

SKY-ANCHOR UNIVERSAL

Safety System

Translation of Original Instructions for Use – standard configuration – Version 1.2.1



Content

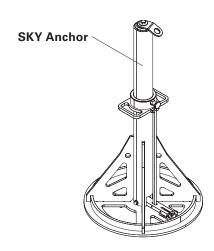


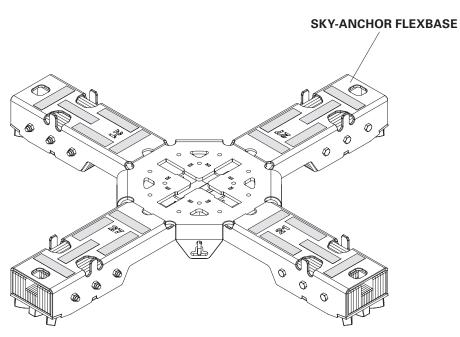
Overview Main components Key				
Introduction				
Target groups Product description Intended use Accessories Cleaning and maintenance instructions Additional technical documentation Approval	6 7 8 8 9 9			
Safety instructions				
Cross-system System-specific	10 11			
System overview A1 Component overview SKY-ANCHOR UNIVERSAL Personal protective equipment to prevent falling from a height (PPE)	12 12			
RFID LA tag A2 Information prior to use Spatial limits of the system Fall prevention variants Substrate requirements Standing surface requirements Identification marking Testing and inspections	14 15 15 15 16 17 20 21			
Structure				
B1 Preparation Preparing the substrate B2 Converting the safety tube General information Conversion	24 24 25 25 26			
B3 Fitting the attachment point	28			
Fitting the SKY Anchor B4 Application General information Permissible attachment points Using the SKY-ANCHOR UNIVERSAL Moving the SKY-ANCHOR UNIVERSAL	28 29 29 30 31 32			
Dismantling				
C1 Disassembly C2 Storage and transportation C3 Service life and disposal Service life Disposal	36 37 39 39 39			
Annex				
D1 Test card D2 EC Declaration of Conformity	40 42			
Program overview				
rrogram overview				

Overview



Main components





Overview



Key

Pictogram | Definition



Danger/Warning/Caution



Note



To be complied with



Load-bearing point



Visual inspection



Tip



Incorrect use



Safety helmet



Safety shoes



Safety gloves



Safety goggles



Personal protective equipment to prevent falling from a height (PPE)



Observe additional documentation

Arrows

- Arrow representing an action
- Arrow representing a reaction of an action*
- Arrow representing forces
- * If not identical to the action arrow.

Safety instruction categories

The safety instructions alert site personnel to the risks involved and provide information on how to avoid these risks. Safety instructions can be found at the beginning of the section or before instructions for action and are highlighted as follows:



Danger

This sign indicates an extremely hazardous situation that could result in death or serious, irreversible injury if the safety instructions are not followed.



Warning

This sign indicates a hazardous situation that could result in death or serious irreversible injury if the safety instructions are not followed.



Caution

This sign indicates a hazardous situation that could result in minor or moderate injury if the safety instructions are not followed.



Note

This sign indicates situations in which failure to observe the information can result in material damage.

Format of the safety instructions



Signal word

Type and source of hazard!
Consequences of non-compliance.

⇒ Preventative measures.

Dimensions

Dimensions are usually given in cm. Other measurement units, e.g. m, are shown 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.

Notes on illustrations

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 valid for all component sizes contained in the standard configuration.

To facilitate understanding, illustrations are sometimes incomplete. The safety equipment that is not shown in these detailed descriptions must nevertheless be available.

Terminology

Unless otherwise stated, the articles SKY-Anchor 21 mm and SKY-Anchor 27 mm are referred to as SKY Anchor to make them easier to read and understand.



Target groups

Contractors

These Instructions for Assembly and Use are designed for contractors who either

- assemble, modify and dismantle PERI systems, or
- use them, e.g. for concreting, or
- allow them to be used for other operations, e.g. carpentry or electrical work.

Safety and Health Protection 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 protection 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 person

- is appointed by the contractor,
- must be on site for all system operations,
- prepares and updates the plan for assembly, modification and dismantling,
- prepares and updates the plan for use of the system by the user,
- supervises the assembly, modification and dismantling work (supervisor).

Competent persons qualified to carry out inspections

Due to the specialist knowledge gained from professional training, professional experience and recent professional activity, the competent person qualified to carry out inspections has a reliable understanding of safety-related issues and can carry out inspections correctly. Depending on the complexity of the inspection to be undertaken, e.g. scope of testing, type of testing or the use of certain measuring devices, a range of specialist knowledge is necessary.

Qualified personnel

PERI systems may only be assembled, modified or dismantled by personnel who are suitably qualified to do so. Qualified personnel must have completed a course of training** in the work to be performed, covering the following points at least:

- Explanation of the plan for the assembly, modification or dismantling of the system in an understandable form and language.
- Description of the measures for safely assembling, modifying or dismantling the system.
- Naming of the preventive measures to be taken to avoid the risk of persons and objects falling.

- Designation of the safety precautions in the event of changing weather conditions that could adversely affect the safety of the system, as well as the personnel concerned.
- Details regarding permissible loads.
- Description of all other risks and dangers associated with assembly, modification or dismantling operations.



- In other countries, ensure that the relevant national guidelines and regulations in the respective current version are complied with!
- If no country-specific regulations are available, it is recommended to proceed according to German guidelines and regulations.

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

^{**} Instructions are given by the contractor themselves or a competent person selected by them.



Product description

PERI products have been designed to be used exclusively in industrial and commercial sectors by suitably trained personnel only.

The SKY-ANCHOR UNIVERSAL safety system is a mobile attachment point and is part of a category III personal protective equipment (PPE) system for preventing falls from a height. The SKY-ANCHOR UNIVERSAL safety system consists of the SKY-AN-CHOR FLEXBASE weight plate and the SKY Anchor as the attachment point. The SKY-ANCHOR FLEXBASE is approved for use on slab formwork systems or concrete surfaces with the appropriate load-bearing capacity. When using the SKY-ANCHOR UNI-VERSAL safety system as an attachment point for a fall arrest system, the user must use a full-body harness compliant with DIN EN 361:2002-09 and the HWPB retractable fall arrester from the manufacturer IKAR. The HWPB retractable fall arrester limits the impact force to 6 kN and is available in utilisation lengths of 3.5 m, 5.5 m, 7.0 m and 9.0 m.



PERI recommends using the IKAR HWPB 9; this variant is described in the further course of the instructions for use.

Features of the SKY-ANCHOR FLEXBASE

- Cross-shaped steel structure with fixed weights.
- Rubber feet with metal screw-on rail
- Weight approx. 640 kg.
- Stackable due to lugs on the top side and matching grooves on the bottom side.
- Up to 3 SKY-ANCHOR FLEXBASES can be stacked on top of each other.
- Transport lugs at the ends of the kicker braces for lifting the weight plate with a crane.
- Recesses for industrial truck forks.
- Tensioning eyelets on the centre section.
- Warning strips with anti-slip coating for improved visibility and to prevent tripping and slipping.
- RFID chip on the centre section.

Features of the SKY Anchor

 Anchor point according to DIN EN 795:2012-10, see the Translation of Original Instructions for Use for the SKY Anchor.

Technical data

- Slab formwork height ≥ 2 m when used as a restraining system.
- Slab formwork height ≥ 3.50 m when used as a fall arrest system.
- Dynamic force application ≤ 9 kN.
 Force application horizontal or diagonally downwards.
- Static force application ≤ 12 kN.
 Force application horizontal or diagonally downwards.
- Displacement of the SKY-ANCHOR UNIVERSAL safety system in load direction < 0.5 m when:
 - impact force limitation \leq 6 kN.
 - clean, dry substrate.
 - inclination angle $\leq 5^{\circ}$.
 - approved retractable fall arrester is used.
- Maximum number of users: 1 person.
- Temperature range: -20 °C to +45 °C.



Intended use

Mobile attachment point for preventing one person from falling when assembling slab formwork through

- Restraint (only when using devices with length adjustment).
 - → Optimum safety
- Arrest (only if there is sufficient clearance above the ground).

Foreseeable misuse

- Use as an attachment device for lifting equipment.
- Transporting more than one SKY-ANCHOR FLEXBASE on the lifting eve.
- Transporting the SKY-ANCHOR UNIVERSAL on the lifting lug of the SKY ANCHOR.
- Protecting more than one person at the same time.
- Use on unauthorised surfaces. See Section "Substrate requirements" on page 16.

Instructions for Use

The equipment may only be used in compliance with the specified conditions of use and for the intended purpose.

Use in a way not intended, deviating from the standard configuration or the intended use set forth in the Instructions for Use, represents a misapplication with a potential safety risk, e.g. risk of falling.

Changes to PERI components are not permitted.

Only PERI original components may be used. The use of other products and spare parts, represents a misapplication with a potential safety risk.

Operation with damaged or incomplete system components is not permitted.

The equipment must comply with the standard DIN EN 363:2019-06 Personal fall protection equipment and personal fall protection systems.

The system described in these Instructions for Use may contain patent-protected components.



These Instructions for Use are part of the SKY-ANCHOR UNIVERSAL safety system and must be supplied in the language of the country of destination. The respective translation must be authorised by PERI.

Accessories

- Height Safety Device 9m EN360.
- Fullbody Harness in accordance with DIN EN 361:2002-09.
- Carabiner hook in accordance with DIN EN 362:2008-09.



Cleaning and maintenance instructions

General information

In order to guarantee cost-effective, technical and safe use over a long period, it is important to take a value-preserving approach.

Never clean powder-coated components, e.g. elements and accessories, with a steel brush or hard metal scraper; this ensures that the powder coating remains intact.

Provide suitable support for the components during cleaning so that no unintentional change in their position is possible.

Do not clean components suspended on crane lifting gear.









Wear suitable protective equipment when cleaning components, such as:

- Safety helmet,
- Safety shoes,
- Safety gloves,
- Safety goggles.

Use PERI original parts as spare parts.

System-specific

- Keep moving parts on carabiners and other components in good working order by applying oil to the hinges. It is best to use fine mechanical oil for this.
 - Ensure that textile PPE components do not come into contact with oil!
- Maintenance of PPE components may only be carried out by a qualified person in accordance with DGUV provision 312-906.
- Allow damp PPE components to air dry; do not place them on artificial heat sources.
 - Rub metal components dry with a cloth.
- After contact with salt water, clean PPE components with distilled water and dry, if necessary blow down with unoiled compressed air.
- If disinfection is required, contact the manufacturer of the PPE component.

Approval

Conformity

Conformity with Regulation (EU) 2016/425 on PPE.

Certification and monitoring

EU type testing (module B) and production monitoring (module C2) by:
DEKRA Testing and Certification
GmbH CE 0158
Dinnendahlstr. 9
D-44809 Bochum, Germany

Quality management system certification according to ISO 9001:2015.

Production monitoring by notified body category III.

Additional technical documentation

- Approvals:
 - ZP/B108/22
- Translation of Original Instructions for Use:
 - SKY Anchor
- User information:
 - RFID LA Tag Mounting Kit
- Manufacturer documentation:
 - Full-body harness in accordance with DIN EN 361:2002-09

- Retractable fall arrester IKAR HWPB
- Relevant standards and regulations:
- DIN EN 360:2002-09: Retractable-type fall arresters
- DIN EN 361:2002-09:Full-body harnesses
- DIN EN 362:2004-09: Connecting elements
 DIN EN 363:2019-06: Personal fall protection equipment and personal fall protection systems
- DIN EN 795:2012-10: Attachment devices
- DGUV regulation 112-198 Use of personal protective equipment against falls from a height
- DGUV regulation 112-199 Rescue from heights and depths using personal fall protection equipment

Safety instructions



Cross-system



Safety instructions apply to all service life phases of the system.

When using the SKY-ANCHOR UNI-VERSAL safety system, the Instructions for Use and the identification marking must be observed! Adhere to the assembly sequence!

Deviations from the standard configuration are only permitted after a further risk assessment has been carried out by the contractor.

Appropriate measures for working and operational safety, as well as stability, are defined on the basis of this risk assessment.

Observe and comply with the safety instructions and permissible loads.

For the application and inspection of PERI products, observe the current laws and regulations in force in the respective countries.

The contractor must ensure that the Instructions for Use provided by PERI are available at all times for the users and that they are fully understood!

Do not stand under any suspended loads.

Notes for use

- Working areas must remain free of any tripping hazards.
- Always keep components and assembly units free of dirt, ice and snow. In wet weather conditions in particular, there is an increased risk of slipping.
- Ensure that the guardrails and edge covers are fully installed.

Check material and workstations before each use and assembly for:

- damage,
- stability and
- functional correctness.

Separate out damaged parts immediately, label them and do not use them again.

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

When on slab formwork, scaffolds and working platforms:

- do not jump,
- do not run,
- do not throw anything off them.









The contractor must ensure that the personal protective equipment required for the assembly, modification or dismantling of the system is available and used as intended.

For work at a higher level, use an approved ladder or platform system, or an assembly scaffold.

Components provided by the contractor must comply with the requirements stipulated in these Instructions for Use and all applicable laws and standards.

Unless otherwise indicated, the following applies in particular:

- Timber components: Strength class C24 for solid wood according to DIN EN 338:2016-07.
- Scaffolding tubes: Galvanised steel tubes with minimum dimension Ø 48.3 x 3.2 mm according to DIN EN 12811-1:2004-03 4.2.1.2.
- Scaffolding tube couplings: according to DIN EN 74-1:2005-12.

Safety instructions



System-specific



Safety instructions apply to all service life phases of the system.

The contractor may only entrust independent application of SKY-AN-CHOR UNIVERSAL safety system to persons who have been familiarised with the system!

People using the SKY-ANCHOR UNI-VERSAL safety system must keep an eye out for visible defects during use (e.g. deformations, cracks, breaks, incomplete identification marking)!

Do not load the SKY-ANCHOR UNI-VERSAL safety system beyond the permissible load-bearing capacity!

Do not use system components if the identification marking is missing or illegible!

System components provided by the contractor must comply with the requirements stipulated in these Instructions for Use and all applicable laws and standards.

Unless otherwise indicated, the following applies in particular:

 Full-body harness: In accordance with DIN EN 361:2002-09.

Notes for use

May only be used by trained and instructed personnel. The personnel must be familiar with and take into account the country-specific requirements.

The user of this product must have read and understood these instructions in full.

Rope protection is part of personal protective equipment to prevent falling from a height and should be assigned to a specific person.

Health impairments may affect the user's level of safety at work.

The user of this product must be in good health.

The user must not be under the influence of drugs, alcohol or medication.

Before use, establish rescue procedures for the event of a fall, taking into account all the emergencies that may occur during work.

Rescue must take place within 20 minutes to prevent suspension trauma. Ensure the supply of first aid! If users intend to use personal fall protection equipment in conjunction with the SKY-ANCHOR UNIVERSAL, users must contact the manufacturer regarding the suitability of the personal fall protection equipment prior to use.

A1 Component overview



SKY-ANCHOR UNIVERSAL

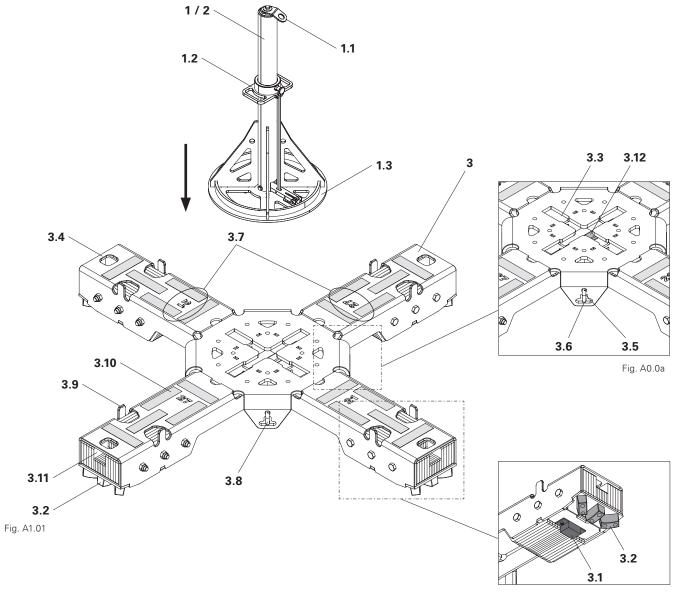


Fig. A0.0b

SKY Anchor

- 1 SKY-Anchor 21 mm
- **1.1** Anchor point
- 1.2 Locking mechanism
- 1.3 Base Plate
- 2 SKY-Anchor 27 mm

SKY-ANCHOR FLEXBASE

- 3 SKY-ANCHOR FLEXBASE
- 3.1 Rubber foot type 1
- 3.2 Rubber foot type 2
- 3.3 SKY Anchor support
- **3.4** Transport lug
- 3.5 Type plate
- **3.6** Tensioning eyelet
- 3.7 SKY Anchor identification marking
- 3.8 RFID chip
- 3.9 Stacking aid
- **3.10** Warning strips
- 3.11 Weight plates
- 3.12 Safety tube

A1 Component overview

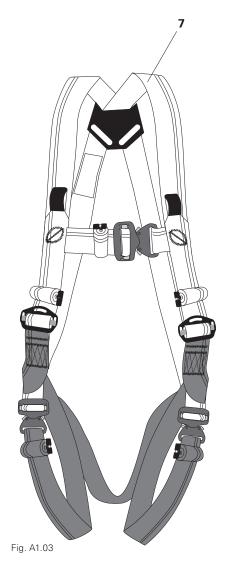
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Personal protective equipment to prevent falling from a height (PPE)

Personal protective equipment to prevent falling from a height (PPE) includes the following components:

- Retractable fall arrester (RFA)
- Full-body harness
- Carabiner hook



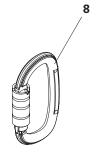


Fig. A1.04

Fig. A1.02

PPE

- 6 Height Safety Device 9m EN360
- **7** Full-body harness
- 8 Carabiner hook oval 62 x 111

A1 Component overview



RFID LA tag



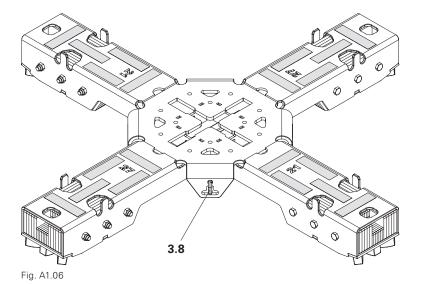
- The abbreviation RFID stands for "Radio Frequency IDentification".
- An RFID LA tag (**3.8**) is fitted to the SKY-ANCHOR FLEXBASE (**3**). (Fig. A1.05 + Fig. A1.06)
- These connect the hardware to a smart product with a range of digital services.



Fig. A1.05



For more information, see "RFID LA-TAG Assembly Set User Information".





To use the SKY-ANCHOR UNIVERSAL safety system safely, various requirements must be met and adhered to.

Spatial limits of the system

The slab or concrete surface to be formed is the area in which the SKY-ANCHOR UNIVERSAL safety system is to be used.



In areas away from the slab formwork, secure the construction site conventionally, e.g. with a facade scaffold, barriers on the top of the wall or similar

Fall prevention variants

Restraining system

The system consists of the SKY-AN-CHOR UNIVERSAL (4) as mobile attachment device, a fastener (5) and a full-body harness (7).

A fall is prevented because the length of the fastener is shorter than the distance from the attachment point to the fall edge.

(Fig. A2.01)

Fall arrest system with retractable fall arrester

The system consists of the SKY-AN-CHOR UNIVERSAL (4) as mobile attachment device, a retractable fall arrester (6) and a full-body harness (7). The retractable fall arrester has an automatic blocking function and an automatic tensioning and retracting device for the fastener. It has an energy-absorbing function which limits the force of a fall to 6 kN. (Fig. A2.02)



For further information see the "Translation of Original Instructions for Use for the SKY Anchor".

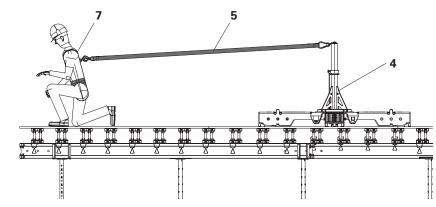


Fig. A2.01

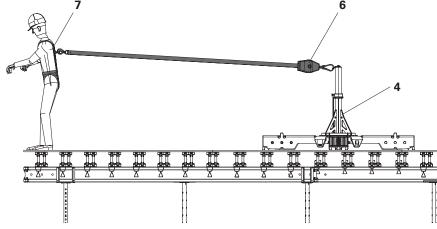


Fig. A2.02



Substrate requirements

The substrate comprises the standing area for the SKY-ANCHOR FLEXBASE and the area between the SKY-AN-CHOR FLEXBASE and a possible fall edge.



Danger

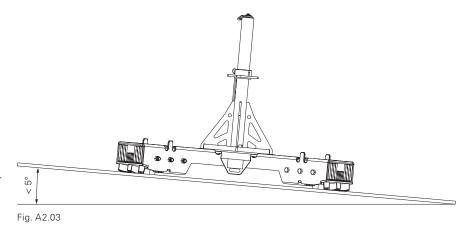
If the requirements are disregarded, it cannot be guaranteed that the SKY-AN-CHOR UNIVERSAL safety system will work correctly. This may cause people to fall!

Serious injury or death in the event of a

⇒ Adhere to the substrate requirements.

Requirements

- Use a substrate with sufficient load-bearing capacity.
- Angle of inclination: The standing surface must not be inclined by more than 5° to the horizontal. (Fig. A2.03)
- The substrate must not be soiled by sand, gravel, concrete residues or similar.
- The substrate must not be soiled with concrete release agents or other substances that reduce friction.
- Standing water must not accumulate on the substrate.
- Snow or frozen water must not accumulate on the substrate.
- Due to reduced or lack of friction, do not use the SKY-ANCHOR FLEXBASE in frosty conditions or if there is a risk of frost.
- All feet of the flexbase must rest evenly and securely on the substrate.
- The substrate must be level and free of obstacles.
- The SKY-ANCHOR FLEXBASE must not be used on semi-prefabricated concrete parts, for example.
- The SKY-ANCHOR FLEXBASE may be used on the following surfaces:
 - Formlining surfaces in general.
 - Concrete.





Standing surface requirements



Danger

If the requirements are disregarded, it cannot be guaranteed that the SKY-AN-CHOR UNIVERSAL safety system will work correctly. This may cause people to fall!

Serious injury or death in the event of a fall

- ⇒ Adhere to the edge distance requirements.
- ⇒ Adhere to the clearance requirements.
- ⇒ Adhere to the direction of force application requirements.

Required edge distance

The minimum distance from the SKY-ANCHOR UNIVERSAL to an edge is 150 cm in all directions. (Fig. A2.04)

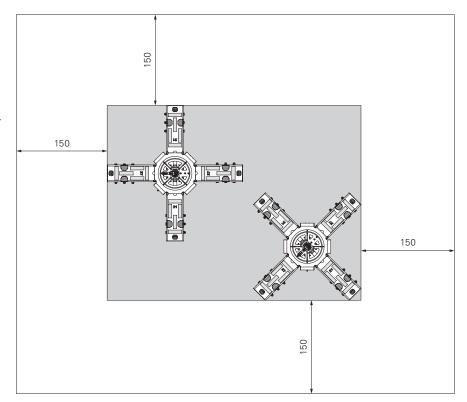


Fig. A2.04



Required clearance

When used as fall arrest system with retractable fall arrester IKAR HWPB, calculate the fall arrest distance in case of a fall.

(Tab. A2.01 + Fig. A2.05)



- At lower heights only use the restraint function so as to prevent injuries arising from contact with the ground.
 - Adjust the fastener accordingly.
- Displacement of the SKY-ANCHOR UNIVERSAL safety system in load direction < 0.5 m (deviating from standard value) in connection with an approved retractable fall arrester.
- Ensure sufficient ground clearance.
 Do not place or store any equipment or materials beneath the working area.

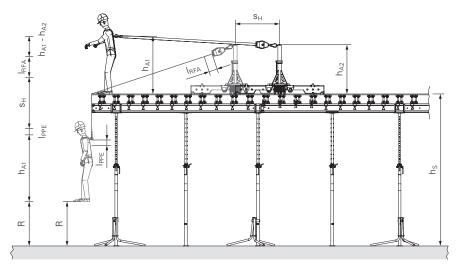


Fig. A2.05

h _{A1}	Height of full-body harness fall arrest eyelet	approx. 150 cm	person-dependent
h_{A2}	Height of SKY-ANCHOR UNIVERSAL attachment point	110 cm	geometrically defined
h_{A1} - h_{A2}		40 cm	
S_{H}	SKY-ANCHOR UNIVERSAL displacement	100 cm	according to standard EN 795
I _{RFA}	Response length (RFA)	approx. 60 cm	component-specific see RFA test book
I _{PPE}	Displacement of strap webbing	approx. 10 cm	component-specific see instruction manual for full-body harness
R	Safety reserve	100 cm	according to standard EN 795
h_{F}	Fall arrest distance		
	$h_F = s_H + h_{A1} + l_{RFA} + l_{PPE} + R + (h_{A1} - h_{A2})$	460 cm	
h _S	Formwork height		
	$h_S = h_F - h_{A2}$	350 cm	

Tab. A2.01



Direction of force application

Requirements

- In the event of a fall, the force applied to the SKY-ANCHOR UNIVERSAL must be applied horizontally or at an angle downwards so that the frictional forces between the SKY-ANCHOR UNIVERSAL and the substrate are not reduced. (Fig. A2.06)
 - It is not permissible to apply force in an upward direction. (Fig. A2.07)
- In the event of a fall, the force must always be applied along the shortest path between the fall edge and the attachment point! If the working position is offset to the side of the attachment point, there is the risk of a swinging fall. If there is the risk of a swinging fall, the amount of clearance required beneath the standing area increases!

Position the SKY-

ANCHOR UNIVERSAL in such a way that swinging falls are prevented. Reposition the SKY-ANCHOR UNIVERSAL several times if necessary.

Fig. A2.08 shows the working areas that could result in a swinging fall.



For further information see the "Translation of Original Instructions for Use for the SKY Anchor".

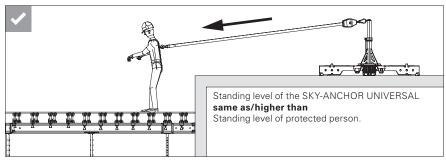


Fig. A2.06

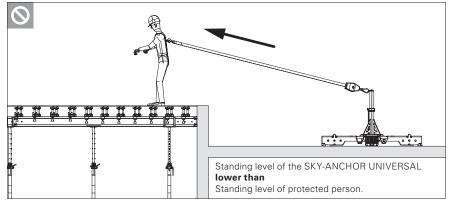


Fig. A2.07

Swinging fall

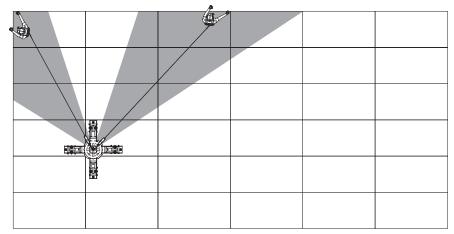


Fig. A2.08



Identification marking

The SKY-ANCHOR FLEXBASE has a type plate containing the following information:

- Manufacturer name with logo
- Product name
- Article number
- Serial number
- Year of manufacture
- CE mark and number of the testing body
- Reference to EN 795-E:2012
- Use in combination with
 - SKY-Anchor 21 mm article 131032
 - SKY-Anchor 27 mm article 133904
- Product weight
- Max. number of users
- Associated retractable fall arrester
- Reference to Instructions for Use
- Manufacturer's address (Fig. A2.09)



Note

- Do not use the SKY-ANCHOR FLEXBASE if the type plate is missing or illegible.
- Do not use the SKY-ANCHOR FLEXBASE after the date of the next required test has passed. See "Test card" on page 40.
- Inspect the SKY-ANCHOR FLEXBASE for damage before each use. See "Testing and inspections" on page 21.
 - Eliminate any defects that are identified. If this is not possible, do not use the SKY-ANCHOR FLEXBASE.



For information on the identification marking of the SKY Anchor, see the "Translation of Original Instructions for Use for the SKY Anchor".



Fig. A2.09



Testing and inspections

1. General information

The procedure described in this section is based on the current German regulations for testing and inspections. The points listed form the minimum requirements for the inspection.

The respective regulations of the individual states and countries where this product is used must be taken into account.

2. Purpose

Regular inspection ensures that operational and functional safety is guaranteed.

3. Responsible party

The contractor must ensure that the SKY-ANCHOR UNIVERSAL safety system is only used if it has been inspected by a qualified person.

4. Inspection

4.1 Safety check

Verification is required in order to determine whether all defects have been rectified or non-functioning products have been replaced. The inspection comprises a visual and functional inspection.

4.2 Visual inspection

- SKY-ANCHOR FLEXBASE
 - Completeness of all parts.
 - Deformation and wear of all metal parts.
 - Cracks on weld seams.
 - Damage due to corrosion.
 - All rubber feet are in place.
 - No soiling, especially on the underside.
 - Rubber feet have sufficient elasticity.
 - Type plate is in place and legible.
 - Previous official inspection took place within last 12 months.
- SKY Anchor
 - The SKY Anchor is complete.
 - The SKY Anchor is not deformed in any way.
 - The SKY Anchor has no cracks.
 - The SKY Anchor is free of corrosion.

Carry out a visual inspection of the SKY Anchor in accordance with the "Translation of Original Instructions for Use for the SKY Anchor".

Fastener

Carry out a visual inspection of the fastener in accordance with the manufacturer's Instructions for Use.

Full-body harness
 Carry out a visual inspection of the full-body harness in accordance with the manufacturer's Instructions for Use.

4.3 Functional test

SKY Anchor

Carry out a functional test of the SKY Anchor in accordance with the "Translation of Original Instructions for Use for the SKY Anchor".

Fastener

Carry out a functional test of the fastener in accordance with the manufacturer's Instructions for Use.

■ Full-body harness

Carry out a functional test of the fullbody harness in accordance with the manufacturer's Instructions for Use.

Implementation of anything beyond the usual scope of inspection is subject to the discretion of the authorised person and can extend to additional checks.

4.4 Measures

- If any defects are determined during the safety inspection, they must be eliminated according to the instructions provided by the qualified person. A new inspection must then be performed.
- If defects are found on a PPE component during the inspection or if there are doubts about safe use, this PPE component must not be used.
- A PPE component that is defective may only be inspected and repaired by the manufacturer of the PPE component or a workshop authorised in writing by the manufacturer.



4.5 Inspection before starting work

For inspection criteria before starting work, see:

- 4.2 Visual inspection
- 4.3 Functional test

4.6 Visual inspection after a fall event

For inspection criteria after a fall event, see:

- 4.2 Visual inspection
- 4.3 Functional test

4.7 Annual inspection

- The SKY-ANCHOR UNIVERSAL safety system must be inspected once a year by an expert in accordance with DGUV provision 312-906. The outcome must be documented on the test card.
- For inspection criteria for the annual inspection, see "Test card" on page 40.
- PERI recommends that the attachment device is marked with the date of the next inspection. (Fig. A2.10)



If no country-specific regulations are available, PERI recommends that you proceed according to German guidelines and regulations.

The contractor is responsible for determining the type, scope and intervals for the required inspections relating to the provision of the SKY-AN-CHOR UNIVERSAL safety system. During these inspections, safety-related deficiencies must be systematically identified and remedied.



Fig. A2.10



B1 Preparation



Preparing the substrate



Danger

This may cause people to fall!

Serious injury or death in the event of a fall

- ⇒ Remove soiling as this can impair the function of the SKY-ANCHOR UNIVERSAL.
- ⇒ Maintain a safe working position at a sufficient distance from fall edges.
- ⇒ Attach PPE to another approved attachment point and secure it.

Preparation

- 1. Check surface for loose stones, sand, gravel, concrete residues or similar and remove this.
- 2. Check surface for standing water accumulation and rectify this.
- Check surface for concrete release agent, oil, grease, algae growth or similar and remove this with a suitable cleaning agent.
 - Remove cleaning agent residues before setting up the SKY-ANCHOR UNIVERSAL.

(Fig. B1.01)



- Isopropanol, for example, is a suitable cleaning agent.
- For further information see "Substrate requirements" on page 16.

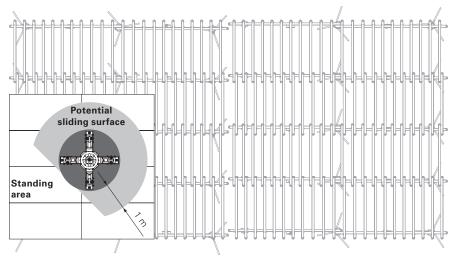


Fig. B1.01

Converting the safety tube



General information



Danger

If the safety tube (3.12) is in the wrong position, this can result in the SKY-ANCHOR 21 (1) or SKY-ANCHOR 27 (2) being mounted in the wrong position!

The SKY Anchor (1 / 2) can slip out of the SKY-ANCHOR FLEXBASE (3), resulting in a fall and death.

- ⇒ Fit the safety tube (3.12) in the correct position.
- ⇒ Check the position of the safety tube (3.12) before mounting the SKY Anchor (1 / 2).



- The SKY-ANCHOR FLEXBASE (3) is supplied with the assembly position for SKY-ANCHOR 21 (1) as standard.
- Depending on the assembly position and the SKY Anchor (1 / 2) to be mounted, the safety tube may need to be converted, see Section "Conversion" on page 26.



Check the assembly position of the safety tube (3.12).

Assembly position for **SKY-ANCHOR 21:**

■ Fig. B2.01 and Fig. B2.01a

Assembly position for **SKY-ANCHOR 27:**

■ Fig. B2.02 and Fig. B2.02a

Assembly position of the safety tube for SKY-ANCHOR 21

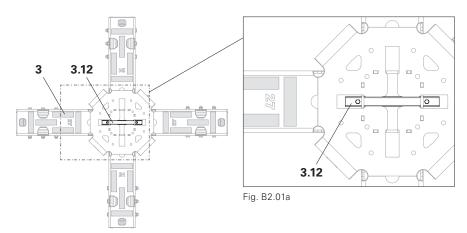


Fig. B2.01

Assembly position of the safety tube for SKY-ANCHOR 27

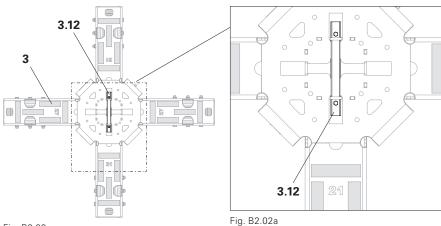


Fig. B2.02

B2 Converting the safety tube



Conversion



When assembling, secure the SKY-ANCHOR FLEXBASE (3) to prevent it from falling over.

Components

3.12 Safety tube	1x
3.13 Bolt ISO 4017 M10 x 40-8.8	2x
3.14 Nut ISO 7040 M10-8	2x

Modifying

 Remove the bolt ISO 4017 M10 x 40-8.8 (3.13) and the nut ISO 7040 M10-8 (3.14) on one side of the safety tube (3.12).

(Fig. B2.03 + Fig. B2.03a)

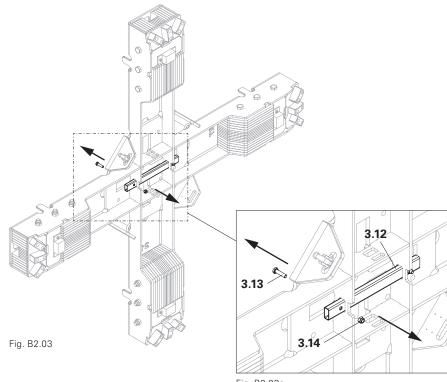
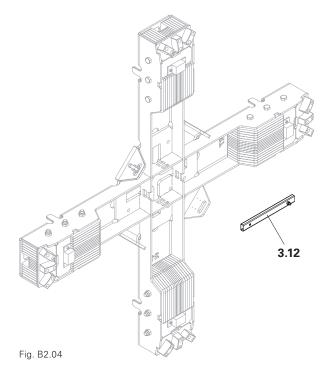


Fig. B2.03a

2. Pull out the safety tube (**3.12**). (Fig. B2.04)



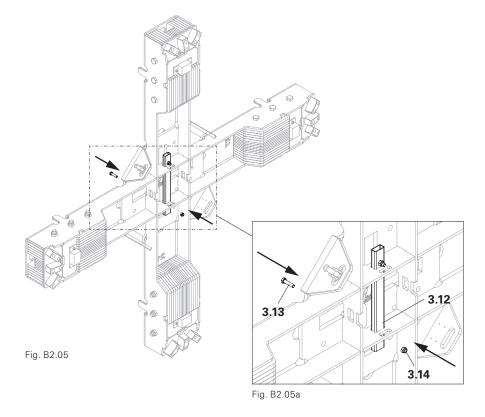
B2 Converting the safety tube



- 3. Turn the safety tube (**3.12**) by 90° and push it into the support.
- 4. Secure the safety tube (**3.12**) with bolt ISO 4017 M10 x 40-8.8 (**3.13**) and nut ISO 7040 M10-8 (**3.14**). (Fig. B2.05 + Fig. B2.05a)



Check the assembly position of the safety tube (3.12).



B3 Fitting the attachment point



Fitting the SKY Anchor



Consider the installation position.

- For SKY-Anchor 21 mm (1), use the SKY-Anchor 21 mm support. (Fig. B3.01)
- For SKY-Anchor 27 mm (2), use the SKY-Anchor 27 mm support. (Fig. B3.02)



1 SKY-Anchor 21 mm

or

- 2 SKY-Anchor 27 mm
- 3 SKY-ANCHOR FLEXBASE



- 1. Insert the fixed clamping claw (1.5) into the SKY Anchor support (3.3).
- Push the SKY Anchor (1) forward in the groove until the fixed clamping claw (1.5) engages in the claw receptacle (3.15).
- 2. Place the base plate of the SKY Anchor (1.3) flat on the SKY-ANCHOR FLEXBASE (3).

(Fig. B3.03 - Fig. B3.05)

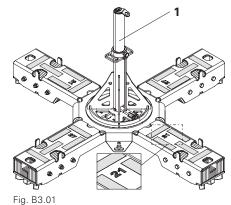
5. Press the hand lever (1.6) down and swing the movable clamping claw (1.4) into the claw receptacle (3.15) until the locking pin (1.7) engages. If the locking pin does not engage independently, manually press the locking mechanism downwards until the locking pin engages.

(Fig. B3.05 + Fig. B3.06)



Check by hand whether the SKY Anchor is anchored in a form-fit manner.

- Both clamping claws enclose the two claw receptacles.
- The locking mechanism is in the bottom position.
- The locking pin is engaged.



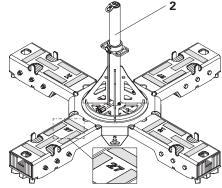
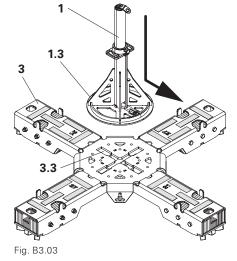


Fig. B3.02



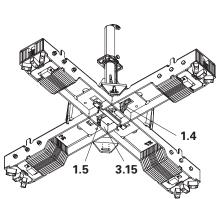
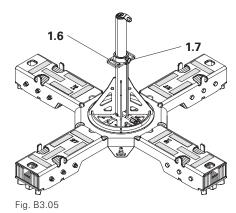


Fig. B3.04



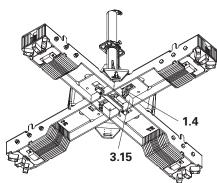


Fig. B3.06



General information

These Instructions for Use describe the installation of the SKY-ANCHOR UNIVERSAL safety system.

The assembly of the slab formwork is not part of these Instructions for Use.



Danger

If the requirements are disregarded, it cannot be guaranteed that the SKY-ANCHOR UNIVERSAL safety system will work correctly. This may cause people to fall!

Serious injury or death in the event of a

⇒ Observe the requirements and instructions for use.

Requirements and information

- Use a full-body harness that is compliant with EN 361 and follow the instructions for use for the full-body harness.
- Only use IKAR HWPB (max. length 9 m) as a retractable fall arrester.
 Combining the SKY-ANCHOR UNIVERSAL safety system with other retractable fall arresters is not permitted.
- If the SKY-ANCHOR UNIVERSAL safety system is combined with fall-absorbing fasteners that comply with DIN EN 355 and these have not been tested together, there is a risk of mutual impairment with regard to function and safety in use.

- When combining this product with components from other manufacturers, there is a risk of mutual impairment with regard to function and safety.
 - Only use components with a CE marking. Compatibility must be assessed as part of a risk assessment. PERI can assist you with queries regarding compatibility or when carrying out the risk assessment.
- Do not use defective PPE components, even if they only have minor defects.
- Immediately reject damaged or fall-affected PPE components, label them and do not use them again. Inspections may only be carried out by an expert in accordance with DGUV principle 312-906, by PERI or by a workshop authorised in writing by PERI.

Document the inspection on the test card.



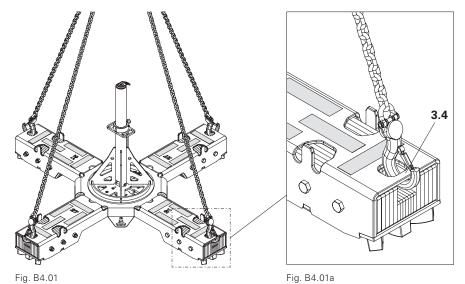
Permissible attachment points

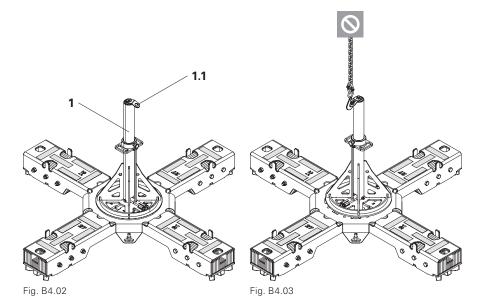
Attachment point for transport

For lifting operations, only ever use the transport lug (3.4).
Do not use the transport lug (3.4) to safeguard people!
(Fig. B4.01)

Attachment point for fall prevention

- For fall prevention, only ever use the anchor point (1.1) on the SKY Anchor (1). (Fig. B4.02) Do not use the anchor point (1.1) for lifting operations! (Fig. B4.03)
- Do not attach the user to the SYSTEM while moving the SKY-ANCHOR UNIVERSAL!
- Do not use stacked SKY-ANCHOR FLEXBASES as an attachment point for fall prevention! Only stack SKY-ANCHOR FLEXBASES for storage and transport purposes.







Using the SKY-ANCHOR UNIVERSAL



- Only ever use a substrate with sufficient load-bearing capacity.
- Ensure that the stability of the slab formwork is guaranteed.
- Carry out a visual inspection and functional test before each use.

Positioning the SKY-ANCHOR UNI-VERSAL

- 1. Hook the four-sling lifting gear onto the transport lugs (**3.4**) of the SKY-ANCHOR UNIVERSAL. (Fig. B4.04)
- 2. Set the SKY-ANCHOR UNIVERSAL down in a suitable position on the slab formwork.

Using the SKY-ANCHOR UNIVERSAL



- Do not store any objects between the attachment point and the user or the fall edge.
- No persons other than the user may be between the attachment point and the fall edge.
- Fasteners must always be routed directly to the attachment point, attached there and be under constant tension.
- 1. Attach the PPE to the anchor point of the SKY Anchor and assemble the slab formwork according to the manufacturer information.

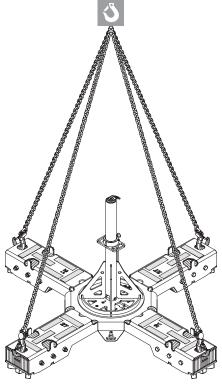


Fig. B4.04



Moving the SKY-ANCHOR UNIVERSAL



Danger

The attachment point moves when the SKY-ANCHOR UNIVERSAL is moved. This may cause people to fall! Serious injury or death in the event of a fall.

⇒ Do not use the SKY-ANCHOR UNIVERSAL as an attachment point when moving.



Warning

The SKY-ANCHOR UNIVERSAL may roll away uncontrollably when it is moved with a lift truck due to inclination of the slab formwork!

A fall can result in serious injuries or even death.

- ⇒ When moving the SKY-ANCHOR UNIVERSAL, no one should be lingering beneath the slab formwork.
- ⇒ If necessary, bring in a second person to help with the moving procedure
- ⇒ Move the SKY-ANCHOR UNIVERSAL by crane.



Observe the Instructions for Use for the lift truck!

Moving

- Check the substrate for soiling before moving and remove this if necessary.
- 2. Unhook the PPE from the anchor point of the SKY Anchor.
- Drive the lift truck in underneath the SKY-ANCHOR UNIVERSAL and raise it.

(Fig. B4.05)

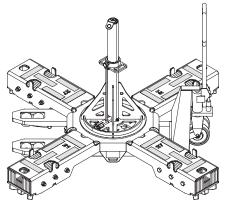


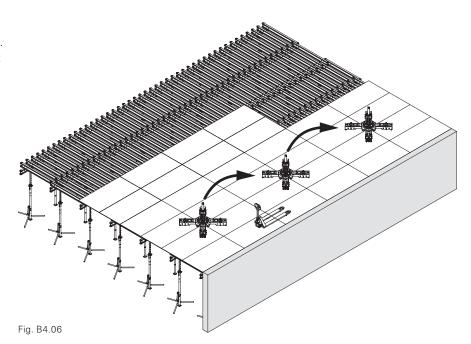
Fig. B4.05

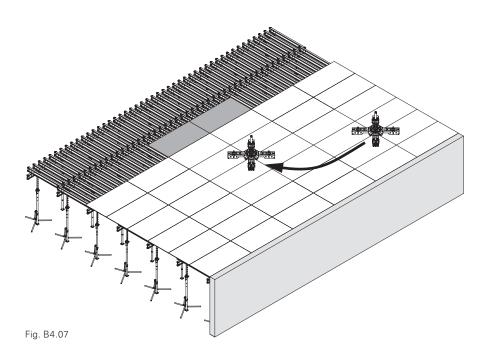


- 4. Move the SKY-ANCHOR UNIVER-SAL to the new position and lower it. Maintain a safety distance of at least 1.5 m to the fall edges.
- 5. Park the lift truck and secure it to prevent it from rolling away.
 - Do not leave the lift truck beneath the SKY-ANCHOR UNIVERSAL!
 - Do not park the lift truck in the working area between the SKY-ANCHOR UNIVERSAL and the fall edge!
- As work progresses, move the SKY-ANCHOR UNIVERSAL accordingly to prevent swinging falls.
 (Fig. B4.06 – Fig. B4.09)



Follow the Instructions for Use for the lift truck!

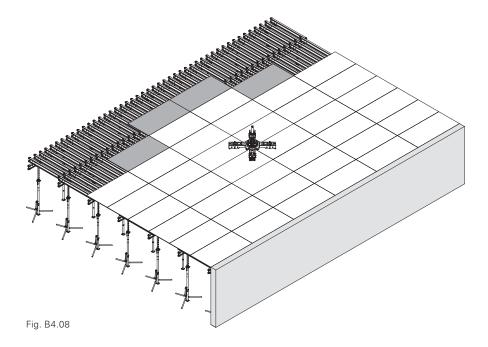


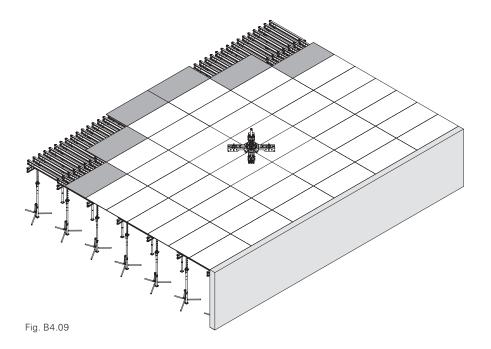






If possible, assemble the slab formwork in a semi-circular manner to reduce the risk of a swinging fall. (Fig. B4.06 – Fig. B4.09)







C1 Disassembly





Danger

This may cause people to fall! Serious injury or death in the event of a fall

- ⇒ Maintain a safe working position at a sufficient distance from fall edges.
- ⇒ Attach PPE to another approved attachment point and secure it.

Flying out the SKY-ANCHOR UNIVERSAL

- Hook the four-sling lifting gear onto the transport lugs (3.4) of the SKY-ANCHOR FLEXBASE (3).
- 2. Fly out the SKY-ANCHOR UNIVERSAL with a crane and set it down at the assembly site. (Fig. C1.01)

Removing the SKY Anchor

- 1. Pull out the locking pin of the locking mechanism (1.2) and, at the same time, pull the locking mechanism upwards.
- 2. Lift the SKY Anchor (1) and release the movable clamping claw from the SKY-ANCHOR FLEXBASE (3).
- 3. Push the SKY Anchor (1) back and lift it out of the SKY-ANCHOR FLEXBASE (3).

(Fig. C1.02)

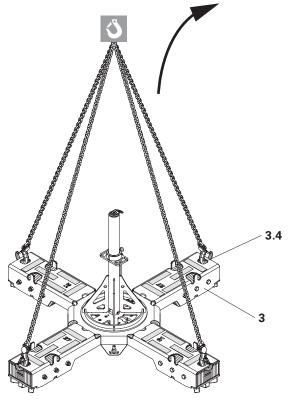


Fig. C1.01

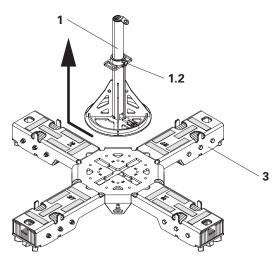


Fig. C1.02

C2 Storage and transportation



General information

Store and transport components in such a way that no unintentional change in their position is possible. Detach load-lifting accessories and lifting gear from the lowered components only if they are in a stable position and no unintentional change is possible.

Do not drop the components.

Use PERI load-lifting accessories and lifting gear and only those load-bearing points provided on the component.

During the relocation procedure

- Ensure that components are picked up and set down in such a way that unintentional falling over, falling apart, sliding, falling down or rolling is avoided.
- No one is allowed to remain under the suspended load.

Pre-assembled assemblies should always be guided with ropes when moving them by crane.

Store PERI products and components

- in such a way that damage is impossible.
- dry, cleaned and with corrosion prevention at temperatures from 20 °C to + 60 °C.
- protected from the effects of the weather, sunlight, oils of any kind and aggressive substances.

The access areas on the construction site must be free of obstacles and tripping hazards and must also be slip-resistant.

For transportation, the substrate must have sufficient load-bearing capacity.

Use original PERI storage and transport systems, e.g. crate pallets, pallets, hardware boxes or stacking devices.

Textile components

- Protect PPE components from heat and chemical and mechanical influences during storage, use and transport.
- Dry out damp PPE prior to storage.
- Store PPE in a dry place where it is protected from light.
 Do not store PPE near heaters. Avoid temperatures below 0 °C or above 50 °C.
- Do not write on textile or plastic components with markers.



- Follow the instructions of the manufacturer of the PPE component.
- For additional information, see "Cleaning and maintenance instructions" on page 9.

C2 Storage and transportation



System-specific information

1. For storage and transport, stack up to three SKY-ANCHOR FLEXBASES on top of each other.

(Fig. C2.01)

2. Secure the stacked SKY-ANCHOR FLEXBASES (3) with a steel strap

(Fig. C2.02)



When stacking the SKY-ANCHOR FLEXBASE (3), make sure that the stacking aid (3.9) engages fully in the recess of the SKY-ANCHOR FLEXBASE (3b) above it. (Fig. C2.01a)

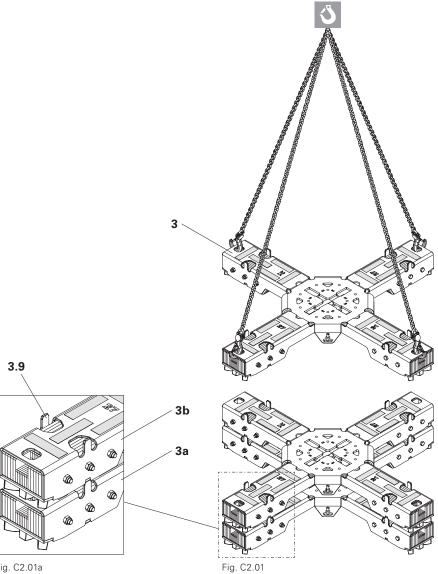
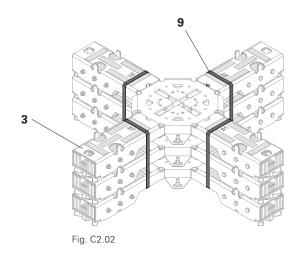


Fig. C2.01a



SKY-ANCHOR UNIVERSAL - Safety System

C3 Service life and disposal



Service life

The rubber feet on the underside may be subject to wear depending on use and the standing surface. It may be necessary to replace the rubber feet before any further use.

The specialist shall make the decision on this.

Metal parts are not subject to an age-related service life. The specialist shall make the decision on the discard criteria.

Intensive use and/or extreme conditions of use such as sharp edges, chemical influences, UV radiation, etc. will lead to a reduced service life. The contractor must take this into account in the workplace risk analysis.

Disposal

The disposal of components and materials must be arranged by a person authorised to do so.



- Separate materials correctly and according to type.
- Dispose of materials according to local regulations and guidelines.

D1 Test card



Test card For annual monitoring					
The checklist must be filled in completely by the specialist during the annual inspection.		SKY-ANCHOR FLEXBASE Article number 136615			
		Date of manufacture:			
This checklist is not intended to be exhaustive in terms of the inspection cri-		Serial number:			
teria and	d does not relieve the special- making a decision on the	Date of purchase:			
	condition.	Date of 1st use:			
		Ready to be discard	led at the latest:		
		Manufacturer's address:		PERI SE Rudolf-Diesel-Strasse 19 89264 Weissenhorn Germany	
Year	Reason for inspection	Date	Signature	Next inspection	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

D1 Test card



Check list For annual monitoring										
Year	1	2	3	4	5	6	7	8	9	10
No deformations										
No mechanical damage										
No damage due to corrosion										
No chemical contamination										
Rubber feet, type 1 - present - no soiling - with sufficient elasticity - abrasion/wear within tolerance range										
Rubber feet, type 2 – present – no soiling – with sufficient elasticity – abrasion/wear within tolerance range										
SKY Anchor supports - no foreign bodies - SKY Anchor engagement mechanism engages in form-fit manner										
Weight plates - present - complete - secured with all screw connections										
RFID chip - present - functioning										
Warning strips - present - complete										
Identification marking – present – legible										
Instructions for Use available incl. test card										
Result of the inspection										
OK										
Prohibited										





Name und Anschrift des Herstellers:

PERI SE Rudolf-Diesel-Straße 19 89264 Weißenhorn

EU-Konformitätserklärung

Im Sinn der PSA-Verordnung (EU) 2016/425.

Hiermit erklären wir, dass die nachfolgend bezeichnete, persönliche Schutzausrüstung

Mobiler Anschlagpunkt:

SKYANKER UNIVERSAL

Art-Nr.:

136615 | SKYANKER FLEXAUFNAHME

in Kombination mit

131032 | SKY-ANKER 21 oder 133904 | SKY-ANKER 27

- den einschlägigen Harmonisierungsrechtsvorschriften gemäß Anhang V (Modul B) der Verordnung (EU) 2016/425 über persönliche Schutzausrüstungen nach Artikel 19 (PSA der Kategorie III) entspricht,
- baumustergeprüft ist nach DIN EN 795-E:2012 durch die notifizierte Stelle

DEKRA Testing and Certification GmbH Dinnendahlstraße 9 44809 Bochum Deutschland CE 0158

 und der Bewertung der Konformität mit dem Baumuster auf der Grundlage einer internen Fertigungskontrolle mit überwachten Produktprüfungen gemäß Modul C2 der Verordnung (EU) 2016/425 für persönliche Schutzausrüstungen (PSA der Kategorie III) unterliegt; überwacht durch die notifizierte Stelle

DEKRA Testing and Certification GmbH Dinnendahlstraße 9 44809 Bochum Deutschland CE 0158

Angewandte harmonisierte Normen, insbesondere:

DIN EN ISO 12100:2010
Sicherheit von Maschinen; Allgemeine Gestaltungsleitsätze Risikobeurteilung und Risikominderung

DIN EN 795-E:2012
DIN EN 363:2019
DIN EN 360:2002
Persönliche Absturzschutzausrüstung - Persönliche Absturzschutzsysteme
DIN EN 360:2002
Persönliche Schutzausrüstung gegen Absturz - Höhensicherungsgeräte

DIN EN 361:2002 Persönliche Schutzausrüstung gegen Absturz - Auffanggurte

DIN EN 362:2004 Persönliche Schutzausrüstung gegen Absturz - Verbindungselemente

Bevollmächtigter für die Zusammenstellung der technischen Unterlagen:

PERI SE, GROUP QUALITY Anschrift siehe Hersteller

Weißenhorn, den 31.05.2022

i.V. Dipl.-Ing. (FH) Dieter Deifel, Head of R&D Civil Engineering





Name and address of manufacturer:

PERI SE Rudolf-Diesel-Straße 19 89264 Weißenhorn

EU Declaration of Conformity

according with the PPE Regulation (EU) 2016/425.

We hereby declare that the following personal protective equipment

Mobile anchor point:

SKYANCHOR UNIVERSAL

Art-Nr.:

136615 | SKY-ANCHOR FLEXBASE

in combination with

131032 | SKY-ANCHOR 21 or 133904 | SKY-ANCHOR 27

- is in conformity with the relevant harmonisation legislation according to Annex V (Module B) of the Regulation (EU) 2016/425 on personal protective equipment according to Article 19 (category III PPE),
- is type-examination tested to EN 795-E:2012 by the notified body

DEKRA Testing and Certification GmbH Dinnendahlstraße 9 44809 Bochum Deutschland CE 0158

 and is subject to the assessment of conformity to type, based on internal production control plus supervised product checks according to Module C2 of the Regulation (EU) 2016/425 for personal protective equipment (category III PPE), monitored by the notified body

DEKRA Testing and Certification GmbH Dinnendahlstraße 9 44809 Bochum Deutschland CE 0158

Applied harmonised standards, in particular:

ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction
EN 795-E:2012	Personal fall protection equipment - Anchor devices (Type E)
EN 363:2019	Personal fall protection equipment - Personal fall protection systems
EN 360:2002	Personal protective equipment against falls from a height - Retractable type fall arresters
EN 361:2002	Personal protective equipment against falls from a height - Full body harnesses
EN 362:2004	Personal protective equipment against falls from a height - Connectors

Person established in the Community authorized to compile the relevant technical documentation:

PERI SE, GROUP QUALITY Address, see manufacturer

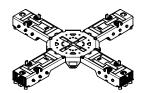
Weißenhorn 2022-05-31

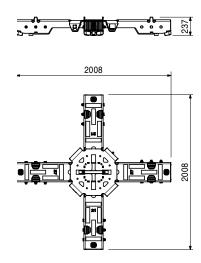
i.V. Dipl.-Ing. (FH) Dieter Deifel, Head of R&D Civil Engineering



Notes

Mobile anchor device according to DIN EN 795 E in combination with accessories below. Follow Instructions for Use!





Accessory (not included)

SKY-ANCHOR 21	17.000	131032
SKY-ANCHOR 27	17.000	133904

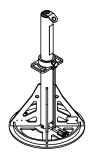
Consists of

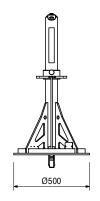
1 pc 129441 RFID LA-TAG D22 Assembly Set 12 pc 136612 BUFFER RP-HR-040X045X080 4 pc 136613 RUBBER-METAL-STOPPER, H=35 24 pc 136614 ZYL-SCHR ISO4762-M06X016-8.8VZ 8 pc 710416 ZYL-BOLT ISO4762-M08X016-8.8GA

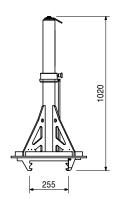
Art no.	Weight [kg]	
131032	17.000	SKY-ANCHOR 21

Notes

Attaching device according to DIN EN 795 B. Follow Instructions for Use!







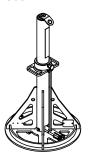
SKYANKER UNIVERSAL

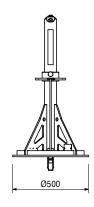


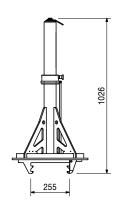
	Weight [kg]	Art no.
SKY-ANCHOR 27	17.000	133904

Notes

Attachment equipment according to DIN EN 795 B. Follow Instructions for Use!

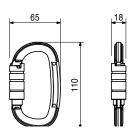






	Weight [kg]	Art no.
CARABINER OVAL 62X111	0.193	131680





Art no.	Weight [kg]		B [mm]	L [mm]
138072	2.300	HEIGHT SAFETY DEVICE 9M EN360	168	480

Notes

Extension length 9.0 m. Follow Instructions for Use!







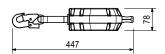


Art no.	Weight [kg]	
131033	1.500	RETRACT. FALL ARRESTER EN360

Notes

Extension length 5.5 m. Follow Instructions Manual!







Art no.	Weight [kg]	
131034	0.950	FULLBODY HARNESS

Notes

Universal size! According to DIN EN 361! Follow Instruction Manuel!

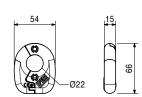


Accessory (not included)

131033	1.500	RETRACT. FALL ARRESTER EN360
131680	0.193	CARABINER OVAL 62X111
138072	2.300	HEIGHT SAFETY DEVICE 9M EN360

Art no.	Weight [kg]	
129441	0.039	RFID LA-TAG D22 ASSEMBLY SET





SKYANKER UNIVERSAL



Art no.	Weight [kg]		
061510	105.000	PALLET LIFTING TRUCK 1800MM	

For moving pallets and crate pallets.

Notes

Follow Instructions for Use!

Forklift arm length 1800 mm, forklift arm width 550 mm, stroke range 115 mm.

Permissible load-bearing capacity 2.0 t.



Art no.	Weight [kg]	
117321	31.000	LIFTING GEAR COMBI MAXIMO

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

Notes

Follow Instructions for Use!



The optimal System for every Project and every Requirement



Wall Formwork



Column Formwork



Slab Formwork



Climbing Systems



Bridge Formwork



Tunnel Formwork



Shoring Systems



Construction Scaffold



Facade Scaffold



Industrial Scaffold



Access



Protection Scaffold



Safety Systems



System-Independent Accessories



Services



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