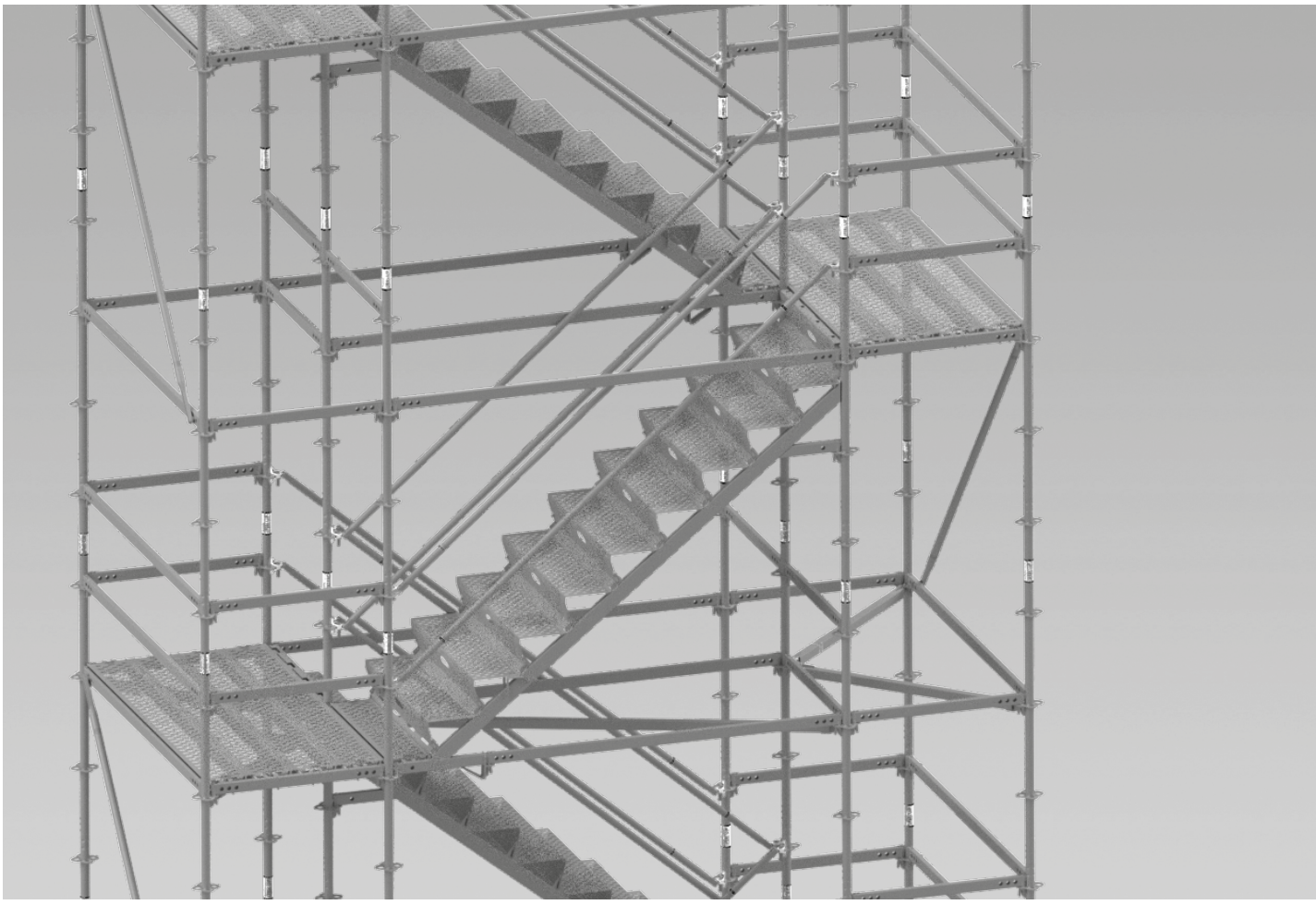
PERI UP Flex

Stair 100 and 125 with Deck UDG

Instructions for Assembly and Use – Standard Configuration – Version 2.2



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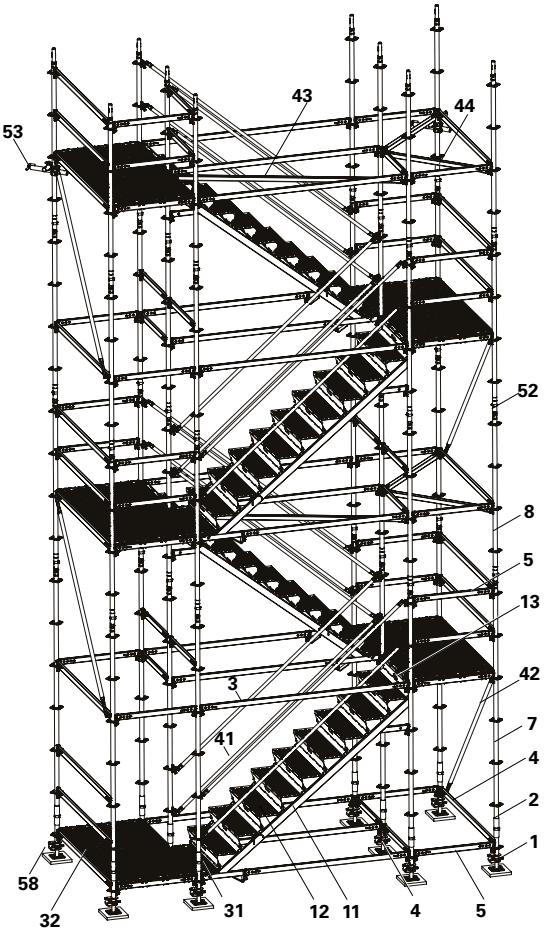
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Overview

Components

Pos. no.	Designation	Article no.
1	Adj.Base Plate UJB Ø38mm 50/30	100411
2	Base Standard UVB 25	133499
3	Horizontal Ledger UH-2 250	132025
4	Horizontal Ledger UH-2 200	132016
5	Horizontal Ledger UH-2 100E	137911
6	Horizontal Ledger UH-2 125 [2)]	132007
7	Standard UVR-2 300	132239
8	Standard UVR-2 200	132234
9	Top Standard UVH-2 100 [1)]	132194
11	Stair Stringer UA 250/200	109219
12	Stair Step UAR 100	109198
13	End Step UAE 100	109208
14	Stair Stringer UA 125/100 [1)]	114731
15	Stair Step UAR 125 [2)]	114179
16	End Step UAE 125 [2)]	114180
31	Steel Deck UDG-2 25x100	132492
32	Steel Deck UDG-2 25x200	132508
33	Steel Deck UDG-2 25x125 [2)]	132502
34	Steel Deck UDG-2 25x250	132511
40	Node Brace UBK-2 125/100 [1)]	133424
41	Node Brace UBK-2 250/200	133454
42	Ledger Brace UBL-2 200/200	132795
43	H-Brace UBH Flex 250/100	114819
44	H-Brace UBH Flex 100/100	114818
46	H-Brace UBH Flex 250/125 [2)]	114996
47	H-Brace UBH Flex 125/125 [2)]	114904
48	Ledger Brace UBL-2 100/100 [1)]	132773
49	Ledger Brace UBL-2 200/100 [1)]	132791
50	Ledger Brace UBL-2 250/200 [2)]	132816
51	Ledger to Ledger Coupler UHA-2	136582
52	Locking Pin Ø48/57	111053
53	Wall Tie UWT 45	100088
54	Wall Tie UWT 140	100093
55	Standard Coupl. RA Ø48/48mm ga	017020
56	Swivel Coupler SW Ø48/48mm ga	017010
57	Scaff. Tube 48.3x3.2mm lfm ga	026415
58	Handle Locking UJS	100863
61	Spacer UA 76	124266
	1) for half the storey height	
	2) for Stair Tower 125 only	



Program overview
Article numbers beginning with the numbers 3 and 4 are only available as rental or used items.

Overview

Key

Pictogram | Definition


Danger/Warning/Caution


Note


To be complied with


Visual inspection


Tip


Incorrect use


Correct use


Load-bearing point


Safety helmet


Safety shoes


Safety gloves


Safety goggles


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


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
Components are not always named in full so that they are easier to read. All components deemed valid according to the program overview may be used.
Exceptions are specified.

Example:
– Horizontal ledger
corresponds to:
– Horizontal Ledger UH Plus
– Horizontal Ledger UH-2
– Horizontal Ledger UH-2 100E.

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/ scaffolding 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.



- **Ensure that the respective current version of relevant national guidelines and regulations are complied with!**
- **If no country-specific regulations are available, PERI recommends that you 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

The PERI UP Flex Stair 100 and 125 with Deck UDG-2 are based on the PERI UP Flex modular scaffolding. The PERI UP Flex Stair 100 and 125 are used to reach elevated access points, e.g. to buildings or scaffolding. In addition, the PERI UP Flex Stair 100 and 125 also allow larger load classes in the basic scaffold as entry platforms are no longer required in the basic scaffold. Access takes place by means of the PERI UP Flex Stair 100 and 125.

Clear step width between the guardrails
- Stair Steps UAR 100: 84 cm
- Stair Steps UAR 125: 109 cm

Step width
- Stair Steps UAR 100: 104 cm
- Stair Steps UAR 125: 129 cm

Storey height 200 cm

Ground plan dimensions
Stair tower with Steps 100:
Width x (landing platform + step + landing platform)
200 x (**100 + 250 + 100**) =
200 x 450 cm

Stair tower with Steps 125:
Width x (landing platform + step + landing platform)
250 x (**125 + 250 + 125**) =
250 x 500 cm

Permissible loads
Stairs and decks:
Surface load P = 3.0 kN/m²
Steps:
Individual load in middle of bay P = 2.4 kN
Overall construction: 40.0 kN evenly distributed over all standards.
With a required surface load of 2.0 kN/m², this corresponds to 20 linear metres for Stair 100 and 16 linear metres for Stair 125.

Wind loads
Wind Zone 2, Terrain Category III

Determining the wind load
- Exposure-time factor of χ = 0.7, maximum exposure time of 2 years,
- unclad stair tower in front of a partially open facade (60 % openings).
- Wind attack surfaces due to icing are not taken into account. Snow and ice loads are not taken into account.

Technical data
Horizontal equivalent load: 6 % of the live loads.

Standard configuration
- Flight of stairs corresponds to class B in accordance with EN 12811, Part 1.
- Covers stair towers with alternating staircase units with superstructure heights from 2.0 m to max. 64.0 m for Stair 100 and 50.0 m for Stair 125 together with associated anchoring.

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

Cleaning and maintenance instructions

Clean the scaffolding components after each use to maintain the value and operational readiness of the PERI products over the long term.

Some repair work may also be inevitable due to the tough working conditions.



The contractor must ensure that the personal protective equipment required for cleaning, maintenance and repair work, e.g.
- Safety helmet,
- Safety shoes,
- Safety gloves,
- Safety goggles,

is available and used as intended.

The following instructions should help to keep cleaning and maintenance costs as low as possible.

Cleaning tools must be adapted to the respective surfaces of the components so that they are not damaged.

Clean mechanical components to remove dirt or concrete residues before and after use and grease them with suitable lubricants.
Do not lubricate spindles.

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.

Any repairs to PERI products are to be carried out by PERI qualified personnel only.

Additional technical documentation

- Approval:
  – Z-8.22-863 PERI UP Flex Module System
- Assembly Instructions:
  – PERI UP Scaffolding Kit components
- User information:
  – User information for pallets and stacking devices

Instructions for Use

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

Deviations from the standard configuration must be verified for the application by means of separate strength and stability calculations (Industrial Safety Regulation Appendix 1, No. 3.2.1) and explicitly reflected in the assembly instructions.

All components listed in the program overview may be used for assembly. Other components are not permitted. Exceptions are named, or must be planned and verified on a project-specific basis.

The use of other products and spare parts is not allowed.
Changes to PERI components are not permitted.

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

Cross-system



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

General information
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. The Instructions for Assembly and Use are not a substitute for a 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.

Materials and working areas are to be inspected before each use and assembly for:
- damage,
- stability and
- functional integrity.

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

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 drop anything from or onto it.

Components provided by the contractor must comply with the characteristics stipulated in these Instructions for Assembly and 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 74-1:2022-09 and DIN EN 74-2:2022-09.

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.

Corresponding proof of stability can be provided by PERI on request, if the risk assessment and resulting measures to be implemented are made available.

Nails and wood screws must not protrude. Only allow other connecting components to protrude to the extent that is necessary.
If necessary, mark protruding components or fit them with protective material.
Secure all bolts with cotter pins and all screws with nuts

Before and after extraordinary events that may have damaging effects on the safety of the system, the contractor must immediately
- produce another risk assessment, the results of which must be used to implement suitable measures to ensure the stability of the system,
- arrange for an extraordinary inspection to be carried out by a competent person qualified to do so. The aim of this inspection is to detect and repair damage in good time in order to ensure safe use of the system.

Exceptional events could be:
- accidents, fire, explosions, collisions,
- long periods of non-use,
- natural events, e.g. heavy rainfall, heavy snowfall, significant icing, storms or earthquakes.

Suitable measures could be:
- removing nets/tarpaulin,
- clearing snow and ice,
- reducing live loads,
- securing loose materials.

Assembly, modification and dismantling work
PERI systems may only be assembled, modified or dismantled under the supervision of a person qualified to do so and by suitably qualified employees. The qualified personnel must have received appropriate training for the work to be carried out with regard to specific risks and dangers.

On the basis of the risk assessment and Instructions for Assembly and Use, the contractor must create installation instructions in order to guarantee safe assembly, modification and dismantling of the climbing unit.

Before initial use, the safe functioning of the scaffold must be checked by a person qualified to carry out the inspection. The results of the inspection must be documented in an inspection log.



The contractor must ensure that the personal protective equipment required for the assembly, modification or dismantling of the system, e.g.
- Safety helmet,
- Safety shoes,
- Safety gloves,
- Safety goggles,

is available and used as intended.

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

Comply with the respective assembly descriptions and safety instructions when making modifications or additions to the scaffold.



If personal protective equipment against falling from a height (PPE) is required or specified in local regulations, the contractor must determine appropriate attachment points on the basis of the risk assessment.
The PPE to be used to prevent falling is determined by the contractor.
For technically possible attachment points, see Section "Attachment points in the system" on page 17.

The contractor must provide safe working areas for site personnel which are to be reached via safe access routes.

The contractor must ensure that the following points are observed:
- If necessary, secure single components and assemblies to prevent them from falling, e.g. using ropes.
- Cordon off and signpost danger zones.
- Ensure stability during all construction stages.
- Ensure and demonstrate that all loads that occur are safely transferred.

Use
Every contractor who uses or allows the PERI systems to be used, is responsible for ensuring that the equipment is in good condition.

If the system is used successively or at the same time by several contractors, the health and safety coordinator must point out any possible mutual hazards and all work must then be coordinated.

When systems are used in publicly accessible areas,
- measures to prevent unauthorised use, e.g. enclosure of access areas, must be taken.
- measures are taken against injuries caused by bumping against protruding components, e.g. assembly of protective components.

Always keep the contact surfaces of the system free of dirt, objects, snow and ice.
Close off the system in extreme weather conditions.

System-specific

The load-distributing support used, such as planking, must match the respective substrate. If multiple layers are required, planks are to be arranged crosswise.
It must be ensured that the scaffold cannot shift in a horizontal direction, irrespective of what substrate is being used.

Access hatches close automatically. Do not disable the mechanism.

Couplings with screw closures must be tightened with 50 Nm. This corresponds to a force of 20 kg using a lever arm length of 25 cm.

Secure the wedges with a jarring blow using a 500 g hammer.

Anchoring

Anchoring forces, position of the anchoring and reaction forces are provided in Section B3.

The enclosure of the scaffold or mounting of additional surfaces exposed to the wind changes the stability and must be calculated separately. If necessary, additional measures must be implemented.

Anchoring must be installed progressively with the erection of the scaffold assembly.

The anchoring forces must be transferred into sufficiently load-bearing anchorage via wall ties and fixing materials e.g. the building.

Checking the anchoring

The anchoring and its components must be inspected by a qualified person nominated by the scaffolding contractor.

Load tests must be carried out at the place of use.

Load tests are to be carried out using suitable test equipment.

The test load must be 1.2 times higher than the required anchoring force $F_{\perp}$.

The scope of testing must, however, include a minimum of 5 load tests for all dowels used for concrete anchoring bases (at least 10 %) and for other building materials (at least 30 %).

Ensure that the relevant national guidelines and regulations are complied with!

Storage and transportation

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 the load-bearing points provided on the component.

During the moving 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.

Always guide pre-assembled scaffolding bays, scaffolding units or scaffolding sections with ropes when moving them by crane.

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 or stacking devices.

Weights

The component weights stated in the program overview may fluctuate depending on production.

Identification marking

When carrying out the work the following identification markings must be observed:
If certain parts of the scaffold are not ready for use – especially during assembly, modification and dismantling – a "No Entry" warning sign restricting access must be clearly displayed (see Sign 1).

In addition, the area must be adequately closed off in order to prevent access.

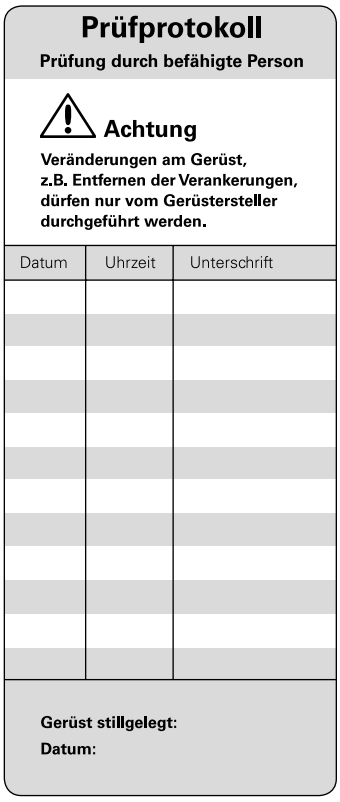
After assembly has been completed, all scaffold entry points must clearly display the designated sign. (Sign 2)
The identification marking does not replace the inspection log! (Sign 2, rear side)



Sign 1



Sign 2



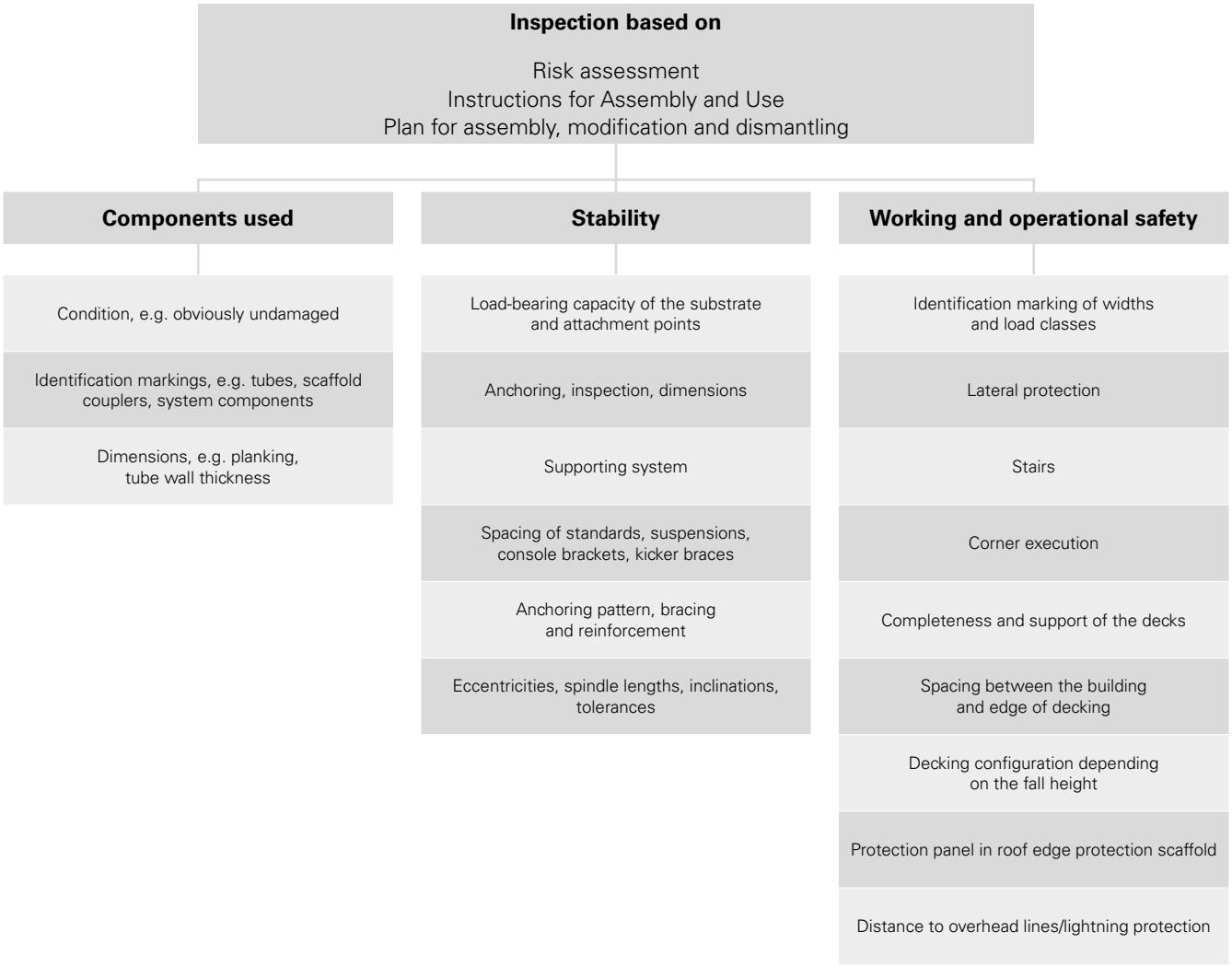
Sign 2, rear side

Inspection, handover and use

The erected scaffold must be inspected by the scaffolding contractor in order to determine that assembly has been carried out correctly. If the contractor is convinced that the scaffold has been correctly erected, it can then be handed over to the user.
It is advisable to carry out the handover with the user and, for example, to document this in a written report.

During the handover, the scaffolding contractor must advise the user of any possible risks involved with non-intended use and their obligation to provide adequate prevention against risk and danger!
- **Put up safety and warning signs at the scaffold access point.**
- **Handover of a usage plan.**

The contractor who uses the scaffolds, must ensure that the scaffolds are in good condition and not arbitrarily altered in any way. In this respect, the qualified specialists must be instructed that if changes have obviously been made during use, these must be reported to the respective qualified and competent person.



Source: based on TRBS 2121 Part 1

Verified attachment points

Certain assembly situations could occur that require the use of personal protective equipment (PPE) to prevent falling from a height. For this, the following verified attachment points must be used:

All attachment points require the following:

- The standing height can be a maximum of one level above the last anchoring position.
- At least one anchoring layer must always be present, or the scaffold is verified to be free-standing and the tilt resistance is guaranteed.

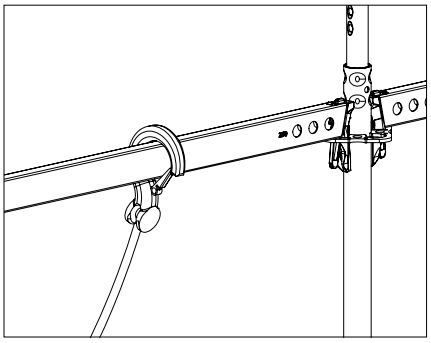


Fig. M.01

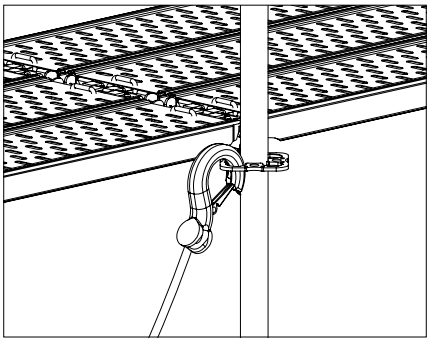


Fig. M.02

Horizontal ledger
Attachment point:
Each Horizontal Ledger UH Plus or UH-2

- which is freely accessible for the lifting gear
- and is installed at a maximum height of 1.0 m above the deck level.
- and which is wedged on two rosettes of 2 standards.
  The standards must be at least 2 m long.

Rosette
Attachment point:
Each rosette that is integrated in the base scaffold. See rules and regulations on the right.

Attachment points in the system

Each specified attachment point is intended for securing only one person!

General information

- The use of personal protective equipment to prevent falling from a height is regulated in the project-related risk assessment that has been prepared by the contractor (user).
- When using personal protective equipment to prevent falling from a height, all valid standards and safety regulations are to be taken into consideration by the contractor.
- Each scaffold assembly is to be secured against tipping by the user.
- The application concerns assembly, reconstruction and dismantling.

Requirements

- The scaffold assembly underneath the final assembly level is complete. This means, all ledgers and diagonal bracing have been installed and the decking is in place as the topmost assembly level.
- The joints of the topmost standards must lie underneath the last assembly level.

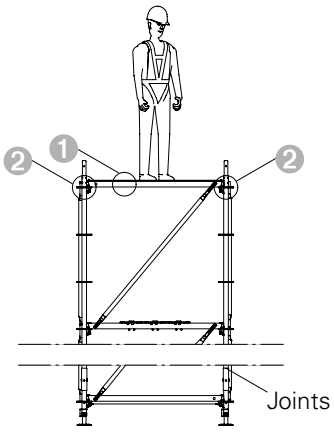


Fig. M.03

Attachment points
Standard ends approx. 2 m below the assembly level:

- each horizontal ledger in the assembly level 1,
- each rosette in the assembly level 2 .

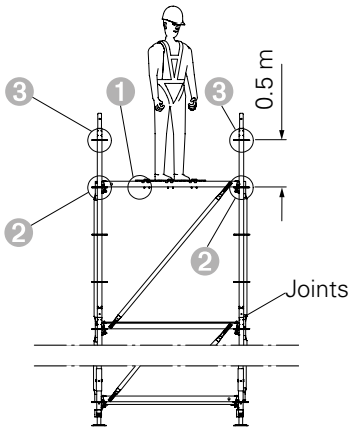


Fig. M.04

Attachment points
Standard ends approx. 1.5 m below the assembly level:

- each horizontal ledger in the assembly level 1,
- each rosette up to max. 0.5 m above the last assembly level 2, 3.

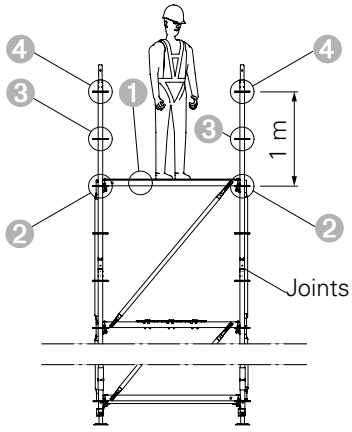


Fig. M.05

Attachment points
Standard ends approx. 1 m below the assembly level:

- each horizontal ledger in the assembly level 1,
- each rosette up to max. 1.0 m above the last assembly level 2 3 4.

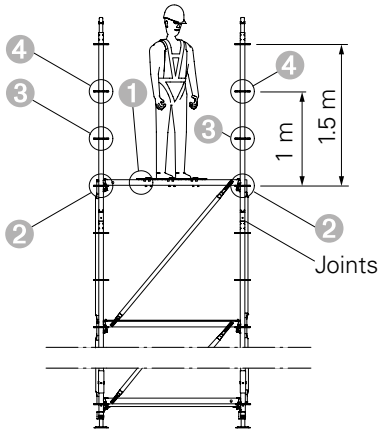


Fig. M.06

Attachment points
Standard ends approx. 0.5 m below the assembly level:

- each horizontal ledger in the assembly level 1,
- each rosette up to max. 1.0 m above the last assembly level 2 3 4.

A1 Base level

General information

For a basic description of the assembly of scaffolding components in the PERI UP system, see the PERI UP assembly instructions – components of scaffolding kit.

Comply with the prescribed assembly sequences!

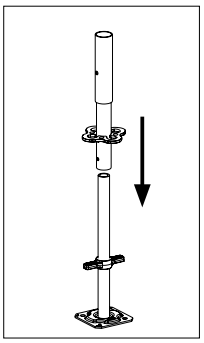


Fig. A1.01

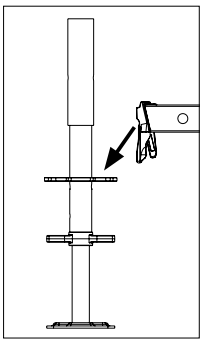


Fig. A1.02

Load-distributing supports

Use load-distributing supports subject to the load-bearing capacity of the substrate.

- Supports and base plates must make full-face contact with the substrate.

Base level

Components

1	Adj.Base Plate UJB Ø38mm 50/30	10x
2	Base Standard UVB 25	10x
3	Horizontal Ledger UH-2 250	1x
4	Horizontal Ledger UH-2 200	2x
5	Horizontal Ledger UH-2 100E	8x

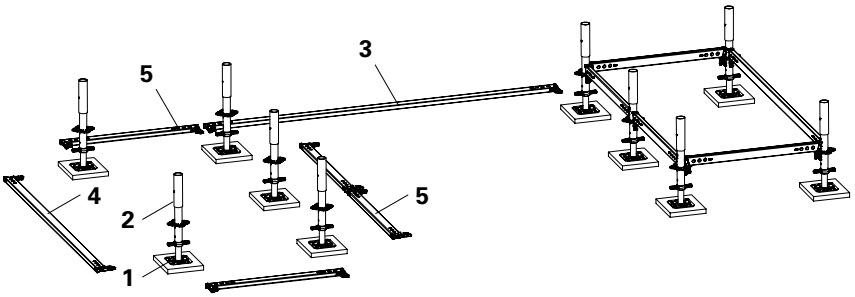


Fig. A1.03

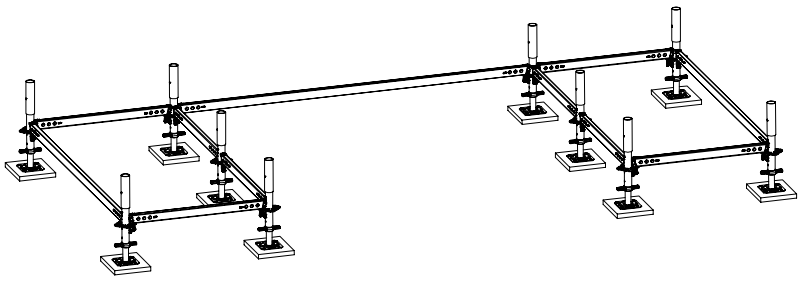


Fig. A1.04

Assembly

Start the assembly process at the highest point of the terrain (= the least height compensation).

1. Set out Horizontal Ledger UH-2 (**3 + 4 + 5**).
2. Set out the load-distributing supports.
3. Set up the Adj.Base Plates UJB (**1**).
4. Fit Base Standards UVB 25 (**2**) onto the Adj.Base Plates UJB.
5. Connect the base standards to the horizontal ledgers. Do not hammer the wedges in yet. (Fig. A1.03 + Fig. A1.04)

A1 Base level

Installing an assembly aid

Assembly aid components

3a	Horizontal Ledger UH-2 250	2x
32a	Steel Deck UDG-2 25x200	2x
34a	Steel Deck UDG-2 25x250	2x

Components

32	Steel Deck UDG-2 25x200	4x

Assembly

1. Fit two more Horizontal Ledgers UH-2 250 (**3a**) as assembly aids. (Fig. A1.05)
2. The base level is aligned horizontally by accurately adjusting the Adj. Base Plates UJB (**1**). Maximum spindle length 30 cm. (Fig. A1.05)
3. Securely fix the wedges of Horizontal Ledgers UH-2 (**3 + 4 + 5**) in position with a jarring blow using a hammer.
4. Fit Steel Decks UDG-2 200 (**32**) as a landing platform.
5. Fit Steel Decks UDG-2 (**32a + 34a**) as an assembly aid. (Fig. A1.06)

→ Lift locks (32.1) drop beneath the crossbar and secure the deck. (Fig. A1.07a – Fig. A1.07d)

→ The deck is now installed.

→ The base level is now installed.

Have all lift locks (**32.1**) on the deck dropped beneath the crossbar?
If not, lift the deck slightly and let it drop into position or operate the lift lock manually. (Fig. A1.07d)

Depending on the requirements or national regulations, fit additional decks linings as assembly aids.

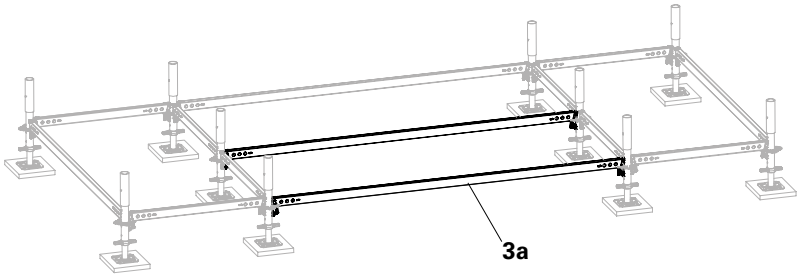


Fig. A1.05

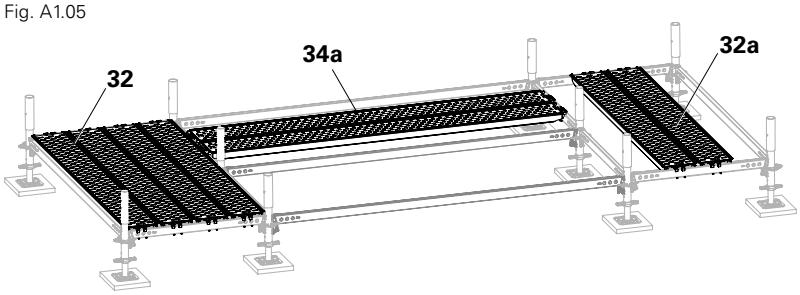


Fig. A1.06

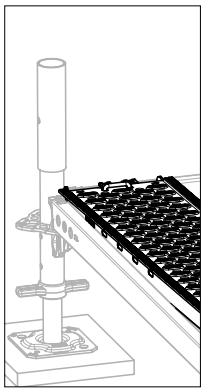


Fig. A1.07a

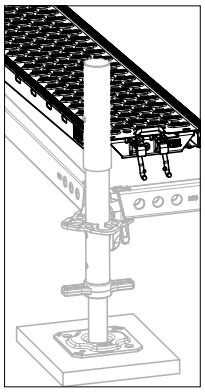


Fig. A1.07b

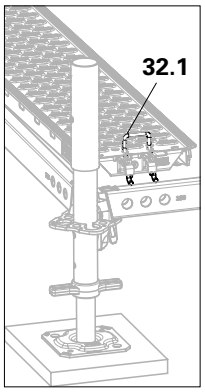


Fig. A1.07c

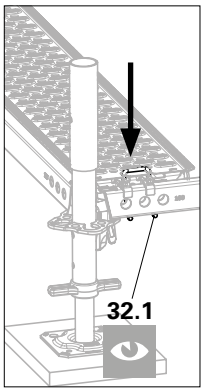


Fig. A1.07d

A2 First staircase

Standards and ledgers, guardrail in advance

Components

7	Standard UVR-2 300	10x
4	Horizontal Ledger UH-2 200	4x
5	Horizontal Ledger UH-2 100E	7x
41	Node Brace UBK-2 250/200	2x

Assembly

1. Fit all Standards UVR-2 300 (**7**) apart from two pieces. (Fig. A2.01)
   Fit Standards UVR-2 with holes lined up so that the locking pins can be easily installed. (Fig. A2.04)
2. Fit Node Brace UBK-2 (**41**) into the upper rosettes of the two remaining standards (**7a**).
   – Fit the node brace into the brace adapters of the rosettes. (Fig. A2.02a)
3. Fit the standards (**7a**) with pre-assembled node braces (**41**) in such a way that the node braces are within the stair frame. (Fig. A2.02)

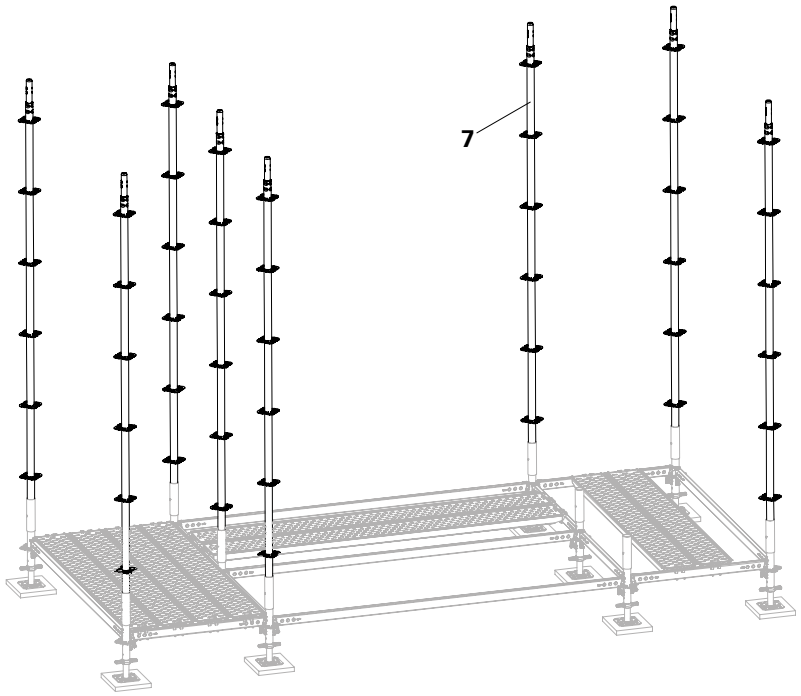


Fig. A2.01

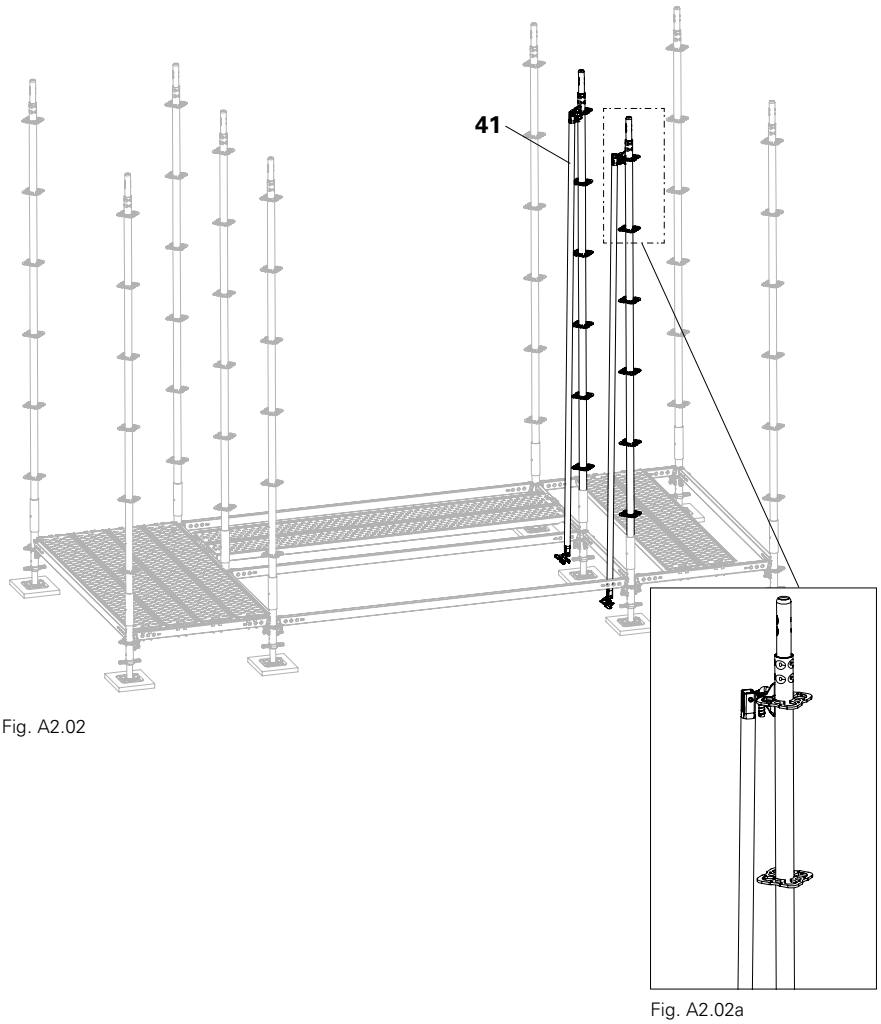


Fig. A2.02

Fig. A2.02a

4. Fit Node Brace UBK-2 (**41**) into the bottom rosettes.
   (Fig. A2.03 to Fig. A2.03b)
5. Hook in the Horizontal Ledgers UH-2 200 and UH-2 100E (**4 + 5**) and knock them in tight.

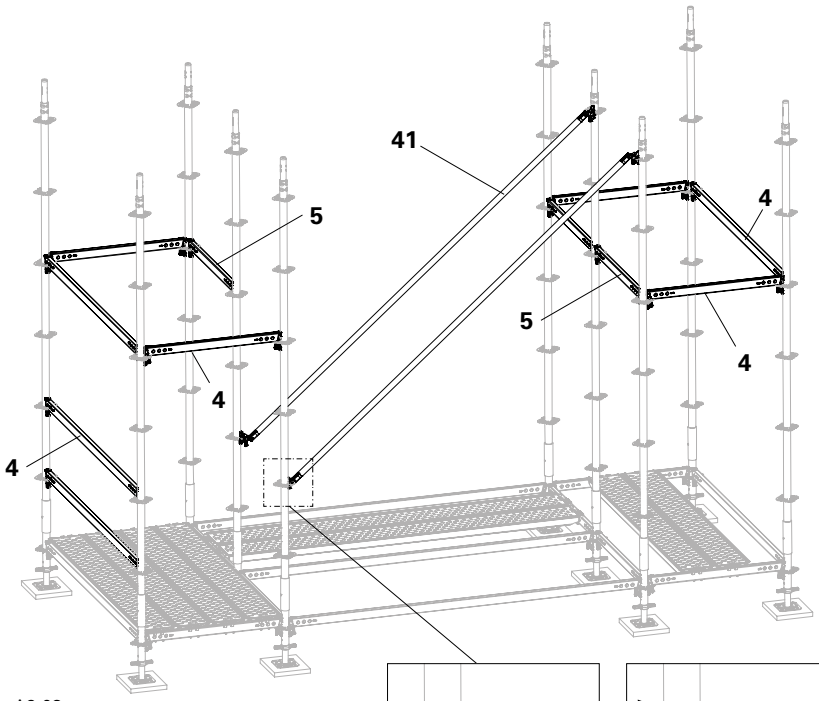


Fig. A2.03

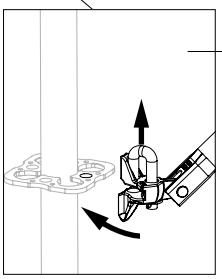


Fig. A2.03a

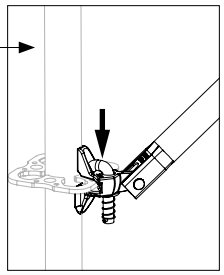


Fig. A2.03b

Preparing for hoisting operations involving cranes

All standards or base standards can be secured with a Locking Pin Ø48/57 mm (**14**) if the steel staircase is to be lifted, e.g. with a crane, in order to move it.

Components

58 Handle Locking UJS	10x
14 Locking Pin Ø48/57mm	10x

Assembly

1. Secure Adj.Base Plates UJB (**1**) with Spindle Locking UJS (**58**).
2. If necessary, tightly connect Base Standards UVB and Standards UVR-2 using Locking Pins Ø48/57mm (**14**). (Fig. A2.04)

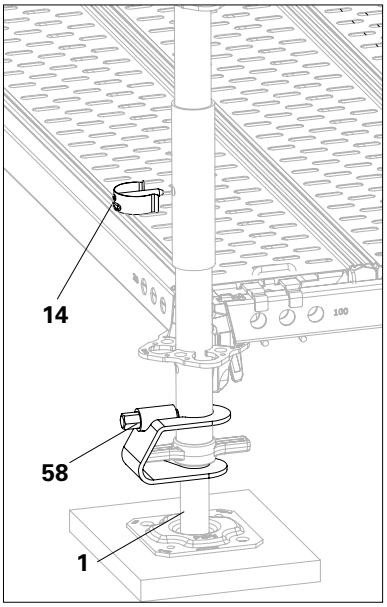


Fig. A2.04

Spindle out the Adj.Base Plate UJB Ø38 mm 50/30 by at least 17 cm. This is the only way to ensure a tension-proof connection between the Base Standard UVB and the Standard UVR-2 with locking pins. (Fig. A2.04a)

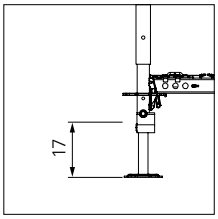


Fig. A2.04a

Decks and braces

Components

32	Steel Deck UDG-2 25x200	4x
42	Ledger Brace UBL-2 200/200	1x

Assembly aid components

32a	Steel Deck UDG-2 25x200	2x
34a	Steel Deck UDG-2 25x250	2x

Assembly

1. Fit Steel Decks UDG-2 200 (**32**) as a landing platform.
2. Fit Steel Decks UDG-2 (**32a + 34a**) as an assembly aid. (Fig. A2.05)
3. Insert Ledger Brace UBL (**42**) into the top Horizontal Ledger UH-2 with the mounting finger. (Fig. A2.05a) Insert the tilt finger into the hole of the bottom Horizontal Ledger UH-2, turn finger to a transverse position to secure. (Fig. A2.05b)
4. Remove the assembly decks (**32a**) from the level below.

→ The decks and braces are now in place.

All tilt fingers (**42.1**) of the assembly must be transverse after installation of the Ledger Braces UBL-2 and rest on both sides of the hole.

Depending on the requirements or national regulations, fit additional steel decks as assembly aids.

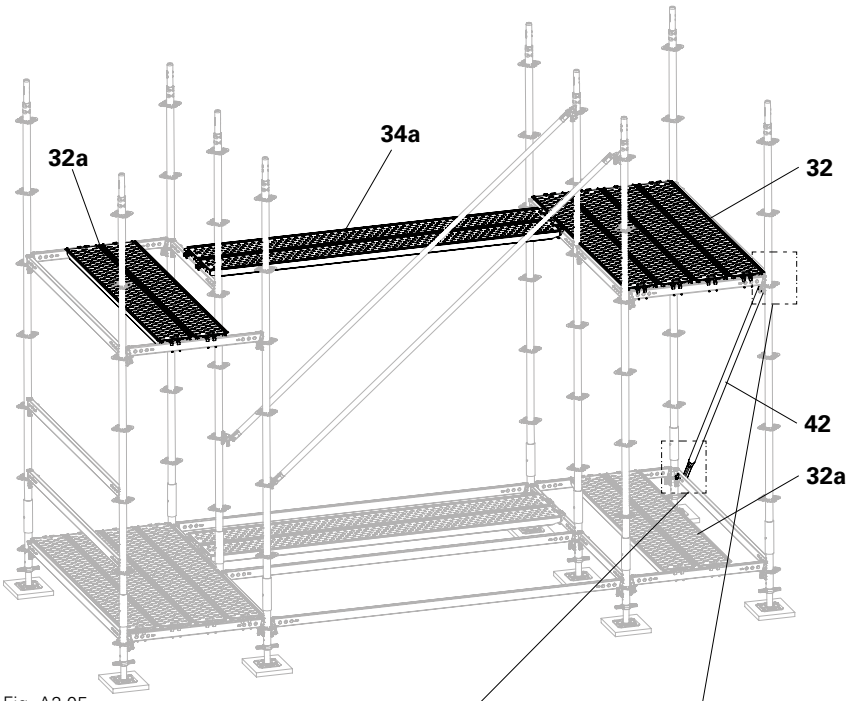


Fig. A2.05

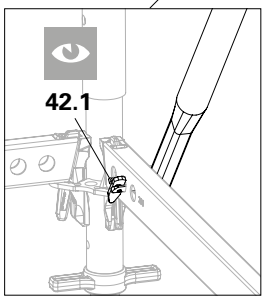


Fig. A2.05b

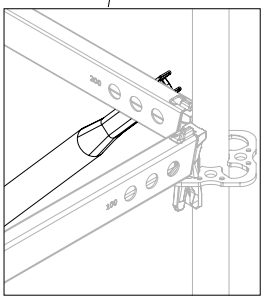


Fig. A2.05a

Stair stringers

11	Stair Stringer UA 250/200	2x
4	Horizontal Ledger UH-2 200	2x

Assembly

1. Remove both Horizontal Ledgers UH-2 250 (**3a**) which were installed as assembly aids (see Fig. A1.05 on page 19).
2. Fit the Stair Stringers UA (**11**) into the rosettes of the standards at the top and bottom and fix securely.
3. Brace with two Horizontal Ledgers UH-2 200 (**4**), secure the wedges. (Fig. A2.06)

→ The stair stringers are now installed.

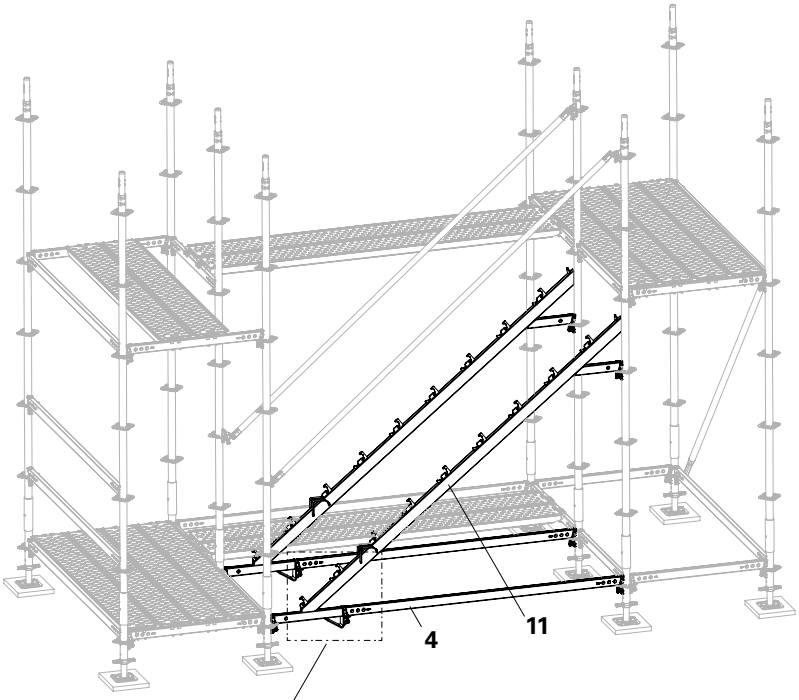


Fig. A2.06

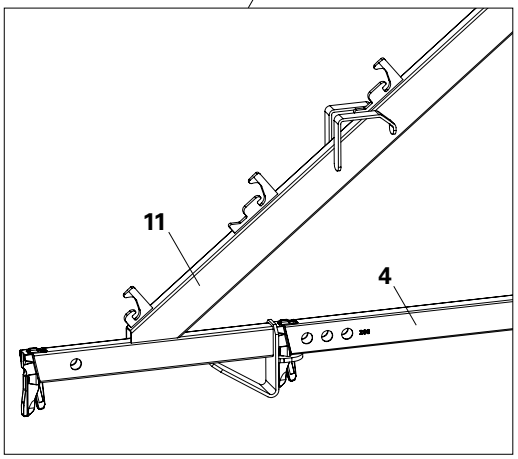


Fig. A2.06a

Stair steps

Components

12	Stair Step UAR 100	9x
13	End Step UAE 100	1x
31	Steel Deck UDG-2 25x100	1x

First step

Assembly:

1. Position Steel Deck UDG-2 100 (**31**) on the Stair Stringers UA (**11**).
2. Tilt the first step (**12**) and place it in the lowest support (**11.1**) of the stair stringers. (Fig. A2.08a)
3. Tilt the step towards the stair stringer and into the upper supports. Make sure that the hooks (**11.2**) engage in the slots (**12.1**) on both sides. (Fig. A2.08b + Fig. A2.08c)

Do the locating hooks (**11.2**) engage in the slots (**12.1**) of the riser? (Fig. A2.08b)
Is the tread resting on top of the stair rail? (Fig. A2.08c)
→ The first step is installed.

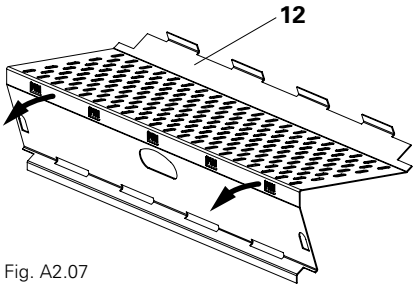


Fig. A2.07

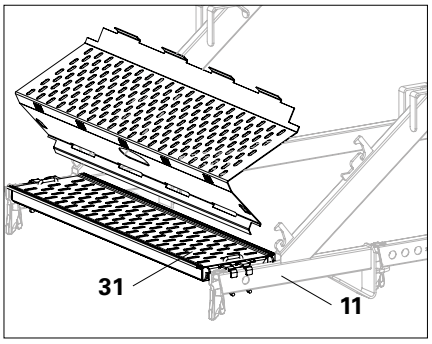


Fig. A2.08a

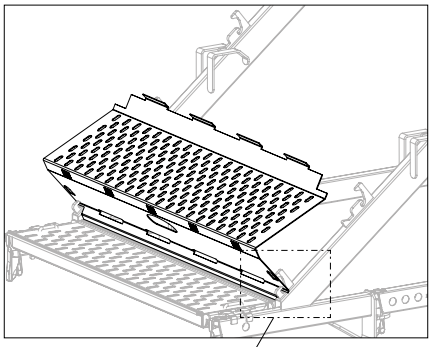


Fig. A2.08b

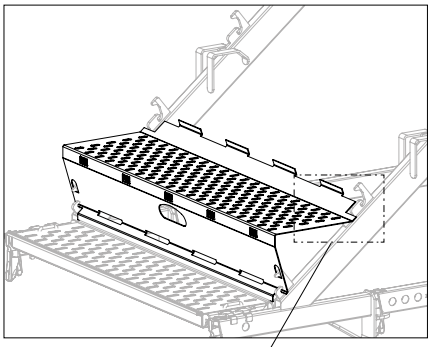
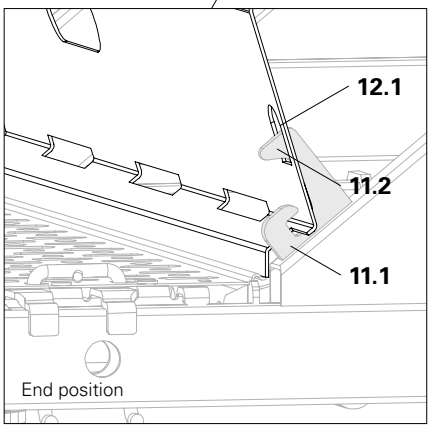
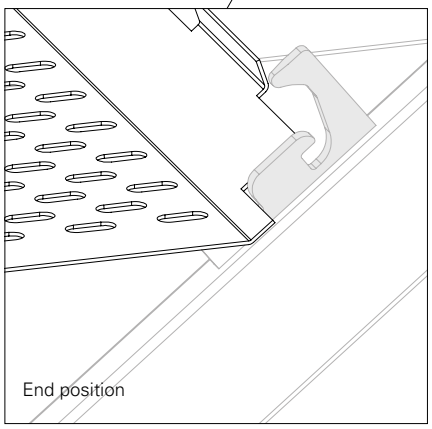


Fig. A2.08c

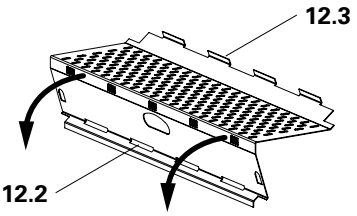




Second to last step

Assembly

1. Position the second step (**12**) on the first step together with the riser. (Fig. A2.09a)
   The teeth (**12.3**) of the preceding step must engage in the slots (**12.2**) of the riser.(Fig. A2.09b)
   → The step is resting in the supports (**11.1**) of the Stair Stringers UA.
2. Tilt the step upwards.
   → The hook (**11.2**) engages in the slots (**12.1**). (Fig. A2.09c + Fig. A2.09d)
   → The teeth (**12.3**) of the preceding step slip through the slots (**12.2**) of the riser and connect both steps. (Fig. A2.09e + Fig. A2.09f)
   → The top of the step rests against the Stair Stringers UA. (Fig. A2.09f)
3. Repeat procedure up to the last step. The uppermost support has a different design. (Fig. A2.10a + Fig. A2.10b)



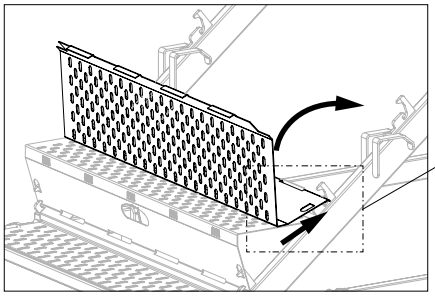


Fig. A2.09a

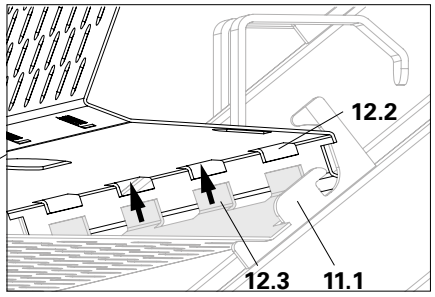


Fig. A2.09b

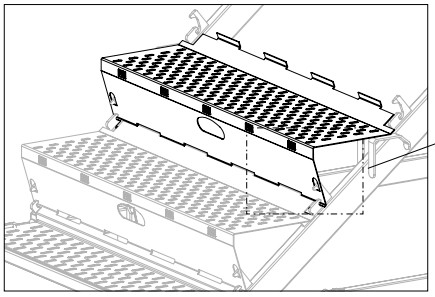


Fig. A2.09c

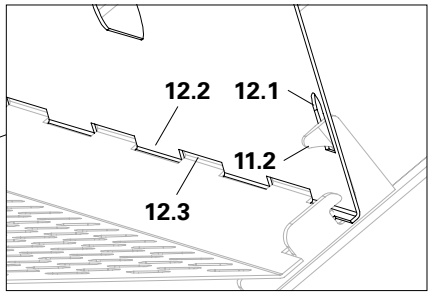


Fig. A2.09d

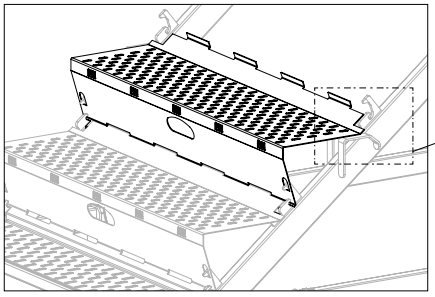


Fig. A2.09e

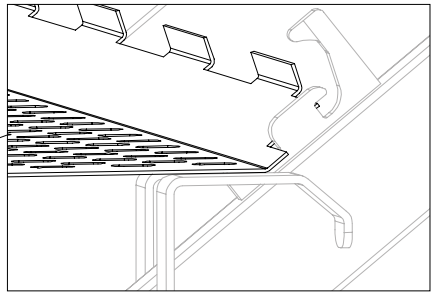


Fig. A2.09f

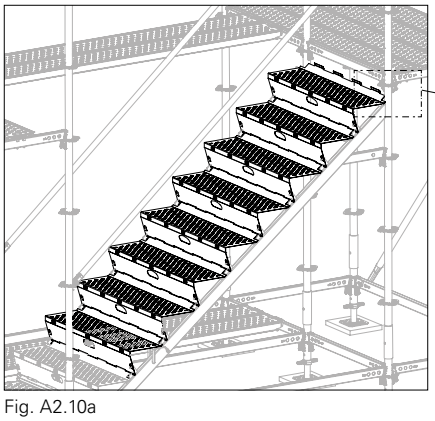


Fig. A2.10a

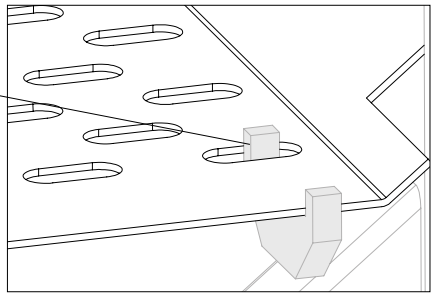


Fig. A2.10b

End step

Assembly

→ Precondition

At the end step, the screws (**13.3**) of the lift lock must be level with the inside of the end step.

1. Lift the step installed most recently (**12**) out of the holder slightly so that it is at an angle. (Fig. A2.11a)
2. Set the End Step UAE (**13**) down flat on last step (**12**). (Fig. A2.11b)
   The teeth (**12.3**) of the preceding Step UA must engage in the slots (**13.2**) of the End Step UAE.
3. Fold up the End Step UAE (**13**)
   → The teeth (**12.3**) of the preceding step slip through the slots (**13.2**) of the end step and connect both steps. (Fig. A2.11c)
4. Swing the End Step UAE (**13**) back together with the last step until the End Step UAE (**13**) can be clipped into the horizontal ledger (**5**). (Fig. A2.11d + Fig. A2.11e)
   → The step installed most recently engages in the Stair Stringers UA (**11**).
5. At the end step: Screw in the screws (**13.3**) so they act as a lift lock.

→ The staircase is installed

Is the end step clipped into the horizontal ledger?
Is the end step's lift lock (**13.3**) working? (Fig. A2.11e)

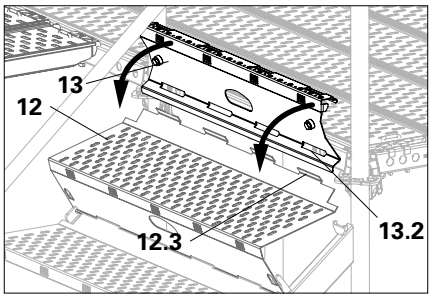


Fig. A2.11a

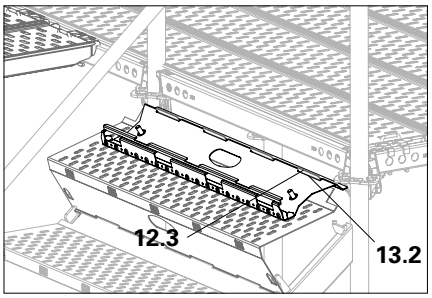


Fig. A2.11b

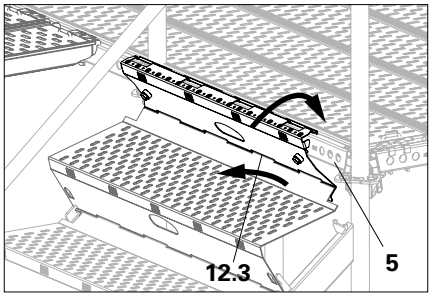


Fig. A2.11c

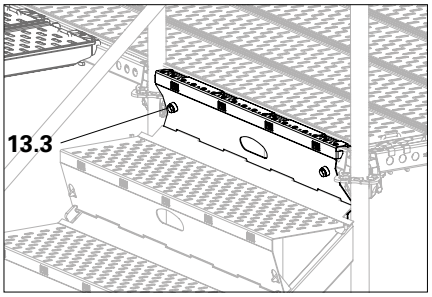


Fig. A2.11d

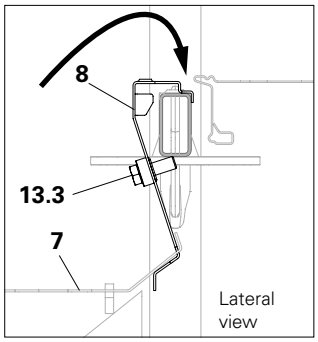
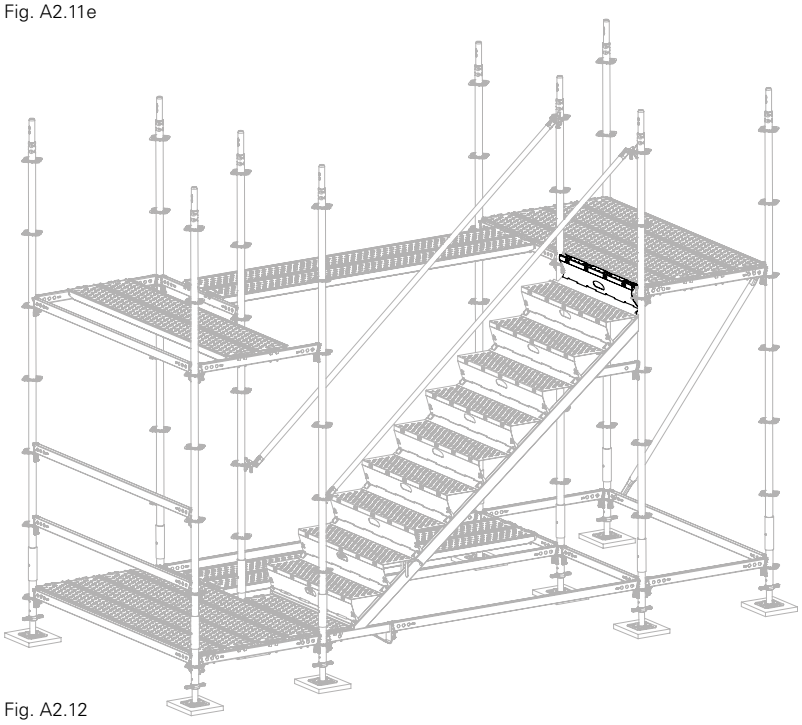


Fig. A2.11e


Fig. A2.12

Bracing

Components

3 Horizontal Ledger UH-2 250	1x

Assembly:

1. Attach Horizontal Ledger UH-2 250 (**3**) from the stairs, and secure with a blow of the hammer.

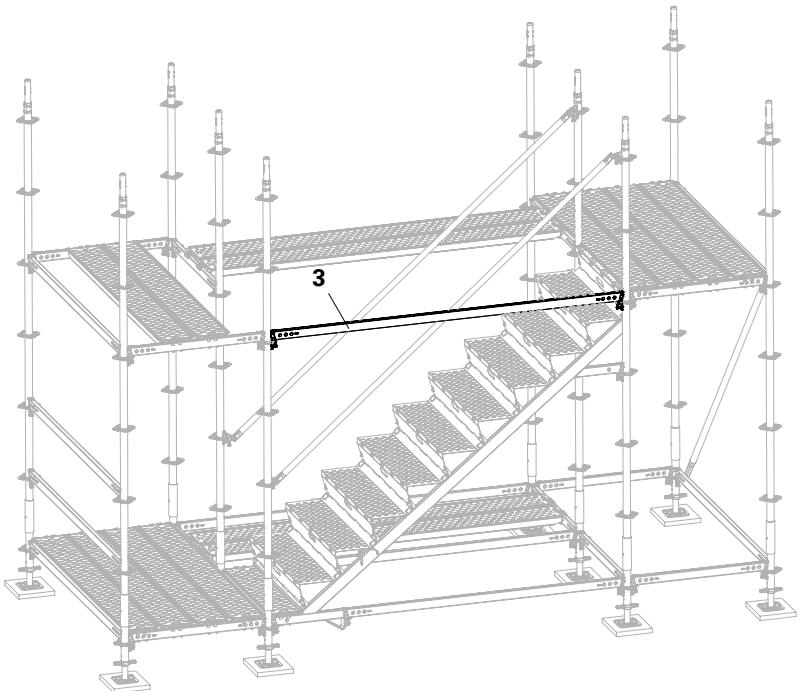


Fig. A2.13

Guardrail

Warning
During assembly, there is no lateral protection on the scaffold!
A fall can result in serious injuries or even death.
⇒ Use personal protective equipment to prevent falling from a height.

Components

41	Node Brace UBK 250/200	2x
4	Horizontal Ledger UH-2 200	2x
5	Horizontal Ledger UH-2 100E	4x

Assembly aid components

3a	Horizontal Ledger UH-2 250	2x
4a	Horizontal Ledger UH-2 200	1x
5a	Horizontal Ledger UH-2 100E	3x

Assembly
1. Fit Node Braces UBK (**41**) into the rosettes as an intermediate guardrail.
2. Fit Horizontal Ledgers UH-2 (**4 + 5**) as a landing guardrail.
3. Fit the horizontal ledgers (**3a + 4a + 5a**) as assembly guardrails. (Fig. A2.14)
4. Secure the wedges.

→ The first flight of stairs is now installed.

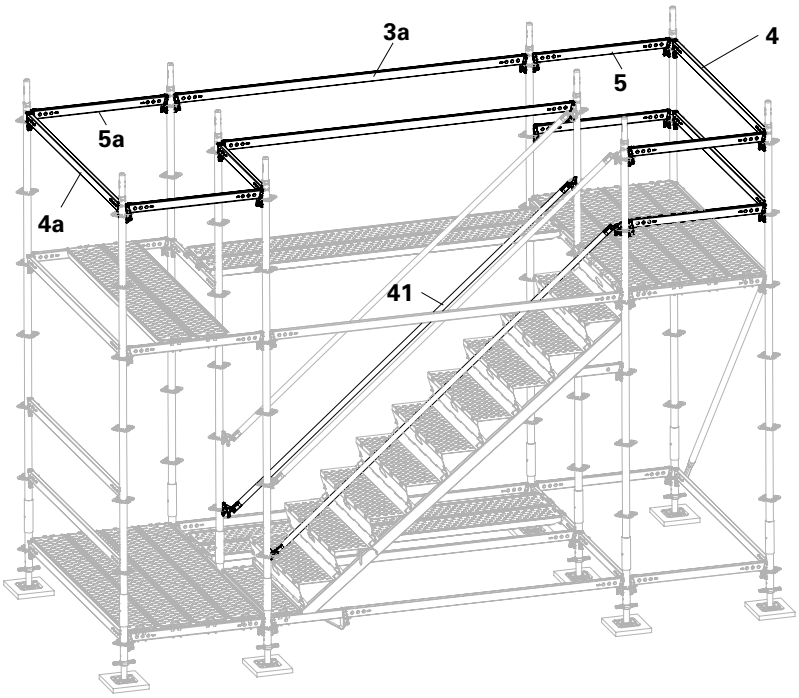


Fig. A2.14

Fit additional horizontal ledgers and toe boards as lateral protection if stipulated by the requirements or national regulations.

Replace Horizontal Ledger UH-2 250 (**3a**) with Guardrail Holder EPW and Guardrails EPG. This allows the temporary lateral protection to remain in place until the stair stringers are installed.
See Section “Stair stringers” on page 35.

Standards and ledgers, guardrail in advance

Components

4	Horizontal Ledger UH-2 200	2x
5	Horizontal Ledger UH-2 100E	7x
8	Standard UVR-2 200	10x
41	Node Brace UBK-2 250/200	2x
52	Locking Pin Ø48/57mm	10x

Assembly

1. Fit all Standards UVR-2 200 (**8**) apart from two pieces.
   Fit Standards UVR-2 with holes lined up so that the locking pins can be easily installed.
2. Fit Node Braces UBK-2 (**41**) on the standards (**8a**) as described in Section "A2 First staircase" on page 22 .
3. Fit the standards (**8a**) and node braces (**41**).
4. Hook in the Horizontal Ledgers UH-2 200 and UH-2 100E (**4 + 5**) and knock them in tight. (Fig. A3.01)

- Always pin the top four vertical joints of all standards with a Locking Pin Ø48/57mm (**52**).
  Pin all the vertical joints if the steel staircase is to be relocated, for example with a crane.
- Fit an additional node brace as lateral protection at a height of 1.5 m in accordance with requirements or national regulations. (**41a**)

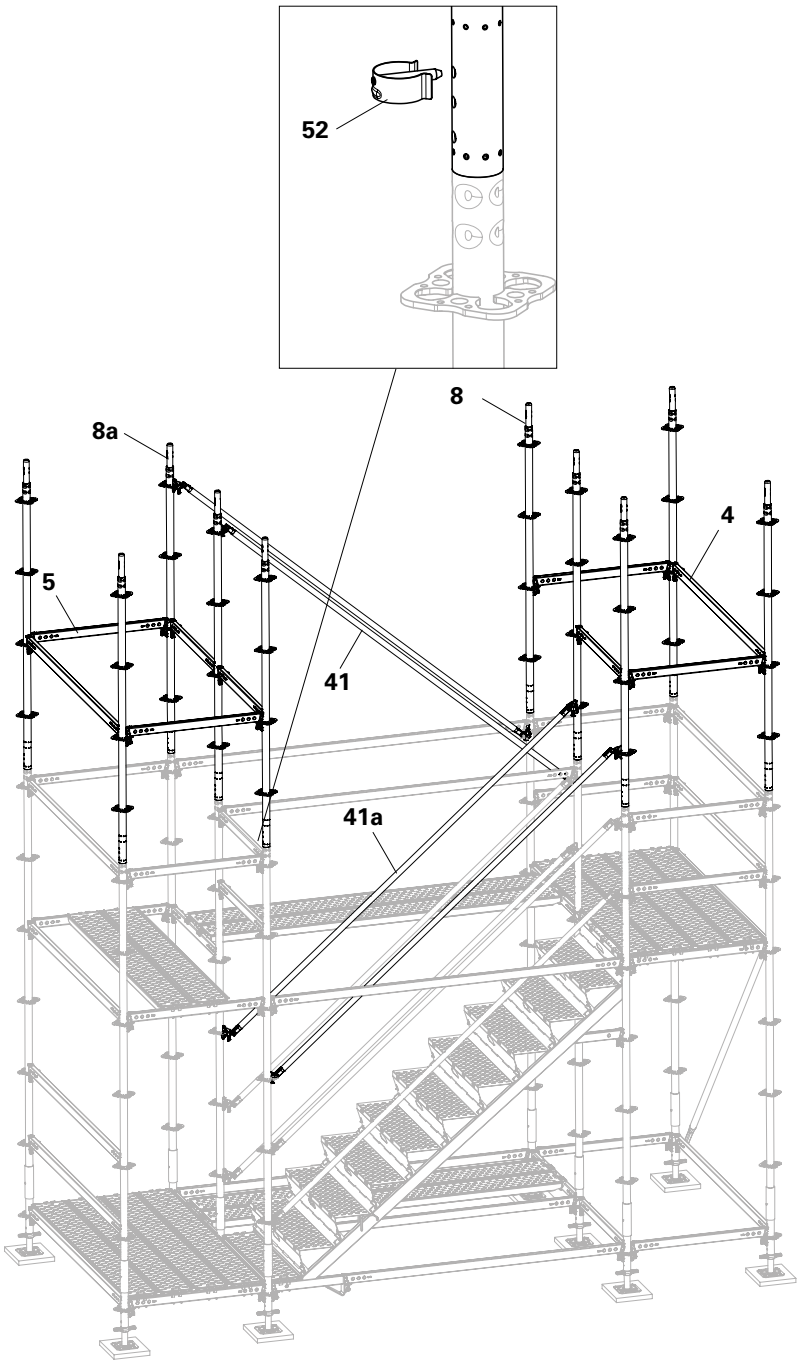


Fig. A3.01

Decks and braces

Components

3	Horizontal Ledger UH-2 250	2x
32	Steel Deck UDG-2 25x200	4x
42	Ledger Brace UBL-2 200/200	1x
43	H-Brace UBH Flex 250/100	1x
44	H-Brace UBH Flex 100/100	4x

Assembly aid components

32a	Steel Deck UDG-2 25x200	2x
34a	Steel Deck UDG-2 25x250	2x

Assembly

From the level immediately below:

1. Fit Steel Decks UDG-2 200 (**32**) and (**32a**). (Fig. A3.02)
2. Fit Steel Decks UDG-2 250 (**34a**).

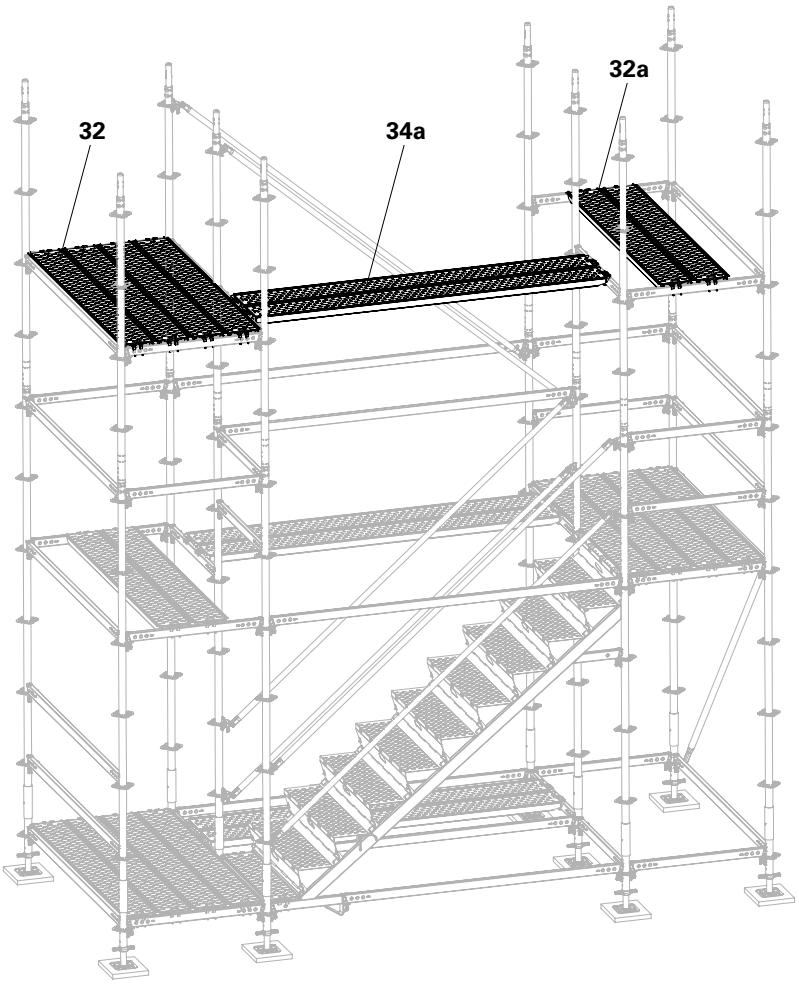


Fig. A3.02

3. Fit Horizontal Ledgers UH-2 250 (**3**) on the outside of the long sides.
4. Fit the Ledger Braces UBL-2 200/200 onto the sides of the platform with the mounting finger at the top and tilt finger at the bottom (**42**). (Fig. A3.03)

Are all tilt gravity pins (**42.1**) of the Ledger Braces UBL in a transverse position and resting on both sides of the hole? (Fig. A3.03a)

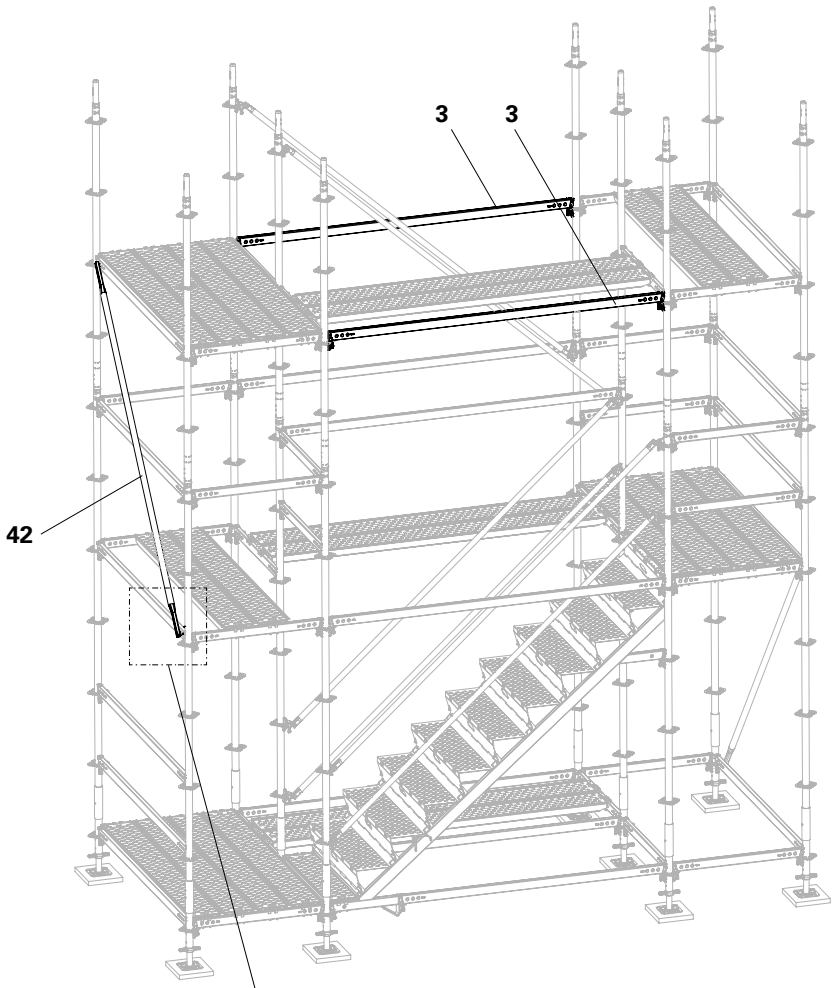


Fig. A3.03

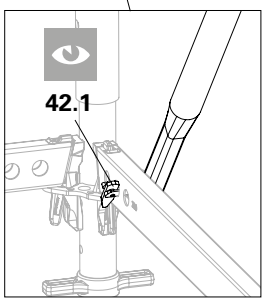


Fig. A3.03a

5. Fit H-Braces UBH Flex (**43 + 44**) beneath the Steel Decks UDG-2 (**32 + 32a + 34a**):
   – Fit the hook into the round hole of the rosette. (Fig. A3.04a)
   – On the opposite side of the horizontal brace, push the safety catch to the centre position and pull back the slider.
   – Attach the hook from below.
   – Push the slider forwards.
   → Safety catch drops down (Fig. A3.04b)

→ The H-Braces UBH Flex are mounted and secured. (Fig. A3.04)

Install the first level of H-Braces UBH Flex at a height of 4.0 m, then at intervals of 4.0 m.

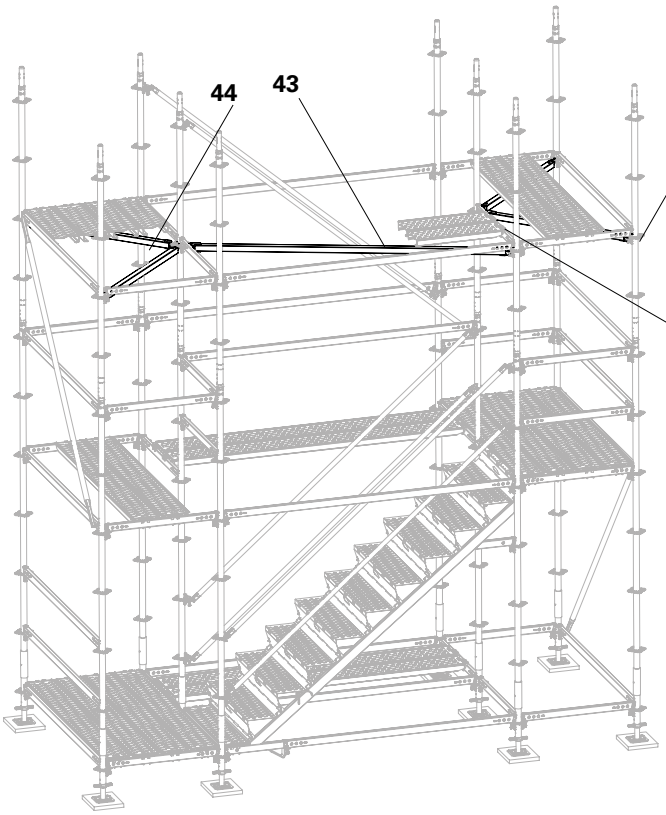


Fig. A3.04

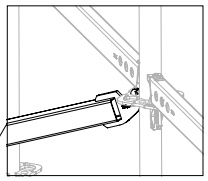


Fig. A3.04a

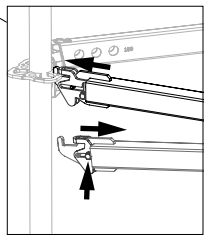


Fig. A3.04b

- For superstructures with a reduced height at the base level, move the bracing levels and anchoring levels downwards accordingly.
  See Section "A8 Height adjustment" on page 47 ff

- Alternative bracing:

The H-Braces UBH Flex 250/100 and UBH Flex 100/100 can be replaced with scaffolding tubes and standard couplers.

⇒ Maintain the required clearance height!

Fit the ties from the auxiliary decks at height increments of 8 m, see Section "A4 Anchoring" on page 42.

Remove assembly aids.

Warning

During disassembly, there is no lateral protection on the scaffold!
A fall can result in serious injuries or even death.
⇒ Use personal protective equipment to prevent falling from a height.

Dismantling

1. Remove the horizontal ledgers (**3a + 4a + 5a**).
2. Remove the Steel Decks UDG (**32a**) from the level below. (Fig. A3.05)

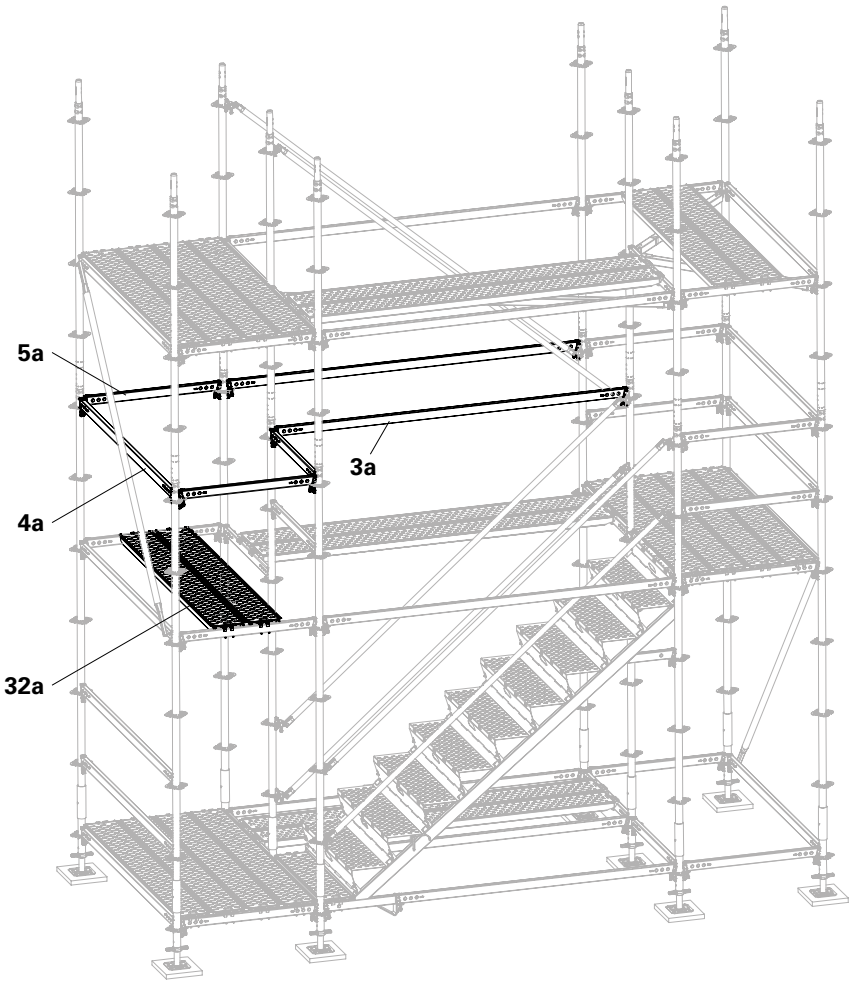


Fig. A3.05

Stair stringers

Components

4	Horizontal Ledger UH-2 200	2x
11	Stair Stringer UA 250/200	2x

Assembly

1. Fit the Stair Stringers UA (**11**) into the rosettes at the top and bottom and hammer in securely.
2. Brace with two Horizontal Ledgers UH-2 200 (**4**). (Fig. A3.06).

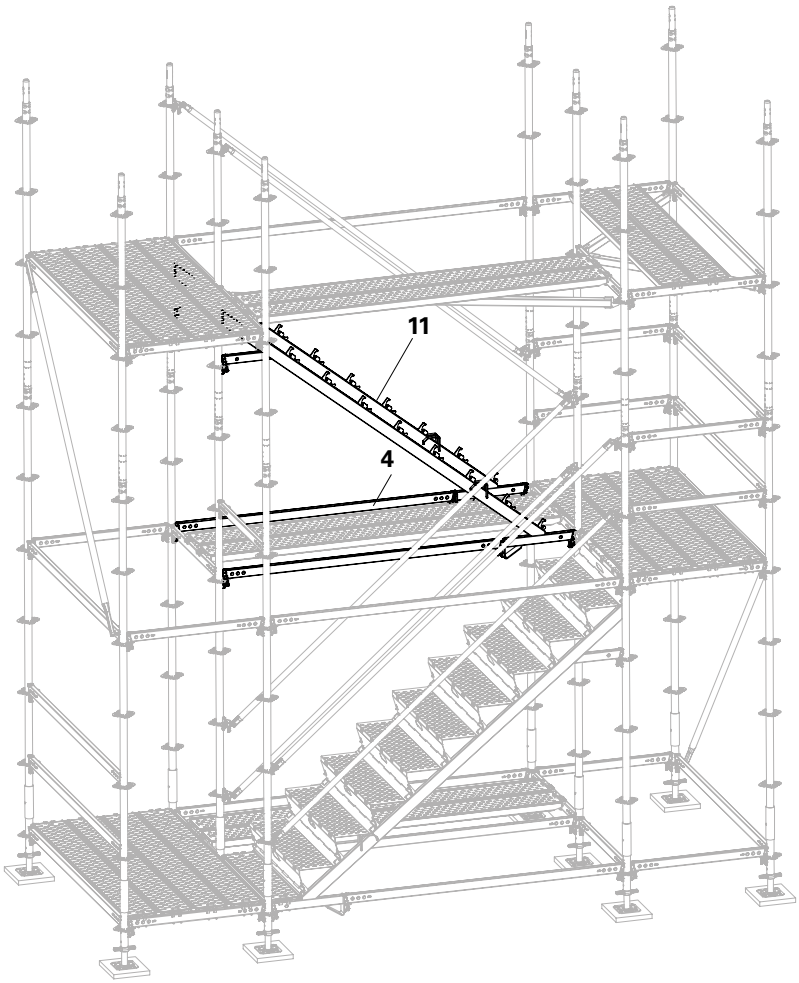


Fig. A3.06

Horizontal ledger

Components

5	Horizontal Ledger UH-2 100E	1x

Assembly

1. Fit Horizontal Ledger UH-2 100E (**5**).
2. Remove the Steel Decks UDG-2 (**34a**) from the level below.
3. Remove the Steel Decks UDG-2 (**34b**).

(Fig. A3.07)

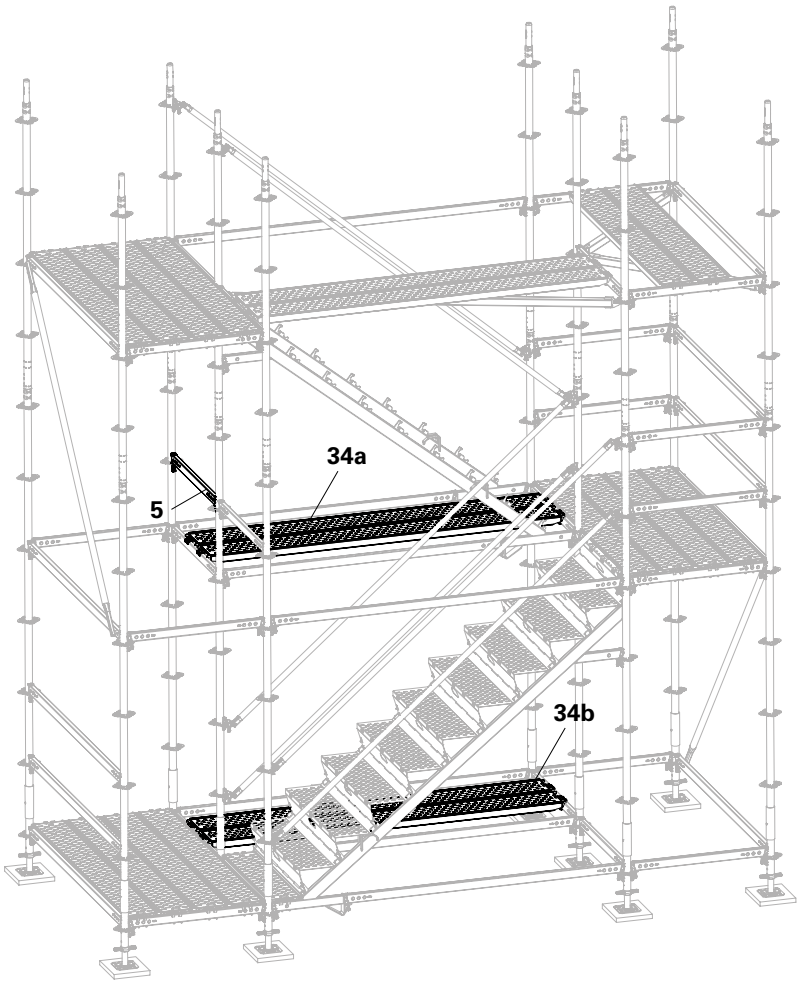


Fig. A3.07

Stair steps

Components

12	Stair Step UAR 100	9x
13	End Step UAE 100	1x
31	Steel Deck UDG-2 25x100	1x

Assembly
The stair steps are installed as described in Section "Stair steps" on page 24 ff.

- Are all steps connected and secured?
- Is the end step clipped into the horizontal ledger?
- Is the end step's lift lock working?

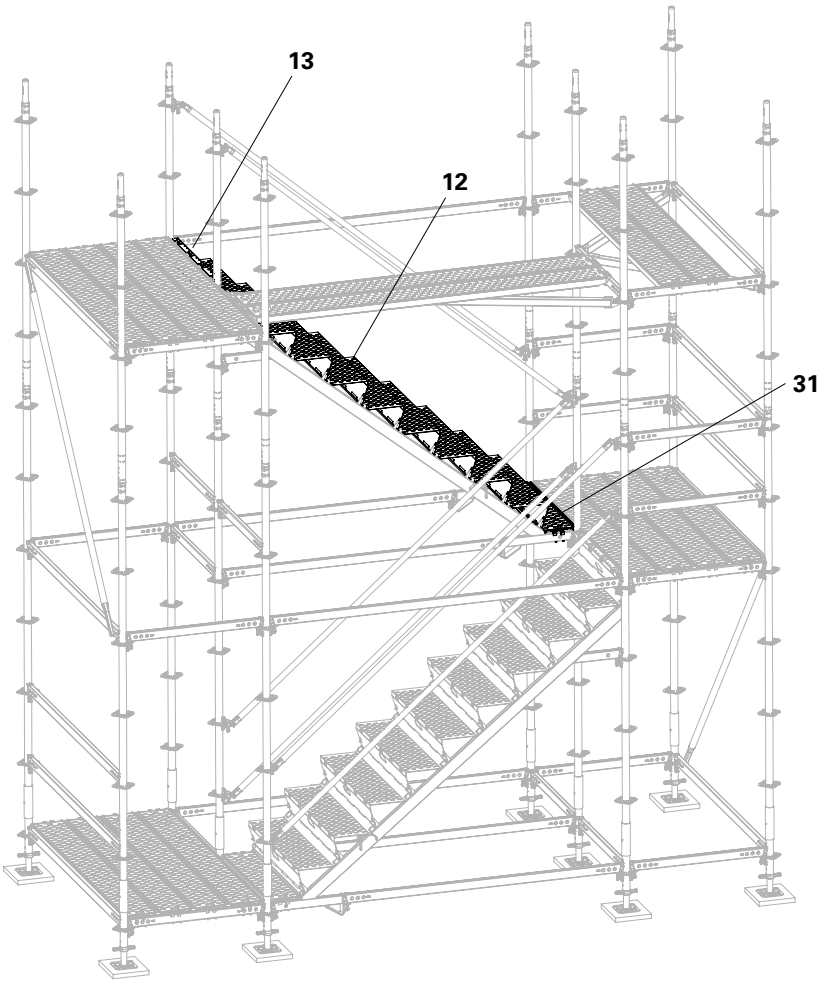


Fig. A3.08

Guardrail

Components

4	Horizontal Ledger UH-2 200	2x
5	Horizontal Ledger UH-2 100E	4x
41	Node Brace UBK-2 250/200	2x

Assembly aid components

3a	Horizontal Ledger UH-2 250	2x
4a	Horizontal Ledger UH-2 200	1x
5a	Horizontal Ledger UH-2 100E	3x

Assembly

1. Fit Node Brace UBK-2 (**41**) into the rosettes.
2. Fit Horizontal Ledgers UH-2 (**4 + 5**) as a landing guardrail. (Fig. A3.09)
3. Fit the Horizontal Ledgers UH-2 (**3a + 4a + 5a**) as assembly guardrails.
4. Hammer down the wedges of all the ledgers.

→ The second flight of stairs is now installed.

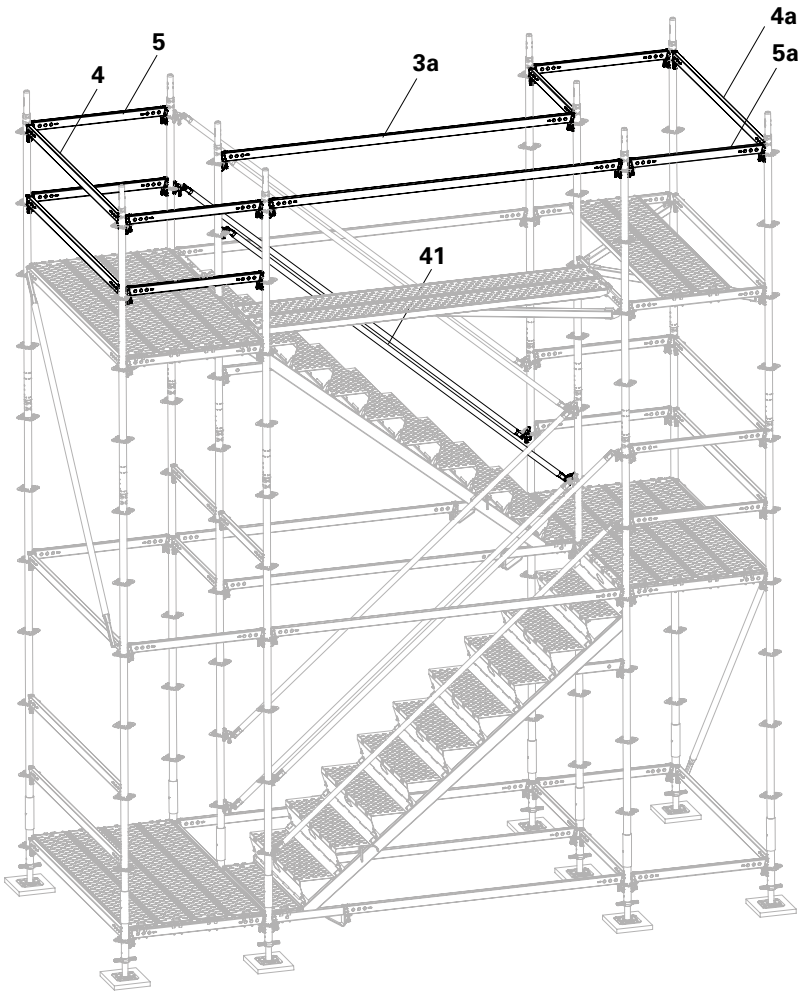


Fig. A3.09

Additional flights of stairs

Fig. A3.10 shows the view from the building side.

Install additional flights of stairs as described in Section "A3 Additional staircases" on page 30 ff .

Staircase assembly is to take place in line with the erection progress:

1. Move assembly aids from one flight of stairs to the next.
2. Fit H-Braces UBH Flex (**43 / 44**) every 4.0 m (Fig. A3.10)
3. Fit anchoring in accordance with "B3 Ties, tie forces" on page 61ff. The top level must always be anchored and braced with Horizontal Ledgers UH-2.
4. Insert locking pins Ø 48 into the standards in the last 8 m.

Last flight of stairs

Components

3	Horizontal Ledger UH-2 250	2x

Assembly

Brace with Horizontal Ledger UH-2 250 (**3**)
(instead of Horizontal Ledger UH-2 200 and the Stair Stringers UA). (Fig. A3.10)

For superstructures with a reduced height at the base level, move the bracing levels and anchoring levels downwards accordingly.
See Section "A8 Height adjustment" on page 47 ff

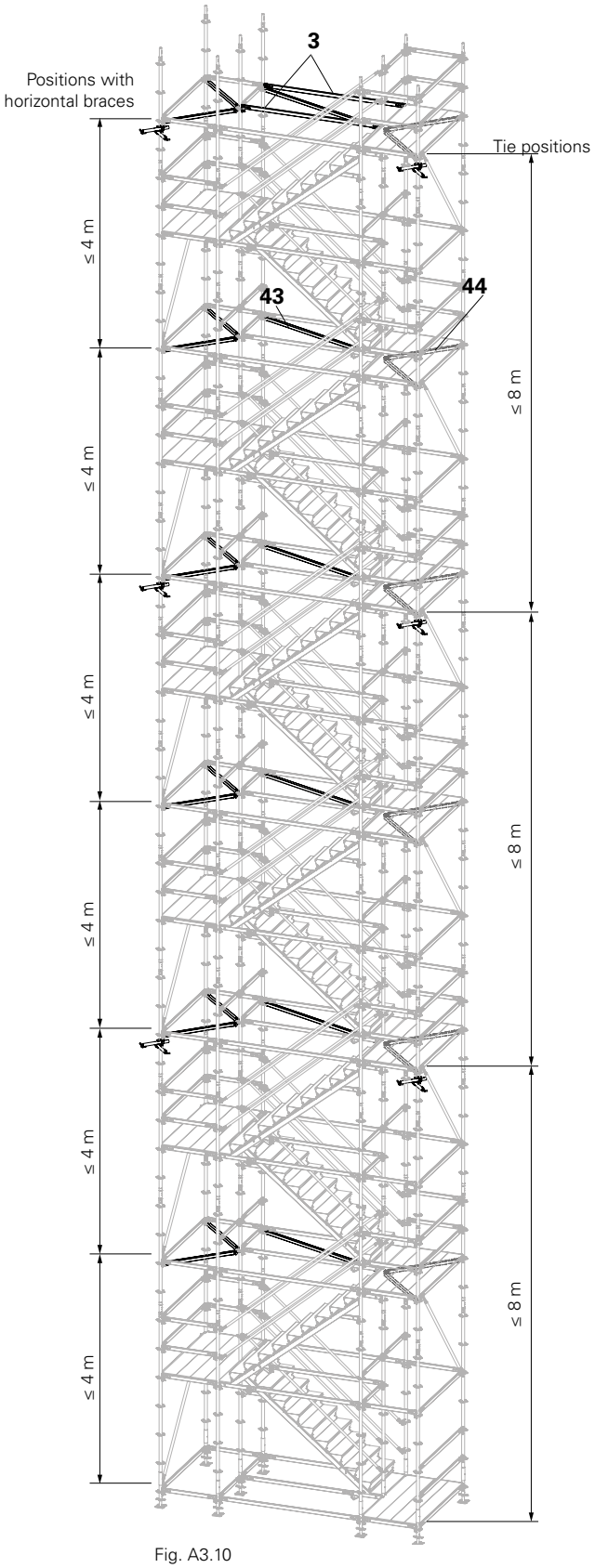


Fig. A3.10

Access into the building

Fig. A3.11 shows the platform heights when the base height is 30 cm.
A footbridge into the building can be established at each landing platform.
View from the side of the building.

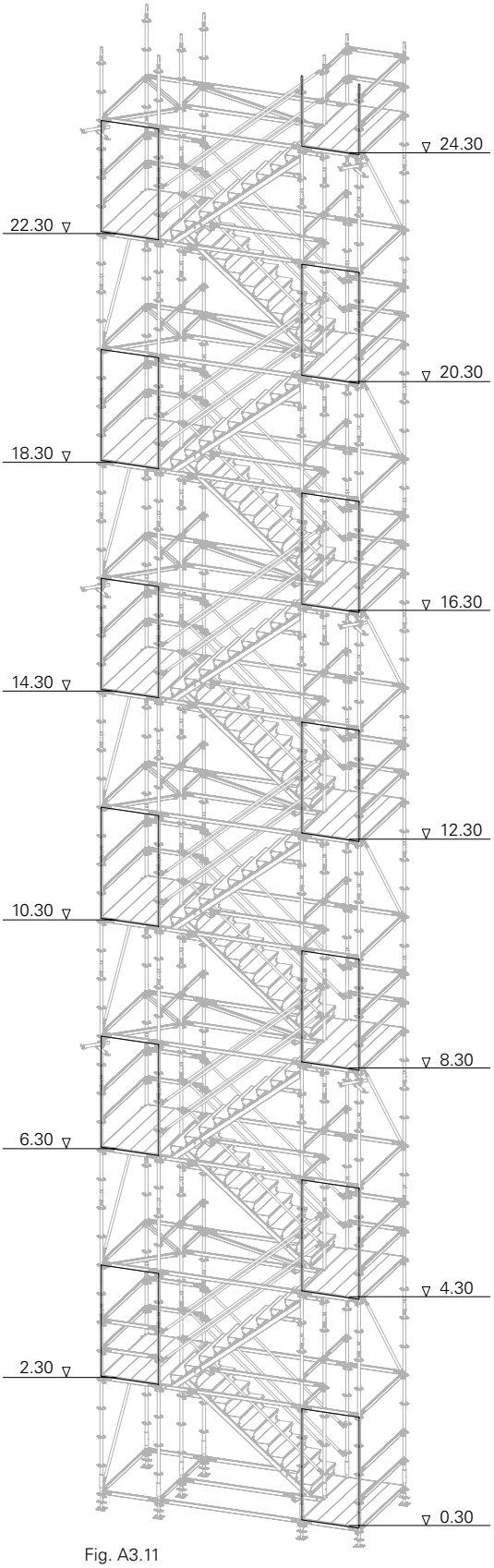


Fig. A3.11

Footbridge

It is possible to access the building from all landing platforms.
To form the footbridge, assemble PERI UP Flex components according to the site-specific requirements.

Remove the
Horizontal Ledgers UH-2 100E from the inner side of the tower.
Static replacement measures are not necessary. (Fig. A3.12)

Before the horizontal ledgers serving as lateral protection are removed, a safe footbridge into the building must be formed in full.

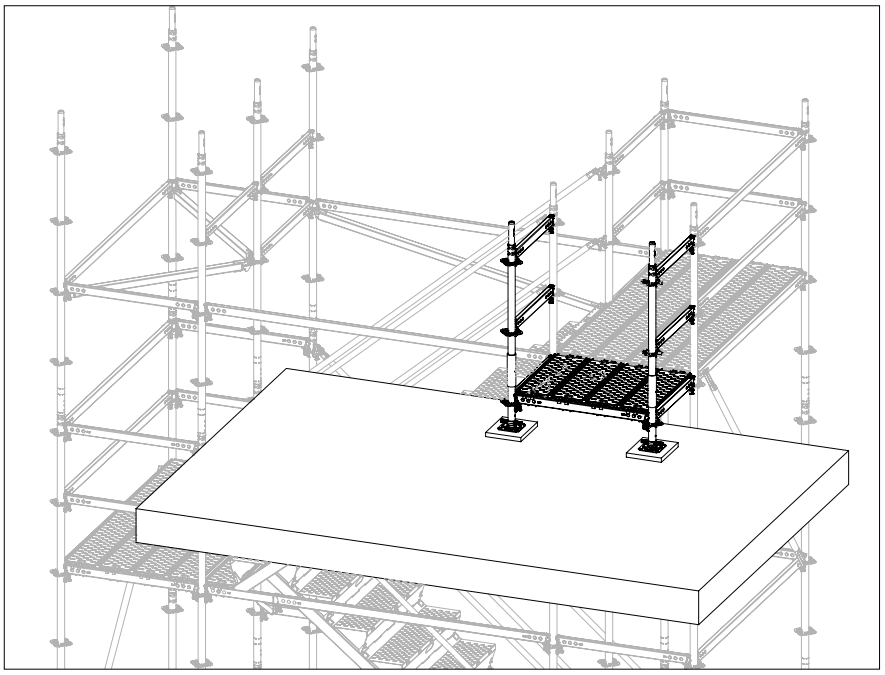


Fig. A3.12

A4 Anchoring

- Ties do not transmit vertical loads!
- Anchoring should be installed progressively with the erection of the scaffolding.
  - Secure anchoring with M12 eyebolts or an equivalent connection.
  - The load-bearing capacity of the fixing materials between the wall ties and anchoring base must be verified by the contractor.
    Tie loads: see tables in Part B.
- Take the height of the tie positions from the tables in Part B.
- Install ties only in the levels that have been braced with horizontal braces.
- Always anchor the top level.

Triangulated tie

For shorter wall spacings, both corner standards must be connected with triangulated ties under 45°.

Components

53 Wall Tie UWT 45	4x
55 Standard Coupler NK 48/48	4x

Assembly

1. Fix the standard couplers (**55**) to the corner standards with Wall Ties UWT 45 (**53**).
2. Fix Wall Ties UWT 45 to the wall, e.g. with M12 eyebolts and dowels, or equivalent connection.

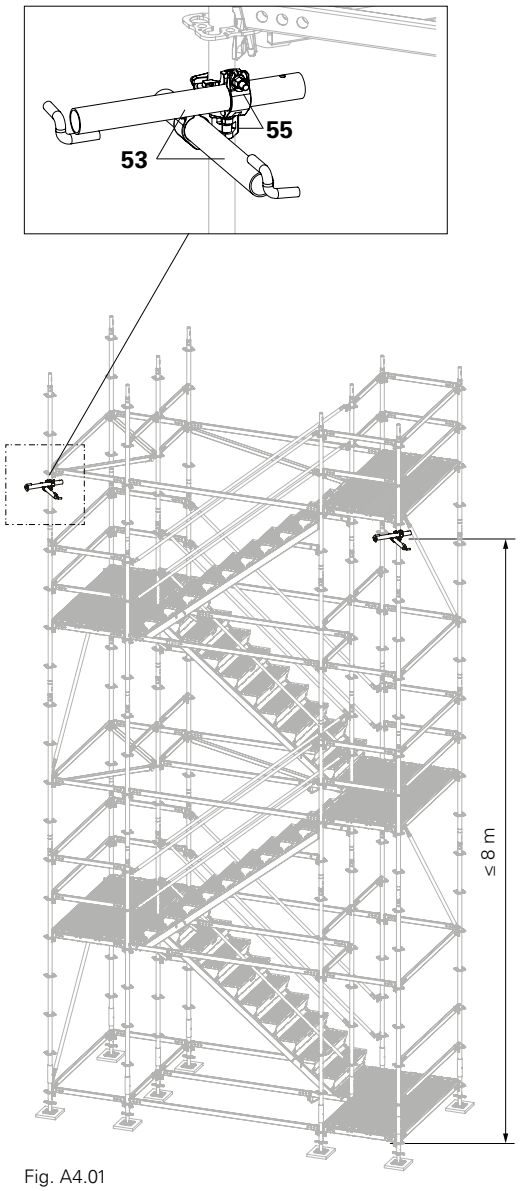


Fig. A4.01

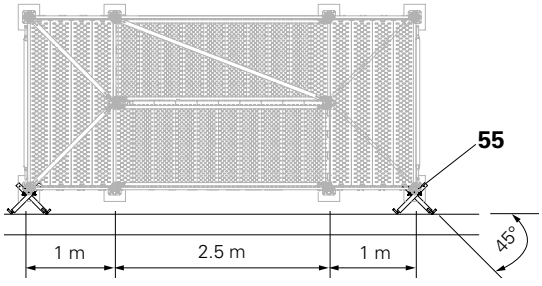


Fig. A4.02

Single wall ties with bracing

For large wall spacings up to max. 200 cm, single wall ties with crossed diagonals are to be used.

Components

54	Wall Tie UWT from 140 onwards	2x
57	Scaff. Tube 48.3x3.2mm lfm ga	2x
55	Standard Coupler NK 48/48	2x
56	Swivel Coupling DK 48/48	5x

Assembly

1. Fix wall ties, e.g. UWT 140 (**54**), to the corner standards using standard couplers (**55**).
2. Fix Wall Ties UWT 140 to the wall, e.g. with M12 eyebolts and dowels, or equivalent connection.
3. Fix scaffolding tubes (**57**) to the Wall Ties UWT 140 using swivel couplings (**56**). (Fig. A4.05)
4. At the intersection point of the scaffolding tubes, fit swivel couplings for connecting both scaffolding tubes. (Fig. A4.03 and A4.04)

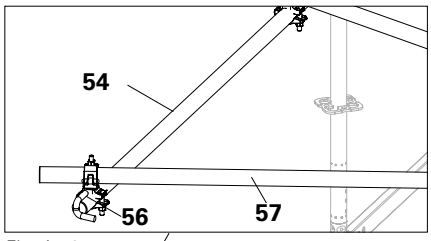


Fig. A4.05

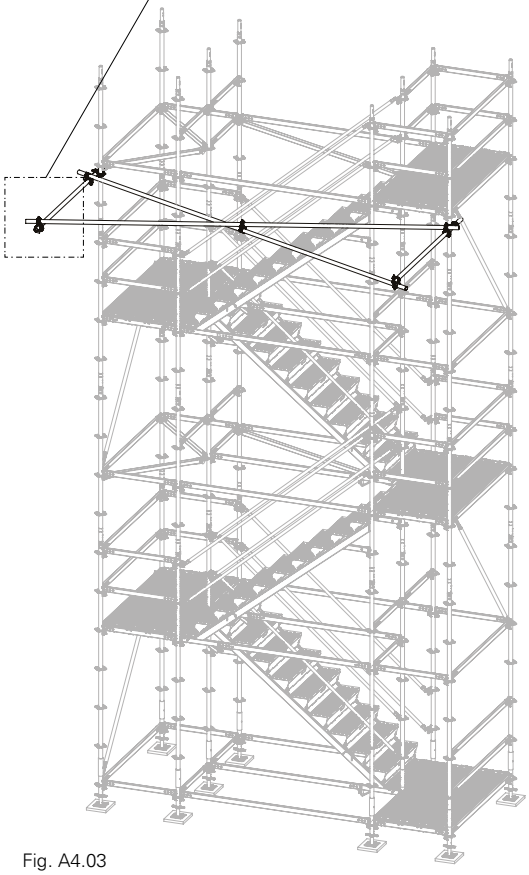


Fig. A4.03

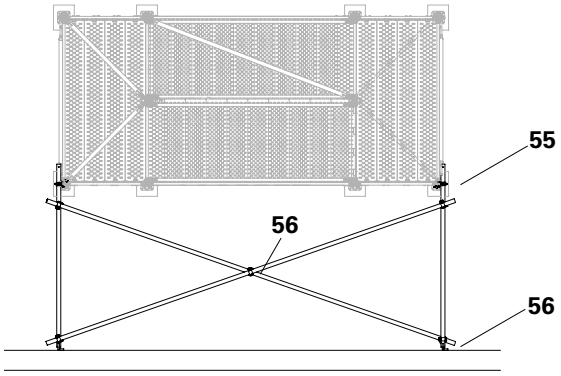


Fig. A4.04

A5 Dismantling

Sequence

- Dismantle from top to bottom, i.e. in the reverse order as shown in the assembly procedure.
- Install auxiliary decks and guardrails in the opposite order to the one described in the assembly process. Dismantle stair parts and remove auxiliary decks and guardrails.
- Remove the anchoring progressively along with the stair tower from top to bottom.
- In the event of work being interrupted, the top level should not extend more than 3.0 m beyond the last tie position.

The scaffolding contractor can also undertake other measures on the basis of his own risk assessment.

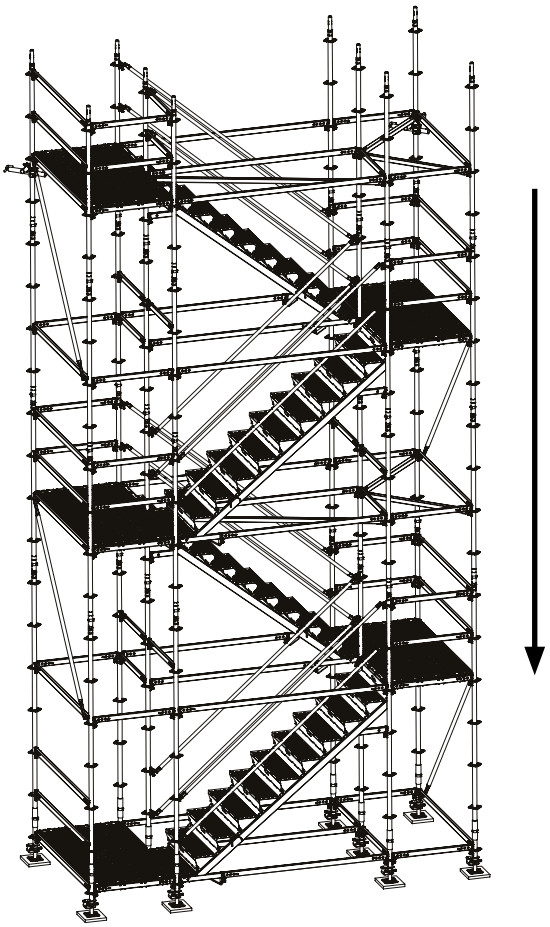


Fig. A5.01

A6 Transportation by crane

Before moving the crane, it must always be ensured that:
- all adjusting base plate locks have been fitted,
- all vertical joints are securely connected to one another,
- loose objects have been removed, no additional loads are transported,
- all wedges have been securely fixed in place with a jarring blow.

For movement by crane:
- For bracing when moving, fit a Horizontal Ledger UH-2 100E (**5**) or 125.
- Crane sling angle max. 30°
- Guide the stairs with ropes.
- Do not carry out transportation by crane in strong winds.

1. From a safe working position, place four chains or textile lifting gear, e.g. round slings, around the standards below the rosette nodes. (Fig. A6.01 - Fig. A6.01b)
2. Slowly raise the stair tower.
3. Set the stair tower down at the designated and prepared location. Do not relieve the crane of all its load just yet.
4. Align the stair tower vertically with adjusting base plates.
5. Lower the crane further and unhook the lifting gear from a safe workplace.

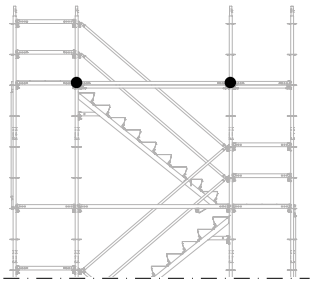


Fig. A6.01a

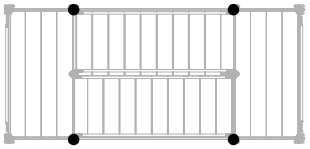


Fig. A6.01b

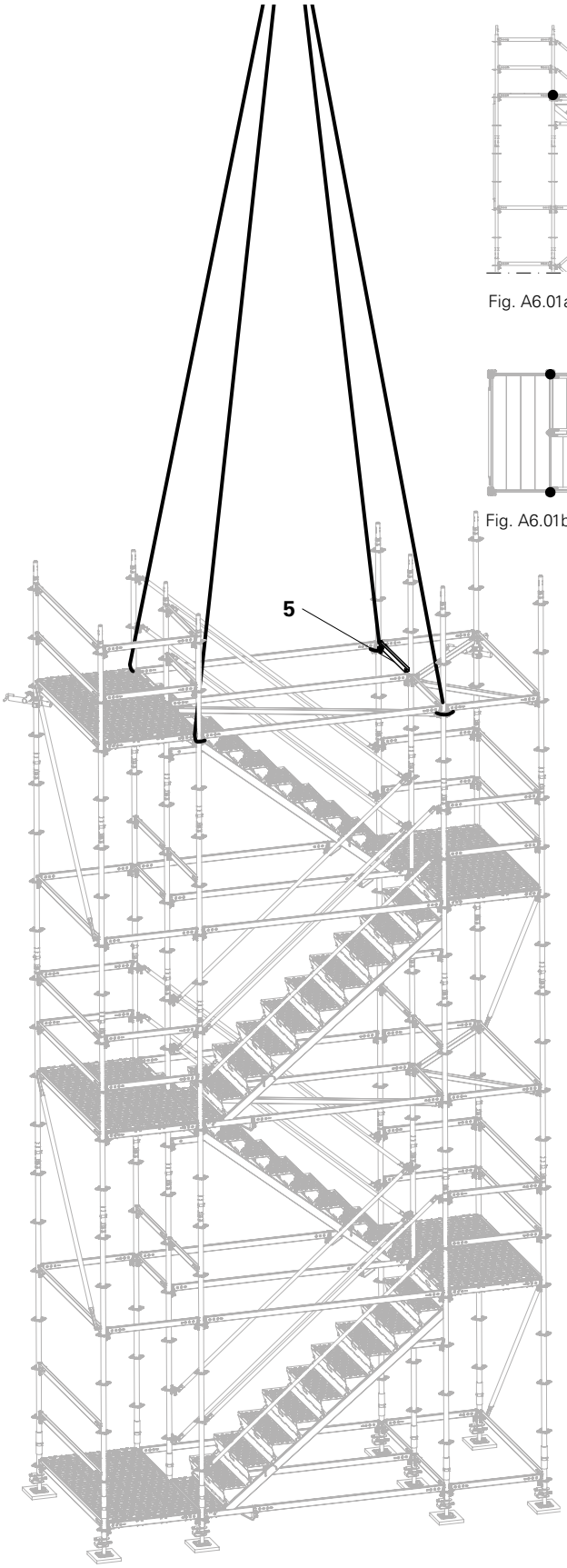


Fig. A6.01

Step width 125 cm

In Sections A1 to A5, the assembly for a staircase with a step width of 100 cm is shown.
The details apply accordingly for the larger step width of 125 cm.
There are changes to the ground plan dimensions of the staircase and therefore also the lengths of the following components:

- Stair Step UAR 125
- End Step UAE 125
- Steel Deck UDG-2 25x125
- Steel Deck UDG-2 25x250
- Horizontal Ledger UH-2 125
- Horizontal Ledger UH-2 250
- Ledger Brace UBL-2 250/200
- H-Brace UBH Flex 125/125
- H-Brace UBH Flex 125/250

Other components are not affected.

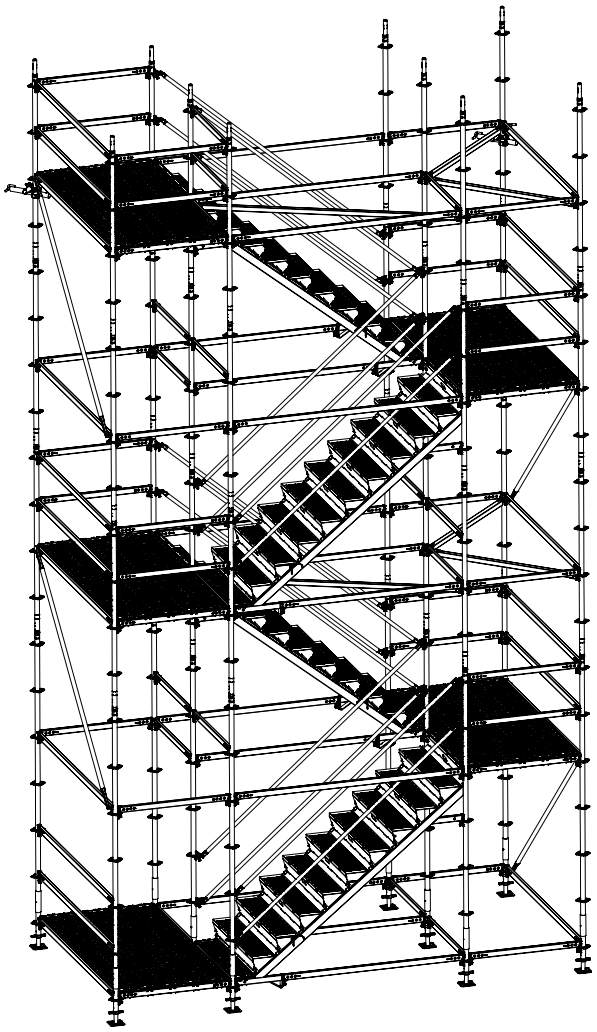


Fig. A7.01

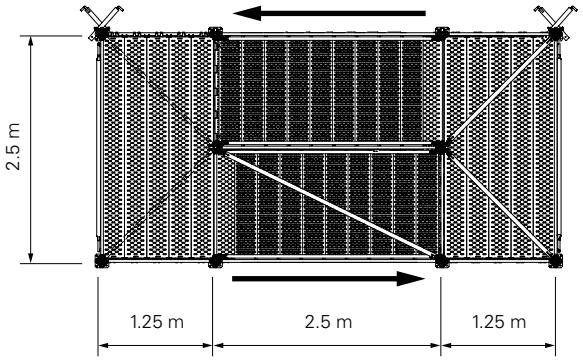


Fig. A7.02

A8 Height adjustment

General information

In some situations, it may be necessary to adjust the height from below.

Load-distributing supports
see Section A1

Base level

Components

1	Adj.Base Plate UJB Ø38mm 50/30	12x
2	Base Standard UVB 25	12x
3	Horizontal Ledger UH-2 250	1x
4	Horizontal Ledger UH-2 200	2x
5	Horizontal Ledger UH-2 100E	5x
6	Horizontal Ledger UH-2 125	2x
31	Steel Deck UDG-2 25x100	5x
32	Steel Deck UDG-2 25x200	4x

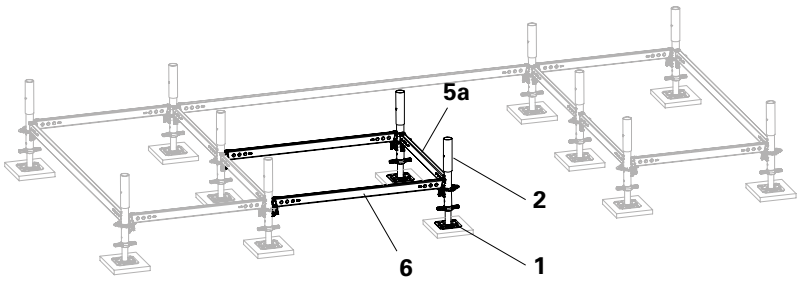


Fig. A8.01

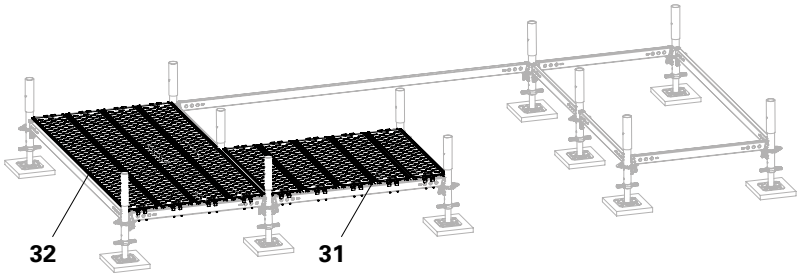


Fig. A8.02

1. Install the base level as described in Section A1 Base level. In addition, place 2 Adj.Base Plates UJB (**1**) with Base Standards UVB 25 (**2**).
2. Connect the base standards with 2 x Horizontal Ledgers UH-2 125 (**6**) and connect with another Horizontal Ledger UH-2 (**5a**). (Fig. A8.01)
3. Fit 4 x Steel Decks UDG-2 200 (**32**) and 5 x UDG-2 100 (**31**). (Fig. A8.02)

A8 Height adjustment

Staircase for height adjustment

Standards and ledgers, guardrail in advance

Components

8	Standard UVR-2 200	10x
9	Top Standard UVH-2 100	2x
4	Horizontal Ledger UH-2 200	3x
5	Horizontal Ledger UH-2 100E	7x
40	Node Brace UBK-2 125/100	2x

Assembly

1. Fit 8 x Standard UVR-2 200 (**8**) and 2 x UVR-2 100 (**9**) in the base standards as shown in the figure. (Fig. A8.03)
2. Fit Node Braces UBK-2 125/100 (**40**) into the upper rosettes of the two remaining standards (**8a**).
   – Fit the node brace into the brace adapters of the rosettes.
3. Fit the standards (**8a**) with pre-assembled node braces (**40**) in such a way that the node braces will be within the stair frame thereafter. (Fig. A8.04)
4. Fit Node Braces UBK-2 (**40**) in the upper rosettes of the top standards (**9**).
5. Hook in the Horizontal Ledgers UH-2 200 and UH-2 100E (**4 + 5**) and knock them in tight. (Fig. A8.05)

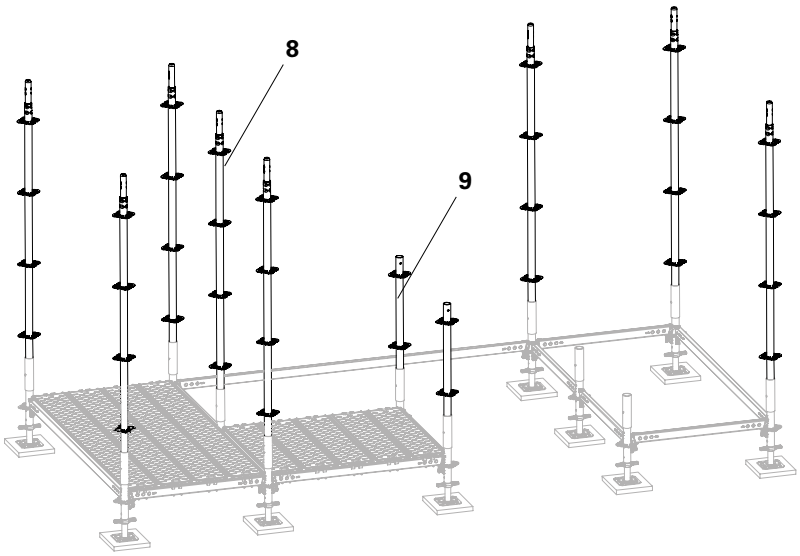


Fig. A8.03

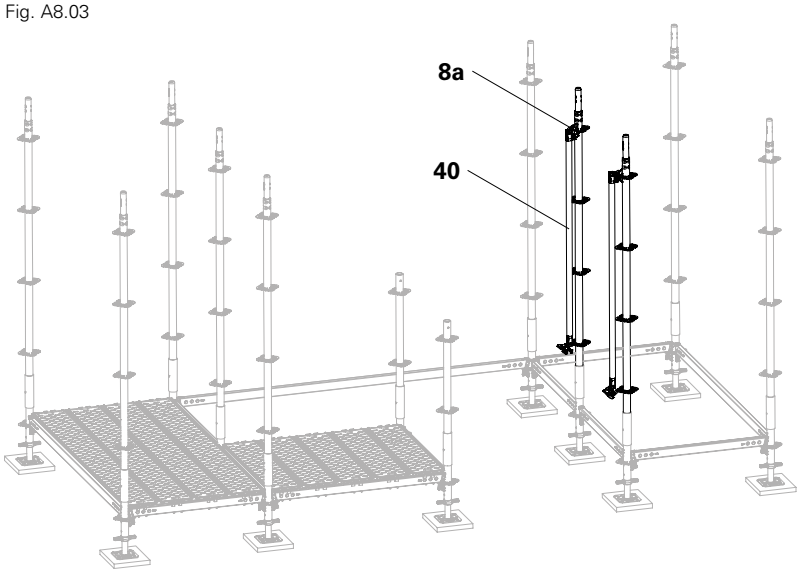


Fig. A8.04

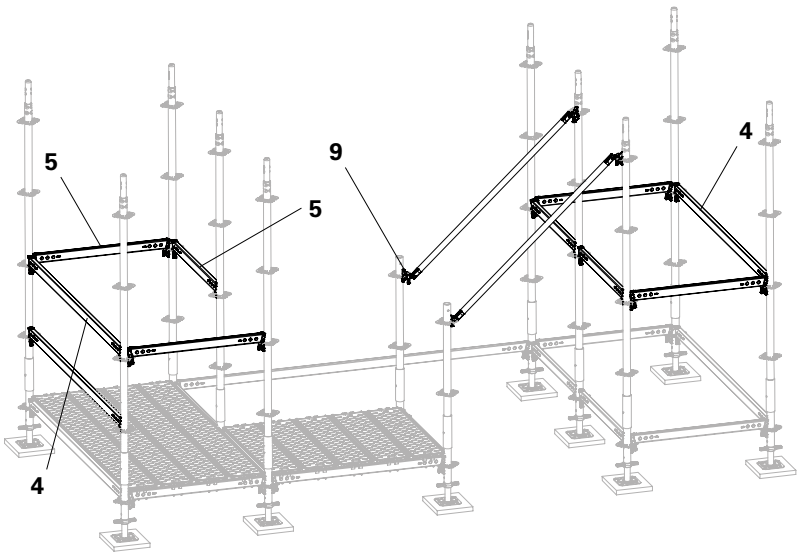


Fig. A8.05

A8 Height adjustment

Decks and diagonals

Components

32	Steel Deck UDG-2 25x200	4x
48	Ledger Brace UBL-2 100/100	2x
49	Ledger Brace UBL-2 200/100	1x

Assembly aid components

32a	Steel Deck UDG-2 25x200	2x
34a	Steel Deck UDG-2 25x250	2x

Assembly

1. Fit Steel Decks UDG-2 200 (**32**) as a landing platform.
2. Fit Steel Decks UDG-2 (**32a + 34a**) as an assembly aid.
3. Fit the Ledger Braces UBL-2 (**48 + 49**) in the upper horizontal ledger with the mounting finger and the tilt finger in the lower horizontal ledger, see Section "Decks and braces" on page 31. (Fig. A8.06)

– For Stair 125, replace the ledger diagonal (**48**) with a scaffolding tube and tube couplers.

All tilt fingers of the assembly must be transverse after installation of the Ledger Braces UBL and be resting on both sides of the hole.

Depending on the requirements or national regulations, fit additional steel decks as assembly aids.

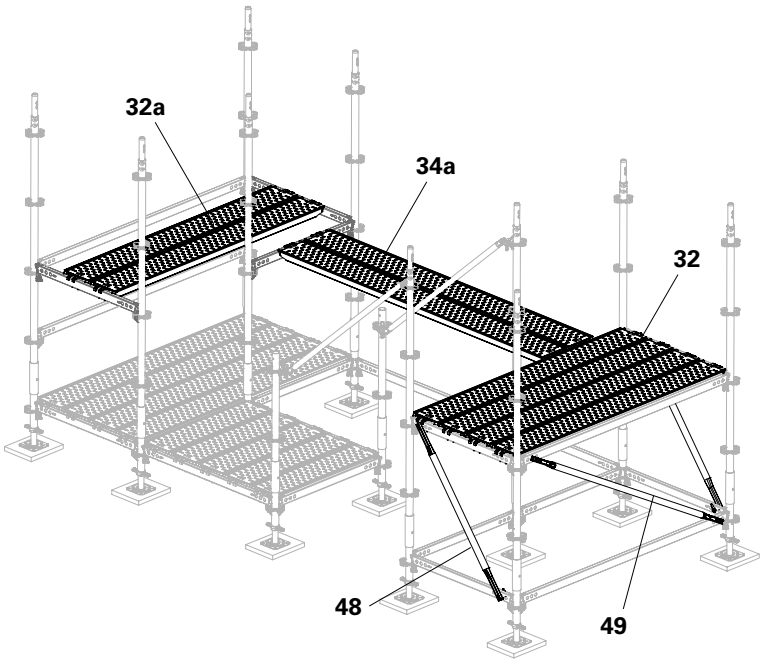


Fig. A8.06

A8 Height adjustment

Stair stringers

Components

14	Stair Stringer UA 125/100	2x
17	Horizontal Ledger UH-2 75	2x

Assembly

1. Fit the Stair Stringers UA (**14**) into the rosettes of the standards at the top and bottom and fix securely.
2. Brace with two Horizontal Ledgers UH-2 75 (**17**), secure the wedges. (Fig. A8.07)

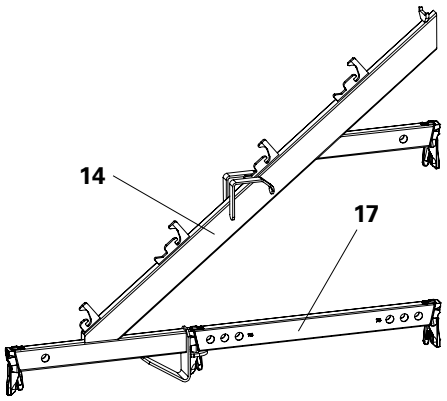


Fig. A8.07a

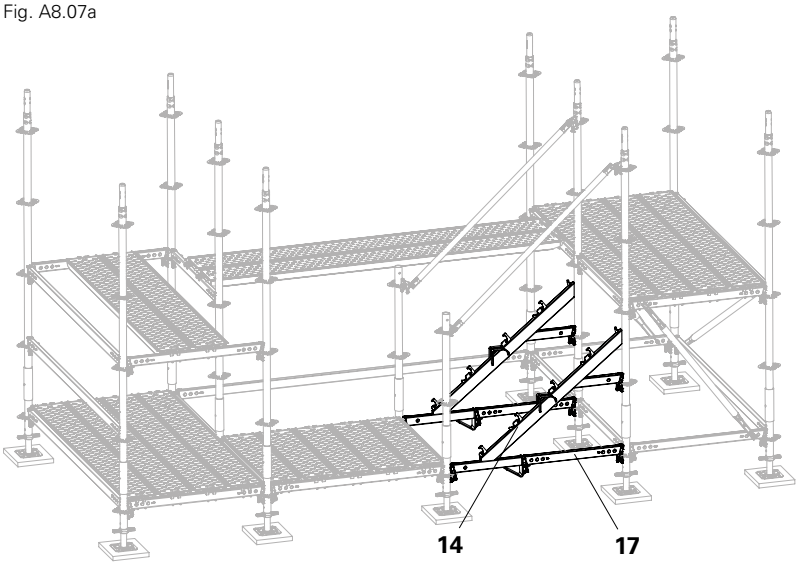


Fig. A8.07

Stair steps

Components

12	Stair Step UAR 100	4x
13	End Step UAE 100	1x
31	Steel Deck UDG-2 25x100	1x

Assembly

1. Position Steel Deck UDG-2 100 (**31**) on the Stair Stringers UA (**14**).
2. Fit 4 x Stair Step UAR 100.
3. Fit 1 x End Step UAE 100. (Fig. A8.08)

For installation of the stair steps, see Section “Stair steps” on page 24 ff.

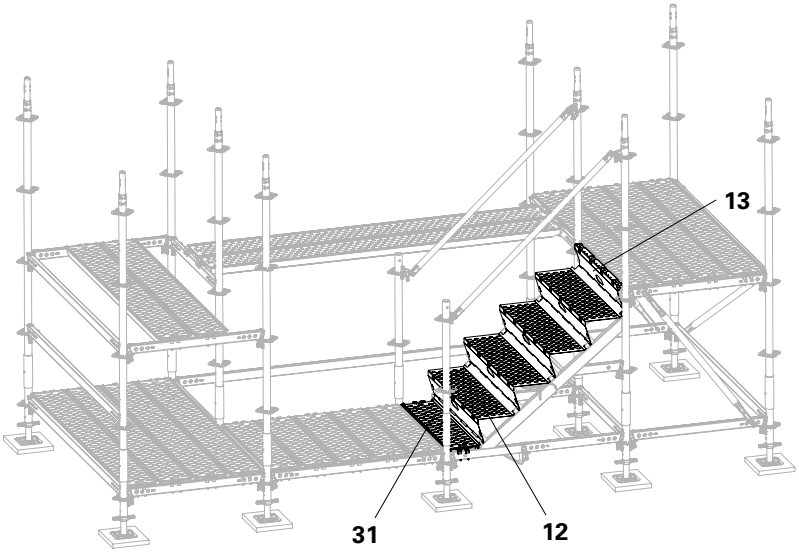


Fig. A8.08

Braces and lateral protection

Components

3	Horizontal Ledger UH-2 250	3x
4	Horizontal Ledger UH-2 200	3x
5	Horizontal Ledger UH-2 100E	7x
6	Horizontal Ledger UH-2 125	3x
40	Node Brace UBK-2 125/100	2x
42	Ledger Brace UBL-2 200/200	1x

Assembly:

1. Fit 3 x Horizontal Ledger UH-2 125 (**6**).
2. Fit Node Braces UBK-2 125/100 (**40**) on the flight of stairs as intermediate guardrails.
3. Fit Horizontal Ledgers UH-2 100E (**5**) and UH-2 200 (**4**) on the upper staircase landing.
4. Fit additional Horizontal Ledgers UH-2 250 (**3 + 3a**), UH-2 200 (**4a**) and UH-2 100E (**5a**) all around at guardrail height.
5. Insert the Ledger Brace UBL-2 (**42**) into the lower Horizontal Ledger UH-2 (**4**) using the mounting finger, insert the tilt finger into the hole of the upper Horizontal Ledger UH-2 (**4a**) and turn finger to a transverse position to secure. (Fig. A8.09)

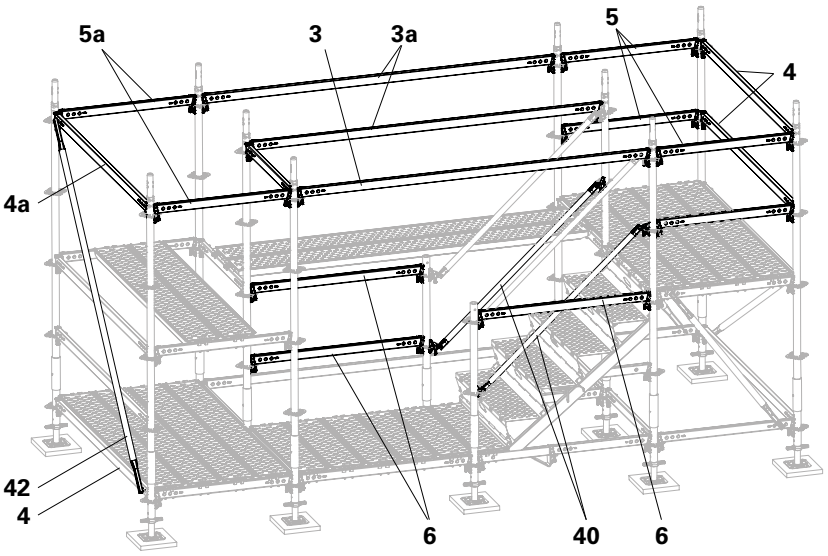


Fig. A8.09

Are all tilt fingers of the Ledger Braces UBL in a transverse position and resting on both sides of the hole?

First staircase

Standards and ledgers, guardrail in advance

Components

3	Horizontal Ledger UH-2 250	1x
4	Horizontal Ledger UH-2 200	2x
5	Horizontal Ledger UH-2 100E	7x
8	Standard UVR-2 200	10x
41	Node Brace UBK-2 250/200	2x
49	Ledger Brace UBL-2 200/100	1x

Assembly

1. Fit 8 x Standard UVR-2 200 (**8**) as shown in the illustration.
2. Fit Node Braces UBK-2 250/200 (**41**) into the upper rosettes of the two remaining standards (**8a**).
3. Fit standards (**8a**) with pre-assembled node braces (**41**) and fit the node braces in the lower rosettes of the opposite standards.
4. Hook in the Horizontal Ledgers UH-2 200 and UH-2 100E (**4 + 5**) and knock them in tight.
5. Fit the Ledger Brace UBL-2 200/100 (**49**). (Fig. A8.10)

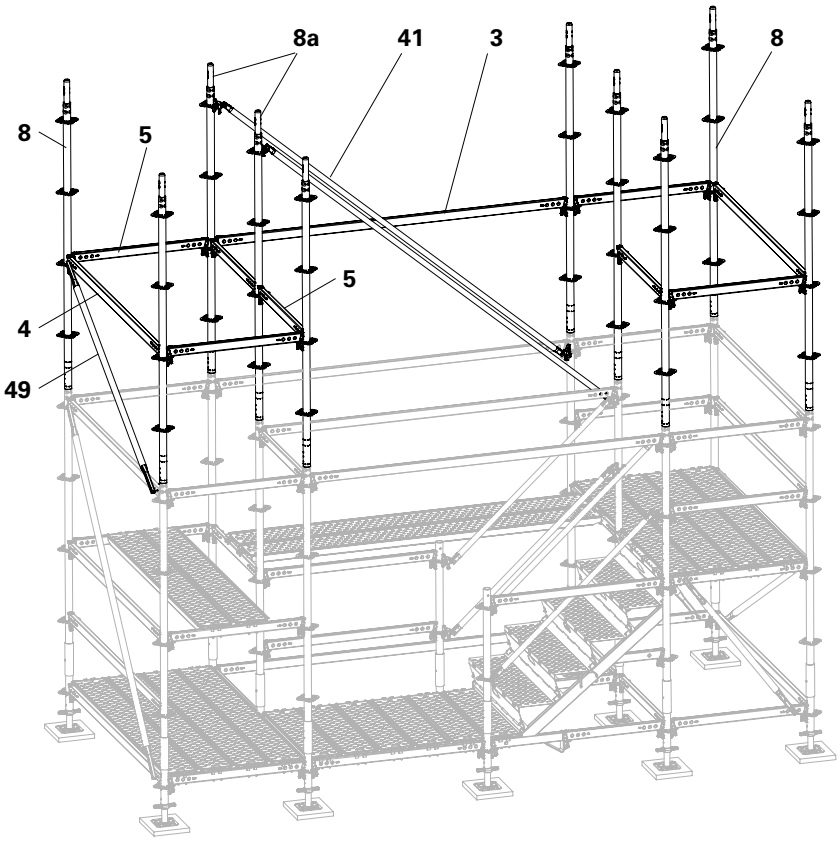


Fig. A8.10

All tilt fingers of the assembly must be transverse after installation of the Ledger Braces UBL and be resting on both sides of the hole.

Decks and diagonals

Components

32	Steel Deck UDG-2 25x200	4x
43	H-Brace UBH Flex 250/100	1x
44	H-Brace UBH Flex 100/100	4x

Assembly aid components

32a	Steel Deck UDG-2 25x200	2x
34a	Steel Deck UDG-2 25x250	2x

Assembly

1. Fit Steel Decks UDG-2 200 (**32**) as a landing platform.
2. Fit Steel Decks UDG-2 (**32a + 34a**) as an assembly aid.
3. Fit H-Braces UBH Flex (**43 + 44**) beneath the Steel Decks UDG-2 (**32 + 32a + 34a**). (Fig. A8.11)

→ For assembly of the horizontal braces, see Section "Decks and braces" on page 31 ff.

Depending on the requirements or national regulations, fit additional steel decks as assembly aids.

Alternative:
The H-Braces UBH Flex 250/100 and UBH Flex 100/100 can be replaced with scaffolding tubes and standard couplers.

⇒ Maintain the required clearance height!

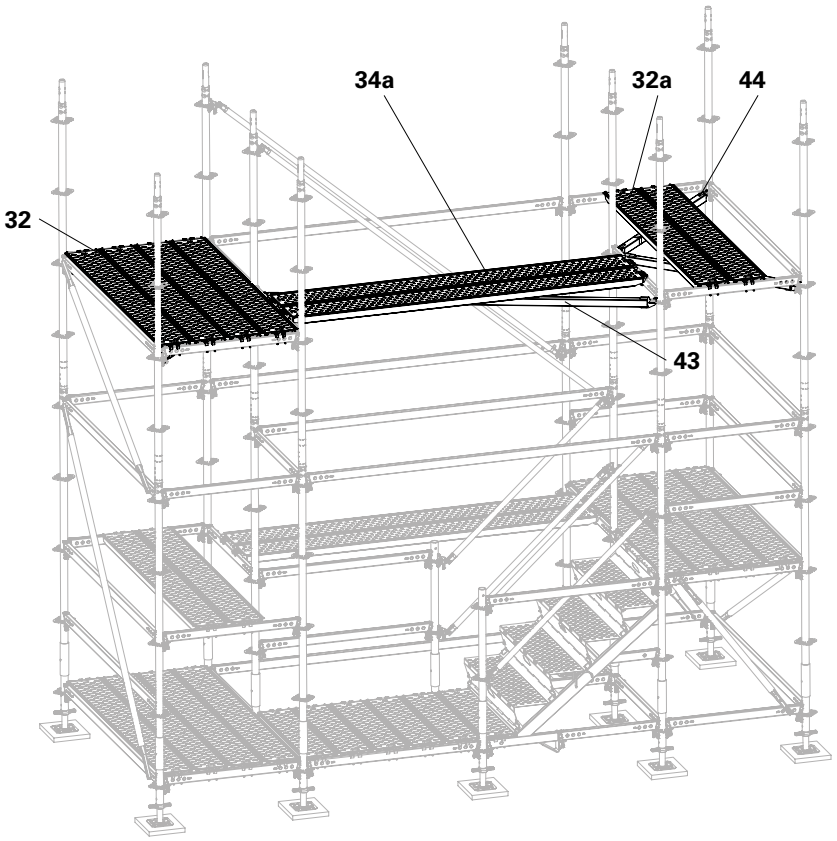


Fig. A8.11

A8 Height adjustment

Horizontal ledger

Components

5	Horizontal Ledger UH-2 100E	1x
6	Horizontal Ledger UH-2 125	2x

Assembly

1. Fit Horizontal Ledger UH-2 100E (**5**).
2. Remove the Horizontal Ledger UH-2 250 (**3a**).
3. Remove the auxiliary decks (**32**).
4. Remove the auxiliary ledger (**5a**).
6. If necessary, block off the sides of the access landing to the stairs with Horizontal Ledgers UH-2 125 (**6**). (Fig. A8.12)

Stair stringers

Components

4	Horizontal Ledger UH-2 200	1x
11	Stair Stringer UA 250/200	2x
17	Horizontal Ledger UH-2 75	1x

Assembly

1. Fit the Stair Stringers UA (**11**) into the rosettes at the top and bottom and hammer in securely.
2. Brace the outer stair stringer (**11a**) with Horizontal Ledger UH-2 200 (**4**).
3. Brace the inner stair stringer (**11b**) with Horizontal Ledger UH-2 75 (**17**). (Fig. A8.13)

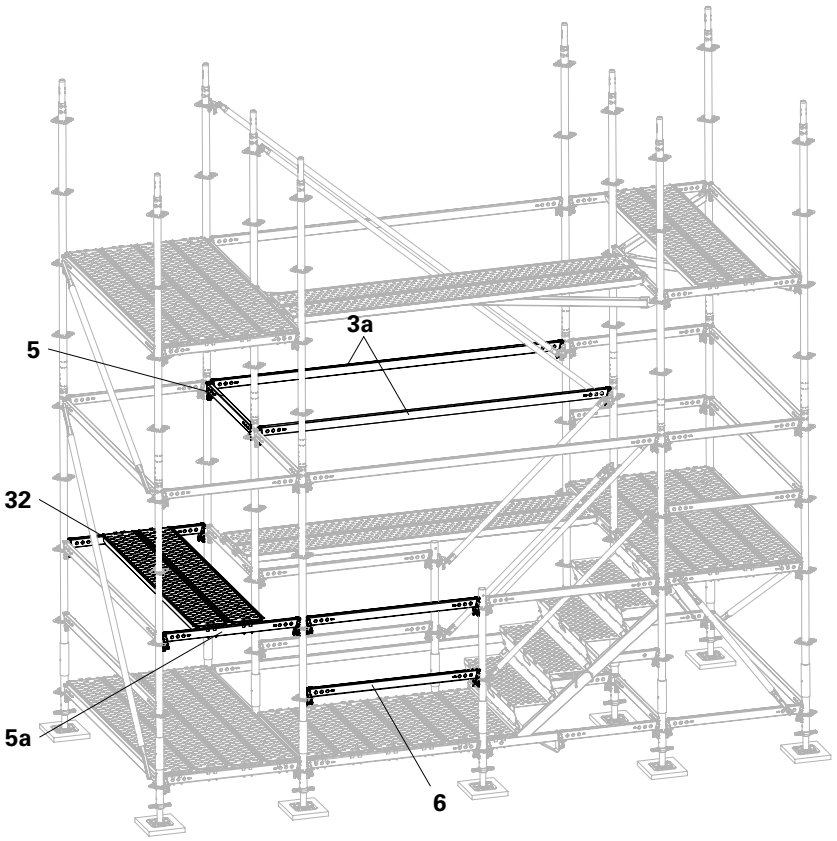


Fig. A8.12

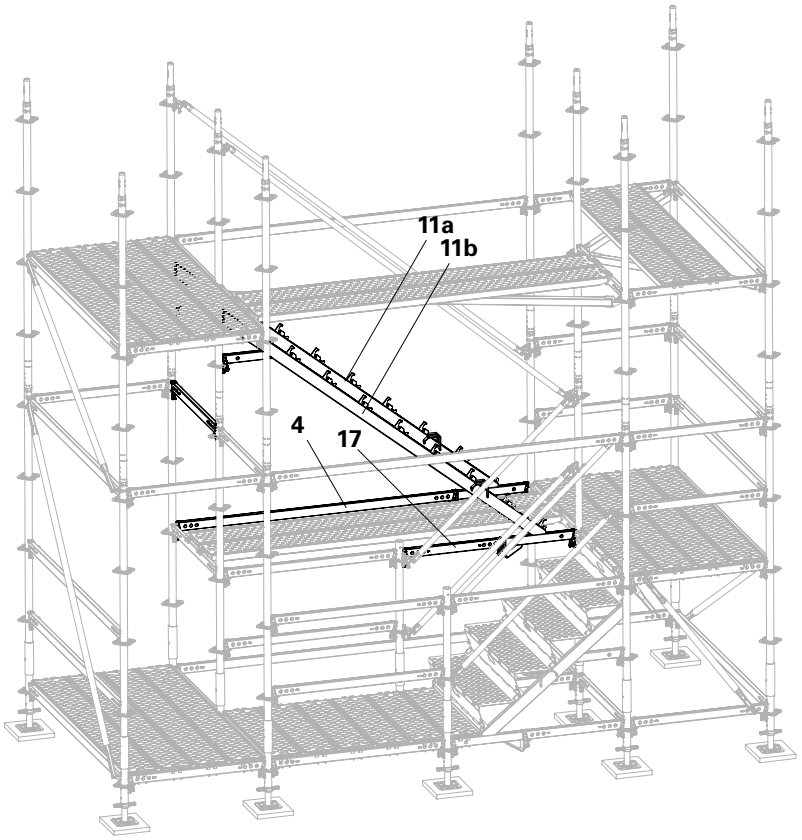


Fig. A8.13

Stair steps and bracing

Components

4	Horizontal Ledger UH-2 200	2x
5	Horizontal Ledger UH-2 100E	4x
12	Stair Step UAR 100	9x
13	End Step UAE 100	1x
41	Node Brace UBK-2 250/200	2x
31	Steel Deck UDG-2 25x100	1x

Assembly aid components

3a	Horizontal Ledger UH-2 250	2x
4a	Horizontal Ledger UH-2 200	1x
5a	Horizontal Ledger UH-2 100E	3x

Assembly

1. Remove the auxiliary decks (**34**). (Fig. A8.14)
2. Position Steel Deck UDG-2 100 (**31**) on the Stair Stringers UA (**11**).
3. Fit 9 x Stair Step UAR 100 (**12**).
4. Fit 1 x End Step UAE 100 (**13**).
5. Fit 2 x Node Brace UBK-2 250/200 (**41**) as intermediate guardrails.
6. Fit Horizontal Ledgers UH-2 (**4 + 5**) as a landing guardrail.
7. Fit the horizontal ledgers (**3a + 4a + 5a**) as assembly guardrails. (Fig. A8.15)

For installation of the stair steps, see Section “Stair steps” on page 24 ff.

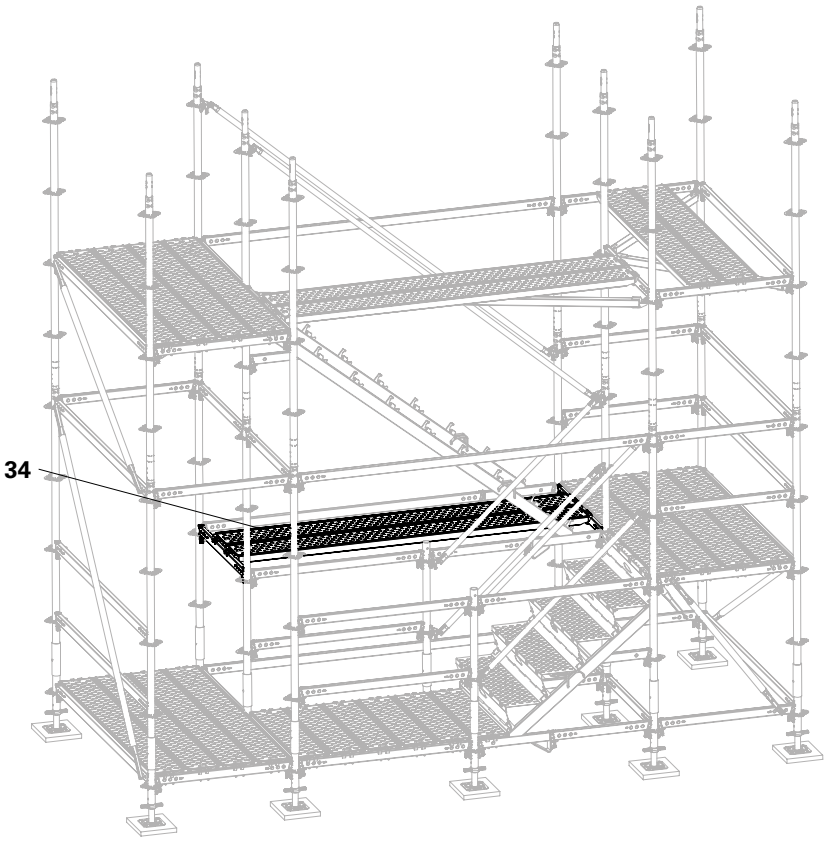


Fig. A8.14

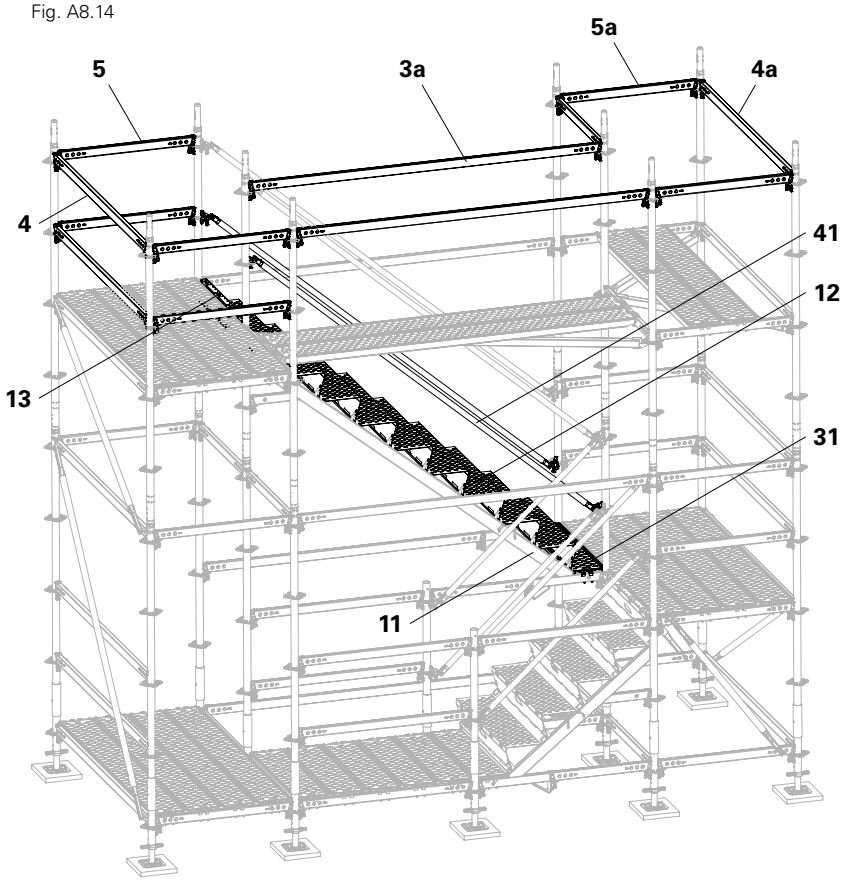


Fig. A8.15

Anchoring

Anchoring (**53**) is carried out in the same way as for the version without height adjustment.
However, the height compensation level must be considered as a complete level.

The tie installation heights specified in Section "B3 Ties, tie forces" on page 61 are therefore shifted downwards by 1 m in each case.

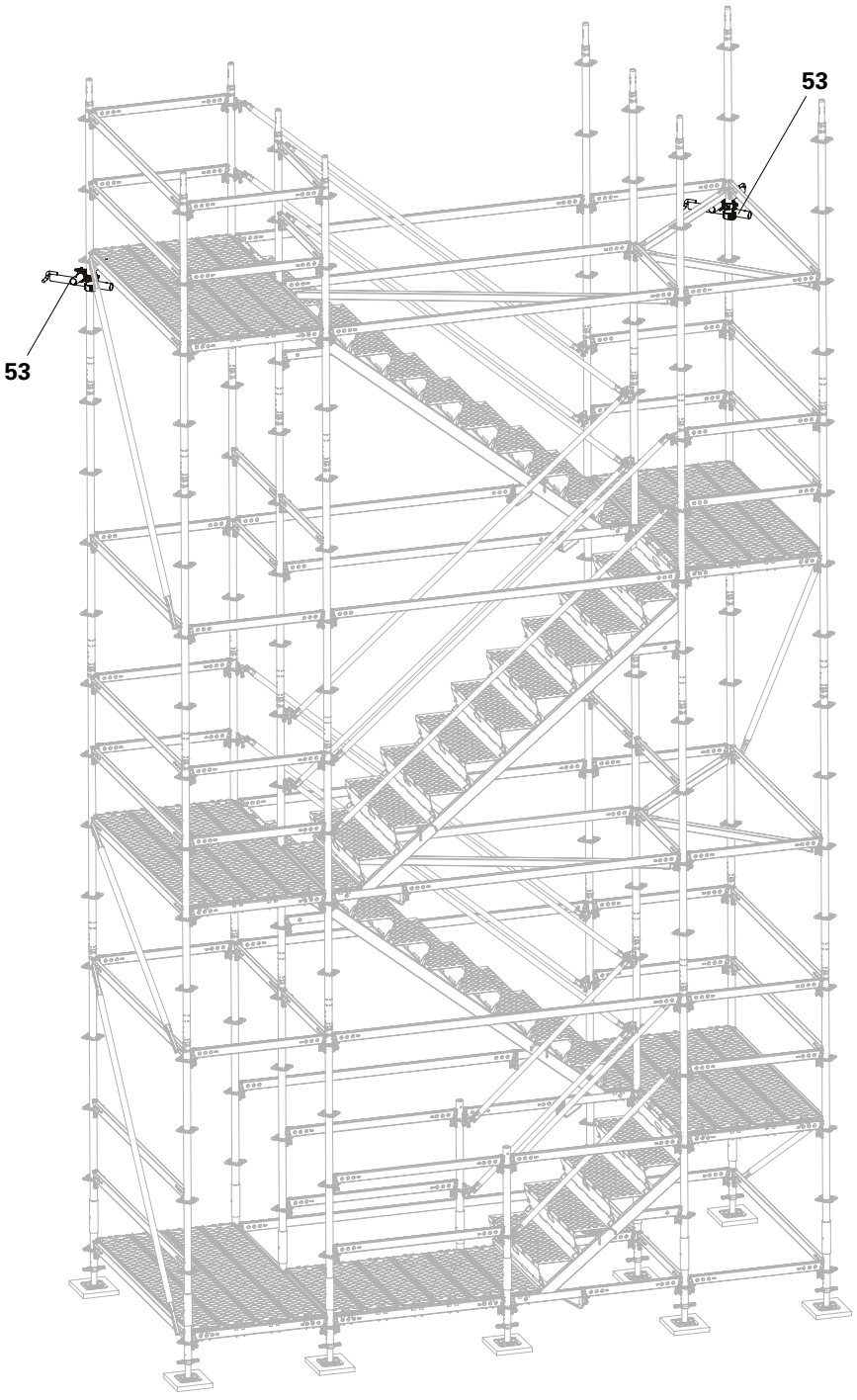


Fig. A8.16

A9 Recessed handrail

Components

41 Node Brace UBK 250/200	2x
61 Spacer UA 76	4x

For the required spacing of the guardrails for components that cross each other (≥ 76 mm), which is necessary in some countries, the Spacer UA 76 (**61**) can be fitted and then the Node Braces UBK can be attached to it.

PERI recommends using Staircase 125 when using the UA 76. This increases the passage width to 96 cm.

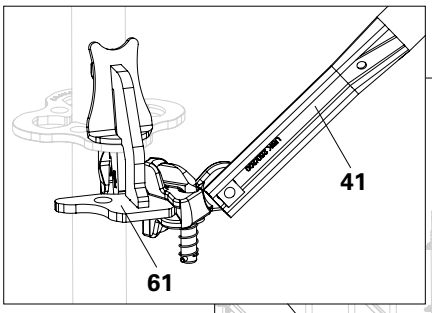


Fig. A9.01a

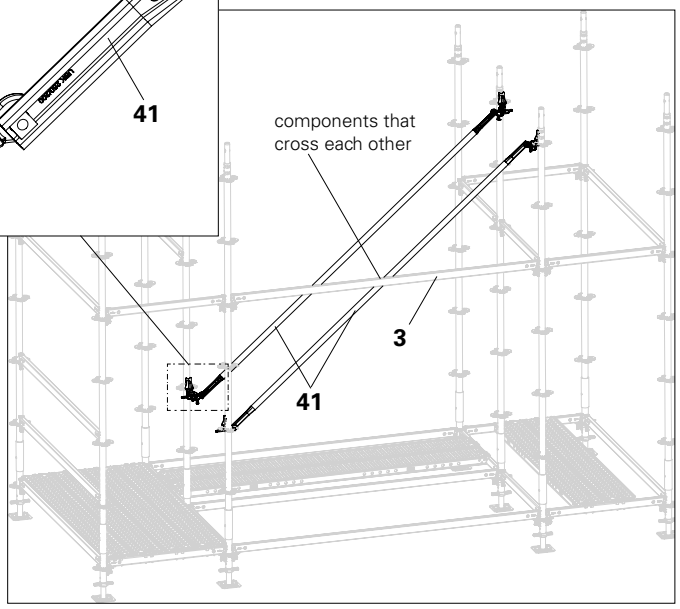


Fig. A9.01

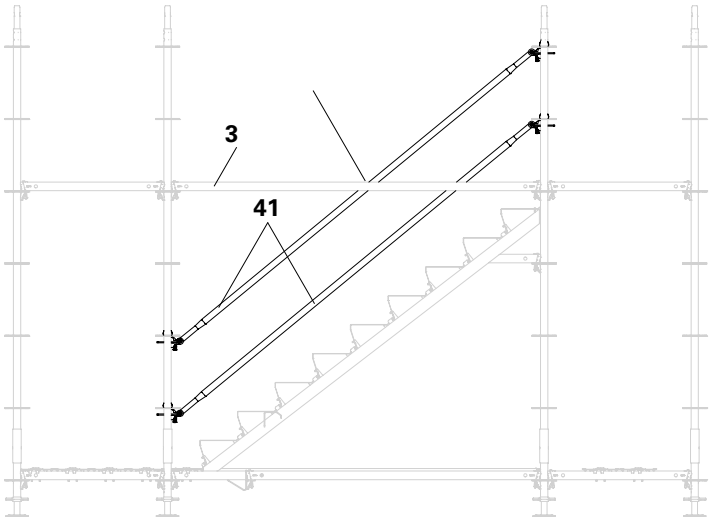


Fig. A9.02

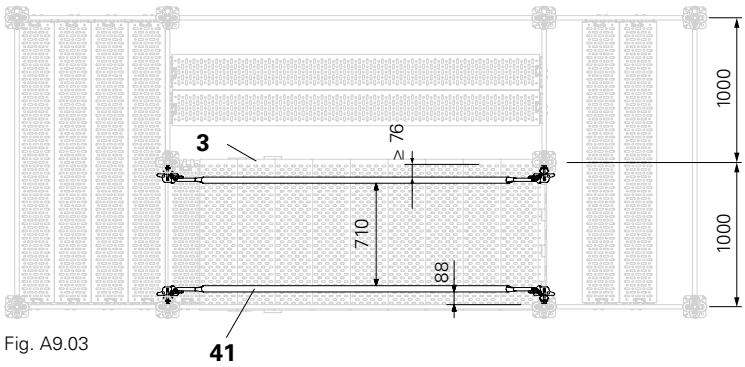


Fig. A9.03

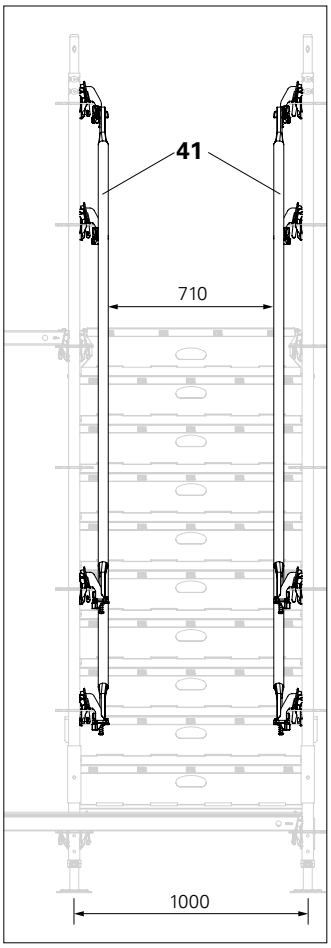


Fig. A9.04

Loads on Stair Steps UAR

The permissible live load is
- Single load in the centre of the bay:
  P = 2.4 kN
- Surface load:
  p = 3.0 kN/m²

Loads on flights of stairs and landing platforms

The permissible live load is:
p = 3.0 kN/m²

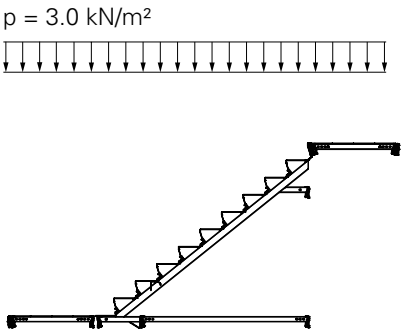


Fig. B1.01

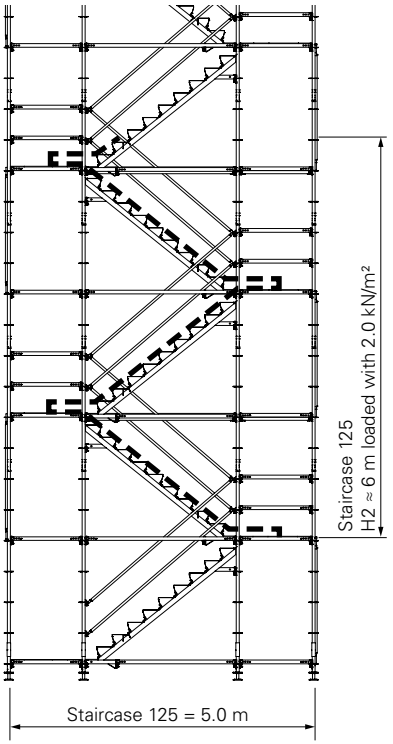


Fig. B1.03

Loads on stair tower

A stair tower consists of several flights of stairs and landing platforms, which are arranged above one another like a tower.

The permissible live load of the stair tower is 40.0 kN, evenly distributed over all standards.
With a required surface load of 2.0 kN/m², this corresponds to:
- no more than 20 linear metres (H1) in the case of a Staircase 100.
  For staircases with a landing platform width of 1.0 m, approx. 4 levels are loaded.

- no more than 16 linear metres (H2) in the case of a Staircase 125.
  For staircases with a landing platform width of 1.25 m, approx. 3 levels are loaded.

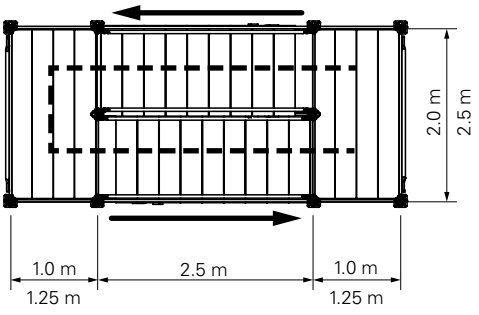


Fig. B1.02

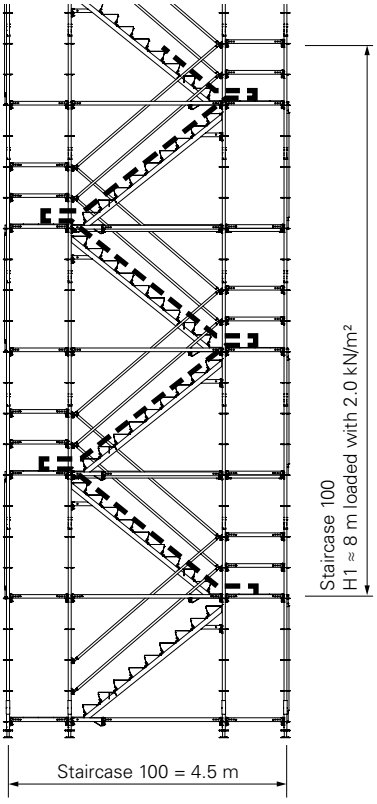


Fig. B1.04

B2 Support forces

Step width 100 cm

The support forces for the stair towers are given in the table and depend on the respective overall height.

Max. design foundation loads F_d [kN]			
Superstructure height [m]	Standards A	Standards B	Standards C
8	7.2	13.5	12.6
12	8.5	14.7	14.2
16	9.9	15.9	15.8
20	11.2	17.0	17.4
24	12.6	18.2	19.0
28	13.9	19.4	20.6
32	15.3	20.6	22.2
36	16.6	21.6	23.4
40	18.0	22.6	24.7
44	19.4	23.8	25.9
48	20.7	25.1	27.1
52	22.0	26.4	28.3
56	23.3	27.7	29.5
60	24.7	28.9	30.7
64	26.0	30.2	31.9

Tab. B2.01

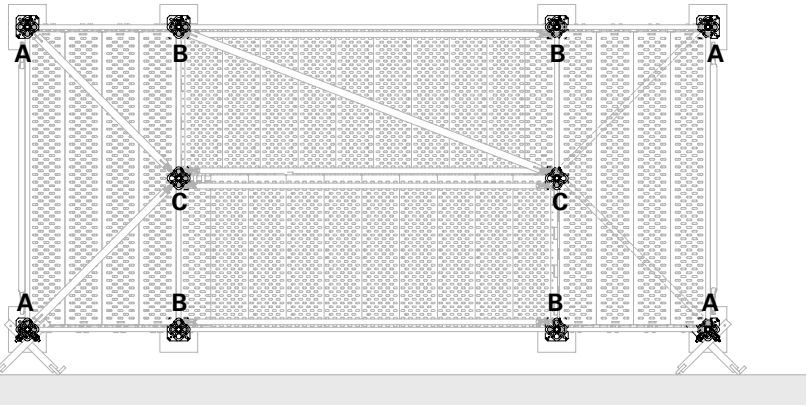


Fig. B2.02

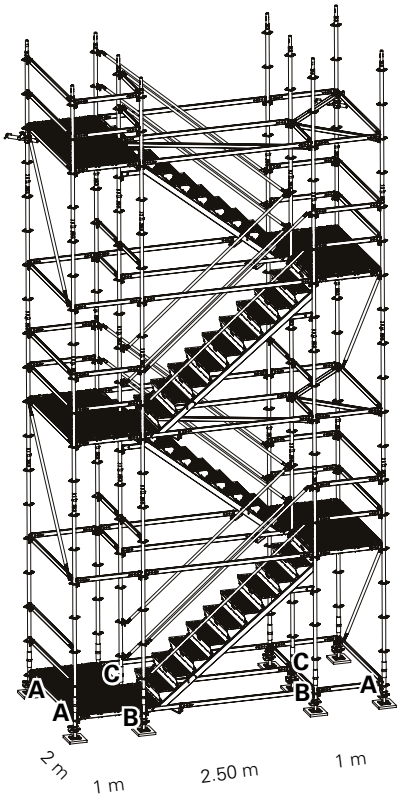


Fig. B2.01

Step width 125 cm

The support forces for the stair towers are given in the table and depend on the respective overall height.

Max. design foundation loads F_d [kN]			
Superstructure height [m]	Standards A	Standards B	Standards C
8	7.5	15.6	14.8
12	9.0	17.2	16.8
16	10.4	18.7	18.8
20	11.8	20.3	20.8
24	13.3	21.8	22.9
28	14.9	23.1	24.5
32	16.4	24.5	26.1
36	18.0	25.8	27.7
40	19.6	27.1	29.4
44	21.1	28.8	30.9
48	22.6	30.5	32.5
50	23.3	31.3	33.3

Tab. B2.02

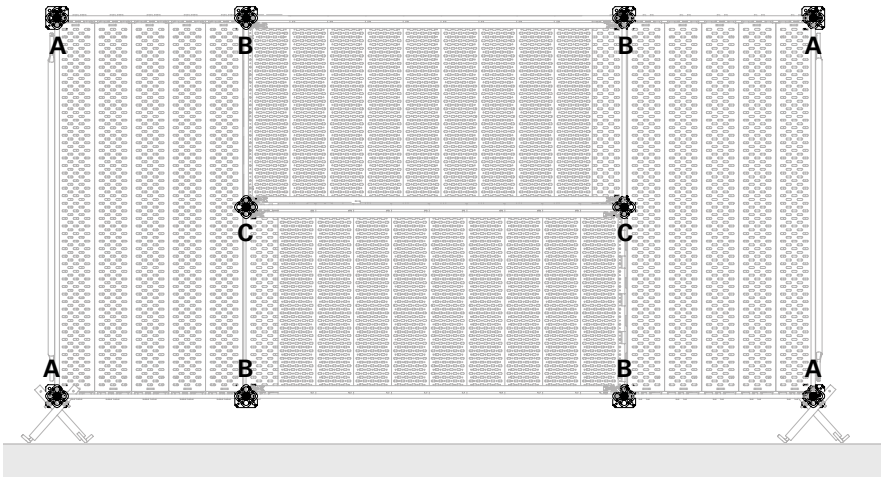


Fig. B2.04

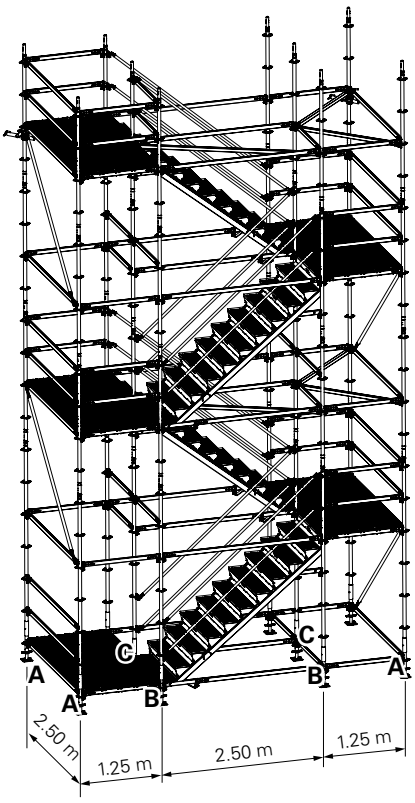


Fig. B2.03

Tie positions – installation heights

Minimum anchoring for PERI UP Flex Stairs

Staircase 100																
Superstructure height [m]	Tie position [m]															
	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64
2 – 8		●														
10 – 16		●		●												
18 – 24		●		●		●										
26 – 32		●		●		●		●								
34 – 40	●	●	○	●	○	●	○	●	○	●						
42 – 48	●	●	●	●	○	●	○	●	○	●	○	●				
50 – 64	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Tab. B3.01

Staircase 125													
Superstructure height [m]	Tie position [m]												
	4	8	12	16	20	24	28	32	36	40	44	48	50
2 – 8		●											
10 – 16		●		●									
18 – 24		●		●		●							
26 – 32	●	●	○	●	○	●	○	●					
34 – 40	●	●	●	●	○	●	○	●	○	●			
42 – 50	●	●	●	●	●	●	●	●	●	●	●	●	●

Tab. B3.02

● Tie position always required.
○ **One** of these tie positions may be **omitted** at the relevant superstructure height.

Tension and compression-proof anchoring
Tie heights are measured without the length of the jack extension.

Top level:
Always brace and anchor horizontally!

Intermediate access on every storey:
Remove Horizontal Ledger UH-2 100E on the inner side of the landing platforms.

* For superstructures with a reduced height at the base level, move the bracing levels and anchoring levels downwards accordingly.

Tie forces

The tie forces have been calculated for an unclad stair tower in front of an open facade (60 % openings). Structural design values are specified.

Wind loads according to EN 12810/12811
Wind Zone 2, Terrain Category III

Determining the wind load
- Exposure-time factor of $\chi = 0.7$, maximum exposure time of 2 years,
- unclad stair tower in front of a partially open facade (60 % openings).
- Wind attack surfaces due to icing are not taken into account. Snow and ice loads are not taken into account.

Tie loads for Staircase 100
- 8 m tie spacing up to superstructure height 32 m:
  - max A = 9.80 kN
  - max A_{II} / max $A_{\perp}$ = 6.93 kN
- minimum anchoring* of the superstructure heights 34 m to 48 m:
  - max A = 8.81 kN
  - max A_{II} / max $A_{\perp}$ = 6.23 kN
- 4 m tie spacing throughout up to superstructure height 32 m:
  - max A = 5.57 kN
  - max A_{II} / max $A_{\perp}$ = 3.94 kN
- 4 m tie spacing throughout for superstructure heights 34 m to 64 m:
  - max A = 7.88 kN
  - max A_{II} / max $A_{\perp}$ = 5.57 kN

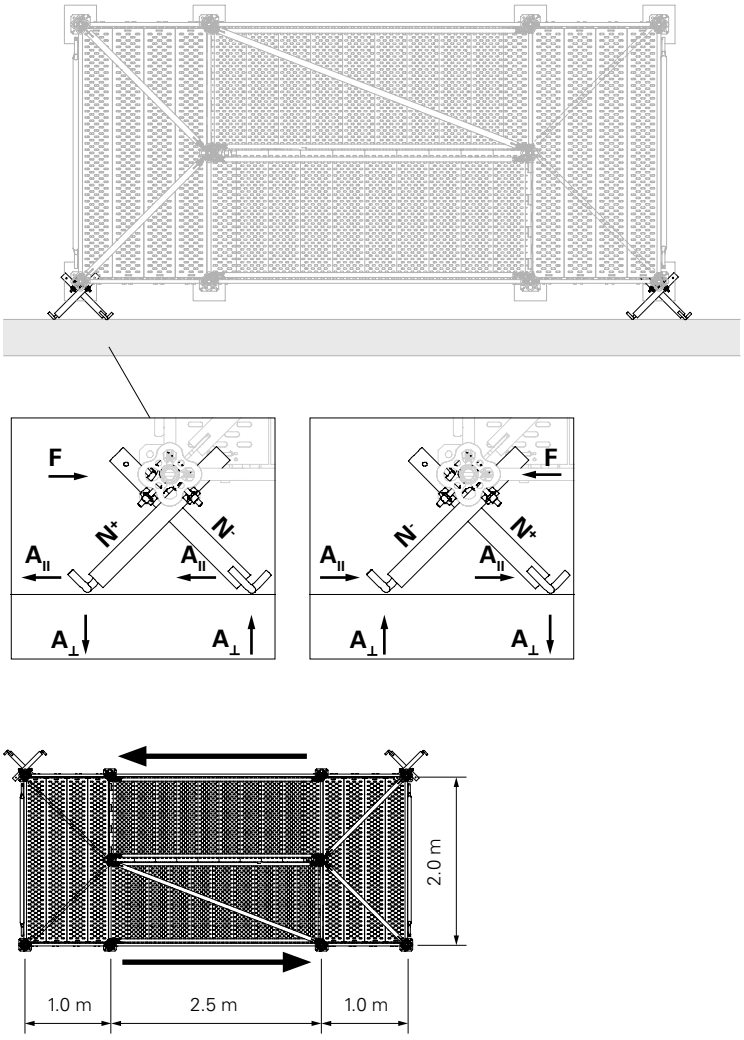


Fig. B3.01

* minimum anchoring:
At superstructure heights of 34 m – 48 m, **one** tie position can be omitted in each case. See Tab. B3.01.

Tie loads for Staircase 125

- 8 m tie spacing up to superstructure height 24 m:
  - max A = 10.7 kN
  - max A_{II} / max $A_{\perp}$ = 7.59 kN
- minimum anchoring* of the superstructure heights 26 m to 40 m:
  - max A = 10.0 kN
  - max A_{II} / max $A_{\perp}$ = 7.08 kN
- 4 m tie spacing throughout up to superstructure height 24 m:
  - max A = 5.94 kN
  - max A_{II} / max $A_{\perp}$ = 4.20 kN
- 4 m tie spacing throughout for superstructure heights 26 m to 50 m:
  - max A = 8.13 kN
  - max A_{II} / max $A_{\perp}$ = 5.75 kN.

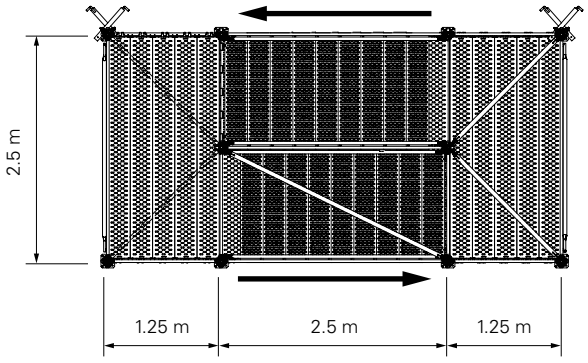


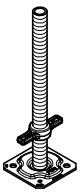
Fig. B3.02

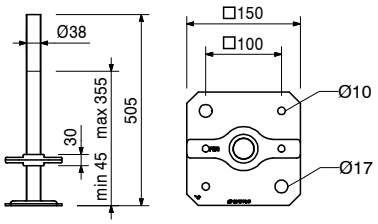
* minimum anchoring:
At superstructure heights of 26 m – 40 m, **one** tie position can be omitted in each case. See Tab. B3.02.

Art no.	Weight [kg]	
100411	3.390	**Adj.Base Plate UJB Ø38mm 50/30**

Notes

With captive red quick jack nut.





Accessory (not included)

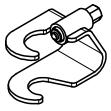
100863	1.020	**Handle Locking UJS**

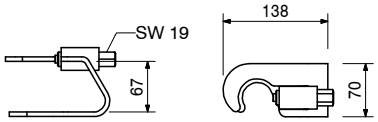
Art no.	Weight [kg]	
100863	1.020	**Handle Locking UJS**

Locks base spindles and section spindles Ø38mm in the leg during moving procedures.

Notes

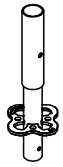
Permissible load 1.5kN.

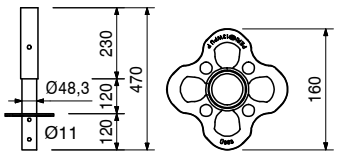




Art no.	Weight [kg]	
400014	2.470	**Base Standard UVB 24**

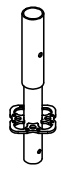
For fitting onto the base spindles directly.

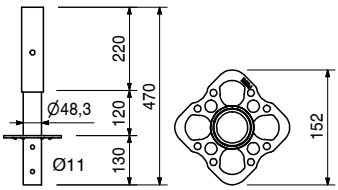




Art no.	Weight [kg]	
133499	2.260	**Base Standard UVB 25**

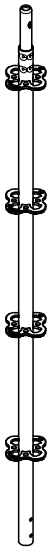
For fitting onto the base spindles directly.
Can also be used as 25cm standard.

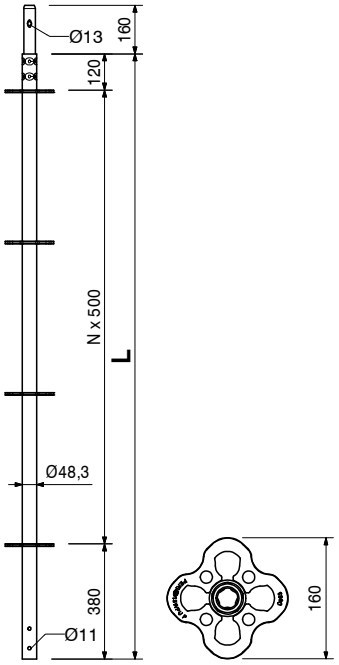




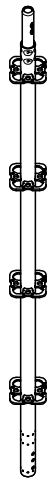
PERI UP Flex Stair 100, 125

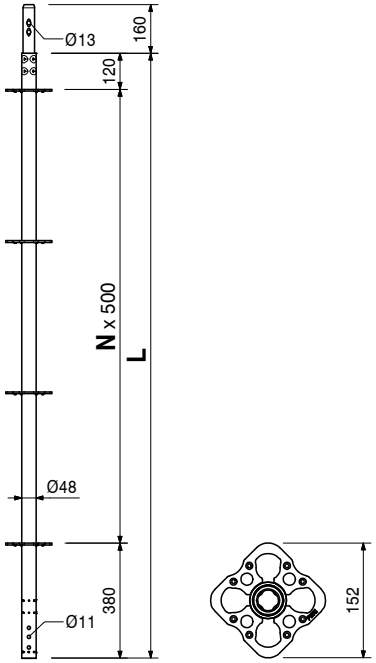
Art no.	Weight [kg]		L [mm]
		Standards UVR	
402859	3.080	**Stadard UVR 50**	500
401306	5.380	**Stadard UVR 100**	1000
402860	7.690	**Stadard UVR 150**	1500
400009	9.990	**Stadard UVR 200**	2000
400012	14.700	**Stadard UVR 300**	3000
400013	19.200	**Standard UVR 400**	4000





Art no.	Weight [kg]		L [mm]
		Standards UVR-2	
132219	2.490	**Standard UVR-2 50**	500
132224	4.340	**Standard UVR-2 100**	1000
132229	6.190	**Standard UVR-2 150**	1500
132234	8.030	**Standard UVR-2 200**	2000
132239	11.700	**Standard UVR-2 300**	3000

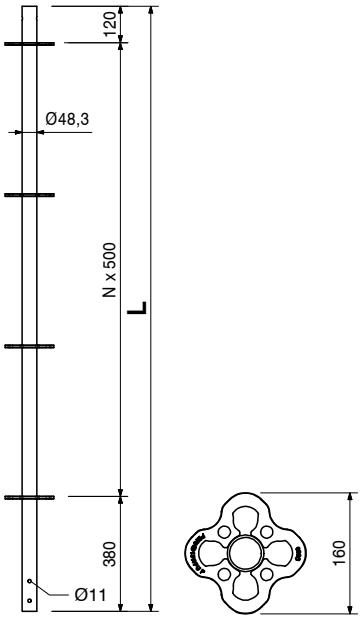




Art no.	Weight [kg]		L [mm]
		Top Standards UVH	
401309	2.510	**Top Standard UVH 50**	500
400000	4.610	**Top Standard UVH 100**	1000
400003	6.920	**Top Standard UVH 150**	1500
400005	9.230	**Top Standard UVH 200**	2000
400007	11.500	**Top Standard UVH 250**	2500

Without pin for supporting head spindles.

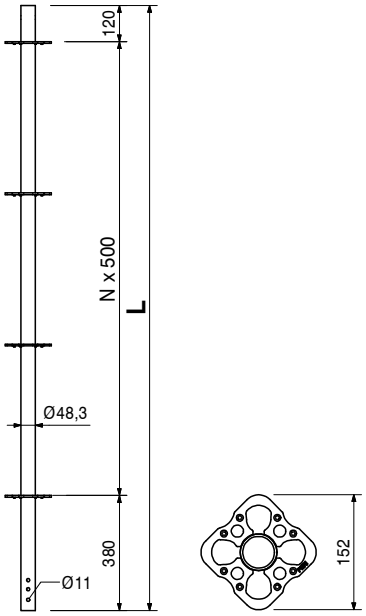




Art no.	Weight [kg]		L [mm]
		Top Standards UVH-2	
132123	2.100	**Top Standard UVH-2 50**	500
132194	4.210	**Top Standard UVH-2 100**	1000
132198	6.320	**Top Standard UVH-2 150**	1500
132200	8.420	**Top Standard UVH-2 200**	2000
132202	10.500	**Top Standard UVH-2 250**	2500

Without spigot for supporting head spindles.

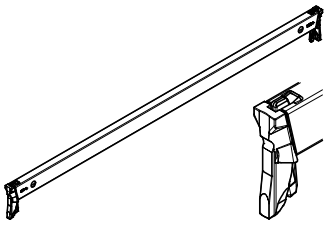


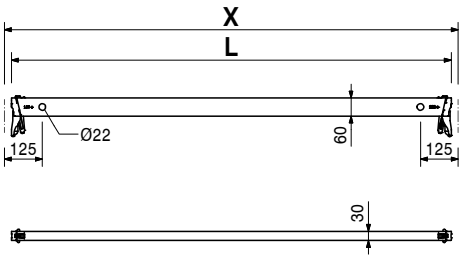


Art no.	Weight [kg]		L [mm]	X [mm]
		Horizontal Ledgers UH Plus		
414613	1.430	**Horizontal Ledger UH 25 Plus**	204	250
414595	2.080	**Horizontal Ledger UH 50 Plus**	454	500
429982	2.520	**Horizontal Ledger UH 67 Plus**	624	670
414629	2.740	**Horizontal Ledger UH 75 Plus**	704	750
414632	4.470	**Horizontal Ledger UH 100 Plus**	954	1000
414638	5.440	**Horizontal Ledger UH 125 Plus**	1204	1250
414641	4.720	**Horizontal Ledger UH 150 Plus**	1454	1500
417032	5.390	**Horizontal Ledger UH 175 Plus**	1704	1750
414645	6.050	**Horizontal Ledger UH 200 Plus**	1954	2000
416356	6.710	**Horizontal Ledger UH 225 Plus**	2204	2250
414648	7.370	**Horizontal Ledger UH 250 Plus**	2454	2500
414651	8.690	**Horizontal Ledger UH 300 Plus**	2954	3000

Notes

With length marking for easier identification.

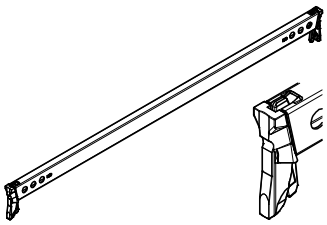


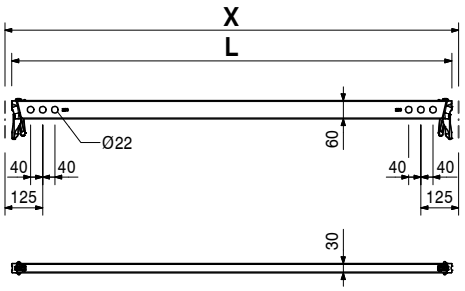


Art no.	Weight [kg]	
		Horizontal Ledgers UH-2
131995	1.400	**Horizontal Ledger UH-2 25**
133900	1.590	**Horizontal Ledger UH-2 33**
131998	2.030	**Horizontal Ledger UH-2 50**
133903	2.470	**Horizontal Ledger UH-2 67**
132213	2.680	**Horizontal Ledger UH-2 75**
432004	3.740	**Horizontal Ledger UH-2 100**
132007	4.500	**Horizontal Ledger UH-2 125**
132010	4.670	**Horizontal Ledger UH-2 150**
132013	5.330	**Horizontal Ledger UH-2 175**
132016	5.990	**Horizontal Ledger UH-2 200**
132019	6.650	**Horizontal Ledger UH-2 225**
132025	7.310	**Horizontal Ledger UH-2 250**
132022	8.640	**Horizontal Ledger UH-2 300**

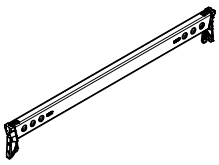
Notes

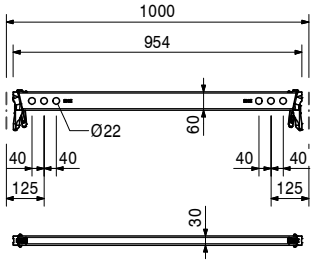
With color coding for length identification.





Art no.	Weight [kg]	
137911	3.750	**Ledger EVOTOP UH-2 100**



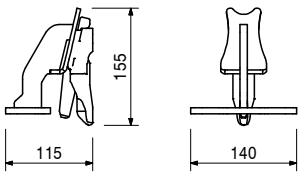


Art no.	Weight [kg]	
124266	1.230	**Spacer UA 76**

Notes

Allows connection of Node Braces UBK as guardrail with 76mm distance to all crossing parts.



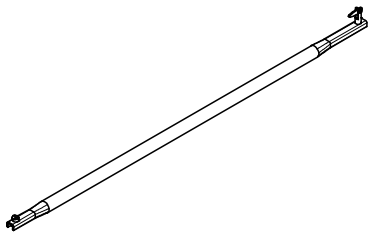


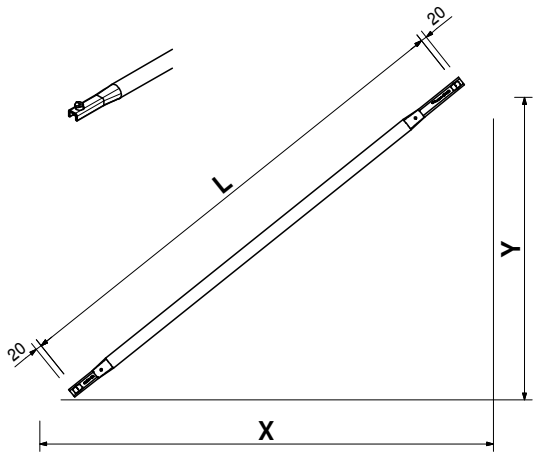
Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Ledger Braces UBL			
415156	2.660	**Ledger Brace UBL 100/50**	901	1000	500
415513	4.640	**Ledger Brace UBL 100/150**	1677	1000	1500
415157	5.810	**Ledger Brace UBL 100/200**	2136	1000	2000
407867	3.790	**Ledger Brace UBL 150/50**	1347	1500	500
400055	4.440	**Ledger Brace UBL 150/100**	1601	1500	1000
402846	5.340	**Ledger Brace UBL 150/150**	1953	1500	1500
400057	6.380	**Ledger Brace UBL 150/200**	2358	1500	2000
409034	6.740	**Ledger Brace UBL 175/200**	2500	1750	2000
404391	5.000	**Ledger Brace UBL 200/50**	1820	2000	500
400059	5.500	**Ledger Brace UBL 200/100**	2016	2000	1000
402862	6.240	**Ledger Brace UBL 200/150**	2305	2000	1500
400061	7.160	**Ledger Brace UBL 200/200**	2658	2000	2000
430282	4.450	**Ledger Brace UBL 225/50**	2062	2250	500
430283	4.800	**Ledger Brace UBL 225/100**	2236	2250	1000
417689	7.580	**Ledger Brace UBL 225/200**	2829	2250	2000
400063	6.640	**Ledger Brace UBL 250/100**	2462	2500	1000
402861	7.260	**Ledger Brace UBL 250/150**	2705	2500	1500
400065	8.050	**Ledger Brace UBL 250/200**	3010	2500	2000
404762	7.490	**Ledger Brace UBL 300/50**	2795	3000	500
400067	7.830	**Ledger Brace UBL 300/100**	2926	3000	1000
404766	8.360	**Ledger Brace UBL 300/150**	3133	3000	1500
400069	9.050	**Ledger Brace UBL 300/200**	3400	3000	2000

Suspension in holes of the horizontal ledgers.

Notes

With length embossing and coloured sticker for easy identification.
UBL 150/250 is identical with UBL 300/50.
UBL 225/150 is identical with UBL 175/200.
UBL 250/50 is identical with UBL 200/150.
UBL 75/200 is identical with UBL 225/50.



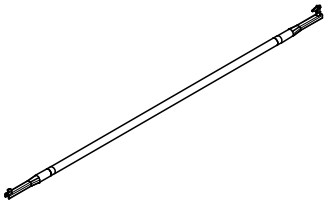


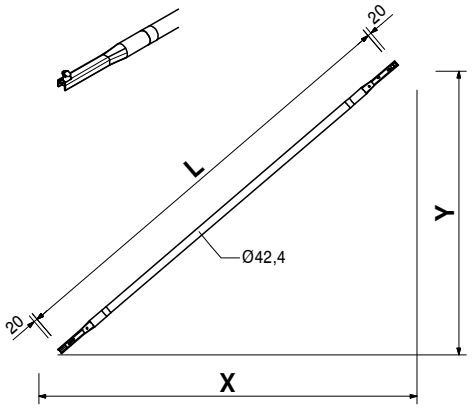
Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Ledger Braces UBL-2			
132771	2.130	**Ledger Brace UBL-2 100/50**	901	1000	500
132773	2.830	**Ledger Brace UBL-2 100/100**	1250	1000	1000
132775	3.680	**Ledger Brace UBL-2 100/150**	1677	1000	1500
132777	4.600	**Ledger Brace UBL-2 100/200**	2136	1000	2000
132779	3.020	**Ledger Brace UBL-2 150/50**	1347	1500	500
132781	3.530	**Ledger Brace UBL-2 150/100**	1601	1500	1000
132783	4.230	**Ledger Brace UBL-2 150/150**	1953	1500	1500
132785	5.040	**Ledger Brace UBL-2 150/200**	2358	1500	2000
132787	5.320	**Ledger Brace UBL-2 175/200**	2500	1750	2000
132789	3.970	**Ledger Brace UBL-2 200/50**	1820	2000	500
132791	4.360	**Ledger Brace UBL-2 200/100**	2016	2000	1000
132793	4.940	**Ledger Brace UBL-2 200/150**	2305	2000	1500
132795	5.640	**Ledger Brace UBL-2 200/200**	2658	2000	2000
132797	4.450	**Ledger Brace UBL-2 225/50**	2062	2250	500
132808	4.800	**Ledger Brace UBL-2 225/100**	2236	2250	1000
132810	5.980	**Ledger Brace UBL-2 225/200**	2829	2250	2000
132812	5.250	**Ledger Brace UBL-2 250/100**	2462	2500	1000
132814	5.730	**Ledger Brace UBL-2 250/150**	2705	2500	1500
132816	6.340	**Ledger Brace UBL-2 250/200**	3010	2500	2000
132827	5.910	**Ledger Brace UBL-2 300/50**	2795	3000	500
132829	6.170	**Ledger Brace UBL-2 300/100**	2926	3000	1000
132831	6.590	**Ledger Brace UBL-2 300/150**	3133	3000	1500
132833	7.120	**Ledger Brace UBL-2 300/200**	3400	3000	2000

Suspension in holes of the horizontal ledgers.

Notes

With length embossing and coloured sticker for easy identification.
UBL-2 150/250 is identical with UBL-2 300/50.
UBL-2 225/150 is identical with UBL-2 175/200.
UBL-2 250/50 is identical with UBL-2 200/150.
UBL-2 75/200 is identical with UBL-2 225/50.





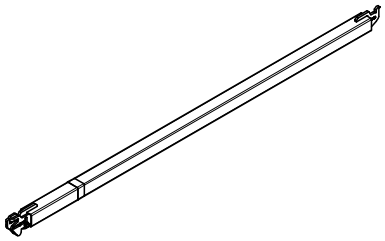
PERI UP Flex Stair 100, 125

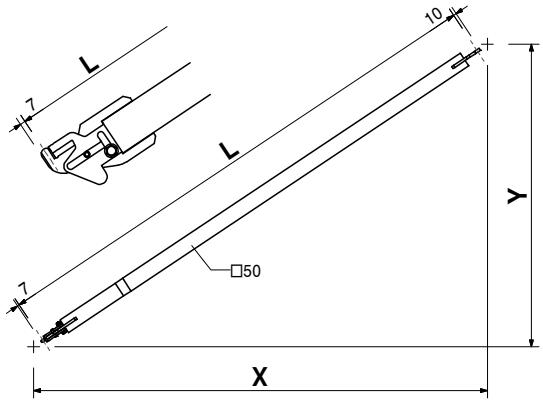
Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		H-Braces UBH Flex			
114818	4.590	**H-Brace UBH Flex 100/100**	1335	1000	1000
114904	5.630	**H-Brace UBH Flex 125/125**	1689	1250	1250
114821	5.730	**H-Brace UBH Flex 150/100**	1725	1500	1000
114908	6.170	**H-Brace UBH Flex 150/125**	1874	1500	1250
114912	6.660	**H-Brace UBH Flex 150/150**	2042	1500	1500
114820	7.010	**H-Brace UBH Flex 200/100**	2161	2000	1000
124097	7.780	**H-Brace UBH Flex 200/150**	2422	2000	1500
114916	8.740	**H-Brace UBH Flex 200/200**	2749	2000	2000
114896	8.130	**H-Brace UBH Flex 250/75**	2541	2500	750
114819	8.360	**H-Brace UBH Flex 250/100**	2620	2500	1000
114996	8.650	**H-Brace UBH Flex 250/125**	2720	2500	1250
124101	9.000	**H-Brace UBH Flex 250/150**	2838	2500	1500
114920	9.840	**H-Brace UBH Flex 250/200**	3123	2500	2000
114928	10.800	**H-Brace UBH Flex 250/250**	3456	2500	2500
114900	9.550	**H-Brace UBH Flex 300/75**	3025	3000	750
114892	9.740	**H-Brace UBH Flex 300/100**	3092	3000	1000
124105	10.300	**H-Brace UBH Flex 300/150**	3279	3000	1500
114924	11.000	**H-Brace UBH Flex 300/200**	3528	3000	2000
114932	11.900	**H-Brace UBH Flex 300/250**	3826	3000	2500
114936	12.900	**H-Brace UBH Flex 300/300**	4163	3000	3000

For horizontal bracing of towers.
Also for use beneath Decks UDG.

Notes

With color coding for length identification.



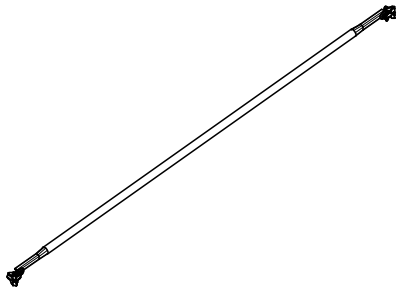


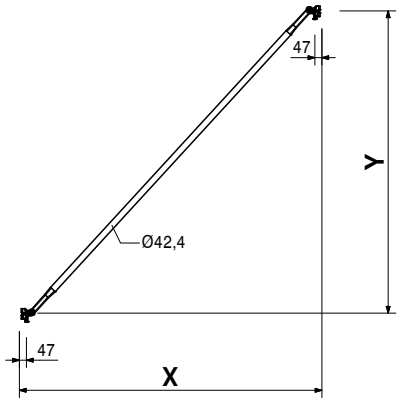
PERI UP Flex Stair 100, 125

Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Node Braces UBK			
424170	6.780	**Node Brace UBK 75/200**	2190	750	2000
412926	6.990	**Node Brace UBK 100/200**	2285	1000	2000
415354	5.220	**Node Brace UBK 125/100**	1625	1250	1000
412765	7.260	**Node Brace UBK 125/200**	2401	1250	2000
400981	5.710	**Node Brace UBK 150/100**	1821	1500	1000
400973	6.580	**Node Brace UBK 150/150**	2152	1500	1500
400572	7.600	**Node Brace UBK 150/200**	2539	1500	2000
400985	6.790	**Node Brace UBK 200/100**	2246	2000	1000
406630	7.510	**Node Brace UBK 200/150**	2521	2000	1500
400573	8.390	**Node Brace UBK 200/200**	2860	2000	2000
400989	7.940	**Node Brace UBK 250/100**	2696	2500	1000
406624	8.540	**Node Brace UBK 250/150**	2930	2500	1500
400574	9.310	**Node Brace UBK 250/200**	3226	2500	2000
400993	9.130	**Node Brace UBK 300/100**	3131	3000	1000
400575	10.300	**Node Brace UBK 300/200**	3625	3000	2000

Notes

With color coding for length identification.



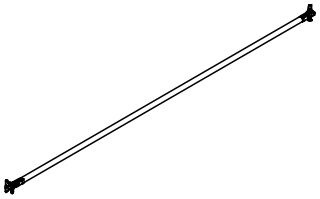


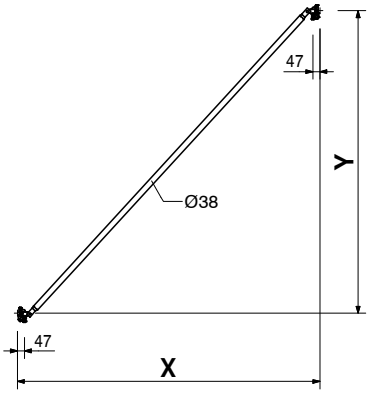
PERI UP Flex Stair 100, 125

Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Node Braces UBK-2			
133418	4.980	**Node Brace UBK-2 75/200**	2190	750	2000
133421	5.130	**Node Brace UBK-2 100/200**	2285	1000	2000
133424	3.900	**Node Brace UBK-2 125/100**	1625	1250	1000
133427	5.320	**Node Brace UBK-2 125/200**	2401	1250	2000
133430	4.240	**Node Brace UBK-2 150/100**	1821	1500	1000
133433	4.840	**Node Brace UBK-2 150/150**	2152	1500	1500
133436	5.550	**Node Brace UBK-2 150/200**	2539	1500	2000
133439	4.990	**Node Brace UBK-2 200/100**	2246	2000	1000
133442	5.490	**Node Brace UBK-2 200/150**	2521	2000	1500
133445	6.100	**Node Brace UBK-2 200/200**	2860	2000	2000
133448	5.790	**Node Brace UBK-2 250/100**	2696	2500	1000
133451	6.210	**Node Brace UBK-2 250/150**	2930	2500	1500
133454	6.740	**Node Brace UBK-2 250/200**	3226	2500	2000
133457	6.620	**Node Brace UBK-2 300/100**	3131	3000	1000
133460	6.980	**Node Brace UBK-2 300/150**	3356	3000	1500
133463	7.440	**Node Brace UBK-2 300/200**	3625	3000	2000

Notes

With color coding for length identification.

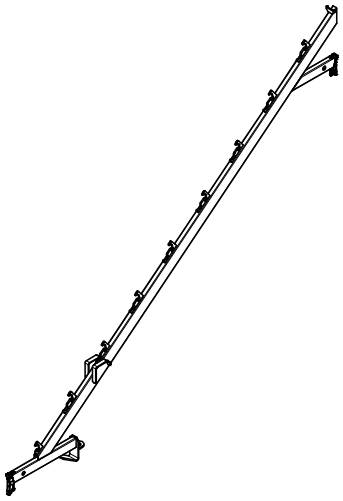


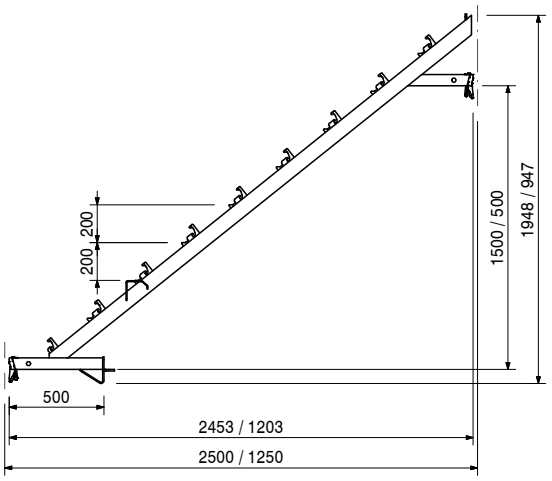


Art no.	Weight [kg]	
		Stair Stringers UA
114731	9.780	**Stair Stringer UA 125/100**
109219	15.800	**Stair Stringer UA 250/200**

Notes

Permissible load 3.0kN/m².



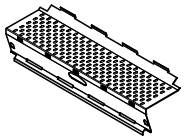


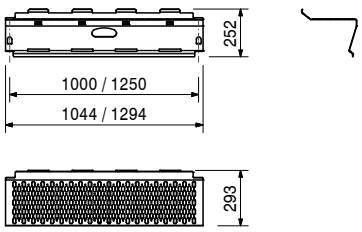
Art no.	Weight [kg]	
		Stair Steps UAR
109198	7.390	**Stair Step UAR 100**
114179	9.250	**Stair Step UAR 125**

Tread for Stair Stringer UA. Non-slip due to perforated surface.

Notes

Permissible load 3.0kN/m².



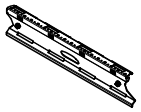


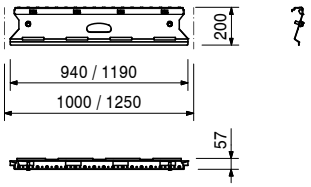
Art no.	Weight [kg]	
		End Steps UAE
109208	5.610	**End Step UAE 100**
114180	6.590	**End Step UAE 125**

Last step for the Stair Stringer UA. Secures all steps.

Notes

Permissible load 3.0kN/m².





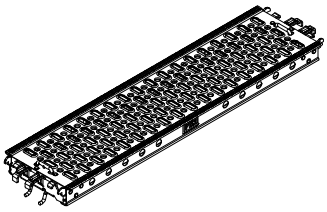
PERI UP Flex Stair 100, 125

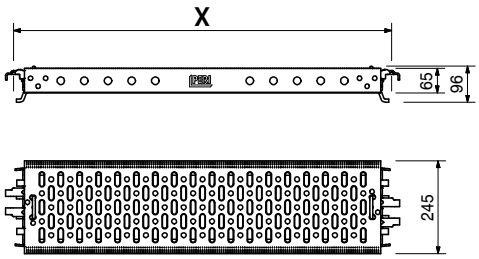
Art no.	Weight [kg]		X [mm]	zul. p [kN/m²]
		Steel Decks UDG 25		
424124	3.810	**Steel Deck UDG 25x 50**	500	6
432858	4.810	**Steel Deck UDG 25x 67**	670	6
424121	5.180	**Steel Deck UDG 25x 75**	750	6
424118	6.550	**Steel Deck UDG 25x100**	1000	6
424115	7.940	**Steel Deck UDG 25x125**	1250	6
424112	9.330	**Steel Deck UDG 25x150**	1500	6
424109	12.200	**Steel Deck UDG 25x200**	2000	6
423771	14.900	**Steel Deck UDG 25x250**	2500	4.5
424915	17.700	**Steel Deck UDG 25x300**	3000	3

Assembly onto Horizontal Ledgers UH.

Notes

Values correspond to EN12811-1.



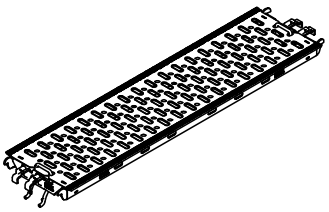


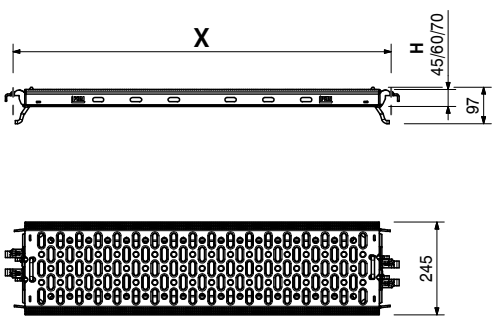
Art no.	Weight [kg]		X [mm]	zul. p [kN/m²]
		Steel Decks UDG-2 25		
132479	3.190	**Steel Deck UDG-2 25x 50**	500	6
132483	3.960	**Steel Deck UDG-2 25x 67**	670	6
132488	4.320	**Steel Deck UDG-2 25x 75**	750	6
138607	2.200	**Steel Deck UDG-2 25x25**	250	6
132492	5.450	**Steel Deck UDG-2 25x100**	1000	6
132502	6.590	**Steel Deck UDG-2 25x125**	1250	6
132505	7.730	**Steel Deck UDG-2 25x150**	1500	6
132508	10.500	**Steel Deck UDG-2 25x200**	2000	6
132511	12.900	**Steel Deck UDG-2 25x250**	2500	4.5
132515	15.800	**Steel Deck UDG-2 25x300**	3000	3

Length X: 50-150 with H of 45mm.
Length X: 200-250 with H of 60mm.
Length X: 300 with H of 70mm.

Notes

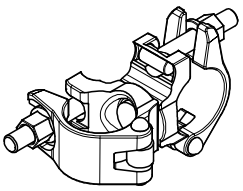
Values correspond to EN12811-1.
With color plugs for length identification.

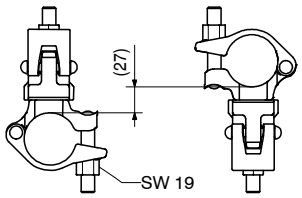




Art no.	Weight [kg]	
017010	1.400	**Swivel Coupler SW Ø48/48mm ga**

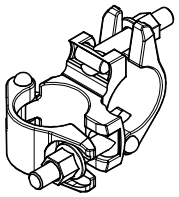
For Scaffold Tubes Ø48mm.

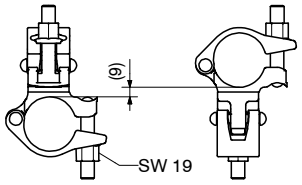




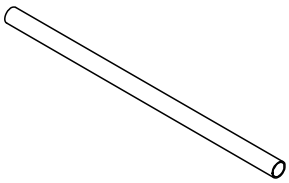
Art no.	Weight [kg]	
017020	1.120	**Standard Coupl. RA Ø48/48mm ga**

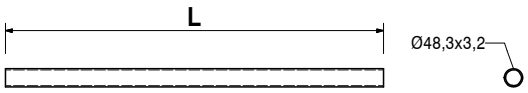
For Scaffold Tubes Ø48mm.





Art no.	Weight [kg]		L [mm]
		Scaff. Tubes 48.3x3.2mm ga	
026417	0.000	**Cutting Costs Scaffold Tube**	1
026411	3.550	**Scaff. Tube 48.3x3.2mm 1m ga**	1000
026412	7.100	**Scaff. Tube 48.3x3.2mm 2m ga**	2000
026413	10.650	**Scaff. Tube 48.3x3.2mm 3m ga**	3000
026414	14.200	**Scaff. Tube 48.3x3.2mm 4m ga**	4000
026419	17.750	**Scaff. Tube 48.3x3.2mm 5m ga**	5000
026418	21.600	**Scaff. Tube 48.3x3.2mm 6m ga**	6000
026415	3.550	**Scaff. Tube 48.3x3.2mm lfm ga**	1000

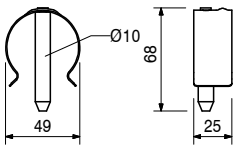




Art no.	Weight [kg]	
111053	0.059	**Locking Pin Ø48-57mm**

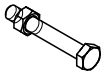
As tension-proof connection of standards with a diameter of 48 up to 57mm.

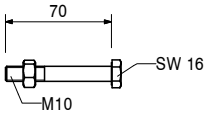




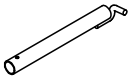
Art no.	Weight [kg]	
100719	0.060	**Screw ISO4014-M10x070-8.8-ga-N**

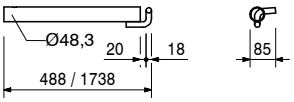
As tension-proof connection of standards at suspended scaffolds and formwork girders.





Art no.	Weight [kg]		L [mm]
		Wall Ties UWT	
100088	1.920	**Wall Tie UWT 45**	488
100091	4.680	**Wall Tie UWT 110**	1138
100093	5.870	**Wall Tie UWT 140**	1438
102951	7.060	**Wall Tie UWT 170**	1738
102954	9.050	**Wall Tie UWT 220**	2238
102957	11.000	**Wall Tie UWT 270**	2738





Art no.	Weight [kg]	
		Ring Bolts UFE
100693	0.169	**Ring Bolt UFE 12/90**
100694	0.190	**Ring Bolt UFE 12/120**
100695	0.250	**Ring Bolt UFE 12/190**

For assembly of the Wall Tie UWT.
Required Wall Insert UFI 14.

Notes

With marking for screw-in depth.

Art no.	Weight [kg]	
		Wall Inserts UFI
100696	0.007	**Wall Insert UFI 14/70**
100697	0.009	**Wall Insert UFI 14/100**
100698	0.010	**Wall Insert UFI 14/135**

Art no.	Weight [kg]	
113832	0.035	**PERI UP Ass. Certificate Tag**

For cordoning off scaffolding areas not yet authorised for use. With the exception of inserting the PERI UP Assembly Certificates.

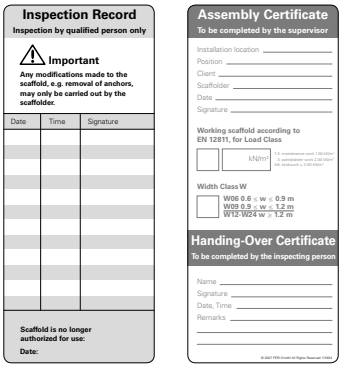


Art no.	Weight [kg]	
		PERI UP Ass. Certificates
125180	0.005	**PERI UP Ass.Certificate AUS/NZ**
113835	0.005	**PERI UP Ass. Certificate CDN**
113839	0.005	**PERI UP Ass. Certificate CZ**
113833	0.005	**PERI UP Ass. Certificate D**
113836	0.005	**PERI UP Ass. Certificate ES**
124052	0.005	**PERI UP Ass. Certificate EST**
113834	0.005	**PERI UP Ass. Certificate Ex**
113829	0.005	**PERI UP Ass. Certificate F**
124645	0.005	**PERI UP Ass. Certificate FIN**
126647	0.005	**PERI UP Ass. Certificate H**
117692	0.005	**PERI UP Ass. Certificate LT**
113838	0.005	**PERI UP Ass. Certificate PL**
113837	0.005	**PERI UP Ass. Certificate PT**
115729	0.005	**PERI UP Ass. Certificate SK**
115739	0.005	**PERI UP Ass. Certificate TR**

Inserted into the PERI UP Assembly Certificate Tag.

Notes

Front:
Assembly certificate for the approval of scaffolding.
Back:
Inspection record.



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