

TRIO Column Formwork

Assembly Instructions for Standard Configuration



Content

Introduction

Overview, Main Components	1
Standard Configuration	2
Intended Use	2
Safety Instructions	3
General	3

Standard Configuration

A1	Storage and Transportation Panels and Accessories	4
A2	Maintenance and Cleaning Tips and Information	5
A3	Assembly Formwork Halves Push-Pull Props Concreting Platform Ladder Access Parts list for access ladders	6 7 8 9 10
A4	Shuttering Placing of Formwork Closing of Formwork	12 13
A5	Striking, Moving Striking, Moving	14
A6	Height Extensions Height adjustments up to 8.10 m	15

Components

Components	16
------------	----

Key



Safety Instructions



Note



Visual Check



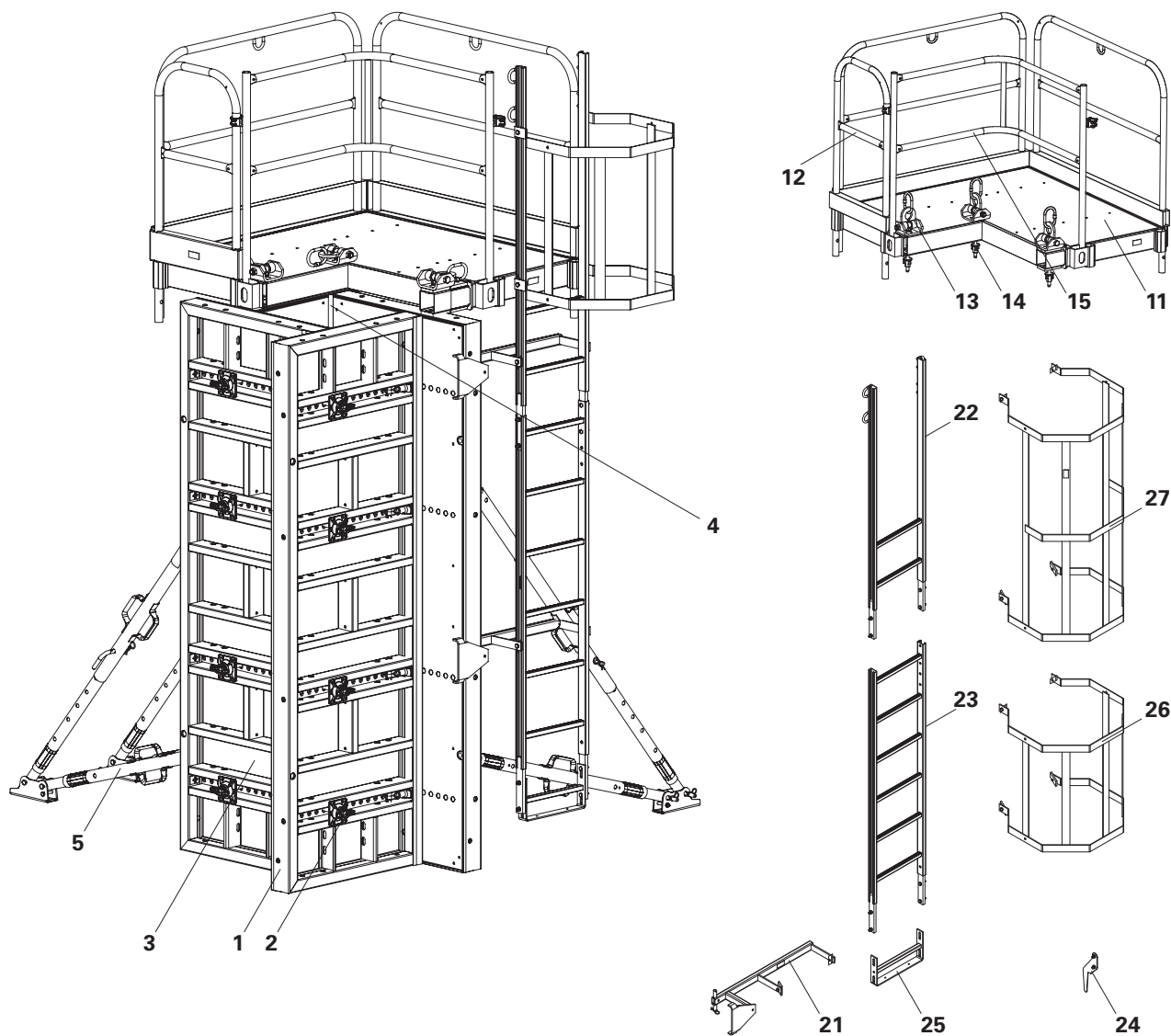
Tip



Load-bearing point

Introduction

Overview, Main Components



TRIO Column

- 1 Column Panel TRS
- 2 Corner Connection
- 3 Formlining
- 4 Chamfer Strip
- 5 Push-Pull Props RS / RS with Kicker

Concreting Platform

- 11 Concreting Landing
- 12 Guardrail Landing 134 or 52
- 13 Crane Eye (load-bearing point)
- 14 Cam Nut DW 15
- 15 Front Guardrail Landing 86/86

Ladder Access

- 21 Ladder Connector TRIO
- 22 Access Ladder 180/2
- 23 Ladder 180/6
- 24 Ladder Hook
- 25 Ladder Base
- 26 Ladder Safety Cage 75
- 27 Ladder Safety Cage 150

Introduction

Standard Configuration

General

PERI TRIO Column Formwork TRS supplements the PERI TRIO wall formwork system. The Column Panel TRS has tie holes in the frame and can be used as a 90 cm wide wall panel. The panel frame is powder-coated which facilitates easier cleaning. Extended column panels are connected at the joints by means of Alignment Couplers BFD. Sharp-edged and – through the use of chamfer strips – chamfered-edged column cross-sections can be realised.

Through the formwork panel arrangement, which is based on the windmill vane principle, both square and rectangular column cross-sections can be formed in 5 cm increments.

For access and concreting operations, appropriate safety measures are available.

System Dimensions

Formwork height:

3 different panel heights: 2.70 m, 1.20 m and 0.60 m.

Column cross-sections

With Column Panel TRS, 90 cm wide: square or rectangular from 20 x 20 cm up to 75 x 75 cm in 5 cm increments.

Technical Data

Permissible fresh concrete pressure 100 kN/m².

Intended Use

1. PERI products have been exclusively designed as technical work equipment for use in the industrial and commercial sectors by suitably trained personnel.

2. These assembly instructions serve as the basis for the project-related risk assessment and the instructions for the provision and use of the system by the contractor (user). However, this does not replace these.

3. Only PERI original components may be used. The use of other products and spare parts represents a misapplication with associated safety risks.

4. The components are to be inspected before each use to ensure that they are in perfect condition and function correctly.

5. Changes to PERI components are not permitted and represent a misapplication with associated safety risks.

6. Safety instructions and permissible loads must be observed at all times.

7. Components provided by the contractor must conform with the characteristics required in these assembly instructions as well as all valid construction guidelines and standards.

In particular, the following apply if nothing else is specified:

- timber components: Strength Class C24 for Solid Wood EN 338.
- scaffold tubes: galvanised steel tubing with minimum dimensions Ø 48.3 x 3.2 mm according to EN 12811-1:2003 4.2.1.2.
- scaffold tube couplings according to EN 74.

8. Deviations from the standard configuration may only be carried out after a separate risk assessment has been completed by the contractor (user). On this basis, appropriate measures for the working safety and stability are to be implemented.

Introduction

Safety Instructions

General

1. Deviations from the standard configuration and/or intended use present a potential safety risk.
2. All country-specific laws, standards and other safety regulations are to be taken into account whenever our products are used.
3. During unfavourable weather conditions, suitable precautions and measures are to be taken in order to ensure both working safety and stability.
4. The contractor (user) must ensure the stability throughout all phases of construction. He must ensure and verify that all loads which occur can be safely transferred.
5. The contractor (user) has to provide safe working areas for site personnel which are to be reached through the provision of safe access ways. Areas of risk must be cordoned off and clearly marked. Hatches and openings on accessible working areas must be kept closed during working operations.
6. For better comprehensibility, detailed drawings are partly incomplete. The safety installations which have possibly not been featured in these detailed drawings must nevertheless be available.

Storage and Transportation

1. Do not drop the components.
2. Store and transport components ensuring that no unintentional change in their position is possible. Detach lifting gear from the lowered units only if these are in a stable position and no unintentional change is possible.
3. When moving the components, make sure they are lifted and set down accordingly so that any unintentional tilting over, falling apart, sliding or rolling away is prevented.
4. Use only suitable load-carrying equipment to move the components as well as the designated load-bearing points.
5. During the lifting and moving procedure, ensure all loose parts are removed or secured.
6. During the moving procedure, always use a guide rope.
7. Move components on clean, flat and sufficiently load-bearing surfaces only.

System-specific

1. Retract components only when the concrete has sufficiently hardened and the person in charge has given the go-ahead for striking to take place.
2. Anchoring is to take place only if the anchorage has sufficient concrete strength.
3. Only use designated PERI lifting gear.
4. During striking, do not tear off the formwork panels with the crane.
5. If a storm warning is given, additional push-pull props are to be attached or other bracing measures are to be carried out along with implementing the details contained in the PERI Design Tables.

General

Additional PERI product information

- TRIO brochure
- Instructions for Use
 - Lifting Hook MAXIMO 1.5 t
 - Pallets and Stacking Devices

The assemblies shown in these PERI assembly instructions are only examples which feature only one component size. They apply accordingly for all component sizes contained in the standard configuration.

A1 Storage and Transportation

Panels and Accessories



Instructions for Use for PERI Pallet and Stacking Devices must be followed at all times!

Manually-created transport units must be correctly stacked and secured!

Transport

PERI pallets and stacking devices are suitable for lifting with a crane or forklift.

They can also be moved with the PERI Pallet Lifting Trolley.

All pallets and stacking devices can be lifted from both the longitudinal and short sides.

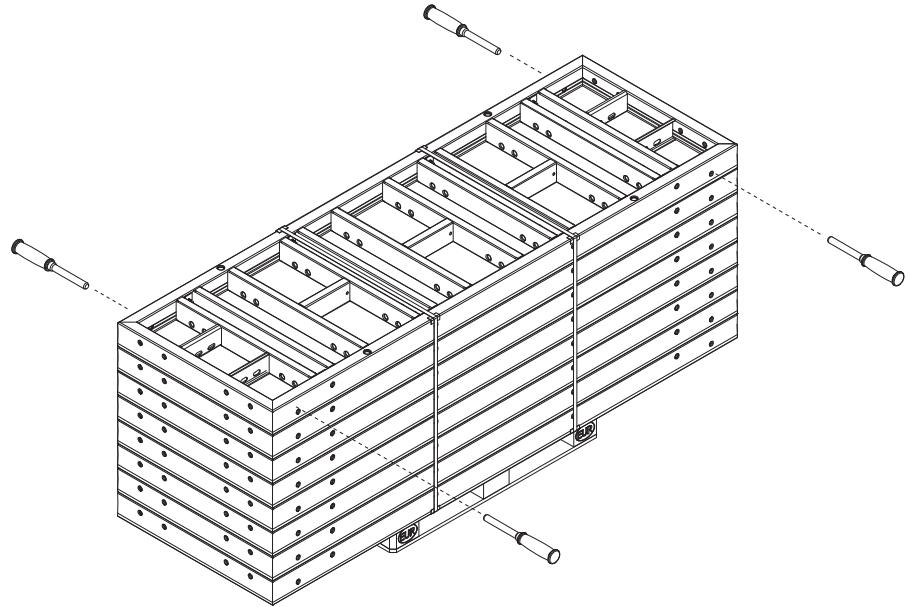


Fig. A1.01a

Stacking



Only panels of the same size are to be transported in one stack!

TRIO formwork panels are placed one on top of each other in a stack and stored as one complete bundle, or alternatively four column panels are stored respectively in a MAXIMO stacking device.

(Fig. A1.01a + A1.01b)

Store individual components in pallets.

(Fig. A1.02)

With four TRIO Stacking Aids, the individual panel can be taken from a stack and moved without requiring a crane.

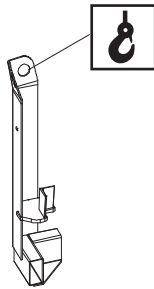


Fig. A1.01b

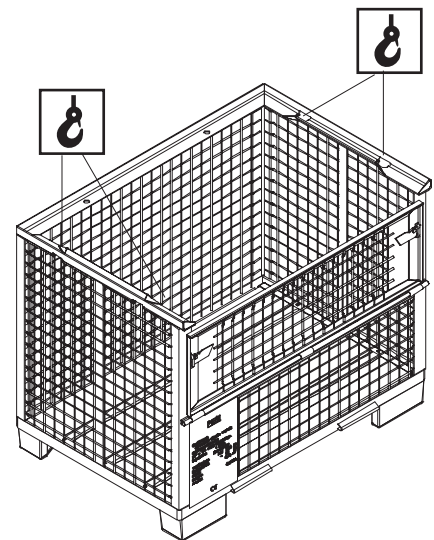


Fig. A1.02

Loading onto trucks

The transportable number of stacks and pallets depends on the respective national traffic regulations.

A2 Maintenance and Cleaning

Tips and Information

In order to maintain the value and operational readiness of the TRIO Column Formwork over a long period of time, the formwork should be carefully handled at all times.

Maintenance instructions

1. Concrete vibrator with rubber end cap reduces the risk of damage to the formlining.
2. Spacers used for the reinforcement with large contact surfaces prevent impressions forming on the formlining.
3. When placing heavy items on the formlining, use support timbers in order to prevent any impressions on and damage to the formlining surface.
4. Spray the components with PERI Bio Clean before every use and clean the rear of the formwork with water immediately after concreting.
(Fig. A2.01)
5. Spray moving parts, if required, with PERI Bio Clean.
6. For damage-free transportation, suitable PERI pallets and stacking devices are available.



Fig. A2.01



Due to the frame being powder coated, cleaning requirements are kept to a minimum. Therefore, do not remove any concrete residue by means of sharp or pointed objects.

Repairs

The repair of damaged formlining surfaces is done through milling and gluing of repair discs.

A3 Assembly

Formwork Halves

Connection with Column Tie Bolt for use without ladder access.

1. Attach chamfer strip (4) to the front side.
2. Place second column panel (1) onto the first column panel (1). (Fig. A3.01)
3. Insert Column Tie Bolt (2.1) through the panel and tighten on the outside using the Wingnut Pivot Plate (2.2). (Fig. A3.01a)
4. Install the second formwork half in the same way.

Alternative:

Connection with TRS Inserting Nut.

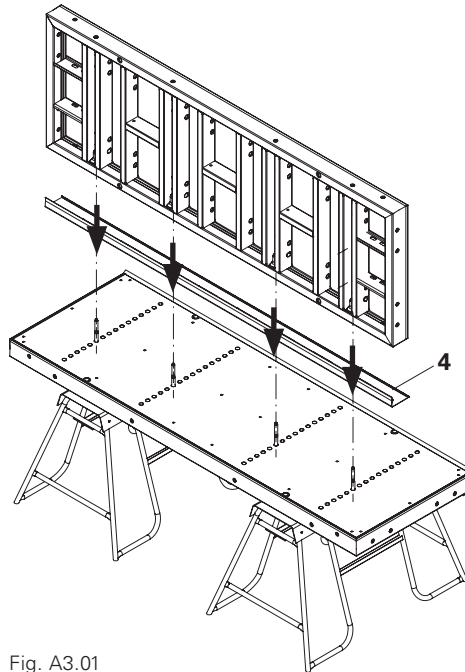


Fig. A3.01

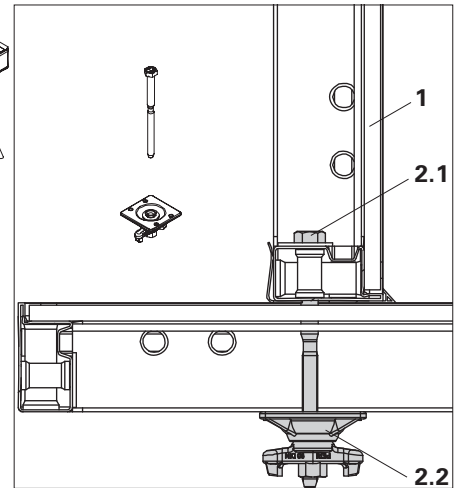


Fig. A3.01a

Connection with TRS Inserting Nut for use with ladder access

1. Attach chamfer strip (4) to the front side.
2. Place second column panel onto the first column panel. (Fig. A3.01)
3. Insert TRS Inserting Nut (2.3) in the perforated profile and secure with pins and cotter pins.
4. Screw in the TRS Clamp (2.4) into the Inserting Nut from the outside and tighten.
5. Install the second formwork half in the same way.



For connecting the formwork halves with one hand:

Pre-assemble TRS Inserting Nuts at the connection points to the second formwork halves.

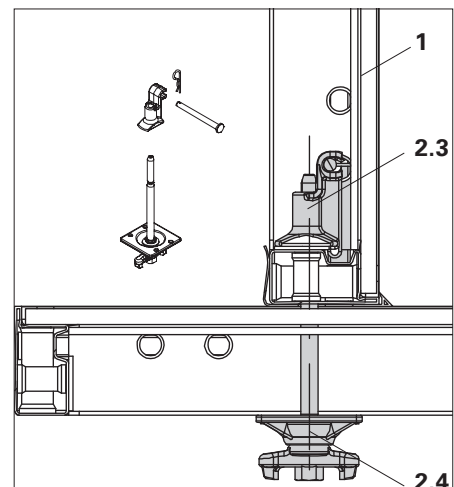


Fig. A3.01b

A3 Assembly

Push-Pull Props

Assembly on the horizontally-positioned formwork half. Connecting to both horizontal and vertical panel struts is possible. (Fig. A3.02a + A3.02b)



Mount 3 push-pull props and kickers to ensure stability!

Brace Connector TRIO

Mount three Brace Connectors to one formwork half. (Fig. A3.02)

Assembly

1. Attach the Brace Connector (6) to the panel strut so that the Hook Tie is securely fixed in a connecting hole.
2. Secure Brace Connector with the Three Wingnut (6.2).
- (Fig. A3.02a)
3. Fix push-pull prop and kicker with bolts and cotter pins (6.3).
4. Mount Base Plate. (Fig. A3.03)

Push-pull props of appropriate length are to be mounted at an angle of $\leq 60^\circ$ to the horizontal, see PERI Design Tables. (Fig. A3.03a)

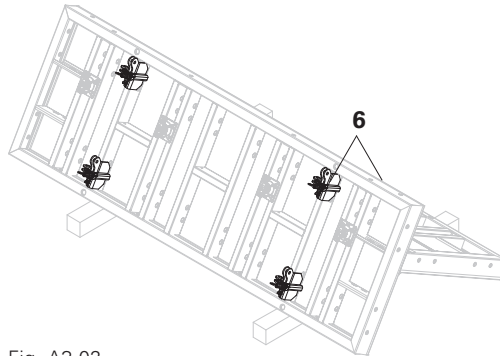


Fig. A3.02

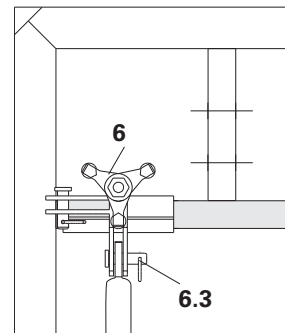
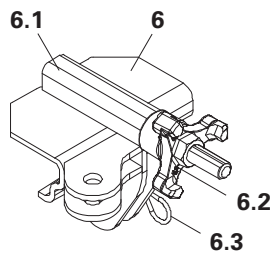


Abb. A3.02a

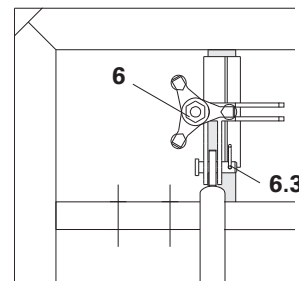
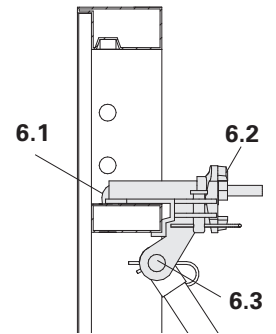


Fig. A3.02b

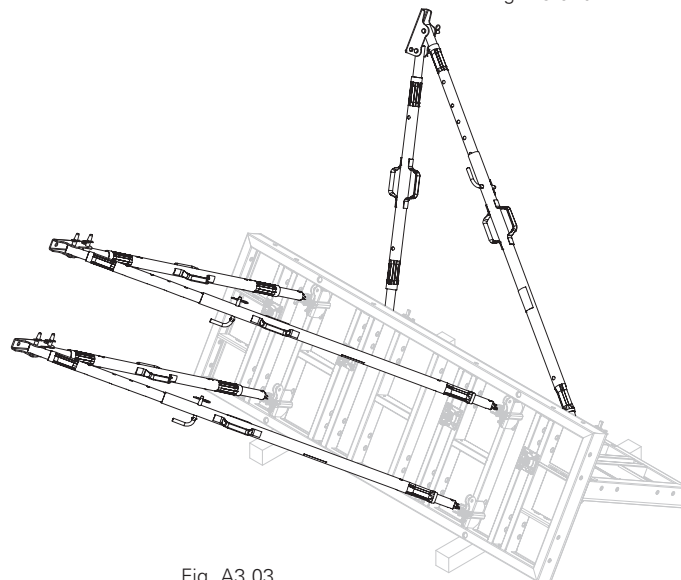


Fig. A3.03

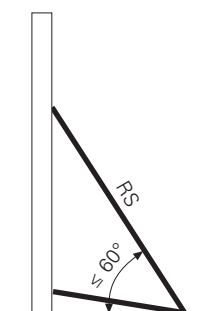


Fig. A3.03a

A3 Assembly

Concreting Platform

Assembly on the horizontally-positioned formwork half.

Assembly

1. Remove cam nuts (14) from the crane eyes (13).
2. Platform (11) is positioned vertically by hand at the formwork halves.
3. Insert crane eye bolt through drilled hole a of the column panel and open cam nuts.
4. Proceed in the same way with drilled hole b.
5. Align telescopic girder (16) to drilled hole c and mount third crane eye. The extension length of the telescopic girder is determined by the column cross-section. (Fig. A3.04)
6. Insert guardrails (12). (Fig. A3.05)

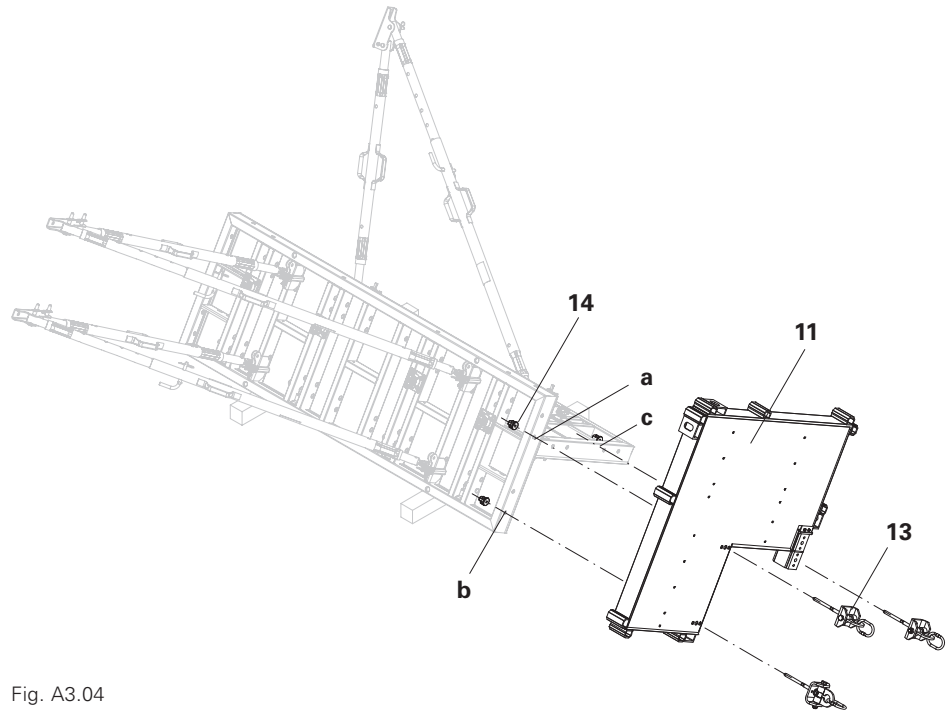


Fig. A3.04

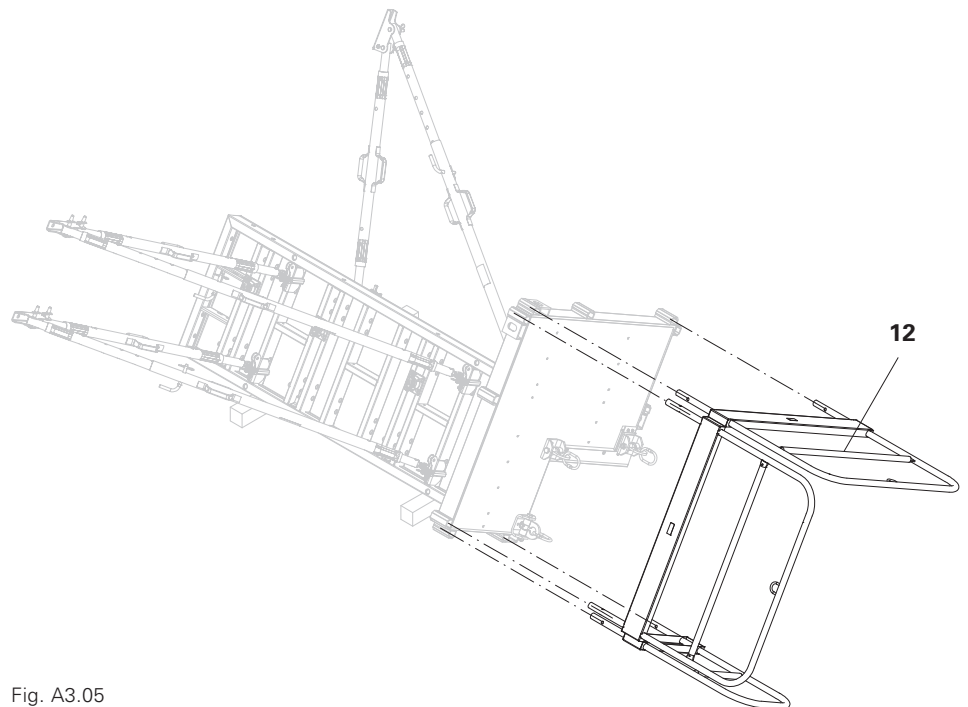


Fig. A3.05

A3 Assembly

Ladder Access

Assembly on the horizontally-positioned formwork half.



For high columns:
Ladder access is also installed for closing the formwork on the second formwork half. It is without any access possibility! (Fig. A3.09)

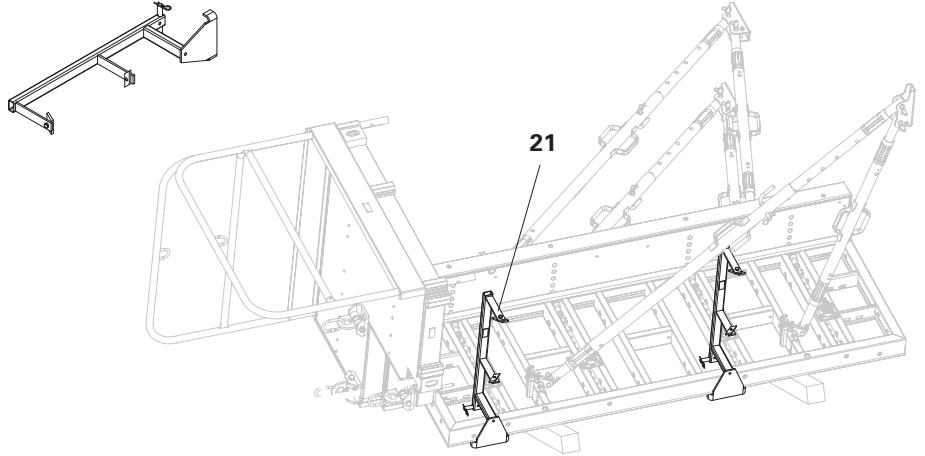


Fig. A3.06

Assembly

1. Place Ladder Connector TRIO (21) on the frame and fix in the panel strut by means of bolts. (Fig. A3.06)
 2. Pre-assemble ladder:
 - Connect End Ladder 180/2 (22) with Ladder 180/6 (23), SW 19. Depending on the height, mount additional ladders 180/6.
 - Mount Ladder Hooks (24) and Ladder Base (25) to the bottom-most ladder, SW 19. (Fig. A3.07)
 3. Fix the pre-assembled ladder to the ladder connections with the clamping plates (23.1), SW 19.
 4. Mount Ladder Safety Cage 75 or 150 with clamping plates according to the plan. Depending on the situation, mount with overlapping ladder joints. (Fig. A3.08)
- Clear spacing between the ladder safety cages ≤ 30 cm.

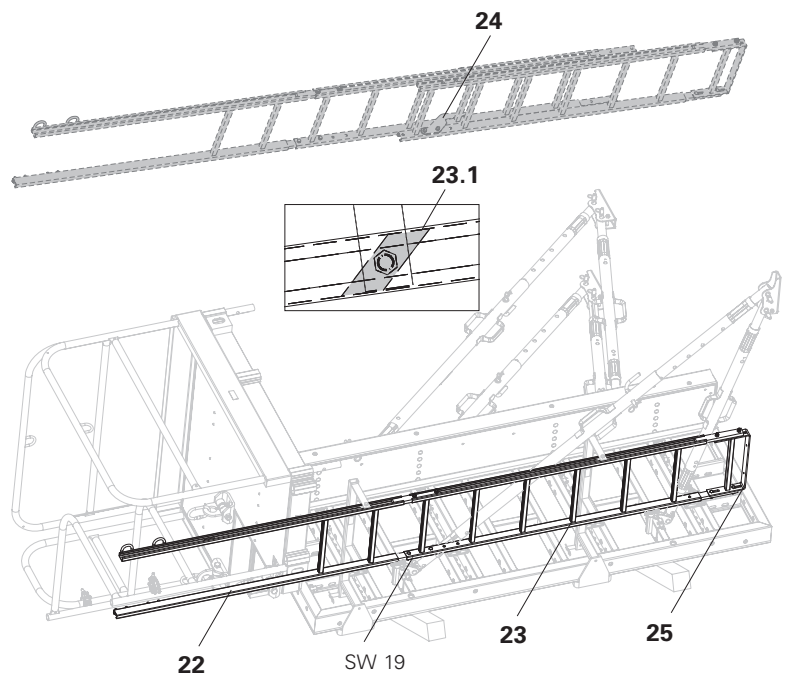


Fig. A3.07



Visual check of the clamping plates. The contact surface must rest against the ladder profile.

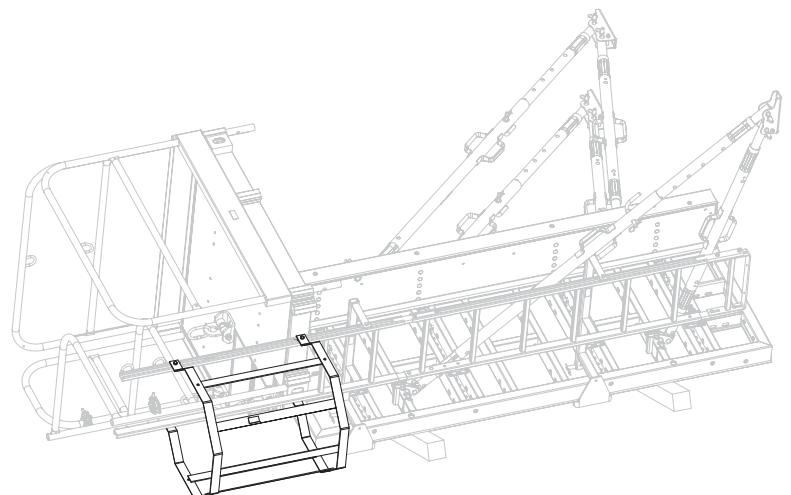


Fig. A3.08

A3 Assembly

Parts list for access ladders



For higher columns, two access ladders are mounted!



There is the possibility of assembling two concreting platforms.

Ladder Access A:

With access to the concreting platform.

Ladder Access B:

Not for accessing the concreting platform, only for opening and closing the column formwork.

(Fig. A3.09)

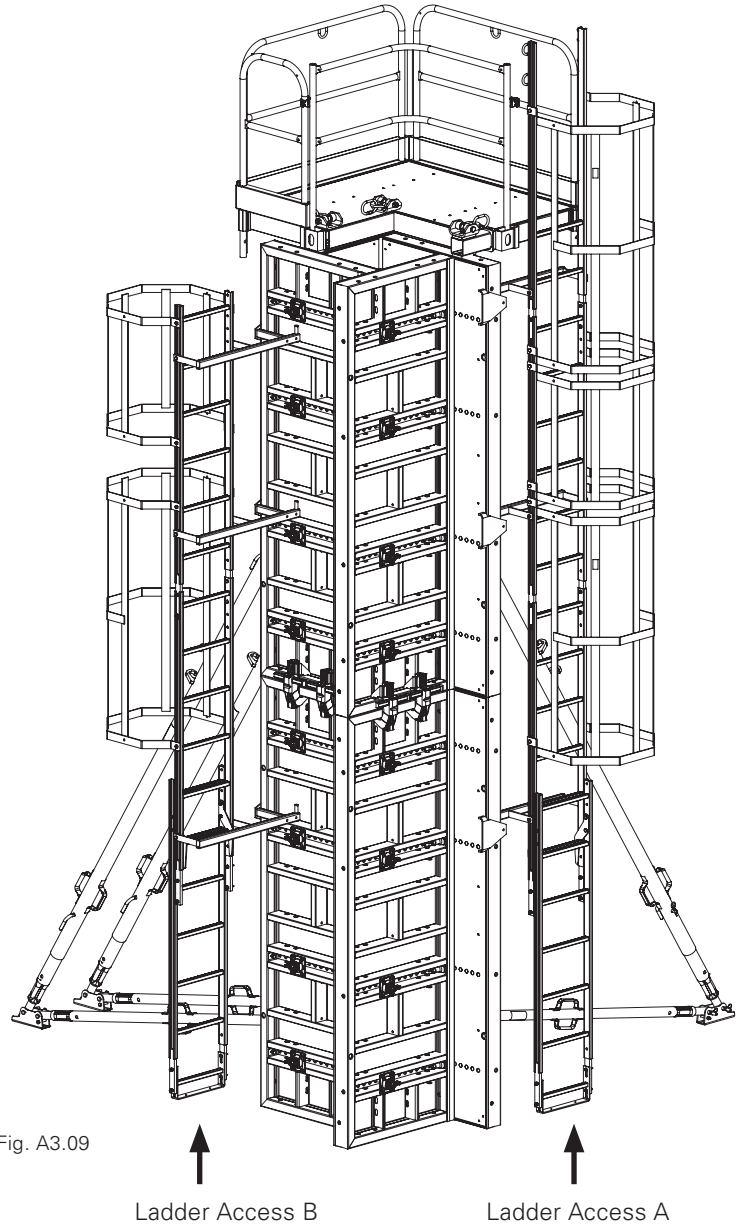


Fig. A3.09

Ladder Access B

Ladder Access A

Parts list for one concreting platform and two access ladders

Item no.	Description	2.70 – 3.60 m		3.90 – 4.20 m		4.50 – 5.70 m		6.00 – 7.50 m		7.80 – 9.30 m		9.60 – 10.80 m	
		A	B	A	B	A	B	A	B	A	B	A	B
037400	Concreting Platform, complete	1	0	1	0	1	0	1	0	1	0	1	0
051410	Ladder 180/6	2	2	2	2	3	3	4	4	5	5	6	6
103724	Access Ladder 180/2	1	0	1	0	1	0	1	0	1	2	1	2
051450	Ladder Safety Cage 150	0	0	1	1	2	2	3	3	4	4	5	5
104132	Ladder Safety Cage 75	1	1	1	0	2	1	2	1	2	1	2	1
051460	Ladder Base	1	1	1	1	1	1	1	1	1	1	1	1
103718	Ladder Hook	2	2	2	2	2	2	2	2	2	2	2	2
103362	Ladder Connector TRIO	2	2	2	2	3	3	4	4	5	5	6	6
115352	Front Guardrail landing 86/86	1	0	1	0	1	0	1	0	1	2	1	2

A4 Shuttering

Placing of Formwork



- Always install the formwork halves with the concreting platform and push-pull props first.
- Align the formwork with the rear side on the locating boards.
- Safe working areas must be selected at great heights.

Position the formwork half with concreting platform and push-pull props (placing formwork)

1. Attach 3-sling lifting gear to the crane eyes (13), align formwork and then transport to the place of use. (Fig. A4.01)
2. Position formwork halves against locating boards. (Fig. A4.02)

Fig. A4.01

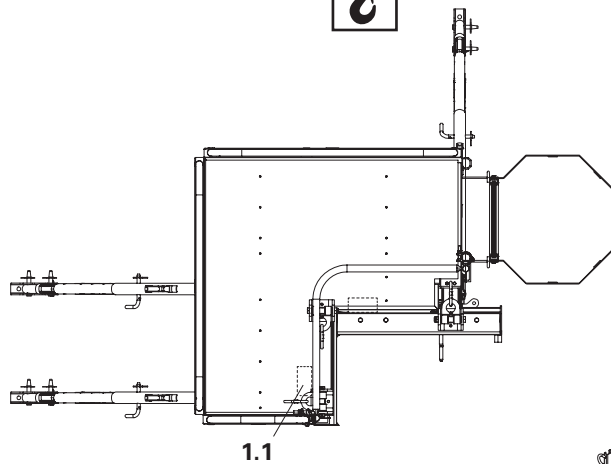
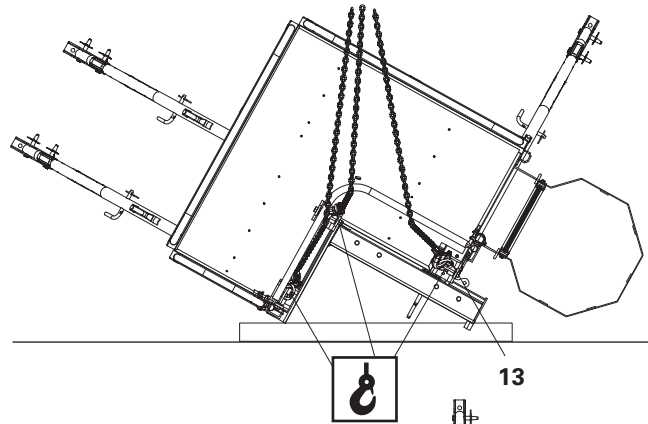


Fig. A4.02

3. Fix base plates of push-pull props and kickers to a sufficiently load-bearing surface, e.g. with Anchor Bolts PERI 14/20x130, Item no. 124777. (Fig. A4.03a)
4. Check stability and vertically align the formwork in both directions.
5. Dismantle crane lifting gear from a safe position.

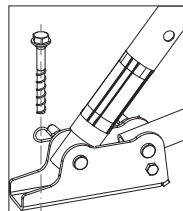


Fig. A4.03a

The first formwork half is now in position. (Fig. A4.03)

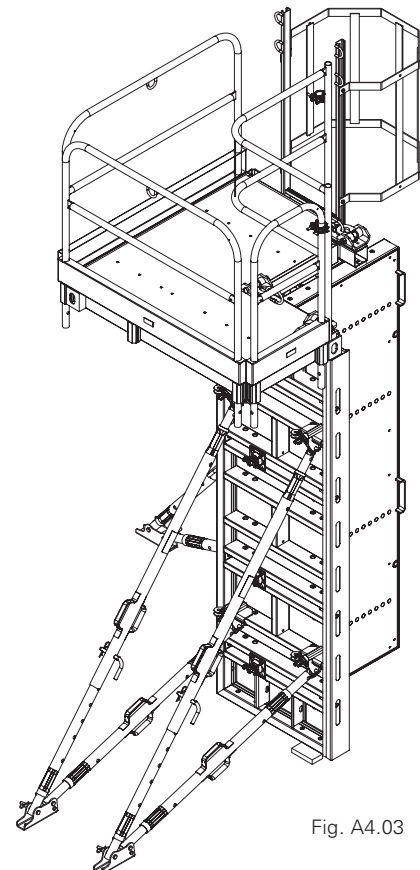


Fig. A4.03

A4 Shuttering

Placing of Formwork



Follow the Instructions for Use for the MAXIMO or TRIO Lifting Hook!

Position the second formwork half (closing formwork)

1. Mount the Lifting Hook MAXIMO or TRIO.
2. Align formwork and transport to place of use.
3. Position the formwork half. (Fig. A4.04)

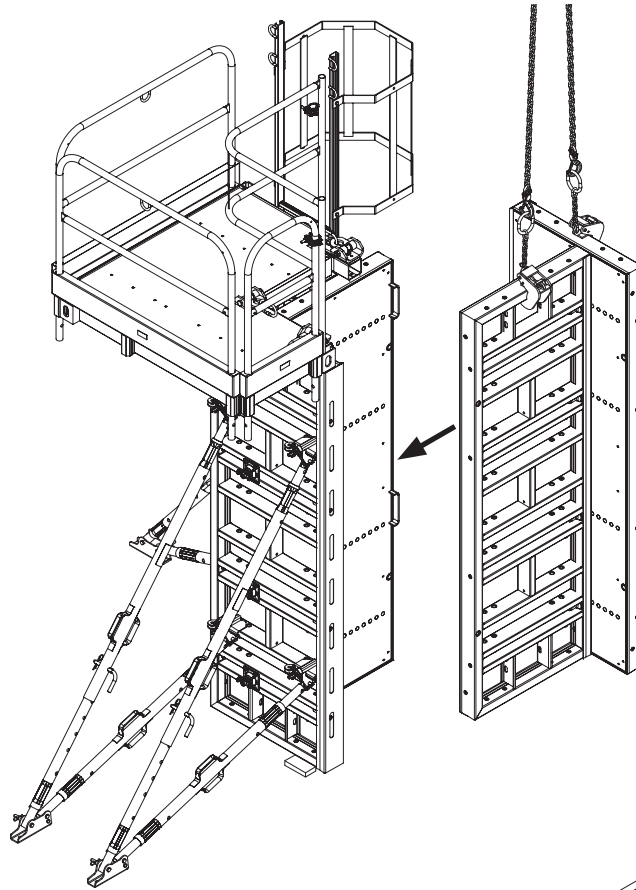


Fig. A4.04

Closing of Formwork



- For higher columns, two access ladders are used. Close formwork beginning from the bottom to top.
- Safe working areas must be selected at great heights.

Connections with the TRS Inserting Nut for use with access ladders

1. Insert the TRS Clamp (2.4) into the TRS Inserting Nut (2.3) from the outside and tighten, see A3 Formwork Halves. (Fig. A4.05 + A4.05a)
2. Dismantle crane lifting gear from a safe position.

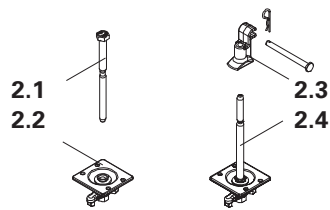


Fig. A4.05a

The formwork is complete.

Alternative:

Panel connections with Column Tie Bolts (2.1) and Wingnut Pivot Plates (2.2).

If needed, the Front Guardrail Landing 86/86 (15) can be mounted.

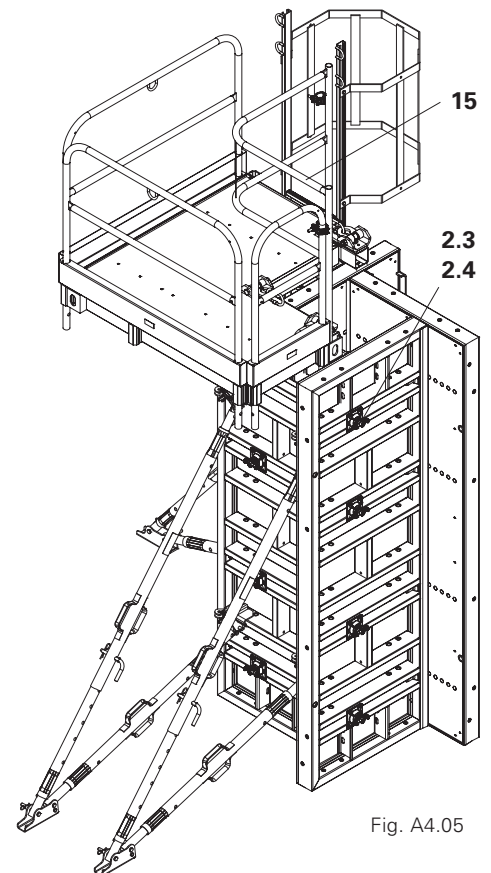


Fig. A4.05

A5 Striking, Moving

Striking, Moving



- Push-pull props, concreting platform and ladder access remain attached.
- Open formwork starting from the top to the bottom.
- Safe working areas at great heights must be selected.

Formwork halves without push-pull props

1. Attach crane lifting gear to the lifting hook and tension (unsupported formwork halves).
2. Separate corner connections between the formwork halves: screw out TRS Clamp. The TRS Inserting Nuts remain on the formwork panel. Or release Wingnut Pivot Plates and remove Column Tie Bolts. (Fig. A5.01)
3. Place formwork half in position for cleaning.



Use second ladder access.

Formwork half with concreting platform and push-pull props

1. Attach lifting gear to the crane eyes (13) of the concreting platform. During additional working steps, no persons should be on the concreting platform and access ladder.
2. Remove base plates of the push-pull props and kickers from the ground.
3. Place formwork half in position for cleaning and secure. (Fig. A5.01)

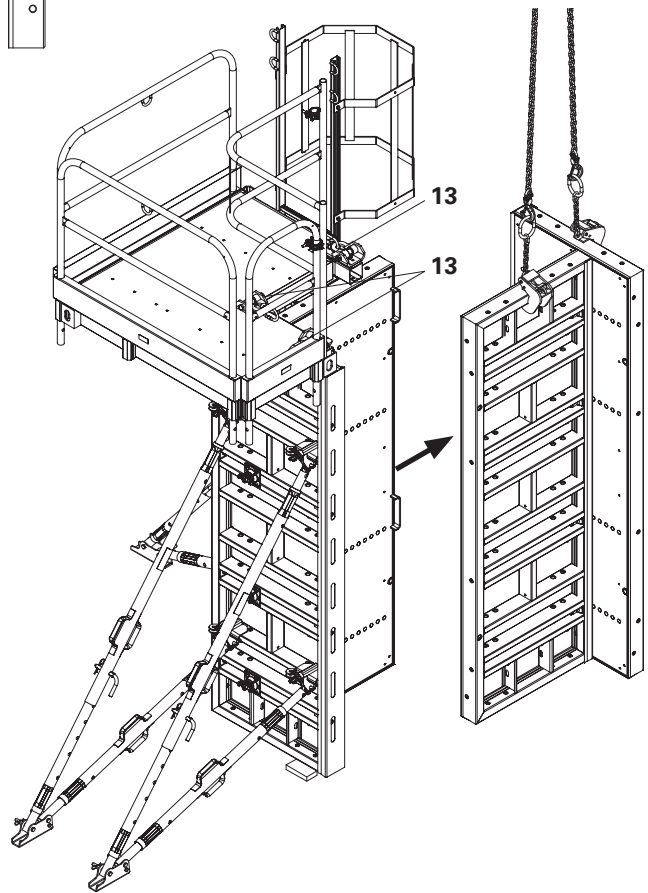
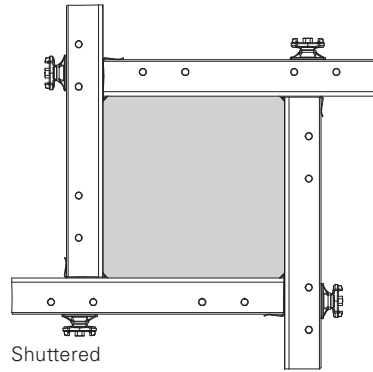
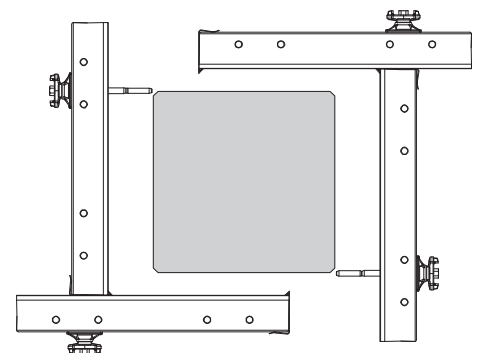


Fig. A5.01



Struck

A6 Height Extensions

Height adjustments up to 8.10 m

Height adjustments in 30 cm increments are possible with three panel heights.

Connecting column panels

Horizontally connect formwork panels with two PERI Alignment Couplers respectively.

Formwork height [m]	Required number of formwork panels		
	270	120	60
2.70	1	-	-
3.00	-	2	1
3.30	1	-	1
3.60	-	3	-
3.90	1	1	-
4.20	-	3	1
4.50	1	1	1
4.80	-	4	-
5.10	1	2	-
5.40	2	-	-
5.70	1	2	1
6.00	2	-	1
6.30	1	3	-
6.60	2	1	-
6.90	1	2	3
7.20	2	1	1
7.50	1	4	-
7.80	2	2	-
8.10	3	-	-

TRIO Column Formwork



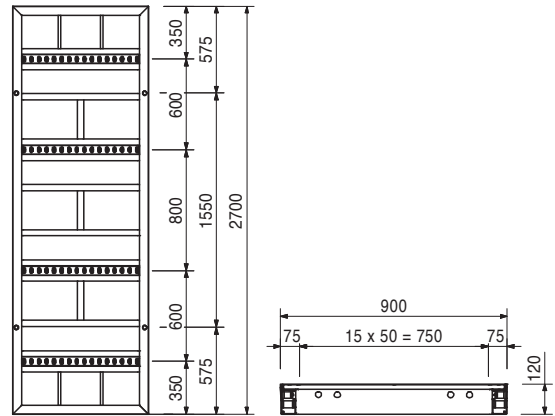
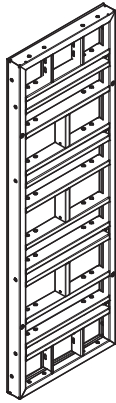
Item no.	Weight kg
054200	142,000

Column Panel TRS 270 x 90

Column panels for cross-sections up to 75 x 75 cm in 5-cm-increments. 18 mm Fin-Ply formlining.

Complete with

64 pc. 030320 Plug Ø 25 mm for TRS



Accessories

030370	1,660
054230	0,584

Wingnut Pivot Plate DW 15, galv.

Column Tie Bolt TRIO, galv.

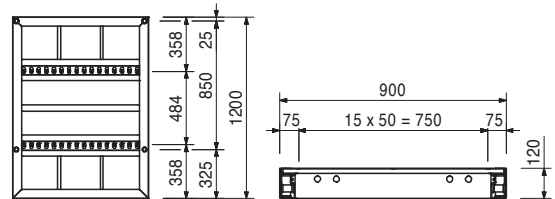
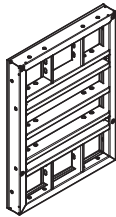
054210	69,900
--------	--------

Column Panel TRS 120 x 90

Column panels for cross-sections up to 75 x 75 cm in 5-cm-increments. 18 mm Fin-Ply formlining.

Complete with

32 pc. 030320 Plug Ø 25 mm for TRS



Accessories

030370	1,660
054230	0,584

Wingnut Pivot Plate DW 15, galv.

Column Tie Bolt TRIO, galv.

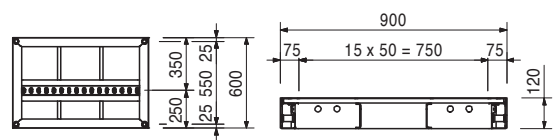
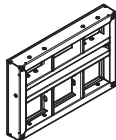
054220	40,300
--------	--------

Column Panel TRS 60 x 90

Column panels for cross-sections up to 75 x 75 cm in 5-cm-increments. 18 mm Fin-Ply formlining.

Complete with

16 pc. 030320 Plug Ø 25 mm for TRS



Accessories

030370	1,660
054230	0,584

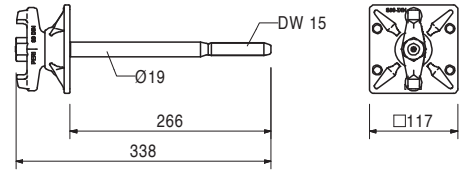
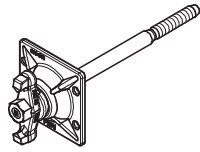
Wingnut Pivot Plate DW 15, galv.

Column Tie Bolt TRIO, galv.

TRIO Column Formwork

Item no.	Weight kg
103716	2,330

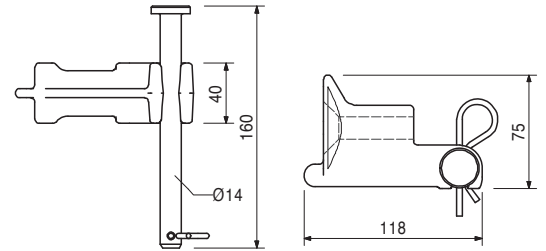
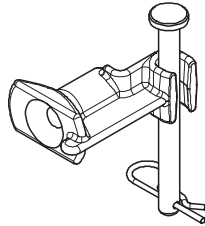
TRS Clamp DW 15, galv.
For corner tying of the TRIO column elements.



103721	0,823
--------	-------

Inserting Nut, compl.
For corner tying of the TRIO column elements.

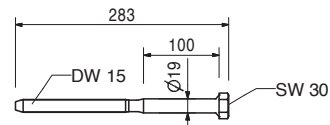
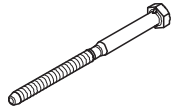
Complete with
1 pc. 103715 Bolt 14 x 160, galv.
1 pc. 018060 Cotter Pin 4/1, galv.



054230	0,584
--------	-------

Column Tie Bolt TRIO, galv.
For corner tying of the TRIO column elements.

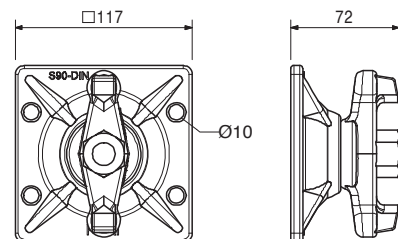
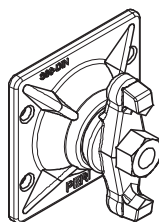
Note
Wrench size SW 30.



030370	1,660
--------	-------

Wingnut Pivot Plate DW 15, galv.
For anchoring with Tie Rod DW 15 and B 15. With pivoting captive nut. Maximum angle of tilting 8°.

Note
Wrench size SW 27.
Technical Data
Permissible load 90 kN.



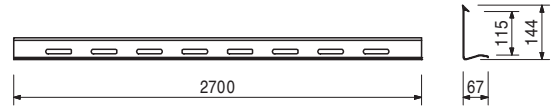
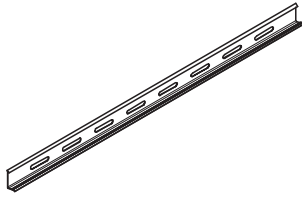
TRIO Column Formwork



Item no.	Weight kg
054240	1,900

Chamfer Strip L = 2.70 m

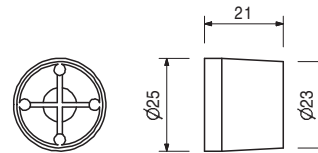
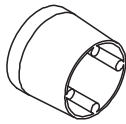
Chamfer strip made of plastic. For TRIO column formwork. Edge length 15 x 15 mm.



030320	0,004
--------	-------

Plug Ø 25 mm for TRS

For closing unused tie holes Ø 25 mm and with TRIO column formwork.



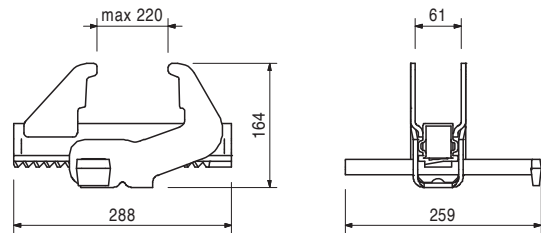
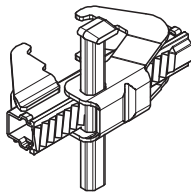
023500	4,580
--------	-------

Alignment Coupler BFD, galv.

For all panel connections for MAXIMO, TRIO and RUNDFLEX. Fillers up to 10 cm.

Technical Data

Permissible tension force 20.0 kN.



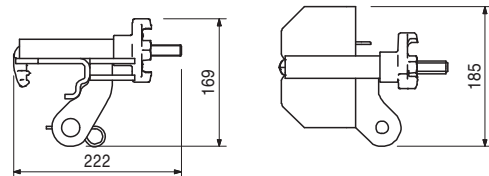
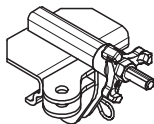
023660	3,300
--------	-------

Brace Connector TRIO, galv.

For connecting push-pull props and kicker braces to MAXIMO and TRIO elements. Mounted on vertical and horizontal struts.

Complete with

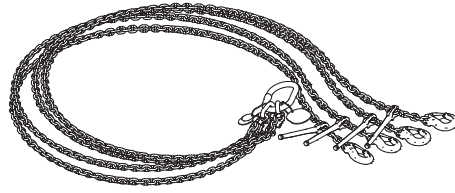
- 1 pc. 027170 Bolt Ø 16 x 42, galv.
- 1 pc. 018060 Cotter Pin 4/1, galv.



Item no.	Weight kg
117321	31,000

Lifting Gear „Combi“ MX

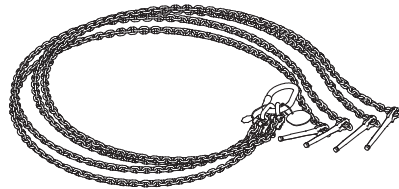
For transporting stacks of MAXIMO and TRIO panels. For attaching Lifting Hook MAXIMO 1.5 t and Stacking Device MAXIMO.



117322	25,000
--------	--------

Lifting Gear MX

For transporting stacks of MAXIMO and TRIO panels.



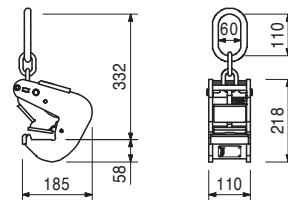
115168	7,530
--------	-------

Lifting Hook MAXIMO 1.5 t

For transporting MAXIMO and TRIO elements.

Technical Data

Load bearing capacity:
Steel elements 1.5 t
Alu elements 750 kg



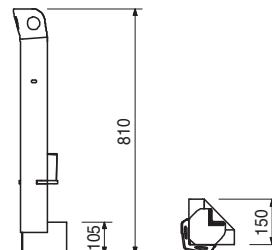
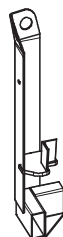
115058	7,450
--------	-------

Stacking Device MAXIMO, galv.

For stacking and transportation of 2 – 5 MAXIMO or TRIO panels of all sizes. Suitable for crane and fork-lift transport. 4 pieces per stack.

Technical Data

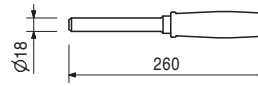
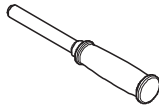
Bearing capacity 550 kg per post, 2.2 t per stack.



Item no.	Weight kg
023440	0,312

Lifting Pin TRIO

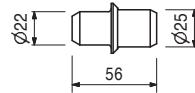
For easy carrying of TRIO elements.



750303	0,014
--------	-------

Stacking Aid TRIO DW 20

Prevents elements sliding and protects the plywood formlining against damage.



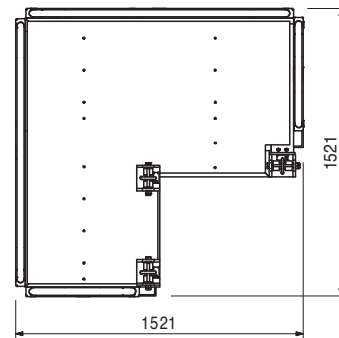
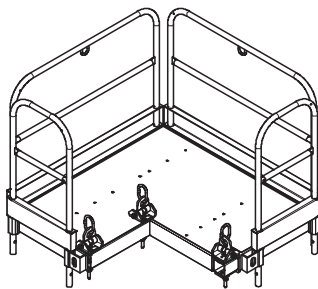
037400	123,000
--------	---------

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



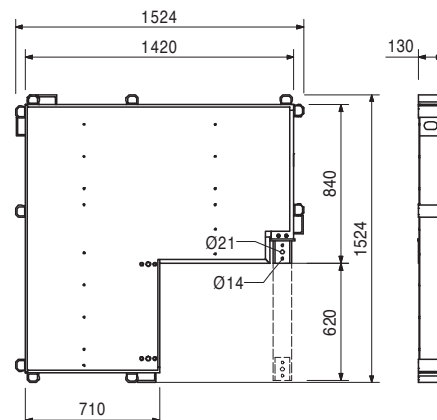
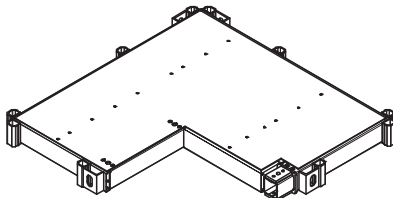
037410	51,400
--------	--------

Concreting Landing, Alu

Adjusts continuously 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/m².



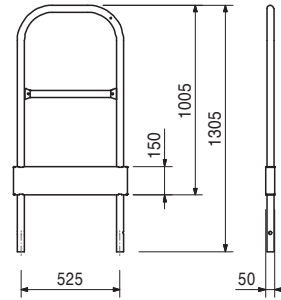
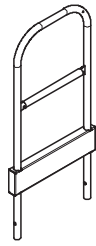
TRIO Column Formwork



Item no.	Weight kg
037420	10,200

Platform Guardrail 52, galv.

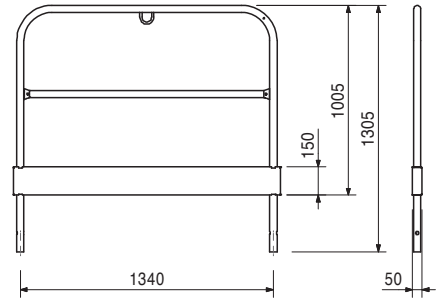
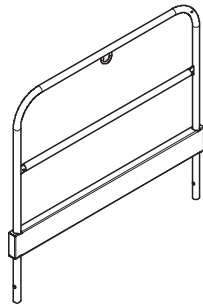
As guardrail for PERI Concreting Platforms. Locks in place automatically.



037430	17,100
--------	--------

Platform Guardrail 134, galv.

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



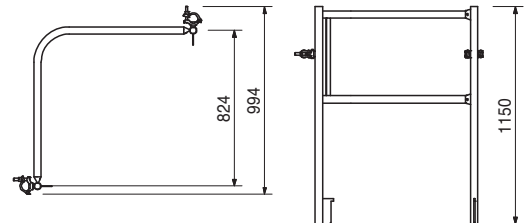
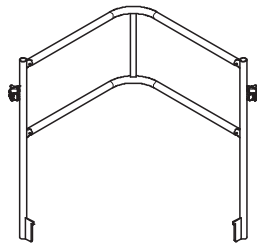
115352	15,100
--------	--------

Platform Front Guardrail 86/86

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

Note

Wrench size SW 19.



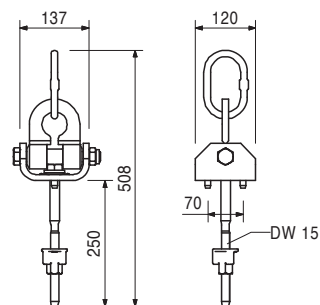
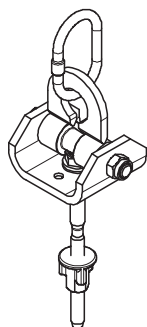
037440	5,660
--------	-------

Crane Hook Concreting Platform

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

Technical Data

Load-bearing point: capacity 1.0 t.

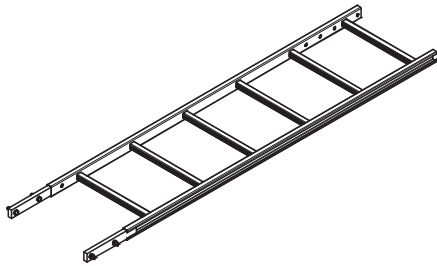


TRIO Column Formwork

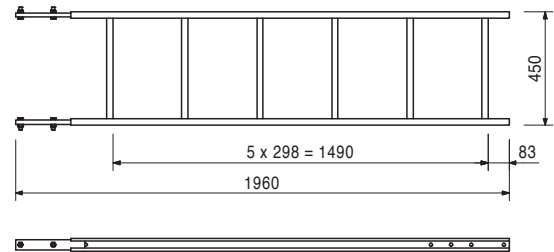


Item no.	Weight kg
051410	11,700

Ladder 180/6, galv.
As access for PERI formwork systems.

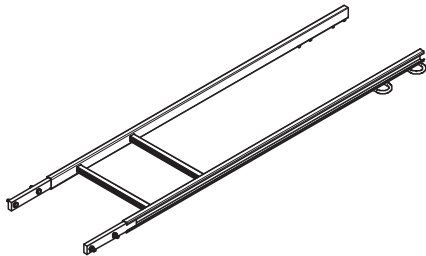


Complete with
4 pc. 710224 Bolt ISO 4017 M12 x 40-8.8, galv.
4 pc. 710381 Nut ISO 7042 M12-8, galv.

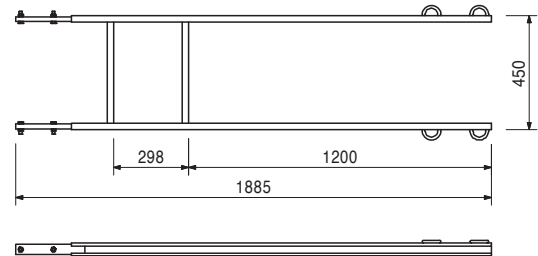


103724	10,400
--------	--------

End Ladder 180/2, galv.
As access for PERI formwork systems.

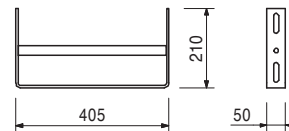
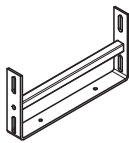


Complete with
4 pc. 710224 Bolt ISO 4017 M12 x 40-8.8, galv.
4 pc. 710381 Nut ISO 7042 M12-8, galv.



051460	2,180
--------	-------

Ladder Base, galv.
As bottom ladder connection and for securing ladders against sliding on the scaffold decks.



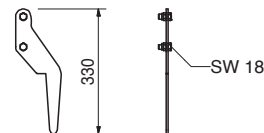
103718	0,684
--------	-------

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.

Note
Wrench size SW 18.



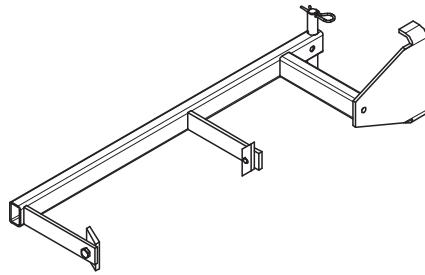
TRIO Column Formwork



Item no.	Weight kg
103362	7,120

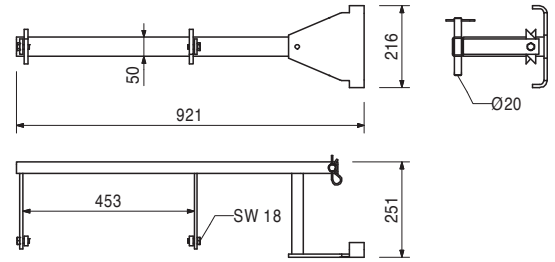
Ladder Connector TRIO

For connecting ladders to the TRIO Column Panel TRS.



Complete with

2 pc. 701763 Clamping Plate FI 25 x 10 x 90
 2 pc. 710266 Bolt ISO 4017 M12 x 25-8.8, galv.
 1 pc. 018060 Cotter Pin 4/1, galv.



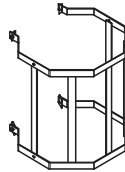
104132	15,600
051450	25,200

Ladder Safety Cages, galv.

Ladder Safety Cage 75, galv.

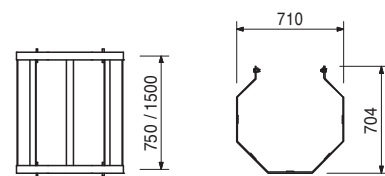
Ladder Safety Cage 150, galv.

Ladder safety cage for PERI access ladders.



Complete with

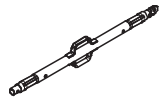
4 pc. 710266 Bolt ISO 4017 M12 x 25-8.8, galv.
 4 pc. 701763 Clamping Plate FI 25 x 10 x 90



117466	10,600
--------	--------

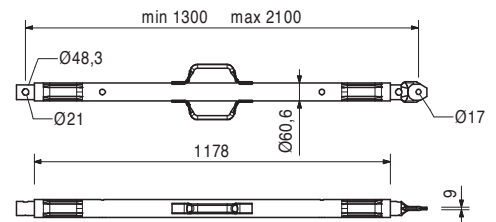
Push-Pull Prop RS 210, galv.

Extension length L = 1.30 – 2.10 m.
 For aligning PERI formwork systems and precast concrete elements.



Note

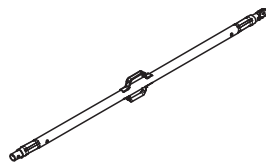
Permissible load see PERI Design Tables.



118238	12,100
--------	--------

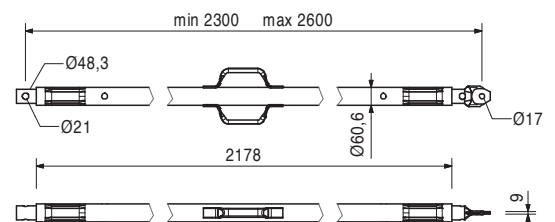
Push-Pull Prop RS 260, galv.

Extension length L = 2.30 – 2.60 m.
 For aligning PERI formwork systems and precast concrete elements.



Note

Permissible load see PERI Design Tables.



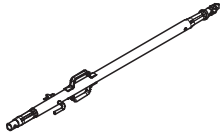
TRIO Column Formwork



Item no.	Weight kg
117467	15,400

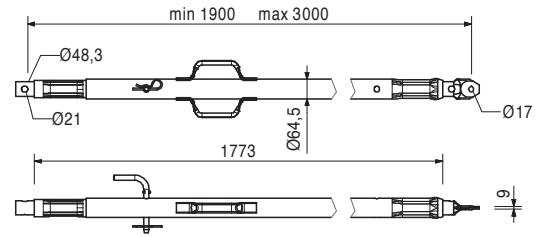
Push-Pull Prop RS 300, galv.

Extension length L = 1.90 – 3.00 m.
For aligning PERI formwork systems and precast concrete elements.



Note

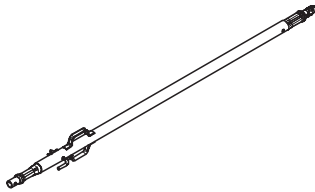
Permissible load see PERI Design Tables.



117468	22,900
--------	--------

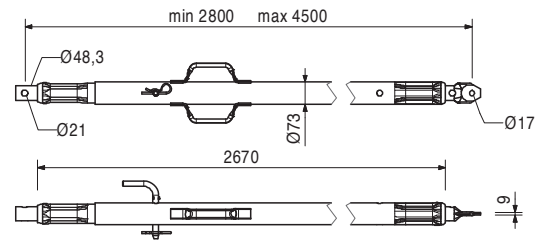
Push-Pull Prop RS 450, galv.

Extension length L = 2.80 – 4.50 m.
For aligning PERI formwork systems and precast concrete elements.



Note

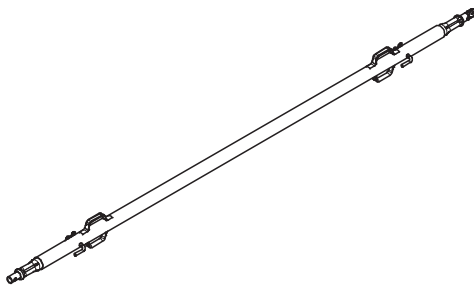
Permissible load see PERI Design Tables.



117469	39,800
--------	--------

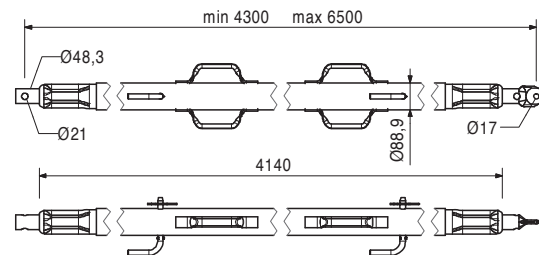
Push-Pull Prop RS 650, galv.

Extension length L = 4.30 – 6.50 m.
For aligning PERI formwork systems and precast concrete elements.



Note

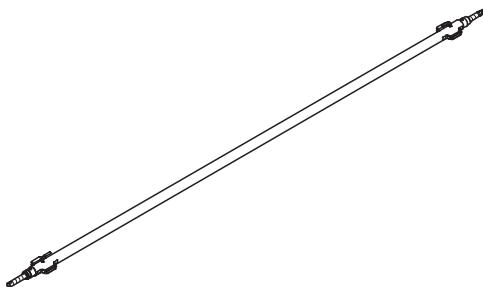
Permissible load see PERI Design Tables.



028990	115,000
--------	---------

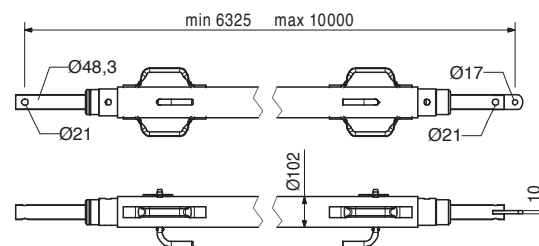
Push-Pull Prop RS 1000, galv.

Extension length L = 6.40 – 10.00 m.
For aligning PERI formwork systems.



Note

Permissible load see PERI Design Tables.



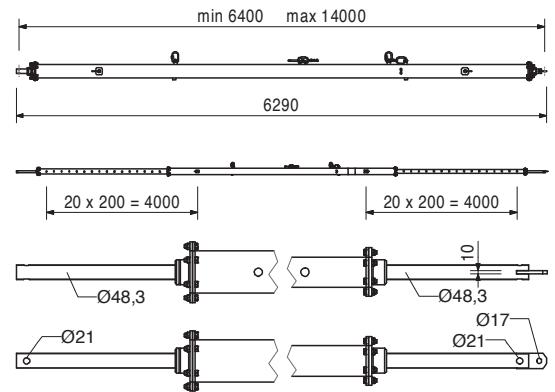
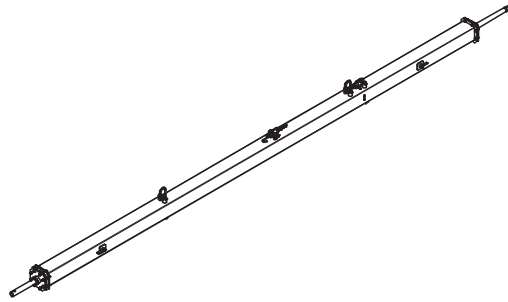
TRIO Column Formwork



Item no.	Weight kg
103800	271,000

Push-Pull Prop RS 1400, galv.
 Extension length L = 6.40 – 14.00 m.
 For aligning PERI formwork systems.

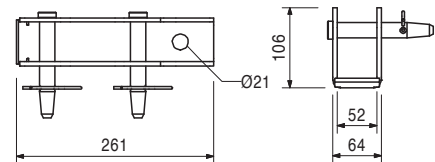
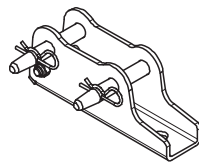
Note
 Permissible load see PERI Design Tables.
 Chain can be operated from bottom.



117343	3,250
--------	-------

Base Plate-2 for RS 210 – 1400, galv.
 For assembly of Push-Pull Props RS 210, 260, 300, 450, 650, 1000 and 1400.

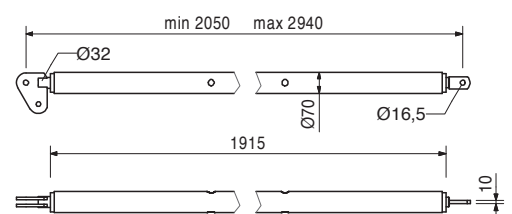
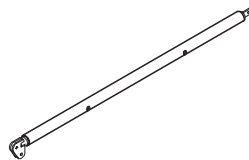
Complete with
 2 pc. 105400 Pin Ø 20 x 140, galv.
 2 pc. 018060 Cotter Pin 4/1, galv.



028010	18,000
--------	--------

Push-Pull Prop RSS I
 Extension length L = 2.05 – 2.94 m.
 For aligning PERI formwork systems.

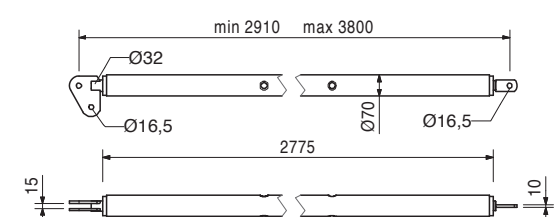
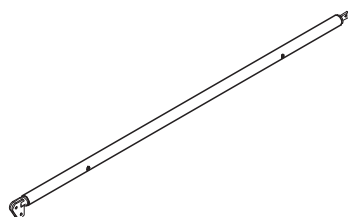
Note
 Permissible load: see PERI Design Tables.



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.



TRIO Column Formwork



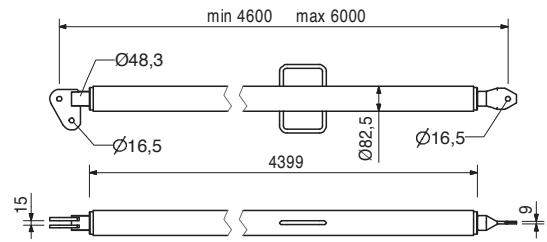
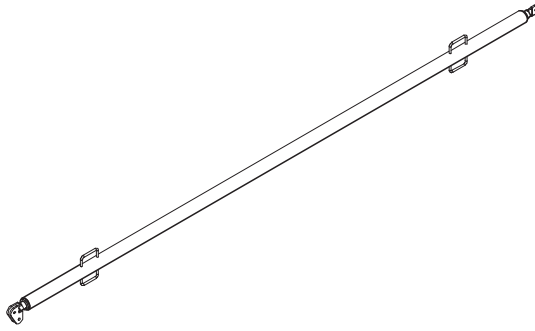
Item no.	Weight kg
028030	38,400

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 140

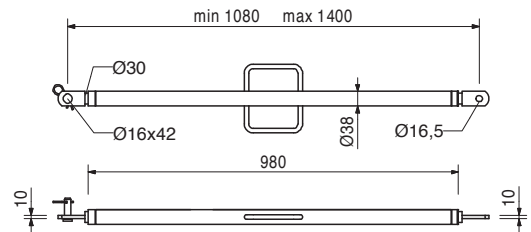
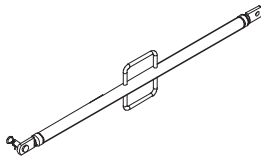
Extension length L = 1.08 – 1.40 m.
For aligning PERI formwork systems.

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.



108135	12,900
--------	--------

Kicker AV 210

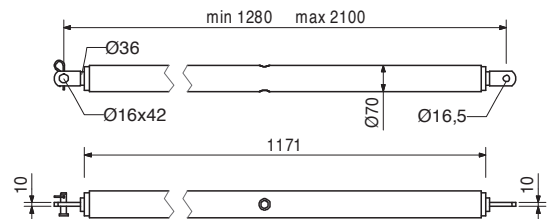
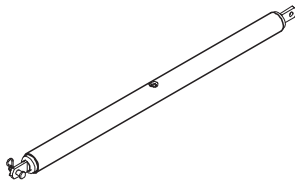
Extension length L = 1.28 – 2.10 m.
For aligning PERI formwork systems.

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

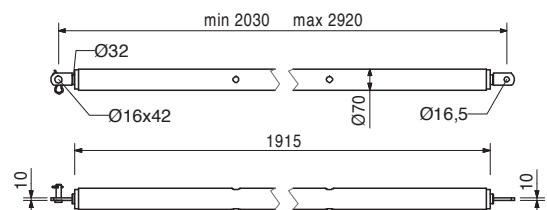
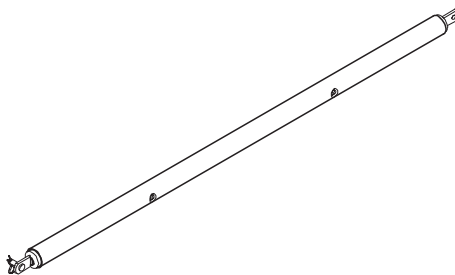
Extension length L = 2.03 – 2.92 m.
For aligning PERI formwork systems.

Complete with

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

Note

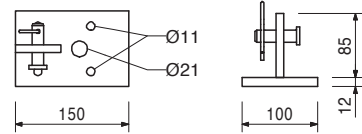
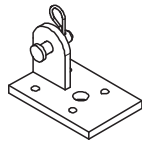
Permissible load: see PERI Design Tables.



Item no.	Weight kg
106000	1,820

Base Plate-2 for RSS, galv.
For assembly of RSS push-pull props.

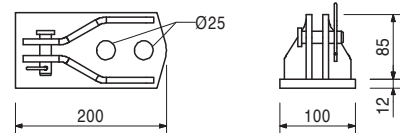
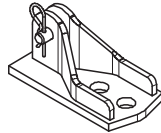
Complete with
1 pc. 027170 Bolt Ø 16 x 42, galv.
1 pc. 018060 Cotter Pin 4/1, galv.



028080	2,970
--------	-------

Connector Kicker/Push-Pull Prop, galv.
For connecting push-pull props and kicker braces to Main Beam HDT.

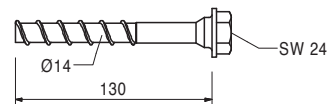
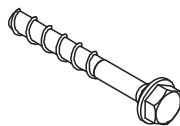
Complete with
1 pc. 027170 Bolt Ø 16 x 42, galv.
1 pc. 018060 Cotter Pin 4/1, galv.



124777	0,210
--------	-------

Anchor Bolt PERI 14/20 x 130
For temporary fixation on reinforced concrete structures.

Note
Wrench size SW 24.
Drilling Ø 14 mm.
Technical Data
See PERI data sheet!





01 Germany
PERI GmbH
 Rudolf-Diesel-Strasse
 89264 Weissenhorn
 info@peri.com
 www.peri.com



02 France
 PERI S.A.S.
 77109 Meaux Cedex
 peri.sas@peri.fr
 www.peri.fr

03 Switzerland
 PERI AG
 8472 Ohringen
 info@peri.ch
 www.peri.ch

04 Spain
 PERI S.A.U.
 28110 Algete - Madrid
 info@peri.es
 www.peri.es

05 Belgium/Luxembourg
 N.V. PERI S.A.
 1840 Londerzeel
 info@peri.be
 www.peri.be

06 Netherlands
 PERI Holding B.V.
 5480 AH-Schijndel
 info@peri.nl
 www.peri.nl

07 USA
 PERI Formwork Systems, Inc.
 Elkridge, MD 21075
 info@peri-usa.com
 www.peri-usa.com

08 Indonesia
 PT Beton Perkasa Wijaksana
 Jakarta 10210
 bpw@betonperkasa.com
 www.peri.com

09 Italy
 PERI S.p.A.
 20060 Basiano
 info@peri.it
 www.peri.it

10 Japan
 PERI Japan K.K.
 Tokyo 103-0015
 info@perijapan.jp
 www.perijapan.jp

11 United Kingdom/Ireland
 PERI Ltd.
 Rugby, CV23 0AN
 info@peri.ltd.uk
 www.peri.ltd.uk

12 Turkey
 PERI Kalip ve Iskeleleri Sanayi
 ve Ticaret Ltd.
 Esenyurt / Istanbul 34510
 info@peri.com.tr
 www.peri.com.tr

13 Hungary
 PERI Kft.
 1181 Budapest
 info@peri.hu
 www.peri.hu

14 Malaysia
 PERI Formwork Malaysia Sdn. Bhd.
 43300 Seri Kembangan,
 Selangor Darul Ehsan
 info@perimalaysia.com
 www.perimalaysia.com

15 Singapore
 PERI ASIA Pte. Ltd
 Singapore 387355
 pha@periasia.com
 www.periasia.com

16 Austria
 PERI Ges.mbh
 3134 Nußdorf ob der Traisen
 office@peri.at
 www.peri.at

17 Czech Republic
 PERI spol. S r.o.
 252 42 Jesenice u Prahy
 info@peri.cz
 www.peri.cz

18 Denmark
 PERI Danmark A/S
 2670 Greve
 peri@peri.dk
 www.peri.dk

19 Finland
 PERI Suomi Ltd. Oy
 05460 Hyvinkää
 info@perisuomi.fi
 www.perisuomi.fi

20 Norway
 PERI Norge AS
 3036 Drammen
 info@peri.no
 www.peri.no

21 Poland
 PERI Polska Sp. z o.o.
 05-860 Płochocin
 info@peri.com.pl
 www.peri.com.pl

22 Sweden
 PERIform Sverige AB
 30262 Halmstad
 peri@periform.se
 www.periform.se

23 Korea
 PERI (Korea) Ltd.
 Seoul 135-936
 info@perikorea.com
 www.perikorea.com

24 Portugal
 Pericofragens Lda.
 2790-326 Queijas
 info@peri.pt
 www.peri.pt

25 Argentina
 PERI S.A.
 B1625GPA Escobar – Bs. As.
 info@peri.com.ar
 www.peri.com.ar

26 Brazil
 PERI Formas e
 Escoramentos Ltda.
 Vargem Grande Paulista – SP
 info@peribrasil.com.br
 www.peribrasil.com.br

27 Chile
 PERI Chile Ltda.
 Colina, Santiago de Chile
 perichile@peri.cl
 www.peri.cl

28 Romania
 PERI România SRL
 077015 Balotești
 info@peri.ro
 www.peri.ro

29 Slovenia
 PERI Agency
 2000 Maribor
 peri.slo@triera.net
 www.peri.com

30 Slovakia
 PERI spol. s. r.o.
 903 01 Senec
 info@peri.sk
 www.peri.sk

31 Australia
 PERI Australia Pty. Ltd.
 Glendenning NSW 2761
 info@periaus.com.au
 www.periaus.com.au

32 Estonia
 PERI AS
 76406 Saku vald
 Harjumaa
 peri@peri.ee
 www.peri.ee

33 Greece
 PERI Hellas Solely Owned Ltd.
 194 00 Koropi
 info@perihellas.gr
 www.perihellas.gr

34 Latvia
 PERI SIA
 2118 Salaspils novads, Rigas rajons
 info@peri-latvija.lv
 www.peri-latvija.lv

35 United Arab Emirates
 PERI (L.L.C.)
 Bolton, ON – L7E 1K1
 perillc@perime.com
 www.perime.com

36 Canada
 PERI Formwork Systems, Inc.
 Bolton, ON – L7E 1K1
 info@peri.ca
 www.peri.ca



- | | | | | |
|---|---|---|--|--|
| <p>37 Lebanon
PERI Representative Office
90416 – Jdeideh
lebanon@peri.de
www.peri.com</p> | <p>44 Russian Federation
OOO PERI
142407, Noginsk District
moscow@peri.ru
www.peri.ru</p> | <p>51 Turkmenistan
PERI Kalıp ve İskeleleri
Aşgabat
ahmet.kadioglu@peri.com.tr
www.peri.com.tr</p> | <p>57 Saudi Arabia
PERI Saudi Arabia Com. Ltd.
21463 Jeddah
info@peri.com.sa
www.peri.com.sa</p> | <p>64 Nigeria
Heights Access Nigeria Ltd.
Victoria Island, Lagos
info@heightsaccessng.com
www.heightsaccessng.com</p> |
| <p>38 Lithuania
PERI UAB
02300 Vilnius
info@peri.lt
www.peri.lt</p> | <p>45 South Africa
PERI (Pty) Ltd
7600 Stellenbosch
info@peri.co.za
www.peri.co.za</p> | <p>52 Belorussia
IOOO PERI Belarus
220100 Minsk
info@peri.by
www.peri.by</p> | <p>58 Qatar
PERI Qatar LLC
P.O.Box: 31295 - Doha
info@periqatar.com
www.periqatar.com</p> | <p>65 Oman
PERI (L.L.C.)
Muscat
perimct@perime.com
www.perime.com</p> |
| <p>39 Morocco
PERI S.A.U.
Tanger
peri25@menara.ma
www.peri.com</p> | <p>46 Ukraine
PERI Ukraina
07400 Brovary
peri@peri.ua
www.peri.ua</p> | <p>53 Croatia
PERI oplate i skele d.o.o.
10 250 Lučko-Zagreb
info@peri.com.hr
www.peri.com.hr</p> | <p>59 Algeria
SarI PERI
Kouba 16092, Alger
info@peri.com
www.peri.com</p> | <p>66 Colombia
PERI S.A.S. Colombia
Chapinero Alto, Bogotá
peri.colombia@peri.com.co
www.peri.com.co</p> |
| <p>40 Israel
PERI Formwork
Engineering Ltd.
Rosh Ha'ayin, 48104
info@peri.co.il
www.peri.co.il</p> | <p>47 Egypt
Egypt Branch Office
11341 Nasr City /Cairo
info@peri.com.eg
www.peri.com.eg</p> | <p>54 India
PERI (India) Pvt Ltd
Mumbai – 400064
info@peri.in
www.peri.in</p> | <p>60 Albania
PERI formwork and
scaffolding Sh.p.k.
Tirane
erti.hasanaj@peri.com.tr
www.peri.com.tr</p> | |
| <p>41 Bulgaria
PERI Bulgaria EOOD
1839 Sofia
peri.bulgaria@peri.bg
www.peri.bg</p> | <p>48 Serbia
PERI – Oplate d.o.o.
22310 Šimanovci
office@peri.rs
www.peri.rs</p> | <p>55 Jordan
PERI GmbH - Jordan
11947 Amman
jordan@peri.com
www.peri.com</p> | <p>61 Peru
PERI Peruana S.A.C.
Villa El Salvador, Lima
contacto@peri.com.pe
www.peri.com.pe</p> | |
| <p>42 Iceland
Armar ehf.
220 Hafnarfjörður
armar@armar.is
www.armar.is</p> | <p>49 Mexico
PERI Cimbras y Andamios,
S.A. de C.V.
Estado de México, Huehuetoca
info@peri.com.mx
www.peri.com.mx</p> | <p>56 Kuwait
PERI Kuwait Company WLL
13011 Kuwait
kuwait@peri.com
www.peri.com</p> | <p>62 Panama
PERI Panama Inc.
0832-00155 Panama City
info@peri.com.pa
www.peri.com.pa</p> | |
| <p>43 Kazakhstan
TOO PERI Kazakhstan
050000 Almaty
peri@peri.kz
www.peri.kz</p> | <p>50 Azerbaijan
PERI Representative Office
Baku
peribaku@peri.com.tr
www.peri.com.tr</p> | <p>63 Angola
Pericofragens, Lda.
Luanda
renato.portugal@peri.pt
www.peri.pt</p> | | |

The optimal System for every Project and every Requirement



Wall Formwork



Column Formwork



Slab Formwork



Climbing Systems



Tunnel Formwork



Bridge Formwork



Shoring Systems



Construction Scaffold



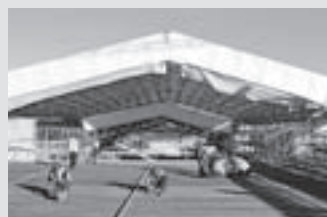
Facade Scaffold



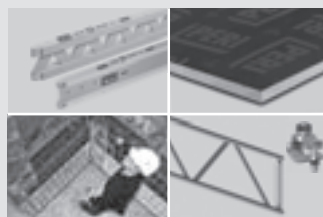
Industrial Scaffold



Access



Protection Scaffold



System-Independent Accessories



Services



PERI GmbH
Formwork Scaffolding Engineering
 P.O. Box 1264
 89259 Weissenhorn
 Germany
 Tel. +49 (0)7309.950-0
 Fax +49 (0)7309.951-0
 info@peri.com
 www.peri.com