

MULTIPROP MP 120, 250, 350, 480, 625 Slab Props

Instructions for Assembly and Use – Standard Configuration



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Standard configuration

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Key



Safety instructions



Note



Visual check



Tip



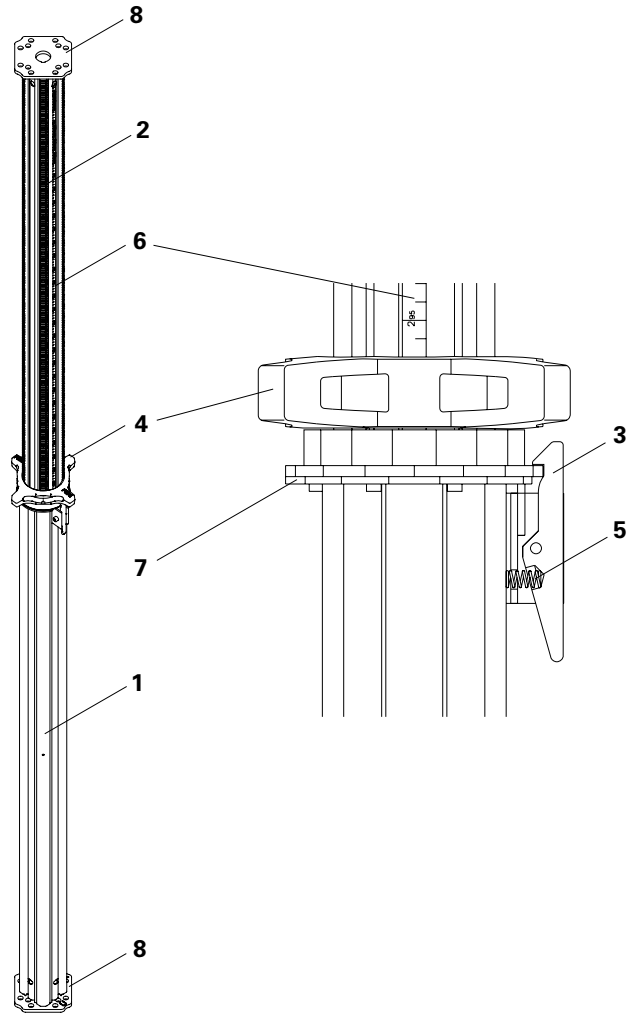
Load-bearing point

Introduction

Overview, main components

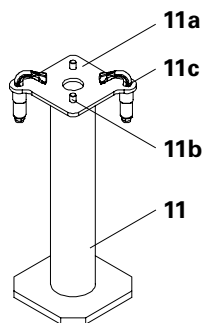
MULTIPROP MP

- 1 Outer Tube
- 2 Inner Tube
- 3 Securing Hook
- 4 Adjusting Collar
- 5 Pressure Spring
- 6 Measuring Tape
- 7 Rubbing Plate
- 8 End Plate



Base MP 50

- 11 Base MP 50
- 11a Head Plate
- 11c Clamping Claw
- 11b Centering Pin



Introduction

Standard configuration

Area of application

MULTIPROP Slab Props

- are props made of aluminium,
- correspond to the load requirements of DIN EN 1065,
- are used as vertical supports for temporary constructions.

Features

MULTIPROP slab props are used in shoring operations in a planned perpendicular position for the transfer of vertical loads. In particular, they also provide support for slab formwork systems. The outer tubes of the MULTIPROP Slab Props are powder coated. The integrated measuring tape and free-running collar allow accurate and fast height adjustment. The height is continuously adjustable by means of the end-to-end thread without pegging. The MULTIPROP Slab Prop has a fail-safe feature which prevents the inner tube from unintentionally slipping out.

Main components

MULTIPROP

- MP 120, L = 0.80 – 1.20 m
- MP 250, L = 1.45 – 2.50 m
- MP 350, L = 1.95 – 3.50 m
- MP 480, L = 2.60 – 4.80 m
- MP 625, L = 4.30 – 6.25 m

System dimensions

Assembly heights as individual props according to the permissible extension lengths 0.80 m – 6.25 m or 1.30 m – 6.75 m for use with Base MP 50.

Technical data

- Approval Z-8.312-824.
- For load-bearing capacities, see Tables.

Intended use

1. PERI products have been designed for exclusive use in the industrial and commercial sectors by suitably trained personnel only.

2. These Instructions for Assembly and Use serve as basis for the project-related risk assessment and the instructions for the provision and use of the system by the contractor (user). However, they do not replace them.

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 correspond to the characteristic features required in these Instructions for Assembly and Use as well as all current laws and standards.

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

- timber components: Strength Class C24 for Solid Wood EN 338.
- scaffold tubes: galvanised steel tubes with minimum dimensions of \varnothing 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 occurring loads are safely transferred.
5. The contractor (user) has to provide safe working areas for site personnel which can be reached through the provision of safe access means. Areas of risk must be cordoned off and 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 included in these detailed drawings must nevertheless still be available.

System-specific

1. Retract components only when the concrete has sufficiently hardened and the person in charge has given the approval for striking to take place.
2. Anchoring is to take place only if the anchorage has sufficient concrete strength.
3. After exceptional occurrences or long periods of downtime at the location where the formwork or shoring is used, the unit and its components must be checked for stability and functionality.

Care and maintenance

1. MULTIPROP Slab Props have been designed for long-term use on the construction site.
2. In order to maintain the value and operational readiness of the MULTIPROP Slab Props over a long period of time, the props should be carefully handled at all times.
3. Occasionally grease the rubbing plate to ensure easier handling.
4. Only PERI qualified personnel are allowed to carry out repairs on the MULTIPROP Slab Props.

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 in a way 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 that all loose parts are removed or secured.
6. Assemble and move components on clean, flat and sufficiently load-bearing surfaces only.

General

Additional PERI product information

Brochure:

- MULTIPROP Aluminium Slab Props

Instructions for Use:

- Pallets and Stacking Devices

PERI design tables

Type tests for:

- MULTIPROP Props
- MULTIPROP System
- MULTIPROP Props with Base MP 50
- MULTIPROP System with Base MP 50

Instructions for Assembly and Use:

- MULTIFLEX
- SKYDECK
- TABLE MODULES / SLAB TABLES
- SKYTABLE
- VARIODECK

The structures shown in these Instructions for Assembly and Use are examples and feature only one component size. They are valid accordingly for all component sizes contained in the standard configuration.

A1 Assembly

Pre-assembling the slab prop



For the safety of the user, the following should be checked before every use to see whether

- the slab prop is complete,
- the slab prop has no cracks, holes or broken parts,
- the inner tube and collar are freely movable and
- the end plates are level.



- Shown here is the assembly of a free-standing MULTIPROP Slab Prop.
- When used in the system, the "MULTIPROP System" Instructions for Assembly and Use must be adhered to.
- The numbers on the integrated measuring tape show the complete length (L) of the MULTIPROP Slab Prop in metres [m], e.g. 1₂₅ = 1.25 m.
- The complete length of the MULTIPROP Slab Prop can be read at the top edge of the collar (4a).
- Adjusting range per complete turn: 36 mm.
- The prop can be continuously readjusted by means of the adjusting collar if partially loaded up to 15 kN.

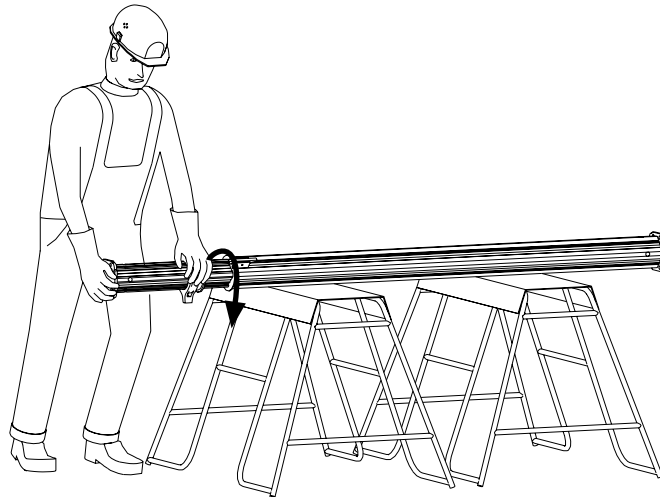


Fig. A1.01a

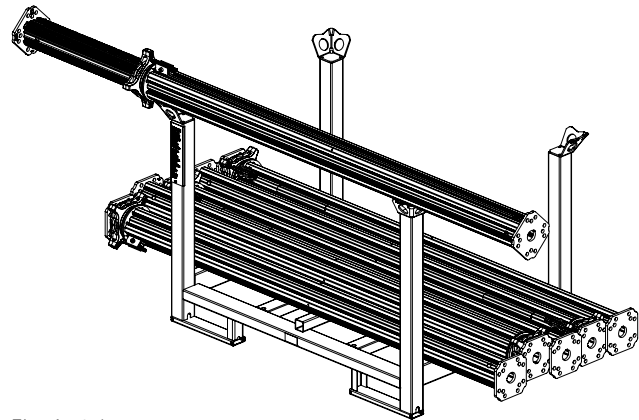


Fig. A1.01b

Preparation

MULTIPROP Slab Props are delivered with retracted inner tubes in a Pallet RP-2 as standard.

Place the prop on an available work trestle or the Pallet RP-2.

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

A1 Assembly

Rough adjustment of the extension length

1. Press down safety hook (3).
- Inner tube (2) together with the adjusting collar (4) is released. (Fig. A1.02a)
2. Pull out inner tube until the length indicated on the measuring tape (6) is slightly more than the required prop length.
3. Turn the adjusting collar until the required extension length is reached.

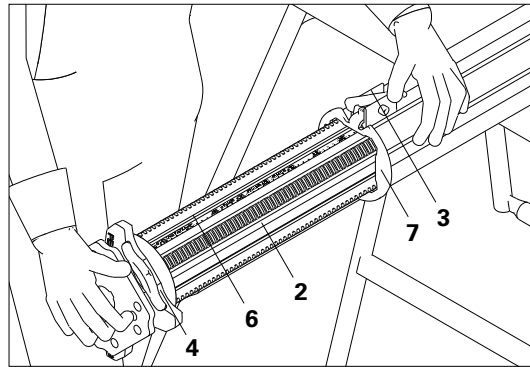


Fig. A1.02a



Position	Turn adjusting collar	"L" is:
Outer tube bottom (Fig. A1.02b)	anti-clockwise	smaller
	clockwise	larger
Inner tube bottom (Fig. A1.02c)	anti-clockwise	larger
	clockwise	smaller

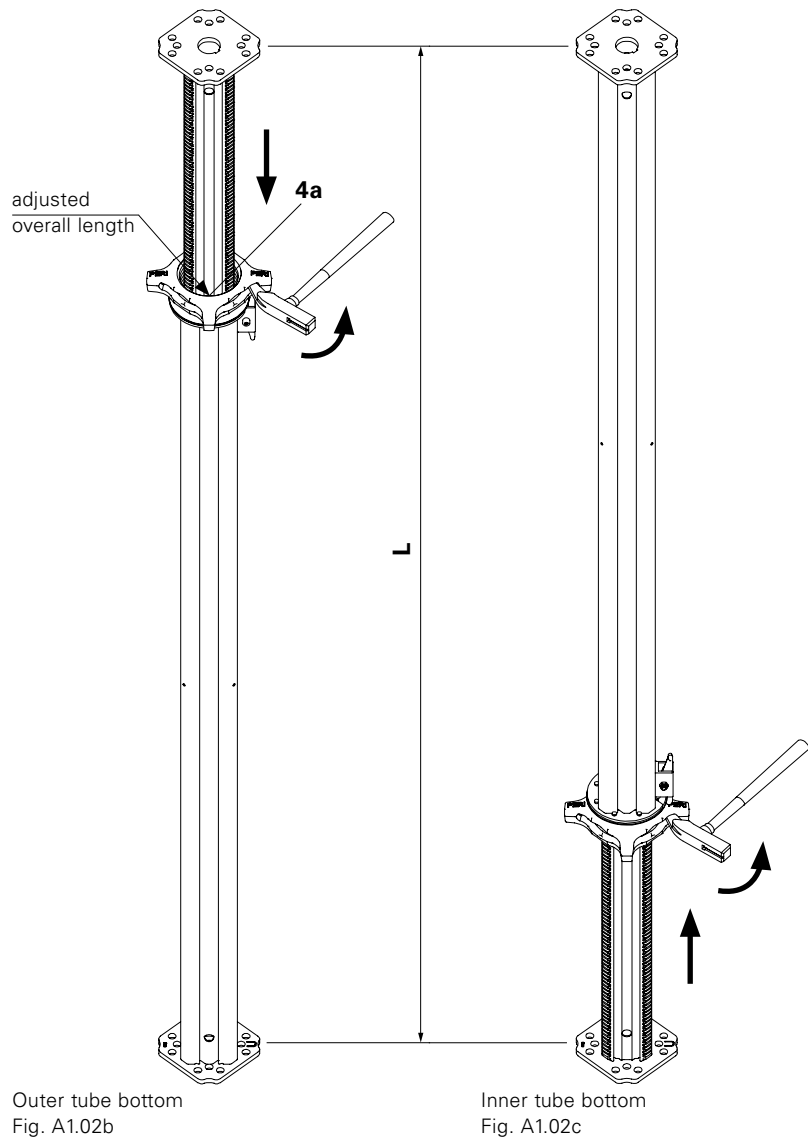
4. Push in the inner tube until the adjusting collar lies against the rubbing plate (7).
- Safety hook locks the inner tube in position.
5. Fine adjustment of adjusting collar (4) to specified length.



Is the safety hook engaged?



Quick adjustment of the smooth-running adjusting collar is carried out by "fast spindling".



Outer tube bottom
Fig. A1.02b

Inner tube bottom
Fig. A1.02c

A1 Assembly

Assembly with Universal Tripod

For slab props with tube Ø 48 mm to Ø 120 mm.



Slab Props and Tripods

- place on clean, flat and sufficiently load-bearing surface only!
- are not suitable for planned transfer of horizontal loads!



- Shown here is the assembly of a free-standing slab prop.
- When used in the system, the respective Instructions for Assembly and Use are to be taken into account.
- Universal Tripods (9) are pure assembly aids for shuttering and striking up to heights of approx. 3 m.

Universal Tripod assembly

1. Insert pre-assembled slab prop into the Universal Tripod (9).
(Fig. A1.03)

2. Tighten clamp (9a).
Ensure that the slab prop lies flat against the top and bottom connection plates (9b and 9c).
(Fig. A1.03)



- Does the slab prop lie flat to the top and bottom connection plates?
- Has the clamp been tightened?
- Is the slab prop in a perpendicular position?

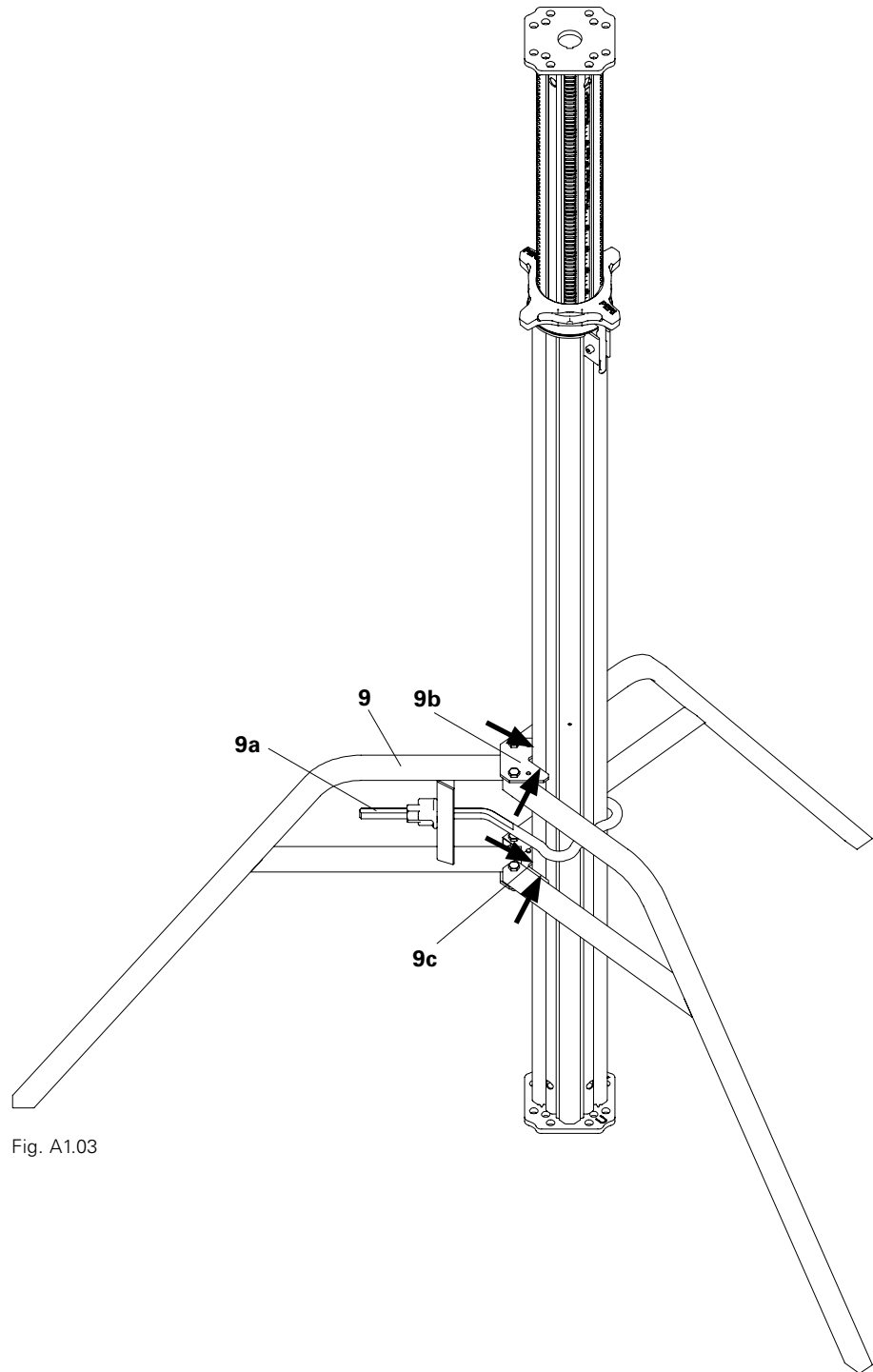


Fig. A1.03

Releasing the slab prop under load



For loads > 60 kN, use the Wing Nut Spanner HD!

Dismantling:

1. Release adjusting collar and set load-free with:
 - hammering the lowering cam. (Fig. A2.01a)
 - Wing Nut Spanner HD Item no. 022027. (Fig. A2.01b)
2. Remove slab prop.
3. Dismantle slab prop.
 - Press down safety hook.
 - > Inner tube with adjusting collar is disengaged.
 - Pull out inner tube a short distance and spindle adjusting collar back to the end plate.
 - Push in the inner tube until the adjusting collar lies against the rubbing plate.
 - > Safety hook locks the inner tube in position.
4. Place slab prop in the pallet.



See Section A5 "Storage and Transportation".



The Wing Nut Spanner HD facilitates energy-saving and noiseless loosening of the adjusting collar – even if the props are placed under maximum load.

Outer tube bottom

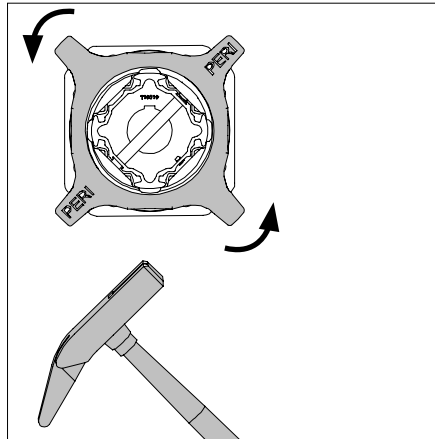
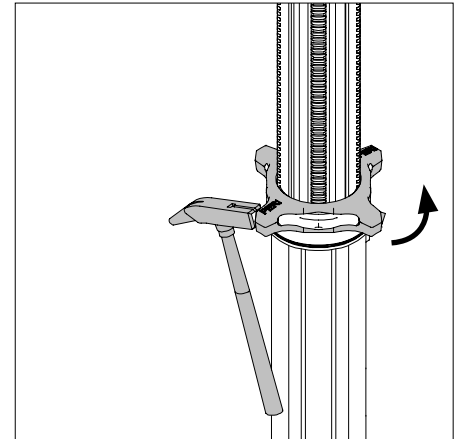


Fig. A2.01a



Outer tube bottom

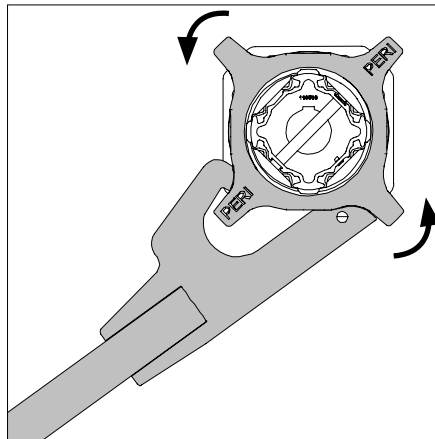
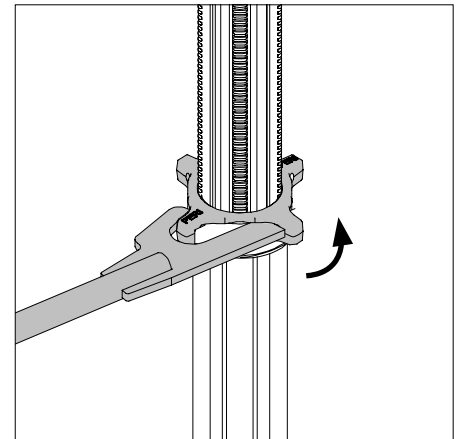


Fig. A2.01b



A3 Accessories

Brace Clamp

Item no. 027790

Used as an alternative assembly aid with high slab props as of approx. 4 m using bracing boards 3 x 15 cm.



Brace Clamps are not suitable for a planned transfer of horizontal loads!



- Brace Clamps (10) are simply assembly aids for shuttering and striking procedures.
- As an option, universal tripods can be used as additional assembly aids.

Assembly

1. Pull the narrow side of the wedge (10a) out of the clamp.
2. Place Brace Clamp (10) around the tube of the slab prop.
3. Insert board in the open side of the clamp.
4. Put wedge back into recess of the clamp and hammer in securely.
-> The wedge secures the board.
5. Mount additional bracing boards by means of Brace Clamps.
(Fig. A3.01)



- Are the slab props in a perpendicular position?
- Are all wedges securely fixed?
- Have all wedges secured the boards?

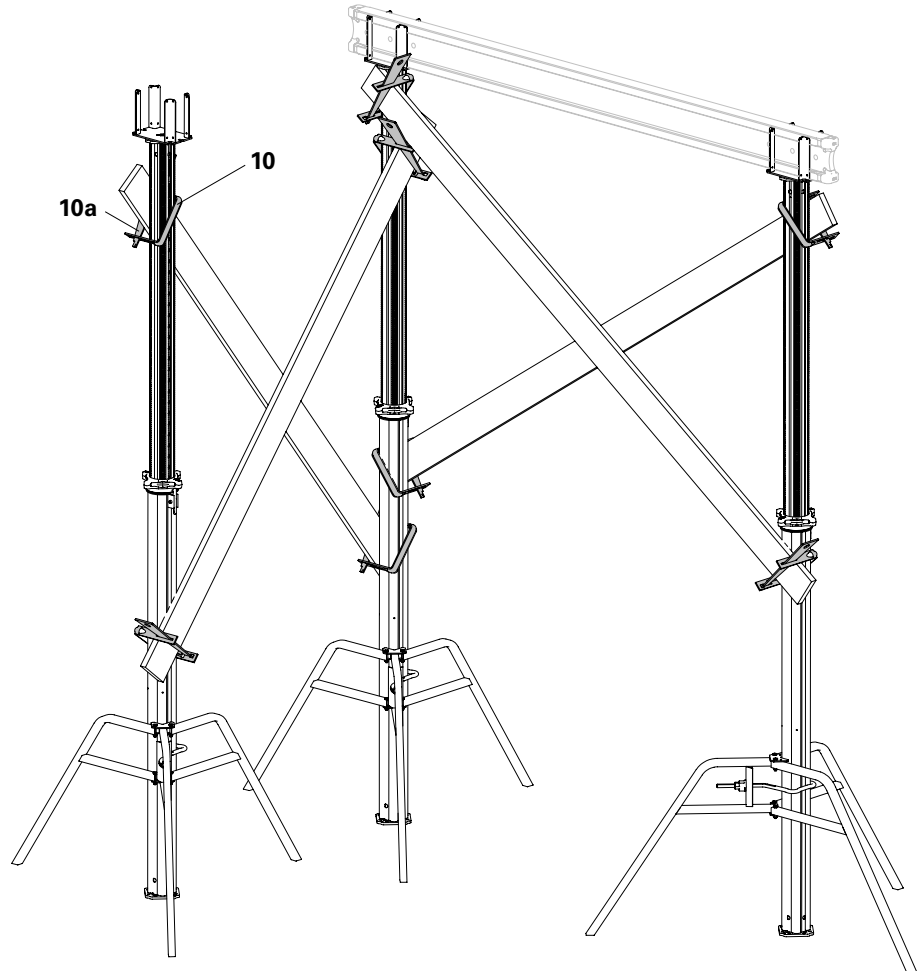


Fig. A3.01

Base MP 50



Take into account separate tables with permissible prop load!

- Used for extending the slab prop by 50 cm.
- Automatic centering of the slab prop by means of centering pins.
- Two clamping claws connect the Base MP 50 with the slab prop.
- The MULTIPROP Slab Prop can be mounted on the Base MP 50 with the inner or outer tube.

Assembly

1. Place the slab prop on the head plate (11a) of the Base MP 50 that the two centering pins (11b) lock into the holes of the end plate.
2. Position clamping claws (11c) with the hammer on the end plate of the slab prop. Base MP 50 (11) is now connected to the prop. (Fig. A3.02)



Are the two clamping claws fully set on the end plate?



Through the use of the Base MP 50, the same type of prop can be used at different heights.

Dismantling

Release clamping claws with a hammer.

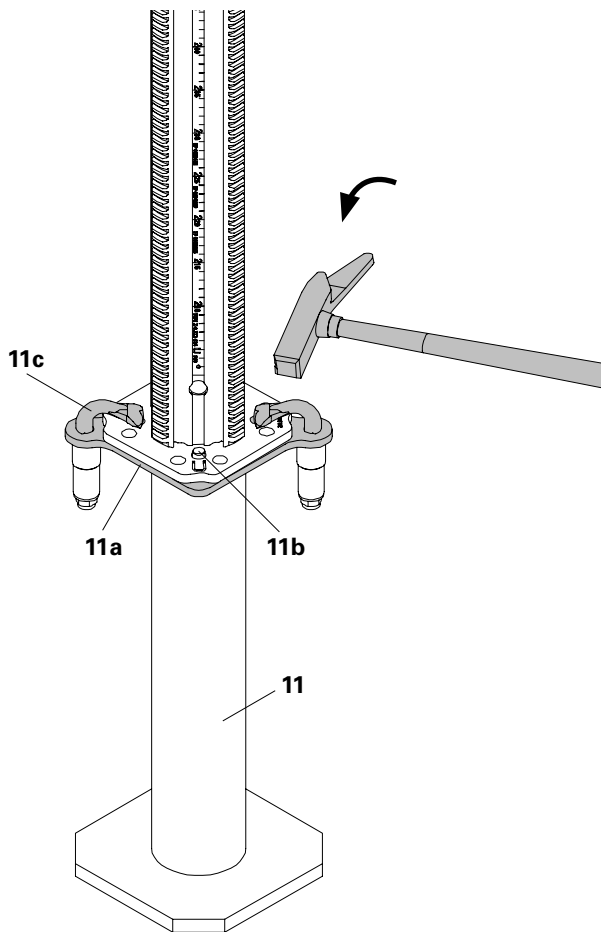


Fig. A3.02

A4 Foreseeable misapplications



Applications of this type or similar are prohibited!

Ensure that slab props are always in a perpendicular position!

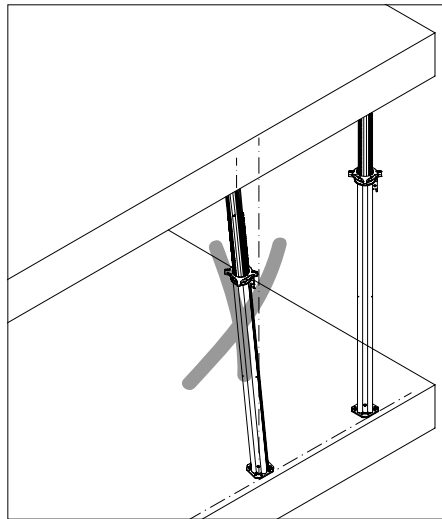


Fig. A4.01

Only use full-faced support surfaces!

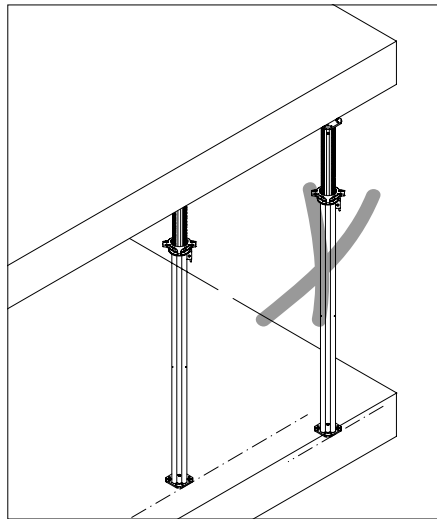


Fig. A4.02a

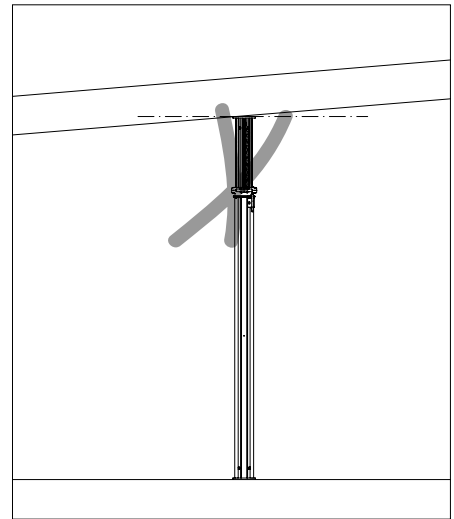


Fig. A4.02b



Slab props must always be in a vertical position.



End plates of the slab props must always lie completely flat. If necessary, fill the gap and secure the wedge.

Non-loadable installation surface!

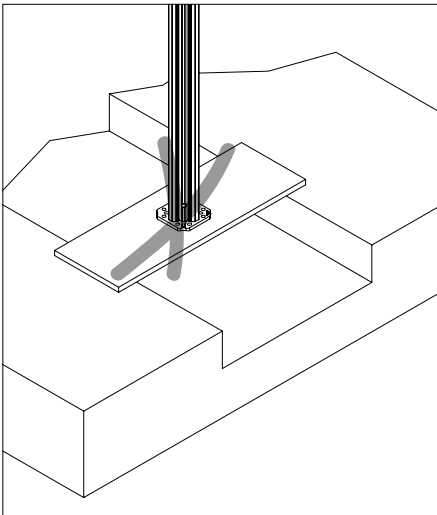


Fig. A4.03a

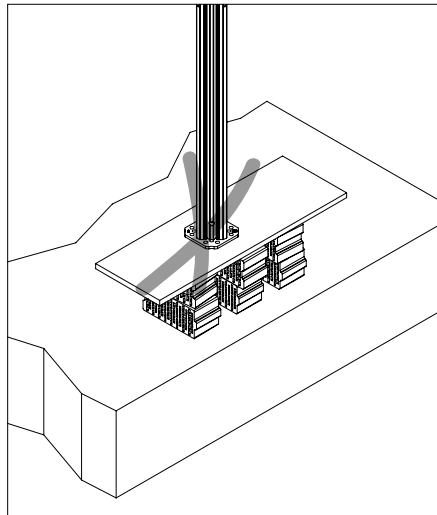


Fig. A4.03b



Slab props must always be positioned on sufficiently load-bearing and flat surfaces.

A4 Foreseeable misapplications



Applications of this type or similar are prohibited!

Do not connect the slab props to each other!

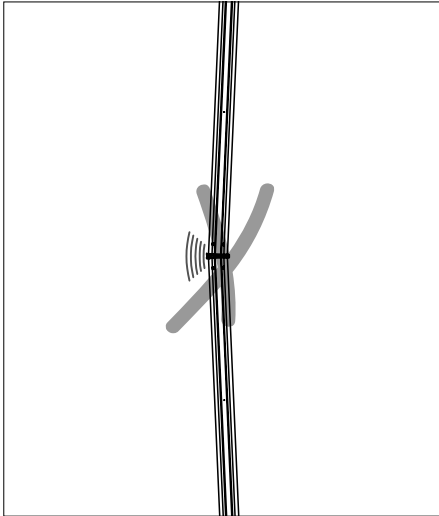


Fig. A4.04

Do not use with Tilting Forkhead MKK or Tilting Base MKF!

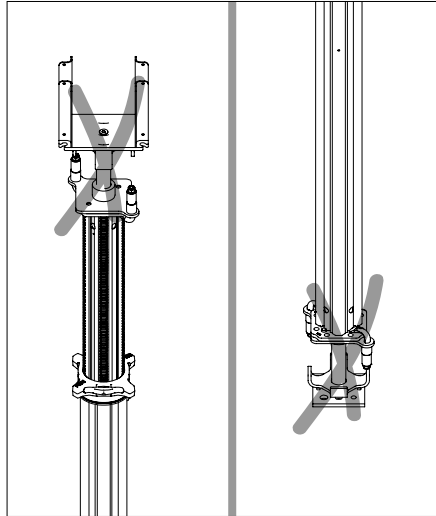


Fig. A4.05

Do not use for supporting formwork elements!

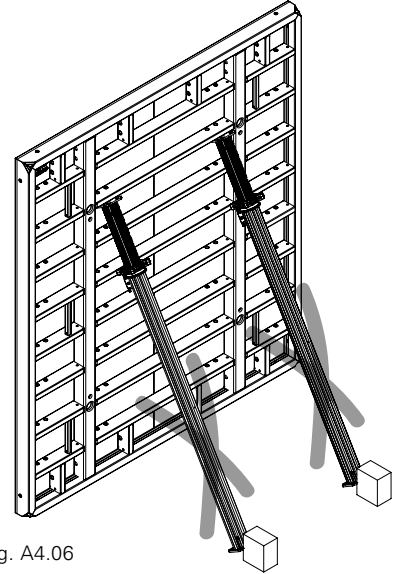


Fig. A4.06



If the clear height is too large, a longer slab prop or shoring tower must be used, e.g. MULTIPROP System with MRK Frames.



Use designated support equipment, e.g. Push-Pull Props or Brace Frames.

A4 Foreseeable misapplications



Applications of this type or similar are prohibited!

Do not use as a trench strut!

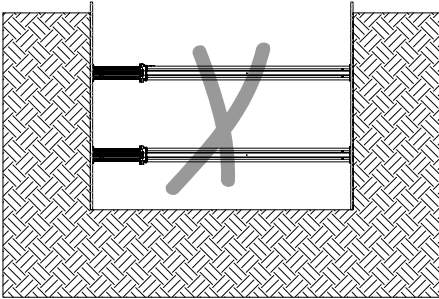


Fig. A4.07

Do not use as anti-fall protection!

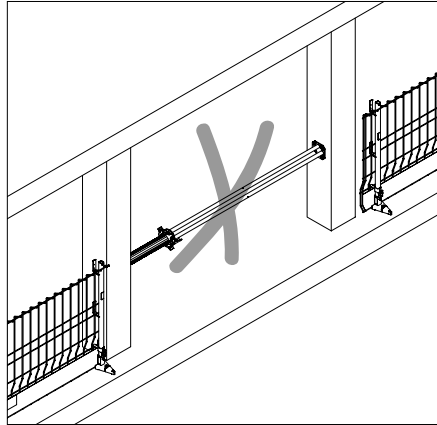


Fig. A4.08

Do not use as a guardrail holder!

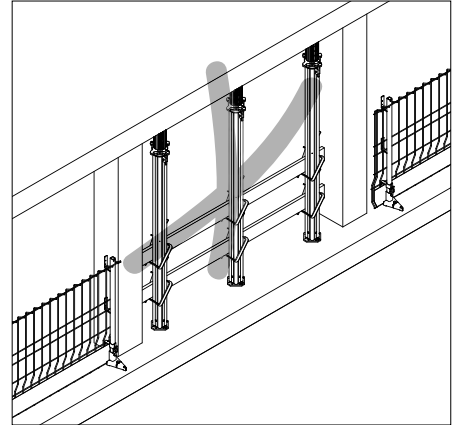


Fig. A4.09



Use designated trench strut.



Use designated anti-fall protection, e.g. PROKIT EP 110 or EP 200.



Use designated anti-fall protection, e.g. PROKIT EP 110 or EP 200.

A5 Storage and Transportation



- **Instructions for Use for PERI Pallet and Stacking Devices must be followed at all times!**
- **Follow PERI packaging guidelines!**
- **Transportation units must be correctly stacked and secured!**

PERI Pallets (14) are suitable for lifting by a crane or forklift. When using a crane, 4-sling lifting gear is used to move the pallets. During fork-lift operations, the pallets can be moved either by a fork-lift truck or by using the PERI Lifting Trolley. All pallets can be lifted using the longitudinal as well as front sides. Max. number of pallets in accordance with packaging guidelines.



The safety hook (3) prevents the inner tube (2) from slipping out and must be engaged.

Storage



Store and transport slab props of the same size! (Fig. A5.01 + A5.02)

Transportation



- **Ensure loads are correctly secured during transport!**
- **Use tension belts or steel bands.**

The number of pallets that can be transported depends on the respective national transport regulations.

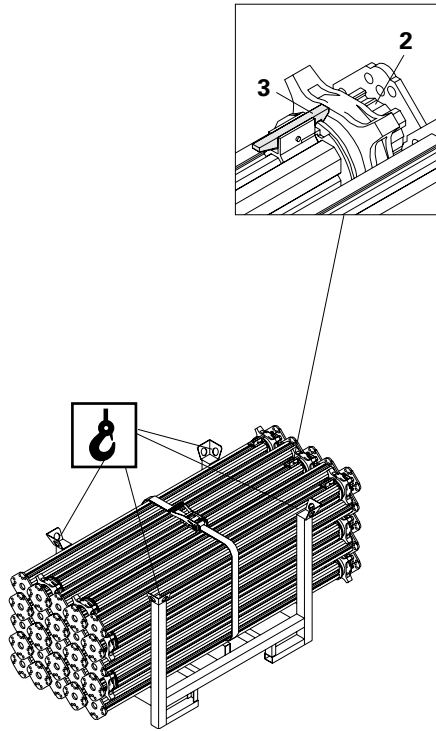


Fig. A5.01

Example: MULTIPROP Slab Props positioned horizontally in a Pallet RP-2 and secured by means of a tension belt.

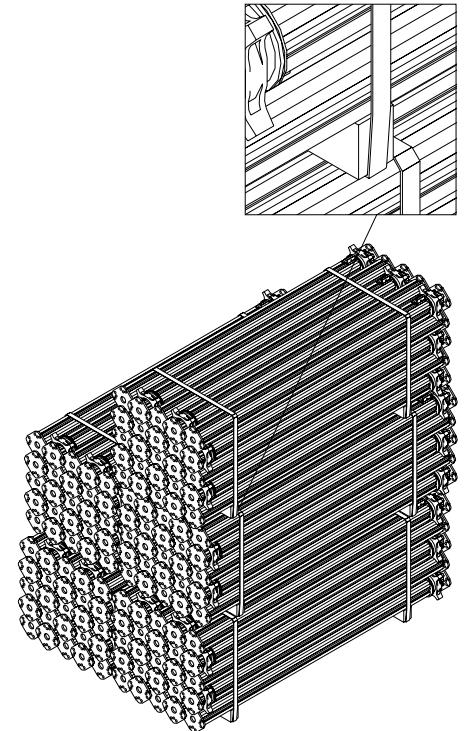


Fig. A5.02

Example: MULTIPROP Slab Props stacked using battens and secured by means of a steel band.

Table for MULTIPROP 250, 350, 480, 625 with Base MP 50

Permissible prop load [kN] according to the type test

Overall height [m] (prop extension + 50 cm)	MP 250 + MP 50 L = 1.95 – 3.00 m		MP 350 + MP 50 L = 2.45 – 4.00 m		MP 480 + MP 50 L = 3.10 – 5.30 m		MP 625 + MP 50 L = 4.80 – 6.75 m	
	Outer tube bottom	Inner tube bottom	Outer tube bottom	Inner tube bottom	Outer tube bottom	Inner tube bottom	Outer tube bottom	Inner tube bottom
2.25	76.6	73.6						
2.30	74.5	72.9						
2.40	72.4	72.1						
2.50	66.1	69.8	87.6	84.2				
2.60	63.3	67.7	83.8	82.9				
2.70	60.5	65.6	79.9	81.7				
2.80	57.7	63.1	76.1	80.5				
2.90	55.1	60.1	70.0	77.0				
3.00	52.4	57.1	63.9	73.5				
3.10			60.8	70.6	76.8	73.3		
3.20			57.6	67.6	74.4	72.8		
3.30			55.2	64.7	71.9	72.3		
3.40			52.7	61.8	69.4	71.8		
3.50			50.8	59.1	67.0	71.3		
3.60			48.8	56.4	62.6	70.0		
3.70			46.9	52.2	58.2	68.7		
3.80			45.0	48.0	53.9	67.4		
3.90			41.8	43.9	51.2	62.9		
4.00			38.5	39.8	48.6	58.4		
4.10					45.9	53.9		
4.20					43.9	50.1		
4.30					41.9	46.3		
4.40					39.8	42.5		
4.50					37.7	40.0		
4.60					35.5	37.5		
4.70					33.3	35.0		
4.80					31.7	33.2	48.7	44.5
4.90					30.0	31.4	47.5	44.4
5.00					28.4	29.6	46.2	44.3
5.10					26.7	27.8	44.5	43.1
5.20					25.1	26.0	42.8	41.8
5.30					23.4	24.2	41.1	40.4
5.40							40.1	39.6
5.50							37.3	37.2
5.60							35.3	35.6
5.70							33.3	34.0
5.80							31.5	32.5
5.90							30.6	31.7
6.00							28.1	29.5
6.10							26.7	28.1
6.20							25.3	26.7
6.30							24.1	25.4
6.40							23.5	24.8
6.50							21.8	22.9
6.60							20.8	21.7
6.70							19.8	20.6
6.75							19.3	20.0

Note:
To release the loads > 60 kN we recommend using the HD Wingnut Spanner, Item no. 022027.

MULTIPROP Slab Props



Item no.	Weight kg
027288	10.200
027289	15.400
027290	19.500
027291	24.900
027305	34.700

- MULTIPROP MP**
- MULTIPROP MP 120**
- MULTIPROP MP 250**
- MULTIPROP MP 350**
- MULTIPROP MP 480**
- MULTIPROP MP 625**

Slab prop made of aluminium. Used as individual prop as well as in combination with MULTIPROP Frames MRK to form towers.

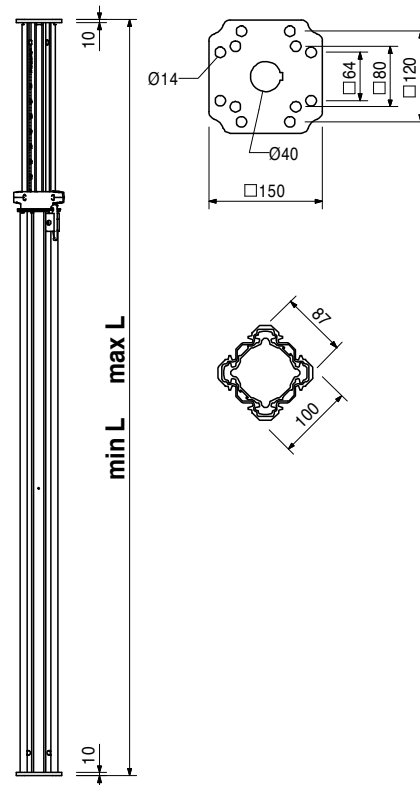
min. L	max. L
800	1200
1450	2500
1950	3500
2600	4800
4300	6250

Note

Approved by the German Building Authorities No. Z-8.312-824.

Technical Data

Permissible load: see PERI Design Tables.



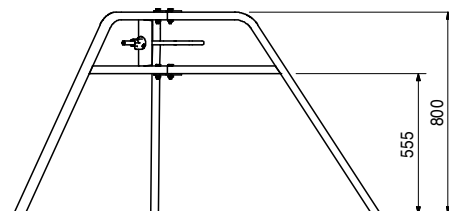
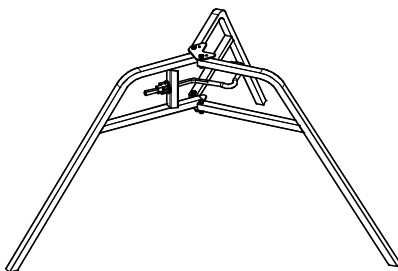
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Universal Tripod, galv.

Erection aid for slab props with Ø 48 – 120 mm and 120 x 120 mm. Can also be used in combination with MULTIPROP MP slab props and all slab props with Base MP 50.

Note

Only use as erection aid!



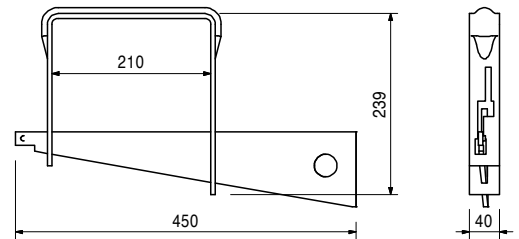
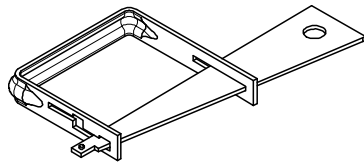
MULTIPROP Slab Props



Item no.	Weight kg
027790	2.460

Brace Clamp HL, galv., 76 – 120 mm

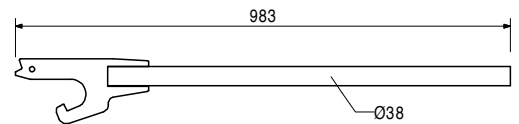
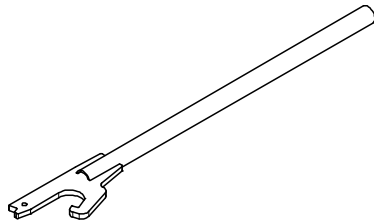
For assembly of 3 x 15 cm stiffening boards at slab props \varnothing 76 – 89 mm and 100 x 100 mm to 120 x 120 mm.



022027	3.600
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Wing Nut Spanner HD

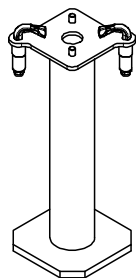
For easy release of the Head Spindle HDK 45, the Head Spindle TR 110-80/55 and the MULTIPROP slab prop.



027310	8.900
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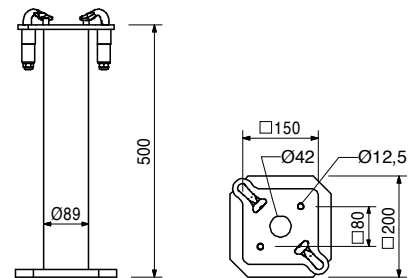
Base MP 50

For use with slab props with an end plate thickness of 6 – 10 mm. With clamped quick-release fastener.



Note

Permissible load: see PERI Design Tables.



MULTIPROP Slab Props



Item no. Weight kg

103434	38.500
103429	45.300

Pallets RP-2, galv.

Pallet RP-2 80 x 120, galv.

Pallet RP-2 80 x 150, galv.

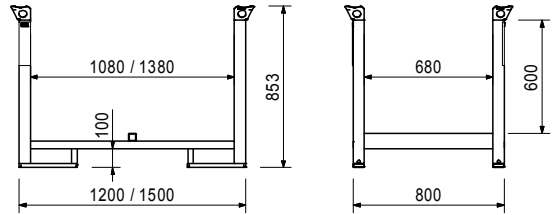
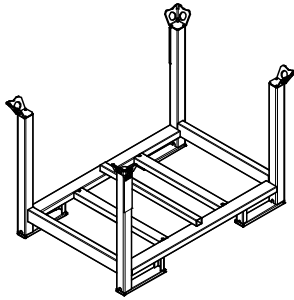
For stacking and transportation of formwork and scaffolding components.

Note

Follow Instructions for Use!

Technical Data

Permissible load-bearing capacity 1.5 t.



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



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