

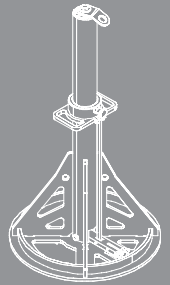
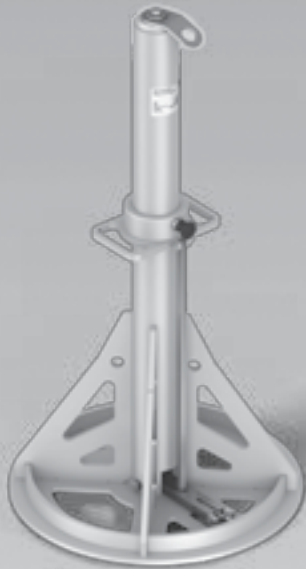
SKY-Anchor

Item no. 131032 SKY-Anchor 21 mm

Item no. 133904 SKY-Anchor 27 mm

Translation of the Original Instructions for Use – Edition 05/2019

CE



Main components



- 1** SKY-Anchor
- 1.1** Anchor point
- 1.2** Locking mechanism
- 1.3** Base plate
- 1.4** Movable clamping claw
- 1.5** Fixed clamping claw

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Key

Pictogram | Definition



Safety instructions



Note



Load-bearing point



Visual check



Tip



Misapplication

Dimension specifications

Dimensions are usually given in mm. Other units of measure, e.g. cm, are specified in the illustrations.

Load details are usually given in kg. Other measurement units, e.g. t, are specified in the illustrations.

Conventions

- Instructions are numbered with:
1., 2., 3.
- The result of an instruction is shown by: →
- Position numbers are clearly provided for the individual components and are given in the drawing, e.g. **1**, in the text in brackets, for example (1).
- Multiple position numbers, i.e. alternative components, are represented with a slash, e.g. **1 / 2**.

Arrows

→ Arrow representing an action

Presentational reference

The illustration on the front cover of these instructions is understood to be a system representation only. The assembly steps presented in these Instructions for Assembly and Use are shown in the form of examples with only one component size. They are correspondingly valid for all component sizes contained in the standard configuration.

For a better understanding, detailed illustrations are partly incomplete. The safety installations which have possibly not been featured in these detailed drawings must nevertheless still be available.

Target groups

Contractors

These Instructions for Use are intended for contractors who either

- assemble, modify and dismantle PERI products, or
- use them, e.g. for concreting, or
- who have them used, e.g. for forming operations.

Construction site coordinator

The Safety and Health Coordinator*

- is appointed by the client,
- must identify potential hazards during the planning phase,
- determines measures that provide protection against risks,
- creates a safety and health plan,
- coordinates the protective measures for the contractor and site personnel so that they do not endanger each other,
- monitors compliance with the protective measures.

Competent personnel

Due to the specialist knowledge gained from professional training, work experience, and recent professional activity, the competent person has a reliable understanding of safety-related issues and can correctly carry out testing.

Depending on the complexity of the test to be undertaken, e.g. scope of testing, type of testing or the use of a certain measuring device, a range of specialist knowledge is necessary.

Qualified persons

PERI products may only be assembled, modified or dismantled by personnel who are suitably qualified to do so.

For the work to be carried out, the qualified persons must have received instructions** which contain at least the following points:

- Explanation of the plan for the assembly, modification or dismantling of the formwork in an understandable form and language.
- Description of measures in order to safely assemble, modify or dismantle SKYDECK and the SKY-Anchor.
- Designation of the preventive measures to avoid the risk of persons and objects falling to the ground.
- Designation of the safety precautions in the event of changing weather conditions which could adversely affect the safety of the PERI products concerned as well as the personnel.
- Details regarding the permissible loads.
- Description of any other risks that are associated with the assembly, modification or dismantling procedures.



In other countries, ensure that the relevant national guidelines and regulations in the respective current version are complied with!

* Valid in Germany: Regulations for Occupational Health and Safety on Construction Sites 30 (RAB 30).

** Instructions are given by the contractor himself or a competent person selected by him.

Intended use

Product description

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

The SKY-Anchor serves as an attachment point for personal protective equipment to prevent falling from a height (PPE):

- For only one person
- During installation of the slab formwork for inserting the panels
- Only in connection with SKYDECK Slab Formwork with Drophead SFK

The following is required for attachment to the SKY-Anchor:

- Full-body harness according to EN 361 with a retraction fall arrester in accordance with EN 360
- Length-adjustable fall arrester according to EN 353-2

Both versions must be suitable for horizontal use.

Any use in any other way is considered contrary to the designated use.

Foreseeable misapplications

The SKY-Anchor:

- must not be used as a load-bearing point for the transport of materials
- must not be used as an attachment point for more than one person
- must not be used for lifting the slab formwork

Instructions on use

The use in a way not intended, deviating from the standard configuration or the intended use according to the Instructions for Assembly and Use, represents a misapplication with a potential safety risk, e.g. risk of falling.

Only PERI original parts may be used. The use of other products and spare parts is not allowed.

Changes to PERI components are not permitted.

Cross-system

General

The contractor must ensure that the Instructions for Assembly and Use supplied by PERI are available at all times and understood by the site personnel.

These Instructions for Assembly and Use can be used as the basis for creating a risk assessment. The risk assessment is compiled by the contractor. These Instructions for Assembly and Use do not replace the risk assessment!

Always take into consideration and comply with the safety instructions and permissible loads.

For the application and inspection of PERI products, the current safety regulations and guidelines must be observed in the respective countries where they are being used.

Materials and working areas are to be inspected on a regular basis, especially before each use and assembly, for:

- signs of damage,
- stability and
- function.

Damaged components must be exchanged immediately on site and may no longer be used.

Safety components are to be removed only when they are no longer required.

Components provided by the contractor must conform with the characteristics required in these Instructions for Assembly and Use as well as all valid construction guidelines and standards. Unless otherwise indicated, this applies in particular to:

- Timber components: Strength Class C24 for Solid Wood according to EN 338.
- Scaffold tubes: galvanised steel tubes with minimum dimensions of $\varnothing 48.3 \times 3.2$ mm according to EN 12811-1:2003 4.2.1.2.
- Scaffold tube couplings according to EN 74.
- Fall arrester in accordance with DIN EN 360:2002
- Full-body harness according to DIN EN 361:2002
- Attachment equipment according to DIN EN 795-B:2002

The equipment corresponds to Standard DIN EN 363:2008 (fall arrester DIN EN 360:2002, Full-body harness DIN EN 361:2002, attachment equipment DIN EN 795-B:2012).

Deviations from the standard configuration are only permitted after a further risk assessment has been carried out by the contractor. On the basis of this risk assessment, appropriate measures for working and operational safety as well as stability are to be determined. Corresponding proof of stability can be provided by PERI on request if the risk assessment and resulting measures to be implemented are made available.

System-specific

Incorrectly installed or damaged SKY-Anchors as well as improper use could lead to a fall with associated injuries and/or death!

A damaged SKY-Anchor could, under some circumstances, fail during normal operating conditions.

Damaged SKY-Anchors must not be used.

Only specially trained persons are allowed to use this product. All trained persons must be aware of and take into account country-specific requirements.

The user of this product must be in good health. The user must not be influenced by drugs, alcohol or medication.

Ensure that an emergency rescue plan is available whereby all possible emergencies at work have been taken into account.

Before each use, check the SKY-Anchor for obvious defects (deformations, cracks) and proper functionality.

Any changes to the SKY-Anchor are expressly forbidden.

All repair measures must be carried out in accordance with the instructions provided by PERI.

Load application may only be realized in the designated direction with a maximum of one person.

The SKY-Anchor has not been designed for lifting loads.

Only use connecting elements suitable for the SKY-Anchor which have been approved in accordance with EN 362. Take into account all corresponding individual operating instructions for all equipment parts that are part of the entire system of the personal protective equipment. Non-compatible equipment items can put the safe functioning of the entire system at risk.

Only tested body restraining devices may be used. They have to feature a fall impact absorber in accordance with EN 355 which limits the forces acting on the person to a maximum of 6 kN during a restraining operation.

Attachment points which have been subjected to stress due to a fall are to be taken out of service and may not be reused until a competent person has given their written approval.

For safety reasons, it is essential that the position of the attachment point is chosen so that the height of a fall is reduced to an absolute minimum in the event of this happening.

The length of the safety rope is to be selected so that, in the event of a fall, no impact with the ground nor striking other obstacles is possible.

Use the SKY-Anchor on construction sites exercising the necessary care, conscientiousness, and sense of responsibility throughout.

When using the SKY-Anchor, personnel must ensure that falling due to carelessness is ruled out and no injuries occur when using the SKY-Anchor.

Equipment:

- Securing support, H = 0.9 m with rotating attachment point
- Base plate with reinforcing ribs
- Locking mechanism for a positive connection with the head element of the PERI SKYDECK Drophead SFK
- Safety device for preventing unintended release using secured locking pins; optional theft protection by means of a lock.
- Ergonomic operation of the locking mechanism with personnel in a standing position (no bending)

Accessories:

Personal protective equipment

- Retraction fall arrester with wire rope or strap webbing, L = 3.0 m or 5.5 m with impact absorption < 6.0 kJ
- Full-body harness according to EN 361

Function:

- Restraint (only when using safety ropes with fixed length adjustment)
→ optimum safety
- Arrest (only if there is sufficient clearance above the ground)

Approval:

- CE Type Examination Certificate according to EC Directive 89/686 EEC
- Type Examination according to EN 795 Category B "Mobile Anchor Devices"
- Additional tests in combination with the PERI SKYDECK system



Maintain the required clearance under the working position. The clearance prevents any landing on or impact with the ground or other obstacles in the event of a fall over the edge of the formwork. Remove obstacles before the commissioning process of the SKY-Anchor.

On every construction site before using the Sky-Anchor, it is to be determined in a risk assessment whether:

- there is sufficient clearance under the SKYDECK.
- the clearance has been restricted by obstacles or installations.
- there is no other securing possibility available.



Safety regulations

- Utilization by trained personnel only.
- Ensure that there is sufficient clearance under the working area.
- Carry out risk assessment with regard to ground contact injuries. Especially for low formwork heights < 4.0 m.
- In the event of a fall over the edge, determine measures for rescue operations and practise these.
- Do not continue to use any defective or fall-affected equipment.
- Only use recommended accessories.
- Use helmet fitted with a chin strap.
- At least once every 12 months: inspection is to be carried out by a specialist including an entry in the equipment register.
- Do not store any tools or materials on the working area on the slab formwork during shuttering operations.

Using the SKY-Anchor

1. Put on the full-body harness and adjust accordingly to match the body measurements (follow the separate Instruction Manual).
2. Attach the Retraction Fall Arrester HSG to the attachment point of the SKY-Anchor.
3. Attach the safety hook of the HSG to the rear fall arrest eyelet of the full-body harness.



Important

When using the SKY-Anchor with restraining system: always keep the connection length shorter than the distance to the edge!

Failure to do so may result in injury if the person falls over the edge!



Important

The SKY-Anchor is a device for attaching personal protection equipment (PPE). The SKY-Anchor is not a safety device that can prevent any injury to the user. In particular, it is possible for the user of the SKY-Anchor to fall against or onto other objects located on the construction site if the person falls thereby causing injury. Such injuries cannot be prevented or excluded through the use of the SKY-Anchor. Therefore, there is a residual risk in the event of a fall that can result in the user of the SKY-Anchor being injured or killed. When using the SKY-Anchor, the user knowingly takes this residual risk.



Important

The complete fall-arrest distance during a fall over the edge is made up as follows:

- Reaction distance of protection system + elongation approx. 0.3 m
 - Braking distance approx. 1.7 m max.
 - Body length of the suspended person approx. 2.0 m
- = minimum height of the formwork surface above the ground: approx. 4.0 m

For lower heights, only use the restraint function in order to prevent any injury due to contact with the ground!
Adjust the connecting means accordingly!

Components

- 1** SKY-Anchor
- 1.1** Anchor point
- 1.2** Locking mechanism
- 1.3** Base plate
- 1.4** Movable clamping claw
- 1.5** Fixed clamping claw
- 1.6** Profile supporting head

Technical data:

Weight:	approx. 15.0 kg
Height:	max. 0.9 m
User:	max. 1 person
Strength:	12.0 kN

Use SKY Anchor Claw Width 21 (Item no. 131032) for formlining thickness 21 mm; use SKY Anchor Claw Width 27 (Item no. 133904) for formlining thickness 27 mm.



The locking mechanism of the SKY-Anchor consists of one fixed and one pivoting clamping claw for the SKYDECK Drothead SFK.

As work progresses, move the attachment device accordingly. Maintain the minimum safety distance of 2 m to the leading edge.

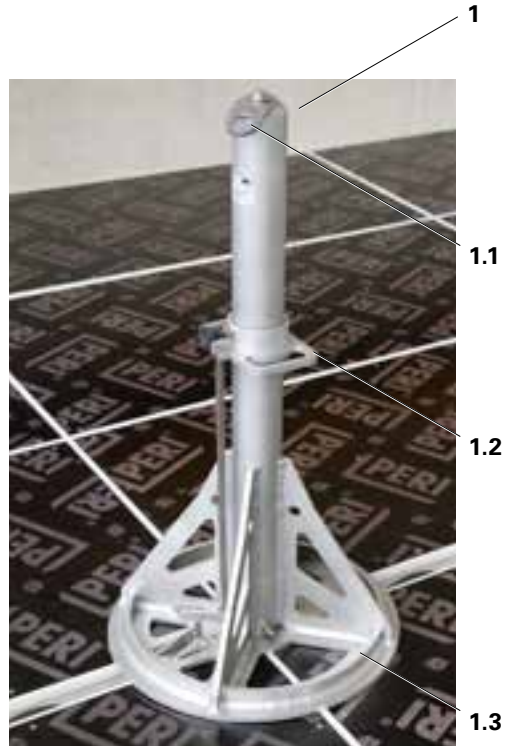


Fig. A1.01

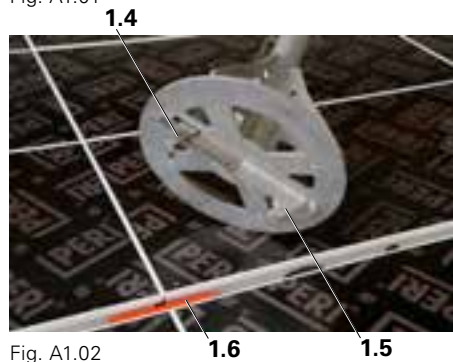


Fig. A1.02



Before using the SKY-Anchor each time, carry out a visual and functionality check!

Visual inspection:

- The SKY-Anchor is complete.
- The SKY-Anchor has no deformations.
- The SKY-Anchor has no cracks.
- The SKY-Anchor is free of corrosion.
- The last inspection by an expert was carried out max. 12 months ago.

Functionality check:

- Movable clamping claw can be freely moved.
- The clamping claws fit into the profile supporting head of the formwork system.
- Locking mechanism closes completely and securely.
- Clamping device of the locking mechanism is free (handle with pulling device).
- Securing pin locks automatically and does not jam.

Maintenance:

- If any defects are found during the inspection of the SKY-Anchor, it may no longer be used.
- The SKY-Anchor may only be inspected or repaired in a workshop authorized by BORNACK GmbH & Co.KG.

Assembly

1. Insert the fixed clamping claw into the joint between the formwork panels.
(Fig. A1.03)
2. Place the base plate of the SKY-Anchor flat on the formwork panels.
(Fig. A1.03)



Fig. A1.03

3. Pull the SKY-Anchor in the direction of the joint until the fixed clamping claw engages the drophead tube of the SKYDECK Prop. (Fig. A1.04 + A1.05)



Fig. A1.04



Fig. A1.05

4. The base plate of the SKY-Anchor is placed in a flat position.
5. By pressing down the hand lever on the support tube, pivot the movable clamping claw into the other end of the drophead tube. The securing pin must then engage. If the securing pin does not engage independently, manually press the locking mechanism downwards until the securing pin engages. (Fig. A1.06 + A1.07)



Fig. A1.06



Fig. A1.07



Manually check whether the attachment device is positively anchored.

- The two clamping claws enclose both ends of the drophead tube.
 - The locking mechanism is in the bottom position.
 - The securing pin is engaged.
- (Fig. A1.08)

- The SKY-Anchor is ready for use.
- The Retraction Fall Arrester can be attached to the anchor point.



Fig. A1.08

Dismantling

1. Pull out the securing pin of the locking mechanism and, at the same time, pull the locking mechanism upwards. (Fig. A1.09 + A1.10)



Fig. A1.09



Fig. A1.10

2. Push back the SKY-Anchor in the joint between the formwork panels and then lift. (Fig. A1.11)



Fig. A1.11

3. Lift out the SKY-Anchor. (Fig. A1.12)



Fig. A1.12

→ The SKY-Anchor is now dismantled and can be transported to the next place of use. (Fig. A1.13)



Fig. A1.13



In order to ensure the safe use of the SKY-Anchor, SKYDECK slab formwork must be installed in accordance with the following instructions!

Comply with the Instructions for Assembly and Use for SKYDECK Panel Slab Formwork!

SKYDECK Panels and Dropheads SFK must be free of any concrete residue so that the clamping claws of the SKY-Anchor can correctly engage and lock in position.

Wall Holder SWH-2

In every second bay, fix SKYDECK panels to the structure using Wall Holder SWH-2 (2).

Secure the fixed panels with two additional Panel Wedge Clips SPKK (3). (Fig. A1.14)

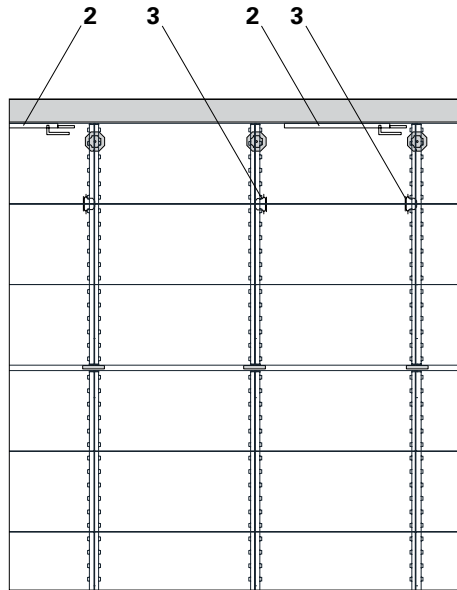


Fig. A1.14

Frame MRK /PRK

Brace the prop (6) supporting the SKY-Anchor (1) by means of a Stiffening Frame MRK or PRK (4a/4b).

The Frame MRK / PRK runs underneath the Main Beam SLT (5). It connects the prop (6) of the SKY-Anchor with the prop (6a) rearwards to the shuttering direction.

Use Frame MRK 201.5 (4a) in the starter bay (Fig. A1.15)

Use Frame MRK 230 (4b) in the centre bay (Fig. A1.16)

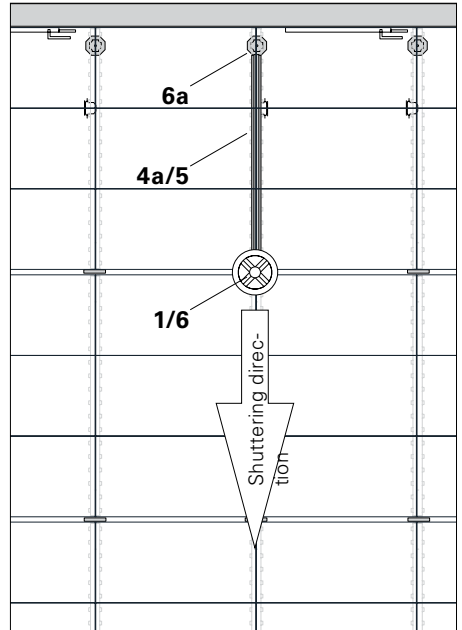


Fig. A1.15

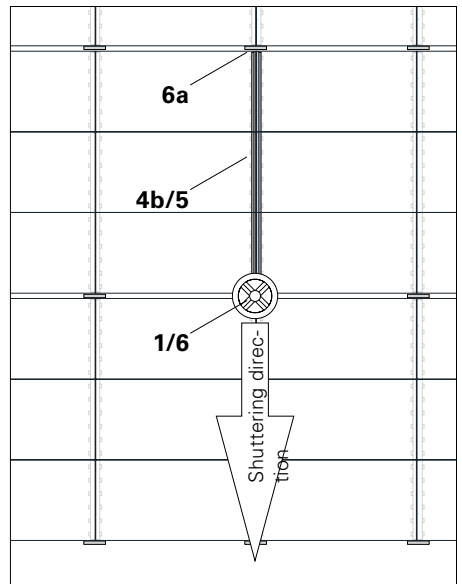


Fig. A1.16

Assembly sequence

When shuttering bay by bay, first work in a lateral direction.

Secure the props of all free-standing Main Beams SLT 225 (5) using Universal Tripods (8). Always place the tripods so that the fixed leg (8.1) is positioned under the assembled formwork. Also secure the props in the adjacent bay using tripods (8a). (Fig. A1.17)

Site personnel, wearing the appropriate safety equipment, may only move on the SKYDECK panels marked in grey. The SKY-Anchor must be positioned in the hatched area.

(Fig. A1.17 + A1.18)

Remove and re-position the tripods (8) only when the bay is completely covered with panels and site personnel wearing safety equipment are no longer in the area of risk. (Fig. A1.19)



The tripods reduce the possible effects on the SKYDECK formwork system in the case of a pendulum fall. Situations where there is a risk of a pendulum fall are to be avoided!

* Installation direction

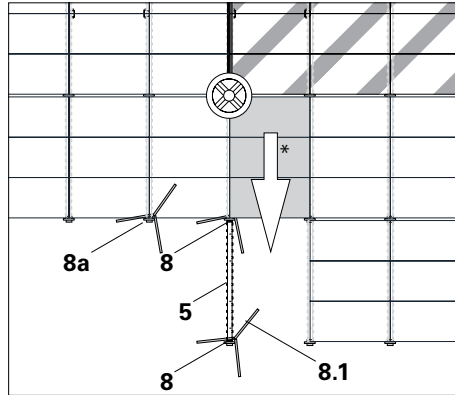


Fig. A1.17

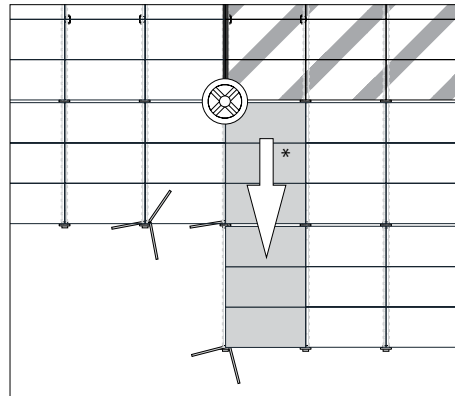


Fig. A1.18

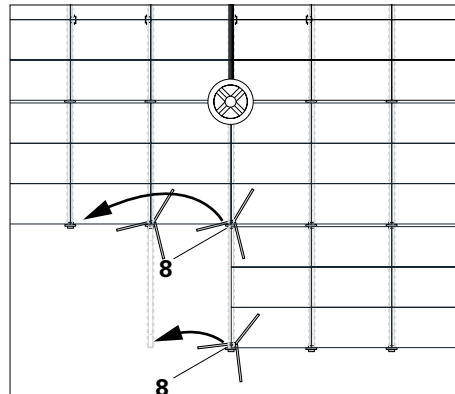


Fig. A1.19

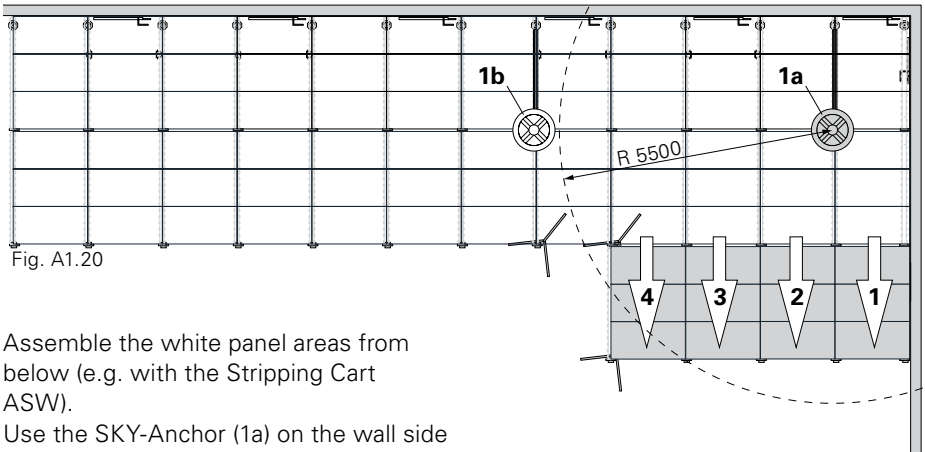


Fig. A1.20

Assemble the white panel areas from below (e.g. with the Stripping Cart ASW).

Use the SKY-Anchor (1a) on the wall side as attachment point.

Only shutter the area marked in grey.

Installation of the SKYDECK panels

always begins on the wall side.

Assembly sequence 1 - 2 - 3 - 4.

(Fig. A1.20)

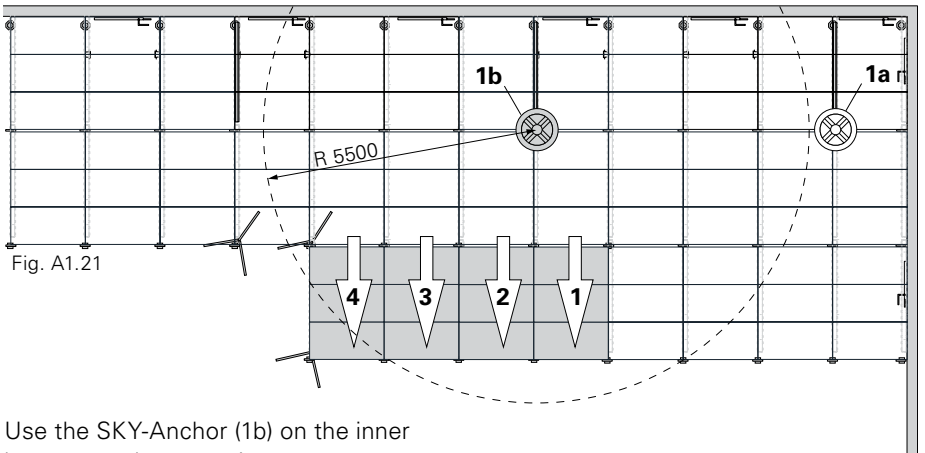


Fig. A1.21

Use the SKY-Anchor (1b) on the inner bay as attachment point.

Only shutter the area marked in grey.

Assembly sequence 1 - 2 - 3 - 4

(Fig. A1.21)

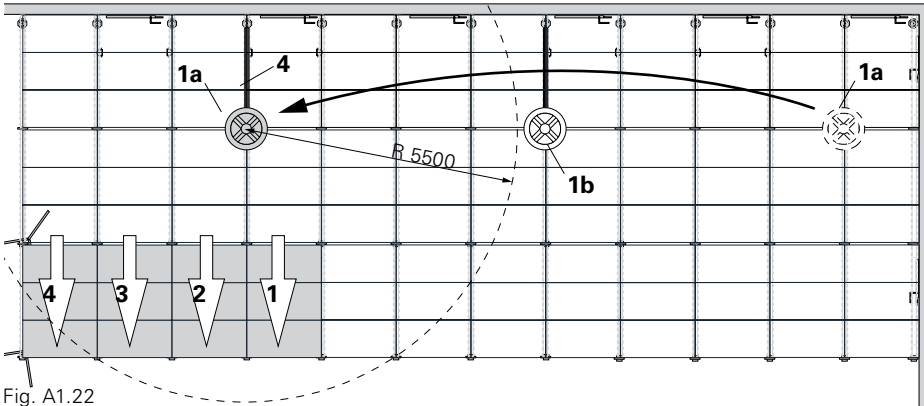


Fig. A1.22

Move the SKY-Anchor (1a) on the wall side. For the moving procedure, use the SKY-Anchor (1b) on the inner bay as attachment point.

Also move the Frame MRK (4).

For shuttering the area marked in grey, use the SKY-Anchor (1a) in its new position as attachment point.

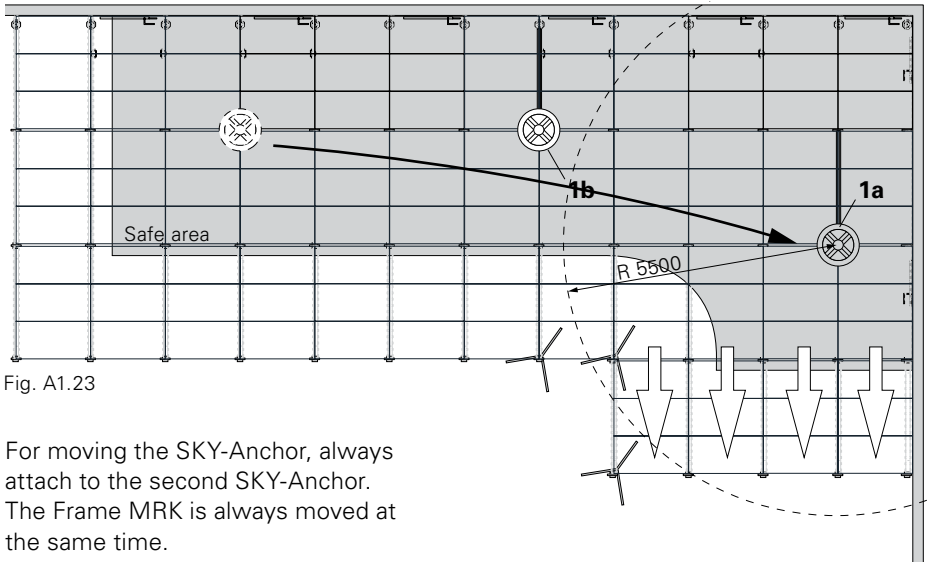


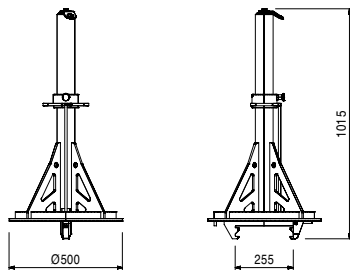
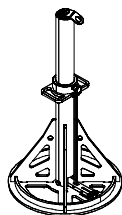
Fig. A1.23

For moving the SKY-Anchor, always attach to the second SKY-Anchor. The Frame MRK is always moved at the same time.

Alternatively, the SKY-Anchor is moved so that the transporting person moves only in the safe area, at least 2 m away from the edge.

Further assembly of the slab formwork and the attachment sequence on the SKY-Anchor is carried out in a corresponding manner.

Item no.	Weight kg		
131032	17,000	SKY-Anker	Note Attachment equipment according to DIN EN 795 B. Follow Instructions for Use!
133904	17,000	SKY-Anker 21	
		SKY-Anker 27	



131033	1.500	Retraction Fall Arrester EN 360	Note Extension length 5.5 m. Follow instruction manual!
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131034	1.000	Full-Body Harness	Note Universal size! According to EN 361. Follow instruction manual!
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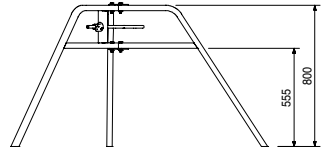
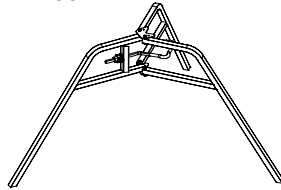
131680	0.193	Carabiner Oval 62 x 111	
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Item no.	Weight kg
028000	9.190

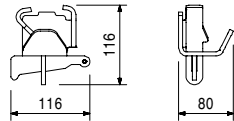
Universal Tripod, galv.
 Assembly aid for slab props
 Ø 57 – 120 mm and
 120 x 120 mm. Can also be
 used in combination with
 MULTIPROP MP Slab Props
 and all slab props with Base
 MP 50.

Note
 Only use as an assembly aid!



061280	0.778
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Panel Wedge Clip SPKK
 Fixes panels on the main
 beam.

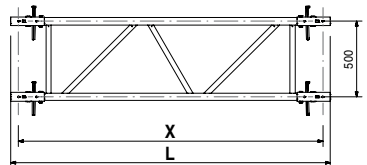
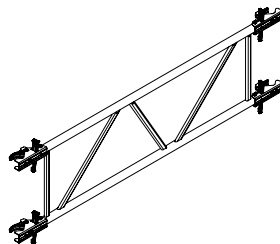


111815	15.400
111817	16.300

PEP Frames PRK
PEP Frame PRK 201.5
PEP Frame PRK 230
 Bracing frame for PEP Slab
 Props. With captive wedge
 coupling.

L	X
2113	2015
2398	2300

Note
 L = loading length
 X = axis length



Item no.	Weight kg
028460	11.600
028470	12.500

Frames MRK

Frame MRK 201.5

Frame MRK 230

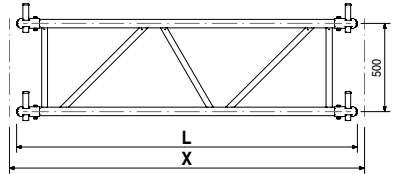
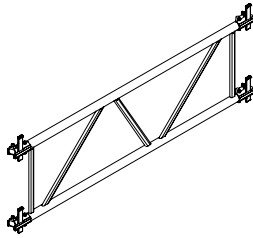
Bracing frame for MULTIPROP.
For connecting to the outer and inner tube. With captive wedge coupling.

	L	X
	1935	2015
	2220	2300

Note

L = loading length

X = axis length



CE Konformitätserklärung

Der Hersteller oder sein autorisierter, in der EU ansässiger Vertreter

BORNACK GmbH & Co KG
Bustadt 39
D-74360 Ilsfeld / Deutschland

erklärt hiermit, dass die nachfolgend bezeichnete, persönliche Schutzausrüstung

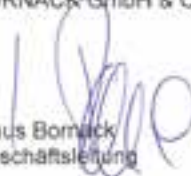
Anschlageinrichtung nach EN 795:2012 Typ B
SKYANKER (SKY-Anker)

den Anforderungen der EG Richtlinie 89/686 EWG entspricht und, falls zutreffend, der in nationales Recht harmonisierten **EN 795:2012 Typ B** entspricht.
(gemäß Artikel 8. Absatz 3 der persönlichen Schutzausrüstung)

- identisch ist mit der PSA, welche Gegenstand ist der
CE- Baumuster-Zertifizierung
Nr.: ZP/B179/17
- ausgestellt von
DEKRA EXAM GmbH
Prüflaboratorium für Bauteilsicherheit
Zertifizierungsstelle **CE 0158**
Dinnendahlstraße 9
D- 44809 Bochum / Germany
- der Fertigungsüberwachung gemäß Art. 11, Punkt A der EG-Richtlinie
89/686 EWG unterliegt, überwacht durch das notifizierte Prüfinstitut
DEKRA EXAM GmbH
Prüflaboratorium für Bauteilsicherheit
Zertifizierungsstelle **CE 0158**
Dinnendahlstraße 9
D- 44809 Bochum / Germany

27.07.2017

BORNACK GmbH & Co. KG

A handwritten signature in blue ink, appearing to read 'Klaus Bornack', written over the printed name.

Klaus Bornack
Geschäftsleitung

CE Declaration of Conformity

The manufacturer or his authorised agent

BORNACK GmbH & Co KG
Bustadt 39
D-74360 Iilsfeld / Germany

hereby declares that the following personal protective equipment

Anchor devices EN 795:2012 Type B
SKYANKER (SKY-Anker)

satisfies the requirements of the EC Directive 89/686 EEC and, if applicable, the harmonised standards in national law standard **EN 795:2012 Type B** (in compliance with Article 8.3 of the personal protective equipment)

- is identical to the personal protective equipment that is the object of the **CE- Baumuster-Zertifizierung Nr.: ZP/B179/17**

DEKRA EXAM GmbH
Prüflaboratorium für Bauteilsicherheit
Notified body **CE 0158**
Dinnendahlstraße 9
D- 44809 Bochum / Germany

- is subject to production monitoring in compliance with Art. 11, Point A of the EC Directive 89/686 EEC, monitored by the notified testing institute

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Klaus Bornack
Geschäftsleitung

**The optimal
System for every
Project and every
Requirement**



Wall Formwork



Column Formwork



Slab Formwork



Climbing System



Bridge Formwork



Tunnel Formwork



Shoring Systems



Construction Scaffold



Facade Scaffold



Industrial Scaffold



Access



Protection Scaffold



Safety Systems



**System-Independent
Accessories**



Services



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

