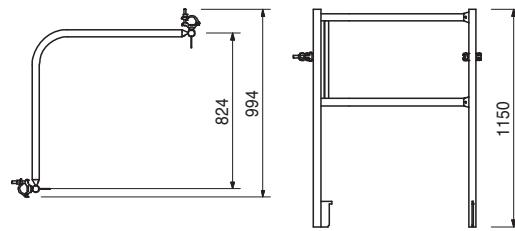
## Platform Front Guardrail 86/86

As guardrail for PERI concreting platforms towards the column. Mounted with Screw-on Coupler.



## Note

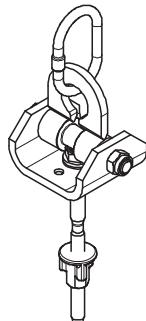
Wrench size SW 19.



037440 5,660

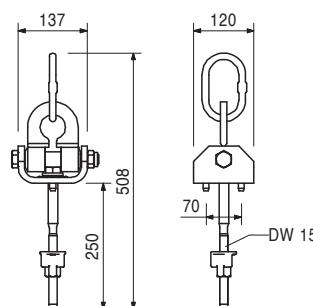
## Crane Hook Concreting Platform

For assembling the concreting landing on the RAPID and QUATTRO column frames.



## Safety Instructions

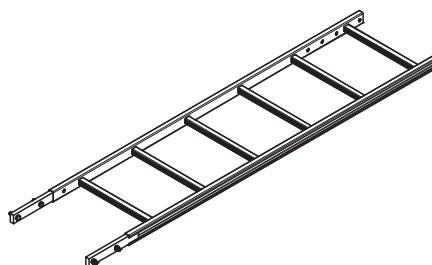
Load-bearing point: capacity 1.0 t.



051410 11,700

## Ladder 180/6, galv.

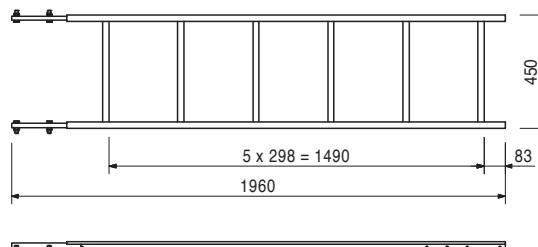
As access for PERI formwork systems.



## Complete with

4 pc. 710224 Bolt ISO 4017 M12 x 40-8.8, galv.

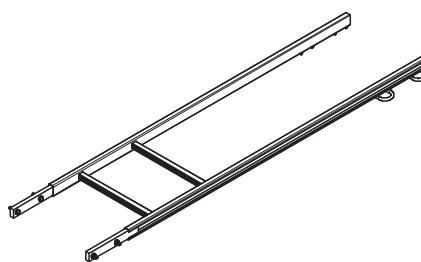
4 pc. 710381 Nut ISO 7042 M12-8, galv.



103724 10,400

## End Ladder 180/2, galv.

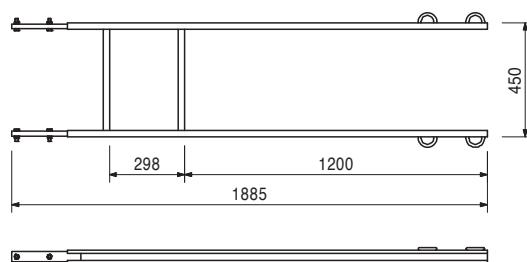
As access for PERI formwork systems.



## Complete with

4 pc. 710224 Bolt ISO 4017 M12 x 40-8.8, galv.

4 pc. 710381 Nut ISO 7042 M12-8, galv.



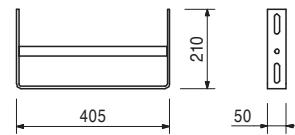
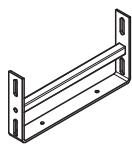
# RAPID Column Formwork

**PERI**

Item no.	Weight kg
051460	2,180

## Ladder Base, galv.

As bottom ladder connection and for securing ladders against sliding on the scaffold decks.



103718	0,684
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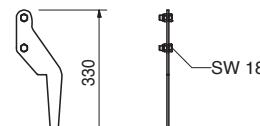
## Ladder Hook, galv.

For adjusting the bottom ladder.  
Always use in pairs.



## Complete with

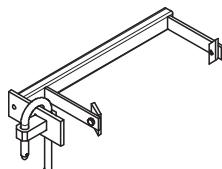
2 pc. 710266 Bolt ISO 4017 M12 x 25-8.8, galv.  
2 pc. 710381 Nut ISO 7042 M12-8, galv.



103369	6,400
--------	-------

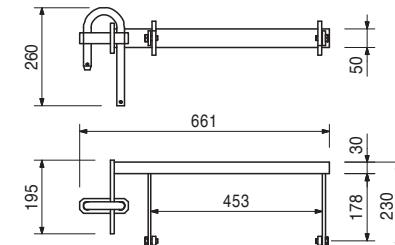
## Ladder Connector RAPID, galv.

For connecting ladders to RAPID column frames.



## Complete with

2 pc. 710266 Bolt ISO 4017 M12 x 25-8.8, galv.  
2 pc. 701763 Clamping Plate FI 25 x 10 x 90



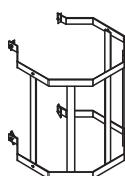
104132	15,600
051450	25,200

## Ladder Safety Cages, galv.

### Ladder Safety Cage 75, galv.

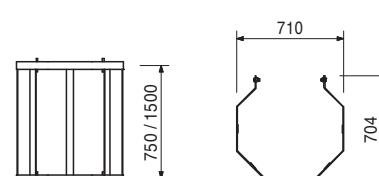
### Ladder Safety Cage 150, galv.

Ladder safety cage for PERI access ladders.



## Complete with

4 pc. 710266 Bolt ISO 4017 M12 x 25-8.8, galv.  
4 pc. 701763 Clamping Plate FI 25 x 10 x 90



# RAPID Column Formwork

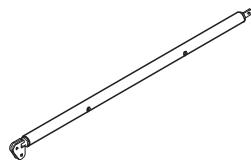
**PERI**

Item no. Weight kg

028010 18,000

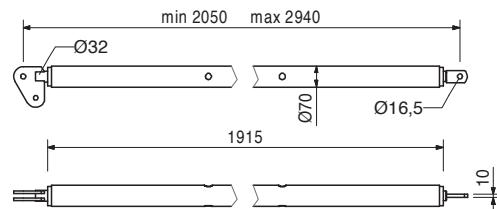
## Push-Pull Prop RSS I

Extension length L = 2.05 - 2.94 m.  
For aligning PERI formwork systems.



### Note

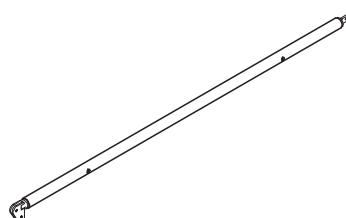
Permissible load: see PERI Design Tables.



028020 22,100

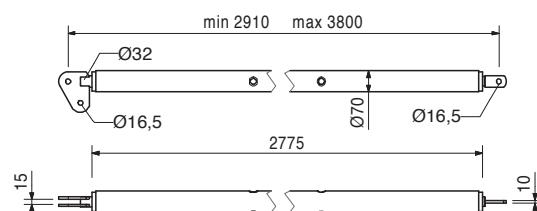
## Push-Pull Prop RSS II

Extension length L = 2.91 - 3.80 m.  
For aligning PERI formwork systems.



### Note

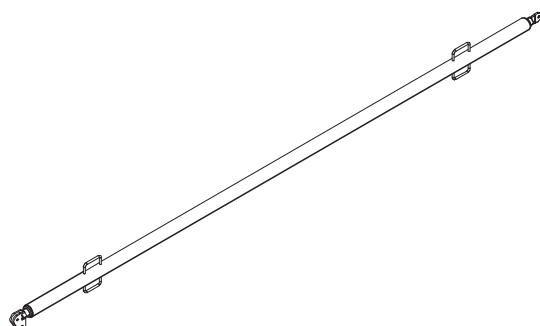
Permissible load: see PERI Design Tables.



028030 38,400

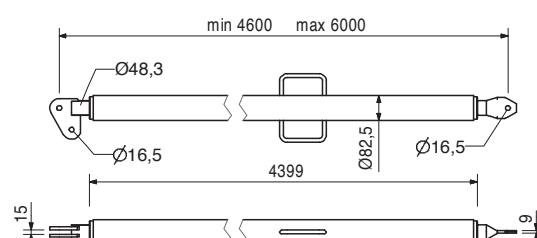
## Push-Pull Prop RSS III

Extension length L = 4.60 - 6.00 m.  
For aligning PERI formwork systems.



### Note

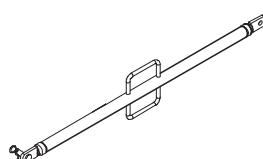
Permissible load: see PERI Design Tables.



028110 5,180

## Kicker AV

Extension length L = 1.08 - 1.40 m.  
For aligning PERI formwork systems.



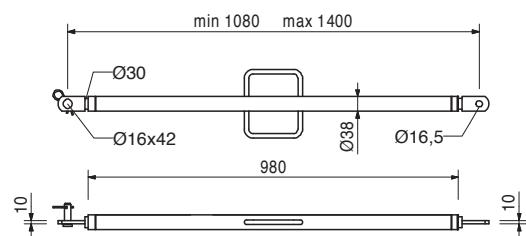
### Complete with

1 pc. 027170 Bolt Ø 16 x 42, galv.

1 pc. 018060 Cotter Pin 4/1, galv.

### Note

Permissible load: see PERI Design Tables.



# RAPID Column Formwork

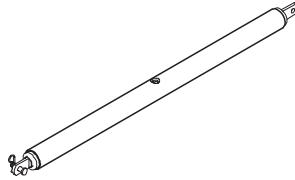
**PERI**

Item no. Weight kg

108135 12,900

## Kicker AV 210

Extension length L = 1.28 - 2.10 m.  
For aligning PERI formwork systems.

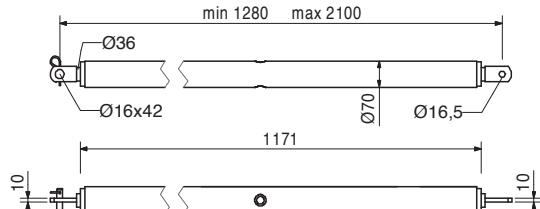


## Complete with

1 pc. 027170 Bolt Ø 16 x 42, galv.  
1 pc. 018060 Cotter Pin 4/1, galv.

## Note

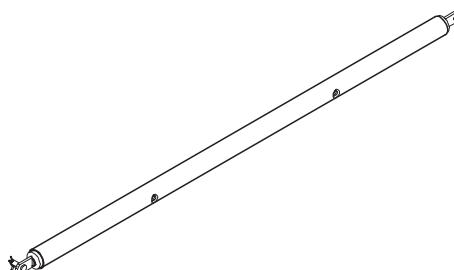
Permissible load: see PERI Design Tables.



028120 16,900

## Kicker AV RSS III

Extension length L = 2.03 - 2.92 m.  
For aligning PERI formwork systems.

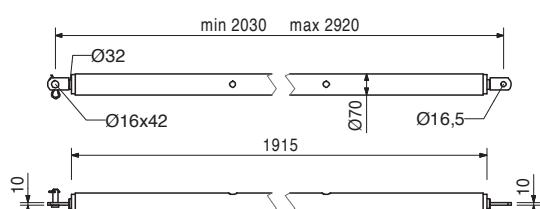


## Complete with

1 pc. 027170 Bolt Ø 16 x 42, galv.  
1 pc. 018060 Cotter Pin 4/1, galv.

## Note

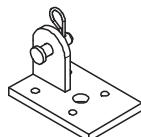
Permissible load: see PERI Design Tables.



106000 1,820

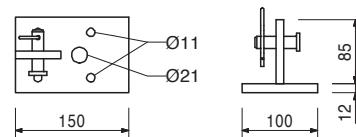
## Base Plate-2 for RSS, galv.

For assembly of RSS push-pull props.



## Complete with

1 pc. 027170 Bolt Ø 16 x 42, galv.  
1 pc. 018060 Cotter Pin 4/1, galv.



## The optimal System for every Project and every Requirements



Wall Formwork



Column Formwork



Slab Formwork



Climbing Systems



Tunnel Formwork



Bridge Formwork



Shoring Systems



Construction Scaffold



Facade Scaffold



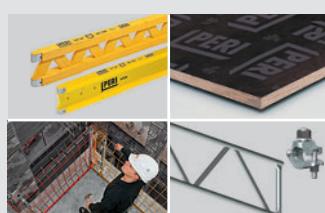
Industrial Scaffold



Access



Protection Scaffold



System-Independent Accessories



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