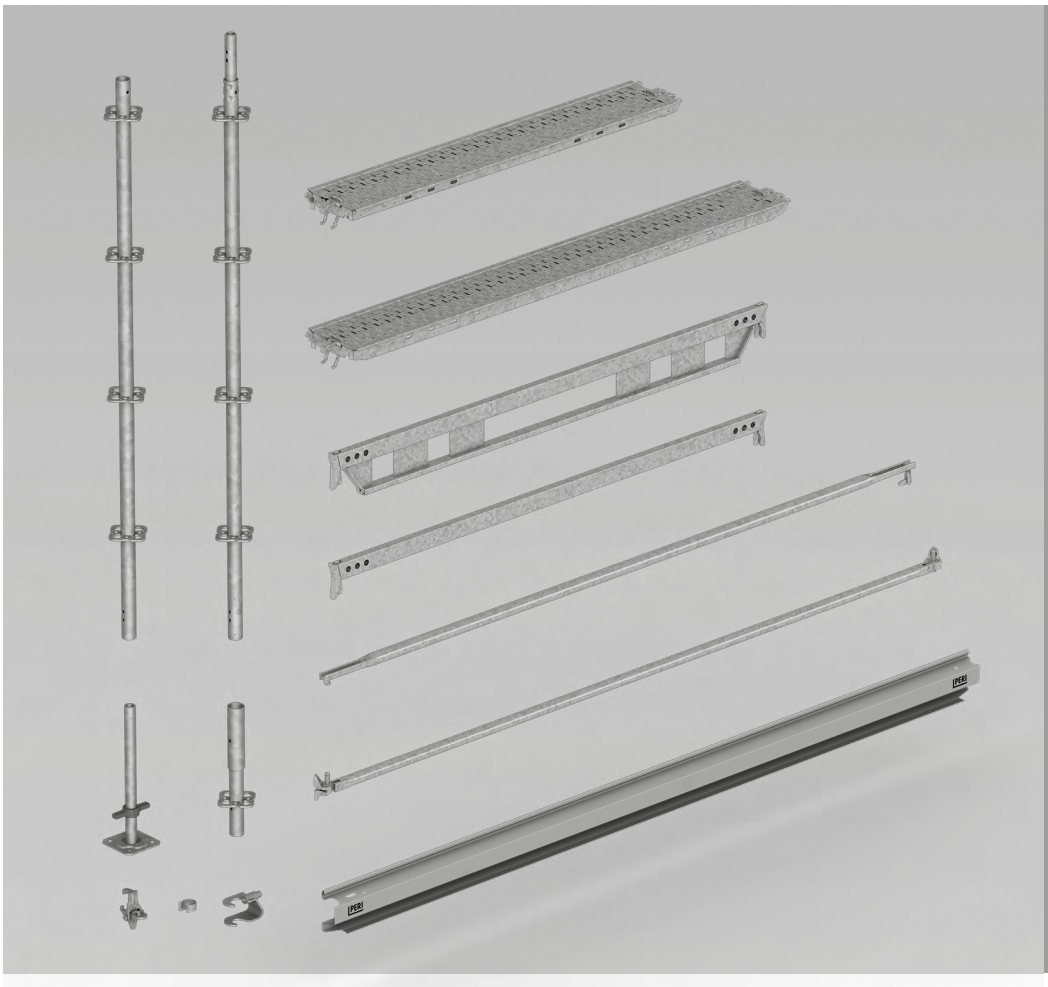
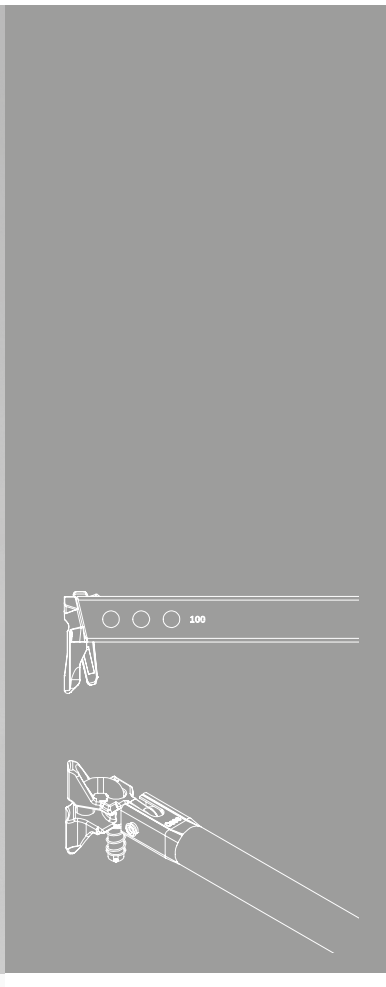
PERI UP Scaffolding Kit

Components

Assembly instructions – Version 2.4





PERI Ltd

Contents

Components

Pos. no.	Designation	Article no.
1	Base Plate UJP	100244
2	Adj. Base Plate UJB 38-36/17	116762
3	Adj. Base Plate TR 38-70/50	019780
4	Adj.Base Plate UJS 38-80/50 Sw	100159
5	Castor UEW 30 with Spindle	123941
6	Castor UEW 26 with Spindle	101858
7	Castor UEW 26 with Spigot	101860
8	Castor UEW 24 with Spindle	138433
9	Castor UEW 24 with Spigot	138434
10	Handle Locking UJS	100863
11	Locking Pin Ø48-57 mm	111053
12	Base Standard UVB 25	133499
13	Standard UVR-2 200	132234
14	Top Standard UVH-2 200	132200
15	Ledger UH-2	131995
16	Ledger UHV-2	137020
17	Top Standard EVT 96	435972
18	Top Standard EVOTOP EVT 96	137517
19	Base Standard EVOTOP EVS 124	137514
20	H-Brace UBH Flex	114818
21	Node Brace UBK-2	133418
22	Coupler Brace UBC-2	131750
23	Ledger Braces UBL-2	132771
25	Easy Standard EVM 200	130621
26	Standard EVOTOP EVM 200	137509
27	Standard UVR 200	400009
28	Top Standard UVH 200	400005
30	Toeboard Steel UPY	132592
31	Toeboard Compensation UPY-L	134542
32	Toeboard Wood UPF	129490
33	Guardrail EPG	130193
34	Swing Ledger UPK 100	416695
35	Safety Entry Gate UPS	125672
36	Advance Guardrail UPA-2	134102
37	Protection Wall Post EPS-2	139997
38	Protection Wall Post EPS	430532
40	Support UC 25	115959
41	Console Bracket ECM 100	130365
42	Console Bracket UCB 25	134005
43	Console Bracket UCM 50 w.H.Ros	412690
44	Console Bracket UCM 50 w. Spig	412676
45	Console Bracket UCM 50-2	410483
46	Bracket Brace UCM	412717

Pos. no.	Designation	Article no.
47	Support UCS 33	136050
48	Console Bracket ECM 50 light	139971
50	Steel Deck UDG-2 25x50	132479
51	Corner Deck EDP 25	134549
52	Bottom Sheeting UDP 100	112809
53	Bottom Sheeting UDB-A 20x100	136927
54	Bottom Sheeting UDB-S 20x150	437449
55	Corner Sheeting UDC 100	113358
56	Steel Deck EDS 33x300	129272
60	Ladder Deck UAA 75x250-L	133314
61	Access Deck UAA 75x150	132993
62	Ladder UAF 200	109879
63	Hatch UAF-2 50x75	137305
64	Hatch UAF 50x75	409783
69	Ladder Connector UAC-2	124813
70	Ladder Connector UAV 43-C	133312
71	Ladder Connector Ledger UAM-S	134520
72	Ladder Connector Ledger UAM-W	134527
73	Ladder Connector Diagonal UAD	134512
74	Vertical Ladder UAV 43x91	133310
75	Ladder Alu UAI 300-A	135529
76	Ladder 180/6	051410
77	Ladder Base ga	051460
78	Ladder Safety Cage 75/150	104132
79	Flex Staircase UAS-2 75x300/200	134561
80	Clamping Rosette UEV 180°	116306
81	Coupling UH 30/60	137211
82	Coupling UH	405824
83	Spacer UEC-2	133739
84	Tension Coupler Ø 48.3 mm ga	100908
85	Tube Connector Ø 48.3 mm	100909
86	Flange Coupler UEF	434204
87	Flange Coupler UEF-2	139171
88	Coupler Ledger UHC 75	127533
90	Adapter Hanging Scaffold UEH	134108
91	Guardrail Holder EPW	130562
92	Guardrail Coupler EPR	130434
93	Ledger to Ledger Coupler UHA	401731
94	Ledger to Ledger Coupler UHA-2	136582
95	Ledger Bracket UHA half	110793
96	UH Spigot-2	130681
97	Ledger Bracket UHA-2 half Spi.	130684
99	Spigot ULT 32	100301

Overview

Pos. no.	Designation	Article no.
100	Spigot w. Spacer URE 4/42	105372
101	Ring Bolt UFE 12/90	100693
102	Wall Insert UFI 14/70	100696
103	Wall Tie UWT 45	100088
110	Multi Girder ELM	131368
111	Latt. Girder Alu ULA 50/425 HD	101656
112	Latt. Girder Steel ULS 50/425	100330
113	Intermediate Elem.ULS 100 Flex	124795
114	End Element ULS 50 Flex	124805
115	Connector ULS FLEX	124806
116	Flange Coupler UEC	413726
120	Coupler EVW	133757
121	LGS Keder Connector URV	126009
122	LGS Keder Rail URK 150	127501
134	Scaffold support, coated	131092
135	Multi Brace EWB	131093
136	Base plate for EWB	131097
137	PERI Anchor Bolt SW24 Ø14/20x130 mm	124777
140	Poly Cover Tubes UPC-T	133907
141	Poly Cover Couplings UPC-C	134175
142	Poly Cover Rosette UPC-R	134176
143	Spindle Lining UES	134177
144	Scaffolding Bump 720	033734
145	Scaff. Tube 48.3x3.2 mm lfm ga	026415
146	Brace Connector HDR-2	131723
147	Push-Pull Prop RS 450 ga	117468
148	Pin Ø20x140 mm ga	105400
149	Cotter Pin 4/1 ga	018060
160	Stair Guardrail UAG	100742
161	Stair Guardrail UAH-2	133543
165	Deck Traverse UDT 25	136786
170	FLRD screw M 10x60 DIN 603-8.8VZ	137252
171	Hex-Nut ISO 4032-M10-8-VZ-SW17	137279
172	Starter Tube ULB 50/70	100529
173	Starter Tube ULB with rosette	139349
174	Screw ISO 4014-M10x070-10.9-ga	138009
176	Standard Coupl. RA Ø48/48 mm ga	017020
178	Swiv.Coup. EN 74 RS Ø38/48 mm ga	102400
181	Base Frame EVB	130518
182	Easy Frame EVF	130466
183	Tube EVR 150	130481
184	Head Frame EVH	129314
185	Easy Base Standard EVS 124	130619

Pos. no.	Designation	Article no.
186	Base Compensation EVA 67/50	130522
187	Base Compensation EVA 67/100	130526
188	Guardrail Post EVP	130512
224	Shoring Brace UBS	428936

Article numbers beginning with the number 3 or 4 are only available as rental articles or used.

Key

Pictogram | Definition

 Danger/Warning/Caution

 Note

 To be complied with

 Load-bearing point

 Visual inspection

 Tip

 Incorrect use

 Safety helmet

 Safety shoes

 Safety gloves

 Safety goggles

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

Arrows

- Arrow representing an action
- Arrow representing a reaction of an action*
- Arrow representing forces

* If not identical to the action arrow.

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

Danger

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

Warning

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

Caution

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

Note

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

Format of the safety instructions

Signal word

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

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

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

Notes on illustrations
The illustration on the front cover of these instructions is understood to be a system representation only. The assembly steps presented in these Assembly Instructions 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. Any safety equipment that is not shown in these illustrations must be incorporated nonetheless.

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:
– Ledger
equally valid:
– Horizontal Ledger UH Plus
– Ledger UH-2

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.

The contractor's procedures for the control of temporary works must ensure that suitably competent persons are appointed to manage the planning and use of PERI formwork systems.

The appointed person(s):

- 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.
- 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 scaffold.
- 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!**

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

Product description

Purpose of these assembly instructions
These Assembly Instructions provide a basic description of the assembly of the PERI UP system scaffolding components. Typical standard set-ups are described in separate Instructions for Assembly and Use, see "Additional technical documentation".

The Assembly Instructions may only be used in combination with the associated application verification.

These Assembly Instructions are based on the scaffolding system approvals
"PERI UP Flex Z-8.22-863" and
"PERI UP Easy Z-8.1-957".
They describe the assembly of the components of the
PERI UP Scaffolding Kit, regardless of the application in which the components are used.

The application verification describes the special requirements of the application.
It contains:
- the permissible loads,
- static proof,
- drawings,
- a parts list.

The application verification must be created by the contractor personally.
PERI offers the following assistance:
- Instructions for Assembly and Use for PERI UP Flex and PERI UP Easy,
- PERI UP Design Tables,
- already created documents, e.g. trench bridge application verification,
- support for project-specific requirements.

The assembly instructions together with the proof of use are equivalent to Instructions for Assembly and Use.

Features
The structure is based on the components of the scaffolding kit.

The permissible loads must be determined and verified on a project-specific basis. These are shown in the where-used list.

The transfer of vertical and horizontal forces from e.g. dead, live, wind and bracing loads into the supporting structure or the building must be verified separately in each individual case.

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

System Variants:

The PERI UP Flex system variants can all be physically interchanged but have different load bearing capacities. Physical differences are identified in Section A. For mixed variants of the same component the lowest applicable combination capacity must be considered. Refer to the PERI UP Design Tables for details.

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 such as
- 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.

Mechanical components, e.g. spindles, must be cleaned of dirt or concrete residue before and after use, and then greased with a suitable lubricant.

Do not use plastic components if fibre reinforcements are exposed.

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.

Components with wood parts are to be stored in well-ventilated and dry conditions.

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

Disposal

Carry out disposal in accordance with the relevant national regulations.

Information regarding relocation by crane

The PERI UP scaffolding system is also suitable for hoisting operations involving cranes.
However, the displacement of the scaffold is not part of these assembly instructions.

The appropriate attachment points and the size of the relocation units should always be calculated on a project-specific basis.

Only vertical crane transportation is permitted. Do not assemble scaffolds horizontally and then erect them. Exceptions are described in the applicable Instructions for Assembly and Use.

Before moving the crane, it must always be ensured that:
- all base spindle locks have been fitted,
- all vertical joints are securely connected to one another,
- all deck levels have additional bracing using ledgers,
- all wedges have been securely fixed in place using a hammer,
- all locks against lifting are engaged,
- all guardrails are at their end position,
- In strong winds, the Toeboards UPY and the Toeboards UPF must be additionally secured.
- Do not stand under suspended loads, guide the scaffold with ropes.

Additional technical documentation

- Approvals
  - Approval Z-8.22-863 PERI UP Flex Module System
  - Approval Z-8.1-957 PERI UP Easy module system
- Design Tables
  - PERI UP Design Tables
- PI Sheet
  - PI 550 Formwork Girder ULS Flex – permissible load
- User information
  - Pallets and stacking devices
- Instructions for Assembly and Use
  - PERI UP Flex Facade Scaffold 75 and 100
  - PERI UP Flex Reinforcement Scaffold 75 and 100 with staircase
  - PERI UP Flex Stair 75
  - PERI UP Flex Stair 100 and 125
  - PERI UP Flex Weather Protection Roof LGS 75
  - PERI UP Flex Weather Protection Roof LGS 150
  - PERI UP Flex Shoring Tower
  - PERI UP Flex Shoring Tower MDS K
  - PERI UP Flex Heavy-Duty Prop HD
  - PERI UP Flex Suspended Scaffold
  - PERI UP Flex Trench Bridge
  - PERI UP Flex Working Platform LGS 150
  - PERI UP Easy Facade Scaffold 67 and 100 Post Variant
  - PERI UP Easy Facade Scaffold 67 and 100 Frame Variant
  - PERI UP Easy EVOTOP 100
  - PERI UP Public Stairs
  - PERI UP Scaffolding Kit Reinforcement Scaffold 75 and 100 with staircase

Instructions for Use

Use in a manner not intended according to the applicable Instructions for Assembly and Use or deviations from the standard configuration or intended use represent an application with a 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.

Only PERI original components may be used.
The use of other products and spare parts is not allowed.
Changes to PERI components are not permitted.

The components described in these assembly instructions may be patent-protected.

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 a basis for the site based Risk Assessment and Method Statement (RAMS) compiled by the contractor. They are not to be considered as a substitute for the RAMS.

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 EN 338.
- Scaffolding tubes: galvanised steel tubing with minimum dimensions of Ø 48.3 x 3.2 mm according to EN 12811-1:2003 4.2.1.2.
- Scaffolding tube couplings according to EN 74-1 and EN 74-2.

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.

Before and after exceptional occurrences that may have an adverse effect on the safety of the scaffolding system, the contractor must immediately
- produce another risk assessment and make use of its results to take suitable steps to guarantee the stability of the scaffolding 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 identify and rectify any damage in good time in order to guarantee safe use of the scaffolding 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.

Safety instructions

Assembly, modification and dismantling work
Assembly, modification or dismantling of scaffolding systems may only be carried out by qualified persons under the supervision of a competent person. 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 the applicable Instructions for Assembly and Use, the contractor must draw up assembly instructions to guarantee safe assembly, modification and dismantling of the scaffolding system.

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 scaffolding system, e.g.
- Safety helmet,
- Safety shoes,
- Safety gloves,
- Safety goggles,

is available and used as intended.

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 "Verified attachment points" on page 16 ff.

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.

All components other than decks and stairs are not intended or suitable for walking on!

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

If the scaffolding 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 scaffolds are used in publicly accessible areas,
- measures to prevent unauthorised use, e.g. enclosure of access areas, must be taken.
- Take measures to prevent injuries caused by impacts with protruding components, e.g. assembly of protective components.

Always keep the contact surfaces of the scaffold free of dirt, objects, snow and ice.
Close off the scaffold 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.

Close hatches immediately after use.

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.

Reaction forces

The anchoring forces, the position of the anchoring and the support reactions can be found in the corresponding tables in the respective Instructions for Assembly and Use.

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

All anchorage systems to be fully in accordance with NASC TG4.

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

Storage and transportation

General information

- Store and transport components in such a way that no unintentional change in their position is possible. Detach load-lifting accessories and lifting gear from the lowered components only if they are in a stable position and no unintentional change is possible.
- Do not drop the components.
- Only ever use approved and inspected means of transportation from PERI including lashing, lifting gear and slings.
- Only ever attach the means of transport to the intended attachment points with a positive fit using suitable lifting gear and slings.

During the moving procedure

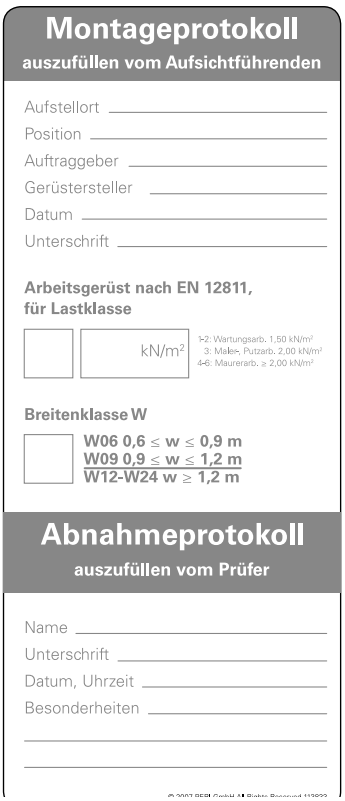
- Ensure that components are picked up and set down in such a way that unintentional falling over, falling apart, sliding, falling down or rolling is avoided.
- Always use ropes to guide components or assemblies that are susceptible to wind when moving them with a crane.
- No one is allowed to remain under the suspended load.
- 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.

Identification marking

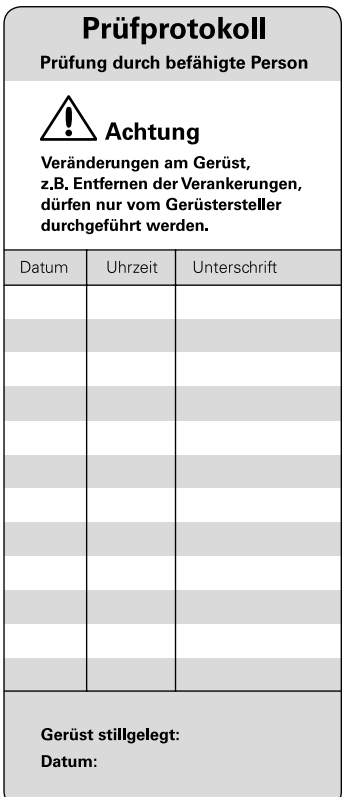
When carrying out the work the following identification markings must be observed:
If certain parts of the scaffold are not ready for use – especially during assembly, modification and dismantling – a "No Entry" warning sign restricting access must be clearly displayed (see Sign 1).
In addition, the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

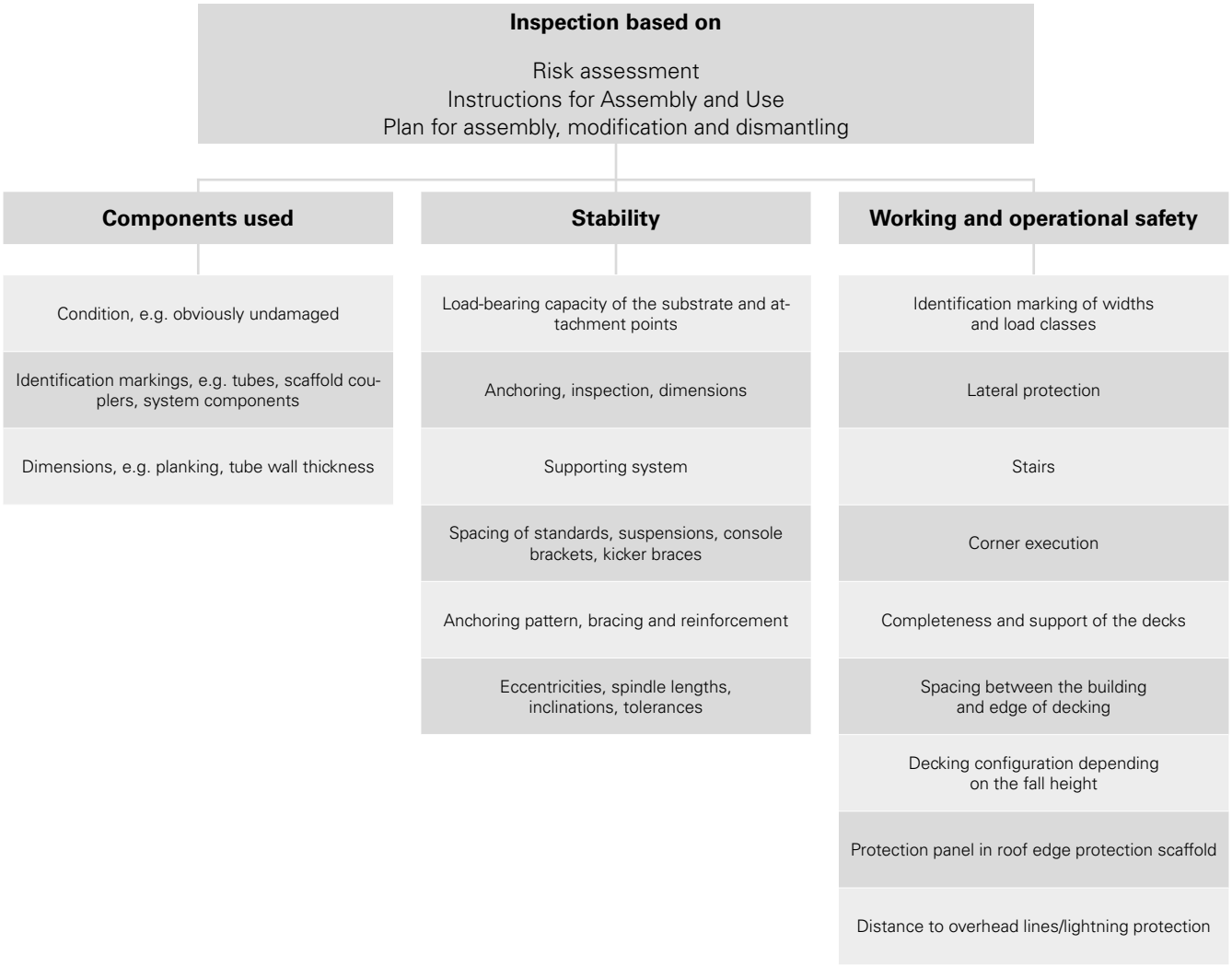
In other countries, ensure that the relevant national guidelines and regulations in the respective current version are complied with!

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

Only decks, stairs and ladders are intended and suitable for walking on!
Do not walk on any other components or use them as an ascent!

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.

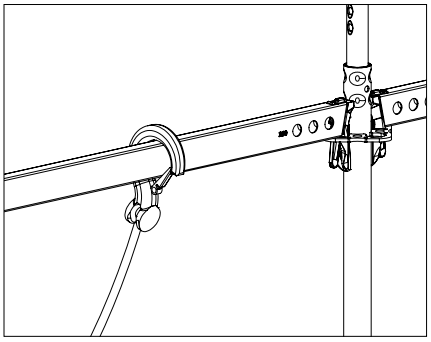


Fig. M.01

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.

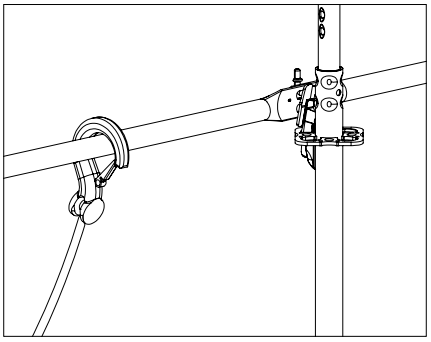


Fig. M.02

Guardrail
Attachment point:
Each Guardrail EPG or intermediate guardrail,

- which is installed at a maximum height of 1.0 m above the deck level.
- and which is installed with 2 Guardrail Holders EPW on two rosettes of 2 standards.
  The standards must be at least 2 m long.
- and both the guardrail and the intermediate guardrail are installed.

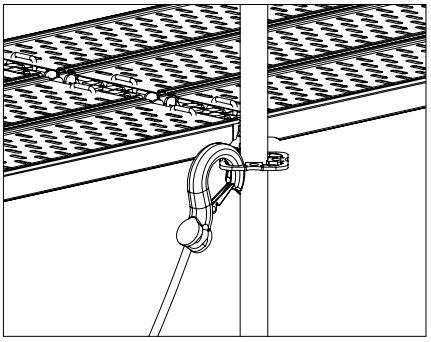


Fig. M.03

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.
- The specified heights for permissible attachment points apply only in relation to the component. The respective employer risk assessment regulates the attachment points to be used for the person.

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.

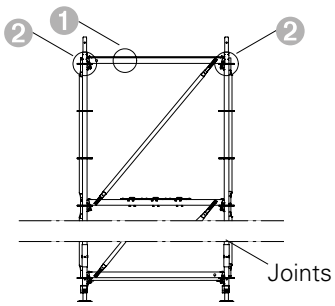


Fig. M.04

Attachment points
Standard ends approx. 2 m below the assembly level:
– each ledger in the assembly level 1,
– each rosette in the assembly level 2 .

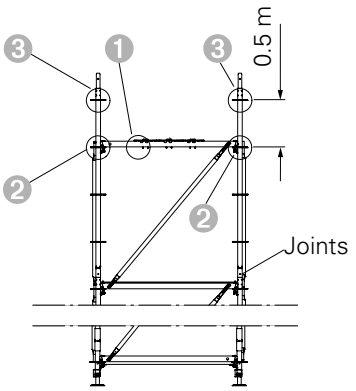


Fig. M.05

Attachment points
Standard ends approx. 1.5 m below the assembly level:
– each ledger in the assembly level 1,
– each rosette up to max. 0.5 m above the last assembly level 2, 3.

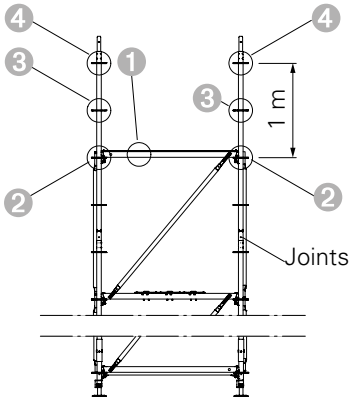


Fig. M.06

Attachment points
Standard ends approx. 1 m below the assembly level:
– each ledger in the assembly level 1,
– each rosette up to max. 1.0 m above the last assembly level 2 3 4.

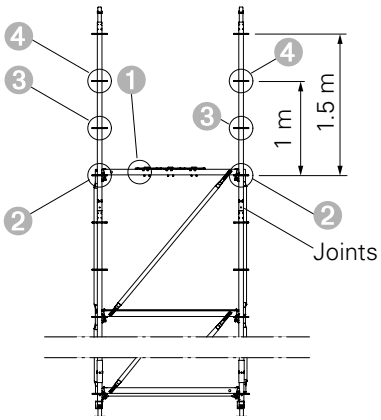


Fig. M.07

Attachment points
Standard ends approx. 0.5 m below the assembly level:
– each ledger in the assembly level 1,
– each rosette up to max. 1.0 m above the last assembly level 2 3 4.

Measures to prevent tipping

Warning

A person who is supported by PPE during a fall can cause a scaffolding system to topple over!
This can result in serious injuries or even death.

⇒ Proof of stability is required! Ensure the stability of the superstructure for arresting falls.
⇒ Anchoring the superstructure to a suitable structure, e.g. building, abutment, supports.
⇒ Connecting the scaffold assembly by means of ledgers; alternatively, with scaffolding tubes and couplers. (Fig. M.08)
⇒ Connecting the superstructure with other system components (Fig. M.08) or widening the base (Fig. M.09) to form stable units.
⇒ For information on supporting the superstructure see Section "A15 Scaffolding support" on page 160 ff.

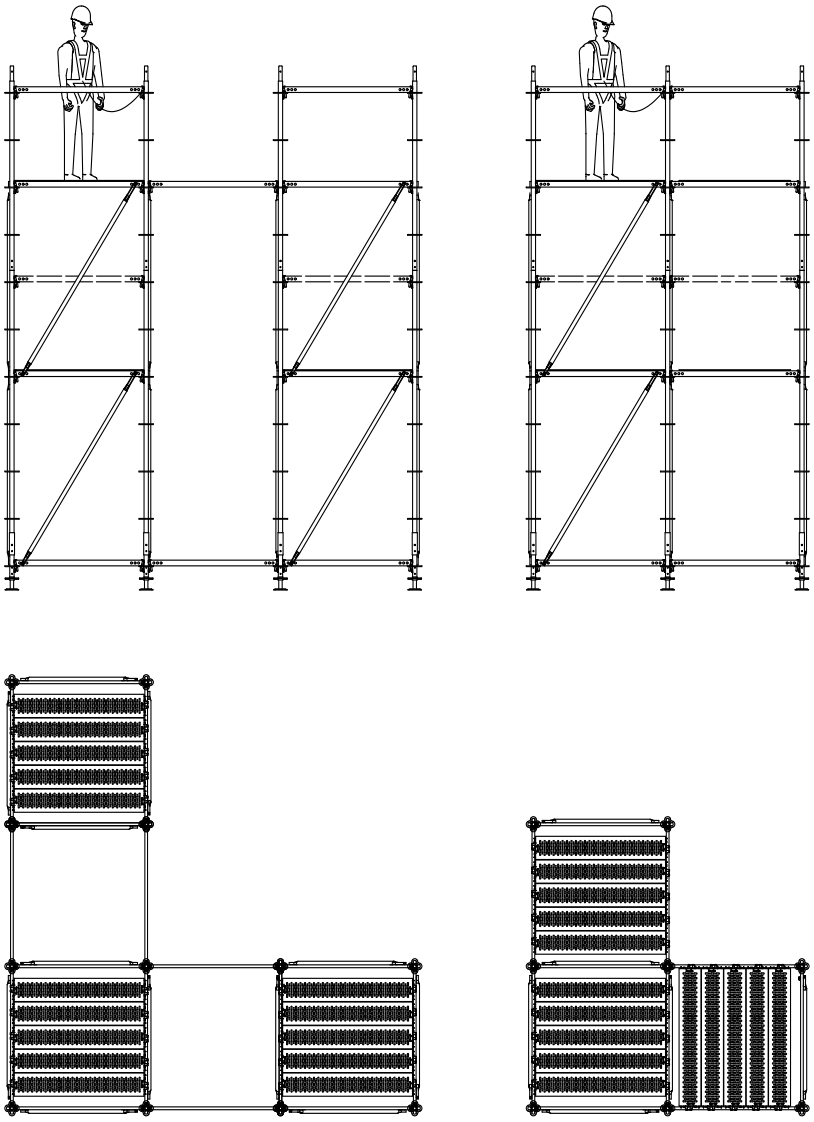


Fig. M.08

Fig. M.09

A1 Spindles and rollers

General information

Note

Stability compromised!

⇒ Settlements must be avoided! The scaffold may only be erected on a sufficiently load-bearing substrate, if necessary with load-distributing pads. For support forces, see the respective Instructions for Assembly and Use.

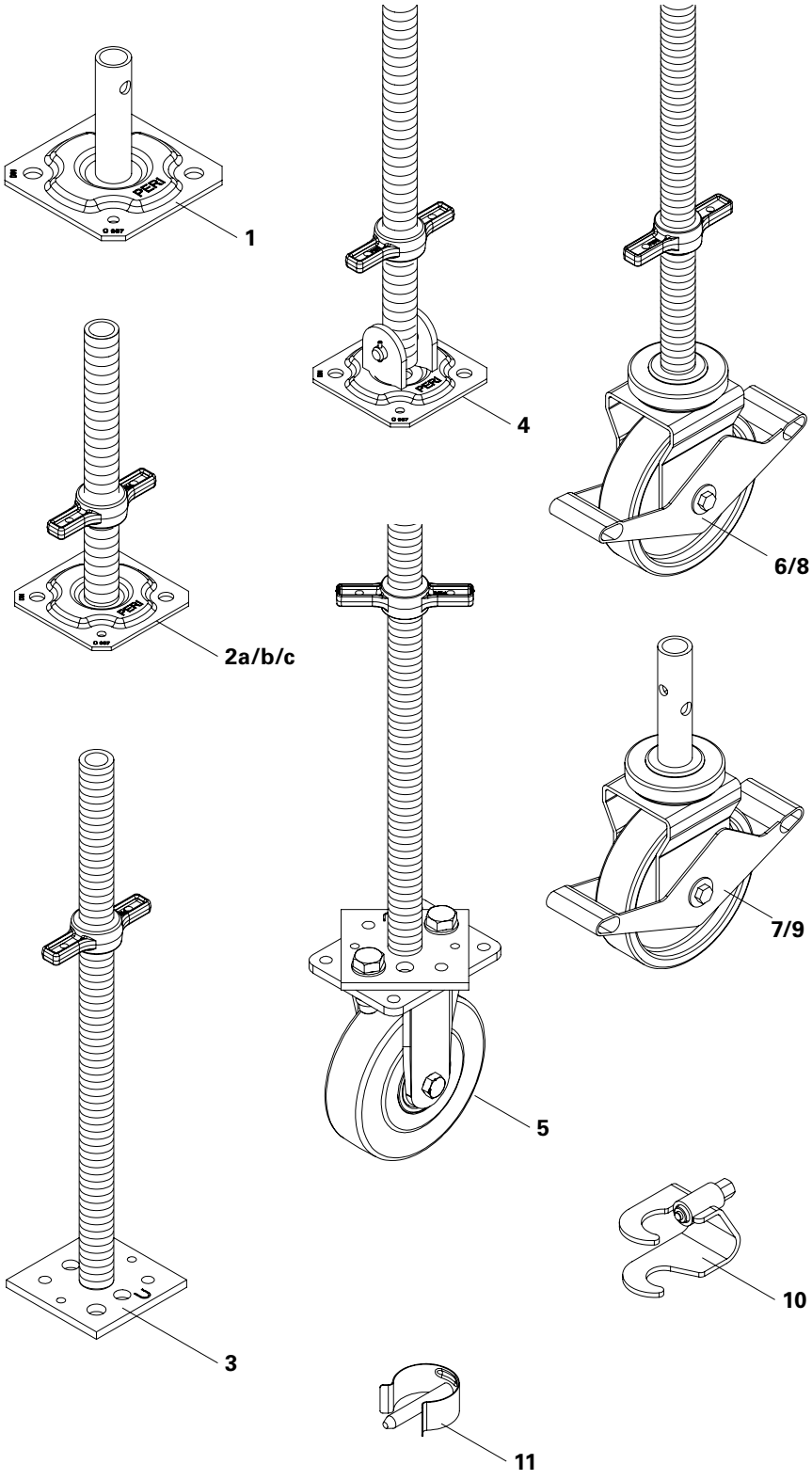
⇒ Observe the maximum spindle extension! For each load class and equipment variation, refer to the respective Instructions for Assembly and Use or the assembly plan for the permitted maximum spindle extensions.

⇒ Quick jack nuts of Adj. Base Plates are secured by a pinch on the threaded rod to prevent them from spinning out too far.
  – The remaining spindle, above the stop of the quick jack nut, must be completely in the vertical.
  – Do not force the quick jack nuts up beyond the pinch.

⇒ Ensure the scaffold cannot shift horizontally on any substrate.

Components

1 Base Plate UJP
2a Adj. Base Plate UJB 38-36/17
2b Adj.Base Plate UJB Ø38 mm 50/30
2c Adj.Base Plate UJB Ø38 mm 80/55
3 Adj. Base Plate TR 38-70/50
4 Adj.Base Plate UJS 38-80/50 Sw
5 Castor UEW 30 with Spindle
6 Castor UEW 26 with Spindle
7 Castor UEW 26 with Spigot
8 Castor UEW 24 with Spindle
9 Castor UEW 24 with Spigot
10 Handle Locking UJS
11 Locking Pin Ø48-57 mm



Base plate

Base Plate UJP

- No adjustment travel.
- With stake-out hole for connection to a standard.
- Only use the base plate on a level substrate. Precisely compensate for any differences in height by using suitable supports.

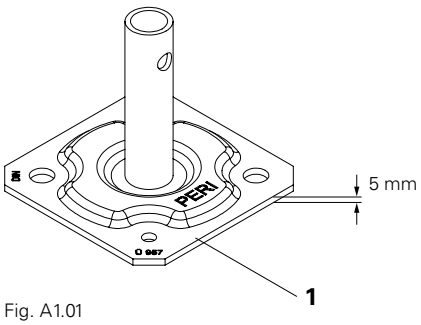


Fig. A1.01

Application example
Very low scaffolds where collisions between head and Adj. Base Plates would occur, e.g. in bridge hollow boxes.

Technical data
Panel height 5 mm.
Assume support points of base plates as joint according to EN 74.

The Base Plate UJP is not included in type-tested superstructures (e.g. shoring scaffolds) and must be verified on a project-specific basis.

Adj. Base Plates

Adj.Base Plate UJB
Adj. Base Plate TR

Components

2a Adj. Base Plate UJB 38-36/17
2b Adj.Base Plate UJB Ø38 mm 50/30
2c Adj.Base Plate UJB Ø38 mm 80/55
3 Adj. Base Plate TR 38-70/50

! Note

Observe the maximum spindling lengths of the various spindles! See Tab. A1.01
Adj.Base Plates UJB (**2**) must be immersed at least 15 cm in the vertical above.
Adj. Base Plates TR (**3**) must be immersed at least 17.5 cm in the vertical above.

⇒ The quick jack nut is secured by a pinch on the threaded rod to prevent it from spinning out too far.
- The remaining spindle, above the stop of the quick jack nut, must be completely in the vertical.
- Do not force the quick jack nuts up beyond the pinch.

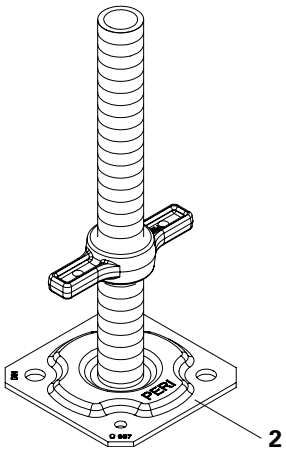


Fig. A1.02

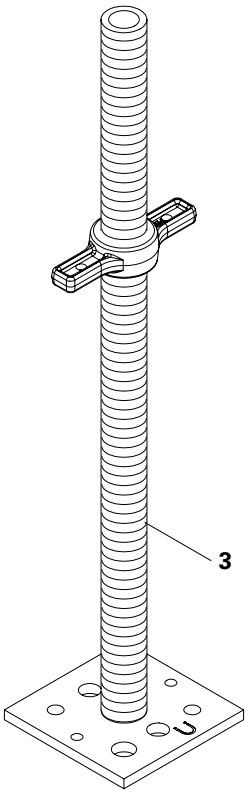


Fig. A1.02a

A1 Spindles and rollers

- Adj. Base Plates (**2/3**) do not have a pin hole, to make a connection with the base plate lock, e.g. for crane repositioning.
- Use Adj. Base Plates only on a level substrate. Compensate for height differences by turning the quick jack nut.

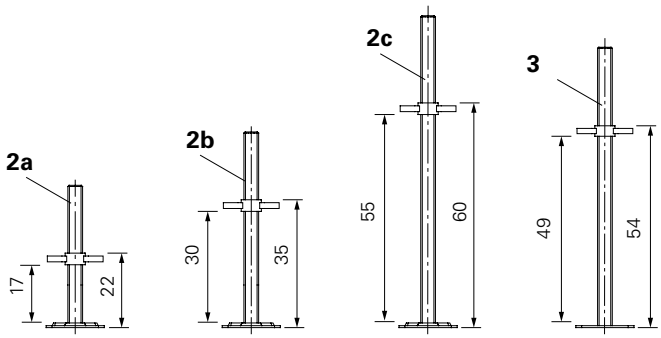


Fig. A1.03

Technical data				
Adj. Base Plate	**Spindle length $_{min}$**	**Adjustment travel**	**Spindle length $_{max}$**	**Colour of Quick Jack Nut**
UJB 38-36/17 (**2a**)	5 cm	17 cm	22 cm	galvanised
UJB 38-50/30 (**2b**)	5 cm	30 cm	35 cm	red
UJB 38-80/55 (**2c**)	5 cm	55 cm	60 cm	yellow
TR 38-70/50 (**3**)	5 cm	49 cm	54 cm	galvanised

Tab. A1.01

Application examples
Working, protective, industrial and shoring scaffolds.

Adj.Base Plate UJS 38-80/50 Sw

Note

Observe the maximum spindling length!

⇒ Adj.Base Plates UJS must be immersed at least 21 cm in the vertical above.

⇒ The quick jack nut is secured by a pinch on the threaded rod to prevent it from spinning out too far.
  – The remaining spindle, above the stop of the quick jack nut, must be completely in the vertical.
  – Do not force the quick jack nuts up beyond the pinch.

Adj.Base Plates UJS (**4**) are used when there is no other possibility to align the substrate horizontally.

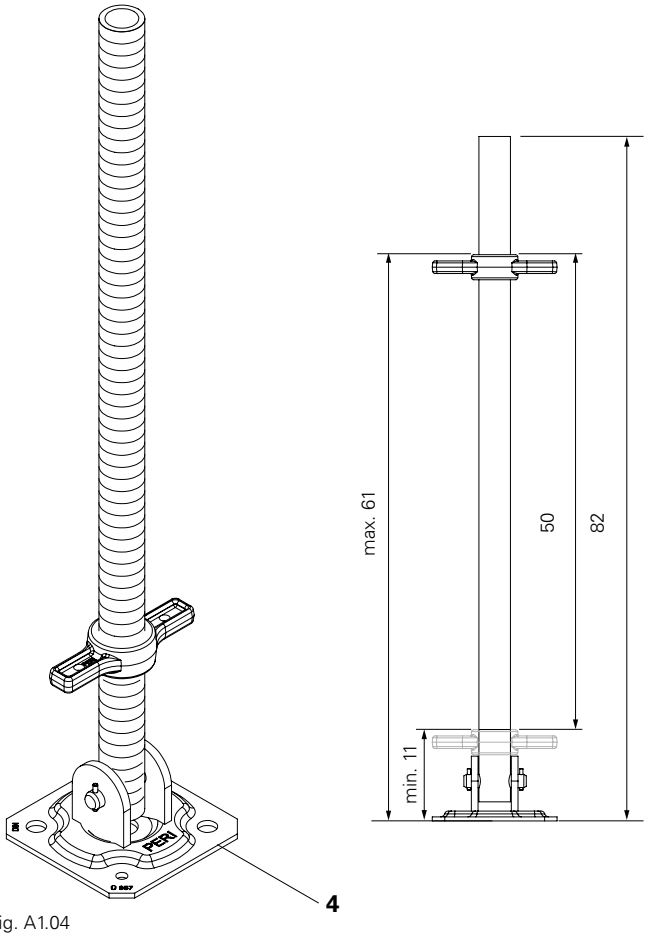


Fig. A1.04

A1 Spindles and rollers

Technical data

- No base restraint can be applied.
- Adjustment travel 50 cm.
- Spindling length min. 11 cm, max. 61 cm.
- For permissible axial force F in the spindle under different inclinations of the base plate see table A1.02
- The permissible values in Tab. A1.02 refer to the Adj.Base Plate/base plate area. The spindle tube must be verified separately to match the selected spindling length!
- Up to an installation angle of 15° on concrete or wood, no securing with screws is required. For other substrates, it must be verified that horizontal shifting is not possible.
- From an installation angle of 15°, the base plate must be secured with screws at the marked holes (Ø 11 mm). The screw head must lie flat against the base plate. Pretensioning of the screw is not necessary. ((Fig. A1.04a) + Fig. A1.04b)

The anchoring means is to be determined on site and must have the following rated resistances:
$F_{tRd} \geq 17.00$ kN limit tensile force,
$F_{vRd} \geq 21.70$ kN limit shear force.

Permissible axial force F in the spindle at inclination α	
0 - 15°	30.00 kN
20°	23.00 kN
25°	18.33 kN
30°	15.67 kN
35°	13.33 kN
40°	12.00 kN
45°	11.00 kN
50°	10.00 kN
55°	9.00 kN

Tab. A1.02

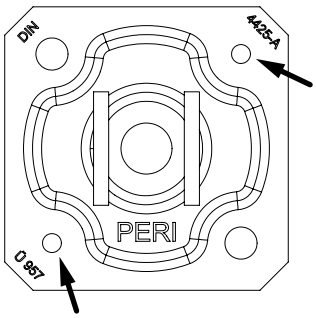


Fig. A1.04a

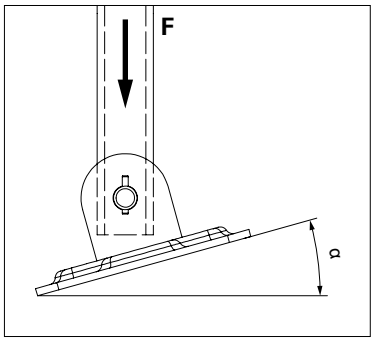


Fig. A1.04b

Application examples

Working, protective, industrial and shoring scaffolds.

Swivel castors and castors

Note

- Only move mobile scaffolds without people on them. Attach or remove loose objects.
- Before people climb on or material is put on, check all brakes. Secure castors against rolling away.
  ⇒ Adjust the spindles of all swivel castors and castors precisely to the substrate after each movement of the scaffold. Observe the maximum spindling length!

- For braked castors the static load limit applies, for unbraked castors the dynamic load limit applies. Regardless of whether the scaffold is moved.
- All specified permissible loads only apply when used on a smooth and level substrate, e.g. industrial floor.
- Always verify the load-bearing capacity of mobile scaffold towers on a project-specific basis.
- Attach symmetrically with a load traverse for moving. Do not pull at an angle. Select the attachment point as low as possible.
- Always secure swivel castors and castors against falling out with spindle locking or locking pin.
- **Do not** use a combination of Castors UEW 24 and UWE 26 in the same mobile scaffold.

Components

5	Castor UEW 30 with Spindle
6	Castor UEW 26 with Spindle
7	Castor UEW 26 with Spigot
8	Castor UEW 24 with Spindle
9	Castor UEW 24 with Spigot

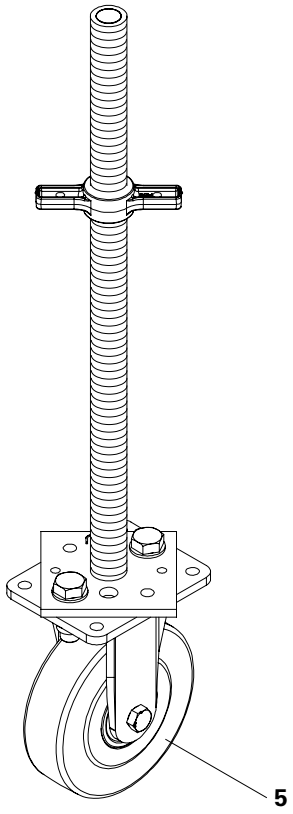


Fig. A1.05

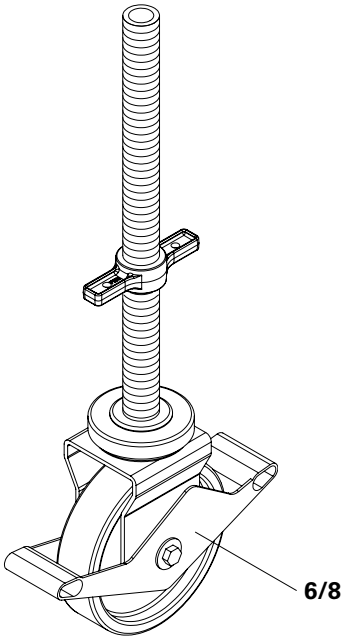


Fig. A1.05a

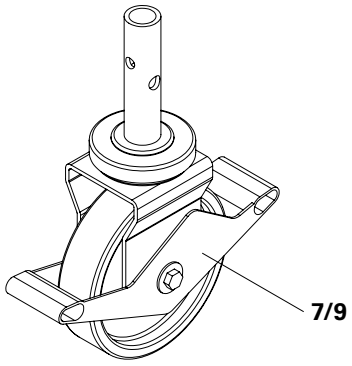


Fig. A1.06

A1 Spindles and rollers

Castor UEW 30

Unbraked, rigid roller with screwed-on Adj. Base Plate TR 38-70/50.
Castor can rotate by turning the Adj. Base Plate in the vertical tube.

The castor can be spatially braced with scaffolding tubes and couplings.
- Bracing is possible in a longitudinal and transverse direction as well as diagonally.
- The castor can then no longer be turned.

Assembly
1. Align Castors UEW (**5**) parallel in the desired direction of travel.
2. Screw the scaffolding tube with Swiv.Coup. EN 74 RS Ø38/48 mm ga (**178**) directly above the screw-on plate on the Adj. Base Plate. (Fig. A1.07a + Fig. A1.08a)

Application examples
Working platforms, stripping carts, cornice cap trolleys.

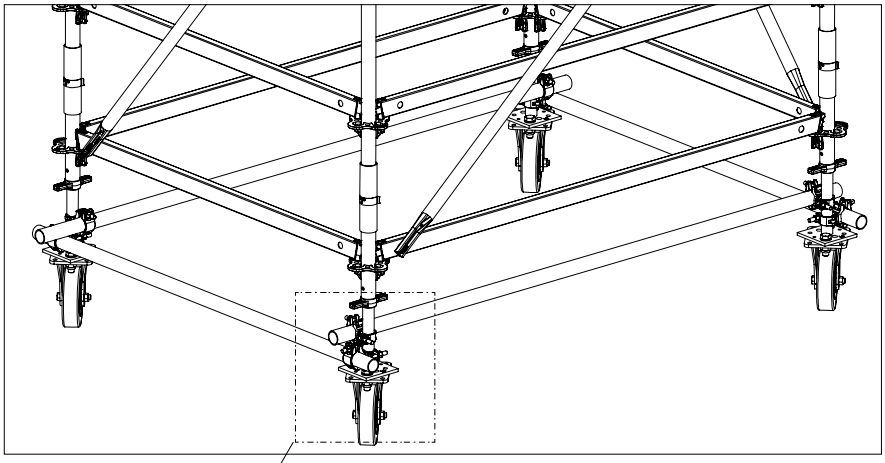


Fig. A1.07

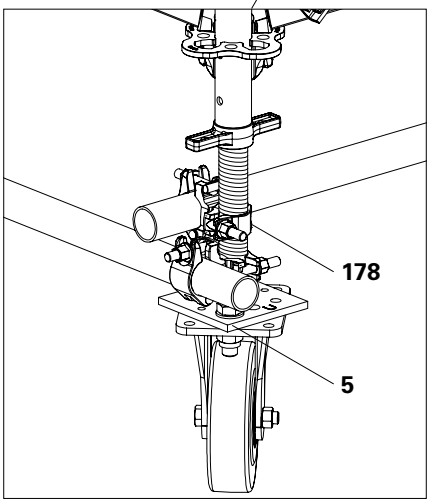


Fig. A1.07a

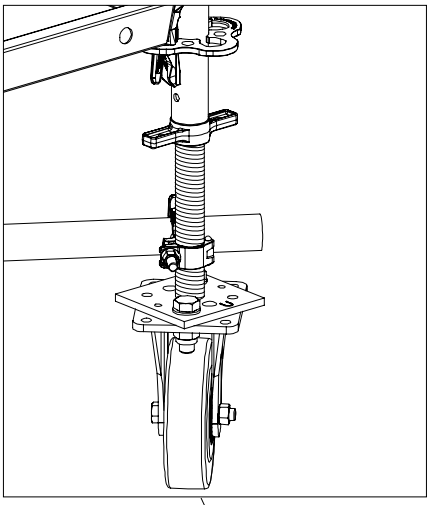


Fig. A1.08a

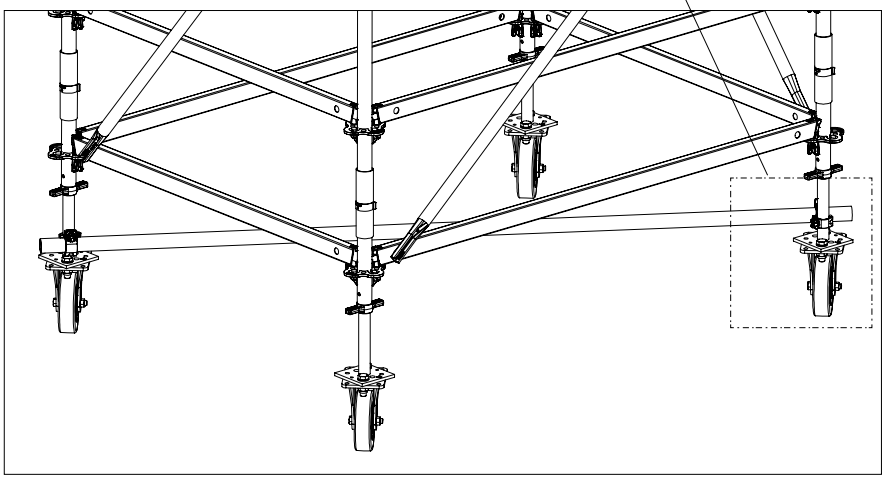


Fig. A1.08

Technical data
See adjacent tables for maximum permissible loads.

The transmittable horizontal force depends on the spindle extension (**x**) and limits the maximum transmittable vertical force.

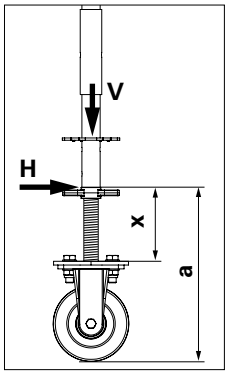


Fig. A1.09

Permissible load combinations	
Vertical load V [kN]	Horizontal load H [kN]
Spindle extension (**x**) 35 cm = spindle height (**a**) 62 cm	
22.50	0.00
15.00	0.65
10.00	1.00
Spindle extension (**x**) 25 cm = spindle height (**a**) 52 cm	
27.00	0.00
22.00	0.45
19.00	0.72
16.00	1.00
15.00	1.05
14.00	1.15
13.00	1.25
12.00	1.35
11.00	1.40
10.00	1.50
Spindle extension (**x**) 20 cm = spindle height (**a**) 47 cm	
30.00	0.00
27.00	0.35
22.00	0.73
19.00	1.00
18.00	1.10
16.00	1.25
14.00	1.40
12.00	1.55
11.00	1.65
10.00	1.75
Spindle extension (**x**) 15 cm = spindle height (**a**) 42 cm	
30.00	0.00
27.00	0.60
25.00	0.82
24.00	1.00
23.00	1.05
21.00	1.15
19.00	1.30
17.00	1.50
15.00	1.60
13.00	1.80
10.00	2.05
Spindle extension (**x**) 10 cm = spindle height (**a**) 37 cm	
30.00	0.00
29.00	0.87
28.00	1.00
25.00	1.20
20.00	1.60
15.00	2.00
10.00	2.40

Tab. A1.03

Castor UEW 24/26 with Spindle

Braked, steerable roller with spindle.

Components

7 Castor UEW 26 with Spindle
9 Castor UEW 24 with Spindle

- The static permissible load only applies when the brake is fully activated.

For the dimensions of UEW 24 (**9**), see illustration.
The dimensions for UEW 26 (**7**) are given in brackets. (Fig. A1.10a)

Operating the brake
To activate the brake, press the pedal with the red colour marking down up to the stop. (Fig. A1.11a)
To release the brake, press the pedal without the colour marking downwards to the stop.(Fig. A1.11b)

Application examples
Working platforms, reinforcement scaffolds, stripping carts.

Technical data
Maximum permissible load
- dynamic: 6 kN
- static: see Tab. A1.04

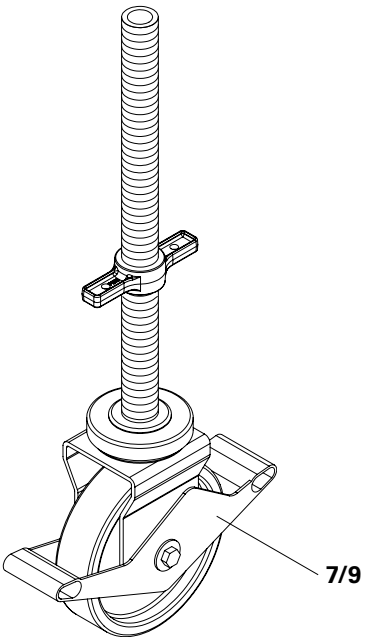


Fig. A1.10

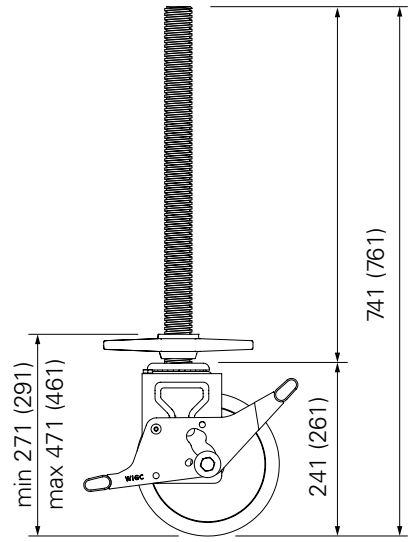


Fig. A1.10a

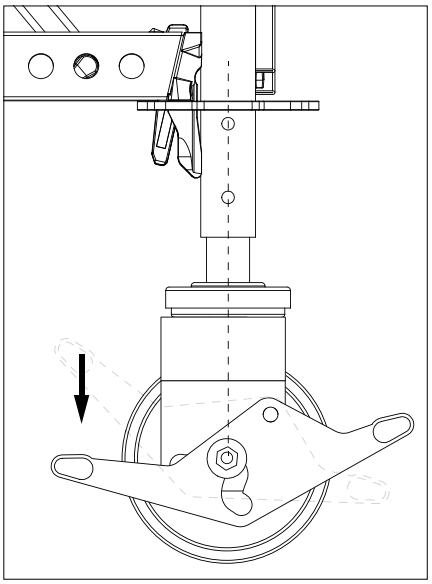


Fig. A1.11a

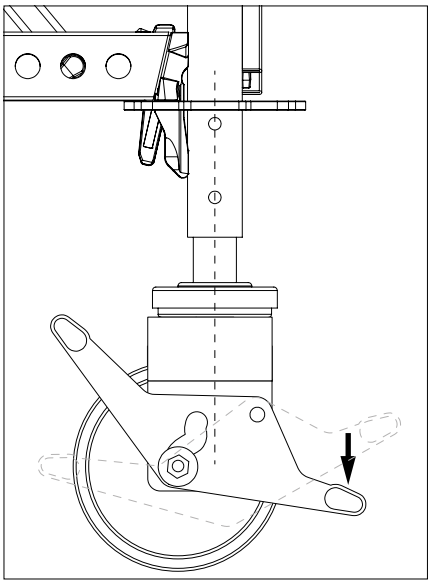
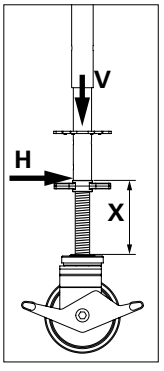


Fig. A1.11b



Permissible load combinations	
Vertical load perm. V [kN]	Horizontal load perm. H [kN] with spindle extension 17 cm
12.00	2.0
10.00	2.2
8.00	2.4
6.00	2.5
4.00	2.7

Tab. A1.04

Castor UEW 24/26 with Spigot

Braked, steerable castor without height adjustment.

Components

6	Castor UEW 26 with Spigot
8	Castor UEW 24 with Spigot

- The static permissible load only applies when the brake is fully activated.

For the dimensions of UEW 24 (**8**), see illustration.
The dimensions for UEW 26 (**6**) are given in brackets. (Fig. A1.12a)

Operating the brake
See Castor UEW 12 with spindle on previous page.

Application examples
Working platforms, reinforcement scaffold, stripping carts.

Technical data

Maximum permissible load	
dynamic	6 kN
static	12 kN

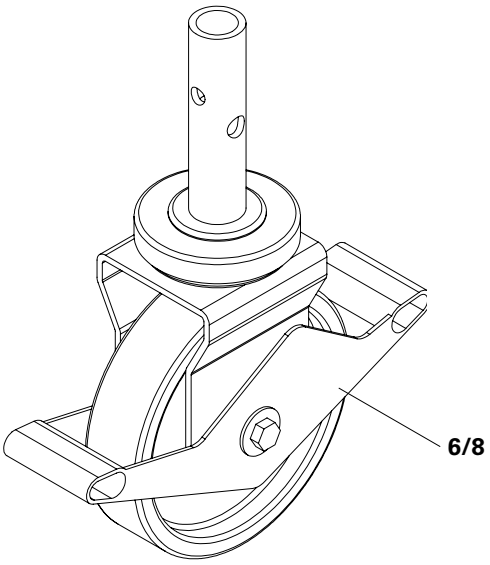


Fig. A1.12

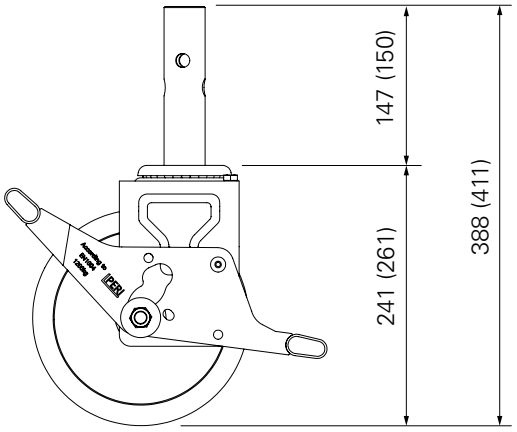


Fig. A1.12a

Movement by crane

Spindle locking is required if, for example, the Adj. Base Plates have to be secured against falling out to enable movement by crane.

Spindle locking is only suitable for enabling movement by crane.
Maximum permissible tensile force Z = 1.5 kN

Components

10	Handle Locking UJS
11	Locking Pin D48/D57

Handle Locking UJS

- A vertical with a stake-out hole, e.g. Base Standard UVB or Standard UVR, UVH, is required for assembly.
- The quick jack nut remains rotatable, the Adj. Base Plate thus remains adjustable.

Assembly

1. Place the Handle Locking UJS (**10**) from the side onto the Adj. Base Plate (**2**) and the base standard. Quick jack nut (**2.1**) must be inside the Handle Locking UJS. (Fig. A1.13a)
2. Tighten the spindle locking with the screw (**10.1**) in the hole of the vertical (**12.1**). (Fig. A1.13b)

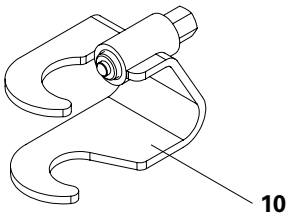


Fig. A1.13

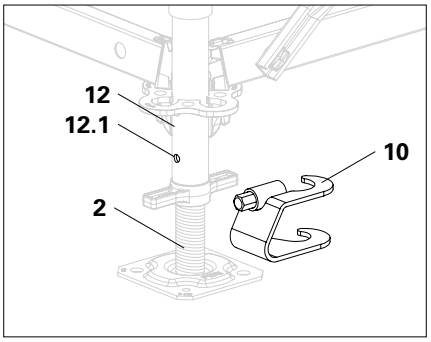


Fig. A1.13a

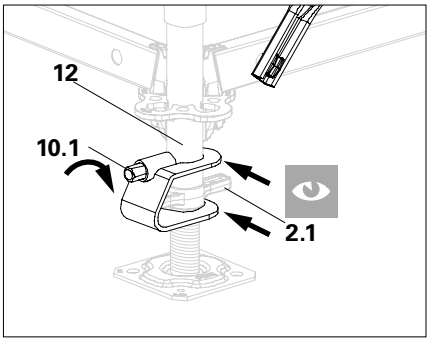


Fig. A1.13b

A1 Spindles and rollers

Locking Pin D48/D57

- For tension- and torsion-proof connection of pin and vertical, e.g. for relocation by crane.

Assembly

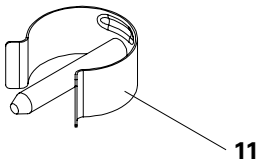
1. Align the insert holes with each other.
2. Insert the Locking Pin Ø48-57 mm (**11**) through the holes in the base standard (**12**) and the spigot of the castor (**6/8**) until the spring clip snaps into the tube. (Fig. A1.14)
3. Fit the ledger in such a way that the wedge is on the side of the tensioning spring. Otherwise it will collide with the bolt. (Fig. A1.14a)

Base Plates UJB (**1**) are fitted to standards (**13**) in the same way.
(Fig. A1.15 + Fig. A1.15a)

- Once the ledger has been fitted, the locking pin can no longer be removed.
- The locking pin does not sit symmetrically in the tensioning spring. For pinning, fit with the higher side of the tension spring facing upwards.

For permissible loads see, Section"Tensile couplings" on page 40.

Application examples
Castor with spigot, Base Plate UJP.



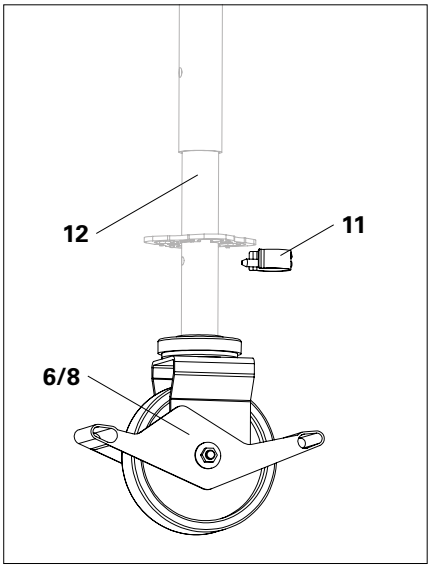


Fig. A1.14

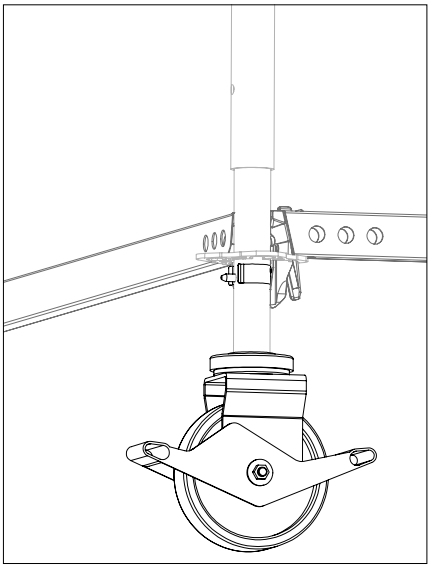


Fig. A1.14a

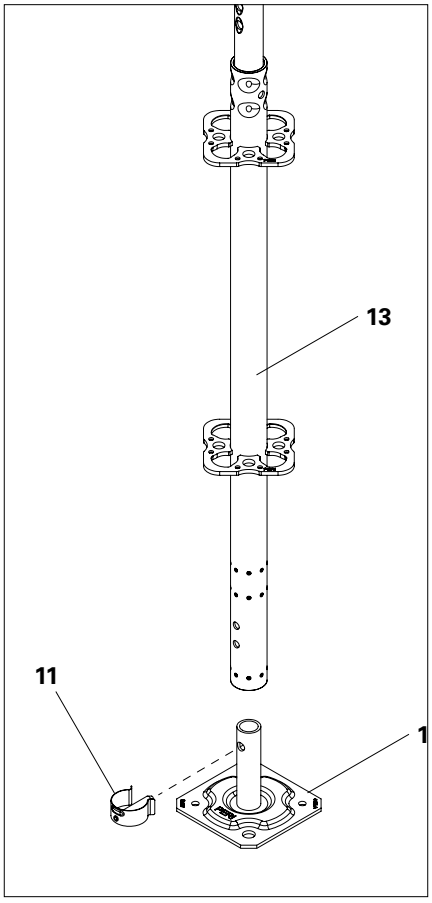


Fig. A1.15

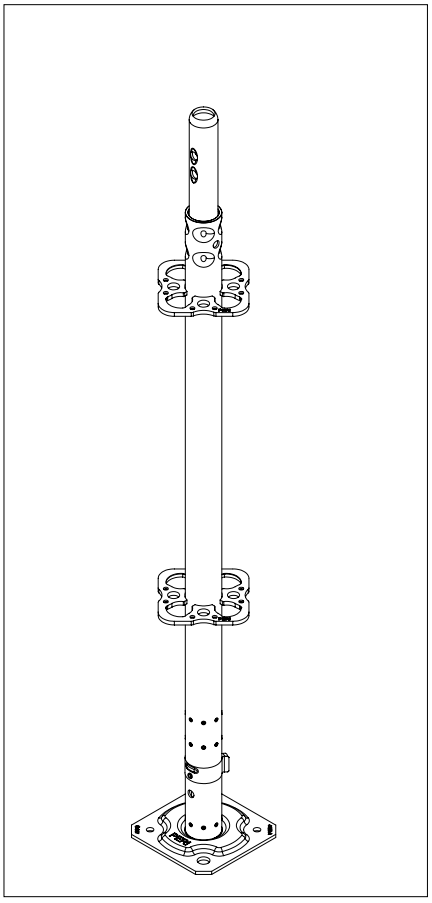


Fig. A1.15a

General information

- The load-bearing capacity of standards can only be verified in dependence on the respective system or individual structure. Therefore, no values are given in this section.
- For node load-bearing capacities see the "PERI UP Design Tables"
- Only insert standards vertically. Permissible exceptions are described in the respective Instructions for Assembly and Use.
- The rosettes (**12.1**) of all standards have ledger-to-ledger couplers (**12.2**) and brace adapters (**12.3**).

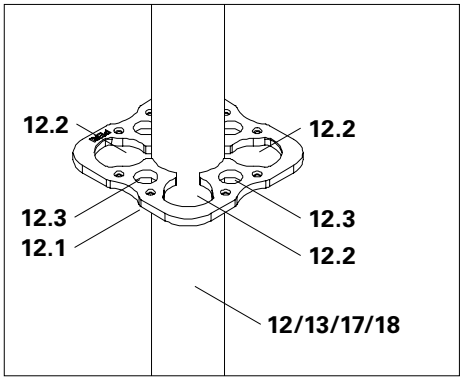
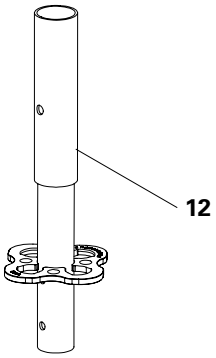


Fig. A2.01

Components

2 Adj.Base Plate UJB
12 Base Standard UVB
13 Standard UVR-2
14 Top Standard UVH-2
15 Ledger UH-2
17 Top Standard EVT 96
18 Top Standard EVOTOP EVT 96



Base Standard UVB

Base Standards UVB are required when horizontal loads are to be applied close to the point of contact.
Use with
- high loads, e.g. shoring,
- one-man assembly.

Assembly

1. Fit the base standards (**12**) onto the already positioned spindles (**2**). (Fig. A2.02)
2. Insert the Ledger UH-2 (**15**) into the ledger-to-ledger coupler.
3. Set up another base pair and connect with Ledger UH-2. (Fig. A2.03)

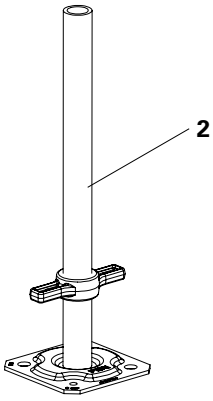


Fig. A2.02

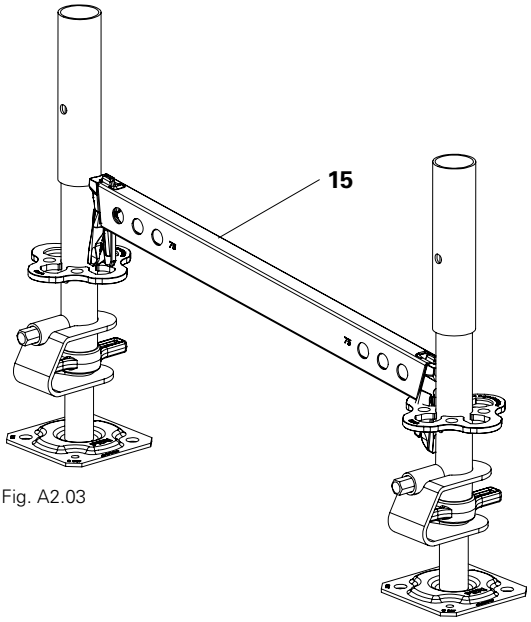


Fig. A2.03

Standards UVR-2

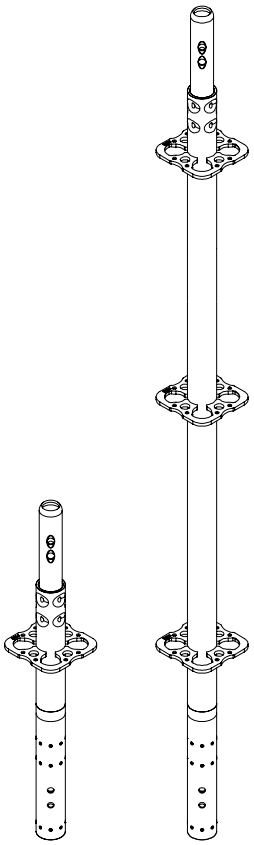
- Available in lengths of 50, 100, 150, 200 and 300 cm.
- Installation of ledgers as guardrails possible.
- Can be fitted with guardrails in advance, see Section "Guardrail EPG" on page 65.

Start assembly with 4 Standards UVR-2 300 (**13a**) on the base layer.
As a result, the end of the vertical is always 1 m above the deck level.
Assemble further scaffolding levels with Standards UVR-2 200, e.g. for scaffold exteriors. (Fig. A2.04)
Instead of the UVR-2 300, a UVR-2 100 (**12c**) can be combined with a UVR-2 200 (**12d**). (Fig. A2.04a)

Alternatively:
Start assembly with Standards UVR-2 200 (**13b**). As a result, the end of the vertical is at deck level.
It is not possible to use a guardrail in advance, e.g. for the inner side of the scaffold.

Assembly

1. Insert Standard UVR-2 (**13a/13b**) into Base Standard UVB 25 (**12**) or onto Standard UVR-2.
   (Fig. A2.04b)
2. Align the insert holes with each other.
   (Fig. A2.04c)



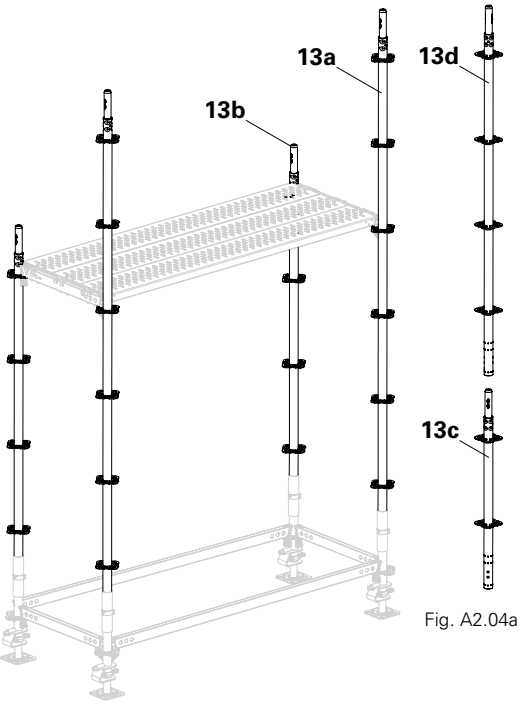


Fig. A2.04a

Fig. A2.04

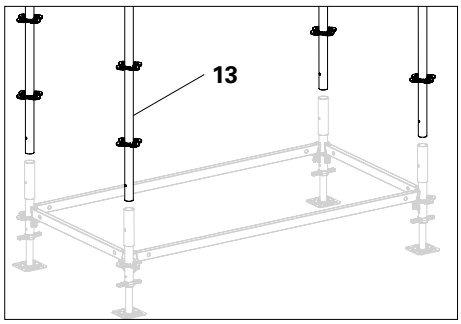


Fig. A2.04b

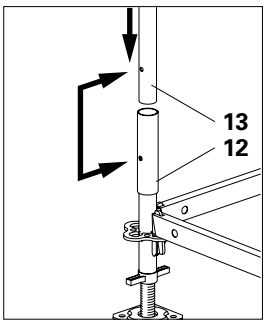


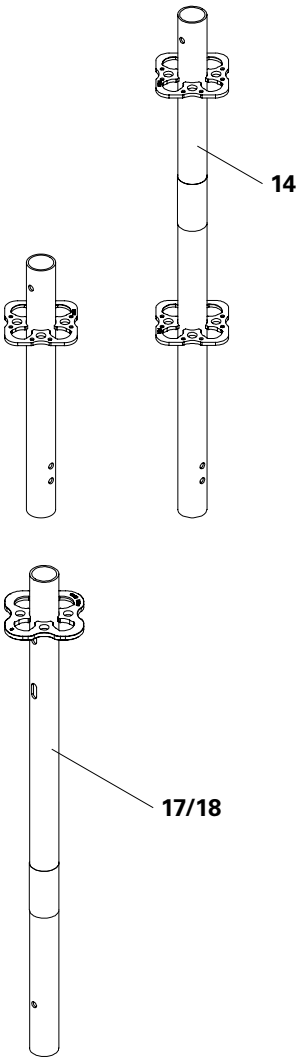
Fig. A2.04c

Top Standard UVH-2
Top Standard EVT 96
Top Standard EVOTOP EVT 96

Top Standards (**14**) are required, for example, if a spindle is to be inserted into the tube end. On platforms there is a 4 cm projection. (Fig. A2.05a)

A deck surface without protruding pipe ends can be created using the Top Standard EVT 96 (**17**) or Top Standard EVOTOP EVT 96 (**18**). (Fig. A2.05b)

- The use of the Top Standard UVH-2 50 with head spindle is geometrically only possible to a limited extent. The spindle of the top standard can collide with the pin of the last Standard UVR-2. Then use Top Standard UVH-2 100 and fit a final standard that is 50 cm shorter.
- Above a top standard it is possible to continue building when the Spigot ULT 32 is installed. See Section “Connector ULT” on page 142.



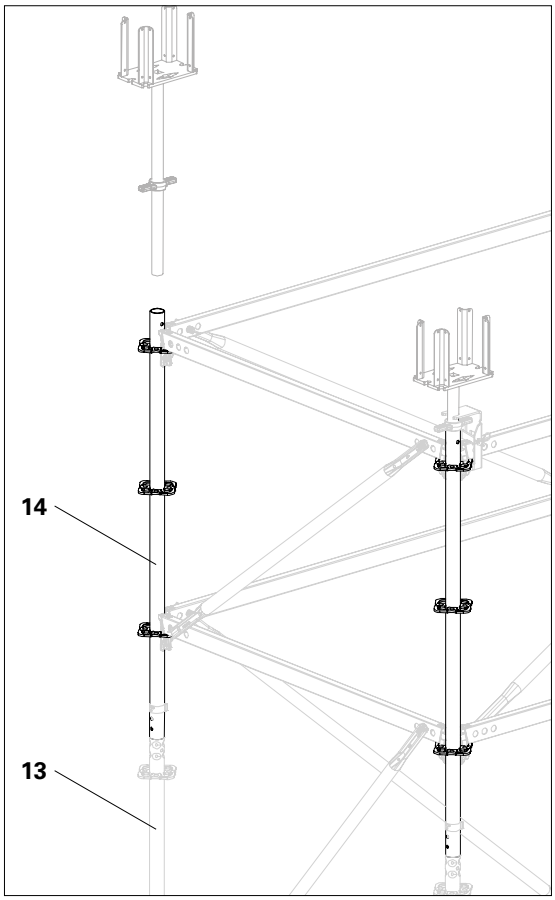


Fig. A2.05

Assembly

1. Put the Top Standard UVH-2 (**14**) on the Standard UVR-2 (**13**).
2. Align the insert holes with each other. (Fig. A2.05)

Application examples

Shoring towers, top scaffolding level with roof catch, birdcage scaffolds.

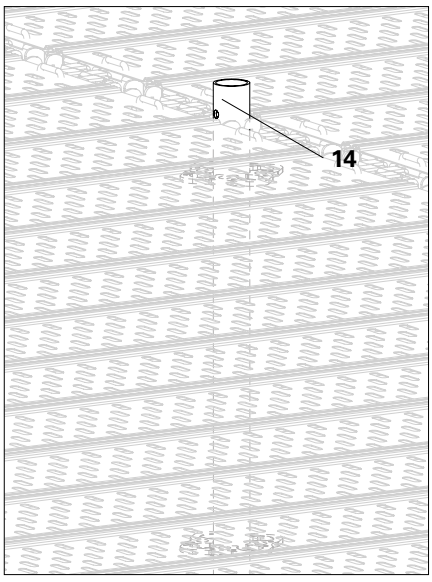


Fig. A2.05a

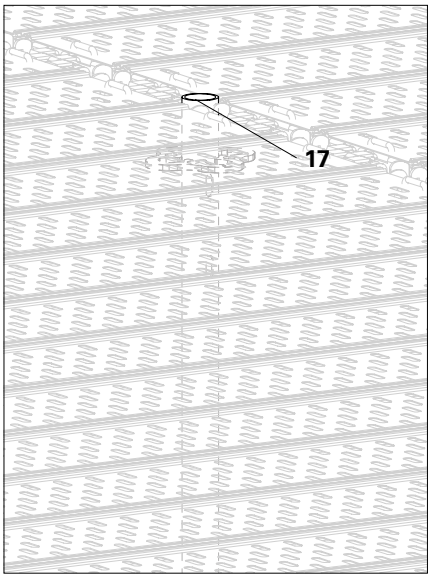


Fig. A2.05b

Hanging verticals used

Rosette on steel waler
To attach a scaffold,
Top Standards UVH and UVH-2 (**14**) can be inserted through
Steel Walers SRU and placed on the girder with rosettes.

The permissible tension forces of the respective Top Standard UVH or UVH-2 can be fully absorbed.
(See Section "Tensile couplings" on page 40.)

- The alignment of the rosette is freely selectable.
- The max. permissible gap width is 52 mm.
- PERI recommends using a Steel Waler SRU.
- Also possible with Standards UVR/ UVR-2.

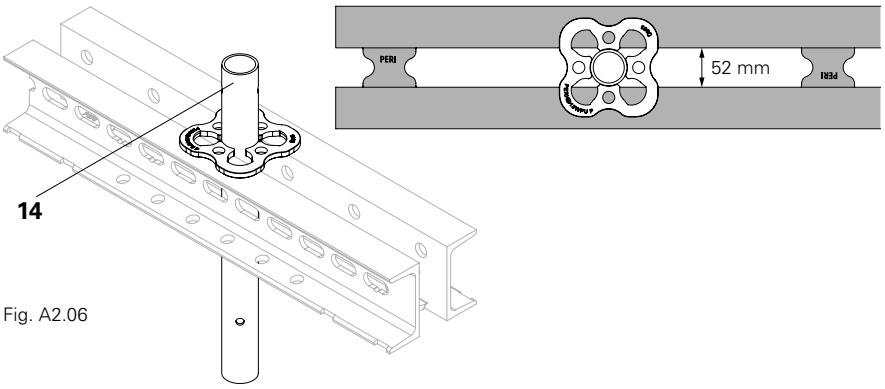


Fig. A2.06

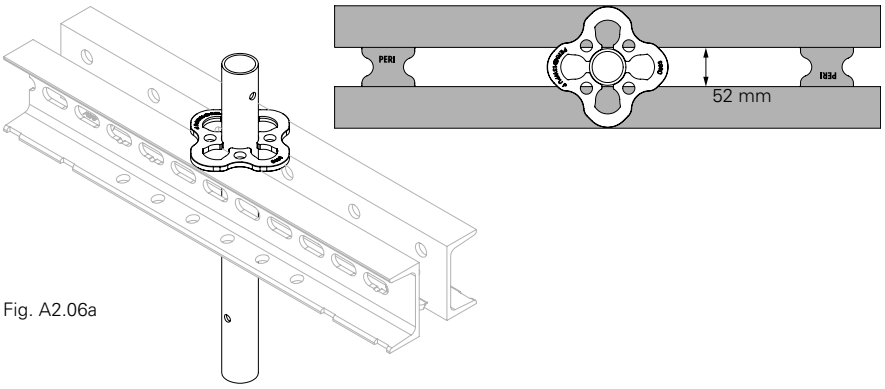


Fig. A2.06a

PERI UP Easy Standards and Frames

Components

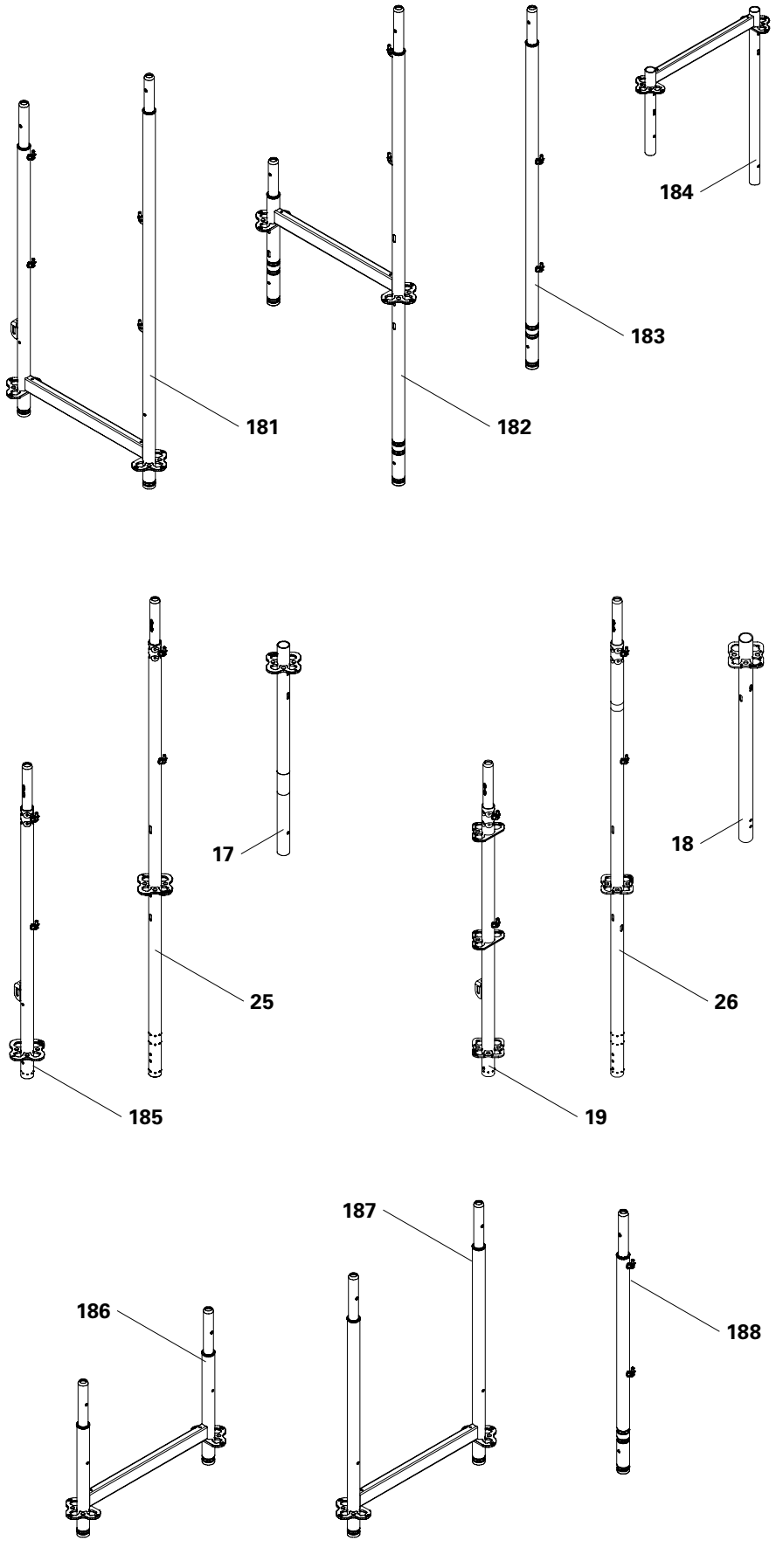
Frame variant
181 Base Frame EVB
182 Easy Frame EVF
183 Tube EVR 150
184 Head Frame EVH

Post variant
185 Easy Base Standard EVS 124
25 Easy Standard EVM 200
17 Top Standard EVT 96

EVOTOP
19 Base Standard EVOTOP EVS 124
26 Standard EVOTOP EVM 200
18 Top Standard EVOTOP EVT 96

For all Easy variants
186 Base Compensation EVA 67/50
187 Base Compensation EVA 67/100
188 Guardrail Post EVP

Assembly
Refer to the respective Instructions for Assembly and Use for system in order to use and fit the components:
- PERI UP Easy Frame variant
- PERI UP Easy Post variant
- PERI UP Easy EVOTOP.

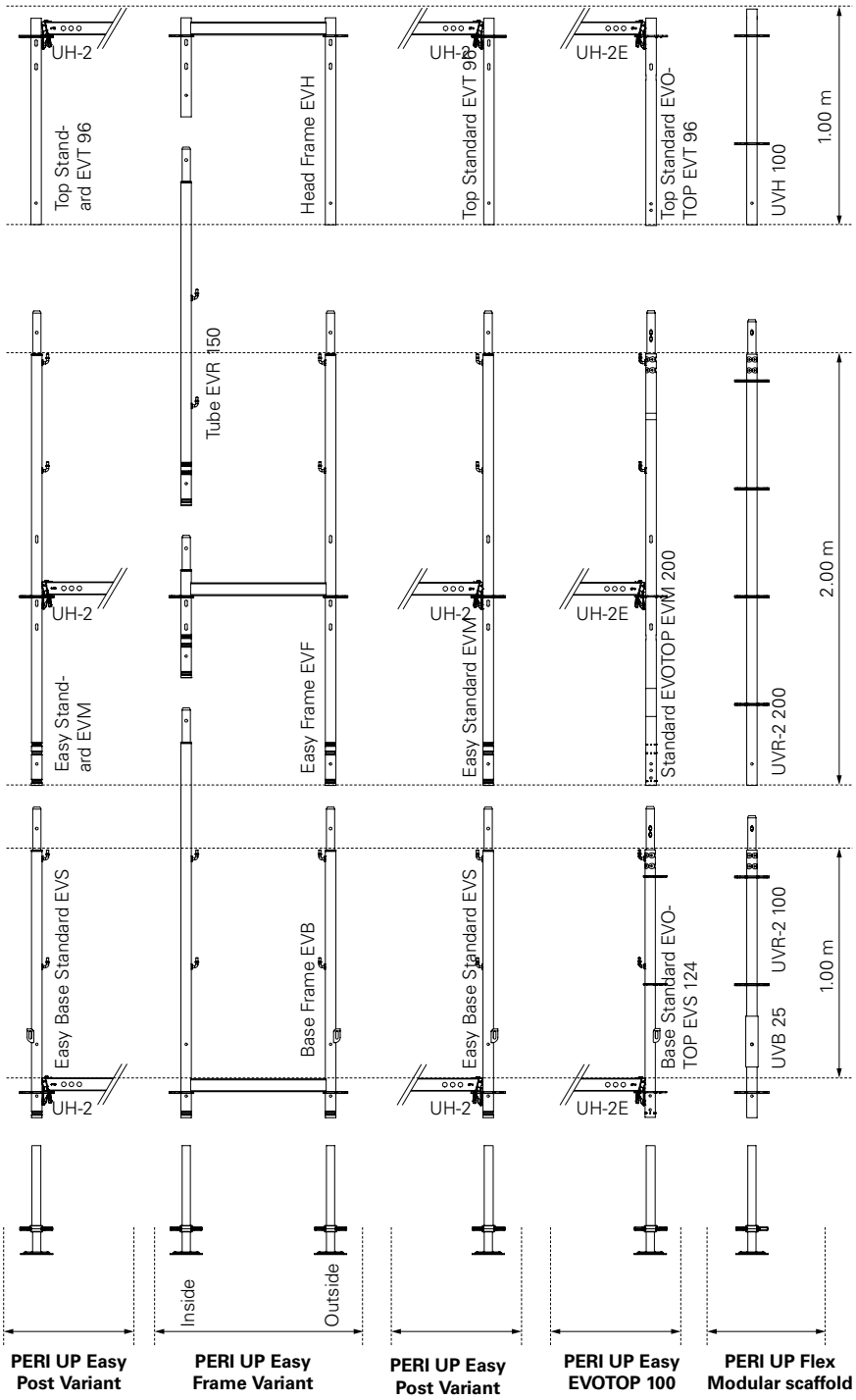


Compatibility

- The resulting load-bearing capacities may be limited. Project-specific verification is required!

Thanks to harmonised system and component dimensions, PERI UP Easy can be set up as a combination of standard, EVOTOP or frame variants, or combined with PERI UP Flex.

If scaffolds are erected with different PERI UP variants, the respective Instructions for Assembly and Use apply to each variant:
- PERI UP Easy Post variant
- PERI UP Easy Frame variant
- PERI UP Flex Facade Scaffolding
- PERI UP Easy EVOTOP.



Tensile couplings
Depending on the components used and the fasteners selected, different tensile forces are permissible for suspended constructions.

If only one is used for components with 2 pegging holes, the pegging hole used can be freely selected.

Components

13 Standard UVR-2 200
14 Top Standard UVH-2 200
17 Top Standard EVT 96
18 Top Standard EVOTOP EVT 96
25 Easy Standard EVM 200
26 Standard EVOTOP EVM 200
27 Standard UVR 200
28 Top Standard UVH 200
99 Spigot ULT 32

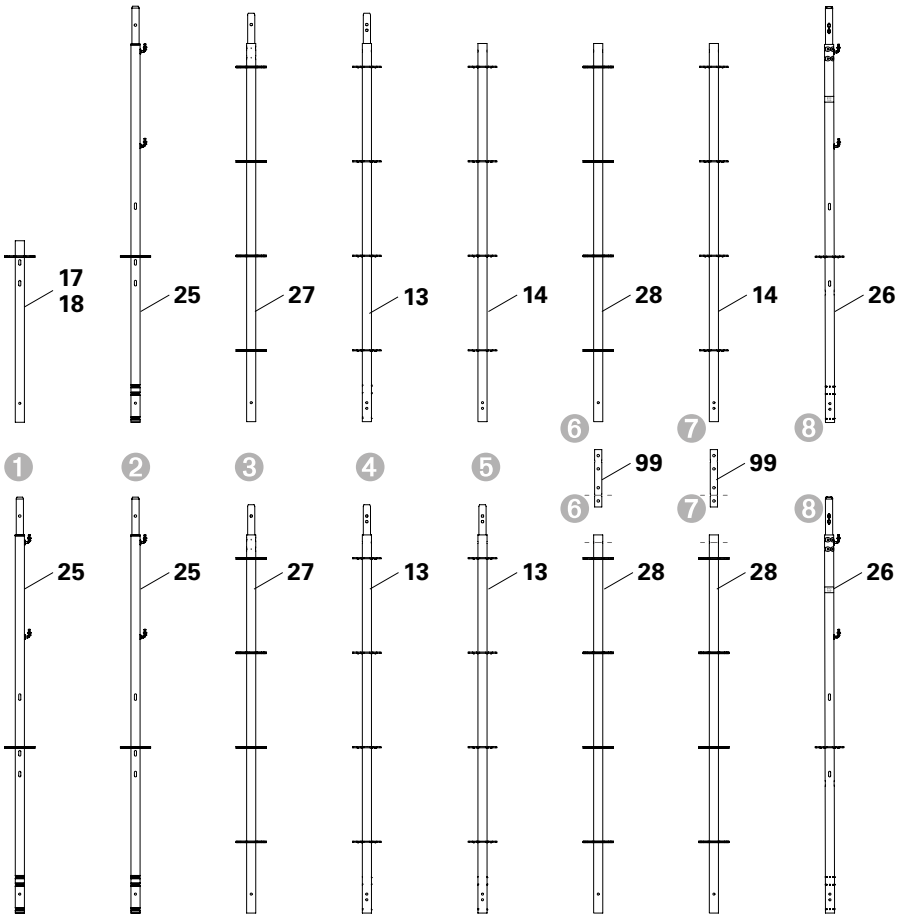


Fig. A2.07

Permissible tension forces [perm.Z) for the fastener*					
Position	Component		Fastener*	Number	perm. Z [kN]
	upper	lower			
1 + 2	EVT 96/EVM	EVM	a	1	12.30
1 + 2	EVT 96/EVM	EVM	b	1	11.90
1 + 2	EVT 96/EVM	EVM	c	1	13.10
3	UVR/UVH	UVR/UVR-2	a b c	1	20.70
4	UVR-2	UVR-2	a	1	12.30
4	UVR-2	UVR-2	b	1	11.90
4	UVR-2	UVR-2	c	1	15.70
4	UVR-2	UVR-2	a	2	24.50
4	UVR-2	UVR-2	b	2	23.90
4	UVR-2	UVR-2	c	2	31.30
5	UVH-2	UVR-2	a b c	1	20.70
5	UVH-2	UVR-2	a b c	2	31.30
6	UVH/UVR	ULT + UVH	a b c	2 x 1**	20.70
7	UVH-2	ULT + UVH	a b c	2 x 1**	20.70
8	EVOTOP EVM	EVOTOP EVM	a b c	1	20.70
8	EVOTOP EVM	EVOTOP EVM	a b c	2	41.40

***** a = Locking pin D 48/57
b = Screws M10 - 8.8
c = Screws M10 - 10.9

** See Section “Connector ULT” on page 142

If EVOTOP components are mixed with Easy components, the permissible tensile forces of Easy must be applied to each configuration.

Tab. A2.01

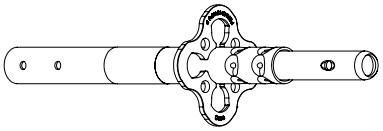
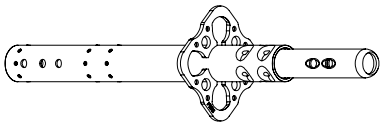
Comparison of components

As part of ongoing product optimisation, the following components have been replaced by 2nd generation components.

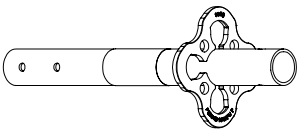
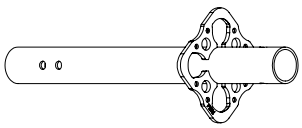
The following comparison tables describe the features of the 1st and 2nd generation.

1st and 2nd generation components can be combined.

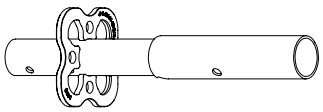
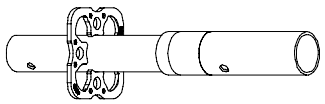
- The optimised components are available under a new article number.
- There may be a difference between the load-bearing capacity of the individual components in the previous version and the new version.

	Standard UVR	**Standard UVR-2 (Gen-2)**
		
Tube	48.3 mm dia. x **3.2 mm**	48.3 mm dia. x **2.7 mm**, embossed points on the bottom standard
Tube-spigot connection	2 rows, with 5 pinch points each	2 rows, with 4 pinch points each
Rosette	160 mm x 130 mm x 8 mm Rounded profile on plan	152 mm x 120 mm x 6 mm More square profile on plan Additional punch points
Holes for tension connection	1 hole	2 holes
Additional identification	None	Red and yellow striped band at the top and bottom

Tab. A2.02

	Top Standard UVH	Top Standard UVH-2 (Gen-2)
		
Tube	48.3 mm dia. x **3.2 mm**	48.3 mm dia. x **3.2 mm**
Rosette	160 mm x 130 mm x 8 mm Rounded profile on plan	152 mm x 120 mm x 6 mm More square profile on plan Additional punch points
Hole for vertical connection	1 hole	2 holes

Tab. A2.03

	Base Standard UVB 24/49	Base Standard UVB 25/50
24/25		
49/50		
Lower Tube	48.3 mm dia. x **3.6 mm**	48.3 mm dia. x **3.6 mm**
Rosette	160 mm x 130 mm x 8 mm Rounded profile on plan	152 mm x 120 mm x 6 mm More square profile on plan Additional punch points
System length	240 mm / 490 mm	250 mm / 500 mm

Tab. A2.04

Ledger

Horizontal Ledgers UH Plus or UH-2 (**15**) are used as horizontal bracing and as girders.

Horizontal Ledgers UHV or UHV-2 (**16**) are used for high loads, e.g. for material storage or ballasting.
In connection with the Ledger to Ledger Coupler UHA-2, bridging devices can be fitted, see Section "Ledger to Ledger Coupler UHA" on page 132 ff.

For permissible linear or concentrated loads, see "PERI UP Design Tables".

Ledgers can be installed up to 15° out of alignment. The stated load-bearing capacities lose their validity in this case. (Fig. A3.03)

Components

15 Ledger UH-2
16 Ledger UHV-2

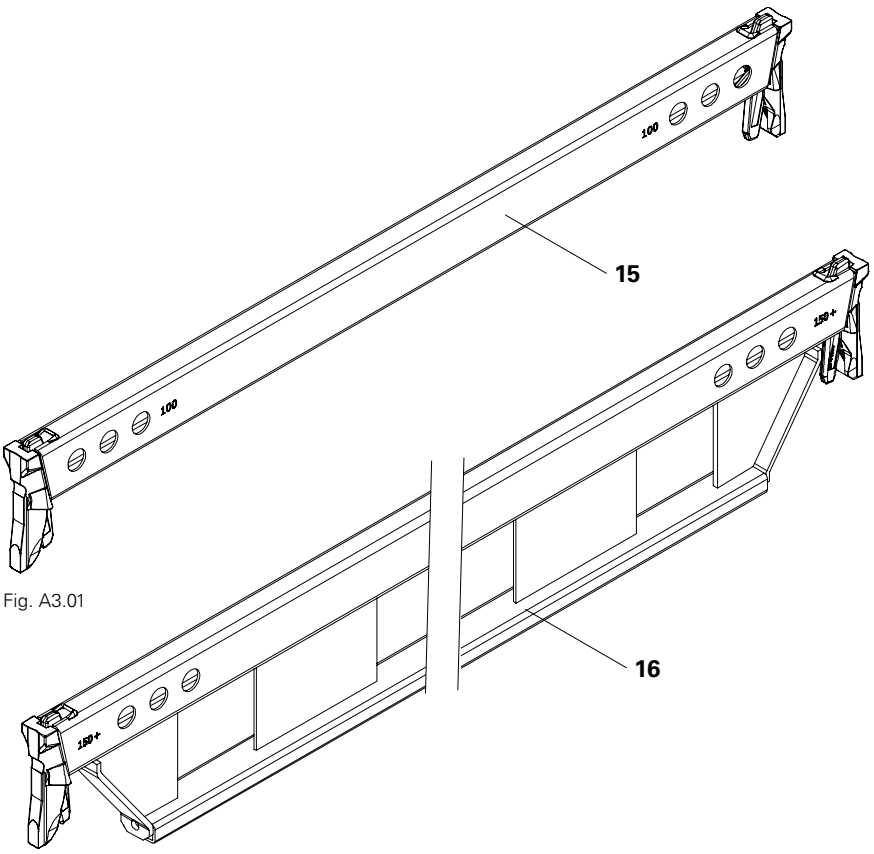


Fig. A3.01

Fig. A3.02

For measuring standards:
Subtract the diameter of the standard from the system dimension.
Clear width between the tubes =
e.g. 250 cm - 4.8 cm = 245.2 cm.

To measure connecting parts (Section 11), subtract half of the desired system dimension (**2.4 cm**) from the standard thickness. Dimension from standard to centre of the connecting part = e.g. 50 cm - 2.4 cm = 47.6 cm.
(Fig. A3.03a)

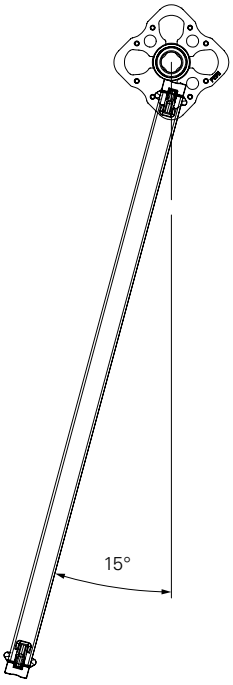


Fig. A3.03

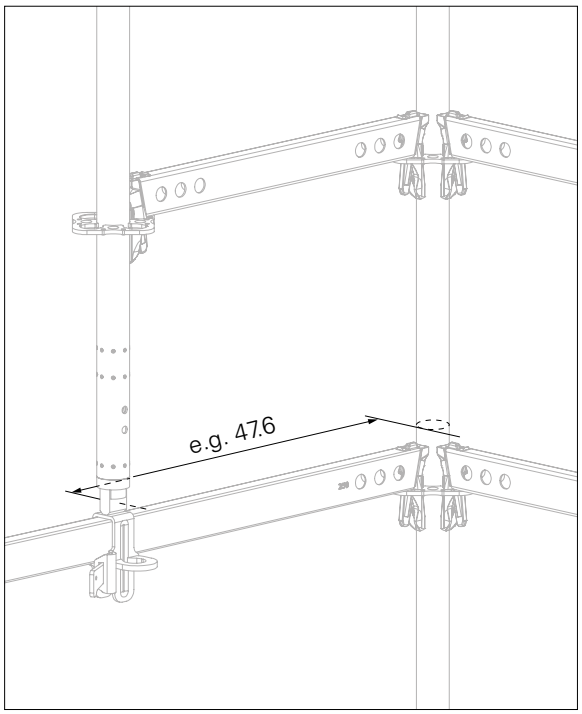


Fig. A3.03a

Wedge couplings

Wedges (**15.1**) are used to connect various components, such as ledgers (**15**), console brackets or connectors. The assembly is always done in the same way.

Assembly

1. Place Ledger UH (**15**) or UHV diagonally on both rosettes and set vertically. (Fig. A3.04a)
2. Press the ledger down onto the rosette up to the stop.
   → Wedges (**15.1**) drop into the rosette and thus already hold the component securely.
   If the wedge does not fall, push the wedge nose (**15.2**) down from the ledger by hand.
   (Fig. A3.04b + Fig. A3.05a)
3. Secure the wedges with a jarring blow using a 500 g hammer.
   Fig. A3.04c

→ Ledger is installed.

Loosening the wedge connection:

1. Hit the wedge from below with a hammer. (Fig. A3.05)
2. Lift out the wedge and place it on the ledger with the wedge nose (**15.2**). (Fig. A3.05a)

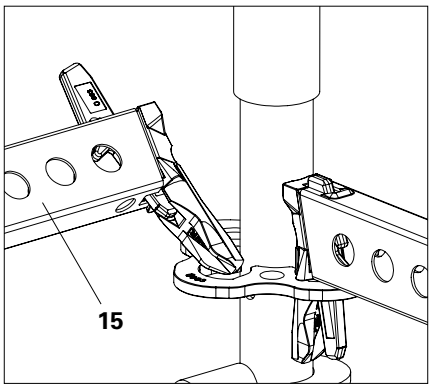


Fig. A3.04a

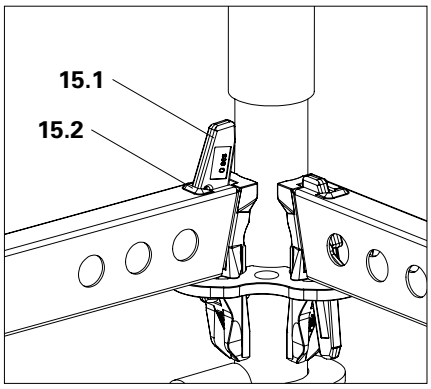


Fig. A3.04b

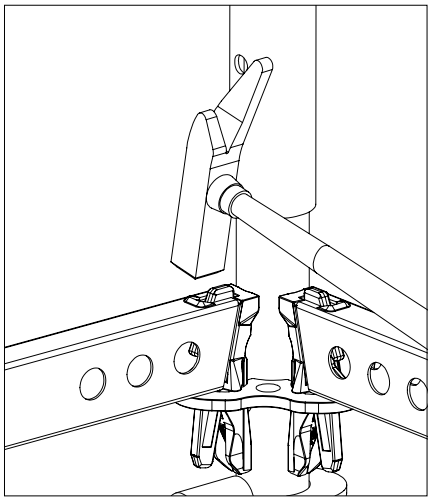


Fig. A3.04c

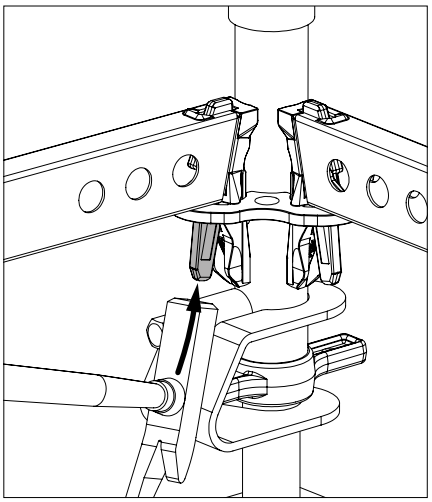


Fig. A3.05

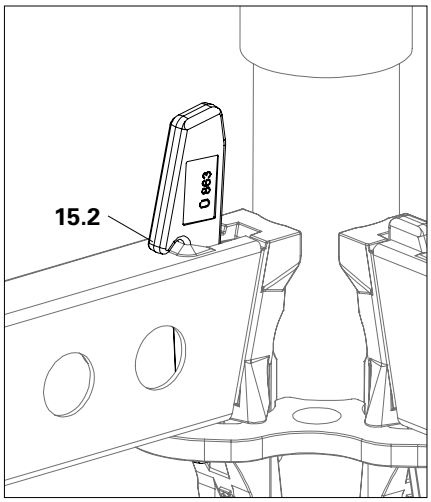


Fig. A3.05a

Comparison of components

As part of ongoing product optimisation, the following components have been replaced by 2nd generation components.

The following comparison tables describe the features of the 1st and 2nd generation.

1st and 2nd generation components can be combined.

- The previous components are no longer available as new components.
- The optimised components are available under a new article number.
- There may be a difference between the load-bearing capacity of the individual components in the previous version and the new version.

	Horizontal Ledger UH*	**Horizontal Ledger UH Plus***	**Horizontal Ledger UH-2 (Gen-2)***	**Horizontal Ledger UH-2 E (Gen-2)**
				
UBL assembly points	2 x 1, for assembly of a Ledger Brace UBL	2 x 1, for assembly of a Ledger Brace UBL	2 x 3, for installation of up to three Ledger Brace UBL	2 x 3, for installation of up to three Ledger Brace UBL
Stamp	None	Length (in cm) plus '+'	Length (in cm)	Length (in cm) plus 'E'
Additional identification	Cast wedge housing protrudes above rectangular section	Cast wedge housing does not protrude above rectangular section	Cast wedge housing does not protrude above rectangular section	Cast wedge housing does not protrude above rectangular section EVO TOP sticker in the middle of the Ledger

Tab. A3.01

* Identification of Reinforced Ledgers UHV is as per Ledger UH, UHV Plus is as per Ledger UH Plus and UHV-2 is as per Ledger UH-2.

A4 Braces

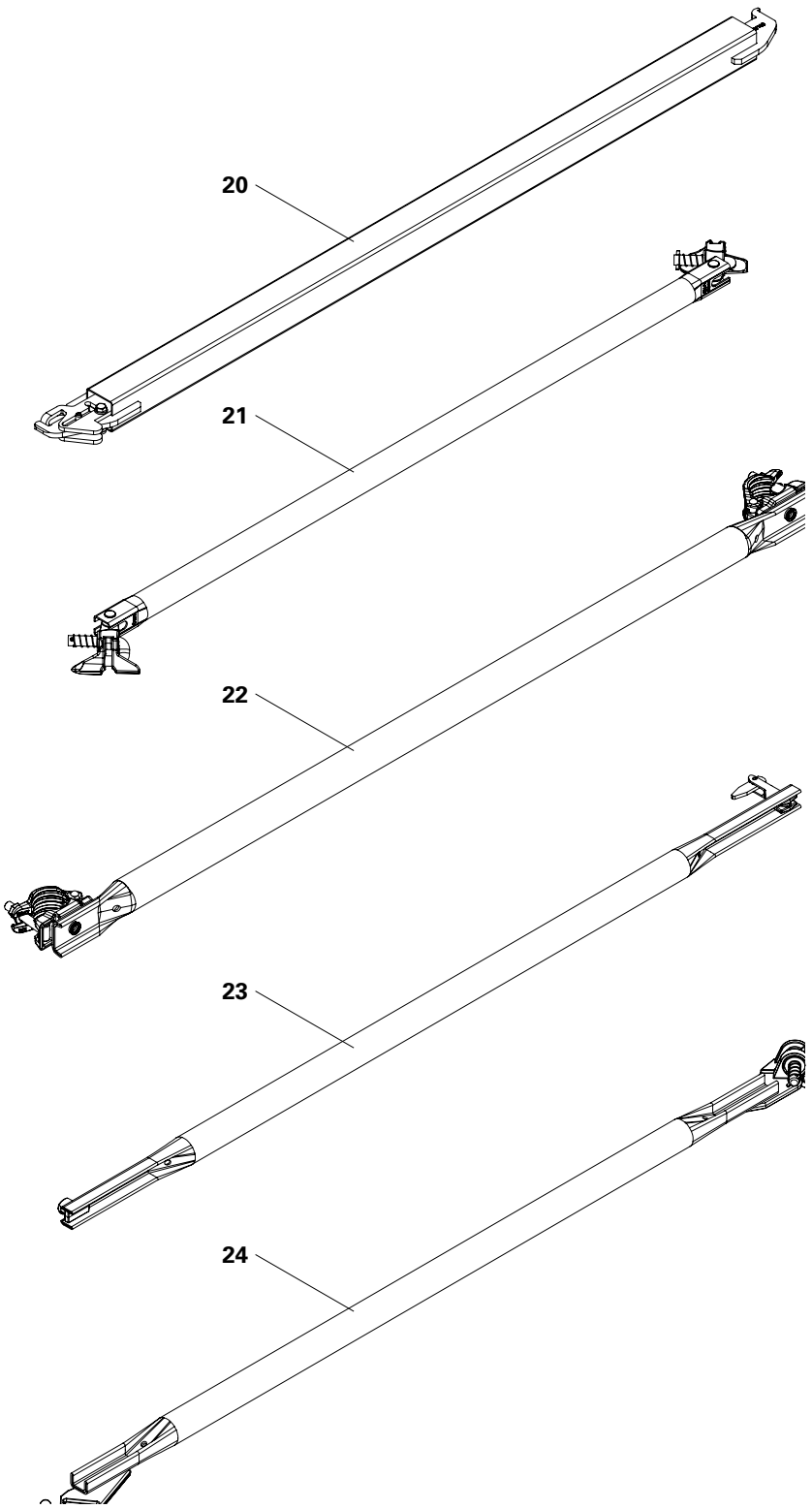
General information

Braces are used for bracing scaffolding systems in all axes.
Different components are required depending on the intended use.

- For permissible loads, see PERI UP tables.
- The exact position of the braces can be found in the respective System Instructions for Assembly and Use or in the implementation plans.

Components

20 H-Brace UBH Flex
21 Node Brace UBK-2
22 Coupler Brace UBC-2
23 Ledger Brace UBL-2
24 Shoring Brace UBS



H-Brace UBH Flex

H-Braces UBH Flex (**20**) ensure the exact perpendicularity of a scaffold. They absorb diagonally acting forces, e.g. in case of crane relocation.

- Horizontal braces are mounted on the rosette nodes in the horizontal plane. Peripheral bracing is always required, e.g. with ledgers.
- H-Braces UBH Flex can be installed from above or below.
- Install horizontal braces from below if deck is installed on the same level.

Assembly

- Install the first side:

1. Thread the mounting lug (**20.1**) of the horizontal brace (**20**) from below into the brace adapter receptacle of the first rosette and secure it by swivelling the brace upwards. (Fig. A4.01a + Fig. A4.01b)

Install first side
(Shown without ledger.)

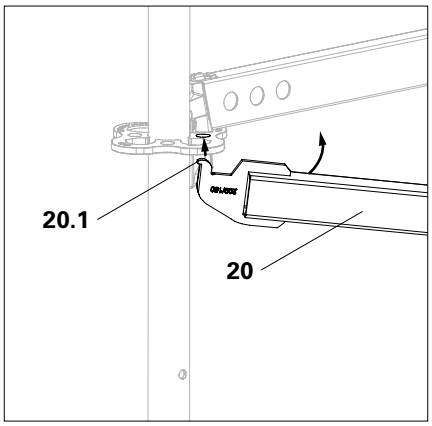


Fig. A4.01a

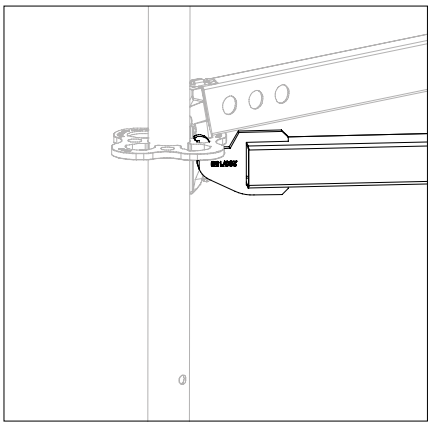


Fig. A4.01b

■ Install the second side:
2. Push back slider (**20.2**) and insert horizontal brace with hook into the brace adapter of the diagonally opposite rosette from below. (Fig. A4.01c)
3. Push the slider in the direction of the rosette until the locking pin (**20.3**) falls into the longitudinal groove. (Fig. A4.01d – Fig. A4.01f)
   → Slider is secured.

→ Horizontal brace is installed.
(Fig. A4.02)

Is the locking pin (**20.3**) in the longitudinal groove and does it secure the slider?

Application examples
Birdcage scaffolds, shoring towers.

Install second side

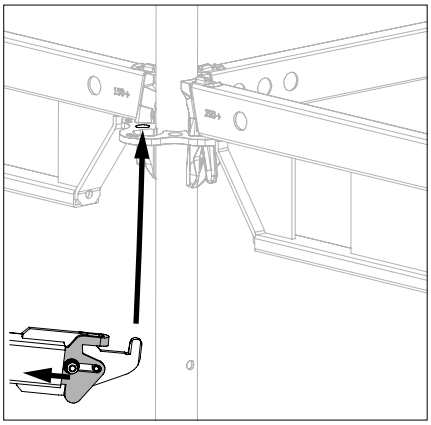


Fig. A4.01c

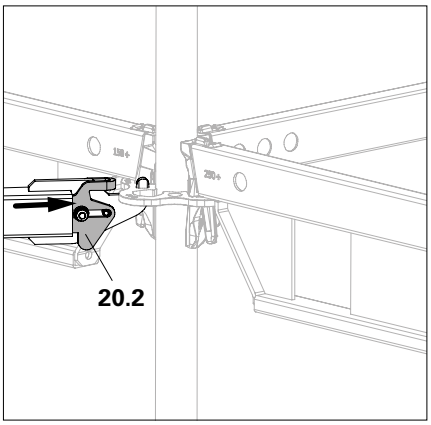


Fig. A4.01d

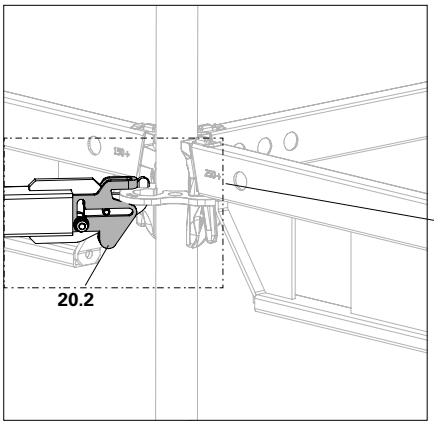


Fig. A4.01e

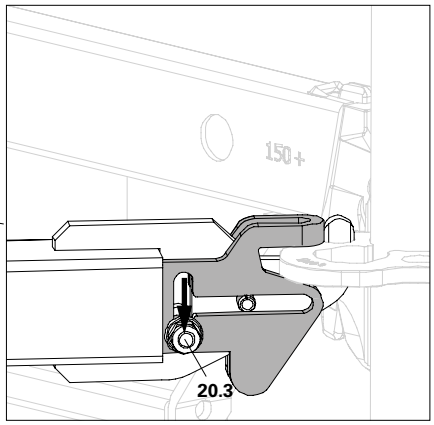


Fig. A4.01f

Node Braces UBK/UBK-2

Caution

Node Brace UBK (**21**) can tilt forward during installation!
People can be hit and injured.
⇒ Install the Node Brace UBK at the top first!

- Node braces are installed directly on the rosette node.

Assembly

1. Push the brace head (**21.1**) with raised bolt (**21.3**) onto the upper rosette (**13.1**). (Fig. A4.02a)
2. Engage bolt (**21.3**) completely in the brace adapter (**13.3**).

→ Node brace is positioned at the top. (Fig. A4.02d)

3. Push the brace head (**21.2**) with raised bolt (**21.4**) onto the lower rosette. (Fig. A4.02c)
4. Engage the bolt completely in the brace adapter (**13.3**) of the lower rosette.

→ Node Brace UBK is installed. (Fig. A4.02d)

All bolts (**21.3/21.4**) must be engaged and rest on the brace head (**21.1/21.2**) after the installation of the Node Brace UBK.
(Fig. A4.02b / Fig. A4.02d)

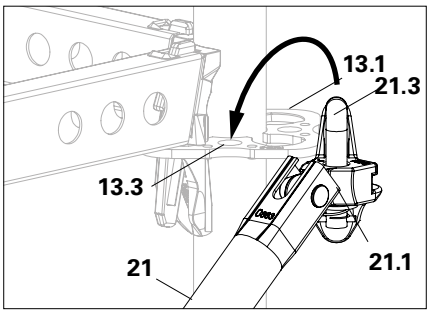


Fig. A4.02a

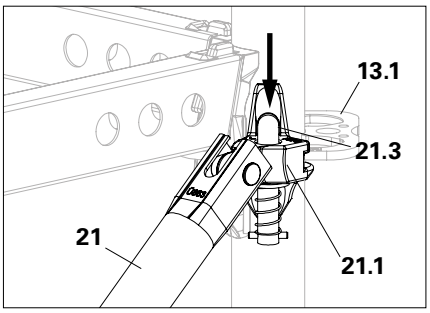


Fig. A4.02b

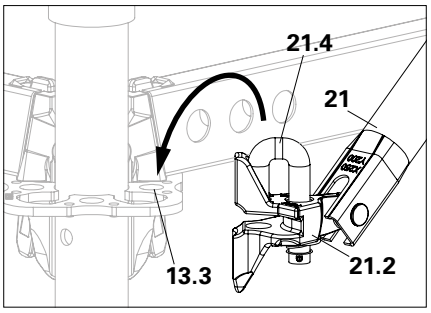


Fig. A4.02c

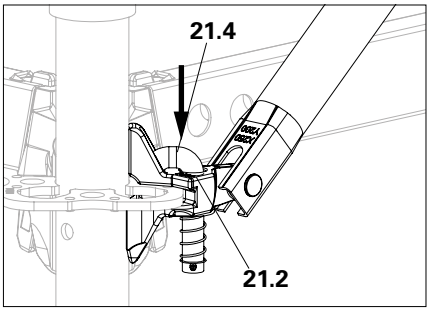


Fig. A4.02d

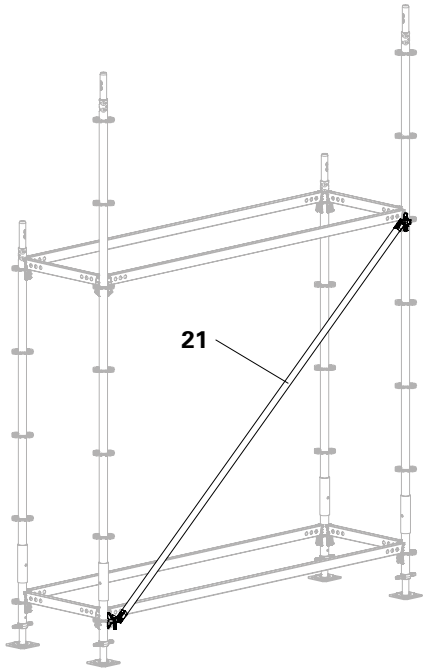


Fig. A4.02

Application example
Suspended platforms

- Suspended platforms require individual planning with static proof of load-bearing capacity.
- The safety measures for construction and operation must be determined on a project-specific basis.

Preparation
Insert the ledger into the ledger-to-ledger coupler of the base standard and hammer it down.
On the side that will later be on the outside, fit a Node Brace UBK in the brace adapter of the base standard.
For the other side of the platform, carry out the assembly inversely.

Assembly
- From existing base scaffold with lateral protection:

1. Bring the prepared assembly in front of the base scaffold. (Fig. A4.03a)
2. Install the node brace on the fixed rosette of the standard, making sure that the bolt is locked in place. (Fig. A4.03b)
3. Hold the ledger at the free end and swing the other side outwards with the base standard. (Fig. A4.03c)
4. Insert the ledger in the rosette provided on the base scaffold and knock it firmly into place.(Fig. A4.03d)
5. Install the second platform kicker brace in the same way.
6. Place the decks on the ledgers and push them outwards.

Further assembly is carried out according to project-specific planning and risk analysis.

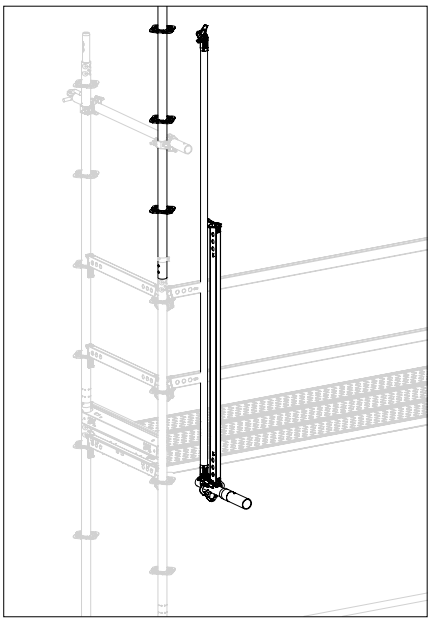


Fig. A4.03a

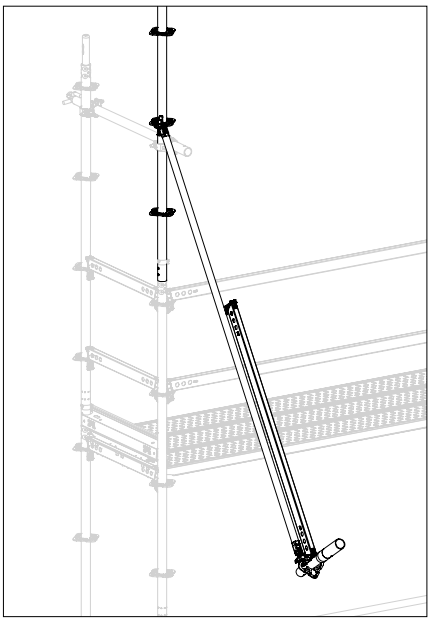


Fig. A4.03b

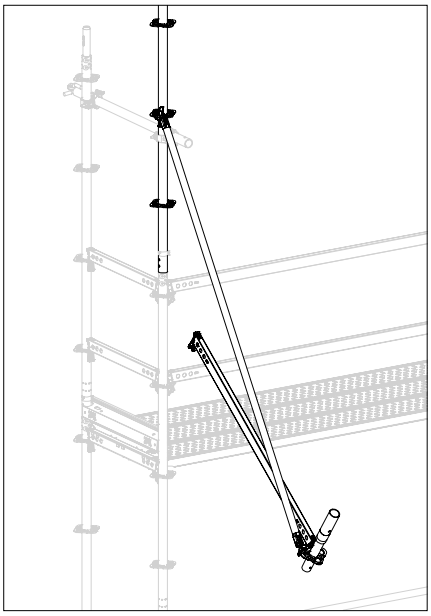


Fig. A4.03c

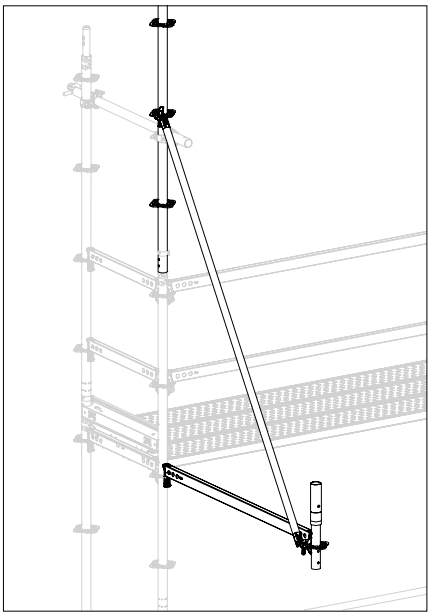


Fig. A4.03d

Comparison of components

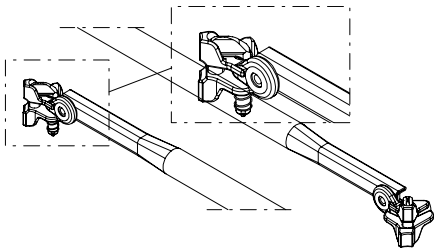
As part of ongoing product optimisation, the following components have been replaced by 2nd generation components.

The following comparison tables describe the features of the 1st and 2nd generation.

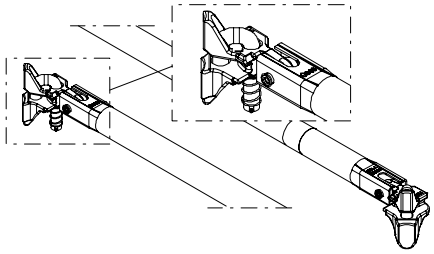
1st and 2nd generation components can be combined.

- The optimised components are available under a new article number.
- There may be a difference between the load-bearing capacity of the individual components in the previous version and the new version.

Node Brace UBK



Node Brace UBK-2 (Gen-2)



Head piece connected to the diagonal tube	Riveted to crimped tube	Bolted to cast shaped component
Additional identification	None	Red and yellow striped band at the top and bottom
Features	Galvanised heads	Yellow-coated heads Possible to connect to Rosette directly under Decks

Tab. A4.01

Coupler Brace UBC-2

Coupler braces (**22**) are required if bracing outside system dimensions must be carried out.

- Tighten the couplings with 50 Nm.
- Couplings and pipes must be clean and free of grease.
- Coupler braces require a pipe diameter of 48 mm.

Assembly

1. Open the couplings (**22.1**).
2. Place the couplings around the scaffolding tubes and tighten with 50 Nm.

→ Coupler brace is installed.

Application examples

Bracing of shoring towers to each other.

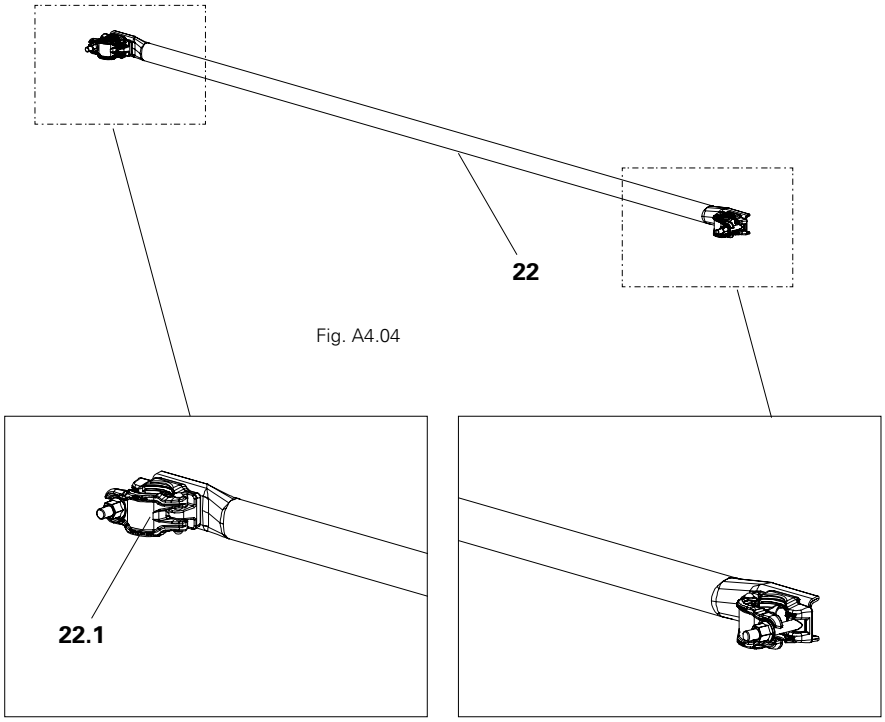


Fig. A4.04

Fig. A4.04a

Fig. A4.04b

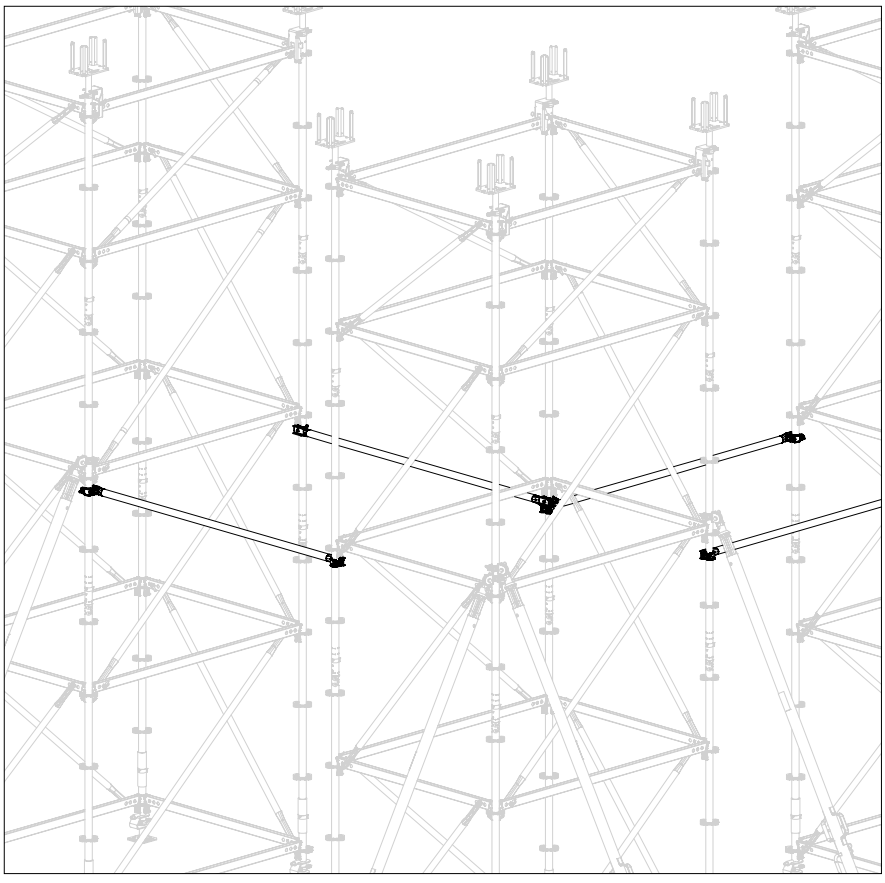


Fig. A4.05

Ledger Brace UBL/UBL-2

Caution

The position of the mounting finger is only secured when the tilt finger is installed. If the tilt finger has to be installed in the lower position, the mounting finger may rotate out of the upper hole during installation.
The brace may then fall and strike and injure someone.
⇒ Always hold the brace tight during installation.

Check load-bearing capacity!
Before installing the
Ledger Braces UBL-2, check the load-bearing capacity for the intended use defined in the proof of use.

The Ledger Brace UBL-2 (**23**) is the most frequently used diagonal in the PERI UP Flex system.

Components

15a Ledger UH-2 (bottom)
15b Ledger UH-2 (top)
23 Ledger Brace UBL-2

Assembly of UBL-2

1. Bring the Ledger Brace UBL-2 (**23**) parallel to the basic scaffold and turn it so that the mounting finger (**23.1**) points upwards.(Fig. A4.06a)
2. Screw the mounting finger into the hole of the lower ledger (**15a**). (Fig. A4.06b)
3. Straighten the tilt finger (**23.2**). (Fig. A4.06c)
4. Insert the tilt finger into the hole of the upper ledger (**15b**). (Fig. A4.06d)
5. Set the tilt finger crosswise.

→ Ledger Brace UBL-2 is mounted. (Fig. A4.06e)

All tilt fingers (**23.2**) of the assembly must be transverse after installation of the Ledger Braces UBL and rest on both sides of the hole.(Fig. A4.06e)

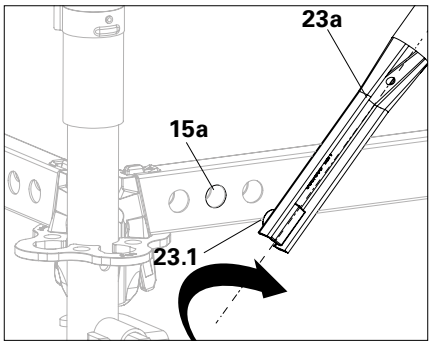


Fig. A4.06a

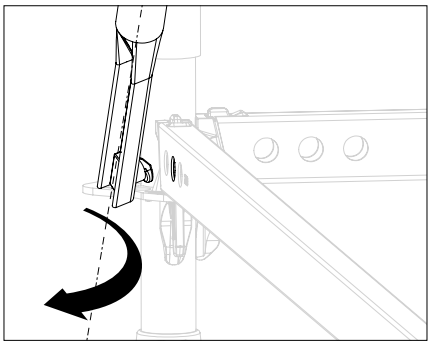


Fig. A4.06b

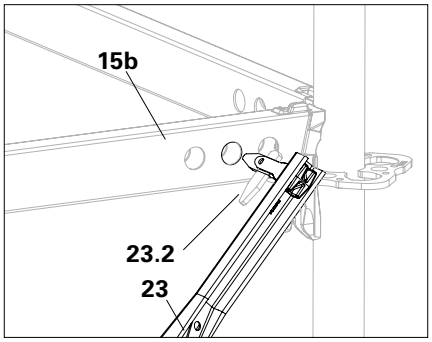


Fig. A4.06c

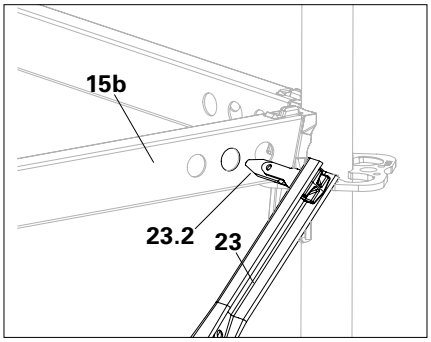


Fig. A4.06d

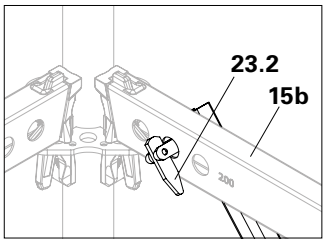


Fig. A4.05e

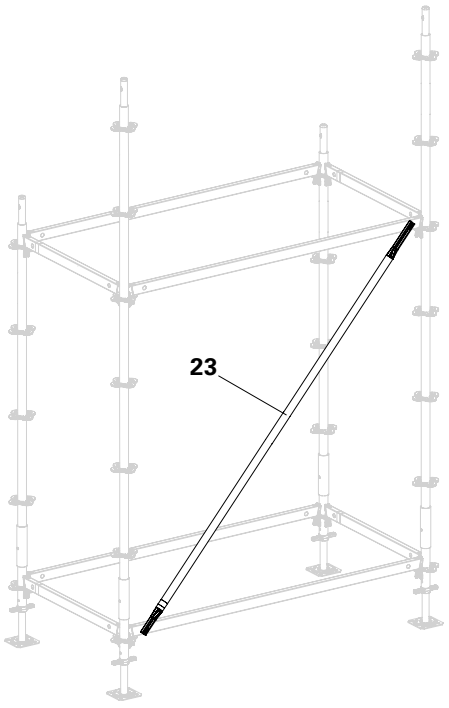


Fig. A4.06

Assembly of UBL

1. Bring the ledger diagonal up to the ledger at an angle of approx. 45°. (Fig. A4.07a)
2. Insert the mounting finger (**23.1**) of the Ledger Brace UBL (**23a**) diagonally into the hole of the lower Horizontal Ledger UH Plus (**15a**) and swing the ledger diagonal towards the base scaffold. (Fig. A4.07b)
3. Straighten the tilt finger (**23.2**). (Fig. A4.07c)
4. Insert the tilt finger into the hole of the upper ledger (**15b**). (Fig. A4.07d)
5. Set the tilt finger crosswise.

→ Ledger Brace UBL is installed. (Fig. A4.07e)

All tilt fingers (**23.2**) of the assembly must be transverse after installation of the Ledger Braces UBL and rest on both sides of the hole. (Fig. A4.07e)

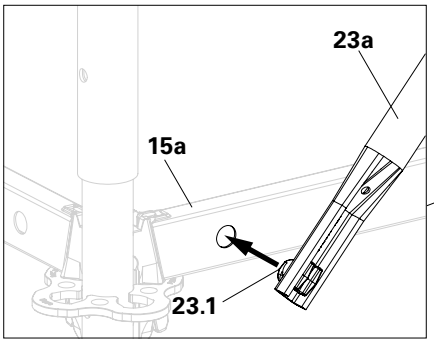


Fig. A4.07a

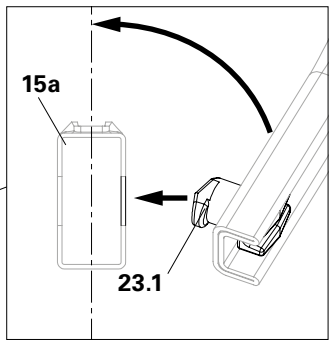


Fig. A4.07b

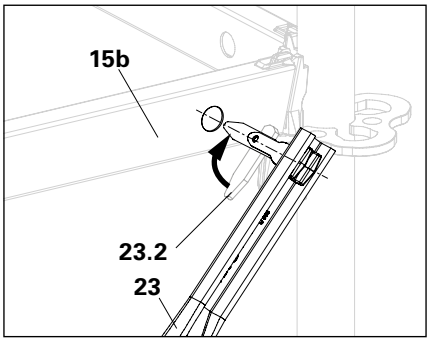


Fig. A4.07c

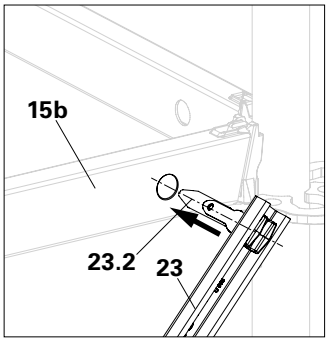


Fig. A4.07d

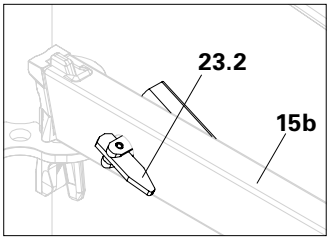


Fig. A4.07e

Ledger Brace UBL/UBL-2 on Ledger UH-2

The assembly position of the Ledger Brace UBL-2 (**23**) can be freely selected at three assembly points (**15.1/15.2/15.3**) on the Horizontal Ledger UH-2.
Always select the same installation position on the upper and lower ledgers. (15.1/15.1, 15.2/15.2, 15.3/15.3)

Up to three ledger braces can be assembled at the same time. The structural stability must be considered separately.

- When mounting a brace, preferably use installation point 15.2.
- When installing 2 ledger braces, use installation points 15.1 and 15.3.
- When installing 3 ledger braces install the third ledger brace on the inside at assembly point 15.2 in order to save space.

- For subsequent braces, the double installation cannot be done in parallel for space reasons:
  - UBL 150/50
  - UBL 200/50
  - UBL 250/50
  - UBL 300/50
  - UBL 200/100
  - UBL 250/100
  - UBL 300/100
  - UBL 300/150
- Only 2 braces are possible per bay.
- If necessary, install the corresponding braces on the inside of the ledgers.
- If the brace is installed on the inside, it may collide with any decks that may be required.

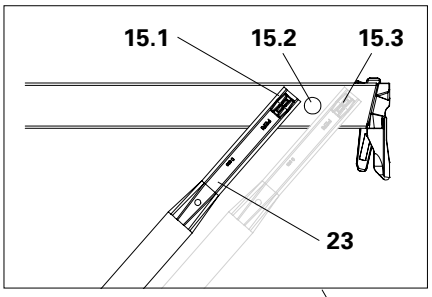


Fig. A4.08a

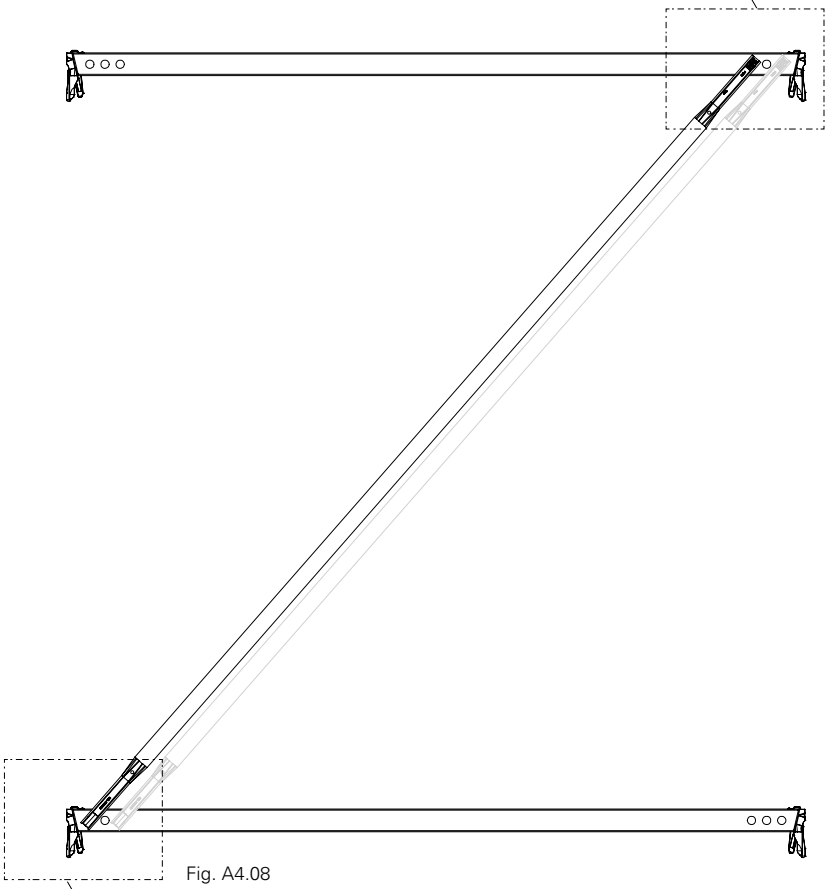


Fig. A4.08

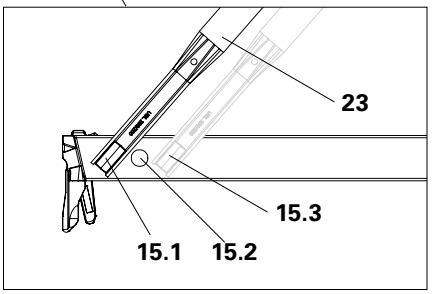


Fig. A4.08b

Comparison of components

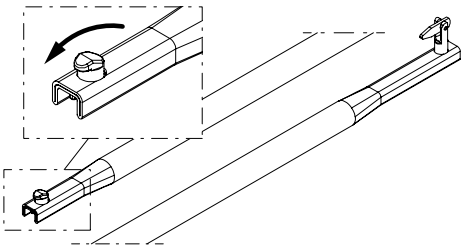
As part of ongoing product optimisation, the following components have been replaced by 2nd generation components.

The following comparison tables describe the features of the 1st and 2nd generation.

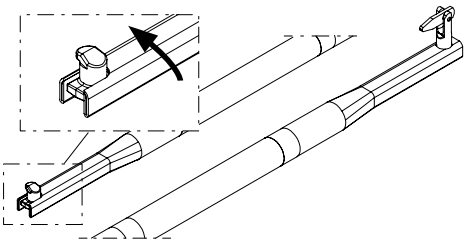
1st and 2nd generation components can be combined.

- The optimised components are available under a new article number.
- There may be a difference between the load-bearing capacity of the individual components in the previous version and the new version.

Ledger Brace UBL



Ledger Brace UBL-2



UBL Mounting Lug	Points in the longitudinal direction	Points in the transverse direction
Additional identification	None	Red and yellow striped band at the top and bottom
Installing	Rotate parallel to brace length	Rotate perpendicular to brace length (Can be fitted in confined space)

Tab. A4.02

Shoring Brace UBS

- Always mount the Shoring Braces UBS from bottom left to top right. Fit opposite braces on the inner side.

Assembly

1. Fit the shoring brace with the lower brace head (**224.1**) onto the lower rosette at an angle of approx. 45°. (Fig. A4.12a + Fig. A4.12c)
2. Insert dowel pin (**224.3**) into the brace adapter (**13.3**). Fig. A4.12b
3. Swivel brace to the base scaffold. Fig. A4.12
4. Push the upper brace head (**224.2**) with raised bolt (**224.4**) onto the upper rosette. Fig. A4.12d
5. Engage bolt (**224.4**) completely in the brace adapter (**13.3**). Fig. A4.12e

→ Shoring Brace UBS is installed.

Are all dowel pins and spring bolts properly engaged?
(Fig. A4.12b, Fig. A4.12e)

Application examples

Free-standing scaffolding constructions, for transferring larger horizontal forces.

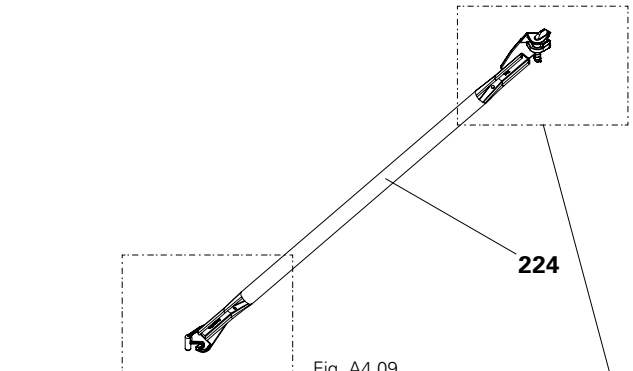


Fig. A4.09

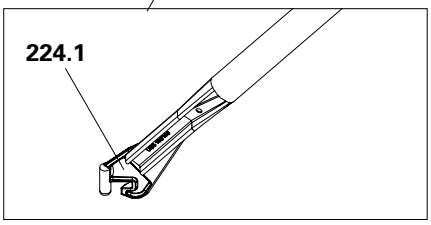


Fig. A4.08a

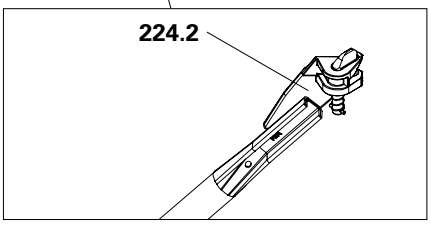


Fig. A4.08b

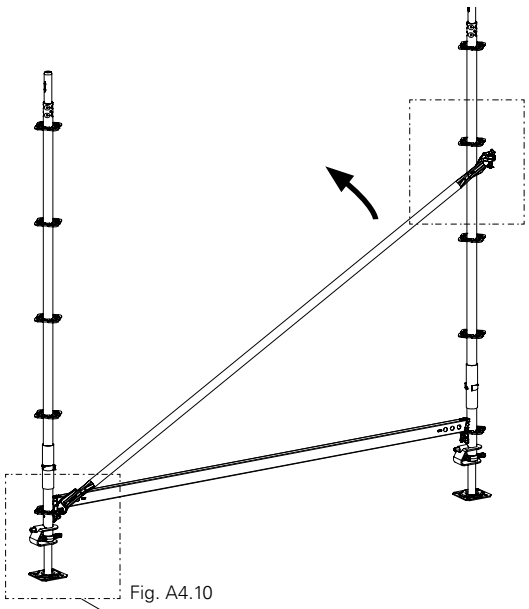


Fig. A4.10

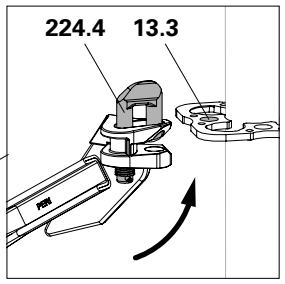


Fig. A4.10d

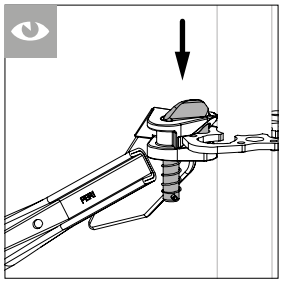


Fig. A4.10e

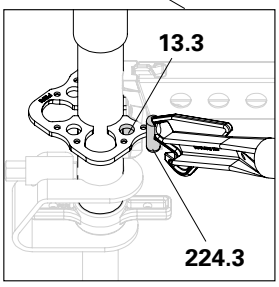


Fig. A4.10a

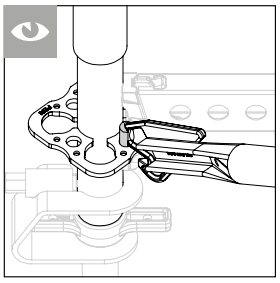


Fig. A4.10b

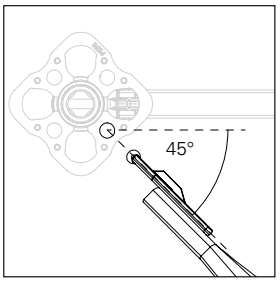


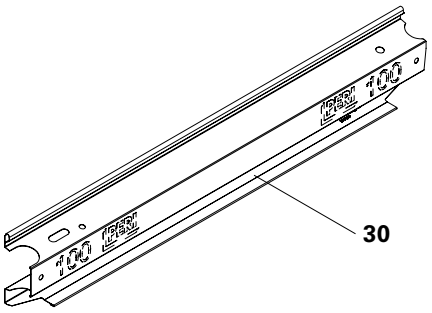
Fig. A4.10c

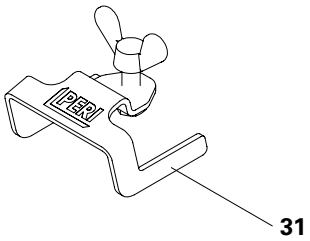
General information

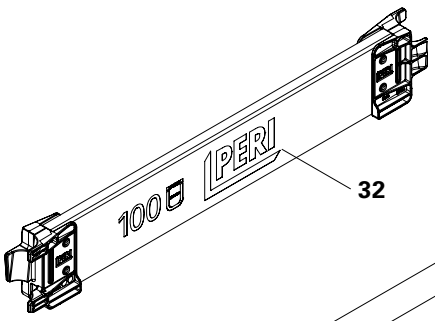
- The components to be used and the assembly sequence are regulated in the respective system-specific Instructions for Assembly and Use.
- In the case of individual superstructures, a safety assessment must be carried out in which suitable safety measures must be prescribed.

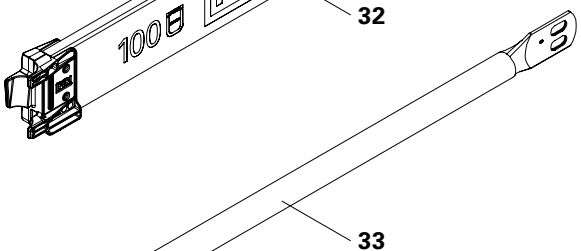
Components

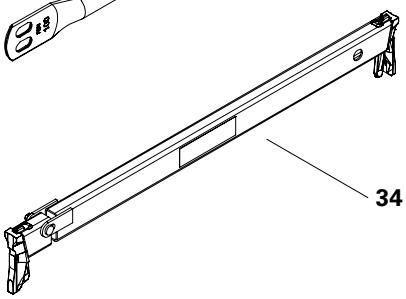
30 Toeboard UPY
31 Toeboard Compensation UPY-L
32 Toeboard UPF
33 Guardrail EPG
34 Swing Ledger UPK
35 Safety Entry Gate UPS
36 Advance Guardrail UPA-2

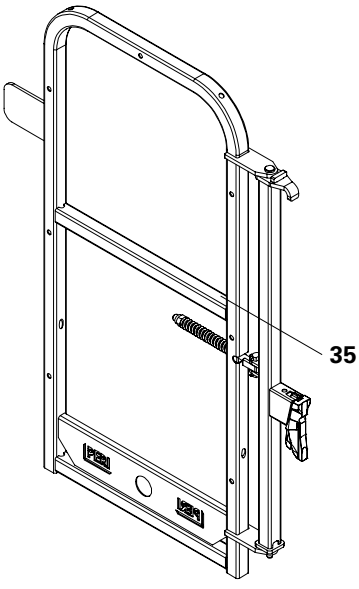


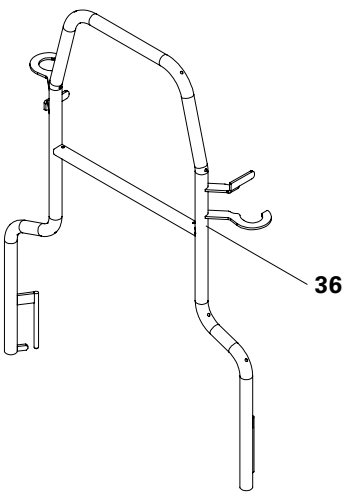












Toeboard UPY

- Toeboards UPY are correctly installed when each PERI logo is legible.
- Observe the different ends of the Toeboards UPY:
  → Side with large tube cut-out (**30.1**) and slot (**30.2**).
  → Side with semi-circle (**30.3**) and drilled hole (**30.4**). (Fig. A5.01a)
- The assembly of the Toeboard UPY-C follows the same procedure.
- In strong winds, additionally secure the Toeboards UPY using suitable means.

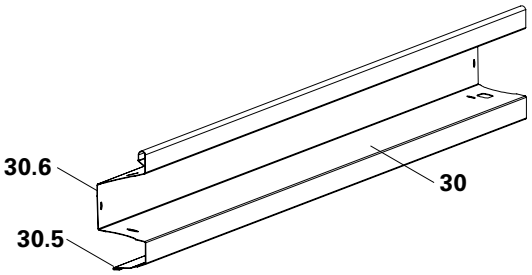


Fig. A5.01

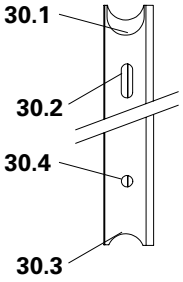


Fig. A5.01a

Assembly in the bay

1. Turn the support bracket (**30.5**) downwards.
2. Turn the trapezoid box (**30.6**) **outwards**.
   → The larger tube section (**30.1**) is on the right. (Fig. A5.02a)
3. From the inner side of the scaffold, insert Toeboard UPY (**30**) at the right-hand tube (**13a**) first.
4. Raise the toe board on the left-hand side until it rests on the tube (**13b**).
5. Lower the toe board onto the deck. (Fig. A5.02b)

→ The toe board is installed.

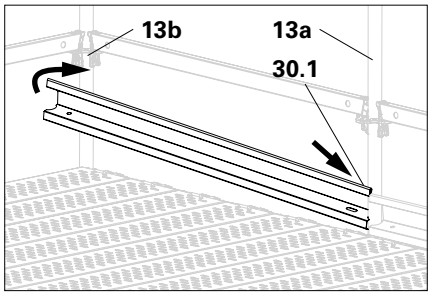


Fig. A5.02a

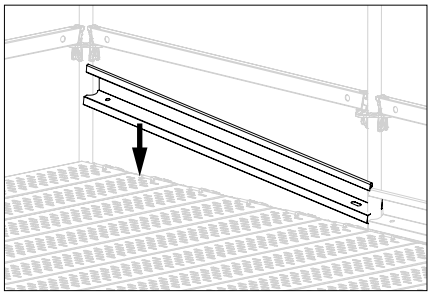


Fig. A5.02b

- When installing and dismantling both toe boards over corners, ensure that no unsecured components can fall to the ground.

Assembly around a corner:

1. Turn the support bracket (**30.5**) downwards.
2. Turn the trapezoid box (**30.6**) **inwards**.
   → The larger tube cut-out (**30.1**) is on the left.

- On a right-hand corner:

3. Insert Toeboard UPY (**30**) from the outside-left first of all using the large tube cut-out (**30.1**). (Fig. A5.04a)
4. Raise the Toeboard UPY on the right-hand side and position it on the second tube.
5. Lower the toe board onto the deck.

→ The toe board is installed.

- On a left-hand corner:

3. Insert Toeboard UPY (**30**) from the outside-left first of all using the large tube cut-out (**30.1**).
4. Raise the Toeboard UPY (**30a**) that has already been mounted in the bay. (Fig. A5.04b)
5. Place the Toeboard UPY (**30**) on the second tube and simultaneously insert it into the trapezoid box (**30.6**) of the toe board in the corner bay.
6. Lower the toe boards simultaneously.

→ The toe board is installed.
(Fig. A5.04c)

When installing the Toeboards UPY at the corner, make sure that the slot is always aligned with the slot (**30.2**) or the hole with the hole (**30.4**).
(Fig. A5.05a / Fig. A5.05b)

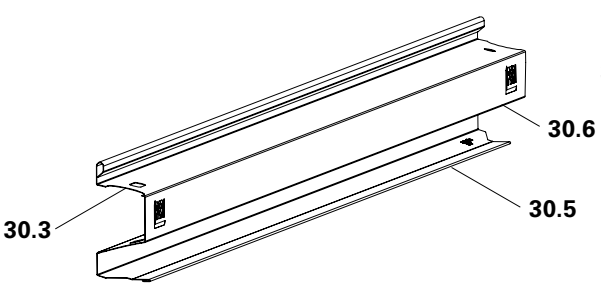


Fig. A5.03

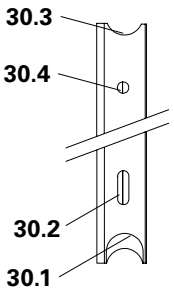


Fig. A5.03a

Right corner

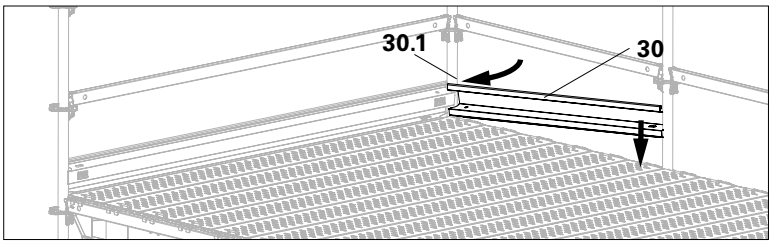


Fig. A5.04a

Left corner

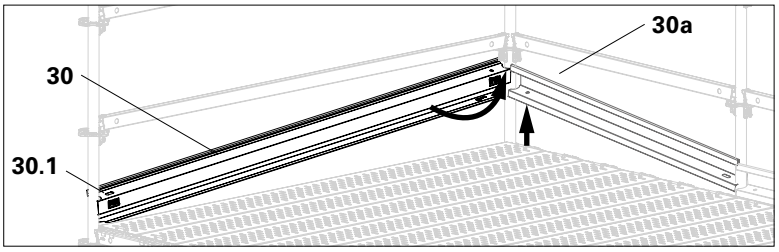


Fig. A5.04b

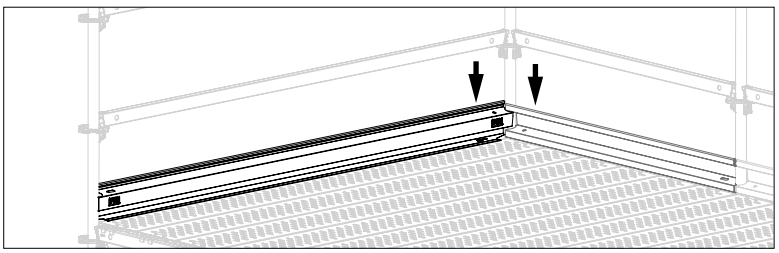


Fig. A5.04c

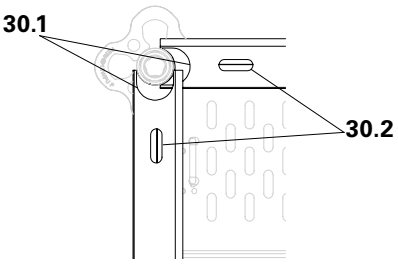


Fig. A5.05a

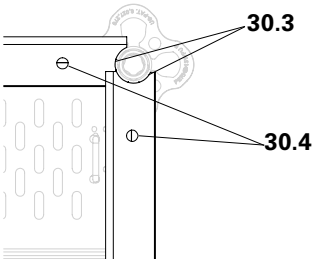


Fig. A5.05b

Toeboard Compensation UPY-L

With the Toeboard Compensation UPY-L (**31**) and two Toeboards UPY (**30**), it is possible to fit a toe board that is continuously adjustable in terms of its length. (Fig. A5.06)
Toe boards with different lengths may be used.

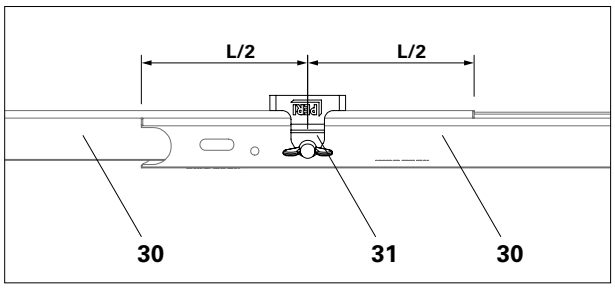


Fig. A5.06

Technical data

- Maximum length: 5.00 m
- Overlap
  - up to length 1 m: L = 20 cm
  - length of 1 m and higher: L = 50 cm

Assembly

1. Slide the Toeboard Compensation UPY-L (**31**) onto the first Toeboard UPY (**30**). (Fig. A5.06a)
2. Slide the second Toeboard UPY (**30**) between the Toeboard UPY and Toeboard Compensation UPY-L in an overlapping position.
3. Pull the boards to the required length between the verticals of the compensation bay.
4. Align the Toeboard Compensation UPY-L centrally at the overlap.
5. Tighten the wing nut.

→ The toe board is installed.
(Fig. A5.06b)

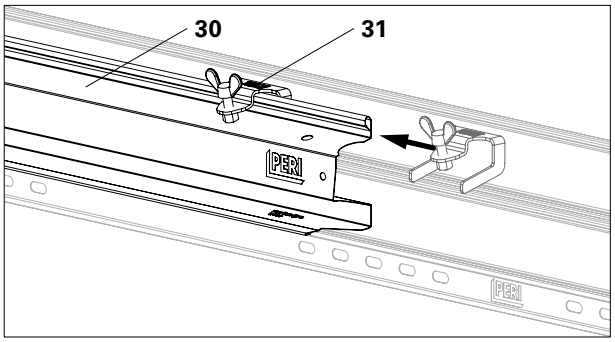


Fig. A5.06a

For distances less than 25 cm, screw a wooden board to the inside of the toe boards. Use the existing screw holes in the toe boards. (Fig. A5.06c)
Alternatively, close the gap elsewhere on site.

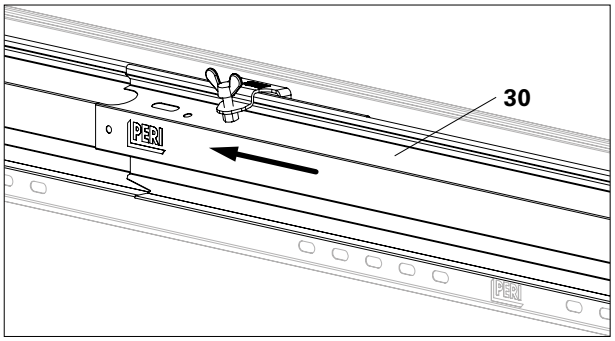


Fig. A5.06b

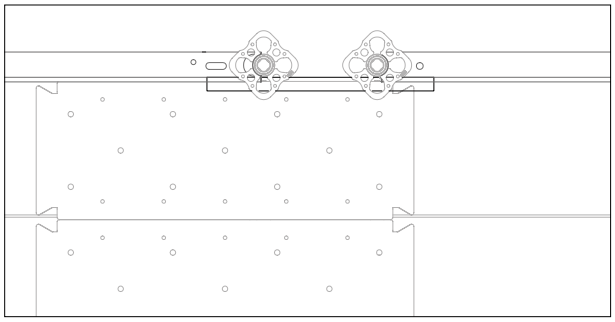


Fig. A5.06c

Toeboard UPF

- In strong winds, additionally secure the Toeboards UPF using suitable means.
- Toeboards UPF are correctly installed when each PERI logo is legible.

Assembly

1. Place the Toeboard UPF(**32**) on one side with the end piece on the Standard UVR (**13a**).
2. Lower onto the deck.
3. Raise the other side so that the second end piece can be fitted onto the second standard (**13b**).

(Fig. A5.07a))

4. Lower the toe board onto the deck.

→ The toe board is now installed.
(Fig. A5.07b)

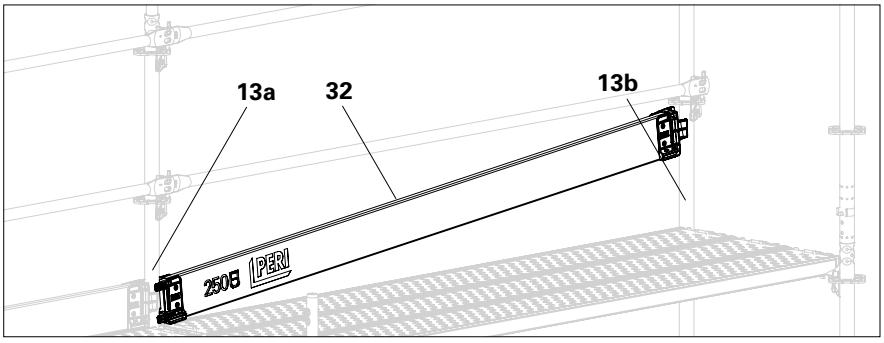


Fig. A5.07a

Assembly at corners

In the case of an all-round closed shape, raise the meeting toe board sides and lower them together.

- Installation is done in the same way on all standards.
- For corners, turn the toe boards so that the retaining lugs (**32.2**) of the end pieces engage with each other. (Fig. A5.07c)

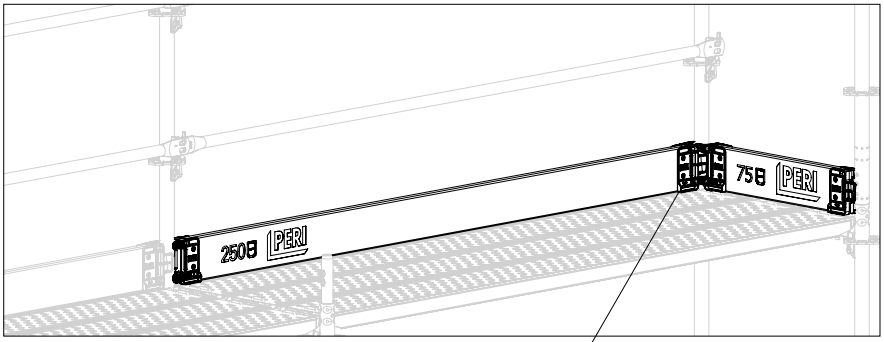


Fig. A5.07b

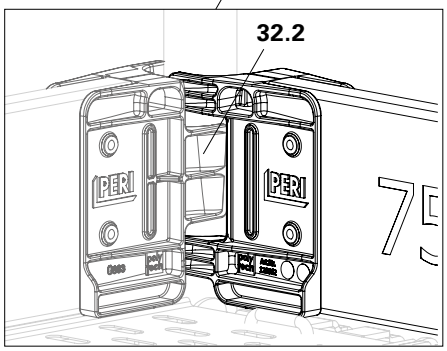


Fig. A5.07c

Guardrail EPG

Guardrail assembly
For assembly of the
Guardrail Holder EPW see
"Guardrail Holder EPW" on page 130.
1. Turn the connecting pieces (**33.1**) of the guardrail horizontally and place them on the Guardrail Hook EPW. (Fig. A5.08a)
2. Align the slot (**33.2**) with the guardrail hook (**16.1**) and insert.(Fig. A5.08b)
3. Release the guardrail.
   → The guardrail drops into a vertical position and is secured.

→ Guardrail is installed.
(Fig. A5.08c)

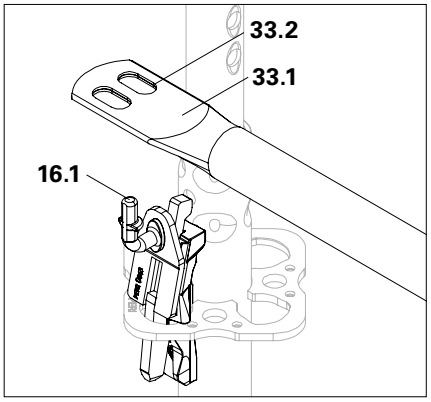


Fig. A5.08a

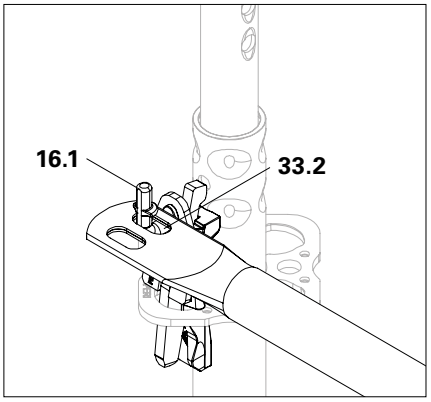


Fig. A5.08b

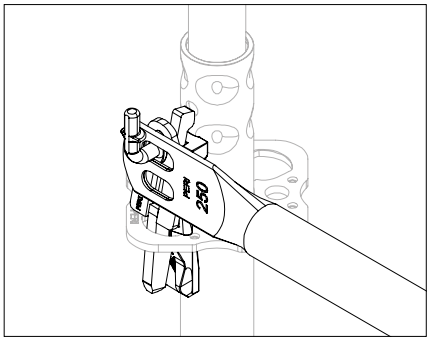


Fig. A5.08c

- For assembly and dismantling, first insert or detach one side, then the other side.
- The assembly can also be carried out "advanced" and "double-advanced" with guardrails and intermediate guardrails.
  (Fig. A5.09a + Fig. A5.09b)

Note
Stability compromised!
⇒ Do not attach any loads (e.g. materials) to the guardrails nor place any loads on the guardrail posts!

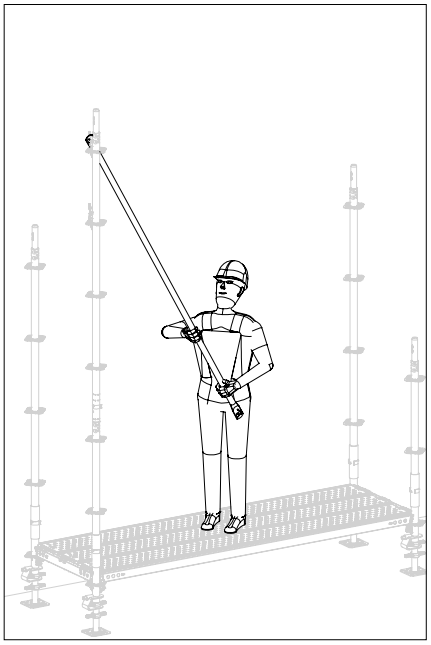


Fig. A5.09a

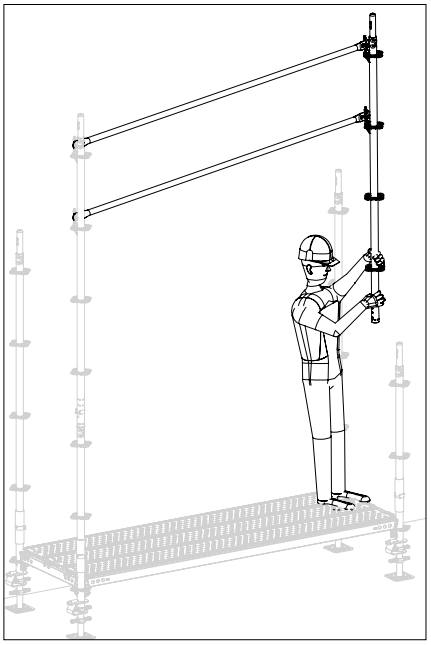


Fig. A5.09b

Swing Ledger UPK

Swing Ledgers UPK (**34**) are used to restrict access.
Locked-off areas, e.g. access to freight lifts, cannot be entered accidentally.

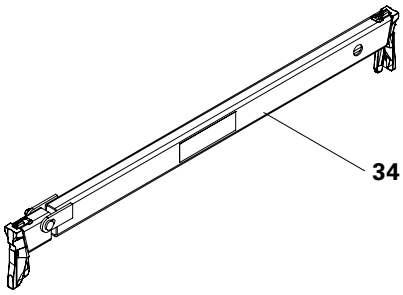


Fig. A5.10

- Swing ledgers must not be used as a structural component.
- During the installation of the swing ledger, other suitable risk prevention and protection measures must be taken to ensure safety.

Assembly

1. Hook the Swing Ledger UPK (**34**) on both standards (**13**) into the ledger-to-ledger couplers (**13.2**) of the rosettes.
2. Secure the wedges. (Fig. A5.11)

→ Swing ledger is installed.

Enter restricted area

1. Knock out the wedge on the swivel part. (Fig. A5.11a)
2. Fold the swivel part upwards, pass through and close the Swing Ledger UPK again.

Application examples

Barricading of danger zones that have to be entered occasionally.

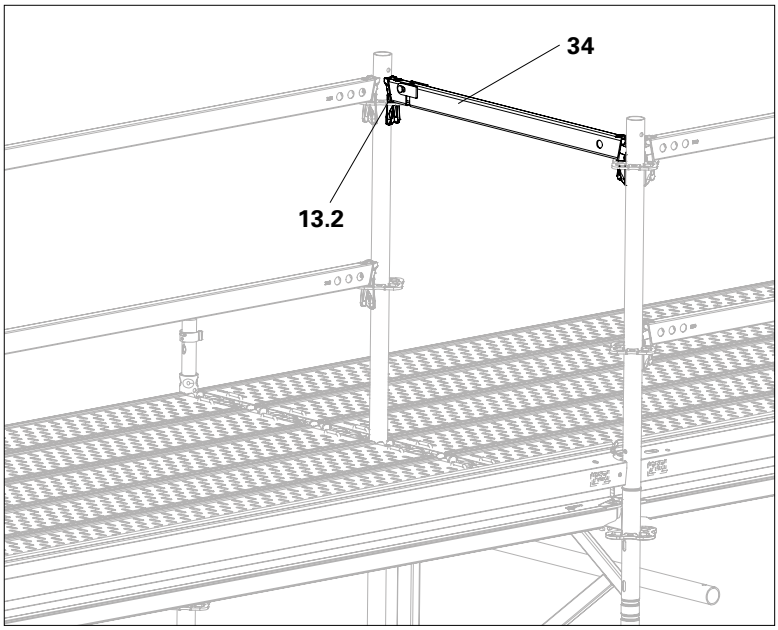


Fig. A5.11

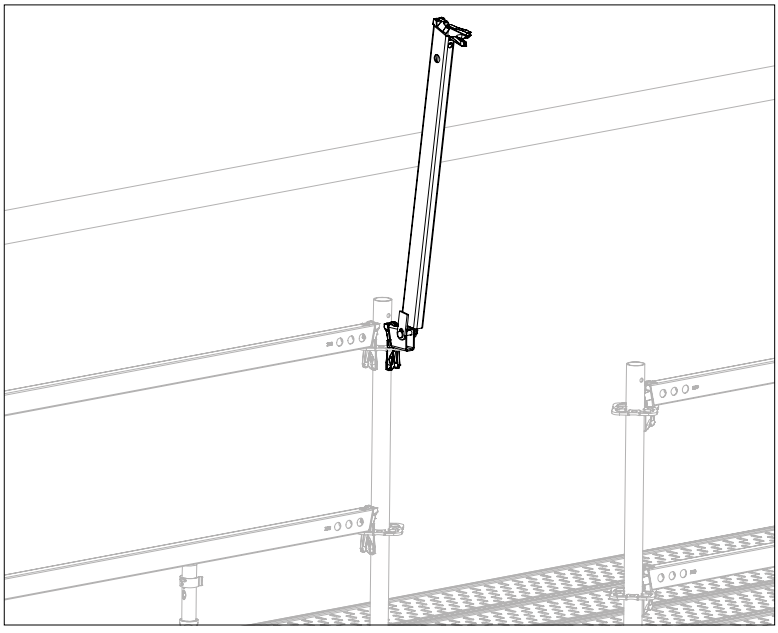


Fig. A5.11a

Safety Entry Gate UPS

Self-closing Safety Entry Gate UPS (**35**) as access to work areas.

- Always install the safety entry gate so that it only opens into the safe area.
- During the installation of the safety entry gate, other suitable measures must be taken to avert the respective danger.
- Safety entry gate must be securely supported by the striking plate (**35.1**) on the opposite standard.

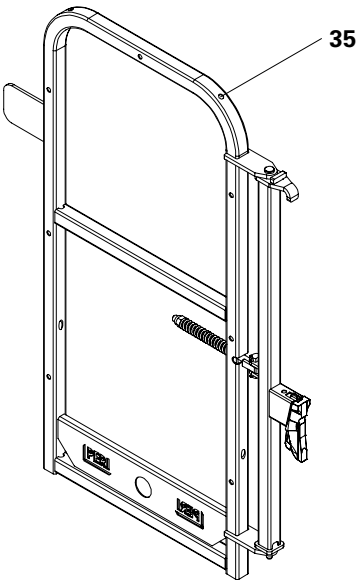


Fig. A5.12

Assembly

1. Install the safety entry gate with wedge (**35.2**) and suspension bracket (**35.3**) on the rosettes of the standard. (Fig. A5.12a – Fig. A5.12c)
2. Secure the wedge.
3. Check that the self-closing function works properly.

→ Safety entry gate is installed.

Application examples

Safeguarding ladder access on working platforms.

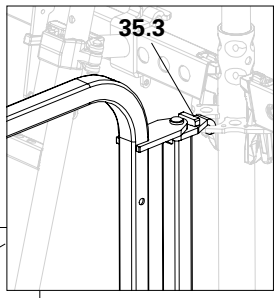


Fig. A5.12b

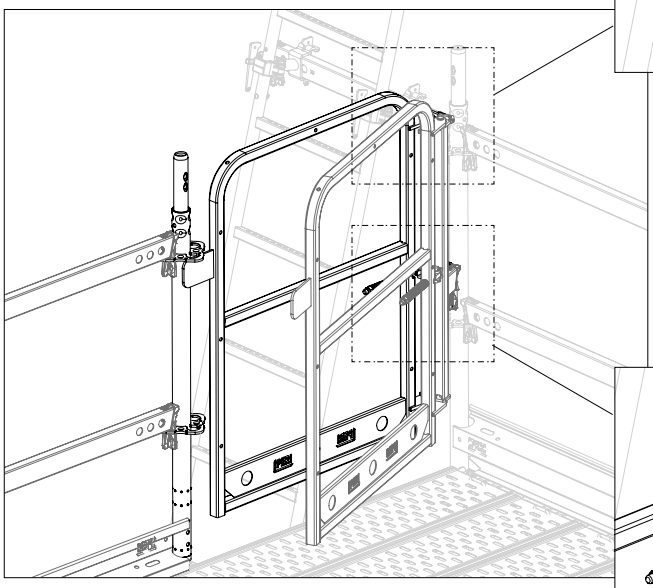


Fig. A5.12a

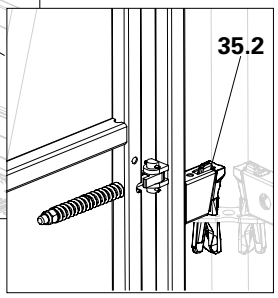


Fig. A5.12c

End Guardrail in Advance UPA-2

The End Guardrail in Advance UPA-2 (**36**) is installed continuously as a system-integrated end guardrail, from a secured position, for the next layer. It can remain on the scaffold for the entire duration of erection or be exchanged for another end protection.

Assembly

1. Suspend the end guardrail in advance (**36**) above the crossbar. The pegs (**36.1**) must point towards the outer side of the scaffolding. (Fig. A5.13a)
2. Reach around the outer standard (**13a**) with the outer hand and grasp the end guardrail in advance at the end of the tube.
3. Swing the end guardrail in advance halfway down and hook the fork (**36.2**) onto the outer standard. (Fig. A5.13b)
4. Guide the inner hand with the end guardrail in advance around the inner standard (**13b**).
5. Raise the end guardrail in advance until the pegs (**36.1**) can be inserted into the rosettes (**13.1**) from above. (Fig. A5.13c)
6. Insert the peg (**36.1**) into the brace adapter (**13.3**) of the rosette and lower it to the stop. (Fig. A5.13d)

→ End Guardrail in Advance UPA-2 is installed.

Application examples

Facade, reinforcement, industrial scaffolding.

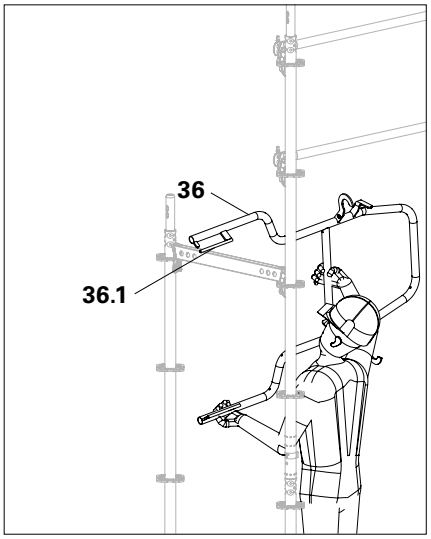


Fig. A5.13a

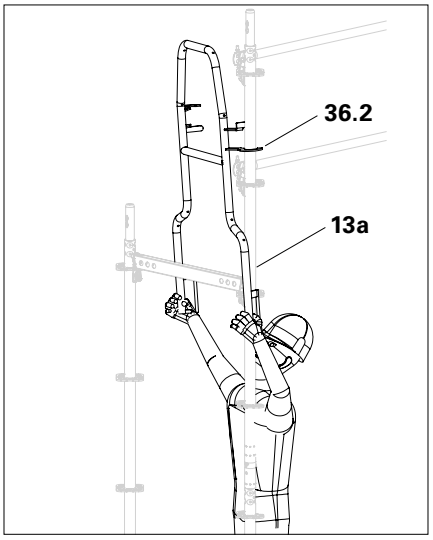


Fig. A5.13b

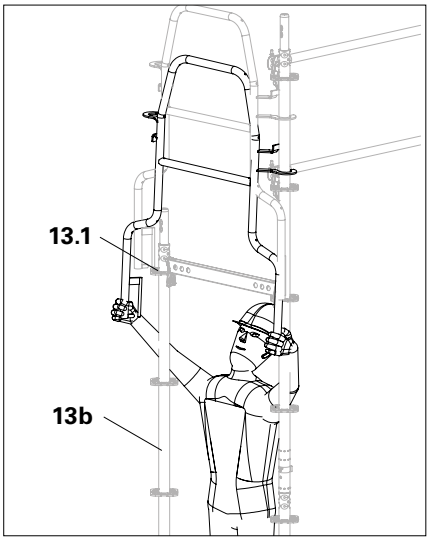


Fig. A5.13c

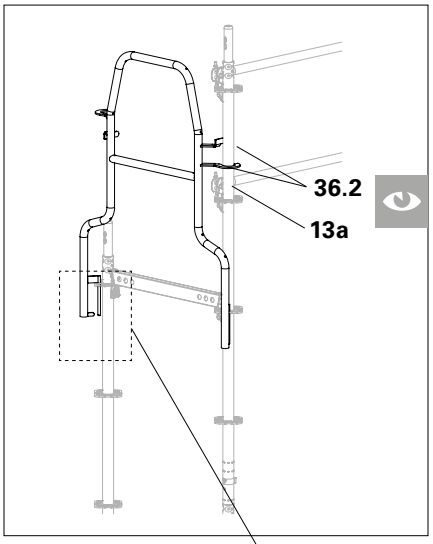
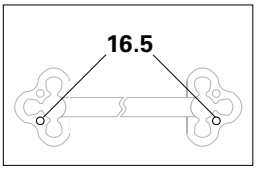
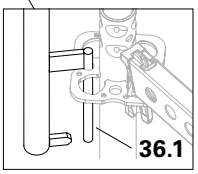


Fig. A5.13d





The End Guardrail UPA can also be installed on the inside. (Not in connection with attached console brackets with decks)

Does the fork (**36.2**) enclose the outer standard (**13a**)?

A6 Console brackets

General information

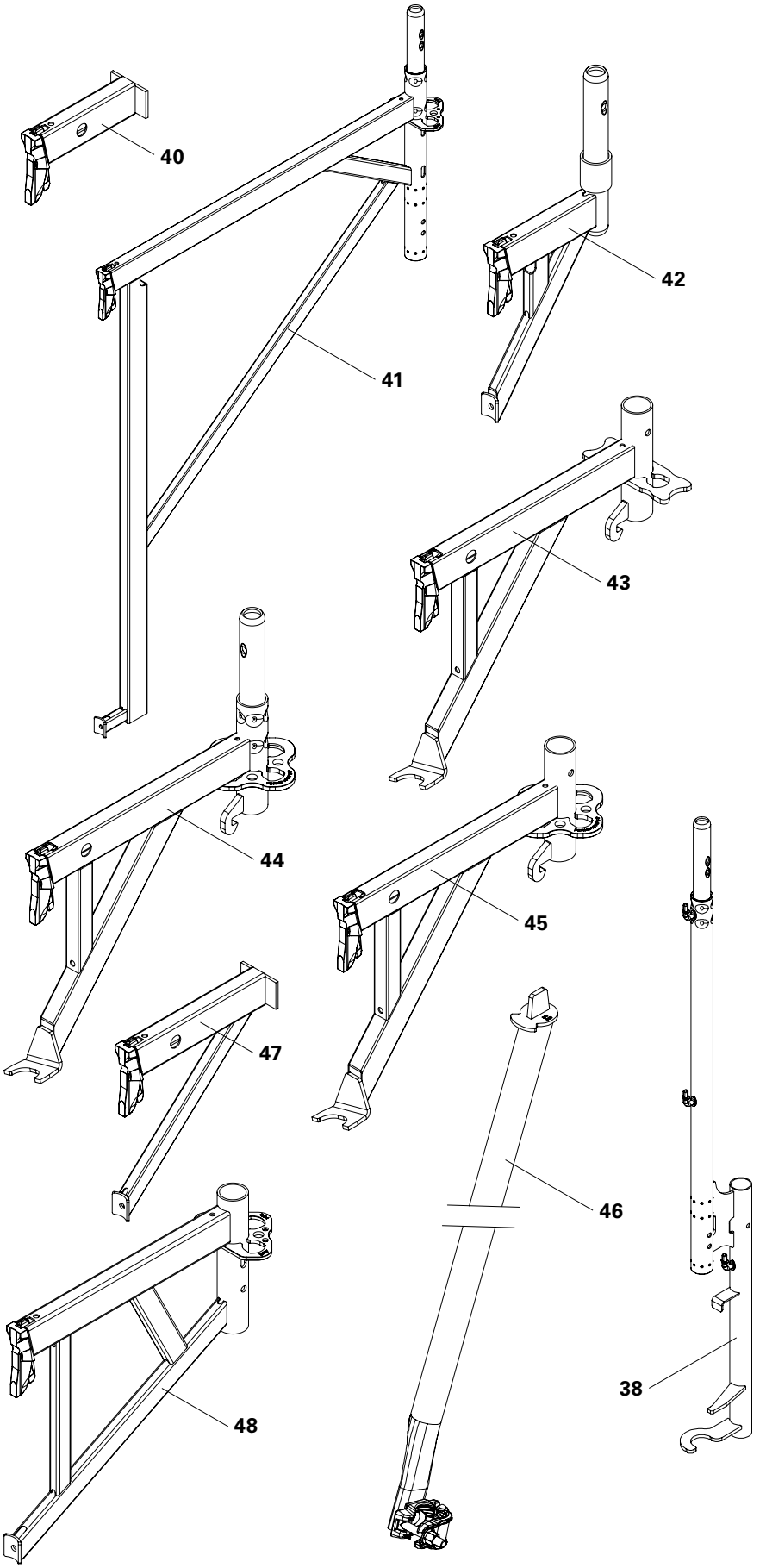
Console brackets (with spigots) and supports (without spigots) are available for PERI UP Flex.

If a guardrail post is required for lateral protection, use console brackets only.

- The addition of console brackets increases the requirements for anchoring and bracing. Observe the tie pattern of the respective system-specific Instructions for Assembly and Use, or provide static proof.
- The respective linear loads or the concentrated loads apply, see next page or the "PERI UP Design Tables".
- Observe the load classes of the decks, see the "PERI UP Design Tables".
- Console Brackets ECM and UCM cannot be mounted on the same rosette at a 90° angle.

Components

38 Protection Wall Post EPS-2
40 Support UC 25/33
41 Console Bracket ECM 33/50/67/75/100
42 Console Bracket UCB 25
43 Console Bracket UCM 50/75 w.H.Ros
44 Console Bracket UCM 50/75 w. Spig
45 Console Bracket UCM 50/75-2
46 Bracket Brace UCM
47 Support UCS 33
48 Bracket ECM 50 light



Load-bearing capacities

The adjacent tables show the permissible concentrated loads and line loads in the most unfavourable application. They can be used for arbitrarily configured superstructures, provided that the boundary conditions are observed. Any higher permissible loads are described in the respective System Instructions for Assembly and Use, e.g. anchored facade scaffolds.

- A ledger (**15**) must be installed opposite the rosette, on which a console bracket is installed.
- If additional components are connected to the rosette, additional static proof for the maximum shoring load is required.
- When determining the max. individual load, the 1 m high lateral protection and the dead weight of the deck were taken into account.
- Maximum individual and line loads cannot be applied together.

Maximum concentrated loads F for console brackets [kN]				
	Vertical			
Support/Console bracket	UVR-2	UVR	UVH	EVT 96
ECM 33	3.55	4.00	4.00	4.00
ECM 50/50 Light	2.80	3.90	3.90	3.72
ECM 67	2.60	3.62	3.62	3.43
ECM 75	2.20	3.15	3.15	2.93
ECM 100	1.68	2.13	2.13	1.95
UC 25	/	/	/	/
UC 33	/	/	/	/
UCB 25	4.55	6.17	6.17	6.10
UCM 50*	2.05	3.05	3.05	2.92
UCM 75*	1.20	1.90	1.90	1.80
UCM 50-2*	2.05	3.05	3.05	2.92
UCM 75-2*	1.20	1.90	1.90	1.80
UCS 33	/	/	/	/

Tab. A6.01

Maximum line loads p for console brackets [kN/m]				
	Vertical			
Support/Console bracket	UVR-2	UVR	UVH	EVT 96
ECM 33	20.00	24.00	24.00	24.00
ECM 50/50 Light	10.00	14.50	14.50	14.00
ECM 67	6.90	9.60	9.60	9.30
ECM 75	5.15	7.25	7.25	7.00
ECM 100	3.00	3.00	3.00	3.00
UC 25	24.00	31.50	31.50	31.50
UC 33	13.40	17.00	17.00	17.00
UCB 25	34.50	48.00	48.00	47.50
UCM 50*	7.80	11.70	11.70	11.50
UCM 75*	3.05	4.80	4.80	4.60
UCM 50-2*	7.80	11.70	11.70	11.50
UCM 75-2*	3.05	4.80	4.80	4.60
UCS 33	19.50	19.50	19.50	19.50

* without support.

Tab. A6.02

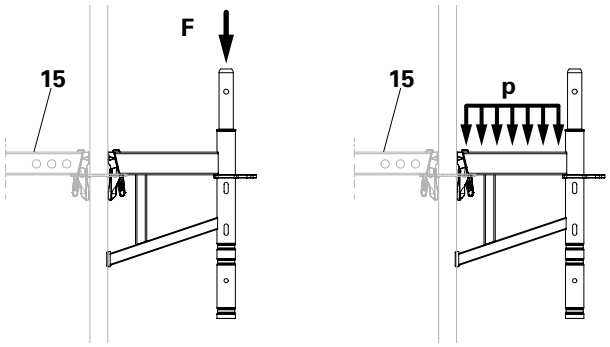


Fig. A6.01

Console bracket assembly

Console brackets are always installed from below!
The assembly procedure is shown using the Console Bracket ECM as an example. Other console brackets are installed in the same way.

Assembly

- Console Bracket ECM 33/50

1. Hang the console bracket (**41a**) into the rosette of the standard or top standard at right angles to the scaffold. The formwork half (**41.1**) must rest against the vertical tube. (Fig. A6.02)
2. Secure the wedge.

→ The console bracket is now mounted. (Fig. A6.02a)

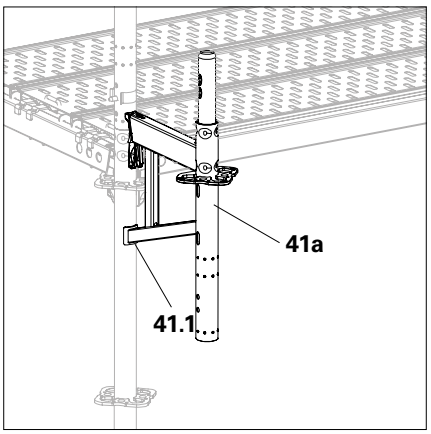


Fig. A6.02

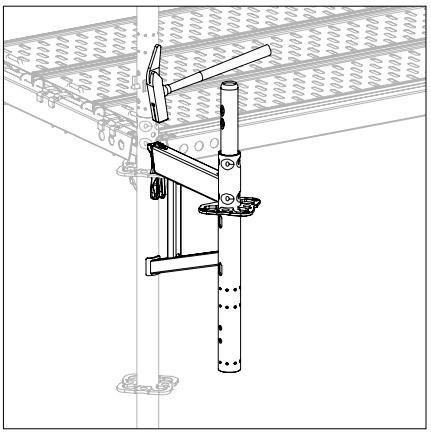


Fig. A6.02a

- Console Bracket ECM 67/75/100

1. Hang the console bracket (**41b**) into the rosette of the standard or top standard parallel to the scaffold. (Fig. A6.03)
2. Hold the wedge (**41.2**) up, and swing the console bracket outwards. The formwork half (**41.1**) must rest against the vertical tube. (Fig. A6.03a)

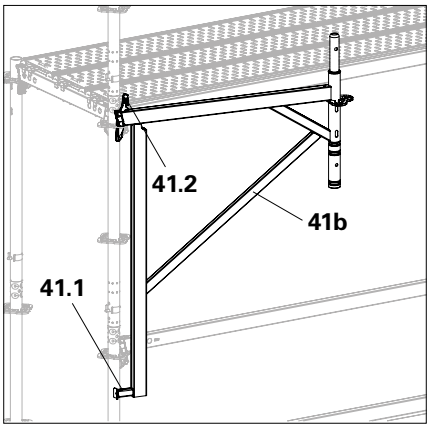


Fig. A6.03

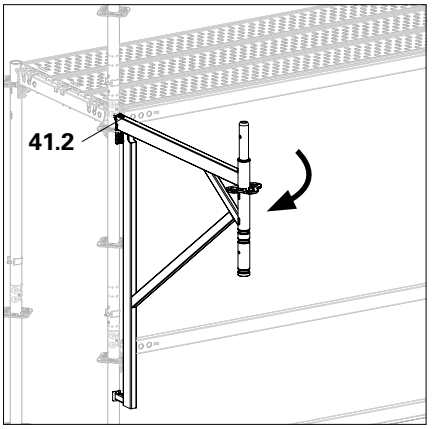


Fig. A6.03a

3. Drop the wedge into the rosette. Secure the wedge.
→ The console bracket is now mounted. (Fig. A6.03b)
4. Place the decks and push them outwards. (not shown)

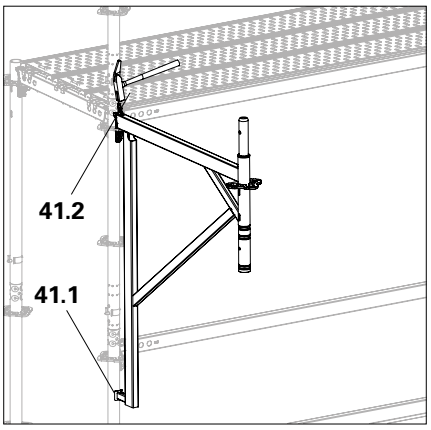


Fig. A6.03b

Console brackets with protection wall posts/guardrail posts

Attach the Protection Wall Post EPS, Guardrail Post EVP, UVR Standard or UVH Top Standard to the scaffold before assembling the console bracket and assemble them together. Alternatively, installation of the protection wall posts and guardrail posts can also be done later after the console brackets have been mounted.

Assembly

Guardrail Post EVP or UVR

1. Before mounting, attach the Standard UVR (**13**) to the Console Bracket ECM (**41**).
2. To extend the reach, pin the standard with a Locking Pin Ø48-57 mm (**11**).
3. The further assembly of the console brackets with the attached standard is done by swivelling them outwards as described previously.

(Fig. A6.04)

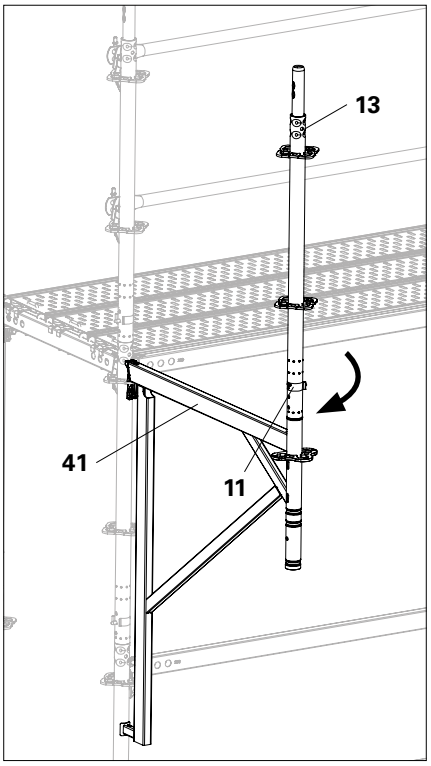


Fig. A6.04

Protection Wall Post EPS-2

The Protection Wall Post EPS-2 can also be mounted on Standards UVR.

The Protection Wall Post EPS-2

1. Turn the Protection Wall Post EPS-2 at an angle and hook the fork (**37.1**) into the bottom tube end of the console bracket (**41**). (Fig. A6.05a)
2. Turn the Protection Wall Post EPS-2 straight and fit it onto the spigot of the Console Bracket ECM and hook the hook block (**37.2**) into the ledger-to-ledger coupler of the rosette from above.
   (Fig. A6.05b + Fig. A6.05c)
3. To extend the reach, pin the protection wall post with Locking Pins Ø48-57 mm (**11**).

→ The protection wall post is now pre-assembled.
(Fig. A6.05c)

The hook block (**37.2**) must engage in the rosette!

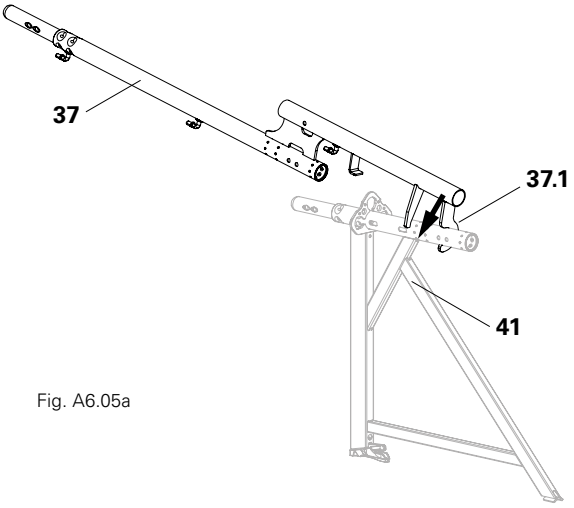


Fig. A6.05a

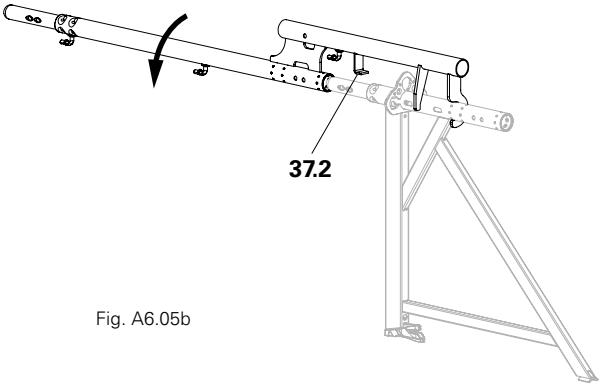


Fig. A6.05b

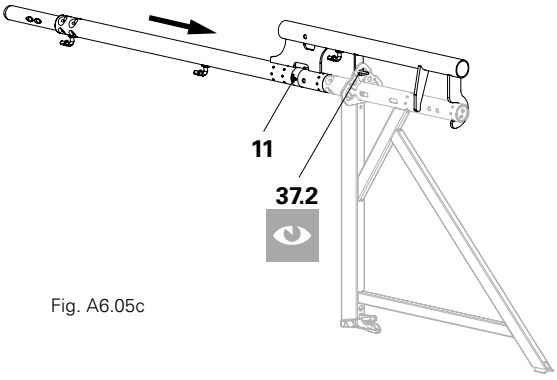


Fig. A6.05c

Protection Wall Post EPS

1. Slide the loop (**38.1**) of the Protection Wall Post EPS (**38**) onto the lower tube end of the console bracket (**41**). (Fig. A6.06a)
2. Push the Protection Panel Post EPS upwards on the Console Bracket ECM and push it onto the spigot of the Console Bracket ECM until the hook block (**38.2**) engages in the ledger-to-ledger coupler of the rosette. (Fig. A6.06b + Fig. A6.06c)
3. To extend the reach, pin the protection wall post with Locking Pins Ø48-57 mm (**11**).

→ The protection wall post is now pre-assembled.
(Fig. A6.06c)

The hook block (**38.2**) must engage in the rosette!

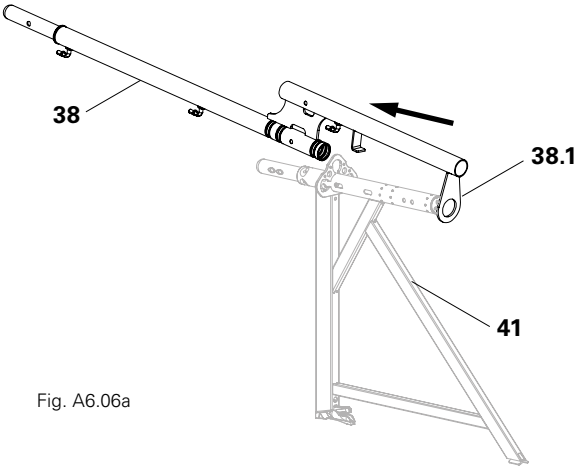


Fig. A6.06a

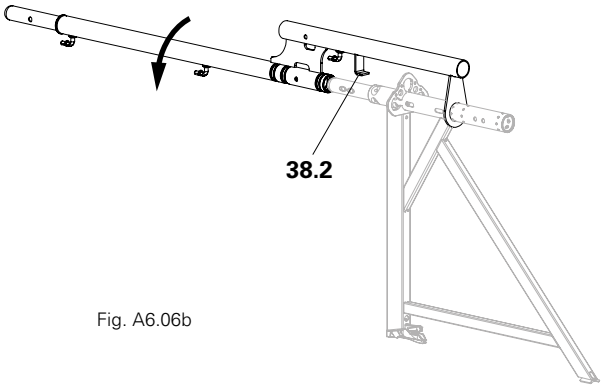


Fig. A6.06b

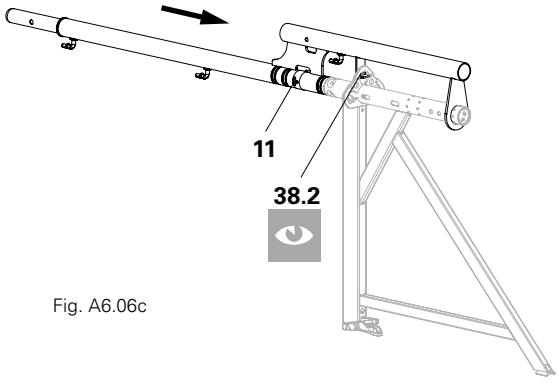


Fig. A6.06c

Support UC 25/33
Support UCS 33

Supports UC (**40**) and UCS (**47**) do not allow the installation of a guardrail. Therefore, only use supports on the inner side of the scaffold.
Distance between deck surface and structure ≤ 30 cm. (Fig. A6.08b)
Always install a console bracket on the edge frame to attach front protection. (Fig. A6.08a)

Assembly
1. Hook the support into the rosette's ledger-to-ledger coupler.
2. Secure the wedge.

Application example
Internal console brackets without lateral protection.

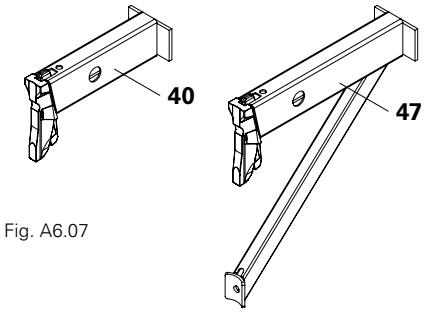


Fig. A6.07

Fig. A6.07a

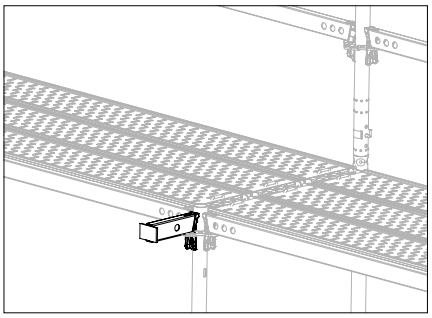


Fig. A6.07b

Edge frame hoist with Console Bracket UCB 25 or ECM 33

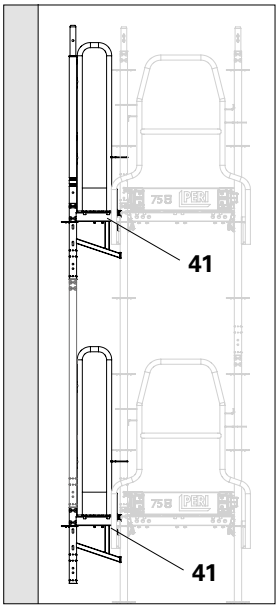


Fig. A6.08a

Centre frame hoist with Support UC 33/25

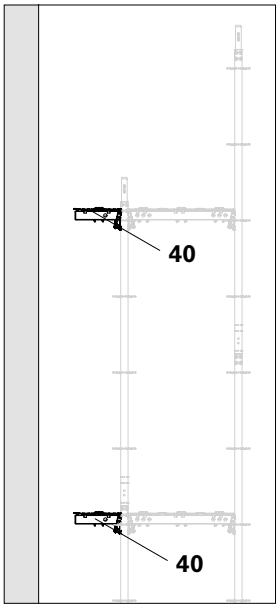


Fig. A6.08b

Console Bracket ECM

Available in widths of 33, 50, 67, 75 and 100 cm.

Console Bracket ECM (**41**) with spigot at the top for attaching a standard and spigot connection at the bottom for supporting on the console bracket below.
A Protection Wall Post EPS (**37**) can be attached to the console bracket.
A console bracket brace is not required and not provided.

Application example
External console brackets as sheet metal walkway or roof catch.

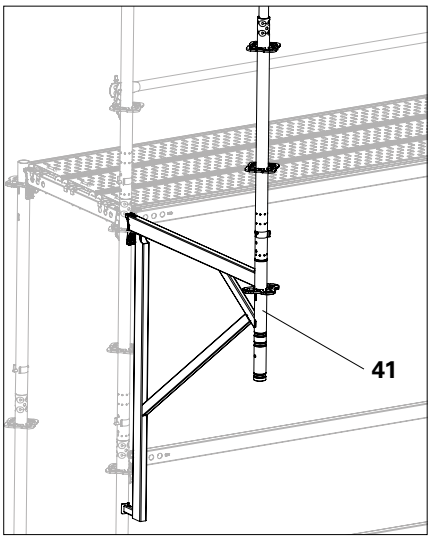


Fig. A6.09

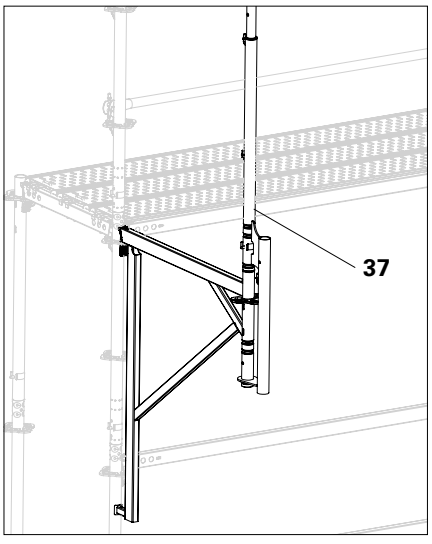


Fig. A6.09a

Console Bracket ECM 50 light

The Bracket ECM 50 Light (**48**) is used when a long outer tube would be obstructed by structural obstacles or more free space is required in the level below. (Fig. A6.10a)
If necessary, a standard, e.g. as a guardrail, can be mounted above using a spigot with spacer tube, see "Pin with Spacer Tube URE 4/42" on page 143.

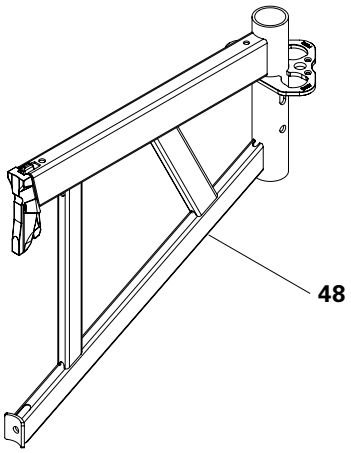


Fig. A6.10

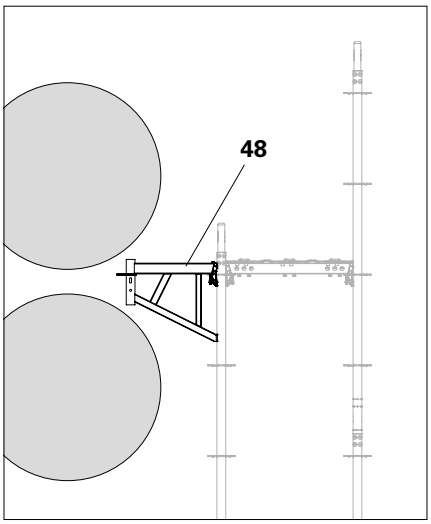


Fig. A6.10a

Coupled console brackets

Console Brackets ECM 33 (**41a**) can be coupled in series. This means that the scaffold width can be easily adjusted to the respective requirements at any time. (Fig. A6.11a + Fig. A6.11b)

Other combinations of console brackets and supports are possible, but the structural stability must be demonstrated for the specific project.

Edge frame hoist with Console Bracket ECM 33 (**41a**)

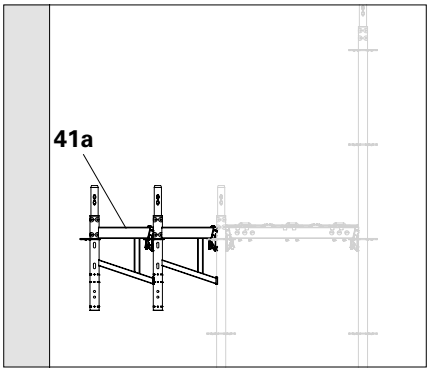


Fig. A6.11a

Centre frame hoist with Support UC 33 (**40a**)

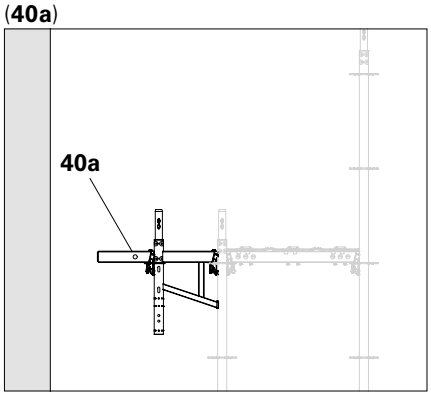


Fig. A6.11b

Lifting wind forces

Securing console brackets against lifting wind forces is generally not necessary. In individual cases, e.g. when using with a protection panel, secure the console brackets as follows. (See structural stability calculations for the project or system-specific Instructions for Assembly and Use.)

1. Fit Guardrail Coupling EPW (**92**) with lug (**92.2**) facing upwards. Nose must engage in the brace of the console bracket. (Fig. A6.12)

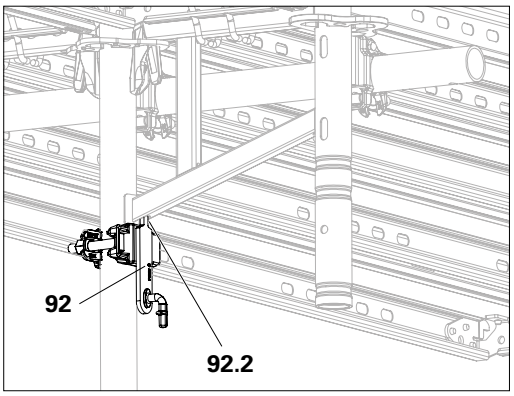


Fig. A6.12

Console Bracket UCB 25

Console Bracket UCB 25 (**42**) with spigot, but without rosette. Additional console brackets cannot be coupled, horizontal bracing with ledgers is not possible.

Application example
External or internal console brackets with lateral protection.

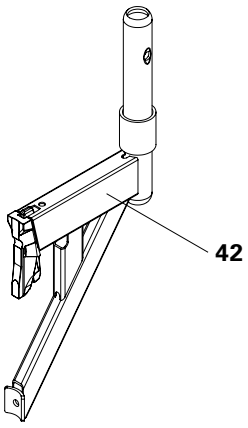


Fig. A6.13

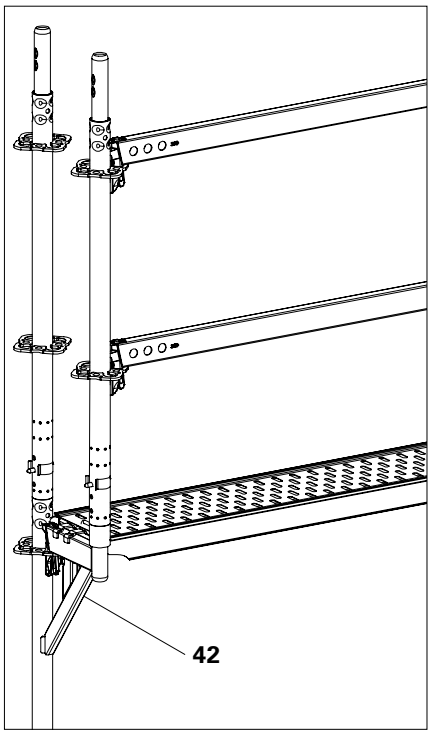


Fig. A6.13a

Console Bracket UCM

Console Brackets UCM are available in widths of 50 cm and 75 cm and in various finishes.
It is not possible to support the console bracket below in the system.
For increased load requirements, the Console Bracket Brace UCM (**46**) can be installed, see Section "Bracket Brace UCM" on page 79.

Console Bracket UCM (**43**) w.H.Ros
Console Bracket UCM w. Spig (**44**)
Console Bracket UCM 50-2 (**45**)
Bracket Brace UCM (**46**)

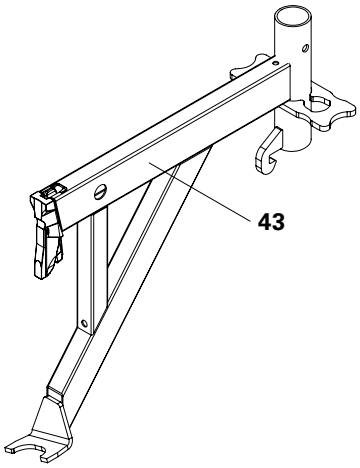


Fig. A6.14a

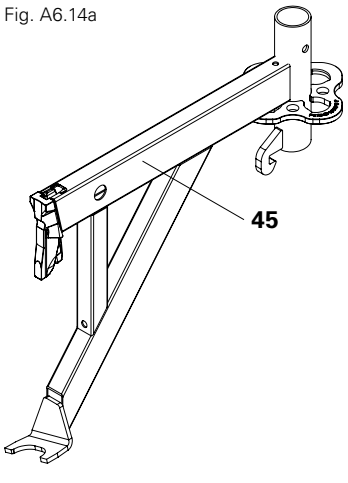


Fig. A6.14c

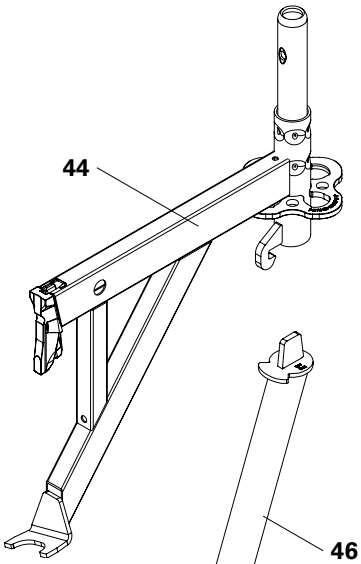


Fig. A6.14b

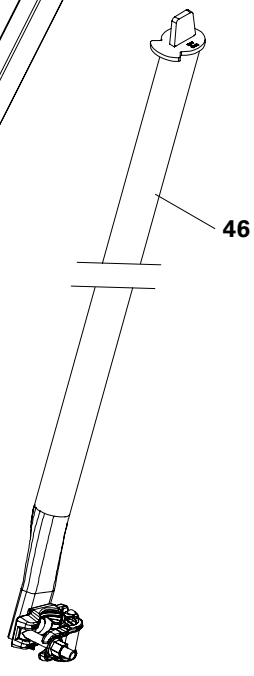


Fig. A6.14d

Bracket Brace UCM

- Assembly is only necessary with increased load requirements in conjunction with Console Bracket UCM, see “PERI UP Design Tables".
- The bracket brace can also be retrofitted.

Assembly

1. Install Console Brackets UCM (**43**).
2. Open the tube coupling of the bracket brace.
3. Insert bracket brace (**46**) with centring lug (**46.1**) from below into the console bracket tube. When doing so, bring the bracket brace up to the console bracket tube at an angle of approx. 45°.
   (Fig. A6.15a + Fig. A6.15b)
4. Press the bracket brace lightly against the console bracket tube and swing it into the console bracket axis – do not release it yet.

   Is the anti-lift plate (**46.2**) held by the hook (**43.9**) of the console bracket? (Fig. A6.15c)
5. Place tube coupling (**46.3**) around standard, close and tighten screw with 50 Nm.

→ The bracket brace is installed. (Fig. A6.15d)

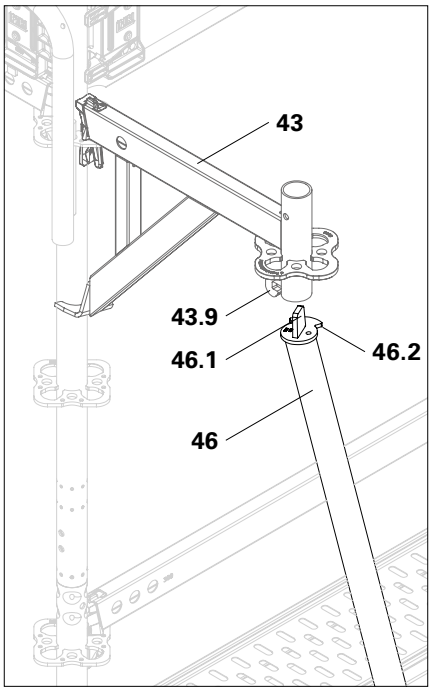


Fig. A6.15a

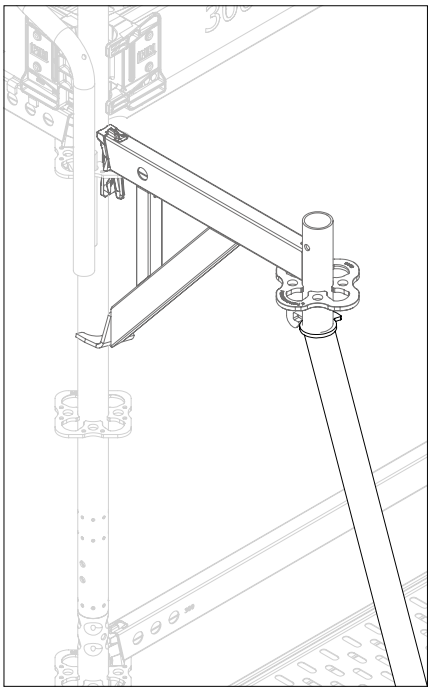


Fig. A6.15b

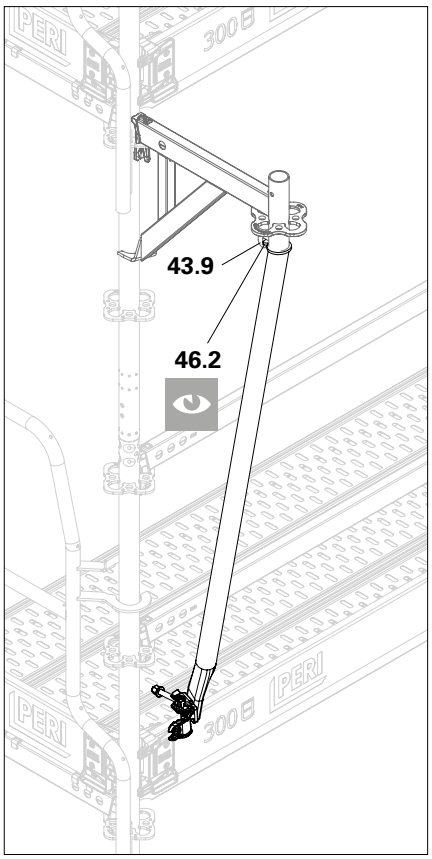


Fig. A6.15c

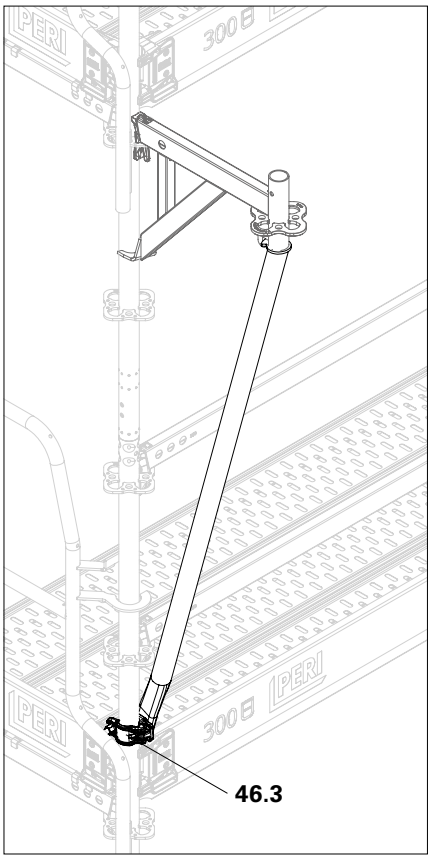


Fig. A6.15d

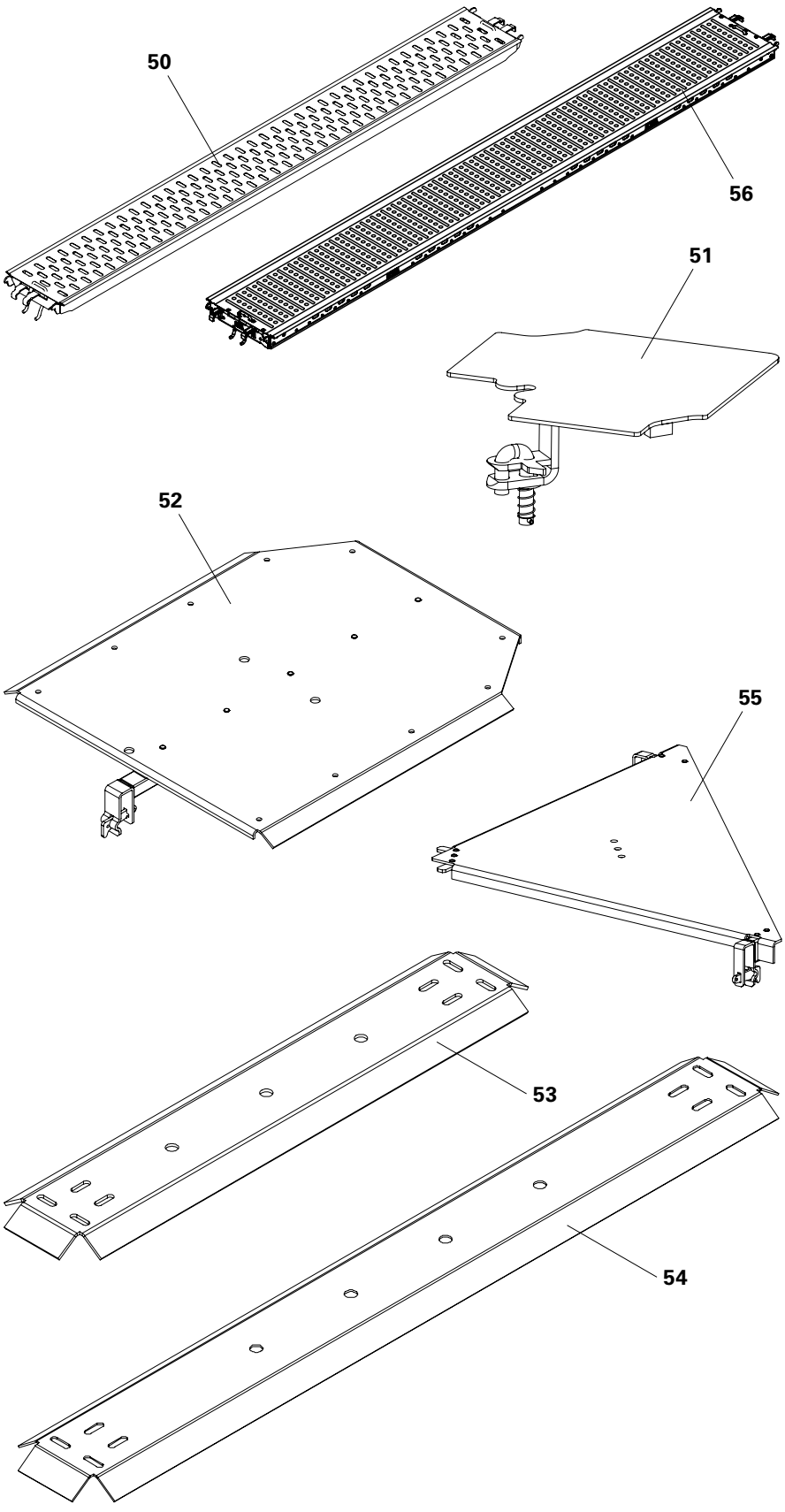
General information

For PERI UP Flex, the deck is normally installed in a width grid of 25 cm. The Steel Deck EDS 33 from the PERI UP Easy system is compatible. All decks have integrated lift locks.

- System decks can be stiffening components. Missing system decks can therefore impair the stability of the assembly.
  - Observe the applicable system-specific Instructions for Assembly and Use.
- Before installing the decks and plates, check the load-bearing capacity for the intended use defined in the certificate of use. For load classes of the decks see "PERI UP Design Tables".

Components

50 Steel Deck UDG-2
51 Corner Deck EDP 25/33
52 Bottom Sheeting UDP 67/75/100
53 Bottom Sheeting UDB-A 100/150
54 Bottom Sheeting UDB-S 100/150
55 Corner Sheeting UDC 50/75/100
56 Steel Deck EDS



Steel Deck UDG-2

The Steel Deck UDG-2 is shown as an installation example.
The installation of further decks as well as the access decks and passage decks in the following Section is identical.

Assembly

1. Pick up the deck (**50**) in the middle and lift it over both ledgers (**15**). (Fig. A7.01)
2. Place the deck on the ledgers one after the other. (Fig. A7.01a + Fig. A7.01b)
3. Lift locks (**50.1**) fall under the ledger and secure the deck. (Fig. A7.01c - Fig. A7.01e)

→ The deck is now installed.

4. Edge the last deck in the scaffolding bay to the side for lifting.

Have all lift locks (**50.1**) fallen below the ledger? Bracket (**50.2**) must be flush with the deck. (Fig. A7.01d)
If not, lift the deck slightly and let it drop into position or operate the lift lock manually.

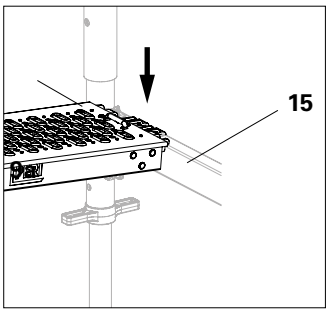


Fig. A7.01a

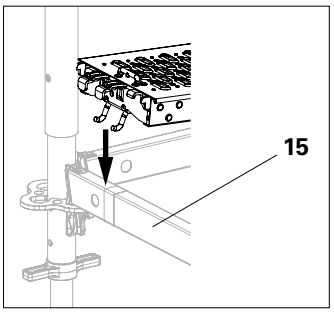


Fig. A7.01b

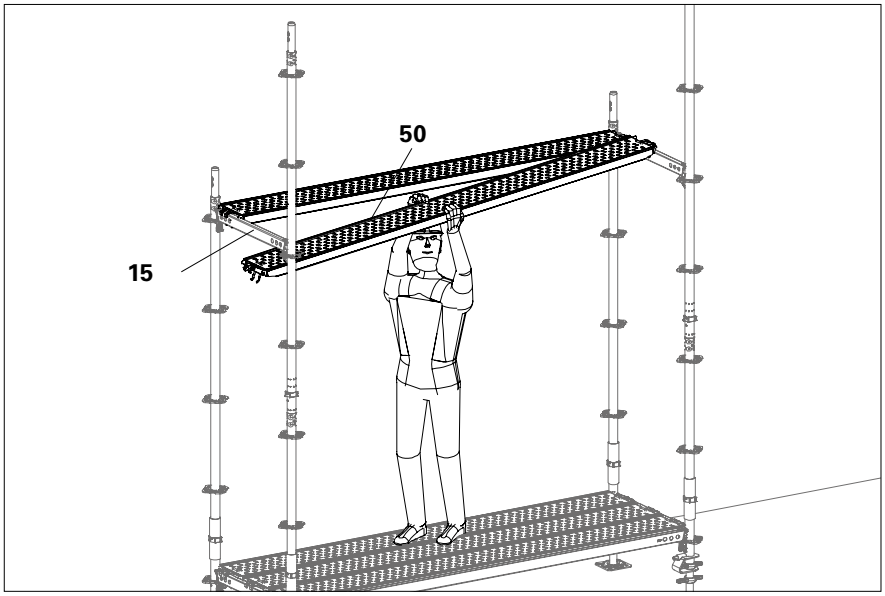


Fig. A7.01

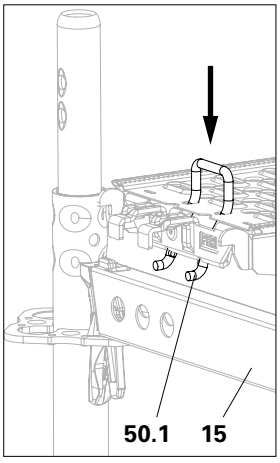


Fig. A7.01c

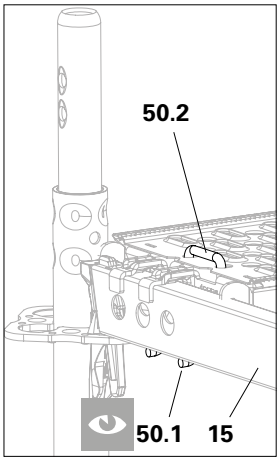


Fig. A7.01d

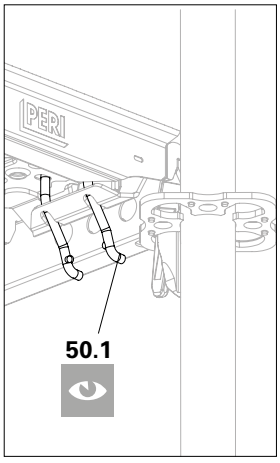


Fig. A7.01e

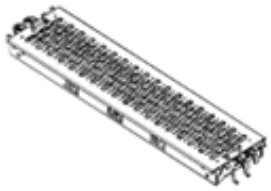
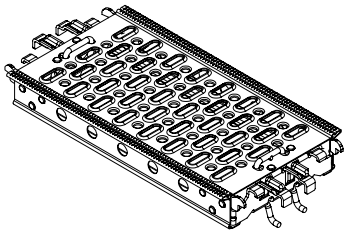
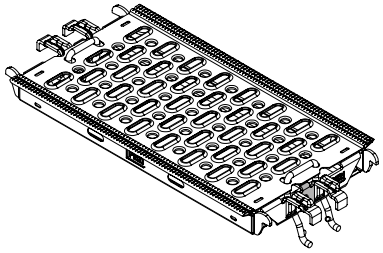
Comparison of components

As part of ongoing product optimisation, the following components have been replaced by 2nd generation components.

The following comparison tables describe the features of the 1st and 2nd generation.

1st and 2nd generation components can be combined.

- The previous components are no longer available as new components.
- The optimised components are available under a new article number.
- There may be a difference between the load-bearing capacity of the individual components in the previous version and the new version.

	Steel Deck UDI	Steel Deck UDG	Steel Deck UDG-2 (Gen-2)
			
Deck assembly	Riveted	Riveted or welded	Welded
Profile height	60 mm	65 mm	L 50 – 150: 45 mm L 200 – 250: 60 mm L 300: 70 mm
Additional identification	Flat edge profile No holes in ribs	Raised edge profile Circular holes in ribs	Raised edge profile Elongated holes in ribs Coloured clip on the ends

Steel Deck EDS

Installation is carried out in the same way as for Steel Deck UDG-2 (**50**).

Steel Decks EDS (**55**) are suitable for scaffold widths in full metres due to its construction width of 33 cm.

Mixing
In the longitudinal direction, mixed joints of Steel Deck UDG-2 and Steel Deck EDS are not possible, as the hooks would overlap. (Fig. A7.02)

Mixing within a bay is possible. This allows even more precise adjustments at interference points. Adjacent bays must be taken into account.
(Fig. A7.02a)

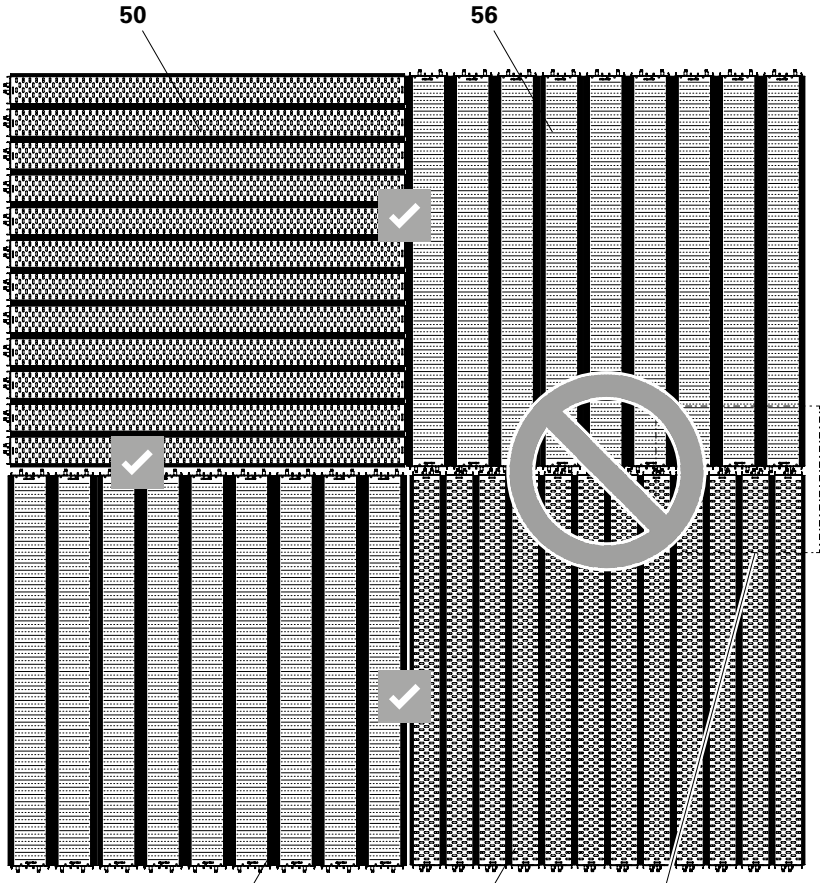


Fig. A7.02

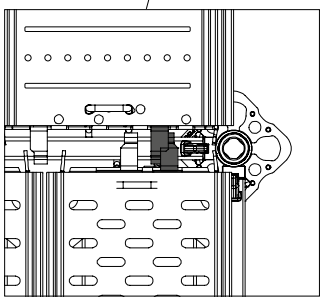


Fig. A7.02b

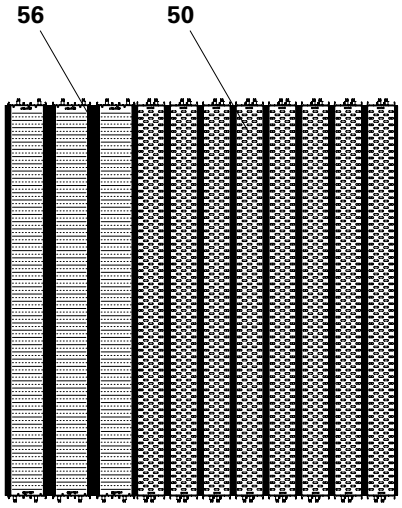


Fig. A7.02a

If Steel Decks UDG and EDS are used within a system in the longitudinal direction, a transition area must be installed. (Fig. A7.02c)

Installation example

1. In the last bay in which Steel Deck UDG-2 is installed, install two ledgers (**15**) in bay length.
2. Install a ledger (**15a**) on 2 Ledger-to-Ledger Couplers UHA-2 (**94**). Distance to frame column 50 cm. (Fig. A7.03c) Do not tighten the wedges yet.
3. In this bay, install the Decks UDG-2 (**50**) 50 cm shorter than the bay length, e.g. 250 cm instead of 300 cm.
4. If necessary, correct the installation position of the ledger (**15a**) and hammer the wedges in tightly.
5. Close the remaining gap with 2 Steel Decks UDG-2 100 (**50a**) mounted crosswise.
6. Install Decks EDS (**55**) in the following bay. (Fig. A7.02d)

Alternatively:
Fit short, transverse Decks EDS.

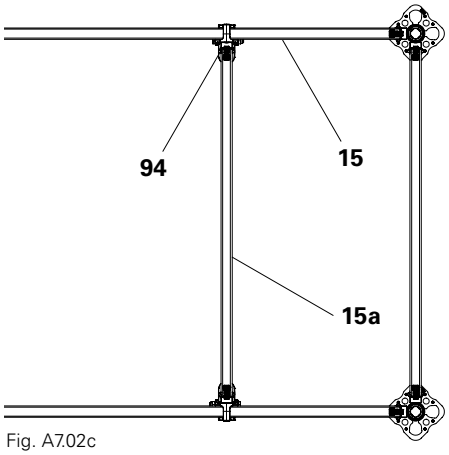


Fig. A7.02c

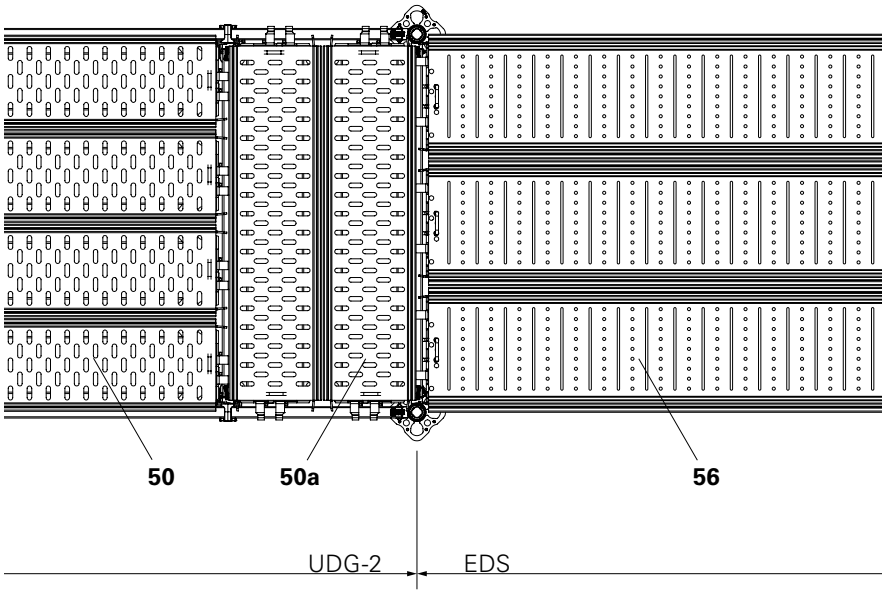


Fig. A7.02d

Deck Traverse UDT

The deck traverse can be used to create deck openings, e.g. for pipelines. Deck traverses are available in lengths of 25, 50 and 75 cm.

- The attachment of the deck traverse increases the requirements of the decks used as a support.
- Observe the load classes of the decks, see the "PERI UP Design Tables".
- The position of the recess can be freely selected. Refer to Table A7.01 for the max. possible loads.

Components

165 Deck Traverse UDT 25/50/75

Assembly

- The assembly is done from a secured position from below.

1. Turn the deck traverse to the head side so that the grips (**165.1**) of the drop ledger (**165.2**) protrude. (Fig. A7.03a)
2. Take hold of the deck traverse at the grips and turn back into the installation position.
3. At the intended position, lift the deck traverse into the deck gap diagonally from below and swing it in at right angles onto the adjacent decks. (Fig. A7.03b)
4. Release the grips.
   → The drop ledgers (**165.2**) engage behind the deck edges and secure the deck traverse.

→ The deck traverse is installed.

5. Install the decks. (Fig. A7.03c)

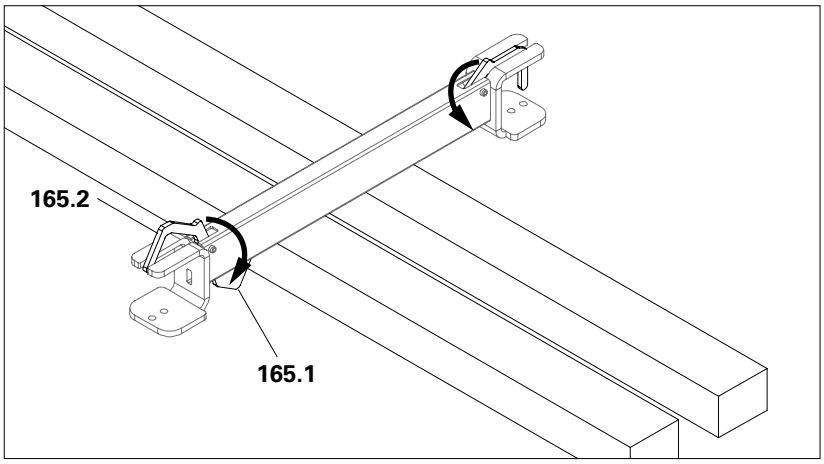


Fig. A7.03a

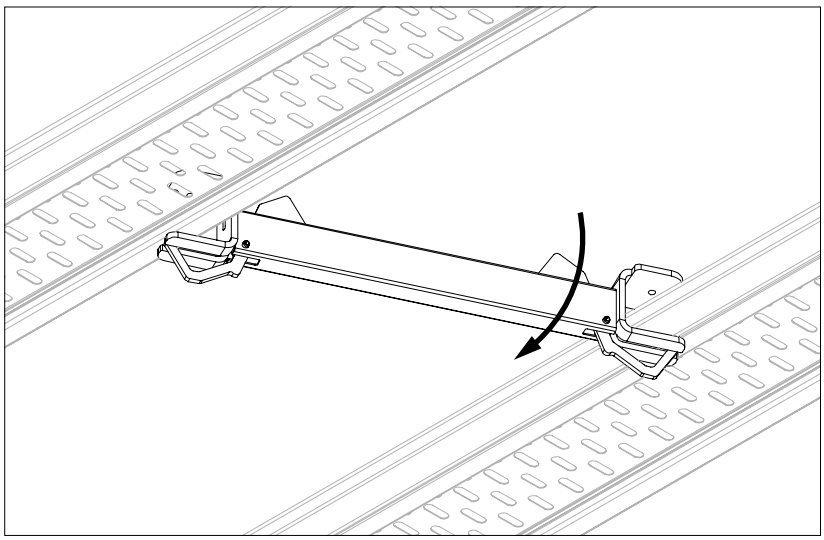


Fig. A7.03b

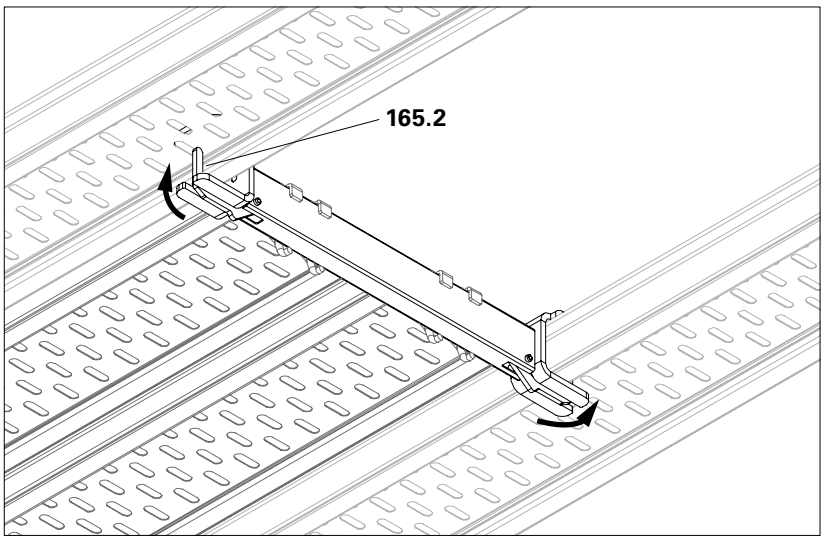
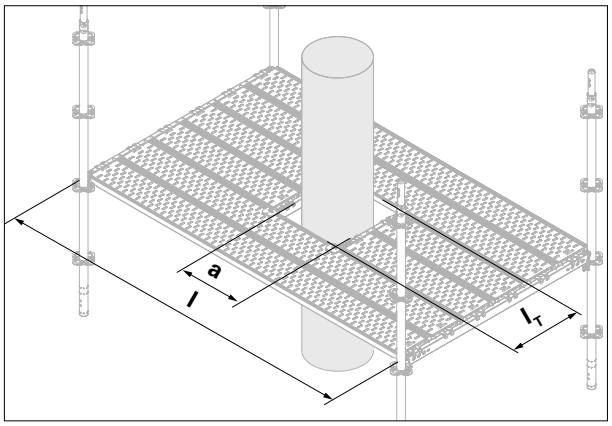


Fig. A7.03c

The table is only valid for the installation situation shown. For any other traverse application, and/or other load requirements, separate static verifications must be carried out for the traverse itself as well as for the load-bearing components.



Possible live load q_k in the illustrated installation situation

Deck series	Beam length l_T	Length Deck bay l	Recess length a [cm]							
			25	50	75	100	125	150	175	200
UDI UDG UDG-2	**25**	150 200 250 300	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²
UDI	**50**	150	3 kN/m²	3 kN/m²	-	-	-	-	-	-
		200	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	-	-	-	-
		250	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	-	-
		300	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²
	75	150	3 kN/m²	3 kN/m²	-	-	-	-	-	-
		200	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	-	-	-	-
		250	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	-	-
		300	2 kN/m²	2 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²
UDG	**50**	150	3 kN/m²	3 kN/m²	-	-	-	-	-	-
		200	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	-	-	-	-
		250	2 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	-	-
		300	2 kN/m²	2 kN/m²	2 kN/m²	2 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²
	75	150	3 kN/m²	3 kN/m²	-	-	-	-	-	-
		200	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	-	-	-	-
		250	2 kN/m²	2 kN/m²	2 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	-	-
		300	2 kN/m²	2 kN/m²	2 kN/m²	2 kN/m²	2 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²
UDG-2	**50**	150	3 kN/m²	3 kN/m²	-	-	-	-	-	-
		200	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	-	-	-	-
		250	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	-	-
		300	2 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²
	75	150	3 kN/m²	3 kN/m²	-	-	-	-	-	-
		200	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	-	-	-	-
		250	2 kN/m²	2 kN/m²	2 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	-	-
		300	2 kN/m²	2 kN/m²	2 kN/m²	2 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²

Bottom Sheeting UDB

Bottom sheeting is used for the bridging of longitudinal infills, for example. Also suitable for bridging in the area of the console brackets.

Bottom Sheeting UDB 20 is available
- in the lengths 100 and 150 cm
- in version Alu (UDB-A) and steel (UDB-S)

.

- As a minimum, support area on both sides: 7.5 cm across entire width
- Max. load class 3 according to EN 12811 ($p = 2.0$ kN/m²).
- Do not walk on the bottom sheeting until it is screwed securely to the adjacent decks.

Components

53 Bottom Sheeting UDB-A 100/150
54 Bottom Sheeting UDB-S 100/150
170 Truss-head screw M10x60 DIN 603 -8.8
171 Nut M10-8-VZ-SW17

Assembly

1. Completely line the scaffold around the filler area with Decks UDG.
2. Place the bottom sheeting (**53/54**) on the bridging area.
3. Insert the flat round screws M10x60 (**170**) through the existing holes or slots from above and tighten with nuts M10-8-VZ-SW17 (**171**).
   – Use at least 2 screws per support, therefore 4 per bottom sheeting.
   – The screw connection can be made through any hole or slot. (Fig. A7.04a)
4. Mount additional bottom sheeting in the same way until the deck gap is closed. (Fig. A7.04b)

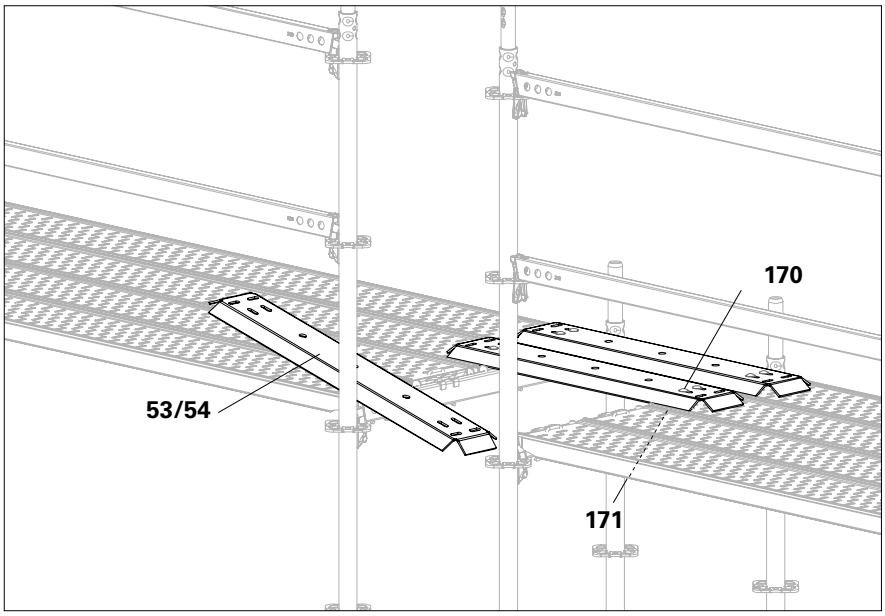


Fig. A7.04a

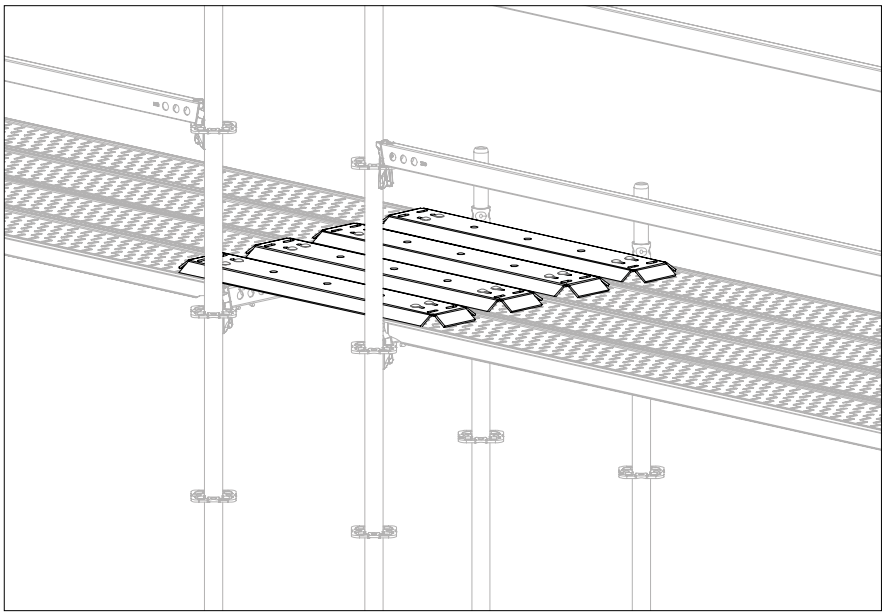


Fig. A7.04b

Corner Deck EDP 25/33

For closing the remaining inside corner when installing internal console brackets.

- Max. load class 4 according to EN 12811 (p = 3.0 kN/m²).

Assembly

- From a safe position on the scaffolding level immediately below:

1. Fit console brackets or supports on the inner side of the scaffold.
2. Put on the decks.
3. Place the Inside Corner Plate EDP (**51**) on the adjacent console bracket decks.
4. Push the bolts of the Inside Corner Plate EDP (**51.1**) up. (Fig. A7.05a)
5. Push the inside corner plate towards the standard and slide the standard mounting head over the rosette.
6. Engage the bolt completely in the brace adapter of the rosette. (Fig. A7.05b)

→ The sheeting is now fixed in position (Fig. A7.05 + Fig. A7.05c)

Is the bolt securely engaged in the rosette?

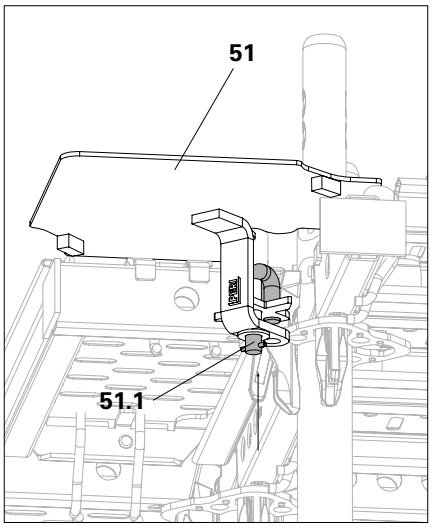


Fig. A7.05a

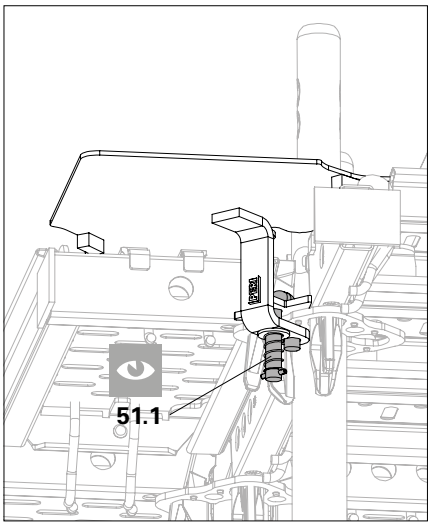


Fig. A7.05b

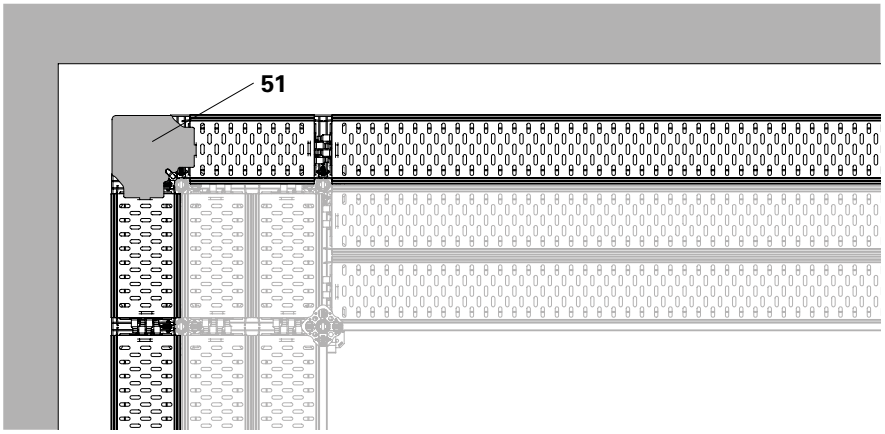


Fig. A7.05

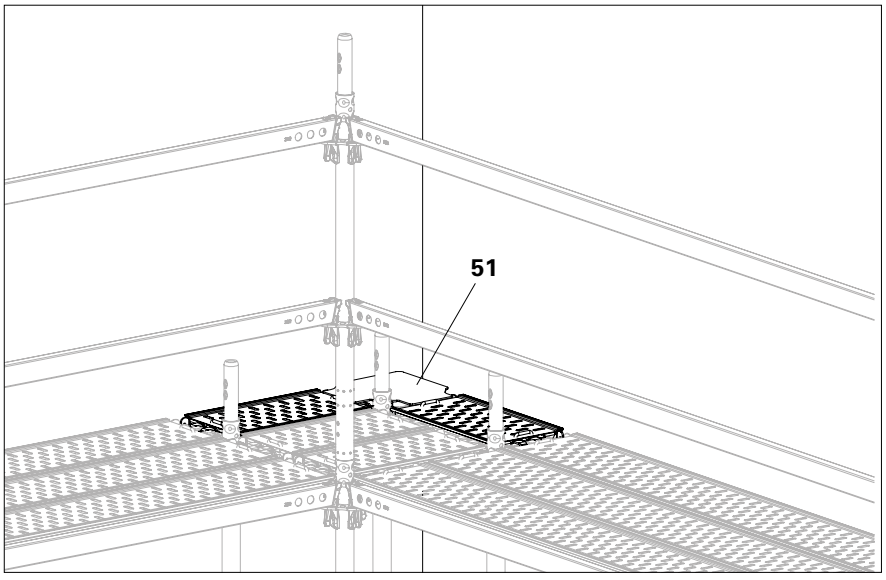


Fig. A7.05c

Bottom Sheeting UDP

Bottom Sheeting UDP (**52**) is available for scaffold widths 67 cm, 75 cm and 100 cm.

- Max. LC3 in the transition area.
- Create lateral protection in the transition area individually. Use PPE.
- Depending on the project-specific situation, collisions may occur between the bottom sheeting edge and ledger wedges. If necessary, plan to have a 3-standard corner.

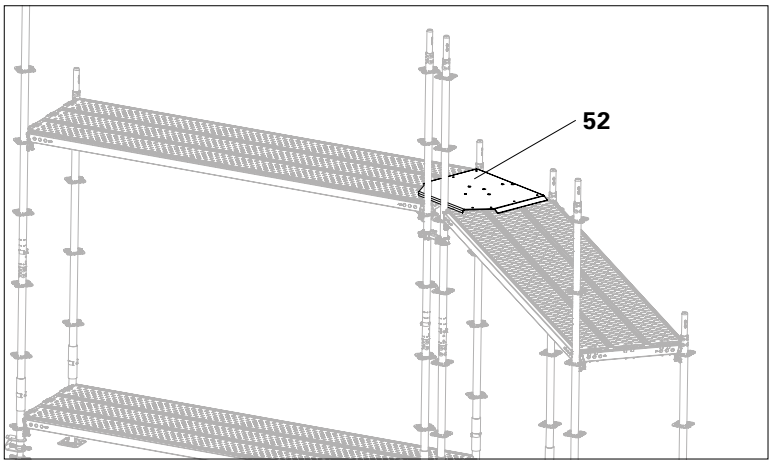


Fig. A7.06

Assembly

- From a safe position on the scaffolding level immediately below:

1. Connect partial scaffolds at the greater distance with Ledger UH-2 (**15**).
2. Thread the Bottom Sheeting UDP (**52**) through the gap and place it between the subframes on top of both deck sides.
3. Pull the wedge (**52.1**) out of the clamping part (**52.2**) and lower the clamping part over the ledger (**15**).
4. Insert the wedge into the clamping part and hammer it tight.

→ Bottom sheeting is installed. (Fig. A7.06 – Fig. A7.06b)

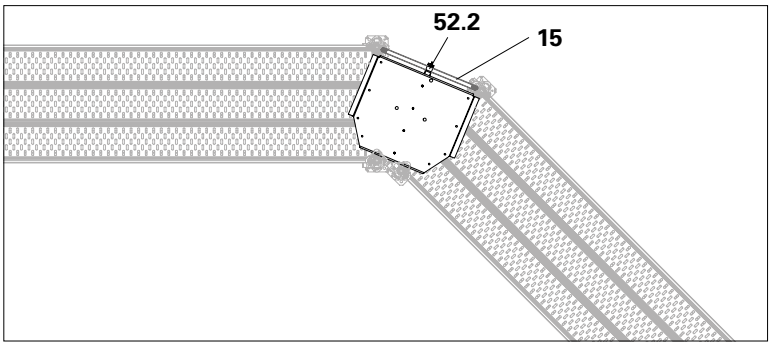


Fig. A7.06a

Application examples

- Bridging of scaffolding parts that are not in alignment, e.g. due to the shape of the building.

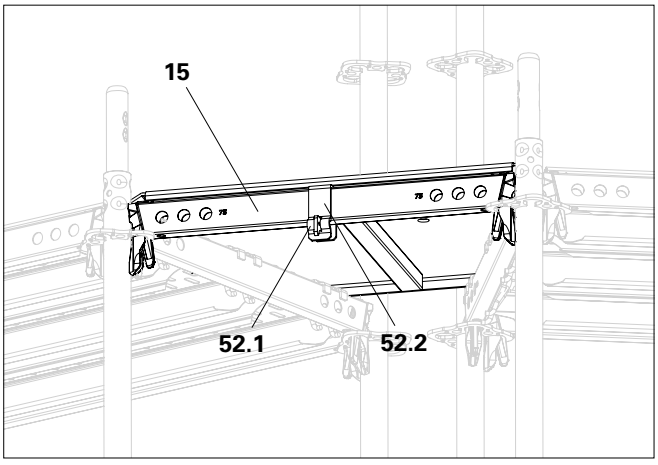


Fig. A7.06b

Corner Sheeting UDC

Corner Sheeting UDC (**55**) is available in leg sizes 50 cm, 75 cm and 100 cm.

Build up the corner sheeting layer-by-layer with the base scaffold.

- Max. load class 3 according to EN 12811 (p = 2.0 kN/m²).

Assembly

- From the scaffolding level below:

1. Mount ledgers (**15**) next to the decks on the side facing the structure. Install transverse ledgers (**15a**) with Ledger to Ledger Couplers UHA-2 (**93**).
2. Pull out wedges (**55.1**) from both clamping parts (**55.2**) and lower clamping parts over both ledgers.
3. Insert the wedges into the clamping part and hammer them in tight.

→ Corner sheeting is installed. (Fig. A7.07 – Fig. A7.07b)

Application example
Building around of round components such as chimneys, columns, pipelines, etc.

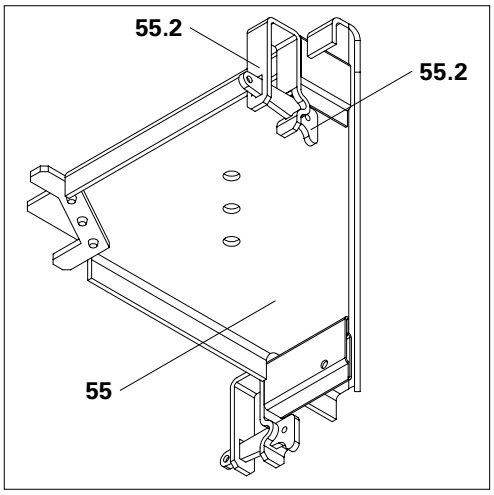


Fig. A7.07

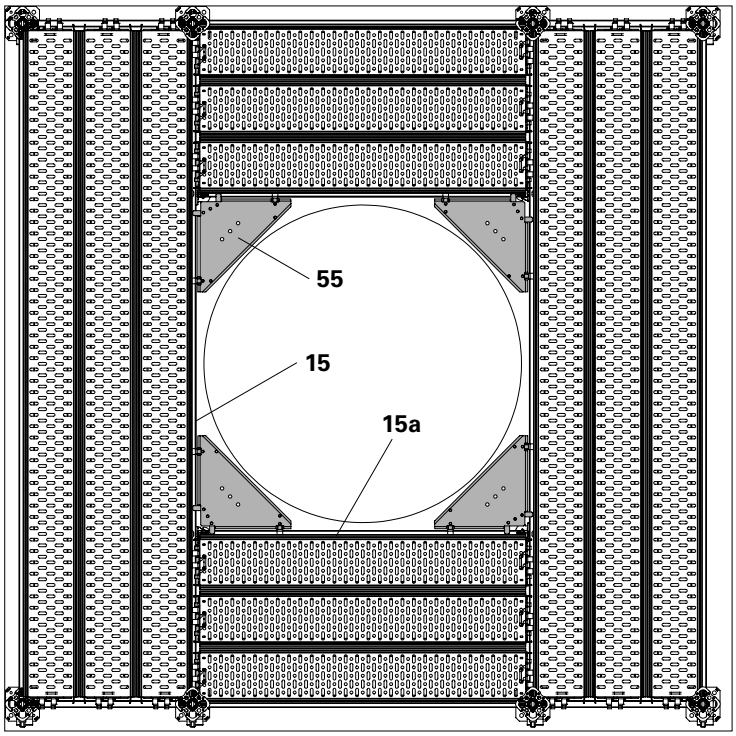


Fig. A7.07a

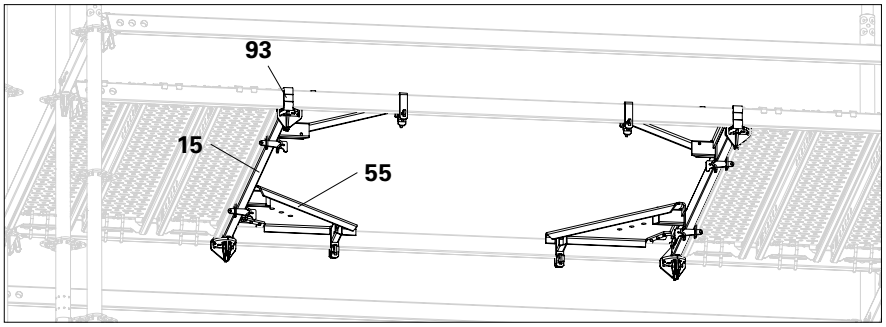


Fig. A7.07b

General information

Warning

- Open access hatches pose a risk of falling.

⇒ Arrange the access openings alternately!

- There is a danger of falling from ladders.

⇒ Always ascend and descend facing the ladder.
⇒ Always grasp the ladder with at least one hand.
⇒ Never move or shift ladders while they are in use.
⇒ Never carry a load or an object when climbing up or down.
⇒ On mobile scaffolds, activate all wheel brakes before climbing.
⇒ Before installing, clean boots or shoes of foreign bodies or slippery substances.
⇒ Ladders should only be used by one person at a time.

Caution!

Hatch can trap body parts if it closes on its own.

⇒ Guide the access hatch by hand when closing, do not let it fall shut!
⇒ Take into consideration any other persons waiting to use the hatch!

Note

Do not overpress the hatch to more than approx. 95° as this may cause damage.

- For wider scaffolding bays, the remaining area next to the access decks must be filled with steel decks to prevent sideways shifting
- All ascents with ladder decks or access decks are possible up to max. load class 3 (LC3).
- The hatches must always be kept closed, except when climbing through!

Components

60a	Ladder Deck UAA 75 L
60b	Ladder Deck UAC 75 L
60c	Ladder Deck UAW 75 L
61a	Access Deck UAA 75
61b	Access Deck UAC 75
61c	Access Deck UAW 75
62	Ladder UAF 200
63	Hatch UAF-2 50 x 75
64	Hatch UAF 50 x 75

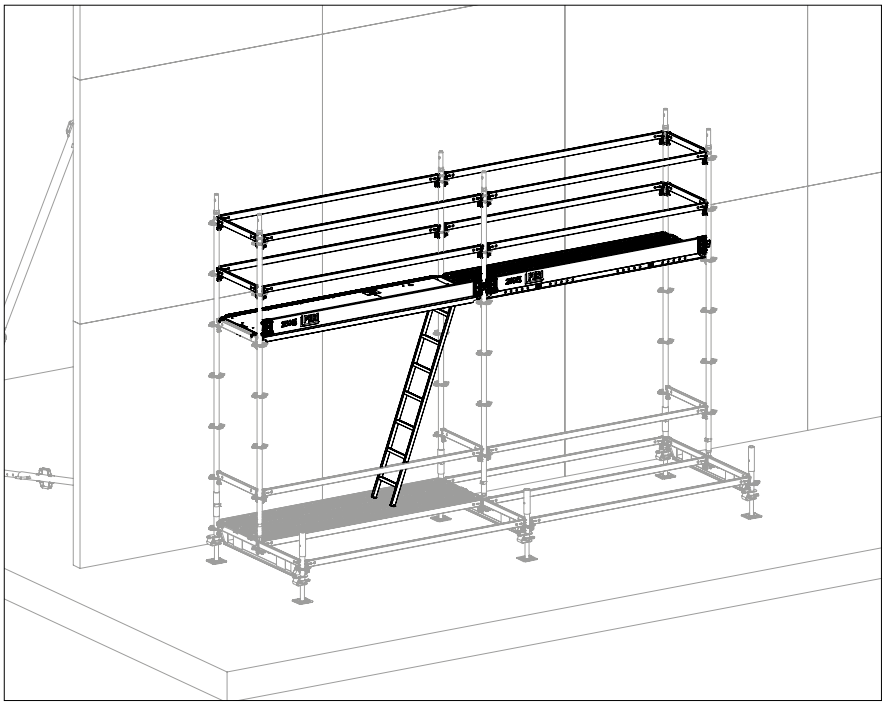


Fig. A8.01

Ladder Deck UAA/UAC/UAW

Ladder decks (**60**) are available in lengths of 2.50 m and 3.00 m.
The access ladder is permanently installed.

The following surfaces are available for decks:
aluminium profiles (UAA),
glass fibre reinforced plastic (UAC),
coated plywood board (UAW).

Assembly

1. Install ladder deck (**60a**) in the same way as steel deck.
2. Secure the ladder on the lowest rung and unlatch latch (**60.1**). Fig. A8.02a
3. Set the ladder down on the scaffolding level underneath. Guide the ladder, do not allow it to drop.

→ Ladder deck is installed.

Application examples
Scaffolds with few layers,
Scaffolding bay lengths 2.50 m and 3.00 m,
Reinforcement scaffolds.

Ladders must stand 2.0 m lower, e.g. on a layer below.
Never use ladders in a suspended position.
Observe national regulations.

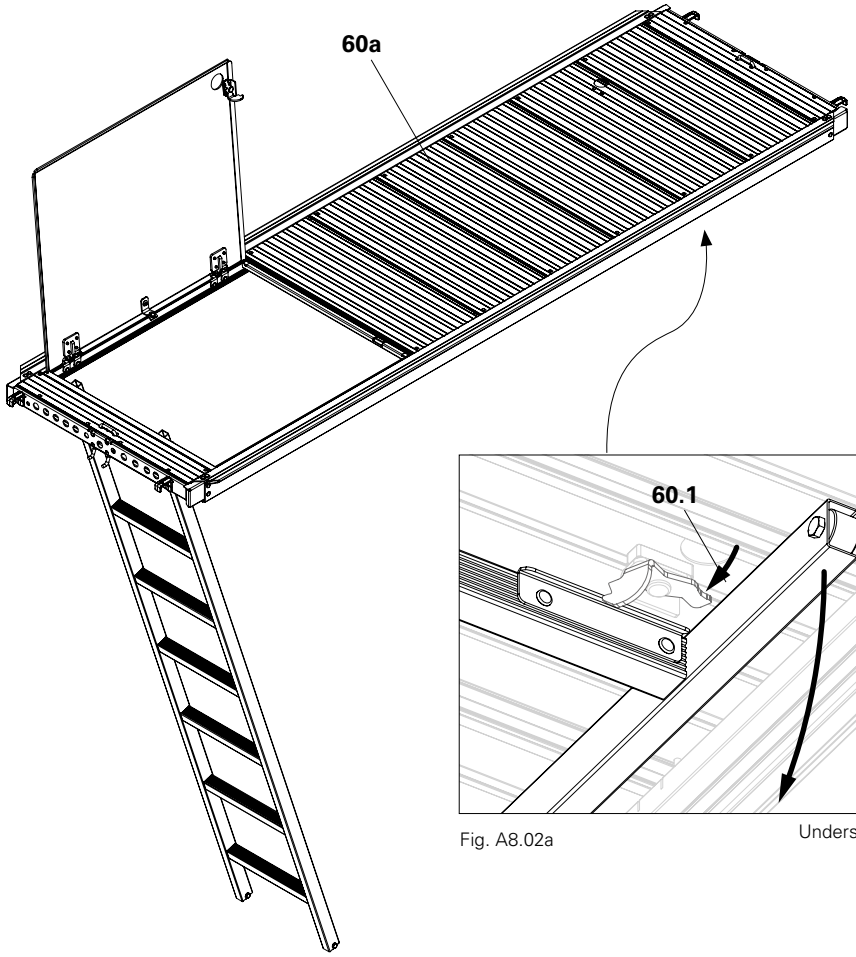


Fig. A8.02a

Fig. A8.02

Access Deck UAA/UAC/UAW

Access decks (**61**) are available in lengths of 1.50 m and 2.00 m.
The Access Ladder UAF 200 (**62**) is also required as an access ladder.

The same materials as for ladder decks are available for deck surfaces.

Assembly

1. Install access deck in the same way as steel deck.
2. Open access hatch and temporarily secure against falling.
3. Lift the ladder into the access opening and hang it over the round tube (**61.1**) from above. Fig. A8.03a)
4. Remove the temporary safety catch on the hatches and close the hatch.

→ The access deck is installed.

Application examples
Scaffolds with few layers,
Scaffolding bay lengths 1.50 m and 2.00 m,
Reinforcement scaffolds.

Ladders must stand 2.0 m lower, e.g. on a layer below.
Never use ladders in a suspended position.
Observe national regulations.

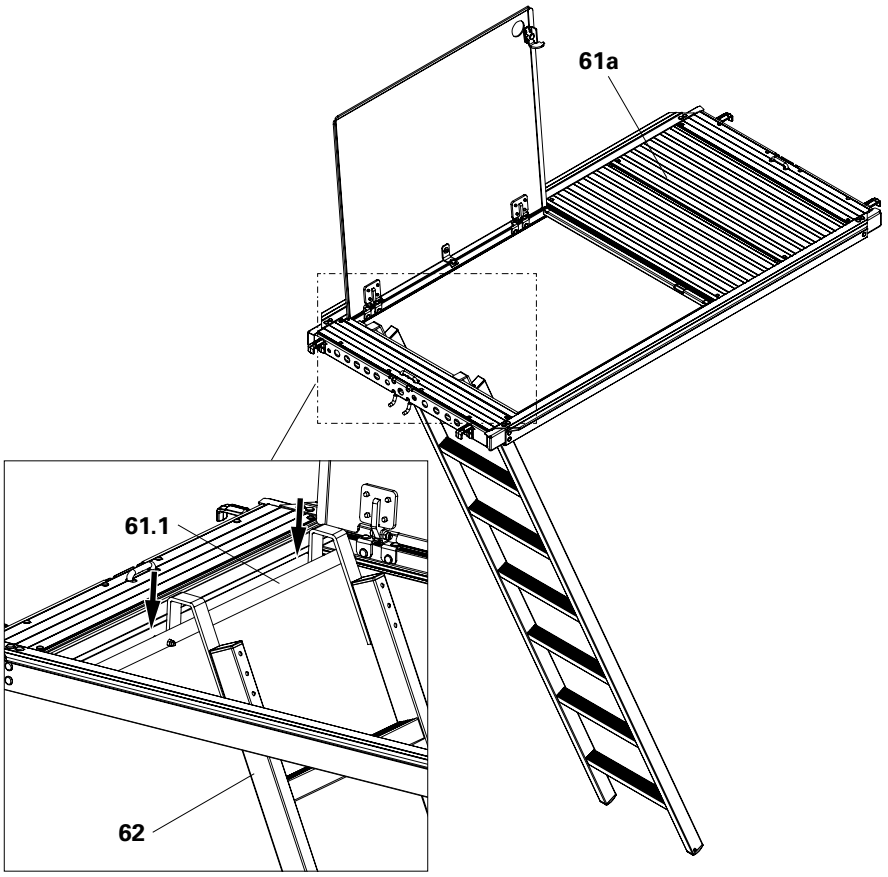


Fig. A8.03a

Fig. A8.03

Fig. A2.14b

Hatch UAF-2

Hatches UAF-2 (**63**) are available in the dimensions 50x75 cm, 67x100 cm and 75x100 cm.
Hatches can be freely positioned in the system grid, regardless of the bay length. Depending on the positioning and bay size, additional ledgers and decks may have to be installed.
In addition, Ladder UAF 200 is required as an access ladder.

Max. load class LC3 according to EN 12811, (p = 2.0 kN/m²).
Frame made of galvanised steel, lid made of anti-slip aluminium chequer plate.

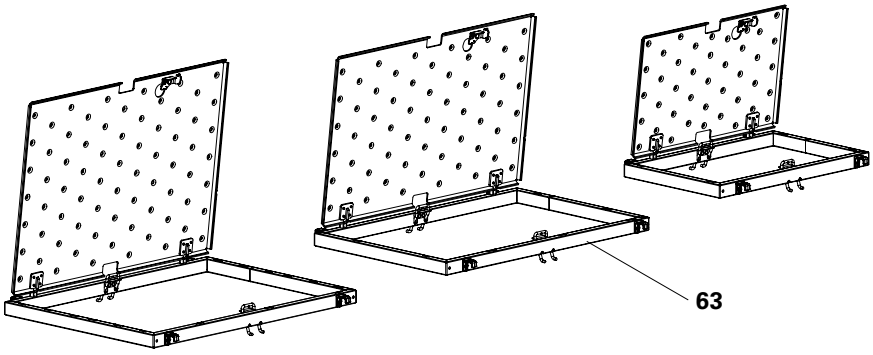


Fig. A8.04

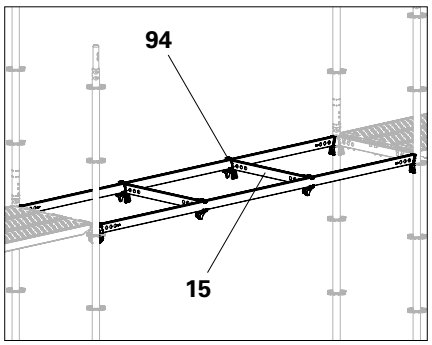


Fig. A8.04a

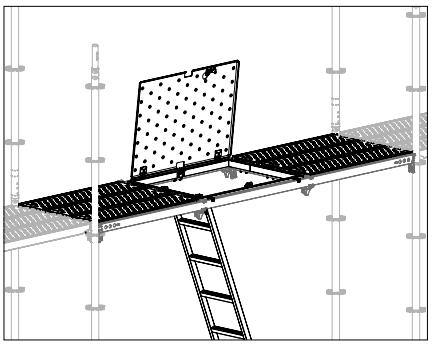


Fig. A8.04b

Assembly

1. Install additional ledgers (**15**) with Ledger to Ledger Coupler UHA-2 (**94**) in the system dimension. Do not secure the wedges yet. (Fig. A8.04a)
2. Fill the remaining bay area with decks, correct the position of the ledgers if necessary
3. Hammer in the wedges of the ledger-to-ledger couplers.
3. Hang the Hatch UAF-2 in the remaining gap on the ledgers like a deck.
   → The lift lock drops beneath the ledger and secures the hatch.

→ Hatch UAF-2 is installed. (Fig. A8.04b)

Application examples
Industrial scaffolds, platforms.

Attaching Ladder UAF 200

Ladder UAF 200 can be hooked into several different positions depending on the size of the hatch.
(Fig. A8.05a - Fig. A8.05c)

Assembly

1. Open access hatch and temporarily secure against falling.
2. Lift the ladder into the access opening and hook the ladder hooks into the openings provided (**63.1**) in the frame profile. (Fig. A8.06)
3. Remove the temporary safety catch on the hatches and close the hatch.

→ Ladder UAF 200 is fitted.

Do not hang the ladder over the frame profile. Otherwise the hatch will no longer close completely.

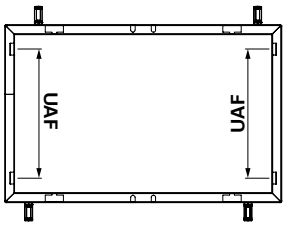


Fig. A8.05a

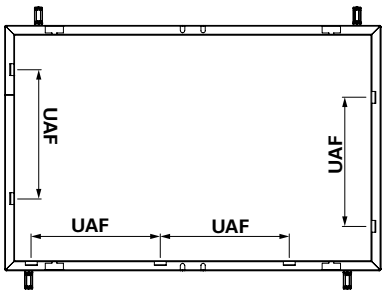


Fig. A8.05b

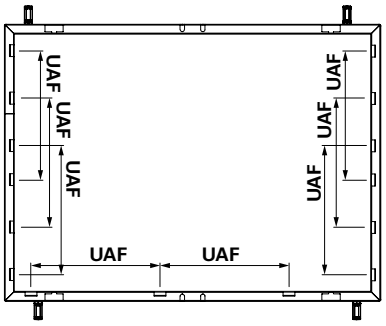


Fig. A8.05c

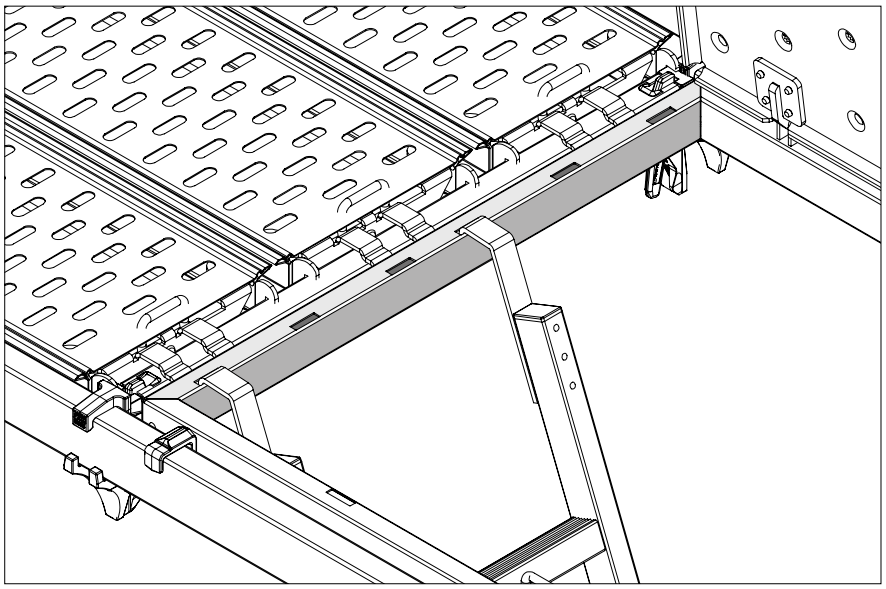


Fig. A8.06

Hatch UAF

Hatches UAF (**64**) are available in the dimensions 50x75 cm and 75x100 cm.

Hatches can be freely positioned in the system grid, regardless of the bay length. Depending on the positioning and bay size, additional ledgers and decks may have to be installed.
In addition, Ladder UAF 200 is required as an access ladder.

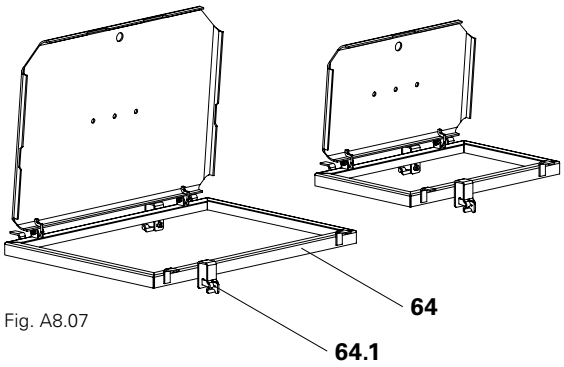


Fig. A8.07

Max. load class LC6 according to EN 12811, (p = 6.0 kN/m²).
Frame made of galvanised steel, lid made of anti-slip aluminium chequer plate.

Assembly

1. Install additional ledgers (**15**) with Ledger-to-Ledger Couplers UHA (**93**) in the system dimension. Do not secure the wedges yet. (Fig. A8.07a)
2. Fill the remaining bay area with decks, correct the position of the ledgers if necessary.
3. Pull the wedges out of the clamping parts (**64.1**) of the Hatch UAF-2 and lower the clamping parts over the ledgers.
4. Push the wedges through the clamping part.
5. Hammer all wedges into place.

→ Hatch UAF-2 is installed. (Fig. A8.07b)

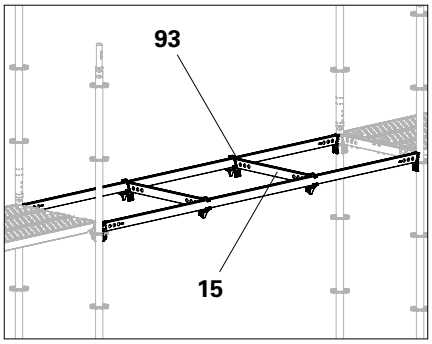


Fig. A8.07a

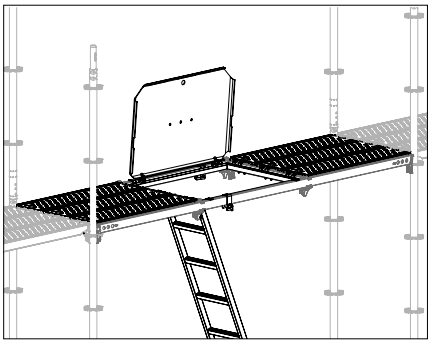


Fig. A8.07b

Ladder installation
Install the ladder in the same way as for UAF-2, but hang the ladder hooks over the frame profile. (Fig. A8.08)

Application examples
Industrial scaffolds, platforms.

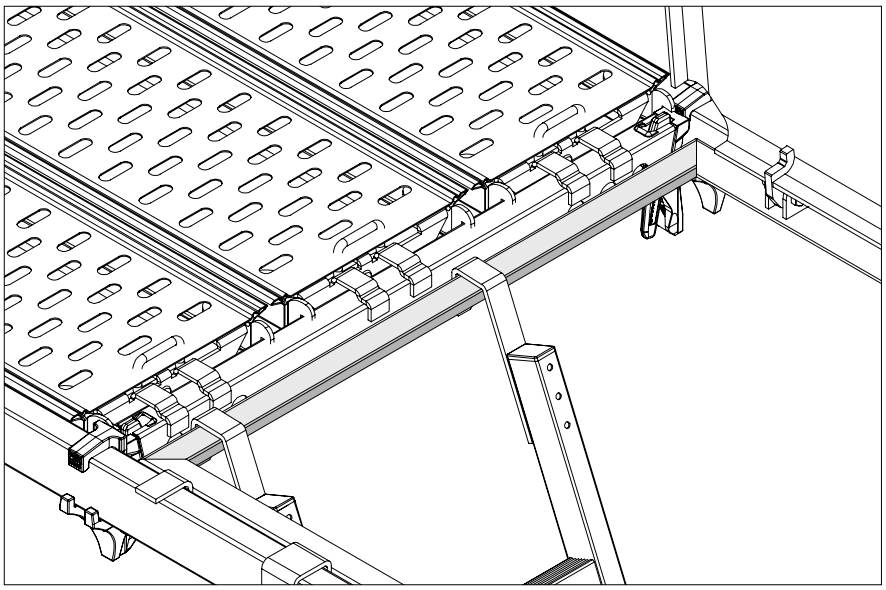


Fig. A8.08

Staircases

The Flex or Easy staircase makes it possible to build staircases that run in the same direction or in opposite directions.

Technical data
- Permissible load 2.0 kN/m².
- Flex Staircase UAS-2 and Easy Staircase EAS fulfil class B according to DIN EN 12811-1.

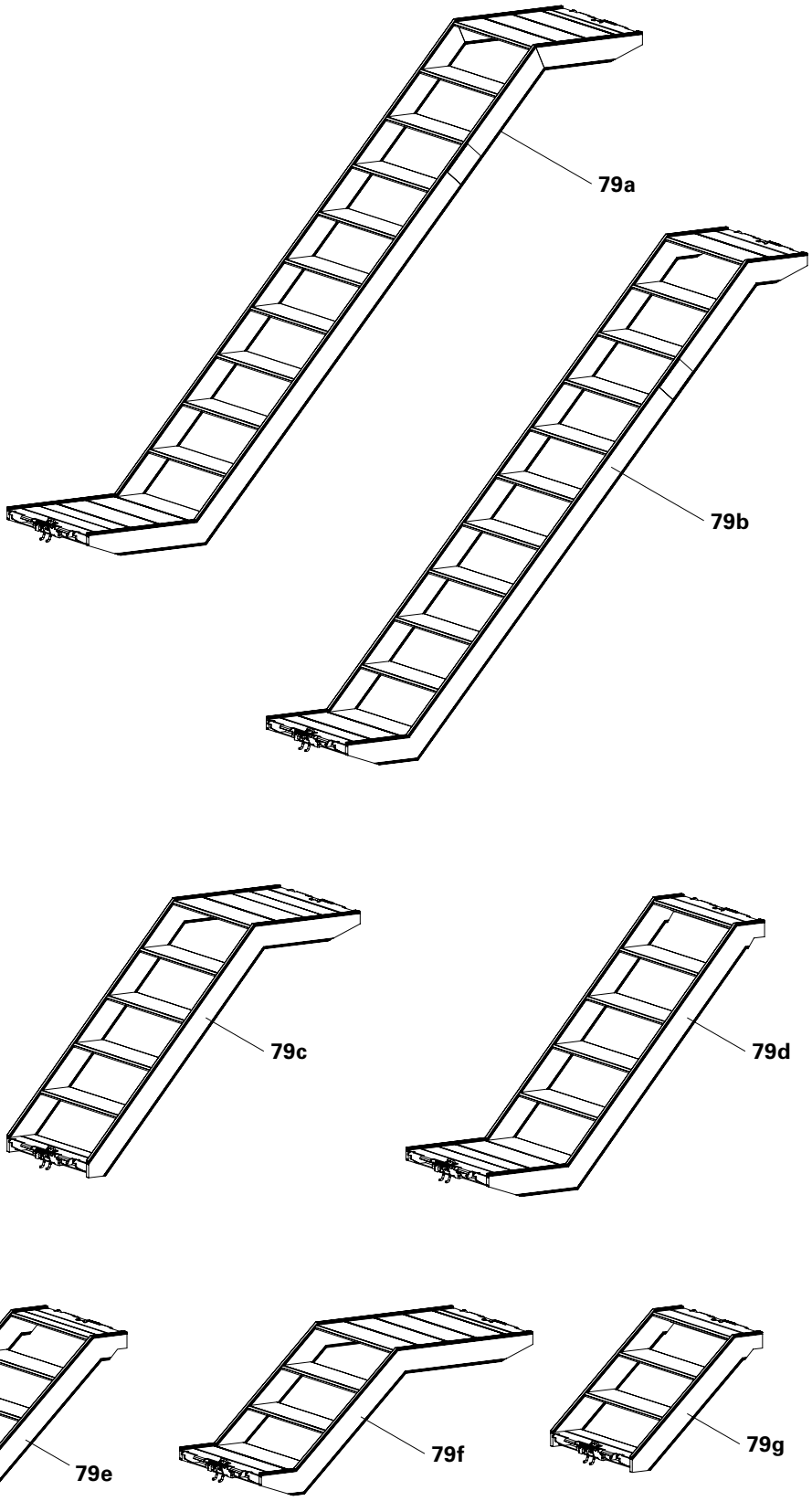
Available sizes WxLxH:
Components

79a	Flex Staircase UAS-2 75x300/200
79b	Flex Staircase UAS-2 75x250/200
79c	Flex Staircase UAS-2 75x150/100 T with landing platform at top
79d	Flex Staircase UAS-2 75x150/100 S with landing platform at bottom
79e	Flex Staircase UAS-2 75x150/50 S with landing platform at bottom
79f	Flex Staircase UAS-2 75x150/50 T with landing platform at top
79g	Flex Staircase UAS-2 75x75/50

79a*	Easy Stair EAS 67x300/200
79b*	Easy Stair EAS 67x250/200
79c*	Easy Stair EAS 67x150/100 T with landing platform at top
79g*	Easy Stair EAS 67x75/50

*Image similar

Only the Flex Staircase UAS is described in these Instructions for Assembly and Use. The Easy Stair is used in the same way.



Assembly
As with ladder decks or access decks, the installation is carried out on Ledgers UH.

1. Attach the Flex Staircase UAS (**79**) to the upper ledger (**15a**) first, then to the lower ledger (**15b**). Both lift locks (**79.1**) must fall under the ledgers. If not, lift the staircase slightly and let it drop into position or operate the lift lock manually. (Fig. A8.09b)
2. Produce lateral protection on stairs and platform opening according to the project.

See also the following section and system-specific Instructions for Assembly and Use, e.g. PERI UP Flex Staircase 75.

For wider scaffolding bays, the installation width must be limited to the dimensions of the intended staircase. For the alternating staircase unit, limit the installation width to 150 cm to prevent lateral shifting.
The Ledger Bracket UHA half (**94**), for example, is suitable for this limitation. (Fig. A8.09b)

Application examples
Access to platforms, stairways, stair towers.

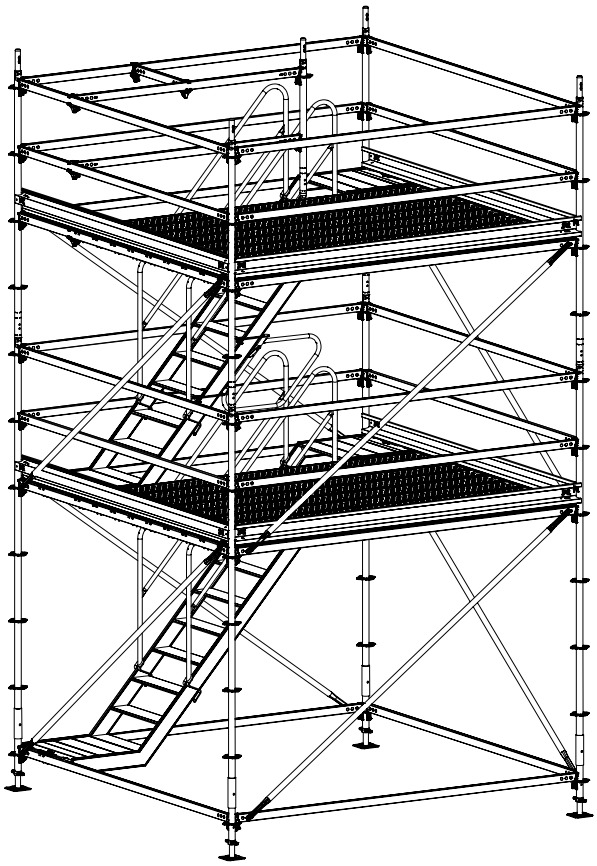


Fig. A8.09

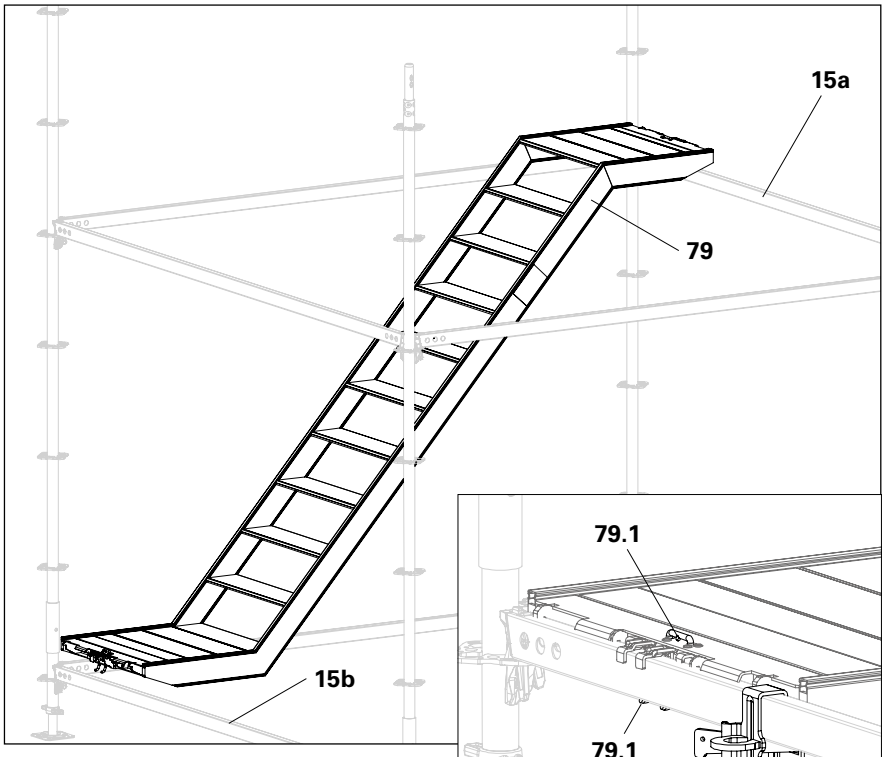


Fig. A8.09a

Fig. A8.09b

Stair Guardrail UAG

Assembly

Fit Stair Guardrail UAG (**160**) with upper suspension (**160.1**) above the second step (**79.1**) from the top.

1. Attach the Stair Guardrail UAG to the stair rail using the mounting rings (**160.1**). (Fig. A8.10a)
2. Lower the stair guardrail to the step and pull the mounting rings to the rear edges of the steps (**79.2**). (Fig. A8.10b)

→ Stair guardrail is installed.

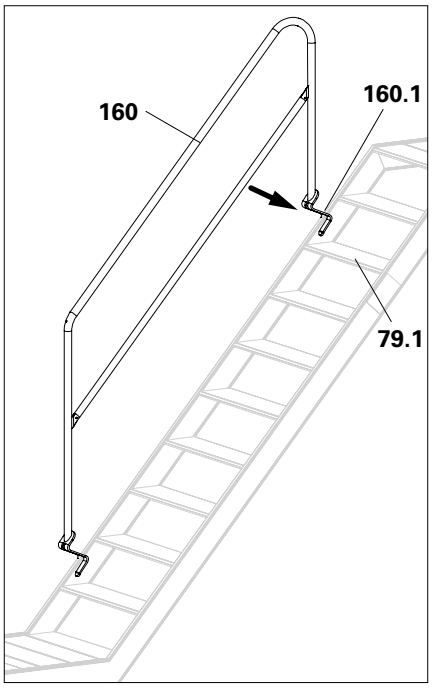


Fig. A8.10a

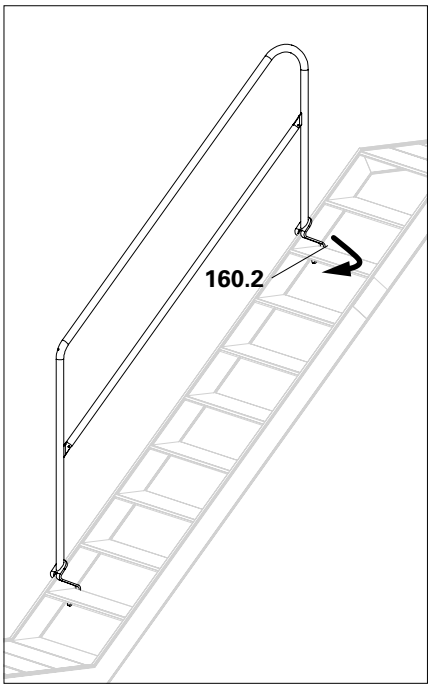


Fig. A8.10b

Stair Guardrail UAH-2

Assembly

Fit Stair Guardrail UAH-2 (**161**) onto the fifth step (**79.2**) from the top with the upper mounting ring (**161.1**).

1. Attach the stair guardrail from the back of the staircase to the stair rail using the mounting rings (**161**). (Fig. A8.11a)
2. Lower the stair guardrail to the step and pull the mounting rings all the way to the front edge of the step (**79.4**). (Fig. A8.11b)
3. Swing out the locking pin (**161.2**) and pull it down between the stair tower and the stair guardrail. (Fig. A8.11c + Fig. A8.11d)

→ Stair guardrail is installed and secured.

→ The upper guardrail is at a height of approx. 1 m.

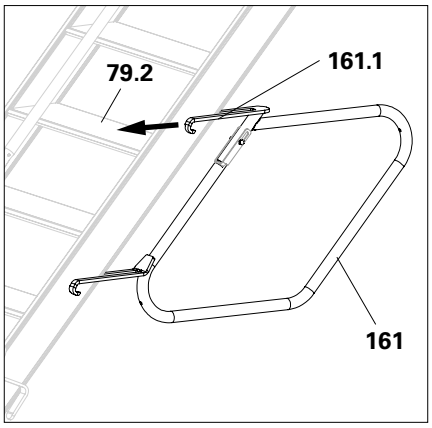


Fig. A8.11a

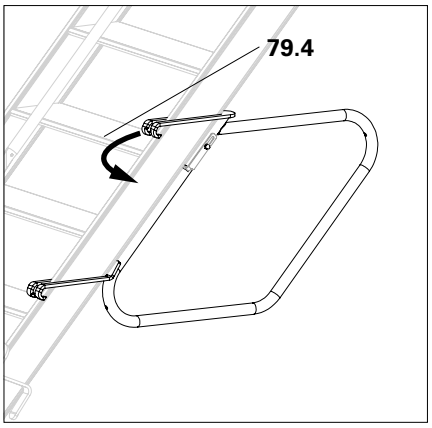


Fig. A8.11b

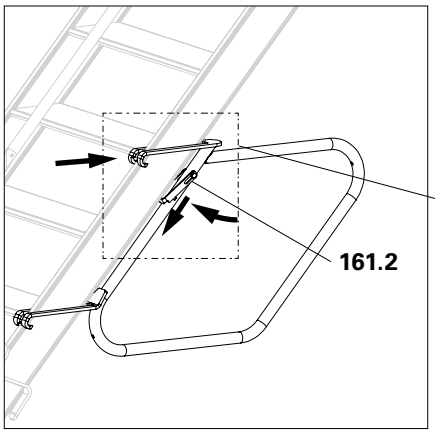


Fig. A8.11c

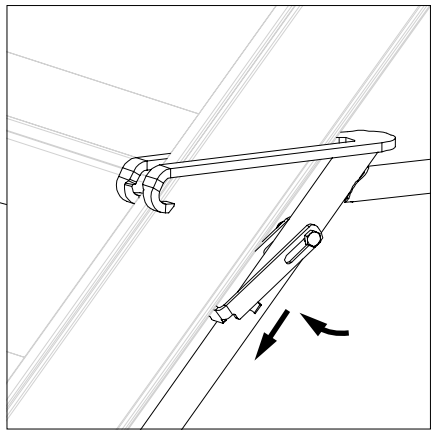


Fig. A8.11d

General information

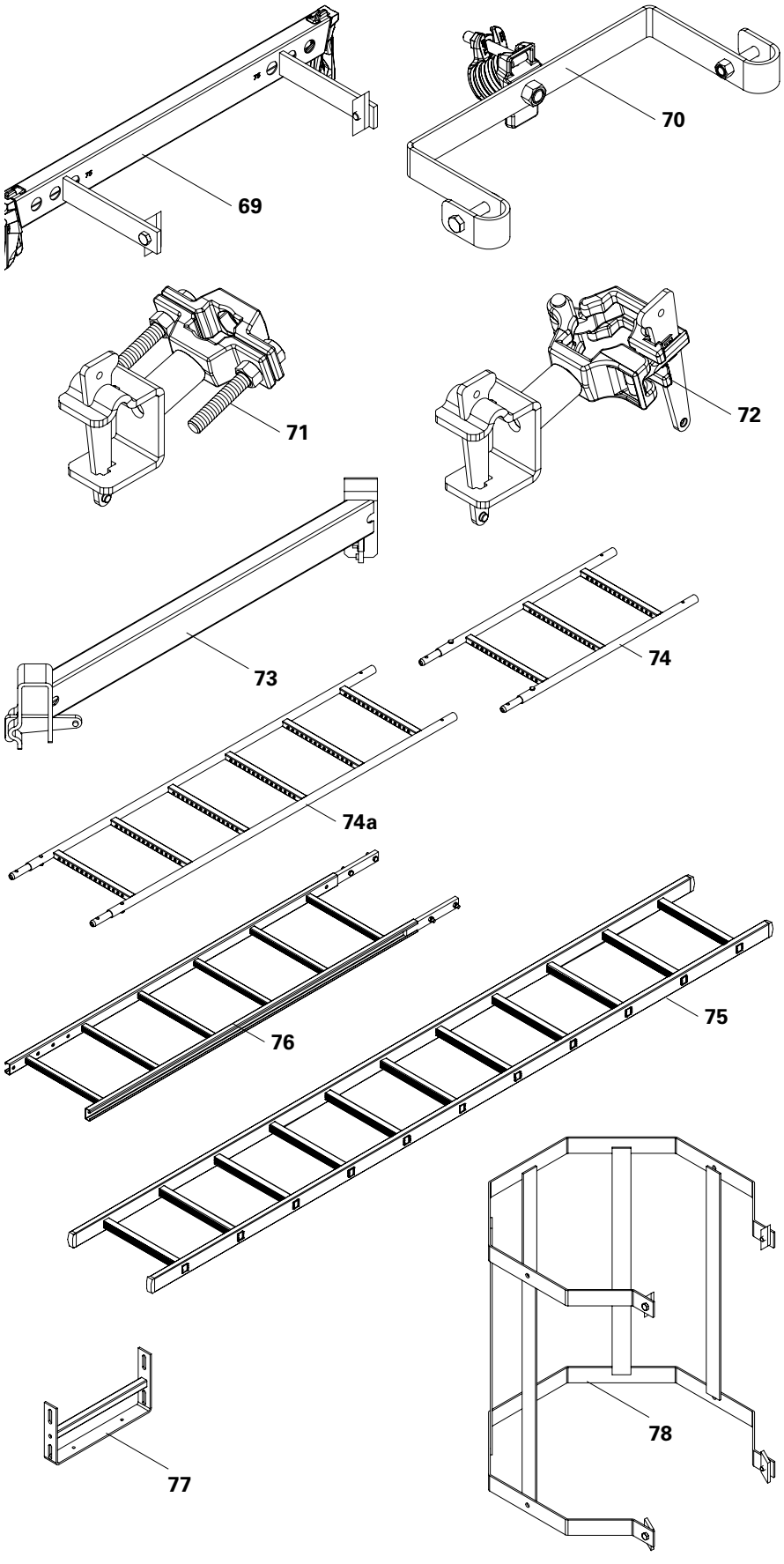
Warning

There is a danger of falling from ladders.
A fall can cause serious or fatal injuries!

⇒ Always ascend and descend facing the ladder.
⇒ Always grasp the ladder with at least one hand.
⇒ Never use the upper edge of the ladder as a step.
⇒ Never move or shift ladders while they are in use.
⇒ Never carry a load or an object when climbing up or down.
⇒ On mobile scaffolds, activate all wheel brakes before climbing.
⇒ Clean boots or shoes of foreign objects or slippery substances before ascending.
⇒ Ladders should only be used by one person at a time.

Components

69 Ladder Connector UAC-2
70 Ladder Connector UAV 43-C
71 Ladder Connector Ledger UAM-S
72 Ladder Connector Ledger UAM-W
73 Ladder Connector Diagonal UAD
74 Vertical Ladder UAV 43x91
74a Vertical Ladder UAV 43x181
75 Ladder Alu UAI 300/400/500-A
76 Ladder 180/6
77 Ladder Base ga
78 Ladder Safety Cage 75/150



A9 Ladders

Install rest areas every 10 m for ladder access.

- Tighten the tube couplings with 50 Nm
- Ladder connections do not absorb vertical forces, therefore place the lowest element of the ladder load-bearing on the substrate.
- As a minimum, always secure ladders at the top and bottom.
- Each time you start work, check the ladders and brackets for damage and proper attachment. Do not climb damaged or improperly fixed ladders, but replace damaged components or fix ladders properly.
- Inclined and vertical ladders provide access to platforms. These can be employed externally or integrated into the platform.
- The ladder may be extended to a maximum height of 10.5 m.
- Access to the platform is via a safety entry door.
- The ladders are firmly connected to the scaffold using the Ladder Connector Ledger UAM-S and UAM-W, which means that the widening described in DIN 131 is not necessary.
- Observe country-specific regulations!
- Pinned ladders are only approved for vertical installation!
  Only use undivided ladders for diagonal installation.

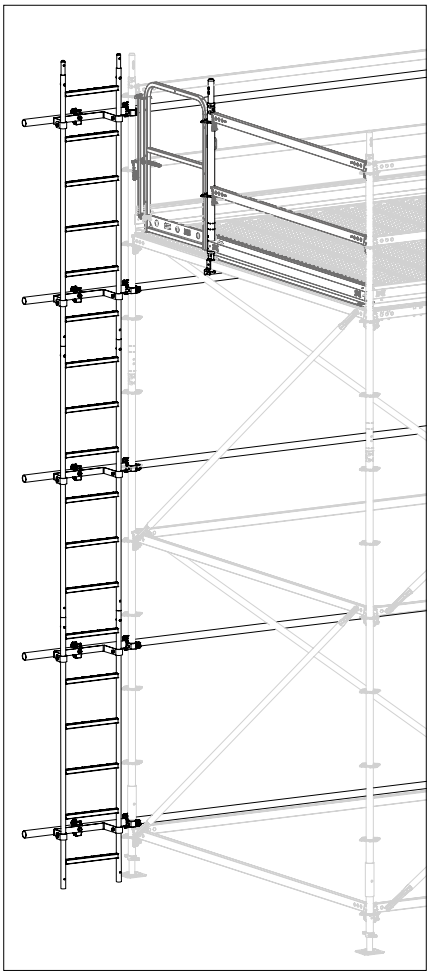


Fig. A9.01

Ladder Connector UAM-W

Suitable for
- Round tubes Ø 48.3 mm.
- Rectangular profile 60x30 mm.

Assembly of the ladder connector
1. Pull the wedge (**72.1**) out of the clamping part (**72.2**) and push the clamping part over the ledger (**15**).
2. Insert the wedge into the clamping part and hammer it tight. (Fig. A9.02a)

→ Ladder connector is installed.

Ladder assembly
1. Knock out wedge from the half-coupling (**72.3**) and open half-coupling.
2. Insert the ladder and close the half-coupling. Secure the wedge. (Fig. A9.02b)

→ Ladder is installed.

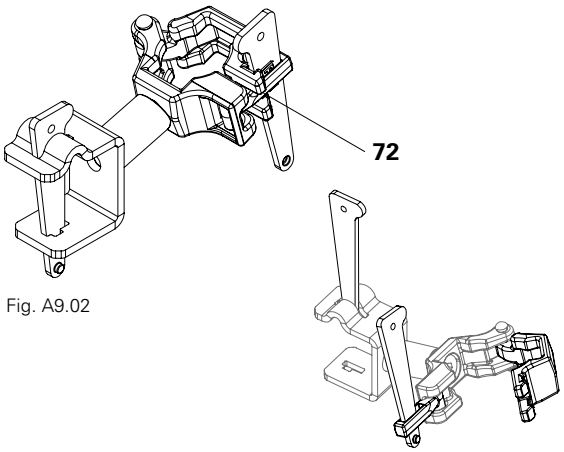


Fig. A9.02

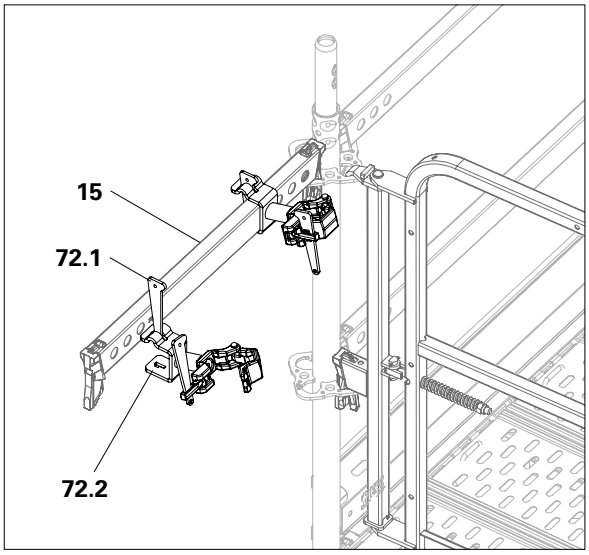


Fig. A9.02a

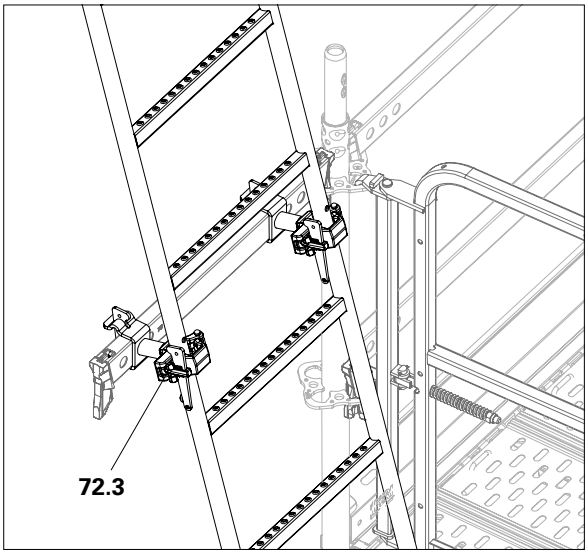


Fig. A9.02b

Ladder Connector Ledger UAM-S

Suitable for
- Round tubes from Ø 32.0 to 48.3 mm.
- Rectangular tubes with width 25 to 30 mm and height from 30 to 80 mm adjustable via screws.

Assembly of the Ladder Connector
The Ladder Connector Ledger UAM-W (**71**) is installed on the ledger in the same way as described for
Ladder Connector Ledger UAM-S.
→ Ladder Connector UAM-S is installed.

Ladder assembly
1. Completely unscrew one screw (**71.1**) from the pipe clamp part (**71.2**). Open the second screw far enough that the ladder stile can be placed.
2. Insert the stile into the pipe clamp.
3. Swivel up the pipe clamp part and tighten with screws. (Fig. A9.03 + Fig. A9.03a)

→ Ladder is installed.

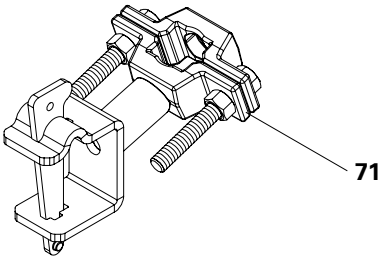


Fig. A9.03

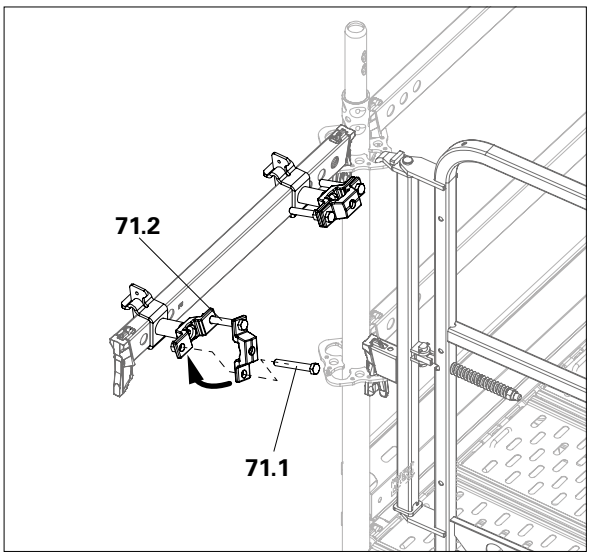


Fig. A9.03a

Ladder UAV

Ladder elements that can be plugged into each other, with holes for connection.
Dimensions: 43x91 cm
43x181 cm

Assembly
1. Assemble the individual elements of the Vertical Ladder UAV (**74/74a**) as required.
2. Secure pin connection with M10x40 bolt and nut. (Fig. A9.04)

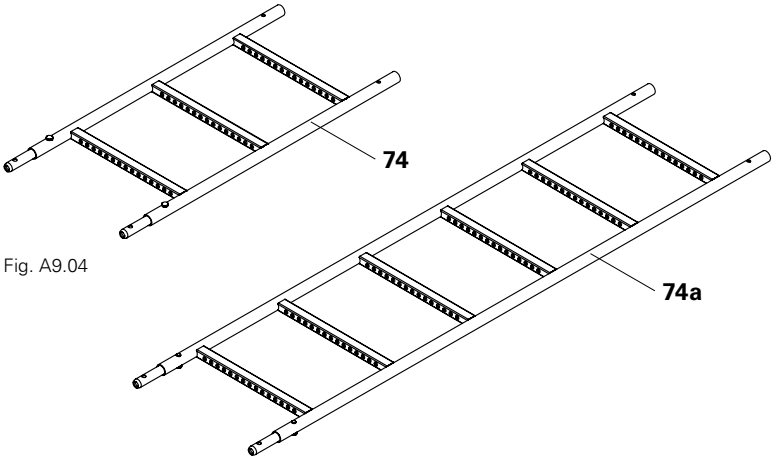


Fig. A9.04

Ladder Connector Diagonal UAD

When attaching a ladder to the side of the base scaffold, the Ladder Connector UAC-2 must be braced with the Ladder Connector Diagonal UAD (**73**). (Fig. A9.05a)

For assembly, see Section "Lower/additional ladder connectors" on page 106.

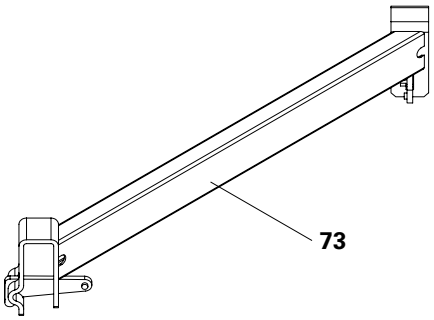


Fig. A9.05

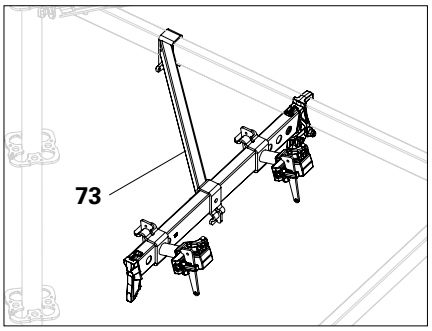


Fig. A9.05a

Installing the access ladder

Upper ladder connection

Assembly

1. Insert ledger (**15**) 1 m above the deck level on torsionally stiff standard (**12**) in the rosette and hammer wedge tight.
2. Install Ladder Connector UAM-S or UAM-W (**72**) on ledger (**15**).
3. Open the ladder connectors and place, for example, Ladder Alu UAI (**75**) in the half-shells of the ladder connectors.
4. Adjust the ladder connectors to the stile spacing of the ladder and hammer the wedges in tight.
5. Close the ladder connectors and tighten the screws or hammer the wedges in tight.
   (Fig. A9.06a + Fig. A9.06b)

- If other ladders are used, also follow the manufacturer's instructions for use.

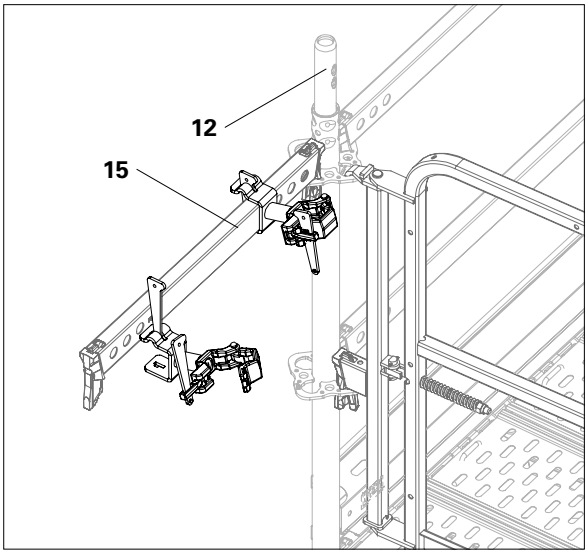


Fig. A9.06a

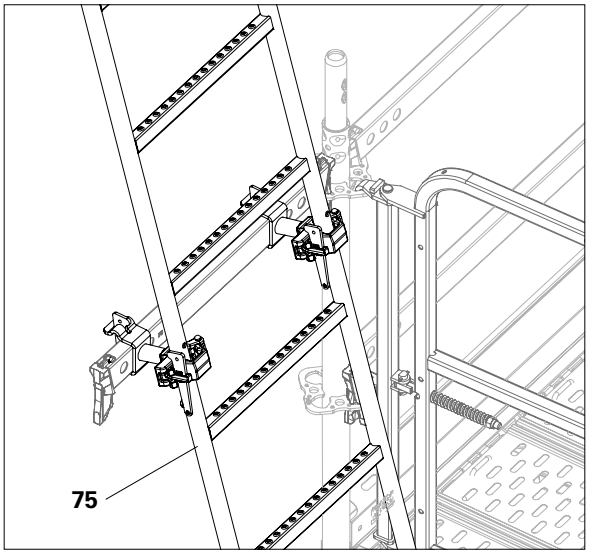


Fig. A9.06b

Lower/additional ladder connectors

The ladder must be held in position below with the ladder connector. Depending on the length, additional connectors may be necessary.

Assembly

1. Attach the Ledger to Ledger Coupler UHA-2 (**93**) and the ledger (**15**).
2. Install Ladder Connector UAM-W (**72**) or UAM-S on the ledger.
3. Fit the Ladder Connector Diagonal UAD (**73**) to both ledgers for bracing and hammer the wedges in tight.
4. Open the screws or wedges of the ladder connectors and place the ladder in the half-shells of the ladder connectors.
5. Close the ladder connectors and tighten the screws or hammer the wedges in tight. (Fig. A9.07)

→ Ladder is installed. (Fig. A9.07a)

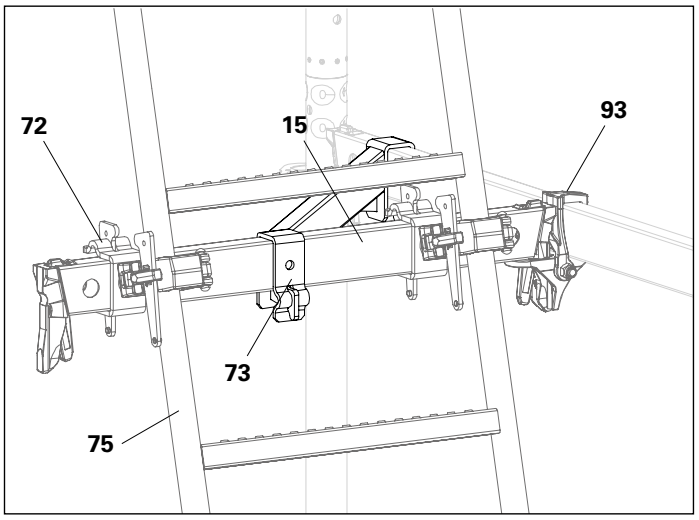


Fig. A9.07

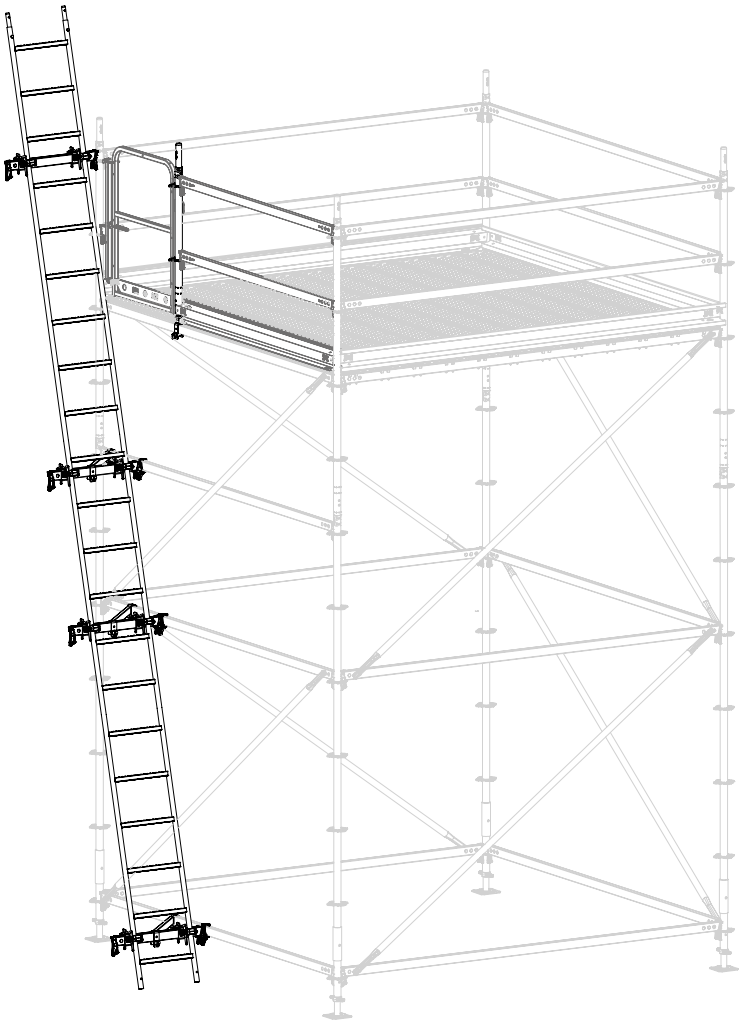


Fig. A9.07a

Ladder Connector UAV 43-C

For the lateral attachment of a Vertical Ladder UAV to the base scaffold with scaffolding tubes

Assembly

1. Pre-assemble the Vertical Ladder UAV (**74/75**) with the Ladder Connector UAV (**70**). (Fig. A9.08a)
2. For the first ladder element, mount the lower ladder connector between the first and second rung, and the upper ladder connector between the 7th and 8th rung. Install the rung.
3. Screw the side screw (**70.1**) through the nut on the inside of the ladder connector. At least one full thread turn must protrude. It is not necessary for the screw head to be flush.
4. Screw the scaffolding tube (**145**) to at least 2 standards (**13**) with standard couplers (**87**). (Fig. A9.08c) Distance between standards must be equal to the cantilever at least. (Fig. A9.08b)
5. Screw the ladder connector to the projecting scaffolding tube with the tube coupling (**70.2**). (Fig. A9.08b)
6. Ladder connectors do not absorb vertical forces, therefore place the first element of the Ladder Connector UAV load-bearing on the substrate.

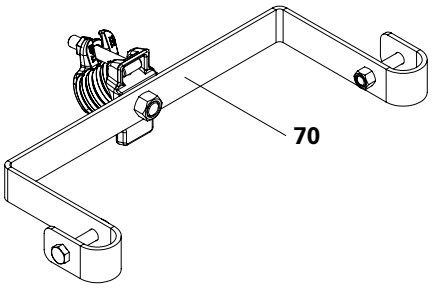


Fig. A9.08

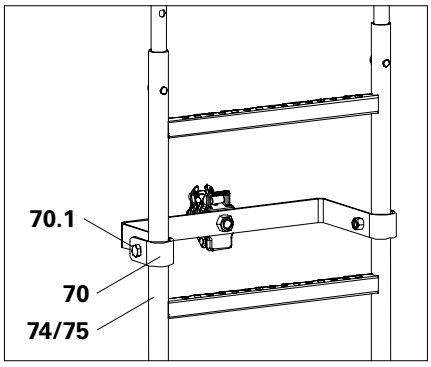


Fig. A9.08a

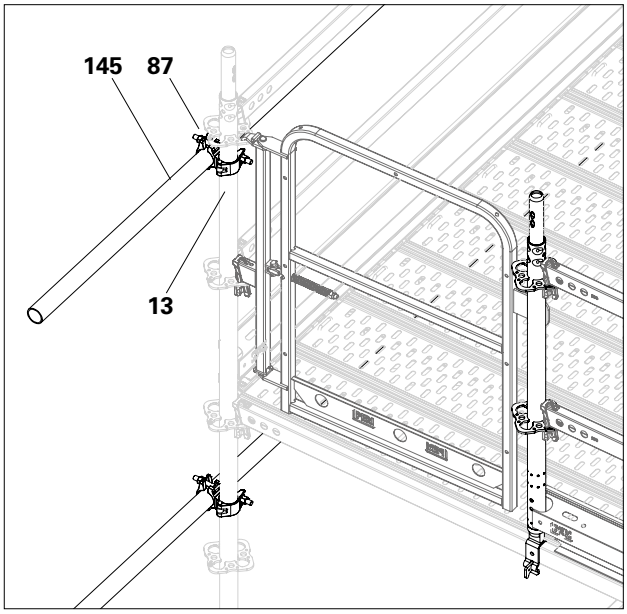


Fig. A9.08b

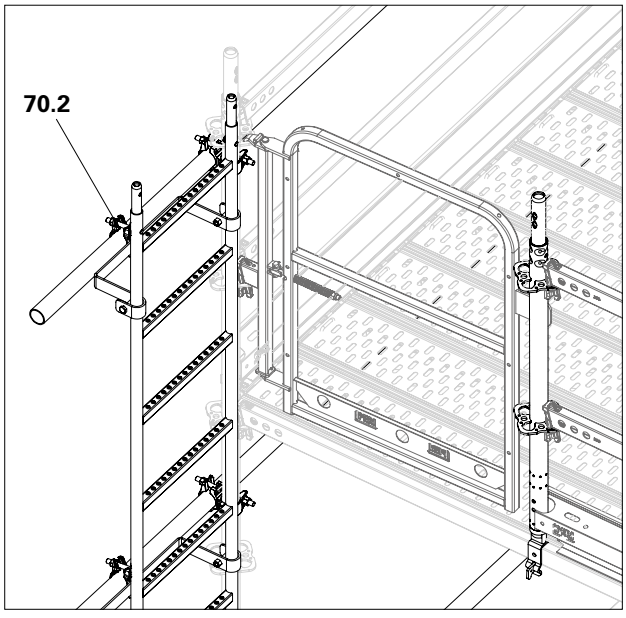


Fig. A9.08c

7. Fit each additional connected ladder with ladder connectors. Distance between ladder connectors approx. 1 m.
8. Install the ladder access approx. 1 m above the desired access height.
9. Fit a ladder connector at the top end of the ladder access in the area of the last rung.

→ Ladder is installed. (Fig. A9.08d)

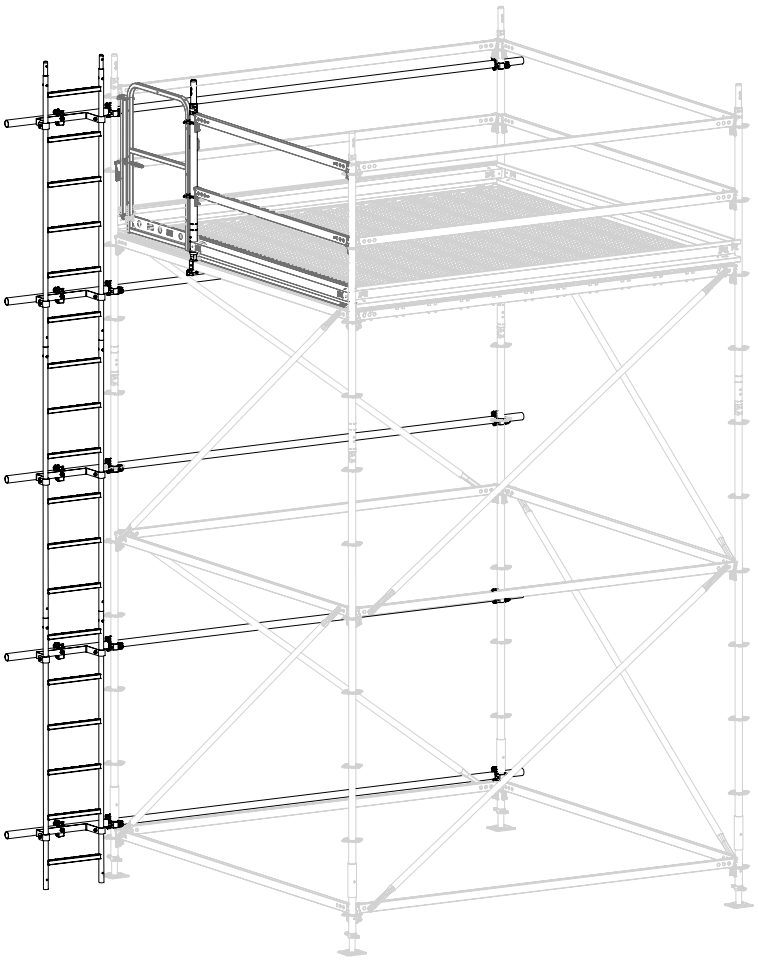


Fig. A9.08d

Ladder Connector UAC-2

For attaching ladders 180/6 to the base scaffold.

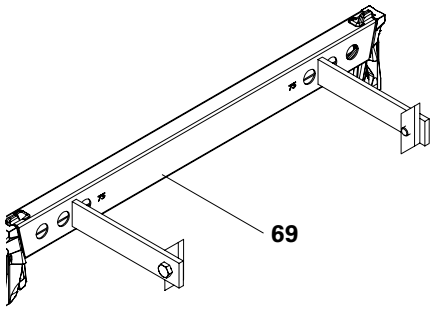


Fig. A9.09

Ladder 180/6

Connecting ladder parts

1. Push the upper ladder 180/6 (**76**) with the connector piece (**76.1**) into the lower ladder 180/6 (**76a**) up to the stop.
2. Secure the bottom ladder to the connector using the 4 bolts M12 x 40 and nuts (**76.2**) which have been provided.
3. Install the Ladder Base ga (**77**) in the same manner with 4 bolts M12 x 40 and nuts onto the connecting piece of the lower ladder. (Fig. A9.10)

Fixing the Ladder Base ga

1. Extend the bracket (**77.1**) of the Ladder Base ga to the substrate. Screw the bracket to the substrate using suitable means.

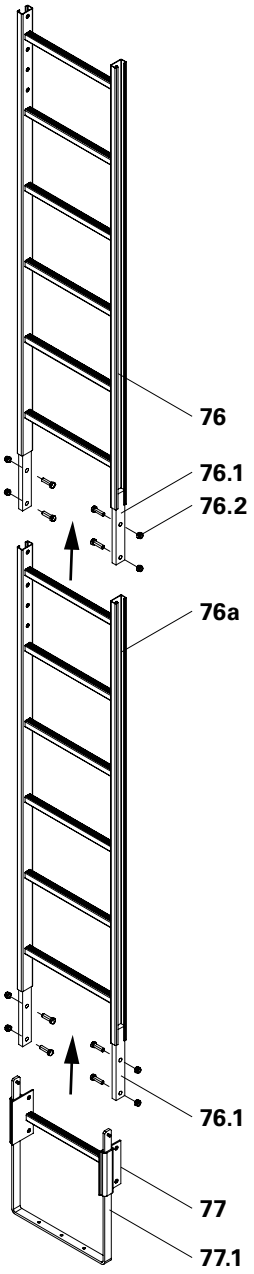


Fig. A9.10

Assembly

1. Insert Ladder Connectors UAC-2 (**69**) into rosettes on torsionally stiff standards (**13**) and knock wedges into place. (Fig. A9.11)
2. If necessary, brace Ladder Connectors UAC-2 with Ladder Connector Diagonal UAD.
3. Fit ladder 180/6 to ladder connector. To do this, slightly loosen screw M12 x 25 of the clamping plate (**69.1**), insert the clamping plate into the ladder stile (**76.1**), turn and tighten the screw. (Fig. A9.12 - Fig. A9.12b)
4. Ladder connectors do not absorb vertical forces, therefore screw the first element of the fixed ladder, e.g. with adjustable Ladder Base 30 ga, to the substrate.
5. Fit each additional connected ladder with ladder connectors.
   Distance between ladder connectors approx. 1 m.
6. Install the ladder access approx. 1 m above the desired access height.
7. Fit a ladder connector at the top end of the ladder access in the area of the last rung. (Fig. A9.12)

→ Ladder is installed.

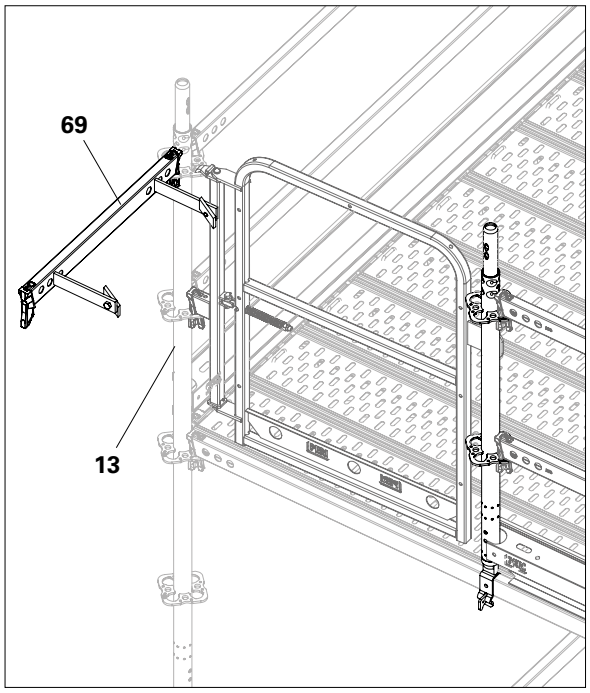


Fig. A9.11

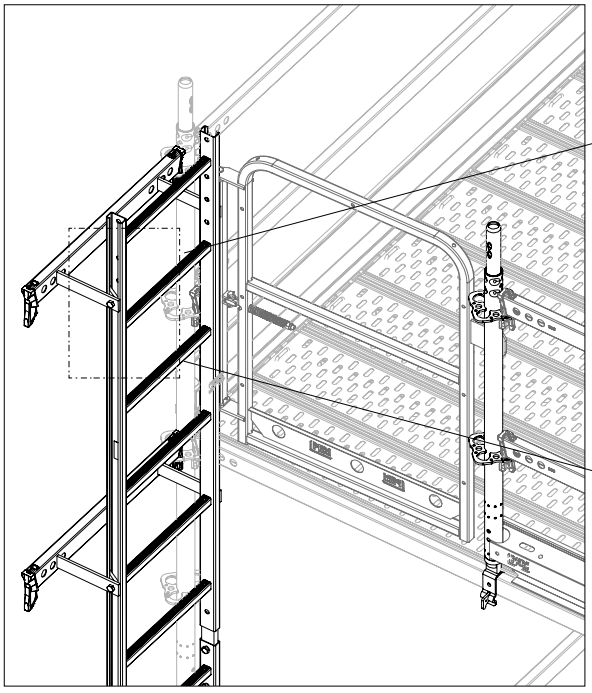


Fig. A9.12

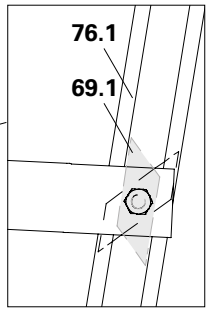


Fig. A9.12a

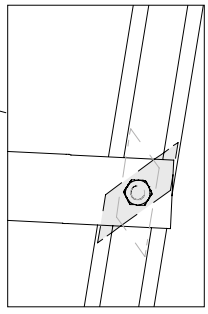


Fig. A9.12b

Installing the ladder cage

- The distance from the erection surface of the ladder to the ladder safety cage may be a height of 2.2 m – 3.0 m.
- The opening between two ladder safety cages must not exceed 50 cm.
- If the ladder is installed parallel to the base scaffold, access to the scaffold is only possible in one position.

1. Bring and hold the ladder safety cage (**78**) in position using a rope.
2. Slightly loosen screw M12 x 25 (**4x**) of the clamping plate (**78.1**), insert clamping plate into the ladder stile (**76**), turn and tighten screw.

→ The ladder cage is installed ((Fig. A9.13a) + (Fig. A9.13b))

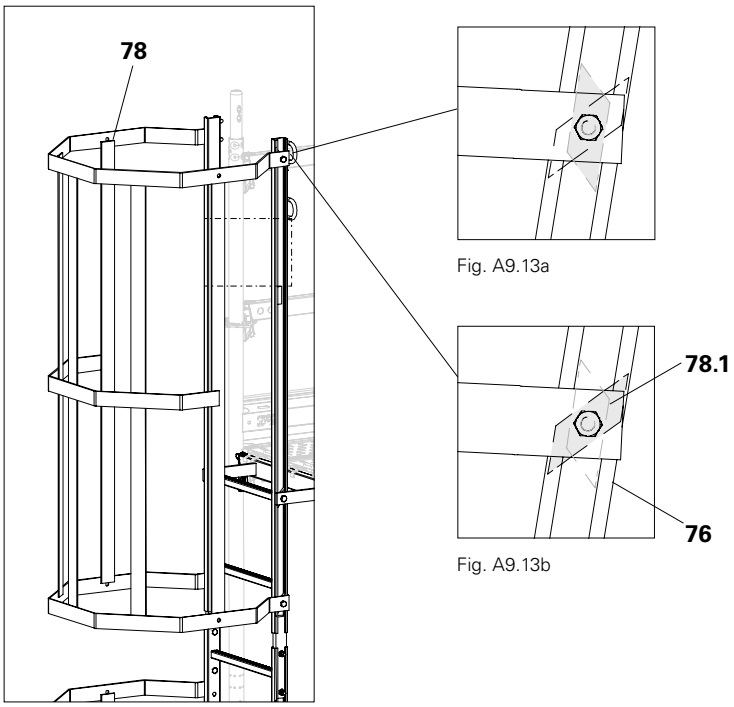


Fig. A9.13a

Fig. A9.13b

Fig. A9.13

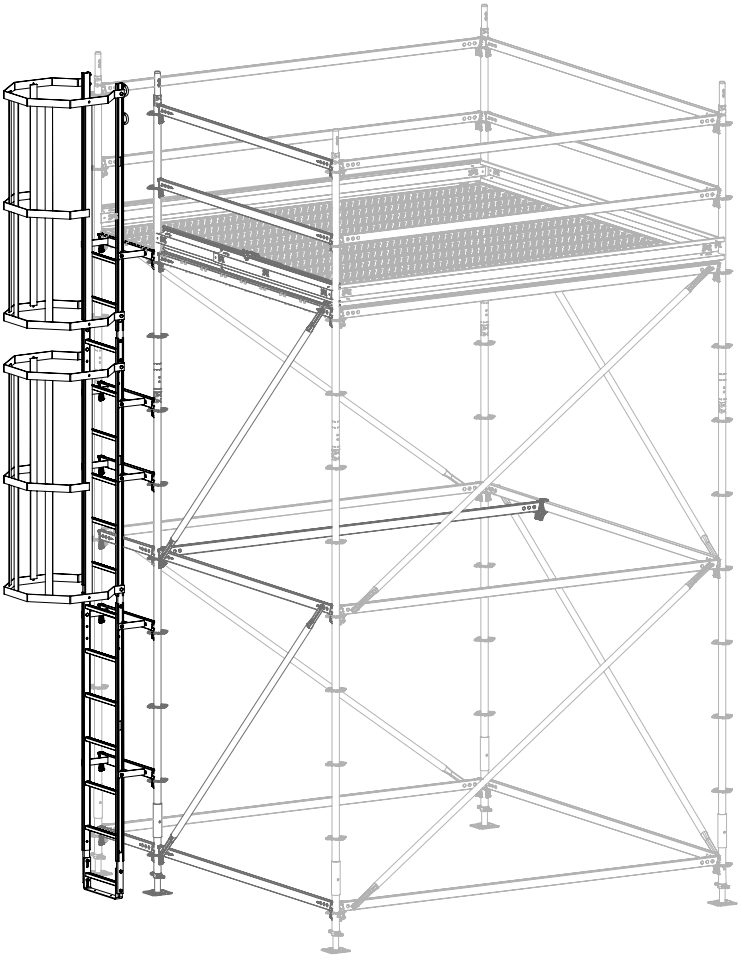


Fig. A9.14

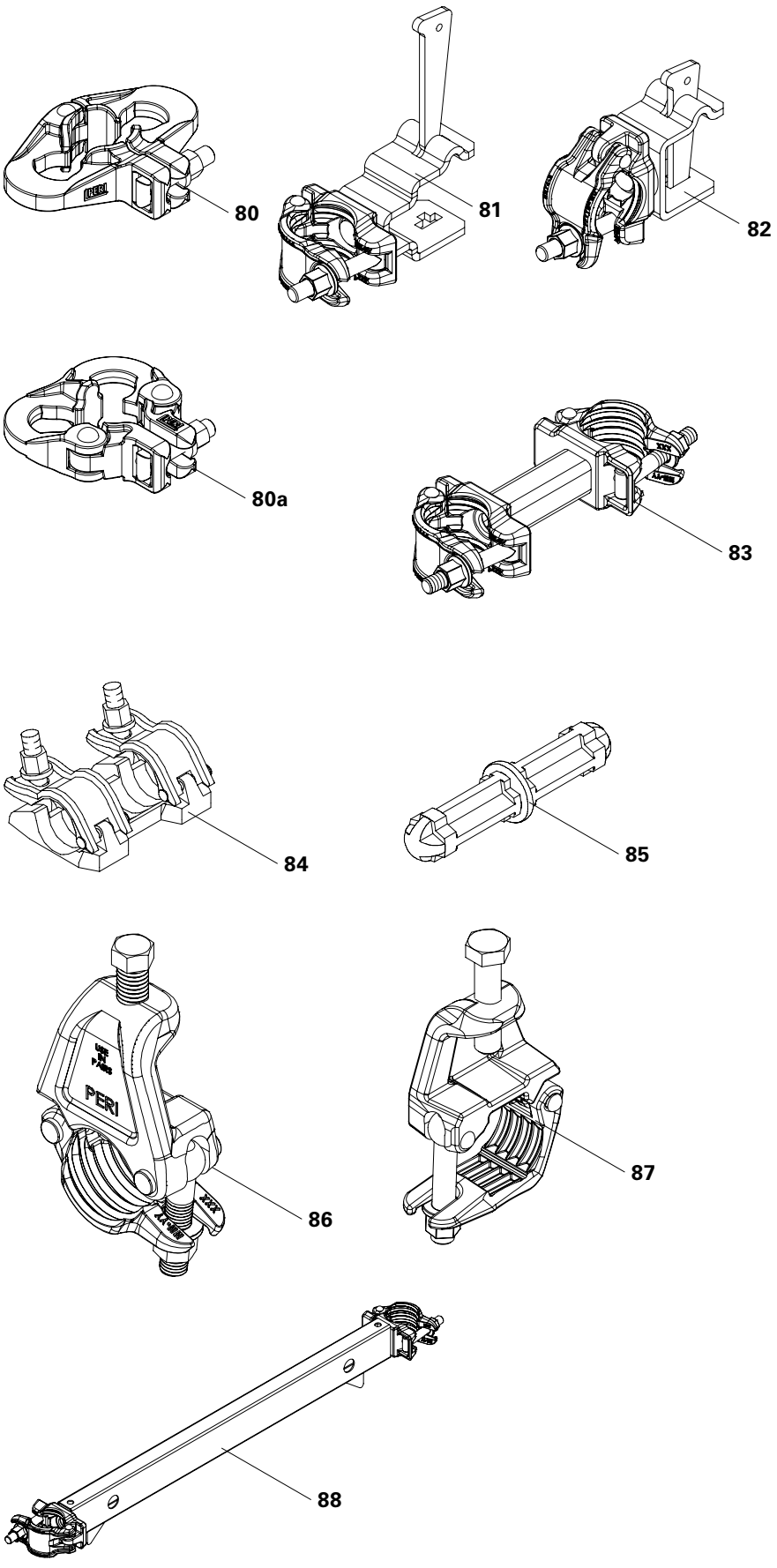
General information

Tighten all screw connections and couplings with 50 Nm.

In any case, carry out a structural stability analysis.

Components

80 Clamping Rosette UEV 180°
80a Clamping Rosette UEV 90°
81 Coupling UH 30/60
82 Coupling UH
83 Spacer UEC-2
84 Tension coupler 1 1/2 inch
85 Tube connector 1 1/2 inch
86 Flange Coupler UEF
87 Flange Coupler UEF-2
88 Coupler Ledger UHC 67/75/100



Clamping rosettes

e.g. for connecting ledgers between the welded rosettes of the standards.
Available as:
- Clamping Rosette UEV 180°
- Clamping Rosette UEV 90°.

Suitable for all scaffolding tubes with Ø 48.3 mm.
Total permissible load:
Fs = 6.0 kN.
The distribution of the total load on both ledger-to-ledger couplers is freely selectable.

Assembly
1. Open the screw connection of the Clamping Rosette UEV (**80/80a**).
2. Place the clamping rosette around the standard (**13**), align it in the system axis and close it.
3. Tighten the screw connection of the clamping rosette with 50 Nm.

→ Clamping rosette is installed.

Application example
e.g. connection of shoring towers with ledgers.
Console brackets, supports on intermediate heights.

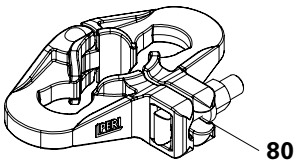


Fig. A10.01

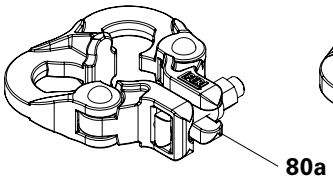


Fig. A10.02

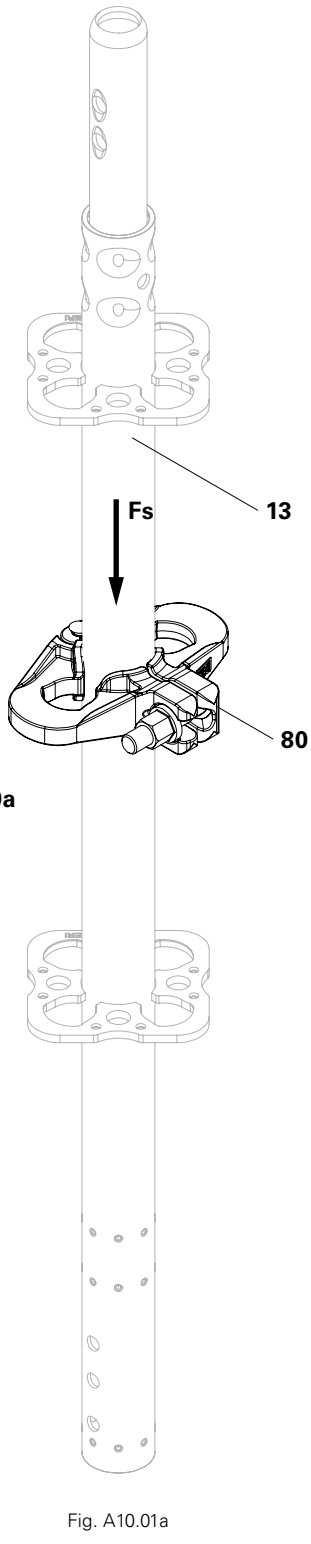


Fig. A10.01a

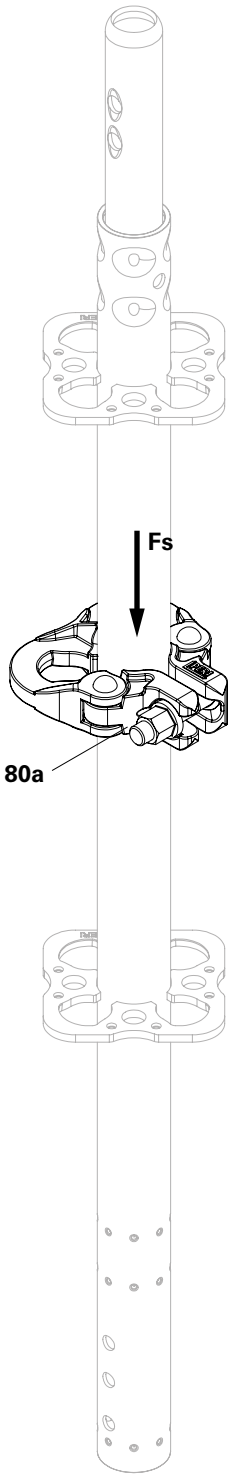


Fig. A10.01b

Coupling UH 30/60

- The ledger serving as a support must be verified for these additionally introduced forces.
- For connecting scaffolding tubes Ø 48.3 mm to ledgers.
- Assembly can be carried out from above or from the side.
- The pipe coupling is freely rotatable at the clamping part.
- Permissible loads:
  - Coupling on narrow side (**A**) upright position:
    $F_s \leq 1.40$ kN
    $F_f \leq 2.67$ kN
  - Coupling on wide side (**B**) horizontal position:
    $F_s \leq 0.80$ kN
    $F_f \leq 2.67$ kN

The direction of pull can be freely selected between lengthwise and crosswise to the ledger. The permissible values for F_Q and F_L must not be exceeded.

Install on the narrow ledger side in an upright position, not suspended below it.
Install on the wide ledger side so that the wedge is knocked into place from top to bottom.

Check that the wedge is firmly seated at regular intervals in accordance with the service life and load. Create a test plan if necessary.

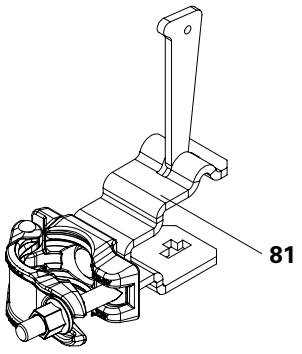


Fig. A10.03

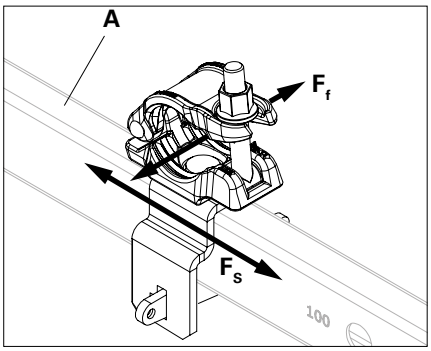


Fig. A10.03a

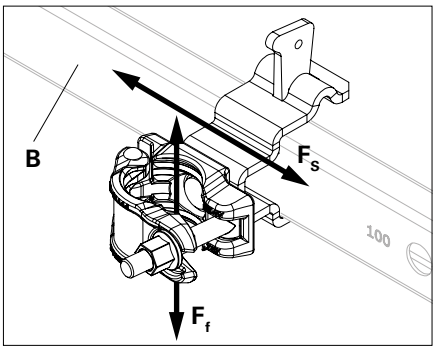


Fig. A10.03b

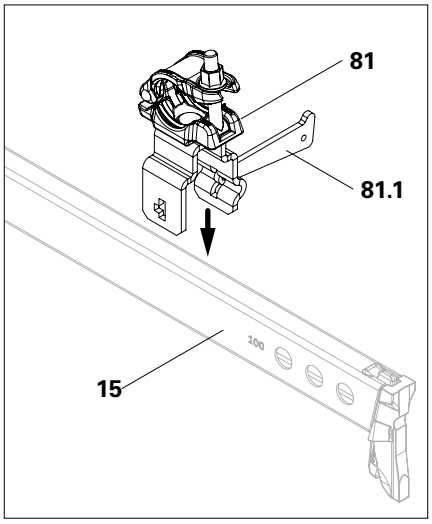


Fig. A10.03c

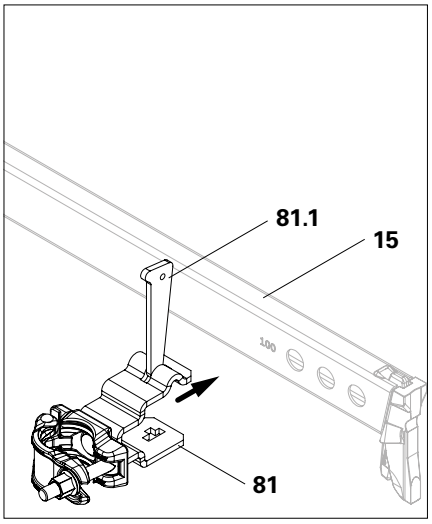


Fig. A10.03d

Assembly

1. Pull the wedge (**81.1**) out of the clamping part and put the clamping part over the ledger (**15**) from the side or from above. (Fig. A10.03c + Fig. A10.03d)
2. Insert the wedge into the clamping part and hammer it tight.
3. Fit the scaffolding tube (**145**) in the tube coupling (**81.2**). (Fig. A10.03e)
4. Tighten the coupling with 50 Nm.

→ Coupling connection is installed.

Application example

For bracing scaffold superstructures.

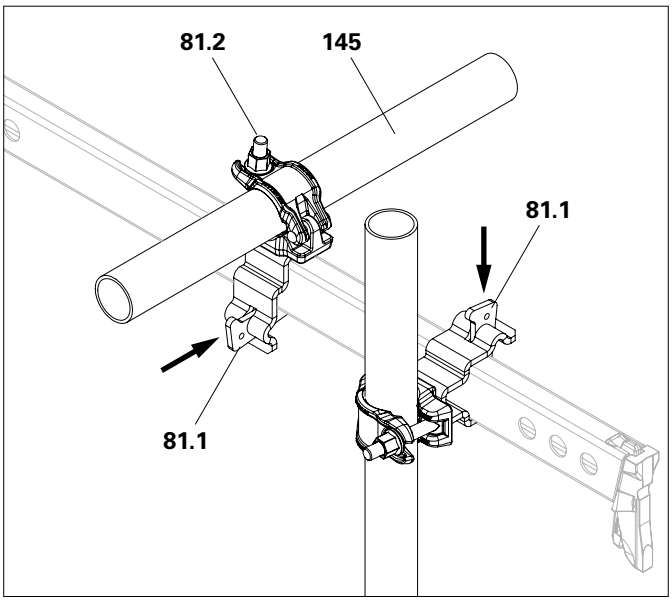


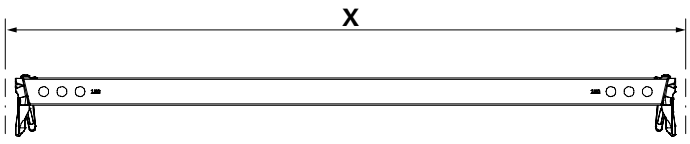
Fig. A10.03e

Permissible transverse loads UH Plus and UH-2	
Length X [mm]	**Permissible transverse load Py [kN]**
250	2.67*
500	2.67*
670	2.67*
750	2.67*
1,000	2.67*
1,250	2.67*
1,500	2.67*
1,750	2.40 (2.55)**
2,000	1.80 (2.15)**
2,250	1.45 (1.90)**
2,500	1.20 (1.67)**
3,000	0.86 (1.33)**

Tab. A10.01

***** 2.67 kN - max. permissible force for Coupling UH 30/60

****** Without consideration of suitability for use



Coupling UH

- The ledger serving as a support must be verified for these additionally introduced forces.
- For connecting scaffolding tubes Ø 48.3 mm to ledgers.
- The pipe coupling is freely rotatable at the clamping part.
- Permissible loads:
  $F_{longitudinal} \leq 0.67$ kN
  $F_{transverse} \leq 2.00$ kN
  The direction of tension between longitudinal and transverse to the ledger can be freely selected. The permissible values for F_Q and F_L must not be exceeded.

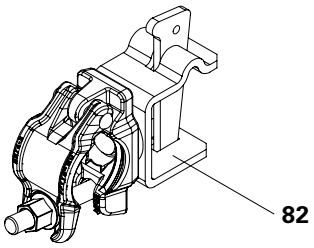
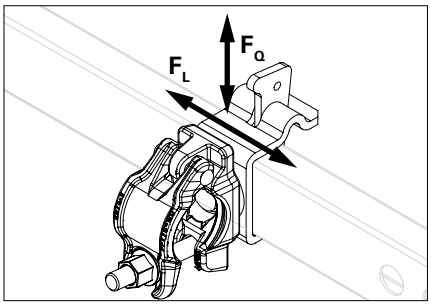


Fig. A10.04



Assembly

1. Pull the wedge (**82.1**) out of the clamping part and put the clamping part over the ledger (**15**) from the side. (Fig. A10.04a)
2. Insert the wedge into the clamping part and hammer it tight. (Fig. A10.04b)
3. Fit the scaffolding tube (**145**) in the tube coupling (**82.2**). (Fig. A10.04c)
4. Tighten the coupling with 50 Nm.

→ Coupling connection is installed.

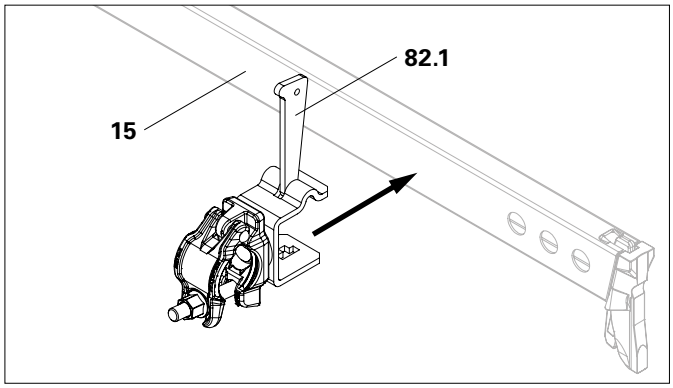


Fig. A10.04a

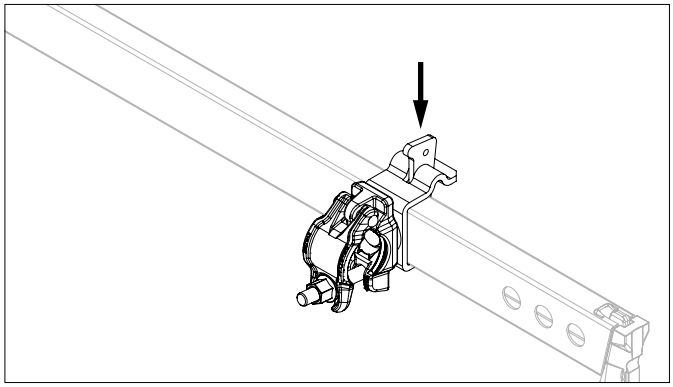


Fig. A10.04b

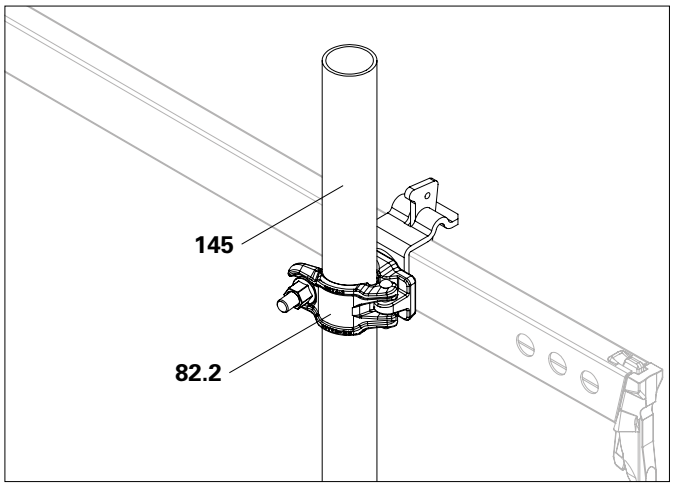


Fig. A10.04c

Application example

For bracing scaffold superstructures.

Spacer UEC-2

For connecting verticals Ø 48 mm.

Assembly

1. Position the verticals to be connected in such a way that the assembly can take place without tension.
2. Open both couplings of the Spacer UEC-2 (**83**) and mount it on the verticals.
3. Tighten the couplings with 50 Nm.

→ Spacer is installed. (Fig. A10.05a)

With the previous version Spacer UEC 10, the rosettes must be offset in height. (Fig. A10.05b)

Application example

For the structural connection of individual scaffolds that are not at right angles.

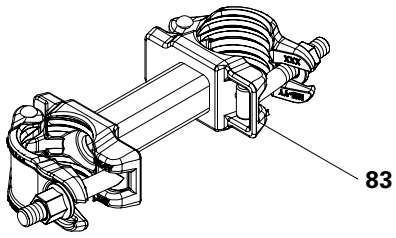


Fig. A10.05

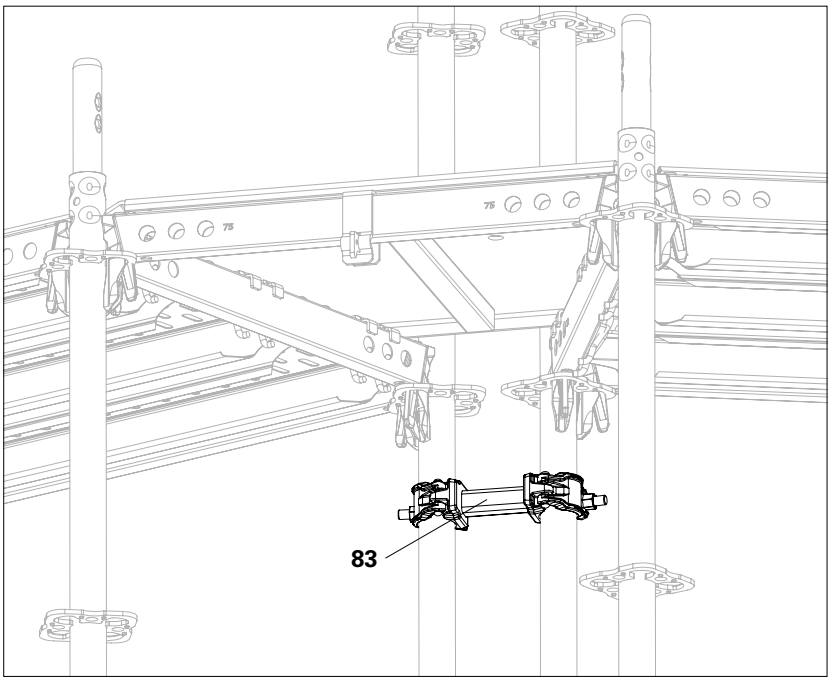


Fig. A10.05a

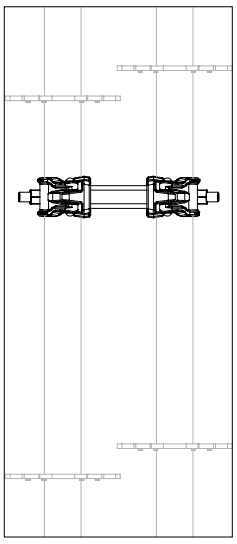


Fig. A10.05b

Tension coupler Ø 48.3
Tube connector Ø 48.3

The Ø 48.3 (**84**) tension coupler is used in conjunction with the Ø 48.3 (**85**) tube connector to extend scaffolding tubes.

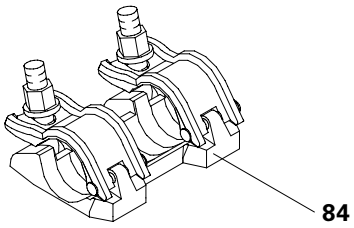


Fig. A10.06

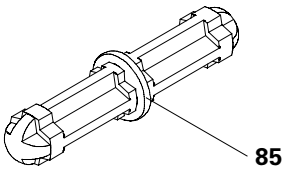


Fig. A10.07

Tension coupler Ø 48.3
Permissible loads:
Class A coupling
Permissible $F_{Tension}$ =3.6 kN.

Connected scaffolding tubes have reduced tensile and compressive stability.
Evidence of structural stability is always required.

Assembly
1. Insert tube connector (**85**) into scaffolding tube Ø 48.3 x 3.2 (**145**). (Fig. A10.07a)
2. Attach another scaffolding tube to the second side of the tube connector.
3. Connect scaffolding tubes with tension coupler (**84**). Tighten the couplings with 50 Nm. (Fig. A10.07b)

→ Scaffolding tubes are connected.

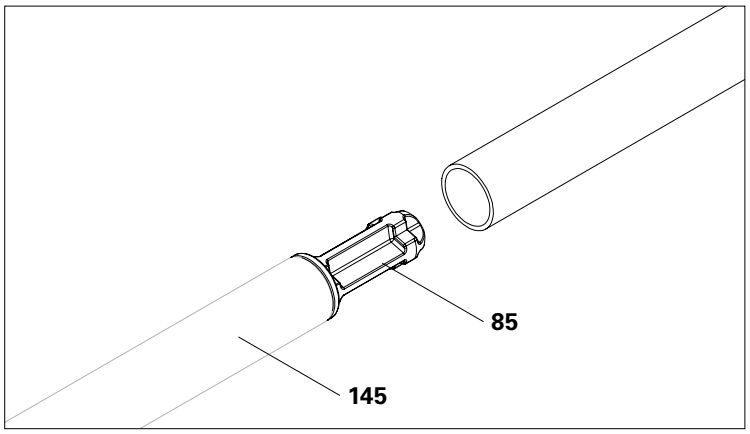


Fig. A10.07a

Application example
Extension of scaffolding tubes and anchors.

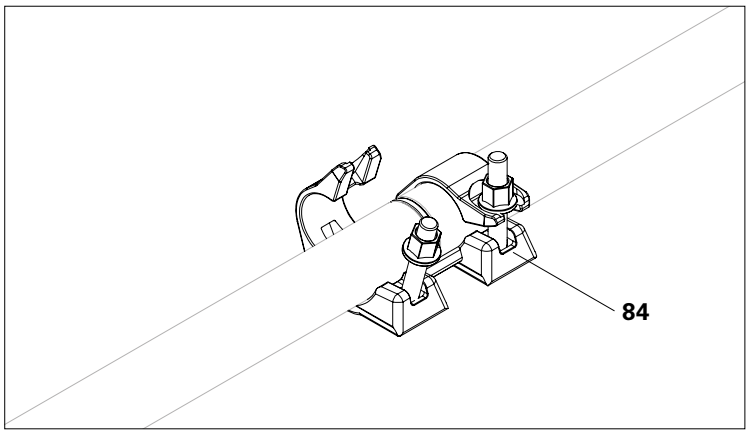


Fig. A10.07b

Flange Coupler UEF-2

For connecting scaffolding tubes and Ledgers UH to flange supports. Ledgers may only be mounted in a vertically suspended manner.
(Fig. A10.08b + Fig. A10.08c)

Scaffolding tubes can be mounted on flange supports of any inclination.
(Fig. A10.08d + Fig. A10.08e)
For permissible loads, see Tab. A10.03.

Only use Flange Couplers UEF-2 (**87**) in pairs and in clamps. The scaffolding tube or the ledger serves as a basis for further construction with a system scaffold.

Technical data
Flange width: bf ≥ 31 mm
Flange thickness: tf ≤ 36 mm
(Fig. A10.08a)
For permissible suspended loads, see Tab. A10.02, Tab. A10.03 and Tab. A11.01 on page 128

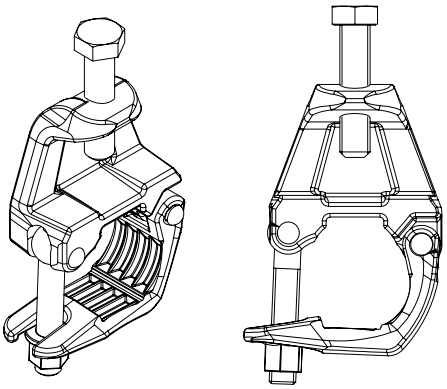


Fig. A10.08

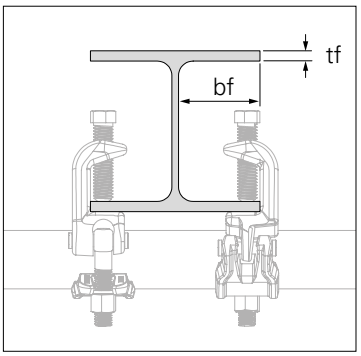


Fig. A10.08a

- The load-bearing capacity of the flange supports must be verified individually.
- Flange couplings must be pushed onto the flange support up to the stop in order to keep the bending stress low.
- Additionally verify the introduction and transmission of the forces into the steel supports. You can limit the permissible load of the entire connection!
- The verifications for the scaffolding tube must be carried out additionally and are not included in the specified permissible loads!

Flange Coupler UEF

For connecting scaffolding tubes to flange supports.
Flange Couplers UEF (**86**) can be used on flange supports of any inclination. (Fig. A10.09)

Only use Flange Couplers UEF (**86**) in pairs and in clamps. The scaffolding tube serves as a basis for further construction with a system scaffold.

Technical data
Flange width: bf ≥ 31 mm
Flange thickness: tf ≤ 36 mm
(Fig. A10.09b)
For permissible suspended loads, see Tab. A10.02, Tab. A10.03 and Tab. A11.01 on page 128

Risk of confusion
The Flange Coupler UEC (**116**) (Fig. A10.10) has been replaced by the Flange Coupler UEF (**86**) (Fig. A10.09) . The Flange Coupler UEC can still be used, but has a lower load capacity compared to the Flange Coupler UEF. It can only be mounted on horizontal flange supports.

- The instructions for UEF-2 also apply to UEF and UEC flange supports.

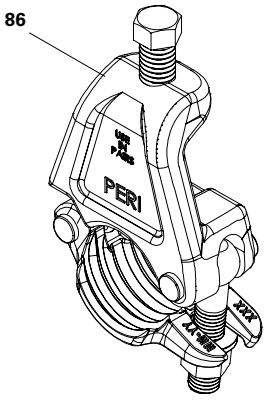


Fig. A10.09

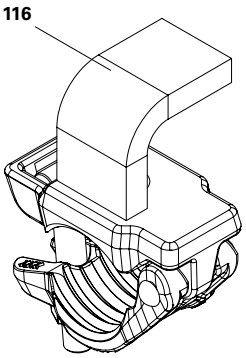


Fig. A10.10

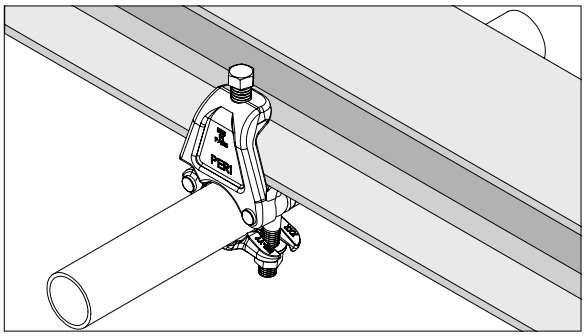


Fig. A10.09a

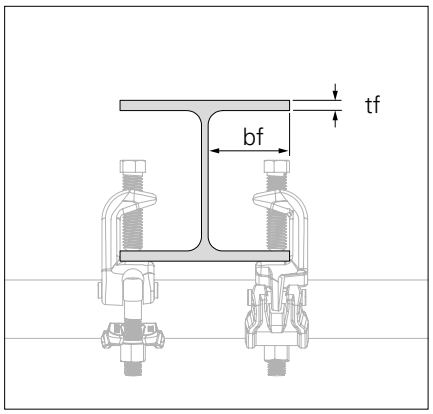


Fig. A10.09b

Flange couplings on horizontal flange supports
e.g. for assembly of a suspended scaffold.

Variant 1
Two flange couplings mounted on a flange support on both sides.
(Fig. A10.11a)

Variant 2
Two flange couplings mounted on the outside of two flange supports.
(Fig. A10.11b)

Variant 3
Two flange couplings mounted on two flange supports. (Fig. A10.11c)

Assembly
1. Open fixing screws (**86.1**) on flange clamping piece (**86**) of flange couplings.
2. Place two flange couplings alternately on a scaffolding tube (**145**). Tighten the half-coupling of one flange coupling with 50 Nm, do not tighten the other.
3. Push the scaffolding tube with fixed flange coupling onto the flange support up to the stop.
4. Push the second flange coupling against the flange support.
5. Tighten the screw of the second half-coupling with 50 Nm.
6. Tighten the fixing screws.

→ Flange couplings are installed.

The greyed out flange couplings (Fig. A10.11c) do not allow any further load increase!

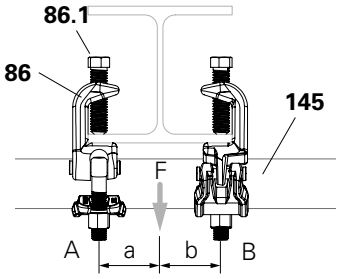


Fig. A10.11a

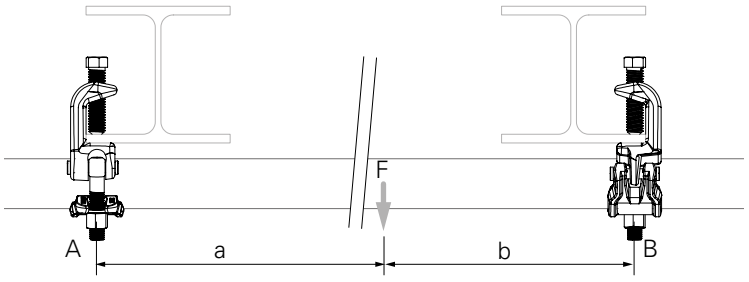


Fig. A10.11b

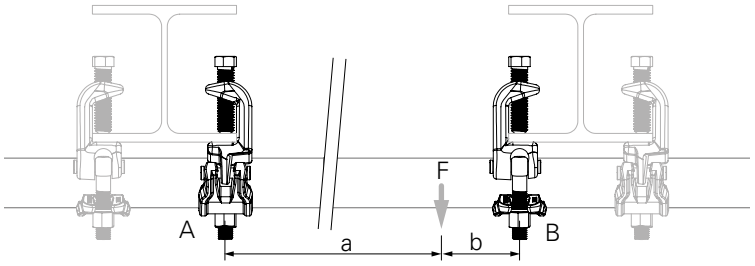


Fig. A10.11c

The permissible load is determined by dividing the distance into sections a and b.
The maximum attachment load is achieved centrally between the flange couplings.
For further allocations, see Tab. A10.02.

Application example
For suspended scaffolds, see Instructions for Assembly and Use "PERI UP Flex Suspended Scaffold".

Permissible load between two flange couplings							
Allocation		**UEF/UEF-2**			**UEC-2**		
a [%]	b [%]	max. F [kN]	max. A [kN]	max. B [kN]	max. F [kN]	max. A [kN]	max. B [kN]
100	0	15.00	0.00	15.00	9.00	0.00	9.00
90	10	16.67	1.67	15.00	10.00	1.00	9.00
80	20	18.75	3.75	15.00	11.25	2.25	9.00
70	30	21.43	6.43	15.00	12.86	3.86	9.00
60	40	25.00	10.00	15.00	15.00	6.00	9.00
50	50	30.00	15.00	15.00	18.00	9.00	9.00
40	60	25.00	15.00	10.00	15.00	9.00	6.00
30	70	21.43	15.00	6.43	12.86	9.00	3.86
20	80	18.75	15.00	3.75	11.25	9.00	2.25
10	90	16.67	15.00	1.67	10.00	9.00	1.00
0	100	15.00	15.00	0.00	9.00	9.00	0.00
		= A + B	≤ 15.00	≤ 15.00	= A + B	≤ 9.00	≤ 9.00

Tab. A10.02

Flange couplings on inclined flange supports

The following loads only apply when the suspension is positioned centrally between the flange couplings.

- The forces specified in the table are permitted subject to the inclination of the flange support.
- The forces shown always relate to two couplings that are subjected to the force precisely in the centre between two couplings. The forces are therefore divided 50:50 between the two couplings.
- Only suitable for scaffolding tubes. Do not fit ledgers to inclined flange supports.
- Slip force:
  Horizontal: max. perm. F_H = 6.0 kN

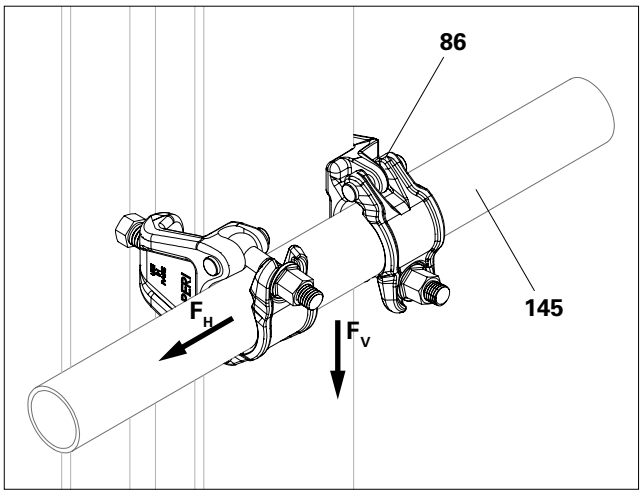


Fig. A10.12

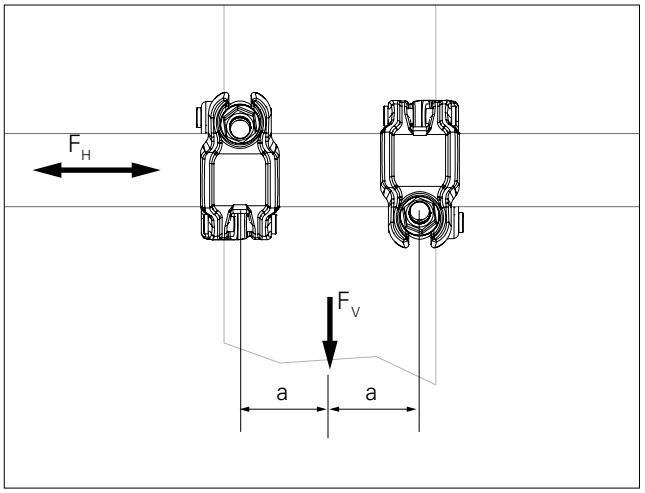


Fig. A10.12a

Assembly

1. Place two Flange Couplings UEF (**86**) alternately on a scaffolding tube (**145**). Tighten only one half-coupling.
2. Open the fixing screws on both flange clamping pieces.
3. Push the flange coupling mounted on the scaffolding tube onto the flange support up to the stop.
4. Tighten the fixing screw as far it will go by hand.
5. Push the second flange coupling onto the flange support up to the stop.
6. Tighten the fixing screw.
7. Tighten the half-coupling with 50 Nm.
8. Tighten the fixing screw of the first flange coupling.

→ Flange couplings are installed.

Permissible load on UEF and UEF-2 couplings	
Girder inclination	Perm. F_V [kN]
30°	31.13
40°	25.52
50°	20.48
60°	19.22
70°	17.95
80°	15.44
90°	3.31

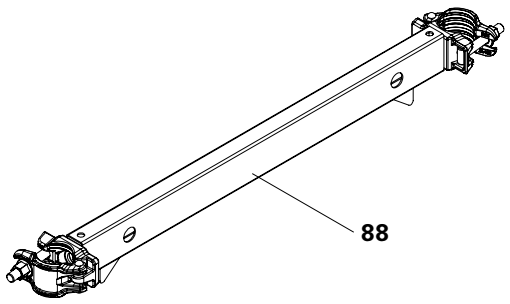
Tab. A10.03

Coupler Ledger UHC

Available in lengths 67 cm, 75 cm, 100 cm.

Standards can be coupled at any point using Coupler Ledgers UHC.

- Only suitable for absorbing horizontal forces.
- Can be used as a platform beam for auxiliary decks.
  → Otherwise, use clamping rosettes and ledgers as platform beams.

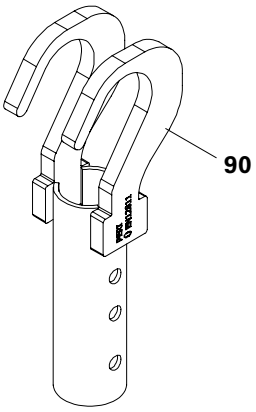


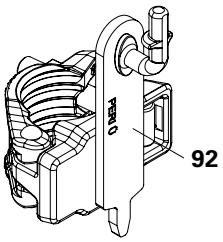
Application example
For bridging, see Section "Lattice Girder ULA/ULS" on page 152

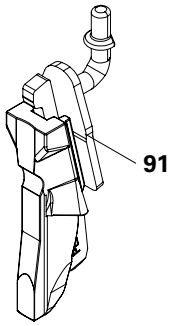
General information

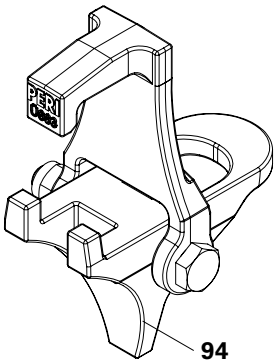
Components

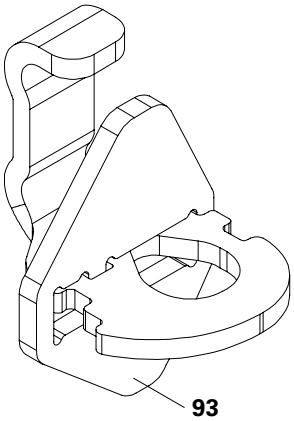
90 Adapter Hanging Scaffold UEH
91 Guardrail Holder EPW
92 Guardrail Coupler EPR
93 Ledger to Ledger Coupler UHA
94 Ledger to Ledger Coupler UHA-2
95 Ledger Bracket UHA half
96 UH-Spigot-2
97 Ledger Bracket UHA-2 half Spi. (previous version)
98 Ledger Bracket UHA-2 half Spi. (new version)
99 Spigot ULT 32
100 Spigot w. Spacer URE 4/42
172 Starter Tube ULB 50/70
173 Starter Tube ULB with rosette

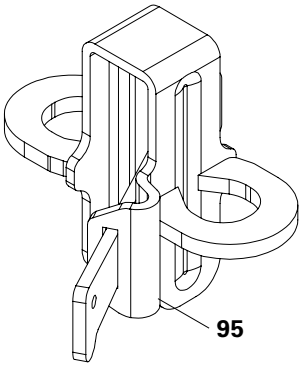


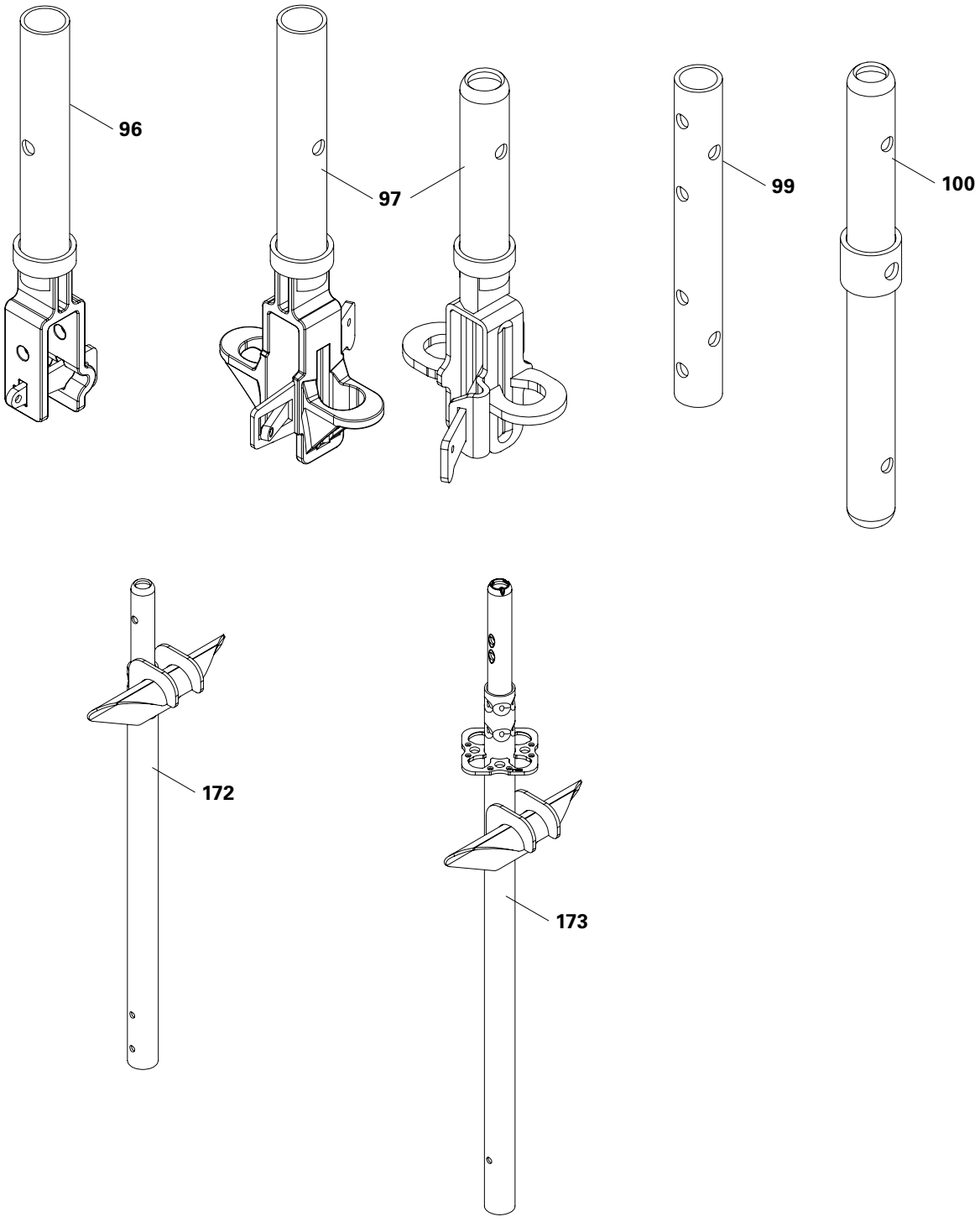











96
97
99
100
172
173

Adapter Hanging Scaffold UEH

With the Adapter Hanging Scaffold EH (**90**), verticals can be suspended as a suspended scaffolding construction.

- Perm. attachment: 31.3 kN
- For permissible attachment loads for standards and fasteners of the tension joints, see Tab. A2.01 on page 41.
- Pay attention to the permissible bending of the scaffolding tube.
- Adapter may only be mounted between two flange couplings.

Installing on scaffolding tube directly under flange support

1. Set Adapter Hanging Scaffold UEH at an angle of approx. 45° and push claws (**90.1**) between the scaffolding tube and flange support. The round inner contour of the adapter hanging scaffold must lie against the scaffolding tube. (Fig. A11.01a)
2. Swing the adapter hanging scaffold down vertically. (Fig. A11.01b)

→ Adapter hanging scaffold is installed.
→ Adapter and scaffold are secured against lifting.

3. Attach the suspended scaffold with locking pin and self-locking nuts in one of the holes (**90.2**). (Fig. A11.01c)
4. The connection is made either with the pin of the UVR or, in the case of the top standard, with the Connector ULT.

Application example

Suspended scaffolds, see Instructions for Assembly and Use "PERI UP Flex Suspended Scaffold"

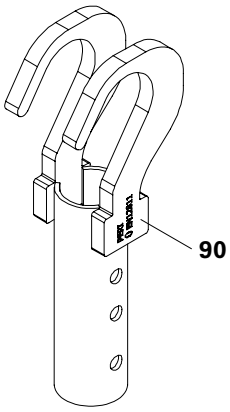


Fig. A11.01

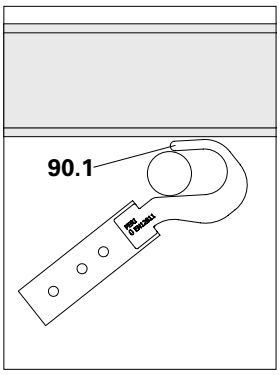


Fig. A11.01a

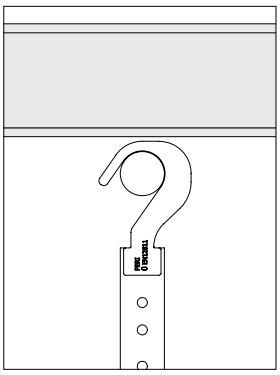


Fig. A11.01b

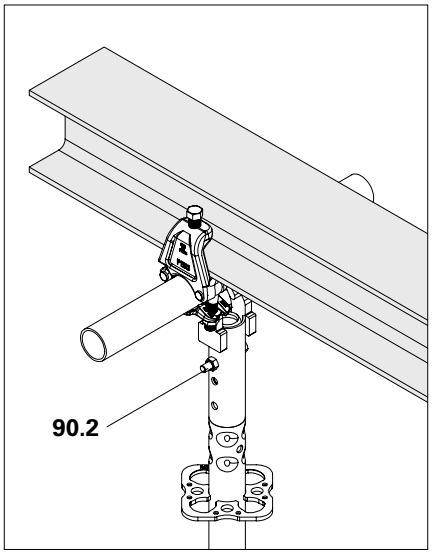


Fig. A11.01c

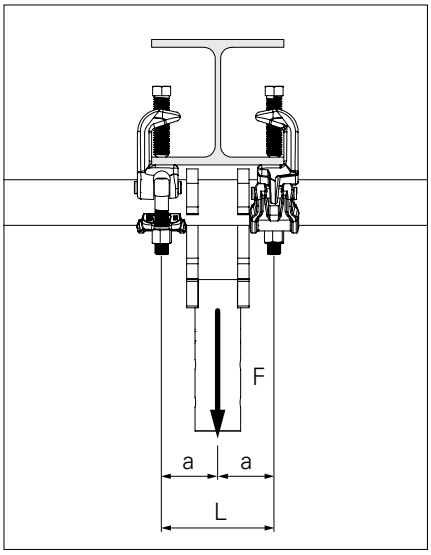


Fig. A11.01d

Permissible attachment load on a flange beam on scaffolding tube traverse min. 48.3 x 3.2 – S235/320		
Span L [mm]	**UEF/UEF-2** Perm. F [kN]*	**UEC** Perm. F [kN]*
320.0	16.9	16.9
300.0	18.2	18.0
280.0	19.6	18.0
260.0	21.3	18.0
240.0	23.3	18.0
220.0	25.7	18.0
200.0	28.6	18.0
191.4	30.0	18.0
80.0	30.0	18.0

*The specified loads only apply when the suspension is positioned centrally between the flange couplings and directly under the flange support

Tab. A11.01

Installing on free scaffolding tube or lattice girder

1. Install the Flange Coupler UEF as described in the Section Flange Coupler UEF.
2. Install Adapter UEH (**90**) as described under Adapter Hanging Scaffold UEH.
3. Install the opposite Adapter UEH (**90a**) rotated through 180°. (Fig. A11.02)
   Hook openings must not point in the same direction.

4. Install verticals and ledgers.

- The scaffolding tube must be verified separately.
- The values given in the table in the previous Section are not valid in this application.

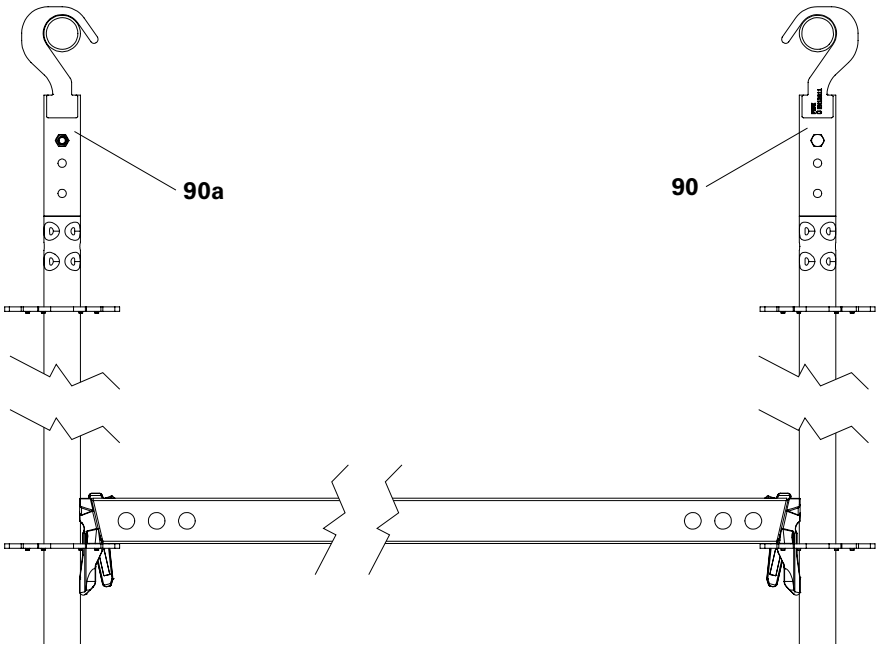


Fig. A11.02

Guardrail Holder EPW

- Install the Guardrail Holder EPW (**91**) so that the guardrail hangs on the deck side of the scaffold.
- 2 Guardrails EPG can be hung overlapping on each guardrail post.

Assembly

1. Insert Guardrail Holders EPW (**91**) into the rosettes of the Standards UVR-2. Guardrail hooks must point inwards towards the deck. Secure the wedges. (Fig. A11.03a)

→ Guardrail Holder EPW is installed.

2. Hang the Guardrails EPG (**33**) and intermediate guardrails on the guardrail hooks. (Fig. A11.03b + Fig. A11.03c)

Application example

Installation of a guardrail in advance.

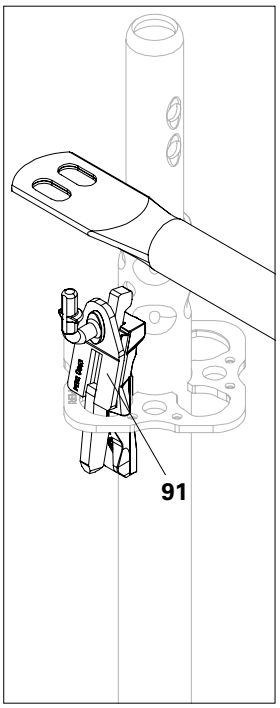


Fig. A11.03a

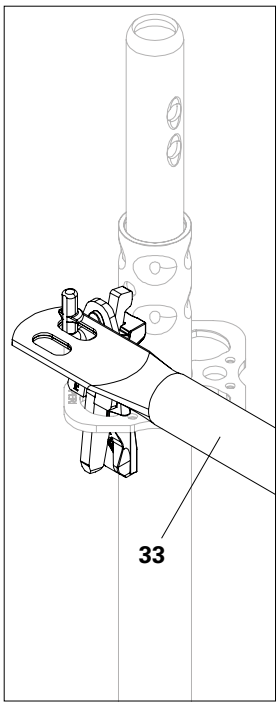


Fig. A11.03b

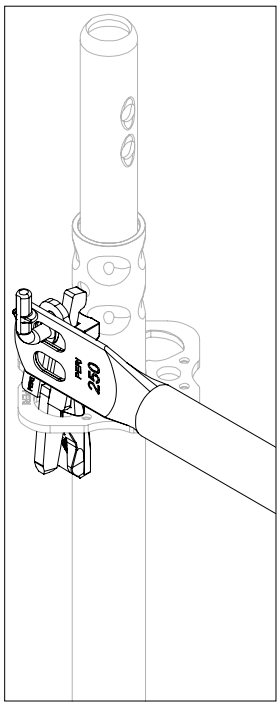


Fig. A11.03c

Guardrail Coupler EPR

- Install the Guardrail Coupler EPR (**92**) so that the guardrail hangs on the deck side of the scaffold.
- 2 Guardrails EPG can be hooked in overlapping on each guardrail coupler.

Assembly

1. Screw the guardrail coupler with guardrail hook (**92.1**) to the top of the standard. Tighten the coupling with 50 Nm. (Fig. A11.04a)

→ Guardrail coupler is installed.

2. Hang the Guardrails EPG (**33**) and intermediate guardrails on the guardrail hooks. (Fig. A11.04b)

Application example

Installing a guardrail in advance at any point on the standards.
Securing console brackets against lifting off.

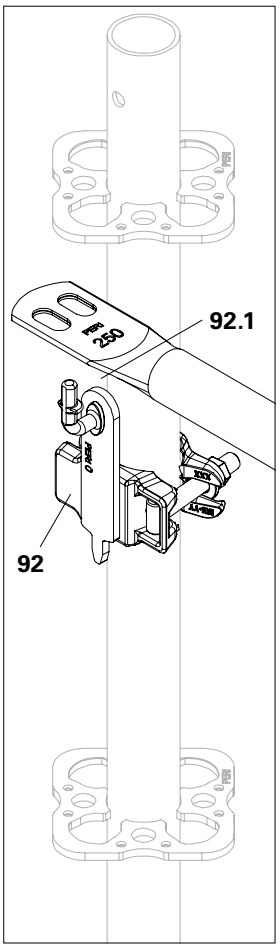


Fig. A11.04a

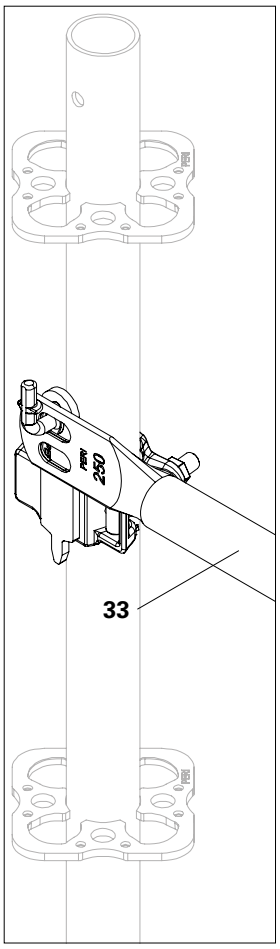


Fig. A11.04b

Ledger to Ledger Coupler UHA

- Perm. F = 1.67 kN (Fig. A11.06)
- The ledger serving as a support must be verified for these additionally introduced forces.
- The Ledger to Ledger Coupler UHA (**93**) can be attached to Horizontal Ledger UH (Fig. A11.05a) as well as the reinforced Horizontal Ledgers UHV (Fig. A11.05b).
- The Ledger to Ledger Coupler UHA is not suitable for cantilevered components.

Assembly

1. Place the suspension (**93.1**) of the Ledger to Ledger Coupler UHA (**93**) on the ledger (**15**) and hold it with one hand. (Fig. A11.06a)
2. Lift the pressure plate (**93.2**) and push it towards the ledger (**15**). (Fig. A11.06b – Fig. A11.06d)
3. Insert the locking finger (**93.3**) into the hole. (Fig. A11.06e + Fig. A11.06f)
4. Hook the ledger (**15a**) from above into the Ledger to Ledger Coupler UHA (**93**). (Fig. A11.06g)
5. Knock in the wedges of the ledgers firmly. (Fig. A11.06h)

→ Ledger to ledger coupler is installed.

Application example

The Ledger to Ledger Coupler UHA is mounted in order to install a ledger between two available ledgers at the same height.
This is applied in order to:
– install a hatch,
– provide an additional support for decking,
– change the direction of the decks.

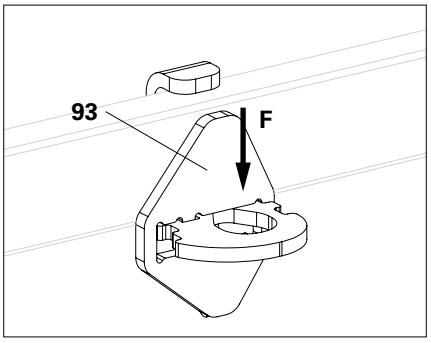


Fig. A11.05

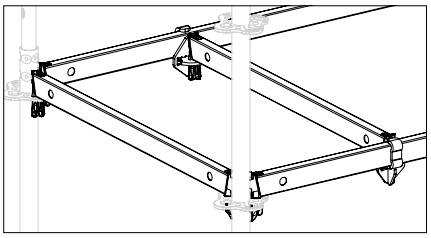


Fig. A11.05a

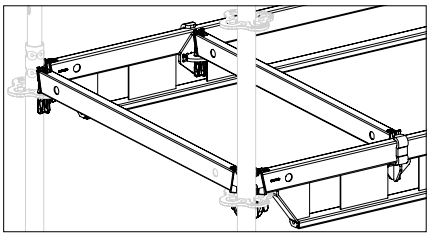


Fig. A11.05b

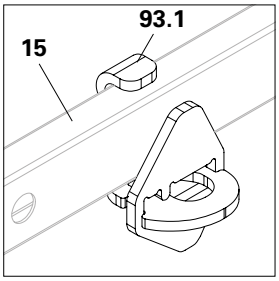


Fig. A11.06a

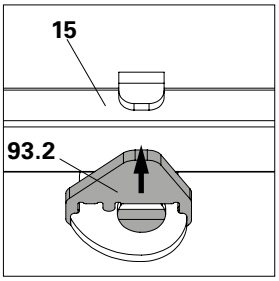


Fig. A11.06b

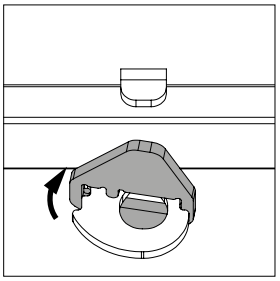


Fig. A11.06c

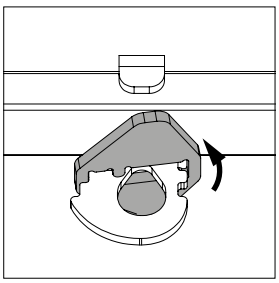


Fig. A11.06d

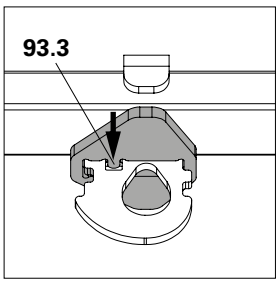


Fig. A11.06e

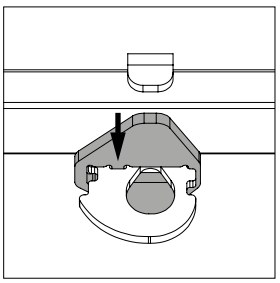


Fig. A11.06f

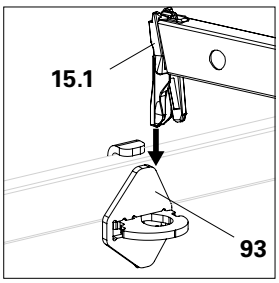


Fig. A11.06g

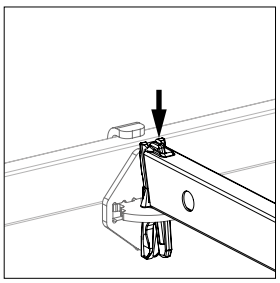


Fig. A11.06h

Ledger to Ledger Coupler UHA-2

- Perm. F = 10 kN
  Perm. My = 35 kNcm
- The ledger serving as a support must be verified for these additionally introduced forces.
- The Ledger to Ledger Coupler UHA-2 replaces the previous version as described above.
- The possible installation positions remain unchanged.

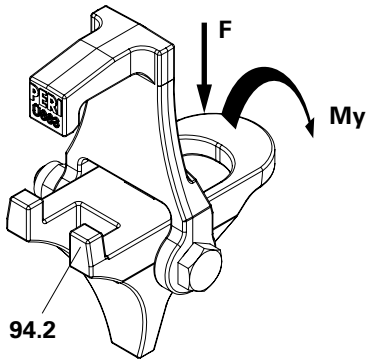


Fig. A11.07

Assembly

1. Unfold the Ledger to Ledger Coupler UHA-2 (**94**), push it onto the ledger (**15**) and release it.
   → The ledger-to-ledger coupler (**94.1**) tilts into the horizontal position and holds the ledger-to-ledger coupler in place.
   (Fig. A11.07a + Fig. A11.07b)
2. Pull the ledger-to-ledger coupler up so that both lugs (**94.2**) are in contact with the ledger.
3. Fit the ledger (**15a**) in the ledger-to-ledger coupler.
   → The ledger-to-ledger coupler is clamped by the wedge.

→ Ledger to ledger coupler is installed. (Fig. A11.07c)

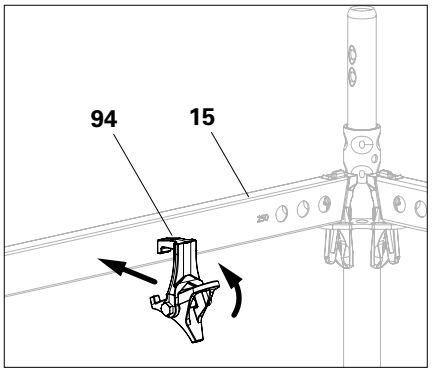


Fig. A11.07a

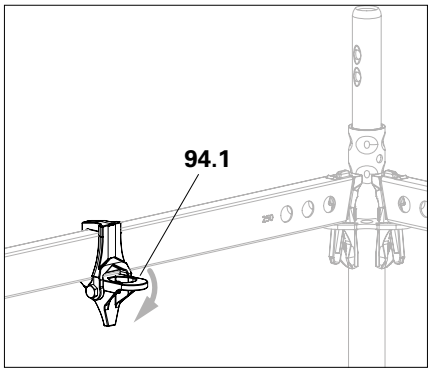


Fig. A11.07b

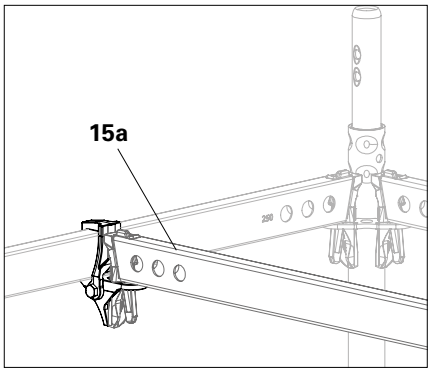


Fig. A11.07c

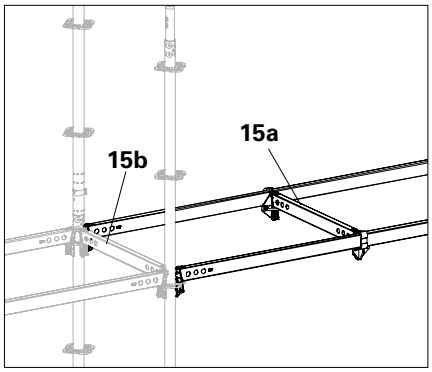


Fig. A11.07d

- Due to increased load requirements, the assembly tolerances are very low. When installing a ledger (**15a**) that is secured on both sides, knock the ledgers (**15b**) running parallel to it into place last. (Fig. A11.07d)
  Alternatively, fit the ledger-to-ledger couplers in a slightly offset manner, insert the ledger (**15a**), align the ledger-to-ledger couplers and hammer the wedges in place.
- The drophead wedge will not fall automatically if the ledger-to-ledger coupler is not mounted correctly.

Application example

See the Ledger to Ledger Coupler UHA.

Recess construction

Access can be created on ledgers, for example for building recesses, using Ledger to Ledger Couplers UHA-2, Supports UC and a Steel Deck EDS or UDG.

Technical data

Max. length of the scaffolding bay 3.00 m
Max. length of the steel deck 2.50 m
Max. width of the access 33 cm
Permissible up to load class LC 3

- The installation situation or the position of the access structure on the facade scaffold may be chosen at will.
- The forces arising from the access point must be verified in the proof of stability for the basic scaffold.
- Plan access in such a way that lateral protection is provided.

Components

94	Ledger to Ledger Coupler UHA-2	2x
40	Support UC 25 or 30	2x
55	Steel Deck EDS 33 or UDG-2	1x

Assembly

From a secured position:

1. Fit a Ledger UH-2 (**15**) in the scaffolding bay on the side where the access point is installed.
2. Hook the Ledger to Ledger Couplers UHA-2 (**94**) at the required position on the ledger.
   The dimension from the centre to the centre of the ledger-to-ledger coupler must match the system length of the deck (e.g. 2.50 m).
3. Fit Supports UC 33 (**40**) in ledger-to-ledger couplers. Secure the wedges.
4. Insert Steel Deck EDS 33 (**55**). (Fig. A11.08)
5. Install the missing steel deck in the basic scaffold.
6. Create project-specific lateral protection.

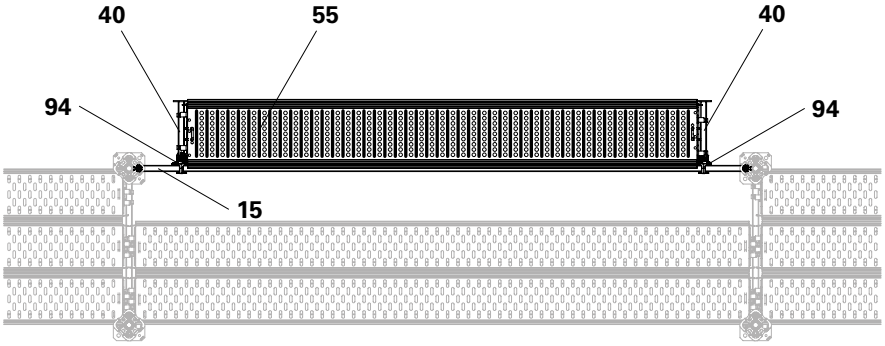


Fig. A11.08

Ledger Bracket UHA half

- Permissible F per ledger-to-ledger coupler = 8.44 kN.
- The ledger serving as a support must be verified for these additionally introduced forces.

Assembly

1. Pull the wedge out of the clamping part and put the clamping part over the ledger (**15**). (Fig. A11.09a)
2. Insert wedge into clamping part, do not yet tighten.
3. Hook the ledger (**15a**) from above into the Ledger Bracket UHA half (**95**), do not tighten the wedges yet.
4. Install other position-determining components, e.g. decks.
5. Hammer all wedges into place.

→ Ledger to ledger coupler is installed. (Fig. A11.09b)

Application example

For right-angled connection of two opposing ledgers to one ledger.

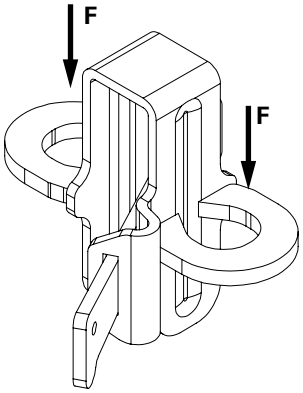


Fig. A11.09

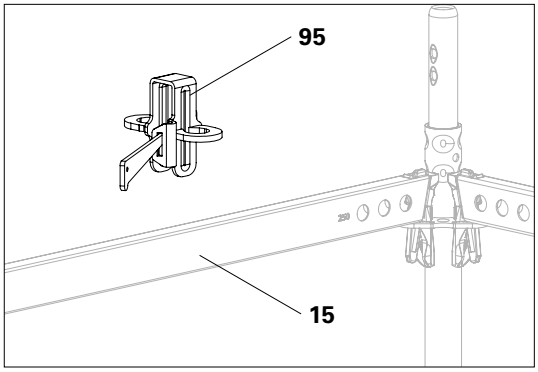


Fig. A11.09a

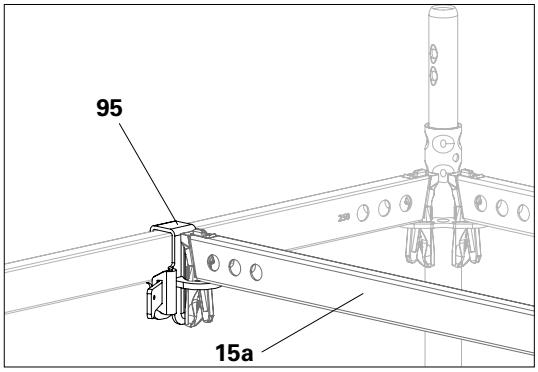


Fig. A11.09b

Ledger to Ledger Cou. LGS URHA

The Ledger to Ledger Cou. LGS URHA is available for creating an access point, e.g. for tarpaulin installation.

- The number of people per access point is limited to 2.

Warning

There is a risk of falling when walking on the walkway due to the lack of lateral protection.
A fall can result in serious injuries or even death.
⇒ Only enter the walkway when using PPE.

Technical data

Perm. F = 3 kN
Each Ledger to Ledger Cou. LGS URHA has been approved for 2 people, each weighing 100 kg.

Assembly

Determine the assembly positions by way of measurement.

1. Fold open the Ledger to Ledger Cou. LGS URHA (**56**), push it onto the beam tube (**5.1**) of Element LGS URB and release.
   → The ledger-to-ledger coupler (**56.1**) tilts into the horizontal position and locks in place.
   (Fig. A11.10b + Fig. A11.10c
2. Pull the ledger-to-ledger coupler up so that the nose (**56.2**) is in contact with the beam tube. (Fig. A11.10c)
3. Fit the Support UC 33 (**57**) in the ledger-to-ledger coupler and hammer in wedge tightly.
   (Fig. A11.10d + Fig. A11.10e)
   → The ledger-to-ledger coupler is clamped by the wedge.

→ Ledger to ledger coupler is installed.

4. Fit the Steel Decks UDG-2 (**58**).
   (Fig. A11.11)
5. Do not install the steel deck in the ridge area until the ridge bar has been installed. (not shown)

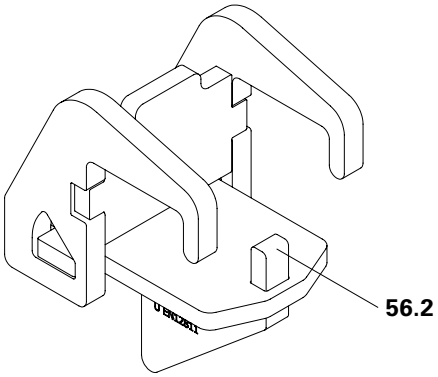


Fig. A11.10

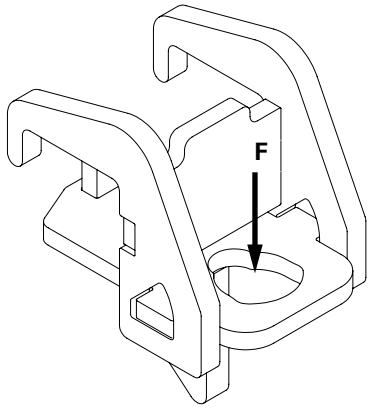


Fig. A11.10a

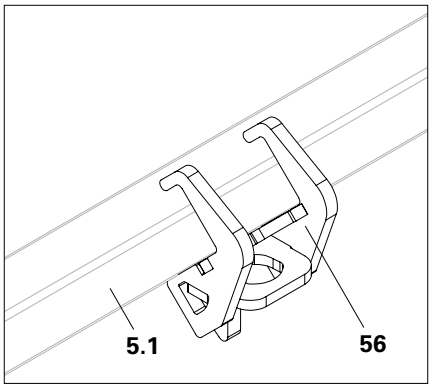


Fig. A11.10b

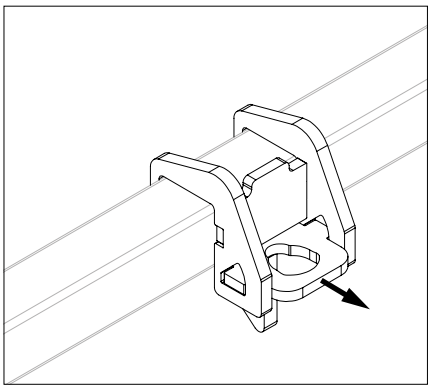


Fig. A11.10c

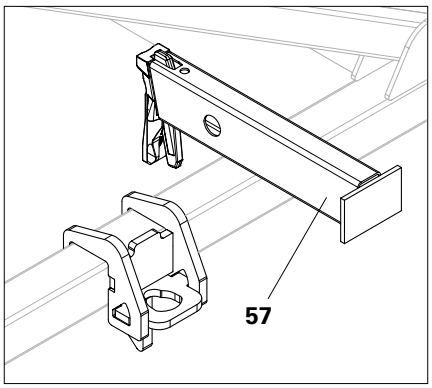


Fig. A11.10d

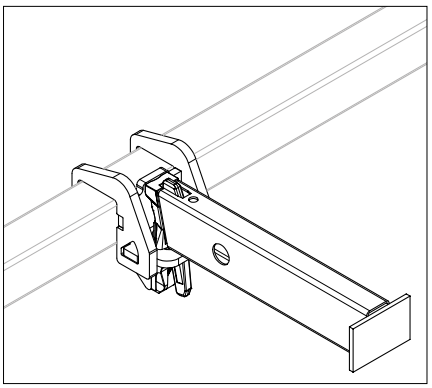


Fig. A11.10e

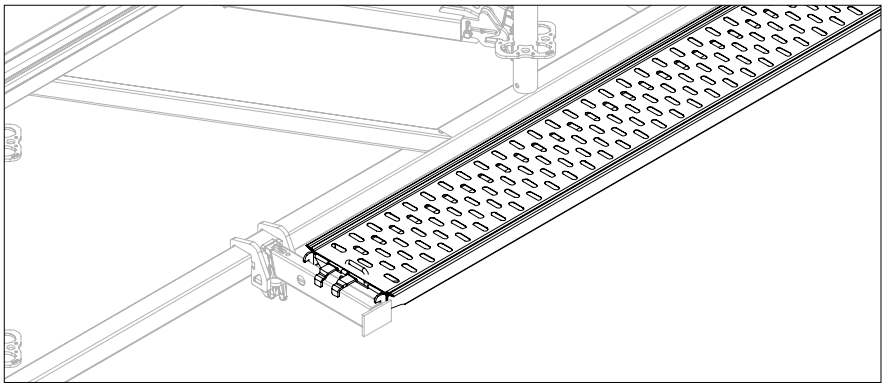
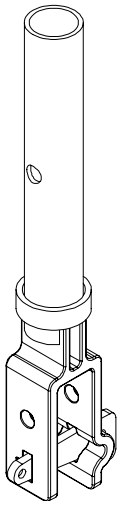


Fig. A11.11

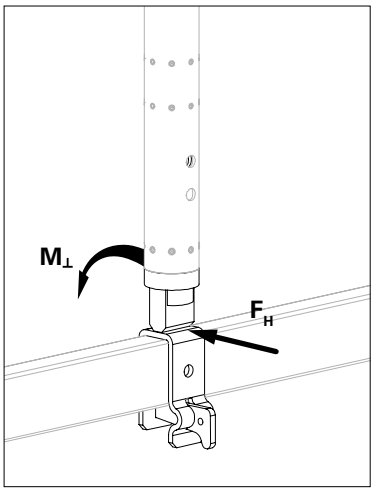
UH Spigot-2

With the UH Spigot-2 (**96**), it is possible to continue building with verticals on ledgers.

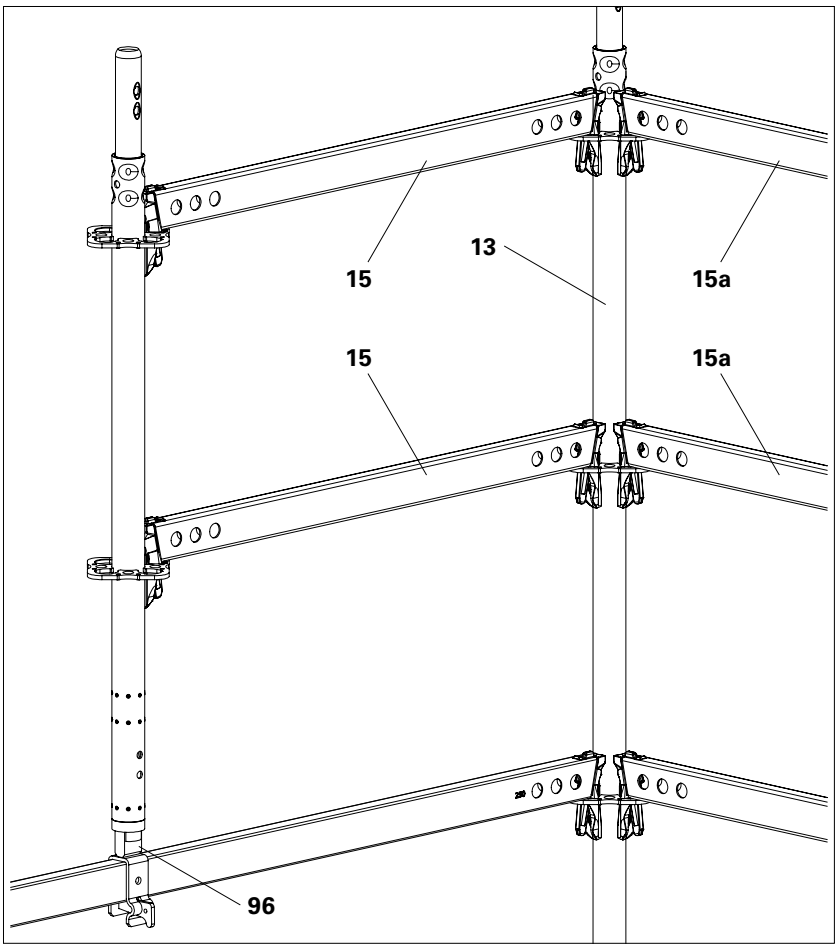
- For absorbing vertical loads from verticals and introduction into the ledger.
- The ledger serving as a support must be verified for these additionally introduced forces.
- Its use as a support for a free-standing guardrail post is only possible if the free guardrail post is connected to a torsionally stiff standard (**13**) with 2 ledgers ≤ 2.25 m (**15**). The standard (**13**) must be held by further ledgers (**15a**) extending at an angle of 90°. (Fig. A11.12b)
  Otherwise, refer to "Installing verticals when using Guardrails EPG" on page 141.
- Perm. max. lateral force F_H = 5 kN, Perm. max. moment $M_\perp$ = 0.17 kNm. Only the moment or the lateral force with the maximum values may be introduced. If moment and shear force are superimposed, the component must be verified separately. (Fig. A11.12a)



108UH-Zapfen2.eps
Fig. A11.12



DR-20-106018_014-02A11VerbUH-ZapfenLast.eps
Fig. A11.12a



DR-20-106018_014-02 A11Verb UH-Zapfen-2_3.eps
Fig. A11.12b

Assembly

1. Pull the wedge (**96.1**) out of the clamping part and put the clamping part over the ledger. (Fig. A11.12c)
2. Insert wedge into clamping part, do not yet tighten.
3. Fit standard (**13**) on UH Spigot (**96**). (Fig. A11.12d)
4. Install other components that determine the position, e.g. ledger, and align the UH Spigots exactly according to this.
5. Tighten all wedges (**96.1**). (Fig. A11.12e)

→ UH Spigot is mounted.

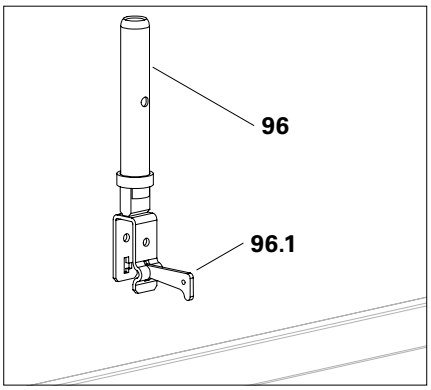


Fig. A11.12c

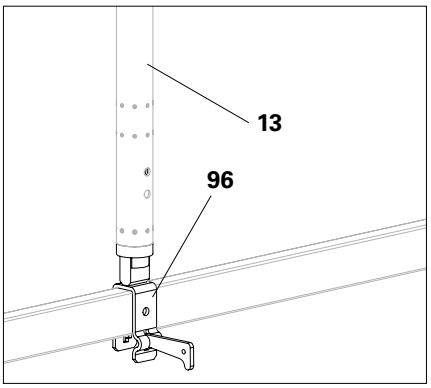


Fig. A11.12d

Application example

For assembly of standards.

- The function of the guardrail is only guaranteed when all the wedges have been tightened.
- The predecessor component UH Spigot does not fit in
  - Standards UVR-2
  - all Easy vertical components.

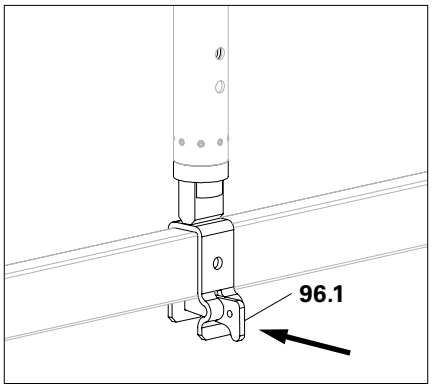


Fig. A11.12e

Ledger-to-Ledger Coupler UHA-2 Half with Spigot

The Ledger-to-Ledger Coupler UHA-2 Half with Spigot (**98**) can be used to continue construction using standards and ledgers either on or at ledgers.

- For absorbing vertical loads from verticals and introduction into the ledger.
- The ledger serving as a support must be verified for these additionally introduced forces.
- Its use as a support for a free-standing guardrail post is only possible if the free guardrail post is connected to a torsionally stiff standard (**13**) with 2 ledgers ≤ 2.25 m (**15**). The standard (**13**) must be held by further ledgers (**15a**) extending at an angle of 90°. (Fig. A11.13b)
  Otherwise, refer to "Installing verticals when using Guardrails EPG" on page 141.
- Perm. F per ledger-to-ledger coupler = 8.44 kN
- Perm. max. lateral force F_H = 5 kN, Perm. max. moment $M_\perp$ = 0.17 kNm. Only the moment or the lateral force with the maximum values may be introduced. If moment and shear force are superimposed, the component must be verified separately. (Fig. A11.13a)

The component must not be used where there are alternating loads (tensile and compressive forces), e.g. in weather protection roofs.

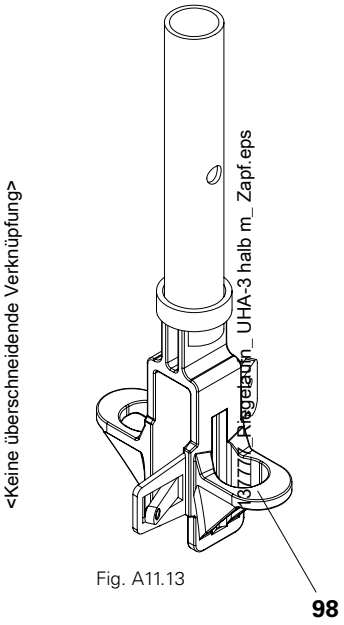
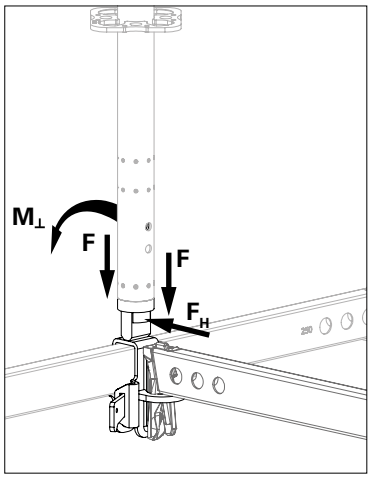
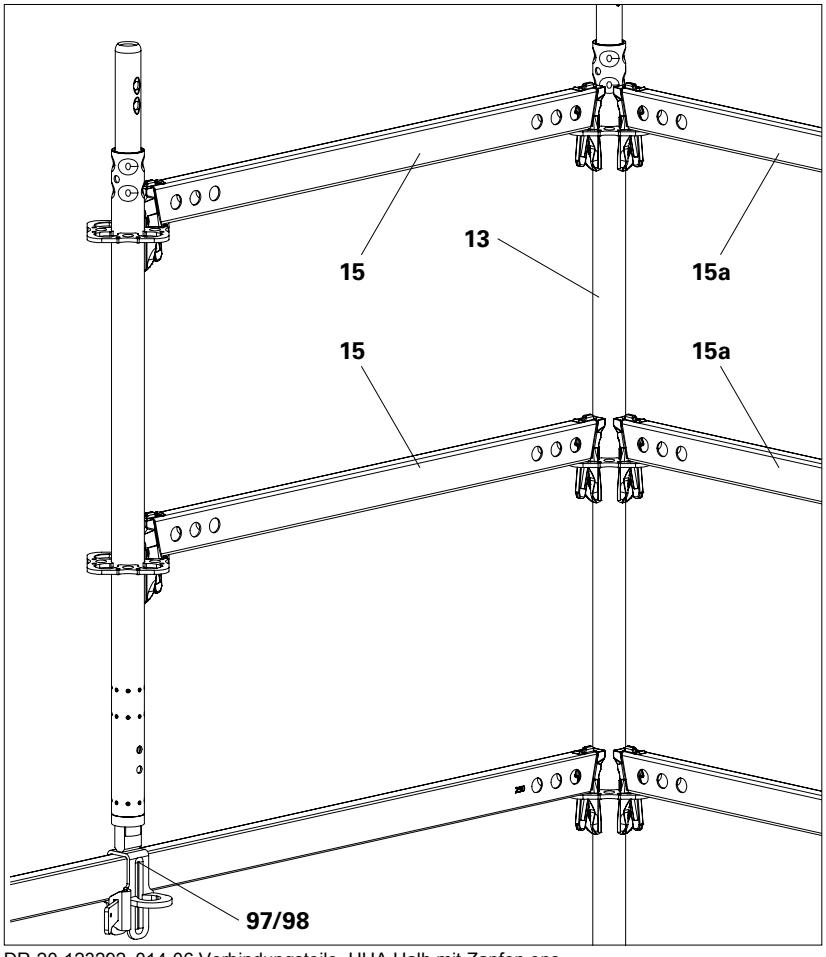


Fig. A11.13



DR-20-106045_014-03A11VerbUHA-2-HalbmZZasten.eps
Fig. A11.13a



DR-20-123292_014-06 Verbindungsteile, UHA Halb mit Zapfen.eps
Fig. A11.13b

Assembly

1. Pull the wedge out of the clamping part and put the clamping part over the ledger (**15**). (Fig. A11.13c)
   Insert wedge (**98.1**) into clamping part, do not tighten yet.
   Fit the standard onto the UH Spigot (**98**).
   Install other components that determine the position, e.g. ledger, and align the ledger-to-ledger coupler exactly according to this.
5. Hook the ledger (**15a**) from above into the Ledger Bracket UHA half (**98**).
6. Hammer all wedges into place.

→ Ledger to ledger coupler is installed. (Fig. A11.13d)

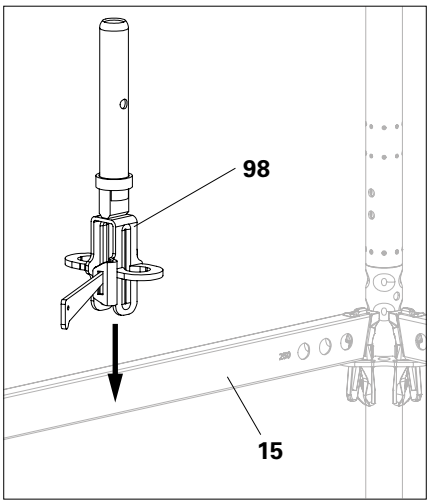


Fig. A11.13c

Application example

For right-angled connection of two opposite ledgers and a standard to one ledger.

- The function of the guardrail is only guaranteed when all the wedges have been tightened.
- The predecessor component Ledger Bracket UHA half with spigot does not fit in
  – Standards UVR-2
  – all Easy vertical components.

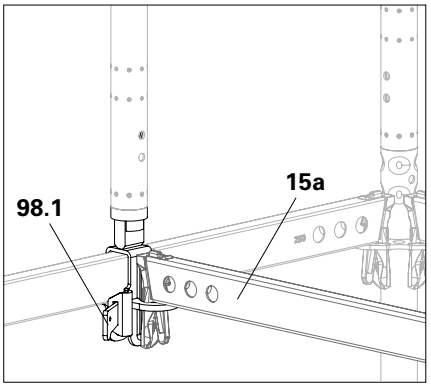


Fig. A11.13d

Installing verticals when using Guardrails EPG

Required for UH Spigot-2 (**95**) and Ledger-to-Ledger Coupler UHA-2 Half with Spigot (**98**) and their predecessor models.

Guardrails EPG have no bracing effect on the free-standing standard. It is therefore imperative that the body is braced.

– The UH Spigot-2 or the Ledger-to-Ledger Coupler UHA-2 Half with Spigot and their predecessor models will otherwise be overloaded.
– The free-standing standard does not otherwise have the necessary bracing as a guardrail post.

Installation example

1. Install the free-standing standard (**13**), e.g. UVR + EPW or Easy Standard EVM 200, starting 1 m below the deck level on the ledger (**15**) and UH Spigot-2 (**95**).
2. Install 2 suitable ledgers (**15a + 15b**) at platform level. (Fig. A11.14)

- Verify the load-bearing capacity of the ledger (**15**). If necessary, install a Ledger UHV.
- Install the decks (**50**) at right angles to the access side. Otherwise they will collide with the free-standing standard (**13**).
- If the deck is installed parallel to the access side: For horizontal bracing, additionally install an H-Brace UBH Flex (**20**) or a scaffolding tube with standard couplers.
- Note the limited selection of H-Brace UBH Flex.
- For further installation examples, see the respective system-specific Instructions for Assembly and Use.

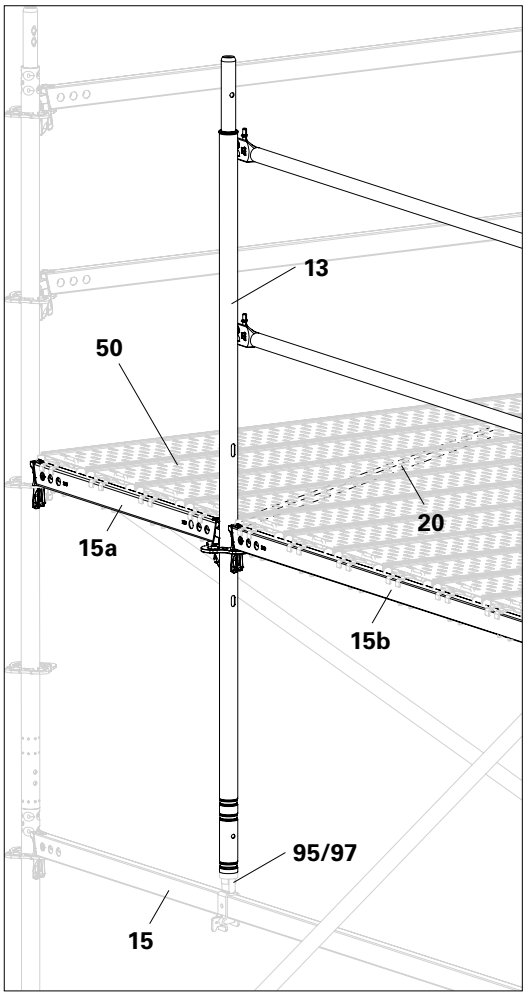


Fig. A11.14

Connector ULT

For connecting
Formwork Girders ULA/ULS or for further construction on top standards.

- Perm. Z per upper and lower chord in combination with 1 x Connector ULT and 4 x bolt M10 x 70 - 8.8 and nut
  – ULA = 37.4 kN.
  – ULS = 42.2 kN.
- For permissible tensile forces for connecting standards, see Section "Tensile couplings" on page 40.

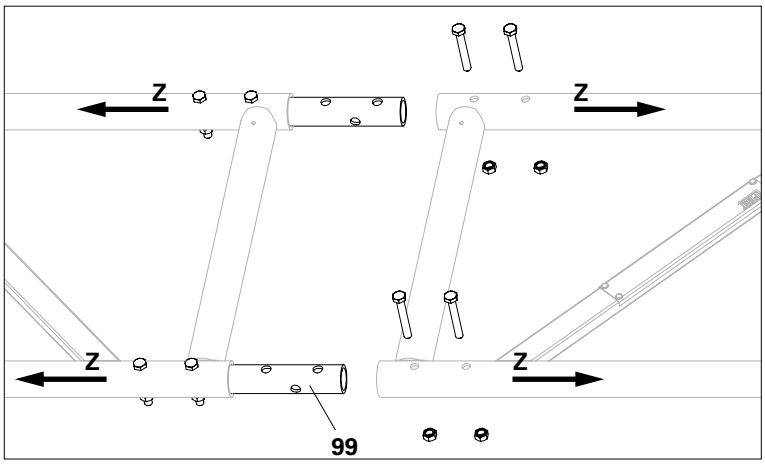


Fig. A11.15a

Assembly

1. Insert two Connectors ULT (**99**) into lattice girders and mount each with 2 screws M10 x 70-8.8 with nut.
2. Fit the second lattice girder onto the Connectors ULT and mount each with 2 screws M10 x 70-8.8 with nut. (Fig. A11.15a)

→ Connector ULT is installed.

For further assembly on top standards, the Connector ULT can be staked out with locking pins Ø 48.3/57 or bolts and nuts.

If both verticals are to be pinned (e.g. suspended scaffold or relocation by crane), turn the verticals through 90° to fit them. Otherwise the ends of the verticals will not engage in a form-fit manner.
(Fig. A11.15b + Fig. A11.15c)

To prevent slipping, insert a screw in an upper hole through the connector before assembly.

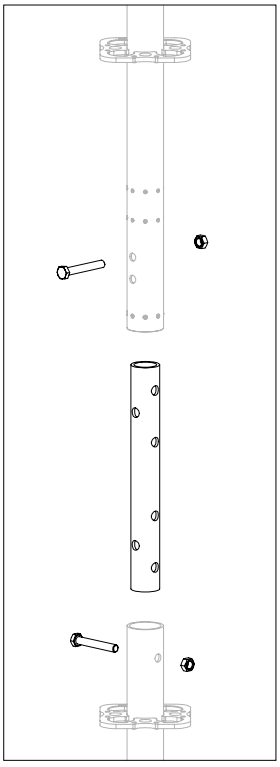


Fig. A11.15b

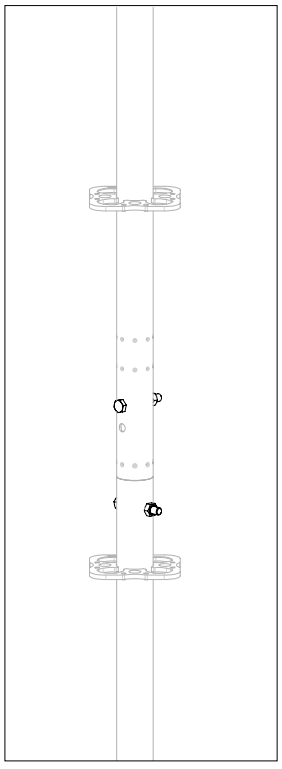


Fig. A11.15c

Application example
Loose pin for connecting tubes Ø 48.3, e.g. lattice girders or top standards.

Pin with Spacer Tube URE 4/42

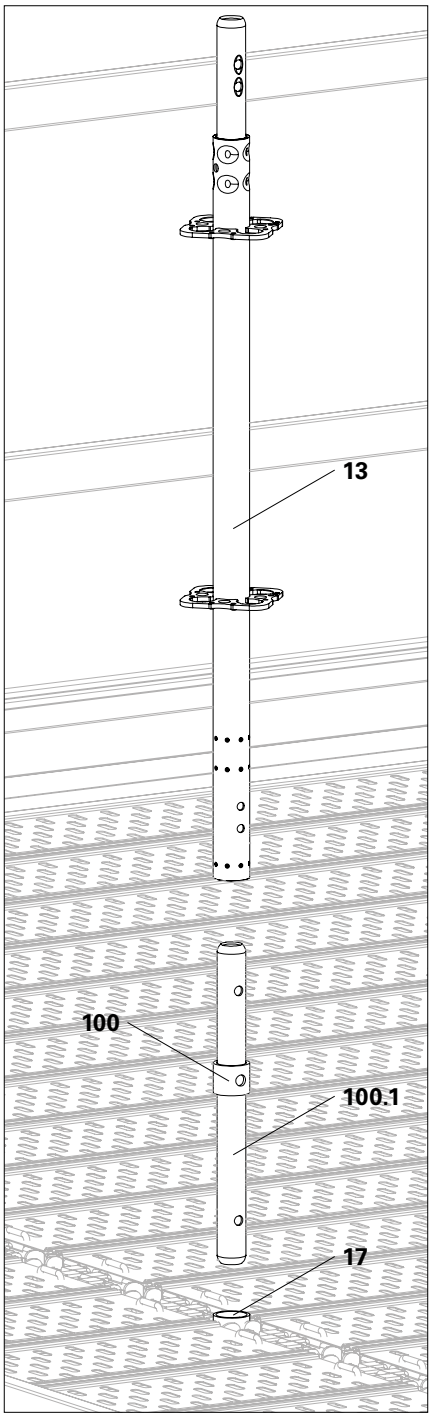
- The pin with spacer tube enables further assembly on Top Standards EVT 96 in the system grid.
  The 4 cm high ring of the spacer tube extends the Top Standard EVT 96 to 100 cm
- Depending on the system and assembly sequence, unsecured drop-off edges may result. In any case, check whether PPE is required.

Assembly

1. Insert the long pin (**100.1**) of the URE 4/42 (**100**) into the Top Standard EVT 96 (**17**).
2. Attach the standard (**13**) to the protruding short pin.

Application example

Temporary guardrail installation in the uppermost layer, e.g. for external console brackets.



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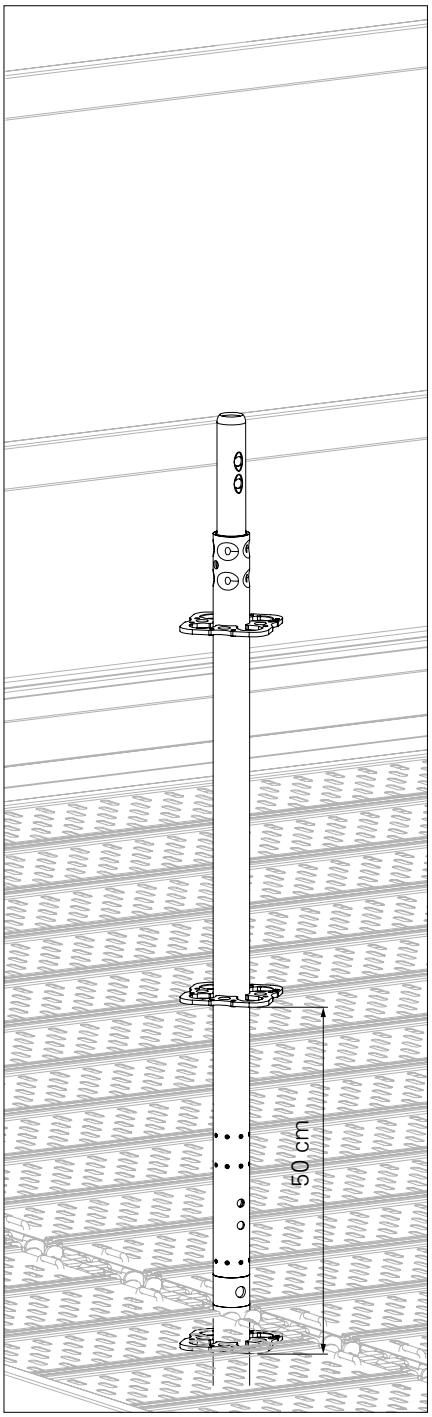

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Fig. A11.16

Starter Tube ULB
Starter Tube ULB with rosette

For creating bridging in conjunction with Lattice Girder ULS/ULA.
Both versions can be used in either an upright or suspended position.

- Only permitted in combination with lattice girders
- Always use starter tubes in pairs.
- The maximum permissible individual load of the lattice girders limits the load-bearing capacity.
- Do not suspend any additional loads.

Starter Tube ULB (172)
A Coupler Ledger UHC must be used to establish the horizontal bracing.
Base standards are required to continue building upwards

Starter Tube ULB with rosette (173)
Use a Ledger UH-2 for horizontal bracing.
Continue building upwards straight away with standards.

Application example
For bridging, see Section "Lattice Girder ULA/ULS" on page 152

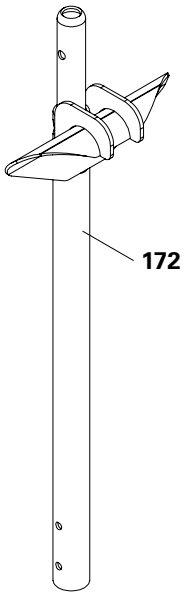


Fig. A11.17

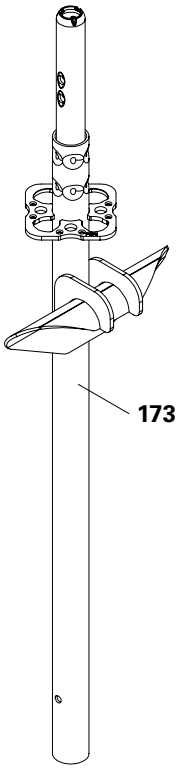


Fig. A11.18

General information

Components

101 Ring Bolt UFE
102 Wall Insert UFI
103 Wall Tie UWT

Ring Bolt UFE

- The anchoring means must always be considered individually from a structural stability viewpoint. The load capacity of the mentioned ring bolts (**101**) is not sufficient for every occurring tie load!
- Check the load-bearing capacity of the anchoring base! See the Section Safety instructions, “Checking the anchoring” on page 13
- The length of the ring bolt to be used depends on the anchoring base and must be determined individually.
- Use the appropriate wall insert (**102**) for the required ring bolt, see Tab. A12.01.

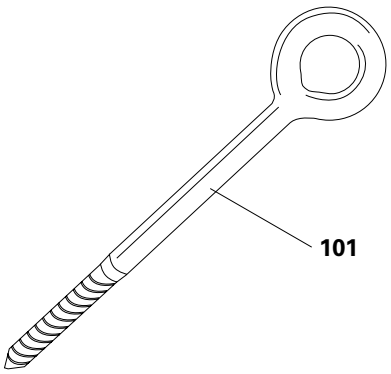


Fig. A12.01a

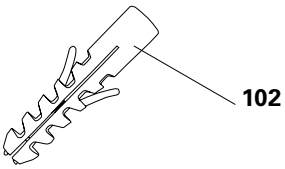


Fig. A12.01b

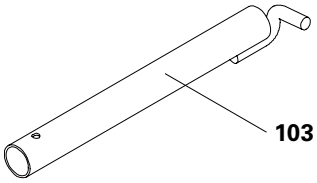


Fig. A12.01c

Ring Bolt UFE	Wall Insert UFI
Ring Bolt UFE 12/90	Wall Insert UFI 14/70
Ring Bolt UFE 12/120	Wall Insert UFI 14/101
Ring Bolt UFE 12/190	Wall Insert UFI 14/135

Tab. A12.01

Standard application
Forces acting parallel and perpendicular to the facade.

- The ring bolt (**101**) including the ring must not protrude more than 7 cm from the anchoring base. This is ensured when the ring bolt is screwed in up to the last mark in front of the ring. (Fig. A12.02)
- For the maximum pull-out force, see Tab. A12.02

Special application
Forces acting at perpendicular to the facade only.

- All parallel loads must be absorbed by the scaffolding system. The transmission of lateral forces is no longer possible.
- For permissible compressive forces for the ring bolt, see Tab. A12.03
- Minimum requirement for ring bolt Ø 12 mm, quality 4.8.

If higher compressive forces have to be dissipated, use commercially available ETICS anchorings.

Assembly
1. Hold the wall tie at the specified assembly position and check for interferences, see Section Scaffold bracket on the following page. Mark the exact installation position on the structure.
2. Install the ring bolt in the structure using suitable means, e.g. wall inserts, depending on the anchoring base. The ring bolt may protrude max. 7 cm incl. the ring.
3. Turn the ring horizontally.

→ Ring bolt is installed.

Maximum pull-out force	
Building material	Pull-out force
Concrete B25	3.9 kN
Wall brick MZ 20	1.4 kN

Always check tie points!

Tab. A12.02

Permissible compressive forces for Ring Bolt UFE			
Shaft projection S^P [cm]	15	20	25
Permissible load [kN]	9.6	6.9	5.7

The values stated only apply if all parallel loads are absorbed in the scaffolding system.
See text "Special application"

Tab. A12.03

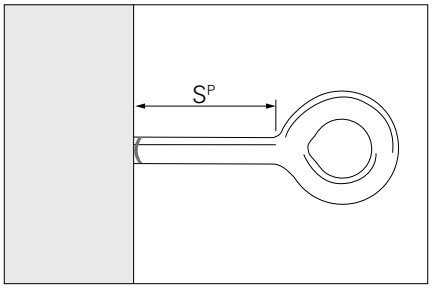


Fig. A12.02

Wall Tie UWT

- Attachments to the base scaffold, such as console brackets or supports, can affect the exact assembly position of the wall tie (**103**). Install the wall tie e.g. to the right instead of to the left of the frame column.
- Install the wall tie free of tension so that the ring bolt is not subjected to any pre-tension.

Assembly

1. Install the standard or system-specific coupling on the scaffold, but do not tighten it yet.
2. Turn the suspension hook (**103.1**) of the wall tie downwards and insert it into the ring bolt from above up to the stop. (Fig. A12.03a) Turn the wall tie clockwise so that the suspension hook is horizontal below the ring bolt. (Fig. A12.03b + Fig. A12.03c)
3. Close the couplings around the wall tie and, if necessary, correct the positions of the couplings on the verticals.
4. Tighten all couplings with 50 Nm.

→ Ring bolt and wall tie are installed.

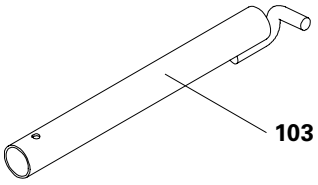


Fig. A12.03

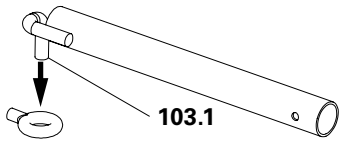


Fig. A12.03a

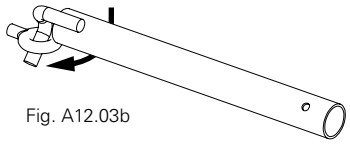


Fig. A12.03b

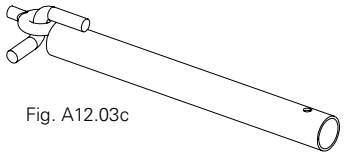
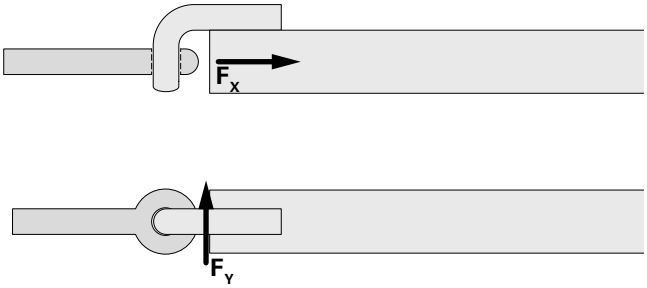


Fig. A12.03c



Permissible forces for Wall Tie UWT	
F_X [kN]	7.91
F_Y [kN]	6.25

Tab. A12.04

Multi Girder ELM 200

Components

110 Multi Girder ELM 200

The Multi Girder ELM 200 (**110**) is used for the making personnel passages or as bridging in modular scaffolds. (Fig. A13.01)

For permissible loads for Multi Girder ELM (**110**), see "PERI UP Design Tables".

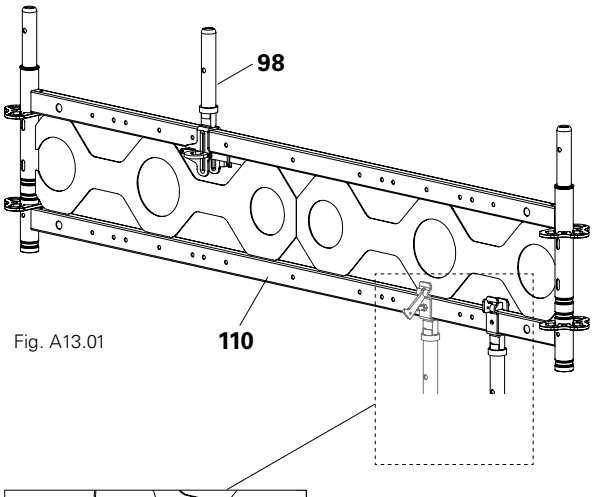


Fig. A13.01

Adjusting the passage width
The multi girder can be attached to:
- both end tubes on Standards UVR-2,
- an end tube on Standards UVR-2 and a UH Spigot-2 (**96**) on Top Standard UVH-2,
- two UH-Spigots-2 on Top Standards UVH-2.

Use the end tubes of the multi adapter to use the full passage width.
For reduced passage widths, attach and securely wedge (**96**) one or two UH-Spigots-2 (**96**) to the underside of the Multi Girder ELM (**110**) or connect with bolts M10 x 70 and nuts (**96a**). (Fig. A13.01a)

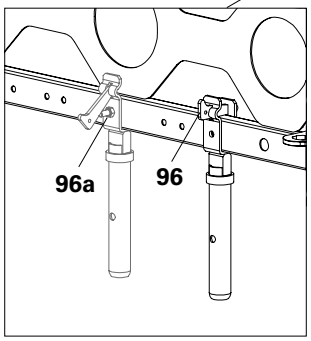


Fig. A13.01a

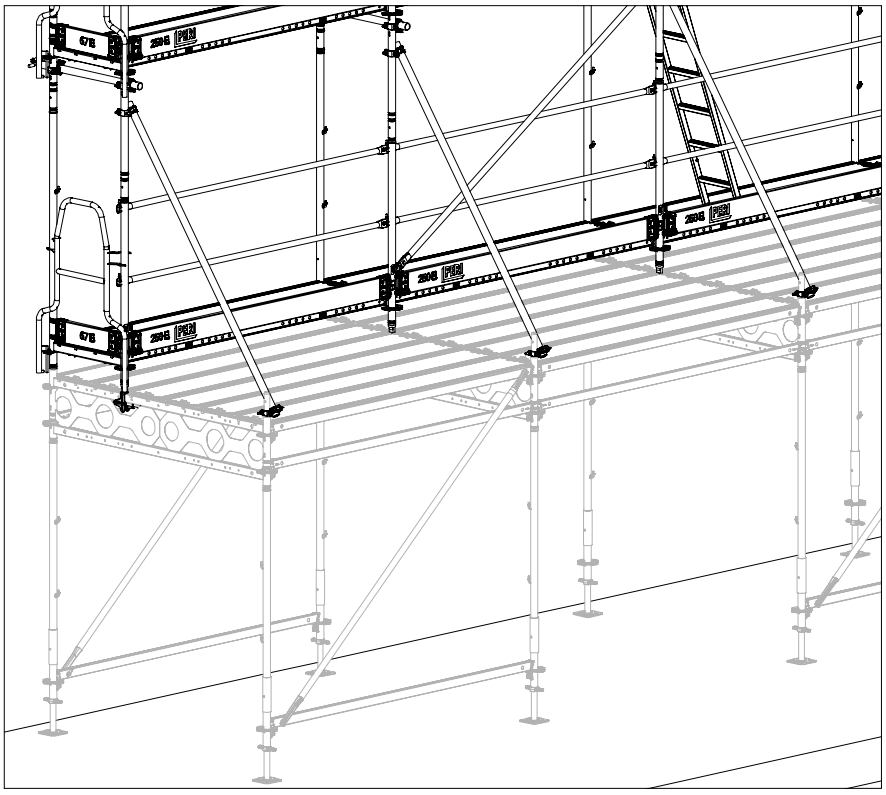


Fig. A13.01b

Positioning the scaffold assembly
The scaffold above the pavement gantry can be erected either:
- on an end tube of the multi girder and a Ledger Bracket UHA-2 half with spigot. (**98**),
- or on two Ledger Brackets UHA-2 half with spigot
.

To position the scaffold assembly on the top of the Multi Girder ELM (**110**), attach the Ledger Bracket UHA-2 half with spigot (**98**) and wedge it tight. (Fig. A13.01)

Possible combinations of pavement gantry widths and working scaffold positions are based on the system width and the construction site requirements. ((Fig. A13.02a) + (Fig. A13.02b))

- Do not load the Multi Girder ELM or UH-Spigot-2!
- Scaffolds in public traffic areas are to be secured according to national legislation and regulations (e.g. traffic signs, barriers, protective components, warning lights etc.).

Combinations for system width 75 cm

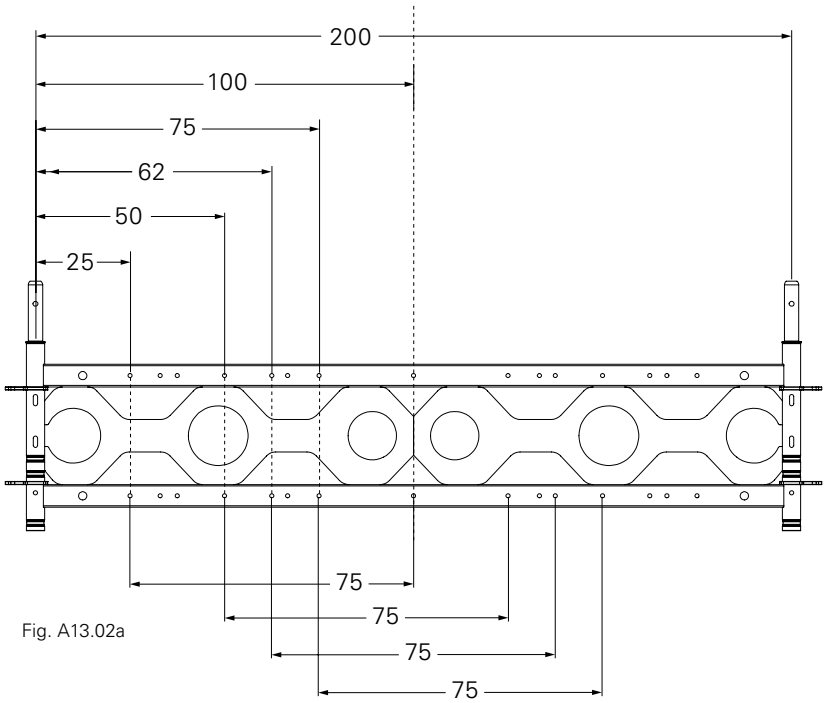


Fig. A13.02a

Combinations for system width 100 cm

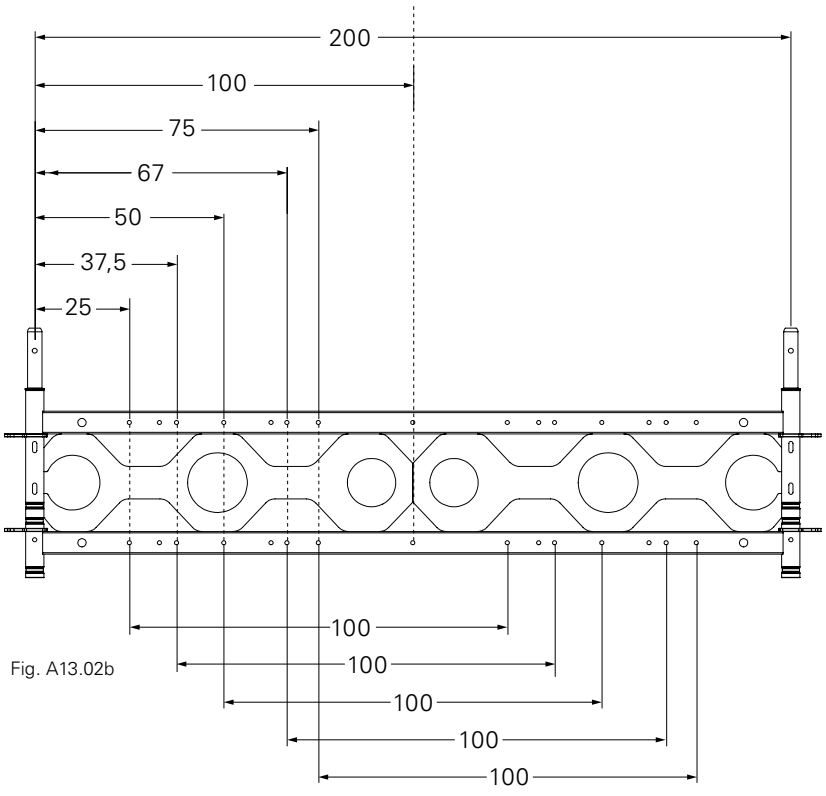


Fig. A13.02b

Lattice Girder ULA/ULS

For permissible loads, see
"PERI UP Design Tables"

Components

88 Coupler Ledger UHC
111 Formwork Girder ULA (aluminium)
112 Lattice Girder ULS (steel)
172 Starter Tube ULB
173 Starter Tube ULB with rosette
176 Standard Coupler RA Ø48/48 mm

Assembly
Tightly bolt the lattice girder to the top chord (**111.1**) and bottom chord (**111.2**) with the standard coupler (**176**) on the standard. Tighten the couplings with 50 Nm. (Fig. A13.04)

Application examples
Facade scaffolds, birdcage scaffolds

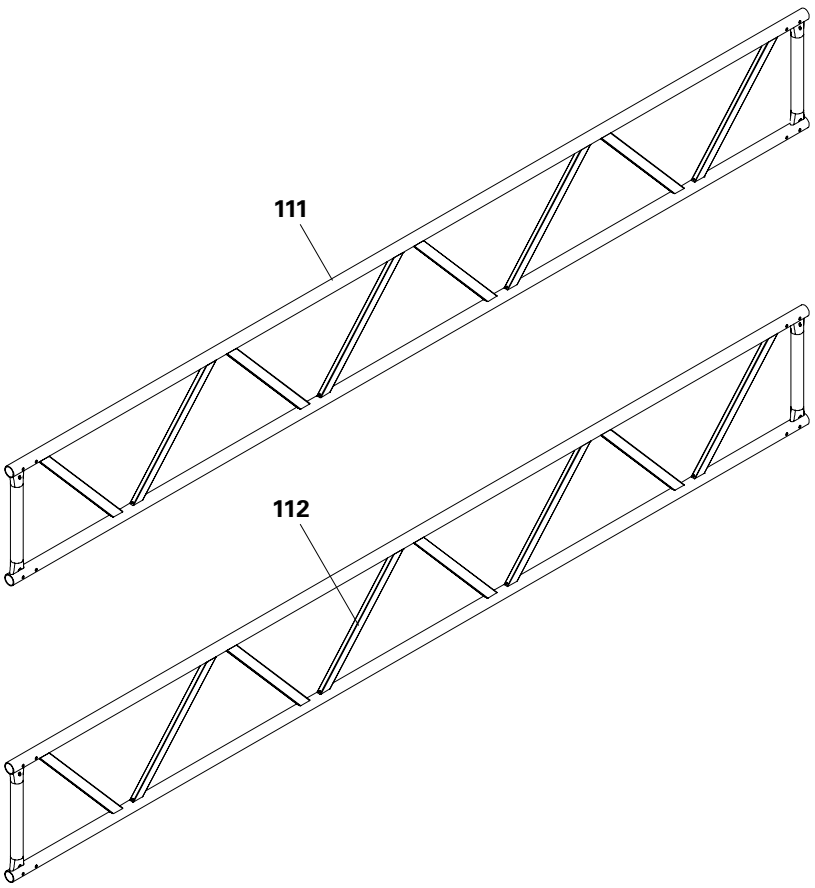


Fig. A13.03

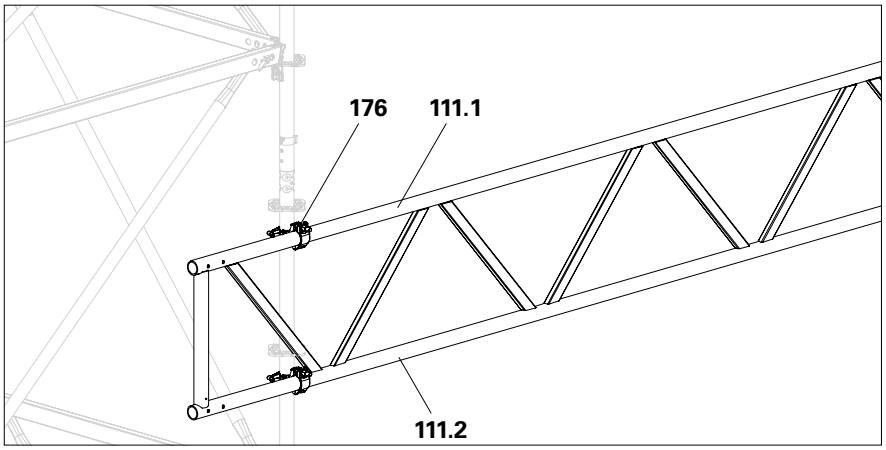


Fig. A13.04

Starter Tube ULB (172)
Starter Tube ULB with rosette (173)

For creating bridging in conjunction with Lattice Girder ULS/ULA.
Both versions can be used in either an upright or suspended position.

- Only permitted in combination with lattice girders
- Always use starter tubes in pairs.
- The maximum permissible individual load of the lattice girders limits the load-bearing capacity.
- Do not suspend any additional loads.

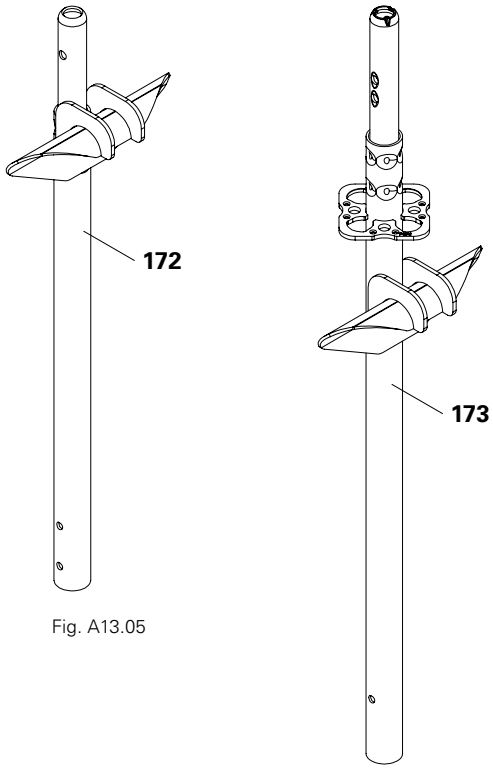


Fig. A13.05

Coupler Ledger UHC (88)

Available in lengths 67 cm, 75 cm, 100 cm.

For coupling the posts of the Starter Tube ULB.

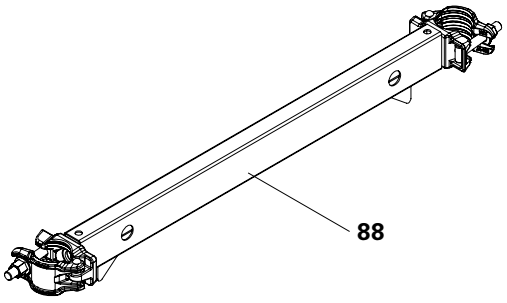


Fig. A13.06

Fitting the starter tube in an upright position
The starter tubes are resting on the lattice girders, the lattice girder is supporting the starter tube.

Starter Tube ULB with rosette:
1. Place the starter tubes (**173**) on the lattice girders (**111/112**).
2. Connect the starter tubes with the system-specific ledger (**15**). Secure the wedges.
3. For example, attach Guardrail Post EVP (**188**) to the starter tubes.
4. Install the decks (**50/56**). (Fig. A13.07)
5. Connect the starter tubes with the Coupler Ledger UHC. Tighten the couplings with 50 Nm.

Starter Tube ULB:
1. Place the starter tubes (**172**) on the lattice girders (**111/112**).
2. Connect the starter tubes with the Coupler Ledger UHC. Tighten the couplings with 50 Nm.
3. Fit base standards or base frames to the starter tubes.
4. Connect the base standards with ledgers. Secure the wedges.
5. Install the decks (**50/56**).

Fitting the starter tube in a suspended position
The lattice girder is resting in the starter tube, the starter tube is supporting the lattice girder.
Carry out the upper bracing of the lattice girders in accordance with the respective Instructions for Assembly and Use for the system.

Starter Tube ULB with rosette:
Carry out lower bracing with ledger (**15**). (Fig. A13.08)

Starter Tube ULB:
Carry out lower bracing with scaffolding tube and couplers. (Fig. A13.09)

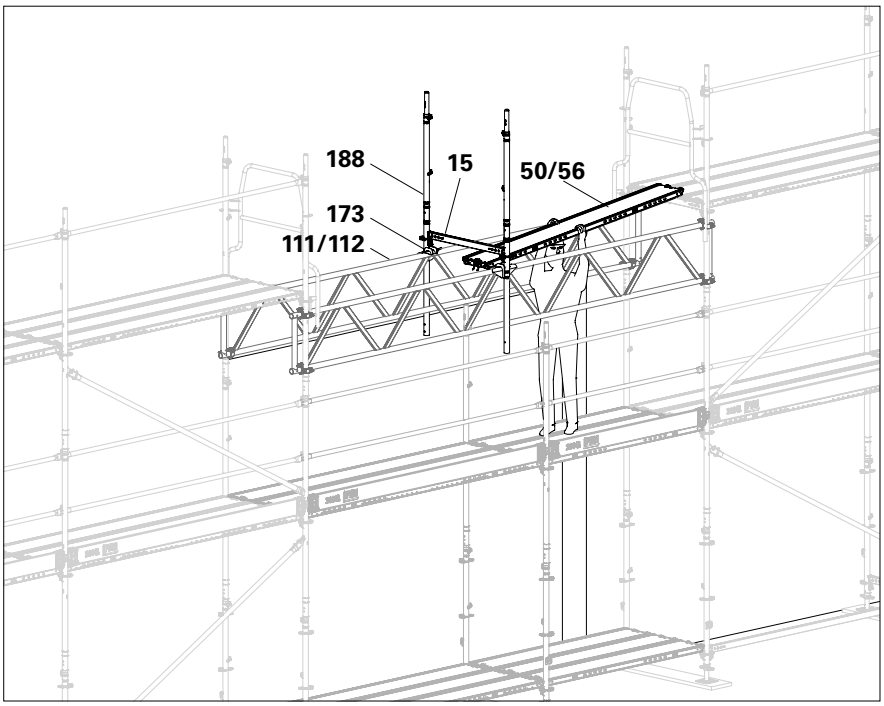


Fig. A13.07

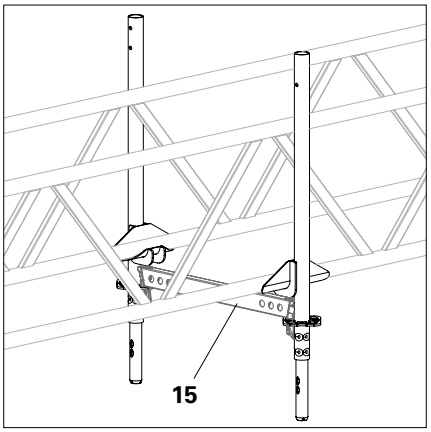


Fig. A13.08

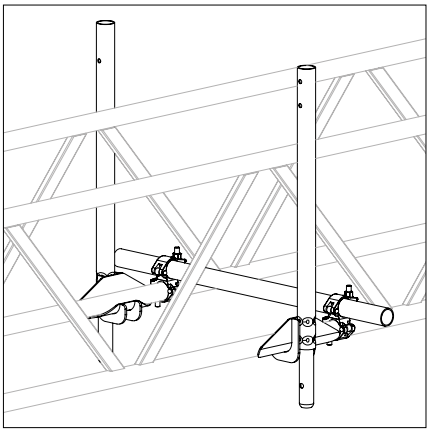


Fig. A13.09

Lattice ULS Flex

Modular system for steel lattice girders.
With the Modular System ULS Flex, large-area bridging in birdcage scaffolding can be achieved.
For this purpose, several lattice girders are connected and braced with ledgers and braces.

For permissible loads and required bracing, see PI Sheet 550

Warning

When installing the lattice girders, situations with a fall hazard may occur!
A fall can cause serious to fatal injuries.
⇒ Use guardrails according to project-specific risk analysis.

Components

113a	Intermediate Elem.ULS 100 Flex
113b	Intermediate Elem.ULS 125 Flex
113c	Intermediate Elem.ULS 150 Flex
114	End Element ULS 50 Flex
115	Connector ULS Flex

Application examples
Suitable for material transport in lifts or other confined situations, e.g. through manholes in production plants, stairwells.

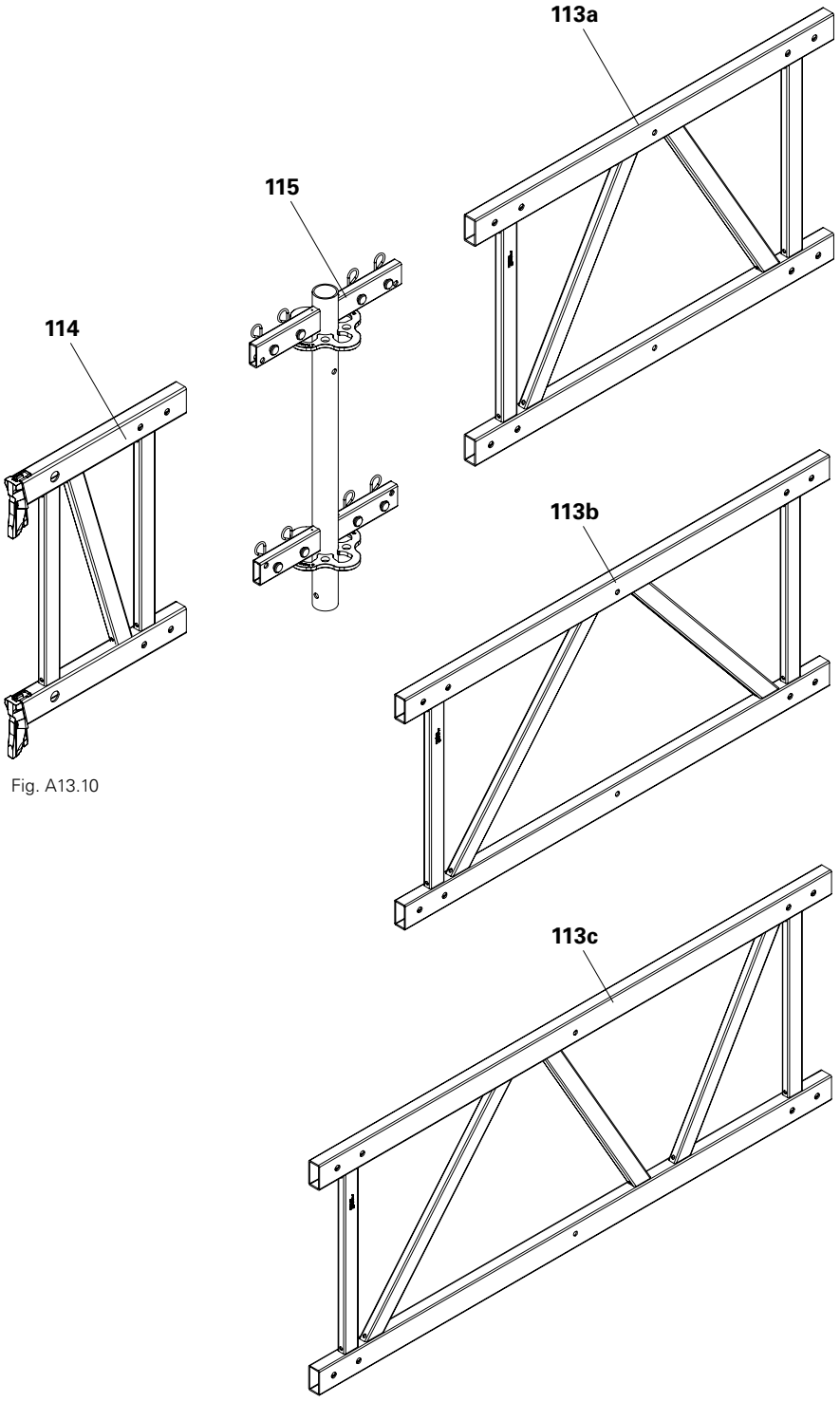


Fig. A13.10

Pre-assembling the lattice girder

1. Install Connector ULS Flex (**115**) to an End Element ULS 50 Flex. To do this, insert connectors (**115.1**) of the connector into the upper and lower chords (**114.1**) of the end element. Connect connector and end element with the 4 supplied collar pins Ø 12 x 44 (**115.2**) and cotter pin 4/1 (**115.3**). (Fig. A13.10a + Fig. A13.10b)
2. Install an Intermediate Element ULS Flex (**113**) on the pre-assembled connector (**115**) of the end element in the same manner. (Fig. A13.10c)
3. Depending on the project-specific planning, mount further intermediate elements with connectors in the same manner.
4. Install the second end element with Connector ULS in the same manner.

→ Lattice girder is pre-assembled. (Fig. A13.10d)

Additional lattice girders can be mounted on the Connector ULS Flex at an angle of 90°, (project-specific verification required.)

Fitting the lattice girders

1. Attach the lattice girder securely to the crane or other lifting device and bring it into the installation position.
2. Insert all wedges of the end elements into the rosettes of the standards and hammer the wedges in tight.

Alternative

Create an auxiliary scaffold in the bridging area and assemble the lattice girders directly at the assembly position.

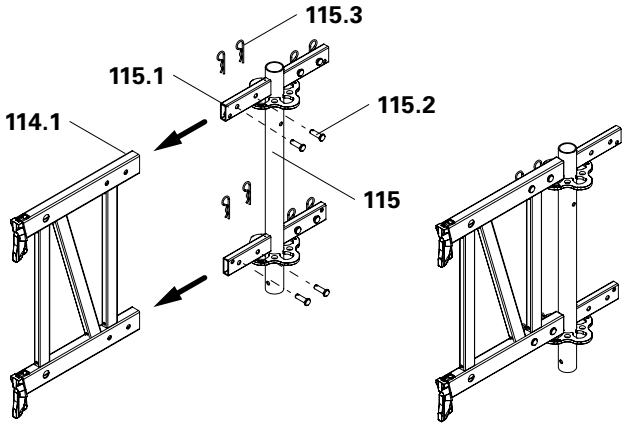


Fig. A13.10a

Fig. A13.10b

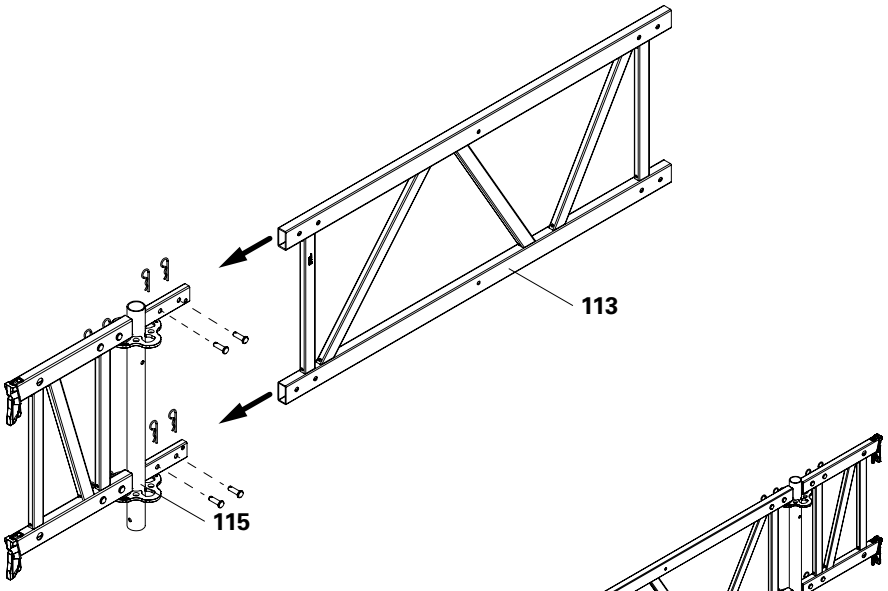


Fig. A13.10c

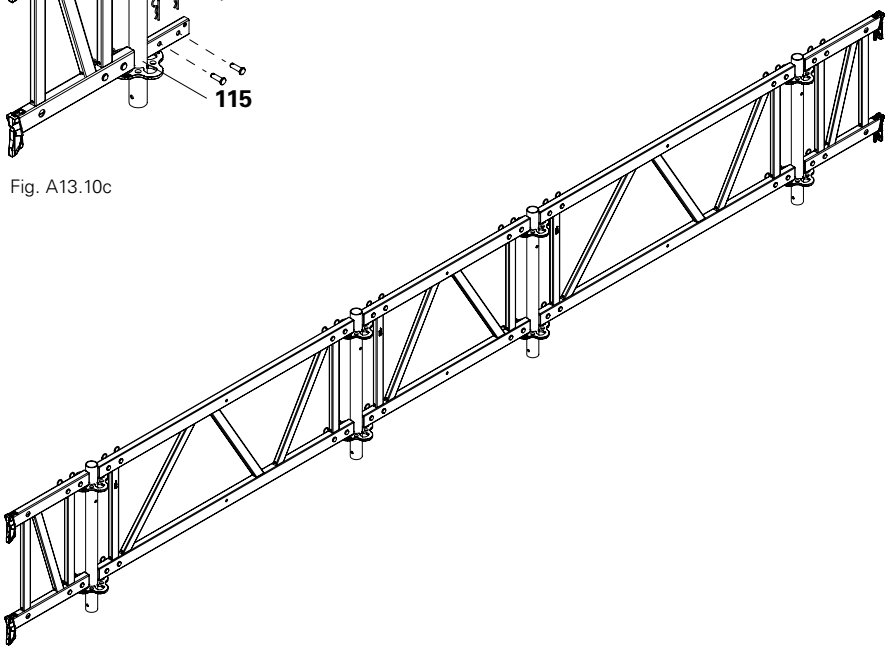


Fig. A13.10d

Brace lattice girders.
For the number and position of stiffening components, see PI Sheet 550

Structures with lattice girders must always be verified for structural stability. The lattice girder with the largest influence width is the decisive factor for the load-bearing capacity.

Assembly
1. Connect the lattice girders with Ledgers UH-2 (**15**). Secure the wedges.
2. Install Ledger Braces UBL (**23**).
3. Install H-Braces UBH Flex (**20**). (Fig. A13.11 + Fig. A13.11aa)

Example
Lattice girder with 5.0 m span.
For further examples, see PI Sheet 550.

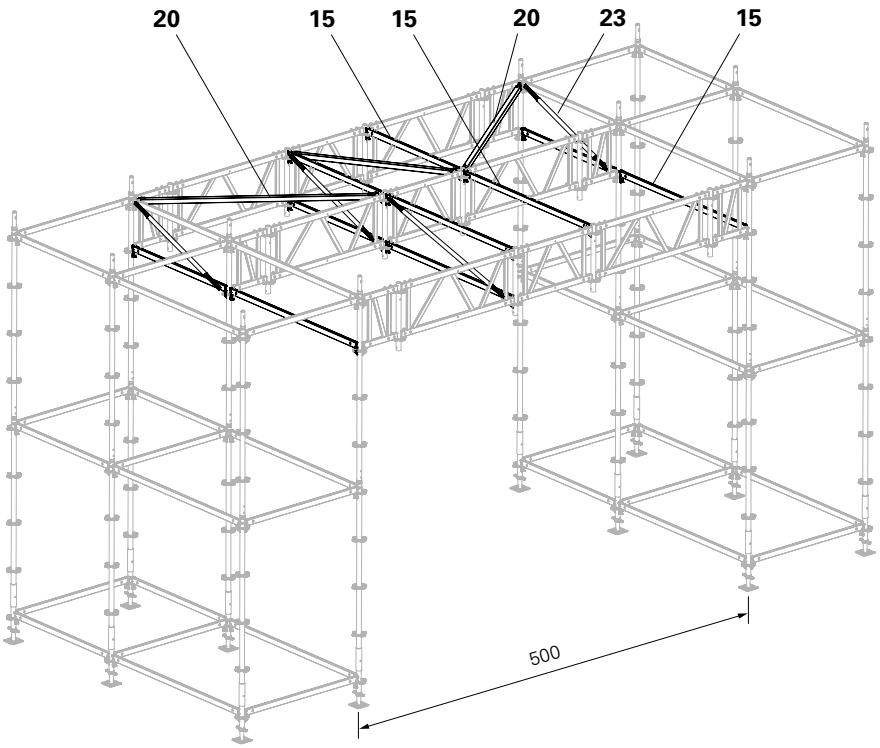


Fig. A13.11

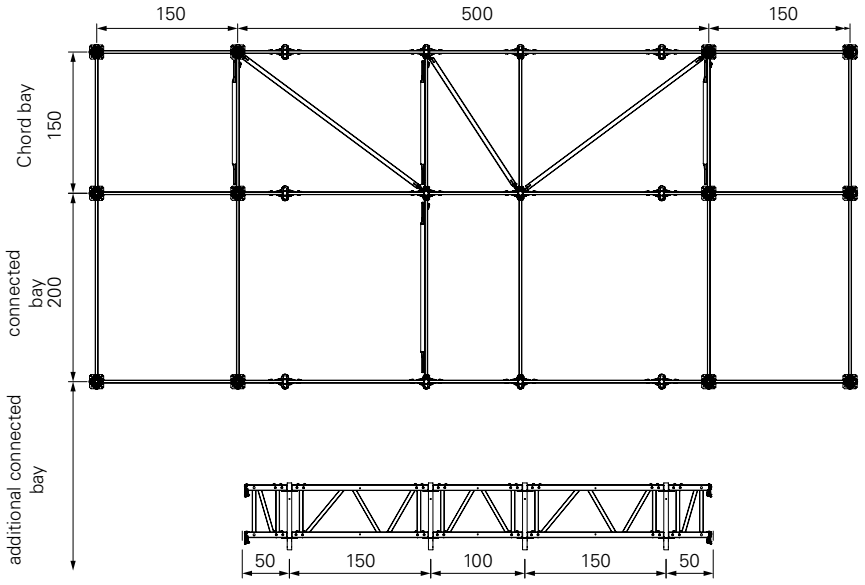


Fig. A13.11a

LGS Keder Rail URK
LGS Keder Connector URV

The LGS Keder Rail URK (**122**) is suitable for tarpaulins with 13 mm keder. Installing on scaffolding tubes with Ø 48 mm is done with LGS Keder Connector URV (**121**).

- Fit the keder connections a maximum of 1.50 m apart.
- Fit at least 2 keder connections for each keder rail.
- The keder rail connector is suitable for pipes with Ø 48 mm.
- Verify snow and wind loads on a project-specific basis.

Install the keder rail connector overlapping at the joint of the keder rail.

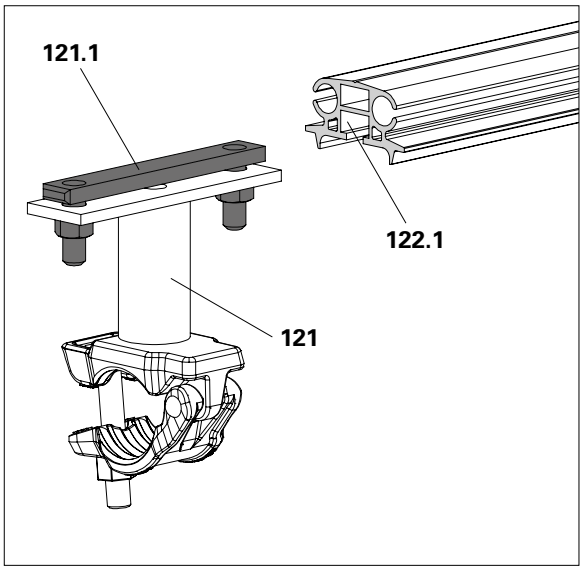


Fig. A14.01

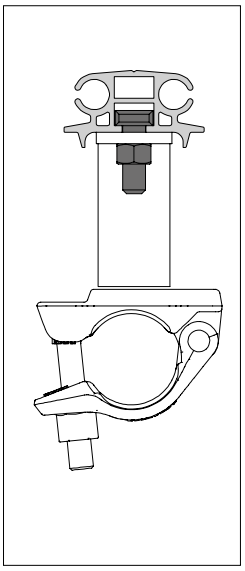


Fig. A14.01a

Assembly

1. Cut the LGS Keder Rail URK (**122**) to the required length and remove the burr.
2. Slide the terminal strip (**121.1**) on the Keder Connector URV (**121**) into the T-groove (**122.1**) of the Keder Rail URK and bolt it into place.
3. Install pre-assembled keder rails with the coupling side (**121.2**) of the keder connector on the respective vertical. (Fig. A14.02)
   For changes of direction, leave some space between the tracks at the joint for easier threading of the tarpaulin.

→ The keder rail is now installed.

Application example

Protection of work areas as a wall or as a roof.

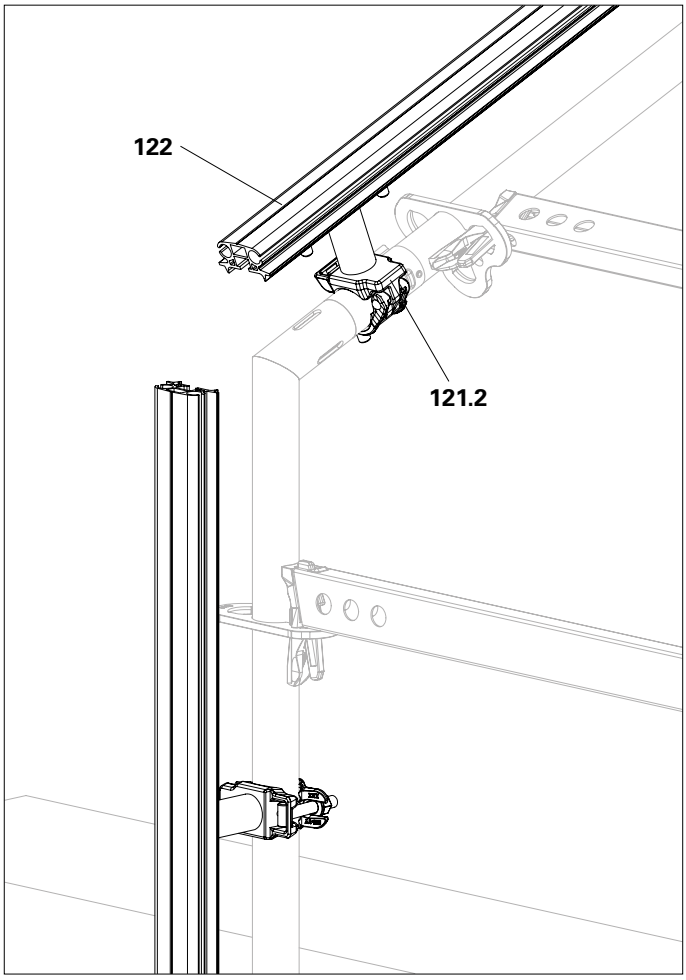


Fig. A14.02

Multi Brace EWB

On structures that do not allow anchoring, Multi Braces EWB can be installed as scaffold support.

A multi brace consists of:
- Outer tube Ø 60 mm (**135.1**) with fixed swivel coupling on both sides. (**135.3 + 135.4**)
- Inner tube Ø 48 mm (**135.2**).

(Fig. A15.01)

- Maximum extension length 5.60 m. The second hole (**135.6**) in the inner tube must not be visible and must always be completely covered by the outer tube. (Fig. A15.01)
- Tighten couplings using 50 Nm.
- Attach scaffolding support on each frame column progressively in line with basic scaffold assembly. Support angle α ≤ 60°.
- The force application must be close to the ledger. (Fig. A15.01a)

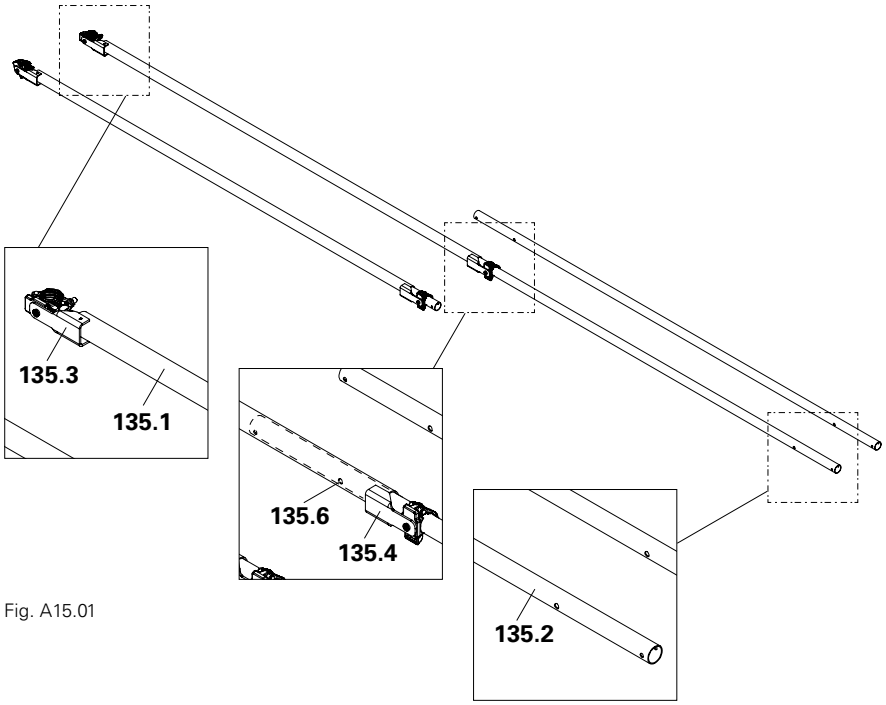


Fig. A15.01

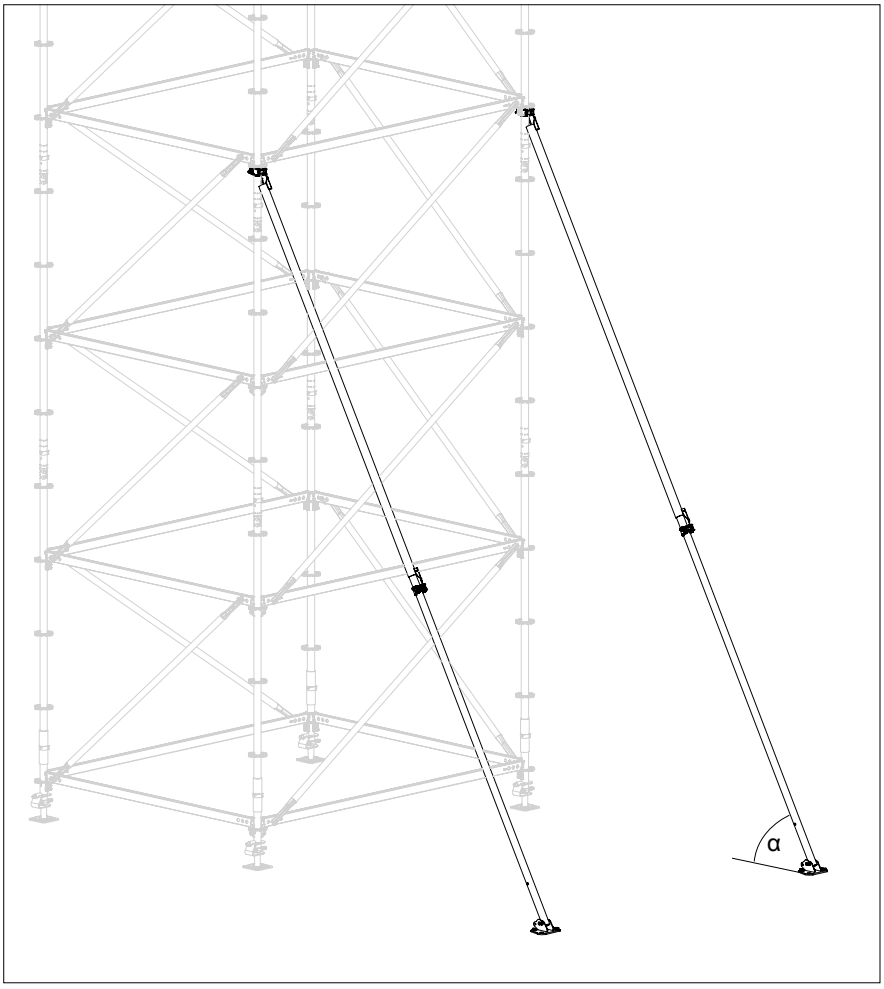


Fig. A15.01a

Base Plate EWB
Fix the Base Plate (**136**) to the substrate using 2 tie bolts (**137**) inserted through the small holes (**136.1**).

Alternatively, fix the base plate to the substrate by means of 2 pegs through the large holes (**136.2**).
Base plate is suitable for standard ground nails up to d = 25 mm. The hole (**136.2**) of the base plate has a diameter of 28 mm.

Install the inner tube of the multi brace with bolt and nut to the hole (**136.4**).
Install a multi brace as a kicker brace at the hole (**136.3**).
(Fig. A15.02a)

Instead of the Multi Brace EWB, one Push-Pull Prop RS can be installed on the middle hole (**136.5**) as scaffolding support.
(Fig. A15.02b)

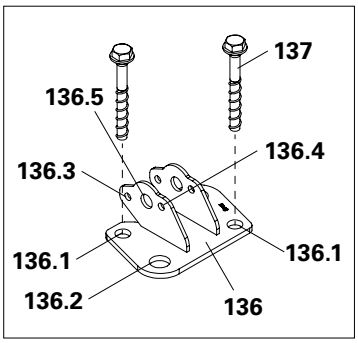


Fig. A15.02

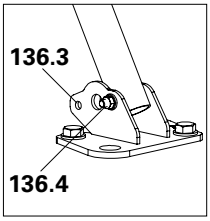


Fig. A15.02a

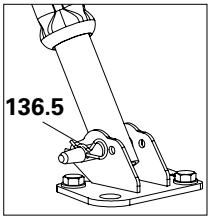


Fig. A15.02b

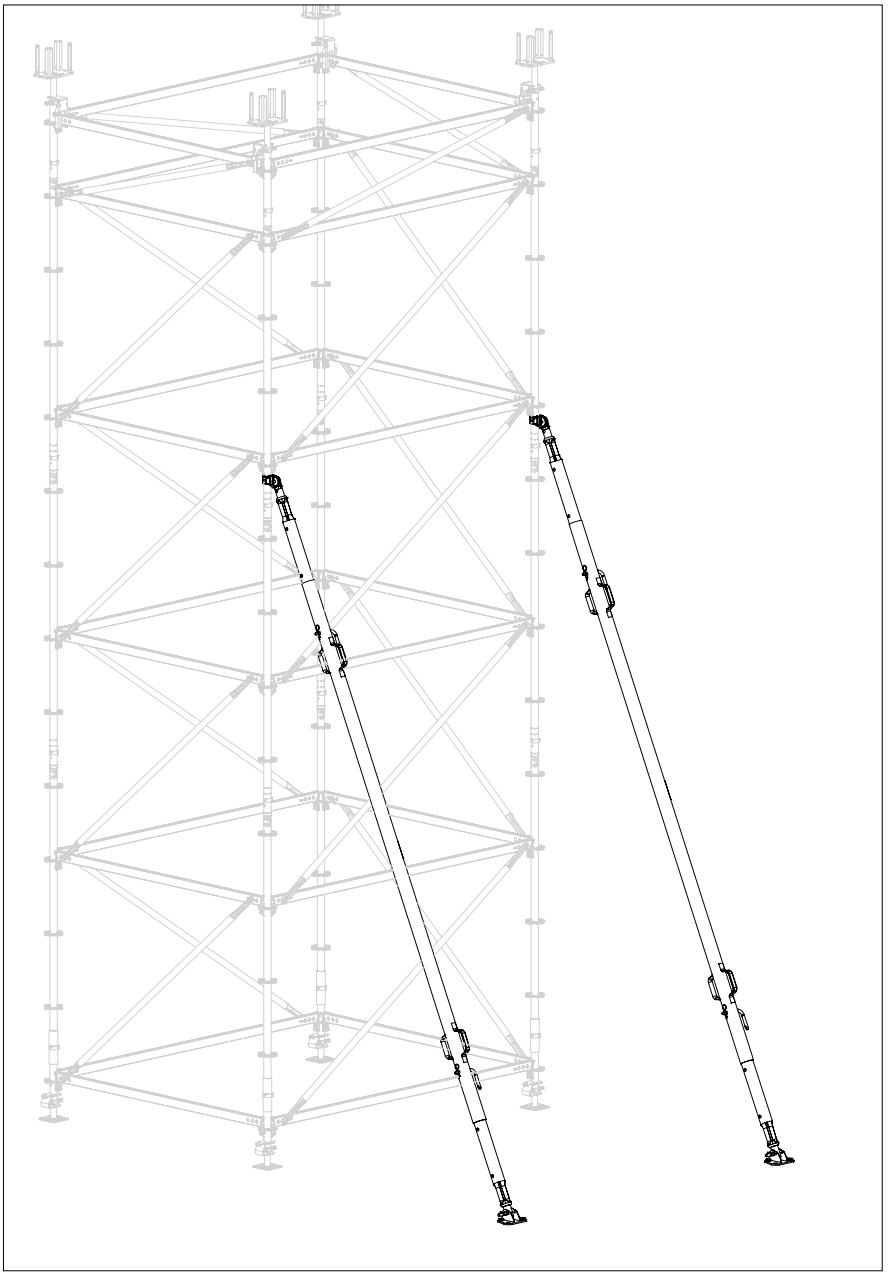


Fig. A15.03

Support up to 4.80 m height
Maximum permissible forces at maximum extension of 5.57 m:
Tension: 6.00 kN
Compression: 3.73 kN
(Fig. A15.04)

Assembly
1. Secure the multi brace on the basic scaffold at the top with an outer tube (**135.1**).
2. From a safe work location, fit the upper coupling (**135.3**) to the standard (**12**). Push the coupling as close as possible to the rosette and tighten. (Fig. A15.04a)
3. Loosen the bottom coupling (**135.4**) and extend the multi brace until the required support angle of $\alpha \leq 60°$ has been reached. Tighten the bottom coupling. (Fig. A15.04b)
4. Fit the inner tube (**135.2**) onto the rear hole (**136.4**) of the base plate by means of bolts (**137**) and nuts (**138**). (Fig. A15.04c)
5. Fix Base Plate EWB (**136**) to the substrate.
6. Label the multi brace as an obstacle.

→ The multi brace is now installed
(Fig. A15.04)

Components

13	Standard UVR-2
134	Scaffold support*
135	Multi Brace EWB
136	Base Plate EWB
137	Bolt M10 x 80-8.8
138	Hex-Nut EN 1661 M10-8
139	Anchor Bolt SW24 Ø14/20x130 mm

*The scaffold support and the inner tube of the multi brace are identical in terms of their construction.

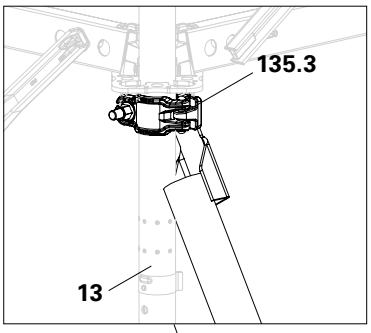


Fig. A15.04a

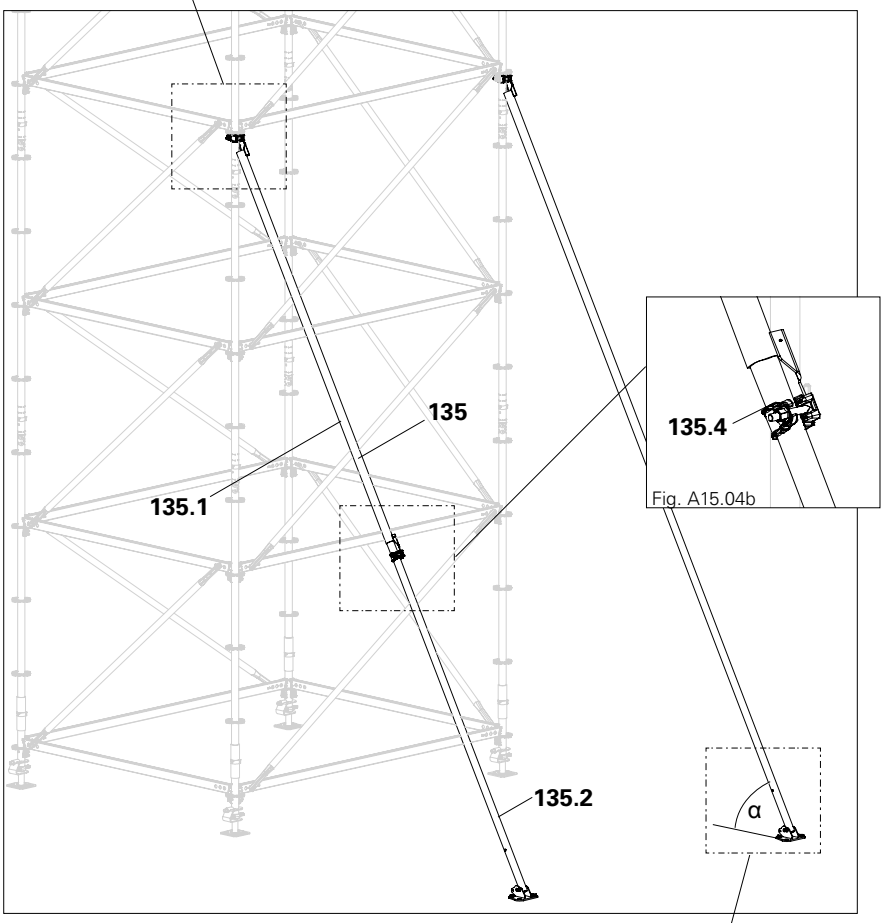


Fig. A15.04

Fig. A15.04b

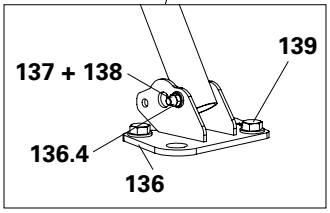


Fig. A15.04c

Support up to 7.10 m height
To extend the multi brace, insert another inner tube into the top side of the outer tube.

Maximum permissible forces at maximum extension of 8.20 m:
(Fig. A15.05a):
Tension 6.00 kN
Pressure 1.31 kN

Assembly
1. Extend the Multi Brace EWB with a scaffold support (**134**) or a further inner tube (**135.5**).
2. Insert upper inner tube (**135.5**) up to above the second hole in the outer tube and tighten the coupling.
3. Secure the multi brace on the basic scaffold.
4. From a safe work location, mount the inner tube to the standard (**13**) with a swivel coupling (**88**). Push the coupling as close as possible to the rosette and tighten. (Fig. A15.05a)
5. Loosen the bottom coupling and extend the multi brace until the required support angle of $\alpha \leq 60°$ has been reached. Tighten the bottom coupling.
6. Fit the inner tube (**135.2**) onto the rear hole (**136.4**) of the base plate by means of bolts (**137**) and nuts (**138**). (Fig. A15.05b)
7. Fix Base Plate EWB (**136**) to the substrate.
8. Label the multi brace as an obstacle.

→ The multi brace is now installed (Fig. A15.05)

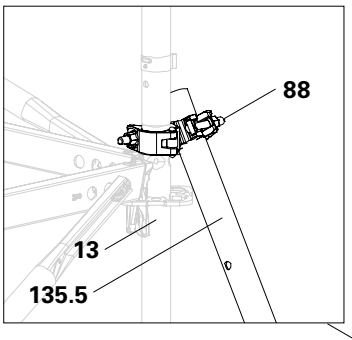


Fig. A15.05a

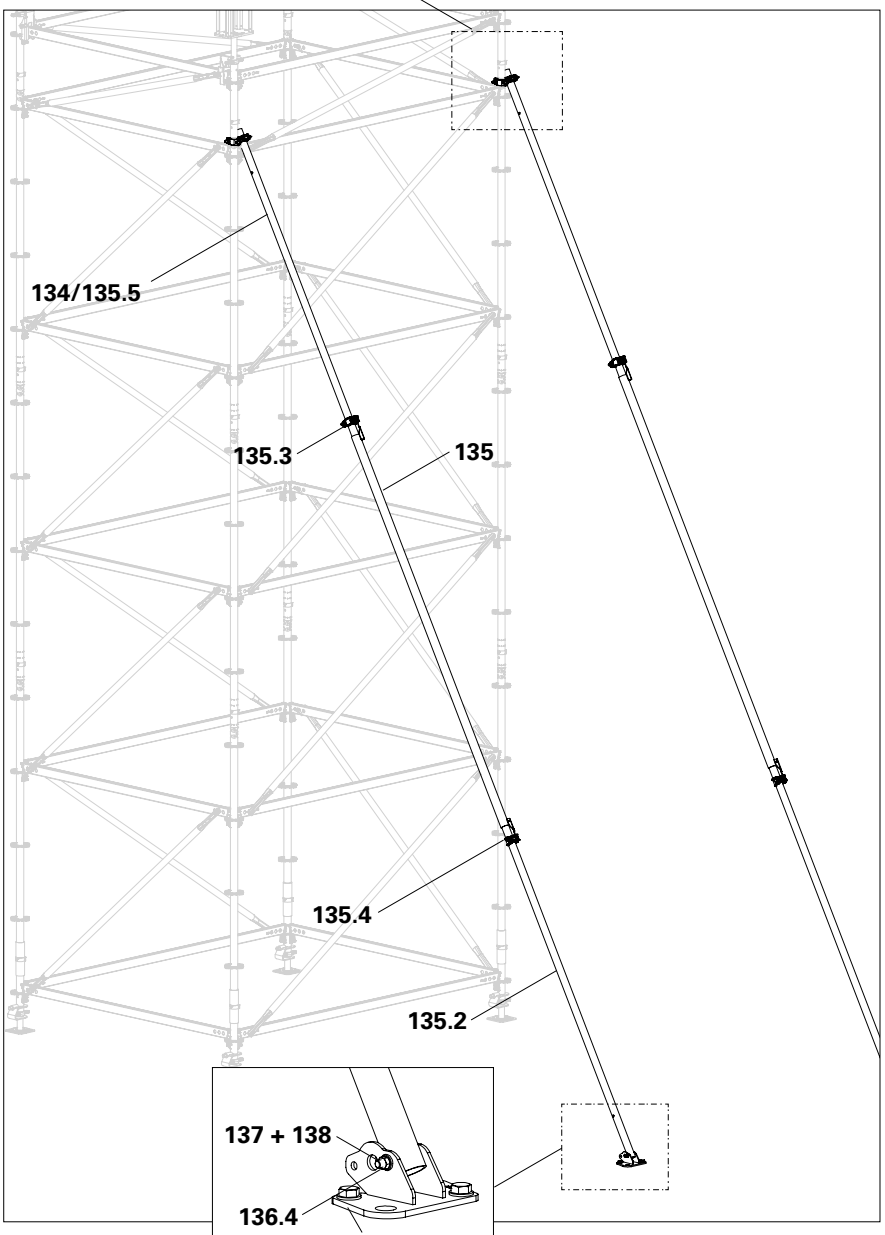


Fig. A15.05

Fig. A15.05b

Bracing

At right angles to the basic scaffold
In special cases, it may be necessary to reinforce the multi brace by means of a ledger, e.g. if the base plate cannot be sufficiently secured to prevent horizontal kicker brace.

- Separate static proof is required!
- The vertical load-bearing capacity of the substrate under the base plate must be guaranteed in any case!

Assembly

1. Fit an inner tube (**135.2**) onto the front hole (**136.3**) of the base plate (**136**) by means of bolts (**137**) and nuts (**138**). (Fig. A15.06b).
   – Alternatively, install a scaffolding tube with swivel coupling on the multi brace.
2. Install the inner tube or scaffolding tube on the standard (**13**) with a swivel coupling (**49**). Tighten the swivel coupling. (Fig. A15.06a)
3. Label horizontal bracing as an obstacle.

→ The bracing is now installed. (Fig. A15.06)

Required length of the scaffolding tube: for support up to 4.80 m approx. 2.50 m, for support up to 7.10 m approx. 4.00 m.

Components

12 Standard UVR-2
87 Standard coupling 48/48
88 Swivel Coupler 48/48
135 Multi Brace EWB
136 Base Plate EWB
137 Bolt M10 x 80-8.8
138 Hex-Nut EN 1661 M10-8

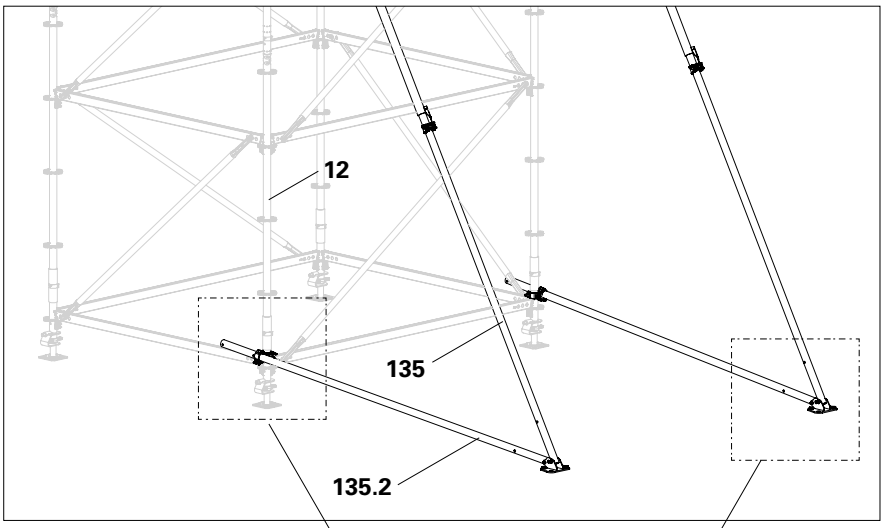


Fig. A15.06

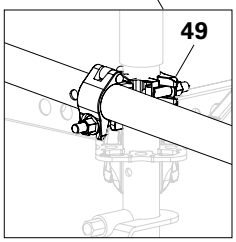


Fig. A15.06a

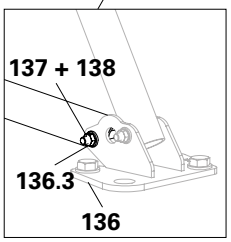


Fig. A15.06b

Horizontal and vertical bracing
If required according to the structural stability calculations, the multi-support must be braced against vertical and horizontal deflection.

- Separate static proof is required!
- The vertical load-bearing capacity of the substrate under the base plate must be guaranteed in any case!

Assembly

1. Vertically reinforce the multi brace (**135**) with an outer tube (**135.1**). Fit the outer tube to the standard (**12**) (Fig. A15.07b) and to the inner tube (**135.2**), close to the outer tube. The assembly position has an impact on the support angle.
2. For 3 m long bays, horizontally reinforce each multi brace with an outer tube.
   For bay lengths ≤ 2.5 m, horizontally reinforce each multi brace with a scaffolding tube (**145**) and standard couplers (**87**). (Fig. A15.07a)
3. Label horizontal bracing as an obstacle.

→ The bracing is now installed.
(Fig. A15.07)

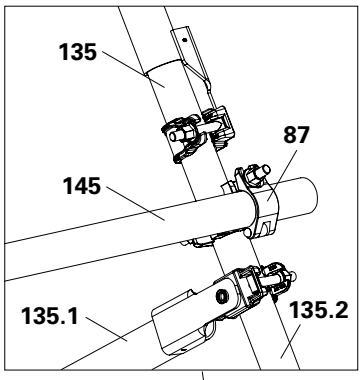


Fig. A15.07a

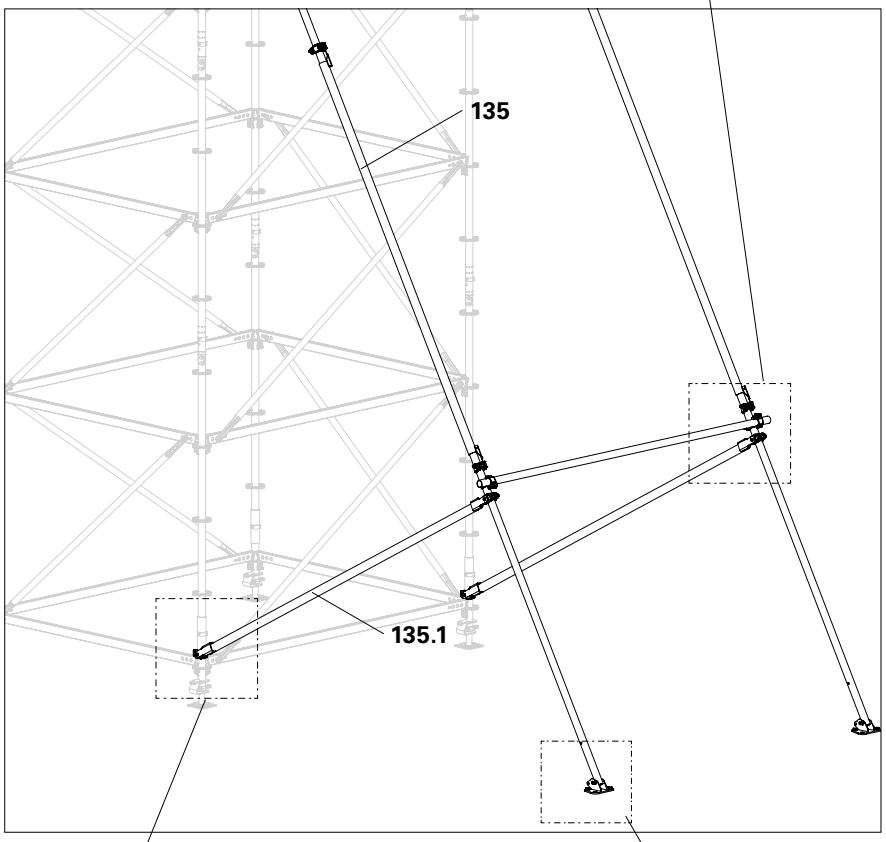


Fig. A15.07

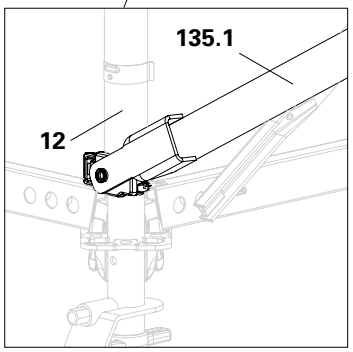


Fig. A15.07b

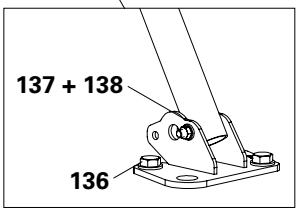


Fig. A15.07c

Push-Pull Props RS

As an alternative to the multi brace, the scaffold can be supported with Push-Pull Props RS.

Assembly

1. From a safe position, fit the Brace Connector HDR-2 (**146**) to the standard (**12**). Push the coupling as close as possible to the rosette and tighten.
2. Install Push-Pull Prop RS (**147**) on Brace Connector HDR-2. (Fig. A15.08a)
3. Spindle out the push-pull prop until the required support angle of $\alpha \leq 60°$ has been reached.
4. Fix the push-pull prop in the large hole of the base plate with bolts (**148**) and cotter pins (**149**). (Fig. A15.08b)
5. Fix Base Plate EWB (**136**) to the substrate.
6. Label the push-pull prop as an obstacle.

→ The push-pull prop is now installed. (Fig. A15.08)

Observe the permissible loads of the push-pull props and the brace connector.

Components

12	Standard
136	Base Plate EWB
146	Brace Connector HDR-2
147	Push-Pull Prop RS 650
148	Bolt Ø 20 x 140
149	Cotter Pin 4/1 ga

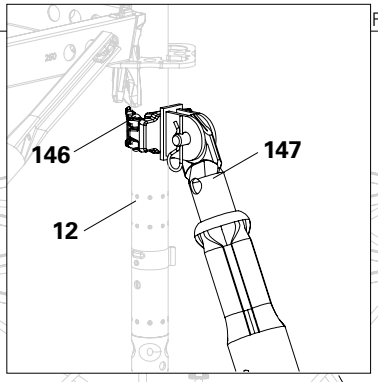


Fig. A15.08a

Fig. A15.08

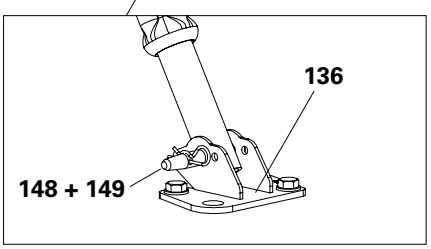


Fig. A15.08b

General information

All polycover components
- make use of signal colours to indicate hazard areas,
- lower the risk of injury in the event of impact,
- reduce fouling.

Note

If handled incorrectly, polycover components may break.
⇒ Do not use a hammer when working with polycover components.
⇒ At temperatures below 0 °C, preheat polycover components for assembly.

Poly Cover Tubes UPC-T

For closing tube ends with d = 48.3 mm. (Fig. A16.01)

1. Push the Poly Cover Tube UPC-T (**140**) onto the end of a tube with d = 48.3 mm. (Fig. A16.01a)

→ The poly cover is mounted.

Fig. A16.01

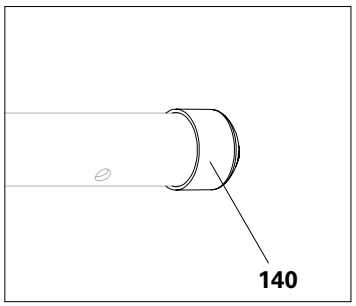


Fig. A16.01a

Poly Cover Rosette UPC-R

For protection around ledger-free rosettes. (Fig. A16.02)

1. Position the Poly Cover Rosette UPC-R (**141**) with one half on the rosette.
2. Close the second half.
   → The clip fastener engages.
   → The poly cover is mounted.

(Fig. A16.02a)

- The poly cover rosette can be additionally secured with cable ties.

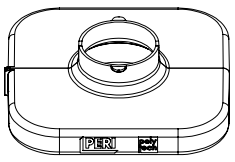


Fig. A16.02

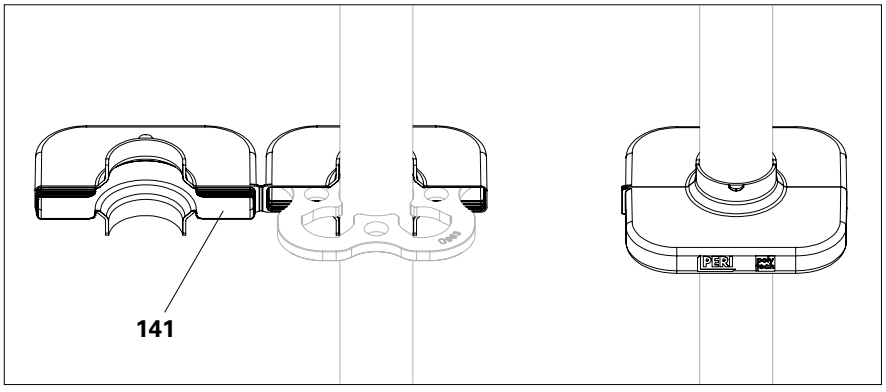


Fig. A16.02a

Poly Cover Couplings UPC-C

For protection around a rosette with ledgers installed or around threaded pipe/coupling connections.
(Fig. A16.03)

Assembly

1. Clip the Poly Cover Couplings UPC-C (**142**) onto the vertical d = 48.3 mm.
2. For ledgers arranged around a 90° corner: fit Poly Cover UPC-C (**142 + 142a**) in an overlapping manner.
   (Fig. A16.03a)
3. If ledgers are arranged longitudinally: fit Poly Cover UPC-C on both sides.
   (Fig. A16.03b)
4. In case of crossing tubes, mount 2x poly covers UPC-C overlapping on one or both tubes.
   (Fig. A16.03c + Fig. A16.03d)

→ The poly cover is mounted.

Use cable ties to provide the poly cover couplings with extra reinforcement.

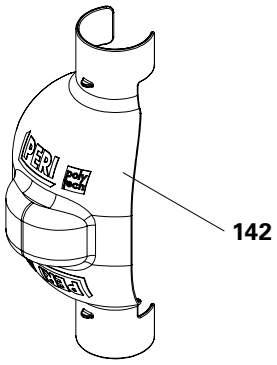


Fig. A16.03

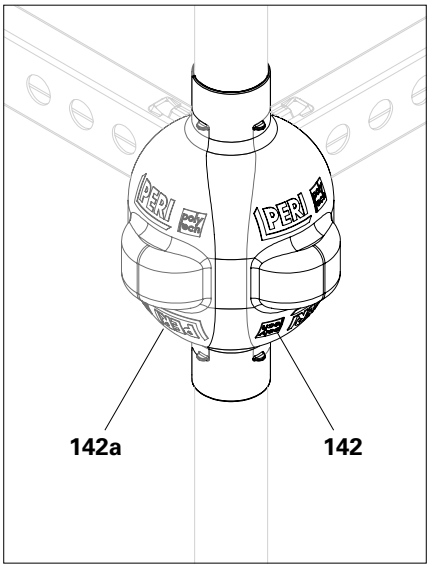


Fig. A16.03a

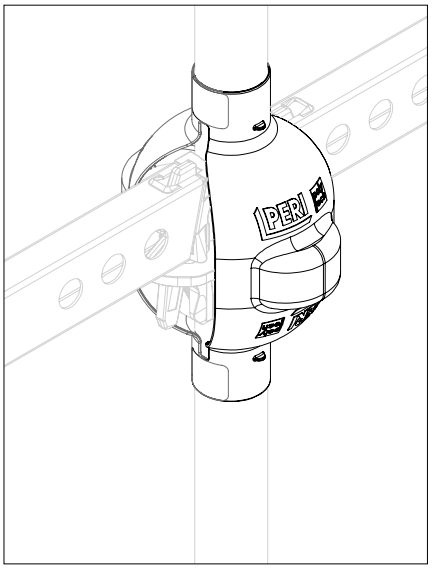


Fig. A16.03b

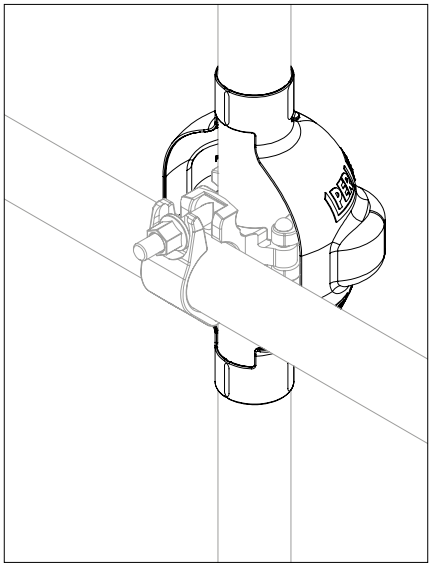


Fig. A16.03c

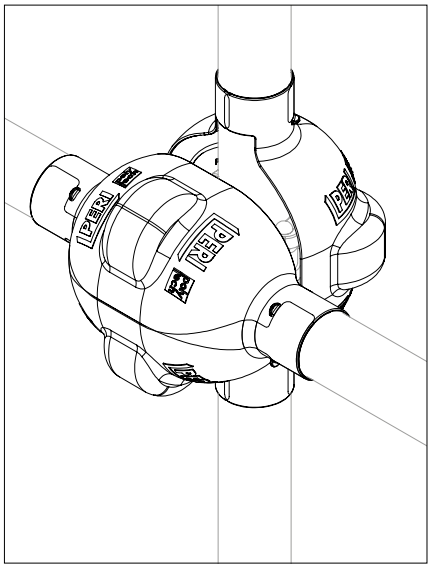


Fig. A16.03d

Spindle Lining UES

Spindle Lining UES serves to protect the substrate.
If additional reflectors (**143.1**) are installed, this improves visibility.
(Fig. A16.04)
The component can transfer compression forces of up to 50 kN.

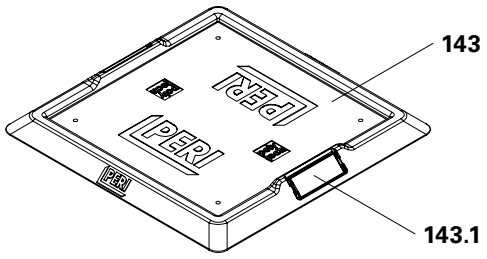


Fig. A16.04

Assembly

1. Place the spindle lining (**143**) on a flat and load-bearing substrate
2. Position the spindle centrally

→ The spindle lining is installed.
(Fig. A16.04a)

Static proof for transferring forces into the substrate is to be carried out separately.

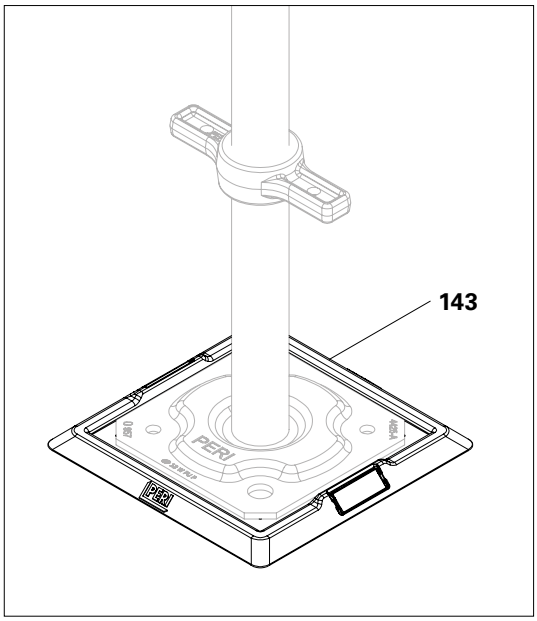
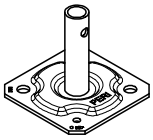
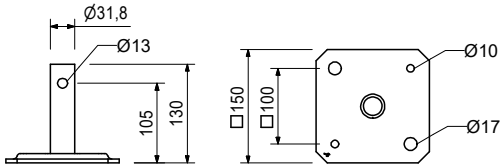


Fig. A16.04a

Art no.	Weight [kg]	
100244	1.200	**Base Plate UJP**

Without height adjustment.

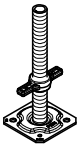


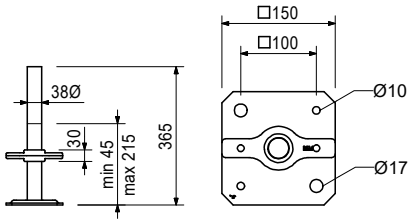


Art no.	Weight [kg]	
116762	2.830	**Adj. Base Plate UJB 38-36/17**

Notes

With captive quick jack nut.





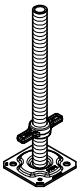
Accessory (not included)

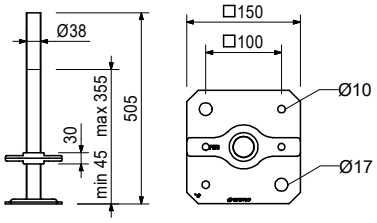
100863 Spindle Locking UJS

Art no.	Weight [kg]	
100411	3.390	**Adj. Base Plate UJB 38-50/30**

Notes

With captive red quick jack nut.





Accessory (not included)

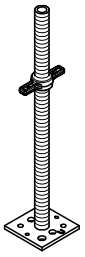
100863 Spindle Locking UJS

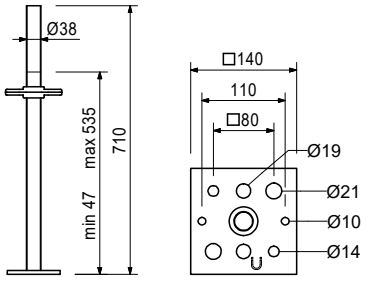
Art no.	Weight [kg]	
019780	5.250	**Adj. Base Plate TR 38-70/50**

For higher loaded shoring scaffolds.

Notes

With captive silver quick jack nut.





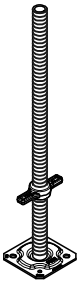
Accessory (not included)

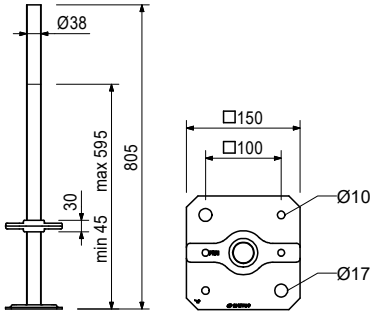
100863 Spindle Locking UJS

Art no.	Weight [kg]	
100242	4.570	**Adj. Base Plate UJB 38-80/55**

Notes

With captive yellow quick jack nut.





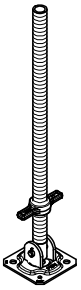
Accessory (not included)

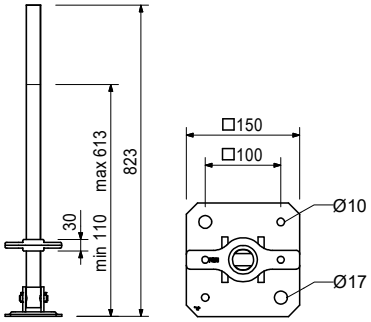
100863 Spindle Locking UJS

Art no.	Weight [kg]	
100159	5.220	**Adj.Base Plate UJS 38-80/50 Sw**

Notes

With captive yellow quick jack nut.





Accessory (not included)

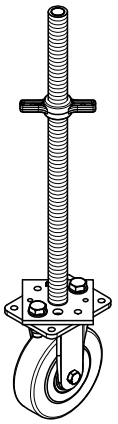
100863 Spindle Locking UJS

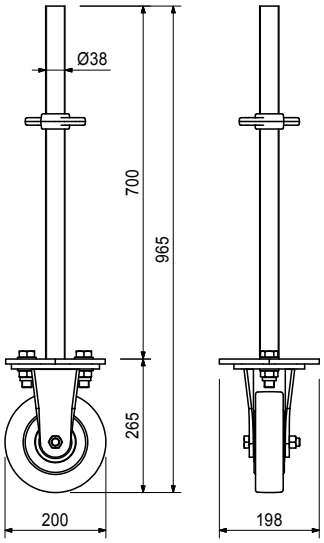
Art no.	Weight [kg]	
123941	12.500	**Castor UEW 30 with Spindle**

As a non-steerable and unbraked castor for mobile scaffolds. Wheel body white.

Notes

Permissible load up to 30.0 kN depending on spindle extension and bracing.





Accessory (not included)

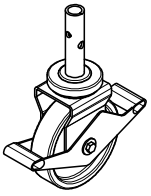
100863 Spindle Locking UJS

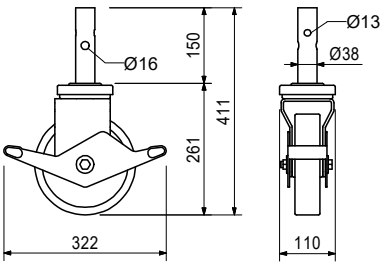
Art no.	Weight [kg]	
101858	7.000	**Castor UEW 26 with Spigot**

Wheel for mobile scaffolds. Wheel bodies red.

Notes

Permissible load:
- Locked state: 12.0 kN.
- Running state: 6.0 kN.





Accessory (not included)

100719 Screw ISO4014-M10x070-8.8-ga-N

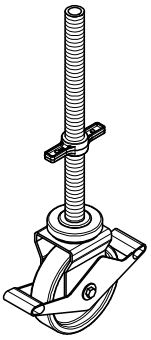
111053 Locking Pin Ø48-57mm

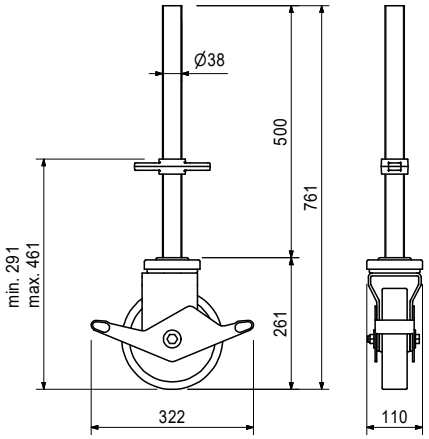
Art no.	Weight [kg]	
101860	7.500	**Castor UEW 26 with Spindle**

Castor for mobile scaffolds. Wheel bodies red.

Notes

Permissible load up to 12.0 kN depending on spindle extension and bracing.





Accessory (not included)

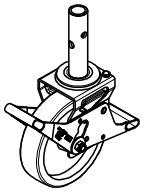
100863 Spindle Locking UJS

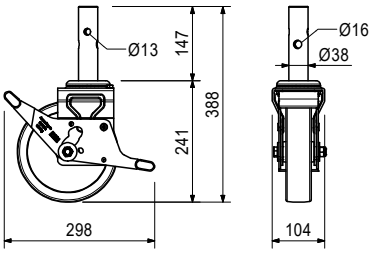
Art no.	Weight [kg]		B [mm]	L [mm]
138433	7.000	**Castor UEW 24 with Spigot**	104	298

Wheel for mobile scaffolds. Wheel bodies red.

Notes

Permissible load:
- Locked state: 12.0 kN.
- Running state: 6.0 kN.





Accessory (not included)

100719 Screw ISO4014-M10x070-8.8-ga-N

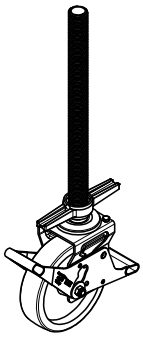
111053 Locking Pin Ø48-57mm

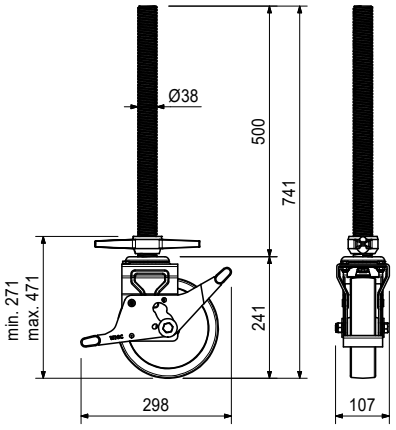
Art no.	Weight [kg]		B [mm]	L [mm]
138434	7.500	**Castor UEW 24 with Spindle**	107	298

Castor for mobile scaffolds. Wheel bodies red.

Notes

Permissible load up to 12.0 kN depending on spindle extension and bracing.





Accessory (not included)

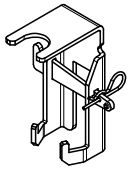
100863 Spindle Locking UJS

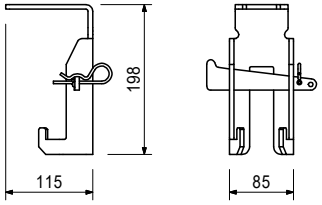
Art no.	Weight [kg]	
109563	1.460	**Head Spindle Locking UJH**

Connects Head Spindles, Section Spindles and Spindle Head with Ledger UH when moving.

Notes

Permissible load 2.1 kN.





Included in delivery

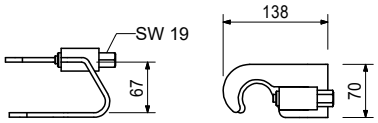
018060 Cotter Pin 4/1 ga 1 pc

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

Locks base spindles and section spindles Ø 38 mm in the leg during moving procedures.

Notes

Permissible load 1.5 kN.

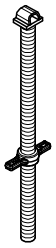


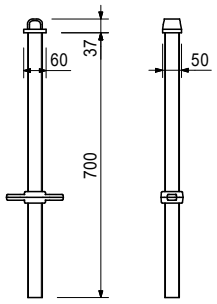
Art no.	Weight [kg]	
109630	4.240	**Spindle Head SRU**

For connecting the Steel Walers SRU on shoring scaffolds.

Notes

With captive quick jack nut.





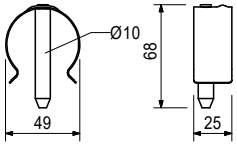
Accessory (not included)

104031 Fitting Pin Ø21x120mm

018060 Cotter Pin 4/1 ga

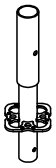
Art no.	Weight [kg]	
111053	0.059	**Locking Pin Ø48-57mm**

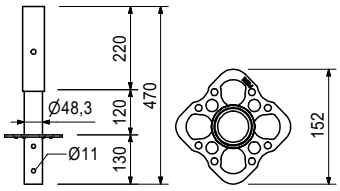
As tension-proof connection of standards with Ø 48 up to 57 mm.



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

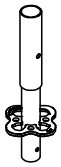
For fitting onto the base spindles directly. Can also be used as 25 cm standard.

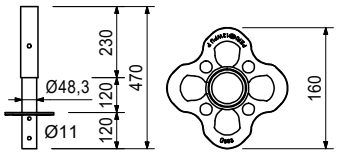




Art no.	Weight [kg]	
400014	2.460	**Base Standard UVB 24**

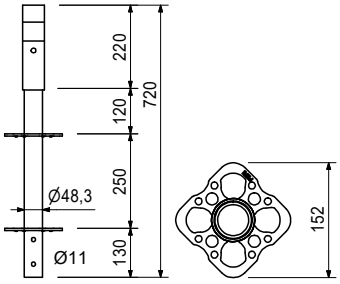
For fitting onto the base spindles directly.





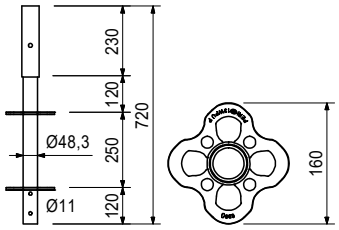
Art no.	Weight [kg]	
135187	3.580	**Base Standard UVB 50**

For fitting onto the base spindles directly. Can also be used as 50 cm standard.

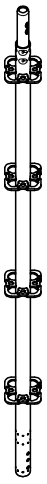


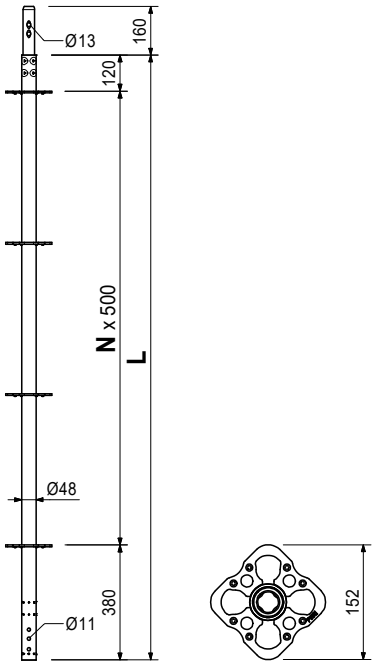
Art no.	Weight [kg]	
417194	3.980	**Base Standard UVB 49**

For fitting onto the base spindles directly. Reduces necessary spindle extensions with 25 cm rosette spacing.

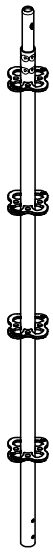


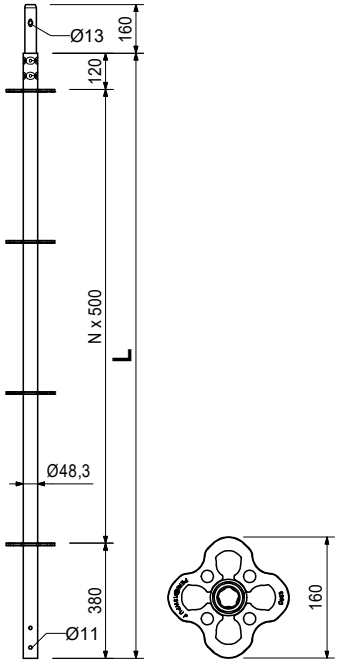
Art no.	Weight [kg]		L [mm]
		Standards UVR-2	
132219	2.720	**Standard UVR-2 50**	500
132224	4.340	**Standard UVR-2 100**	1000
132229	6.190	**Standard UVR-2 150**	1500
132234	8.030	**Standard UVR-2 200**	2000
132239	11.700	**Standard UVR-2 300**	3000





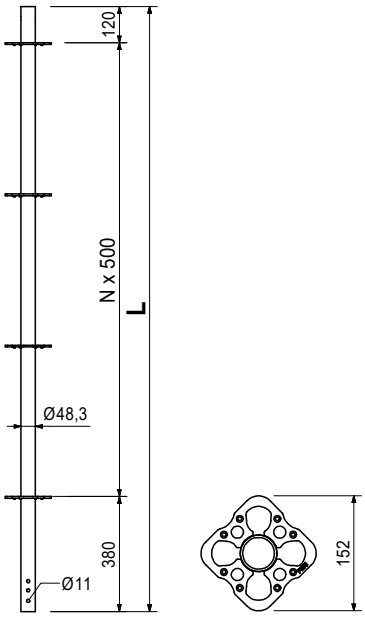
Art no.	Weight [kg]		L [mm]
		Standards UVR	
402859	3.080	**Standard UVR 50**	500
401306	5.380	**Standard UVR 100**	1000
402860	7.690	**Standard UVR 150**	1500
400009	10.000	**Standard UVR 200**	2000
400012	14.700	**Standard UVR 300**	3000





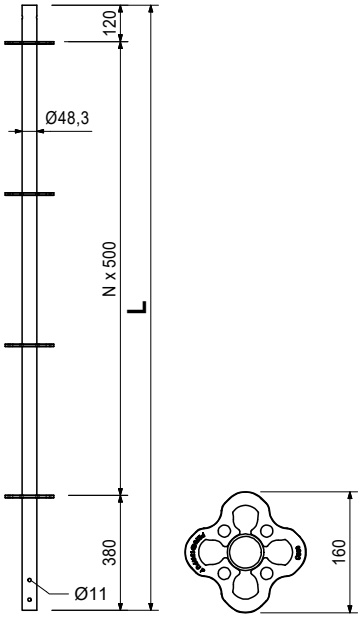
Art no.	Weight [kg]		L [mm]
		Top Standards UVH-2	
132123	2.100	**Top Standard UVH-2 50**	500
132194	4.210	**Top Standard UVH-2 100**	1000
132198	6.320	**Top Standard UVH-2 150**	1500
132200	8.420	**Top Standard UVH-2 200**	2000
132202	10.500	**Top Standard UVH-2 250**	2500

Without spigot for supporting head spindles.



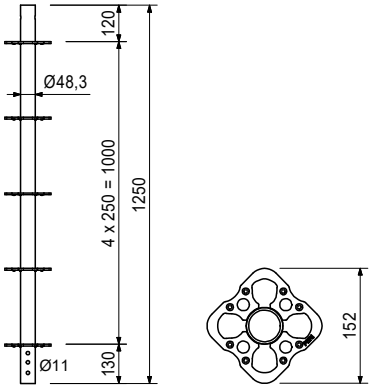
Art no.	Weight [kg]		L [mm]
		Top Standards UVH	
401309	2.510	**Top Standard UVH 50**	500
400000	4.610	**Top Standard UVH 100**	1000
400003	6.920	**Top Standard UVH 150**	1500
400005	9.240	**Top Standard UVH 200**	2000
400007	11.500	**Top Standard UVH 250**	2500

Without spigot for supporting head spindles.



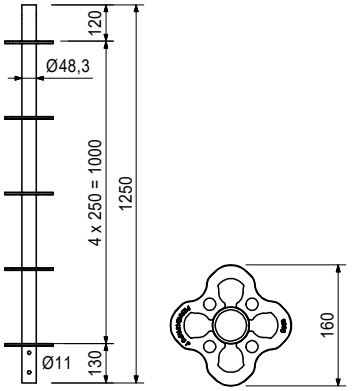
Art no.	Weight [kg]		L [mm]
132196	6.060	**Top Standard UVH-2 125**	1250

Without spigot for supporting head spindles.

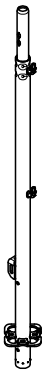


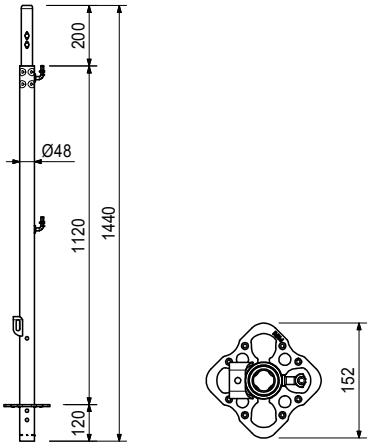
Art no.	Weight [kg]		L [mm]
417195	7.600	**Top Standard UVH 125**	1250

Without spigot for supporting head spindles.

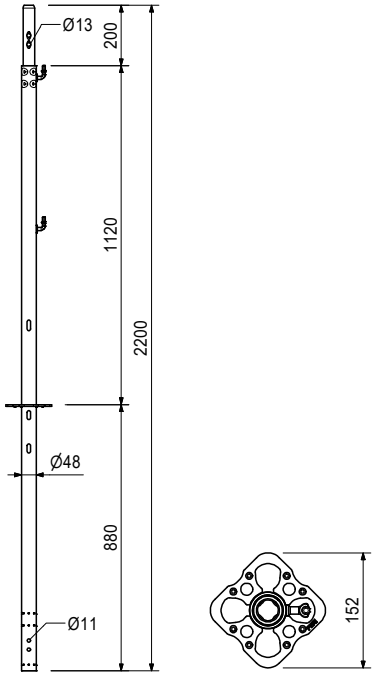


Art no.	Weight [kg]	
130619	5.050	**Easy Base Standard EVS 124**

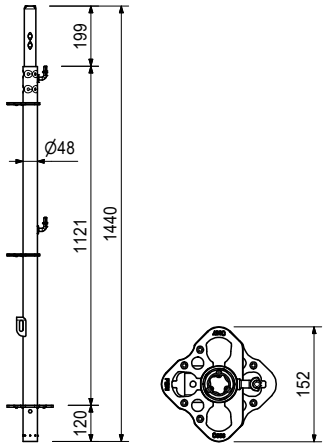




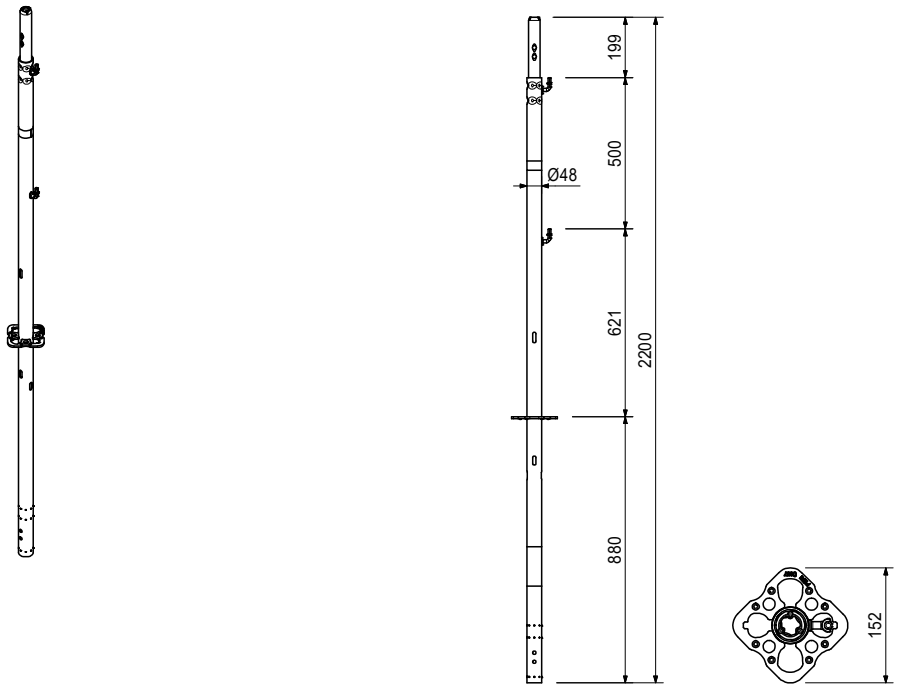
Art no.	Weight [kg]	
430621	7.250	**Easy Standard EVM 200**



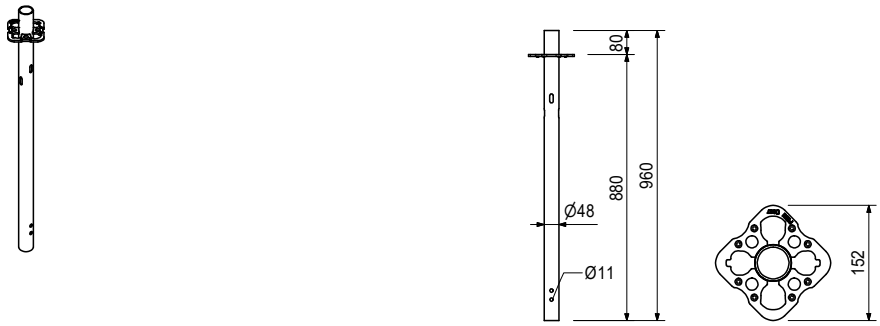
Art no.	Weight [kg]	
137514	6.500	**Base Standard EVOTOP EVS 124**



Art no.	Weight [kg]	
137509	8.500	**Standard EVOTOP EVM 200**

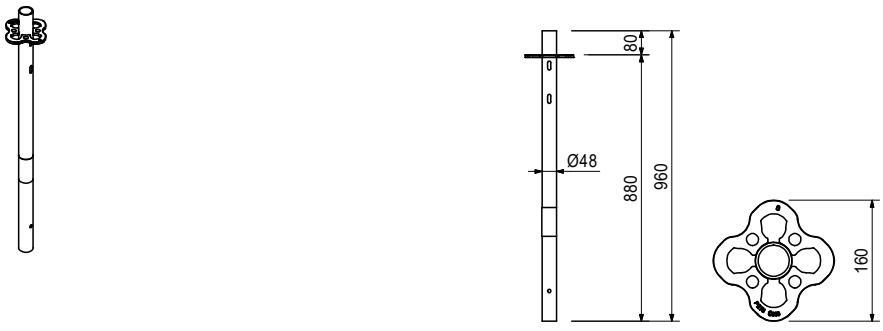


Art no.	Weight [kg]	
137517	3.730	**Top Standard EVOTOP EVT 96**

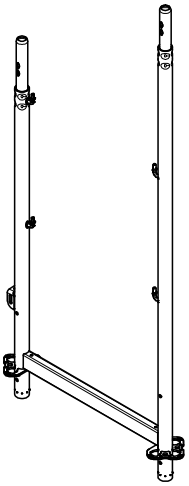


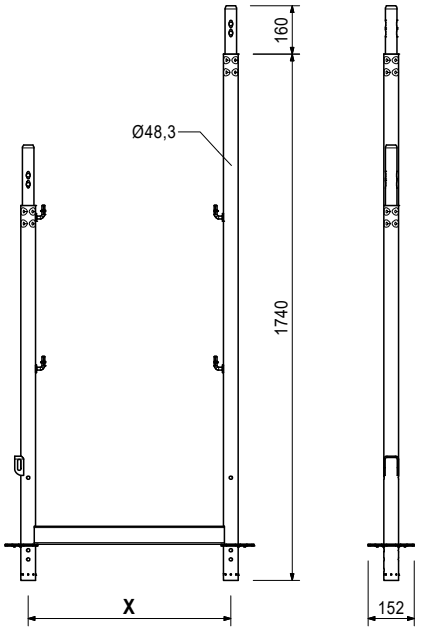
Art no.	Weight [kg]	
435972	4.310	**Easy Head Standard EVT 96**

For completing the top section of the scaffold when using Console Bracket ECM in conjunction with Easy Standard EVM to increase the width of the scaffold.

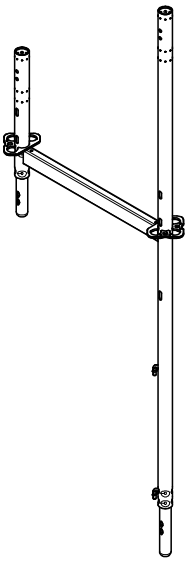


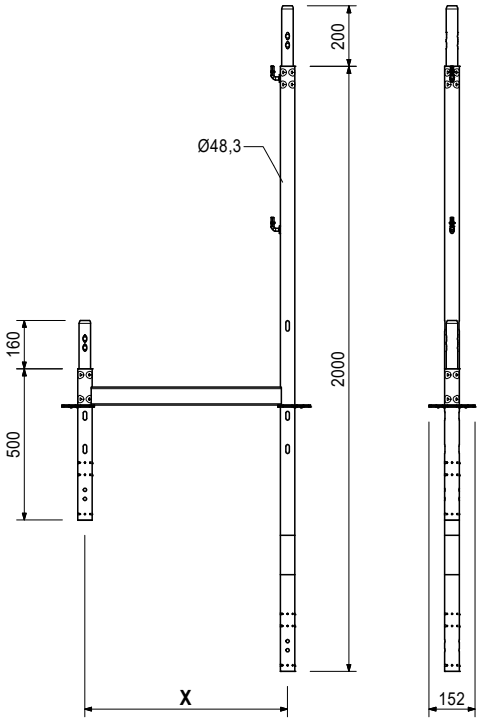
Art no.	Weight [kg]		X [mm]
		Base Frames EVB	
130518	13.200	**Base Frame EVB 67**	670
130858	14.200	**Base Frame EVB 100**	1000





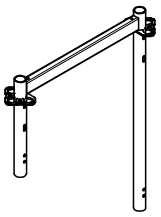
Art no.	Weight [kg]		X [mm]
		Easy Frames EFV	
130466	11.700	**Easy Frame EVF 67**	670
130860	10.300	**Easy Frame EVF 100**	1000

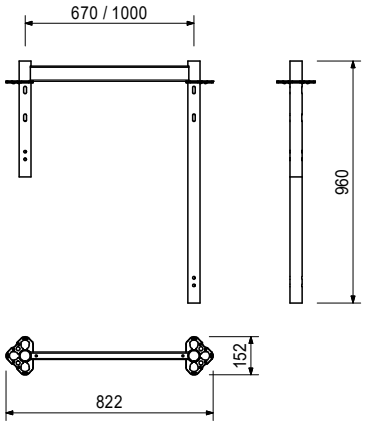




Art no.	Weight [kg]	
		Head Frames EVH
129314	8.580	**Head Frame EVH 67**
130804	10.300	**Head Frame EVH 100**

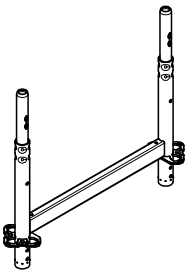
For completing the top section of the scaffold when using Console Bracket ECM to increase width of scaffold.

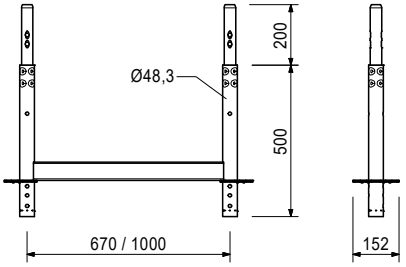




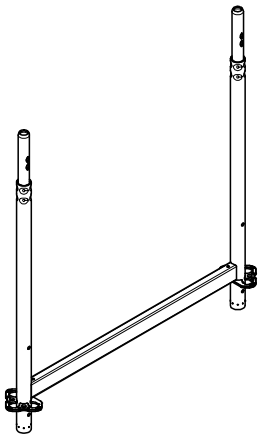
Art no.	Weight [kg]	
		Base Compensations EVA
130522	7.010	**Base Compensation EVA 67/50**
130854	8.900	**Base Compensation EVA 100/50**

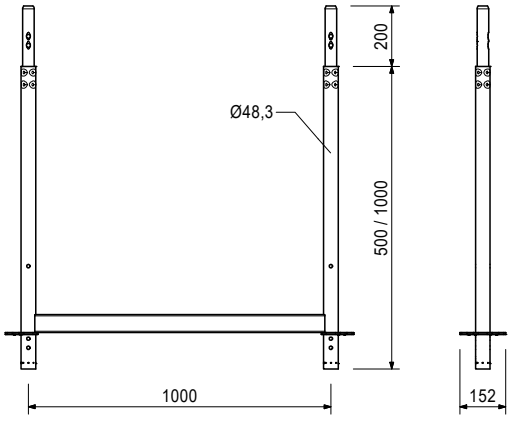
Facilitates height adjustments.





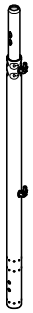
Art no.	Weight [kg]	
		Base Compensations EVA
130526	14.900	**Base Compensation EVA 67/100**
130856	11.100	**Base Compensation EVA 100/100**

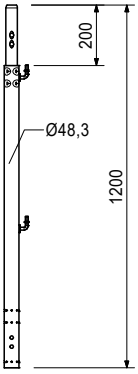




Art no.	Weight [kg]	
130512	5.080	**Guardrail Post EVP**

For completing the scaffold in conjunction with Console Brackets ECM or Protection Panel EPS.

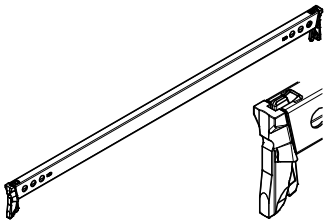


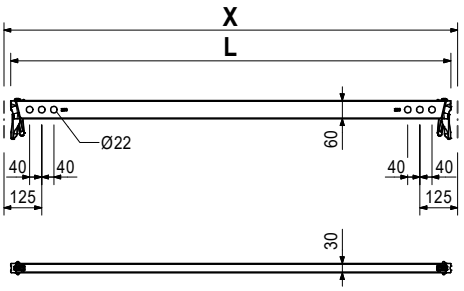


Art no.	Weight [kg]		L [mm]	X [mm]
		Horizontal Ledgers UH-2		
131995	1.400	**Horizontal Ledger UH-2 25**	204	250
133900	1.590	**Horizontal Ledger UH-2 33**	284	330
131998	2.220	**Horizontal Ledger UH-2 50**	454	500
133903	2.720	**Horizontal Ledger UH-2 67**	624	670
132213	2.680	**Horizontal Ledger UH-2 75**	704	750
137911	3.750	**Horizontal Ledger UH-2 100E**	954	1000
432004	3.730	**Horizontal Ledger UH-2 100**	954	1000
132007	4.500	**Horizontal Ledger UH-2 125**	1204	1250
140107	4.770	**Horizontal Ledger UH-2 133E**	1284	1330
132010	4.670	**Horizontal Ledger UH-2 150**	1454	1500
132013	5.330	**Horizontal Ledger UH-2 175**	1704	1750
132016	6.620	**Horizontal Ledger UH-2 200**	1954	2000
132019	6.650	**Horizontal Ledger UH-2 225**	2204	2250
132025	8.210	**Horizontal Ledger UH-2 250**	2454	2500
132022	9.590	**Horizontal Ledger UH-2 300**	2954	3000

Notes

With color coding for length identification.

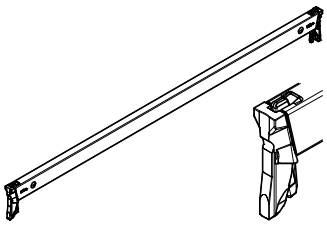


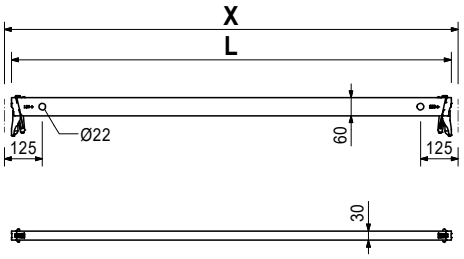


Art no.	Weight [kg]		L [mm]	X [mm]
		Horizontal Ledgers UH Plus		
414613	1.420	**Horizontal Ledger UH 25 Plus**	204	250
414595	2.070	**Horizontal Ledger UH 50 Plus**	454	500
429982	2.520	**Horizontal Ledger UH 67 Plus**	624	670
414629	2.730	**Horizontal Ledger UH 75 Plus**	704	750
414632	4.390	**Horizontal Ledger UH 100 Plus**	954	1000
414638	5.340	**Horizontal Ledger UH 125 Plus**	1204	1250
414641	4.720	**Horizontal Ledger UH 150 Plus**	1454	1500
417032	5.380	**Horizontal Ledger UH 175 Plus**	1704	1750
414645	6.040	**Horizontal Ledger UH 200 Plus**	1954	2000
416356	6.700	**Horizontal Ledger UH 225 Plus**	2204	2250
414648	7.360	**Horizontal Ledger UH 250 Plus**	2454	2500
414651	8.680	**Horizontal Ledger UH 300 Plus**	2954	3000

Notes

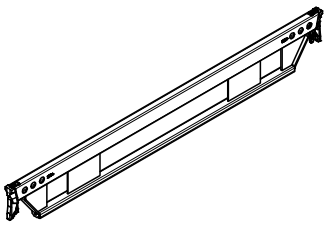
With length marking for easier identification.

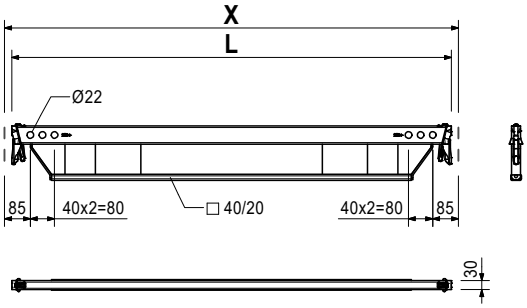




Art no.	Weight [kg]		L [mm]	X [mm]
		Horizontal Ledgers UHV-2		
137020	10.100	**Horizontal Ledger UHV-2 150**	1454	1500
137025	13.600	**Horizontal Ledger UHV-2 200**	1954	2000
137030	17.000	**Horizontal Ledger UHV-2 250**	2454	2500
137035	20.200	**Horizontal Ledger UHV-2 300**	2954	3000

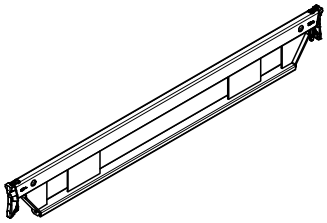
For high loads, e.g. in the case of material storage.

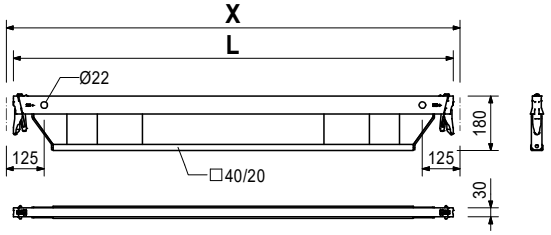




Art no.	Weight [kg]		L [mm]	X [mm]
		Horizontal Ledgers UHV Plus		
414681	10.900	**Horizontal Ledger UHV 150 Plus**	1454	1500
414687	14.700	**Horizontal Ledger UHV 200 Plus**	1954	2000
414691	17.900	**Horizontal Ledger UHV 250 Plus**	2454	2500
414695	21.600	**Horizontal Ledger UHV 300 Plus**	2954	3000

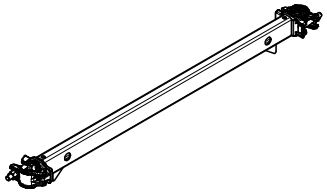
For high loads, e.g. in the case of material storage.

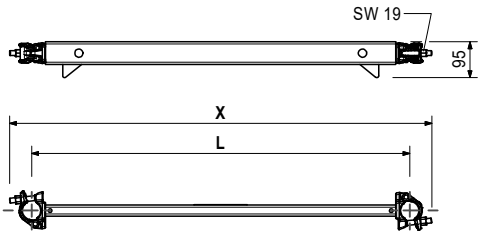




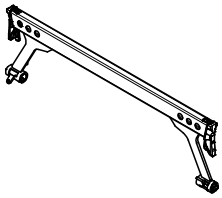
Art no.	Weight [kg]		L [mm]	X [mm]
		Coupler Ledgers UHC		
130009	3.410	**Coupler Ledger UHC 67**	670	780
127533	3.620	**Coupler Ledger UHC 75**	750	860
127537	5.310	**Coupler Ledger UHC 100**	1000	1110

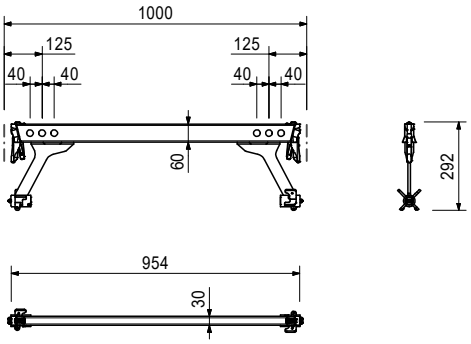
For bracing of formwork girders.





Art no.	Weight [kg]	
137595	6.220	**Ledger EVOTOP UH-SL 100**



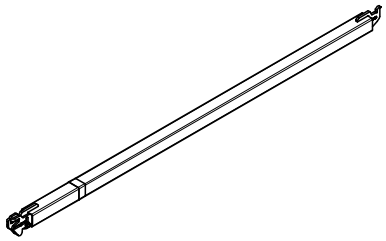


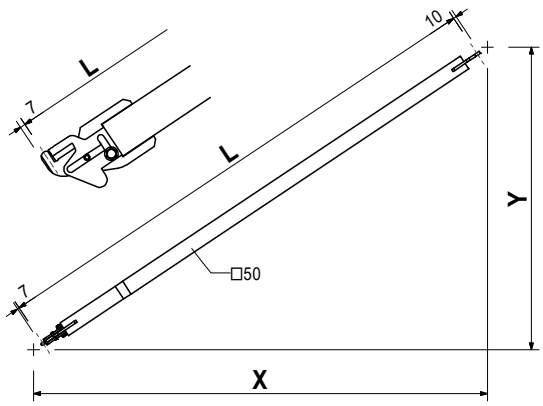
Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		H-Braces UBH Flex			
114818	4.810	**H-Brace UBH Flex 100/100**	1335	1000	1000
114904	5.700	**H-Brace UBH Flex 125/125**	1689	1250	1250
114821	5.770	**H-Brace UBH Flex 150/100**	1725	1500	1000
114908	6.260	**H-Brace UBH Flex 150/125**	1874	1500	1250
114912	6.580	**H-Brace UBH Flex 150/150**	2042	1500	1500
114820	7.120	**H-Brace UBH Flex 200/100**	2161	2000	1000
124097	8.160	**H-Brace UBH Flex 200/150**	2422	2000	1500
114916	8.740	**H-Brace UBH Flex 200/200**	2749	2000	2000
114896	8.300	**H-Brace UBH Flex 250/75**	2541	2500	750
114819	8.900	**H-Brace UBH Flex 250/100**	2620	2500	1000
114996	9.050	**H-Brace UBH Flex 250/125**	2720	2500	1250
124101	9.290	**H-Brace UBH Flex 250/150**	2838	2500	1500
114920	10.000	**H-Brace UBH Flex 250/200**	3123	2500	2000
114928	11.400	**H-Brace UBH Flex 250/250**	3456	2500	2500
114900	9.550	**H-Brace UBH Flex 300/75**	3025	3000	750
114892	9.820	**H-Brace UBH Flex 300/100**	3092	3000	1000
124105	11.400	**H-Brace UBH Flex 300/150**	3279	3000	1500
114924	11.300	**H-Brace UBH Flex 300/200**	3528	3000	2000
114932	12.300	**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.

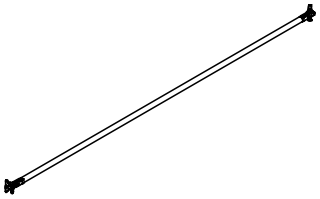


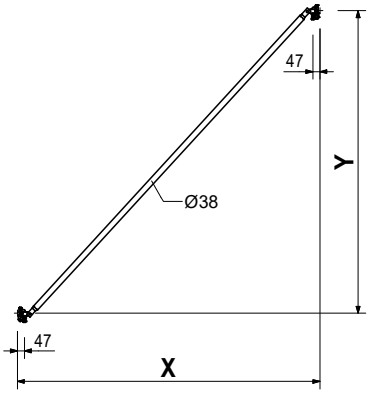


Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Node Braces UBK-2			
133418	5.280	**Node Brace UBK-2 75/200**	2190	750	2000
133421	5.490	**Node Brace UBK-2 100/200**	2285	1000	2000
133424	3.900	**Node Brace UBK-2 125/100**	1625	1250	1000
133427	5.590	**Node Brace UBK-2 125/200**	2401	1250	2000
133430	4.240	**Node Brace UBK-2 150/100**	1821	1500	1000
133433	5.260	**Node Brace UBK-2 150/150**	2152	1500	1500
133436	5.810	**Node Brace UBK-2 150/200**	2539	1500	2000
133439	4.990	**Node Brace UBK-2 200/100**	2246	2000	1000
133442	5.860	**Node Brace UBK-2 200/150**	2521	2000	1500
133445	6.430	**Node Brace UBK-2 200/200**	2860	2000	2000
133448	6.280	**Node Brace UBK-2 250/100**	2696	2500	1000
133451	6.210	**Node Brace UBK-2 250/150**	2930	2500	1500
133454	7.160	**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	7.910	**Node Brace UBK-2 300/200**	3625	3000	2000

Notes

With color coding for length identification.

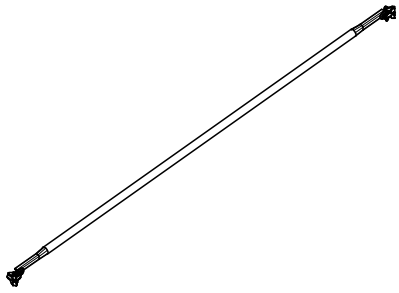


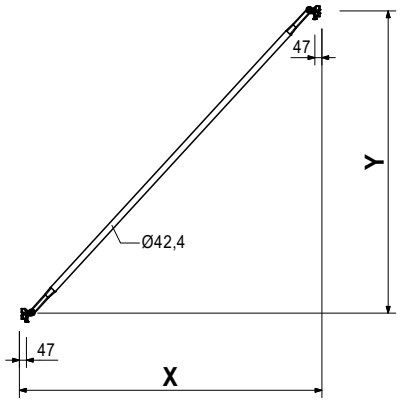


Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Node Braces UBK			
424170	6.770	**Node Brace UBK 75/200**	2190	750	2000
412926	6.980	**Node Brace UBK 100/200**	2285	1000	2000
415354	5.210	**Node Brace UBK 125/100**	1625	1250	1000
412765	7.250	**Node Brace UBK 125/200**	2401	1250	2000
400981	5.700	**Node Brace UBK 150/100**	1821	1500	1000
400973	6.570	**Node Brace UBK 150/150**	2152	1500	1500
400572	7.590	**Node Brace UBK 150/200**	2539	1500	2000
400985	6.780	**Node Brace UBK 200/100**	2246	2000	1000
406630	7.500	**Node Brace UBK 200/150**	2521	2000	1500
400573	8.380	**Node Brace UBK 200/200**	2860	2000	2000
400989	7.930	**Node Brace UBK 250/100**	2696	2500	1000
406624	8.530	**Node Brace UBK 250/150**	2930	2500	1500
400574	9.300	**Node Brace UBK 250/200**	3226	2500	2000
400993	9.120	**Node Brace UBK 300/100**	3131	3000	1000
400575	10.300	**Node Brace UBK 300/200**	3625	3000	2000

Notes

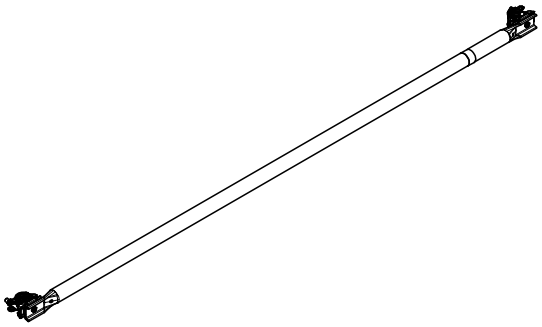
With color coding for length identification.

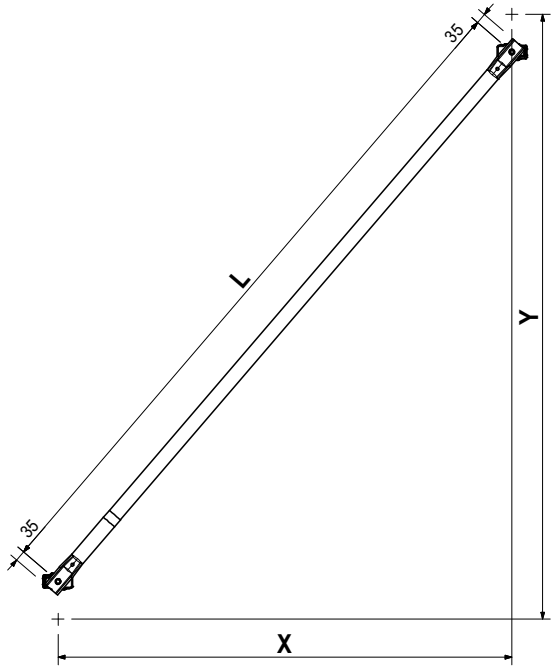




Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Coupler Braces UBC-2			
131750	7.330	**Coupler Brace UBC-2 67-100/200**	1750	670	2000
131726	9.020	**Coupler Brace UBC-2 150/200**	2305	1500	2000
131741	10.100	**Coupler Brace UBC-2 200/200**	2657	2000	2000
131744	11.300	**Coupler Brace UBC-2 250/200**	3052	2500	2000
131747	12.500	**Coupler Brace UBC-2 300/200**	3473	3000	2000

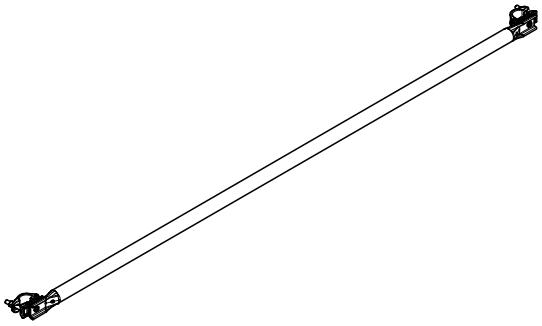
For special applications.
For connecting scaffold tubes Ø 48 mm.

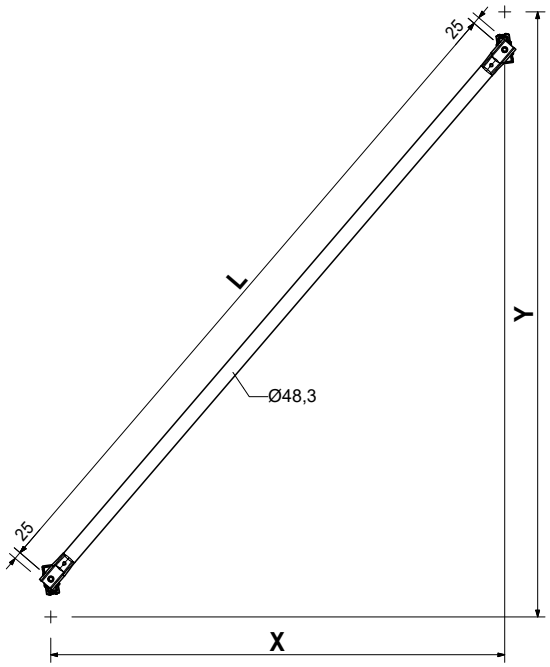




Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Coupler Braces UBC			
400416	9.520	**Coupler Brace UBC 150/200**	2305	1500	2000
400419	10.800	**Coupler Brace UBC 200/200**	2657	2000	2000
400422	12.200	**Coupler Brace UBC 250/200**	3052	2500	2000
400425	13.700	**Coupler Brace UBC 300/200**	3473	3000	2000

For special applications.
For connecting to Scaffold Tubes Ø 48 mm.



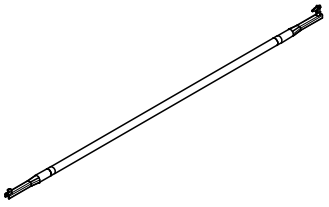


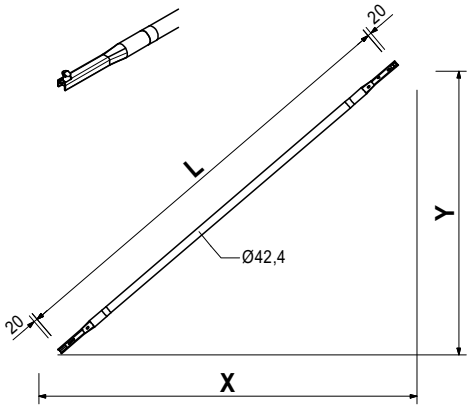
Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Ledger Braces UBL-2			
132771	2.320	**Ledger Brace UBL-2 100/50**	901	1000	500
132773	3.130	**Ledger Brace UBL-2 100/100**	1250	1000	1000
132775	4.040	**Ledger Brace UBL-2 100/150**	1677	1000	1500
132777	5.090	**Ledger Brace UBL-2 100/200**	2136	1000	2000
132779	3.260	**Ledger Brace UBL-2 150/50**	1347	1500	500
132781	3.720	**Ledger Brace UBL-2 150/100**	1601	1500	1000
132783	4.640	**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	4.370	**Ledger Brace UBL-2 200/50**	1820	2000	500
132791	4.770	**Ledger Brace UBL-2 200/100**	2016	2000	1000
132793	4.940	**Ledger Brace UBL-2 200/150**	2305	2000	1500
132795	6.110	**Ledger Brace UBL-2 200/200**	2658	2000	2000
132797	4.870	**Ledger Brace UBL-2 225/50**	2062	2250	500
132808	5.190	**Ledger Brace UBL-2 225/100**	2236	2250	1000
132810	6.460	**Ledger Brace UBL-2 225/200**	2829	2250	2000
132812	5.250	**Ledger Brace UBL-2 250/100**	2462	2500	1000
132814	6.170	**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	6.830	**Ledger Brace UBL-2 300/100**	2926	3000	1000
132831	7.360	**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.



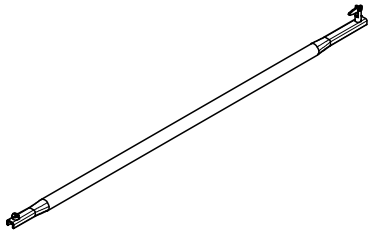


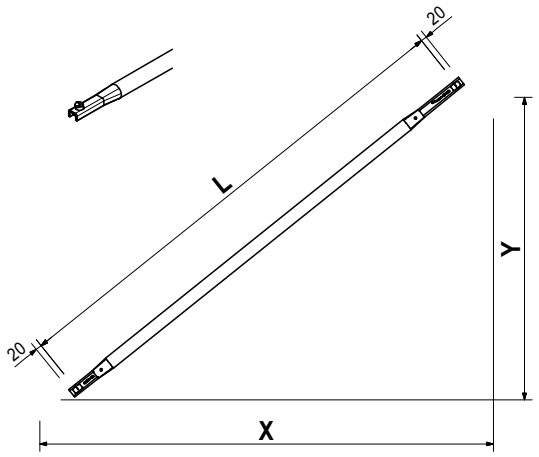
Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Ledger Braces UBL			
415156	2.660	**Ledger Brace UBL 100/50**	901	1000	500
415513	4.640	**Ledger Brace UBL 100/150**	1677	1000	1500
415157	5.810	**Ledger Brace UBL 100/200**	2136	1000	2000
407867	3.790	**Ledger Brace UBL 150/50**	1347	1500	500
400055	4.440	**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	5.510	**Ledger Brace UBL 200/100**	2016	2000	1000
402862	6.240	**Ledger Brace UBL 200/150**	2305	2000	1500
400061	7.150	**Ledger Brace UBL 200/200**	2658	2000	2000
430282	5.620	**Ledger Brace UBL 225/50**	2062	2250	500
430283	6.070	**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	9.040	**Ledger Brace UBL 300/200**	3400	3000	2000

Suspension in holes of the Horizontal Ledgers.

Notes

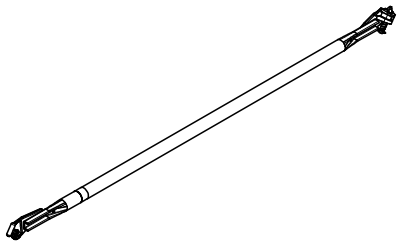
With length embossing and coloured sticker for easy identification.
UBL 150/250 is identical with UBL 300/50.
UBL 225/150 is identical with UBL 175/200.
UBL 250/50 is identical with UBL 200/150.
UBL 75/200 is identical with UBL 225/50.

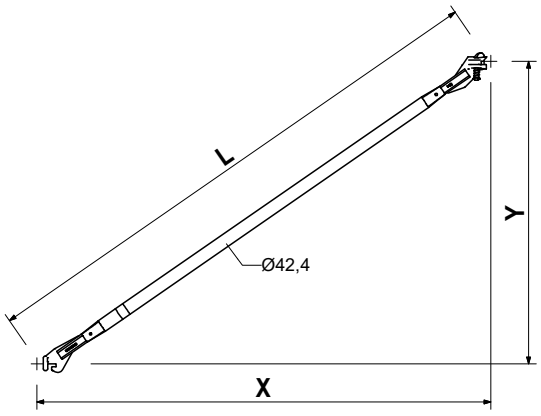




Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Shoring Braces UBS			
128936	4.250	**Shoring Brace UBS 100/100**	1413	1000	1000
129354	5.300	**Shoring Brace UBS 100/150**	1771	1000	1500
107801	5.260	**Shoring Brace UBS 150/100**	1792	1500	1000
107810	6.050	**Shoring Brace UBS 150/150**	2122	1500	1500
115504	6.360	**Shoring Brace UBS 200/100**	2219	2000	1000
115291	7.050	**Shoring Brace UBS 200/150**	2492	2000	1500
123592	7.630	**Shoring Brace UBS 250/100**	2672	2500	1000
123588	8.090	**Shoring Brace UBS 250/150**	2902	2500	1500
123584	8.820	**Shoring Brace UBS 300/100**	3139	3000	1000
123580	9.360	**Shoring Brace UBS 300/150**	3337	3000	1500

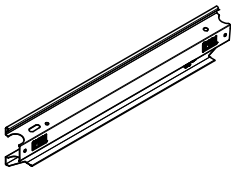
Standard brace for yoke discs.

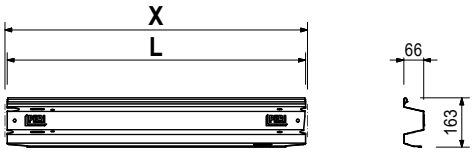




Art no.	Weight [kg]		L [mm]	X [mm]
		Toeboards Steel UPY-C		
134643	0.413	**Toeboard Steel UPY-C 25**	236	250
134642	0.927	**Toeboard Steel UPY-C 50**	486	500
134641	1.280	**Toeboard Steel UPY-C 67**	656	670
134640	1.440	**Toeboard Steel UPY-C 75**	736	750
134639	1.960	**Toeboard Steel UPY-C 100**	986	1000
134638	2.480	**Toeboard Steel UPY-C 125**	1236	1250
140117	2.640	**Toeboard Steel UPY-C 133**	1316	1330
134637	2.990	**Toeboard Steel UPY-C 150**	1486	1500
134636	4.020	**Toeboard Steel UPY-C 200**	1986	2000
134635	5.060	**Toeboard Steel UPY-C 250**	2486	2500
134634	6.090	**Toeboard Steel UPY-C 300**	2986	3000

Customised toeboard steel design in RAL colour scheme possible on request.

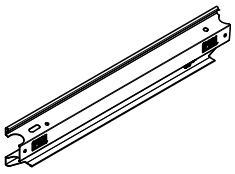


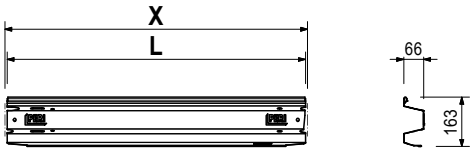


Art no.	Weight [kg]		L [mm]	X [mm]
		Toeboards Steel UPY		
132592	0.413	**Toeboard Steel UPY 25**	236	250
110213	0.927	**Toeboard Steel UPY 50**	486	500
110514	1.440	**Toeboard Steel UPY 75**	736	750
110073	1.960	**Toeboard Steel UPY 100**	986	1000
134628	2.480	**Toeboard Steel UPY 125**	1236	1250
117987	1.000	**Toeboard Steel UPY 133**	1316	1330
110160	2.990	**Toeboard Steel UPY 150**	1486	1500
110176	4.020	**Toeboard Steel UPY 200**	1986	2000
110208	5.060	**Toeboard Steel UPY 250**	2486	2500
110211	6.090	**Toeboard Steel UPY 300**	2986	3000

Notes

Surface, galvanised and painted in yellow.



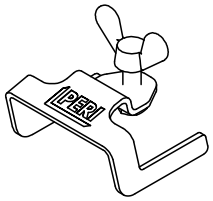


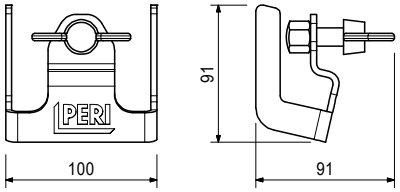
Accessory (not included)

134542 Toeboard Compensation UPY-L

Art no.	Weight [kg]		
134542	0.606	**Toeboard Compensation UPY-L**	

Connecting component for connecting of 2 x Toeboards UPY.

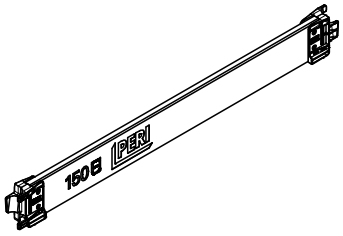


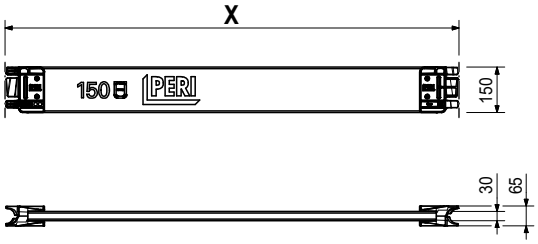


Art no.	Weight [kg]		L [mm]	X [mm]
		Toeboards Wood UPF		
129490	1.180	**Toeboard Wood UPF 50**	495	500
129494	1.720	**Toeboard Wood UPF 75**	745	750
129496	2.250	**Toeboard Wood UPF 100**	995	1000
141271	2.960	**Toeboard Wood UPF 133**	1325	1330
129498	3.320	**Toeboard Wood UPF 150**	1495	1500
129500	4.390	**Toeboard Wood UPF 200**	1995	2000
129502	5.460	**Toeboard Wood UPF 250**	2495	2500
129504	6.520	**Toeboard Wood UPF 300**	2995	3000

Notes

Surface, painted yellow.

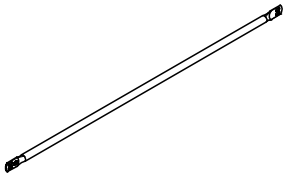


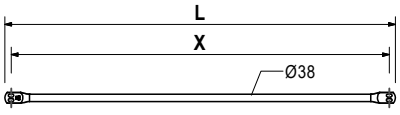


Art no.	Weight [kg]		L [mm]	X [mm]
		Guardrails EPG		
130193	1.680	**Guardrail EPG 100**	1065	1000
130195	2.480	**Guardrail EPG 150**	1565	1500
130197	3.280	**Guardrail EPG 200**	2065	2000
130199	4.090	**Guardrail EPG 250**	2565	2500
130201	4.890	**Guardrail EPG 300**	3065	3000

Notes

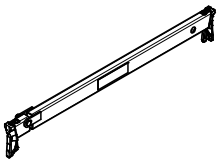
With length marking for easier identification.

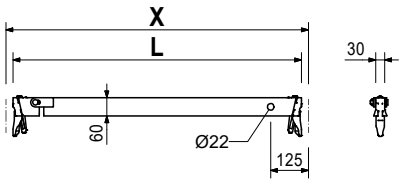




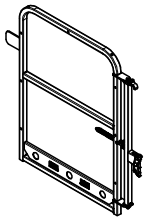
Art no.	Weight [kg]	
		Swing Ledgers UPK
410072	3.910	**Swing Ledger UPK 75**
416695	4.470	**Swing Ledger UPK 100**
417192	4.240	**Swing Ledger UPK 125**

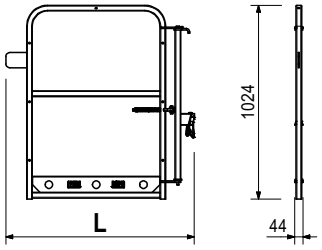
Access opening to the top.





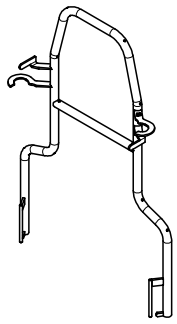
Art no.	Weight [kg]		L [mm]
		Safety Entry Gates UPS	
125672	9.470	**Safety Entry Gate UPS 75**	747
126675	11.100	**Safety Entry Gate UPS 100**	996

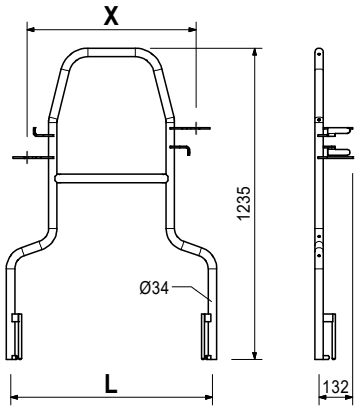




Art no.	Weight [kg]		L [mm]	X [mm]
		Advance Guardrails UPA-2		
134100	6.730	**Advance Guardrail UPA-2 67**	801	670
134102	7.000	**Advance Guardrail UPA-2 75**	881	750
134104	8.100	**Advance Guardrail UPA-2 100**	1131	1000

Assembly in advance.



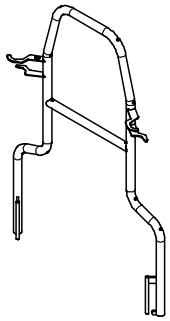


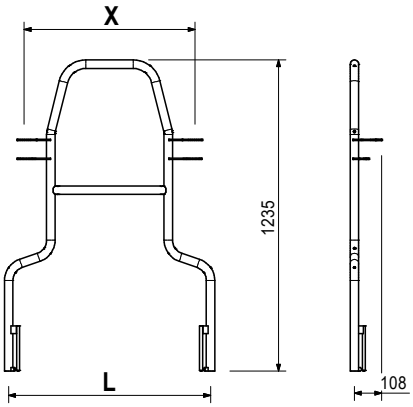
Art no.	Weight [kg]	
		Advance Guardrails UPA
430476	6.230	**Advance Guardrail UPA 67**
430583	7.600	**Advance Guardrail UPA 100**

Assembly in advance.

Notes

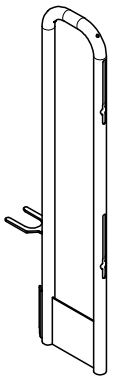
Toe board wood / toe bord steel not integrated.

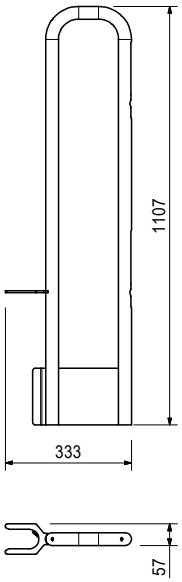




Art no.	Weight [kg]		L [mm]
130233	4.480	**End Guardrail EPF 33**	358

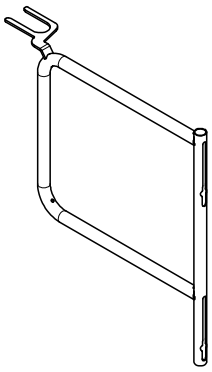
Assembly not in advance.

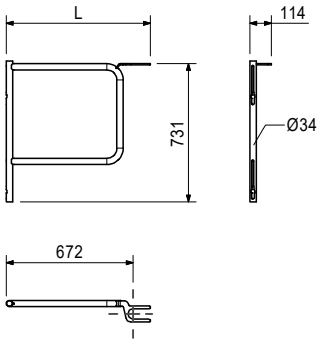




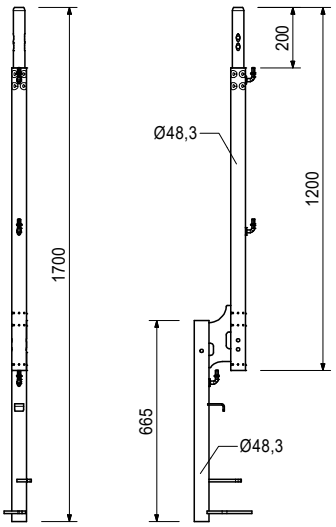
Art no.	Weight [kg]		L [mm]
		End Guardrails EPF	
130228	3.630	**End Guardrail EPF 67**	683
130225	4.660	**End Guardrail EPF 100**	1013

Assembly not in advance.



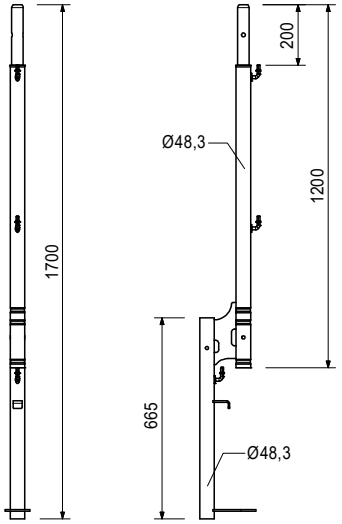


Art no.	Weight [kg]		B [mm]	L [mm]
139997	6.990	**Protection Wall Post EPS-2**	48.3	48.3



Art no.	Weight [kg]	
130532	6.640	**Protection Panel Post EPS**

For installing a protection panel.



Accessory (not included)

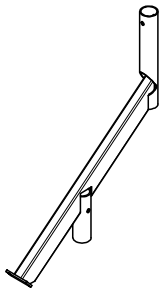
130512 Guardrail Post EVP

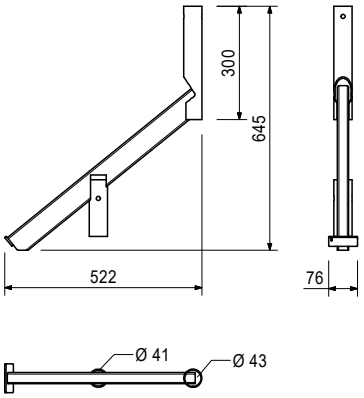
Art no.	Weight [kg]	
130385	2.970	**Connection Protect Panel EPC**

For installing a protection roof.

Notes

Alternative accessories:
100719 Screw ISO4014-M10x070-8.8





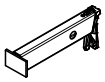
Accessory (not included)

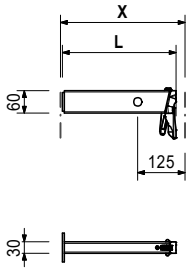
123480 Tube Clip 10x60mm coat

Art no.	Weight [kg]		L [mm]	X [mm]
		Supports UC		
115959	1.160	**Support UC 25**	223	250
130390	1.360	**Support UC 33**	301	330

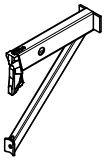
Notes

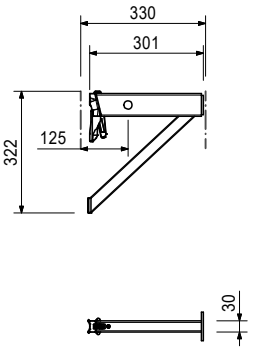
Small console brackets with limit stop for fixing the decks in place.



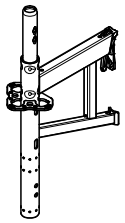


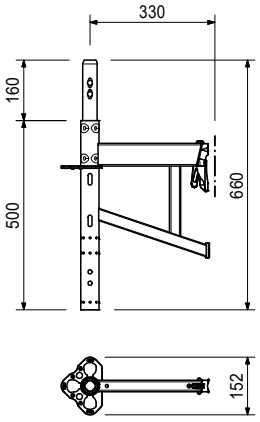
Art no.	Weight [kg]	
136050	2.000	**Deck Support UCS 33**



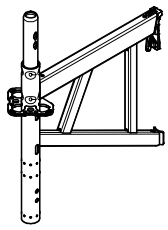


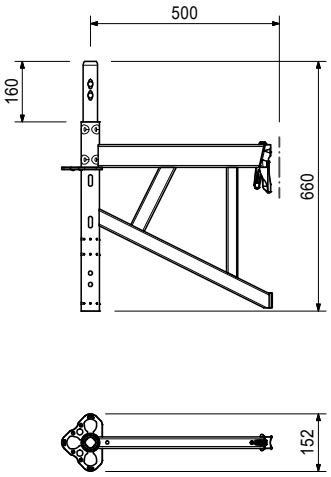
Art no.	Weight [kg]	
130378	4.680	**Console Bracket ECM 33**



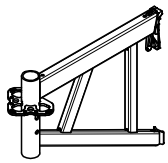


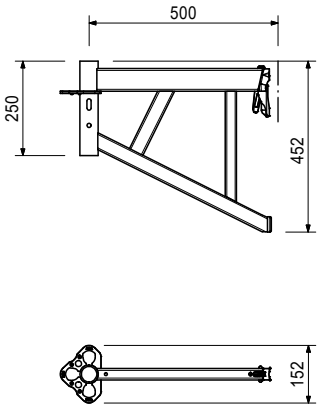
Art no.	Weight [kg]		
136923	6.380	**Console Bracket ECM 50**	



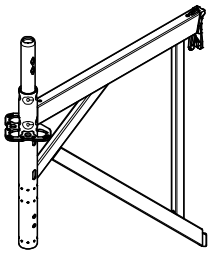


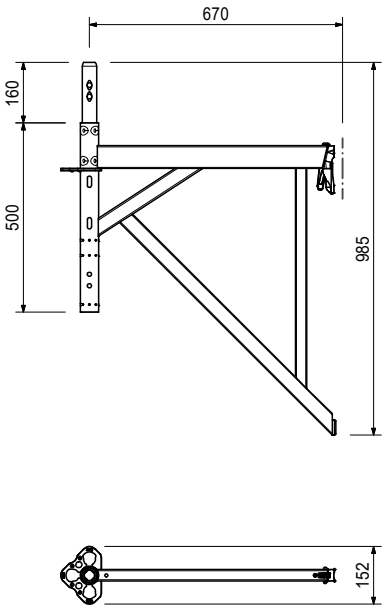
Art no.	Weight [kg]		B [mm]	L [mm]
139971	4.980	**Bracket ECM 50 light**	152	558



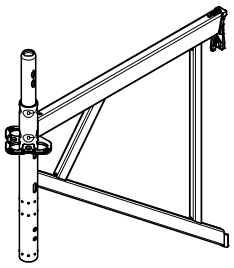


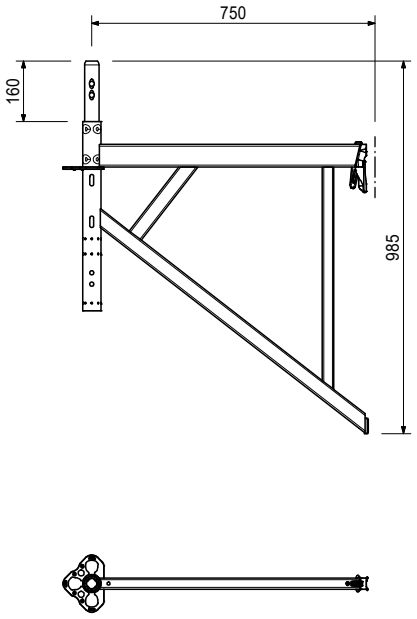
Art no.	Weight [kg]	
130372	7.570	**Console Bracket ECM 67**



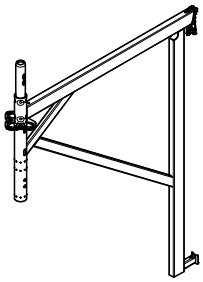


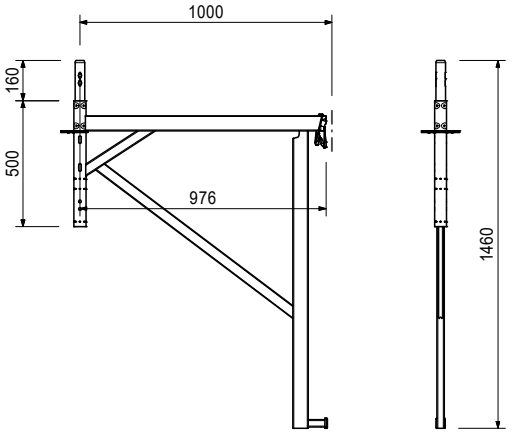
Art no.	Weight [kg]	
136918	7.840	**Console Bracket ECM 75**

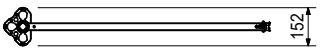




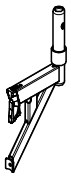
Art no.	Weight [kg]	
130365	11.300	**Console Bracket ECM 100**

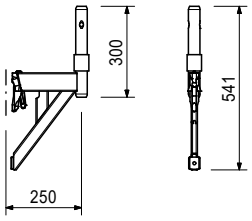






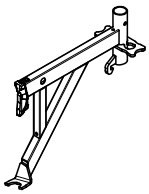
Art no.	Weight [kg]	
134005	3.880	**Console Bracket UCB 25**

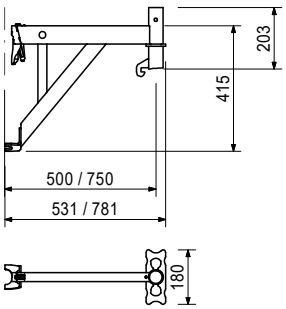




Art no.	Weight [kg]	
		Console Brackets UCM w.H.Ros.
412690	4.630	**Console Bracket UCM 50 w.H.Ros**
412693	5.610	**Console Bracket UCM 75 w.H.Ros**

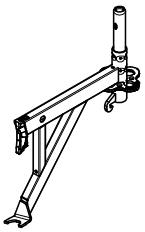
With connection for Console Bracket Brace UCM.

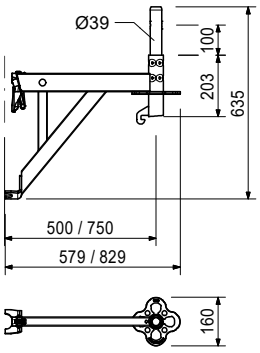




Art no.	Weight [kg]	
		Console Brackets UCM w. Spig
412676	5.270	**Console Bracket UCM 50 w. Spig**
412678	6.510	**Console Bracket UCM 75 w. Spig**

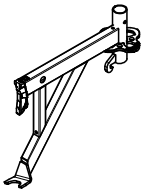
With connection for Console Bracket Brace UCM.

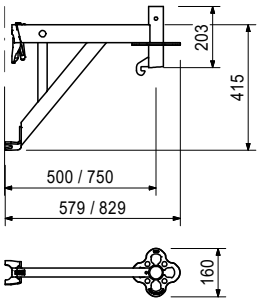




Art no.	Weight [kg]	
		Console Brackets UCM
410483	5.960	**Console Bracket UCM 50-2**
411128	5.710	**Console Bracket UCM 75-2**

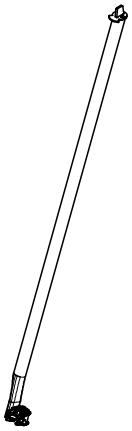
With connection for Console Bracket Brace UCM.

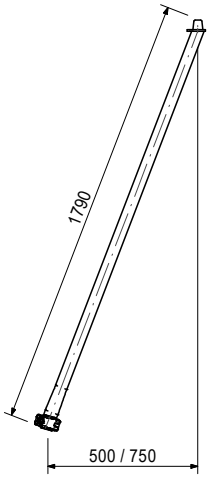




Art no.	Weight [kg]	
412717	7.320	**Bracket Brace UCM**

For increasing the load-bearing capacity of Console Brackets UCM 50 and UCM 75 with a yellow coupling.



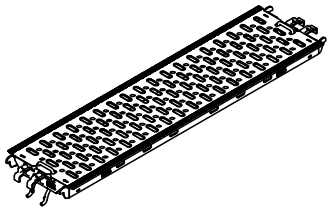


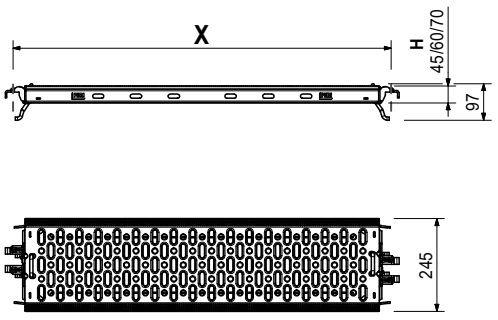
Art no.	Weight [kg]		X [mm]	zul. p [kN/m²]
		Steel Decks UDG-2 25		
138607	2.200	**Steel Deck UDG-2 25x25**	250	6
132479	3.190	**Steel Deck UDG-2 25x50**	500	6
132483	3.960	**Steel Deck UDG-2 25x67**	670	6
132488	4.320	**Steel Deck UDG-2 25x75**	750	6
132492	5.450	**Steel Deck UDG-2 25x100**	1000	6
132502	6.590	**Steel Deck UDG-2 25x125**	1250	6
132505	7.730	**Steel Deck UDG-2 25x150**	1500	6
132508	9.340	**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 45 mm.
Length X: 200 - 250 with H of 60 mm.
Length X: 300 with H of 70 mm.

Notes

Values correspond to EN 12811-1.
With color plugs for length identification.



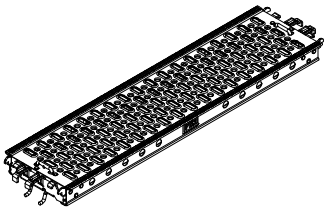


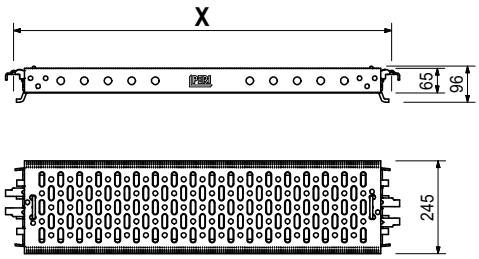
Art no.	Weight [kg]		X [mm]	zul. p [kN/m²]
		Steel Decks UDG 25		
424124	3.880	**Steel Deck UDG 25x50**	500	6
432858	4.810	**Steel Deck UDG 25x67**	670	6
424121	5.260	**Steel Deck UDG 25x75**	750	6
424118	6.630	**Steel Deck UDG 25x100**	1000	6
424115	8.010	**Steel Deck UDG 25x125**	1250	6
424112	9.410	**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 EN 12811-1.

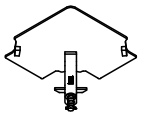


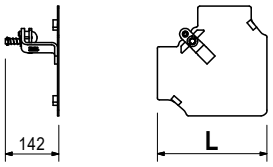


Art no.	Weight [kg]		L [mm]
		Corner Decks EDP	
134549	2.800	**Corner Deck EDP 25**	290
134552	4.940	**Corner Deck EDP 33**	378

Notes

Load Class 4, 3.0 kN/m²



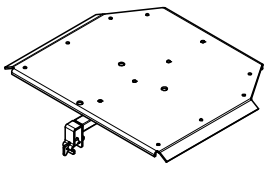


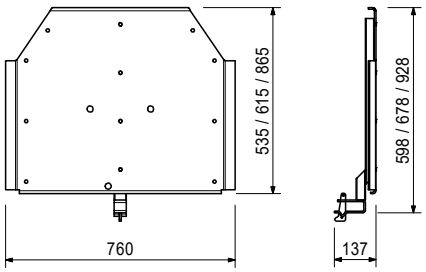
Art no.	Weight [kg]	
		Bottom Sheetings UDP
136832	6.820	**Bottom Sheeting UDP 67**
111101	7.780	**Bottom Sheeting UDP 75**
112809	10.900	**Bottom Sheeting UDP 100**

Assembly onto Horizontal Ledgers UH. Closes deck gaps between scaffold bays in the scaffolding of circular buildings.

Notes

Load Class 3, 2.0 kN/m².

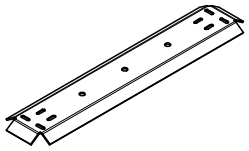


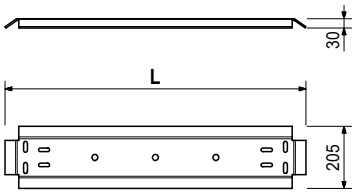


Art no.	Weight [kg]	
		Bottom Sheetings UDB-A
136927	2.780	**Bottom Sheeting UDB-A 20x100**
136925	4.250	**Bottom Sheeting UDB-A 20x150**

Notes

Load Class 3, 2.0 kN/m².



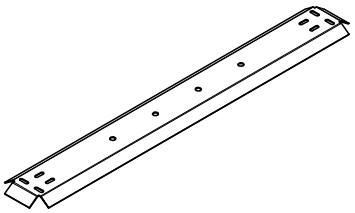


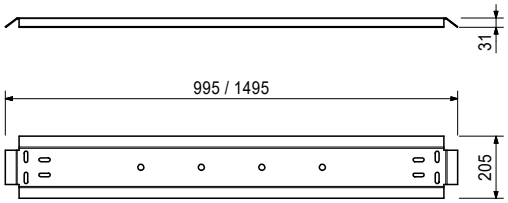
Accessory (not included)

137252	Screw DIN603-M10x060-8.8-ga
137279	Hex-Nut ISO4032-M10-8-ga

Art no.	Weight [kg]	
		Bottom Sheetings UDB-S
437447	5.410	**Bottom Sheeting UDB-S 20x100**
437449	8.280	**Bottom Sheeting UDB-S 20x150**

For gridless bridging.



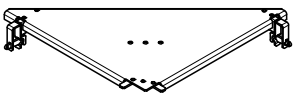


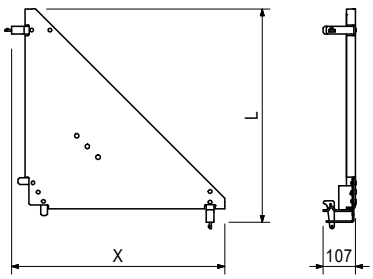
Art no.	Weight [kg]		L [mm]	X [mm]
		Corner Sheetings UDC		
134537	2.710	**Corner Sheeting UDC 50**	458	458
114148	4.890	**Corner Sheeting UDC 75**	705	705
113358	10.000	**Corner Sheeting UDC 100**	965	965

Fit onto Horizontal Ledgers UH. For inside corners of platforms on round containers.

Notes

Load Class 3, 2.0 kN/m².



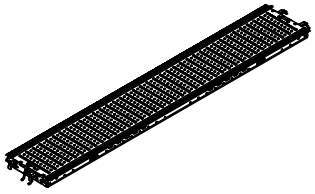


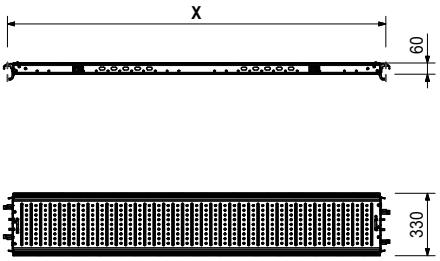
Art no.	Weight [kg]	
		Steel Decks EDS 33
130450	5.420	**Steel Deck EDS 33x67**
130448	7.360	**Steel Deck EDS 33x100**
141356	9.330	**Steel Deck EDS 33x133**
130445	10.300	**Steel Deck EDS 33x150**
130441	13.300	**Steel Deck EDS 33x200**
130438	16.200	**Steel Deck EDS 33x250**
129272	19.200	**Steel Deck EDS 33x300**

Installation on transoms of frame components or on Horizontal Ledgers UH.

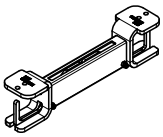
Notes

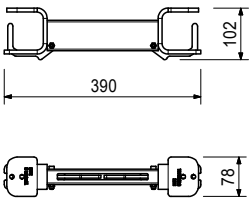
Values correspond with EN 12811-1.



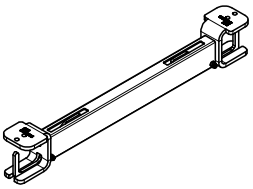


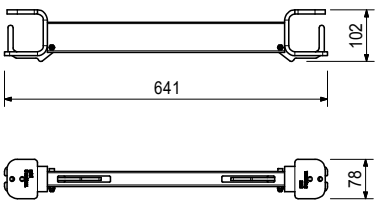
Art no.	Weight [kg]		L [mm]
136786	2.510	**Deck Traverse UDT 25**	396



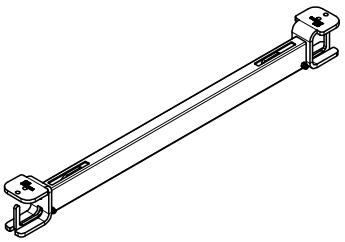


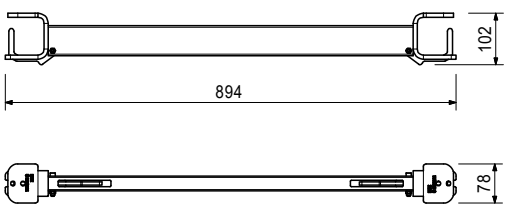
Art no.	Weight [kg]		L [mm]
136790	3.290	**Deck Traverse UDT 50**	647





Art no.	Weight [kg]		L [mm]
136794	4.820	**Deck Traverse UDT 75**	900



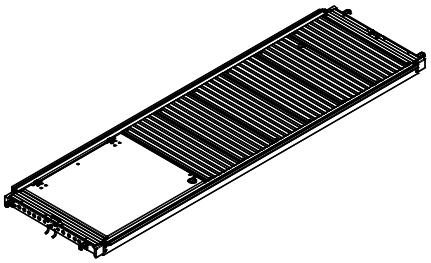


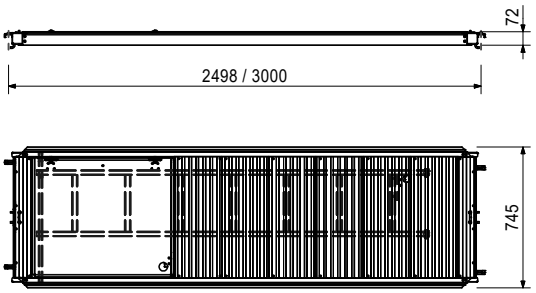
Art no.	Weight [kg]	
		Ladder Decks UAA 75
133314	27.000	**Ladder Deck UAA 75x250-L**
133315	30.300	**Ladder Deck UAA 75x300-L**

Installation on Crossbars or Horizontal Ledgers UH.

Notes

Load Class 3 = 2.0 kN/m².



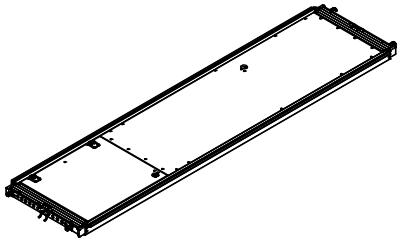


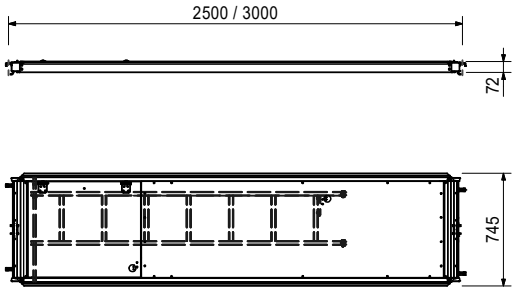
Art no.	Weight [kg]	
		Ladder Decks UAC 75
135372	26.600	**Ladder Deck UAC 75x250-L**
135371	30.700	**Ladder Deck UAC 75x300-L**

Aluminium spar profile with glass-fibre reinforced plastic trapdoor. Installation on Crossbars or Horizontal Ledgers UH. Lateral hatch.

Notes

Load Class 3 = 2.0 kN/m².



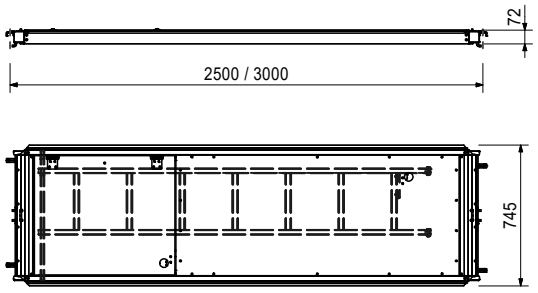


Art no.	Weight [kg]	
		Ladder Decks UAW 75
130334	25.900	**Ladder Deck UAW 75x250-L**
133309	29.700	**Ladder Deck UAW 75x300-L**

Installation on crossbars or Horizontal Ledgers UH.

Notes

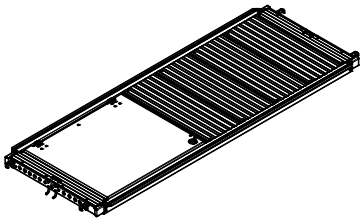
Load Class 3 = 2.0 kN/m².

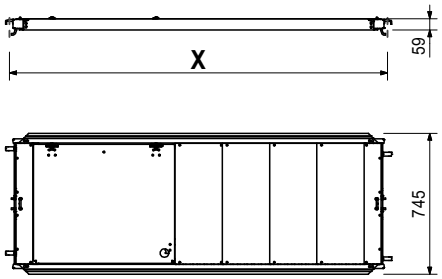


Art no.	Weight [kg]		X [mm]
		Access Decks UAA	
132993	16.000	**Access Deck UAA 75x150**	1500
132990	19.100	**Access Deck UAA 75x200**	2000

Notes

Load Class 3 = 2.0 kN/m².





Accessory (not included)

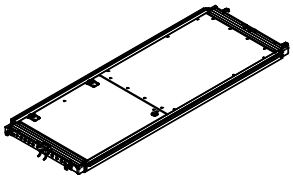
109879 Ladder UAF 200

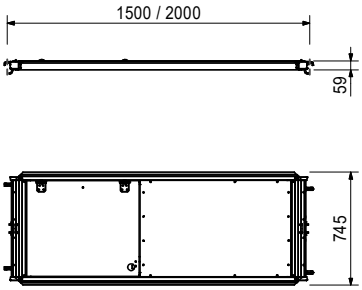
Art no.	Weight [kg]	
		Access Decks UAC 75
136197	14.500	**Access Deck UAC 75x150**
135373	18.500	**Access Deck UAC 75x200**

Aluminum spar profile with glass-fiber reinforced plastic plate. Installation on transom or horizontal ledger UH. Side access hatch. Without ladder.

Notes

Load Class 3 = 2.0 kN/m².





Accessory (not included)

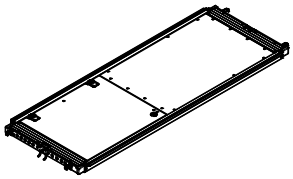
109879 Ladder UAF 200

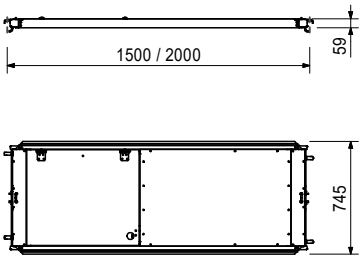
Art no.	Weight [kg]	
		Access Decks UAW 75
134046	14.100	**Access Deck UAW 75x150**
132996	17.900	**Access Deck UAW 75x200**

Installation on Crossbars and Horizontal Ledgers UH.

Notes

Load Class 3 = 2.0 kN/m².





Accessory (not included)

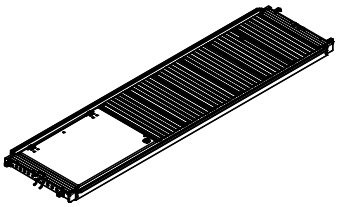
109879 Ladder UAF 200

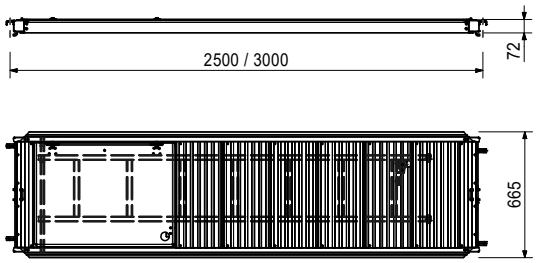
Art no.	Weight [kg]	
		Ladder Accesses EAA 67
133289	25.200	**Ladder Access EAA 67x250-L**
133287	28.300	**Ladder Access EAA 67x300-L**

Deck surface made of aluminium profiles.

Notes

Load class 3, 2.0 kN/m².



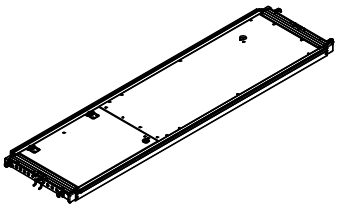


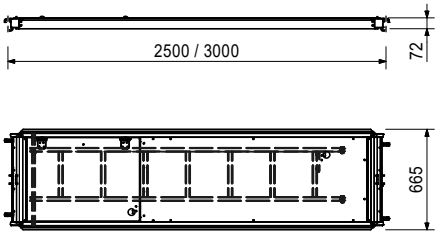
Art no.	Weight [kg]	
		Ladder Accesses EAC 67
135368	24.800	**Ladder Access EAC 67x250-L**
135367	28.100	**Ladder Access EAC 67x300-L**

Deck surface made of glass-fibre reinforced plastic.

Notes

Load class 3, 2.0 kN/m².



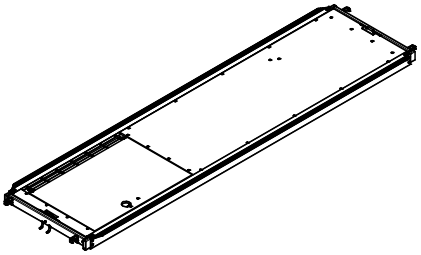


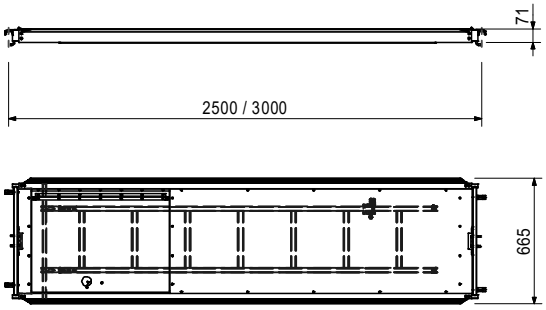
Art no.	Weight [kg]	
		Ladder Accesses EAW-2
133286	24.100	**Ladder Access EAW-2 67x250-L**
133285	27.300	**Ladder Access EAW-2 67x300-L**

Deck surface made of coated plywood sheet.

Notes

Load class 3, 2.0 kN/m².



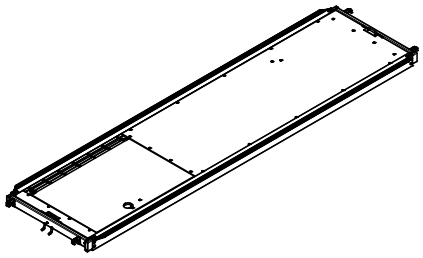


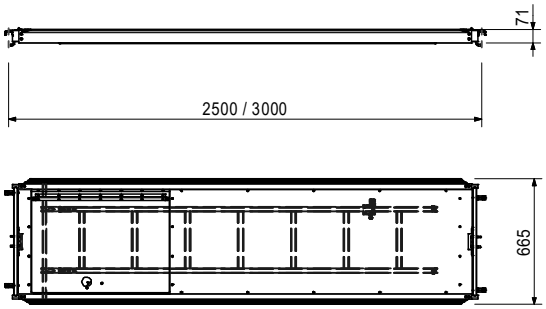
Art no.	Weight [kg]	
		Ladder Accesses EAW-L 67
430431	25.800	**Ladder Access EAW-L 250**
430425	29.200	**Ladder Access EAW-L 300**

Deck surface made of coated plywood sheet.

Notes

Load class 3, 2.0 kN/m².



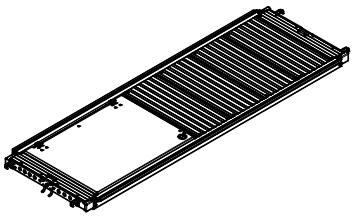


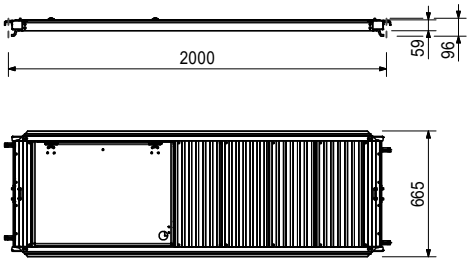
Art no.	Weight [kg]	
132882	17.500	**Access Deck EAA 67x200**

Deck surface made of aluminium profiles.

Notes

Load Class 3, 2.0 kN/m².





Accessory (not included)

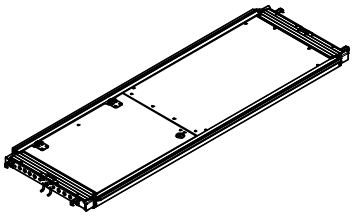
109879 Ladder UAF 200

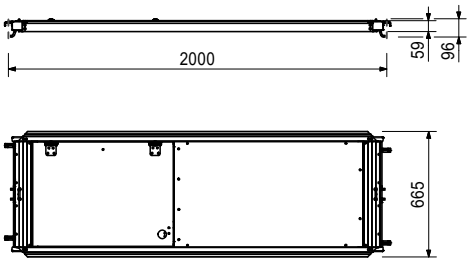
Art no.	Weight [kg]	
132928	15.900	**Access Deck EAW-2 67x200**

Deck surface made of coated plywood sheet.

Notes

Load Class 3, 2.0 kN/m².





Accessory (not included)

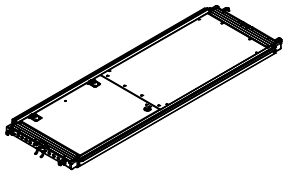
109879 Ladder UAF 200

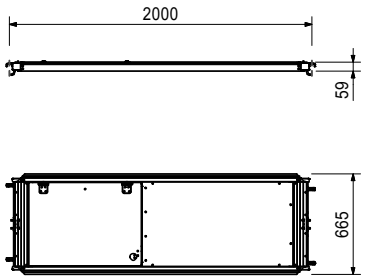
Art no.	Weight [kg]	
135369	16.500	**Access Deck EAC 67x200**

Deck surface made of glass-fibre reinforced plastic.

Notes

Load Class 3, 2.0 kN/m².





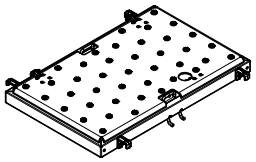
Accessory (not included)

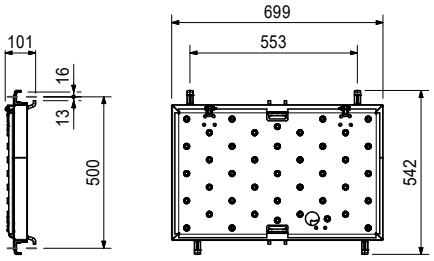
109879 Ladder UAF 200

Art no.	Weight [kg]	
137305	8.110	**Hatch UAF-2 50x75**

Notes

Load Class 3 = 2.0 kN/m².

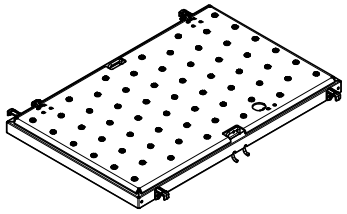


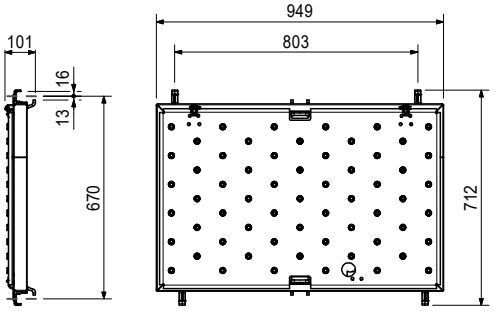


Art no.	Weight [kg]	
137313	12.600	**Hatch UAF-2 67x100**

Notes

Load Class 3 = 2.0 kN/m².

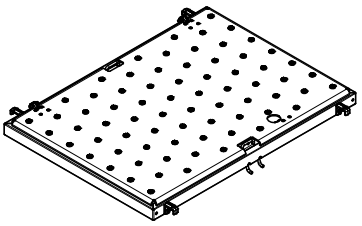


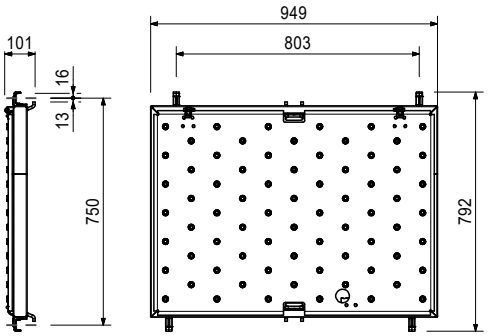


Art no.	Weight [kg]	
137320	13.400	**Hatch UAF-2 75x100**

Notes

Load Class 3 = 2.0 kN/m².



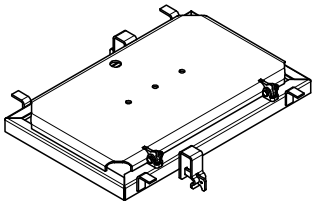


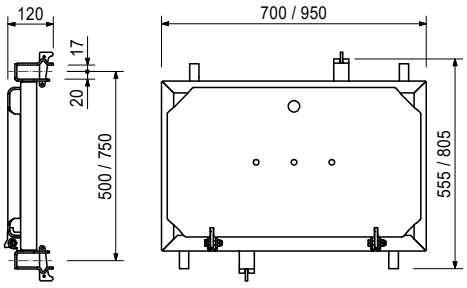
Art no.	Weight [kg]	
		Hatches UAF
409783	9.320	**Hatch UAF 50x75**
409755	15.600	**Hatch UAF 75x100**

Fit onto Horizontal Ledgers UH.

Notes

Load Class 6 = 6.0 kN/m².



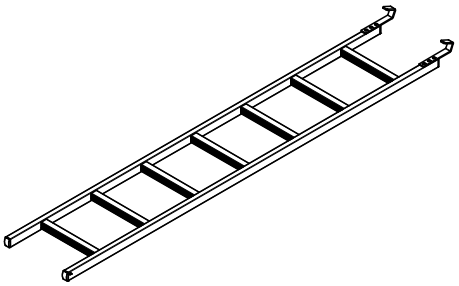


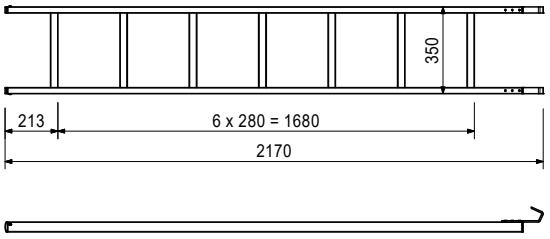
Accessory (not included)

109879 Ladder UAF 200

Art no.	Weight [kg]	
109879	3.820	**Ladder UAF 200**

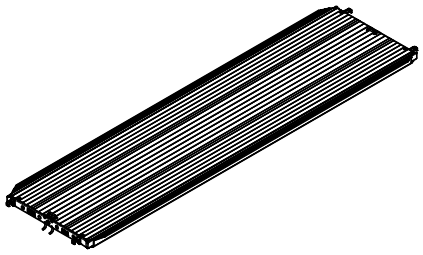
To mount on the Passage Deck EAW, EAA, EAC 200.

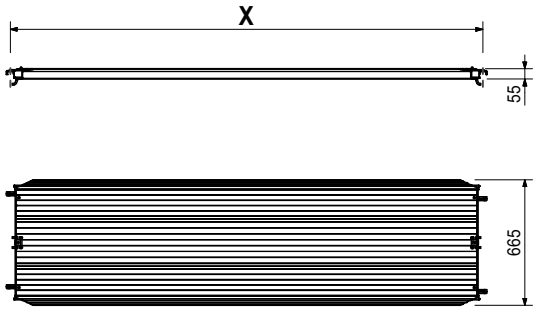




Art no.	Weight [kg]		X [mm]	zul. p [kN/m²]
		Alu Decks EDA 67		
133525	6.420	**Alu Deck EDA 67x67**	670	6
133524	8.480	**Alu Deck EDA 67x100**	1000	6
133523	11.600	**Alu Deck EDA 67x150**	1500	6
133522	14.700	**Alu Deck EDA 67x200**	2000	4.5
133521	17.800	**Alu Deck EDA 67x250**	2500	4.5
133492	21.000	**Alu Deck EDA 67x300**	3000	2

Deck surface made of aluminium profiles.



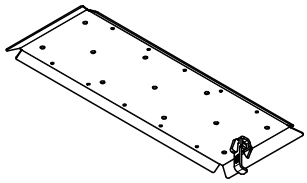


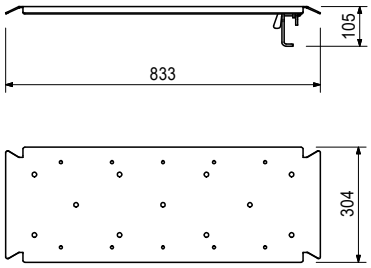
Art no.	Weight [kg]	
134539	6.270	**Compensation Deck EDL 33**

For compensation lengthsof up to 67 cm.

Notes

Load Class 4, 3.0 kN/m²

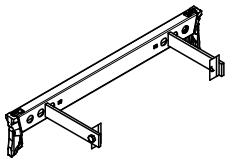


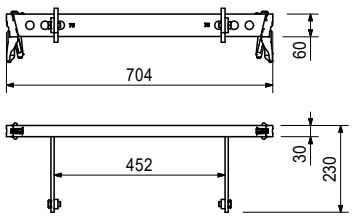


Art no.	Weight [kg]	
124813	4.260	**Ladder Connector UAC-2**

Notes

Connects Ladder 180/6 (Article No. 051410) with PERI UP Standards.

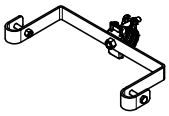


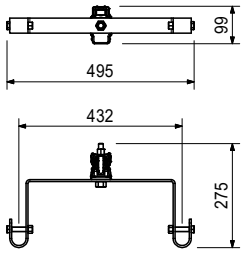


Accessory (not included)

051410	Ladder 180/6
051460	Ladder Base ga
103724	End Ladder 180/2 cpl
104132	Ladder Safety Cage 75
051450	Ladder Safety Cage 150

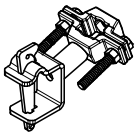
Art no.	Weight [kg]	
133312	3.620	**Ladder Connector UAV 43-C**

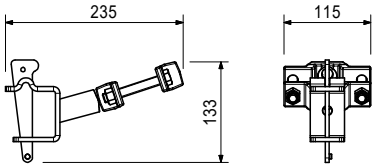




Art no.	Weight [kg]	
134520	1.670	**Ladder Connector Ledger UAM-S**

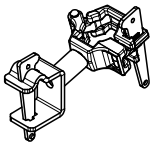
Is used to attach ladders up to maximum stile size 25 x 80 mm or round tubes up to Ø = 48.3 mm.

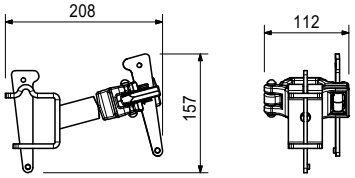




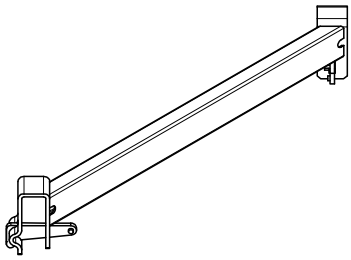
Art no.	Weight [kg]	
134527	1.670	**Ladder Connector Ledger UAM-W**

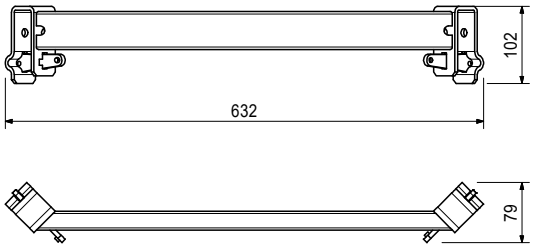
Is used to attach ladders up to max. stile size 30 x 60 mm or Round tubes up to Ø = 48.3 mm..



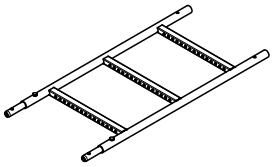


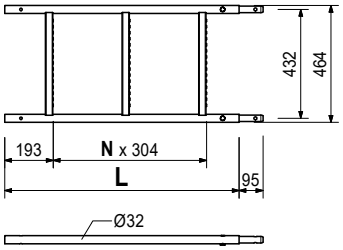
Art no.	Weight [kg]	
134512	1.990	**Ladder Connector diagonal UAD**





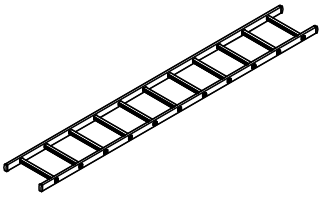
Art no.	Weight [kg]		L [mm]	N
		Vertical Ladders UAV		
133310	4.652	**Vertical Ladder UAV 43x91**	930	2
133311	8.751	**Vertical Ladder UAV 43x181**	1828	5

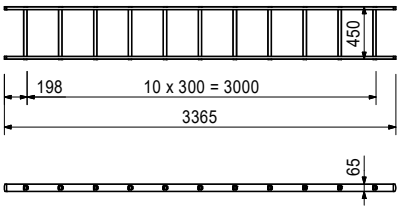




Art no.	Weight [kg]	
135529	5.840	**Ladder Alu UAl 300-A**

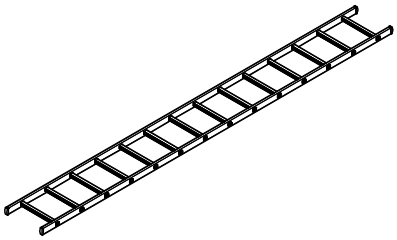
This ladder is no leaning ladder according EN 131. Use the ladder always with suitable ladder connectors!

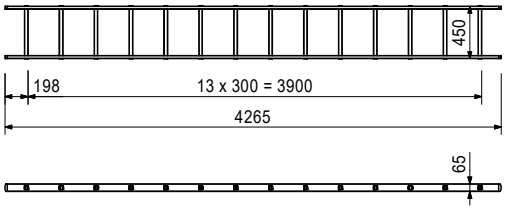




Art no.	Weight [kg]	
135530	7.593	**Ladder Alu UAl 400-A**

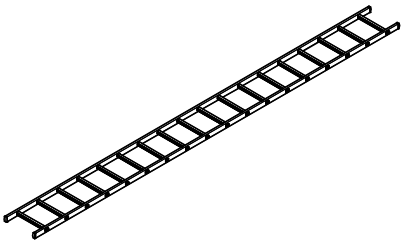
This ladder is no leaning ladder according EN 131. Use the ladder always with suitable ladder connectors!

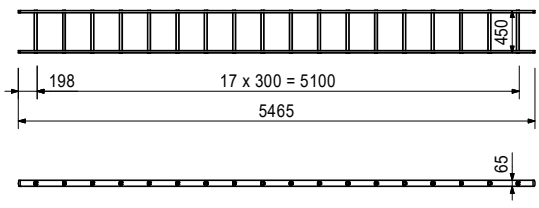




Art no.	Weight [kg]	
135531	10.100	**Ladder Alu UAl 500-A**

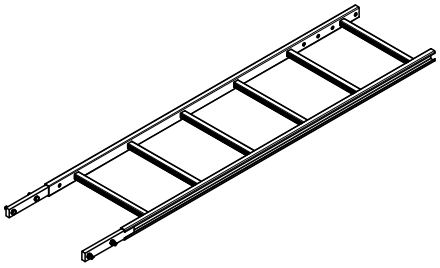
This ladder is no leaning ladder according EN 131. Use the ladder always with suitable ladder connectors!

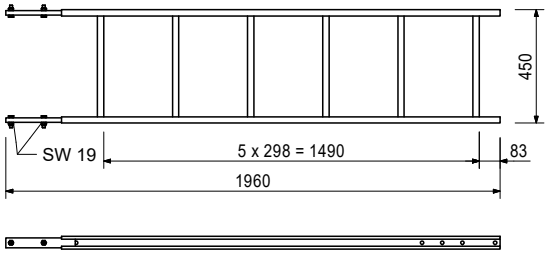




Art no.	Weight [kg]	
051410	11.700	**Ladder 180/6**

For accessing PERI Formwork Systems.



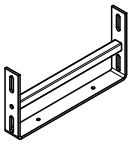


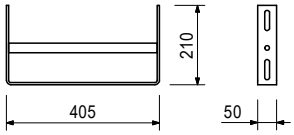
Included in delivery

710224 Screw ISO4017-M12x040-8.8-ga 4 pc
710381 Hex-Nut ISO7040-M12-8-ga 4 pc

Art no.	Weight [kg]	
051460	2.180	**Ladder Base ga**

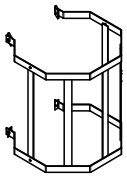
As bottom ladder connection and for securing ladders against sliding on the scaffold decks.

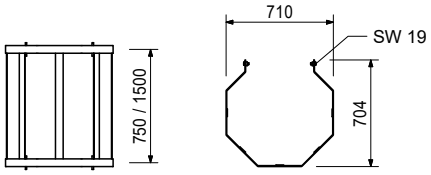




Art no.	Weight [kg]	
		Ladder Safety Cages
104132	15.600	**Ladder Safety Cage 75**
051450	25.200	**Ladder Safety Cage 150**

Ladder cage for PERI Ladder Access.



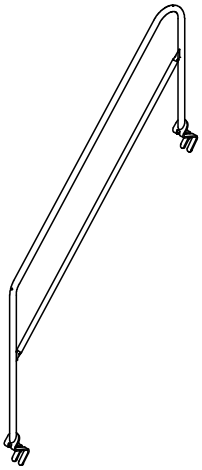


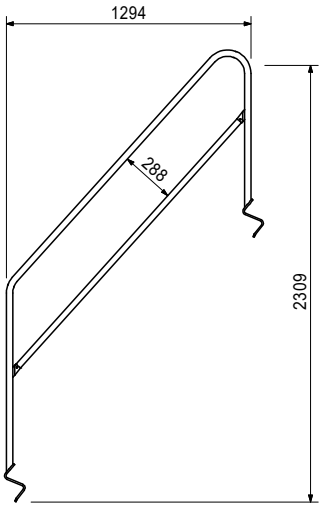
Included in delivery

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

Art no.	Weight [kg]	
100742	10.000	**Stair Guardrail UAG**

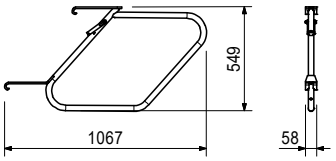
Suitable for Staircases UAS and EAS as internal and external guardrails.





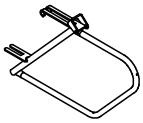
Art no.	Weight [kg]	
133543	4.510	**Stair Guardrail UAH-2**

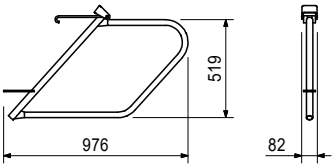
For fixing to the stringers of the Staircases UAS, UAS-2 and EAS.



Art no.	Weight [kg]	
400830	4.970	**Stair Guardrail UAH**

For fixing to the stringers of the Staircases UAS.



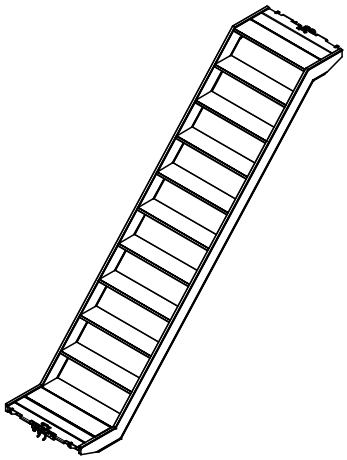


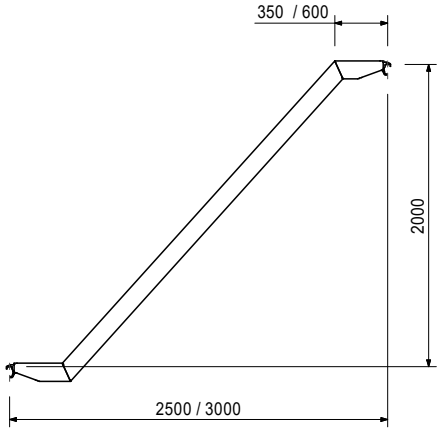
Art no.	Weight [kg]	
		Staircases UAS 75
411117	28.000	**Staircase UAS 75x250/200**
411124	32.900	**Staircase UAS 75x300/200**

Fits onto Horizontal Ledgers UH.

Notes

Load Class 3 = 2.0 kN/m².



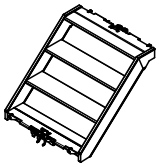


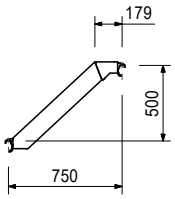
Art no.	Weight [kg]	
413228	10.100	**Staircase UAS 75x75/50**

Fits onto Horizontal Ledgers UH.

Notes

Load Class 3 = 2.0 kN/m².



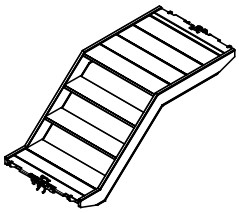


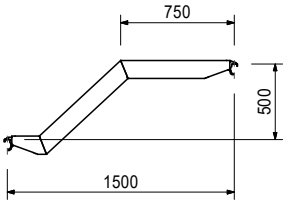
Art no.	Weight [kg]	
411087	17.500	**Staircase UAS 75x150/50 T**

Fits onto Horizontal Ledgers UH.

Notes

Load Class 3 = 2.0 kN/m².



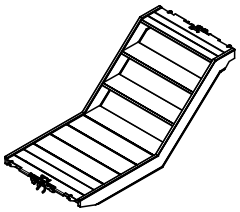


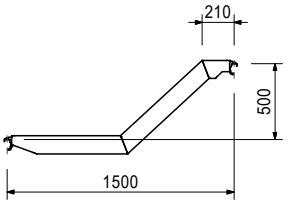
Art no.	Weight [kg]	
411095	17.500	**Staircase UAS 75x150/50 S**

Fits onto Horizontal Ledgers UH.

Notes

Load Class 3 = 2.0 kN/m².



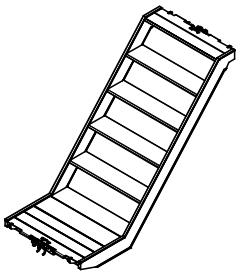


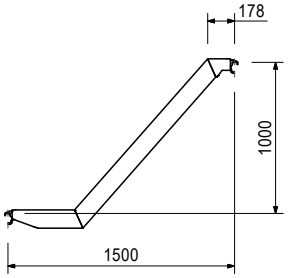
Art no.	Weight [kg]	
414536	17.900	**Staircase UAS 75x150/100 S**

Fits onto Horizontal Ledgers UH.

Notes

Load Class 3 = 2.0 kN/m².



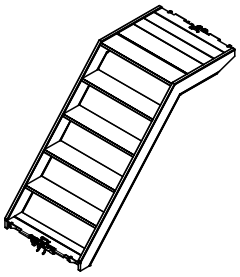


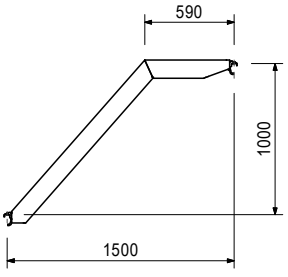
Art no.	Weight [kg]	
411103	17.900	**Staircase UAS 75x150/100**

Fits onto Horizontal Ledgers UH.

Notes

Load Class 3 = 2.0 kN/m².



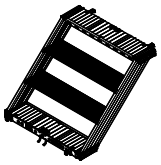


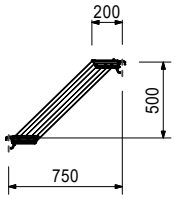
Art no.	Weight [kg]	
134556	11.300	**Flexstairs UAS-2 75x75/50**

Fits onto Horizontal Ledger UH.

Notes

Class B according to DIN EN 12811-1.



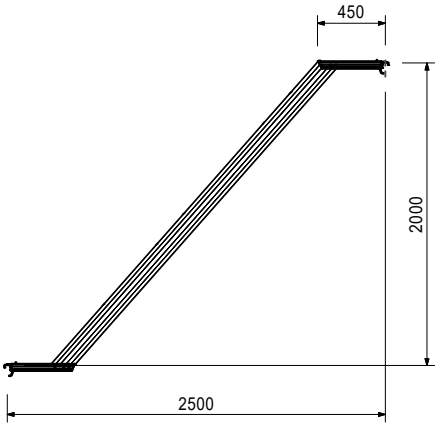


Art no.	Weight [kg]	
134562	29.200	**Flexstairs UAS-2 75x250/200**

Fits onto Horizontal Ledger UH.

Notes

Class B according to DIN EN 12811-1.

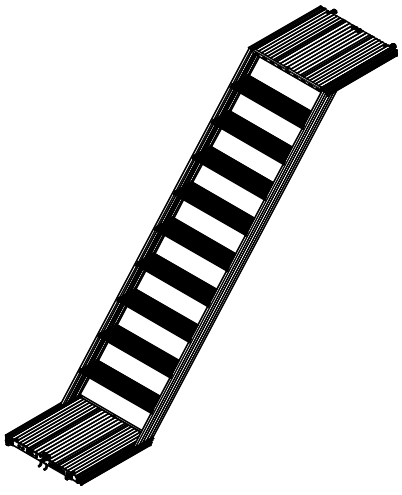


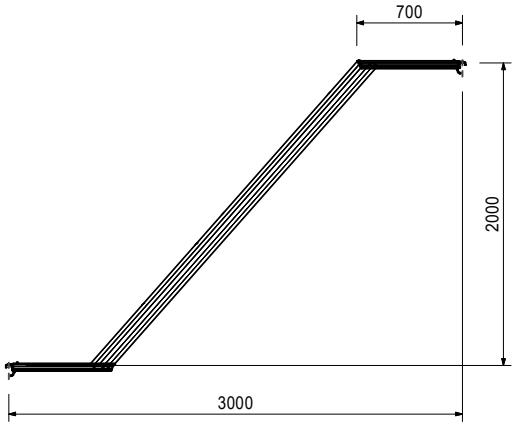
Art no.	Weight [kg]	
134561	32.800	**Flexstairs UAS-2 75x300/200**

Fits ontp Horizontal Ledger UH.

Notes

Class B according to DIN EN 12811-1.



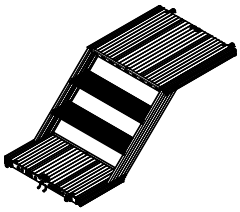


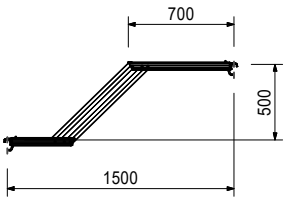
Art no.	Weight [kg]	
134563	16.800	**Flexstairs UAS-2 75x150/50T**

Fits onto Horizontal Ledger UH.

Notes

Class B according to DIN EN 12811-1.



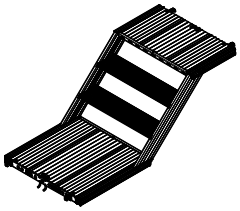


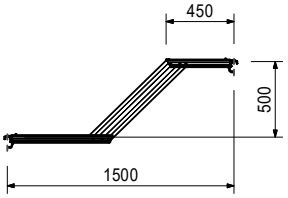
Art no.	Weight [kg]	
134564	16.800	**Flexstairs UAS-2 75x150/50S**

Fits onto Horizontal Ledger UH.

Notes

Class B according to DIN EN 12811-1.



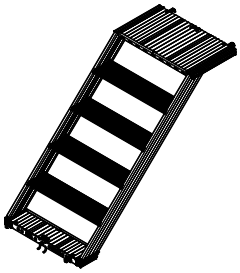


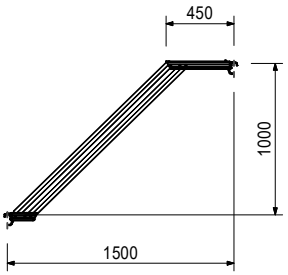
Art no.	Weight [kg]	
134557	17.700	**Flexstairs UAS-2 75x150/100T**

Fits onto Horizontal Ledger UH.

Notes

Class B according to DIN EN 12811-1.



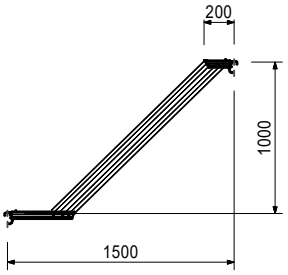


Art no.	Weight [kg]	
134558	17.700	**Flexstairs UAS-2 75x150/100S**

Fits onto Horizontal Ledger UH.

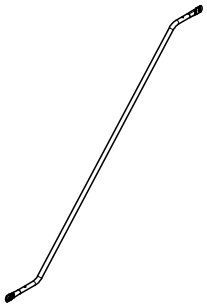
Notes

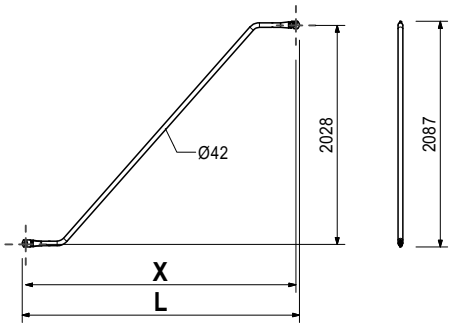
Class B according to DIN EN 12811-1.



Art no.	Weight [kg]		L [mm]	X [mm]
		Stair Guardrails EAG		
124561	7.180	**Stair Guardrail EAG 250/200**	2565	2500
124558	8.180	**Stair Guardrail EAG 300/200**	3065	3000

Suitable for external scaffold access in conjunction with Easy Standard.

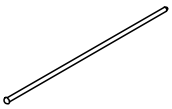


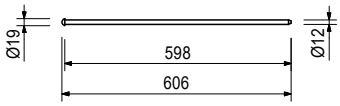


Accessory (not included)

133705 Locking Pin EAG

Art no.	Weight [kg]	
133705	0.538	**Locking Pin EAG**

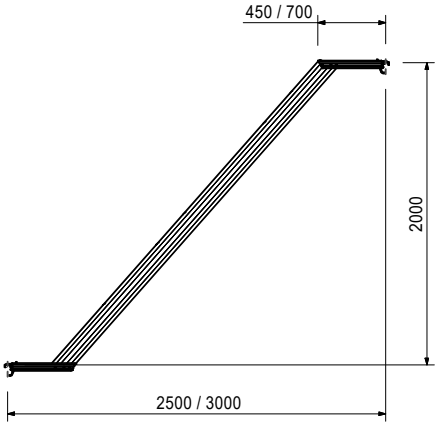




Art no.	Weight [kg]	
		Easystairs EAS 67
134553	26.600	**Easystairs EAS 67x250/200**
134554	29.700	**Easystairs EAS 67x300/200**

Notes

Permissible load 2.0 kN/m².
Class B according to DIN EN 12811-1.

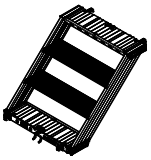


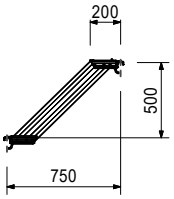
Art no.	Weight [kg]	
134555	10.300	**Easystairs EAS 67x75/50**

Fit onto Horizontal Ledger UH.

Notes

Permissible load 2.0 kN/m².
Class B according to DIN EN 12811-1.



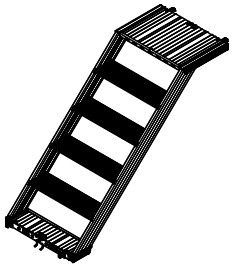


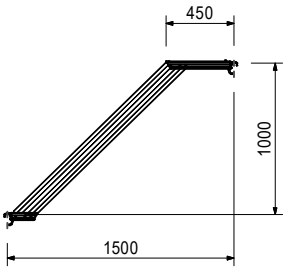
Art no.	Weight [kg]	
134559	16.100	**Easystairs EAS 67x150/100T**

Fit onto Horizontal Ledger UH.

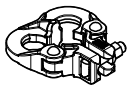
Notes

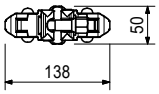
Permissible load 2.0 kN/m².
Class B according to DIN EN 12811-1.

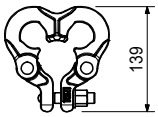




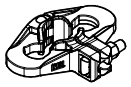
Art no.	Weight [kg]	
126453	1.650	**Rosett Coupler UEV 90°**

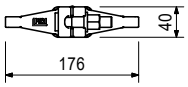


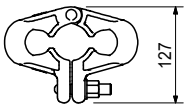




Art no.	Weight [kg]	
116306	1.700	**Rosett Coupler UEV 180°**

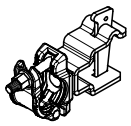


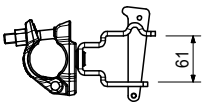




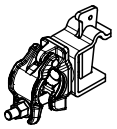
Art no.	Weight [kg]	
137211	1.600	**Coupling UH 30/60**

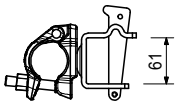
Horizontal and vertical connection of Scaffold Tube 48 mm to UH Ledger.



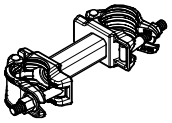


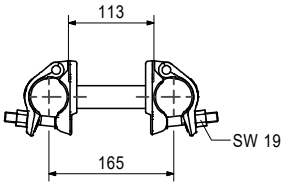
Art no.	Weight [kg]	
405824	1.480	**Coupling for UH**





Art no.	Weight [kg]	
133739	2.000	**Spacer UEC-2**



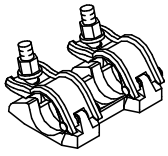


Art no.	Weight [kg]	
100908	1.400	**Tension Coupler Ø48.3mm ga**

For tensile-proof connections of Scaffold Tubes Ø 48 mm.

Notes

Coupling category: A.

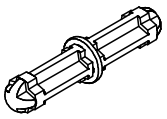


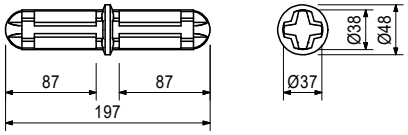
Accessory (not included)

100909 Tube Connector Ø48.3mm

Art no.	Weight [kg]	
100909	1.000	**Tube Connector Ø48.3mm**

Shear connection of Scaffold Tubes Ø 48 mm.

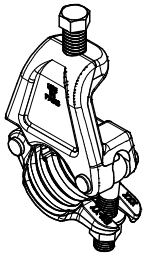


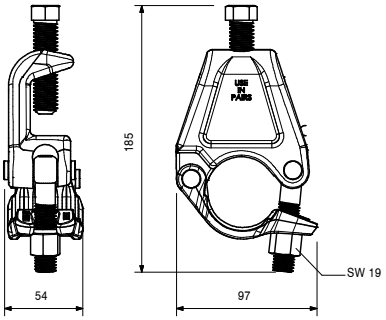


Accessory (not included)

100908 Tension Coupler Ø48.3mm ga

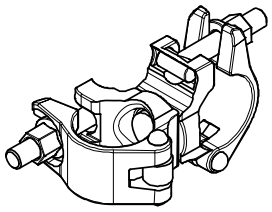
Art no.	Weight [kg]	
201415	0,060	**SRU Scaffold Tube Coupler**

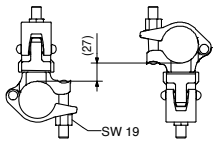




Art no.	Weight [kg]	
201412	1.400	**Swivel Coupler Pressed Steel** .

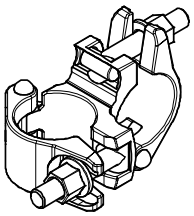
For Scaffold Tubes Ø48mm.

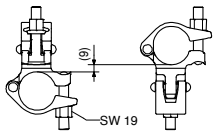




Art no.	Weight [kg]	
201411	1,120	**Double Coupler Pressed Steel**

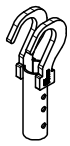
For Scaffold Tubes Ø48mm.

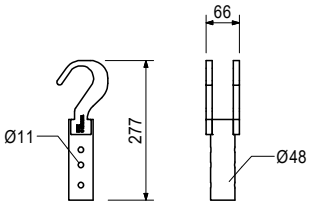




Art no.	Weight [kg]	
134108	1.580	**Adapter Hanging Scaffold UEH**

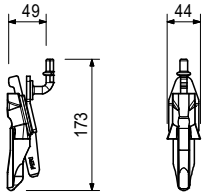
Suitable for suspending scaffolds. Further construction with Standard UVR or Spigot with Spacer URE 4/42 in connection with Starter Tube ULB to accommodate the lattice girders.





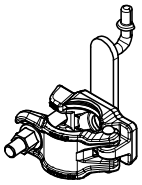
Art no.	Weight [kg]	
130562	0.623	**Guardrail Holder EPW**

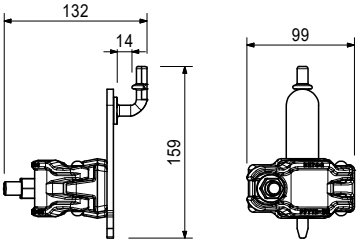
For mounting the Guardrails EPG to rosettes.

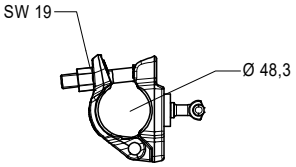


Art no.	Weight [kg]	
130434	1.100	**Guardrail Coupler EPR**

For installing the Guardrails EPG on the scaffold standards at any height.

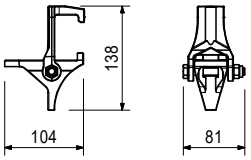






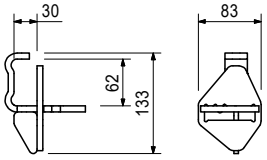
Art no.	Weight [kg]	
136582	0.831	**Ledger Bracket UHA-2**

For connecting horizontal ledgers at right-angles.

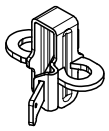


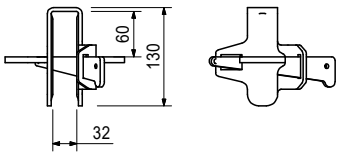
Art no.	Weight [kg]	
401731	0.841	**Ledger to Ledger Coupler UHA**

For connecting horizontal ledgers to horizontal ledgers at right-angles.

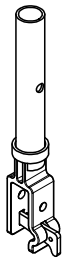


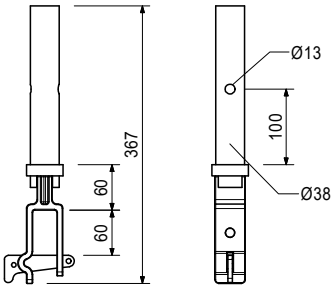
Art no.	Weight [kg]	
110793	1.090	**Ledger Bracket UHA half**



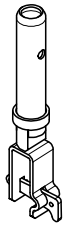


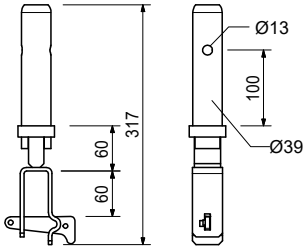
Art no.	Weight [kg]	
130681	1.500	**UH-Spigot-2**



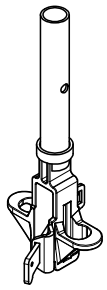


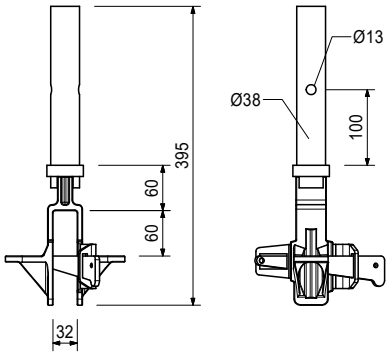
Art no.	Weight [kg]	
409764	1.250	**UH-Spigot**



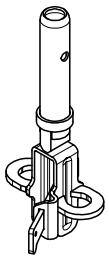


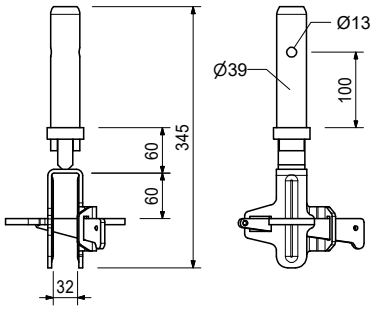
Art no.	Weight [kg]	
130684	2.020	**Ledger Bracket UHA-2 half Spi.**





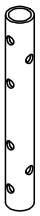
Art no.	Weight [kg]	
410792	1.900	**Ledger Bracket UHA half Spigot**

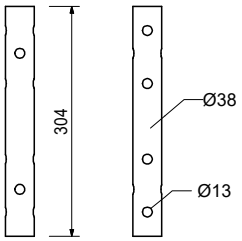




Art no.	Weight [kg]	
100301	0.920	**Spigot ULT 32**

Single pin for connection of tubes Ø 48.3 x 3.2 mm, e.g. lattice girders or top standards without interlock.





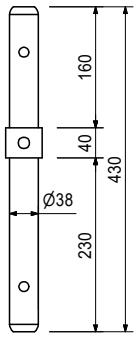
Accessory (not included)

100719 Screw ISO4014-M10x070-8.8-ga-N

111053 Locking Pin Ø48-57mm

Art no.	Weight [kg]	
105372	2.500	**Spigot w. Spacer URE 4/42**

For attaching to Element Collar URP, Connector ULS Flex and Head Frame EVH. Spacer tube enables further installation in the system grid.



Accessory (not included)

100719 Screw ISO4014-M10x070-8.8-ga-N

780356 Hex-Nut ISO7040-M10-8-ga

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**

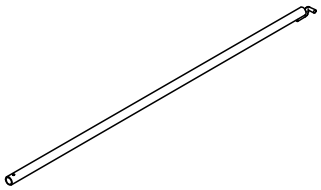
For assembly of the Wall Tie UWT.
Required Wall Insert UFI 14.

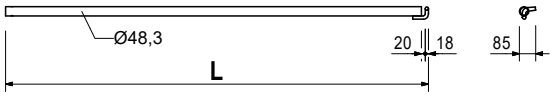
Notes

With marking for screw-in depth.

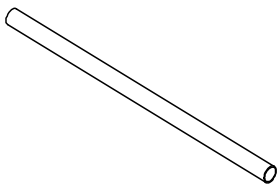
Art no.	Weight [kg]	
		Wall Inserts UFI
100696	0.007	**Wall Insert UFI 14/70**
100697	0.009	**Wall Insert UFI 14/100**
100698	0.010	**Wall Insert UFI 14/135**

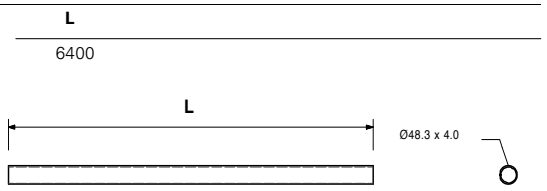
Art no.	Weight [kg]		L [mm]
		Wall Ties UWT	
100088	2.780	**Wall Tie UWT 45**	488
138285	3.040	**Wall Tie UWT 70**	738
100091	4.680	**Wall Tie UWT 110**	1138
100093	5.870	**Wall Tie UWT 140**	1438
102951	7.060	**Wall Tie UWT 170**	1738
102954	9.050	**Wall Tie UWT 220**	2238
102957	11.000	**Wall Tie UWT 270**	2738



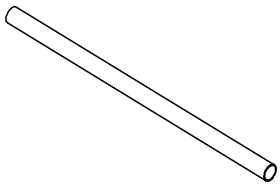


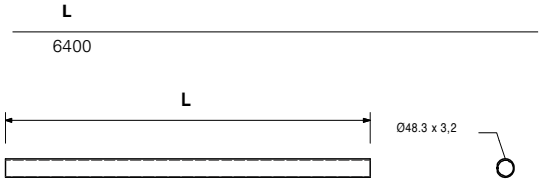
Art no.	Weight [kg]	
201410	28,560	**Scaffold Tubes Steel Ø 48.3 x 4.0** **Scaff. Tube Steel Ø 48.3 x 4.0, l = 6.4 m**





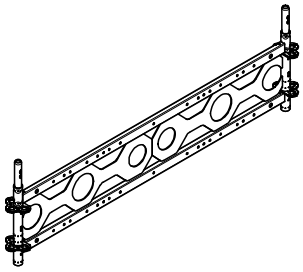
Art no.	Weight [kg]	
201416	22,400	**Scaffold Tubes Steel Ø 48.3 x 3.2** **Galv.Scaff. Tube Ø 48.3 x 3.2, l = 6.4 m** **to BS EN 10219 S355JOH**

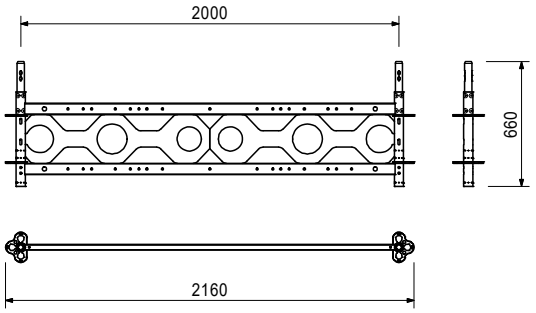




Art no.	Weight [kg]	
131368	26.400	**Multi Girder ELM**

e.g. suitable for the use of pavement gantries!





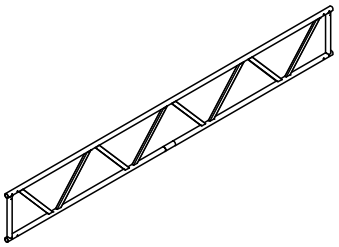
Accessory (not included)

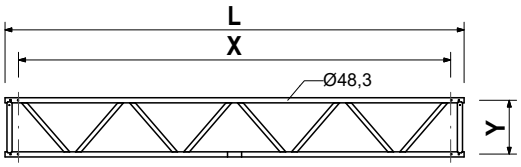
130681 UH-Spigot-2

130684 Ledger Bracket UHA-2 half Spi.

Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Latt. Girders Alu ULA HD			
101656	18.300	**Latt. Girder Alu ULA 50/425 HD**	4250	4000	500
101657	22.400	**Latt. Girder Alu ULA 50/525 HD**	5250	5000	500
101658	26.500	**Latt. Girder Alu ULA 50/625 HD**	6250	6000	500
101659	37.300	**Latt. Girder Alu ULA 70/825 HD**	8250	8000	700

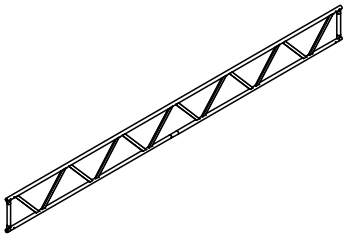
For bridging of openings.
For system-independent application.

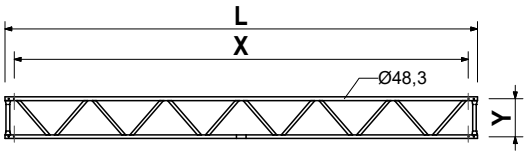




Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Latt. Girder Steel ULS			
100330	41.700	**Latt. Girder Steel ULS 50/425**	4250	4000	500
100336	50.900	**Latt. Girder Steel ULS 50/525**	5250	5000	500
100339	60.200	**Latt. Girder Steel ULS 50/625**	6250	6000	500
100185	54.800	**Latt. Girder Steel ULS 70/525**	5250	5000	700

For bridging of openings.
For system-independent application.

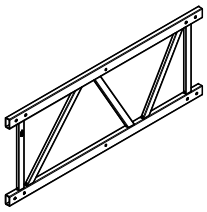


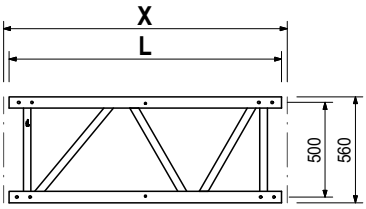


Art no.	Weight [kg]		L [mm]	X [mm]
		Intermediale Elem.ULS Flex		
124795	10.500	**Intermediale Elem.ULS 100 Flex**	941	1000
124790	12.700	**Intermediale Elem.ULS 125 Flex**	1191	1250
124781	15.400	**Intermediale Elem.ULS 150 Flex**	1441	1500

Notes

Only usable with End Element ULS 50 Flex and Connector ULS Flex.

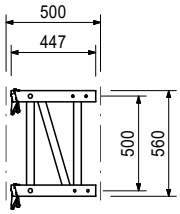




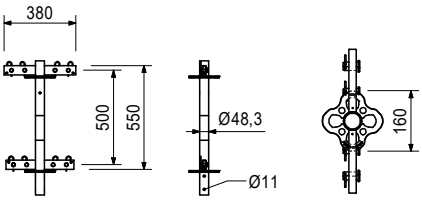
Art no.	Weight [kg]	
124805	6.480	**End Element ULS 50 Flex**

Notes

End element for the extension of Additional Element ULS Flex.



Art no.	Weight [kg]	
124806	5.870	**Connector ULS Flex**

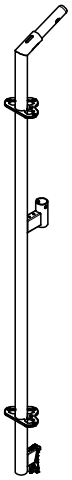


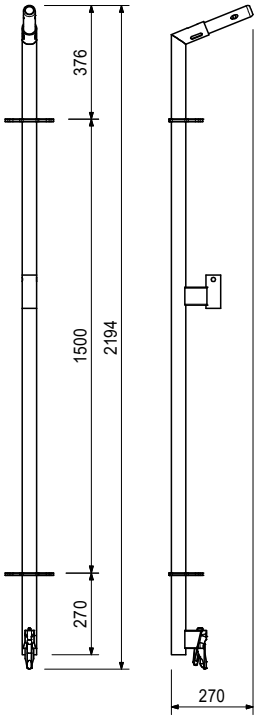
Included in delivery

124771 Collar Pin Ø12x44mm coat 8 pc
018060 Cotter Pin 4/1 ga 8 pc

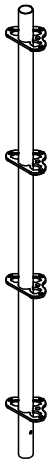
Art no.	Weight [kg]	
133753	9.290	**Weatherprotection EVW 200-V**

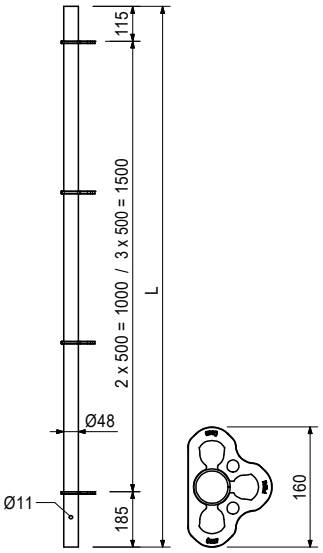
Standard on uppermost level in conjunction with Weather Protection EVW 130 or 180. Used together with tarpaulin coverings against the effects of the weather.





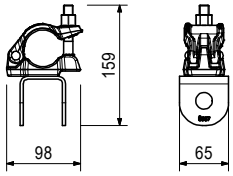
Art no.	Weight [kg]		L [mm]
		Weatherprotection EVW	
133745	5,240	**Weatherprotection EVW 130**	1300
133742	7,200	**Weatherprotection EVW 180**	1800





Art no.	Weight [kg]	
133757	1.200	**Coupler EVW**

In combination with Weather Protection EVW 180.



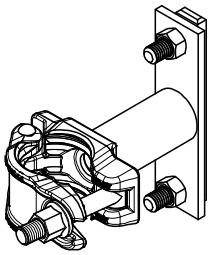
Accessory (not included)

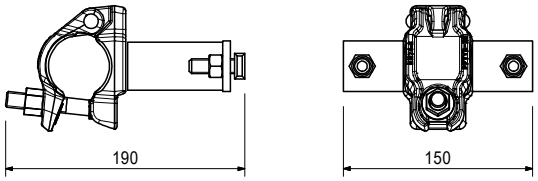
104031 Fitting Pin Ø21x120mm

018060 Cotter Pin 4/1 ga

Art no.	Weight [kg]	
126009	1.630	**LGS Keder Connector URV**

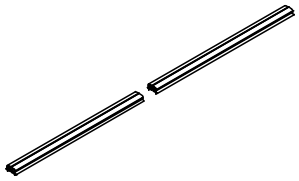
For fixing LGS Keder Rails URK to scaffold components with tube Ø 48.3 mm.

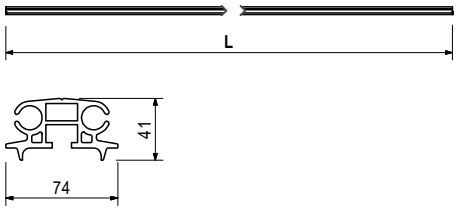




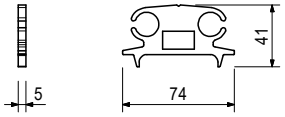
Art no.	Weight [kg]		L [mm]
		LGS Keder Rails URK	
127501	3.530	**LGS Keder Rail URK 150**	1500
127500	7.050	**LGS Keder Rail URK 300**	3000
126071	14.100	**LGS Keder Rail URK 600**	6000

Track for drawing keder tarpaulins into scaffold constructions.



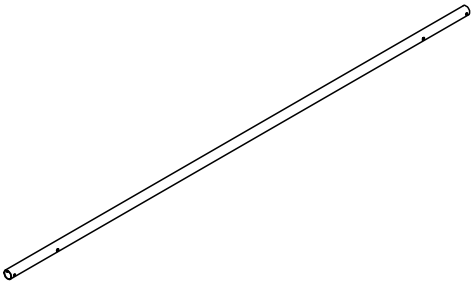


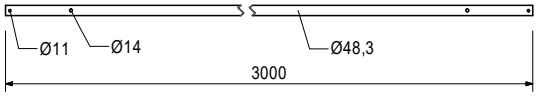
Art no.	Weight [kg]		B [mm]	L [mm]
139050	0.004	**Keder Sealing**	5	74



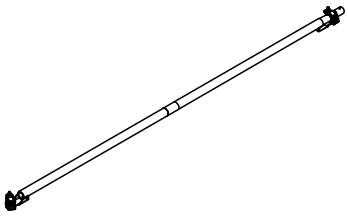
Art no.	Weight [kg]	
131092	9.090	**Scaffold Support coat**

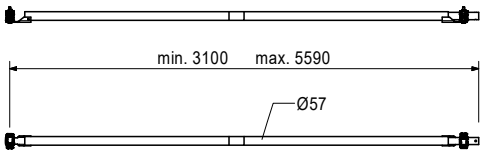
Can be used as an additional inner tube for Multi Brace EWB, if required.





Art no.	Weight [kg]	
131093	23.700	**Multi Brace EWB**

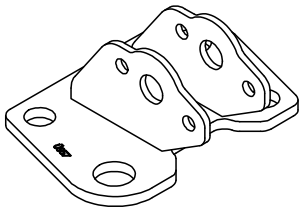


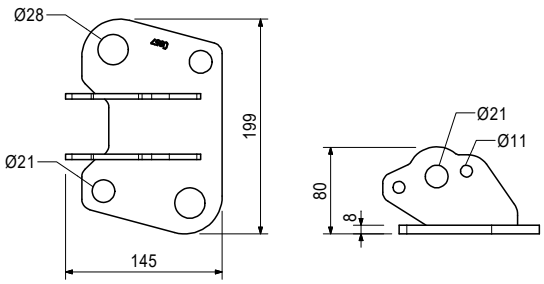


Accessory (not included)

131097 Base Plate for EWB

Art no.	Weight [kg]	
131097	1.700	**Base Plate for EWB**





Accessory (not included)

710593 Screw ISO4014-M10x080-8.8-ga

112786 Hex-Nut EN1661-M10-8-ga

Art no.	Weight [kg]	
134175	0.065	**Poly Cover Coupling UPC-C**

Surface: Yellow fluorescent (RAL 1026).

Art no.	Weight [kg]	
133907	0.015	**Poly Cover Tube UPC-T**

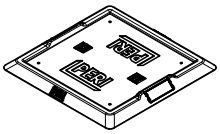
Surface: Yellow fluorescent (RAL 1026).

Art no.	Weight [kg]	
134176	0.098	**Poly Cover Rosette UPC-R**

Surface: Yellow fluorescent (RAL 1026).

Art no.	Weight [kg]	
134177	0.186	**Spindle Lining UES**

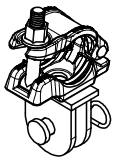
The protective underlay for base spindles protects sensitive base decks from damage by the base spindle plate. Surface: Yellow fluorescent (RAL 1026).

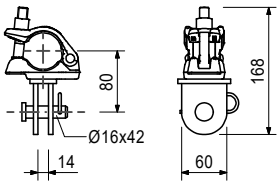


Art no.	Weight [kg]	
033734	0.850	**Scaffolding Bump 720**

Art no.	Weight [kg]	
131723	1.440	**Brace Connector HDR-2**

For connecting push-pull props and kicker braces to components Ø 48 mm.





Included in delivery

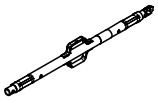
027170 Pin Ø16x42mm ga 1 pc
018060 Cotter Pin 4/1 ga 1 pc

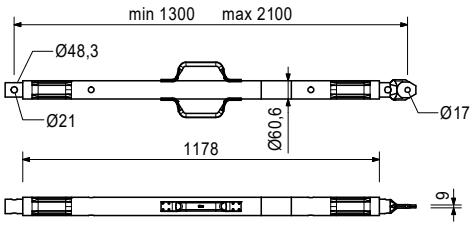
Art no.	Weight [kg]	
117466	10.600	**Push-Pull Prop RS 210 ga**

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

Notes

Permissible load see PERI Design Tables.



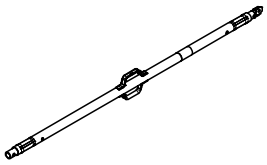


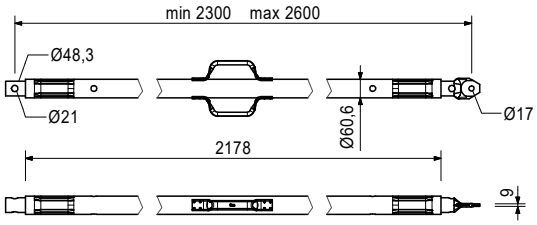
Art no.	Weight [kg]	
118238	12.100	**Push-Pull Prop RS 260 ga**

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

Notes

Permissible load see PERI Design Tables.



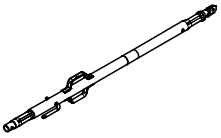


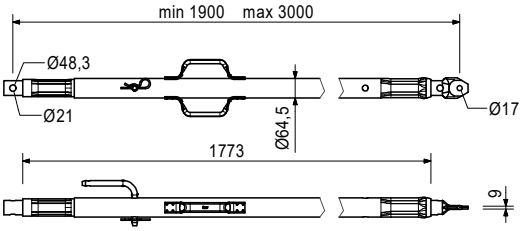
Art no.	Weight [kg]	
117467	15.500	**Push-Pull Prop RS 300 ga**

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

Notes

Permissible load see PERI Design Tables.



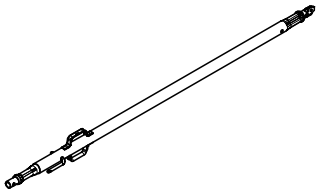


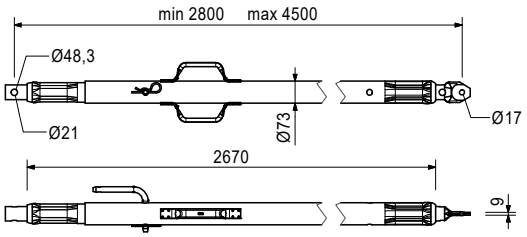
Art no.	Weight [kg]	
117468	23.000	**Push-Pull Prop RS 450 ga**

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

Notes

Permissible load see PERI Design Tables.



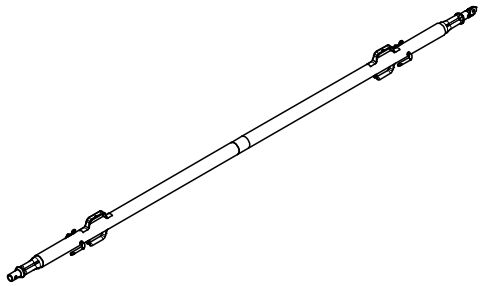


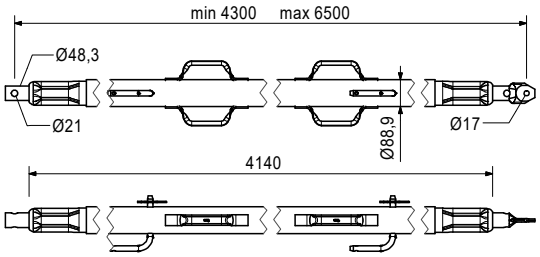
Art no.	Weight [kg]	
117469	39.900	**Push-Pull Prop RS 650 ga**

Extension length L = 4.30 – 6.50 m.
For aligning PERI Formwork Systems.

Notes

Permissible load see PERI Design Tables.



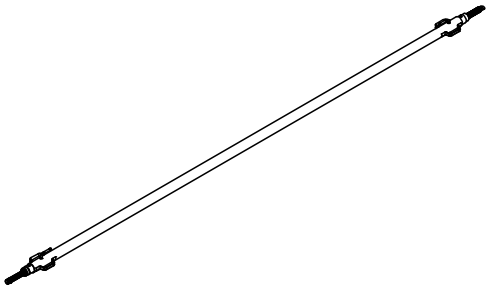


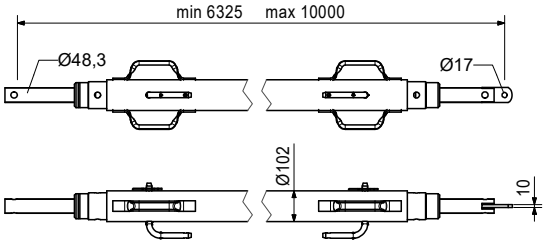
Art no.	Weight [kg]	
028990	115.000	**Push-Pull Prop RS 1000 ga**

Extension length L = 6.40 – 10.00 m.
For aligning PERI Formwork Systems.

Notes

Permissible load see PERI Design Tables.



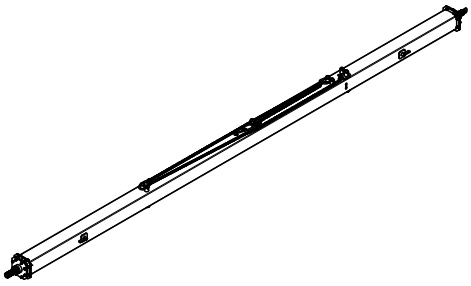


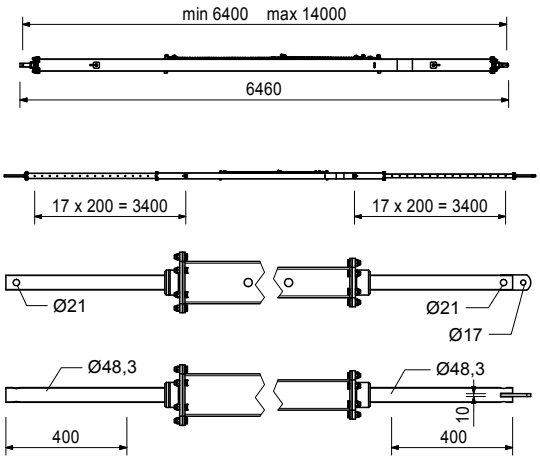
Art no.	Weight [kg]	
103800	271.000	**Push-Pull Prop RS 1400 ga**

Extension length L = 6.40 – 14.00 m.
For aligning PERI Formwork Systems.

Notes

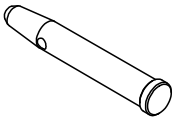
Permissible load see PERI Design Tables.
Chain can be operated from bottom.

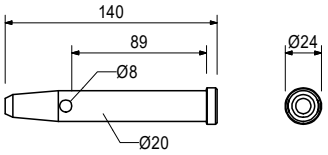




Art no.	Weight [kg]	
105400	0.330	**Pin Ø20x140mm ga**

For different connections.

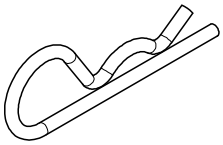




Accessory (not included)

018060 Cotter Pin 4/1 ga

Art no.	Weight [kg]	
018060	0.014	**Cotter Pin 4/1 ga**

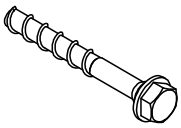


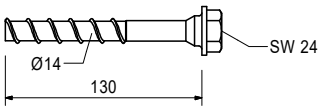
Art no.	Weight [kg]	
		Anchor Bolts Ø14
124777	0.210	**Anchor Bolt SW24 Ø14/20x130mm**
132889	0.213	**Anchor Bolt SW21 Ø14x150mm**

For temporary attachment to reinforced concrete components.

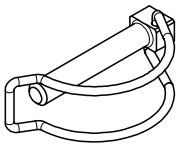
Notes

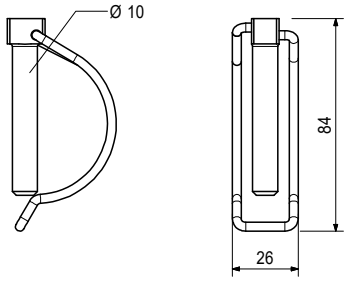
Take the PERI Data Sheet into consideration!
Hole Ø 14 mm.





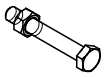
Art no.	Weight [kg]	
123480	0.080	**Tube Clip 10x60mm coat**

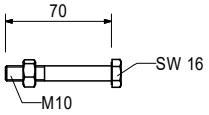




Art no.	Weight [kg]	
100719	0.060	**Screw ISO4014-M10x070-8.8-ga-N**

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



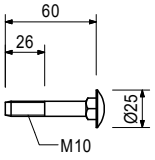


Art no.	Weight [kg]	
138009	0.060	**Screw ISO4014-M10x070-10.9-ga**

With Nut.

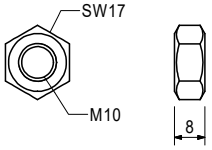
Art no.	Weight [kg]	
137252	0.050	**Screw DIN603-M10x060-8.8-ga**

For fixing the cover plates UDG



Art no.	Weight [kg]	
137279	0.012	**Hex-Nut ISO4032-M10-8-ga**

For fastening the cover plates UDG

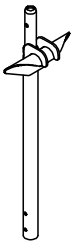


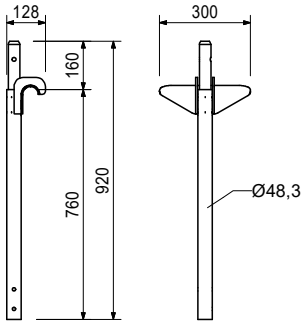
Art no.	Weight [kg]	
100529	6.710	**Starter Tube ULB 50/70**

For Lattice Girders ULS and ULA.

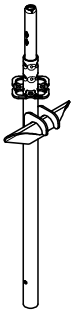
Notes

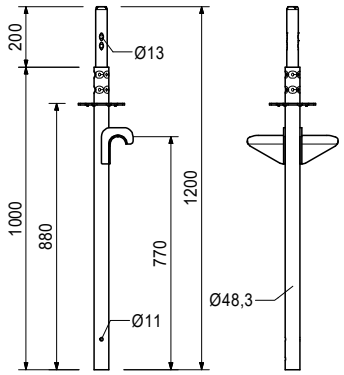
Only to be used for system-independent formwork girder assembly.

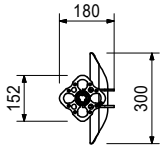




Art no.	Weight [kg]		B [mm]	L [mm]
139349	7.800	**Starter Tube ULB with rosett**	300	1200







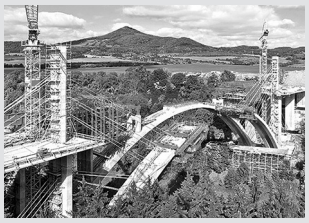
The optimal system for every project and any requirement

Wall formwork

Column formwork

Slab formwork

Climbing systems



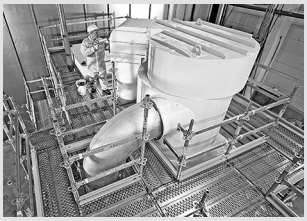
Bridge formwork

Tunnel formwork

Shoring

Working scaffolds for construction

Working scaffolds for facades



Working scaffolds for industry

Access

Safety scaffolds

Safety systems

System-independent accessories

Services

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