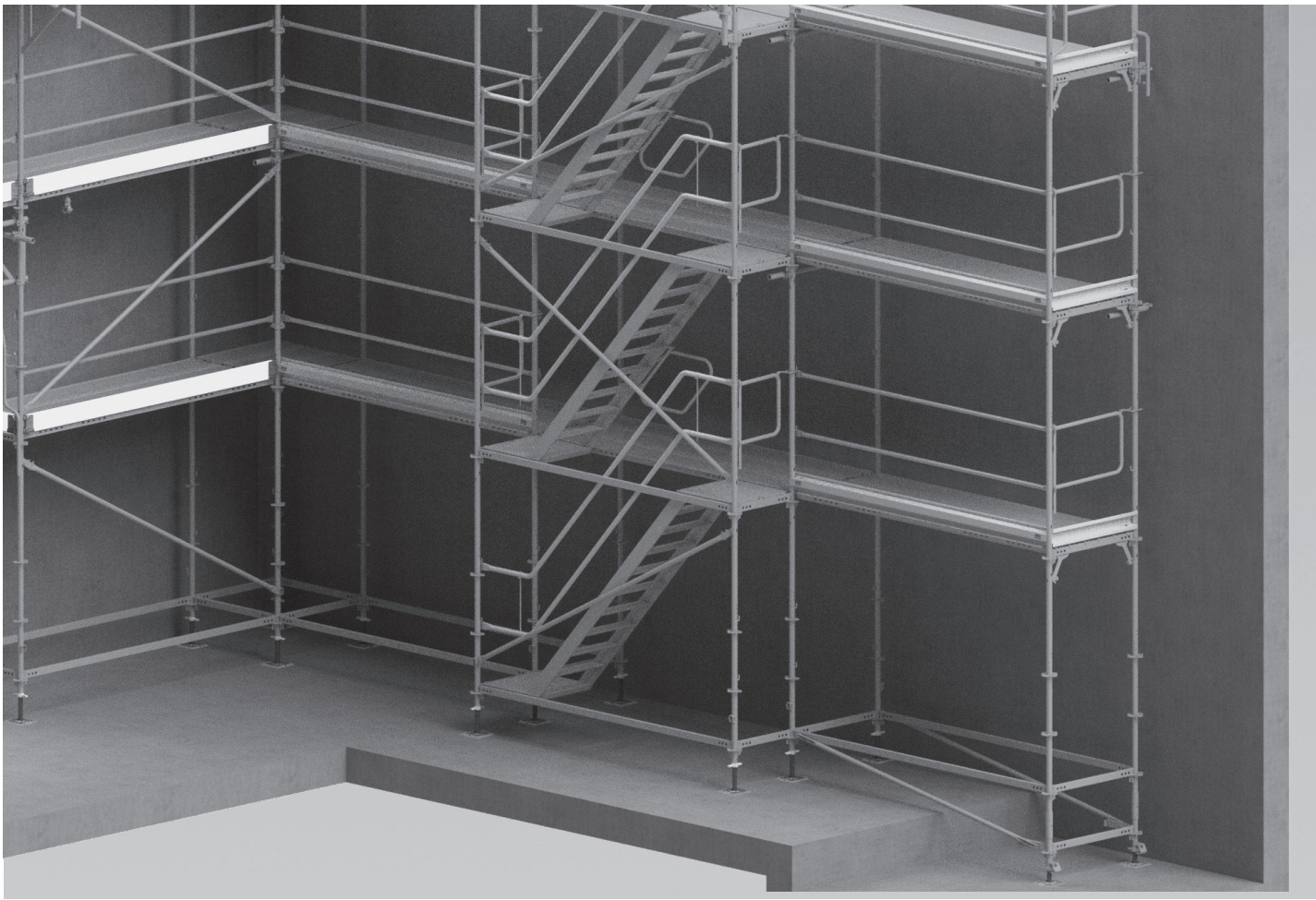
PERI UP Easy
EVOTOP 100

Instructions for Assembly and Use – Standard Configuration – Version 1.1



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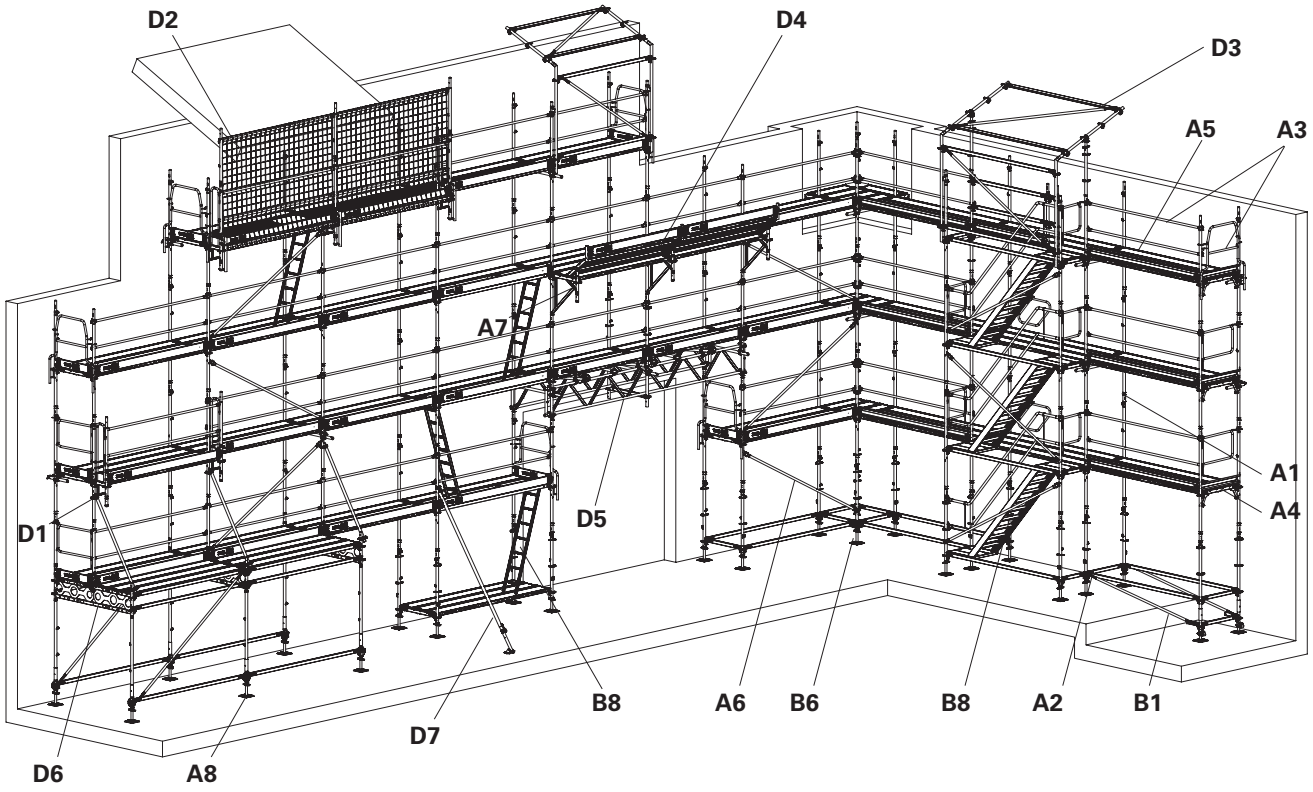
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Overview

Main components



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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 Instructions for Assembly and Use are shown in the form of examples with only one component size. They are valid for all component sizes contained in the standard configuration.

To facilitate understanding, illustrations are sometimes incomplete. Any safety equipment that is not shown in these illustrations must be incorporated nonetheless.

Target groups

Scaffolding contractors/contractors
These assembly instructions are intended for contractors who either
- assemble, modify and dismantle the scaffolds, or
- use them, e.g. for concreting, or
- allow them to be used for other operations, e.g. carpentry or electrical work.

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

Competent person
- is appointed by the scaffolding contractor,
- must be on site for all scaffolding work,
- prepares and updates the plan for assembly, modification and dismantling,
- prepares and updates the plan for use of the scaffold by the scaffold 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
Scaffolds 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 scaffold in an understandable form and language.
- Description of the measures for safely assembling, modifying or dismantling the scaffold.
- Designation 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 scaffold, as well as the personnel concerned.
- Details regarding permissible loads.
- Description of all other risks and dangers associated with assembly, modification or dismantling operations.



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

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

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

Product description

Purpose of these assembly instructions
These Instructions for Assembly and Use are based on Approval Z-8.1-957 and Z-8.1-970 for the PERI UP Easy scaffolding system.

They describe the standard configuration for a facade scaffold as a working and safety scaffold according to the provisions set down in DIN 4420-1 as well as the requirements as a scaffolding system according to EN 12810 and EN 12811.

These Instructions for Assembly and Use show the assembly with
- Bay width 3 m
- with Steel Decks EDS,
- with Toeboard UPF.

The assembly process with
- Bay width < 3 m
- other decks,
- Toeboard Steel UPY

is carried out in the same way.

Designs deviating from the standard configuration require separate structural proof of stability from the contractor.

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

Features
The PERI UP Easy scaffolding system is a length-oriented steel scaffold in frame and standard variants comprised of prefabricated components with supplementary components. In these Instructions for Assembly and Use, only the PERI UP Easy EVOTOP standard variant with a scaffold width of 100 cm is considered.
- For the scaffold width 67 cm, see the Instructions for Assembly and Use for the PERI UP Easy Facade Scaffold 67and 100, standard variant
- For the frame variant, see the Instructions for Assembly and Use for the PERI UP Easy Facade Scaffold 67 and 100, frame variant.

PERI UP Easy EVOTOP can be used as a working scaffold in load classes 1 – 4 according to EN 12811-1
0.75 – 3.00 kN/m².

For a bay width of 3 m, EVOTOP components are required for load class 4.

Fulfils the requirements for safety scaffolds (edge and roof edge protection scaffolds for falling heights ≤ 2.0 m, protection roofs) according to DIN 4420-1.
The standard configuration covers a scaffold assembly with a height of 24 m plus the maximum spindle extension specified.

The standard configuration for clad scaffolds applies to cladding with netting having aerodynamic force coefficients not in excess of $c_{f\perp} = 0.6$ and $c_{f\parallel} = 0.2$, and to cladding with tarpaulins. In the case of clad scaffolds, these must always be closed up to the erection surface and around the front sides of the scaffold, i.e. the tarpaulin or netting must be stretched all the way to the facade. Wind load is calculated with an exposure-time factor of $\chi = 0.7$, which assumes a maximum exposure time of 2 years.

Wind attack surfaces due to icing are not taken into account.
Snow and ice loads are not taken into account.

Technical data
Scaffold width: 100 cm
Scaffolding bay lengths:
67/100/150/200/250/300 cm

Product description according to EN 12810:

PERI UP Easy EVOTOP 100
EN 12810-4D-SW09/300-H1/H2-B-LS

Explanation:
4 = Load Class 4 (LC 4 = 3.00 kN/m²)
D = decks with drop test suitable as safety scaffold
SW09 = Width class 09
(0.9 ≤ w < 1.2 m)
300 = bay length ≤ 300 cm
H1/H2 = height class depending on the anchoring used.
B = with cladding
LS = equipment with ladder and stairs

PERI UP Easy EVOTOP scaffolds can be erected with bay lengths
≤ 2.0 m up to LC 6 = 6.00 kN/m²
≤ 2.5 m up to LC 5 = 4.50 kN/m².
Depending on the equipment, additional anchoring and bracing may be required.

Individual structural proof must be provided.

Cleaning and maintenance instructions

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

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



The contractor must ensure that the personal protective equipment required for cleaning, maintenance and repair work, e.g.

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

is available and used as intended.

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

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

Clean mechanical components to remove dirt or concrete residues before and after use and grease them with suitable lubricants.

Do not 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.

Additional technical documentation

Approvals:
- Z-8.1 – 970 PERI UP Easy 100
- Z-8.1 – 957 PERI UP Easy
- Z-8.22 – 863 PERI UP Flex

Instructions for Assembly and Use:
- PERI UP Easy Facade Scaffold 67and 100, Standard Variant
- PERI UP Easy Facade Scaffold 67and 100, Frame Variant
- PERI UP Flex Stair Aluminium 75
- PERI UP Flex Stair 100 and 125 with Deck UDG
- PERI UP Scaffolding Kit – Core components

Instructions for Use

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

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

All components listed in the program overview may be used for assembly. Components labelled EVOTOP must not be replaced with other components. Other components are not permitted or must be planned and verified on a project-specific basis.

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

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

Cross-system

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

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

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

Observe and comply with the safety instructions and permissible loads.

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

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

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

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

When on slab formwork, scaffolds and working platforms:
- do not jump,
- do not run,
- do not drop anything from or onto it.

Components provided by the contractor must comply with the characteristics stipulated in these Instructions for Assembly and Use and all applicable laws and standards. Unless otherwise indicated, the following applies in particular:
- Timber components:
  Strength class C24 for solid wood according to DIN EN 338:2016-07.
- Scaffolding tubes:
  Galvanised steel tubes with minimum dimension Ø 48.3 x 3.2 mm according to DIN EN 12811-1:2004-03 4.2.1.2.
- Scaffolding tube couplings:
  according to DIN EN 74-1:2005-12.

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.

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 Instructions for Assembly and Use, the contractor must create installation 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.

The scaffolding is disassembled by reversing the assembly sequence as described in these Instructions for Assembly and Use.
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.
For verified attachment points, see Section "Verified attachment points" on page 19.
The PPE to be used to prevent falling is determined by the contractor.

The contractor must
- provide safe working areas for site personnel, which are to be reached through the provision of safe access ways. cordon off and clearly mark danger zones.
- guarantee stability during all stages of construction, in particular during assembly, modification and dismantling operations.
- ensure and demonstrate that all loads that occur are safely transferred.

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.
- Measures are taken against injuries caused by bumping against 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 scaffolding cannot shift in a horizontal direction, irrespective of what substrate is being used.

Access hatches close automatically. Do not disable the mechanism.

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

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

Anchoring

Refer to the Section "Static design" for the anchoring forces and the anchoring positions.

Enclosing the scaffold, or mounting additional surfaces that are exposed to the influences of the wind, changes the stability. As a result, the stability must be re-assessed.
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.

Inspecting the anchoring

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

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

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

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

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



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

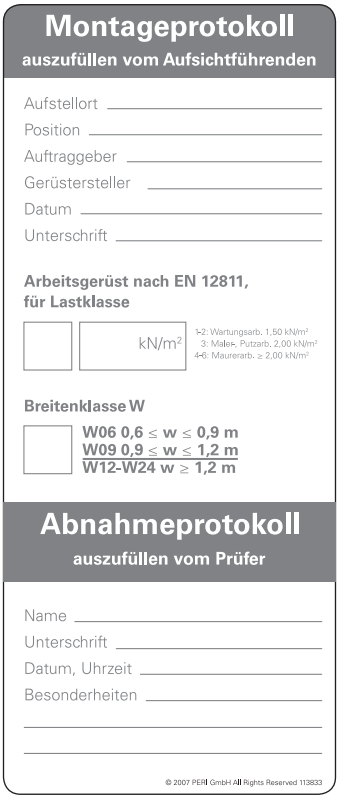
Identification marking

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.

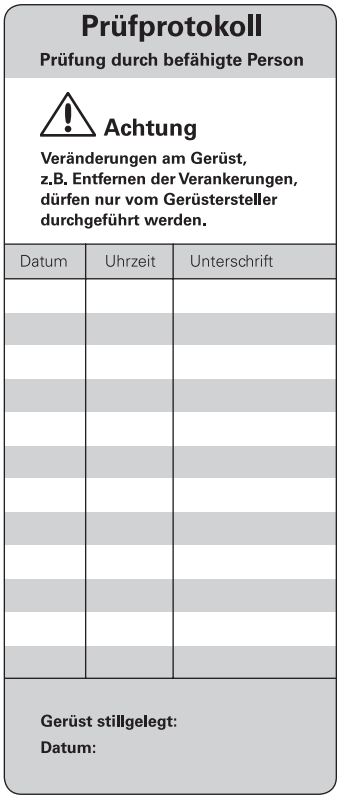
After assembly has been completed, all scaffold entry points must clearly display the designated sign. (Sign 2)
The identification marking does not replace the inspection log! (Sign 2, rear side)



Sign 1



Sign 2



Sign 2, rear side

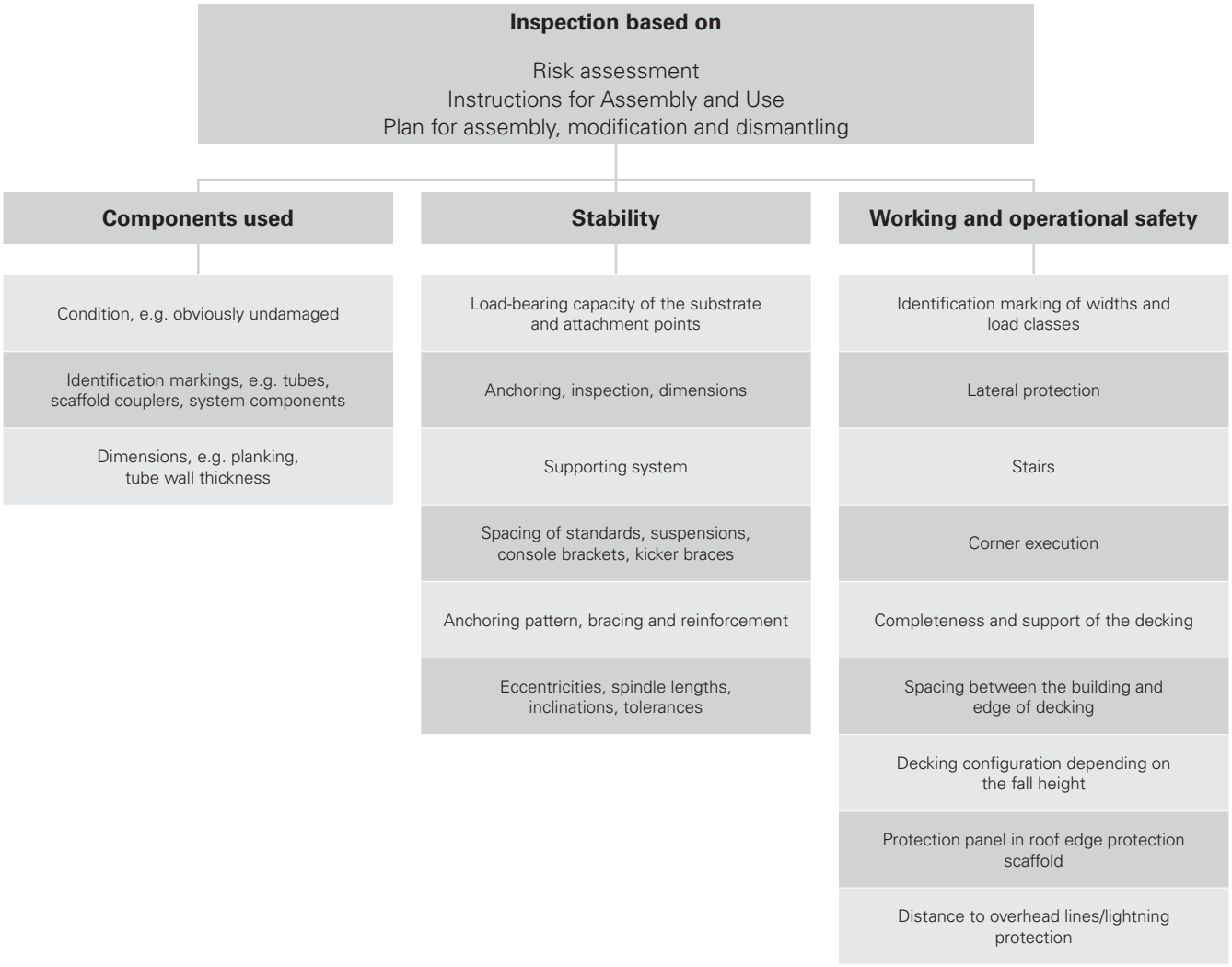
Ensure that the relevant national guidelines and regulations in the respective current version are complied with!

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 his 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

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 attach the means of transport to the intended attachment points using suitable lifting gear and slings.

During the relocation procedure

- ensure that components are picked up and set down in such a way that unintentional falling over, falling apart, sliding, falling down or rolling is avoided.
- no persons are 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.

Vertical transportation

Note

Adverse effect on safety levels due to damaged scaffolding components!

⇒ Do not drop scaffolding components!

⇒ Transport and store scaffolding components in a way that poses no risk of damage to the components.

- For assembly, modification and disassembly work, guardrails and intermediate guardrails must be installed at all times in the material acceptance bay. If double-advanced guardrail posts are used, every bay is a material acceptance bay.
- Vertical transportation must be carried out under the supervision of site personnel in all situations.

If scaffolds higher than 8 m (deck height above erection surface) are being erected, construction hoists or winches should be used for vertical transportation of the scaffolding components. Observe the respective manufacturer's documentation!

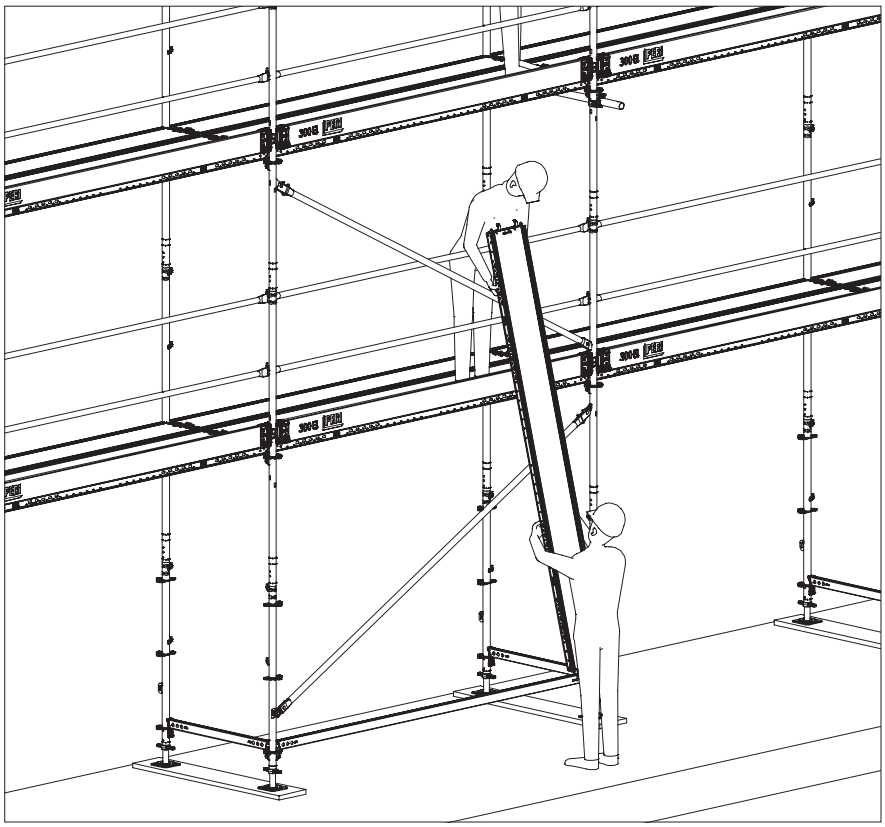


Fig. E.01

Basic scaffolding in the standard configuration

Working situation:
Assembly/dismantling of all scaffolding components. (standards, horizontal ledgers, lateral and end protection, decks, ties)

Assembly with guardrail in advance as system-integrated guardrails
From the most recently completed scaffolding level, the top guardrail for the next scaffolding level is assembled together with the EVOTOP Standard.

The end guardrail for the next scaffolding level is also installed from the level below.

The scaffold constructors will come across the end guardrail and upper guardrail posts straight away, allowing them to continue with installation from a safe working position. (Fig. E.02)

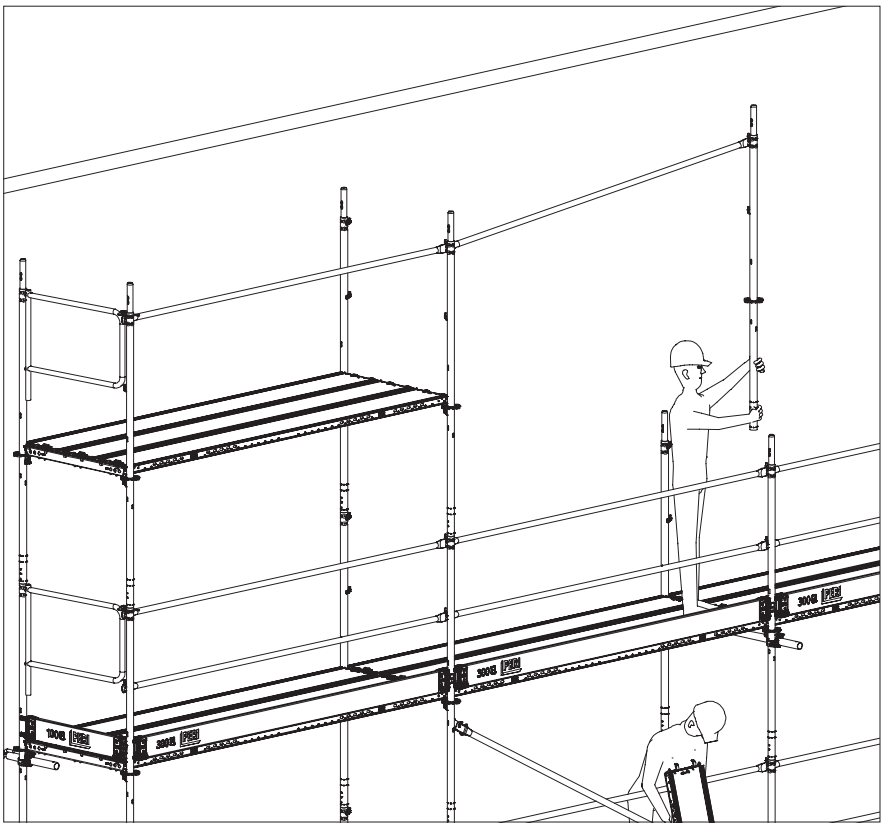


Fig. E.02

Comply with the prescribed assembly sequences!

Assembly of the EVOTOP Standard can also be carried out in a "double-advanced" manner with guardrails and intermediate guardrails. (Fig. E.03)

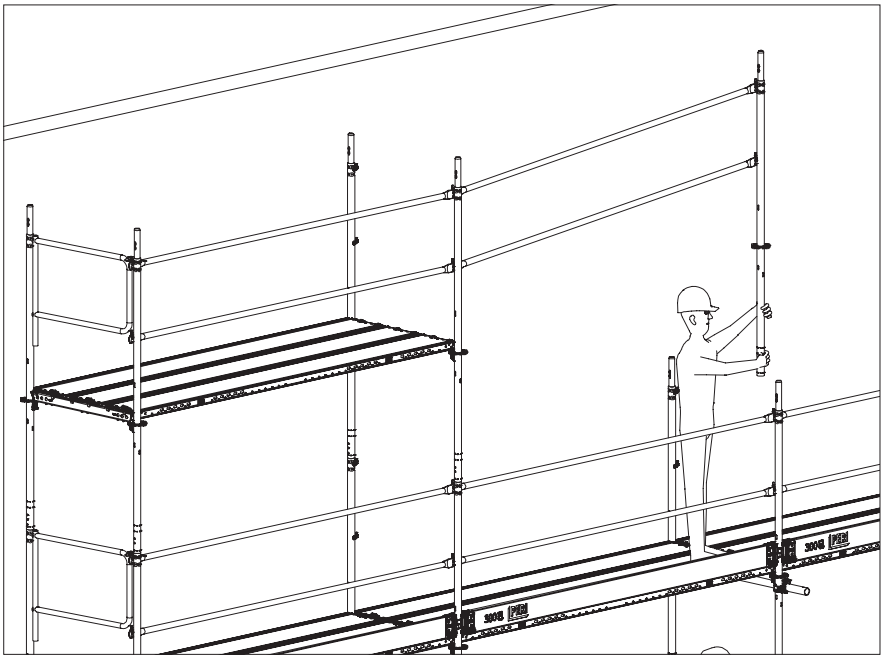


Fig. E.03

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 position must be available at all times.
- With the exception of the base level, all scaffolding levels must be completely covered with decks.
- The attachment points shown apply to frame and standard variants.
- Each specified attachment point is intended for securing only one person!

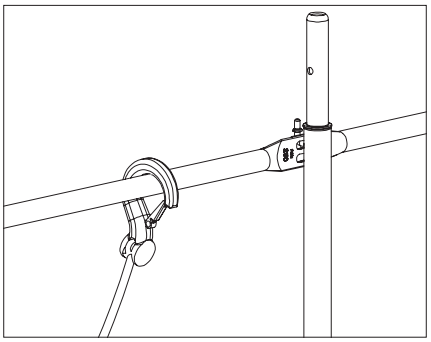


Fig. E.04

Guardrail post
Attachment point:
Each Guardrail EPG or intermediate guardrail,

- which is connected to two Standards EVOTOP EVM
- whereby both the guardrail and intermediate guardrail are installed
- and is mounted a maximum 1.0 m above the decking level.

Guardrail posts which are connected to Tubes EVP, EVR or EVS are not attachment points.

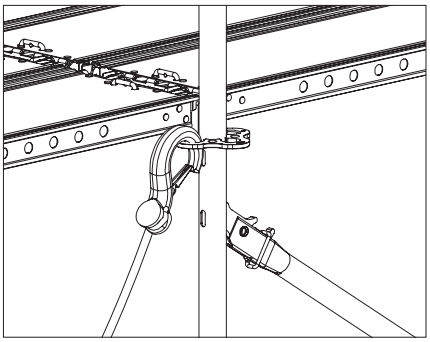


Fig. E.05

Rosette
Attachment point:

- Each rosette on Standard EVOTOP EVM and Top Standard EVOTOP EVT integrated into the basic scaffold

PERI UP Easy EVOTOP 100 components

- PERI UP Easy EVOTOP components **cannot** be replaced by similar components from the Easy vertical variant or PERI UP Flex.
- It is not possible to fit the Wall Tie Coupler EWC.

Visible differences

- Ledger bracket (**22.3**) of the rosettes in keyhole format.
- All EVOTOP components are labelled with a sticker (**149**).

See the comparison table for further differences.

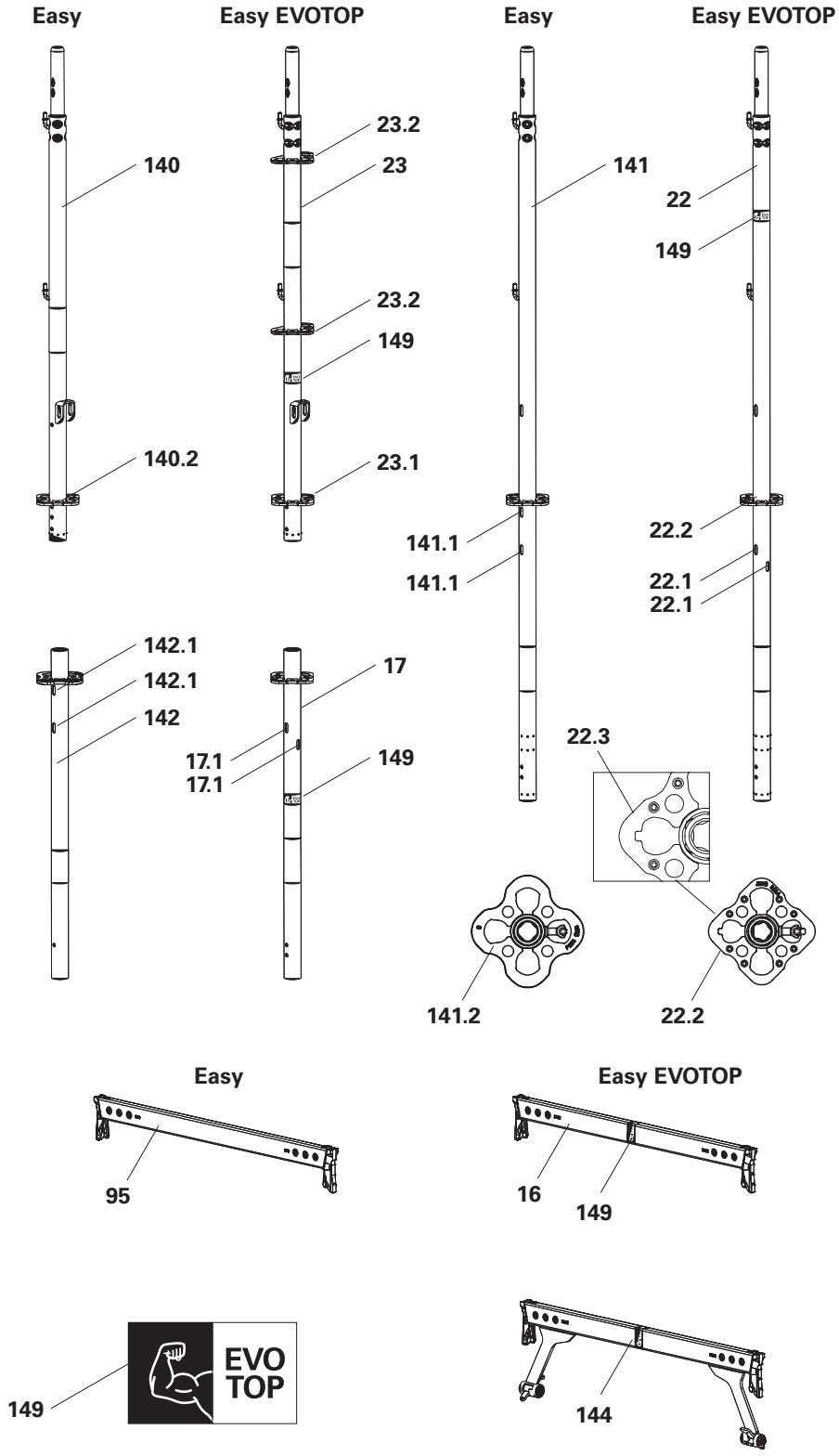


Fig. A1.01

Comparison table			
Components to be used		**Cannot be replaced with**	
Easy EVOTOP 100 component		Easy standard variant component	
23	Base Standard EVOTOP EVS 124	**140**	Easy Base Standard EVM 124
	■ 1 rosette at height of base level (**23.1**) 2 x 3/4 rosettes at height of 50 or 100 cm (**23.2**) ■ Ledger bracket (**23.3**) of the rosettes in keyhole format ■ "EVOTOP" sticker (**149**)		■ 1 rosette at height of base level (**140.2**)
22	Standard EVOTOP EVM 200	**141**	Easy Standard EVM 200
	■ 2 pairs of slots below the rosette rotated through 90° (**22.1**) ■ Ledger bracket (**22.3**) of the rosettes in keyhole format ■ "EVOTOP" sticker (**149**)		■ 2 pairs of slots below the rosette (**141.1**)
17	Top Standard EVOTOP EVT 96	**142**	Top Standard EVT 96
	■ 2 pairs of slots below the rosette rotated through 90° (**17.1**) ■ Ledger bracket (**22.3**) of the rosettes in keyhole format ■ "EVOTOP" sticker (**149**)		■ 2 pairs of slots below the rosette (**141.1**)
16	Ledger EVOTOP UH-2 100	**95**	Horizontal Ledger UH-2 100
	■ "EVOTOP" sticker (**149**)		■ no marking
144	Ledger EVOTOP UH SL 100		No corresponding component
	■ "EVOTOP" sticker (**149**) not required in standard configuration up to 24 m.		

Tab. A1.01

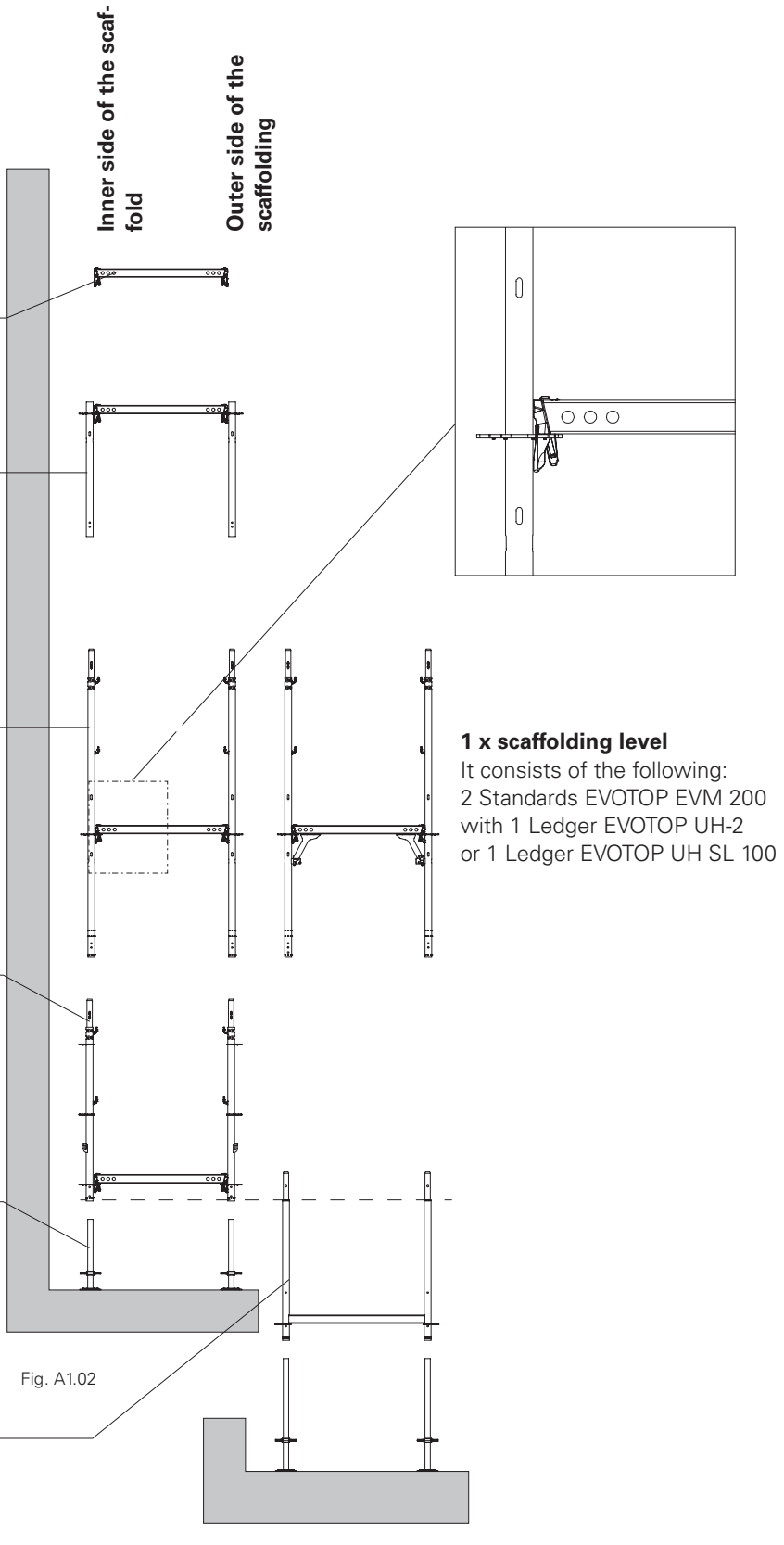
Replaceable components:

Component	Can be replaced with
Standard UVR-2	Standard UVR
Horizontal Ledger UH-2	Horizontal Ledger UH Plus
Ledger Brace UBL-2	Ledger Brace UBL
Horizontal Ledger UHV-2	Horizontal Ledger UHV Plus
Top Standard UVH-2	Top Standard UVH
Easy Staircase EAS	Scaffold Staircase UAS 67

Tab. A1.02

Easy EVOTOP standard variant

The scaffold side that faces the building is always referred to as the inner side of the scaffold.



Ledger EVOTOP UH-2 100
as a crossbar.

Top Standard EVOTOP EVT 96
Height = 0.96 m.
Fit the standards on the inner and outer sides.

Standard EVOTOP EVM 200
Height = 2.00 m.
Fit the standards on the inner and outer sides.

1 x scaffolding level
It consists of the following:
2 Standards EVOTOP EVM 200
with 1 Ledger EVOTOP UH-2
or 1 Ledger EVOTOP UH SL 100

Base Standard EVOTOP EVS 124
Height = 1.24 m.
Fit the standards on the inner and outer sides.

Adjusting Base Plates UJB
see the following page.

Fig. A1.02

Optional
Base Compensation EVA
available in 0.50 m and 1.00 m compensation heights.

Fig. A1.02a

A2 Wedge connections

Wedges (**94.1**) are used with various components, e.g. horizontal ledgers (**94**), console brackets (**62**) or supports (**61**), for connecting purposes.

Horizontal ledger assembly
Other wedge connections are assembled in the same way.

1. Place Horizontal Ledger UH-2 (**94**) or UHV-2 diagonally on both rosettes and set vertically. (Fig. A2.01)
2. Press the horizontal ledger down onto the rosette up to the stop.
   → Wedges (**94.1**) drop into the rosette and thus already hold the component securely. (Fig. A2.02)
   If the wedge does not fall, push the wedge nose (**94.2**) down from the horizontal ledger by hand. (Fig. A2.01a)
3. Secure the wedges with a jarring blow using a 500 g hammer.

→ Horizontal ledger is installed.
(Fig. A2.03)

Loosening the wedge connection:

1. Hit the wedge from below with a hammer.
2. Lift out the wedge and place it on the horizontal ledger together with the wedge nose.

(Fig. A2.01a)

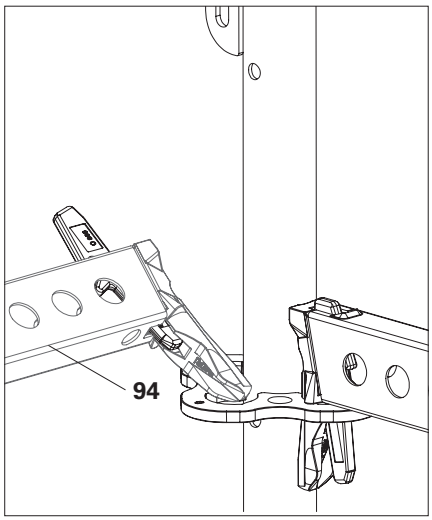


Fig. A2.01

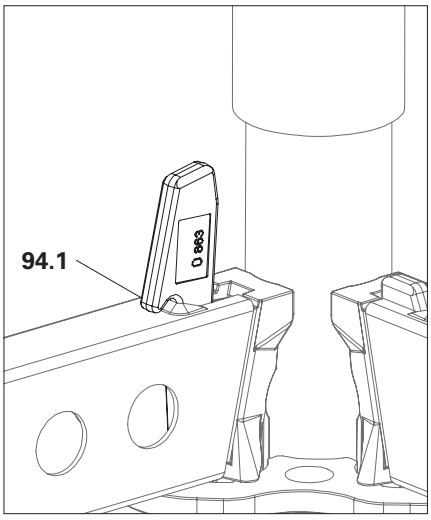


Fig. A2.01a

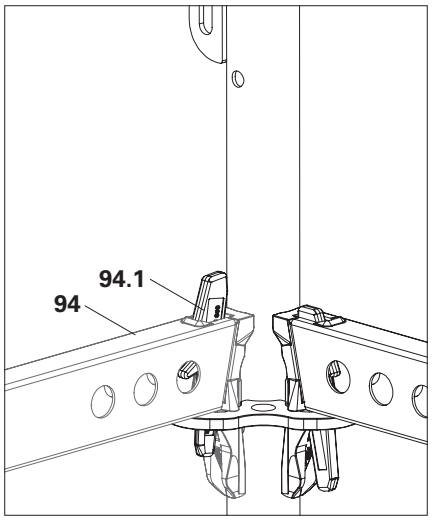


Fig. A2.02

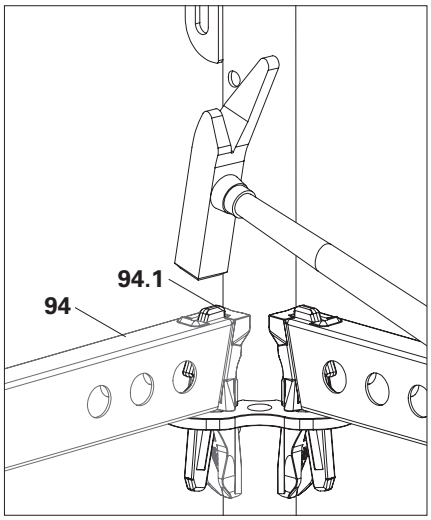


Fig. A2.03

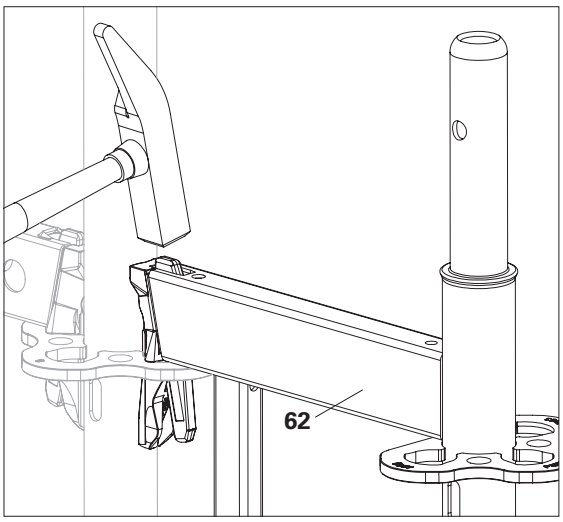


Fig. A2.04

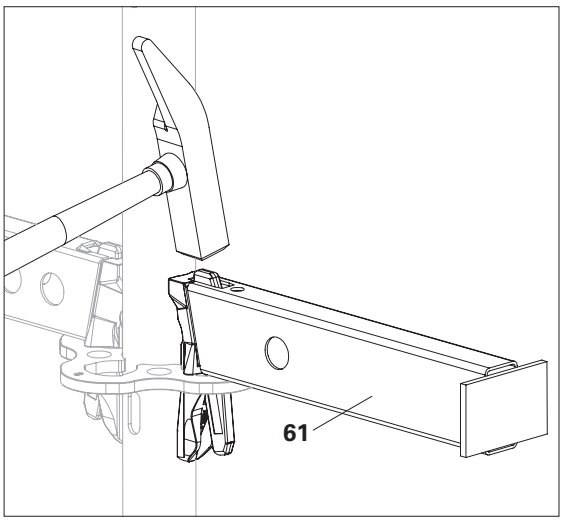


Fig. A2.05

Stair Guardrails EAG

The Stair Guardrail EAG (**77**) is used in conjunction with Locking Pin EAG (**79**) as an advanced guardrail for all staircases in the PERI UP Easy system.

Assembly

1. Attach the Stair Guardrail EAG with labyrinth (**77.1**) to the upper guardrail hook and pull it up to the stop. (Fig. A3.01a + Fig. A3.01b)
2. Attach the stair guardrail with keyhole (**77.2**) to the lower guardrail hook. (Fig. A3.01c)
3. Fit the second stair guardrail post in the same way.
4. Both Stair Guardrails EAG can be connected with 2 Locking Pins EAG (**79**) through the post holes (**77.3**) and thus braced.

→ The Stair Guardrail EAG is mounted. (Fig. A3.01)

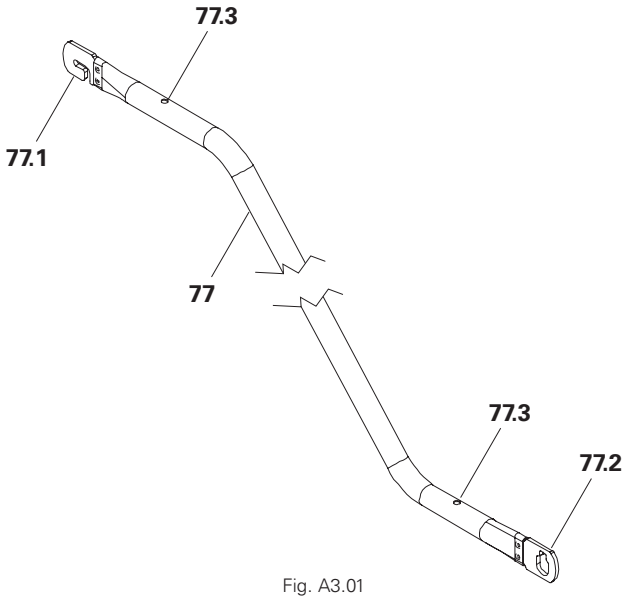


Fig. A3.01

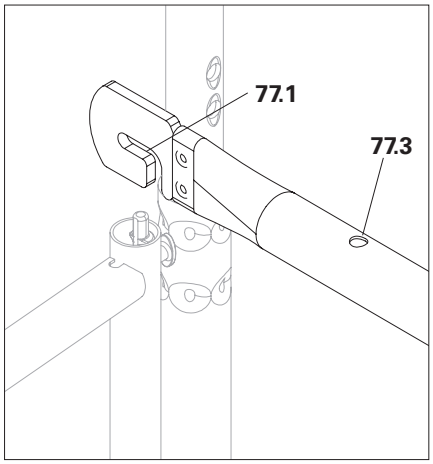


Fig. A3.01a

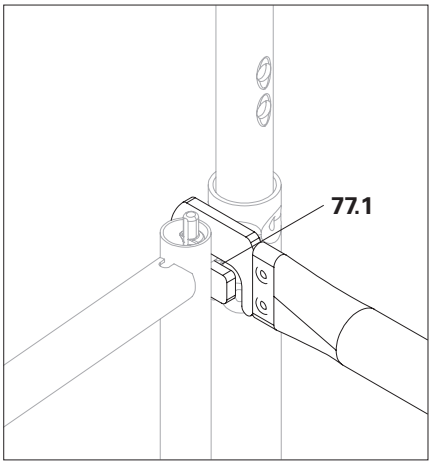


Fig. A3.01b

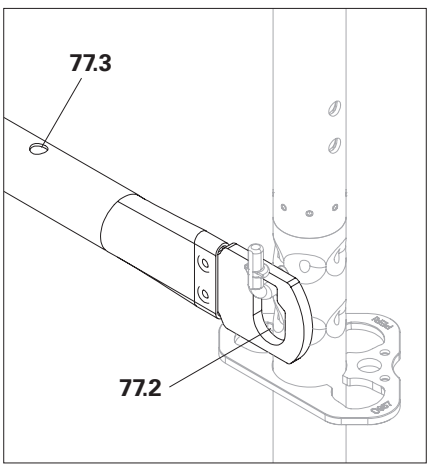


Fig. A3.01c

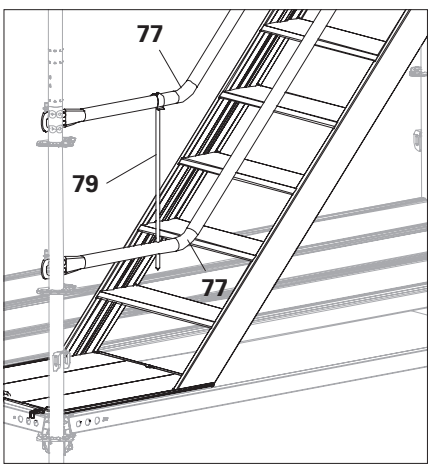


Fig. A3.02

Guardrail EPG

Assembly

1. Turn the connecting pieces (**51.1**) of the guardrail post horizontally and position them on the guardrail hooks. (Fig. A3.03)
2. Align the slot (**51.2**) with the guardrail hook (**22.1**) and insert.

(Fig. A3.03a)

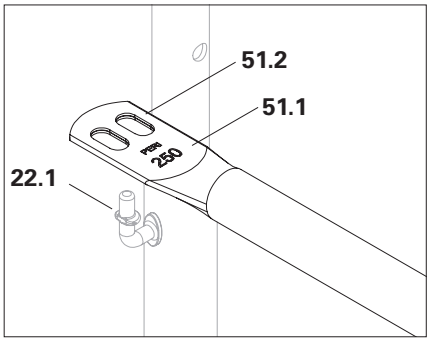


Fig. A3.03

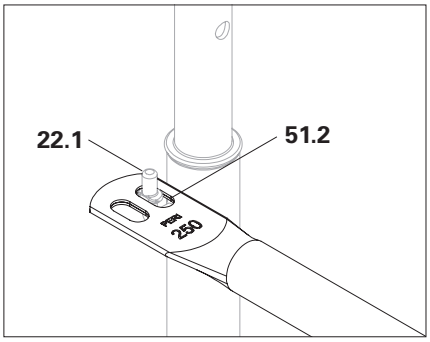


Fig. A3.03a

3. Release the guardrail post.
   → The guardrail post drops into a vertical position and is secured.

(Fig. A3.03b)

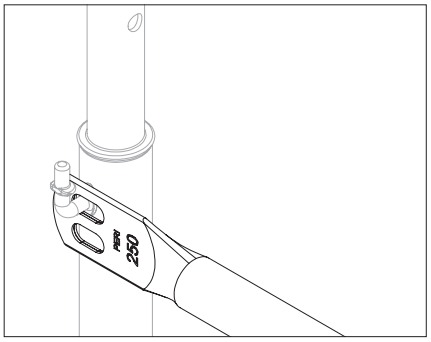


Fig. A3.03b

- For assembly and dismantling, first insert or detach one side, then the other side.
- The assembly process for Standard EVOTOP EVM 200, Guardrail Post EVP and Base Standard EVOTOP EVS 124 is carried out in the same way.

Note

Stability compromised!

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

advanced guardrail

The lateral protection is always assembled in front.
For the assembly procedure, see also Section "Easy EVOTOP standards and guardrail post" on page 57.

Assembly can also be carried out in a "double-advanced" manner with guardrails and intermediate guardrails, e.g. for a material acceptance bay.
(Fig. A3.04a)

Assembly

1. Turn and attach the Standards EVOTOP EVM 200 in such a way that the guardrail hooks face inwards.
2. Attach the Guardrails EPG (**51**) to the standard (**22a**) and place them on the deck with the other side facing down. (Fig. A3.04)
3 Set the second Standard EVOTOP EVM 200 (**22b**) down on the deck and attach the free guardrail post side to the guardrail hook.
4. Attach the standard (**22b**) to the scaffold together with the guardrail posts.

→ The lateral protection is installed.
(Fig. A3.04b)

If the maximum permissible distance to the building is exceeded, you should also fit the advanced guardrail on the inner side of the scaffold. (Fig. A3.04b) Observe national laws and regulations.

As an alternative to the inner guardrail, mount suitable console brackets on the inner side of the scaffold with end protection.

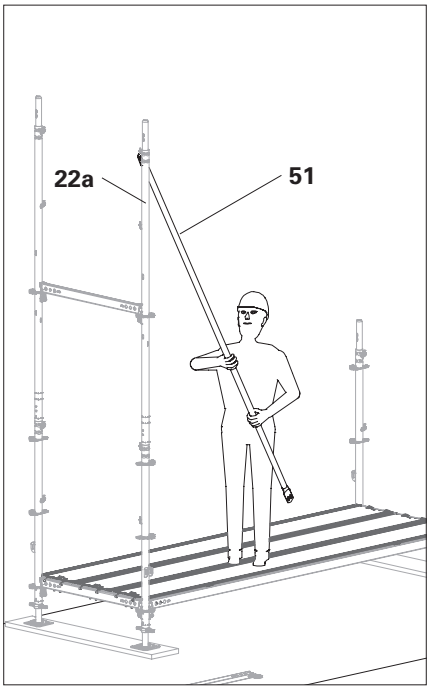


Fig. A3.04

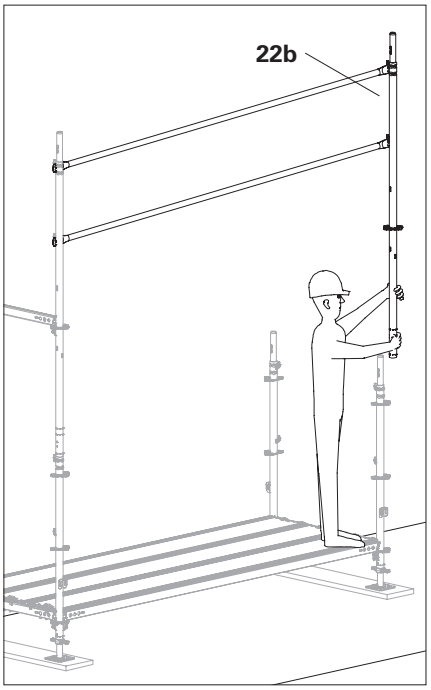


Fig. A3.04a

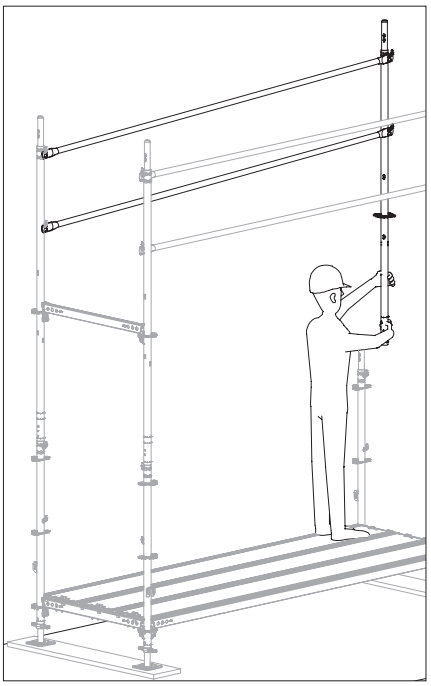


Fig. A3.04b

Wood toe board/steel toe board

In the event of high winds, the Toeboards Steel UPY and the Toeboards UPF require additional reinforcement with suitable means.

Toeboard Wood UPF

Toeboards UPF are correctly installed when each PERI logo is legible.

Assembly

1. Insert the Toeboard UPF (**56**) on one side with the end piece on the Standard EVOTOP EVM 200 (**22**).
2. Lower onto the deck.
3. Raise the other side so that the second end piece can be fitted onto the other standard.

(Fig. A3.05)

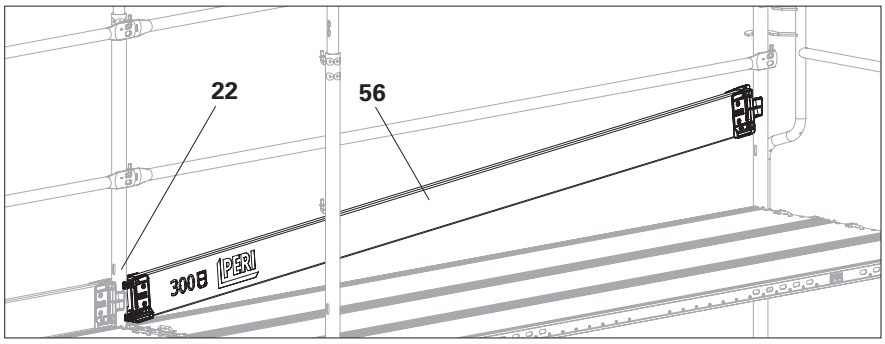


Fig. A3.05

4. Lower the toe board onto the deck.

→ The toe board is now installed.

(Fig. A3.06)

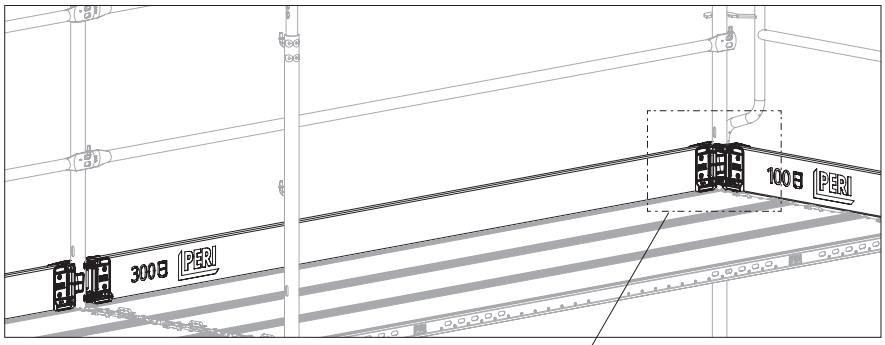


Fig. A3.06

- Installation is done in the same way on all standards.
- For corners, turn the toe boards so that the retaining lugs (**56.2**) of the end pieces engage with each other. (Fig. A3.06a)

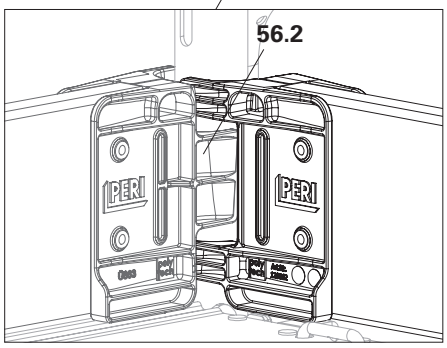


Fig. A3.06a

Toeboard Steel UPY

Using Toeboard Steel UPY (**57**) is optional.

Assembly in the bay

1. Turn the support bracket (**57.1**) downwards.
2. Turn the trapezoid box (**57.2**) **outwards**. (Fig. A3.07)

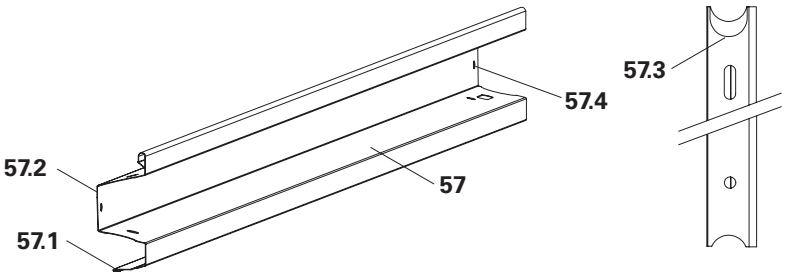


Fig. A3.07

3. Insert Toeboard Steel UPY (**57**) from the inner side of the scaffold to the right. The larger tube section (**57.3**) is on the right.
4. Raise the toe board on the left-hand side until it rests on the tube (**22**). (Fig. A3.08)
5. Lower the toe board onto the deck.

→ The toe board is installed.

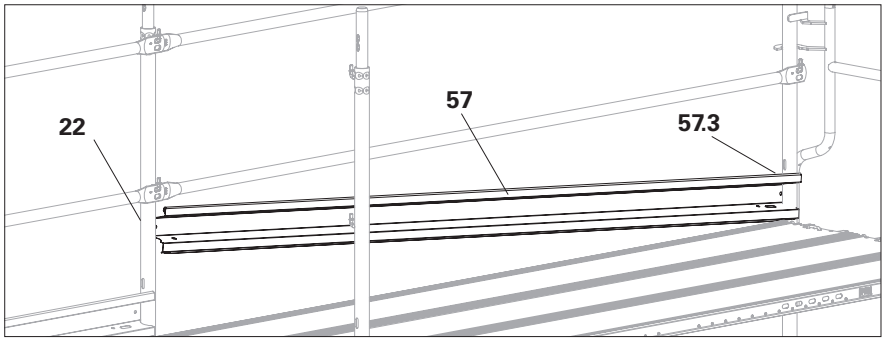


Fig. A3.08

Assembly around a corner:

1. Turn the support bracket (**57.1**) downwards.
2. Turn the trapezoid box (**57.2**) **inwards**. (Fig. A3.09)

■ On a right-hand corner:

3. Insert the Toeboard Steel UPY (**57**) on the left first. The larger tube cut-out (**57.3**) is on the left. (Fig. A3.10)
4. Raise the Toeboard Steel 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.
(Fig. A3.10)

■ On a left-hand corner:

3. Insert the Toeboard Steel UPY (**57**) on the left first. The larger tube cut-out (**57.3**) is on the left.

(Fig. A3.09)

4. Raise the Toeboard Steel UPY (**57a**) that has already been mounted in the bay.
5. Place the Toeboard Steel UPY (**57**) on the second tube and simultaneously insert it into the trapezoid box (**57.2**) of the toe board in the straight scaffolding bay.
6. Lower the toe boards simultaneously.

→ The toe board is installed.
(Fig. A3.11)

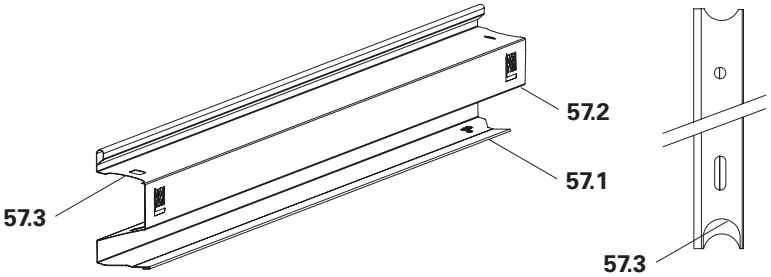


Fig. A3.09

Right corner

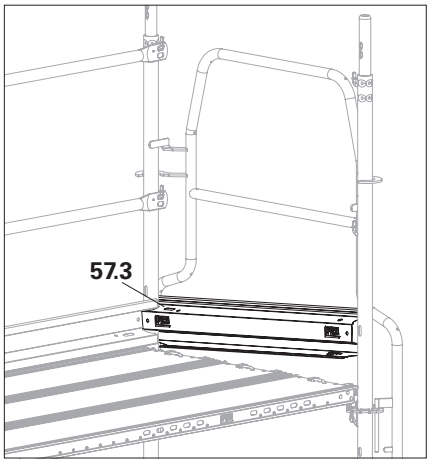


Fig. A3.10

Left corner

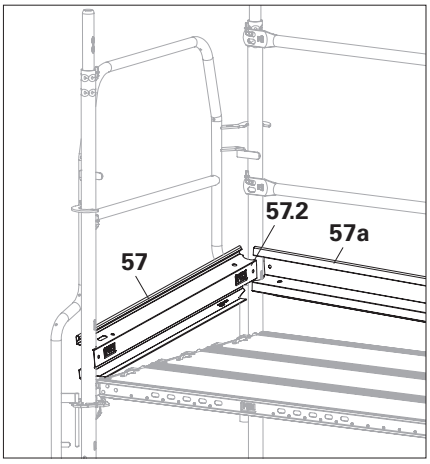


Fig. A3.11

End Guardrail UPA in advance

The end guardrail in advance is continuously mounted from a safe and secure position as system-integrated end protection for the next scaffolding bay. It can remain or be replaced by End Guardrails EPF. See the next page.

Assembly

1. Guide the end guardrail in advance (**52**) outwards around the end frame. The pegs (**52.1**) should then be pointing towards the inner side of the scaffold. (Fig. A3.12)
2. Swing the leading end guardrail to the left so that the fork (**52.2**) engages around the inner tube (**22**). (Fig. A3.12a)

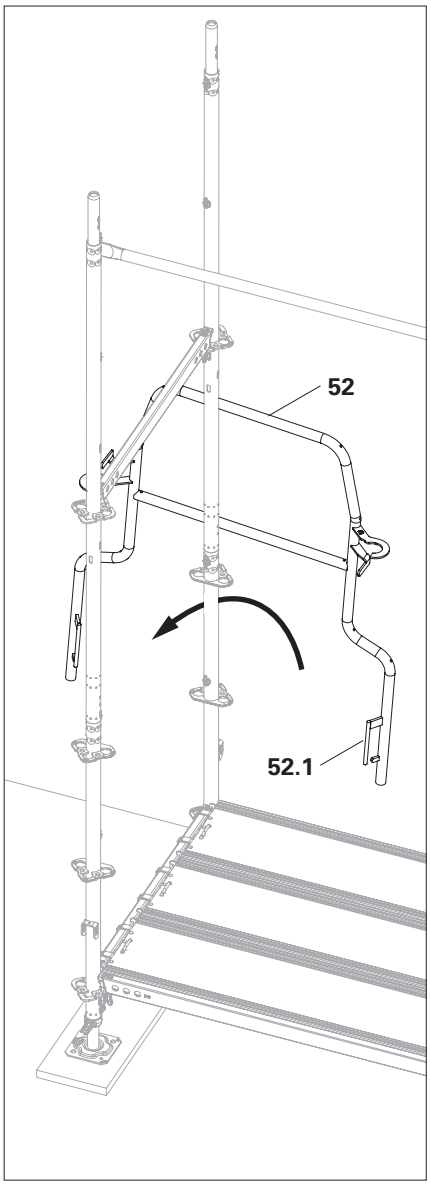


Fig. A3.12

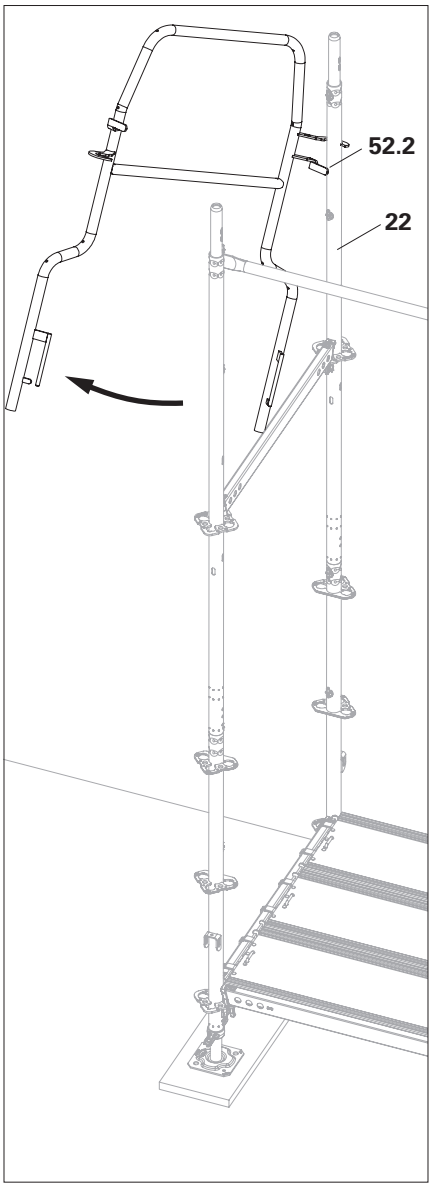


Fig. A3.12a

3. Swing the end guardrail in advance back and hook the second fork (**52.2**) over the outer tube (**22a**). (Fig. A3.12b)
4. Raise the end guardrail in advance and insert the pegs (**52.1**) into the brace adapter (**22.5**) of the rosette from above. Lower the end guardrail in advance as far as it will go. (Fig. A3.12c)

→ The End Guardrail UPA in Advance is now installed.

(Fig. A3.12c)

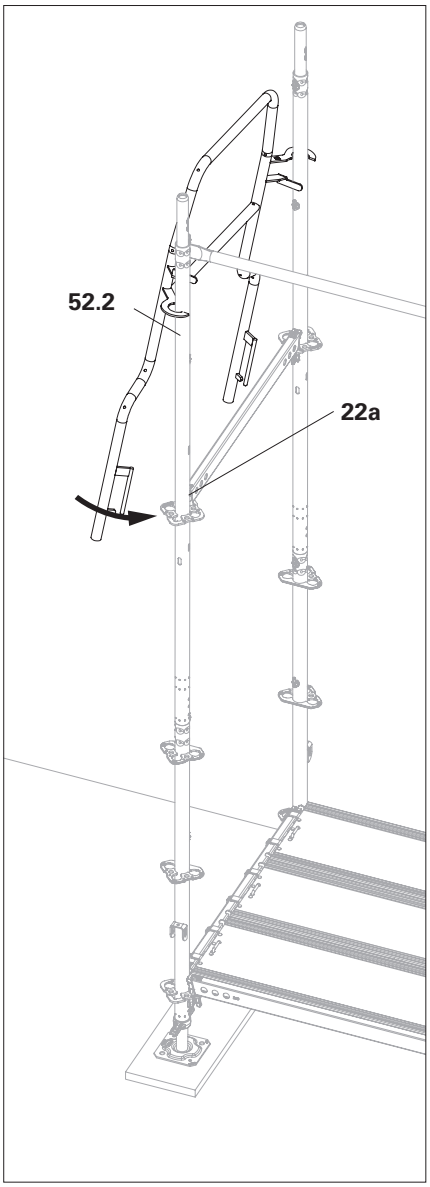


Fig. A3.12b

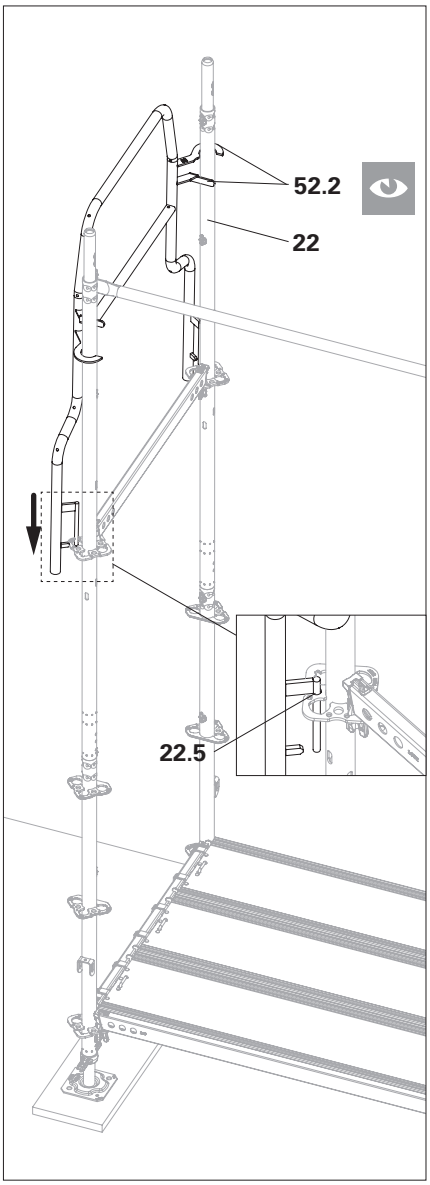


Fig. A3.12c

The End Guardrail UPA can also be mounted on the inner side of the frame column. (Not in connection with attached console brackets with decks)

Does the fork (**52.2**) enclose the standard (**22**)?
Are the holders sitting on the rosettes?

End Guardrail EPF

Install the End Guardrail EPF (**54**) from a secured position.
Fit the Guardrail Post EVP or Standard EVOTOP EVM 200 in such a way that the guardrail hook is pointing to the deck side.

Assembly

1. Push the fork (**54.1**) onto the tube positioned opposite. (Fig. A3.13)
2. Attach both slots (**54.2**) to the guardrail hooks.
   (Fig. A3.14 + Fig. A3.14a)
3. Lower the End Guardrail EPF as far as possible.
4. Add toe board to the lateral protection.

→ End Guardrail EPF is now installed. (Fig. A3.15)

Has the end guardrail been lowered as far as it will go?

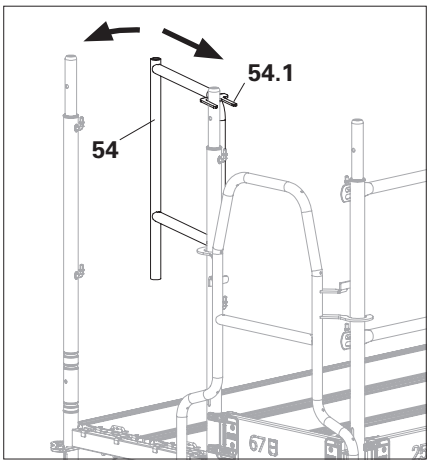


Fig. A3.13

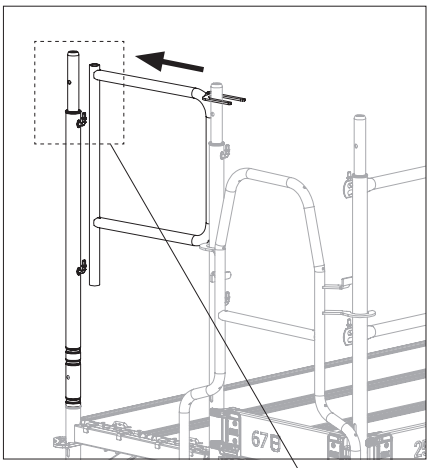


Fig. A3.14

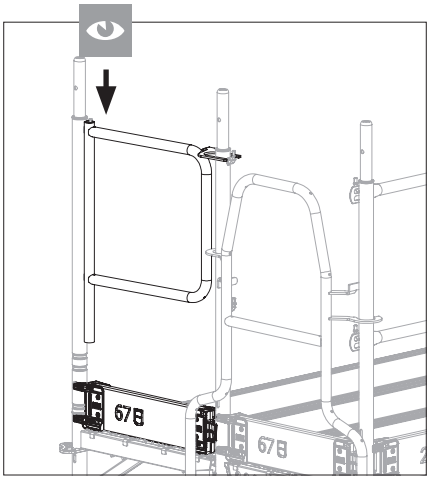


Fig. A3.15

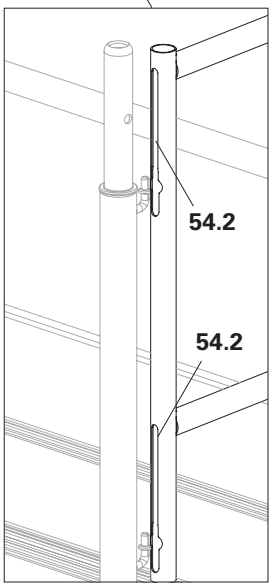


Fig. A3.14a

End Guardrail in Advance EPF

Warning

Incorrect handling can cause the assembly to come loose and components to fall. This could seriously injure or kill people!

⇒ Only grasp the assembly by the Standard EVOTOP EVM 200.

⇒ Do not set the pre-assembled assembly down, but instead hold it vertically and move it into the assembly position straight away and install it.

- In the edge bay, the lateral protection must first be mounted in a "double-advanced" manner.
- It is not possible to install an inner guardrail.

Assembly

1. Fit the first Standard EVOTOP EVM 200 (**22**) onto the scaffold.
2. Fit the Guardrails EPG (**51**) in a double-advanced manner in the edge bay.
3. Pre-assemble the End Guardrail EPF (**54**) on the second standard (**22a**).
4. Place the standard with its pre-assembled end guardrail on the scaffold in the assembly position and attach the fork (**54.1**) to the previously assembled standard. (Fig. A3.16)
5. Fit the standard onto the inner side of the scaffold.

→ The End Guardrail EPF is mounted in advance.

(Fig. A3.16a)

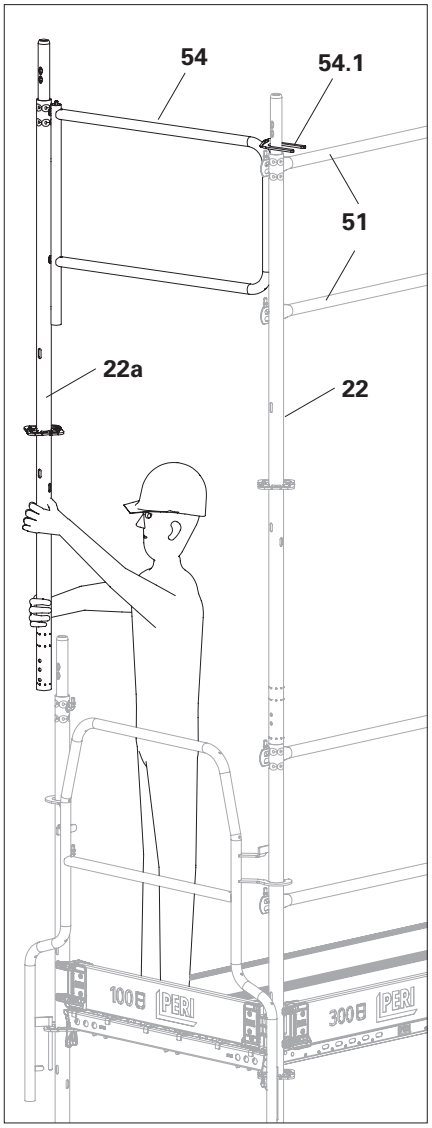


Fig. A3.16

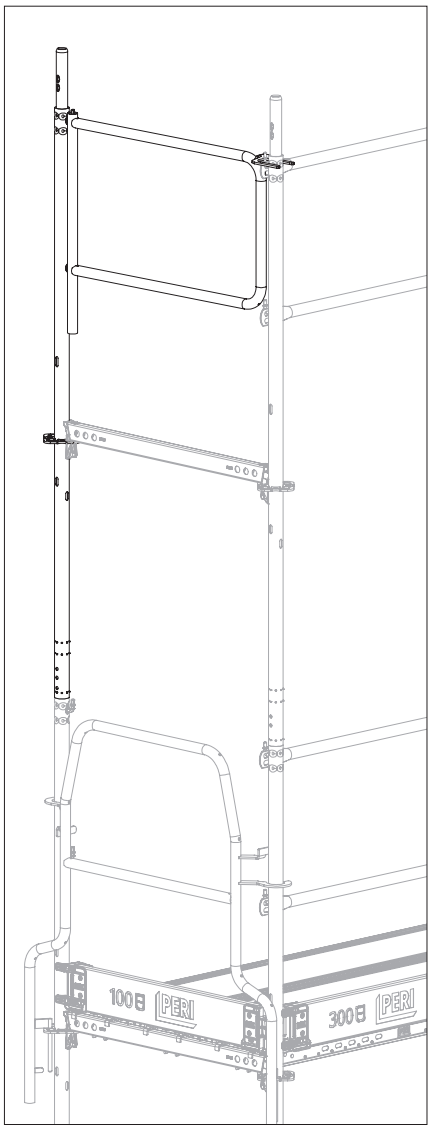


Fig. A3.16a

Replacing end guardrails

The End Guardrail in Advance UPA-2 can be replaced with an End Guardrail EPF at every level.
On the upper scaffolding level, End Guardrail UPA-2 can remain in place until the scaffold is dismantled.
Assembly is carried out from a safe position. Observe national regulations.

Assembly

1. Installation of the End Guardrail in Advance UPA-2 (**52**) for the next level takes place from a safe position, see previous section.
- Once the next scaffolding level is complete:
2. Install End Guardrail EPF (**54**) in addition to End Guardrail UPA-2, see previous section.

→ The End Guardrail in Advance UPA-2 can be dismantled again and used for the next level.

(Fig. A3.17 + Fig. A3.17a)

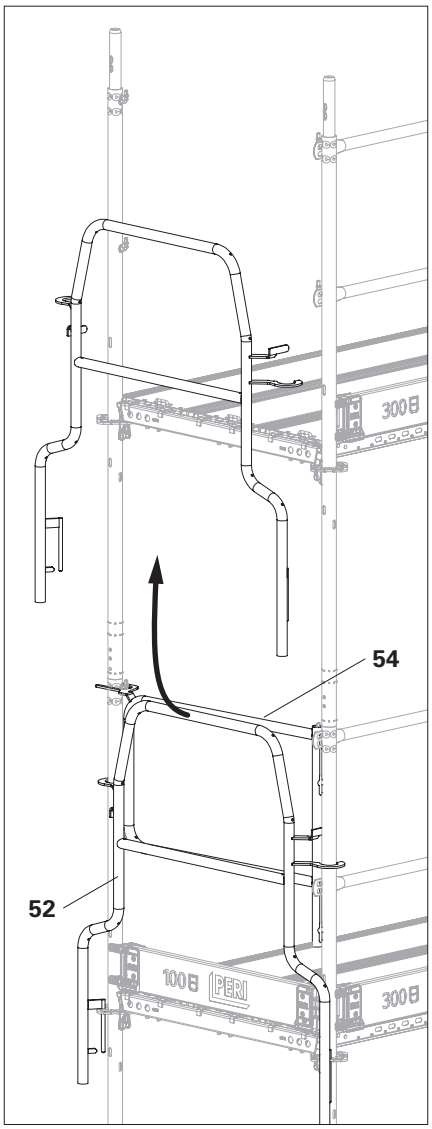


Fig. A3.17

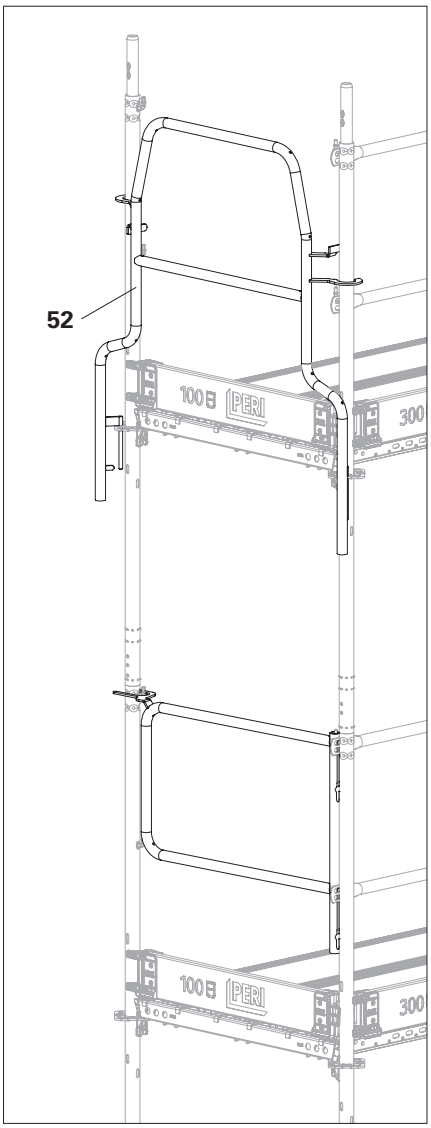


Fig. A3.17a

For scaffolding heights above 24 m, some scaffolding configurations require the Ledger EVOTOP UH SL 100 in some scaffolding levels. See Section "Tie pattern" on page 178ff.

Assembly

1. Move the T-locks (**144.1**) back into the bearing sleeves (**144.2**). (Fig. A4.03a)
2. Fit the Ledger EVOTOP UH SL 100 (**144**) into the rosettes of the standards with the wedges (**144.3**). (Fig. A4.03)
3. On both sides, insert the T-lock (**144.1**) with wedge (**144.4**) into the vertical uprights and position it transversely. (Fig. A4.04)
4. Hammer all wedges in tight (**144.3 + 144.4**).

→ The Ledger EVOTOP is fitted. (Fig. A4.05)

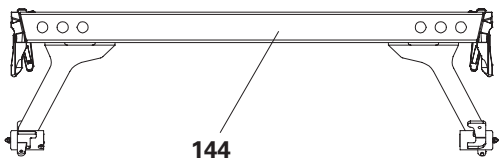


Fig. A4.01

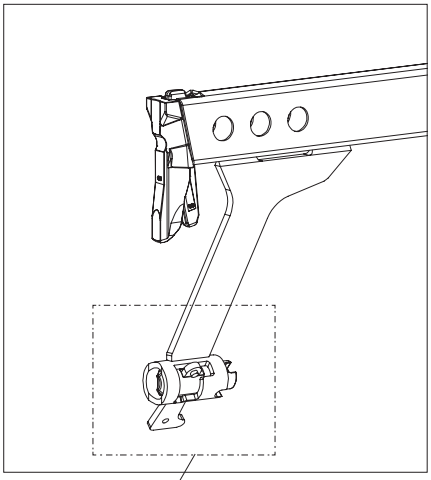


Fig. A4.02

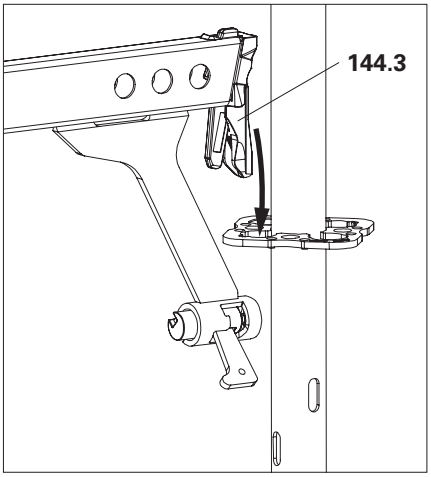


Fig. A4.03

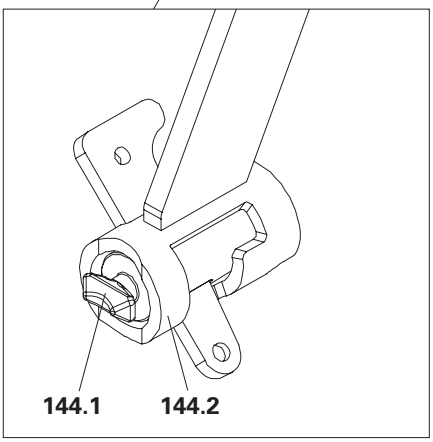


Fig. A4.03a

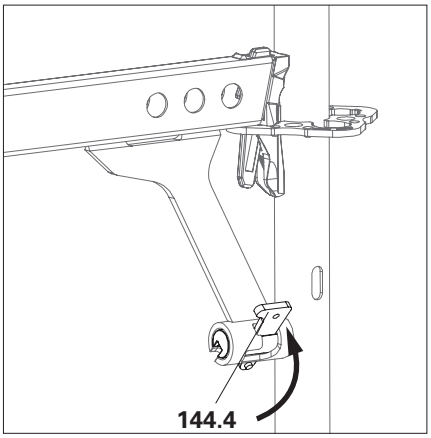


Fig. A4.04

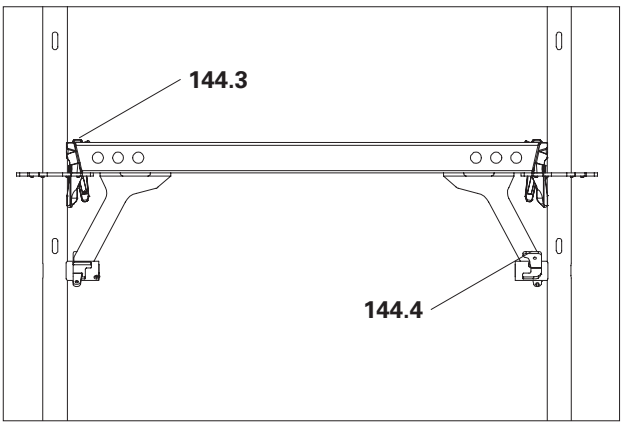


Fig. A4.05

Decks

Note

Stability compromised without system decking.

⇒ System decks are bracing components and must, therefore, be installed across the full scaffold width and in every scaffolding bay!

Various system decks are available for PERI UP Easy EVOTOP 100:

- For bay length up to 2.50 m
  - Steel Deck EDS 33 (**30**),
  - Aluminium Deck EDA 67 (**31**)
- For bay length up to 3.00 m
  - Steel Deck EDS 33 (**30**).

All decks have integrated lift locks.

→ Installation of the Steel Deck EDS is shown below.

Assembly

1. Pick up the deck (**30**) in the centre, set it laterally on its edge and lift it over both Ledgers EVOTOP UH-2 (**16**).
2. Place the deck on the horizontal ledgers one after the other.
3. Lift locks (**30.1**) fall under the horizontal ledger and secure the deck.

→ The deck is now installed.
(Fig. A5.03)

The access decks and entry platforms are assembled in the same way.

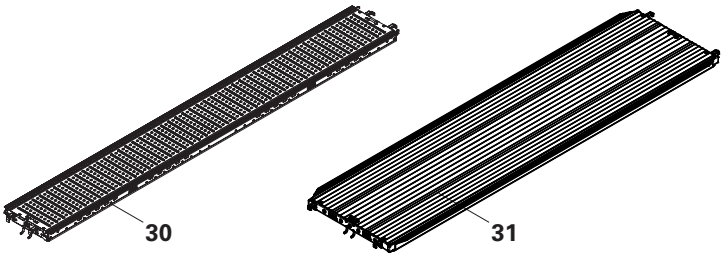


Fig. A5.01

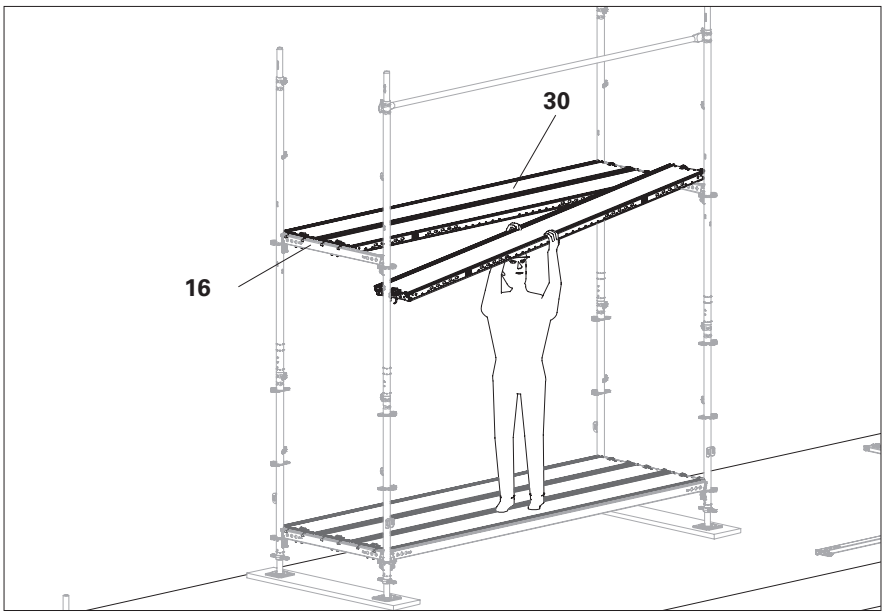


Fig. A5.02

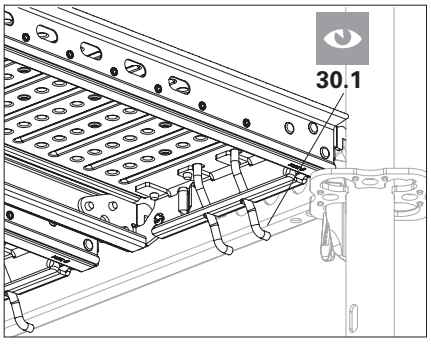


Fig. A5.03

Have all lift locks (**30.1**) on the deck dropped beneath the horizontal ledger? If not, lift the deck slightly and let it drop into position or operate the lift lock manually.(Fig. A5.03)

Dismantling the decking

1. On one side of the deck, pull up the lift lock to release it and lift the deck.
2. Pull out the lift lock as far as it will go.
3. Set the deck with the lift lock (**30.1**) down on Ledger EVOTOP UH-2 (**16**). (Fig. A5.04)
4. Lift the deck in the centre, set it laterally on its edge, and unscrew it in a downwards direction. (not shown)

→ The deck has now been removed

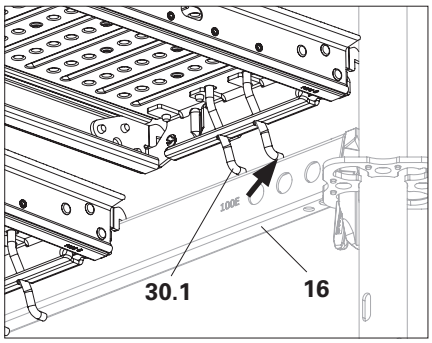


Fig. A5.04

External access

Internal access is not possible for width class W09.
Alternatively, entry platforms can be mounted on a front-positioned scaffold access point. The assembly process is based on Section "B8 External stair tower" from page 82

Warning

Open access hatches pose a risk of falling. A fall can result in serious injury
⇒ When not in use, the access hatches must remain closed!
⇒ Arrange the access openings alternately!

Caution

Body parts can become trapped by self-closing access hatches resulting in injuries.
⇒ 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

Ensure that the hatch does not exceed an angle of 95° when opened.
This can lead to injuries.

Internal access by way of access decks or entry platforms is possible up to Load Class 3 (LC3).

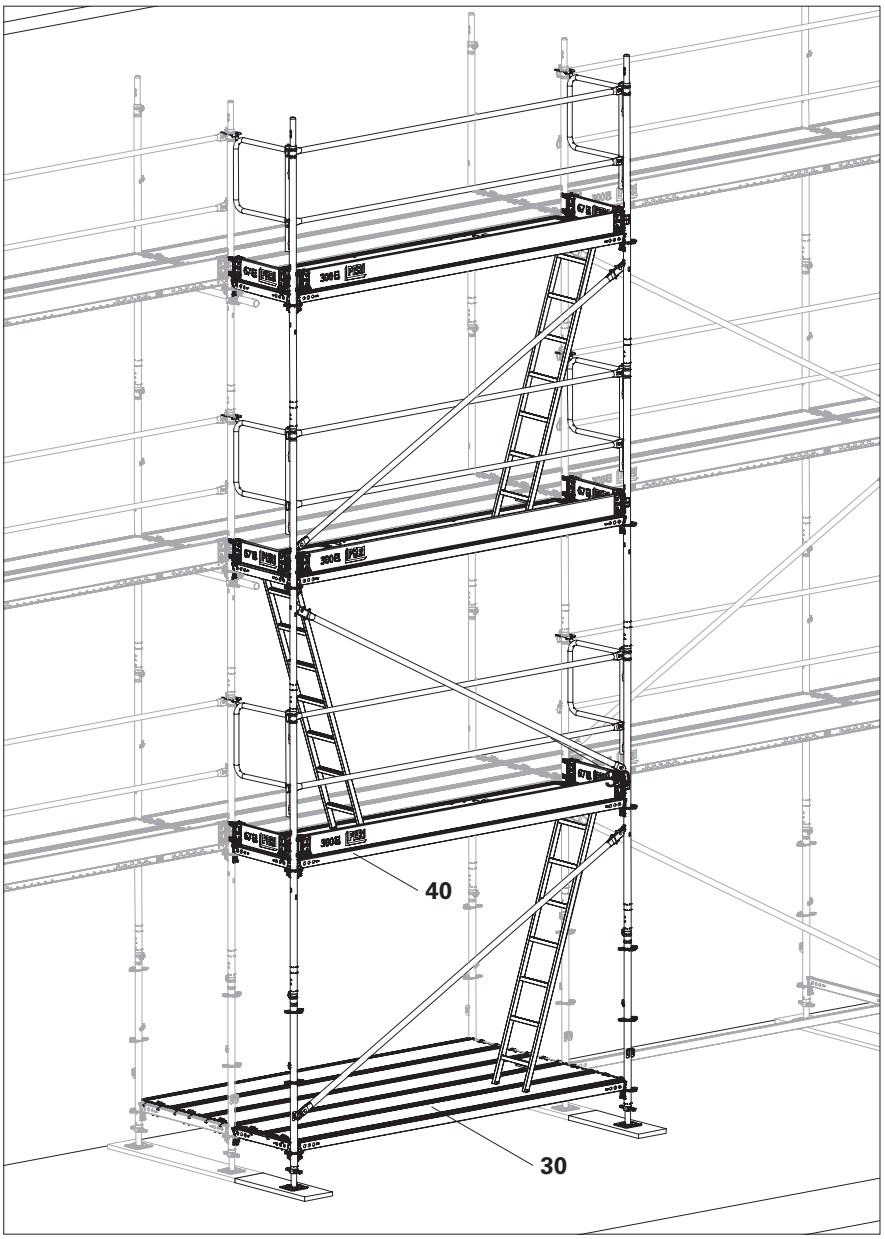


Fig. A5.05

Access deck
For bay lengths of 2.50 m and 3.00 m, install the Access Decks EAW-L, EAC-L, or EAA-L (**40**), all of them with access ladder attached.

Assembly
1. Mount decks (**30**) on the bottom level as a base for the first ladder.
2. Install an access deck (**40**) in the subsequent scaffolding levels.
   See Section "Decks" on page 36.

→ Access deck is installed.
(Fig. A5.05)

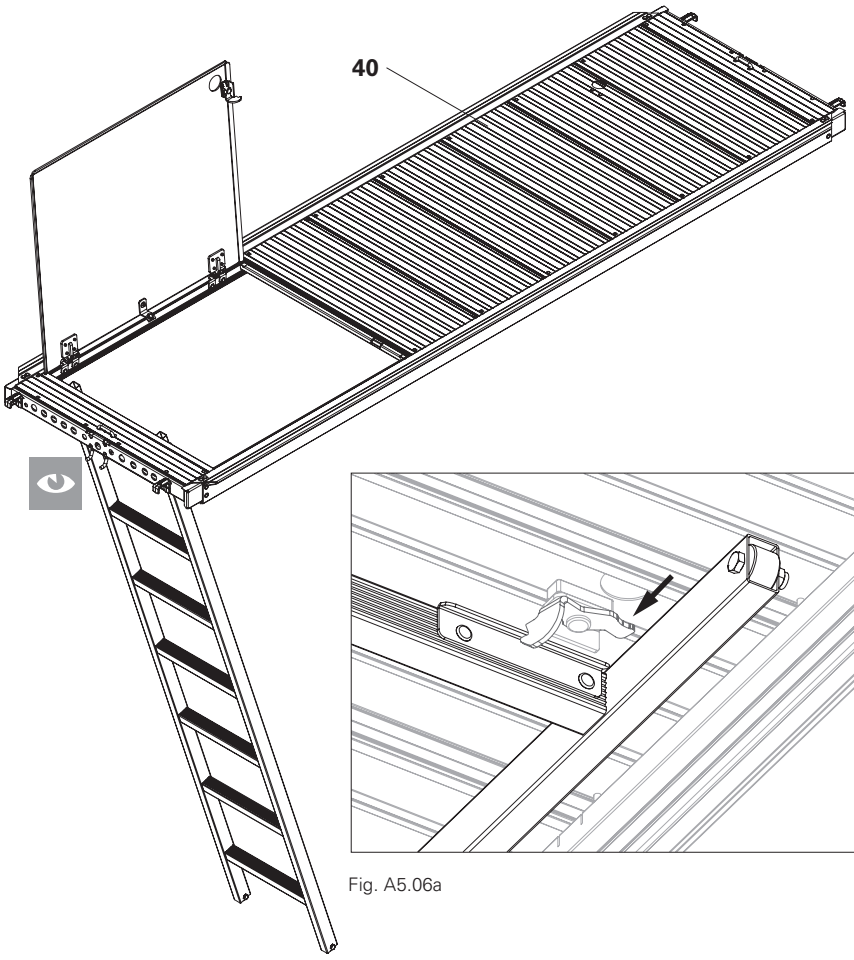


Fig. A5.06

Fig. A5.06a

- Ladders must stand 2.0 m lower, e.g. on a level below. Never use ladders in a suspended position. Observe national regulations.
- For system width 100, the entry platforms must be mounted in front.
- To lock and unlock the hatch and ladder, hold the spring clip down and guide the hatch or ladder by hand. (Fig. A5.06a)

Entry platform
For 2.00 m bay lengths, install the Entry Platform EAW, EAC or EAA and Ladder UAF.

Assembly
1. Carry out the assembly process as you would for access decks.
2. Open the access hatch and secure temporarily.
3. Attach the ladder to the circular tube.
4. Close the access hatch.

→ The entry platform is installed.

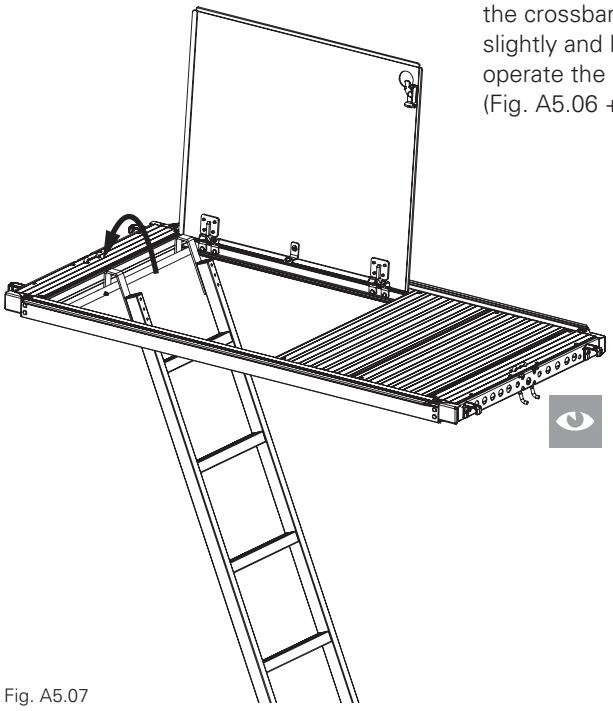


Fig. A5.07

- Have both lift locks dropped beneath the crossbar? If not, lift the deck slightly and let it drop into position or operate the lift lock manually. (Fig. A5.06 + Fig. A5.07)

Face braces

Note

Stability compromised due to missing face braces and/or horizontal ledgers.
⇒ Comply with the tie pattern!

Diagonal bracing

- To brace the outer vertical plane, use vertical braces with a tower-like diagonal bracing arrangement. One brace may be used to brace a maximum of five scaffolding bays. (Fig. A6.01)
- The exact number and position of the horizontal ledgers in the base level and the braces is given in the section Tie pattern.

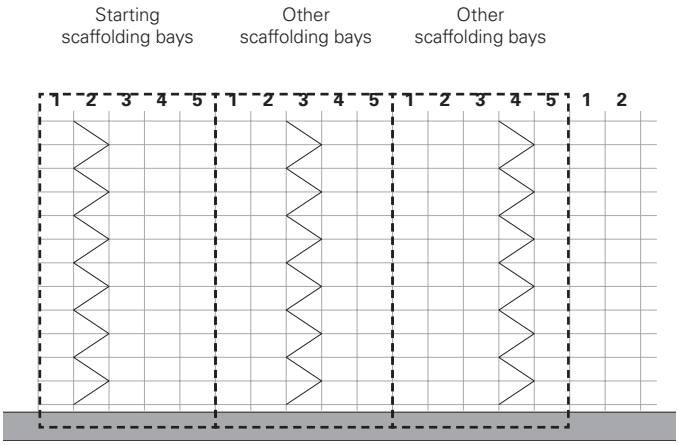


Fig. A6.01

Assembly

1. Attach the fixed brace head (**20.1**) to the slot (**23.7**).
   - For Base Standard EVOTOP EVS 124 (**23**), see Fig. A6.02 + Fig. A6.02a
   - For Standard EVOTOP EVS 200 (**22**), see Fig. A6.02 + Fig. A6.02b

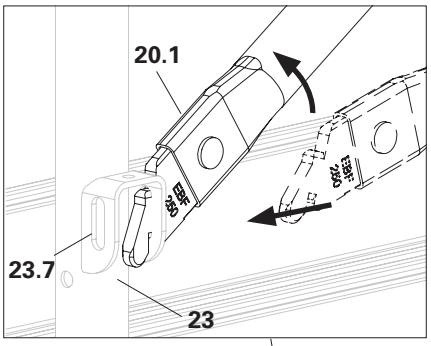


Fig. A6.02a

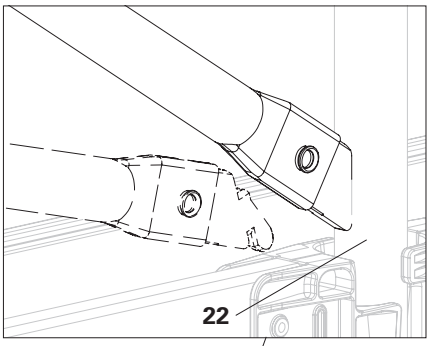


Fig. A6.02b

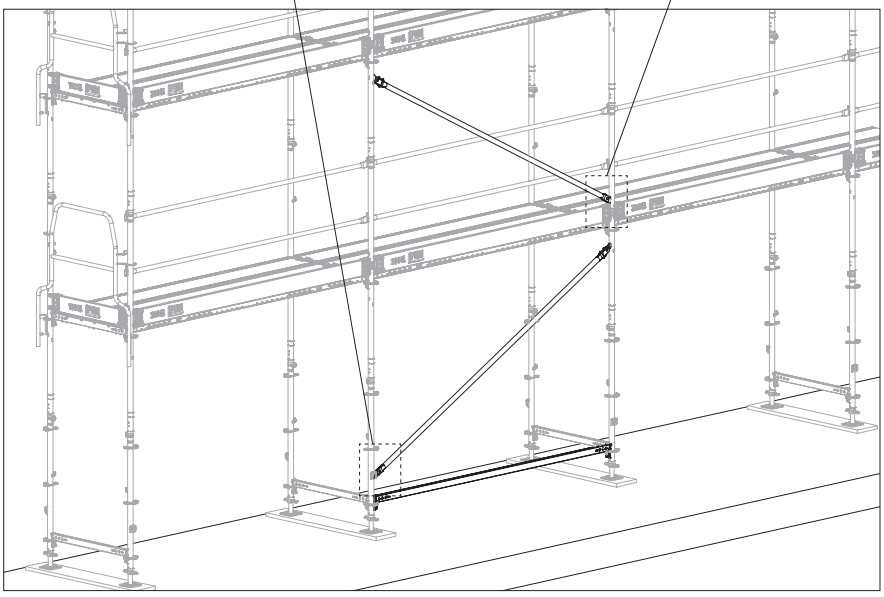


Fig. A6.02

2. Lift the Face Brace EBF (**20**) on the other side up to the slot.
3. Push the safety clip (**20.3**) upwards, swivel the Brace Head (**20.2**) and insert it into the slot (**22.1**) of the Standard EVOTOP EVM. (Fig. A6.03)
4. Press the Face Brace EBF (**20**) downwards and secure with the locking ring (**20.3**).

→ The face brace is now installed. (Fig. A6.04)

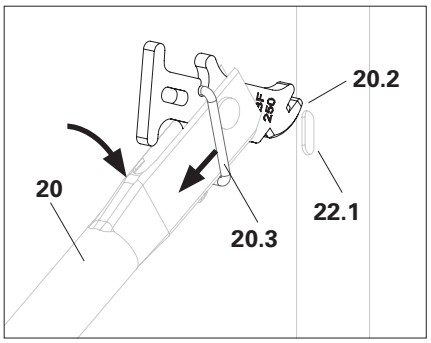


Fig. A6.03

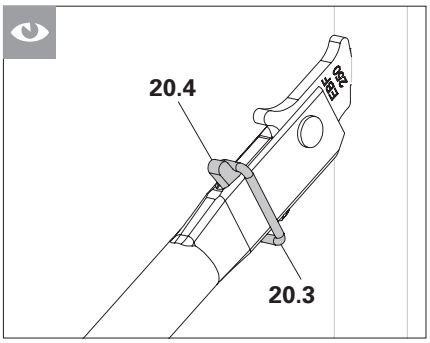


Fig. A6.04

Is the locking ring (**20.3**) at the lower limit stop (**20.4**)? If not, push it as far as possible manually! (Fig. A6.04)

Internal braces

Internal bracing is assembled in the same way.
(Fig. A6.05)

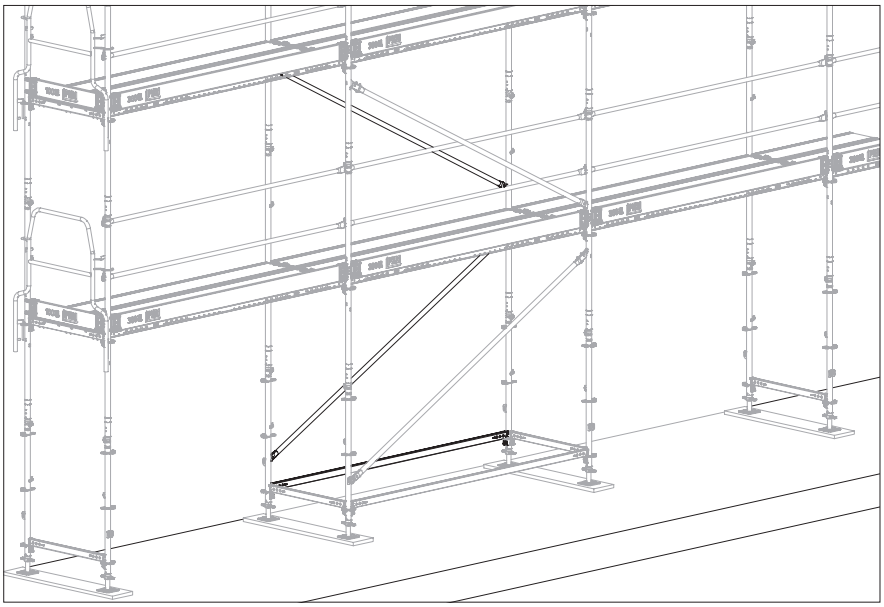


Fig. A6.05

A7 System components: Console bracket

General information

For PERI UP Easy, Console Brackets ECM (**62**) (with rosette and 50 cm vertical) and Supports UC (**61**) (without rosette and vertical) are available.

If a Guardrail Post EVP 100 is required for the lateral protection (e.g. for installation of end guardrails), only Console Brackets ECM (**62**) are to be used.

Console brackets available:
Console Bracket ECM 33 (**62**)
Console Bracket ECM 67 (only as protection roof)
Console Bracket ECM 100 (only as protection roof)

Supports:
Deck Support UCS 33 (**61**)

Alternatively:
Console Brackets UCB 25 with Decks UDG in 25 cm widths.

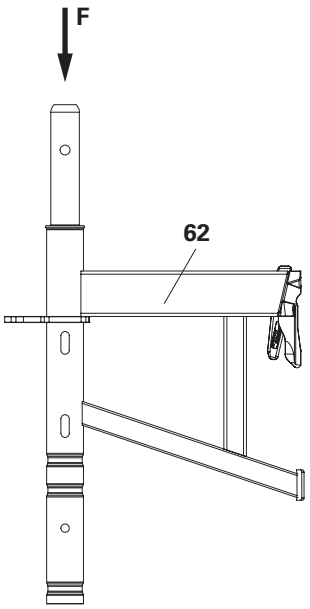


Fig. A7.01

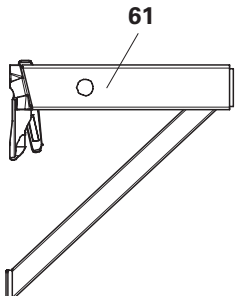


Fig. A7.01a

- External console brackets may only be mounted in any one scaffolding level. When using all console bracket widths, the scaffolding level on which the console brackets are mounted must be additionally anchored.
- For additional ties for internal and external console brackets, see section Tie pattern
- Observe the load classes of the decks, see Section "Load-bearing capacities" on page 160.
- The surface loads or standard loads specified in each case shall apply.

Use as internal console brackets			
Supports	**Bay length**	**Load class**	**F [kN]**
UCS 33	≤ 3.00 m	LC 4	-
Console brackets			
UCB 25	≤ 2.50 m	LC 6	5.2
	3.00 m	LC 5	5.2
ECM 33	≤ 3.00 m	LC 6	3.9

Use as external console bracket			
Console brackets	**Bay length**	**Load class**	**F [kN]**
ECM 33	≤ 3.00 m	LC 6	3.9
ECM 33 with protection panel	≤ 3.00 m	LC 3	
ECM 67 *	≤ 3.00 m	LC 4	2.8

* This version is not covered by the standard configuration. Separate static proof for the stability is required here.

On the scaffold

- Console brackets are always installed from below!
- See Section "A2 Wedge connections" on page 23.

Assembling Console Bracket ECM 33

1. Attach Console Bracket ECM 33 (**62**) to rosette. The formwork half (**62.2**) must rest against the vertical tube. (Fig. A7.02)
2. Secure the wedge.

→ The console bracket is now mounted. (Fig. A7.02a)

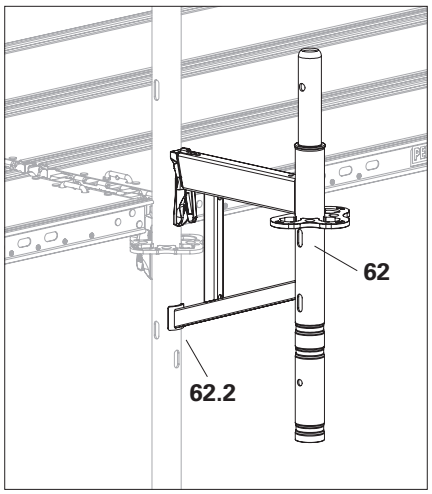


Fig. A7.02

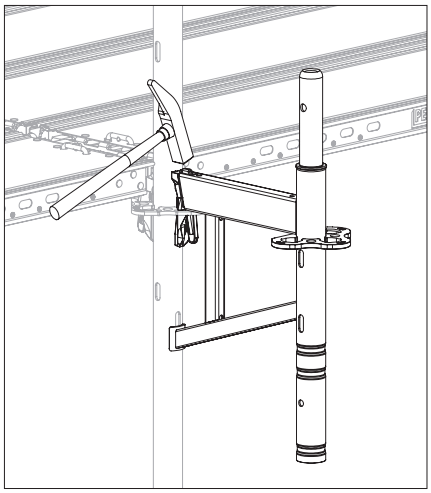


Fig. A7.02a

Console Bracket ECM 67/ECM 100

1. Connect the Console Bracket ECM 67 (**63**) or ECM 100 to the rosette (**22.4**) of the Standard EVOTOP EVM or Top Standard EVT 96 parallel to the scaffold. (Fig. A7.03)
2. Hold the wedge (**63.1**) up, and swing the console bracket outwards. The formwork half (**63.2**) must rest against the vertical tube. (Fig. A7.03a)

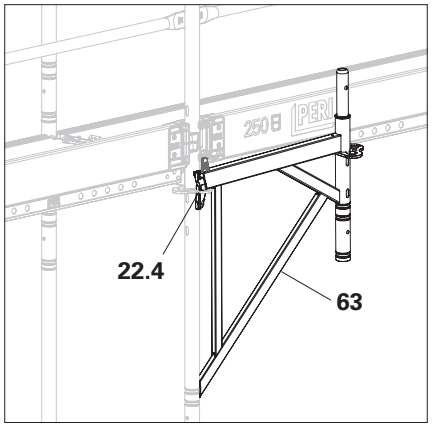


Fig. A7.03

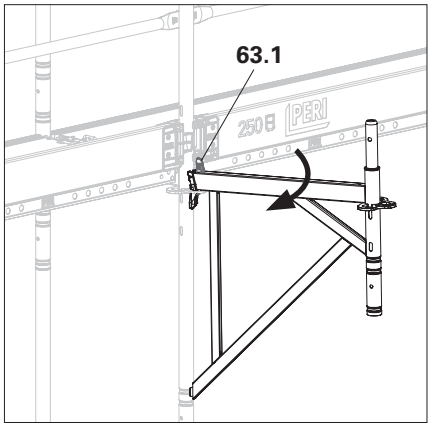


Fig. A7.03a

3. Drop the wedge into the rosette. Secure the wedge.

→ The console bracket is now mounted. (Fig. A7.03b)

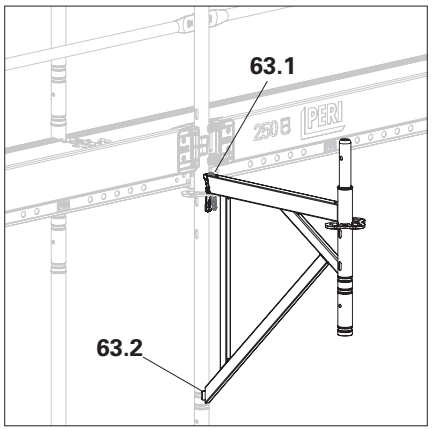


Fig. A7.03b

With protection panel post / guardrail post

- Only verified for Console Bracket ECM 33.
- Pre-assemble the Protection Panel Post EPS or Guardrail Post EVP with the console bracket. Then fit them together on the scaffold.
- Alternatively, installation of the protection panel posts and guardrail posts can also be done later after the console brackets have been mounted.

Assembling the Protection Panel Post EPS on the console bracket

1. Slide the loop (**67.2**) of the Protection Panel Post EPS (**67**) onto the lower tube end of the console bracket (**62**). (Fig. A7.04)
2. Push Protection Panel Post EPS upwards on the Console Bracket ECM, and then attach it to the Console Bracket ECM. (Fig. A7.05 + Fig. A7.06)
3. To extend the reach, pin the protection panel post with locking pins Ø 48/57 (**19**).

→ The protection panel post is now pre-assembled.
(Fig. A7.06)

The hook block (**67.3**) must engage in the rosette!

Assembling the Guardrail Post EVP on the console bracket

1. Attach the Guardrail Post EVP to the Console Bracket ECM.
2. Disconnect the guardrail post for passing on with Locking Pins Ø 48/57.

→ The guardrail post is now pre-assembled.
(not shown)

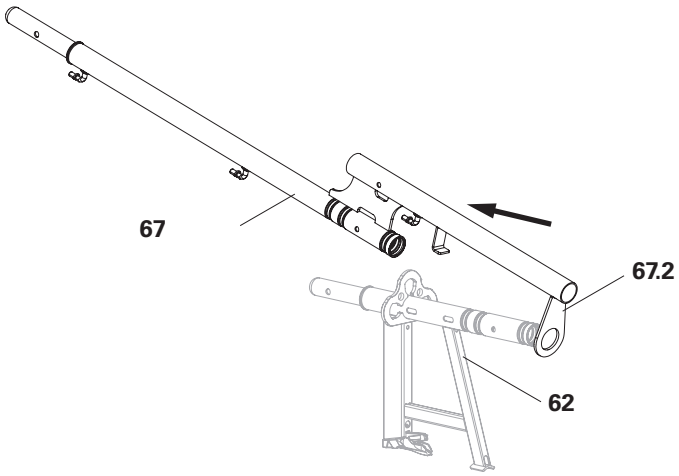


Fig. A7.04

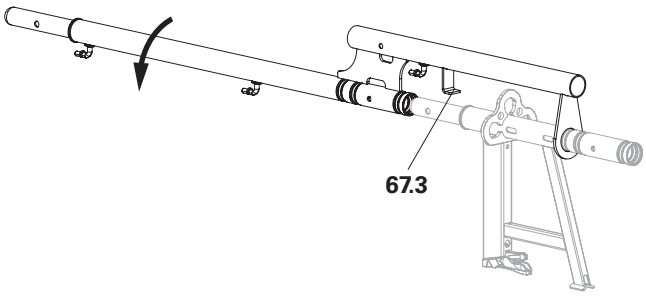


Fig. A7.05

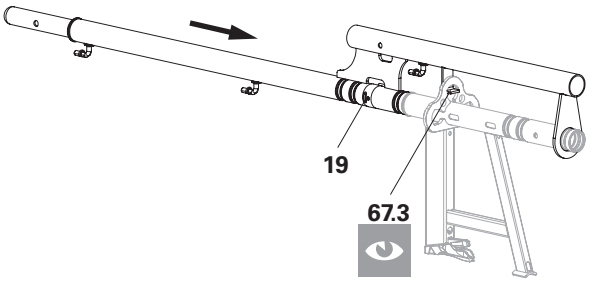


Fig. A7.06

Assembling the console brackets on the scaffold
Assembly of the console brackets with attached Protection Panel Post EPS or Guardrail Post EVP takes place by pivoting outwards as described on the previous page.
(Fig. A7.07)

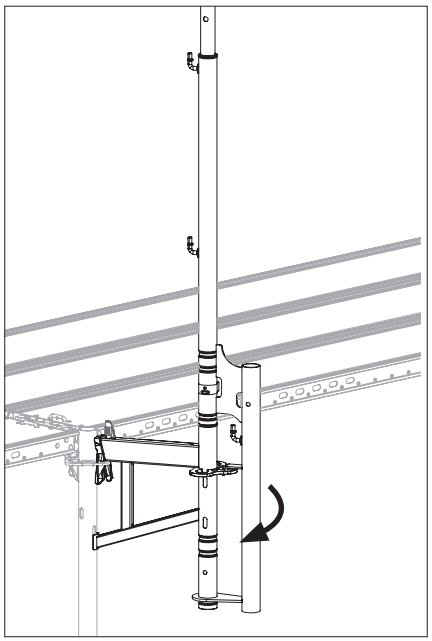


Fig. A7.07

Console brackets connected one behind the other

- Additional Console Brackets ECM 33 (**62a**) or Supports UC (**61**) can only be attached to Console Brackets ECM 33 (**62**).
  (Fig. A7.08 + Fig. A7.08a)
- Fit only one additional console bracket!
- Console brackets connected one behind the other are not covered by the standard configuration. Separate static proof for the stability is required here.

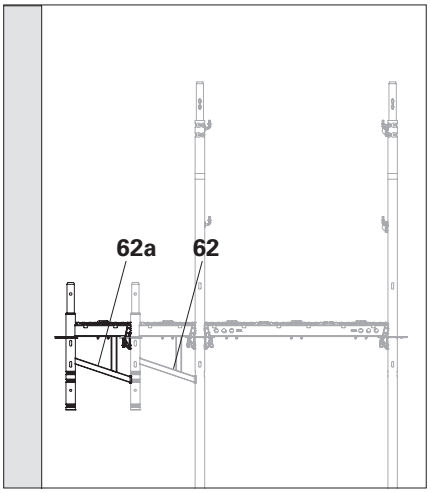


Fig. A7.08

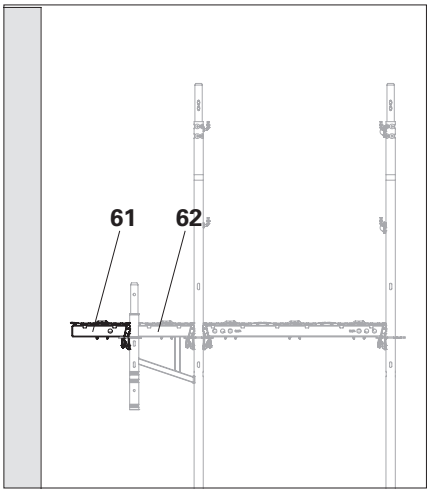


Fig. A7.08a

General information

Polycover components are optional, and not required in the standard configuration

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.
⇒ In temperatures below 0 °C, warm up polycover components prior to assembly.

Poly Cover Tubes UPC-T

For closing tube ends with d = 48.3 mm. (Fig. A8.03)

1. Push the Poly Cover Tube UPC-T (**120**) onto the end of a tube with d = 48.3 mm. (Fig. A8.02)

→ The poly cover is mounted.



Fig. A8.01

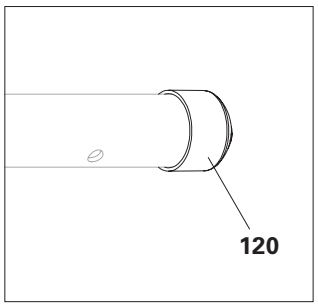


Fig. A8.02

Poly Cover Rosette UPC-R

For protection around ledger-free rosettes. (Fig. A8.03)

1. Position the Poly Cover Rosette UPC-R (**121**) with one half on the rosette.
2. Close the second half.
   → The clip fastener engages.
   → The poly cover is mounted.

(Fig. A8.04)

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

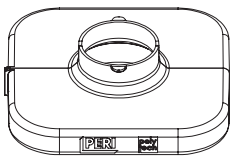


Fig. A8.03

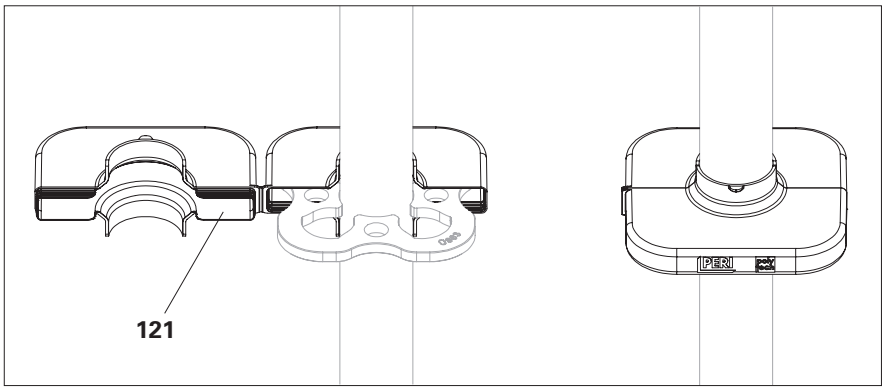


Fig. A8.04

Poly Cover Couplings UPC-C

For protection around a rosette with mounted ledgers or around bolted tube/coupler connections.
(Fig. A8.05 - Fig. A8.07a)

Assembly

1. Clip the Poly Cover Couplings UPC-C (**122**) onto the vertical d = 48.3 mm.
2. For ledgers arranged around a 90° corner: fit Poly Cover UPC-C (**122 + 122a**) in an overlapping manner. (Fig. A8.06)
3. If ledgers are arranged longitudinally: fit Poly Cover UPC-C on both sides. (Fig. A8.06a)
4. In case of crossing tubes, mount 2x poly covers UPC-C overlapping on one or both tubes. (Fig. A8.07 + Fig. A8.07a)

→ The poly cover is mounted.

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

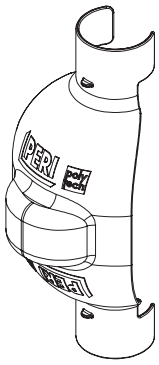


Fig. A8.05

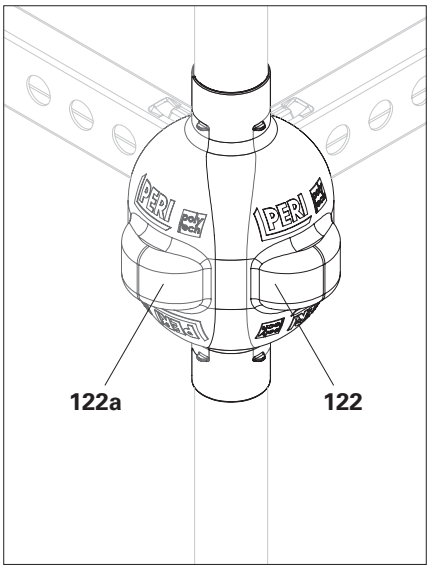


Fig. A8.06

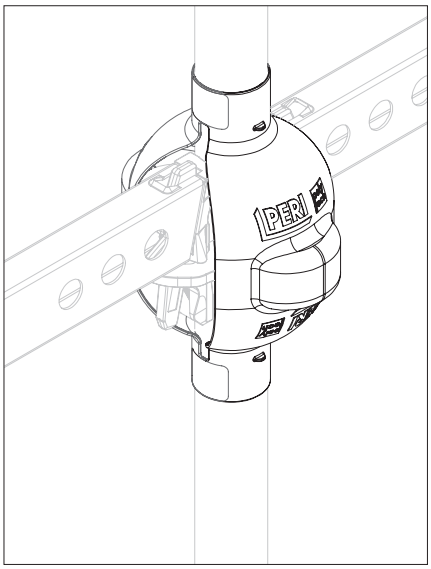


Fig. A8.06a

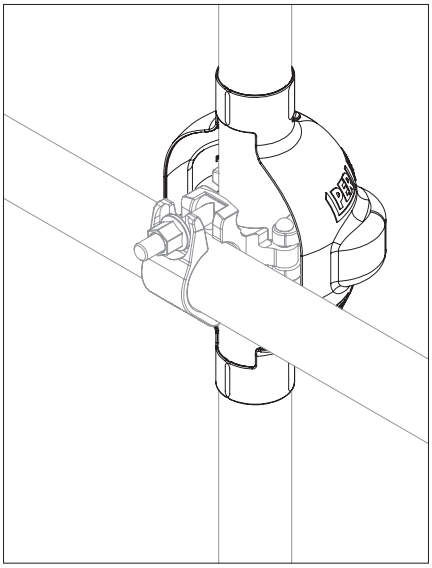


Fig. A8.07

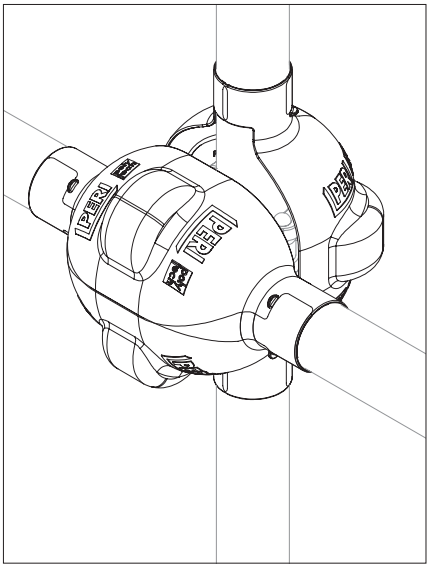


Fig. A8.07a

Spindle Lining UES

Spindle Lining UES serves to protect the substrate.
If additional reflectors (**123.1**) are installed, this improves visibility.
(Fig. A8.08)
The component can transfer compression forces of up to 50 kN.

Assembly

1. Place the spindle lining (**123**) on a flat and load-bearing substrate
2. Position the spindle centrally

→ The spindle lining is installed.
(Fig. A8.08a)

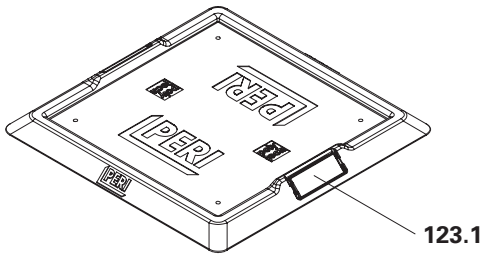


Fig. A8.08

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

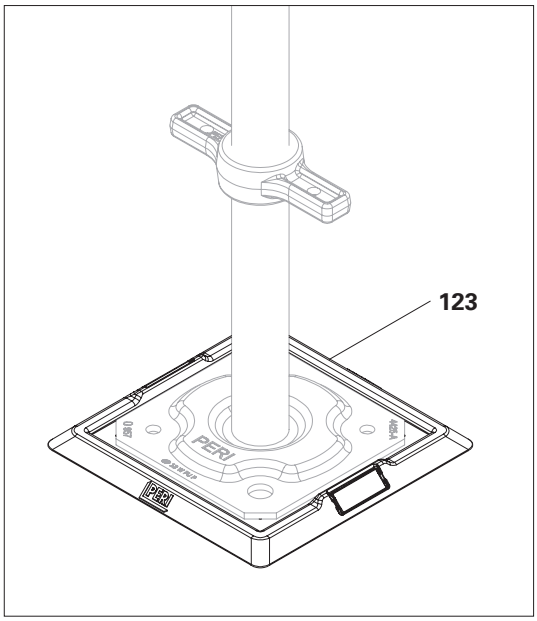


Fig. A8.08a

General information

Note

Stability compromised!

⇒ Settlements must be avoided! The scaffold may only be erected on sufficiently load-bearing substrate with load-distributing pads. For support forces, see Section "E4 Support forces" from page 174.

⇒ Observe the maximum spindle extension! Use the permitted maximum extension length in the tie patterns for each load class and equipment variation.

Changes in height and inclined erection surfaces

Base Compensation EVA

On sloping ground or in the event of changes in height, adjust the scaffold using Base Compensation EVA 50 (**13**) or EVA 100 (**14**) to accommodate the terrain (see Fig. B1.02, next page).

By combining two different Base Compensations EVA (**13/14**) and two different Adjusting Base Plates UJB (**10/11**), differences in height of 0 – 2.00 m can be accounted for without any gaps. (Fig. B1.01)

For combinations, see Tables.

The smallest possible dimension from the contact area to the surface of the base layer H_{min} is 25 cm.

Alternatively, height jumps can be realised with Standards UVR-2 and Base Standards UVB.

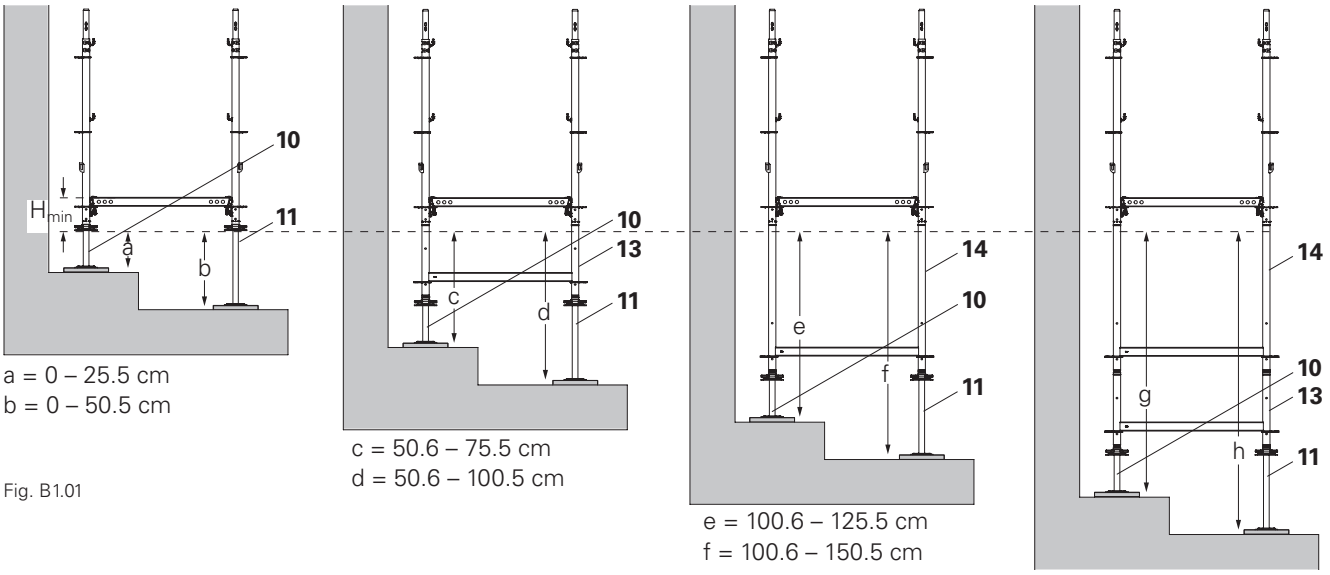


Fig. B1.01

Component combinations for height differences

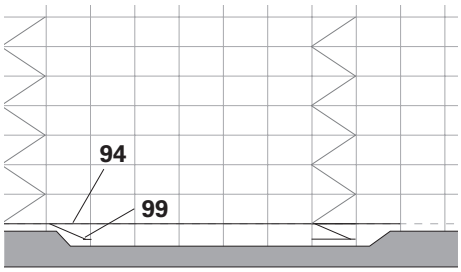
Fig.	Height difference	Adjusting Base Plate UJB 38-50/30 (10) (red nut)	Adjusting Base Plate UJB 38-80/55 (11) (yellow nut)	Base Compensation EVA 50 (13)	Base Compensation EVA 100 (14)
a	0 – 25.5 cm	X			
b	0 – 50.5 cm		X		
c	50.6 – 75.5 cm	X		X	
d	50.6 – 100.5 cm		X	X	
e	100.6 – 125.5 cm	X			X
f	100.6 – 150.5 cm		X		X
g	150.6 – 175.5 cm	X		X	X
h	150.6 – 200.5 cm		X	X	X

Additional bracing
Base compensations require additional longitudinal bracing
- if there are no diagonals within the next 5 bays
- or if the diagonal is not directly connected to decking or horizontal ledgers.

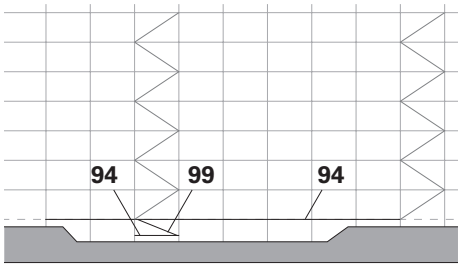
Examples
A Base compensation with Ledger Brace UBL-2 (**99**) and Horizontal Ledger UH-2 (**94**) connected to diagonal.
B Diagonal extended into the base compensation with Ledger Brace UBL (**99**) and horizontal ledgers.
C Base compensations are connected directly to braced bay within 5 bays.
D Base compensations connected to start of scaffolding with Face Brace EBF (**20**) and Horizontal Ledger UH-2 (**94**) connected to diagonal.

- For the permitted maximum extension length for each load class and equipment variation, refer to the tie patterns in the section Tie pattern.
- Separate static proof is required for other cases

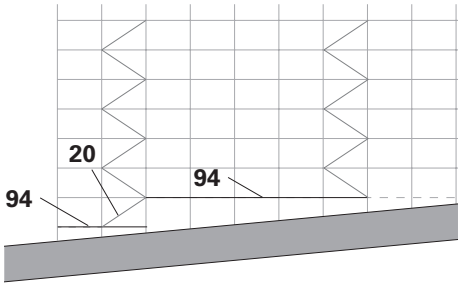
Example A



Example B



Example C



Example D

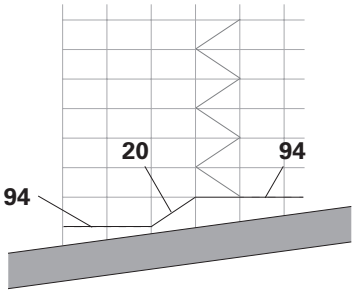


Fig. B1.02

Components

10 Adj. Base Plate UJB 38-50/30
11 Adj. Base Plate UJB 38-80/55
13 Base Compensation EVA 100/50
14 Base Compensation EVA 100/100
23 Base Standard EVOTOP EVS 124
61 Support UC 33
94 Horizontal Ledger UH-2
99 Ledger Brace UBL-2

Assembly

1. Fit Horizontal Ledgers UH-2 (**94**) into the rosettes of the Base Standards EVOTOP EVS.
2. Mount Support UC 33 (**61**) on the ¾ rosettes of the Base Compensation EVA (**13/14**). Secure the wedges. (Fig. B1.03)
3. Mount Ledger Brace UBL-2 (**99**): insert mounting ring (**99.1**) into the horizontal ledger. Place the gravity pin (**99.2**) in an upright position and push through the Support UC 33 (**61**). Tilt the gravity pin on the inner side.

→ Additional bracing is installed (Fig. B1.04 – Fig. B1.05a)

All tilt fingers (**99.2**) of the assembly must be transverse after installation of the Ledger Braces UBL and rest on both sides of the hole.

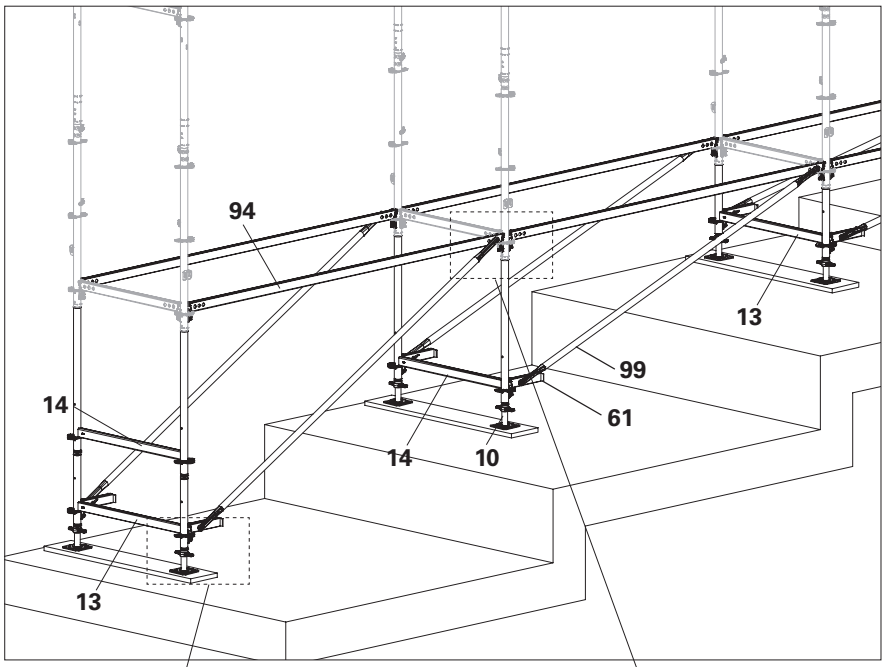


Fig. B1.03

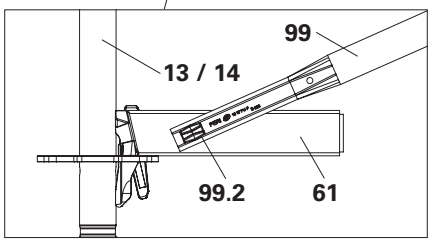


Fig. B1.04

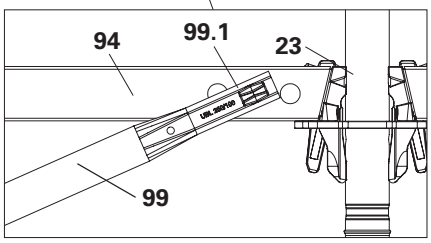


Fig. B1.05

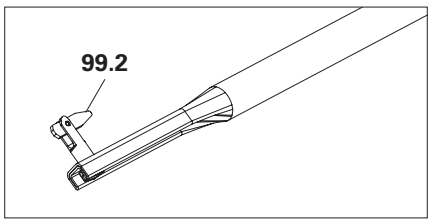


Fig. B1.04a

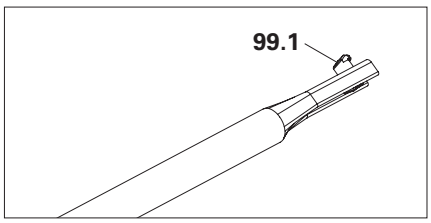


Fig. B1.05a

- Alternatively, the Supports UC 25 or short Horizontal Ledgers UH-2 can also be used instead of Support UC 33 (**61**).
- Alternatively, if the compensation height is 1.0 m or 1.5 m, Node Braces UBK can also be used.
- If space is limited, use the Ledger Brace UBL-2.
- Alternatively, fit the ledger brace on the horizontal ledger (**94**) first, then install together on the base frame (**13/14**).

General information

Assembly of the scaffold must follow the sequence described below!

Load-distributing supports

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

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

Assembly

Start assembling at the highest point of the ground (= the least height compensation), see Section "B1 Substructure" from page 50.

1. Set out Horizontal Ledgers UH-2 (**94**) in the longitudinal direction.
2. If necessary, set out load-distributing supports.
3. Set out the Ledger EVOTOP UH-2 100 (**16**) in the transverse direction.
4. Set up the Adjusting Base Plates UJB (**10**).

(Fig. B2.01)

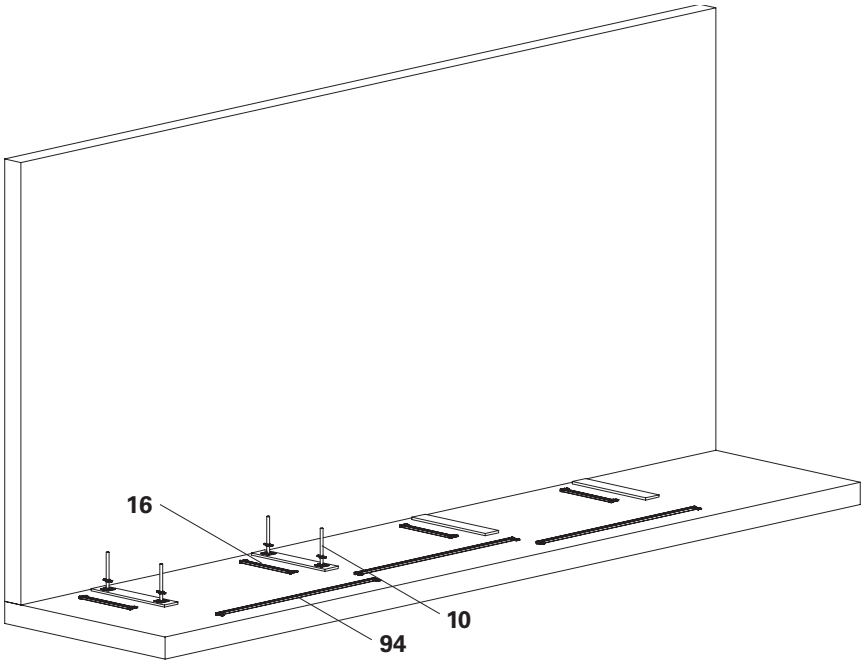


Fig. B2.01

Components

10	Adj. Base Plate UJB 38-50/30
16	Ledger EVOTOP UH-2 100
23	Base Standard EVOTOP EVS 124
30	Steel Deck EDS
94	Horizontal Ledger UH-2 300

Base unit

- PERI recommends starting the assembly process in a diagonal bay.
- Each diagonal bay is braced using Horizontal Ledgers UH-2, see section Tie pattern.
- Hammer in wedges of the Horizontal Ledgers UH-2 only after alignment has taken place!
- In some structural arrangements, a Ledger EVOTOP UH-2 100 with a height of 1.00 m is required in the Base Standard EVOTOP. Then install the base standard, rotated through 180°, with the rosettes facing inwards.

Assembly

1. Assemble 2 x Base Standards EVOTOP EVS 124 (**23**) and 1 x Ledger EVOTOP UH-2 100 (**16**) to create a base unit.
2. Secure with Horizontal Ledger UH-2 (**94**) to prevent it from falling over. (Fig. B2.02)
3. Fit the second base unit and connect with Horizontal Ledger UH-2 (**94**).
4. The base level is aligned horizontally by accurately adjusting the Adjusting Base Plates UJB (**10**). Adjust the distance to the structure. (Fig. B2.03a)
5. Securely fix the wedges of Horizontal Ledger UH-2 (**16+ 94**) in position with a jarring blow using a hammer.

→ The base unit is installed.
(Fig. B2.03)

PERI recommends using horizontal ledgers as an assembly aid.
From a structural point of view, horizontal ledgers are not always required, see the section Tie pattern.

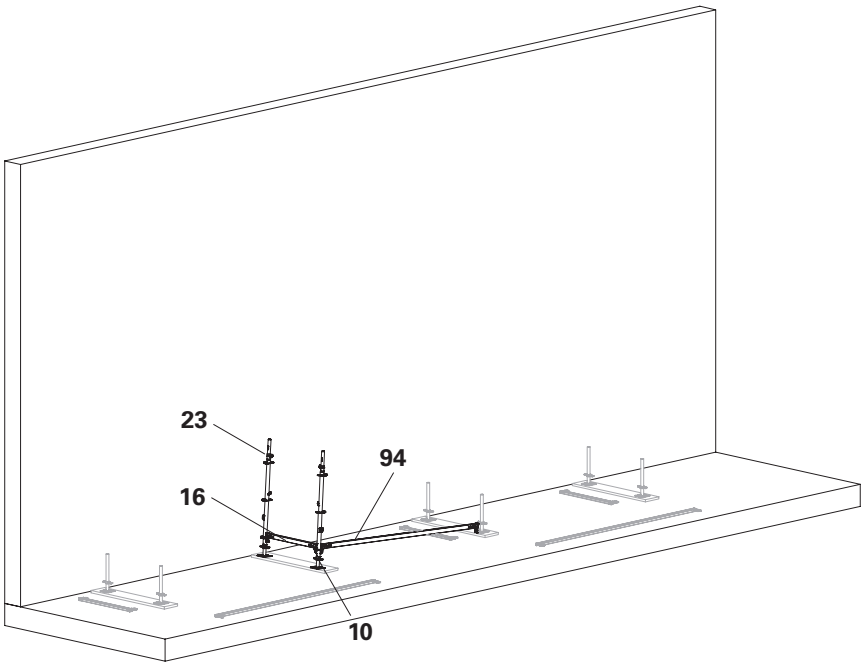


Fig. B2.02

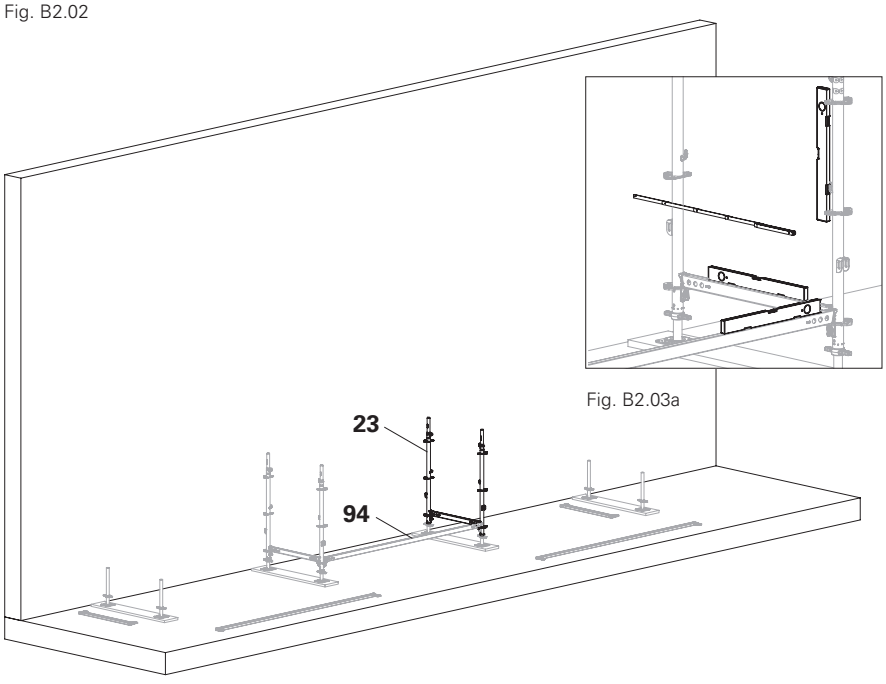


Fig. B2.03a

Fig. B2.03

Assembly aid for the decking

Hook the Steel Deck EDS (**30**) into the base unit as an assembly aid.

Assembly

1. Pick up the deck (**30**) from the centre and place it on the Ledgers EVOTOP UH-2 100 (**16**).

→ The deck is now installed.
(Fig. B2.04)

Have both lift locks (**30.1**) dropped below the horizontal ledger?
If not, lift the deck slightly and let it drop into position or operate the lift lock manually.
(Fig. B2.04a)

The Steel Decks EDS (**30**) used at the base are assembly aids only. They can be removed later.

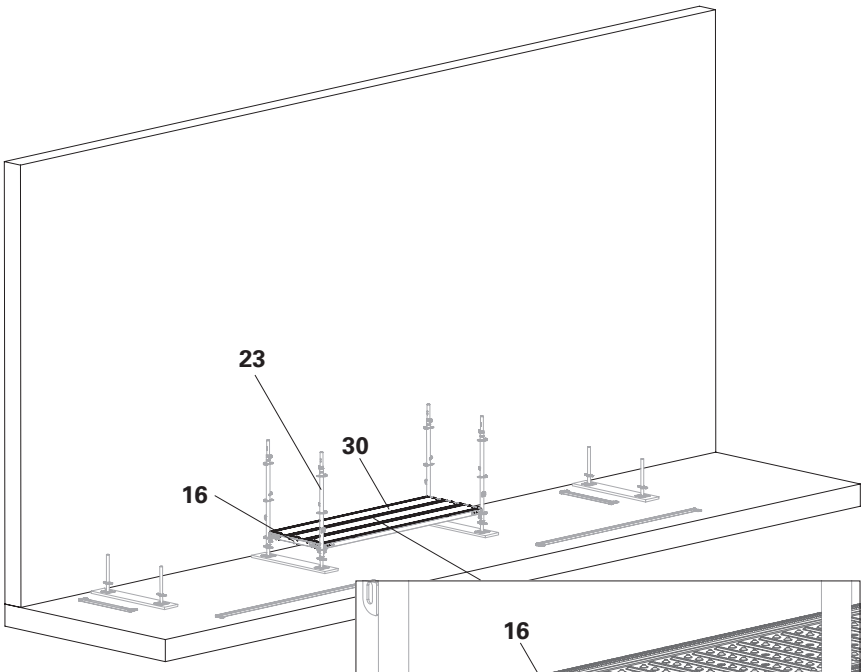


Fig. B2.04

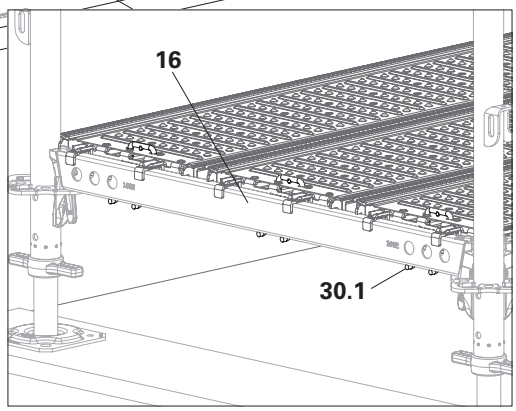


Fig. B2.04a

Easy EVOTOP standards and guardrail post

Components

16	Ledger EVOTOP UH-2 100
20	Face Brace EBF
22	Standard EVOTOP EVM 200
30	Steel Deck EDS
51	Guardrail EPG

The Guardrail EPG (**51**) is continuously mounted together with the Easy Standard (**22**) from a secure position in the next scaffolding bay.

Assembly

1. Attach 2 x Standard EVOTOP EVM 200 (**22**) to Base Standard EVOTOP EVS 124 (**23**). Turn the guardrail connections (**22.1**) to the deck side.
2. Fit the Ledger EVOTOP UH-2 100 between the standards (**98**). Secure the wedges. (Fig. B2.05)

3. Attach Guardrail EPG (**51**) to the upper guardrail hooks (**22.1**) of the attached standard, see "A3 System components: Lateral protection" on page 24.

(Fig. B2.06 + Fig. B2.06a)

Turn the guardrail hook of the inner Standard EVOTOP EVM 200 (**22a**) to the wall side. This enlarges the clear passage width.
Not in conjunction with
- Internal guardrails,
- Ledger EVOTOP UH SL 100.

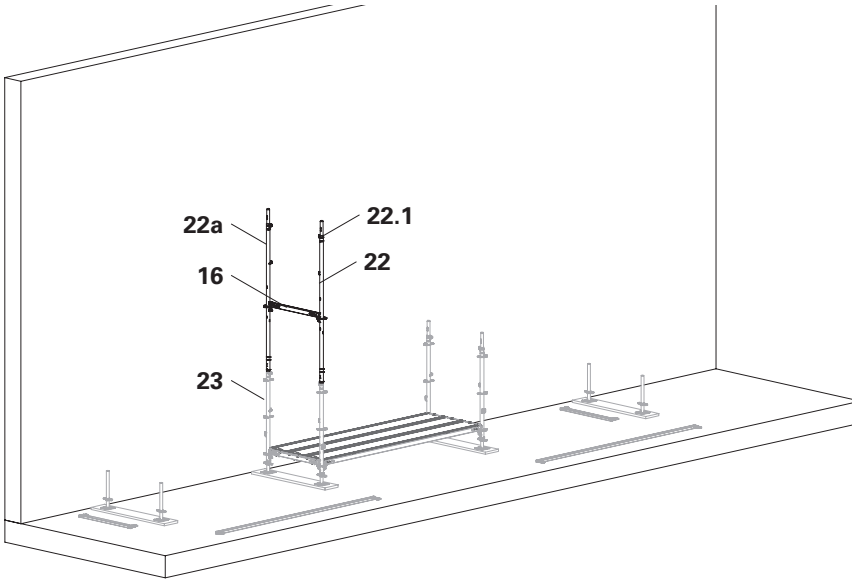


Fig. B2.05

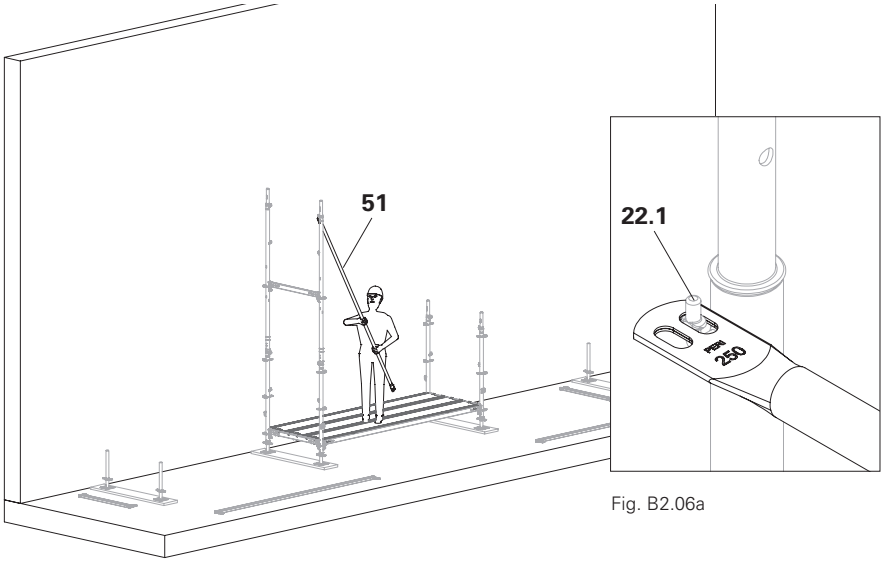


Fig. B2.06a

Fig. B2.06

3. Attach Guardrail EPG (**51**) to the guardrail hooks (**22.1**) of the second Standard EVOTOP EVM 200.

(Fig. B2.07)

Assembly of the Standard EVOTOP EVM can also be carried out in a "double-advanced" manner with guardrails and intermediate guardrails. See Section "A3 System components: Lateral protection" on page 24.

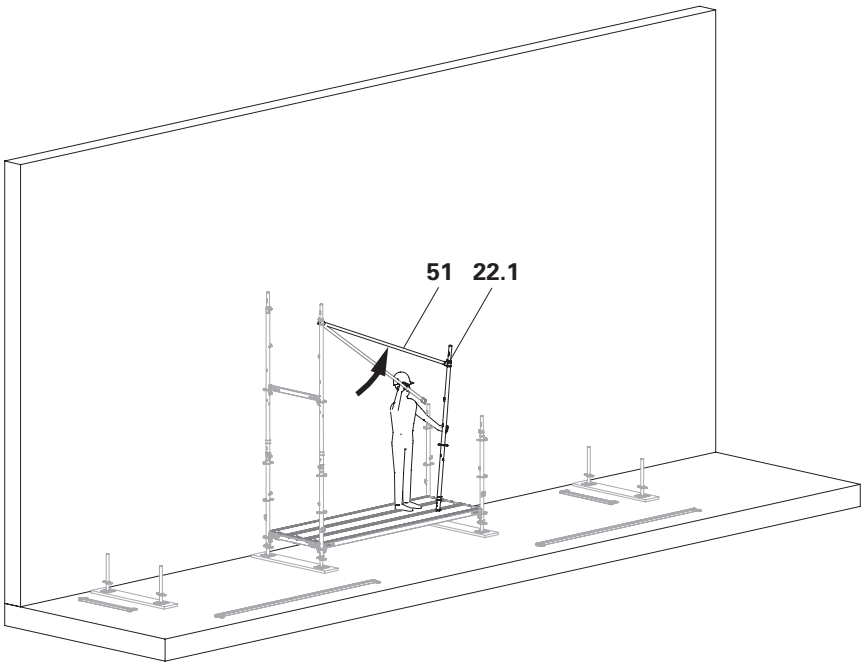


Fig. B2.07

4. Position the second Standard EVOTOP EVM 200 (**22**) together with Guardrail EPG (**51**) on the available Base Standard EVOTOP EVS 124 (**23**).
5. Fit another standard (**22a**) on the inner side of the scaffold.
6. Connect both standards with Ledger EVOTOP UH-2 100 (**16**).

→ The standards and guardrail post are now installed.

(Fig. B2.08)

In the material acceptance bay, install the guardrail and intermediate guardrail in advance.

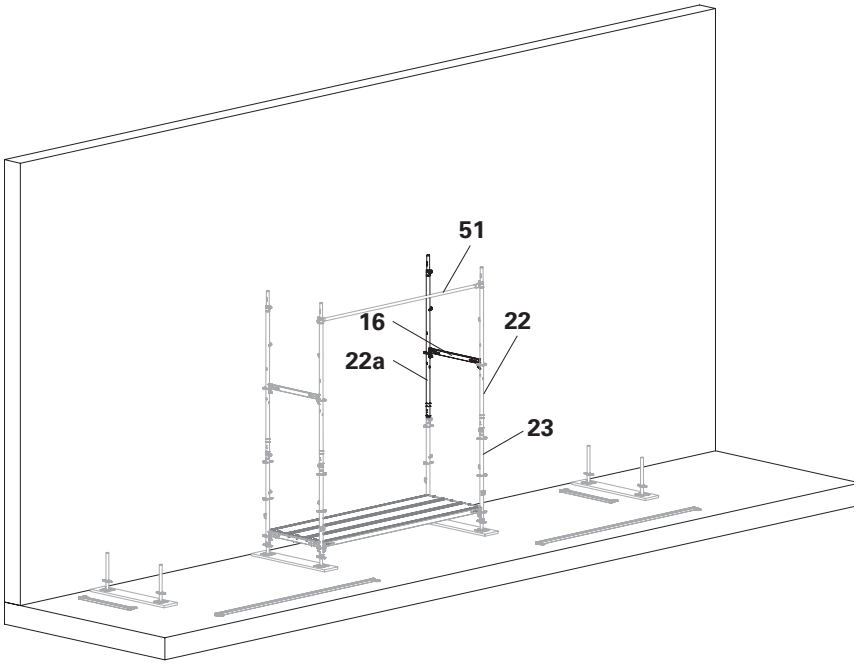


Fig. B2.08

Decks

Note

Stability compromised without system decking.

⇒ System decks are bracing components and must, therefore, be installed across the full scaffold width and in every scaffolding bay!

Assembly

1. To install the decks, see "A5 System components: Deck" from page 36.

→ The deck is now installed.

(Fig. B2.09)

On the deck levels, Horizontal Ledgers UH-2 are generally not required in the longitudinal direction.
However, some additional fittings require horizontal ledgers in certain positions. See section Tie pattern.

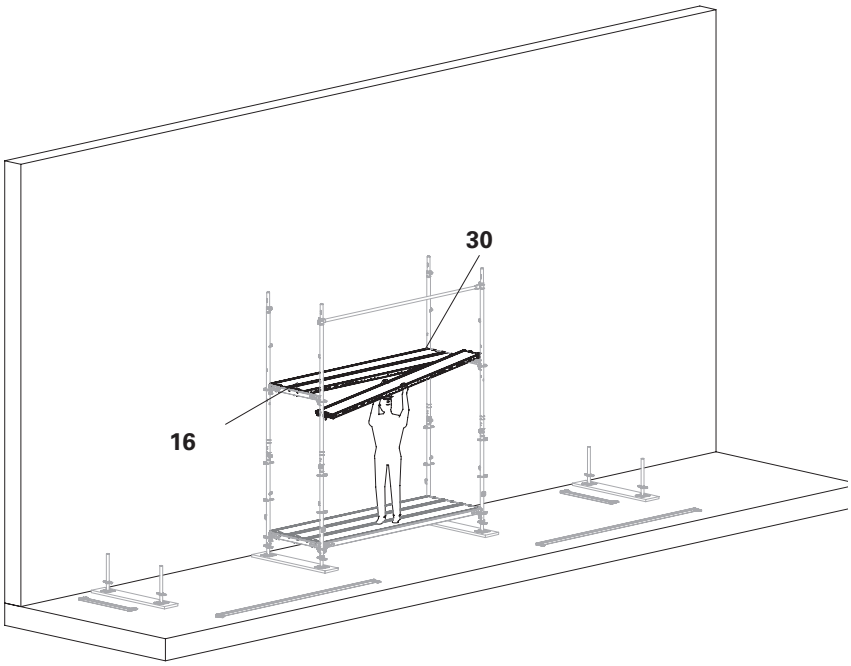


Fig. B2.09

Face braces

Note

Stability compromised due to missing face braces or horizontal ledgers.

⇒ Comply with the tie pattern!

Assembly

1. To install the Face Brace EBF (**20**), see Section "A6 System components: Diagonal bracing" on page 40.

→ The face brace is now installed.

2. Fit the horizontal ledgers according to the tie pattern.

(Fig. B2.10)

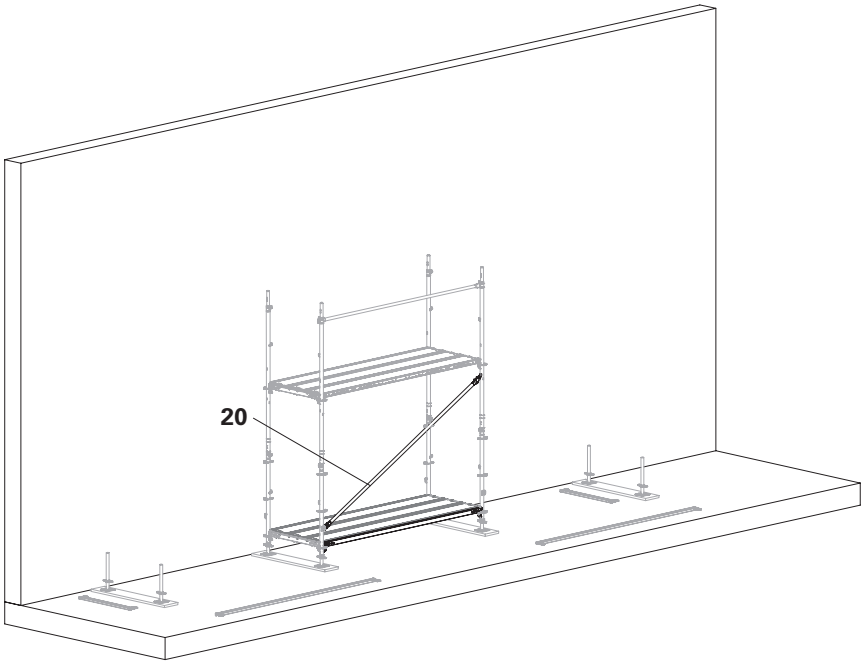


Fig. B2.10

Other scaffolding bays

Components

16 Ledger EVOTOP UH-2 100
22 Standard EVOTOP EVM 200
23 Base Standard EVOTOP EVS 124
30 Steel Deck EDS
51 Guardrail EPG
52 Advance Guardrail UPA 100
56 Toeboard UPF
57 Toeboard Steel UPY
94 Horizontal Ledger UH-2 300

Assembly of other scaffolding bays takes place in both directions starting from the scaffolding bay with diagonals. (Fig. B3.01)

Assembly

1. Fit the Base Standard EVOTOP EVS 124 (**23**) onto the Adjusting Base Plates UJB and connect it to the Ledger EVOTOP UH-2 100 (**16**).
2. Connect to existing scaffolding bay with horizontal ledger (**94**) and align.
3. Position decks (**30**) as assembly aids. (Fig. B3.01)

➔ If the base level is to be used as a working area, PERI recommends covering the entire level with decking.

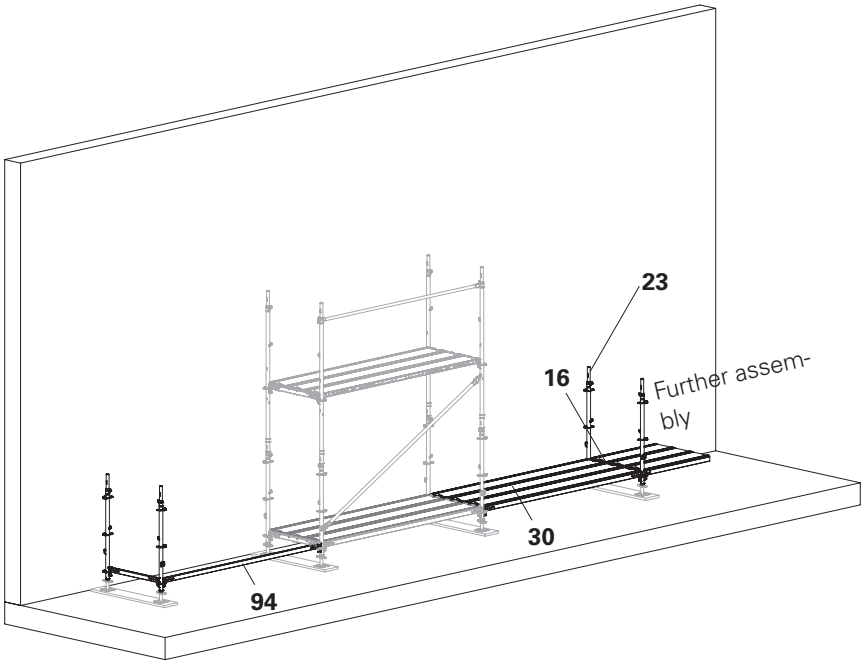


Fig. B3.01

4. Attach Guardrail EPG (**51**) to the existing scaffolding bay and install it together with the standard (**22**).
5. Attach the Standard EVOTOP EVM 200 (**22a**) on the inner side of the scaffold.
6. Connect standards (**22 + 22a**) to the horizontal ledgers (**16**). Secure the wedges.
7. Install End Guardrail in Advance UPA 100 (**52**) in the edge bay, see Section "End Guardrail UPA in advance" on page 30. (Fig. B3.02)

Alternatively:

Fit End Guardrail EPF, see Section "End Guardrail in Advance EPF" on page 33. (Fig. B3.02a)

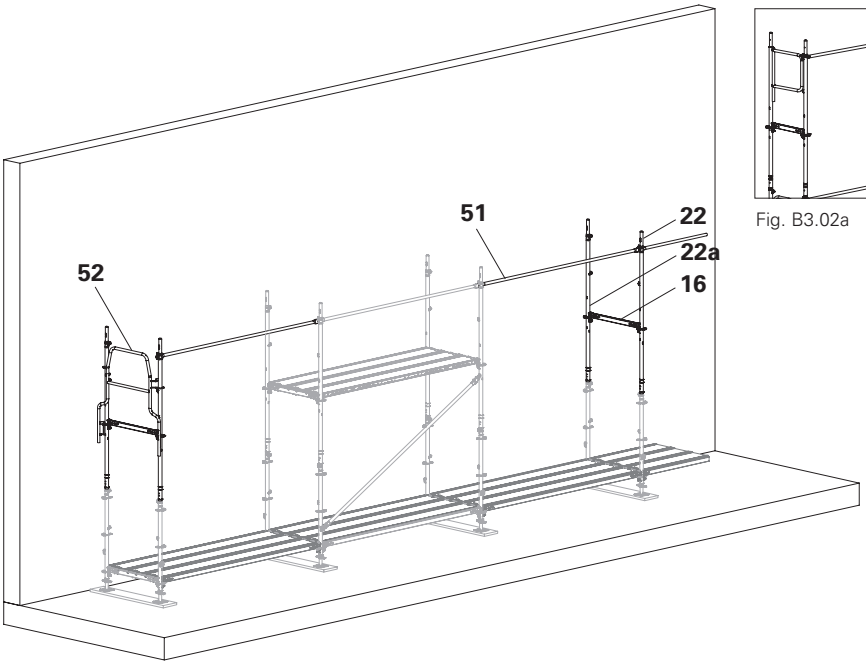


Fig. B3.02

Fig. B3.02a

6. Install decks (**30**) in the first scaffolding level.
7. Establish access to the next scaffolding level, see "B8 External stair tower" from page 82.

→ Other scaffolding bays have been installed.

(Fig. B3.03)

After these work steps, the decks (**30a**) and horizontal ledgers (**94**) can be removed from the base level and used elsewhere.

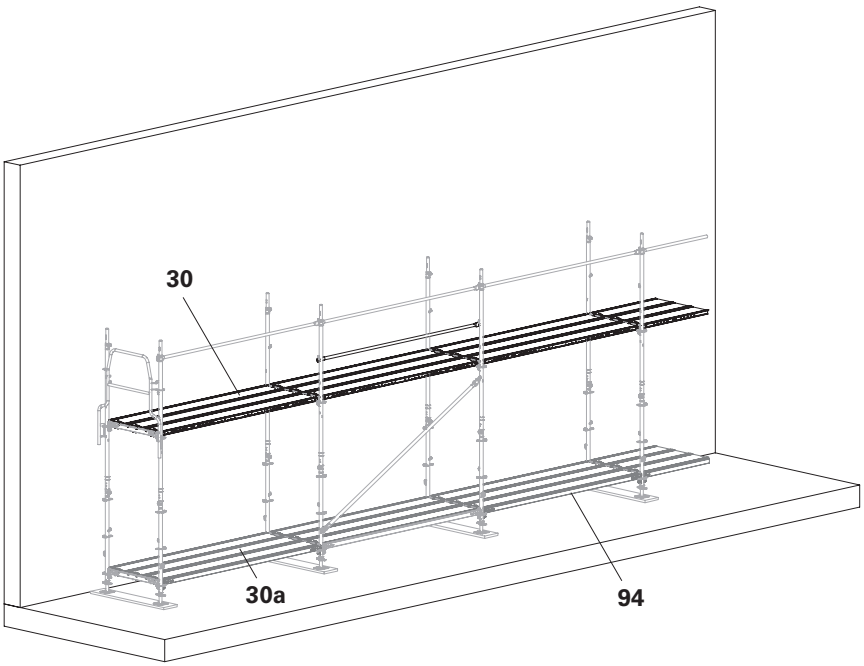


Fig. B3.03

Lateral protection

Ensure that lateral protection is complete in every scaffolding bay.

Intermediate guardrail

Assembly
If not already mounted as "double advanced" guardrails:
1. Attach Guardrail EPG (**51a**) as an intermediate guardrail on both sides, one after the other, on the guardrail hooks, see Section "A3 System components: Lateral protection" on page 24.

→ The intermediate guardrail is now in place.
(Fig. B3.04)

Toe board

Assembly
1. Fit Toeboard UPF (**56**) on both sides, one after the other onto the standards, see Section "A3 System components: Lateral protection" on page 24.

→ The toe board is now installed.
(Fig. B3.04)

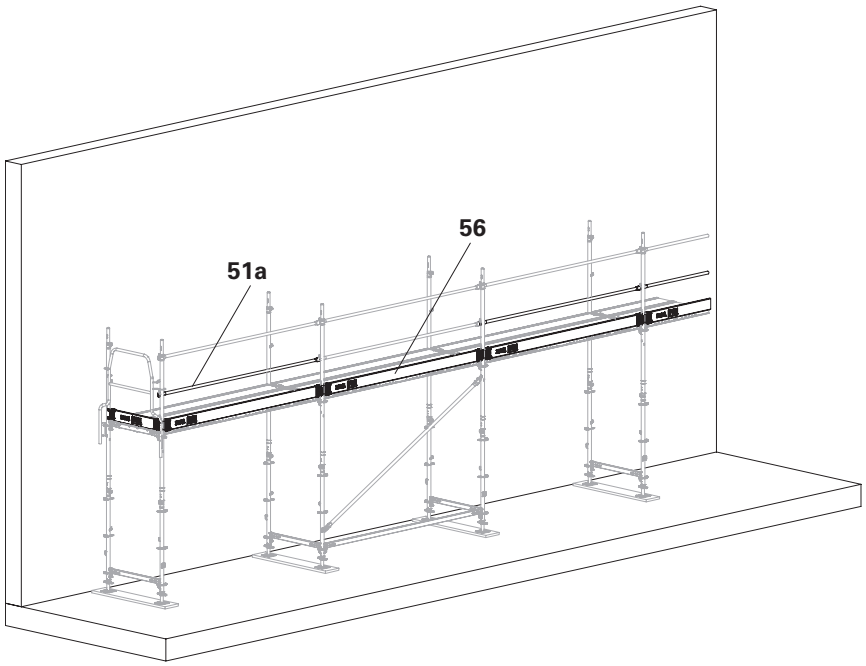


Fig. B3.04

Toeboard Steel UPY (**57**) can be installed instead of Toeboard UPF, see Section "A3 System components: Lateral protection" from page 24.
(Fig. D3.05)

Install intermediate guardrails in the assembly sequence of the scaffolding.

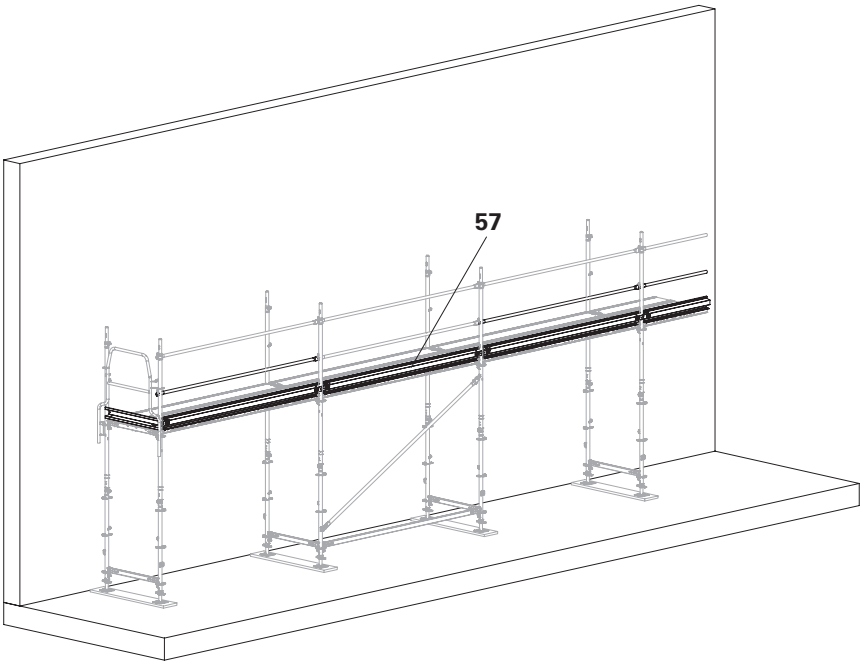


Fig. B3.05

Other levels

Components

16 Ledger EVOTOP UH-2 100
20 Face Brace EBF
22 Standard EVOTOP EVM 200
30 Steel Deck EDS
46 Wall Tie UWT
48 Standard Coupler RA 48/48
51 Guardrail EPG
52 Advance Guardrail UPA 100
56 Toeboard UPF

Assembly

1. Attach the Standard EVOTOP EVM 200 (**22a**) to all inner legs.
2. Fit Standard EVOTOP EVM 200 (**22**) with Guardrail EPG in Advance (**51**) onto all outer legs.
3. Connect Standards EVOTOP EVM 200 with Ledger EVOTOP UH-2 100 (**16**). Secure the wedges.

(Fig. B4.01)

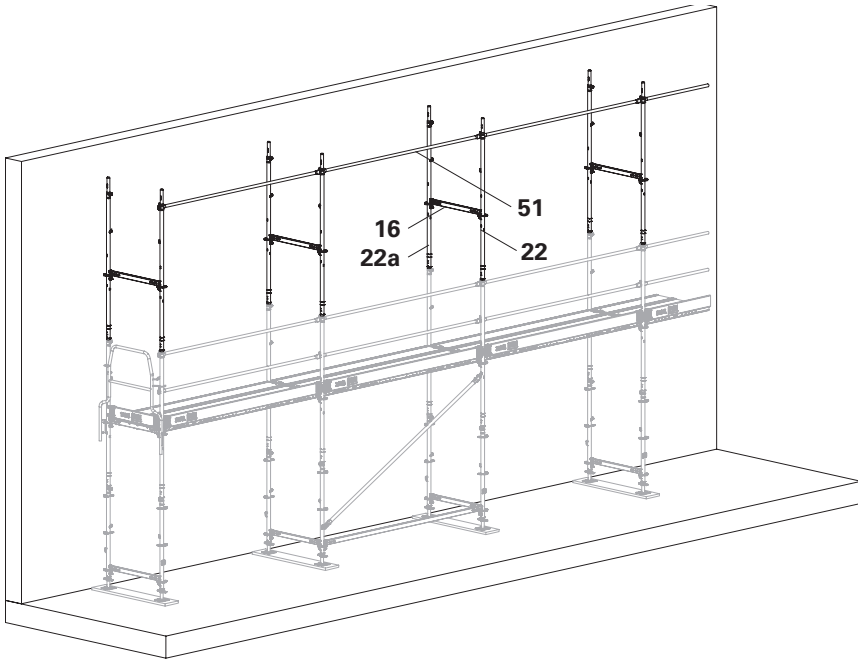


Fig. B4.01

- Turn the guardrail hooks of the inner standard (**22a**) towards the wall if no inner guardrails are required. This enlarges the clear passage width.
- Alternatively, fit the top level on the inner side of the scaffold with the Top Standard EVOTOP EVT 96.

4. Attach End Guardrail in Advance UPA 100 (**52**) to the front side.
5. Install decking (**30**).

(Fig. B4.02)

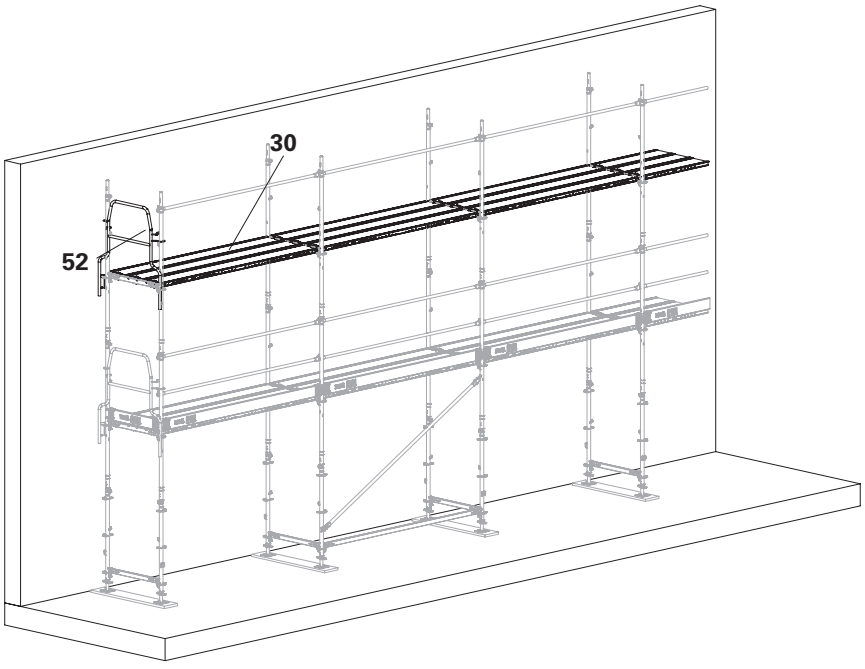


Fig. B4.02

6. Fit Face Braces EBF (**20**) in accordance with the section Tie pattern.
(Fig. B4.03)

Always fit the face braces after the decks. This simplifies the deck installation process.

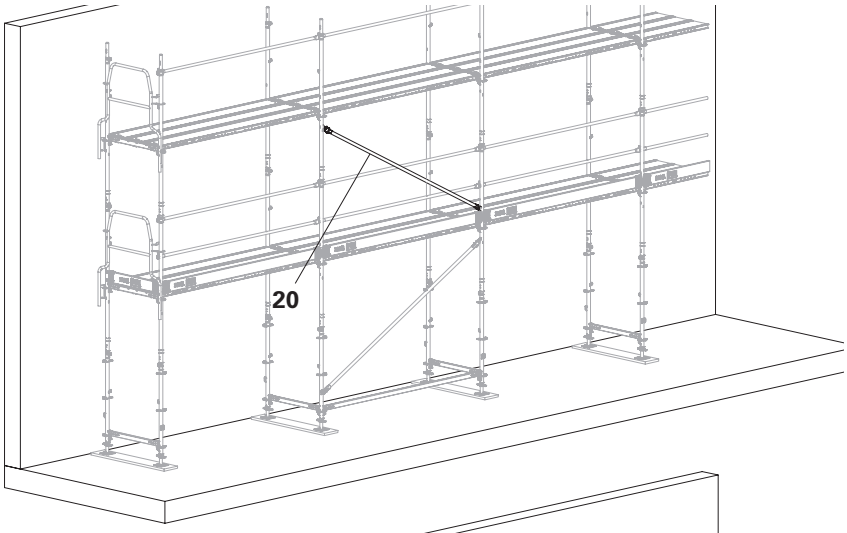


Fig. B4.03

7. Install intermediate guardrail (**51a**) and Toeboard UPF (**56**).
→ The next level is now installed.
(Fig. B4.04)

Repeat assembly steps 1 to 7 until all scaffolding levels are complete.

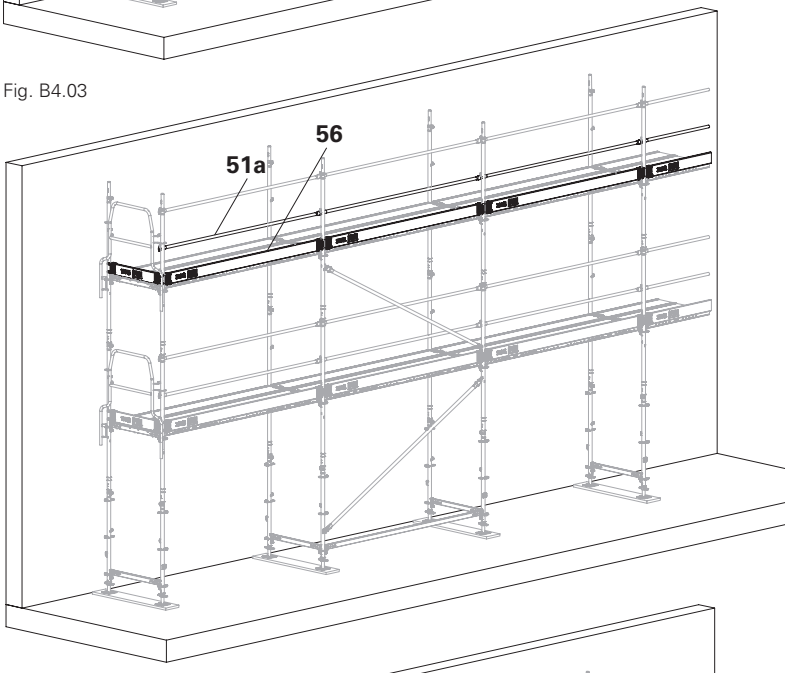


Fig. B4.04

Anchoring
Fit the Wall Ties UWT (**46**) continuously with Standard Couplers RA 48/48 (**48**).
(Fig. B4.05 + Fig. B4.05a)

- Refer to Section "Tie pattern" for the number and position of the ties.

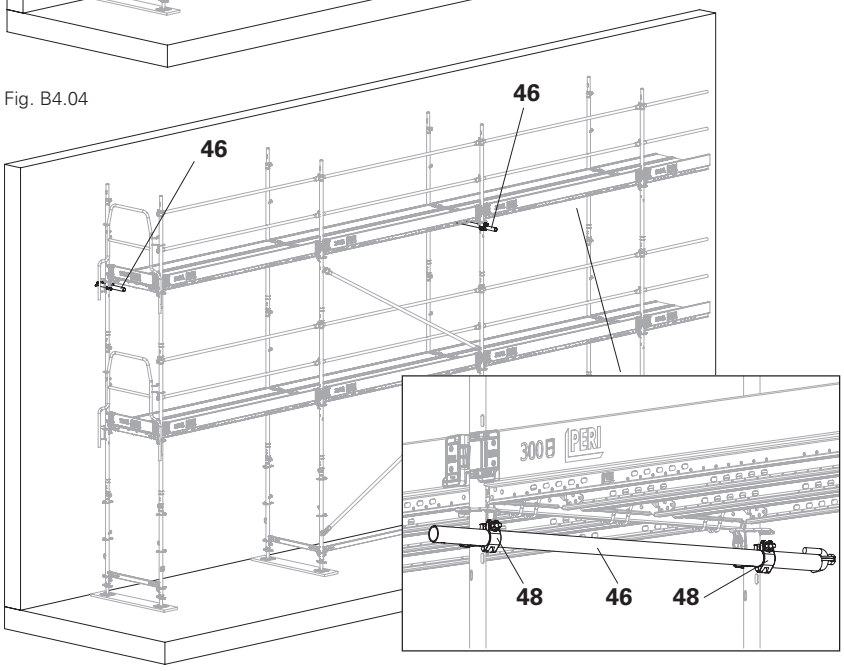


Fig. B4.05

Fig. B4.05a

Disassembly

Components

16 Ledger EVOTOP UH-2 100
20 Face Brace EBF
22 Standard EVOTOP EVM 200
30 Steel Deck EDS
46 Wall Tie UWT
51 Guardrail EPG
52 Advance Guardrail UPA 100
56 Toeboard UPF

- Follow the dismantling sequence!
- Before dismantling the scaffolding, check that all guardrail posts are mounted in the same direction on the guardrail hooks in a "fish scale arrangement". See Section "B9 Scaffold modification" on page 94.
- Have any dismantled components taken away from the scaffold immediately; do not store them somewhere temporarily.

Dismantling

1. Dismantle the Toeboards UPF (**56**) and intermediate guardrails (**51a**). The top Guardrails EPG (**51**) remain in position as anti-fall protection.

(Fig. B5.01)

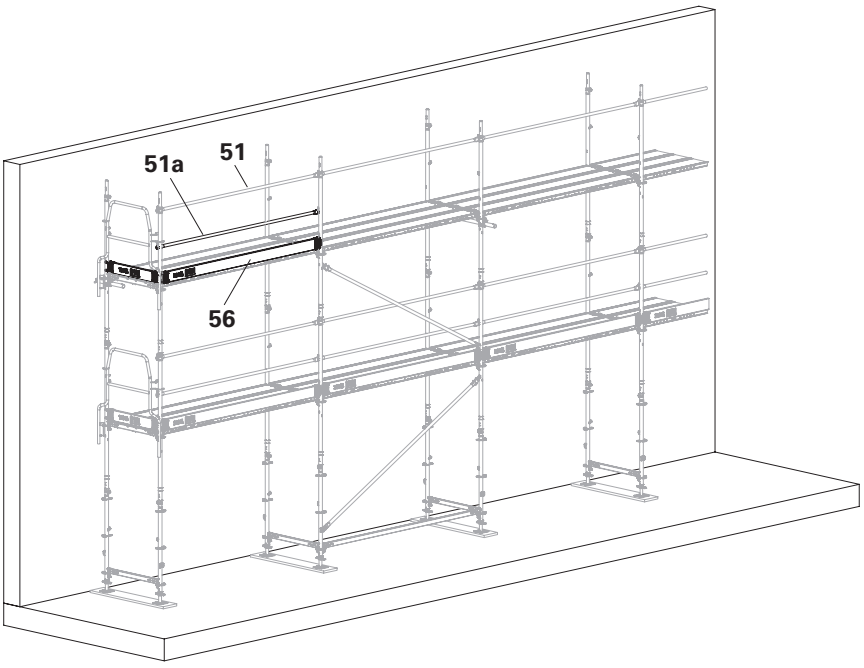


Fig. B5.01

The intermediate guardrail post can also be dismantled together with the guardrail (step 4).

2. From the level immediately below, remove the Wall Tie UWT (**46**), decks (**30**), Face Brace EBF and End Guardrail in Advance UPA (**52**).

(Fig. B5.02)

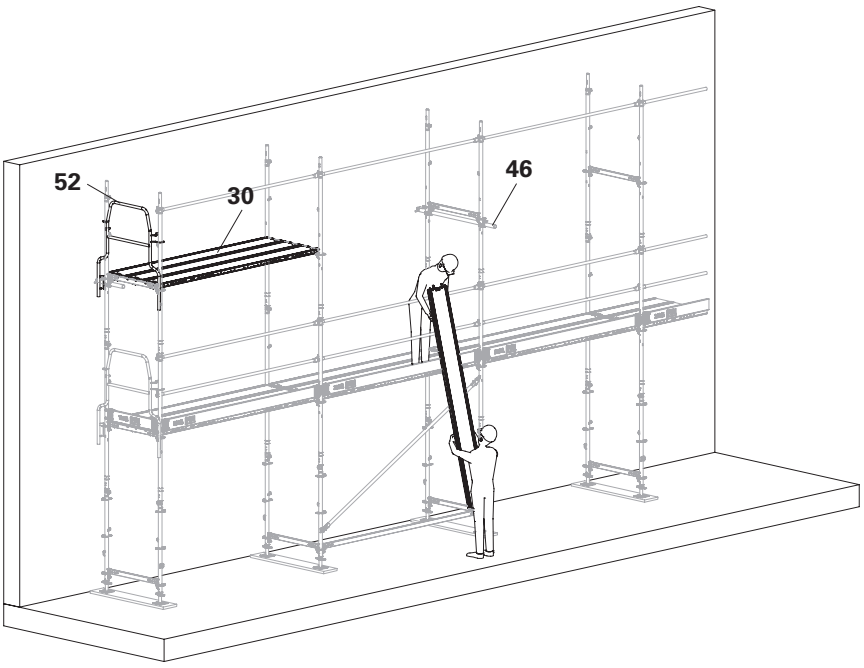


Fig. B5.02

3. Remove Ledger EVOTOP UH-2 100 (**16**).
4. Remove the Standard EVOTOP EVM 200 (**22**) together with the top Guardrail EPG (**51**) in the reverse order of the assembly sequence. Otherwise the guardrail posts cannot be unhooked.

(Fig. B5.03)

Repeat steps 1 – 4 until the entire scaffold has been dismantled.

Note

Do not drop the guardrail post. This will prevent any possible damage to the guardrail post or decks.

⇒ Guide the guardrail post manually.

To dismantle the last scaffolding level, install auxiliary decks at the base level.

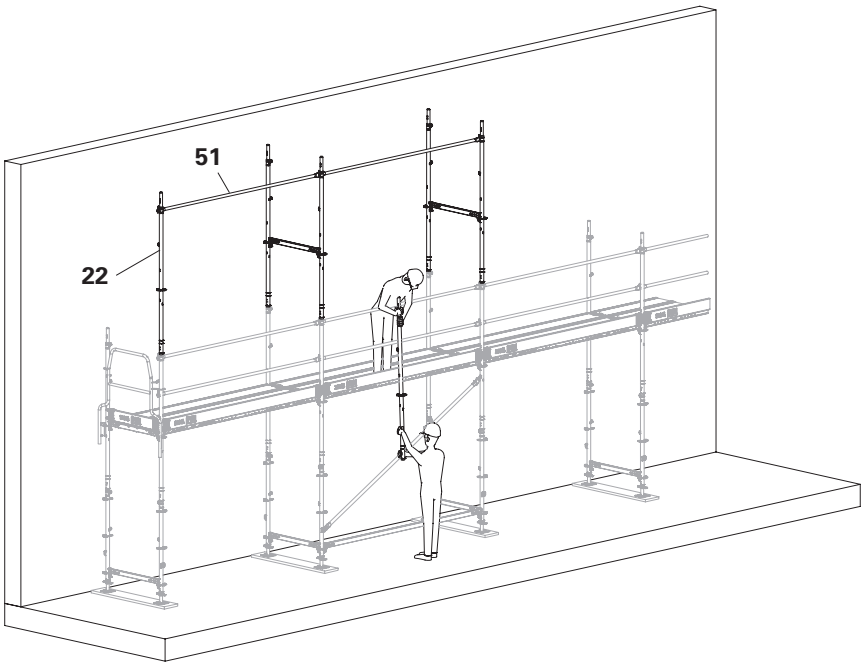


Fig. B5.03

B6 Corner configuration

General information

- Start assembly at the corner.
- Position decks in the base level as assembly aids.
- For higher load classes than LC4, construct the outside corner like an inside corner.

Outside corner

In this version of the assembly process, the decks on the base level are taken out again. (Fig. A7.01a)

Continuous scaffolding bay

Components

16 Ledger EVOTOP UH-2 100
20 Face Brace EBF
22 Standard EVOTOP EVM 200
23 Base Standard EVOTOP EVS 124
30 Steel Deck EDS
51 Guardrail EPG
52 Advance Guardrail UPA 100
94 Horizontal Ledger UH-2 300

Assembly

1. Set up the base units.
2. Fit two Horizontal Ledgers UH-2 (**94a**) into the continuous scaffolding bay (**A**). Secure the wedges.
3. Connect the adjacent scaffolding bay (**B**) with one horizontal ledger (**94**).
4. In both of the following bays, fit two Horizontal Ledgers UH-2 (**94b**) (one diagonal is installed in each of these bays). (Fig. A7.01a)
5. Fit two Standards EVOTOP EVM 200 (**22 + 22a**) together with Ledger EVOTOP UH-2 100 (**16**). The guardrail hook (**22.1**) on the standard (**22a**) points inwards in the direction of the continuous scaffold.
6. Attach the guardrail post (**51**).

(Fig. B6.01)

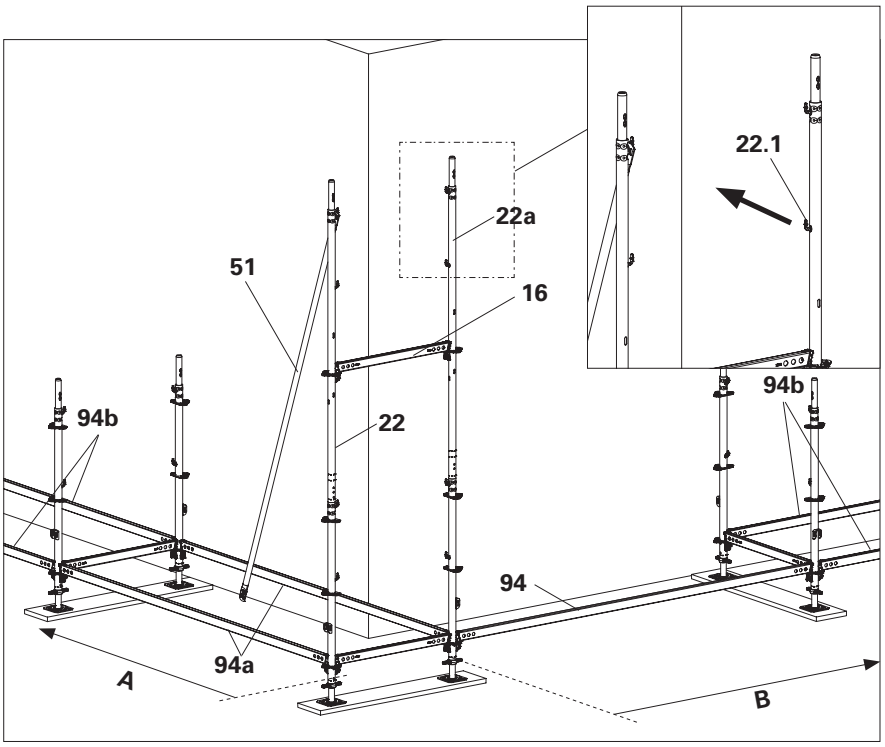


Fig. B6.01

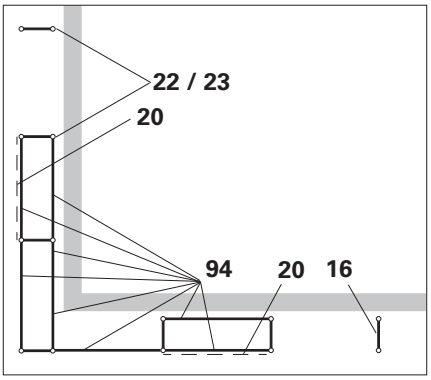


Fig. B6.01a
Arrangement of the Horizontal Ledgers UH-2 (**94**) in the base level if decks are not installed or if the decks are subsequently removed.

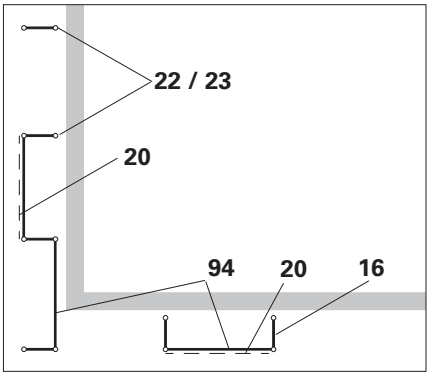


Fig. B6.01b
Arrangement of the Horizontal Ledgers UH-2 (**94**) in the base level if the decks remain in place.

7. Insert the Standards EVOTOP EVM 200 (**22**) with Guardrail EPG (**51**) into the next frame column. Fit the Ledger EVOTOP UH-2 100 (**16**).
8. Fit End Guardrail in Advance UPA 100 (**52**).
9. Fit Horizontal Ledger UH-2 (**94a**) onto the inner side of the continuous scaffolding bay. Secure the wedges.

(Fig. B6.02)

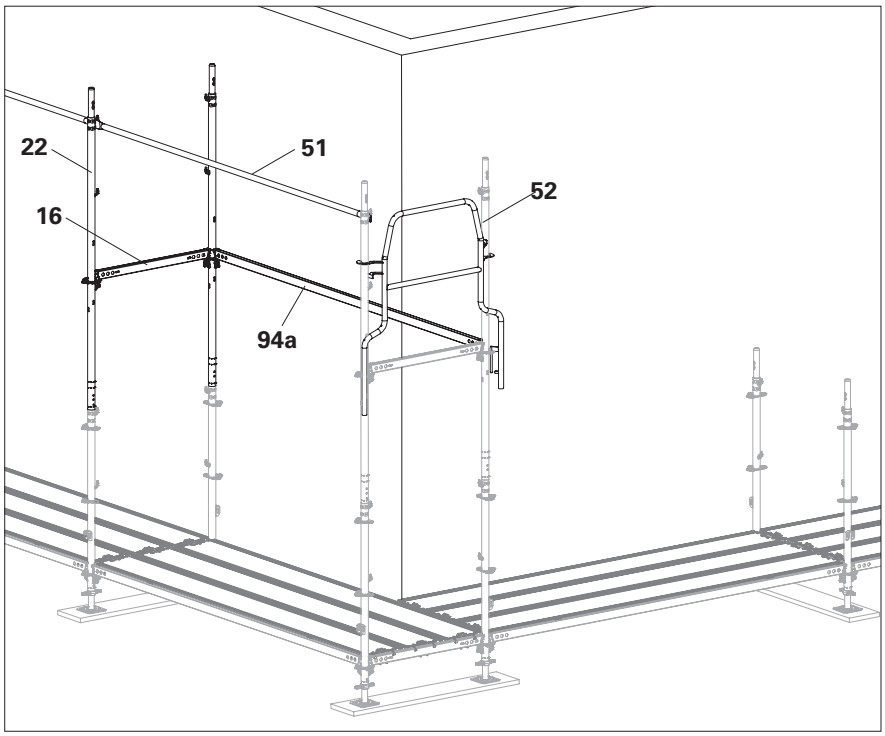


Fig. B6.02

10. Position the decks (**30**) excluding the corner bay.
11. Install Face Braces EBF (**20**).

(Fig. B6.03)

- For the arrangement of horizontal ledgers and face braces, see Fig. B6.01a or Fig. B6.01b.
- One diagonal will suffice in scaffold areas with 5 bays or fewer.

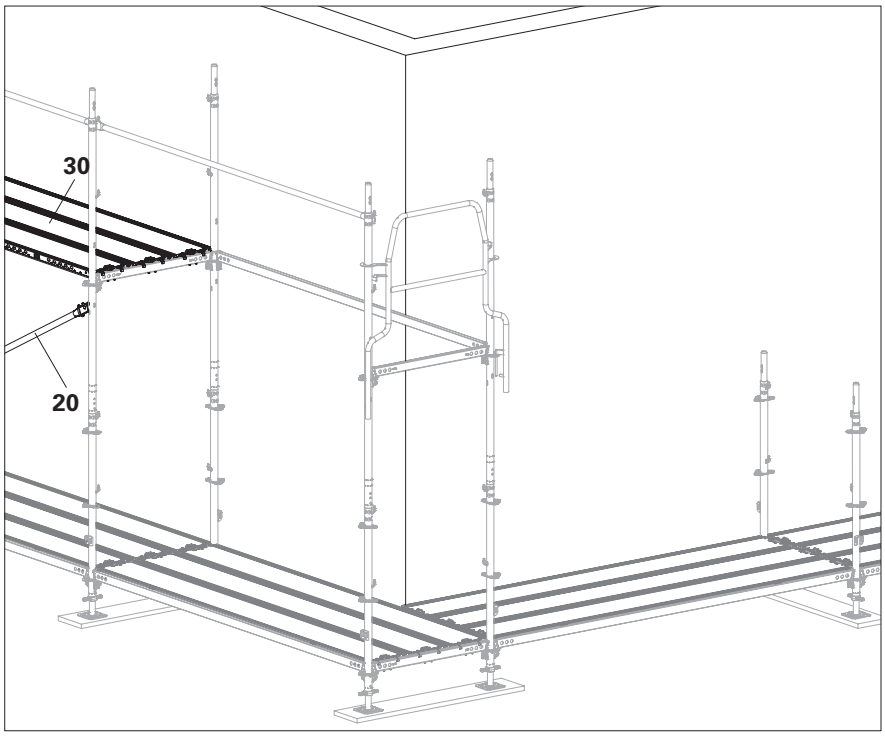


Fig. B6.03

B6 Corner configuration

Adjacent scaffolding bay

Components

16 Ledger EVOTOP UH-2 100
20 Face Brace EBF
22 Standard EVOTOP EVM 200
30 Steel Deck EDS
51 Guardrail EPG
56 Toeboard UPF

Assembly

1. For the adjacent scaffolding bay, attach the Guardrail EPG (**51**) to the inwardly turned guardrail hook (**22.1**) of the standard (**22a**) from the level immediately below.
2. For the adjacent scaffolding bay, fit Guardrail EPG (**51**) with another standard (**22**).
3. Fit another standard (**22b**) onto the inner side of the scaffold and connect it to the Ledger EVOTOP (**16**).

(Fig. B6.04)

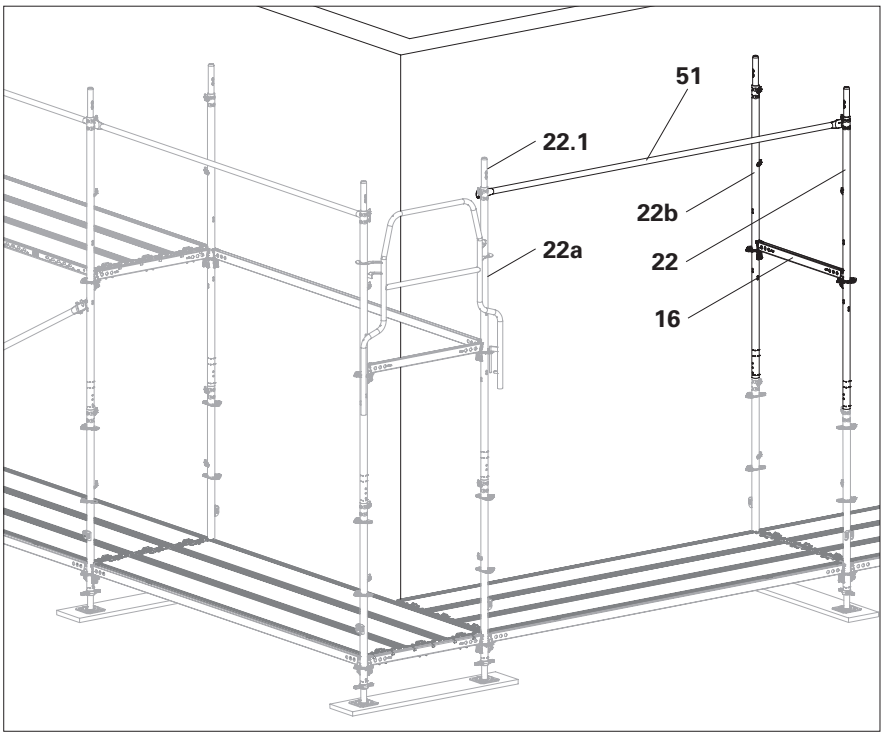


Fig. B6.04

3. Firstly, install decks (**30**) in the adjacent scaffolding bay.
4. Install the remaining decks (**30a**).

(Fig. B6.05)

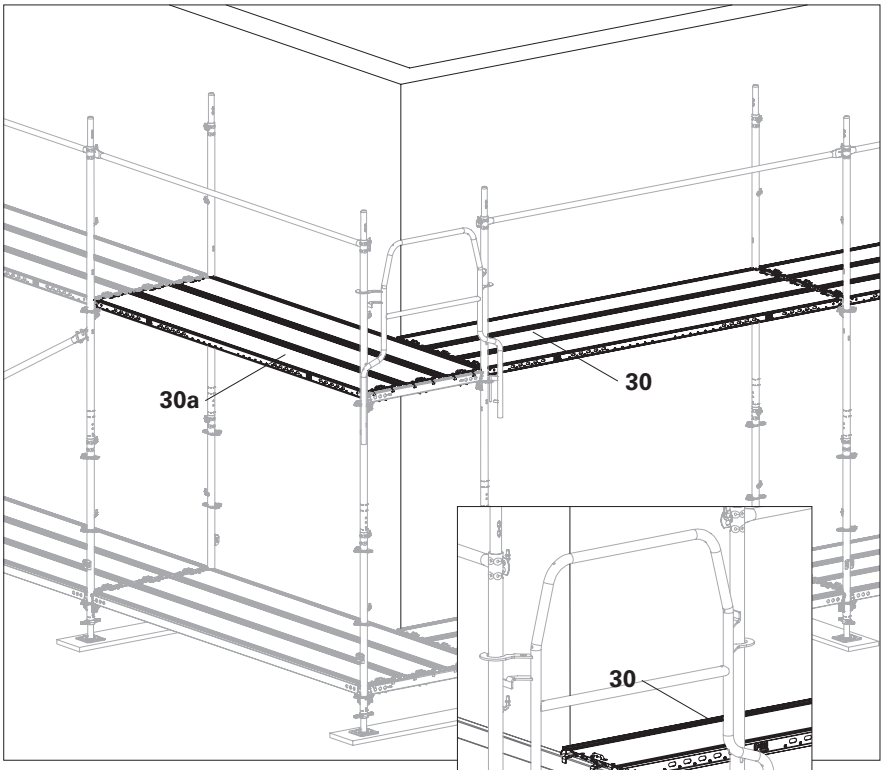


Fig. B6.05

Fig. B6.05a

5. Fit Face Brace EBF (**20**).
6. Complete the lateral protection with intermediate guardrail (**51**) and Toeboards UPF (**56**).
7. Anchoring:
   Anchor the neighbouring frame column (**R**) to the outside corner with a triangulated tie. (Fig. B6.06a)
   Anchor uncovered scaffolds in a 4 m tie pattern, and covered scaffolds in a 2 m tie pattern

→ The outside corner is now complete. (Fig. B6.06)

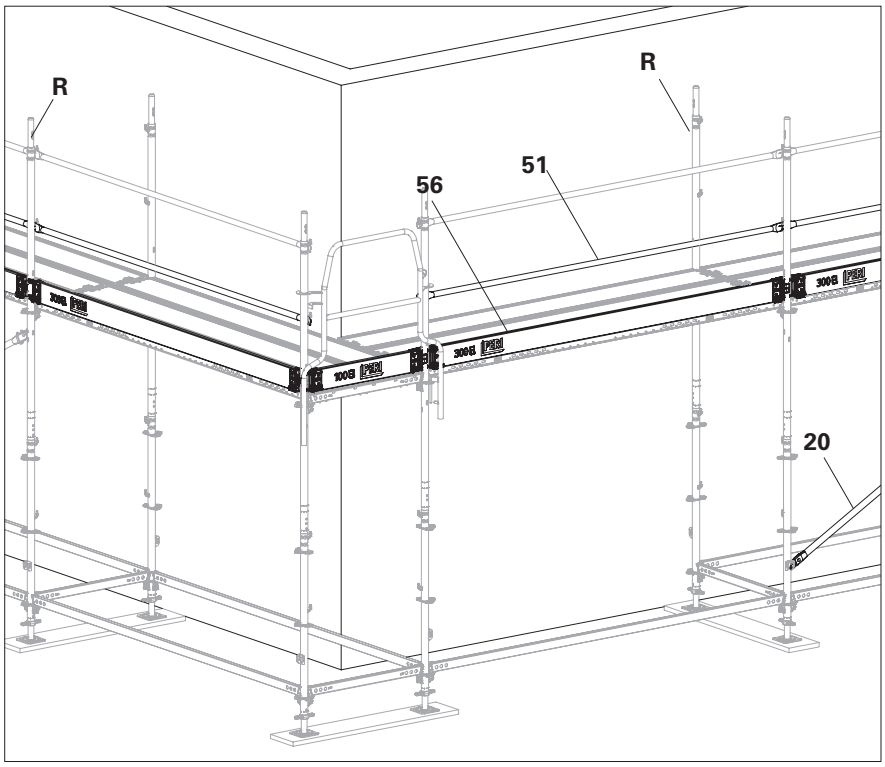
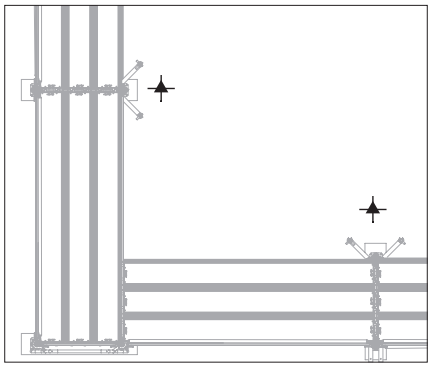


Fig. B6.06



Triangulated tie

Fig. B6.06a

Corners can be built in the shape of windmills. Plan and install customised lateral protection.

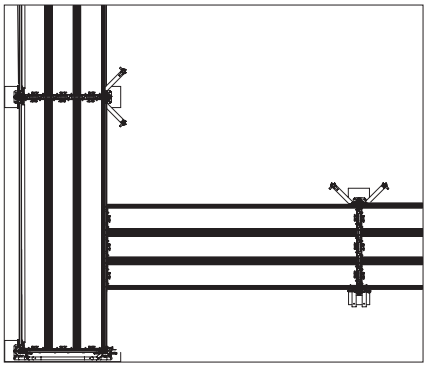


Fig. B6.07

Inside corner

In this version of the assembly process, the decks on the base level are taken out again. (Fig. B6.08a)

Base level

Components

16 Ledger EVOTOP UH-2 100
20 Face Brace EBF
22 Standard EVOTOP EVM 200
23 Base Standard EVOTOP EVS 124
51 Guardrail EPG
58 Guardrail Coupler EPR
94 Horizontal Ledger UH-2 300

Assembly

1. In the inside corner, assemble four Base Standards EVOTOP EVS 124 (**23**) with four Ledgers EVOTOP UH-2 100 (**16**) to form a corner tower. Hammer all wedges into place.
2. In each case, connect the next frame column using two Horizontal Ledgers UH-2 (**94**).

(Fig. B6.08 + Fig. B6.08a)

- For the arrangement of horizontal ledgers and face braces, see Fig. B6.08a or Fig. B6.08b.
- One diagonal will suffice in scaffold areas with 5 bays or fewer.

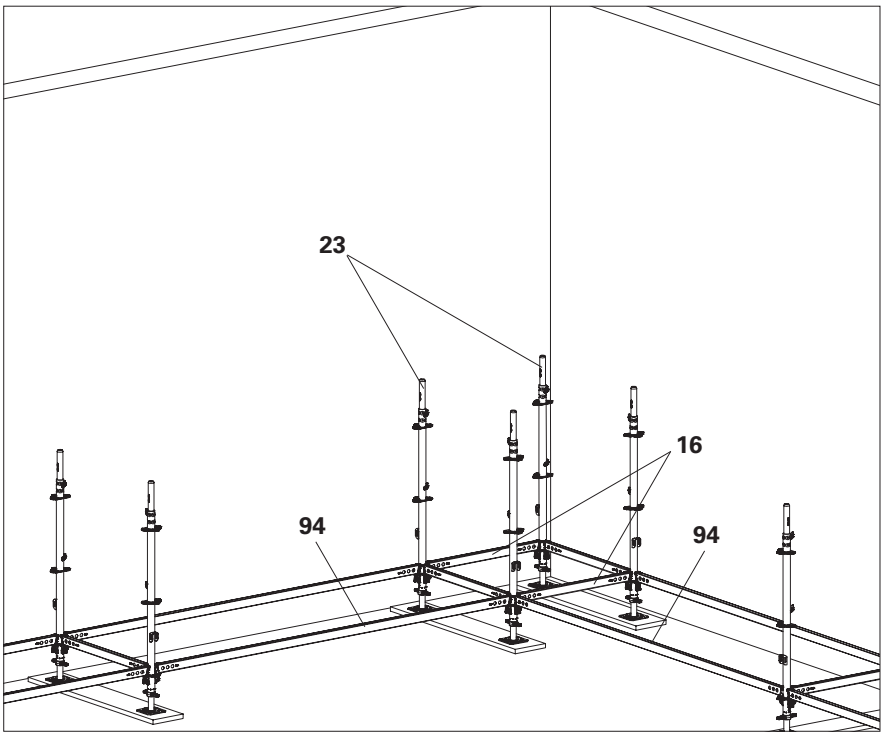


Fig. B6.08

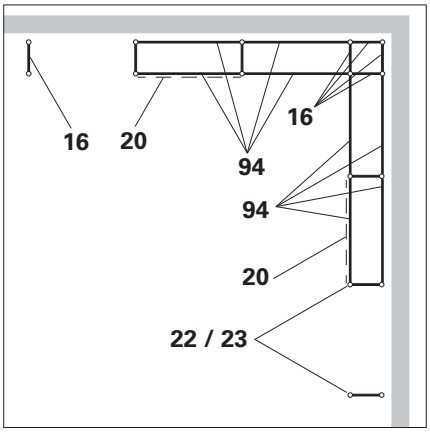


Fig. B6.08a

Arrangement of the Horizontal Ledgers UH-2 (**94**) in the base level if decks are not installed or if the decks are subsequently removed.

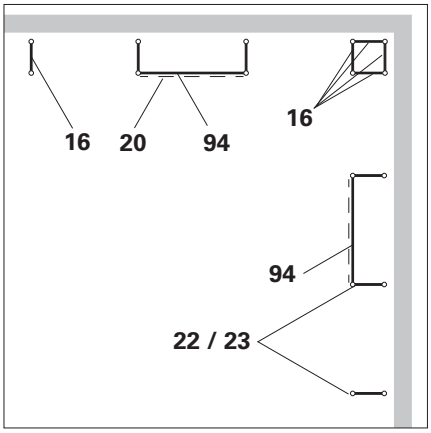


Fig. B6.08b

Arrangement of the Horizontal Ledgers UH-2 (**94**) in the base level if the decks remain in place.

Standards and guardrail post

Assembly

1. Pre-assemble two Guardrail Couplers EPR (**58**) on a Standard EVOTOP EVM 200 (**22a**).
   – Fit the guardrail hook of the Guardrail Couplers EPR at the same height as the guardrail hook turned by 90° on the standard.
   – The guardrail hook of the Guardrail Couplers EPR subsequently points to the inner side of the scaffold in the second scaffolding bay.
2. Place the pre-assembled standard (**22a**) on the front base standard (**23**).
3. Fit additional standards (**22**). Note the alignment of the guardrail hooks.
4. Connect the standards with Ledger EVOTOP UH-2 100 (**16**). Secure the wedges.
5. Attach Guardrail EPG (**51**) for the first scaffolding bay (**A**) onto the guardrail pin of the Standards EVOTOP EVM (**22a**) from the level below.
6. Fit the other side of the Guardrail EPG onto the Standard EVOTOP EVM (**22b**), and then place in position.

(Fig. B6.09)

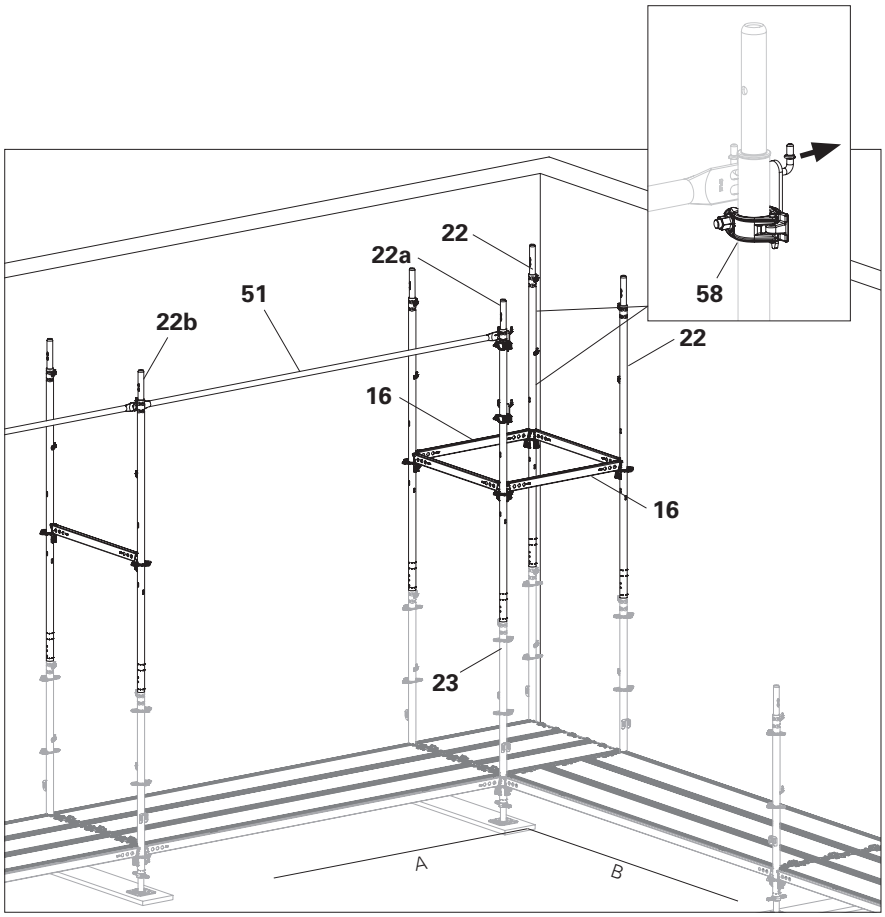


Fig. B6.09

7. For the second scaffolding bay (**B**), attach the Guardrail EPG (**51**) to the Guardrail Coupler EPR (**58**) from the level immediately below.
8. Fit the other side of the Guardrail EPG onto the standard (**22**), and then place in position together.

(Fig. B6.10)

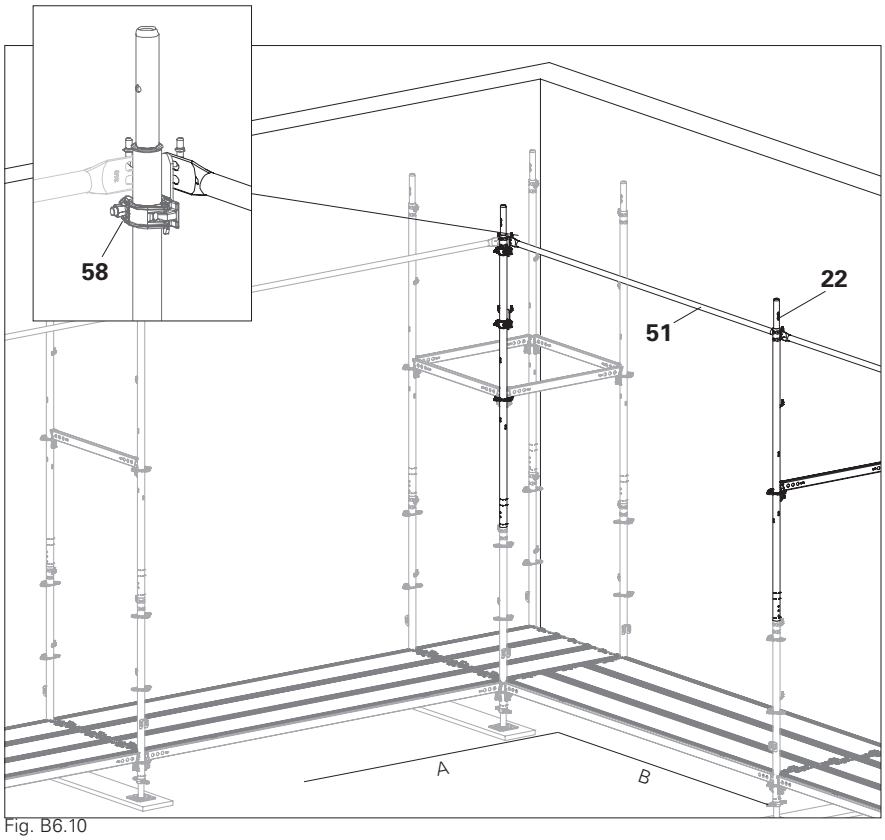


Fig. B6.10

B6 Corner configuration

Decks and diagonals

Components

20 Face Brace EBF
30 Steel Deck EDS 33x300
35 Steel Deck EDS 33x100
51 Guardrail EPG
56 Toeboard UPF

Assembly

1. Install decks (**30**) in the first and second scaffolding bays.
2. Place three Steel Decks EDS 33x100 (**35**) in the inside corner.
3. Fit Face Braces EBF (**20**).
4. Complete the lateral protection with intermediate guardrail (**51**) and toe board (**56**).

→ The inside corner is now complete. (Fig. B6.11)

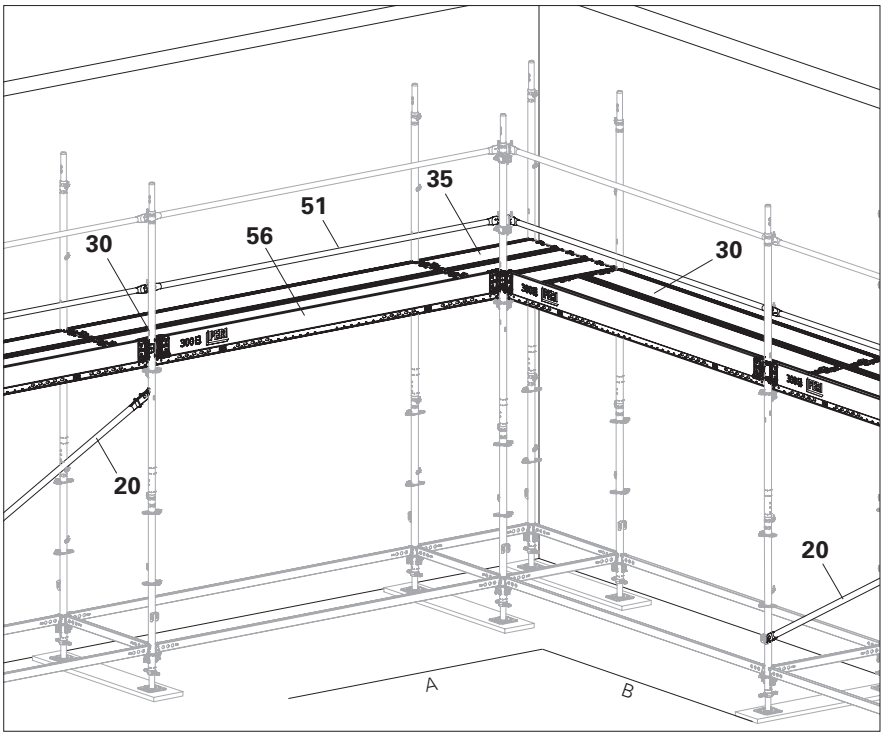


Fig. B6.11

B7 Longitudinal infills

General information

- Carry out longitudinal infills in a longitudinal bay. Longitudinal infills in corner areas require project-specific planning.
- Plan the lengths of the adjacent scaffolding bays in such a way that the maximum infill length is not exceeded
- Erect the scaffolds to the right and left of the filler area as stand-alone scaffolding. Anchor the edge standards according to the respective tie pattern. (Fig. B7.01)
- Set up the individual scaffolds level by level and connect them using longitudinal infills.

Assembly sequence

1. Secure the edge bays of both scaffolds with Advance Guardrail UPA.
2. Fit Deck Compensation EDL 33 from the scaffolding level immediately below, see the following section.
3. Working from the protection of the end guardrail in advance: fit the guardrail and intermediate guardrail, see the following section.
4. Fit the toe board, see the following section.
5. Remove the end guardrails in advance and install them on the next scaffolding level.

Using the tie patterns
Example arrangement with tie pattern for equipment variation 1a "A"

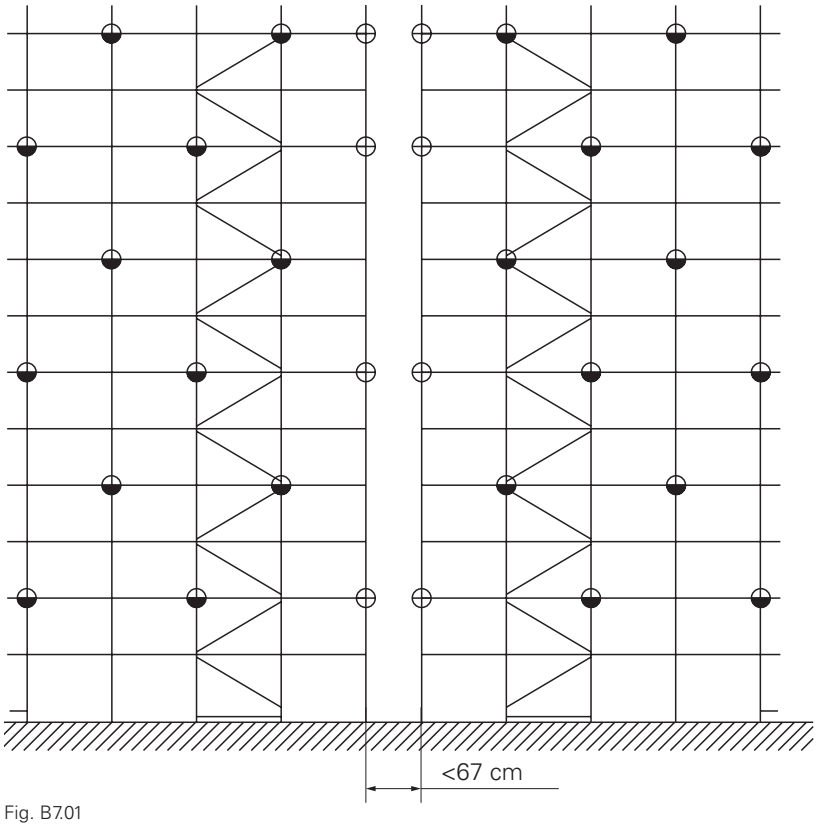


Fig. B7.01

Deck Compensation EDL 33

Technical data

- Maximum length of the compensation bay 67 cm
- max. load class 4 according to EN 12811 (p = 3.0 kN/m²)
- The longitudinal infill does not have any bracing function.
  → Comply with the tie pattern!

Assembly

The Deck Compensation EDL 33 (**33**) is installed from a safe position on the scaffolding level immediately below.

1. On one side of the scaffolding, place the shiftable side (**33.1**) on the standard decking and shift the deck compensation towards the crossbar. (Fig. B7.02)
2. Turn the securing bracket (**33.2**) approx. 90° and place it on the crossbar 60 x 30 with the claw.
3. Release the securing bracket.

→ The securing bracket drops down and secures the Compensation EDL 33.
→ The compensation deck is installed. (Fig. B7.03 + Fig. B7.03a)

Is the securing bracket (**33.2**) hanging in a perpendicular position? If not, turn it by hand. (Fig. B7.03b)

The Deck Compensation EDL 33 cannot be mounted on Console Brackets ECM 33, only on Deck Supports UCS 33.

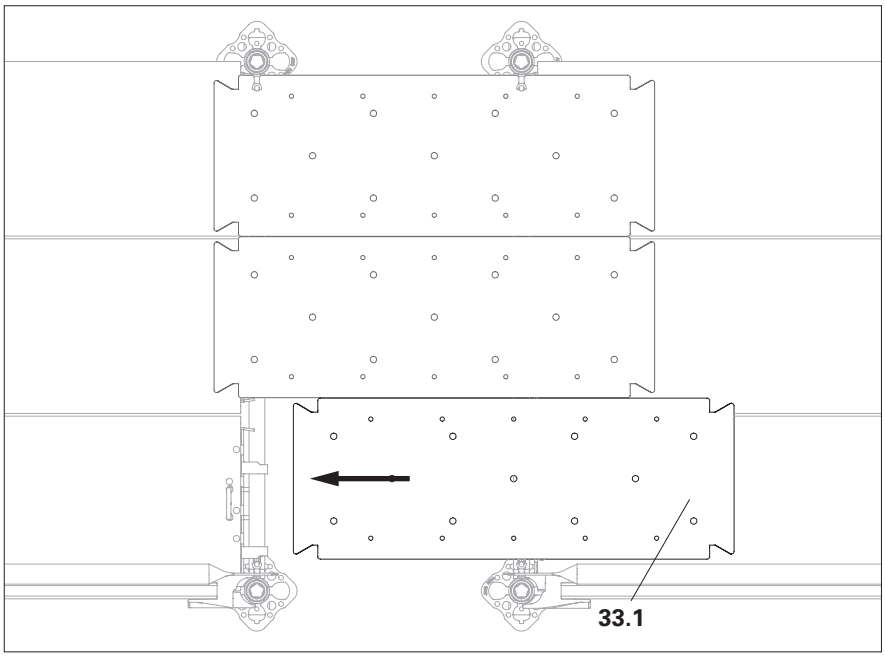


Fig. B7.02

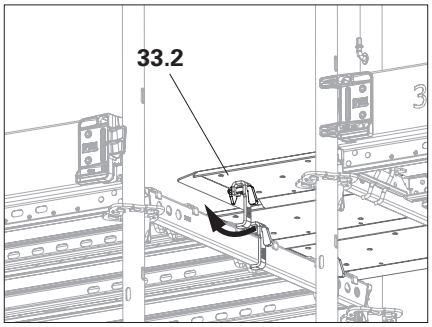


Fig. B7.03

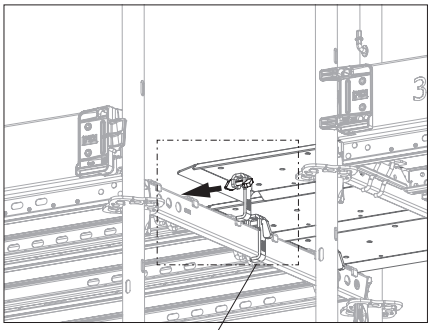


Fig. B7.03a

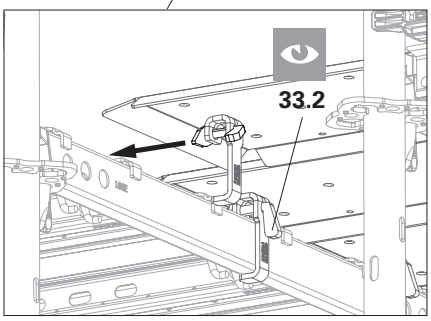


Fig. B7.03b

Guardrail Posts

Variant 1
Fit the scaffolding tubes onto the standards with standard couplers. (not shown)

Variant 2
1. On one side, fit Guardrails EPG 100 or 150 (**51**) onto the guardrail connection of the Standards EVOTOP EVM 200 (**22**).
2. On the other side, fit it onto the guardrail post that is already attached to the standard bay using a half-coupler or wall tie coupling (**45**).
   – Clamp the flat connection piece of the guardrail post into the screw connection of the coupling.
   – Fit the coupling in such a way that the projecting screw points outwards.

→ The guardrails posts are now installed.
(Fig. B7.04 + Fig. B7.05)

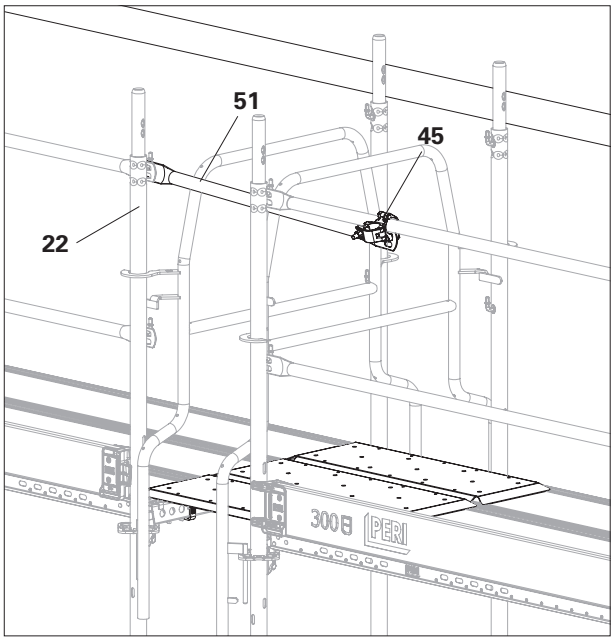


Fig. B7.04

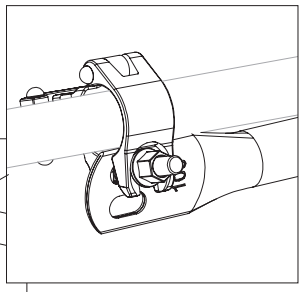


Fig. B7.05a

Toe boards

On the longitudinal infill, fit the toe board onto the Easy standard using suitable means or screw it onto the adjacent toe boards.

Dismantle the End Guardrail in Advance UPA (**52**) last.

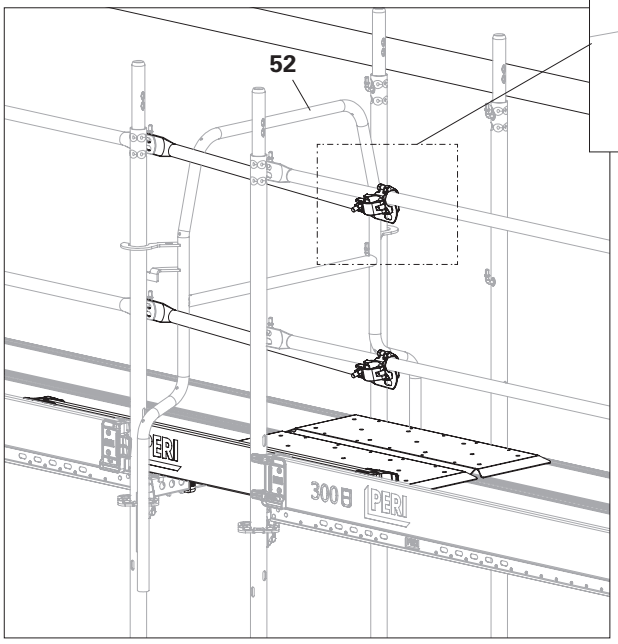


Fig. B7.05

Toe Board Compensation UPY-L

With the Toe Board Compensation UPY-L (**111**) and two Toeboards Steel UPY (**57**), it is possible to fit a toe board that is continuously adjustable in terms of its length. (Fig. B7.06)
Toe boards with different lengths may be used.

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 (**111**) onto the first Toeboard Steel UPY (**57**). (Fig. B7.07)
2. Slide the second Toeboard Steel UPY (**57**) between the Toeboard Steel 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 Toe Board Compensation UPY-L centrally at the overlap.
5. Tighten the wing nut.

→ The toe board is installed.
(Fig. B7.08)

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. B7.08a)
Alternatively, close the gap elsewhere on site.

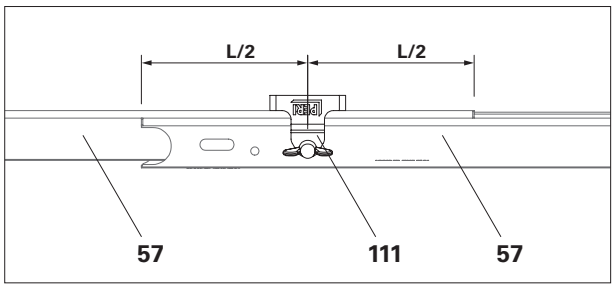


Fig. B7.06

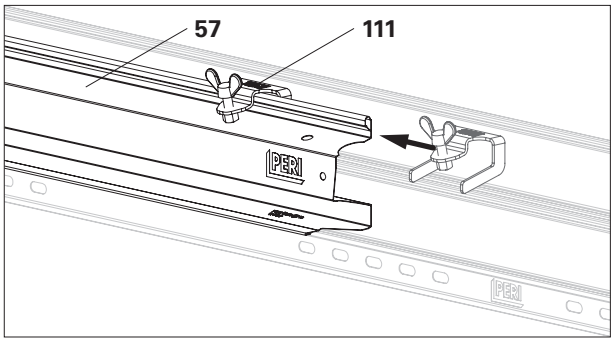


Fig. B7.07

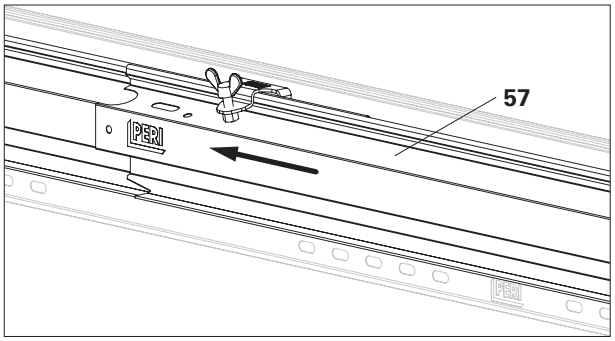


Fig. B7.08

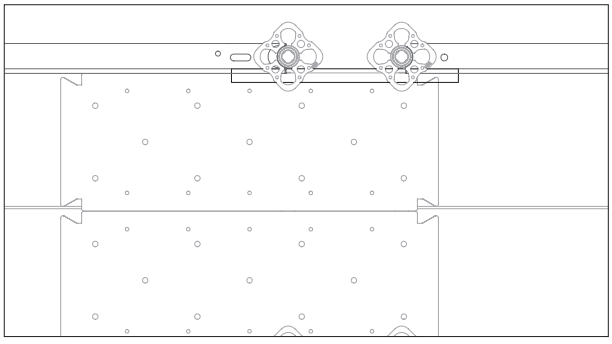


Fig. B7.08a

Cover Plate UDP

- Max. LC3 in the transition area.
- Create lateral protection in the transition area individually using PPE.

Assembly

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

1. Connect partial scaffolds at the greater distance with, for example, Horizontal Ledger UH-2 75 (**97**).
2. Thread the Cover Plate UDP (**39**) through the gap and place it between the subframes on top of both deck sides.
3. Pull the wedge (**39.1**) out of the clamping part (**39.2**) and lower the clamping part over the horizontal ledger (**97**).
4. Insert the wedge into the clamping part and hammer it tight.

→ Cover plate is installed. (Fig. B7.09 – Fig. B7.09b)

Application examples

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

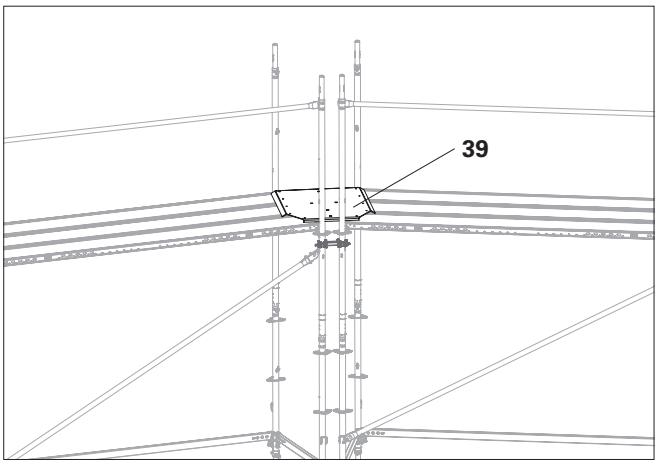


Fig. B7.09

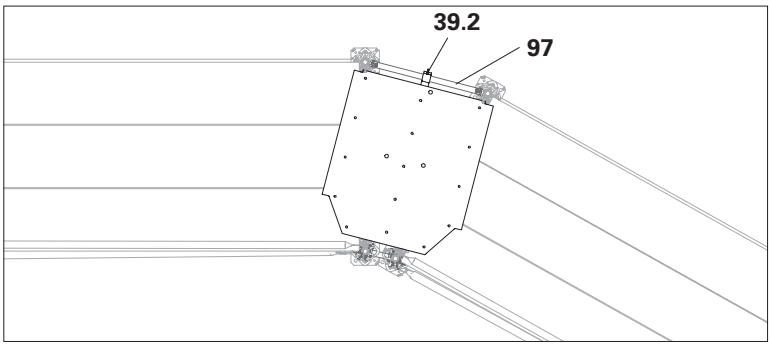


Fig. B7.09a

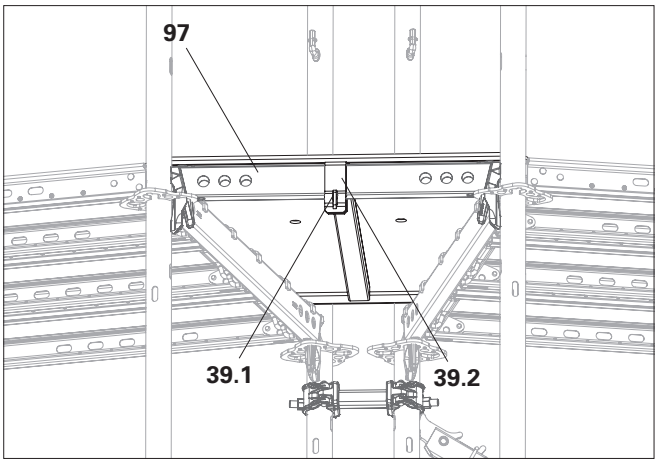


Fig. B7.09b

General information

If all bays in the basic scaffold are to be >LC3, external access must be fitted.

The scaffold access can be realised in two ways.
The following section describes the version involving Standard EVOTOP EVM 200 and Stair Guardrail EAG.
For the version with Standard UVR and Horizontal Ledger UH-2, see Section H examples "External access" on page 227.

- Follow the prescribed assembly sequences!
- The scaffold access grows in line with the basic scaffold.
- Do not set any objects down on the scaffold access.

The staircases are intended for scaffolding bays with 2.50 m and 3.00 m widths.
Length-determining components, e.g. Horizontal Ledger UH-2, must be selected accordingly.
Both versions are assembled in the same way.
(Fig. B8.01)

- When erecting the basic scaffold in this bay, the guardrail in advance is assembled last as this will be dismantled again later.

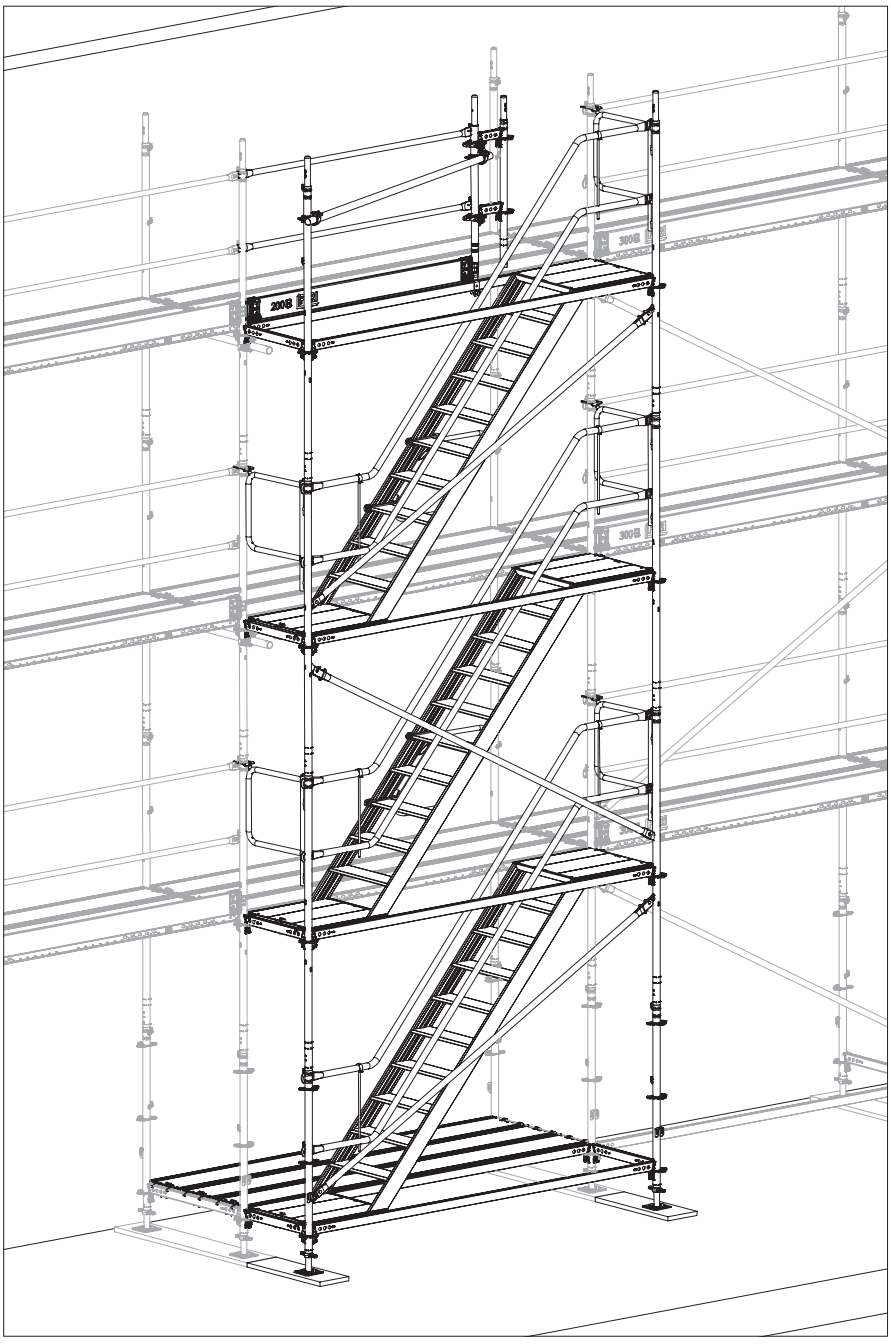


Fig. B8.01

Base level

Components

10 Adjusting Base Plate UJB
23 Base Standard EVOTOP EVS 124
94 Horizontal Ledger UH-2 300
98 Horizontal Ledger UH-2 67

Assembly

1. Position Adjusting Base Plates UJB (**10**) 67 cm apart.
2. Position Base Standards EVOTOP EVS 124 (**23**) on Adjusting Base Plates UJB (**10**).
3. Connect Base Standards (**23**) to the basic scaffold with Horizontal Ledgers UH-2 67 (**98**). Do not secure the wedges yet.
4. Connect base standards to the Horizontal Ledger UH-2 (**94**). Do not secure the wedges yet.
5. Horizontally align the base level using a spirit level.
6. Hammer all wedges into place.

→ The base level is now installed. (Fig. B9.02)

Decks in the base level of the basic scaffold increase walking comfort. They are not required from a structural point of view.

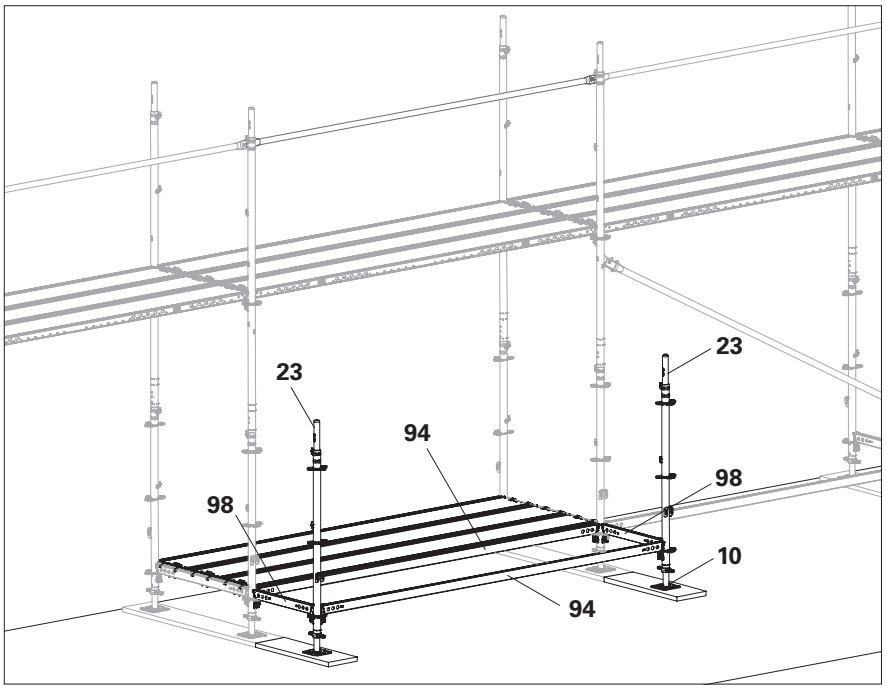


Fig. B8.02

First staircase

Components

22 Standard EVOTOP EVM 200
54 End Guardrail EPF 67
76 Staircase UAS/EAS
77 Stair Guardrail EAG
79 Locking Pin EAG
98 Horizontal Ledger UH-2 67

Assembly

1. Pre-assemble the End Guardrail EPF (**54**) on the Standard EVOTOP EVM 200 (**22**).
2. Fit the standard (**22**) with pre-mounted end guardrail (**54**) to Base Standard EVOTOP EVS 124 (**23**).
3. Fit Horizontal Ledger UH-2 67 (**98**) between the standard (**22**) and the basic scaffold as an upper stair support. Secure the wedges.

(Fig. B8.03)

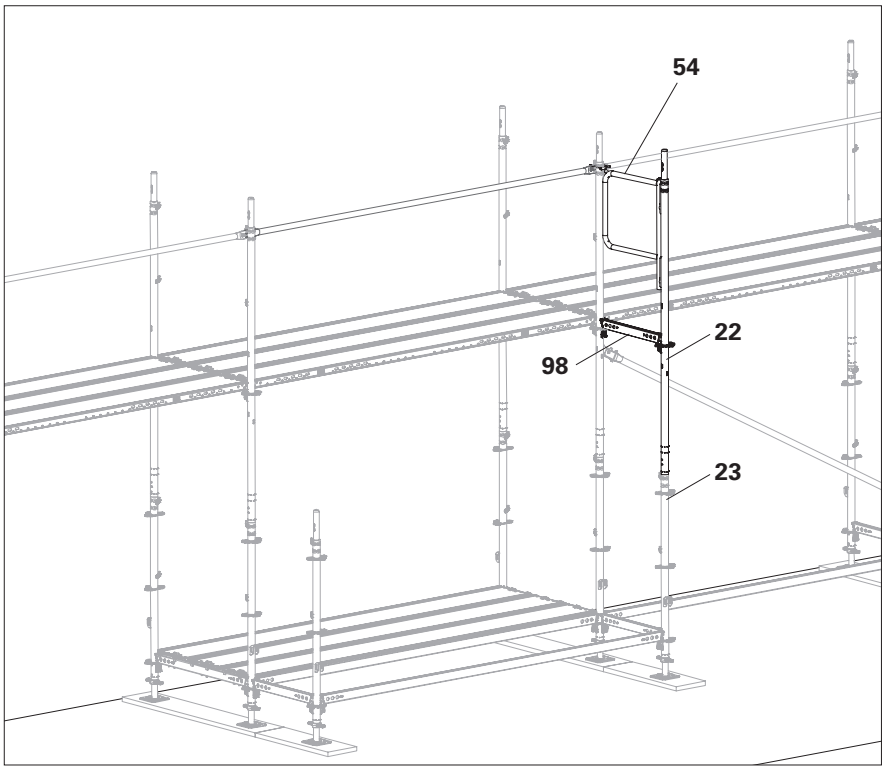


Fig. B8.03

4. Attach Staircase UAS/EAS (**76**) firstly to the top Horizontal Ledger UH-2 67 and then to the bottom one.
5. Fit two Stair Guardrails EAG (**77**) between the standard (**22**) and base standard (**23a**). See Section "Stair Guardrails EAG" on page 24.
6. At the step at the bottom, connect both Stair Guardrails EAG (**77**) with Locking Pin EAG (**79**). To do so, insert the locking pin through the holes of the guardrail posts.

(Fig. B8.04)

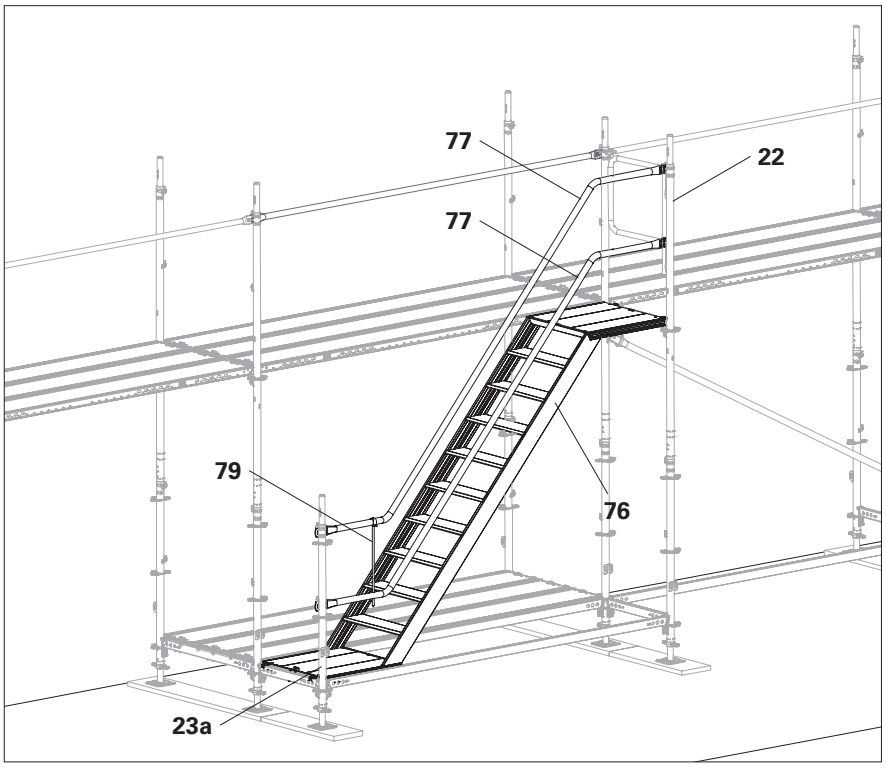


Fig. B8.04

Have both lift locks (**76.1**) of the staircase dropped beneath the crossbar? If not, lift the staircase slightly and let it drop into position or operate the lift lock manually.
(Fig. B8.04a)

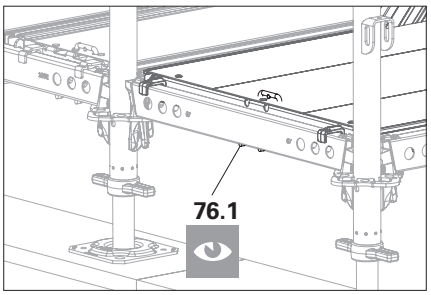


Fig. B8.04a

Optional:
- A Stair Guardrail UAG can also be mounted on the inside of the staircase.
- Fit a Toeboard Steel UPY 67 or Toeboard UPF 67 at the front sides of the staircase.

7. Attach the second standard (**22**) to the base standard.
8. Brace both outer legs using a face brace (**20**) and horizontal ledger (**94+98**).
9. At the step at the top, connect both Stair Guardrails EAG (**77**) with Locking Pin EAG (**79**).

→ The first staircase is now installed.
(Fig. B8.05)

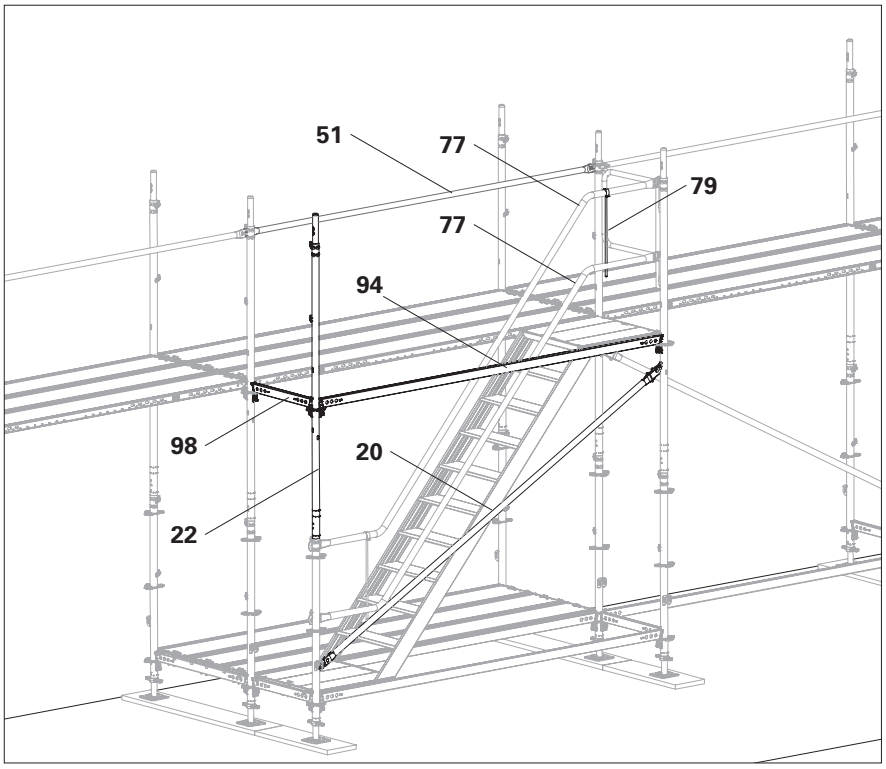


Fig. B8.05

- The guardrail post (**51**) of the basic scaffold remains in place until the next stair level is installed.
- To access the upper scaffolding level, detach the guardrail post (**51**) on the side of the stair exit, enter the scaffolding level and then reattach it straight away.

Additional staircases

Components

22 Standard EVOTOP EVM 200
54 End Guardrail EPF
76 Staircase UAS/EAS
77 Stair Guardrail EAG
78 Stair Guardrail UAH-2
79 Locking Pin EAG
98 Horizontal Ledger UH-2 67

Assembly

1. Fit two Standards EVOTOP EVM 200 (**22**) to the basic scaffold and connect them with a horizontal ledger (**98**).
2. As described for the base level, fit the standard EVOTOP EVM (**22a**) with pre-mounted end guardrail (**54**) and Horizontal Ledger UH-2 67 (**98a**).
3. Install Staircase UAS/EAS (**76**) from the staircase below.

(Fig. B8.06)

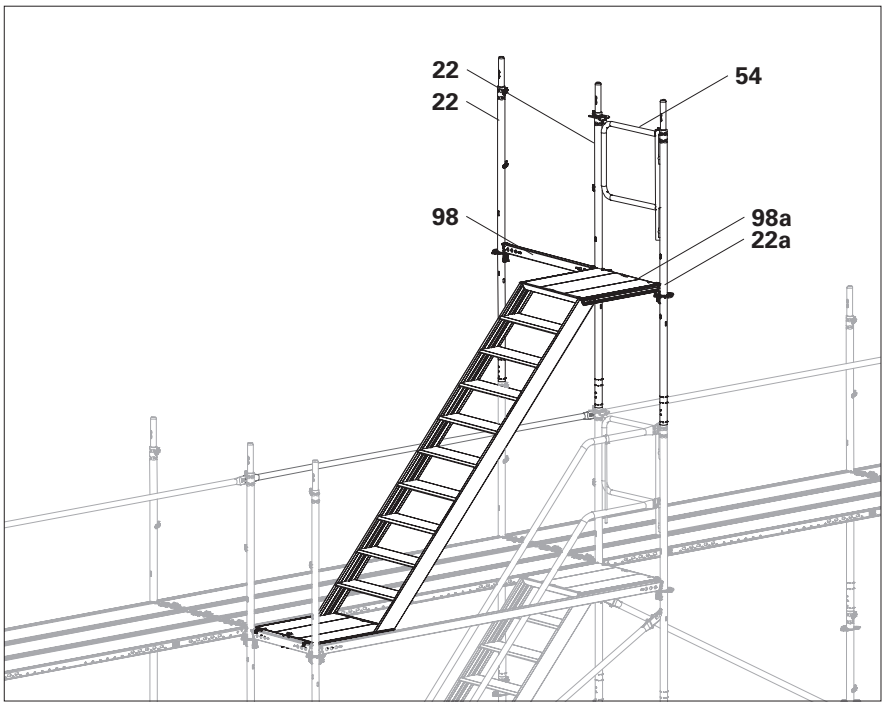


Fig. B8.06

■ From the basic scaffold:

4. Install two Stair Guardrails EAG (**77**).
5. Both Stair Guardrails EAG can be connected with Locking Pins EAG (**79**) through the post holes (**77.3**) and thus braced.
6. Fit the End Guardrail EPF (**54**).
7. A Stair Guardrail UAH-2 (**78**) can also be installed on the inside of the staircase.
8. Remove guardrail post (**51**) from the basic scaffold.

(Fig. B8.07)

The Stair Guardrail UAH cannot be mounted on the Flex Stair UAS-2 or Easy Stair EAS.

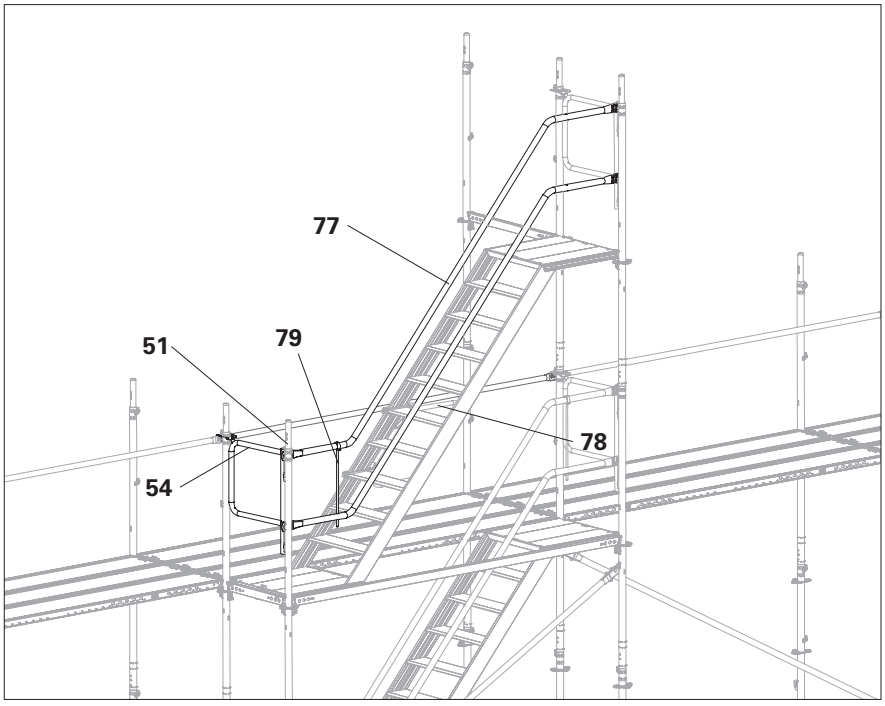


Fig. B8.07

Installing an additional scaffolding level

1. Complete the lateral protection on the existing scaffolding level.
2. Assemble the next scaffolding level.
3. If necessary, connect the Stair Guardrail EAG (**77**) at the top with another locking pin (**79**).

→ The scaffolding level and staircase are now installed.

(Fig. B8.08)

Install additional scaffolding levels and staircases in the same way.

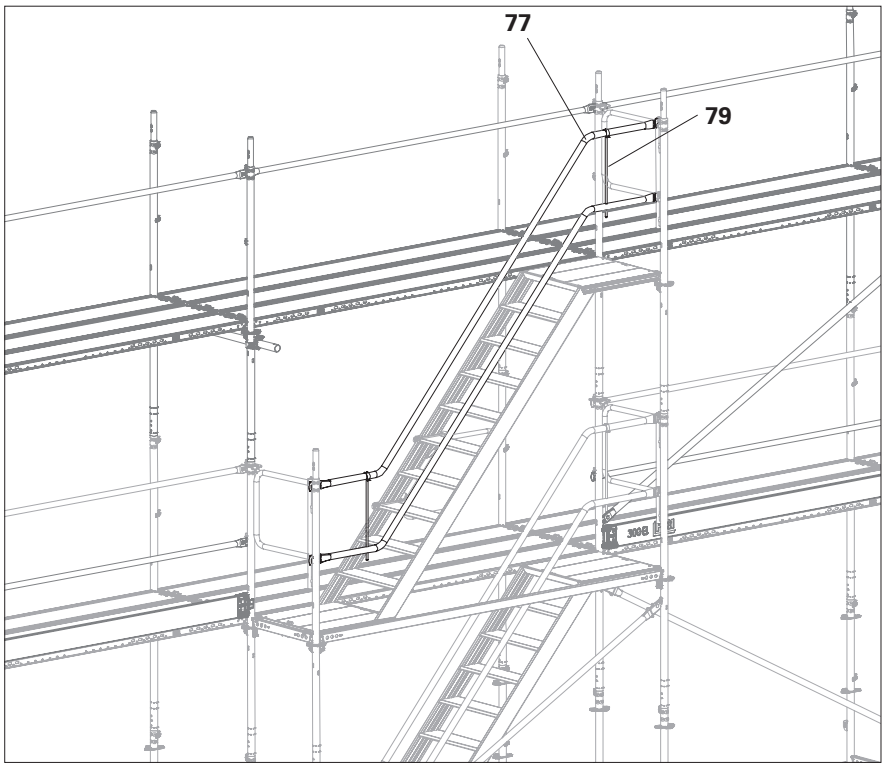


Fig. B8.08

Bracing and anchoring

Components

20 Face Brace EBF
22 Standard EVOTOP EVM 200
46 Wall Tie UWT
48 Standard Coupler RA 48/48
94 Horizontal Ledger UH-2 300

Assembly

Brace the scaffold staircase at every level
with a horizontal ledger (**94**) and face brace (**20**).

Anchor the basic scaffold in the staircase area as per the tie pattern, see Section "External scaffold access" on page 169.
Anchor both standards of the basic scaffold. The outer leg of the scaffold access does not need to be anchored:

- Anchor Wall Tie UWT (**46**) to both standards (**22**) of the basic scaffold with one standard coupler (**48**) in each case.

(Fig. B8.09)

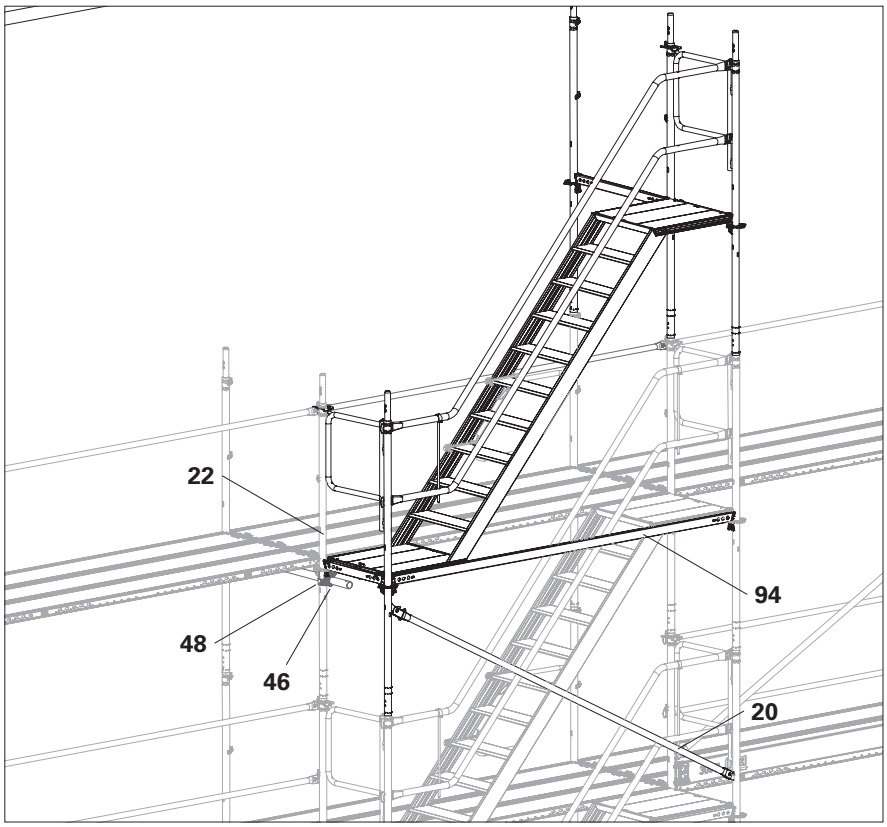


Fig. B8.09

Top staircase

Components

22 Standard EVOTOP EVM 200
98 Horizontal Ledger UH-2 67

Always anchor and brace the basic scaffold in the top staircase.

Assembly
Assemble the uppermost staircase in the same way as an additional staircase, and in addition:
1. Attach the Standard EVOTOP EVM (**22a**) and connect it to the basic scaffold using the Horizontal Ledger UH-2 (**98**).

(Fig. B8.10)

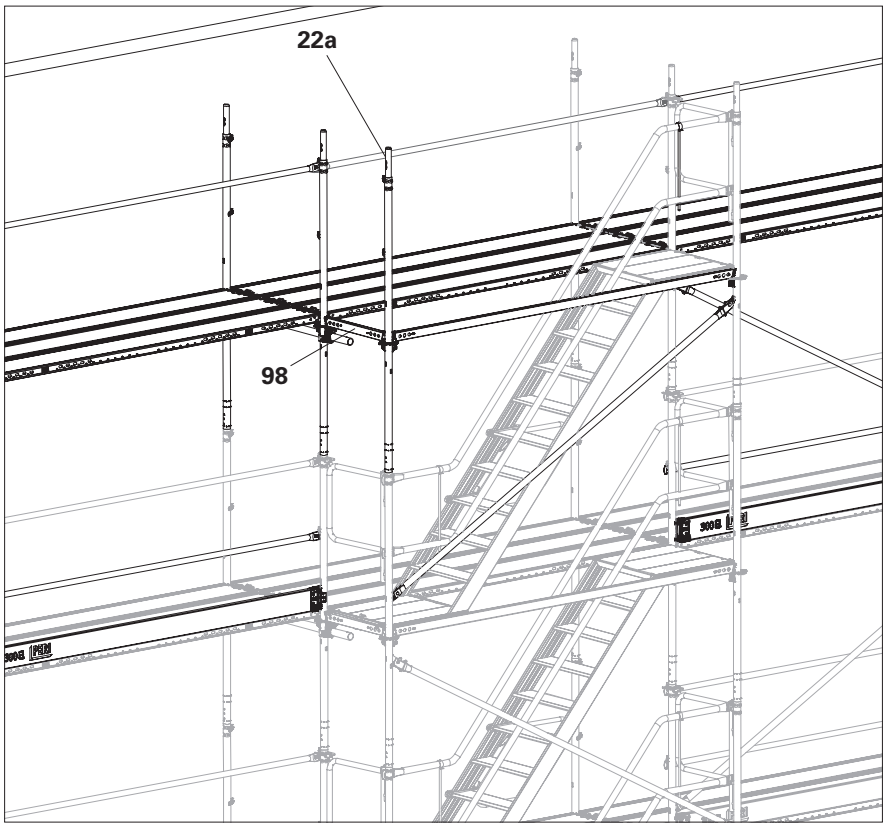


Fig. B8.10

Guardrails

Variant 1

Components

22 Standard EVOTOP EVM 200
48 Standard Coupler RA 48/48
50 Guardrail Post EVP
51 Guardrail EPG
56 Toeboard Wood UPF
75 Scaffolding tube
93 UH-Spigot-2
94 Horizontal Ledger UH-2 300

1. Prior to installing the deck on the top level of the basic scaffold, fit a Horizontal Ledger UH-2 (**94**) onto the outer side.
2. Attach the UH-Spigot-2 (**93**) to the horizontal ledger so that the wedge can be secured from the outside. (Fig. B8.11a)
3. Attach the Guardrail Post EVP (**50**) to the UH-Spigot-2.
4. Attach the Guardrail EPG (**51**) to the Standard EVOTOP EVM 200 (**22**) and Guardrail Post EVP (**50**). (Fig. B8.11)
5. Align UH-Spigot-2 (**93**) and secure the wedge.
6. Complete the lateral protection on the basic scaffold: fit Guardrail EPG (**51a**) as an intermediate guardrail and also fit Toeboard UPF (**56**).
7. Brace Guardrail Post EVP on the Standard EVOTOP EVM 200 (**22a**) with scaffolding tube (**75**) and standard couplers (**48**).
   Length of the scaffold tube for
   – scaffolding bay 2.5 m = 1.75 m
   – scaffolding bay 3.0 m = 2.2 m.

→ The top staircase is now installed. (Fig. B8.12)

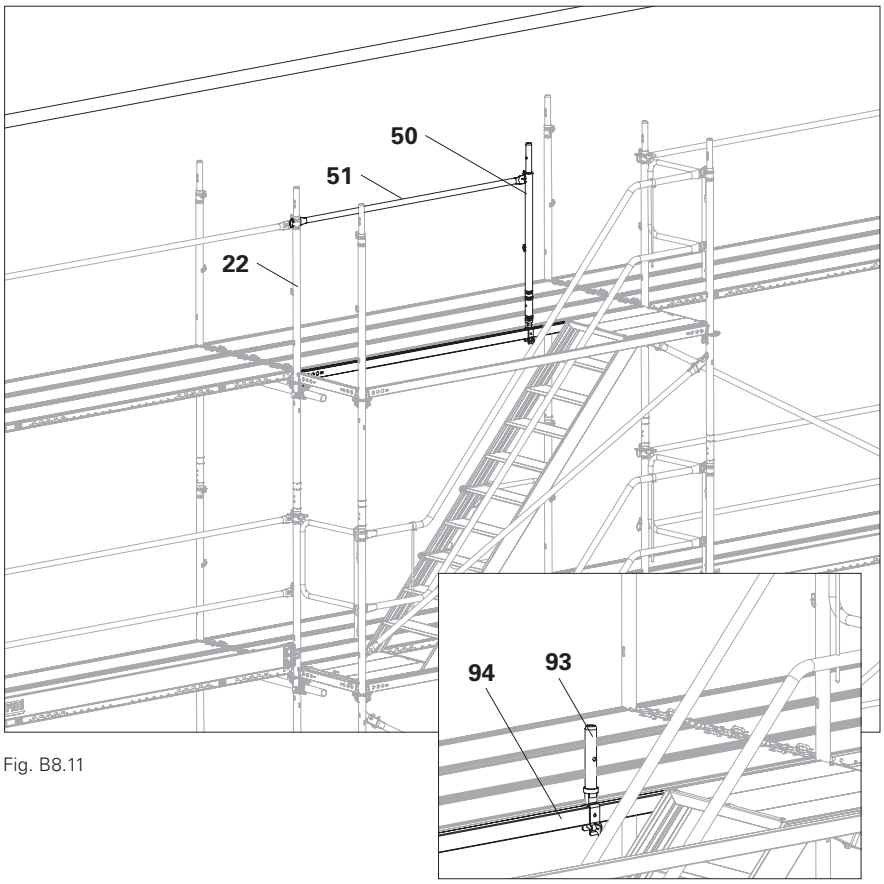


Fig. B8.11

Fig. B8.11a

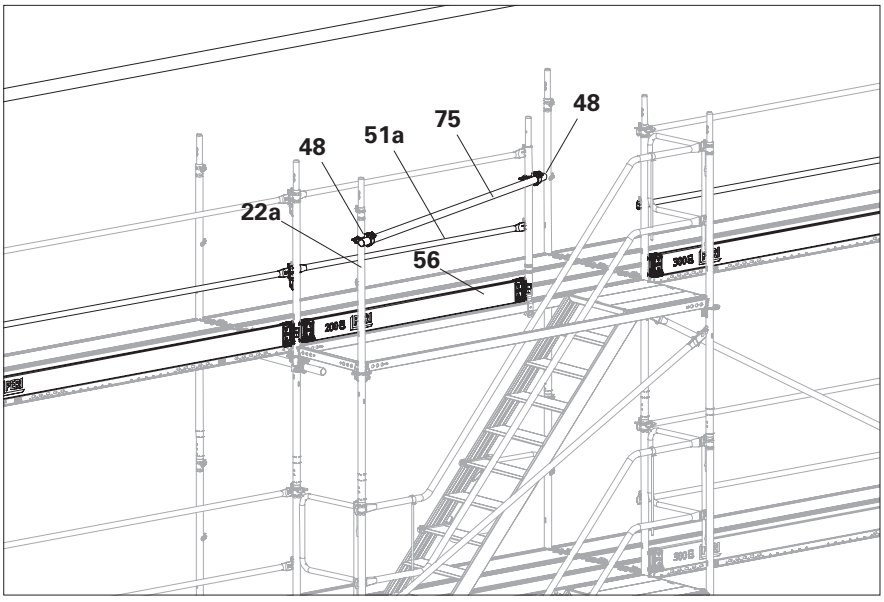


Fig. B8.12

Variant 2

Fit a Standard UVR-2 200 (**83**) with pre-mounted Guardrail Holder EPW (**59**) onto the basic scaffold as an outer leg in place of the Standard EVOTOP EVM.

Components

56 Toeboard Wood UPF
59 Guardrail Holder EPW
83 Standard UVR-2 200
85 Standard UVR-2 100
93 UH-Spigot-2
94 Horizontal Ledger UH-2 300
95 Horizontal Ledger UH-2 200

Assembly

1. Prior to installing the deck on the top level of the basic scaffold, fit a Horizontal Ledger UH-2 (**94**) onto the outer side.
2. Attach the UH-Spigot-2 (**93**) to the horizontal ledger so that the wedge can be secured from the outside. (Fig. B8.13a)
3. Fit a Standard UVR-2 100 (**85**) onto UH-Spigot-2.
4. Fit Horizontal Ledger UH-2 (**95**) between Standards UVR-2 (**83 + 85**) as a guardrail post.
   – For bay length 250 cm: Horizontal Ledger UH-2 150,
   – For bay length 300 cm: Horizontal Ledger UH-2 200.
   (Fig. B8.13)
5. Align UH-Spigot-2 (**93**) and secure the wedge.

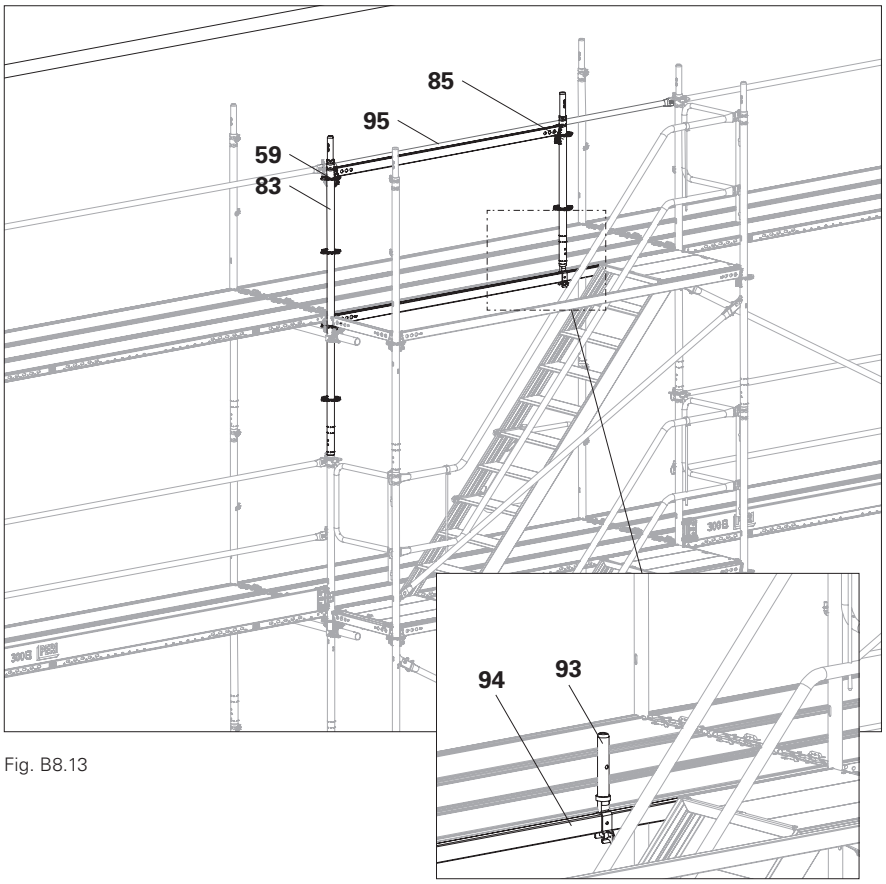


Fig. B8.13

Fig. B8.13a

6. Complete the lateral protection in the basic scaffold: Fit horizontal ledgers (**95a**) as intermediate guardrails as well as Toeboards UPF (**56**).
7. For the adjacent scaffolding bay, fit a Guardrail Holder EPW (**59**) and a Guardrail EPG (**51**) as an intermediate guardrail.

→ The top staircase is now installed. (Fig. B8.14)

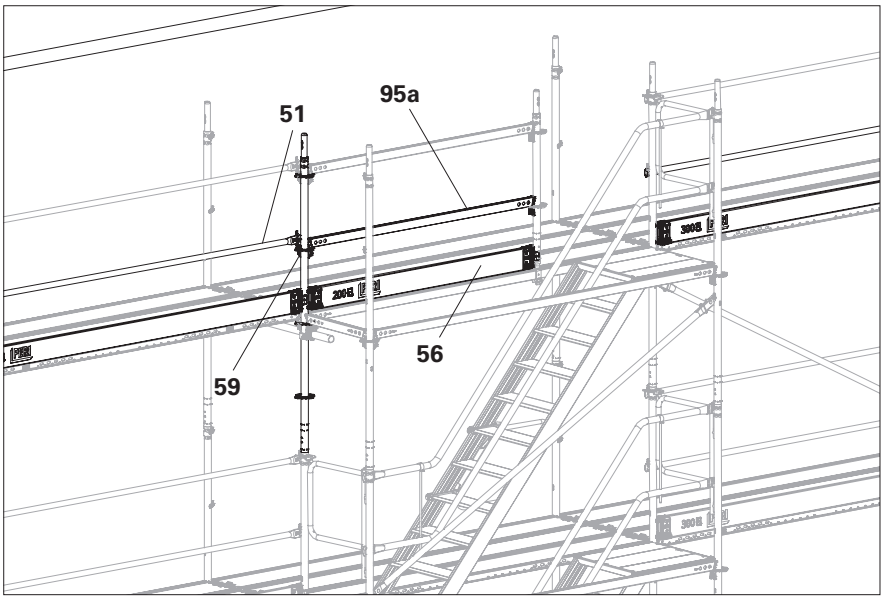


Fig. B8.14

Exit width 75 cm:

Components

50	Guardrail Post EVP
96	Horizontal Ledger UH-2 25
85	Standard UVR-2 100
100	Rosett Coupler UEV 180°

Assembly

For side guardrail variant 1 only:

1. Fit two Rosett Couplers UEV 180° (**100**) to Guardrail Post EVP (**50**).
2. Pre-assemble two Horizontal Ledgers UH-2 25 (**96**) on a Standard UVR-2 100 (**85a**).
3. Fit the pre-assembled standard (**85a**) to rosett couplers (**100**) with the horizontal ledgers (**96**). Secure the wedges. (Fig. B8.15)

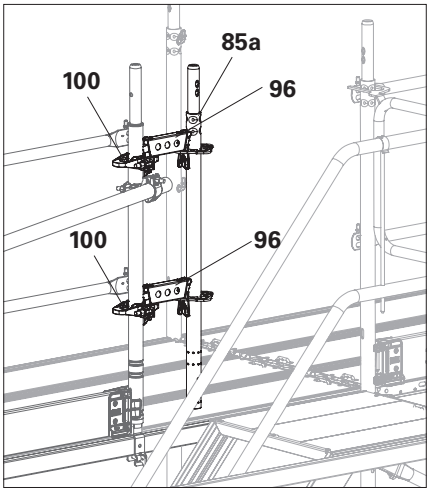


Fig. B8.15

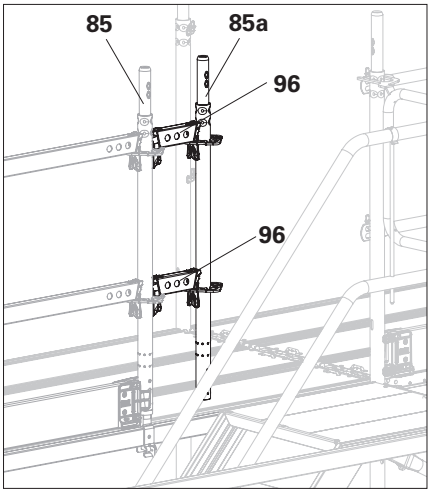
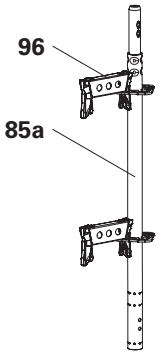


Fig. B8.16

For side guardrail variant 2 only:

1. Pre-assemble two Horizontal Ledgers UH-2 25 (**96**) on a Standard UVR-2 100 (**85a**).
2. Fit the pre-assembled standard (**85a**) to standard (**85**) with the horizontal ledgers (**96**). Secure the wedges. (Fig. B8.16)



Externally, with entry platforms.

Alternatively, the external access point can be designed with entry platforms.

- Assembly is carried out as the basic scaffold is being built.
- The assembly sequence corresponds to that of the basic scaffold.

(Fig. B8.17)

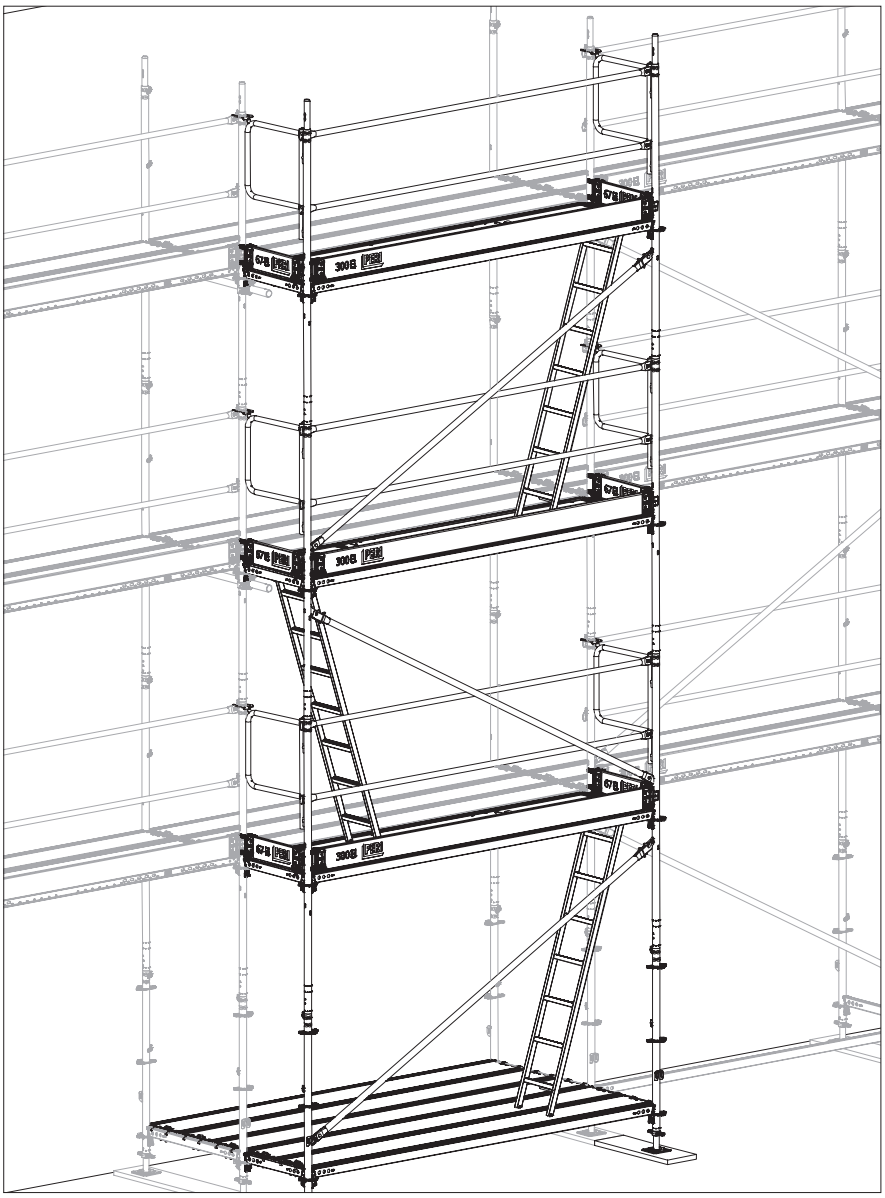


Fig. B8.17

General information

- Comply with the prescribed assembly sequences!
- During modification work, the scaffold must be cordoned off to prevent any access!
- Anchor the scaffold section in the area of the opening on the left and right as an independent scaffold section at right angles and parallel to the facade.

Installing and removing scaffolding bays

The integrated lift lock allows individual decks to be removed and refitted.
This means that:
- individual bays can be opened or
- gaps that were necessary during erection can be closed later.

Opening the scaffolding bay

Components

51 Guardrail EPG
54 End Guardrail EPF 100
58 Guardrail Coupler EPR

Assembly

From the scaffolding bay to be dismantled:
1. Fit a Guardrail Coupler EPR (**58**) onto both Standards EVOTOP on the left and right of the planned opening. Fit the guardrail hooks facing outwards, at the same height as the guardrail hooks on the inside.
2. Attach a temporary Guardrail EPG on the outside on the Guardrail Couplers EPR.
3. An End Guardrail EPF (**54**) must be installed on the side where the fitting order of the guardrail posts needs to be changed.

(Fig. B9.01)

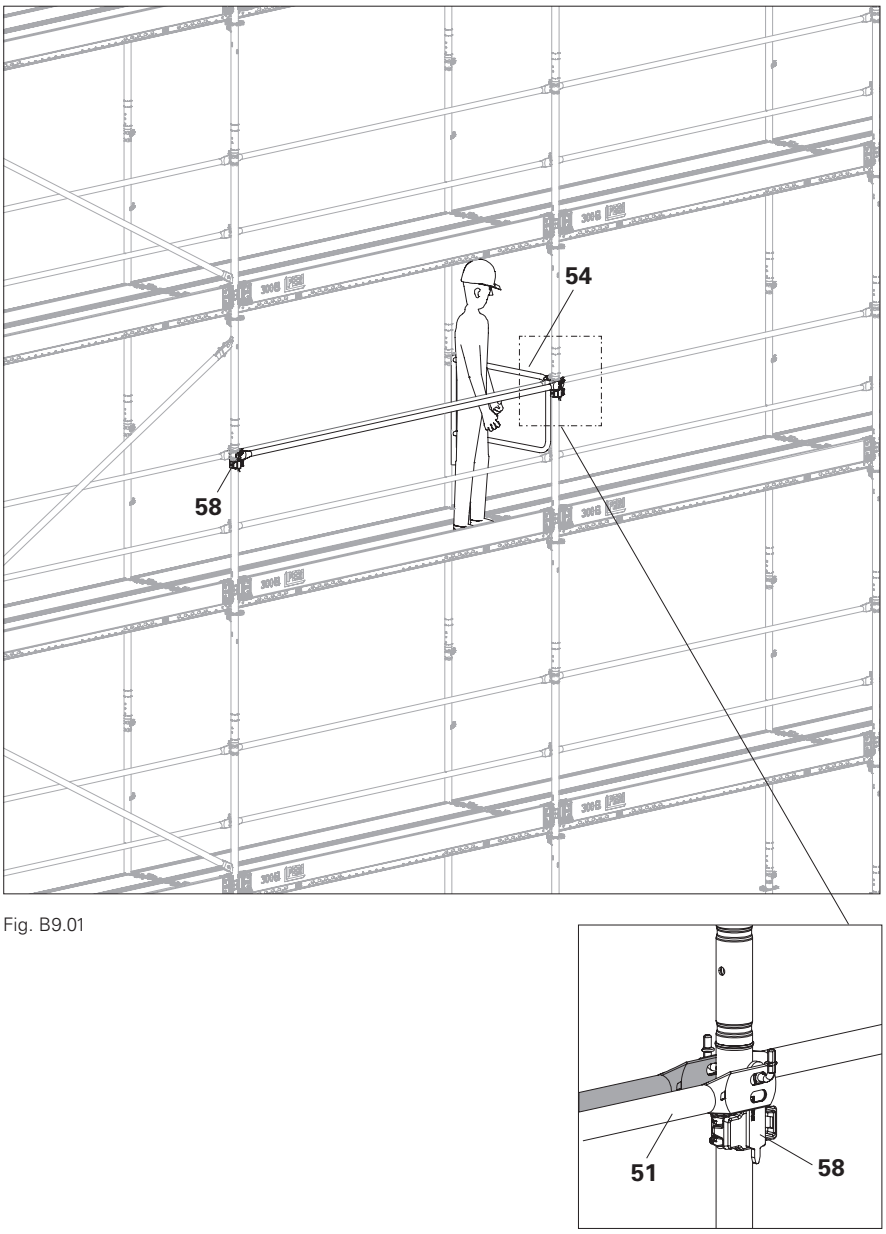


Fig. B9.01

4. Change the fitting order of the guardrails (51a, 51b) so that the guardrail post (**51a**) to be dismantled is hanging freely. (Fig. B9.01a)
5. Dismantle the temporary guardrail post (**51**) and guardrail couplings again.
6. Proceed in the same way with the intermediate guardrail.

- The side on which the guardrail posts have to be re-positioned depends on the assembly direction. The other guardrail side remains unchanged. (Fig. B9.01b)
- To remove/rehang, grasp the guardrail post in the middle, pull it towards you and turn it up as far as the horizontal of the connection piece. If necessary, turn it back slightly and then up again.

Leave guardrail couplings fitted if scaffolding bay is to be closed again.

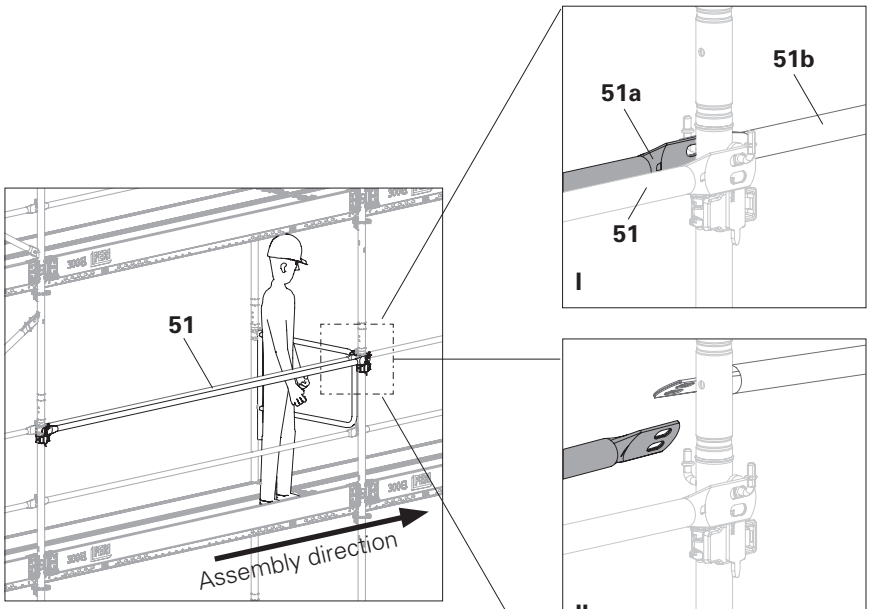


Fig. B9.01a

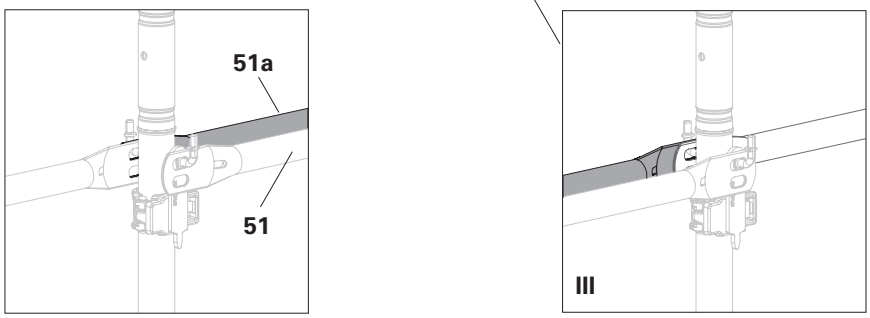


Fig. B9.01b

From the adjacent scaffolding bay:
7. Block off the scaffolding bay with a second end guardrail (**54**).
8. From a safe position, disconnect Guardrail EPG (**51a**) and the intermediate guardrail from the guardrail hooks and remove the toe board.

(Fig. B9.01c)

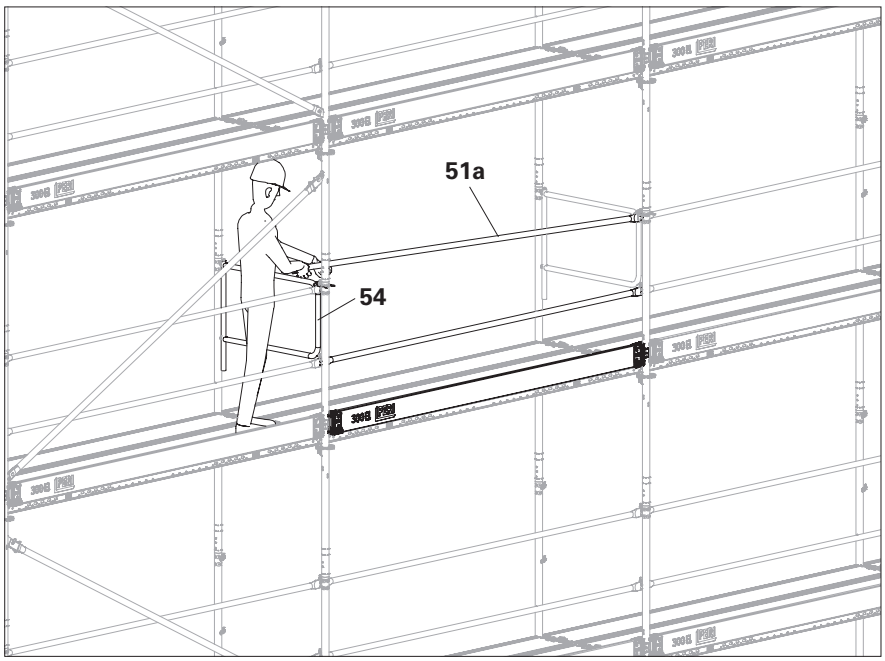


Fig. B9.01c

From the level immediately below:
9. Remove the decks.
10. Install Toeboards UPF (**56**).
→ The scaffolding bay is now dismantled.
(Fig. B9.02)

Provide suitable access to cut scaffolding level.

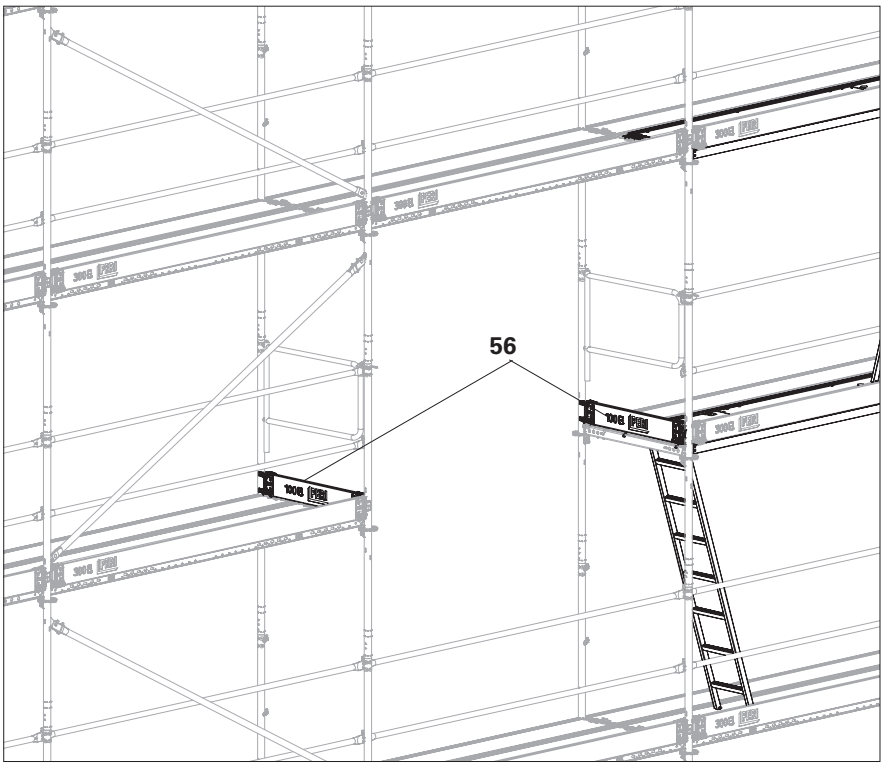


Fig. B9.02

Closing the scaffolding bay

Components

30 Steel Deck EDS
51 Guardrail EPG
52 End Guardrail EPF
56 Toeboard UPF
58 Guardrail Coupler EPR

Assembly
From the level immediately below:
1. Remove the Toeboards UPF (**56**).
2. Install the decks (**30**).
(Fig. B9.03)

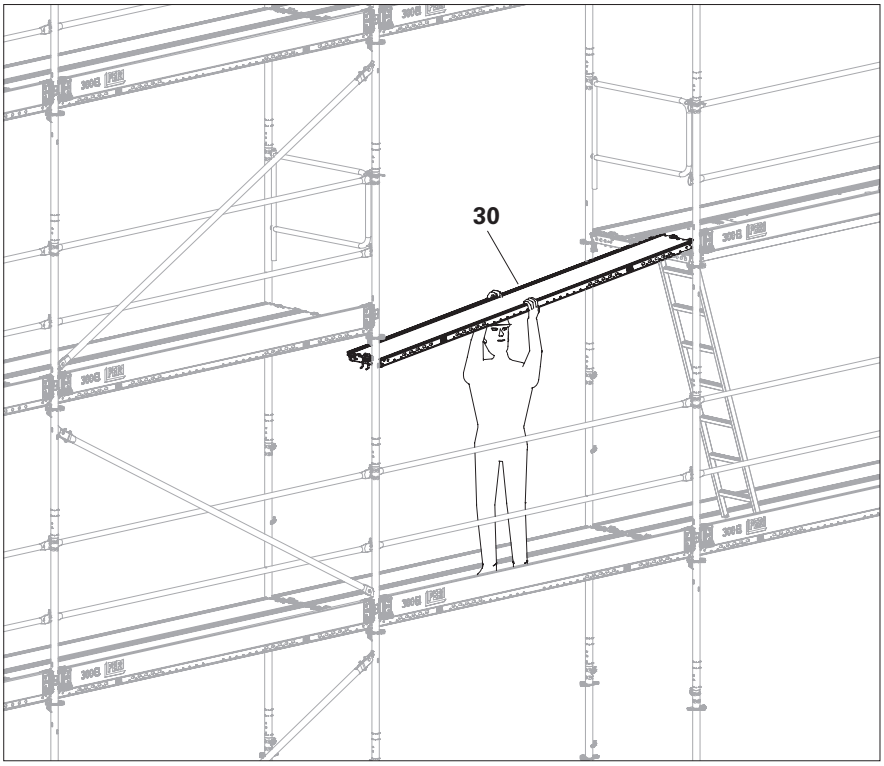


Fig. B9.03

- From the adjacent scaffolding bay:

3. Attach the Guardrail EPG and intermediate guardrail post to the guardrail hooks and fit the toe board.
4. Remove the first End Guardrail EPF (**52**). (Fig. B9.03a)

- From the scaffolding bay to be closed:

5. Fit a Guardrail Coupler EPR (**58**) onto both Standards EVOTOP on the left and right of the opening. Fit the guardrail hooks facing outwards, at the same height as the guardrail hooks on the inside.(Fig. B9.03c)
6. Attach a temporary additional Guardrail EPG (**51**) to the outside of the Guardrail Couplers EPR.
7. Make suitable amendments to the fitting order of the guardrail posts. (Fig. B9.03b)

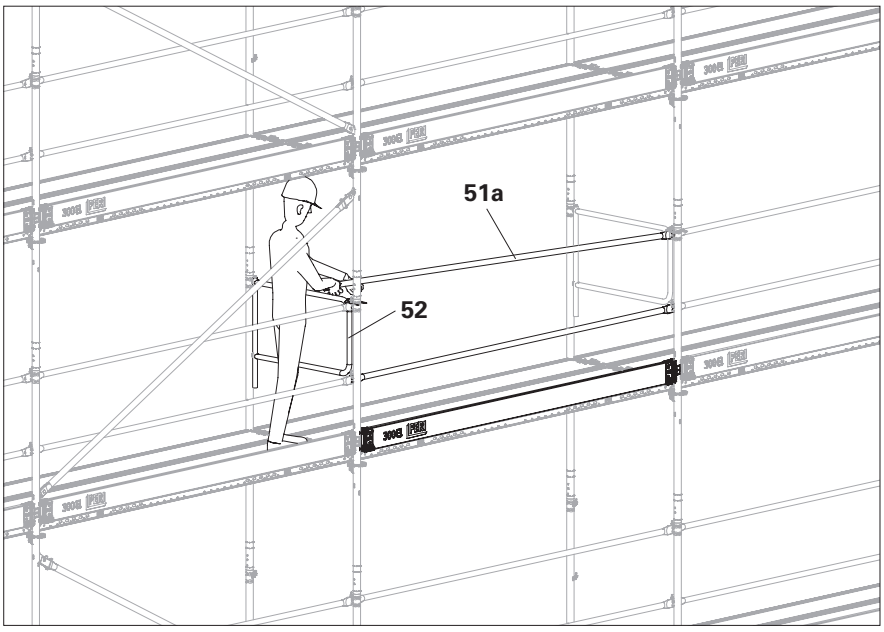


Fig. B9.03a

- To remove/rehang, grasp the guardrail post in the middle, pull it towards you and turn it up as far as the horizontal of the connection piece. If necessary, turn it back slightly and then up again.
- Install the guardrail post in the same direction as was used for the scaffold assembly, namely in a "fish scale arrangement". Otherwise it cannot be removed correctly during dismantling operations.

8. Remove the temporary guardrail post (**51**) and guardrail couplings (**58**).
9. Proceed in the same way with the intermediate guardrail.
10. Remove the second end guardrail (**52a**).

→ The scaffolding bay is now closed.

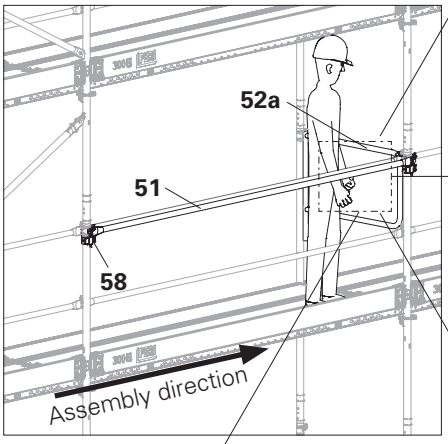
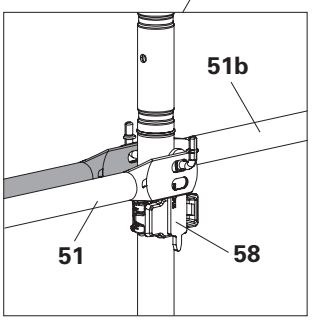
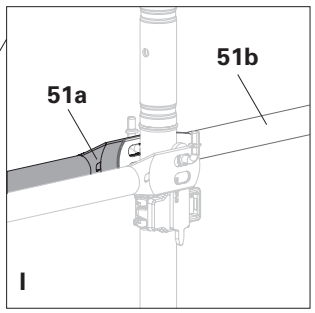
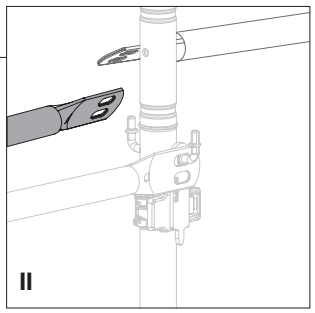


Fig. B9.03b







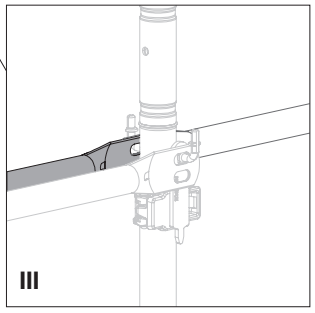


Fig. B9.03c

Closing scaffold areas

Any building around an obstruction (e.g. with a console bracket scaffold for formwork materials) that is necessary due to the construction process can be subsequently closed using PERI UP Easy. (Fig. B9.04)

Components

16 Ledger EVOTOP UH-2 100
22 Standard EVOTOP EVM 200
30 Steel Deck EDS
51 Guardrail EPG
52 Advance Guardrail UPA 100
56 Toeboard UPF

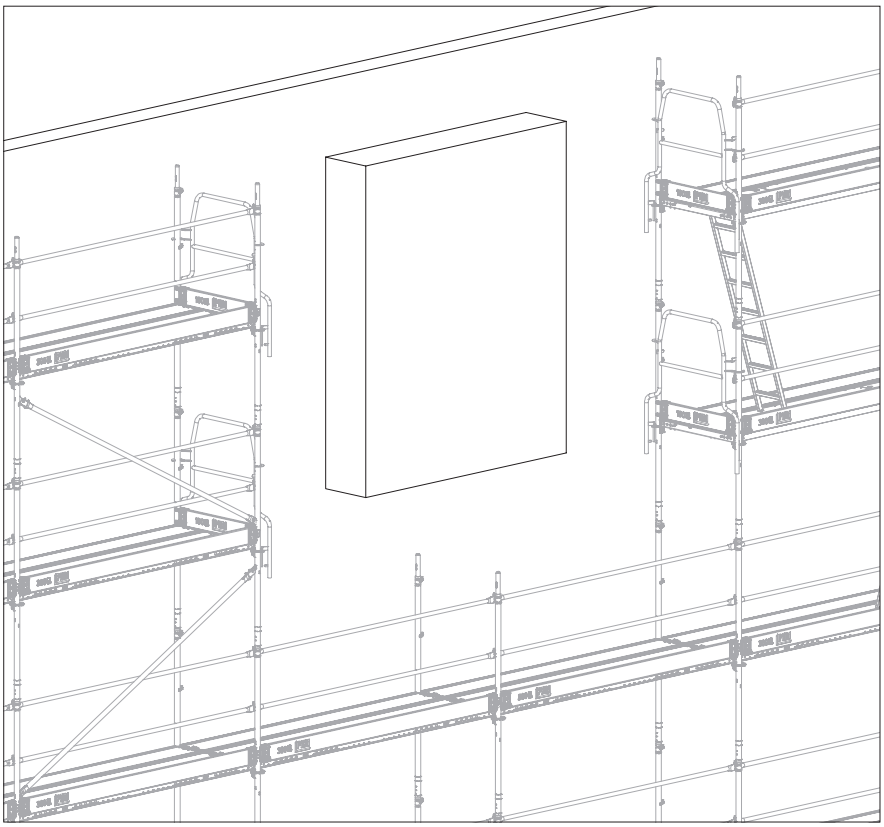


Fig. B9.04

Assembly

1. From the level immediately below, fit 2 Standards EVOTOP EVM 200 (**22**) and Ledger EVOTOP UH-2 100 (**16**) with Guardrail EPG (**51**).
2. Install the decks (**30**).

(Fig. B9.05)

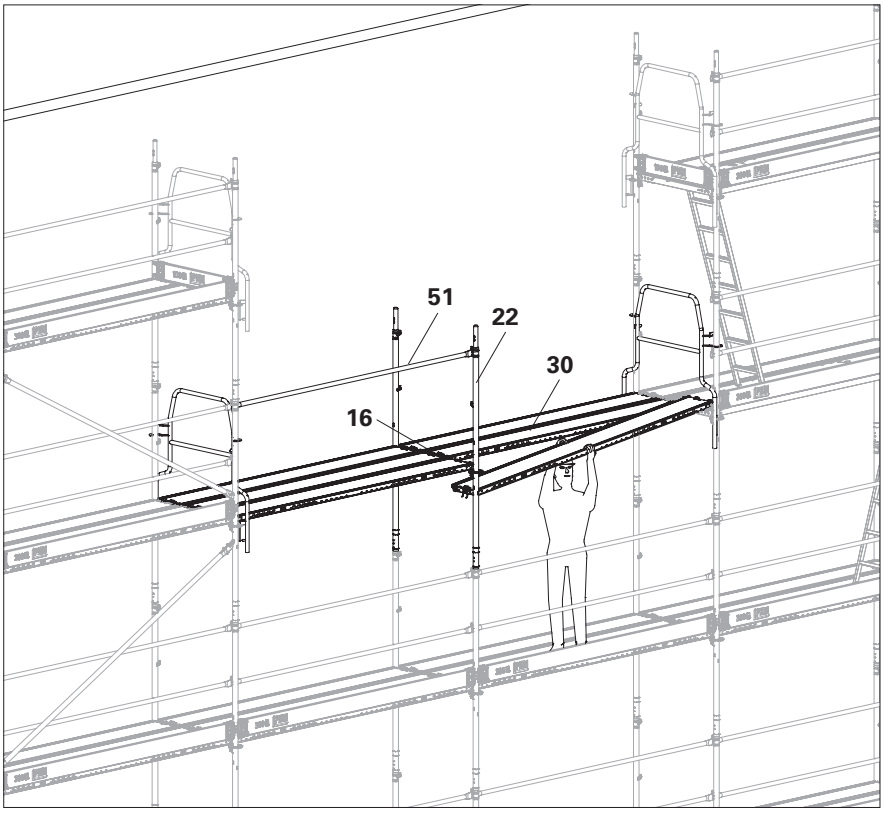


Fig. B9.05

3. From a safe position, install the second Guardrail EPG (**51**).
4. Remove End Guardrails in Advance UPA (**52**).

(Fig. B9.06)

Install the guardrail post in the same direction as was used for the scaffold assembly, namely in a "fish scale arrangement". Otherwise it cannot be removed correctly during dismantling operations, see Section "Installing and removing scaffolding bays" from page 94.

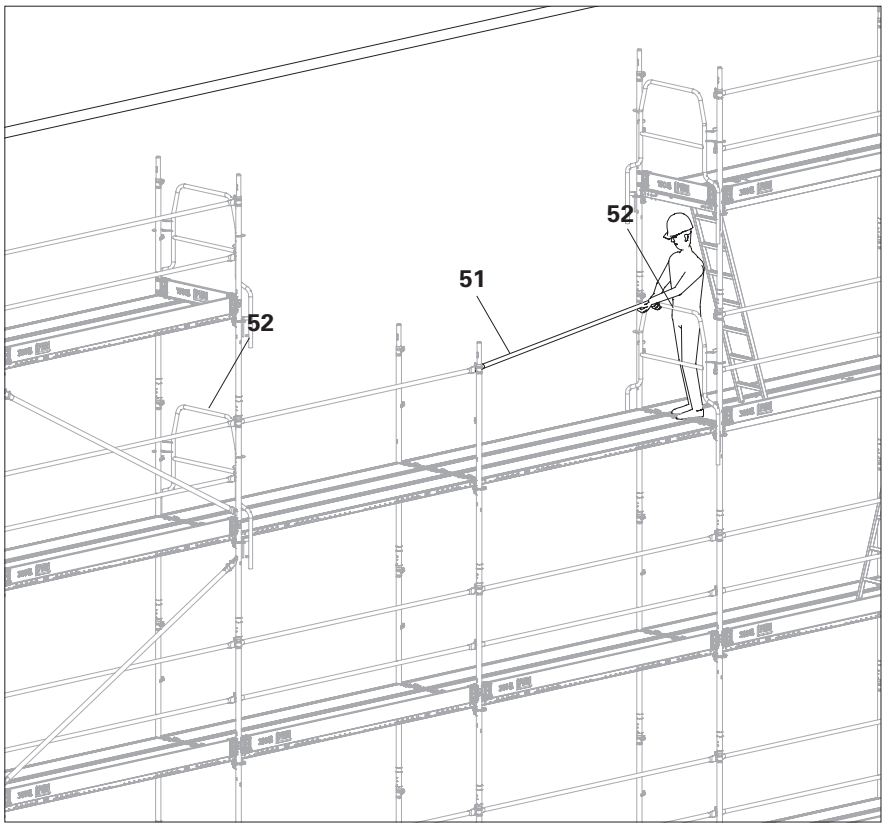


Fig. B9.06

5. Complete the lateral protection with intermediate guardrails (**51a**) and Toeboards UPF (**56**), see Section "B4 Other levels" on page 64.
6. Repeat work steps 1 – 5 until all levels are closed.

→ The scaffold area is closed.

(Fig. B9.07)

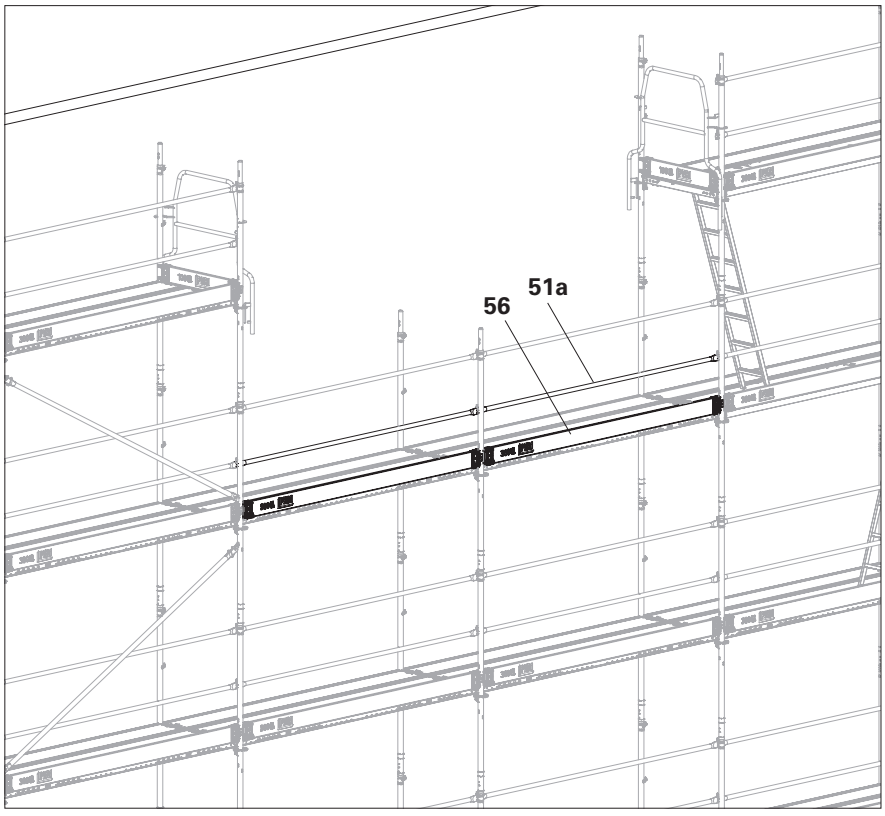


Fig. B9.07

Nets/tarpaulin

Note

Stability compromised!

⇒ When cladding with nets or tarpaulin, pay particular attention to the increased number of ties.

The number of ties is largely determined by the wind permeability of the netting and ratio of openings on the facade, see section Tie pattern.

- Likewise, the front side of the facade scaffold must be closed up to the wall.

Cladding with nets

The standard configurations shown in the "Tie pattern" sections were determined with coefficients for the netting of cf ⊥ ≤ 0.6 and cf II ≤ 0.2.
The nets are to be fastened to the verticals according to the manufacturer's instructions. (Fig. B10.01 + Fig. B10.02)

Cladding with tarpaulins

The tarpaulins are to be fastened to the verticals according to the manufacturer's instructions (not shown).

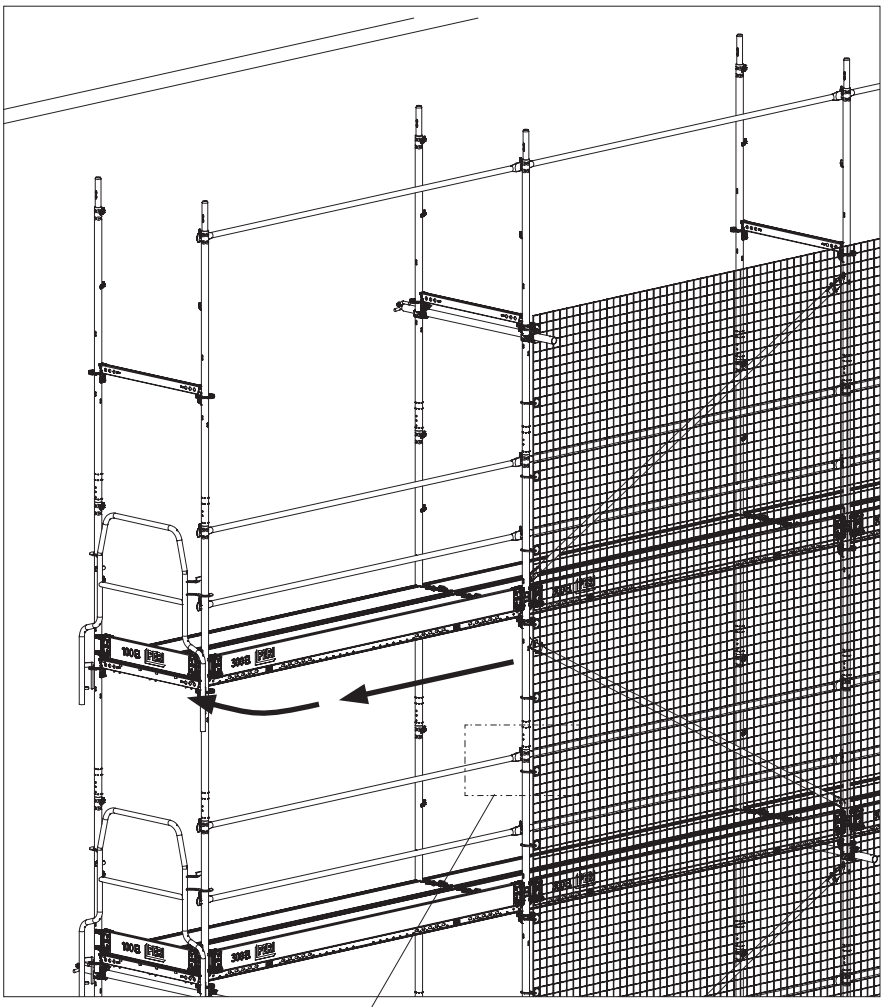


Fig. B10.01

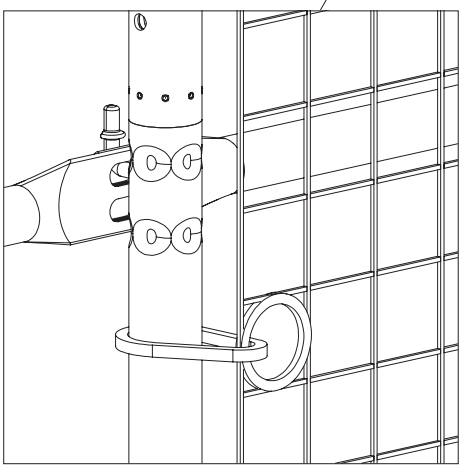


Fig. B10.02

Compatible in 3 dimensions

PERI UP Easy EVOTOP and PERI UP Flex

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

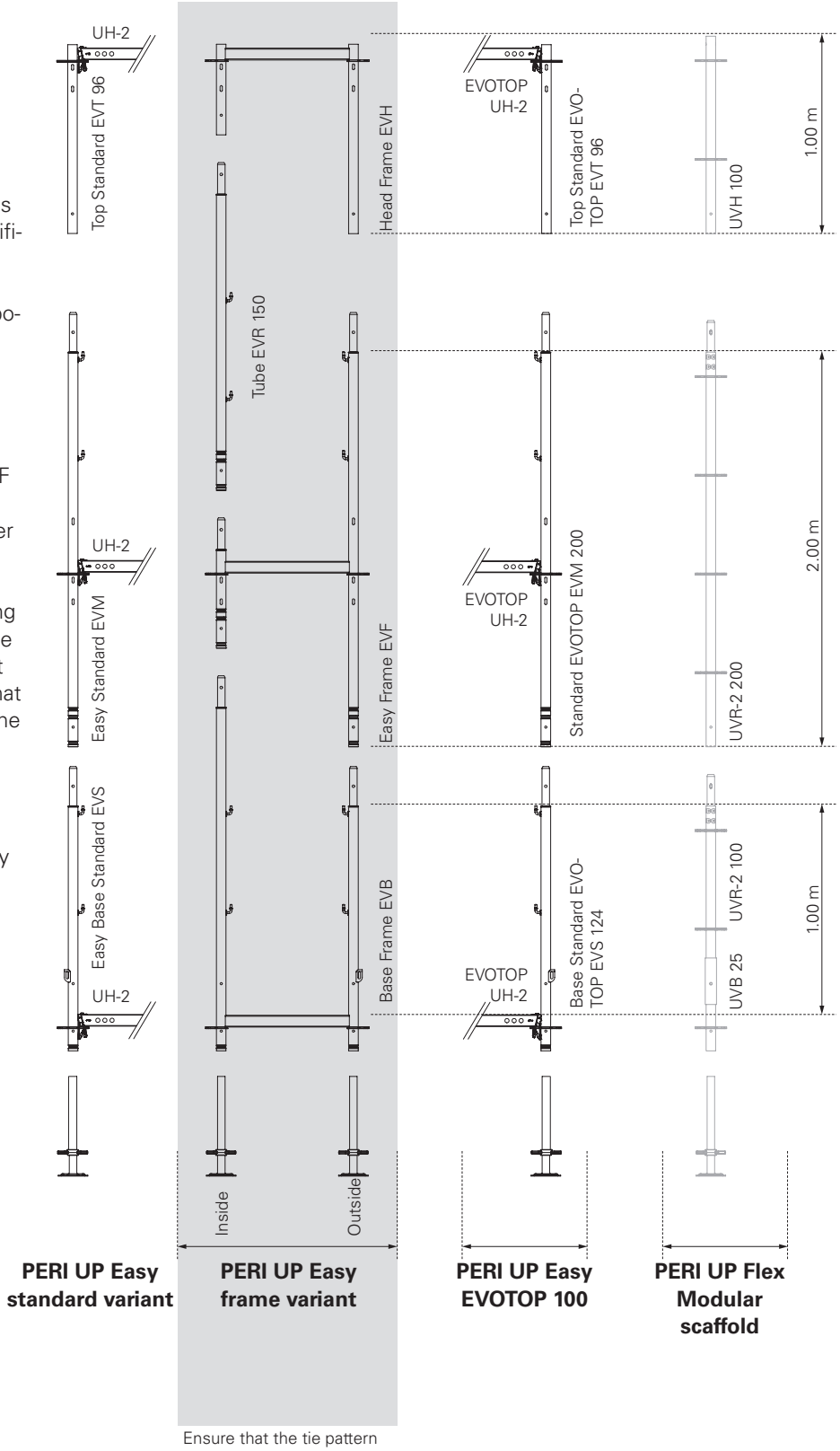
Due to coordinated system and component dimensions, the PERI UP Easy Facade Scaffold can be combined with the PERI UP Easy as a standard, EVOTOP or frame variation.

Thus, for example, an Easy Frame EVF can be replaced by a Standard UVR-2 50, UVR-2 200 and a Horizontal Ledger UH-2.

The integrated protection against lifting facilitates a smooth transition from the modular to the frame variants without additional components. This means that any combination is possible, both in the vertical and horizontal directions.

If scaffolds are erected with different PERI UP variants, the respective Instructions for Assembly and Use apply to each variant:
- PERI UP Easy standard variant
- PERI UP Easy frame variant
- PERI UP Flex Modular Scaffolding
- PERI UP Easy EVOTOP, available here.

Possible applications in conjunction with Standards UVR-2:
- Height compensation.
- Building around obstacles, e.g. bay windows.
- Attaching console brackets in 50-cm height increments.
- Attaching material platforms.
- Compatibility with PERI UP Flex staircases.



Ensure that the tie pattern is geometrically compatible!

Fig. C1.01

Side-by-side combination

The PERI UP Flex Modular Scaffold is connected to the PERI UP Easy EVOTOP Facade Scaffold using Steel Decks EDS (**30**) or Combi Decks EDW and Guardrails EPG (**51**). (Fig. C1.02)

- The Flex area is erected as stand-alone scaffold according to the Instructions for Assembly and Use for PERI UP Flex.
- Comply with the applicable tie pattern.

Assembly

1. Insert Guardrail Holder EPW (**59**) into the rosettes of the Standards UVR-2 (**82**). Guardrail hooks must point inwards towards the deck. Secure the wedges.
2. Attach Guardrails EPG and intermediate guardrails to the guardrail hooks.
3. Fit the steel decks onto the Horizontal Ledgers UH-2 100.
4. Fit Toeboard UPF.

(Fig. C1.02 + Fig. C1.03)

Components

30	Steel Deck EDS
51	Guardrail EPG
59	Guardrail Holder EPW
82	Standard UVR-2

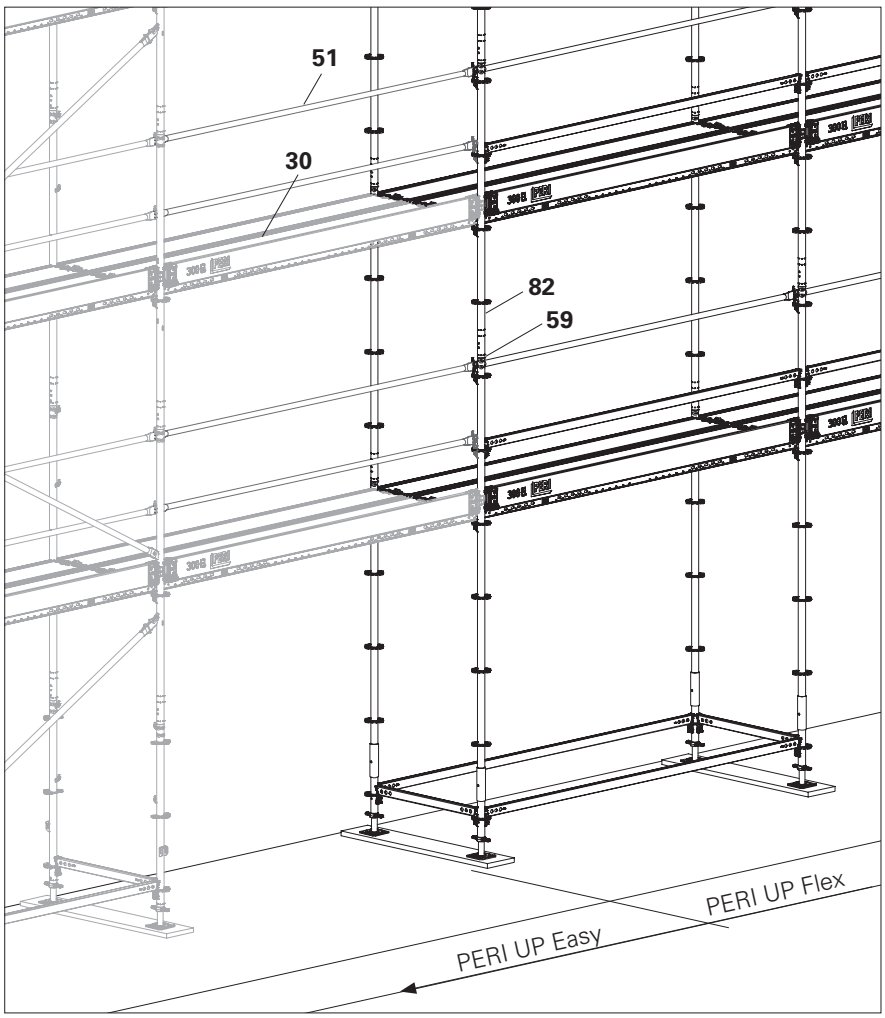


Fig. C1.02

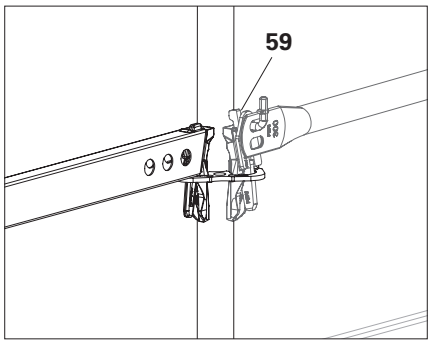


Fig. C1.03

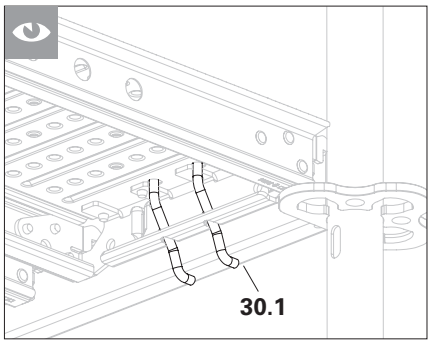


Fig. C1.04

Have both lift locks (**30.1**) dropped beneath the crossbars and horizontal ledgers? (Fig. C1.04)
If not, lift the deck slightly and let it drop into position or operate the lift lock manually.

One above the other combination

A system change can take place at any height.

PERI UP Flex on PERI UP Easy EVOTOP

1. Fit Standards UVR-2 200 (**83**) onto the Standards EVOTOP EVM 200 (**22**) on the inner and outer sides.
2. Fit one Node Brace UBK (**89**) at the transition to the PERI UP Flex. Fit one side (**89.1**) to the last deck level of the Easy scaffold in the rosette of the standard (**22**) (Fig. C1.05b).
   Fit the other side (**89.2**) in the rosette of the Standard UVR-2 200 (**83**) on the first deck level of the Flex scaffolding. (Fig. C1.05a)
3. Continue erecting according to the Instructions for Assembly and Use for PERI UP Flex.
4. Create lateral protection for the PERI UP Flex consisting of Guardrail EPG (**51**) and Horizontal Ledger UH-2 (**94**).
5. Fit Toeboards UPF.

(Fig. C1.05)

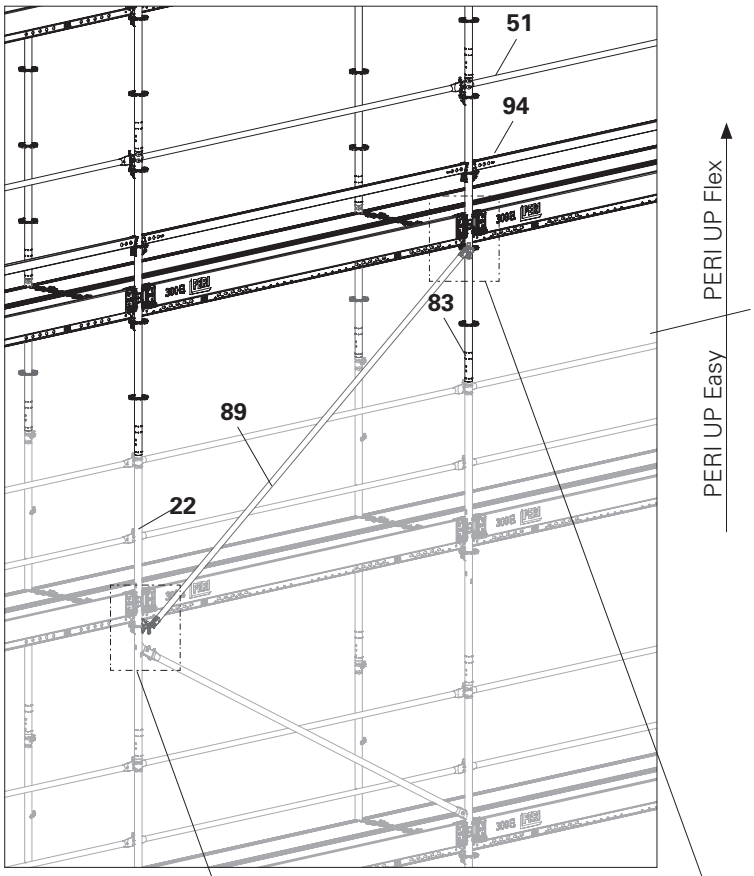


Fig. C1.05

Components

22	Standard EVOTOP EVM 200
51	Guardrail EPG
59	Guardrail Holder EPW
83	Standard UVR-2 200
89	Node Brace UBK
94	Horizontal Ledger UH-2

The guardrail can also be mounted in advance using Standards UVR-2 and Guardrail Holders EPW.

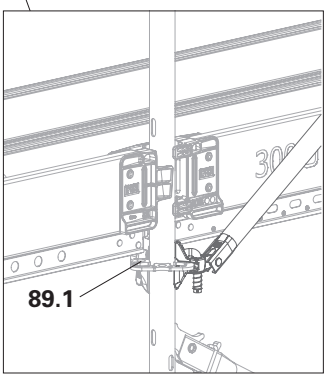


Fig. C1.05b

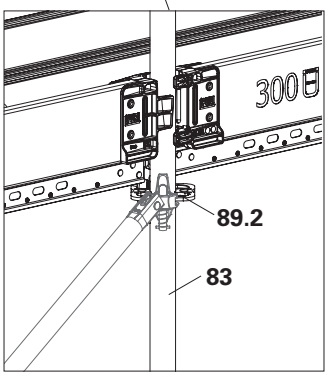


Fig. C1.05a

PERI UP Easy EVOTOP and PERI UP Flex

1. End the flex scaffold at the inner and outer legs 1 m above deck level at the transition to the Easy scaffold. If necessary, fit a Standard UVR-2 100 (**85**) onto the inner side of the scaffold
2. Install Horizontal Ledgers UH-2 (**94**) or Guardrail Holders EPW (**59**) and Guardrail EPG (**51**) as guardrail posts.
3. Fit the Standards EVOTOP EVM 200 (**22**) with Guardrail Post in Advance EPG (**51**) onto the Standards UVR-2 (**83**).
4. Continue erecting according to the Instructions for Assembly and Use for PERI UP Easy EVOTOP 100.

(Fig. C1.06)

- In bays with Face Braces EBF

1. Form the outer leg of the Flex scaffold at the transition to the Easy scaffold from two Standards UVR-2 100 (**85a**). The pin hole of the standards is used for fitting the Brace Adapter EBA (**24**).
2. Fit the Brace Adapter EBA (**24**). Insert the twist protection into the hole of the Standards UVR.
3. Fit Face Brace EBF (**20**).

(Fig. C1.06a – Fig. C1.06c)

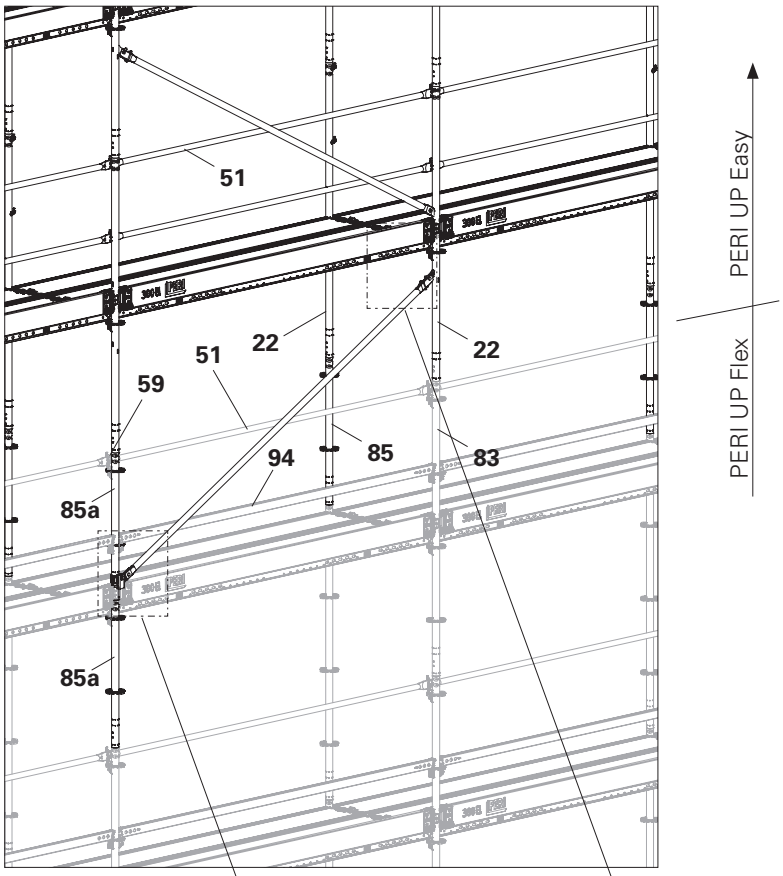


Fig. C1.06

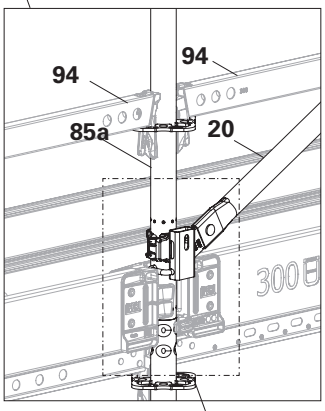


Fig. C1.06a

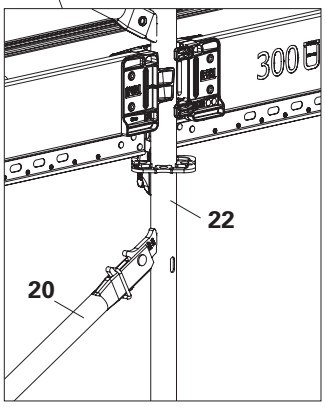


Fig. C1.06b

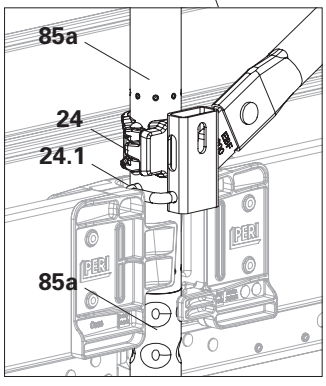


Fig. C1.06c

D1 Console brackets

General information

- For the permissible Load Classes, see Section "A7 System components: Console bracket" on page 42.
- Additional anchoring is required to mount the console brackets, see the section Tie pattern.

Internal console brackets

The following supports can be installed simultaneously on all scaffolding levels as internal console brackets.
Steel Decks EDS (**30**) are installed as decks.

The following supports are used:
- Supports UC 25, (with Decks UDG)
- Deck Supports UCS 33 (**60**).

Furthermore, the following may be used on all scaffolding levels:
- Console Brackets ECM 33 (**62**),
- Console Brackets UCB 25 (with Decks UDG)

All supports and console brackets are attached to rosettes of the Standards EVOTOP EVM 200 (**22**) or to the Top Standards EVOTOP 96 (**17**) on the top scaffolding level.

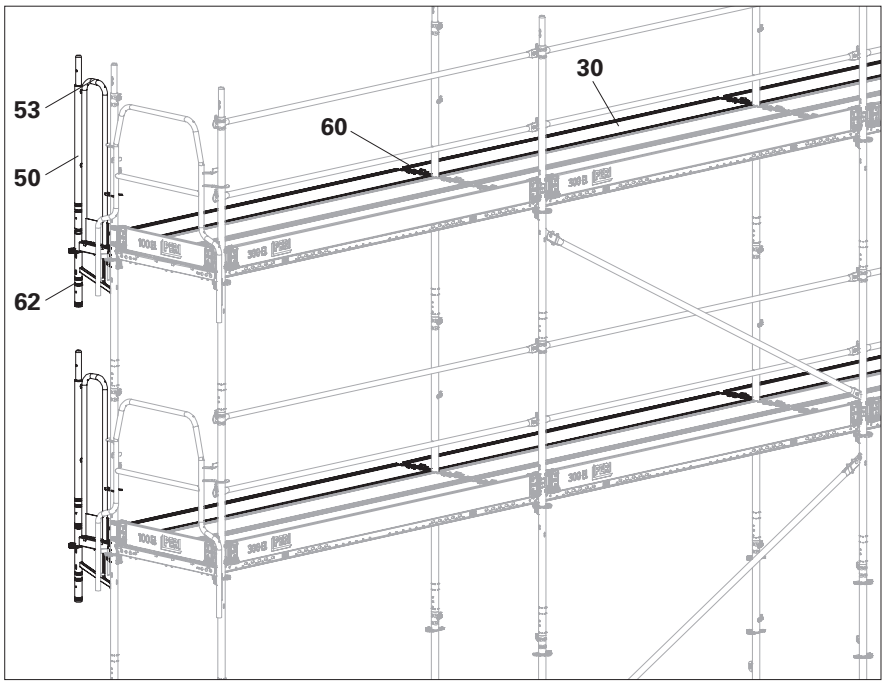


Fig. D1.01

Components

30 Steel Deck EDS
50 Guardrail Post EVP
51 Guardrail EPG
53 End Guardrail EPF 33
60 Deck Support UCS 33
62 Console Bracket ECM 33

Assembly

1. Fit Console Bracket ECM 33 (**62**) onto the edge frame column with pre-assembled Guardrail Post EVP (**50**). (Fig. D1.02 + Fig. D1.02a)
2. Fit Deck Support UCS 33 (**60**) onto the middle frame. (Fig. D1.03)
3. Insert Steel Decks EDS (**30**).
4. Fit the End Guardrail EPF (**53**). (Fig. D1.02)

→ The console brackets are now installed.

To assemble an inner guardrail (**51a**), fit Console Brackets ECM (**62**) with guardrail posts instead of Deck Supports UCS 33 (**60**).
(Fig. D1.03a + Fig. D1.03b)

Alternatively, Supports UC 25, Console Brackets UCB 25 and Decks UDG can be fitted as internal console brackets.

Edge frame column with Console Bracket ECM 33

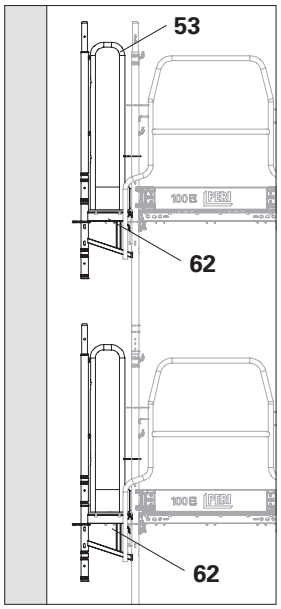


Fig. D1.02

Middle frame column with Deck Support UCS 33

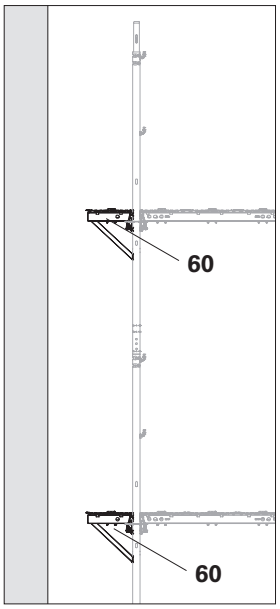


Fig. D1.03

Middle frame column with Console Bracket ECM 33 and guardrail post

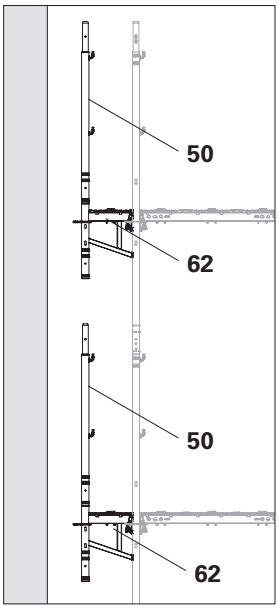


Fig. D1.03a

Edge frame column Middle frame column

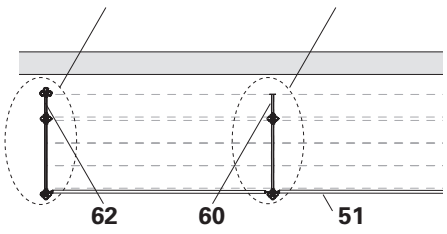


Fig. D1.02a

Alternatively: with inner guardrail (**51a**).

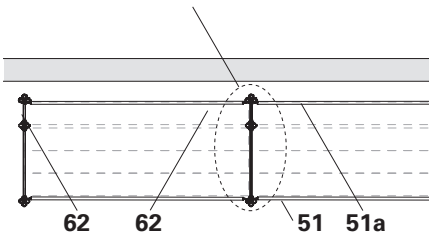


Fig. D1.03b

Internal console brackets with additional support

Two console brackets connected one behind the other can be installed simultaneously on the inner side of the scaffold at all scaffolding levels.

A minimum scaffold width of 0.9 m and additional, removable internal console brackets are recommended for ETICS assembly. Local laws and regulations must be observed.

Console brackets connected one behind the other are not covered by the standard configuration. Separate static proof for the stability is required here.

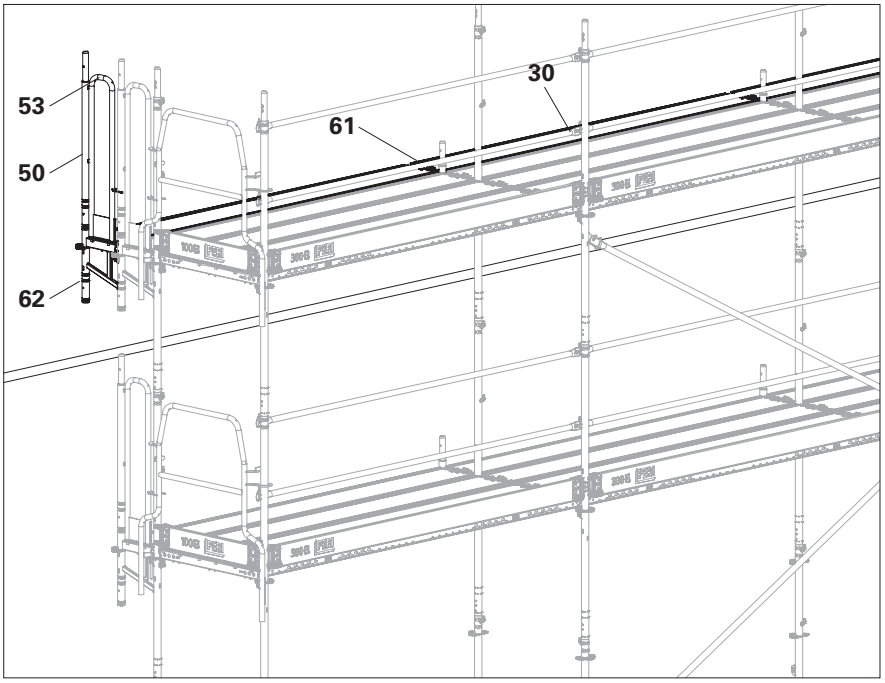


Fig. D1.04

Components

30 Steel Deck EDS
50 Guardrail Post EVP
51 Guardrail EPG
53 End Guardrail EPF 33
61 Support UC 33
62 Console Bracket ECM 33

Assembly

1. Fit the first row of Console Brackets ECM 33 (**62**), see internal console brackets.
   As a result, the scaffold width is 1.33 m.
2. Fit two rows of Console Brackets ECM 33 or Supports UC 33 into the ¾ rosette of the Console Bracket ECM as removable internal console brackets.
   – Fit Console Bracket ECM 33 (**62**) onto the edge frame columns with pre-assembled Guardrail Post EVP (**50**) and End Guardrail EPF (**53**). (Fig. D1.05 + Fig. D1.05a)
   – Fit Support UC 33 (**61**) onto the middle bays. (Fig. D1.05a + Fig. D1.06)
3. Install decks.

→ The console brackets are now installed.

Alternatively:
Fit Supports UC 25 and Console Brackets UCB 25 with Decks UDG in 25 cm widths.

To assemble an inner guardrail (**51a**), fit Console Brackets ECM (**62**) with guardrail posts instead of Supports UC 33 (**61**). (Fig. D1.06a + Fig. D1.06b)

Edge frame column with additional Console Bracket ECM 33/UCB 25.

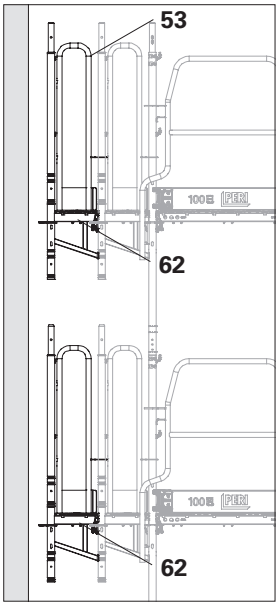


Fig. D1.05

Middle frame column with additional Support UC 33/25.

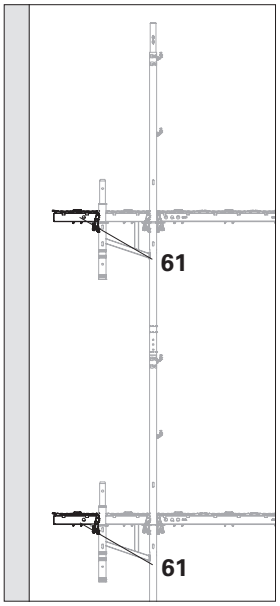


Fig. D1.06

Middle frame column with additional Console Bracket ECM 33/UCB 25 and guardrail post.

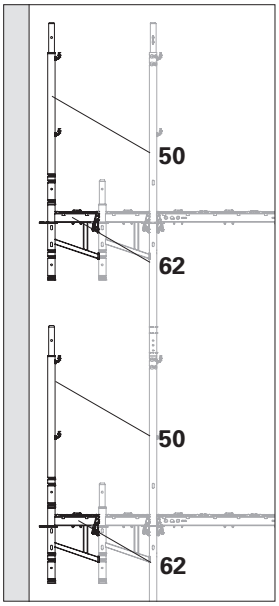


Fig. D1.06a

Edge frame column Middle frame column

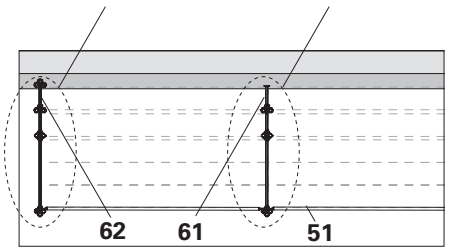


Fig. D1.05a

Alternatively: with inner guardrail (**51a**).

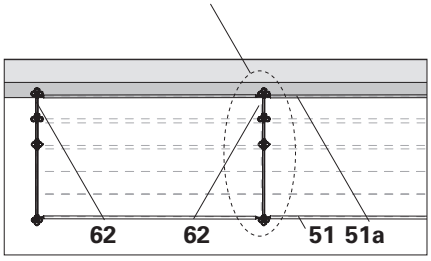


Fig. D1.06b

Dismantling of internal console brackets

To install thermal insulation from below, the internal console bracket must be dismantled gradually.

Warning

Dismantling the internal console brackets may result in an impermissible large distance to the building. A resulting fall can cause serious injury.
⇒ Install inner guardrails in advance.

Components

50	Guardrail Post EVP
53	End Guardrail EPF 33
61	Support UC 33
62	Console Bracket ECM 33

Dismantling

1. Fit the inner guardrails, see Section "advanced guardrail" on page 26.
2. Dismantle End Guardrails EPF (**53**) and Guardrail Posts EVP (**50**) at the edge bays.
3. Remove the decks.
4. Dismantle Supports UC 33 (**61**) or Console Brackets ECM 33.

(Fig. D1.07 + Fig. D1.08)

Middle frame column

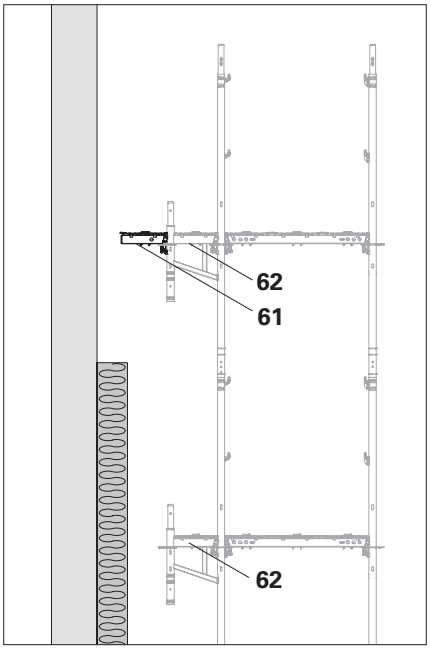


Fig. D1.07

Edge frame column

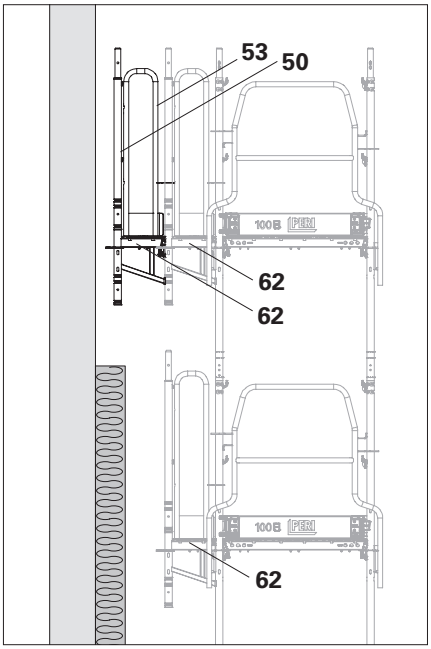


Fig. D1.08

Anchoring with ETICS

In accordance with standards DIN EN 12811-1 and DIN EN 12810-1, scaffolds must be designed to accommodate forces parallel to the facade as well.
The load-bearing capacity of eyebolts for forces parallel to the facade approaches zero as the shaft length increases.
The following measures are suitable for accommodating these forces:
- permanent anchoring
- ETICS special scaffold tie

With PERI UP Easy, additional measures are possible:
- Structural scaffold bracing
- Free-standing scaffold

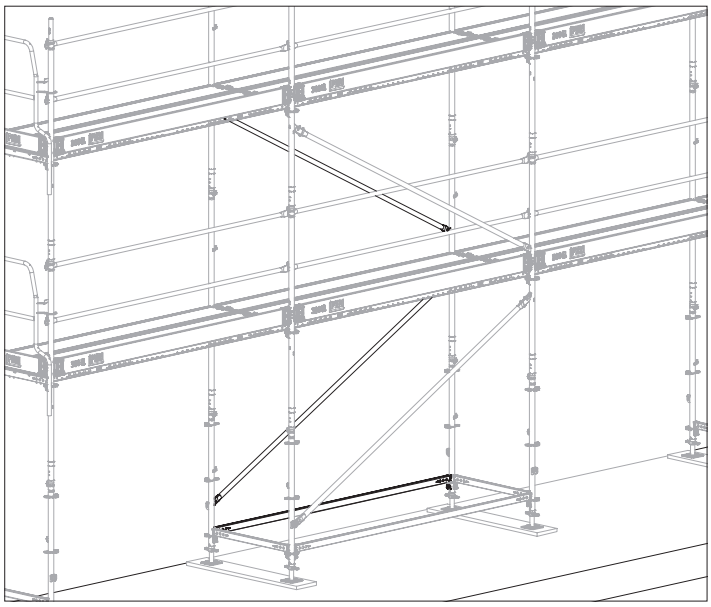


Fig. D1.09

Structural scaffold bracing
This can be effected, for example, by installing additional diagonals on the inside of the scaffolding. See Section "Internal braces" on page 41. (Fig. D1.09)

Free-standing scaffold
Scaffolds that cannot be anchored require a larger erection surface and, if necessary, additional ballasting. See Section "Scaffolding support" on page 225. (Fig. D1.10)

For a structurally braced or free-standing scaffold, separate static proof of stability is required.

For further information on anchoring, see the assembly instructions for the PERI UP Scaffolding Kit – core components.

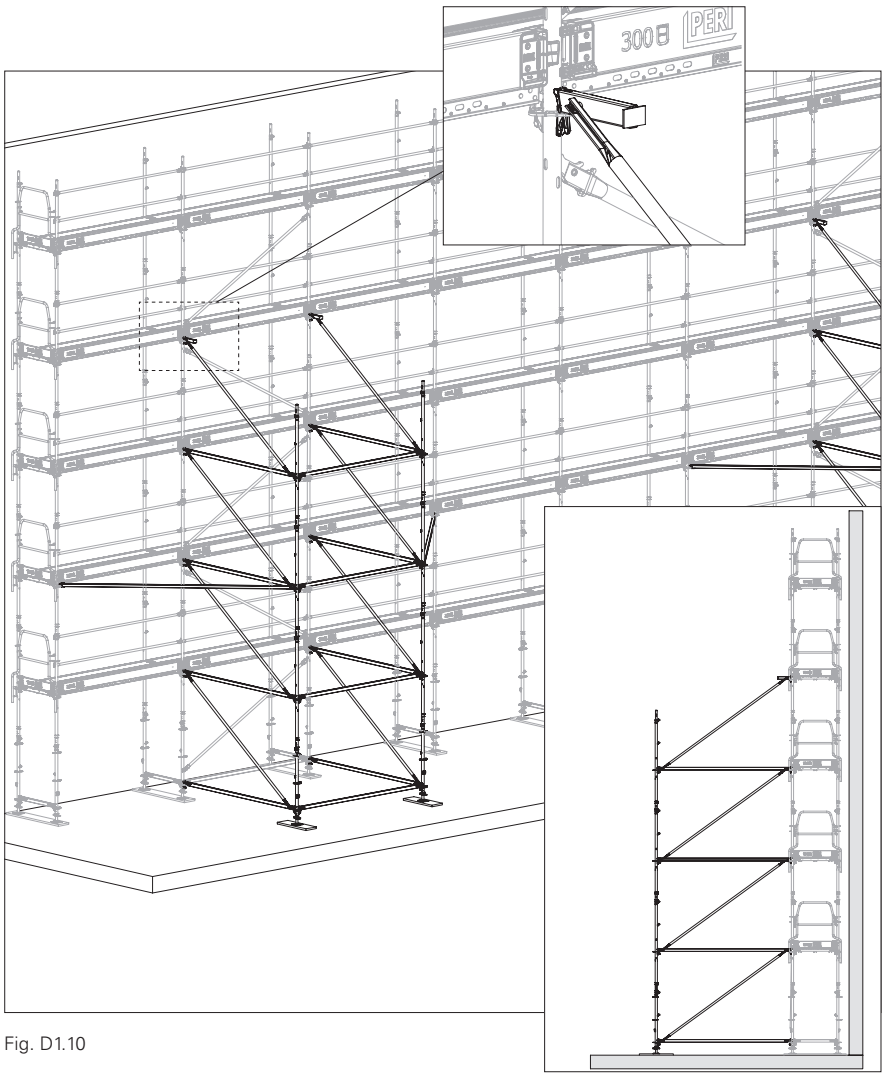


Fig. D1.10

External console brackets

Console brackets can be mounted as external console brackets on just one scaffolding level of choice.
Steel Decks EDS (**30**) are installed as decks.

- Note additional anchoring, see section Tie pattern.

The following console brackets are used:
- Console Bracket ECM 33 (**62**)

For the permissible Load Classes, see Section "A7 System components: Console bracket" on page 42.

All console brackets are attached to rosettes of the Standard EVOTOP EVM 200 (**22**) or to the Top Standard EVOTOP 96 (**17**) on the top scaffolding level.

Components

17	Top Standard EVOTOP 96
22	Standard EVOTOP EVM 200
30	Steel Deck EDS
50	Guardrail Post EVP
51	Guardrail EPG
52	Advance Guardrail UPA 100
68	Spigot with Spacer URE 4/42

Preparation
Assemble the top level of the basic scaffold with the advanced guardrail.
1. Assemble edge frame with Standard EVOTOP EVM 200 (**22**) and End Guardrail in Advance UPA 100 (**52**).
2. Assemble outer leg of the middle frames with Top Standard EVOTOP 96 (**17**), Spigot with Spacer Tube URE (**68**), Guardrail Post EVP (**50**) and Guardrail EPG (**51**).
3. Insert Steel Decks EDS (**30**) into the basic scaffold.

(Fig. D1.11)

For frame columns with diagonal ends above: insert the short spigot of the spacer tube (**68**) into the top standard. (Fig. D1.11a)

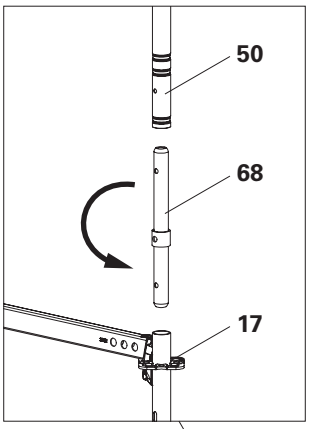


Fig. D1.11a

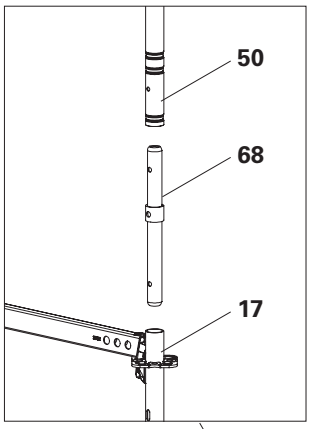


Fig. D1.11b

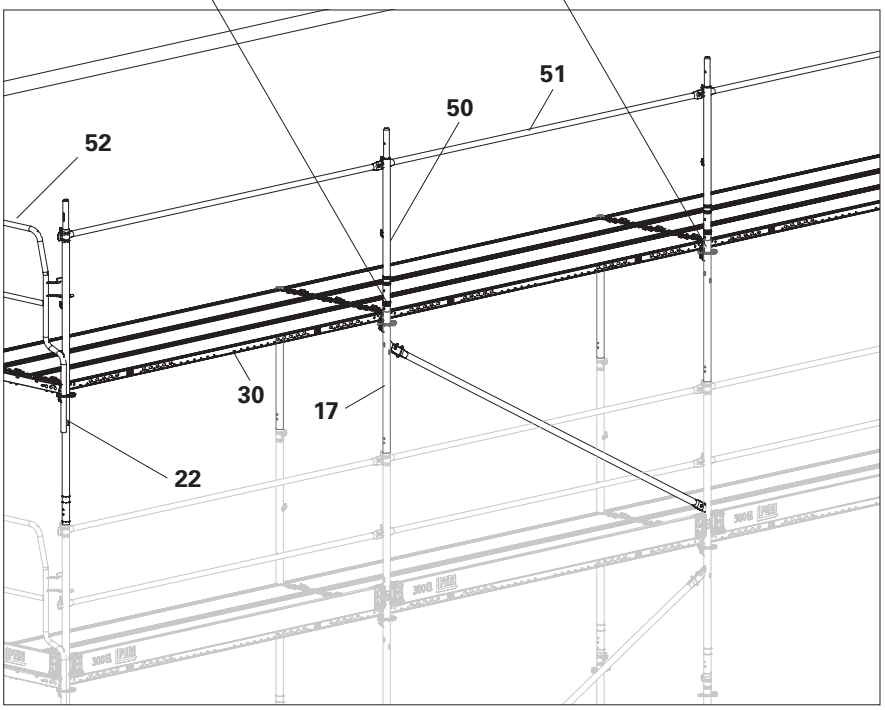


Fig. D1.11

Assembly at the top scaffolding level

Components

30 Steel Deck EDS
50 Guardrail Post EVP
62 Console Bracket ECM 33

- Assembly takes place from the level immediately below:

1. Fit Console Bracket ECM (**62**) with Guardrail Post EVP (**50**). Secure the wedges. See "A7 System components: Console bracket" from page 42.
2. Place the Steel Deck EDS (**30**) into the console bracket. (Fig. D1.12)
3. Anchoring:

- Anchor each frame column in the console bracket position:
  - Anchor every frame column to the inner and outer standards with a Wall Tie UWT (**46**). (Fig. D1.12a + Fig. D1.12a)
  - Alternatively, with triangulated ties, anchor every second frame column to the inner standard.
    Anchor remaining frame columns with single-standard wall ties.
- Depending on the equipment variation, additional anchoring may be required in the levels underneath.
- See section Tie pattern.

The 50 cm standards of the console brackets do not need to be anchored. The anchoring of the inner and outer legs is sufficient. (Fig. D1.12a)

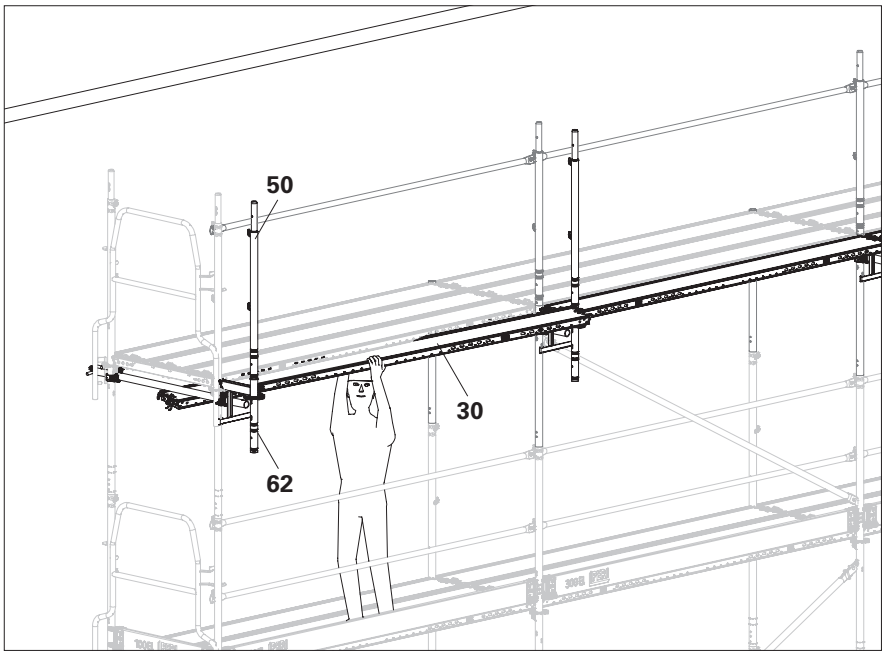


Fig. D1.12

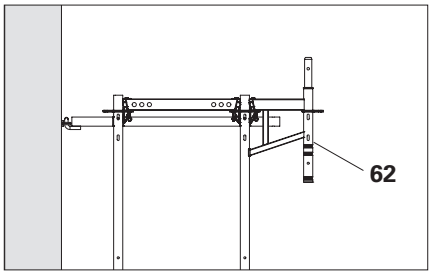


Fig. D1.12a

- Assembly from a safe position behind the guardrail post of the basic scaffold:

5. Fit a guardrail post (**51**) and an intermediate guardrail (**51a**) in the edge bays, then fit End Guardrail EPF 33 (**53**).
6. In the standard bays, attach Guardrails EPG (**51b**) to the Guardrail Post EVP (**50**) mounted on the Console Brackets ECM.
7. Dismantle the guardrails (**51c**) on the basic scaffold and attach them as intermediate guardrails to the Guardrail Post EVP (**50**) of the console brackets.

(Fig. D1.13)

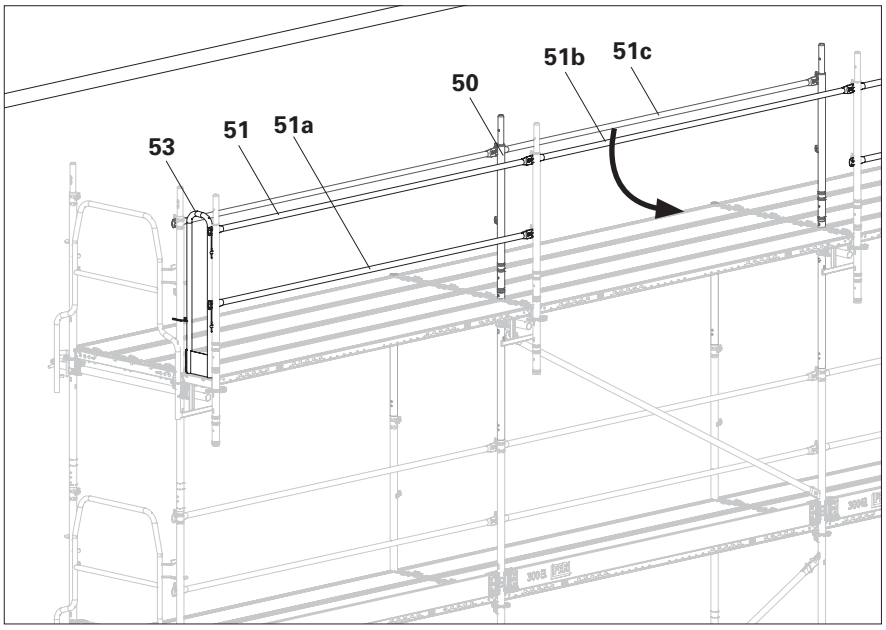


Fig. D1.13

8. Fit Toeboards UPF (**56**).

In the top position only:

9. Dismantle Guardrail Post EVP (**50a**) and spigot with Spacer Tube URE (**68**) from the outer leg EVM.

→ The external console brackets are now installed.

(Fig. D1.14)

Components

50	Guardrail Post EVP
51	Guardrail EPG
53	End Guardrail EPF 33
56	Toeboard UPF
68	Spigot with Spacer URE 4/42

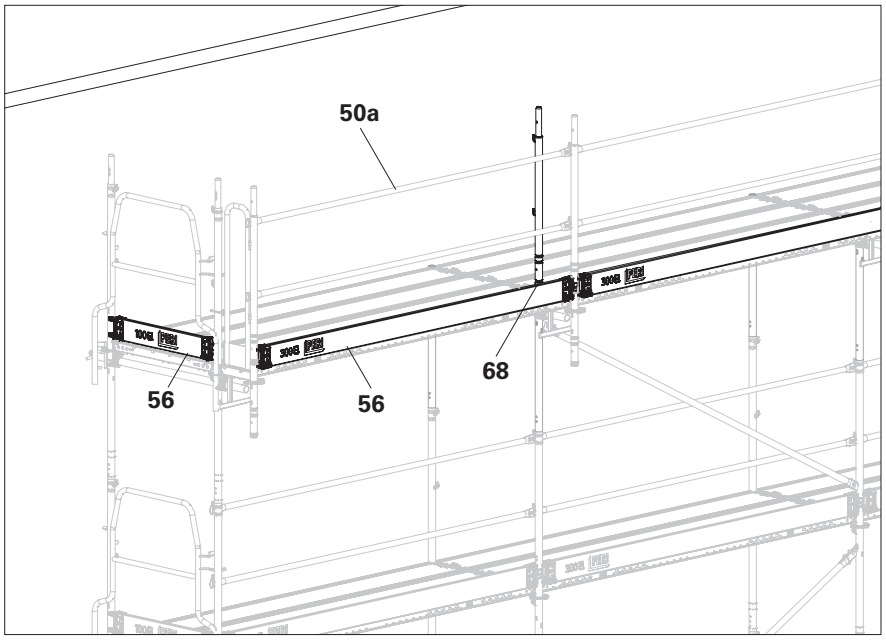


Fig. D1.14

External corner with internal console brackets

The internal console brackets can be installed at the same time on all scaffolding levels.
Assemble the basic scaffold in the manner detailed in Section "Outside corner" on page 68. Take into consideration additional space requirements for supports or console brackets on both scaffolding bays.

- Take additional anchoring for internal console brackets into account, see section Tie pattern.
- For higher load classes than LC4, construct the outside corner like an inside corner.

Assembly

1. Attach Supports UC 33 (**61**) and Console Bracket ECM 33 (**62**) from the lower scaffolding level to the rosette. Secure the wedges!
   Arrangement pursuant to Fig. D1.15.
2. Attach two Ledger Brackets UHA-2 (**90 + 90a**) to the Horizontal Ledger UH-2 (**94**).
3. Fit Horizontal Ledger UH-2 (**94a**) onto the Ledger Bracket UHA-2 (**90**) and Console Bracket ECM 33 (**62**) in the adjacent scaffolding bay. Secure the wedges. (Fig. D1.15)
4. Fit the Support UC 33 (**61a**) onto the ledger bracket (**90a**). Secure the wedges.
5. Attach the Steel Decks EDS 33x300 (**30**), EDS 33x100 (**30a**) and EDS 33x67 (**30b**).

→ The external corner with internal console brackets is now installed. (Fig. D1.16)

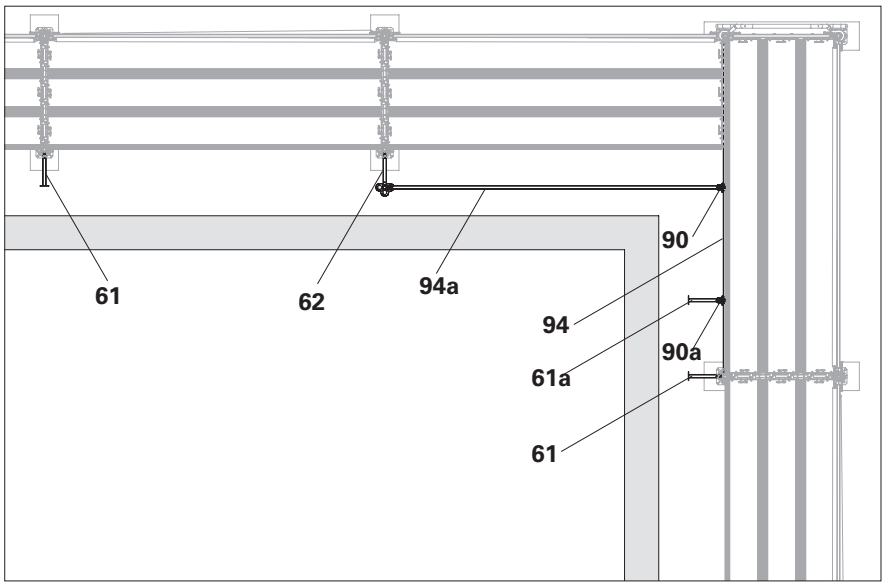


Fig. D1.15

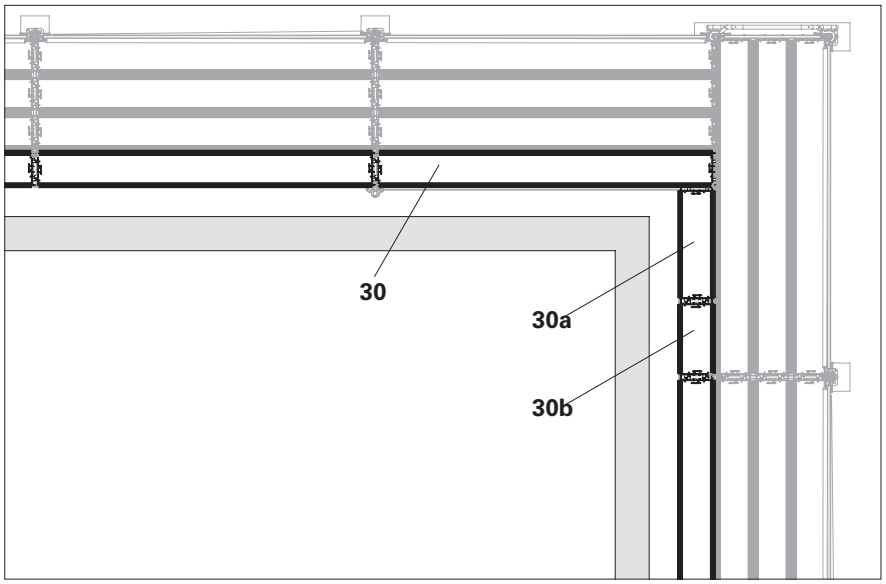


Fig. D1.16

Components

30	Steel Deck EDS
61	Support UC 33
62	Console Bracket ECM 33
90	Ledger Bracket UHA-2
94	Horizontal Ledger UH-2

Console brackets at inside corners

Internal scaffolding corners must be realised ensuring that no openings are created.
Fit an Inside Corner Plate EDP (**34**) for the remaining internal corner.
(Fig. D1.17 – Fig. D1.19)

- The Inside Corner Plates EDP can be used for internal console bracket widths of 25 and 33 cm
- 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. Place the Inside Corner Plate EDB (**34**) next to the adjacent console bracket decks.
3. Push the bolts of the Inside Corner Plate EDP (**34.1**) up.
4. Push the inside corner plate towards the vertical and slide the standard mounting cone over the rosette.
5. Push the bolt into the hole of the rosette until it fully engages.
   → The deck is now fixed in position

→ The inside corner with internal console brackets is now installed.
(Fig. D1.17 + Fig. D1.17a)

Is the bolt securely engaged in the rosette?

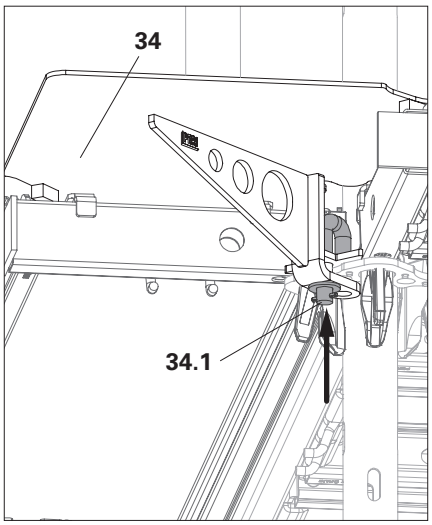


Fig. D1.17

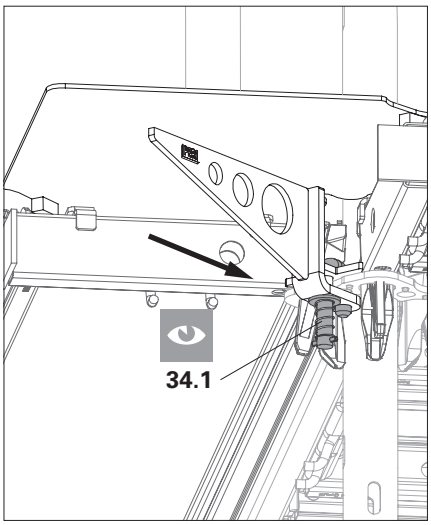


Fig. D1.17a

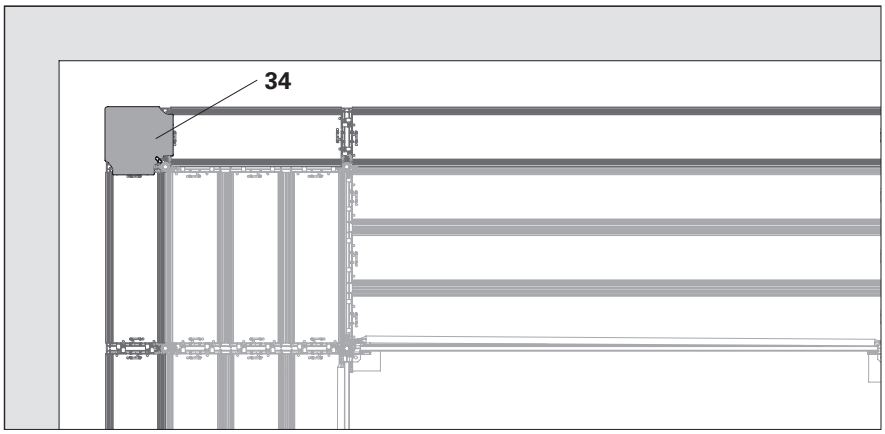


Fig. D1.18

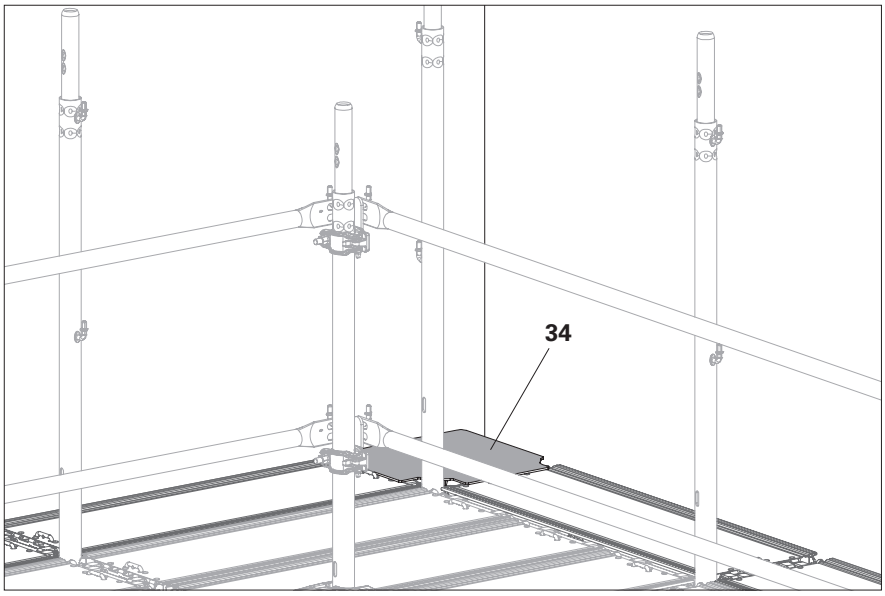


Fig. D1.19

D2 Protection panel

General information

Protection panels with safety nets (in Europe, e.g. according to DIN EN 1263) are installed on Guardrail Posts EPG in the top scaffolding level.

- Note additional anchoring, see section Tie pattern.
- For the permissible Load Classes, see Section "A7 System components: Console bracket" on page 42.
- Securely connect all frame columns in the top three levels to the outer and inner legs using locking pins (**19**).

Protection panel on the base scaffold

Components

22 Standard EVOTOP EVM 200
30 Steel Deck EDS
46 Wall Tie UWT
50 Guardrail Post EVP
51 Guardrail EPG
56 Toeboard UPF
59 Guardrail Holder EPW

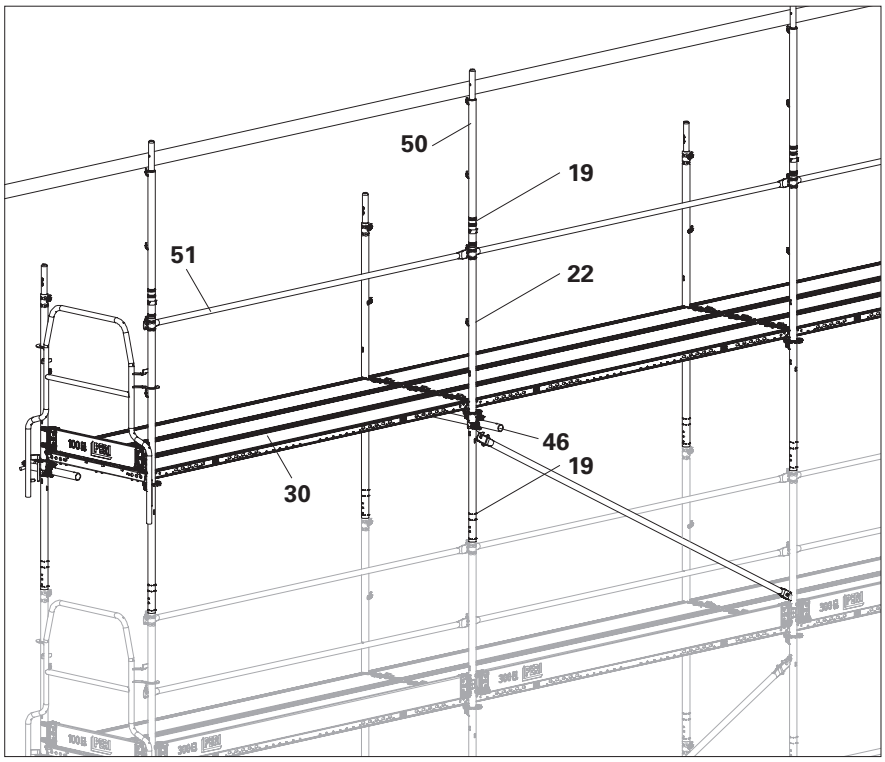


Fig. D2.01

Assembly

1. Assemble top scaffolding level with Standards EVOTOP EVM 200 (**22**) and Guardrail Post in Advance EPG (**51**). If required, fit the inner leg with Top Standard EVT 96. (Not shown)
2. Insert Steel Decks EDS (**30**).
3. Attach Guardrail Post EVP (**50**) to the outer standard (**22**).
4. Connect the guardrail post (**50**) and the outer tube with a locking pin (**19**) so that they are tension-proof. (Fig. D2.01)
5. Anchoring:
   - Anchor every frame column in the protection panel position.
     - Anchor every second frame column with Wall Ties UWT (**46**) to the inner and outer legs; alternatively, anchor with triangulated ties to the inner standard.
     - Anchor remaining frame columns with single-standard wall ties.
   - Depending on the equipment variation selected, further anchoring may be required.
   - See section Tie pattern.

D2 Protection panel

Installing the safety net

1. Attach Guardrail Post (**51a**) to the top guardrail hooks, 2 m above the deck level.
2. Attach the safety net to the Guardrail EPG (**51a**), e.g. with quick-release buckles. Note the quantity and tensile force specified in the manufacturer information.
3. Install the intermediate guardrail (**51b**). As seen from the scaffold, the net must hang in front of the guardrail post (**51**) and behind the intermediate guardrail (**51b**).

(Fig. D2.02 + Fig. D2.02a)

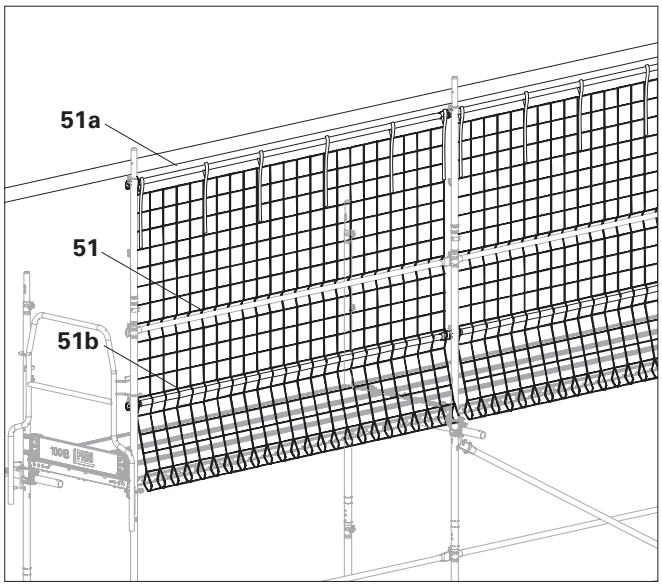


Fig. D2.02

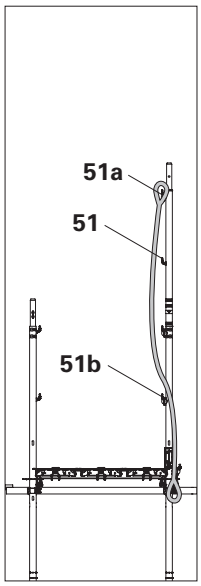


Fig. D2.02a

4. Fit Guardrail Holder EPW (**59**) into the rosette of the standard.
5. Thread Guardrail EPG (**51**) through the mesh at the bottom edge of the safety net and attach it to the guardrail hooks (**59.1**) of the Guardrail Holder EPW.
6. Secure the guardrail posts on the Guardrail Holder EPW at the beginning and end of the protection panel with suitable means. (Fig. D2.03a)
7. Fit Toeboards UPF (**56**) onto the protection panel.

→ The protection panel is now installed. (Fig. D2.03)

When installing safety nets, follow the instructions of the net manufacturer.

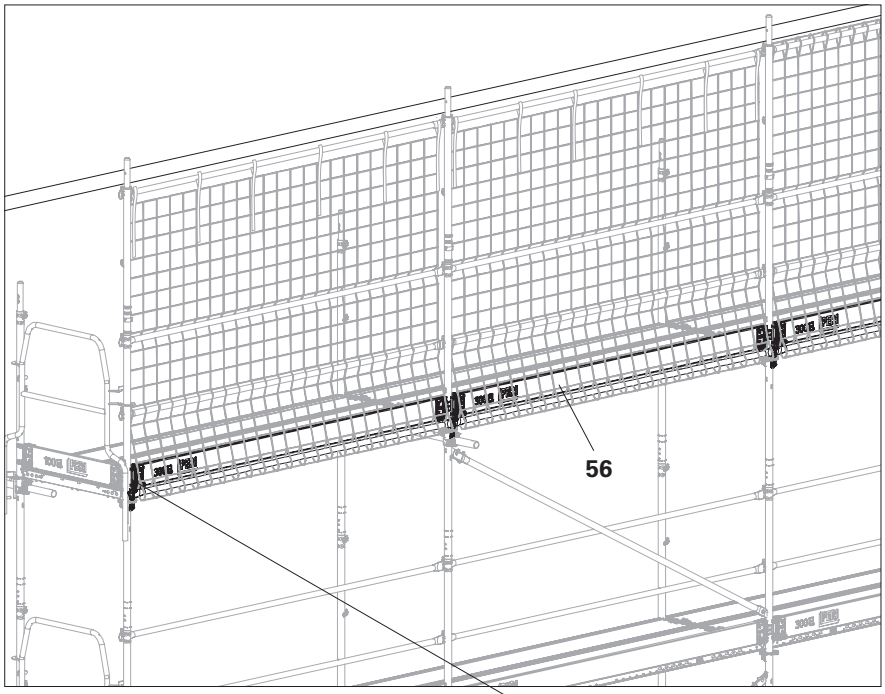


Fig. D2.03

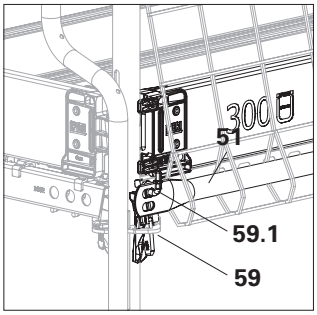


Fig. D2.03a

Protection panel on external console brackets

Verified for Console Bracket ECM 33

Components

17 Top Standard EVOTOP 96
22 Standard EVOTOP EVM 200
30 Steel Deck EDS
46 Wall Tie UWT
50 Guardrail Post EVP
51 Guardrail EPG
62 Console Bracket ECM 33
67 Protection Panel Post EPS
68 Spigot with Spacer URE 4/42

Assembly

- From the level immediately below:

1. Assemble the outer legs of the top level of the basic scaffold in the area of the roof overhang with Top Standard EVOTOP 96 (**17**), spigot with Spacer Tube URE (**68**), Guardrail Post EVP 100 (**50**) and Guardrail in Advance EPG (**51**).
   If required, also fit the inner leg with Top Standard EVT 96. (Not shown).

Assemble edge frame with Standard EVOTOP EVM 200 (**22**).

2. Install Steel Decks EDS (**30**) in the basic scaffold.

(Fig. D2.04)

For frame columns with diagonal ends above: insert the short spigot of the spacer tube (**68**) into the top standard, see Section “External console brackets” on page 112.

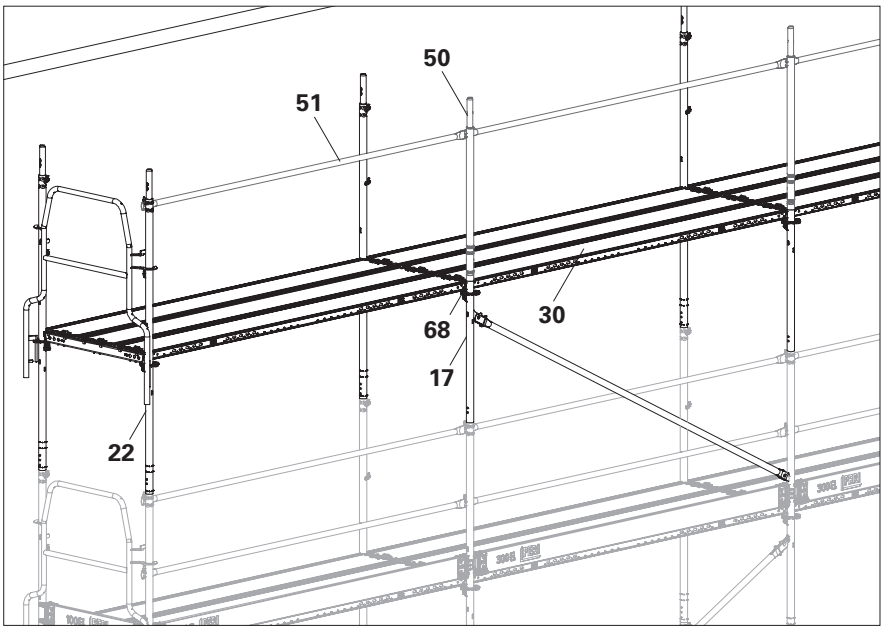


Fig. D2.04

Console Bracket ECM 33

1. Fit Console Bracket ECM 33 (**62**) together with the Protection Panel Post EPS (**67**), see Section "A7 System components: Console bracket" from page 42.
2. Securely connect the protection panel post (**67**) and console bracket (**62**) using a locking pin (**19**).
3. Secure every console bracket against lifting using a Guardrail Coupler EPR (**58**). (Fig. D2.05a)
4. Attach Steel Decks EDS (**30**).
5. Anchoring:

- Anchor every frame column in the protection panel position.
  - Anchor each frame column to the inner and outer leg of the vertical frames with a wall tie (**46**).
  - Alternatively: anchor frame columns to the inner standard of the vertical frames alternating between single-standard wall ties and triangulated ties. (not shown)
- Depending on the equipment variation selected, further anchoring may be required.
- See section Tie pattern.

(Fig. D2.05)

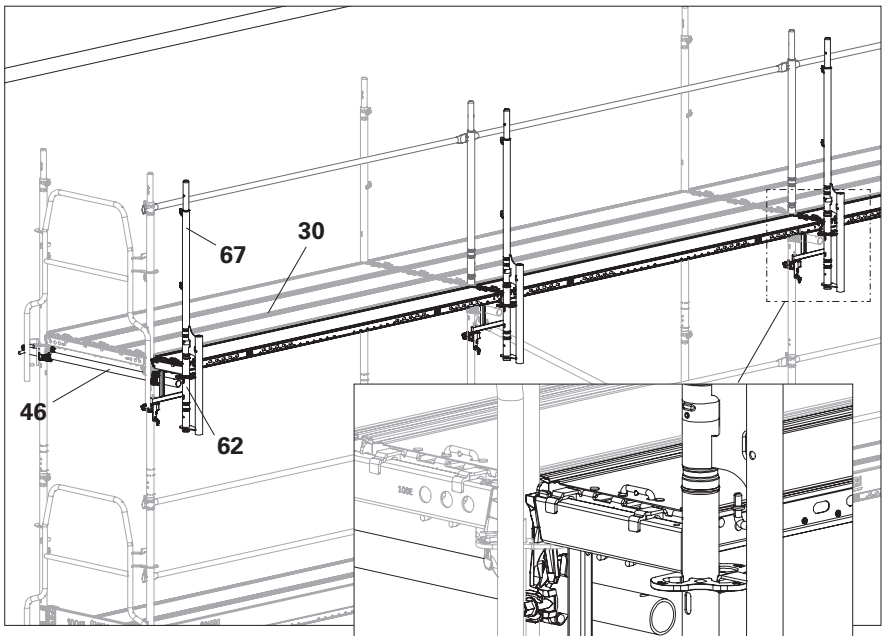


Fig. D2.05

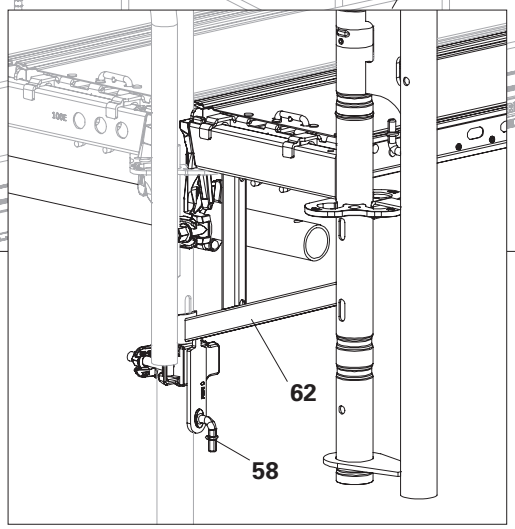


Fig. D2.05a

Protection panel

Components

50 Guardrail Post EVP
51 Guardrail EPG
54 End Guardrail EPF
56 Toeboard UPF
67 Protection Panel Post EPS
68 Spigot with Spacer URE 4/42

Assembly

- Carry out the assembly process from a safe position behind the guardrail in advance:

1. Fit a guardrail post (**51**) and an intermediate guardrail (**51a**) in the edge bays, then fit End Guardrail EPF (**54**).
2. In the intermediate bays, attach Guardrails EPG (**51b**) to the Protection Panel Posts EPS (**67**).
3. Dismantle guardrail posts (**51c**) on the basic scaffold and attach them as intermediate guardrails on the Protection Panel Posts EPS (**67**).
4. Install Toeboard UPF (**56**) in the edge bays.
5. Remove Guardrail Post EVP (**50**) from the Top Standard EVT 96 and position on the protection panel posts. Guardrail pins must be pointing towards the middle of the scaffolding.
6. Securely connect the guardrail post (**50**) and protection panel post (**67**) using a locking pin (**19**).
7. Remove the spigot with Spacer Tube URE (**68**).

(Fig. D2.06)

Depending on the roof overhang, it may be necessary to use PPE for assembly operations.

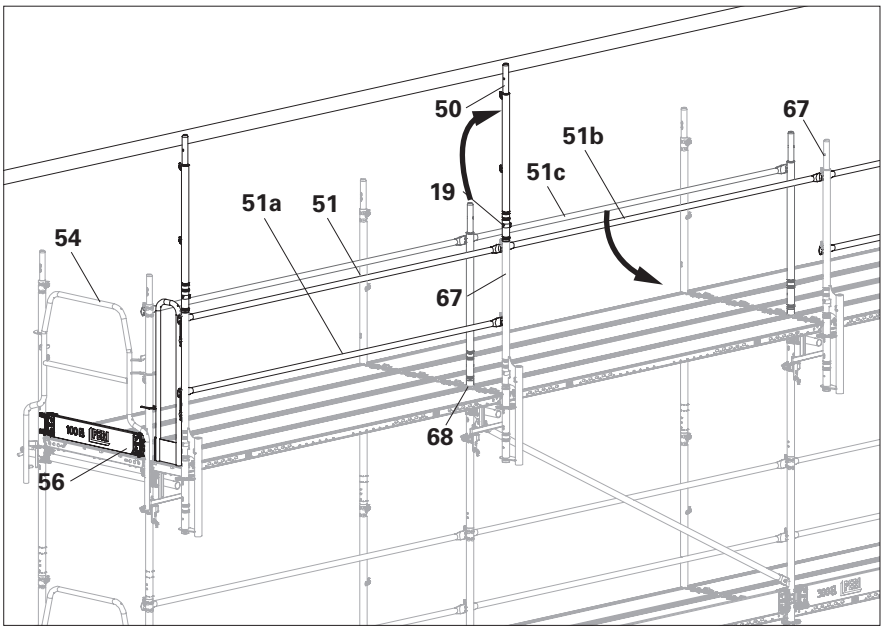


Fig. D2.06

Installing the safety net

1. Attach Guardrail Post (**51a**) to the top guardrail hooks, 2 m above the deck level.
2. Attach the safety net to the Guardrail EPG (**51a**), e.g. with quick-release buckles. Note the quantity and tensile force specified in the manufacturer information.
3. As seen from the scaffold, the safety net hangs in front of the guardrail post (**51**) and behind the intermediate guardrail (**51b**).

(Fig. D2.07 + Fig. D2.07a)

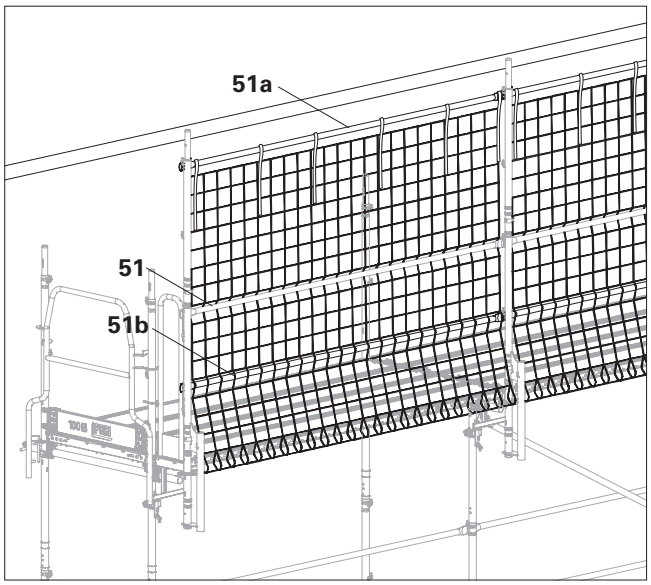


Fig. D2.07

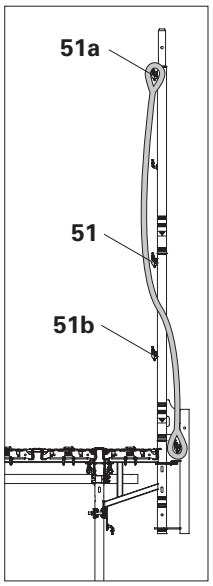


Fig. D2.07a

4. Thread Guardrail EPG (**51**) through the mesh at the bottom edge of the safety net and attach it to the guardrail hooks (**67.1**) of the Protection Panel Post EPS.
5. Secure the guardrail posts on the protection panel post at the beginning and end of the protection panel with suitable means.
6. Install Toeboards UPF (**56**).

→ The protection panel is now installed.

Fig. D2.08

When installing safety nets, follow the instructions of the net manufacturer.

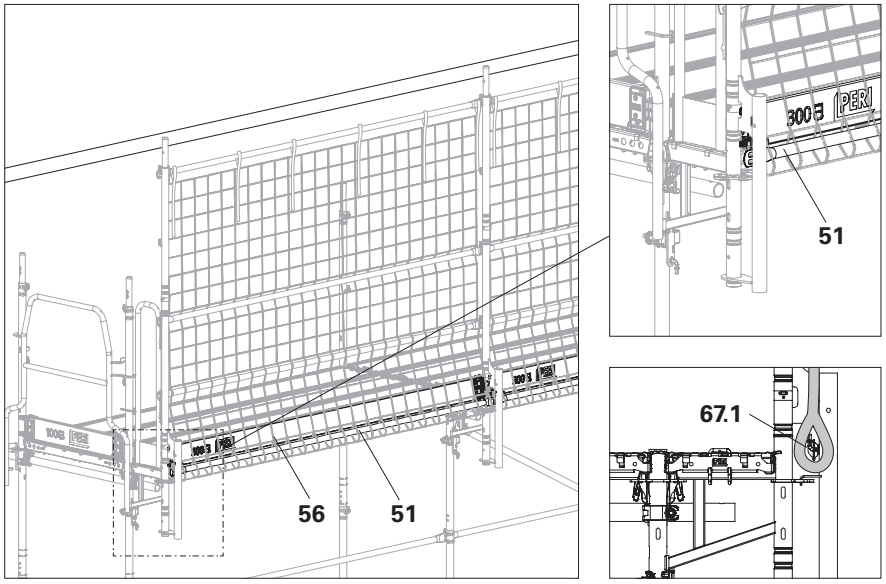


Fig. D2.08

General information

The weather protection must be closed on all sides. No more than 10 % of the facade should be open.
Pull tarpaulins all the way around the front sides.
Fit the tarpaulins in accordance with the manufacturer's information.
(Fig. D3.01)
Not approved for assembly on console brackets.

Technical data

- No snow load, but 0.10 kN/m², minimum load similar to DIN EN 16508.
- Wind load q max. with 0.20 kN/m². If greater wind loads are to be expected, suitable securing measures, e.g. removing tarpaulins, must be taken in good time.
- When using Weatherprotection EVW 130:
  – up to scaffolding bay length ≤ 250 cm without support.
  – up to scaffolding bay length 300 cm with support.
- When using Weatherprotection EVW 180:
  – all scaffolding bay lengths with support.

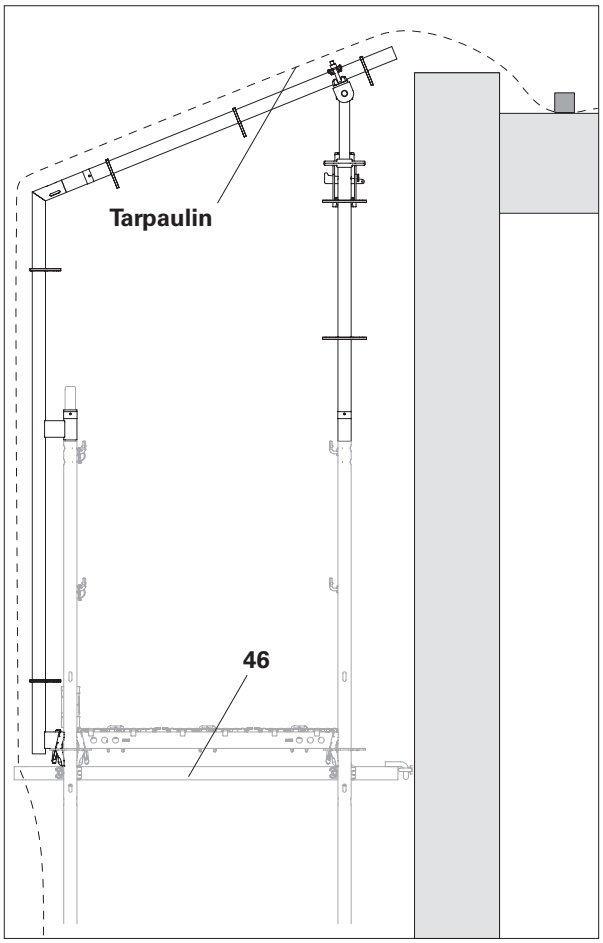


Fig. D3.01

Anchoring

- Take additional anchoring (**46**) into account, see Section "Tie pattern" on page 128.
- From the uppermost anchored level to the next anchored level, securely connect all frame columns to the outer and inner standards using locking pins.
- Depending on the tarpaulin quality and tension, it may be necessary to implement additional measures to prevent water sacks from forming on the tarpaulin. For example, fitting Horizontal Ledgers UH-2 onto all rosette nodes on the roof standard.

Components

19	Locking Pin Ø48/57
22	Standard EVOTOP EVM 200
46	Wall Tie UWT
50	Guardrail Post EVP
104	Weatherprotection EVW 200-V
105	Weatherprotection EVW 130
106	Weatherprotection EVW 180
107	Spindle Head SRU
108	Coupler EVW
109	Top Standard UVH-2 100
110	Head Spindle Locking UJH

Assembly

Fitting the outer leg and roof standard

1. Fit Standard EVW 200-V (**104**) onto the spigot of the erected scaffold using the top connection while simultaneously inserting it into the rosette below.
2. Secure the wedge.
3. Secure Standard EVW 200-V on the outer Standard EVOTOP EVM 200 (**22**) with a locking pin (**19**)
3. Fit Standard EVW 130 (**105**) or EVW 180 onto the spigot of Standard EVW 200 and secure it with a locking pin (**19a**).
   → Three-quarters of the rosette must be pointing downwards.

→ The outer leg and roof standard are now installed.
(Fig. D3.02)

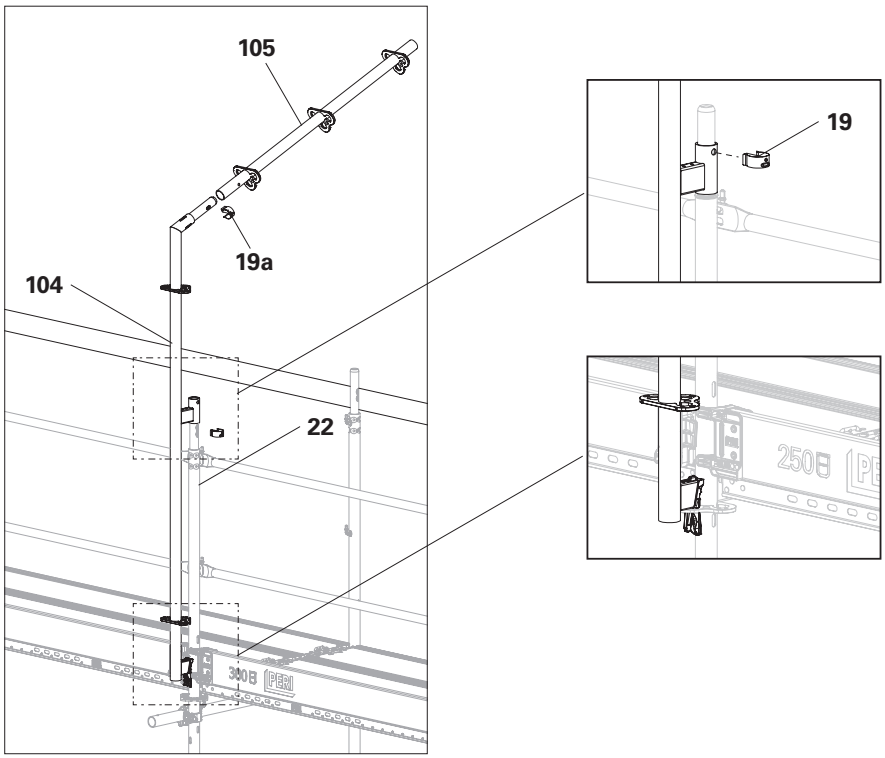


Fig. D3.02

Fitting the inner leg

The inner leg is always required for internal support when the bay is 3 m long or if Weatherprotection EVW 180 is used.
In other cases, the inner leg is not strictly necessary, but can be used in the event of enhanced requirements.

1. Pin the Spindle Head SRU (**107**) and Coupler EVW (**108**) with a filler pin (**107.2**) and secure them with a cotter pin (**107.3**).
2. Screw the quick jack nut (**107.1**) all the way up.
3. Insert the spindle head into Top Standard UVH-2 (**109**).

(Fig. D3.03)

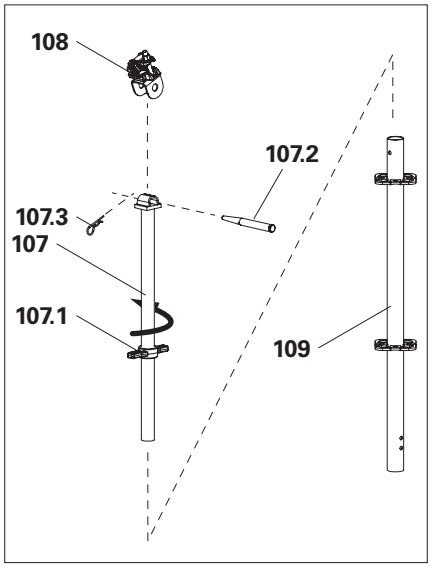


Fig. D3.03

4. Open Coupler EVW (**108**), place the pre-assembled inner standard (**109**) on the roof rail from below and then fit it onto the inner Standard EVOTOP EVM (**22**).
5. Secure the top standard with a locking pin (**19**).
6. Screw the quick jack nut (**107.1**) down until the coupling is resting on the roof rail again.
7. Close the coupling around the roof rail and tighten the nut. Tightening torque 50 Nm.

→ The inner leg is now installed.
(Fig. D3.04)

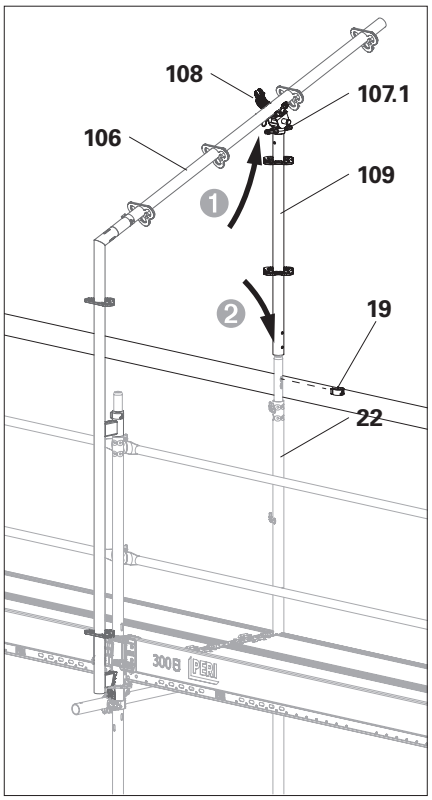


Fig. D3.04

Bracing system width 100 cm

1. In each bay, fit the horizontal ledgers (**94a**) onto the outer legs as shown in the figure.
2. Fit the horizontal ledgers (**94b**) onto the roof standards and hammer it into place immediately so that it does not fall down.
3. Brace the inner legs in pairs using horizontal ledgers (**94c**). If there is another free-standing inner leg, this should also be connected with a horizontal ledger.
4. Continue the arrangement of all diagonals in the basic scaffold into the weather protection roof using Ledger Braces UBL (**99**).

→ The bracing is now installed.
(Fig. D3.05)

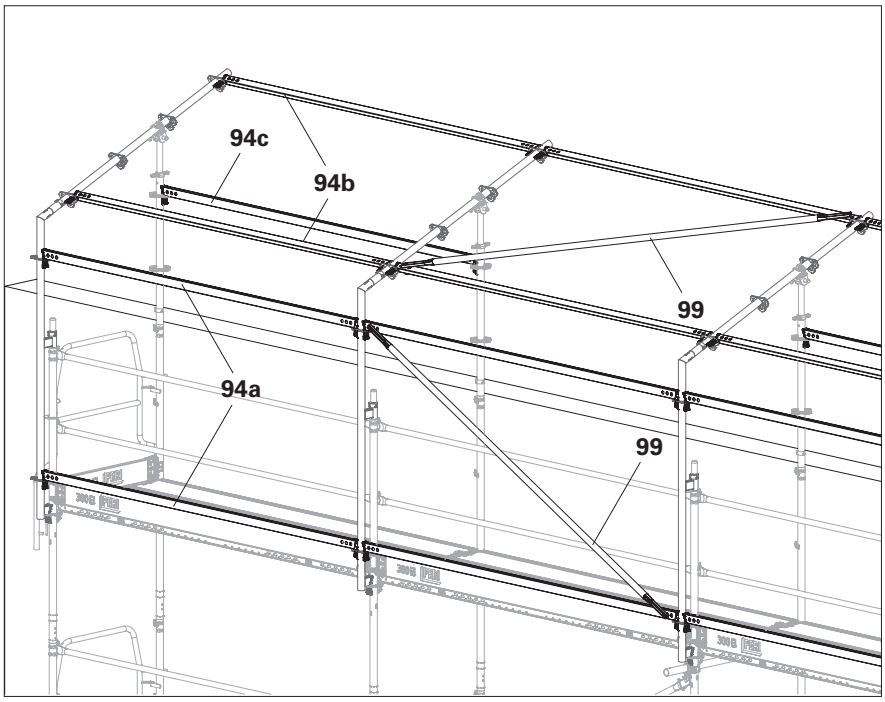


Fig. D3.05

Fitting spindle locking

1. Pull the cotter pin (**110.3**) and wedge (**110.2**) out of the spindle locking up to the stop.
2. Place the head spindle locking (**110**) on the horizontal ledger at an angle and insert the hooks (**110.1**) into the rosette holes (**109.1**) from below.
3. Swivel the head spindle locking upwards over the quick jack nut (**107.1**), hammer in the wedge (**110.2**) and secure with a cotter pin (**110.3**).

→ Spindle locking is now installed.
(Fig. D3.06)

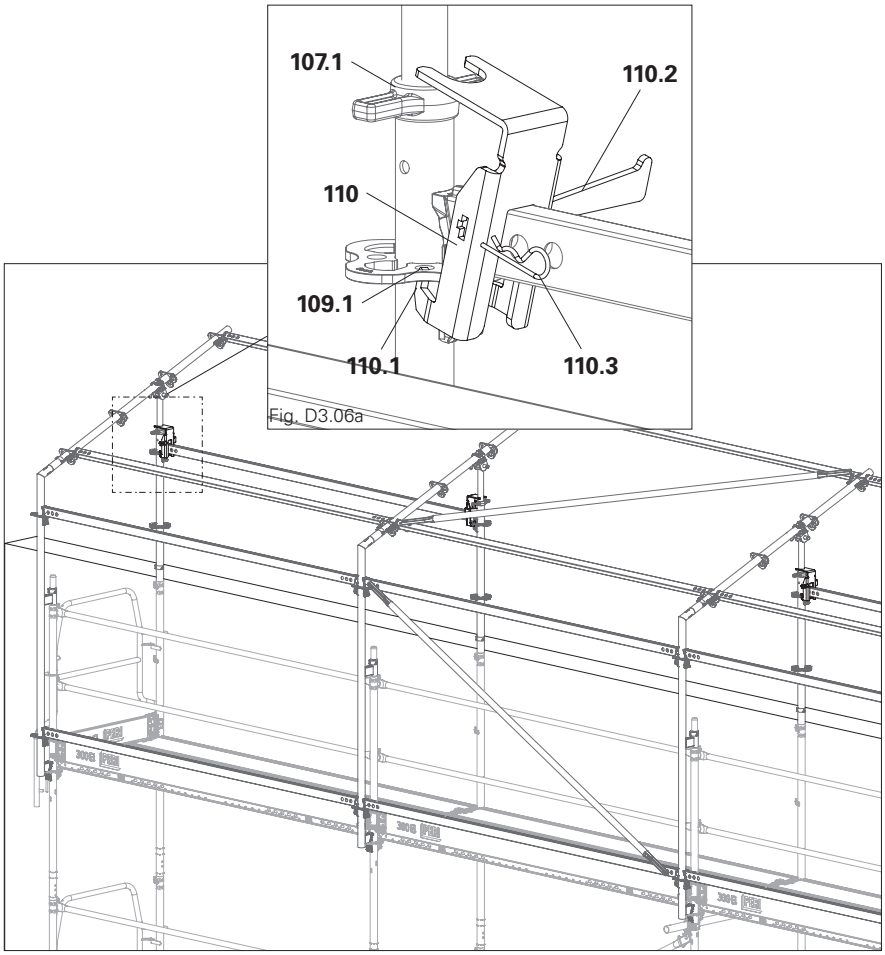


Fig. D3.06a

Fig. D3.06

Tie pattern

Minimum requirements for anchoring the top level:

- Anchor every second frame column to the inner and outer legs with Wall Ties UWT (**46**).
- Anchor remaining frame columns with single-standard wall ties (**46a**).

(Fig. D3.07)

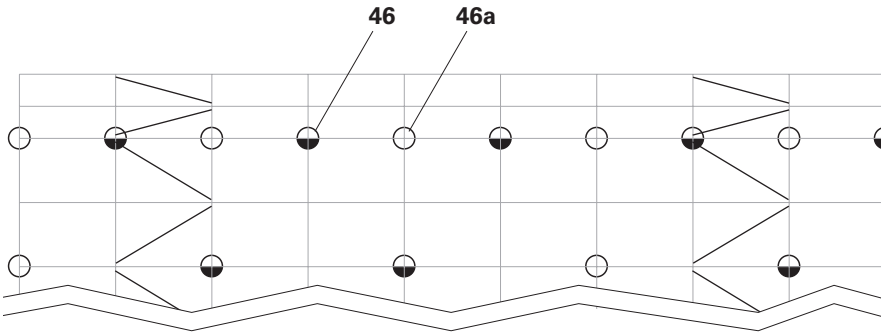


Fig. D3.07

Stronger anchoring or bracing in accordance with the required tie pattern, e.g. tarpaulin in front of a closed facade, must be used.
(Fig. D3.07a)

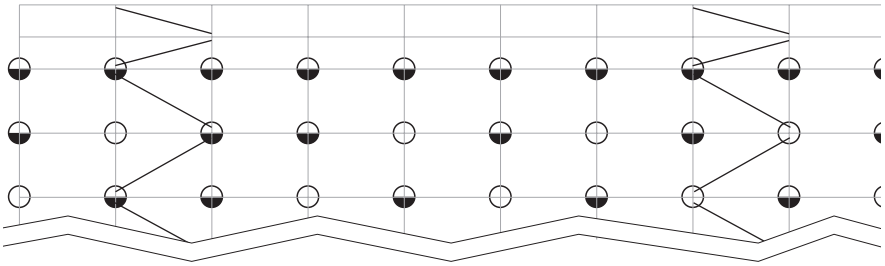


Fig. D3.07a

Keder tracks

The LGS Keder Track URK (**131**) is suitable for tarpaulins with 13 mm keder. LGS Keder Connection URV (**132**) is used for assembly on the scaffold.

- Fit the keder connections a maximum of 1.50 m apart.
- Fit at least 2 keder connections for each keder track.

Fit the keder track connection at the joint of the keder tracks in an overlapping manner.

Assembly

1. Cut the LGS Keder Track URK (**131**) to the required length and remove the burr.
2. Slide the terminal strip (**132.1**) on the Keder Connection URV (**132**) into the T-groove (**131.1**) of the Keder Track URK and bolt it into place.
3. Fit the coupling side (**132.2**) of the keder connection on the pre-assembled keder tracks onto Standard EVW (**105 + 104**). Leave a little clearance at the joint between the vertical rail and roof rail to make it easier to thread in the tarpaulin.

→ The keder track is now installed. (Fig. D3.09)

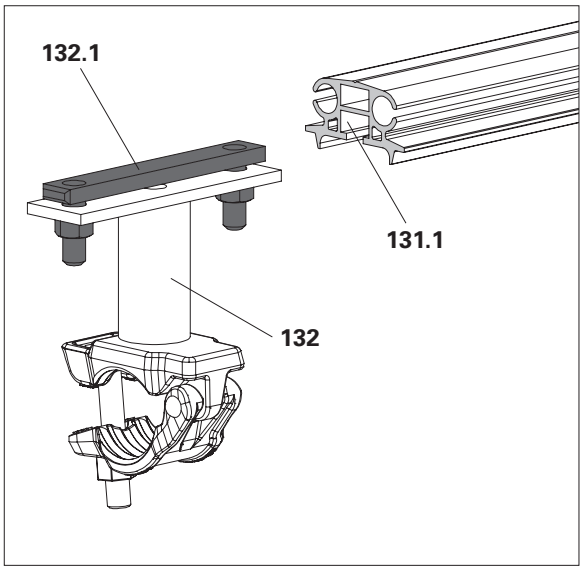


Fig. D3.08

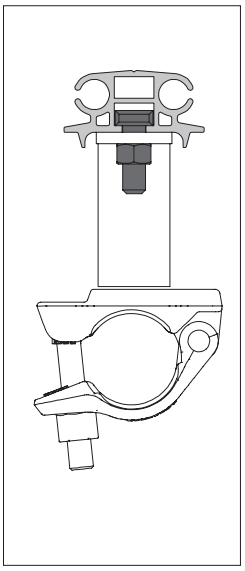


Fig. D3.08a

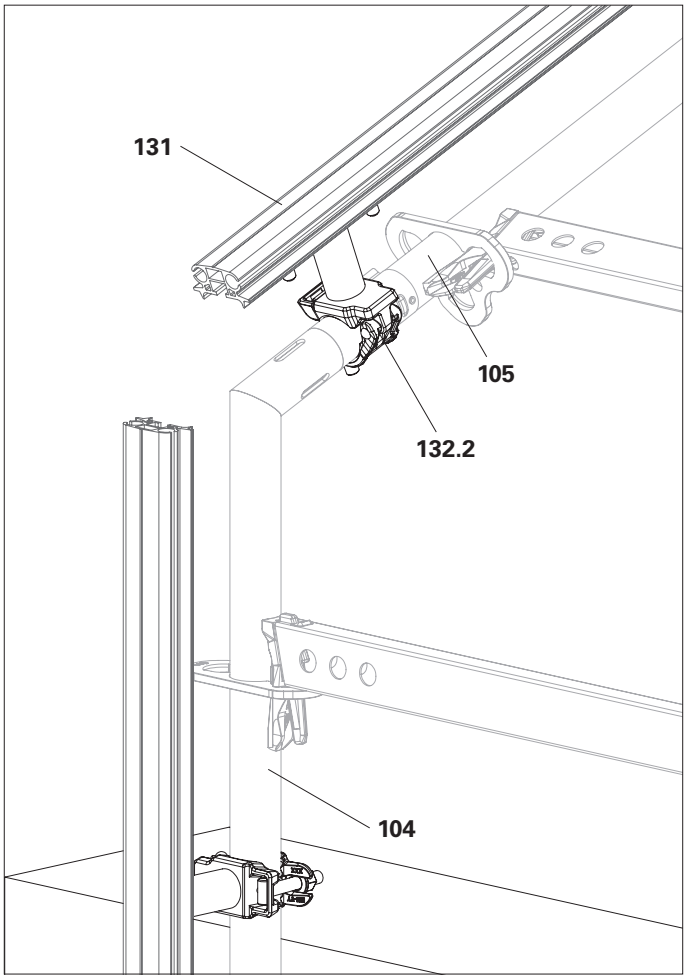


Fig. D3.09

D4 Protection roof

General information

The deck must be installed flush with the basic scaffold.
The following are used for assembling the protection roof:

- Console Bracket ECM 67 (**63**)
- Console Brackets ECM 100.

Placing materials on the protection roof is not permitted!
The effect of the protection roof can be impaired by materials being placed on it!

Protection roof on external console bracket

Assembly
Installation of the console brackets and decks is carried out from the scaffolding level below, in the protection of the lateral protection installed beforehand.

1. Fit Connection Protect. Panel EPC (**66**) into Console Bracket ECM 67 (**63**) and secure with sleeve (**21**) or bolts M10 x 70 and nuts.
2. Fit Console Bracket ECM 67 with attached Connection Protect. Panel EPC, see Section "A7 System components: Console bracket" from page 42.

(Fig. D4.01)

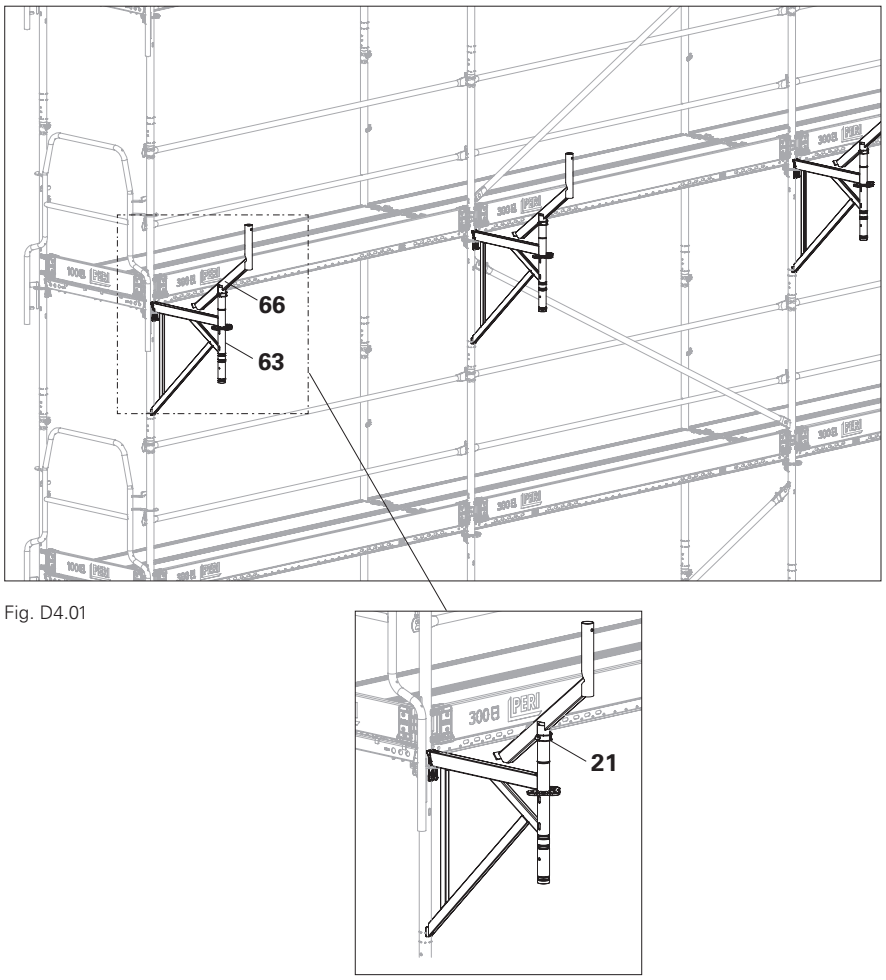


Fig. D4.01

3. Attach Steel Decks EDS (**30**).
4. Anchoring:
– In the protection roof position, anchor each frame column to the inner and outer legs using a Wall Tie UWT (**46**).
– Alternatively, anchor them on the inner standard using triangulated ties.
– Depending on the structural arrangement selected, additional ties may be required in further scaffolding levels, see section Tie pattern.

(Fig. D4.02)

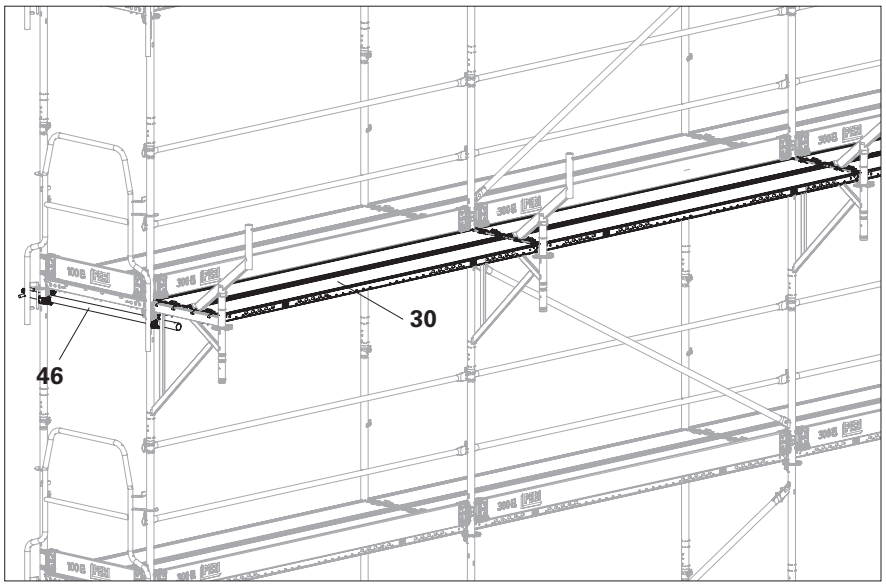


Fig. D4.02

6. Position Steel Decks EDS (**30**) on the Connection Protect. Panel EPC.
7. Insert Toeboard UPF (**56**) into Connection Protect. Panel EPC and secure with suitable means. (Fig. D4.03a)

→ The protection roof is now installed. (Fig. D4.03)

The Guardrails EPG (**51**) installed in the basic scaffold separate the protection roof from the working area.

- Depending on the scaffolding components or static configuration, install additional measures, e.g. anchoring, in the scaffolding level positioned immediately below with single-standard wall ties, see section Tie pattern.
- Width class B2 according to DIN EN 12811-4 is achieved when Console Brackets ECM 67 (**63**) are used.
- Width class B3 is achieved with Console Brackets ECM 100.

2 persons are required for the installation of the decks and toe boards.

Components

21	Sleeve 10x60
30	Steel Deck EDS
46	Wall Tie UWT
51	Guardrail EPG
56	Toeboard UPF
63	Console Bracket ECM 67
66	Connection Protect. Panel EPC

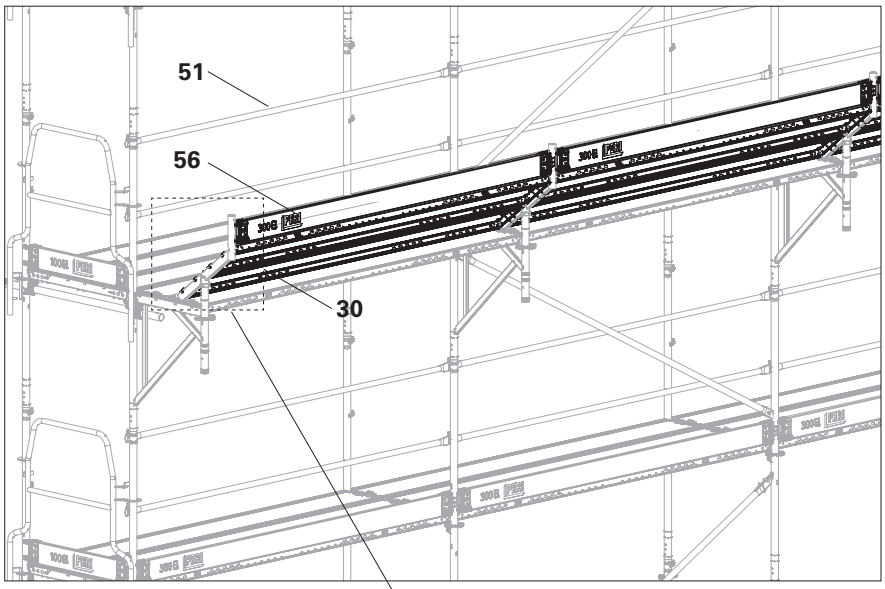


Fig. D4.03

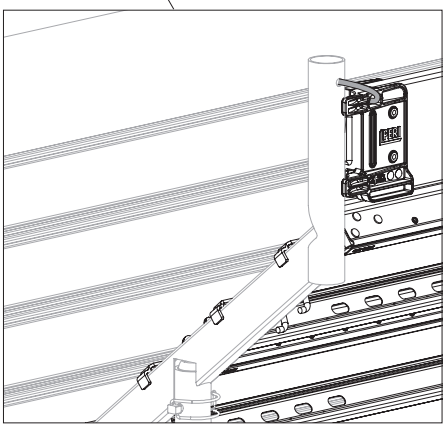


Fig. D4.03a

General information

In order to bridge openings, scaffolding bays are built over with lattice girders (**70**), either Steel ULS or Aluminium ULA. Depending on the load, lattice girders with a height of 50 cm or 70 cm can be used individually or in pairs, see Section "Lattice girders" on page 161 and Section "E5 Bridging" on page 176.

Bridging with auxiliary scaffolding

- The bridging opening in the scaffold above the erection area must have a clear width of at least 3.5 m and a clear height of 3.5 m.
- For bridging, a Ledger EVOTOP UH-2 100 at a height of 1.00 m is required in the adjoining frame columns in the Base Standard EVOTOP. Install the base standard, rotated through 180°, with the rosettes facing inwards.

Bridging

Components

16	Ledger EVOTOP UH-2 100
22	Standard EVOTOP EVM 200
23	Base Standard EVOTOP EVS 124
30	Steel Deck EDS
48	Standard Coupler RA 48/48
70	Lattice Girder ULS / ULA
71	Starter Tube ULB
72	Coupler Ledger UHC 100

Assembly

1. Install auxiliary scaffolding in order to assemble bridging. To facilitate the removal of the auxiliary scaffolding, set up the auxiliary scaffolding asymmetrically. This will mean that the frame column (**A**) will be free-standing at a later time.

(Fig. D5.01 - Fig. D5.01a)

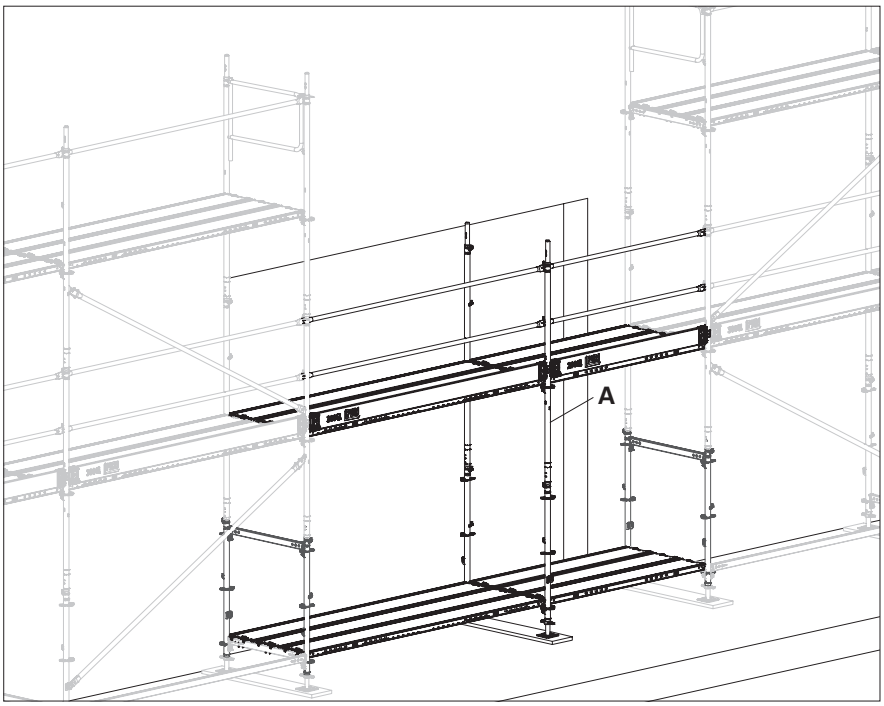


Fig. D5.01

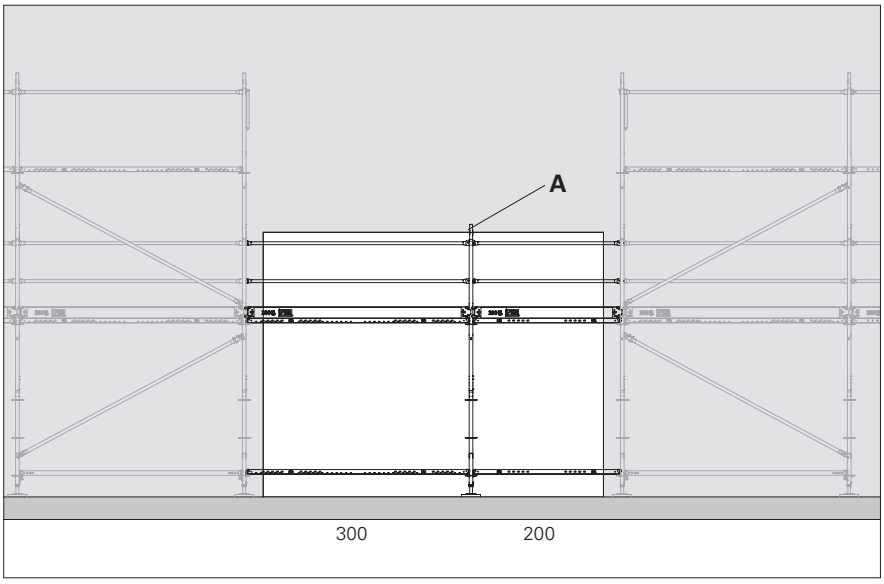


Fig. D5.01a

- From the auxiliary scaffolding:

2. Fit four standard couplers (**48**) onto the inner standard (**22**) and outer leg (**22a**) to the right and left of the opening.
   → Installation height: Upper edge of standard coupler to upper edge of rosette of standard: 12 cm. (Fig. D5.02a)
3. Position the lattice girder at the installation height and screw the top chord (**70.1**) onto the pre-assembled couplings.
4. Using four additional standard couplers, firmly screw the bottom chords of the lattice girders (**70.2**) in the same way.

(Fig. D5.02)

Do not deviate from the installation height dimensions of the lattice girder! Inaccuracies lead to reduced load-bearing capacity, as well as wobbly or uneven decking.

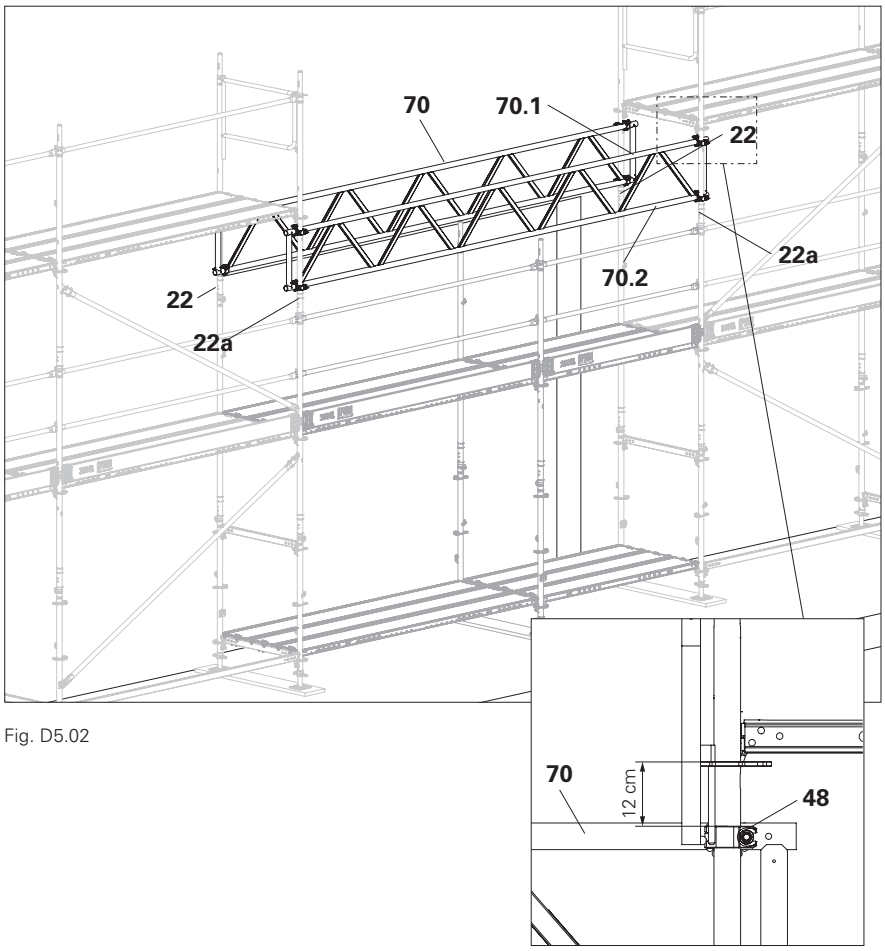


Fig. D5.02

Fig. D5.02a

5. Position Starter Tube ULB (**71**) on the lattice girders (**70**).
6. Fit the Base Standards EVOTOP EVS 124 (**23**) onto starter tubes and connect it to the Ledger EVOTOP UH-2 100 (**16**). Secure the wedges.
7. Install the decks (**30**).

(Fig. D5.03)

Secure the base standards against toppling until all decks are installed.

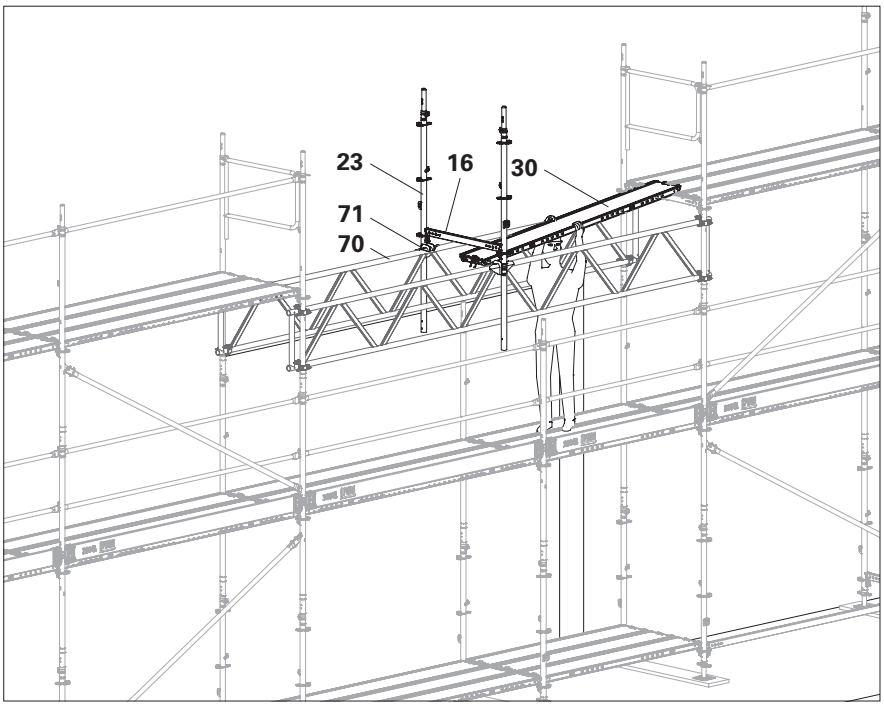


Fig. D5.03

8. Place Coupler Ledger UHC 100 (**72**) on both bottom chords (**70.2**) of the lattice girders with the lugs (**72.1**) downwards. Place couplings around the starter tube (**71**), close and tighten.

(Fig. D5.04 + Fig. D5.04a)

Due to lifting wind forces, mount the Coupler Ledger UHC from below.

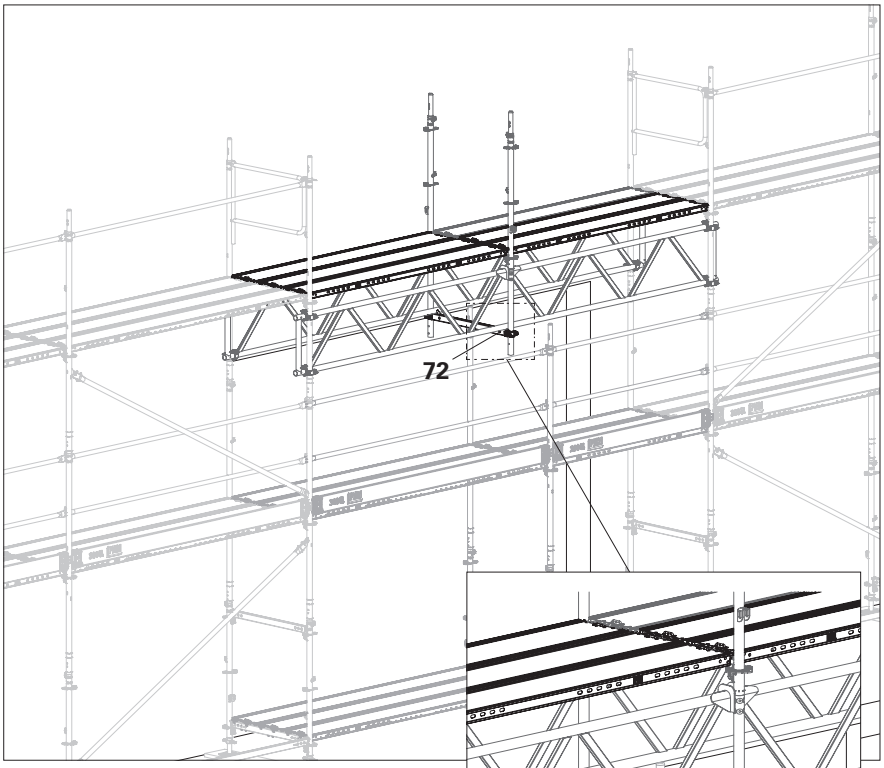


Fig. D5.04

Fig. D5.04a

9. Install the bracing and anchoring from the auxiliary scaffolding (**46**). See "Bracing and anchoring" from page 138.

(Fig. D5.05)

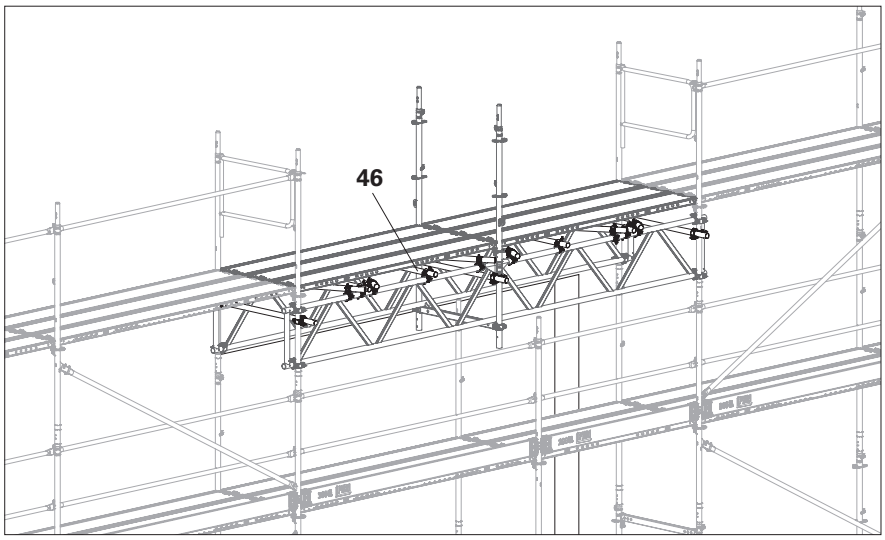


Fig. D5.05

Dismantling the auxiliary scaffolding

Components

55 End Guardrail EPF 100

Assembly

1. Install End Guardrail EPF 100 (**55**) or End Guardrail UPA Flex in Advance along the subsequent opening on the basic scaffold.
2. Dismantle the auxiliary scaffolding.

(Fig. D5.06)

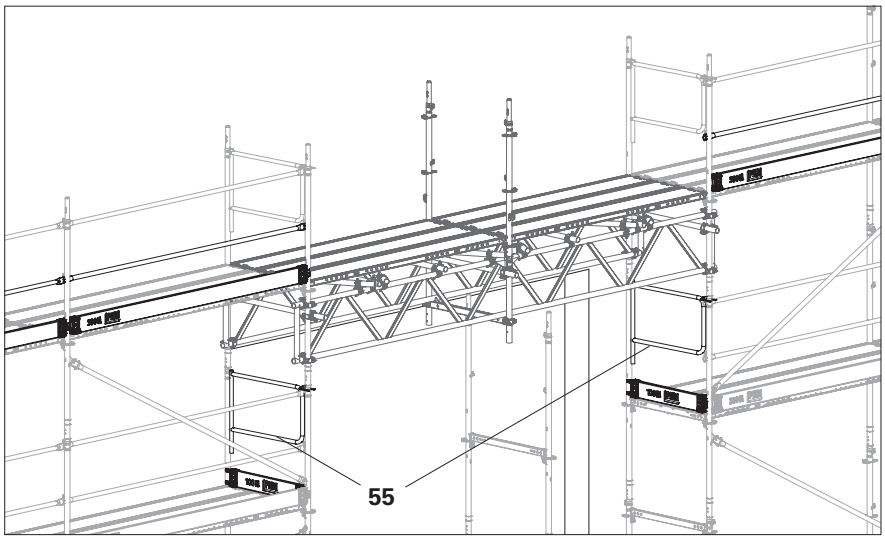


Fig. D5.06

Lateral protection

Components

46 Wall Tie UWT
51 Guardrail EPG
55 End Guardrail EPF 100
56 Toeboard UPF

Assembly

- From the basic scaffold:

1. Fit Guardrails EPG (**51**).
2. Remove the End Guardrail EPF 100A (**55**) at the bridging position.
3. Complete the lateral protection with intermediate guardrail (**51a**) and Toeboard UPF (**56**).

→ The bridging is now installed.

(Fig. D5.07)

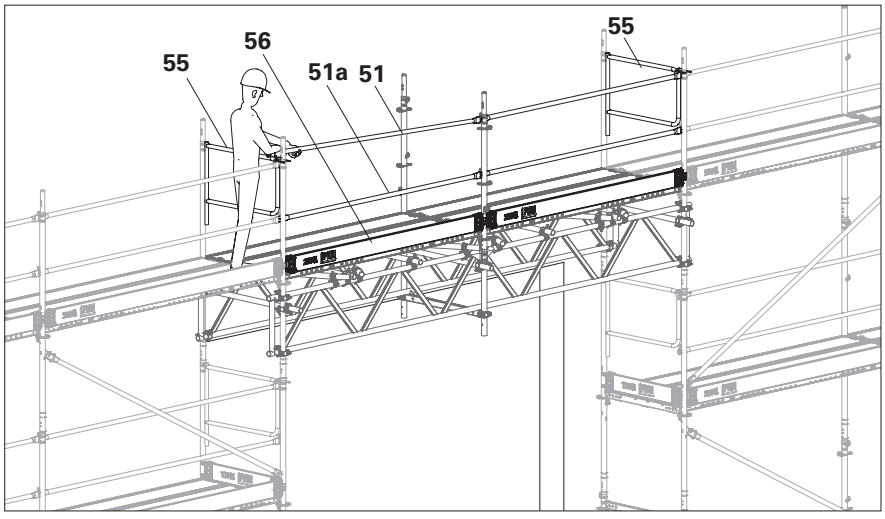


Fig. D5.07

Bracing and anchoring

The spacings a_1 – a_3 of the lateral holders are to be selected according to the load stated in "Lattice girders" on page 161, whilst ties and braces are installed in accordance with the section Tie pattern.
Execution in accordance with standard configurations in Section E2.

Components

22	Standard EVOTOP EVM 200
23	Base Standard EVOTOP EVS 124
44	Eyebolt UFE
46	Wall Tie UWT
48	Standard coupler
49	Swivel coupler
70	Lattice Girder ULS / ULA
71	Starter Tube ULB
72	Coupler Ledger UHC
75	Scaffolding tube

Variant 1
Bracing with scaffolding tubes
Brace the top chords of the Lattice Girders ULS / ULA (**70**) with a combination of scaffolding tubes and swivel couplings.

1. Fit the scaffolding tubes (**75**) onto both top chords (**70.1**) of the lattice girders with swivel couplings (**49**) and standard couplers (**48**).
2. Attach Wall Tie UWT to the Eyebolt UFE (**44**).
3. Fit the Wall Tie UWT (**46**) onto both Starter Tubes ULB (**71**) with standard couplers beneath the top chords of the lattice girders.
4. Fit the Wall Tie UWT (**46a**) onto both Standards EVOTOP EVM 200 (**22**) beneath the top chords of the lattice girders.

→ The bracing is now installed.
(Fig. D5.08 - Fig. D5.10)

Section A – A

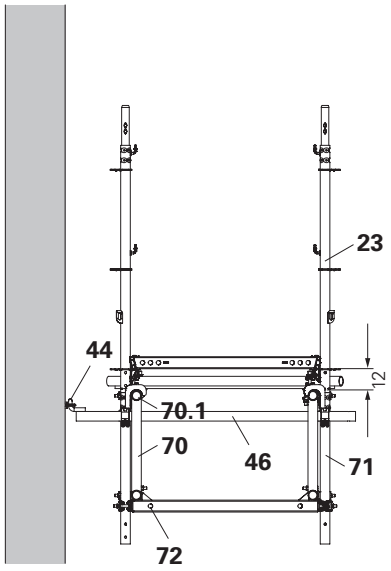


Fig. D5.08

View B

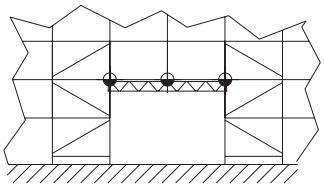


Fig. D5.10

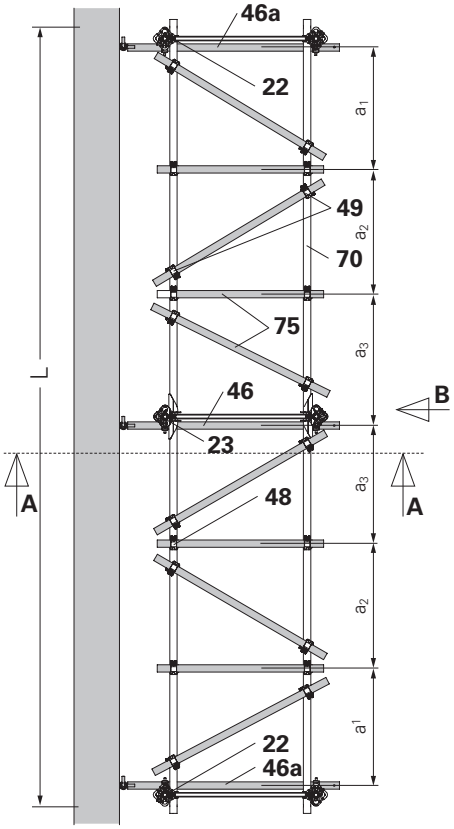


Fig. D5.09

Variant 2
Bracing with Wall Tie UWT
Alternatively, brace the Lattice Girders ULS / ULA (**70**) with Wall Ties UWT (**46**) and standard couplers.

1. Attach Wall Tie UWT to the Eyebolt UFE (**44**).
2. Fit the Wall Tie UWT (**46**) onto both Starter Tubes ULB (**71**) with standard couplers (**48**) beneath the top chords of the lattice girders.
3. Fit Wall Ties UWT (**46a**) onto both top chords of the lattice girders.
4. Fit the Wall Tie UWT (**46b**) onto both Standards EVOTOP EVM 200 (**22**) beneath the top chords of the lattice girders.

→ The bracing is now installed.
(Fig. D5.11 - Fig. D5.13)

Section A – A

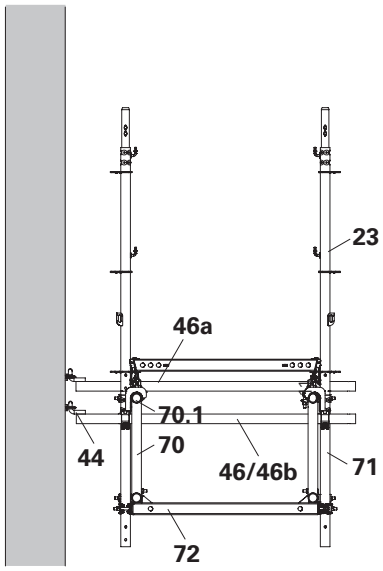


Fig. D5.11

View B

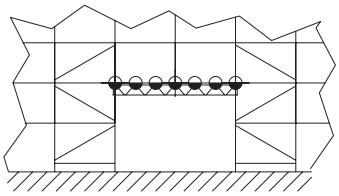


Fig. D5.13

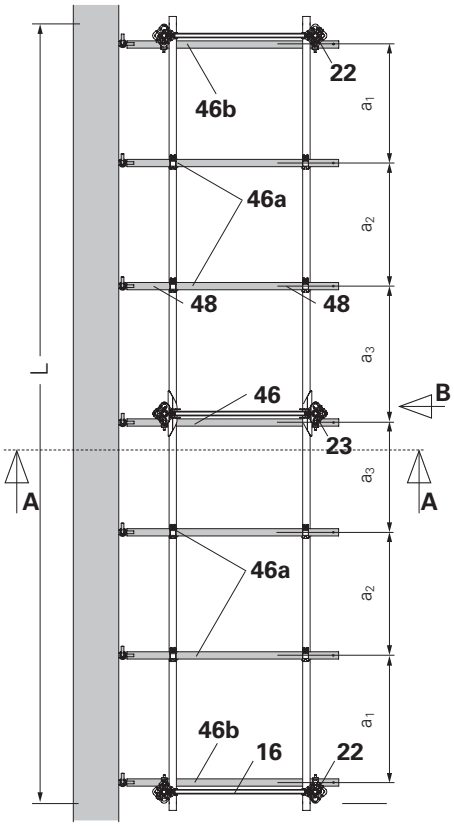


Fig. D5.12

Bridging with 2 x 2 Lattice Girders ULS

After installation of the first lattice girders on the inside, lattice girders can additionally be installed below on the outer side of the vertical tubes with an offset of 12 cm.

- The spacings $a_1 – a_3$ of the lateral holders are to be selected according to the load stated in "Lattice girders" on page 161, whilst ties and braces are installed in accordance with the section Tie pattern.
- The permissible loads for bridging with 2 x 2 lattice girders are derived from the sum of the permissible loads of the individual girders.

Components

22 Standard EVOTOP EVM 200
23 Base Standard EVOTOP EVS 124
44 Eyebolt UFE
46 Wall Tie UWT
48 Standard coupler
49 Swivel coupler
70 Lattice Girder ULS / ULA
71 Starter Tube ULB
72 Coupler Ledger UHC
75 Scaffolding tube

Section A – A

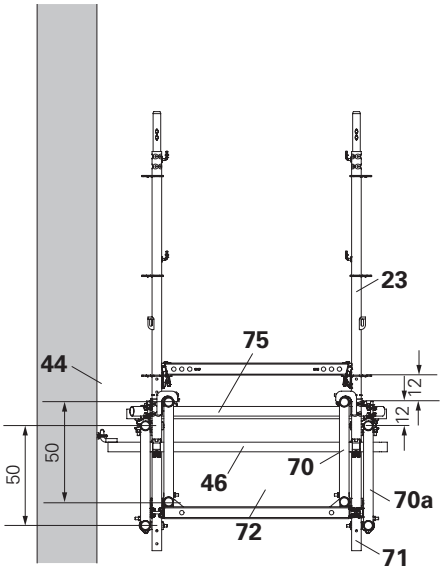


Fig. D5.14

View B

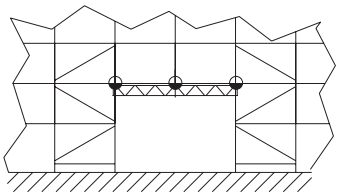


Fig. D5.15

Variant 1
Bracing with scaffolding tubes

1. Brace the internal lattice girders with standard couplers (**48**) and scaffolding tubes (**75**) beneath the top chords.
2. Fit the lattice girders (**70a**) that have been shifted downwards onto the scaffolding tubes (**75**) using standard couplers, align them and fit them onto both Standards EVOTOP EVM 200 (**22**).
3. Attach Wall Tie UWT (**46**) to the Eyebolt UFE and fit it onto both Starter Tubes ULB (**71**) with standard couplers beneath the top chords of the lattice girders (**70a**).
4. Attach Wall Tie UWT (**46a**) to the Eyebolt UFE and fit it onto both Standards EVOTOP EVM 200 (**22**) beneath the top chords of the lattice girders (**70a**).
5. Insert scaffolding tubes (**75a**) diagonally between the top chords of the lattice girders. Fit the scaffolding tubes onto the top chords of the outer lattice girders with swivel couplings (**49**).

→ The bracing is now installed.
(Fig. D5.14 - Fig. D5.16)

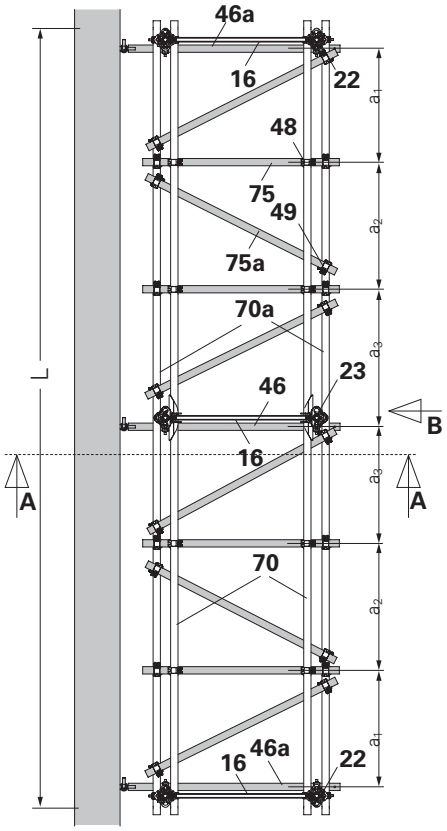


Fig. D5.16

Variant 2
Bracing with Wall Tie UWT
Alternatively, brace the Lattice Girders ULS / ULA (**70**) with Wall Ties UWT (**46**) and standard couplers (**48**).

1. Attach Wall Tie UWT (**46**) to the Eyebolt UFE and brace inner lattice girders with standard couplers (**48**) beneath the top chords.
2. Fit the lattice girders (**70a**) that have been shifted downwards onto the wall ties (**46**) using standard couplers, align them and fit them onto both Standards EVOTOP EVM 200 (**22**).
3. Attach Wall Tie UWT (**46a**) to the Eyebolt UFE and fit it onto both Starter Tubes ULB (**71**) with standard couplers beneath the top chords of the lattice girders (**70a**).
4. Attach Wall Tie UWT (**46b**) to the Eyebolt UFE and fit it onto both Standards EVOTOP EVM 200 (**22**) beneath the top chords of the lattice girders (**70a**).

→ The bracing is now installed.
(Fig. D5.17 - Fig. D5.19)

Section A – A

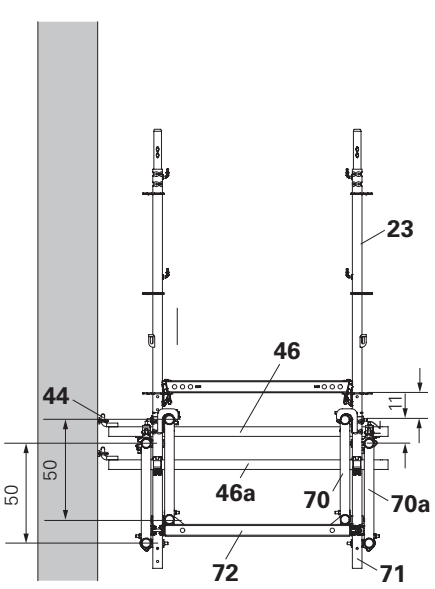


Fig. D5.17

View B

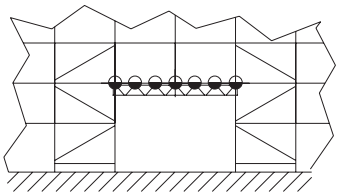


Fig. D5.19

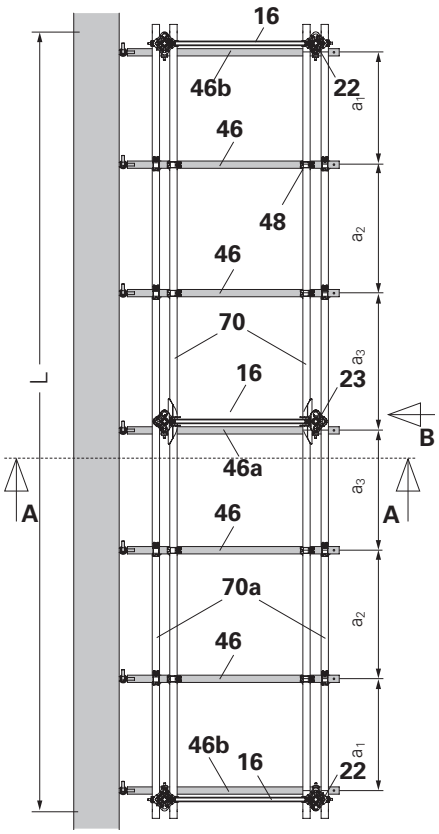


Fig. D5.18

General information

Core components for installing pavement gantries:

Components

73	Multi Girder ELM 200
92	Ledger Bracket UHA-2 half Spig.
93	UH-Spigot-2

Adjusting the passage width
The multi girder can be attached to:
- both tube ends on Tubes EVR 150, Standards EVOTOP EVM 200 (**22**) or Standards UVR-2,
- a tube end on Tube EVR 150, Standard EVOTOP EVM 200 (**22**), or Standards UVR-2 and a UH-Spigot-2 (**93**) on Top Standard UVH-2,
- two UH-Spigots-2 on Top Standards UVH-2.

Use the tube ends of the multi adapter to use the full passage width.
For reduced passage widths, attach and securely wedge (**93**) one or two UH-Spigots-2 (**93**) to the underside of the Multi Girder ELM (**73**) or connect with bolts M10 x 70 and nuts (**93a**). (Fig. D6.01)

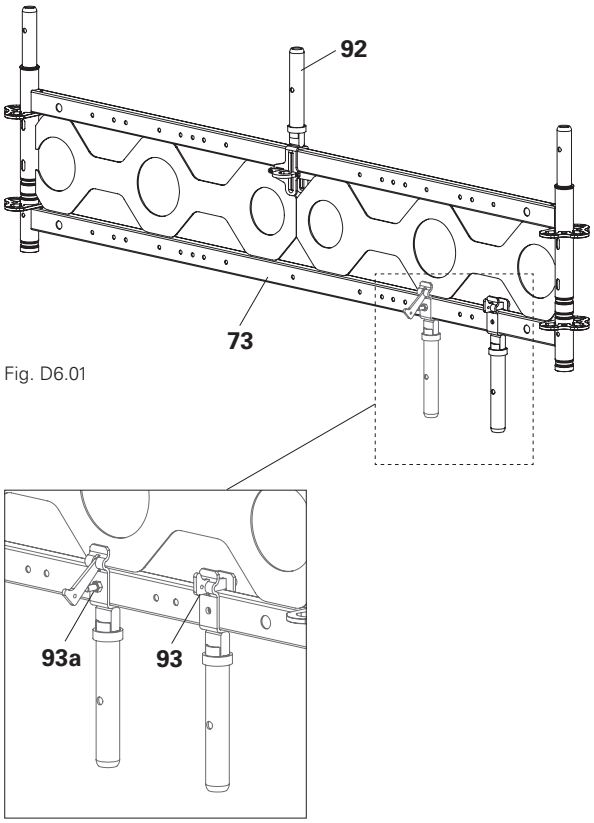


Fig. D6.01

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 Spig. (**92**),
- or on two Ledger Brackets UHA-2 half Spig. (**92**)
.

To position the scaffold assembly on the top of the Multi Girder ELM (**73**), attach the Ledger Bracket UHA-2 half Spig. (**92**) and wedge it tight.

Possible combinations of pavement gantry widths and working scaffold positions are based on the system width and the construction site requirements. (Fig. D6.02)

- 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 Easy EVOTOP 100

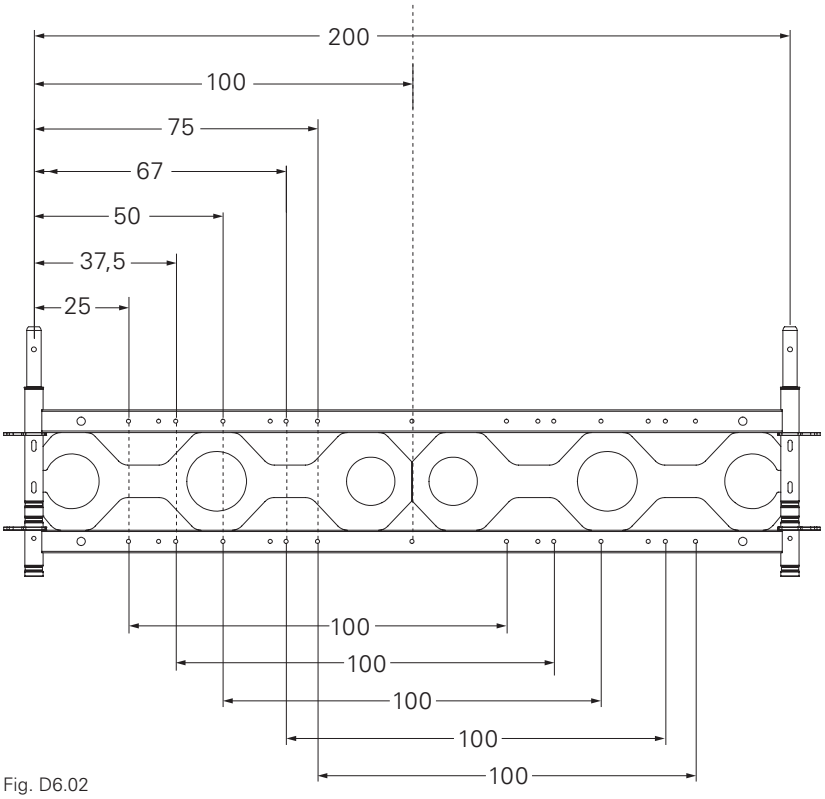


Fig. D6.02

Adjusting the passage height

Variant 1
The minimum passage height of 2.10 m is realised with 1.50 m long standards (EVR, UVR-2) in connection with base standards.
For this, spindle out Adj. Base Plates UJB 38-50/30 for 30 cm.
Max. spindling length = 35 cm (incl. plate and quick jack nut)

An additional adjustment range of 5 cm is available for ground surface compensation. (Fig. D6.03)

Variant 2
For standards with lengths of 2.00 m, this results in a minimum passage height of 2.35 m with a 5 cm spindling extension range.

The maximum passage height can be adjusted up to 2.90 m.
For this, spindle out
Adj. Base Plates UJB 38-80/55 for 60 cm (= max.).

For further combinations see Tab. D6.01

For the maximum extension lengths, see section Tie pattern

Components

10 Adj. Base Plate UJB 38-50/30
11 Adj. Base Plate UJB 38-80/55
18 Tube EVR 150
30 Steel Deck EDS
73 Multi Girder ELM 200
80 Base Standard UVB
82 Standard UVR-2
92 Ledger Bracket UHA-2 half Spig.
94 Horizontal Ledger UH-2
99 Ledger Brace UBL-2

Variant 1

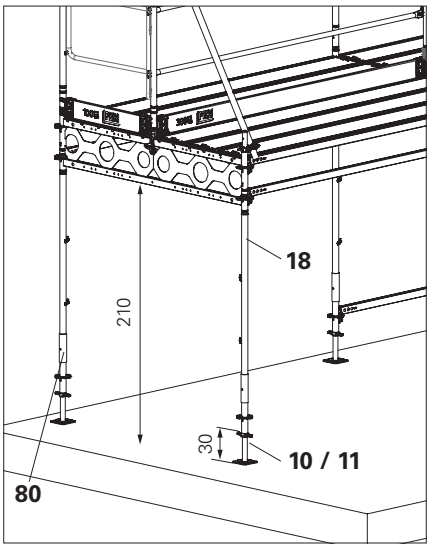


Fig. D6.03

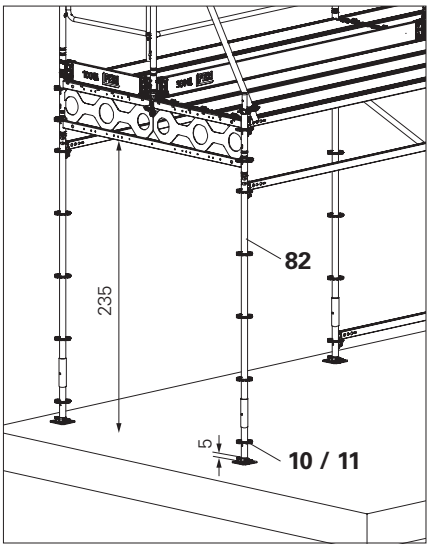


Fig. D6.04

Passage heights			
Standard	**Adjusting Base Plate**	**Extension range**	**Passage height**
Variant 1 EVR 150 UVR-2 150	UJB 38-50/30	30 cm	2.10 m
	UJB 38-80/55	60 cm	2.40 m
Variant 2 EVM 200 UVR-2 200	UJB 38-50/30	5 cm	2.35 m
		30 cm	2.60 m
	UJB 38-80/55	60 cm	2.90 m

Tab. D6.01

Assembling pavement gantries

- Follow the assembly sequence!
- Quantity and positions of ties, bracing with Horizontal Ledgers UH-2, Face Braces EBF and Ledger Braces UBL, see section Tie pattern.

Horizontal pre-assembly of frame columns

1. Spindle out Adj. Base Plates UJB 38-50/30 (**10**) sufficiently so as to realise the required clear passage height.
2. Connect adjusting base plate to Base Standard UVB 25 (**80**), Tube EVR 150 (**18**) and the prepared Multi Girder ELM.
3. Fit additional frame columns.

(Fig. D6.05)

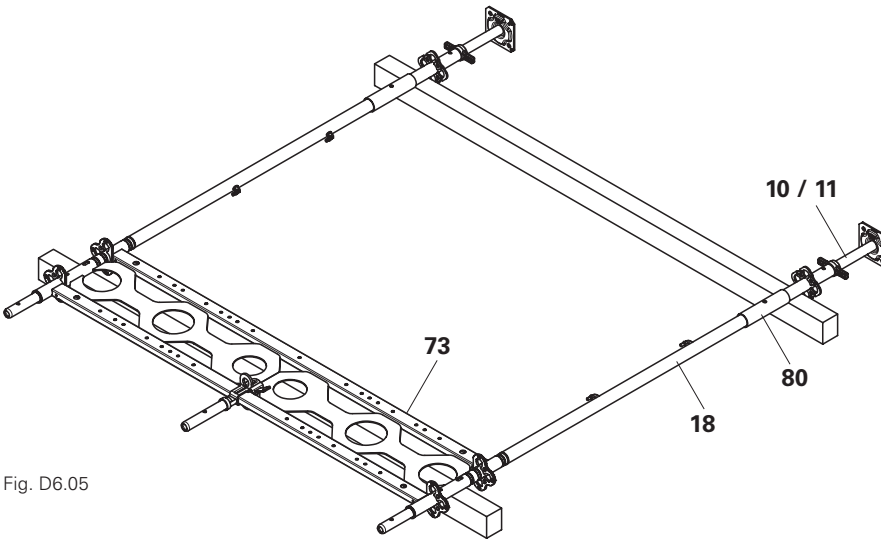


Fig. D6.05

- Alternatively, the Standard UVR-2 150 can be used.
- For larger passage heights, use Standard EVOTOP EVM 200 or UVR-2 200.

Be mindful of loose components during the erection process; if necessary, pin with Locking Pins Ø 48/57.

Setting up the first bay

1. Set up frame columns and connect them to the base standard using Horizontal Ledgers UH-2 (**94**).
2. Horizontally align the frame columns using a spirit level and securely fix the wedges.
3. Fit Horizontal Ledger UH-2 (**94a**) as an assembly aid on the base level and attach the decks (**30**).

(Fig. D6.06)

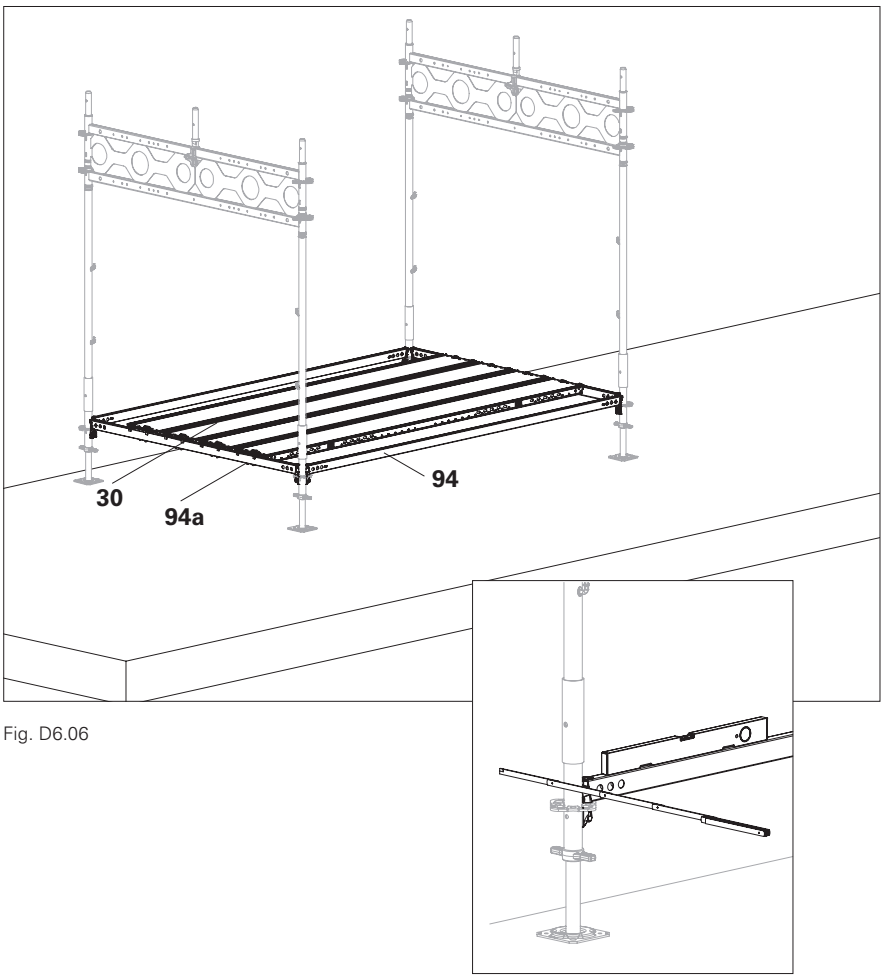


Fig. D6.06

4. Connect frame columns to the inner and outer sides of the scaffold with Horizontal Ledgers UH-2 (**94**):
   – to rosettes (**73.1**) of the Multi Girder ELM.
   – to pre-assembled Ledger Brackets UHA-2 half Spig. (**92**).
   – Hammer all wedges into place.
5. Install Ledger Braces UBL (**99**) on the inner and outer sides of the pavement gantry. Firstly, insert the mounting finger above and then the gravity pin below.

(Fig. D6.07)

All tilt fingers (**99.1**) of the assembly must be transverse after installation of the Ledger Braces UBL and rest on both sides of the hole.(Fig. D6.07a)

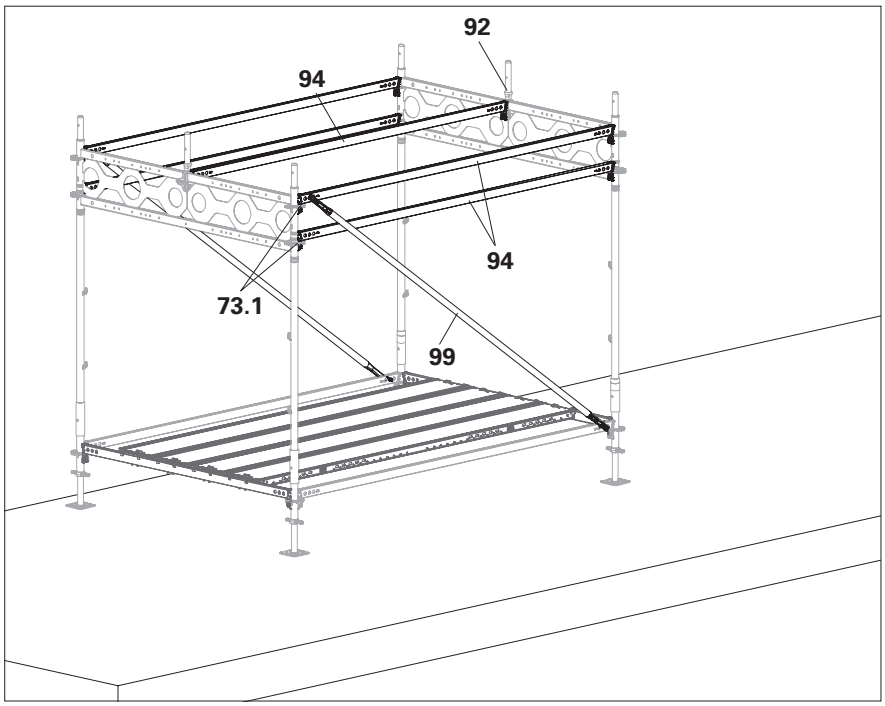


Fig. D6.07

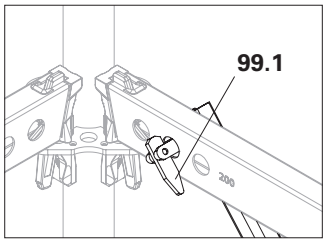


Fig. D6.07a

Erecting additional bays

Components

30 Steel Deck EDS
92 Ledger Bracket UHA-2 half Spig.
94 Horizontal Ledger UH-2

1. Set up additional frame columns and brace with Horizontal Ledgers UH-2 (**94**). See work steps for setting up the first bay.
2. Brace every second bay on the base level with Horizontal Ledgers UH-2 (**94a**). The horizontal ledgers (**94c**) only serve as an assembly aid.
3. If required, install Ledger Braces UBL.
4. Fit Horizontal Ledger UH-2 (**94b**) as an assembly aid on the base level and attach the decks (**30**).

(Fig. D6.08)

5. Place Steel Decks EDS (**30**) in the Multi Girder ELM; to do so, gradually start to use the auxiliary decks no longer required in the base level.
6. Remove the Horizontal Ledgers UH-2 (**94b**), which served as a support for the auxiliary decks, on the base level.

→ The pavement gantry is now installed.

(Fig. D6.09)

From a static point of view, Horizontal Ledgers UH-2 and Ledger Braces UBL are not always required, see section Tie pattern.

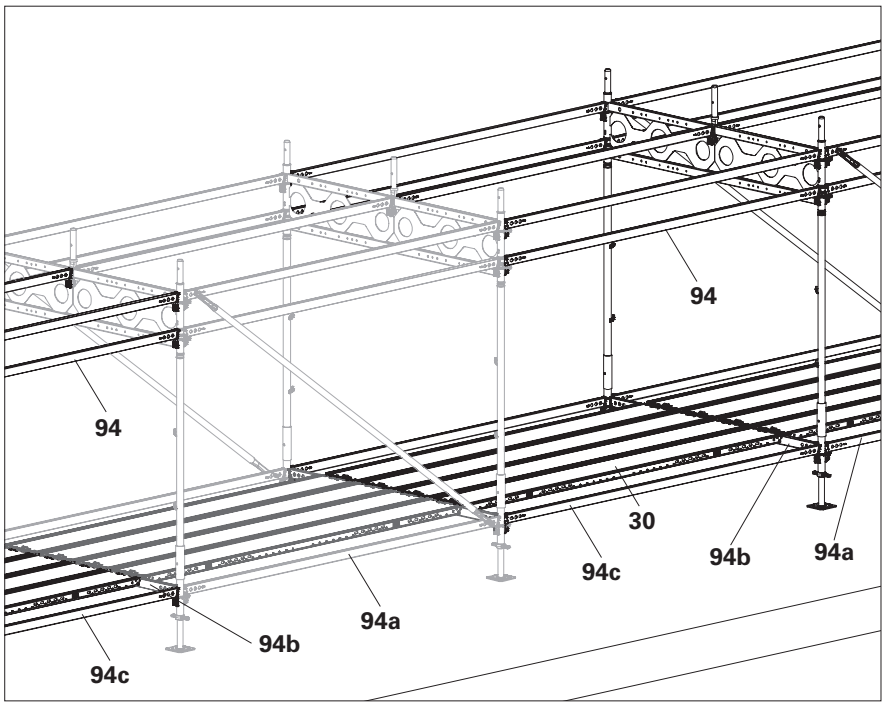


Fig. D6.08

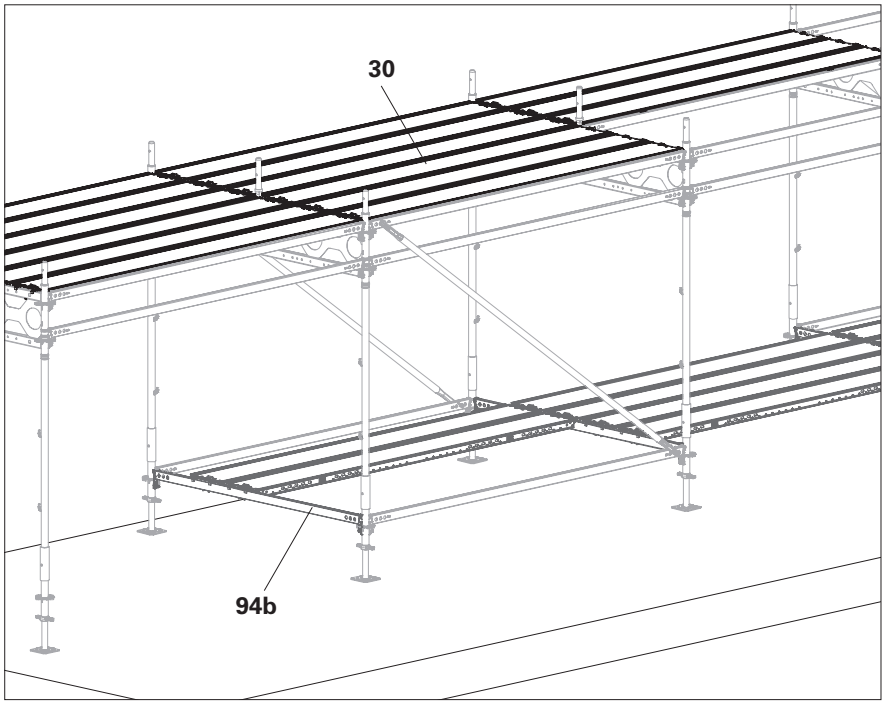


Fig. D6.09

Scaffold assembly

Warning

When walking on the pavement gantry, there is a risk of falling. A fall can result in serious injury.

⇒ Take appropriate measures to prevent falls, e.g. install guardrails.

Variant 1 – with base standards

Components

16	Ledger EVOTOP UH-2 100
23	Base Standard EVOTOP EVS 124
46	Wall Tie UWT
49	Swivel Coupler 48/48
49.1	Swivel Coupler 38/48
75	Scaffolding tube

Assembly

1. Fit two Base Standards EVOTOP EVS 124 (**23**) onto each frame column and connect it to the Ledger EVOTOP UH-2 100 (**16**).
2. Scaffold erection continues as described in Sections "B2" – "B3".
3. Brace every frame column with scaffolding tubes (**75**), swivel couplings (**49**) (**49.1**) and wall ties (**46**).
4. Scaffold erection continues in accordance with Section "B4".

→ The scaffold assembly is now installed.

(Fig. D6.10 + Fig. D6.10a)

For the quantity and positions of ties, bracing with Horizontal Ledgers UH-2 and braces, see the section Tie pattern.

The assembly of the additional deck level on the scaffold protects any weather-resistant sheeting that may have been installed on the pavement gantry.

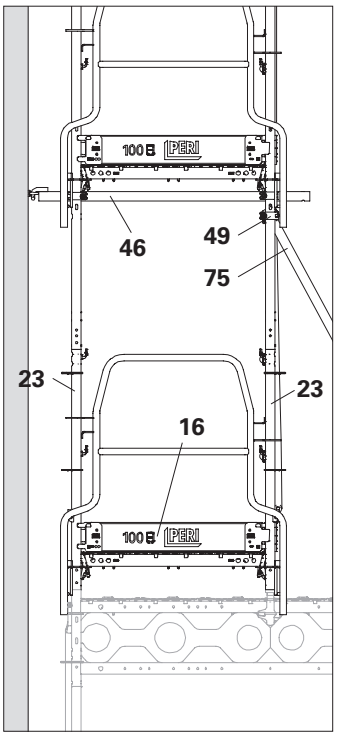


Fig. D6.10a

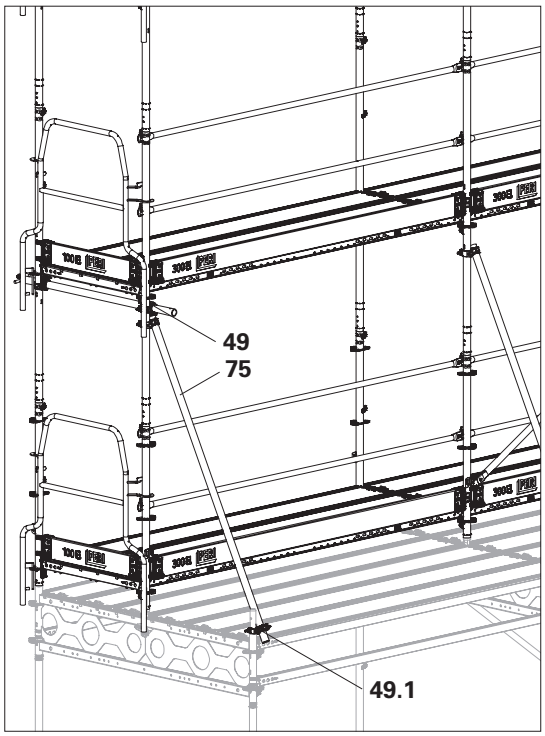


Fig. D6.10

Variant 2 – continue immediately on Multi Girder ELM

This variant is not covered by the standard configuration.
Separate static proof for the stability is required here.

Components

16	Ledger EVOTOP UH-2 100
22	Standard EVOTOP EVM 200
24	Brace Adapter EBA
46	Wall Tie UWT
49	Swivel Coupler 48/48
49.1	Swivel Coupler 38/48
50	Guardrail Post EVP
51	Guardrail EPG
54	End Guardrail EPF
56	Toeboard UPF
75	Scaffolding tube

Assembly

1. On every frame column:
   – Attach the Guardrail Post EVP (**50**) to the Ledger Bracket UH half with spigot (**92**). Fit the second guardrail post (**50a**) onto the multi girder (**73**).
   – Fit Guardrails EPG (**51**) onto the Guardrail Post EVP (**50**).
   – Fit Toeboard UPF (**56**).
2. Attach End Guardrail EPF (**54**) to first and last scaffolding bays.
3. Fit Standards EVOTOP EVM 200 (**22**) onto all guardrail posts and connect with Ledgers EVOTOP UH-2 100 (**16**).
4. Scaffold erection continues as described in Sections "B2" – "B3".
5. Brace every frame column with scaffolding tubes (**75**), swivel couplings (**49**) (**49.1**) and wall ties (**46**).
6. Fit a brace onto Guardrail Post EVP using Brace Adapter EBA (**24**). (Fig. D6.11b)
7. Scaffold erection continues in accordance with Section "B4".

→ The scaffold assembly is now installed.

(Fig. D6.11 + Fig. D6.11a)

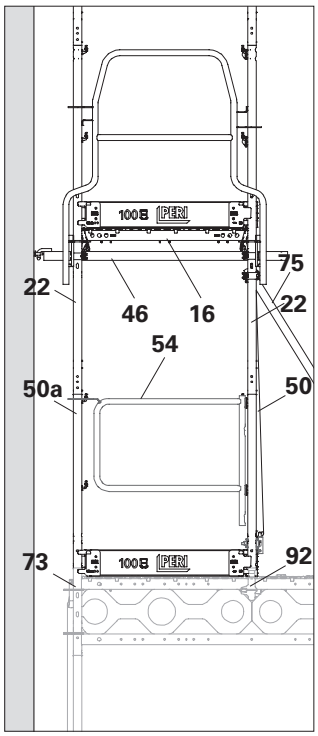


Fig. D6.11a

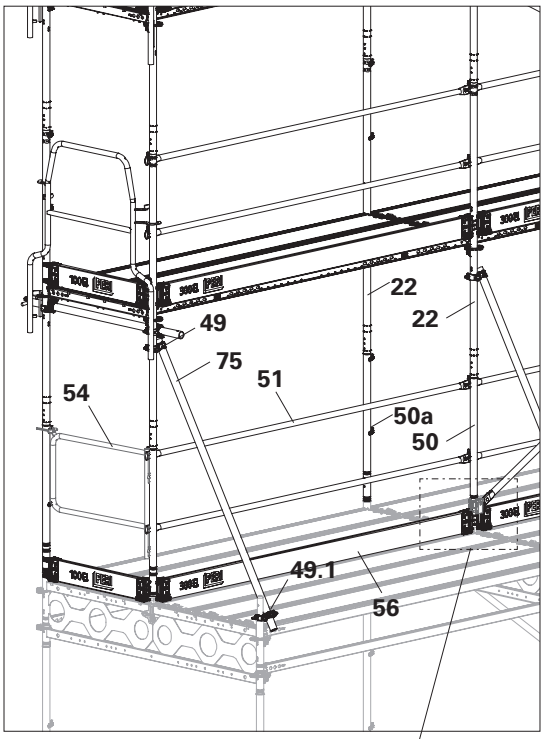


Fig. D6.11

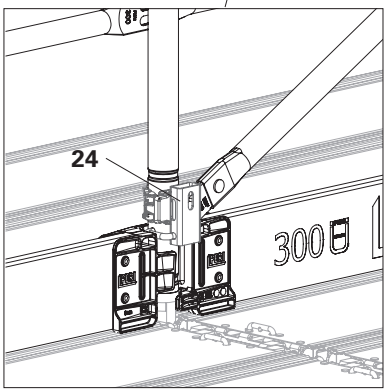


Fig. D6.11b

Multi Brace EWB

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

A multi brace consists of:
- An outer tube Ø 60 mm (**25.1**) with swivel couplings fixed on both sides (25.3, 25.4)
- Inner tube Ø 48 mm (**25.2**).

(Fig. D7.01)

- Maximum extension length 5.60 m. The second hole (**25.6**) in the inner tube must not be visible and must always be completely covered by the outer tube. (Fig. D7.01)
- Tighten couplings using 50 Nm.
- Attach scaffolding support on each frame column progressively in line with basic scaffold assembly. Support angle $\alpha \leq 60°$.
- The force application must be close to the horizontal ledger. (Fig. D7.01a)

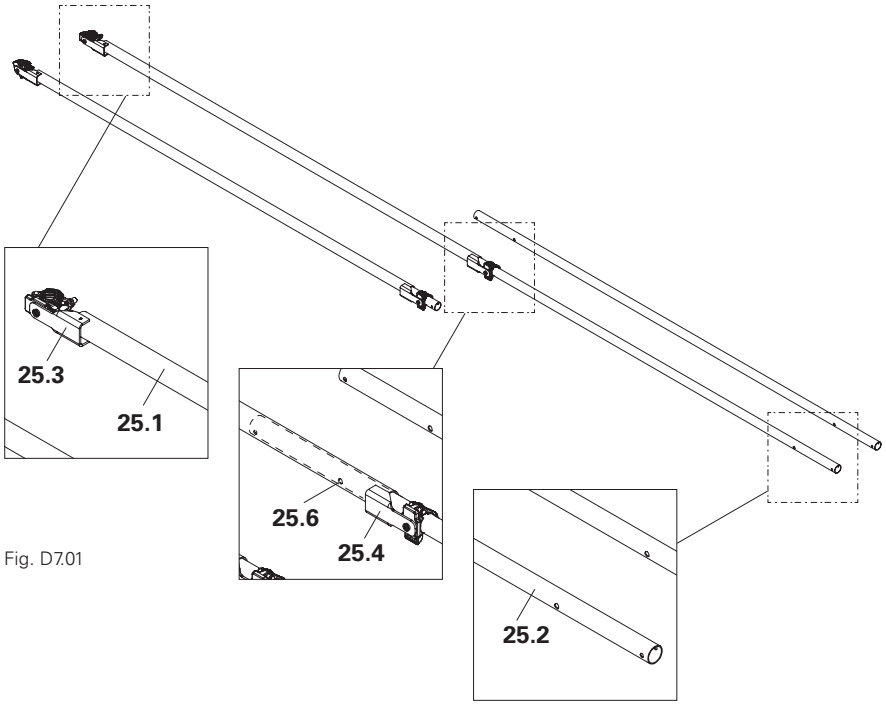


Fig. D7.01

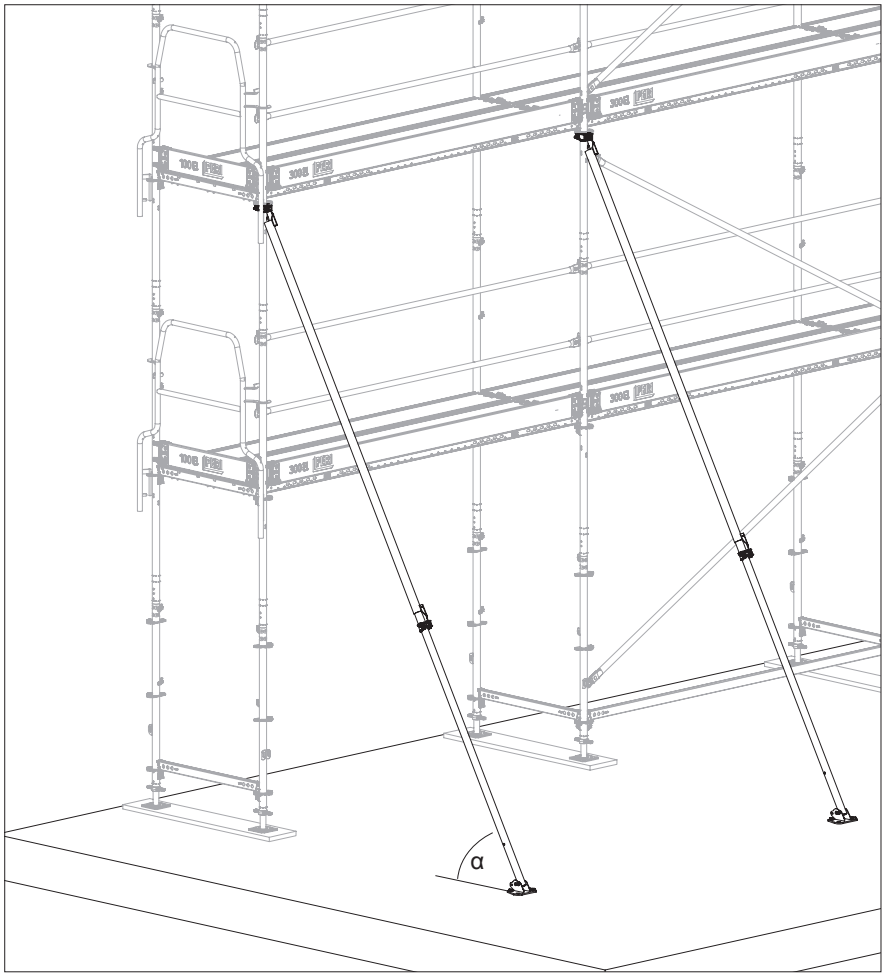


Fig. D7.01a

Base Plate EWB
Fix the Base Plate (**26**) to the substrate using 2 tie bolts (**29**) inserted through the small holes (**26.1**).

Alternatively, fix the base plate to the substrate by means of 2 pegs through the large holes (**26.2**).
Base plate is suitable for standard ground nails up to d = 25 mm. The hole (**26.2**) of the base plate has a diameter of 28 mm.

Mount the inner tube of the multi brace on the holes using bolts and nuts (**26.3**) and (**26.4**). If necessary, install a multi brace as a kicker brace at the hole (**26.3**). (Fig. D7.02)

Instead of the Multi Brace EWB, one Push-Pull Prop RS can be installed on the middle hole (**26.5**) as scaffolding support.
(Fig. D7.03)

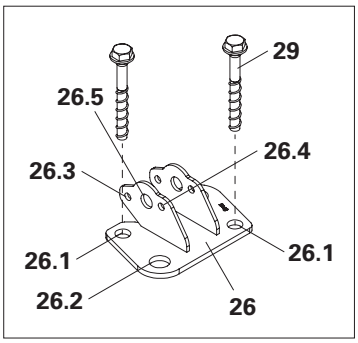


Fig. D7.02

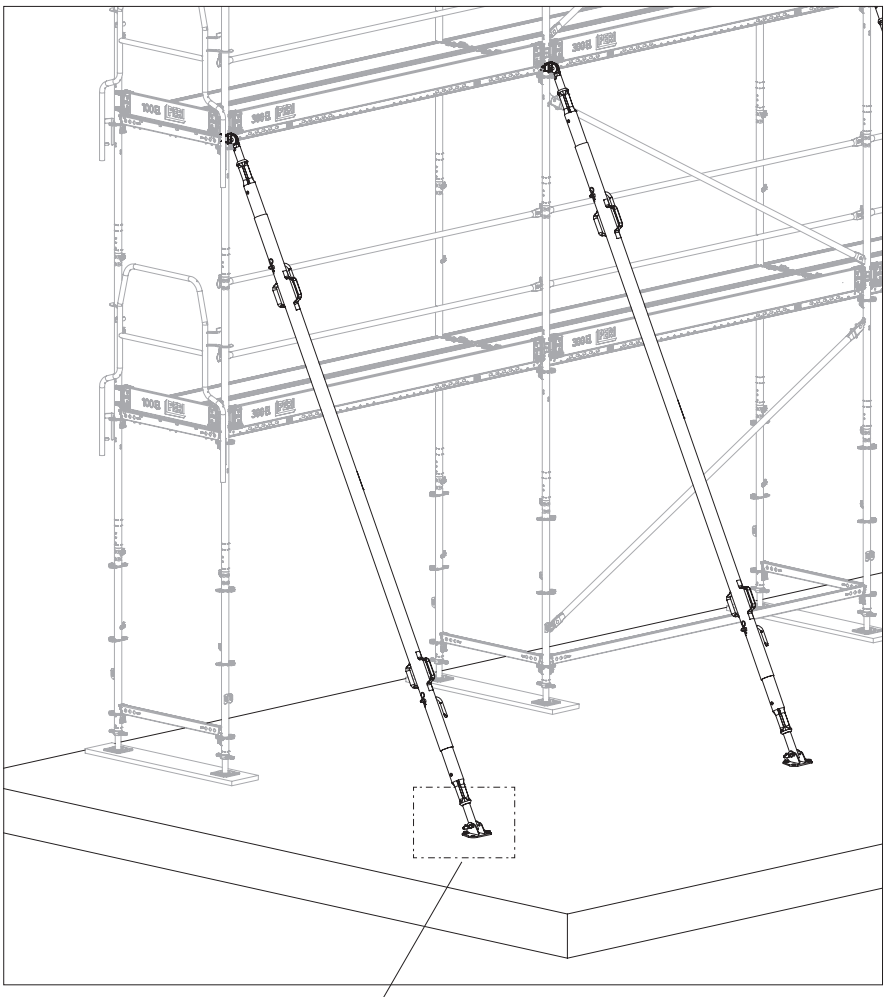
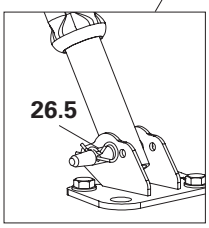


Fig. D7.03



Support on the second scaffolding level
Maximum permissible forces at maximum extension of 5.60 m:
Tension: 6.00 kN
Compression: 3.73 kN

Components

22	Standard EVOTOP EVM 200
25	Multi Brace EWB
26	Base Plate EWB
27	Bolt M10 x 80-8.8
28	Hex-Nut EN1661 M10-8
29	Tie Bolt PERI 14/20 x 130

Assembly
1. Secure the multi brace on the basic scaffold at the top with an outer tube (**25.1**).
2. From the first scaffolding level, fit the top coupling (**25.3**) onto the outer Standard EVOTOP (**22**). Push the coupling as close as possible to the rosette and tighten. (Fig. D7.04a)
3. Loosen the bottom coupling (**25.4**) and extend the multi brace until the required support angle of $\alpha \leq 60°$ has been reached. Tighten the bottom coupling. (Fig. D7.04b)
4. Fit the inner tube (**25.2**) onto the rear hole (**26.4**) of the base plate by means of bolts (**27**) and nuts (**28**).
5. Fix Base Plate EWB (**26**) to the substrate. (Fig. D7.04c)
6. Label the multi brace as an obstacle.

→ The multi brace is now installed (Fig. D7.04)

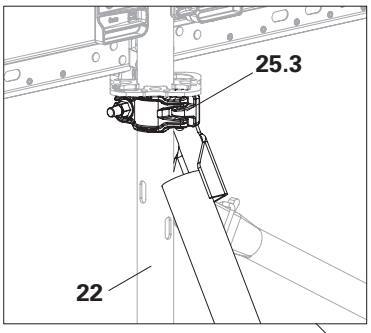


Fig. D7.04a

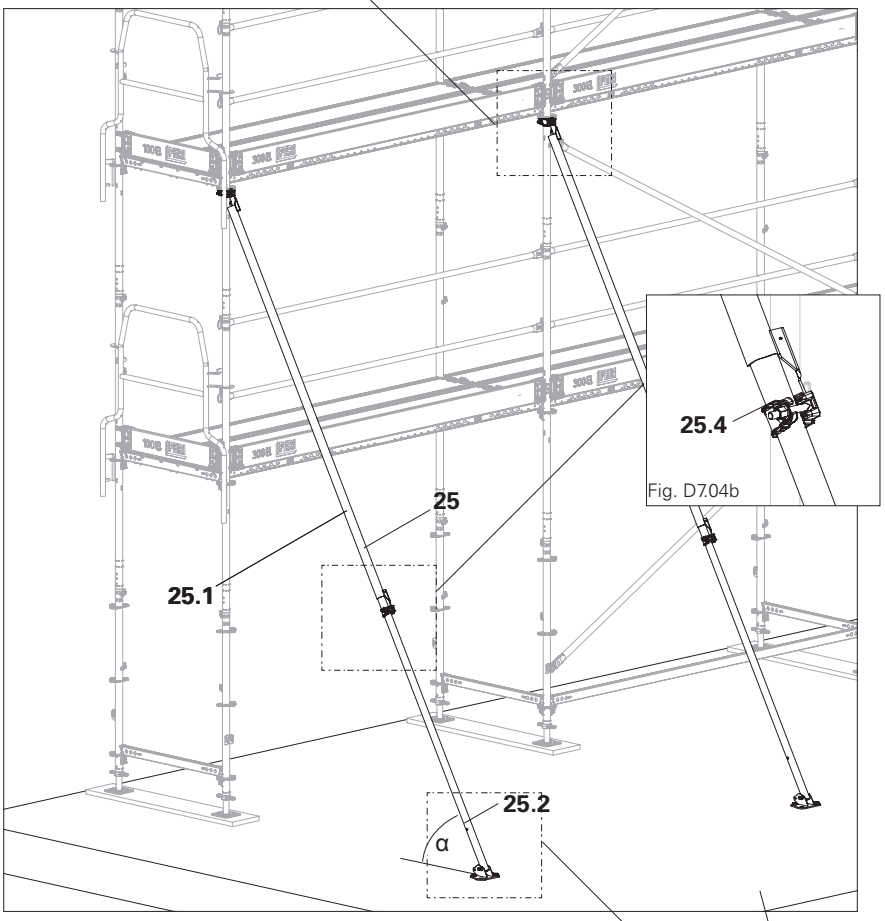


Fig. D7.04b

Fig. D7.04

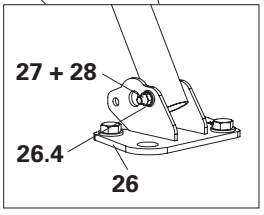


Fig. D7.04c

Support on the third scaffolding level
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:
Tension: 6.00 kN
Compression: 1.31 kN

Components

22	Standard EVOTOP EVM 200
25	Multi Brace EWB
26	Base Plate EWB
27	Bolt M10 x 80-8.8
28	Hex-Nut EN1661 M10-8
29	Tie Bolt PERI 14/20 x 130

Assembly
1. Extend the Multi Brace EWB with an additional inner tube (**25.5**).
2. Insert upper inner tube (**25.5**) 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 the second scaffolding level, fit the inner tube onto the outer Standard EVOTOP (**22**) using a swivel coupling (**49**). Push the coupling as close as possible to the rosette and tighten. (Fig. D7.05a)
5. Loosen the bottom coupling (**25.4**) 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 (**25.2**) onto the rear hole (**26.4**) of the base plate by means of bolts (**27**) and nuts (**28**).
7. Fix Base Plate EWB (**26**) to the substrate. (Fig. D7.05b)
8. Label the multi brace as an obstacle.

→ The multi brace is now installed (Fig. D7.05)

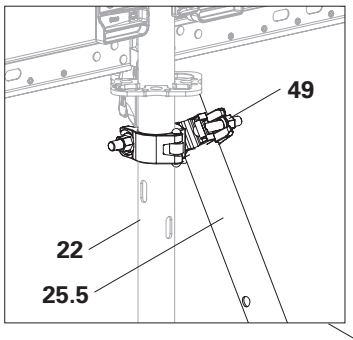


Fig. D7.05a

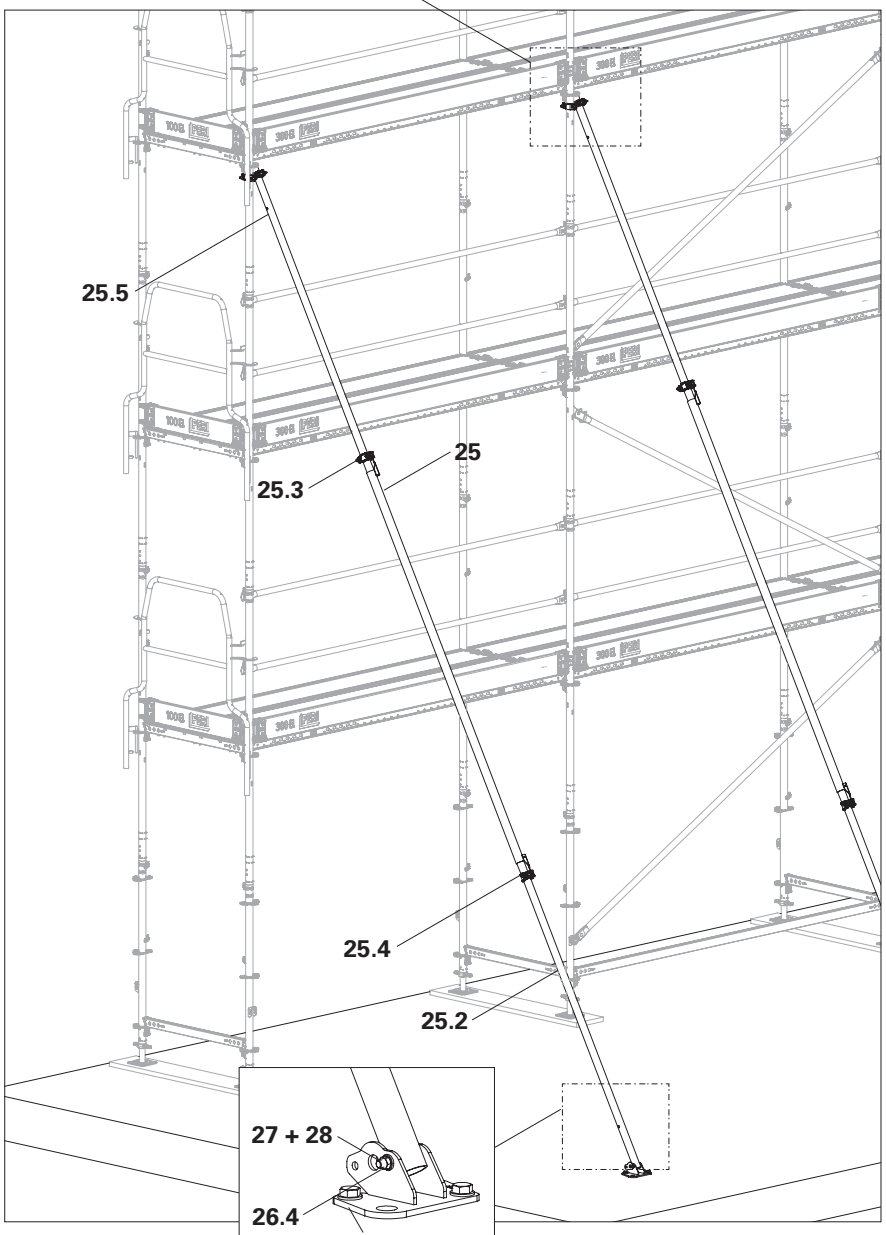


Fig. D7.05

Fig. D7.05b

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 beneath the base plate must always be ensured!

Components

23	Base Standard EVOTOP EVS 124
25	Multi Brace EWB
26	Base Plate EWB
27	Bolt M10 x 80-8.8
28	Hex-Nut EN1661 M10-8
49	Swivel Coupler SW Ø48/48 mm ga
75	Scaffolding tube

Assembly

1. Fit an inner tube (**25.2**) onto the front hole (**26.3**) of the base plate (**26**) by means of bolts (**27**) and nuts (**28**). (Fig. D7.06b).
– Alternatively, fit scaffolding tube (**75**) onto the multi brace (**25**) by means of a swivel coupling.
2. Install the inner tube or scaffolding tube on the outer base standard (**23**) with a swivel coupling (**49**). Tighten the swivel coupling.
(Fig. D7.06a)
3. Label horizontal bracing as an obstacle.
→ The bracing is now installed.
(Fig. D7.06)

Required length of the scaffolding tube:
for support on the second scaffolding level 2.50 m,
for support on the third scaffolding level 4.00 m.

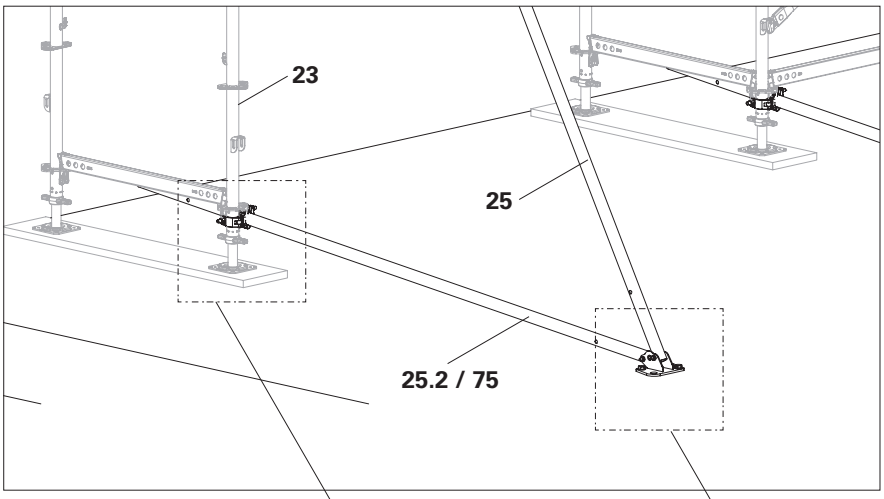


Fig. D7.06

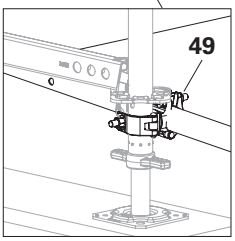


Fig. D7.06a

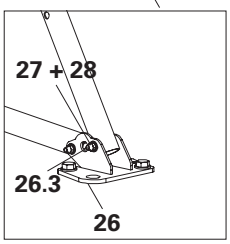


Fig. D7.06b

Horizontal and vertical bracing
If statically required, the multi brace must be reinforced against vertical and horizontal displacement.

- Separate static proof is required!
- The vertical load-bearing capacity of the substrate beneath the base plate must always be ensured!

Components

23	Base Standard EVOTOP EVS 124
25	Multi Brace EWB
48	Standard Coupler RA 48/48
75	Scaffolding tube

Assembly

1. Vertically reinforce the multi brace (**25**) with an outer tube (**25.1**). Fit the outer tube onto the base standard (**23**) (Fig. D7.07b) and onto the inner tube (**25.2**), 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 (**75**) and standard couplers (**48**). (Fig. D7.07a)
3. Label horizontal bracing as an obstacle.

→ The bracing is now installed.
(Fig. D7.07)

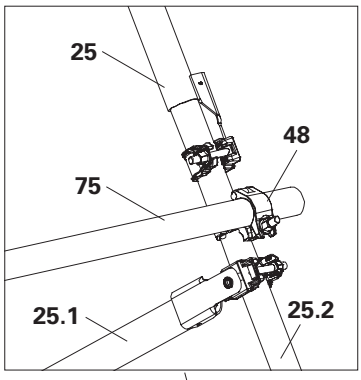


Fig. D7.07a

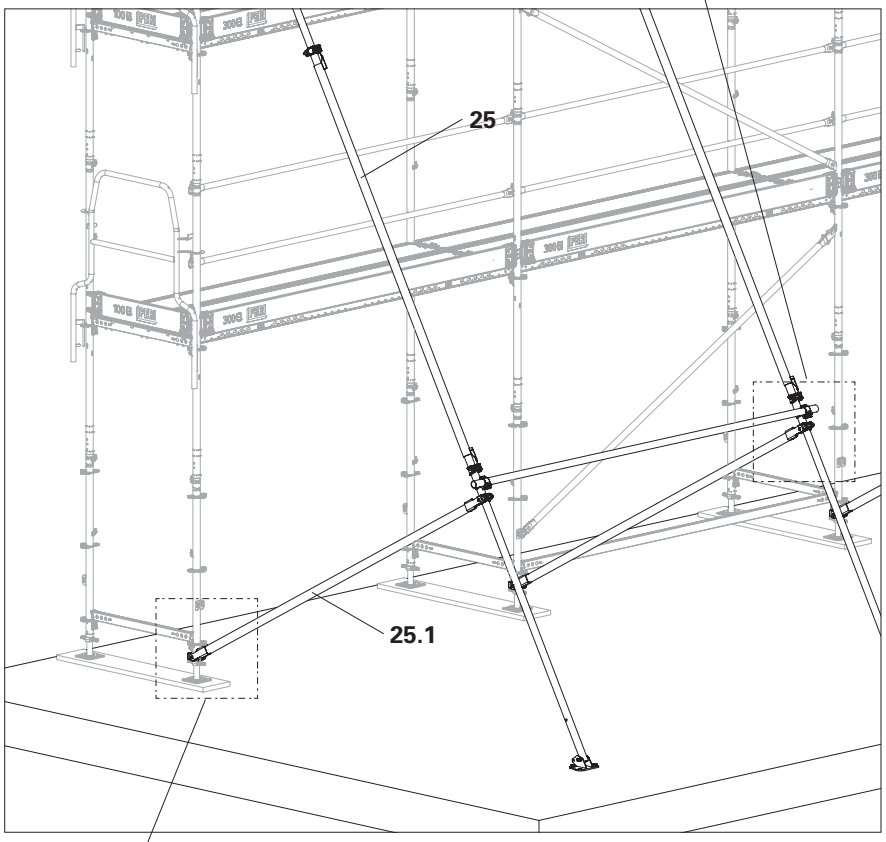


Fig. D7.07

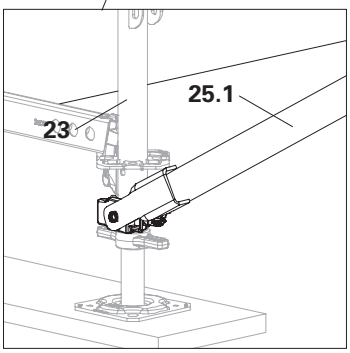


Fig. D7.07b

Push-Pull Props RS

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

Assembly

1. From the first scaffolding level, fit a Brace Connector HDR-2 (**101**) onto the outer Standard EVO-TOP EVM 200 (**22**). Push the coupling as close as possible to the rosette and tighten.
2. Fit Push-Pull Prop RS 650 (**102**) onto the Brace Connector HDR-2. (Fig. D7.08a)
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 (**103**) and cotter pins (**104**).
5. Fix Base Plate EWB (**26**) to the substrate. (Fig. D7.08b)
6. Label the push-pull prop as an obstacle.

→ The push-pull prop is now installed. (Fig. D7.08)

Components

22	Standard EVOTOP EVM 200
26	Base Plate EWB
101	Brace Connector HDR-2
102	Push-Pull Prop RS 650
103	Bolt Ø 20 x 140
104	Cotter Pin 4/1

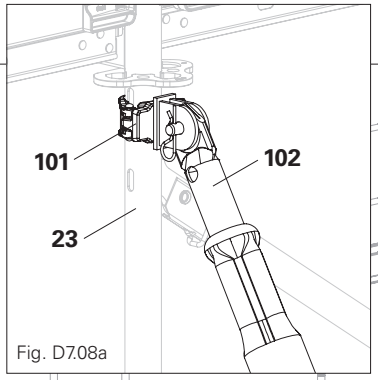


Fig. D7.08a

Fig. D7.08

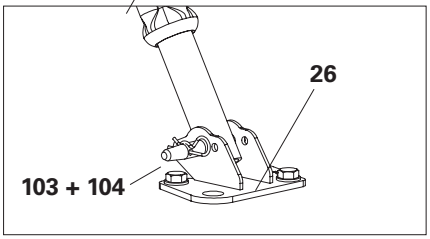


Fig. D7.08b

E1 Load-bearing capacities

Decks

Overview of decks according to lengths, load classes and use as roof edge protection scaffold.



Suitable decks and the corresponding lengths have to be chosen for the respective load class for the standard configuration described in these Instructions for Assembly and Use!

Scaffold deck	Length [m]	Width [m]	Weight [kg]	Load Classes according to EN 12811						Use as roof edge protection scaffold
				1	2	3	4	5	6	
				Uniformly distributed nominal load p [kN/m²]						
				0.75	1.50	2.00	3.00	4.50	6.00	
Steel Deck EDS	0.67	0.33	5.4	x	x	x	x	x	x	x
	1.00	0.33	7.4	x	x	x	x	x	x	x
	1.50	0.33	10.3	x	x	x	x	x	x	x
	2.00	0.33	13.3	x	x	x	x	x	x	x
	2.50	0.33	16.2	x	x	x	x	x	–	x
	3.00	0.33	19.2	x	x	x	x	–	–	x
Steel Deck UDG-2	2.00	0.33	10.5	x	x	x	x	x	x	x
	2.50	0.33	12.9	x	x	x	x	x	–	x
	3.00	0.33	15.8	x	x	x	x	–	–	x
Aluminium Deck EDA	0.67	0.67	6.4	x	x	x	x	x	x	x
	1.00	0.67	8.4	x	x	x	x	x	x	x
	1.50	0.67	11.5	x	x	x	x	x	x	x
	2.00	0.67	14.7	x	x	x	x	x	–	x
	2.50	0.67	17.8	x	x	x	x	x	–	x
	3.00	0.67	21.0	x	x	x	–	–	–	x
Combi Deck EDW-2	1.50	0.67	12.1	x	x	x	–	–	–	x
	2.00	0.67	15.1	x	x	x	–	–	–	x
	2.50	0.67	18.5	x	x	x	–	–	–	x
	3.00	0.67	22.3	x	x	x	–	–	–	x
Composite Deck EDC	1.50	0.67	12.5	x	x	x	–	–	–	x
	2.00	0.67	15.6	x	x	x	–	–	–	x
	2.50	0.67	19.2	x	x	x	–	–	–	x
	3.00	0.67	23.2	x	x	x	–	–	–	x
Access Deck EAA	2.50	0.67	24.50	x	x	x	–	–	–	x
	3.00	0.67	27.50	x	x	x	–	–	–	x
Entry Platform EAA	2.00	0.67	17.30	x	x	x	–	–	–	x
Access Deck EAW	2.50	0.67	26.2	x	x	x	–	–	–	x
	3.00	0.67	29.5	x	x	x	–	–	–	x
Entry platform EAW	2.00	0.67	15.80	x	x	x	–	–	–	x
Access Deck EAC	2.50	0.67	24.82	x	x	x	–	–	–	x
	3.00	0.67	28.26	x	x	x	–	–	–	x
Entry Platform EAC	2.00	0.67	16.78	x	x	x	–	–	–	x

x = use permissible
– = use not permissible

Lattice girders

The permissible loads stated in the table apply only when starter tubes are used and load is introduced at the nodes of the diagonal struts.

Load-bearing capacity of the lattice girders				Steel Lattice Girder ULS	
Type	Spacing of the lateral holders*			Individual load in middle of bay	Connecting the chords with bottom chord/top chord
Height/ length [cm]	a1 [cm]	a2 [cm]	a3 [cm]	perm. F [kN]	[–]
Span L = 400 cm					
50/425	200	–	–	15.1	NK/NK
50/525	200	–	–	15.1	NK/NK
70/525	200	–	–	20.7	NK/NK
50/425	100	100	–	30.7	NK/NK
50/525	100	100	–	30.7	NK/UNK
70/525	100	100	–	31.1	NK/UNK
Span L = 500 cm					
50/525	250	–	–	15.1	NK/NK
50/625	250	–	–	15.1	NK/NK
50/525	150	100	–	27.2	NK/NK
50/625	150	100	–	27.4	UNK/NK
70/525	250	–	–	20.7	NK/NK
70/625	250	–	–	20.7	NK/NK
70/525	150	100	–	29.1	UNK/NK
70/625	150	100	–	29.1	UNK/NK
Span L = 600 cm					
50/625	300	–	–	8.8	NK/NK
70/625	300	–	–	12.1	NK/NK
70/825	300	–	–	12.1	NK/NK
50/625	150	150	–	17.5	NK/NK
70/625	150	150	–	23.5	NK/UNK
50/625	100	100	100	23.2	NK/NK
70/625	100	100	100	26.8	NK/UNK
70/825	100	100	100	26.6	NK/UNK

* see "Bracing and anchoring" from page 138

NK: Standard coupler, class B according to DIN EN 74-1
UNK: Standard coupler class BB with standard coupler class BB placed underneath (coupler configuration BB/BB) according to DIN EN 74-1

General information

- Ties must be installed progressively with the scaffold assembly
- Proof of the load-bearing capacity of the connectors between the wall ties and the anchoring base for the tie forces in the tables of Section "E3 Tie forces" is required.

Warning

- The structural stability of the scaffolding construction is reduced by missing or insufficiently load-bearing ties.
- Ties do not transfer vertical loads.

This could result in the scaffold collapsing.

⇒ Adhere to the number and position of the ties in Section "E6 Tie pattern"!

- In the case of structural arrangements 1a, 1b, 1.2, 2a, 2b, 2.3, in exceptional cases, ties may be fitted at up to 30 cm below the decking transom, but in no more than one tie position. If the pavement gantry profile is smaller, this must be clearly marked!
- If the scaffold ends in what is an unanchored level according to the tie pattern, then it must be anchored to the top anchoring level shown in the tie pattern.

With respect to how the PERI UP Easy EVOTOP Scaffold is used, various equipment variations are shown on the following pages in accordance with the proven standard configurations.

The number and type of ties, the number of braces and horizontal ledgers as well as the maximum spindle extension are shown in the tie patterns.

The following applies for use:

- The ties, vertical braces and horizontal ledgers of the basic variants must always be installed (marked in grey in the variants).
- Additional ties, vertical braces and horizontal ledgers (shown in black) are necessary when these variants are used.
- Contrary to the arrangements depicted in the tie patterns, the external console brackets they show can be mounted on the scaffold on any given level, but on one level only.

Typical tie patterns

Typical tie patterns are shown on the following two pages.
The final tie pattern depends on the factors that exert an influence on the scaffold:

1. Closed/open facades,
2. Cladding,
3. Mounting parts, e.g.:
   - Console brackets,
   - Protection roofs,
   - Pavement gantries,
   - Roof edge protection scaffold, etc.

Basic variant 1
For unclad scaffolds in front of open and closed facades **without** internal console bracket.
8 m offset tie pattern.
(Fig. E2.01)

Basic variant 2
For unclad scaffolds in front of open and closed facades **with** internal console bracket.
8 m offset tie pattern.
(Fig. E2.01)

Basic variant 3
For scaffolds with netting in front of closed facades.
8 m offset tie pattern.
(Fig. E2.01)

Basic variant 4
For scaffolds with netting in front of the open facade.
4 m offset tie pattern.
(Fig. E2.02)

Variant 4.4
For scaffolds with tarpaulins in front of closed or open facades.
2 m tie pattern.
(Fig. E2.02a)

The tie pattern to be used can only be found in the Section "E6 Tie pattern" from page 178!

Tie pattern 8 m, offset.
Basic variant 1, 2 & 3.

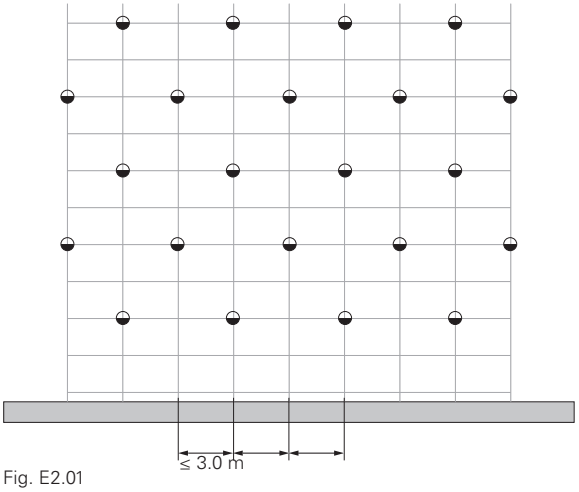


Fig. E2.01

Tie pattern 4 m, offset
Basic variant 4

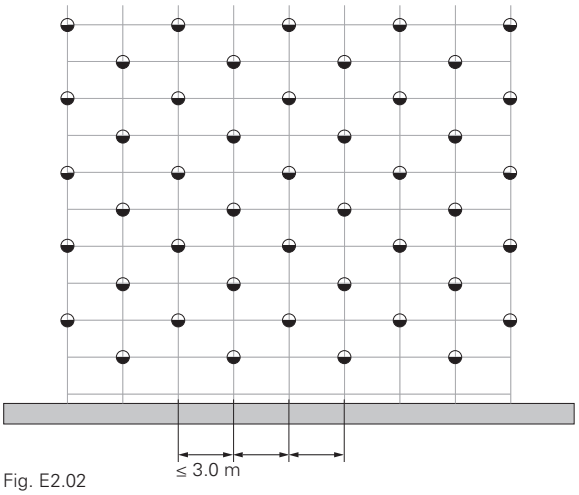


Fig. E2.02

Tie pattern 2 m, offset
Variant 4.4

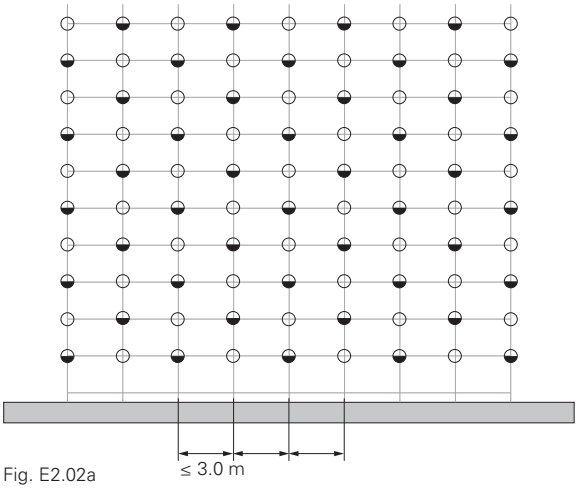


Fig. E2.02a

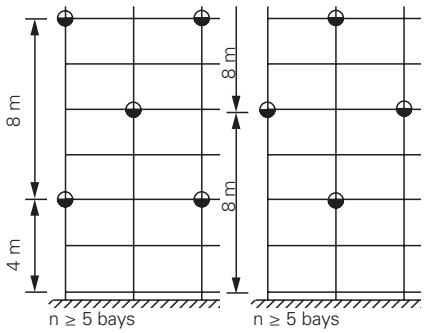
Rules for tie pattern h >24 m

Scaffolding with an assembly height >24 m must be erected as shown in the following overviews (pages 208 – 221).

Rules for tie pattern h ≤24 m

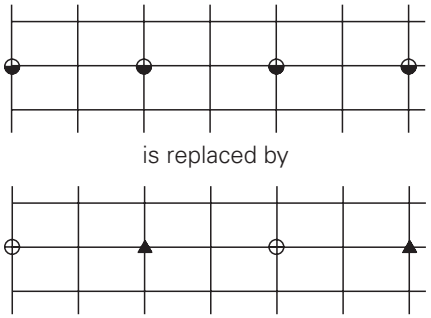
- Scaffold with a maximum structure height of 24 m plus spindle extension length according to the tie pattern and standard height on the base standards of 0.18 m.
- In each tie position, at least two wall ties or one triangulated tie are to be fitted in every fifth bay.
- For use in Easy EVOTOP 100 for load class LC4
  Live load on one scaffolding level.
- Scaffold in front of open or closed facade (for open facades up to 60 % of the visible area can be openings).
- The tables show the tie forces and the support forces.
- For scaffolds with fewer than 5 bays, the edge standards must be anchored at least every 4 m. For scaffolds with 5 or more bays, the following two variants are permissible:

or

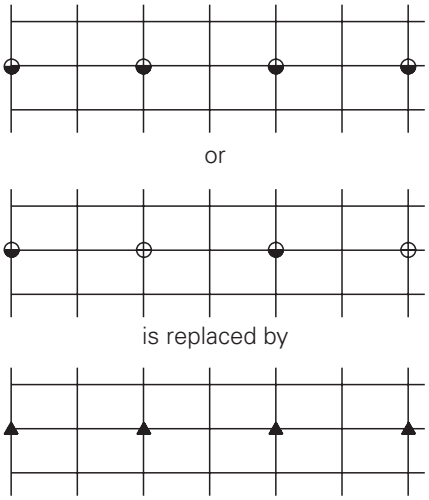


Wall ties replaced by triangulated ties on all levels:
For basic variants 1, 2 and 4 the tie patterns with wall ties (index a) show the alternatives with triangulated ties (index b).

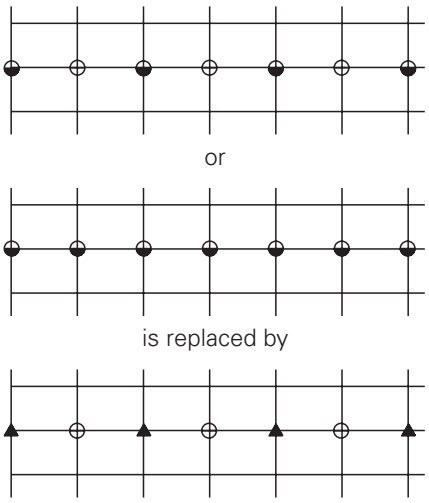
The alternatives are not shown for basic variant 3. In that arrangement the wall ties can be replaced by triangulated ties (combined with single-standard wall ties) in all tie positions as shown below.



Wall ties replaced by triangulated ties on individual levels:
With all variants, wall ties can be replaced by triangulated ties in individual tie positions as shown below:



The process is similar for tie positions with external console brackets, with or without protection panels and protection roofs:



Scaffolds with fewer than 5 bays:
At least three wall ties or two triangulated ties are required in the tie position of protection panels, protection roofs, external or internal console brackets. Each edge standard has to be anchored at vertical spacing of no more than 4 m.

Scaffolds with fewer than 3 bays:
At least two triangulated ties are required in the tie position of protection panels.

Key

- Single-standard wall ties
- Wall ties
- Triangulated ties

Types of anchoring

Single-leg wall tie
For accommodating tension and compressive forces at right angles to the facade ($A_{\perp}$.

Fasten Wall Tie UWT (**46**) to the inner Standard EVOTOP EVM (**22**) with a standard coupler (**48**). Fasten it as close as possible to the rosette. (Fig. E2.03 + Fig. E2.04)

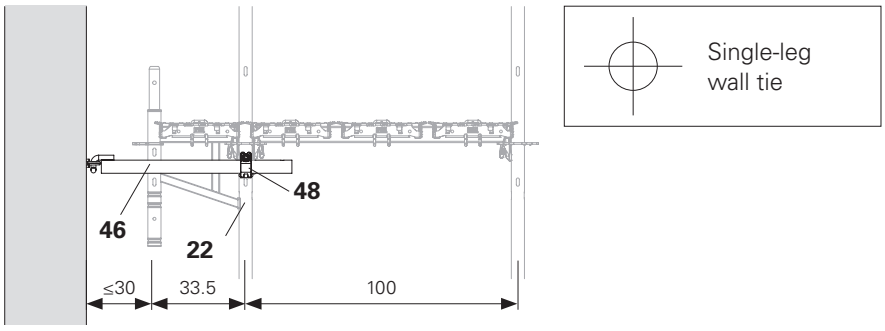


Fig. E2.03

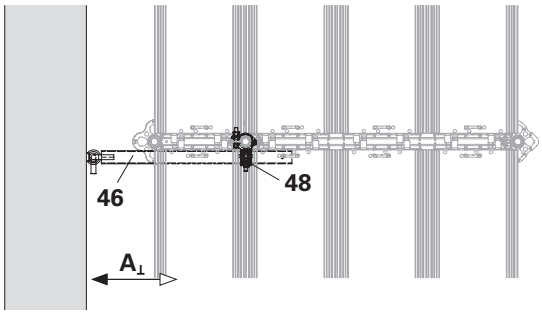


Fig. E2.04

Wall ties (two-legged)
For accommodating tension and compressive forces at right angles and parallel to the facade ($A_{\perp}$, $A_{\parallel}$).

Fasten Wall Tie UWT (**46**) onto the inner standard (**22a**) and outer Standard EVOTOP EVM (**22b**) with one standard coupler (**48**) in each case. Fasten it as close as possible to the rosette. (Fig. E2.05 + Fig. E2.06)

Components

22	Standard EVOTOP EVM 200
46	Wall Tie UWT
48	Standard Coupler RA 48/48

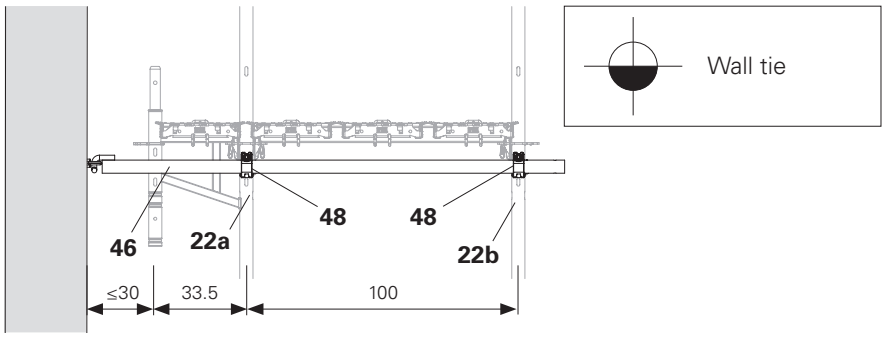


Fig. E2.05

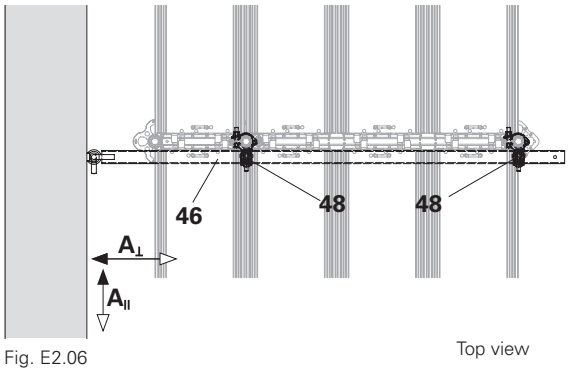
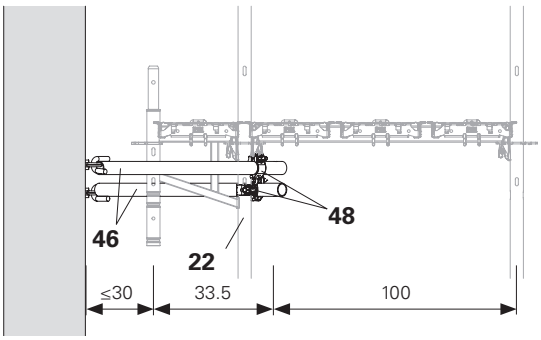


Fig. E2.06

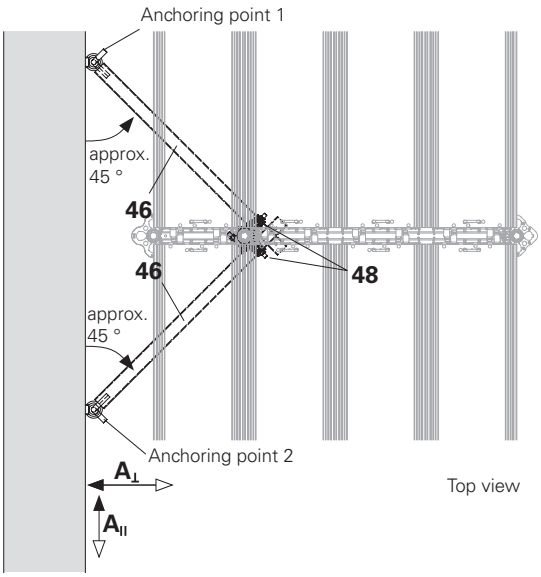
Triangulated tie
For accommodating tension and compressive forces at right angles and parallel to the facade ($A_\perp$, $A_\parallel$).

Attach two Wall Ties UWT (**46**) below at approx. 45° to the ledger axis.
Attach both wall ties to the inner Standard EVOTOP EVM (**22**) with standard couplers (**48**).
(Fig. E2.07 + Fig. E2.08)



Section

Fig. E2.07



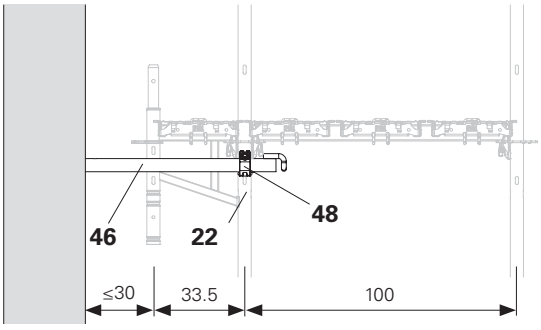
Top view

Fig. E2.08

Triangulated tie

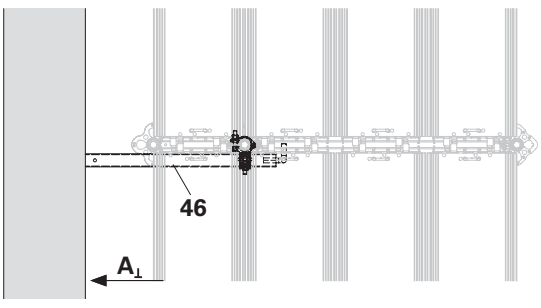
Pressure-resistant support
Only for accommodating compressive forces at right angles to the facade ($A_\perp$).

Fasten Wall Tie UWT (**46**) to the inner Standard EVOTOP EVM 200 (**22**) with a standard coupler (**48**). The tube end without a hook is positioned obtusely against the wall.
(Fig. E2.09 + Fig. E2.10)



Section

Fig. E2.09



Top view

Fig. E2.10

Pressure-resistant support

Components

22	Standard EVOTOP EVM 200
46	Wall Tie UWT
48	Standard Coupler RA 48/48

Statics

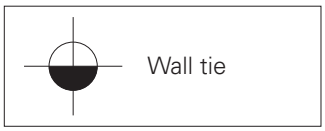
External scaffold access

For accommodating tension and compressive forces at right angles and parallel to the facade ($A_{\perp}$, $A_{\parallel}$).

Fasten Wall Tie UWT (**46**) to the inner (**22a**) and outer Standard EVO-TOP EVM 200 (**22b**) with standard couplers (**48**).
(Fig. E2.11 + Fig. E2.12)

Components

22	Standard EVOTOP EVM 200
46	Wall Tie UWT
48	Standard Coupler RA 48/48



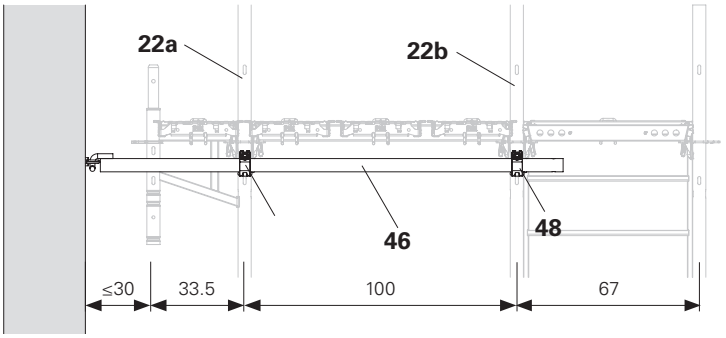


Fig. E2.11

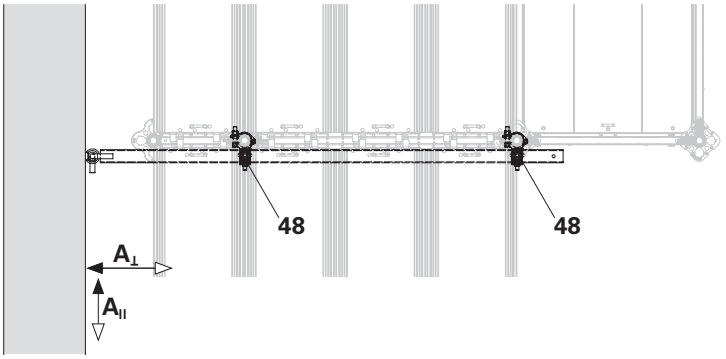


Fig. E2.12

External scaffold access

The external scaffold access bay has to be braced with Horizontal Ledger UH-2 as a longitudinal ledger and Face Brace EBF (**20**) as a vertical brace and anchored to the basic scaffold in accordance with the tie pattern as shown.

The following rules apply:

- Fit a horizontal ledger on the outside of the basic scaffold at the height of the base standard and at the highest scaffolding level.
- The tie pattern to be used for the scaffold access point depends on the respective scaffold variant and is noted in the respective tie pattern.
  See Section "E6 Tie pattern" from page 178.
- The access bay is only connected to the basic scaffold by means of Horizontal Ledger UH-2 67.
- The ties of the basic scaffold must always be installed.
  The anchoring of the external scaffold access ladder must also be installed.
  Ties in the same positions do not need to be installed twice.
  When anchoring ties are in the same position, the higher quality tie must be installed.
  A triangulated tie can remain in the basic scaffold and does not need to be replaced by a wall tie.

Tie pattern 8 m, offset

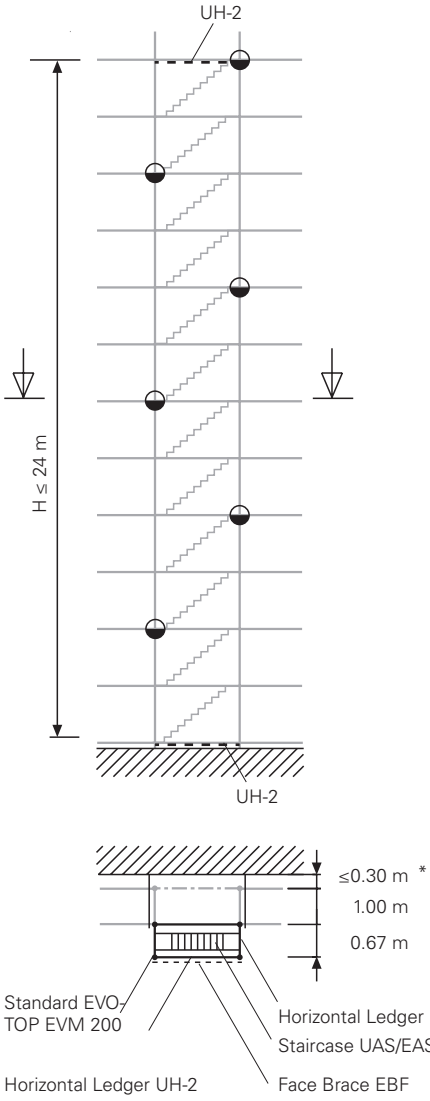


Fig. E2.13

Tie pattern 4 m, offset

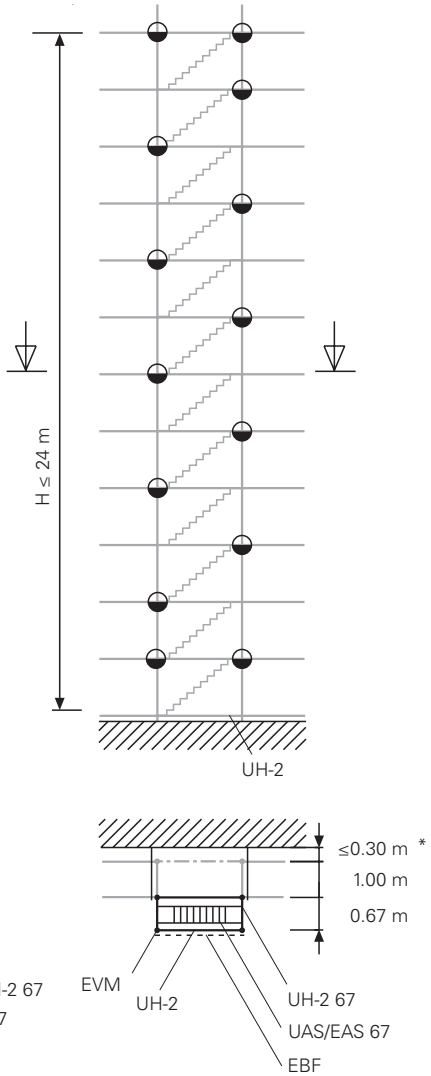
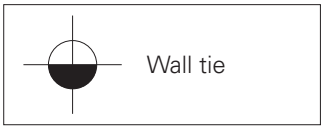


Fig. E2.14

* Dimension depends on attached internal console brackets and permissible building spacing.

Note: lateral protection components not shown.



Tie pattern 4 m

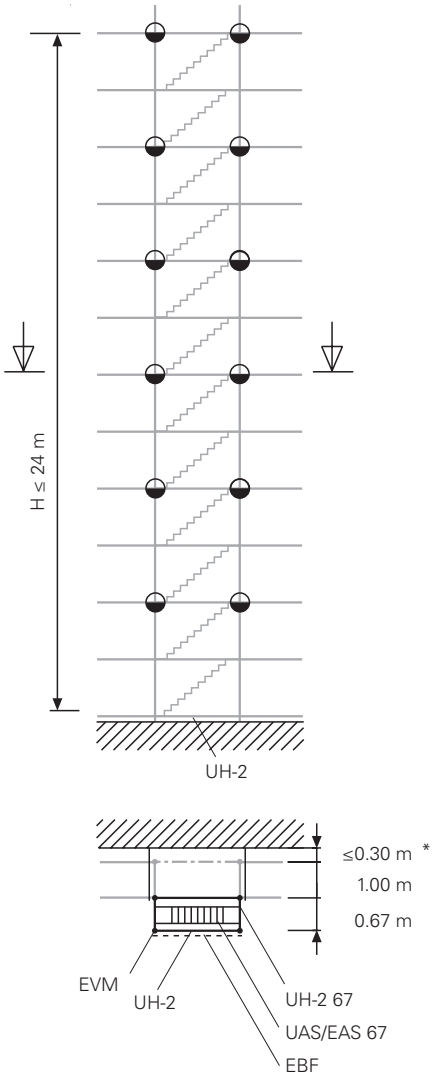


Fig. E2.15

Tie pattern 2 m

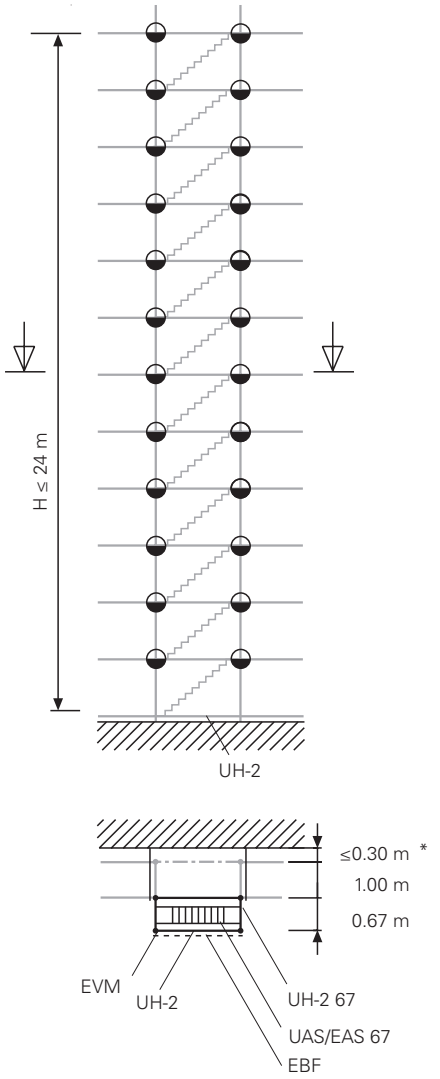


Fig. E2.16

Anchoring with wall ties

PERI UP Easy EVOTOP
Application in load class 4 (3.0 kN/m²)

			Tie forces for (+ = tension force / – = compressive force) **			
			Standard configuration open facade		Standard configuration closed facade	
Tie pattern	Cladding	Bay length [m]	Full-width wall tie			
			⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]	⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]
8.0 m offset	without	2.00	+/-2.9	2.4*	+/-1.0	2.4*
		2.50	+/-3.4	2.4*	+/-1.1	2.4*
		3.00	+/-4.0	2.4*	+/-1.3	2.4*
	with netting	2.00	not possible		+/-2.3	2.3
		2.50			+/-2.8	2.3
		3.00			+/-3.4	2.3
4.0 m	without	2.00	+/-1.4	2.4*	+/-0.5	2.4*
		2.50	+/-1.7	2.4*	+/-0.6	2.4*
		3.00	+/-2.0	2.4*	+/-0.7	2.4*
	with netting	2.00	not possible		+/-1.1	2.3
		2.50			+/-1.4	2.3
		3.00			+/-1.7	2.3
4.0 m offset	with netting	2.00	+/-3.0	2.6	+/-0.8	2.6
		2.50	+/-3.8	2.6	+/-1.3	2.6
		3.00	+/-4.6	2.6	+/-1.5	2.6
	with tarpaulin	2.00	not possible		not possible	
		2.50				
		3.00				
2.0 m	with tarpaulin	2.00	-4.4 / +4.0	2.4	-4.4 / +4.0	2.4
		2.50	-5.5 / +5.0	2.4	-5.5 / +5.0	2.4
		3.00	-6.6 / +5.9	2.4	-6.6 / +5.9	2.4

Open facade vs. closed facade depends on ratio of gross face area of the facade A_g to net face area of the facade with openings deducted A_n:

$\frac{A_n}{A_g} = 1.0$: closed facade

$0.4 \leq \frac{A_n}{A_g} \leq 1.0$: open facade

** For protection panels, use whichever of the "open" and "closed" facade standard configurations is the worse.

* If there are only two continuous scaffold ties per five bays (variant 1), multiply the table value by 1.5.

Anchoring with triangulated ties (DRA) or single-leg wall ties

PERI UP Easy EVOTOP
Application in load class 4 (3.0 kN/m²)

			Tie forces for (**+** = tension force/**–** = compressive force) *						
			Standard configuration open facade			Standard configuration closed facade			
Tie pattern	Cladding	Bay length [m]	Single-leg wall tie	Triangulated tie (per anchoring point)		Single-leg wall tie	Triangulated tie (per anchoring point)		
			⌖ $A_{\perp}$ [kN]	✦ $A'_{\perp}$ [kN]	✦ $A'_{\parallel}$ [kN]	⌖ $A_{\perp}$ [kN]	✦ $A'_{\perp}$ [kN]	✦ $A'_{\parallel}$ [kN]	
8.0 m offset (1 DRA per 5 bays)	without	2.00	+/-2.7	+/-4.1	4.1	+/-0.9	+/-4.1	4.1	
		2.50	+/-3.2	+/-4.1	4.1	+/-1.1	+/-4.1	4.1	
		3.00	+/-3.8	+/-4.1	4.1	+/-1.3	+/-4.1	4.1	
	with netting	2.00	not possible			+/-2.1	+/-2.8	2.8	
		2.50				+/-2.6	+/-2.8	2.8	
		3.00				+/-3.1	+/-2.8	2.8	
4.0 m (1 DRA per 5 bays)	without	2.00	+/-1.4	+/-4.1	4.1	+/-0.5	+/-4.1	4.1	
		2.50	+/-1.6	+/-4.1	4.1	+/-0.5	+/-4.1	4.1	
		3.00	+/-1.9	+/-4.1	4.1	+/-0.6	+/-4.1	4.1	
	with netting	2.00	not possible			+/-1.0	+/-2.8	2.8	
		2.50				+/-1.3	+/-2.8	2.8	
		3.00				+/-1.6	+/-2.8	2.8	
4.0 m offset (2 DRA per 5 bays)	with netting	2.00	+/-2.2	+/-2.3	2.3	+/-0.7	+/-1.4	1.4	
		2.50	+/-2.7	+/-2.3	2.3	+/-0.9	+/-1.4	1.4	
		3.00	+/-3.3	+/-2.3	2.3	+/-1.1	+/-1.4	1.4	
	with tarpaulin	2.00	not possible			not possible			
		2.50							
		3.00							
2.0 m (2 DRA per 5 bays)	with tarpaulin	2.00	-4.4 / +4.0	+/-3.6	3.6	-4.4 / +2.4	+/-3.6	3.6	
		2.50	-5.5 / +5.0	+/-3.6	3.6	-5.5 / +3.0	+/-3.6	3.6	
		3.00	-6.6 / +6.0	+/-3.6	3.6	-6.6 / +3.6	+/-3.6	3.6	

Open facade vs. closed facade depends on ratio of gross visible area of the facade A_g to net visible area of the facade with openings deducted A_n:

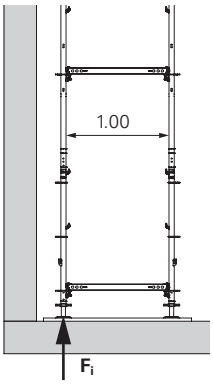
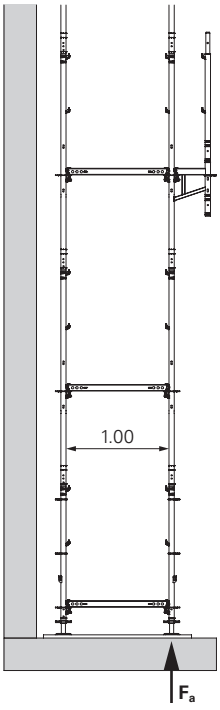
$\frac{A_n}{A_g}$ = 1.0: closed facade

$0.4 \leq \frac{A_n}{A_g} \leq 1.0$: open facade

* For protection panels, use whichever of the "open" and "closed" facade standard configurations is the worse.

E4 Support forces

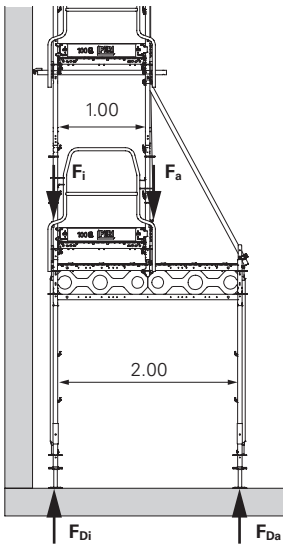
Support forces of the standards

PERI UP Easy EVOTOP Application in load class 4 (3.0 kN/m²)					
	Equipment	**Bay length [m]**	**Structure height**		
			24 m	**16 m**	**8 m**
	**Inner leg**				
			F_i [kN]	**F_i** [kN]	**F_i** [kN]
	without internal console brackets	2.0	10.2	8.9	7.5
		2.5	11.8	10.4	8.9
		3.0	13.9	12.2	10.5
	with Internal console Brackets UCS 33	2.0	15.2	13.1	11.0
		2.5	18.7	16.4	14.1
		3.0	22.7	20.1	17.5
	**Outer leg**				
			F_a [kN]	**F_a** [kN]	**F_a** [kN]
	without external console bracket	2.0	12.5	10.5	8.4
		2.5	14.6	12.3	10.1
		3.0	17.1	14.5	11.8
			in addition to F_a [kN]		
	with external console bracket ECM 33	2.0	2.2		
		2.5	2.7		
		3.0	3.3		
	Protection panel (in addition to console bracket or frame)	2.0	0.1		
		2.5	0.1		
		3.0	0.1		
	Protection roof on Console Bracket ECM 67 (incl. Console Bracket ECM 67	2.0	0.7		
		2.5	0.8		
		3.0	0.9		
	Protection roof on Console Bracket ECM 100 (incl. Console Bracket ECM 100)	2.0	0.9		
		2.5	1.1		
		3.0	1.2		

Pavement gantries/bridging

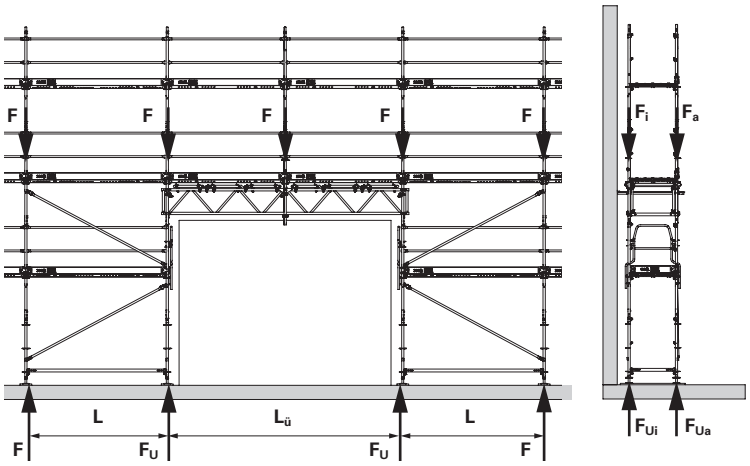
PERI UP Easy EVOTOP
Application in load class 4 (3.0 kN/m²)

Pavement gantry



F_{Da} [kN]	F_{Di} [kN]
0.6 x F_a	Fi+0.6 x F_a

Bridging



Bay length L [m]	F_{Ua} [kN]	F_{Ui} [kN]
	$L_ü$ = 4.0 m	
2.00	1.5 x F_a	1.5 x F_a
2.50	1.4 x F_a	1.4 x F_i
3.00	1.3 x F_a	1.3 x F_i
	$L_ü$ = 5.0 m	
2.00	1.6 x F_a	1.6 x F_i
2.50	1.5 x F_i	1.5 x F_i
3.00	1.4 x F_a	1.4 x F_i
	$L_ü$ = 6.0 m	
2.00	1.7 x F_i	1.7 x F_i
2.50	1.6 x F_a	1.6 x F_i
3.00	1.5 x F_a	1.5 x F_i

Select F_a and F_i for appropriate bay length L.

Selecting the lattice girders
LC4 – 3.00 kN/m²

1. Determine the support forces for the inner and outer leg.
   To do so, read off the resulting values from Table "Support forces of the standards" on page 174, taking into account
   - Equipment,
   - Control field length,
   - Structure height

   and enter them here.

2. Specify the lattice girder.
   To do so, read off the permissible individual load in the middle of the bay from Table "Load-bearing capacity of the lattice girders" on page 161, taking into account:
   - required span,
   - type of lattice girder (material, length/construction height),
   - bracing and anchoring distance,

   and enter it here.

3. Determine the number of lattice girders.
   To do so, compare the resulting support force (row 4 or 5) with the permissible individual load in the middle of the bay (row 9).
   In certain cases, a single lattice girder may not be sufficient for the resulting support force. In that case, fit a second lattice girder on the relevant side.



It is not permitted to have more than 2 lattice girders per scaffold side, i.e. max. 4 lattice girders per bridging.

Row	**Determination of support forces** see Table "Support forces of the standards" on page 174	**Values**	**Example values**
1	Equipment		without internal console brackets with protection panel on outer leg
2	Bay length		3.0 m
3	Structure height up to height		16 m
4	**Resulting support force at inner leg**		**12.2 kN**
5	**Resulting support force at outer leg**		**14.5 kN + 0.1 kN**

Row	**Determination of the lattice girder** See Table "Load-bearing capacity of the lattice girders" on page 161	**Values**	**Example values**
6	Required span of the lattice girder		6 m
7	Lattice girder type		Steel ULS 50/625
8	Spacing of the lateral holders "a"		2 x 150 cm
9	**permissible individual load in middle of bay**		**17.5 kN**

Row	**Determination of number of lattice girders**	**Values**	**Example values**
10	Required number of lattice girders on the inner leg		1 pc.
11	Required number of lattice girders on the outer leg		1 pc.

Overview of equipment variations

Standard variant ≤ 24 m, Load Class 4

LC4 – 3.00 kN/m² — PERI UP Easy EVOTOP: LC4 – 3.0 kN/m²: overview of equipment variations

Equipment variation		1a/b	1.1	1.2	1.3	1.4	1.5	2a/b	2.1	2.2	2.3	2.4	2.5	2.6	2.7	3	3.1	3.2	3.3	4a/b	4.1	4.2	4.3	4.4
Page		182	184	185	186	187	188	189	191	192	193	194	195	196	197	198	199	200	201	202	204	205	206	207
alternatively possible with ▲ tie		183						190												203				
Cladding		without														Netting								Tarpaulin
Facade		open														closed				open				closed
Internal Console Brackets UCS 33		–	–	–	–	–	–	●	●	●	●	●	●	●	●	–	–	●	●	–	–	●	●	●
Internal Console Brackets ECM 33		–	–	–	–	–	–	○	○	○	○	○	○	○	○	–	–	○	○	–	–	○	○	○
External Console Bracket ECM 33		–	●	–	●	–	●	–	–	●	–	●	–	●	–	–	●	–	●	–	●	–	●	●
External Console Bracket ECM 67		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
External Console Bracket ECM 100		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Protection panel on outer leg		●	–	●	–	●	–	●	●	–	●	–	●	–	–	●	–	●	–	●	–	●	–	–
Protection panel on console bracket		–	●	–	●	–	●	–	–	●	–	●	–	●	–	–	●	–	●	–	●	–	●	●
Protection roof on ECM 67		⊕	⊕	⊕	⊕			⊕	●	⊕	⊕	⊕			⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕
Protection roof on ECM 100		⊕	⊕	⊕	⊕			⊕	●	⊕	⊕	⊕			⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕
Bridging 5.0 m (2.5 + 2.5)		–	–	○	○	–	–	–	–	–	○	○	–	–	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕
Bridging 6.0 m (3.0 + 3.0)		–	–	●	●	–	–	–	–	–	●	●	–	–	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕
Pavement gantry		–	–	–	–	●	●	–	–	–	–	–	●	●	⊕	–	–	–	–	–	–	–	–	–

– Not permitted within this structural arrangement
● Possible within this structural arrangement – shown
○ Possible within this structural arrangement – not shown
⊕ Possible with additional local anchoring – not shown

Overview of equipment variations

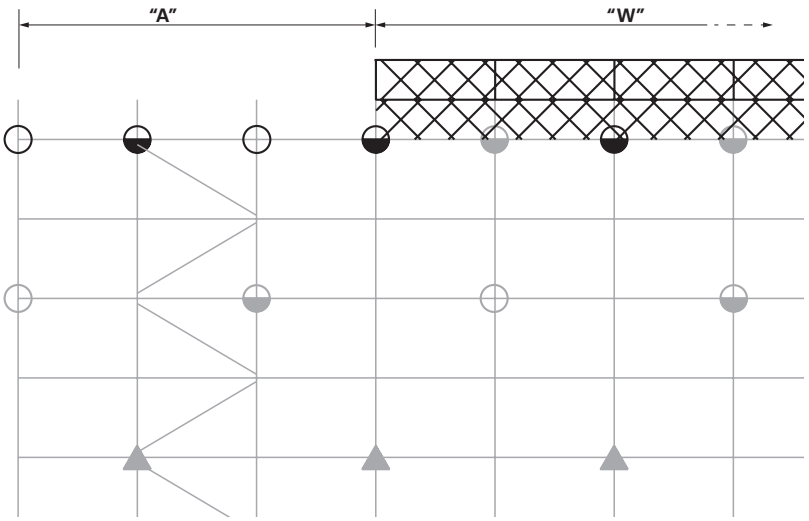
Standard variant > 24 m, Load Class 4

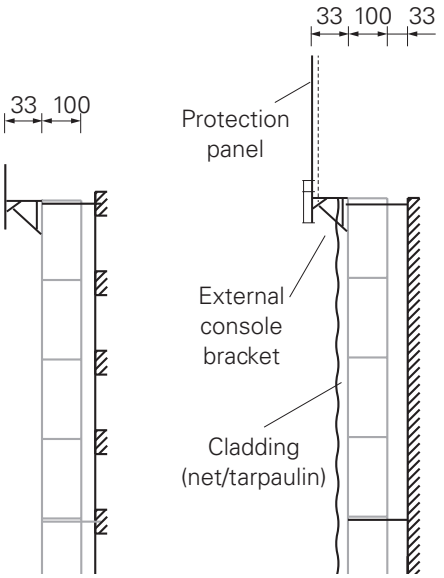
LC4 – 3.00 kN/m²	PERI UP Easy EVOTOP: LC4 – 3.0 kN/m²: overview of equipment variations													
Equipment variation	1a "A"						1a "B"			2a "A"				
Bay width [m]	2.5			3.0			2.5	3.0		2.5			3.0	
Scaffold height [m]	40	92	120	32	80	100	60	52	56	32	72	92	56	72
Page	208	209	210	211	212	213	214	215	216	217	218	219	220	221
Cladding	**without**													
Facade	**open**			**open**			**open**			**open**			**open**	
Internal Console Brackets USC33	–	–	–	–	–	–	–	–	–	●	●	●	●	●
Internal Console Brackets ECM 33	–	–	–	–	–	–	–	–	–	○	○	○	○	○
Protection panel on outer leg	–	–	–	–	–	–	●	●	●	–	–	–	–	–

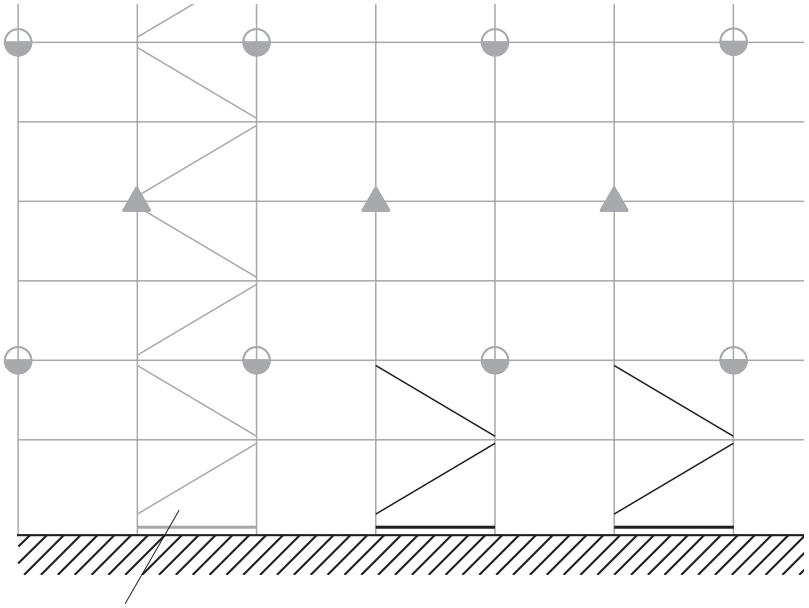
– Not permitted within this structural arrangement
● Possible within this structural arrangement – shown
○ Possible within this structural arrangement – not shown

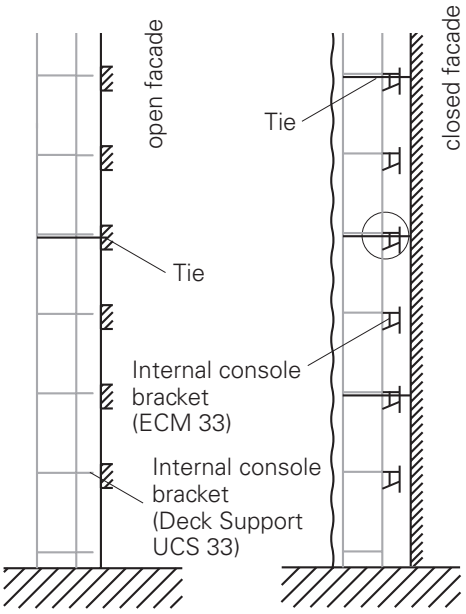
E6 Tie pattern

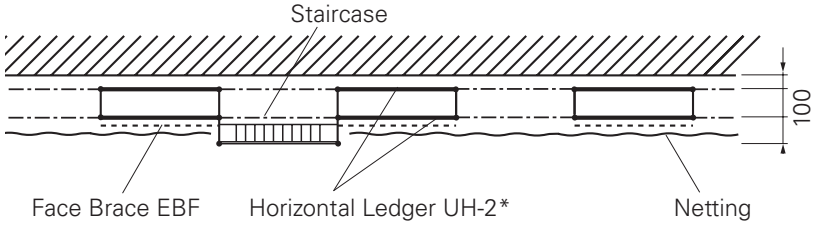
Key











*Unless stated otherwise, horizontal ledgers are only required at the base level

Tie types

- Single-leg wall tie
- Wall tie (multi-standard)
- Triangulated tie

Ties and bracing shown in grey are already included in the respective basic variant. Modified or additional ties and bracing are shown in black.

All tie patterns illustrated are shown as a continuous scaffold with a left-hand edge post. There is no separation between the areas "A" and "B". At the right-hand edge of the illustration, the scaffold continues to run as intended.

E6 Tie pattern

Meanings of the pictograms



PERI UP Easy EVOTOP
Load Class 4 (3.0 kN/m²)



Maximum spindle extension height h (incl. plate and nut)



without console brackets

Extension console brackets



External console bracket ECM 33



Internal console brackets UCS 33 or ECM 33

Protection roof



on Console Bracket ECM 67



on Console Bracket ECM 100

Protection panel



on outer leg



on External Console Bracket ECM 33

Pavement gantry



Pavement gantry

attachment parts not shown

Protection roof



on Console Bracket ECM 67



on Console Bracket ECM 100

Bridging



6 m, with lattice girders

Scaffold with netting



in front of closed facade



in front of open facade (with <60 % opening)

Scaffold with tarpaulin



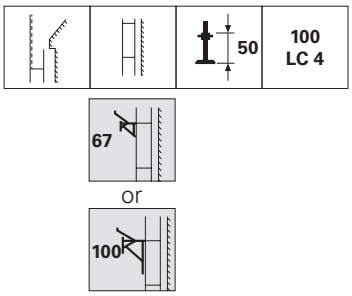
in front of closed facade



in front of open facade (with <60 % opening)

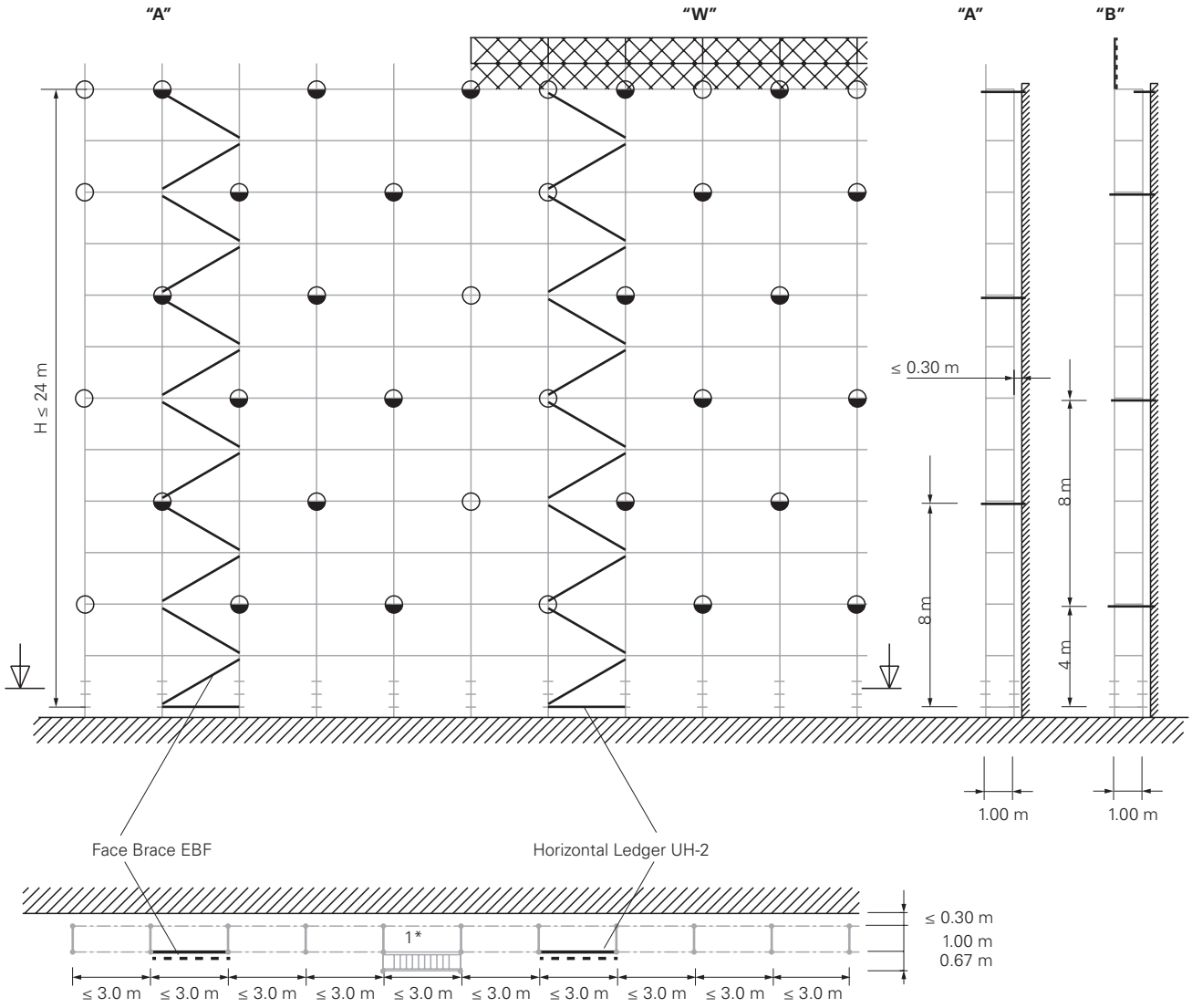
Equipment variants:
Possible with additional local ties, cf. equipment variant tables.

Graphical tie pattern
EVOTOP – variant ≤ 24 m



Basic variant 1a/LC4
Standard configuration without internal console bracket:
Unclad scaffold in front of open or closed facade.

8 m offset tie pattern

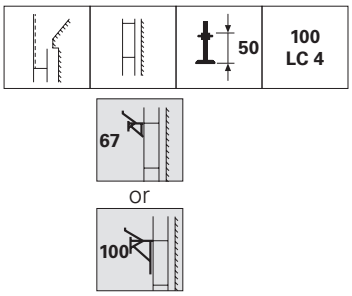


1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
Note: lateral protection components not shown.

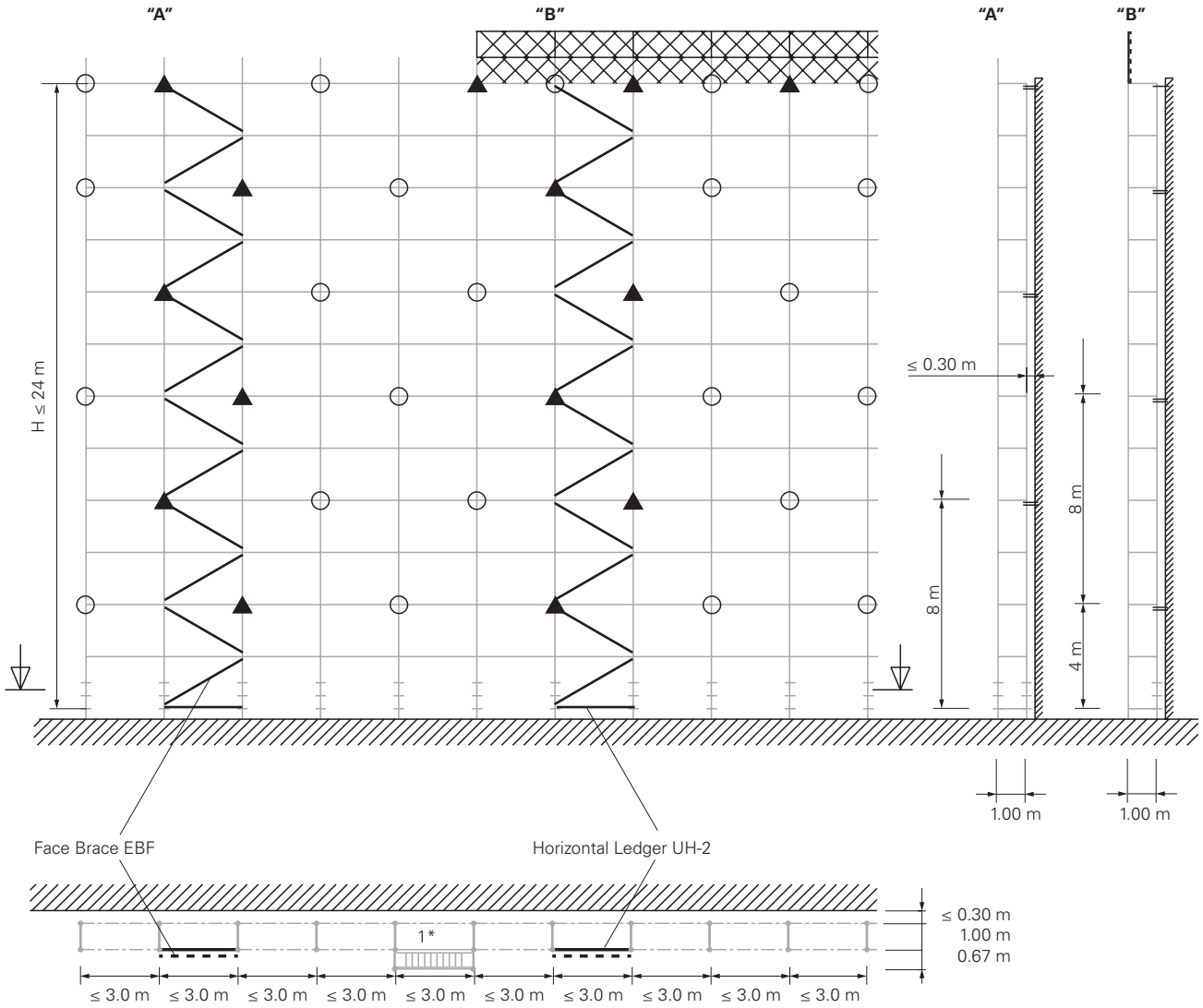
⊕ Single-leg wall tie
⊕ Wall tie

EVOTOP – variant ≤ 24 m

Basic variant 1b/LC4
Standard configuration without internal console bracket: Unclad scaffold in front of open or closed facade



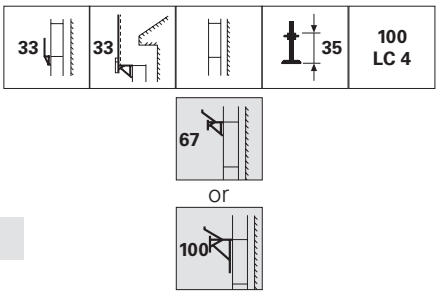
8 m offset tie pattern



1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
Note: lateral protection components not shown.

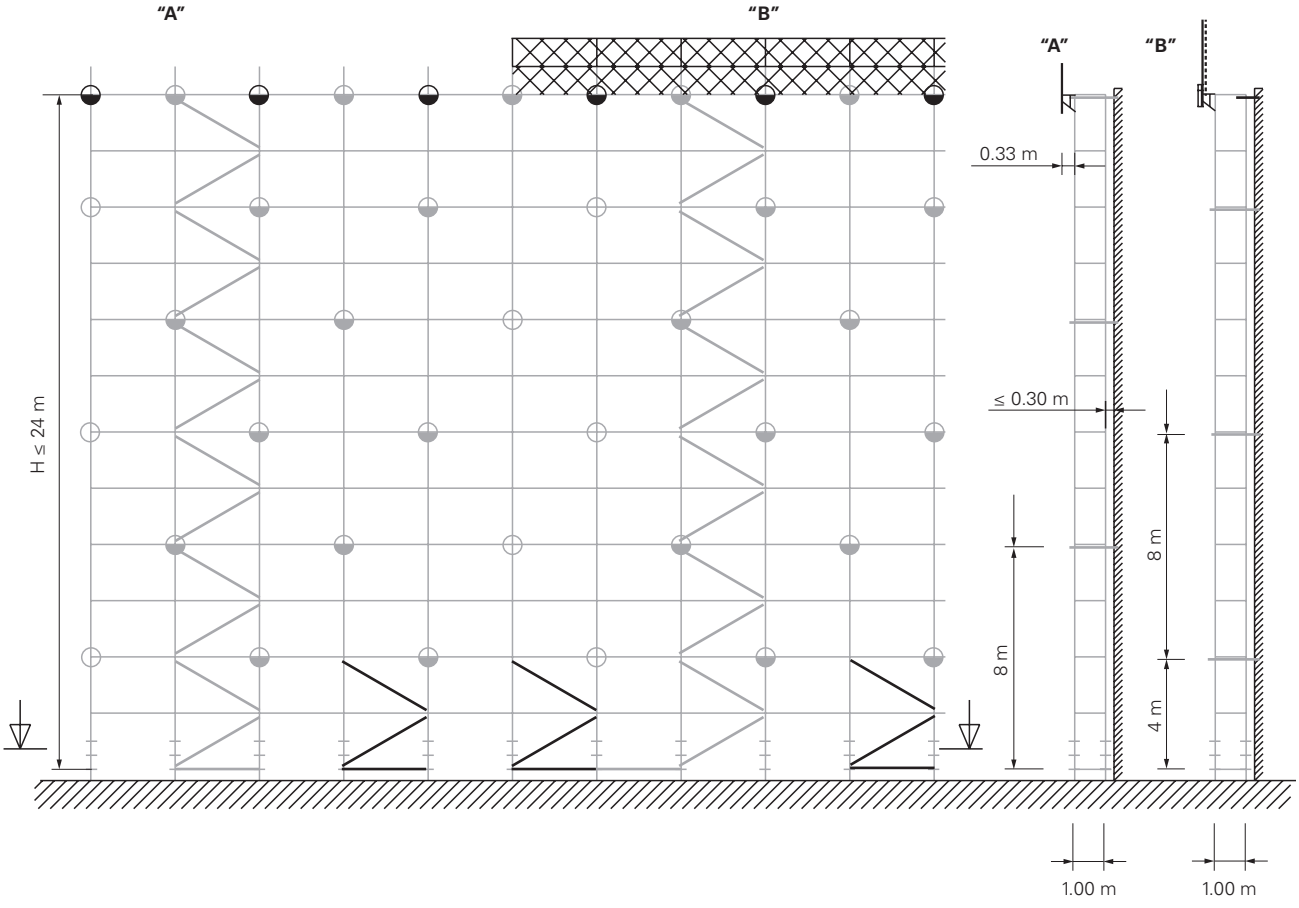
⊕ Single-leg wall tie
✦ Triangulated tie

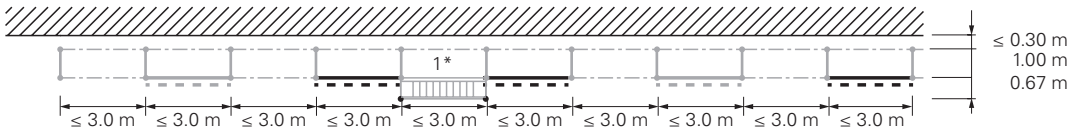
EVOTOP – variant ≤ 24 m



Variant 1.1/LC4
Standard configuration:
Unclad scaffold in front of open or closed facade.

8 m offset tie pattern



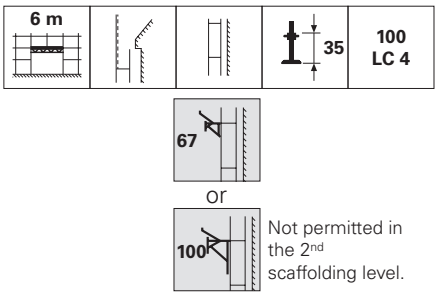


1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
Note: lateral protection components not shown.

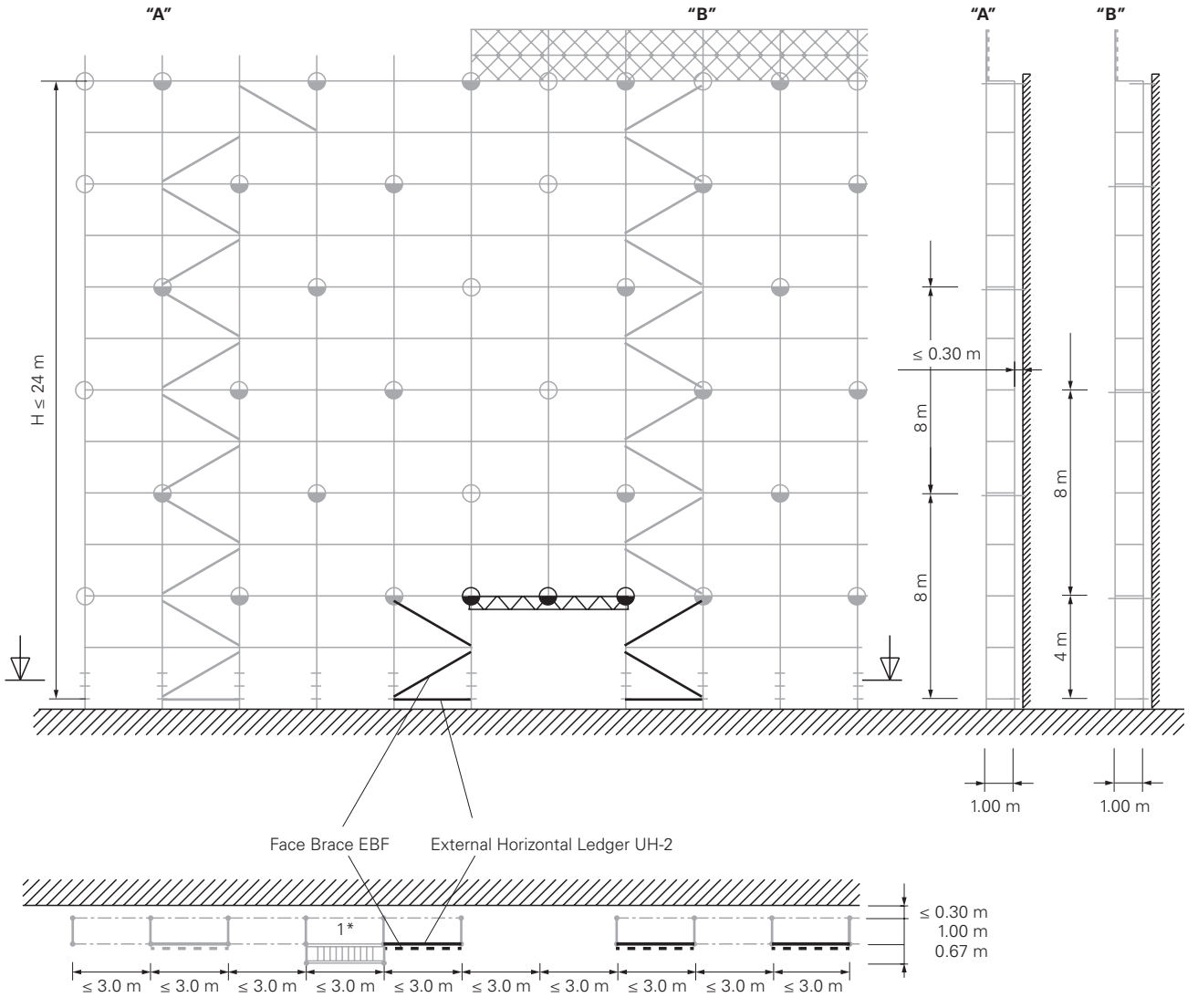
⊕ Single-leg wall tie
⊕ Wall tie

EVOTOP – variant ≤ 24 m

Variant 1.2/LC4 – bridging 6 m (5 m)
Standard configuration without internal console bracket:
Unclad scaffold in front of open or closed facade.



8 m offset tie pattern

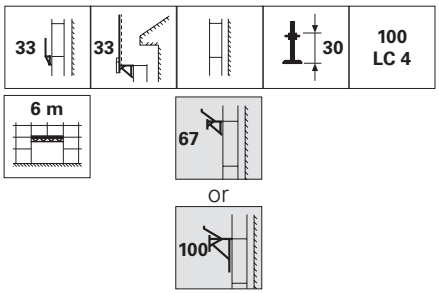


1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
Note: lateral protection components not shown.

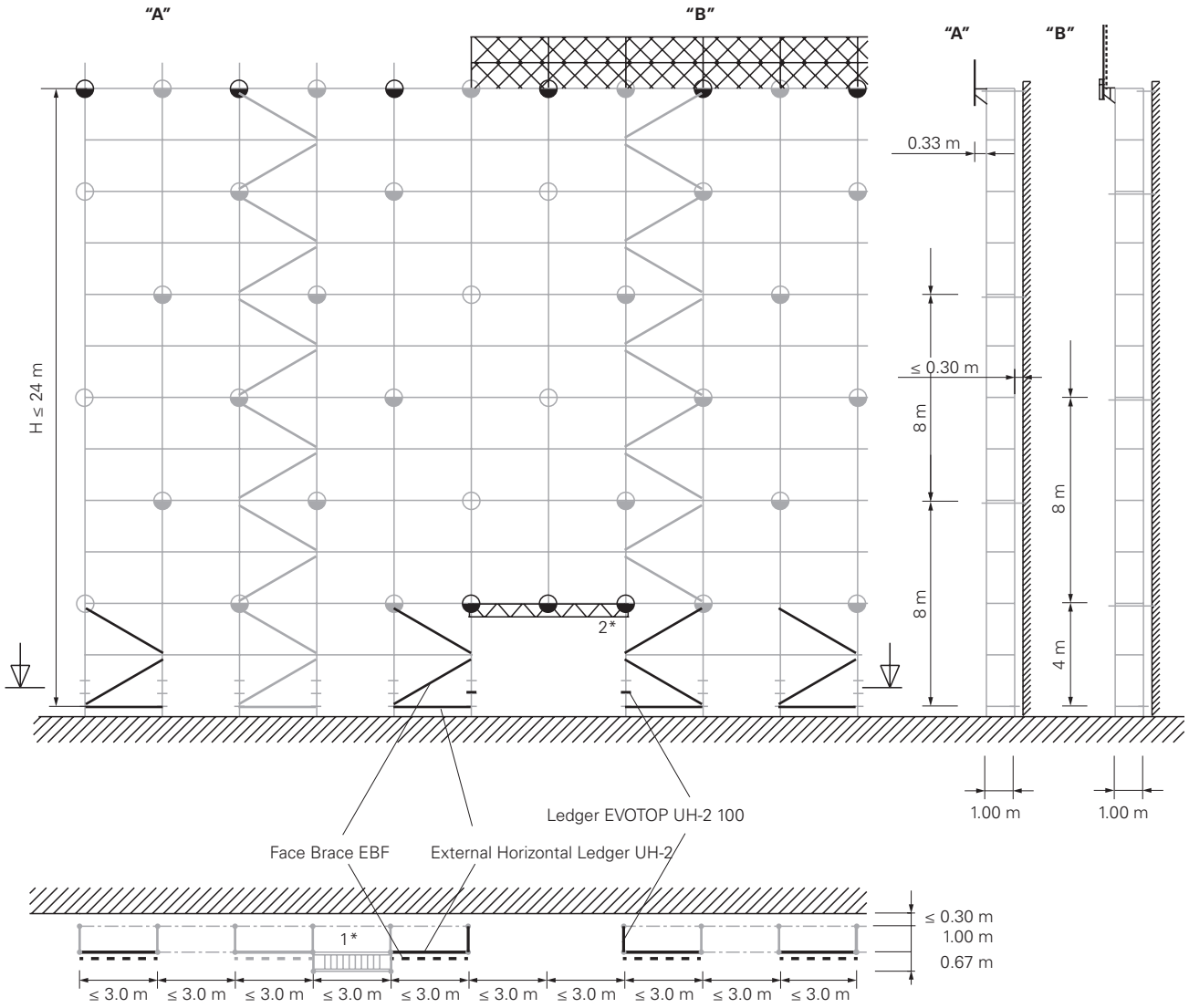
⊕ Single-leg wall tie
⊕ Wall tie

EVOTOP variant ≤ 24 m

Variant 1.3/LC4 – bridging 6 m (5 m)
Standard configuration:
Unclad scaffold in front of open or closed facade.



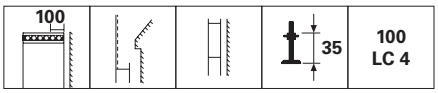
8 m offset tie pattern



1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
2* Only Steel Lattice Girder ULS possible.
Note: lateral protection components not shown.

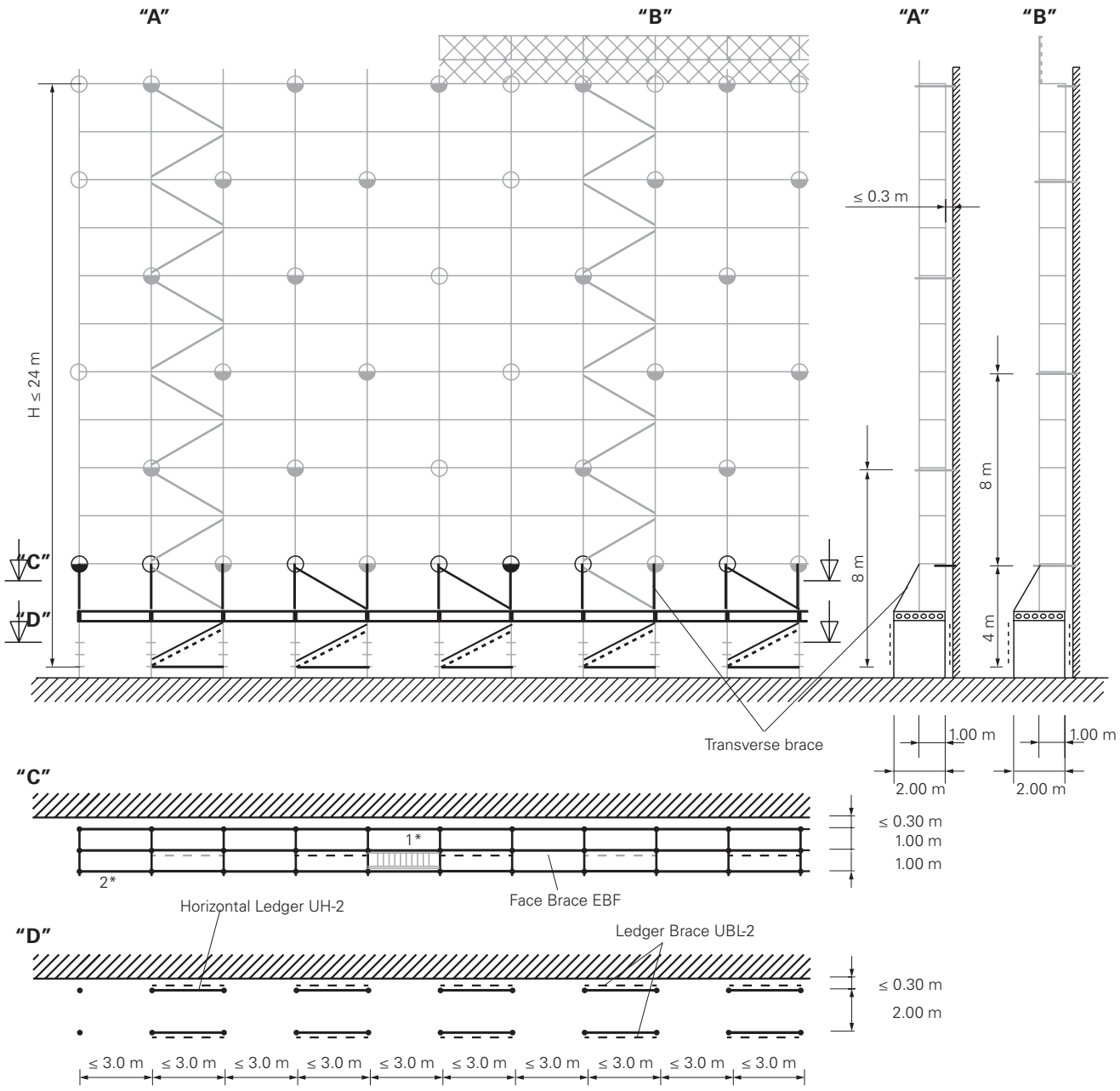
⊕ Single-leg wall tie
⊕ Wall tie

EVOTOP variant ≤ 24 m



Variant 1.4/LC4, pavement gantry
Standard configuration:
Unclad scaffold in front of open or closed facade.

8 m offset tie pattern

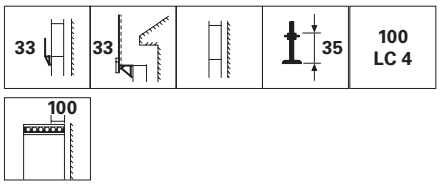


1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
2* On the multi girder, a total of five Horizontal Ledgers UH-2 are required for each bay. See Section "D6 Pavement gantry" from page 144
Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie

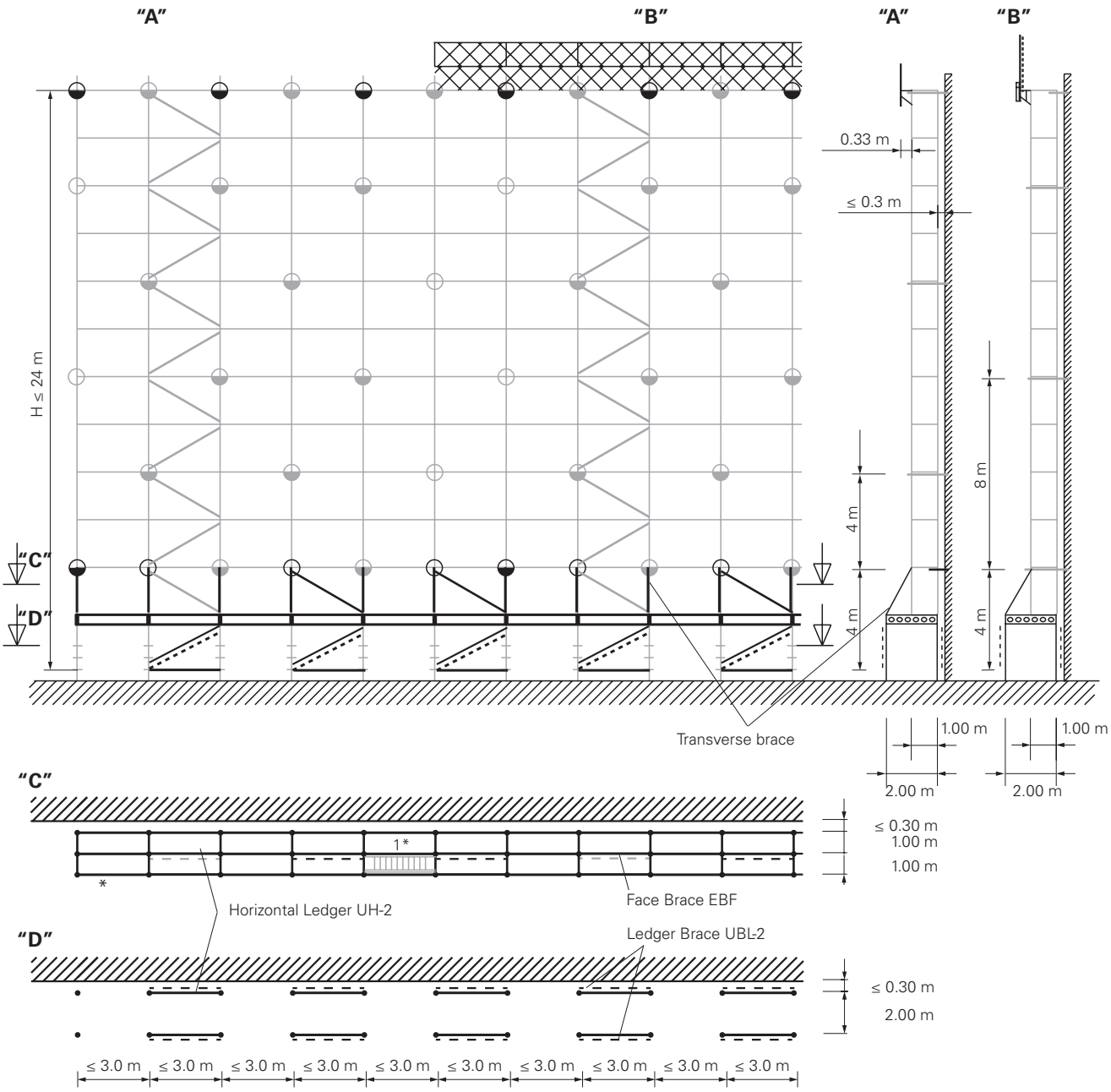
Statics

EVOTOP variant ≤ 24 m



Variant 1.5/LC4, pavement gantry
Standard configuration:
Unclad scaffold in front of open or closed facade.

8 m tie pattern

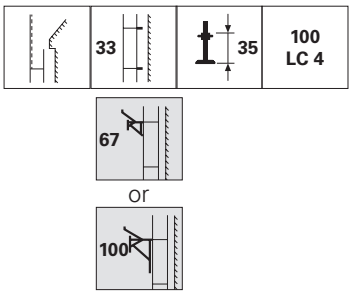


1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
2* On the multi girder, a total of five Horizontal Ledgers UH-2 are required for each bay. See Section "D6 Pavement gantry" from page 144
Note: lateral protection components not shown.

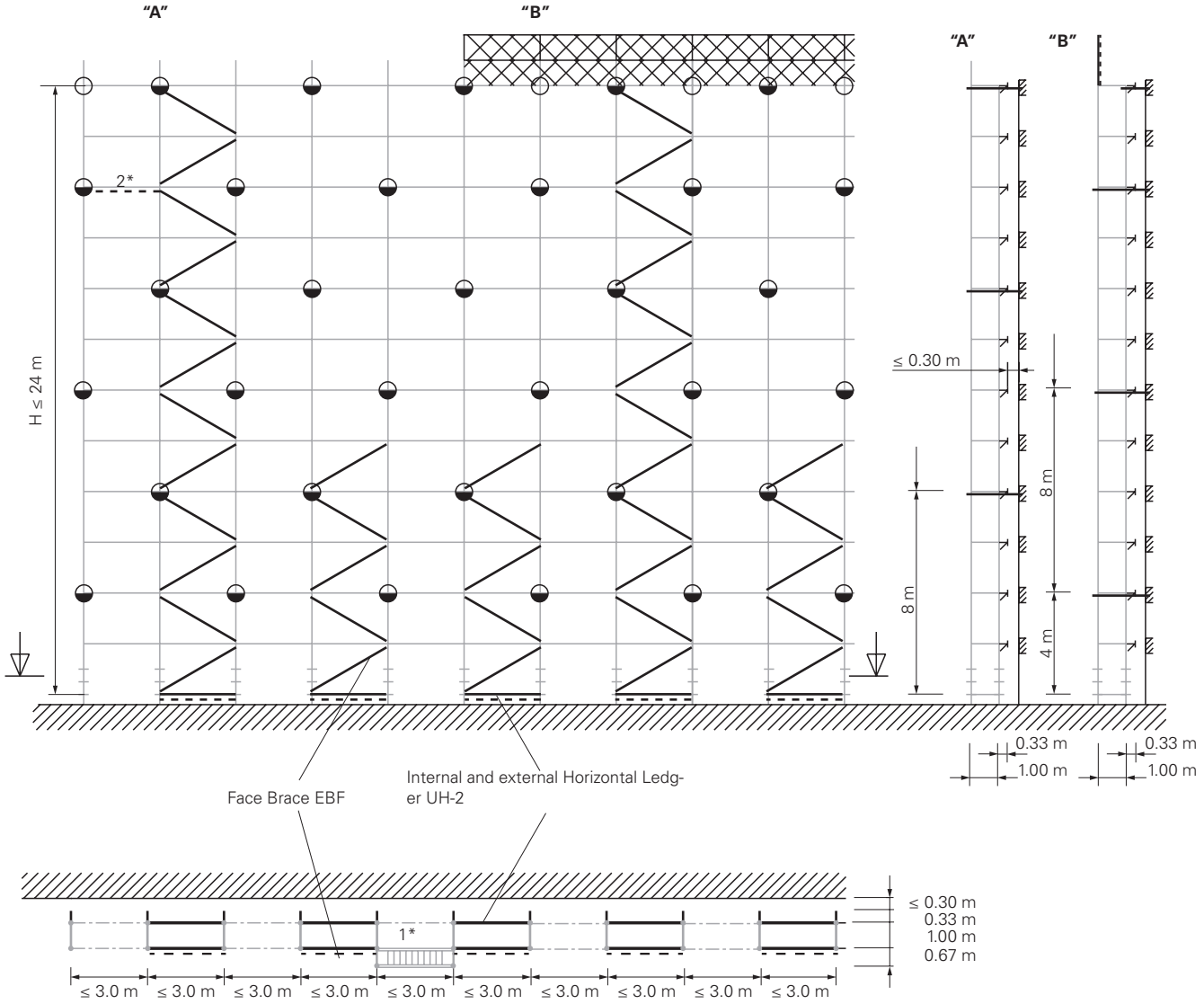
⊕ Single-leg wall tie
⊕ Wall tie

EVOTOP – variant ≤ 24 m

Basic variant 2a/LC4
Standard configuration with internal console brackets:
Unclad scaffold in front of open or closed facade.



8 m tie pattern



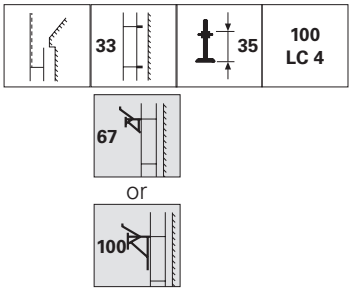
1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
2* Fit a Horizontal Ledger UH-2 onto the inner leg in the 10th scaffolding level.
Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie

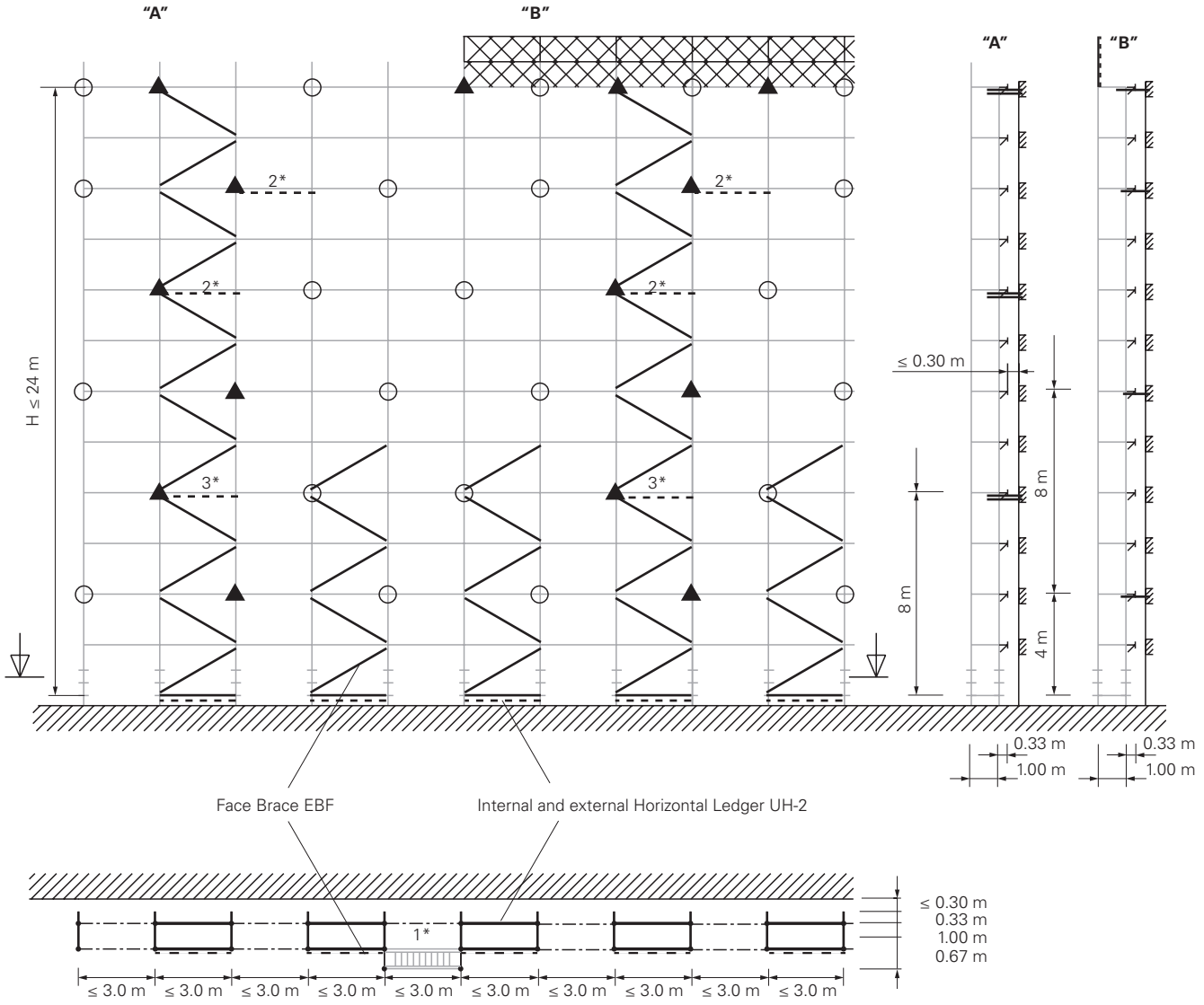
E6 Tie pattern

EVOTOP – variant ≤ 24 m

Basic variant 2b/LC4
Standard configuration with internal console brackets:
Unclad scaffold in front of open or closed facade.



8 m tie pattern



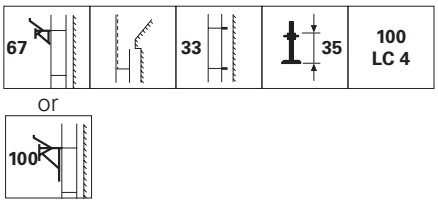
1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**.
See "External scaffold access" on page 169
On frame columns with scaffold access, brace the triangulated brackets with Horizontal Ledgers UH-2 (longitudinal ledgers).
2* Fit Horizontal Ledgers UH-2 onto the triangular bracket in scaffolding levels 8 and 10.
3* In the case of offset tie position on the triangulated tie, fit the internal Horizontal Ledger UH-2.
Note: lateral protection components not shown.

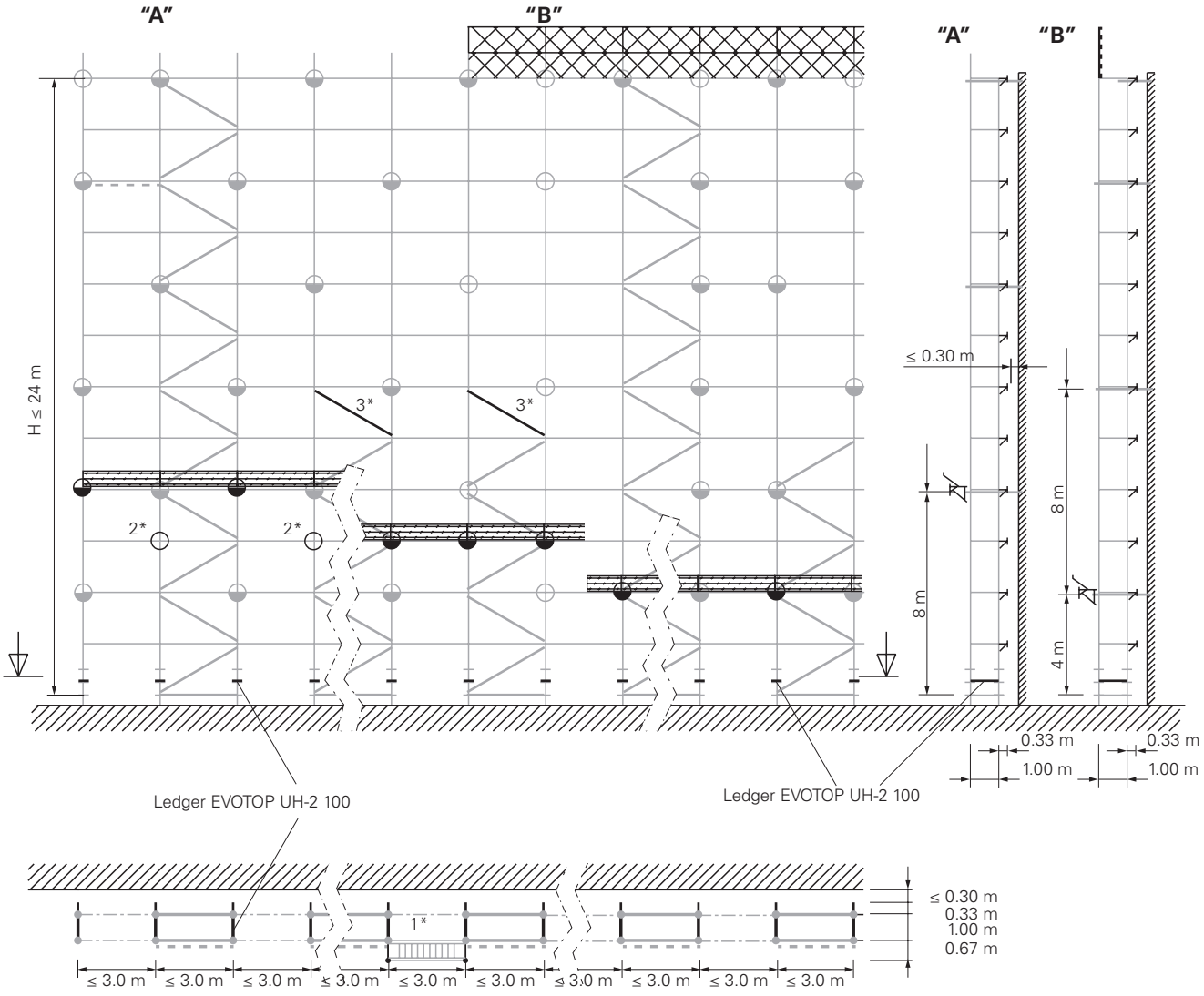
⊕ Single-leg wall tie
✦ Triangulated tie

E6 Tie pattern

EVOTOP – variant ≤ 24 m

Variant 2.1/LC4
Standard configuration:
Unclad scaffold in front of open or closed facade.





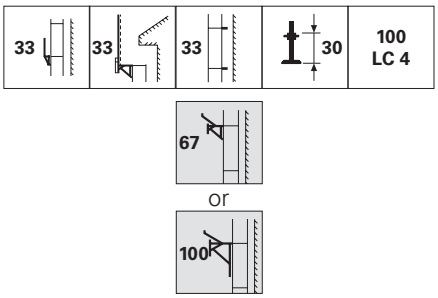
1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
2* Additional anchoring for protection roof on ECM 100
3* Additional vertical brace with offset tie position as well as protection roof on ECM 100
Note: lateral protection components not shown.

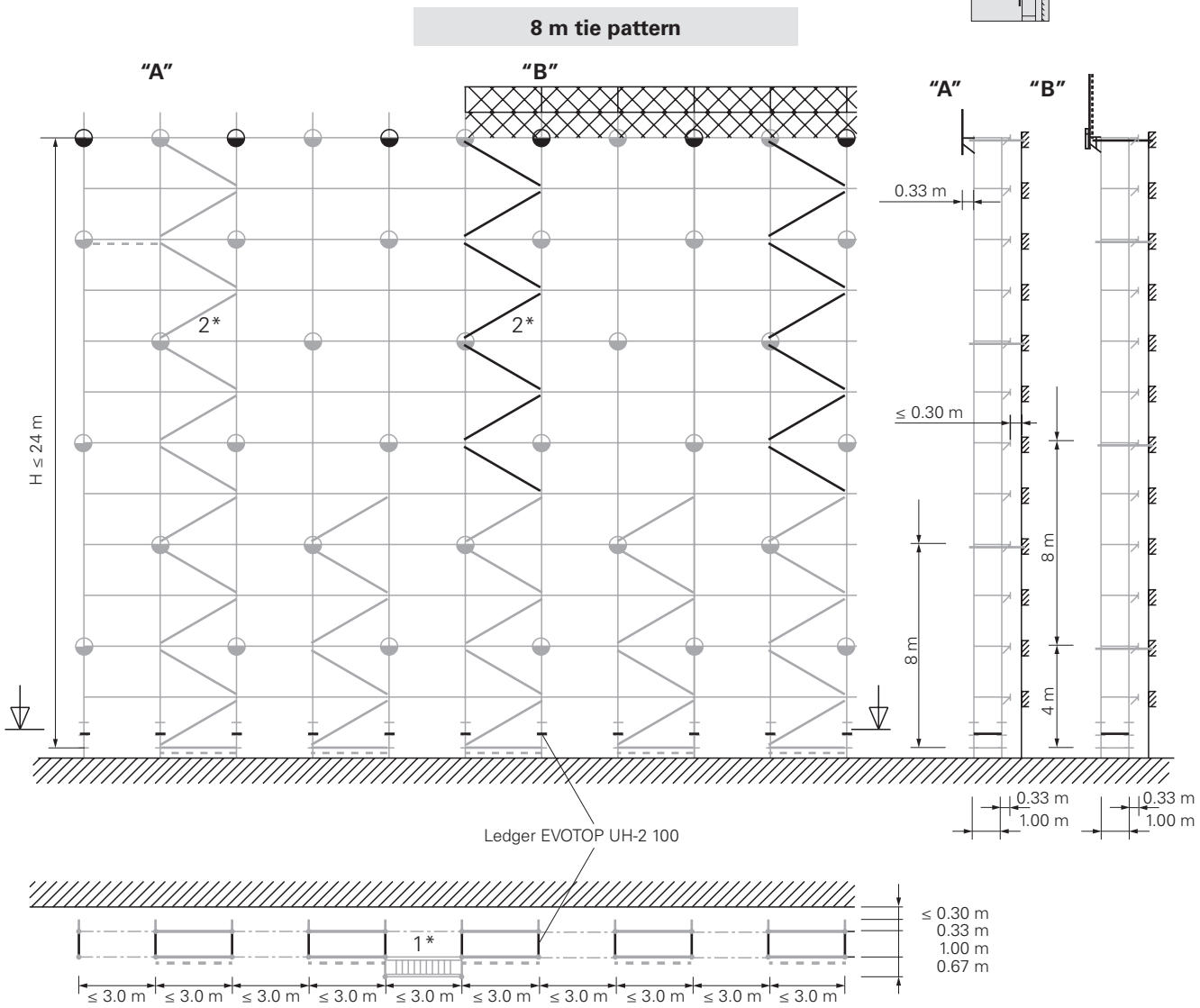
⊕ Single-leg wall tie
⊕ Wall tie

Statics

EVOTOP – variant ≤ 24 m

Variant 2.2/LC4
Standard configuration:
Unclad scaffold in front of open or closed facade.





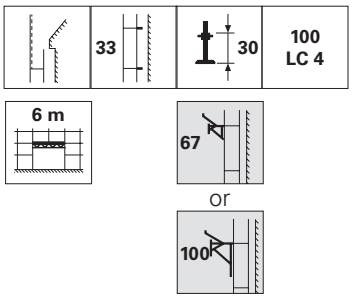
1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
2* Diagonal up to highest scaffolding level in every 4th bay.
Note: lateral protection components not shown.

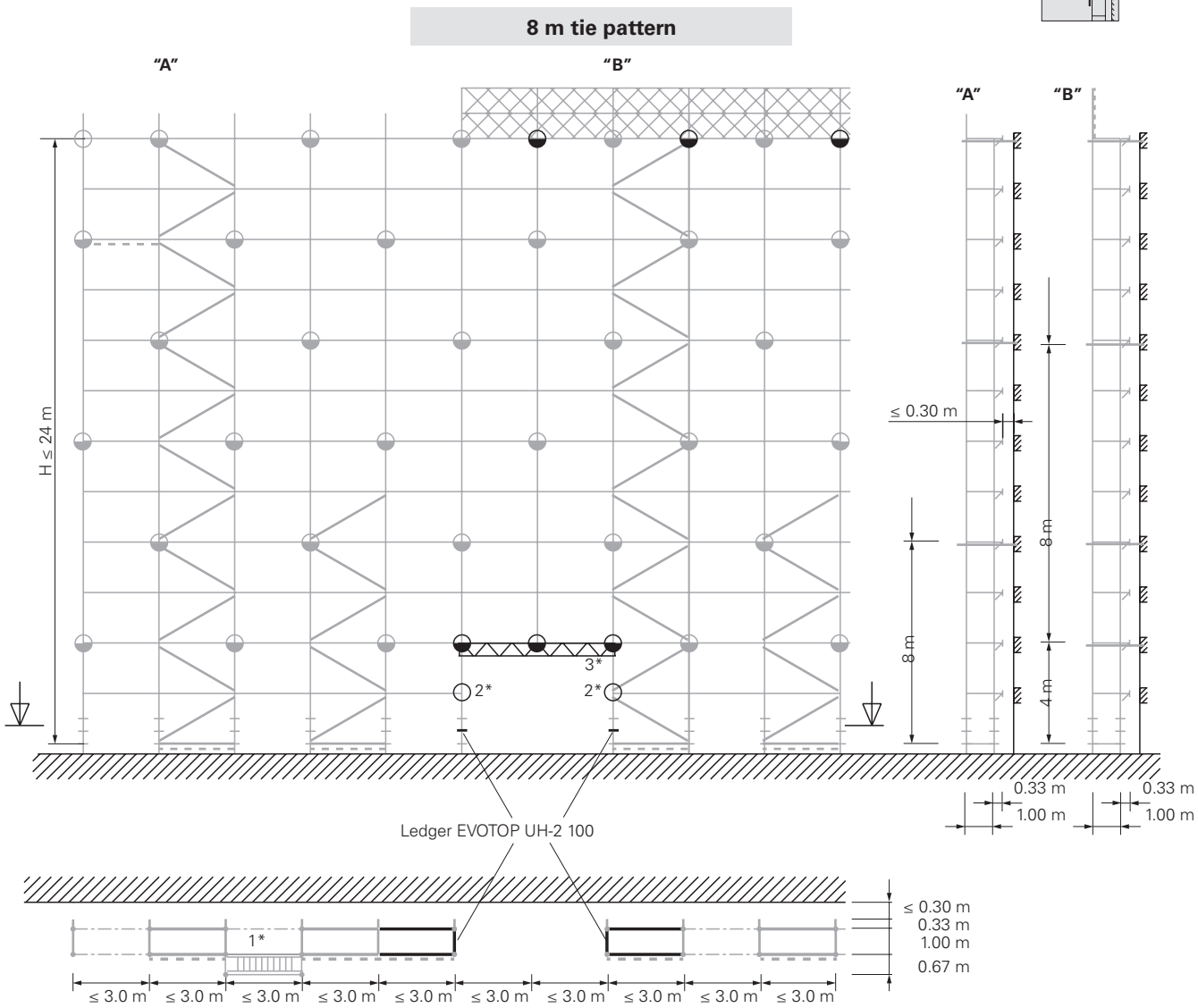
⊕ Single-leg wall tie
⊕ Wall tie

E6 Tie pattern

EVOTOP – variant ≤ 24 m

Variant 2.3/LC4, bridging
Standard configuration with internal console brackets:
Unclad scaffold in front of open or closed facade.





1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
2* Only required if a protection roof is available.
3* Only Steel Lattice Girder ULS possible.
Note: lateral protection components not shown.

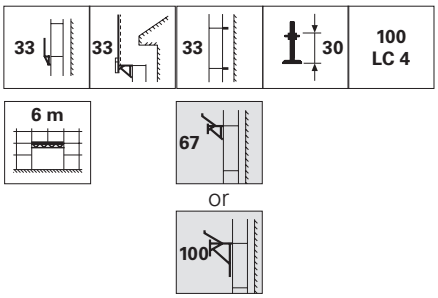
⊕ Single-leg wall tie
⊕ Wall tie

Statics

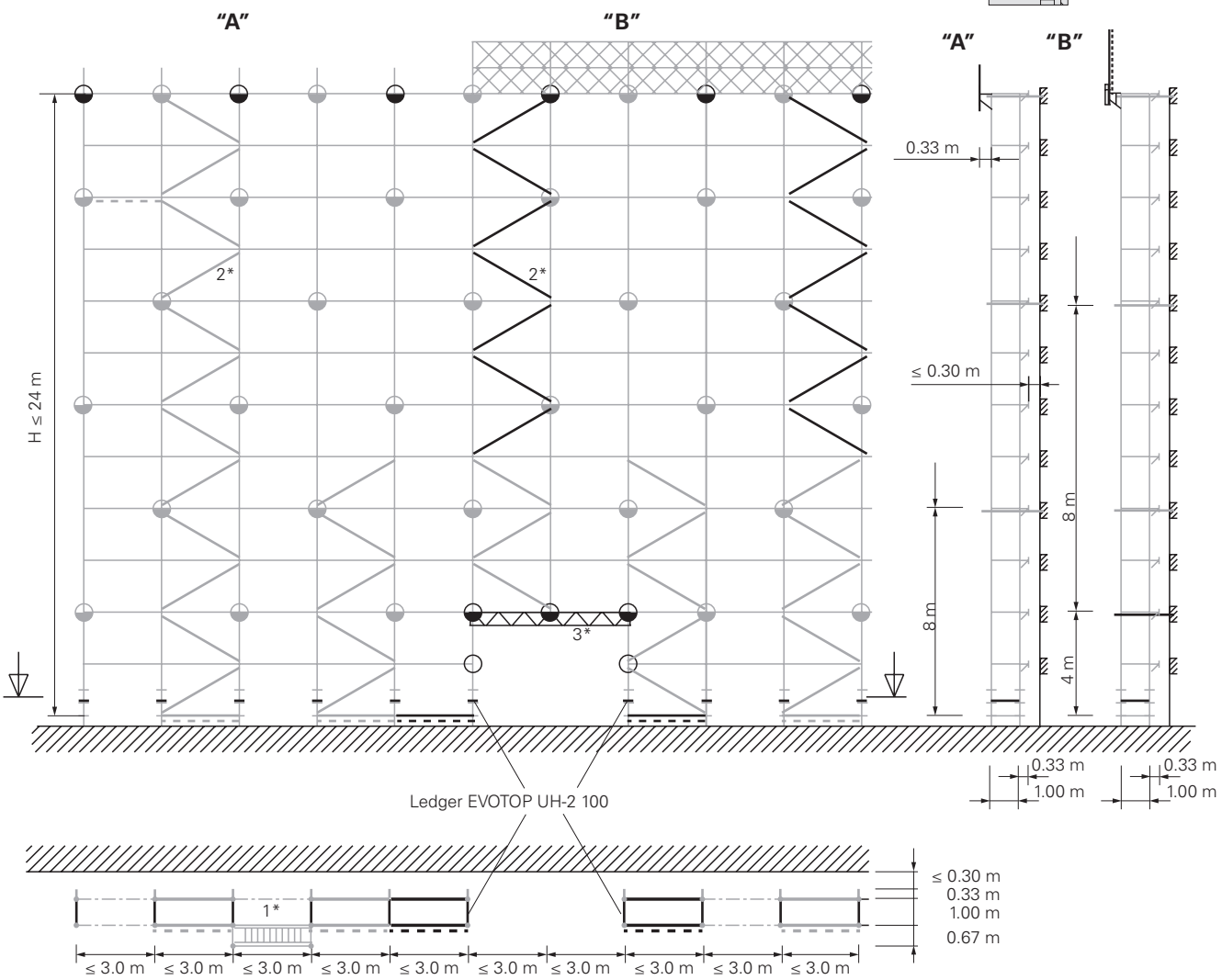
E6 Tie pattern

EVOTOP – variant ≤ 24 m

Variant 2.4/LC4 – bridging 6 m (5 m)
Standard configuration:
Unclad scaffold in front of open or closed facade.



8 m tie pattern



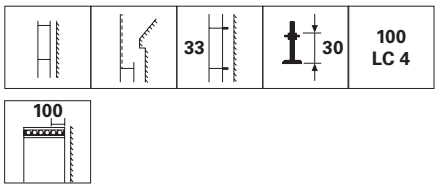
1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
2* Diagonal up to highest scaffolding level in every 4th bay.
3* Only Steel Lattice Girder ULS possible.
Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie

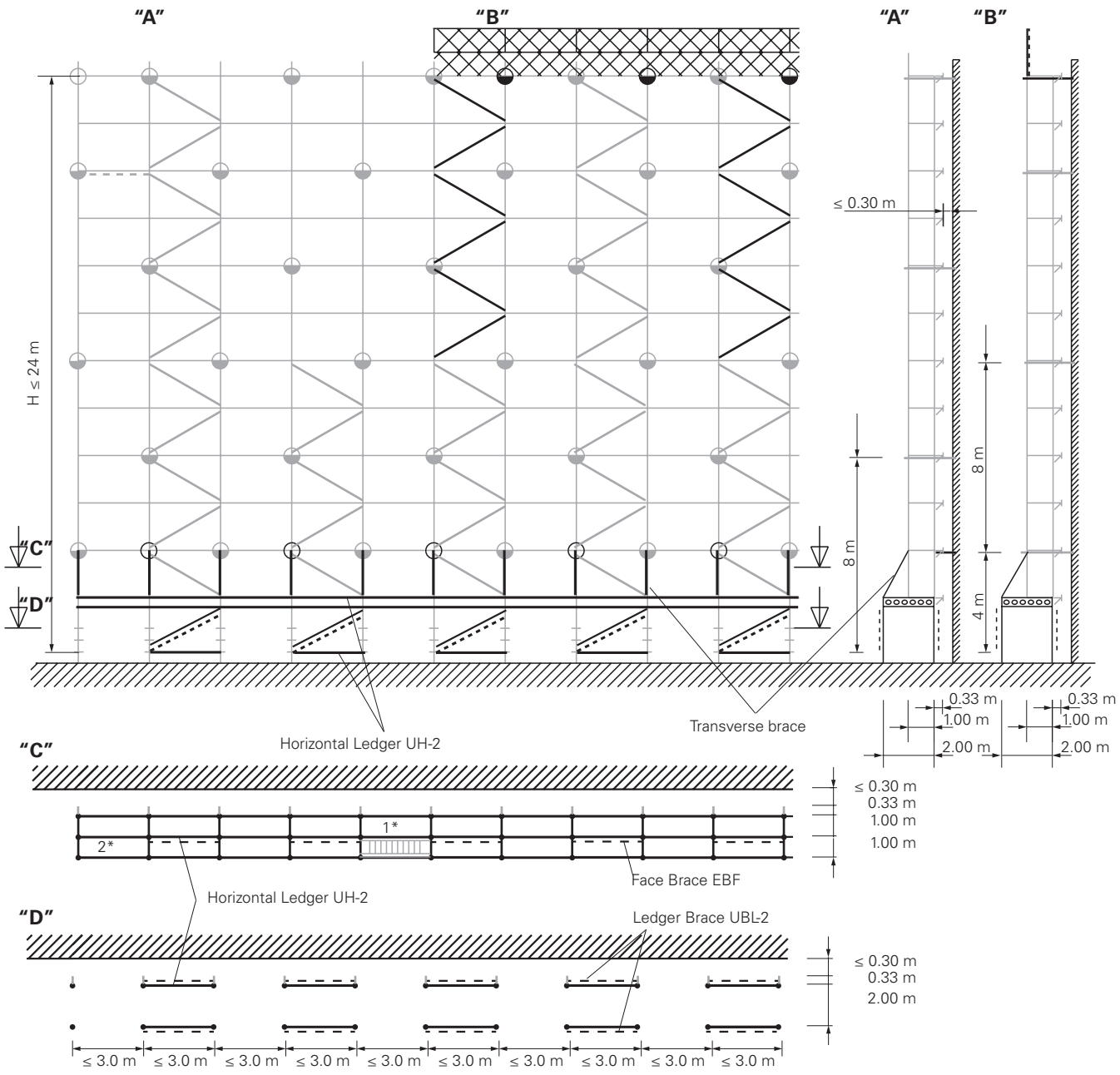
E6 Tie pattern

EVOTOP – variant ≤ 24 m

Variant 2.5/LC4, pavement gantry
Standard configuration:
Unclad scaffold in front of open or closed facade.



8 m tie pattern

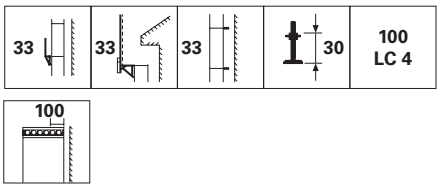


1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
2* On the multi girder, a total of five Horizontal Ledgers UH-2 are required for each bay. See Section "D6 Pavement gantry" from page 144
Note: lateral protection components not shown.

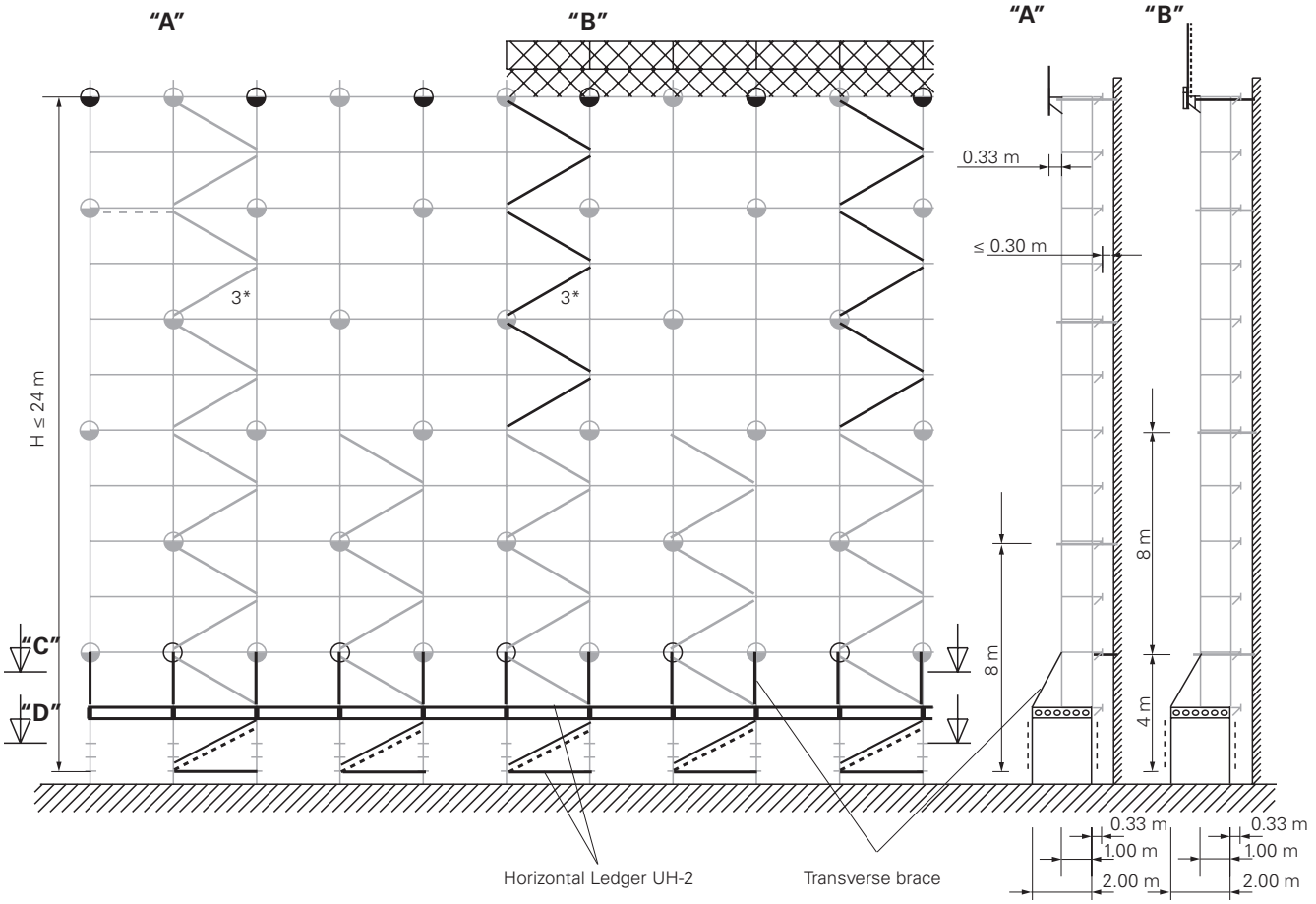
⊕ Single-leg wall tie
⊕ Wall tie

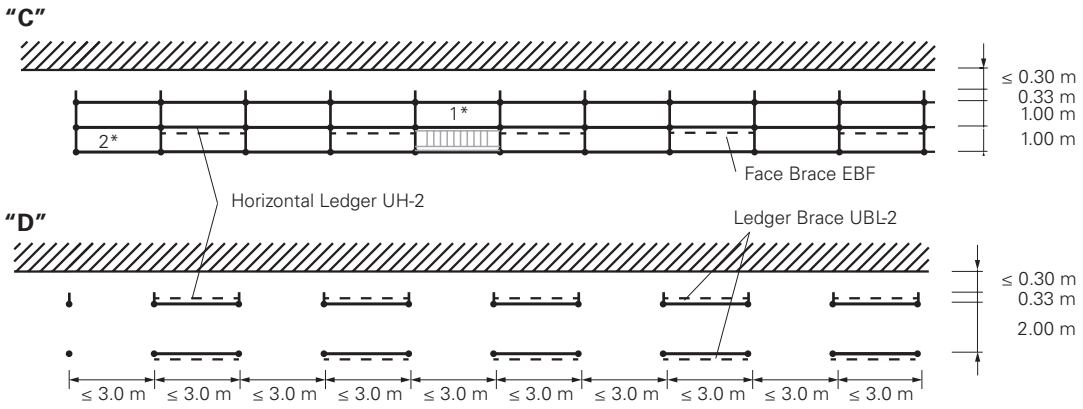
Statics

EVOTOP – variant ≤ 24 m



Variant 2.6/LC4, pavement gantry
Standard configuration:
Unclad scaffold in front of open or closed facade.





1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
2* On the multi girder, a total of five Horizontal Ledgers UH-2 are required for each bay. See Section "D6 Pavement gantry" from page 144.
3* Diagonal up to highest scaffolding level in every 4th bay.
Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie

E6 Tie pattern

Standard variant ≤ 24 m

33 | 100 LC 4

Variant 2.7/LC3, topmost level not anchored/free-standing
Standard configuration:
Unclad scaffold in front of open or closed facade.
Gaps between buildings, uplifting wind forces.

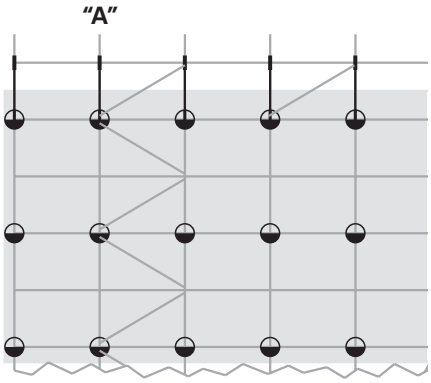


Fig. E6.01

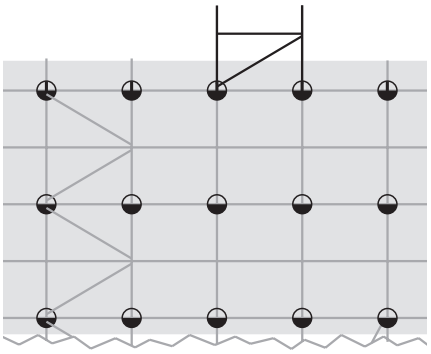
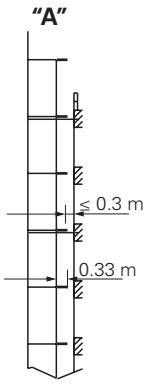
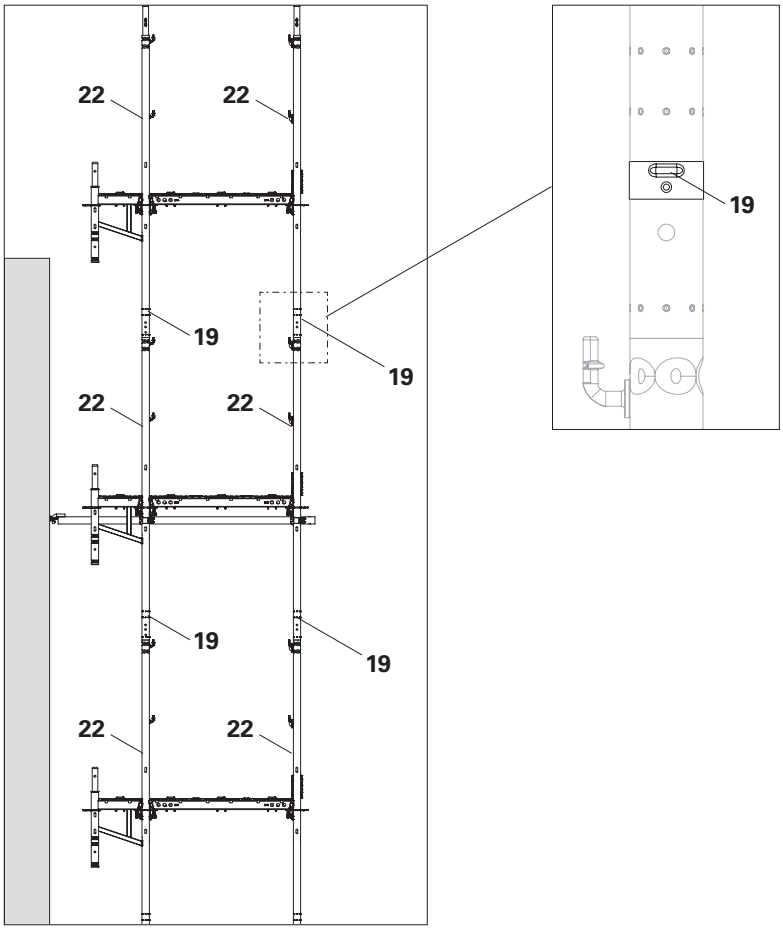


Fig. E6.02



In the case of scaffolds that grow in line with the building, for example, the top scaffolding level may be erected without anchoring.

- Anchor the highest tie position in each frame column with a wall tie.
- Face brace in every second bay in scaffolding level above the highest tie position.
- The joints of the Easy standards (**22**) on the three uppermost scaffolding levels must be connected with locking pins (**19**) so that they are tension-proof. (Fig. E6.01)
- If only two frame columns are built higher when higher wind loads are expected,
  – these must also be braced longitudinally using two Horizontal Ledgers UH-2 and
  – one Ledger Brace UBL-2
  . (Fig. E6.02)



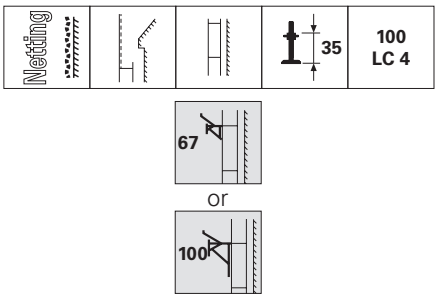
Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie

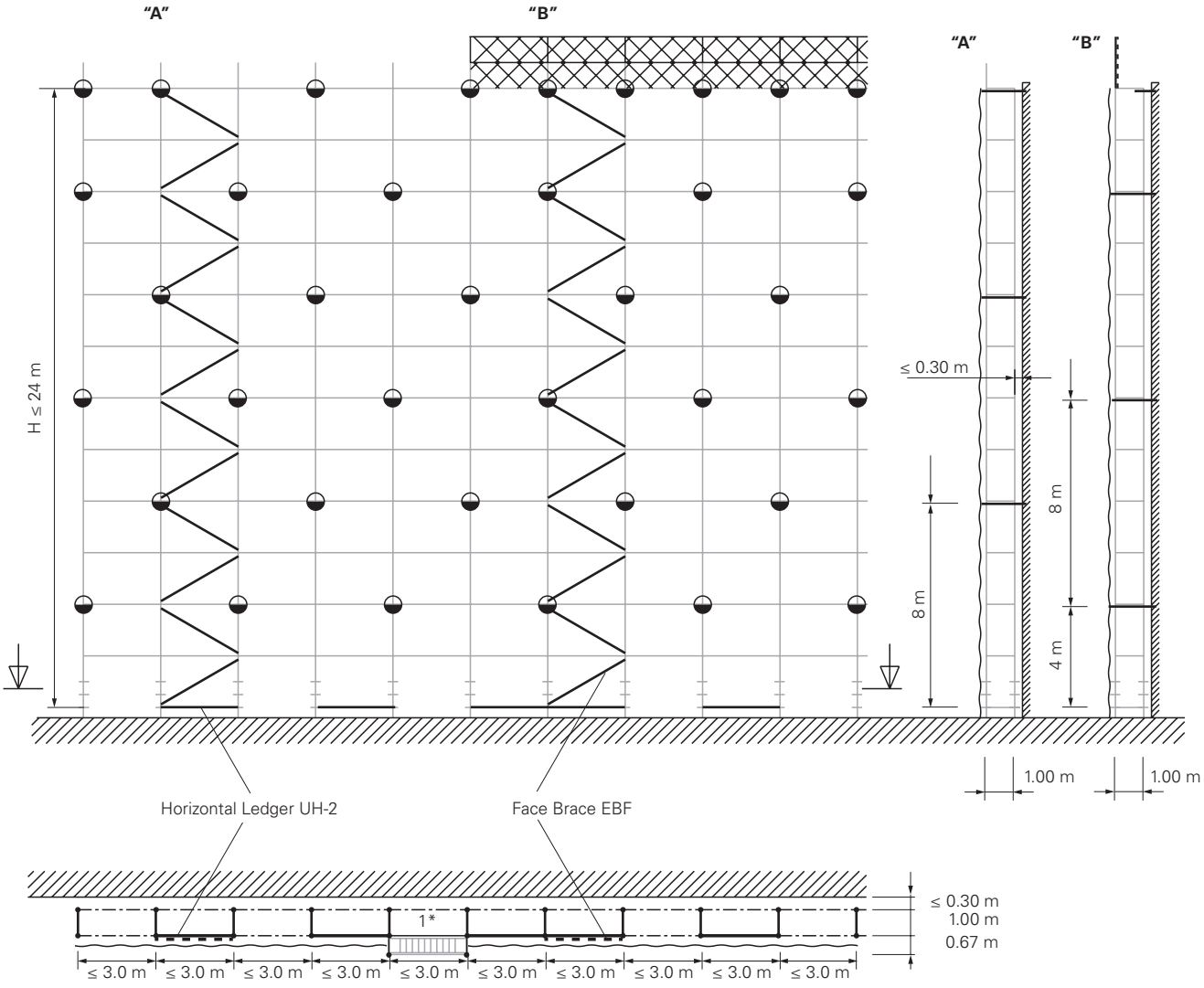
E6 Tie pattern

EVOTOP – variant ≤ 24 m

Basic variant 3/LC4
Standard configuration:
netting in front of closed facade.



8 m offset tie pattern



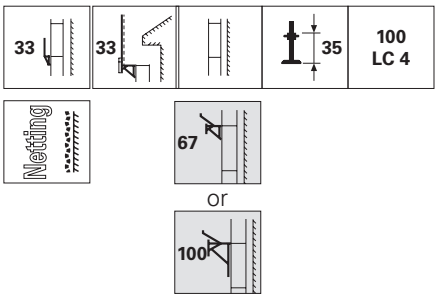
1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie

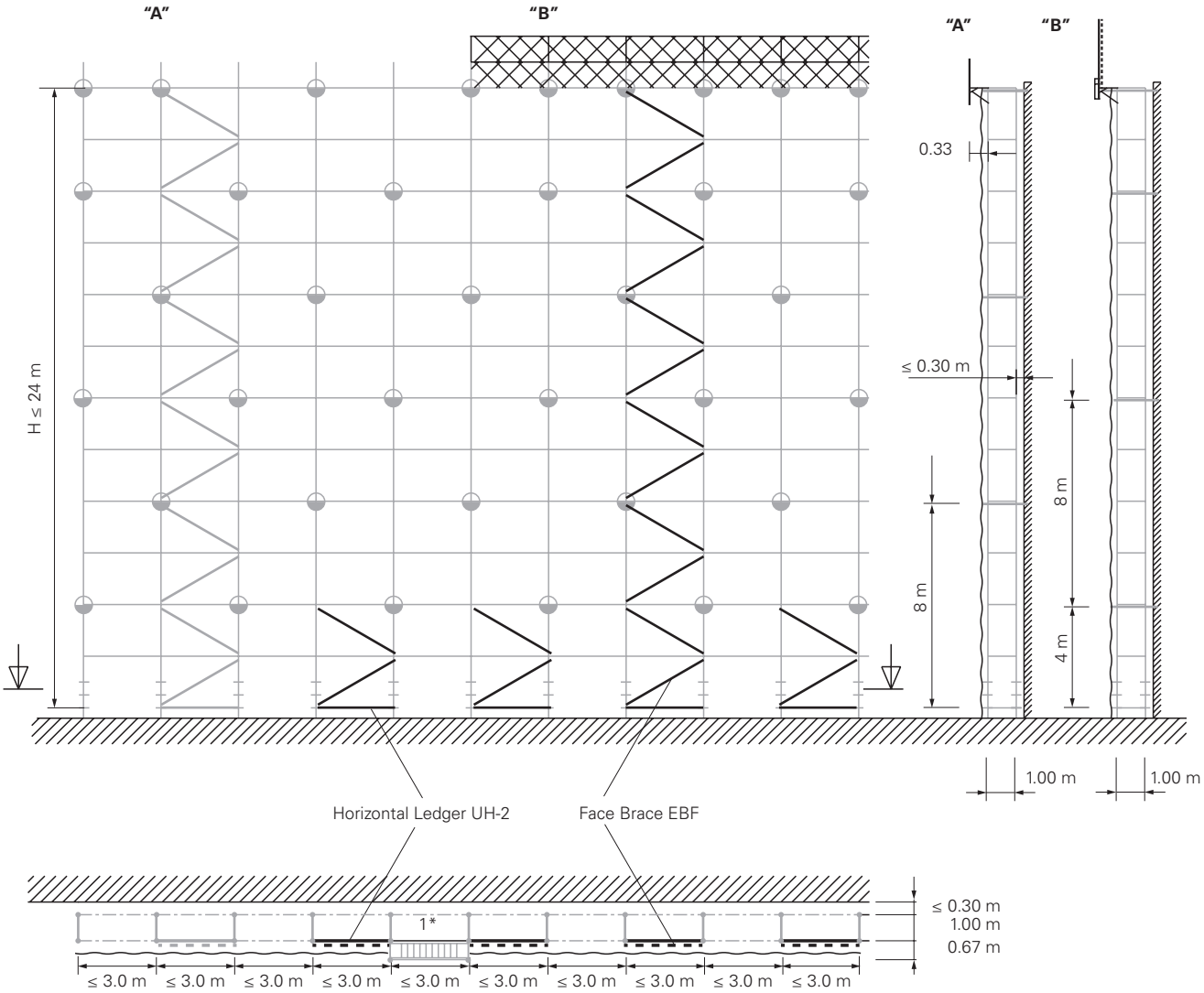
E6 Tie pattern

EVOTOP – variant ≤ 24 m

Variant 3.1/LC4
Standard configuration:
netting in front of closed facade.



8 m offset tie pattern



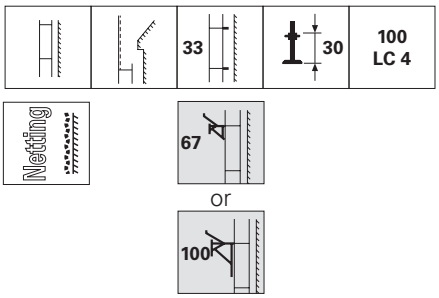
1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**.
See "External scaffold access" on page 169
Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie

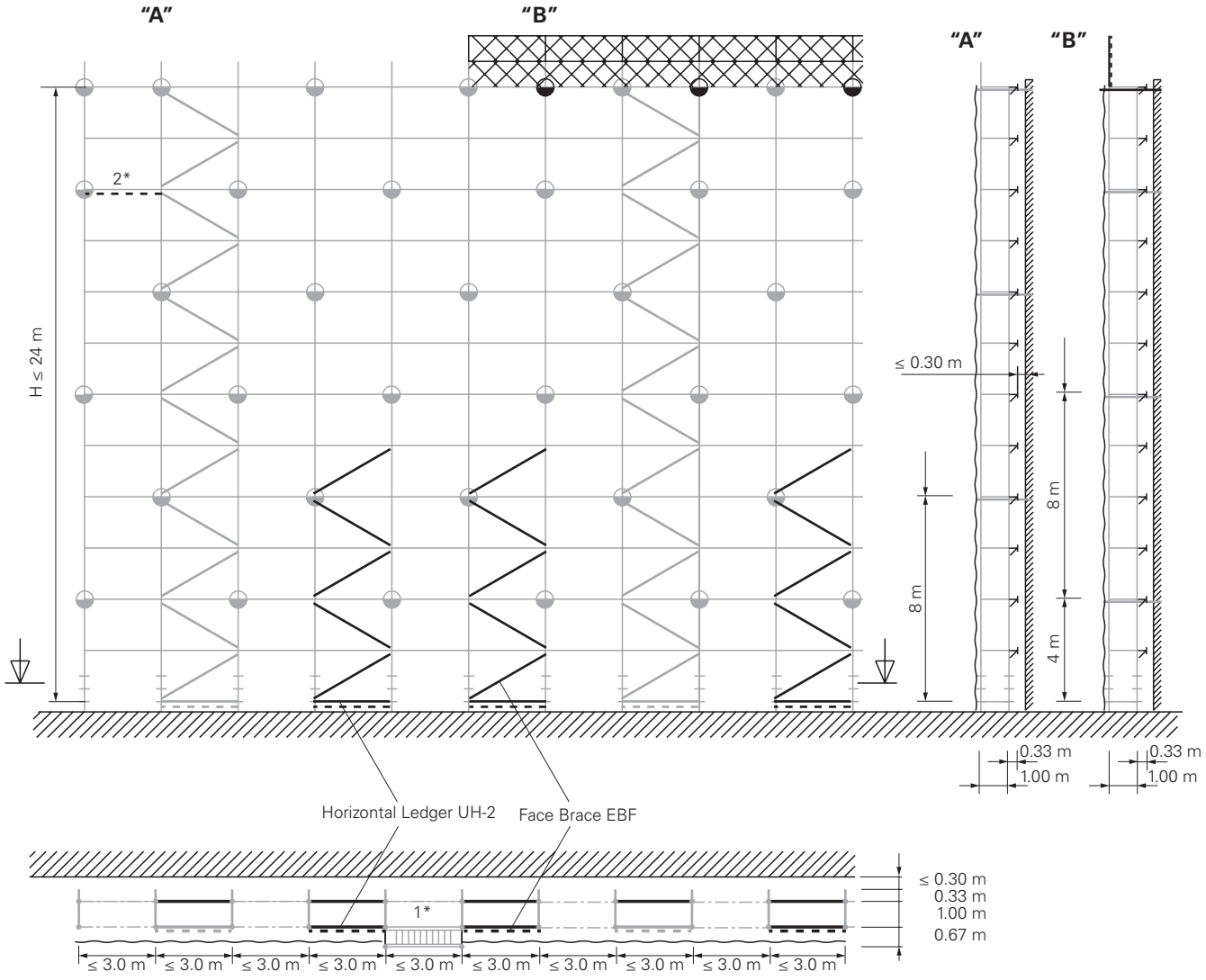
E6 Tie pattern

EVOTOP – variant ≤ 24 m

Variant 3.2/LC4
Standard configuration:
netting in front of closed facade.



8 m offset tie pattern

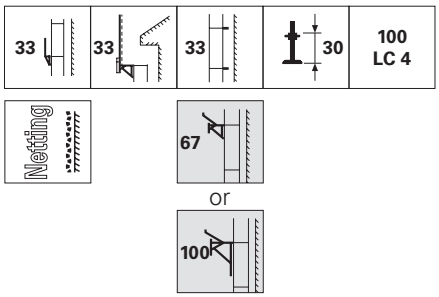


1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**.
See "External scaffold access" on page 169
2* Fit a horizontal ledger onto the inner leg in the 10th scaffolding level.
Note: Lateral protection components are not shown.

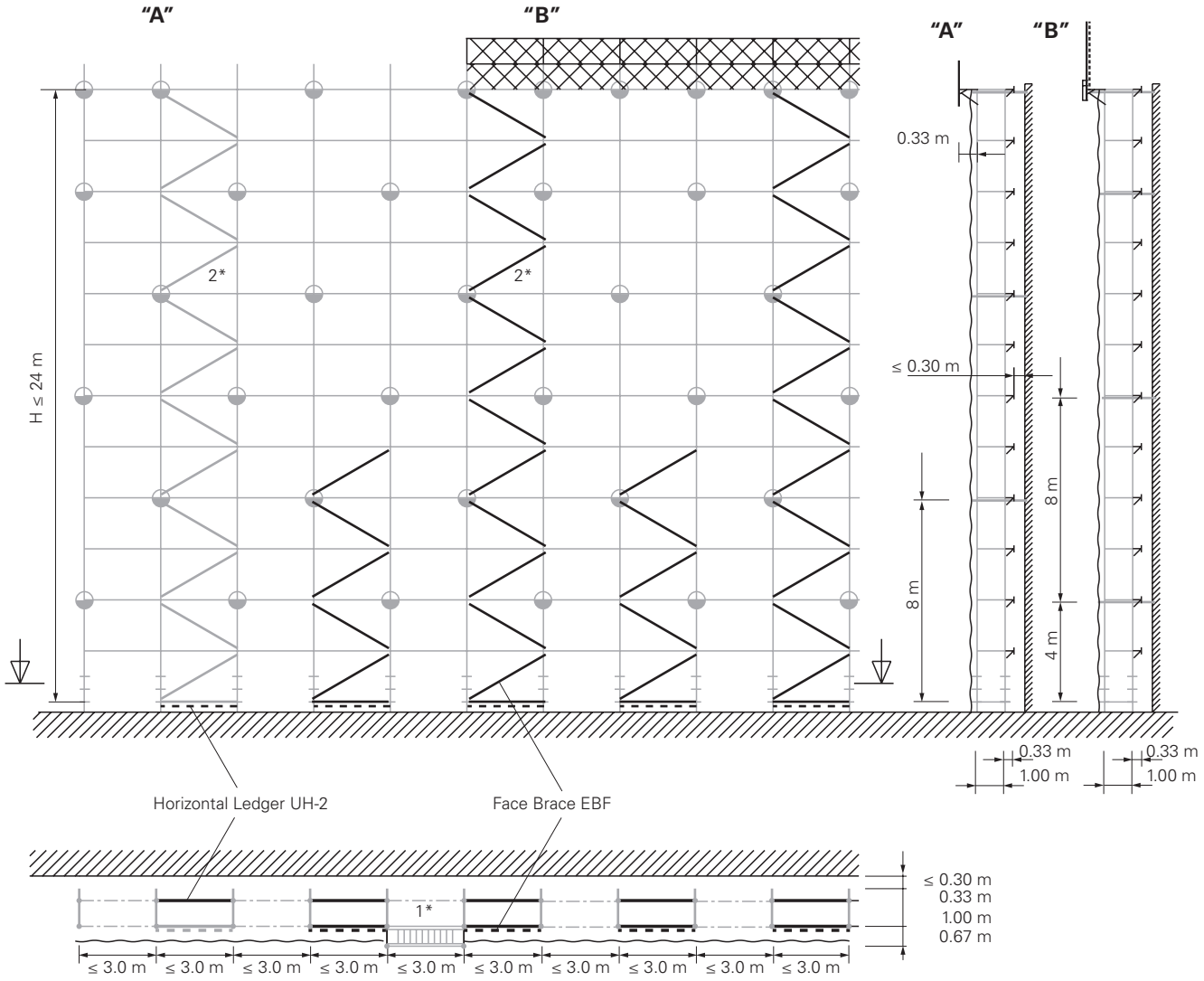
⊕ Single-leg wall tie
⊕ Wall tie

EVOTOP – variant ≤ 24 m

Variant 3.3/LC4
Standard configuration:
netting in front of closed facade.



8 m offset tie pattern



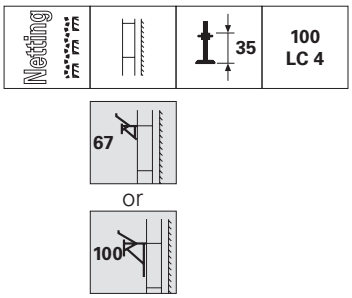
1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"8 m offset"**. See "External scaffold access" on page 169
2* Diagonal up to highest scaffolding level in every 4th bay.
Note: lateral protection components not shown.

⊕ Single-leg wall tie
✦ Wall tie

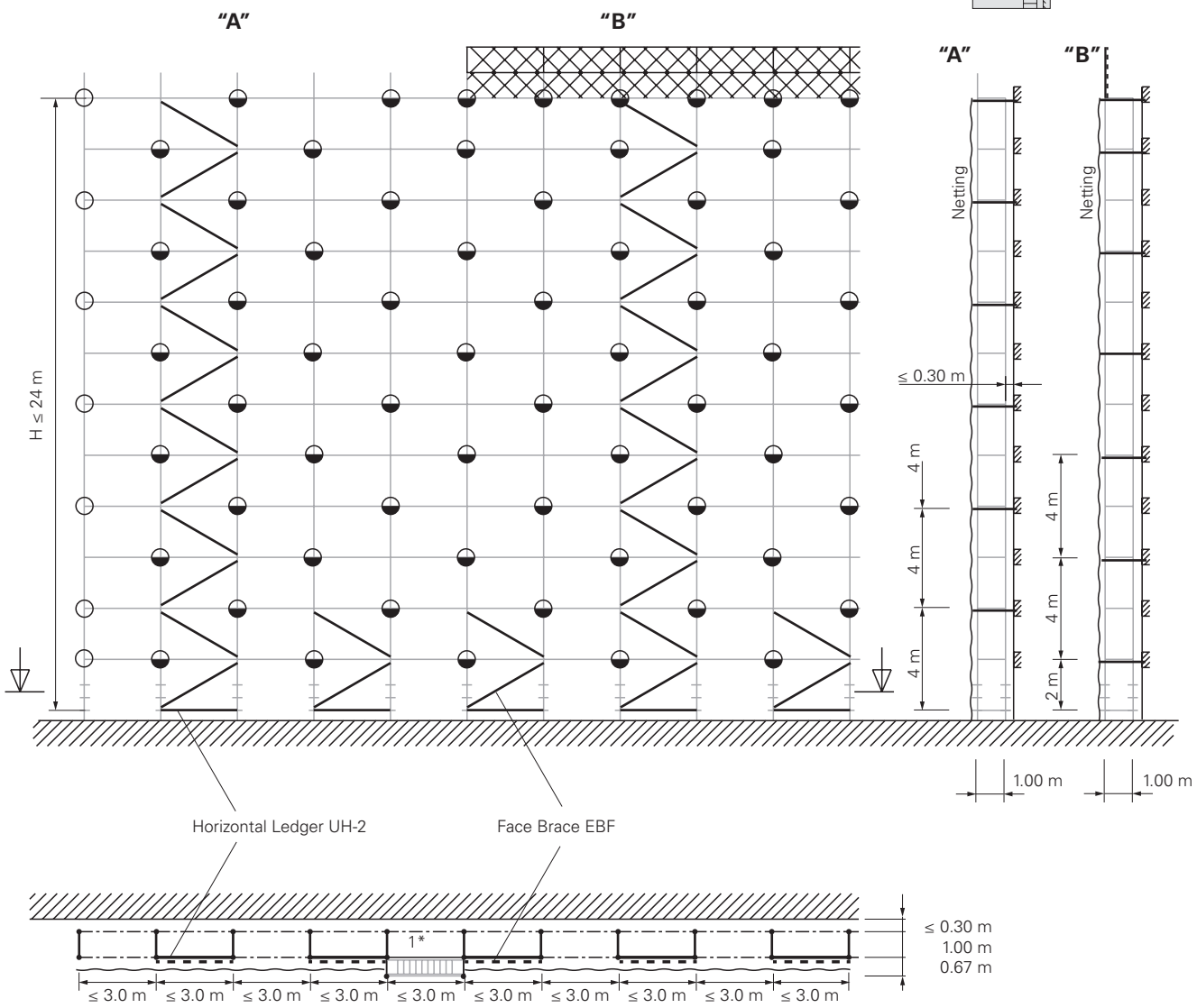
E6 Tie pattern

EVOTOP – variant ≤ 24 m

Basic variant 4a/LC4
Standard configuration:
netting in front of open facade.



4 m offset tie pattern



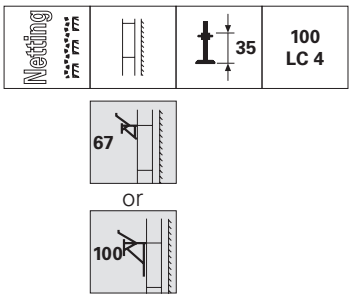
1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m offset"**.
See "External scaffold access" on page 169
Note: lateral protection components not shown.

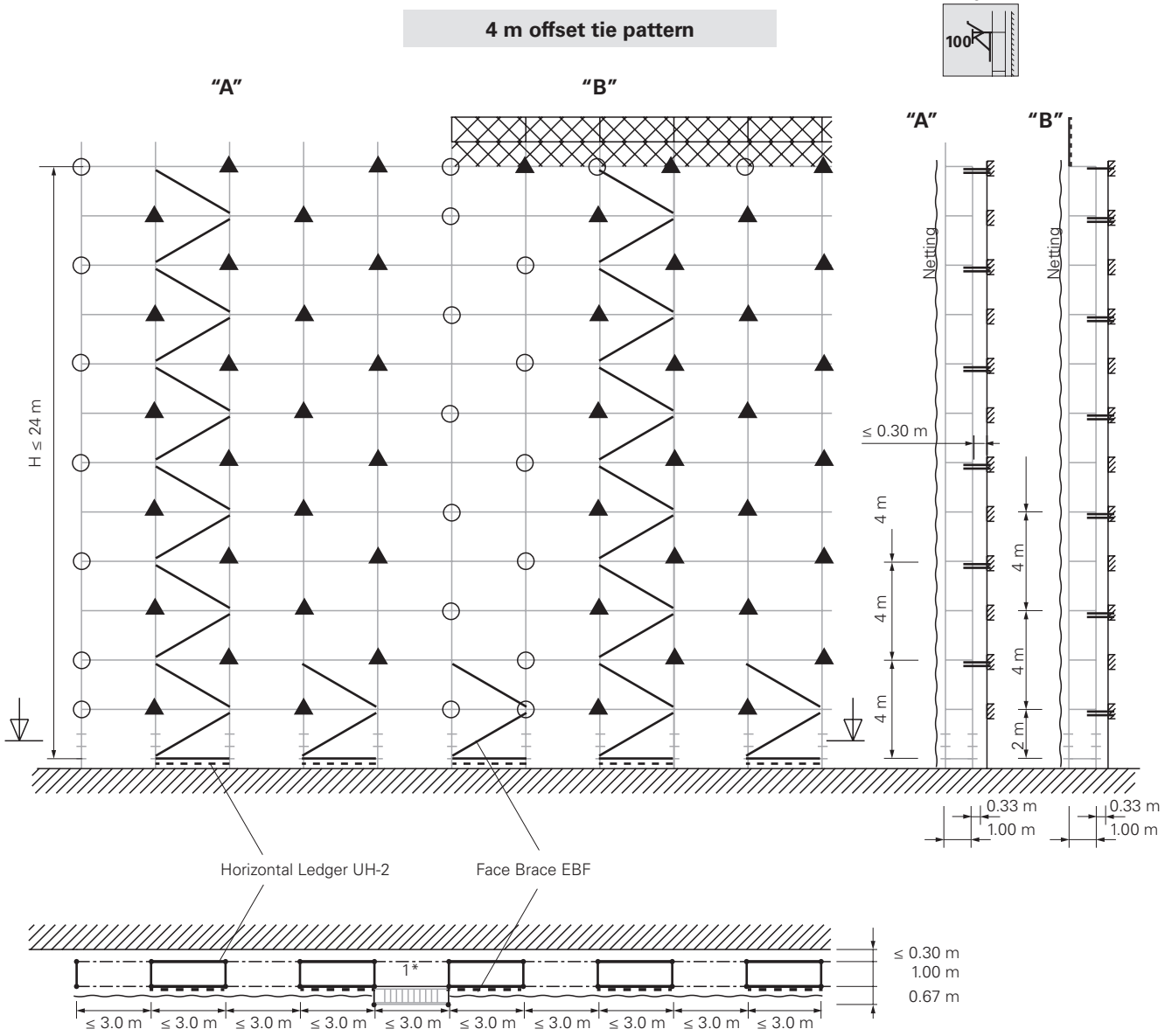
⊕ Single-leg wall tie
⊕ Wall tie

E6 Tie pattern

EVOTOP – variant ≤ 24 m

Basic variant 4b/LC4
Standard configuration:
netting in front of open facade.





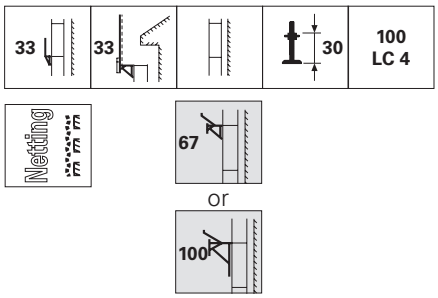
1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m offset"**.
See "External scaffold access" on page 169
Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie

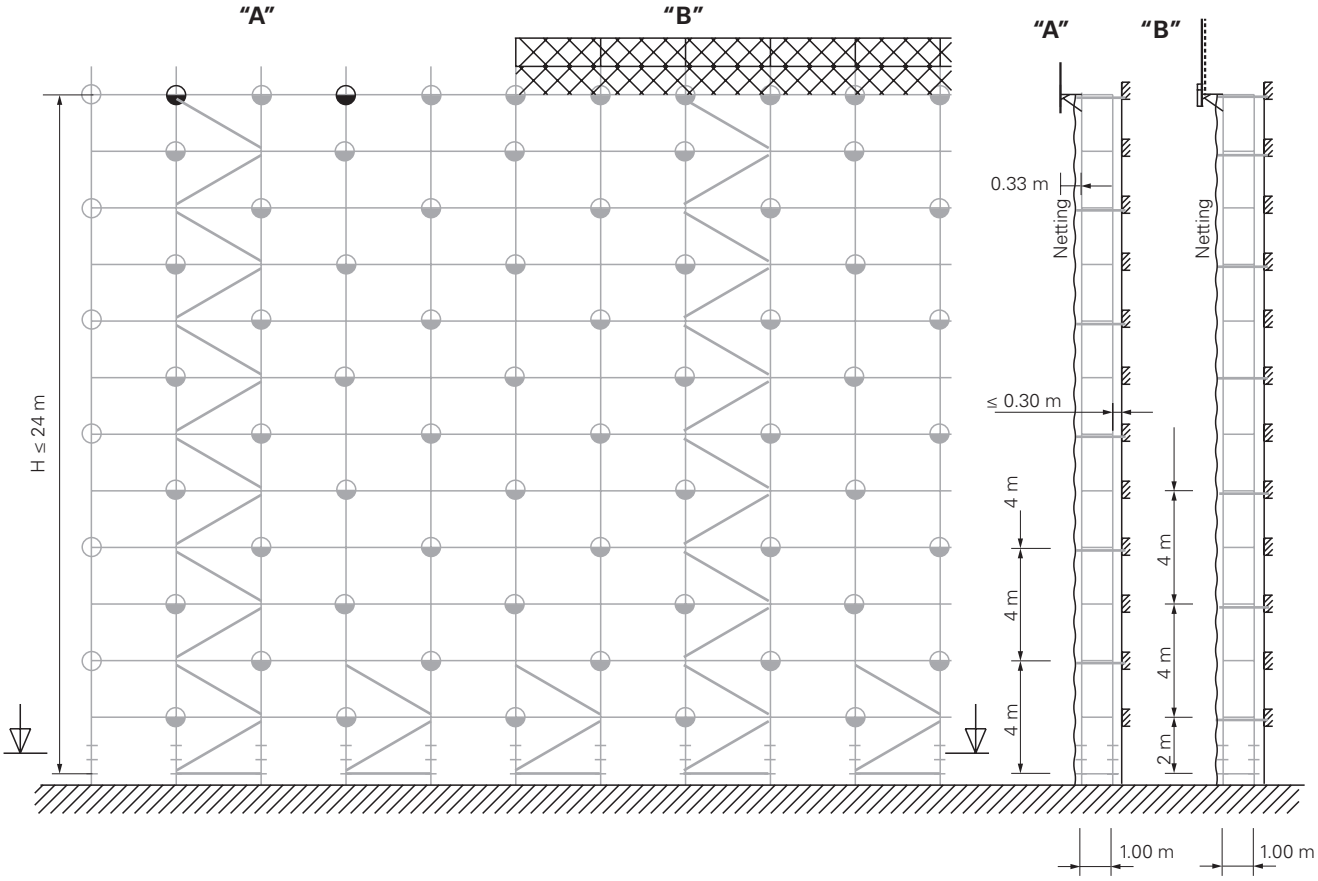
E6 Tie pattern

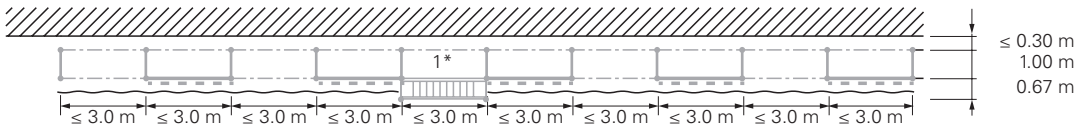
EVOTOP – variant ≤ 24 m

Variant 4.1/LC4
Standard configuration:
netting in front of open facade.



4 m offset tie pattern





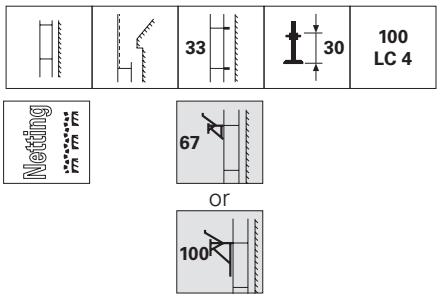
1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m offset"**.
See "External scaffold access" on page 169
Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie

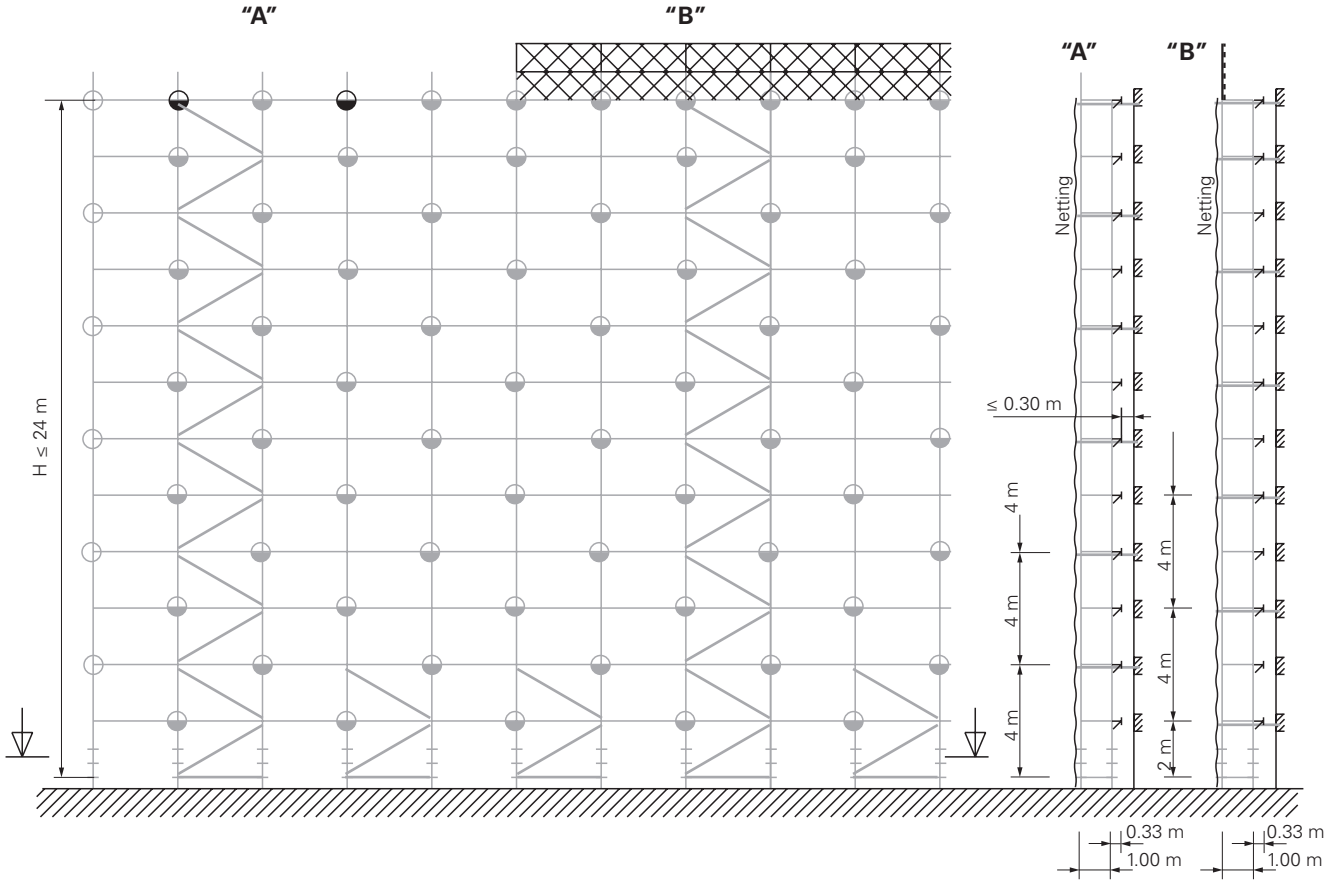
E6 Tie pattern

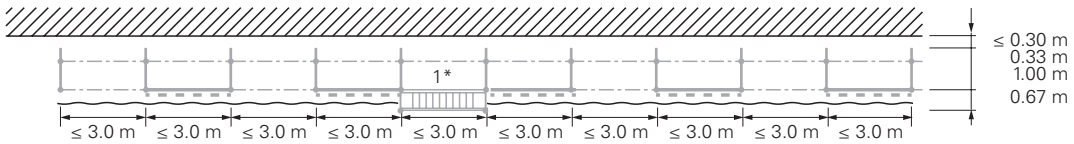
EVOTOP – variant ≤ 24 m

Variant 4.2/LC4
Standard configuration:
netting in front of open facade.



4 m offset tie pattern





1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"2 m"**.
See "External scaffold access" on page 169
Note: lateral protection components not shown.

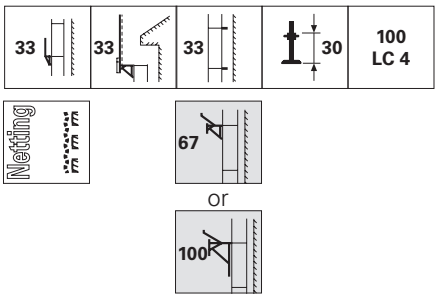
⊕ Single-leg wall tie
⊕ Wall tie

Statics

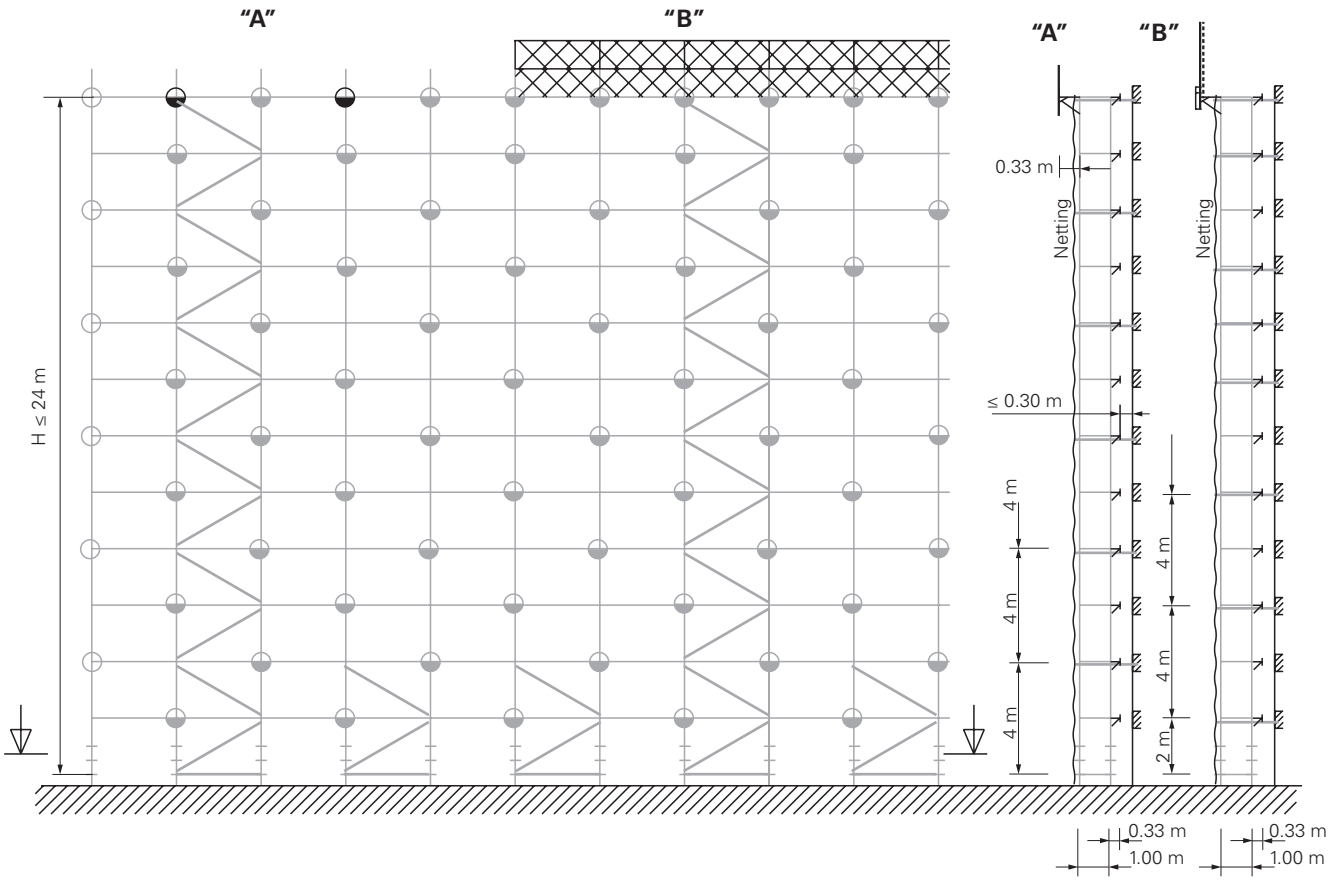
E6 Tie pattern

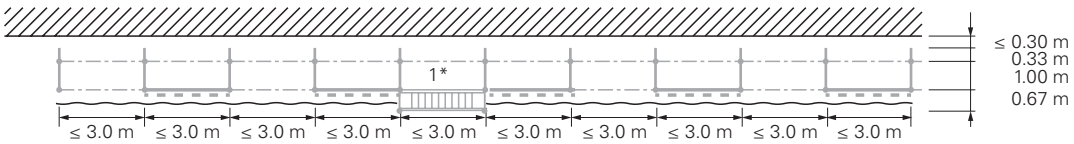
EVOTOP – variant ≤ 24 m

Variant 4.3/LC4
Standard configuration:
netting in front of open facade.



4 m offset tie pattern





1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m offset"**.
See "External scaffold access" on page 169

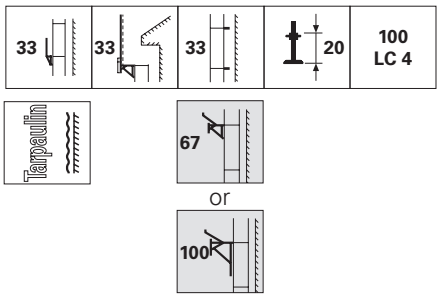
Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie

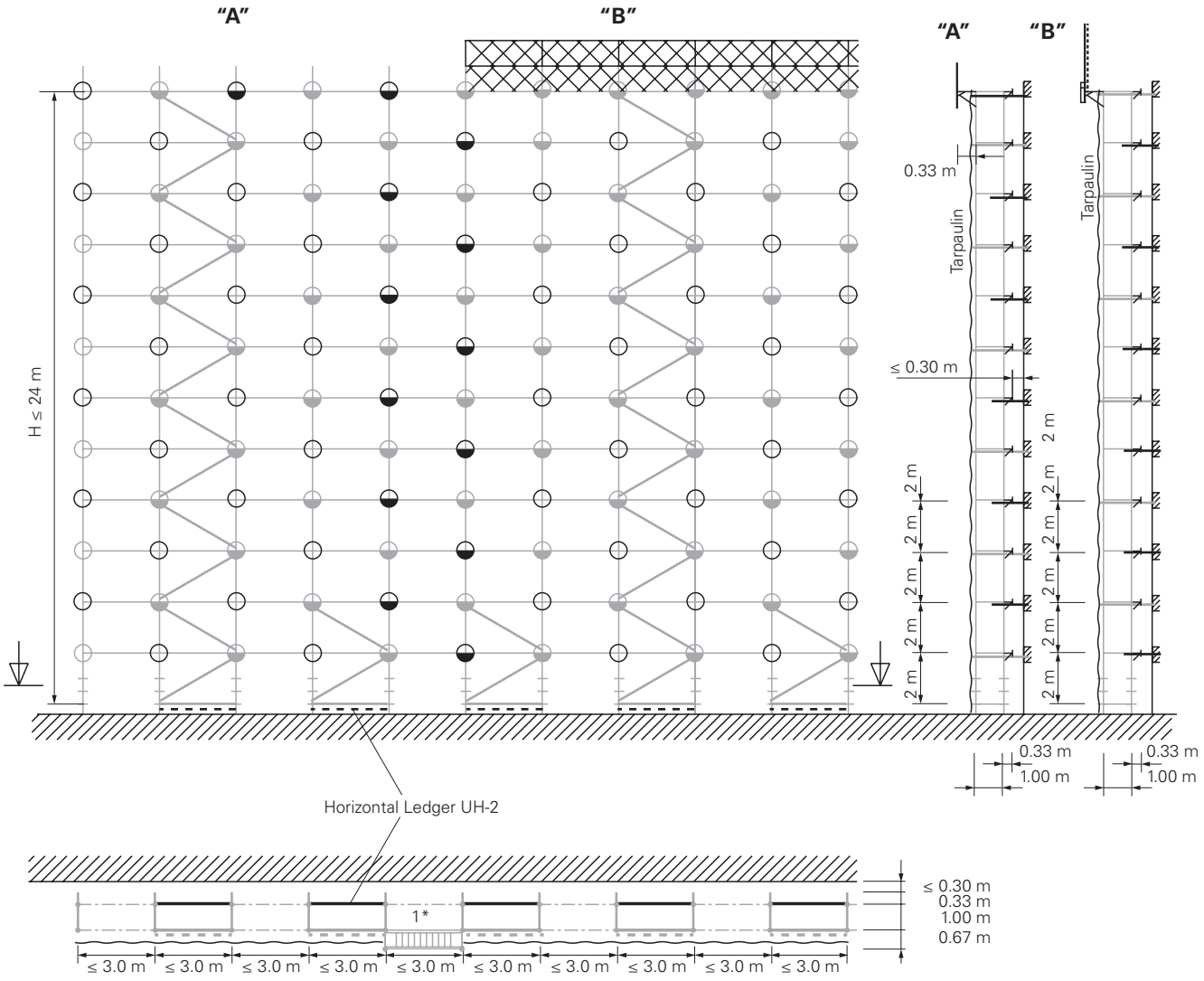
E6 Tie pattern

EVOTOP – variant ≤ 24 m

Variant 4.4/LC4
Standard configuration:
tarpaulin in front of closed facade.



2 m tie pattern



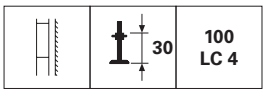
1* Anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"2 m"**.
See "External scaffold access" on page 169

Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie

E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III



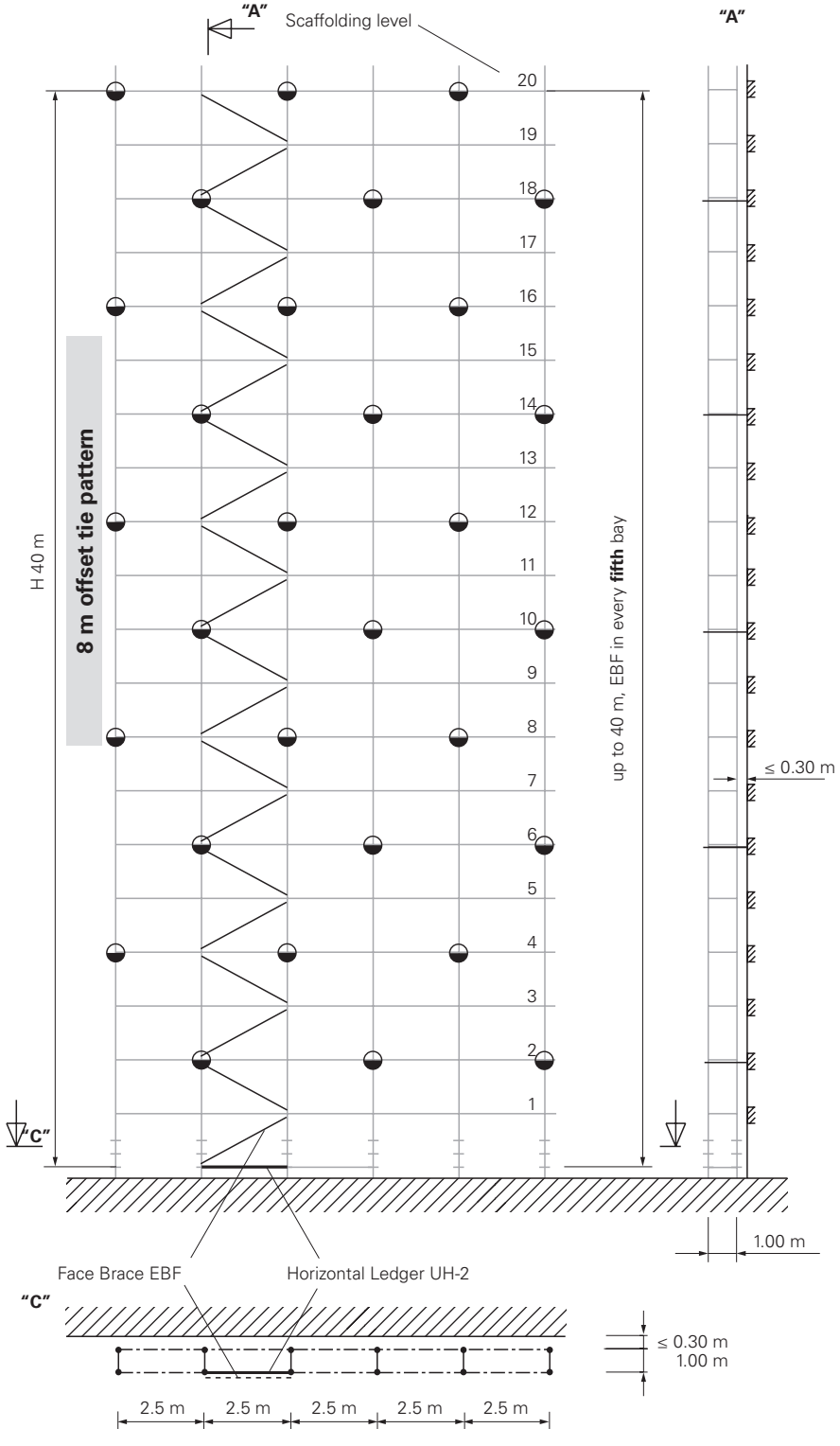
Basic variant 1a "A"/LC4

Bay width 2.50 m
Scaffold height 40 m

Spindle extension
Max. 30 cm.

Tie pattern
- 8 m offset up to 40 m,
- per tie position, anchor every second frame column with a wall tie.

Bracing:
- Face Brace EBF 250-200
  - in every fifth bay up to topmost scaffolding level.
- Horizontal Ledger UH-2
  - in the base level of every scaffolding bay with diagonal on the outside.



Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie
---- Diagonal in top view

E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III

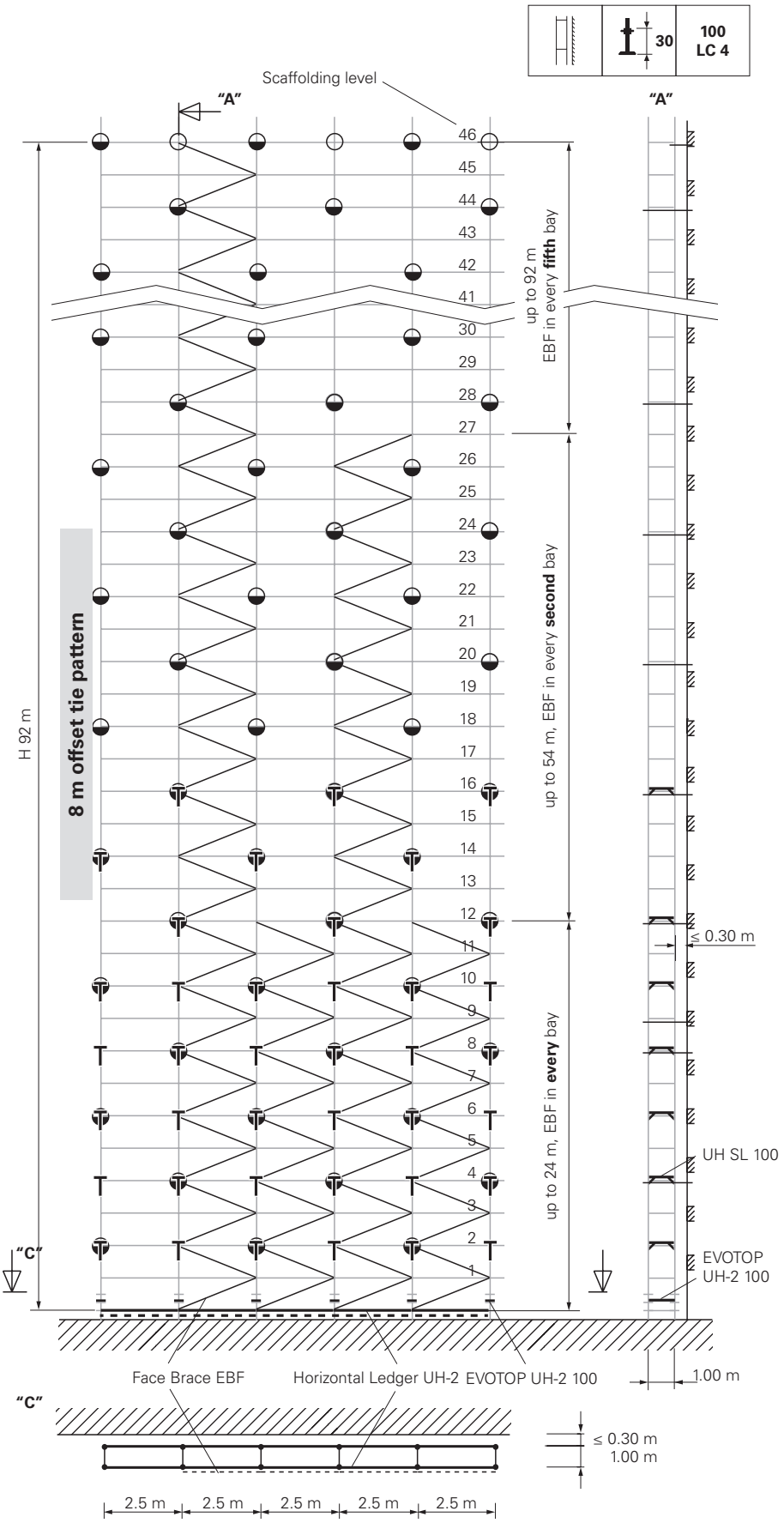
Basic variant 1a "A"/LC4

Bay width 2.50 m
Scaffold height 92 m

Spindle extension
Max. 30 cm.

Tie pattern
- 8 m offset up to 92 m,
- per tie position, anchor every second frame column with a wall tie,
- anchor the topmost scaffolding level in each frame column with a single-standard wall tie at the very least.

Bracing:
- Face Brace EBF 250-200
  - in every fifth bay up to topmost scaffolding level.
  - up to scaffolding level 27 in every second bay,
  - up to the 12th scaffolding level in each bay, with the exception of edge bays.
- Horizontal Ledger UH-2
  - on the outside and inside of every scaffolding bay in the base level.
- Ledger EVOTOP UH-2 100
  - on the Easy base standard in the lower 3/4 rosette in each frame column
- Ledger EVOTOP UH-2 SL 100
  - in scaffolding level 2, 4, 6, 8 10 on each frame column,
  - in scaffolding level 12, 14, 16 on each anchored frame column.



Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

Note: lateral protection components not shown.

- Single-leg wall tie
- Wall tie
- T Ledger EVOTOP UH SL 100
- ---- Diagonal in top view

E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III

Basic variant 1a "A"/LC4

Bay width 2.50 m
Scaffold height 120 m

Spindle extension
Max. 30 cm.

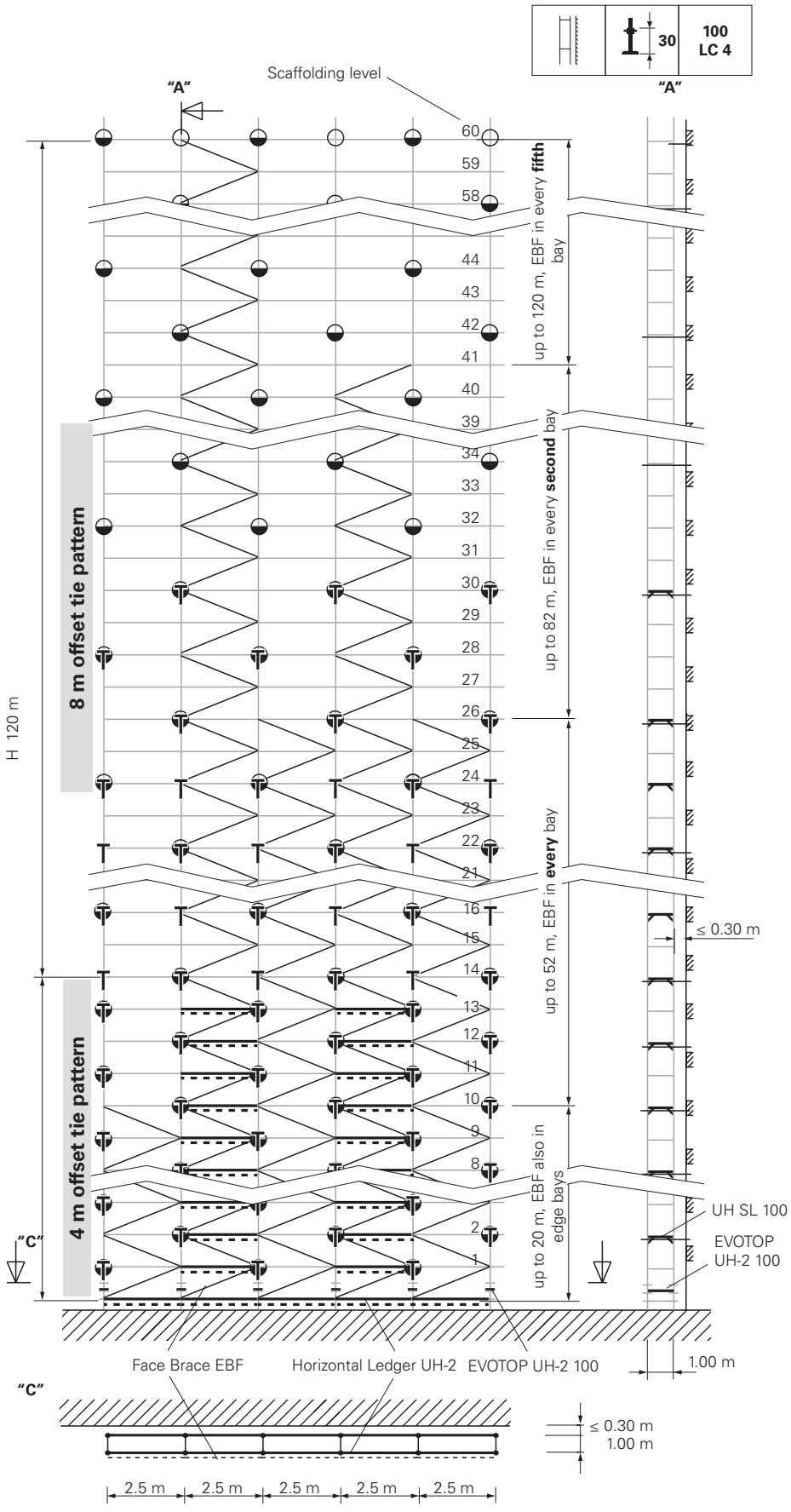
Tie pattern
- 4 m offset up to 28 m,
- above that, offset 8 m,
- per tie position, anchor every second frame column with a wall tie,
- anchor the topmost scaffolding level in each frame column with a single-standard wall tie at the very least.

Bracing:
- Face Brace EBF 250-200
  - in every fifth bay up to topmost scaffolding level.
  - up to scaffolding level 41 in every second bay,
  - up to the 26th scaffolding level in each bay, with the exception of edge bays.
  - up to the 10th scaffolding level, even in edge bays.
- Horizontal Ledger UH-2
  - on the outside and inside of every scaffolding bay in the base level.
  - in every second bay up to the 13th scaffolding level, on the outside and inside.
- Ledger EVOTOP UH-2 100
  - on the Easy base standard in the lower 3/4 rosette in each frame column
- Ledger EVOTOP UH-2 SL 100
  - in scaffolding level 1 - 13 on each anchored frame column,
  - In scaffolding levels 14, 16, 18, 20, 22, 24 on each frame column,
  - In scaffolding levels 26, 28, 30 on each anchored frame column.

Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

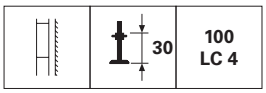
Note: lateral protection components not shown.

- Single-leg wall tie
- Wall tie
- T Ledger EVOTOP UH SL 100
- ---- Diagonal in top view



E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III



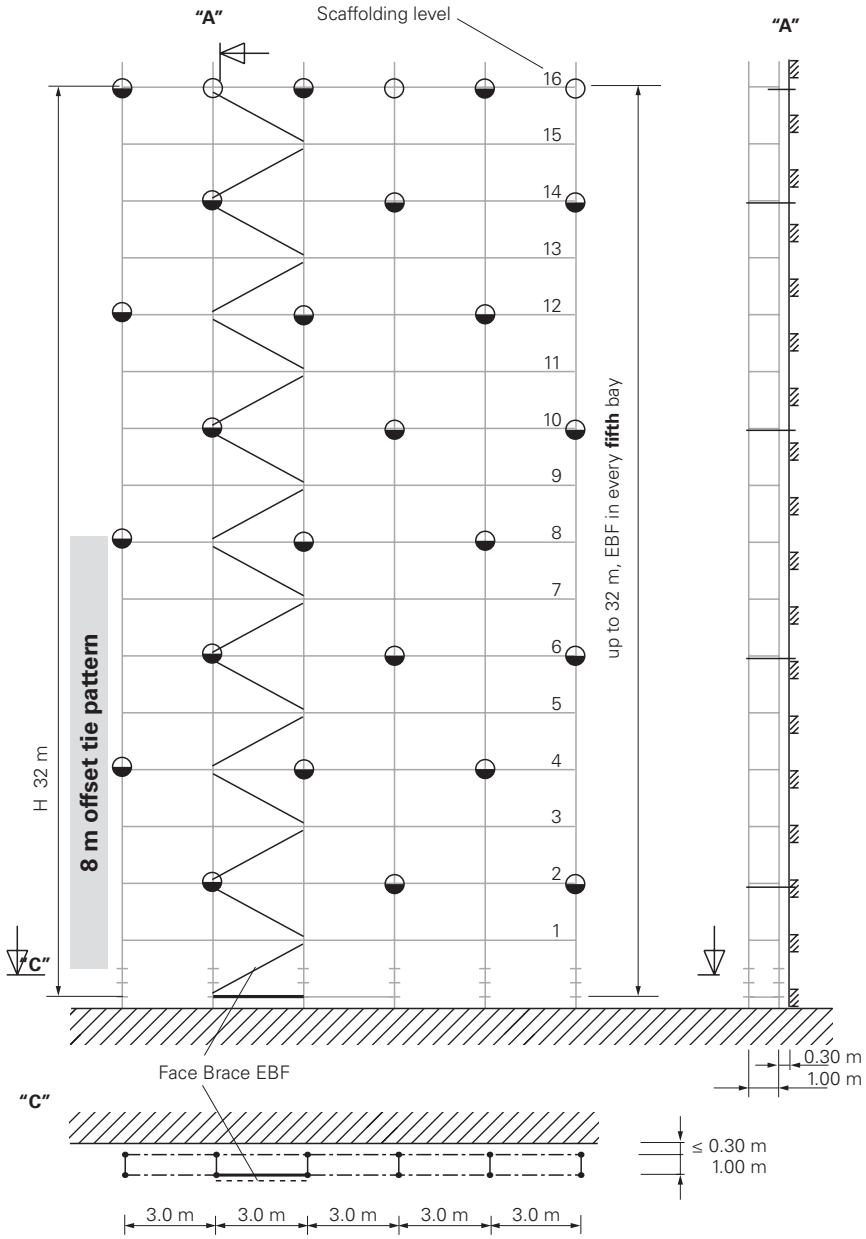
Basic variant 1a "A"/LC4

Bay width 3.00 m
Scaffold height 32 m

Spindle extension
Max. 30 cm.

Tie pattern
- 8 m offset tie pattern,
- per tie position, anchor every second frame column with a wall tie.
- Anchor the topmost scaffolding level in each frame column with a single-standard wall tie at the very least.

Bracing:
- Face Brace EBF 300-200
  - in every fifth bay up to topmost scaffolding level.
- Horizontal Ledger UH-2 (longitudinal ledger)
  - on the outside of the scaffolding bay in the base level with a diagonal.



Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie
---- Diagonal in top view

E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III

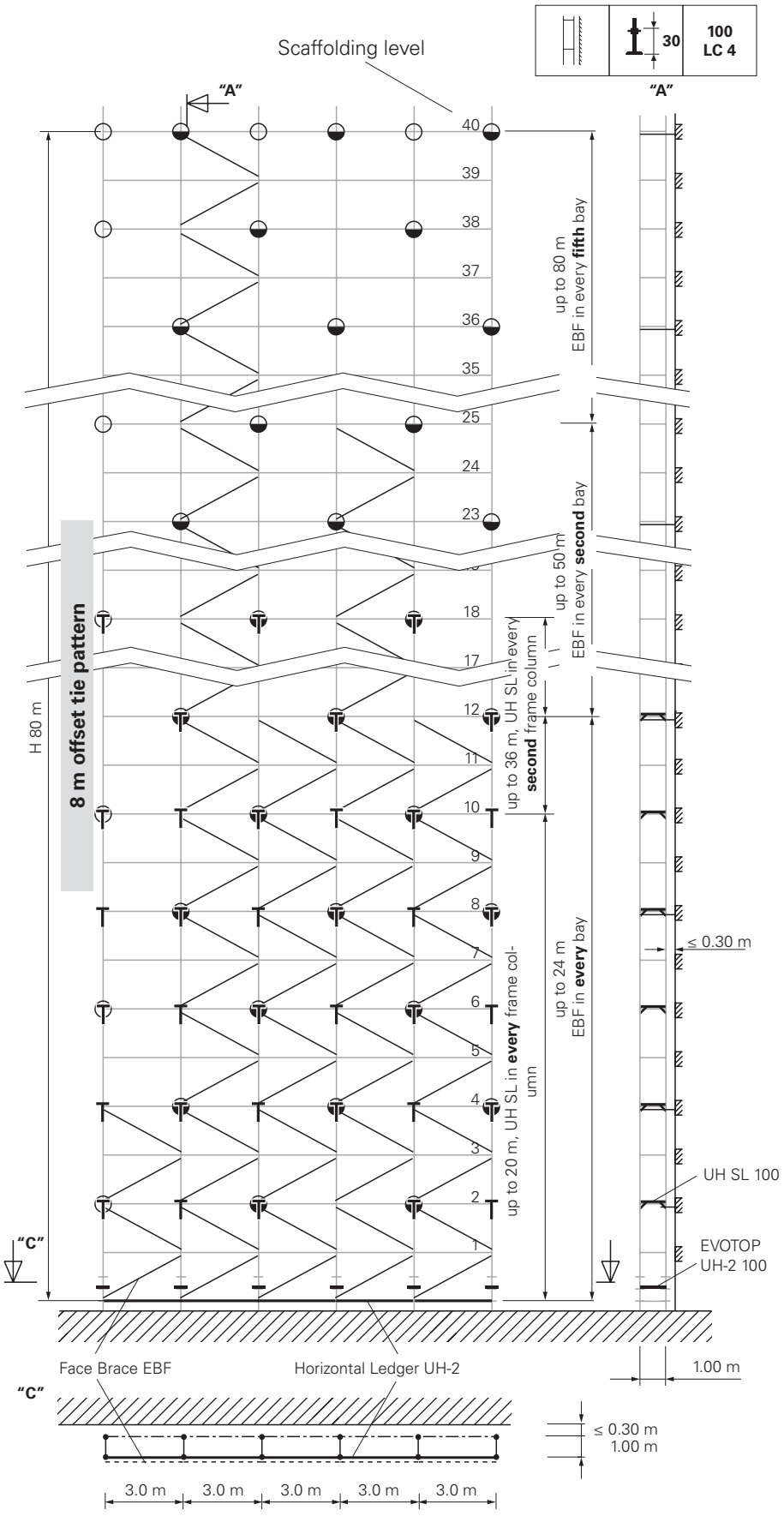
Basic variant 1a "A"/LC4

Bay width 3.00 m
Scaffold height 80 m

Spindle extension
Max. 30 cm.

Tie pattern
- 8 m offset tie pattern,
- per tie position, anchor every second frame column with a wall tie.
- Anchor the topmost scaffolding level in each frame column with a single-standard wall tie at the very least.
- Anchor the edge post with a single-leg wall tie.

Bracing:
- Face Brace EBF 300-200
  - in every bay up to the 12th scaffolding level,
  - in every second bay up to the 25th scaffolding level,
  - in every fifth bay up to topmost scaffolding level.
  - only up to the 4th scaffolding level in the edge bay.
- Horizontal Ledger UH-2
  - on the outside of every scaffolding bay in the base level.
- Ledger EVOTOP UH-2 100
  - on the EVOTOP base standard in the lower ¾ rosette-2 in each frame column.
- Ledger EVOTOP UH SL 100
  - in scaffolding level 2, 4, 6, 8, 10 on each frame column,
  - in scaffolding level 12, 14, 16, 18 on each anchored frame column.



Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

Note: lateral protection components not shown.

- Single-leg wall tie
- Wall tie
- T Ledger EVOTOP UH SL 100
- ---- Diagonal in top view

E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III

Basic variant 1a "A"/LC4

Bay width 3.00 m
Scaffold height 100 m

Spindle extension
Max. 30 cm.

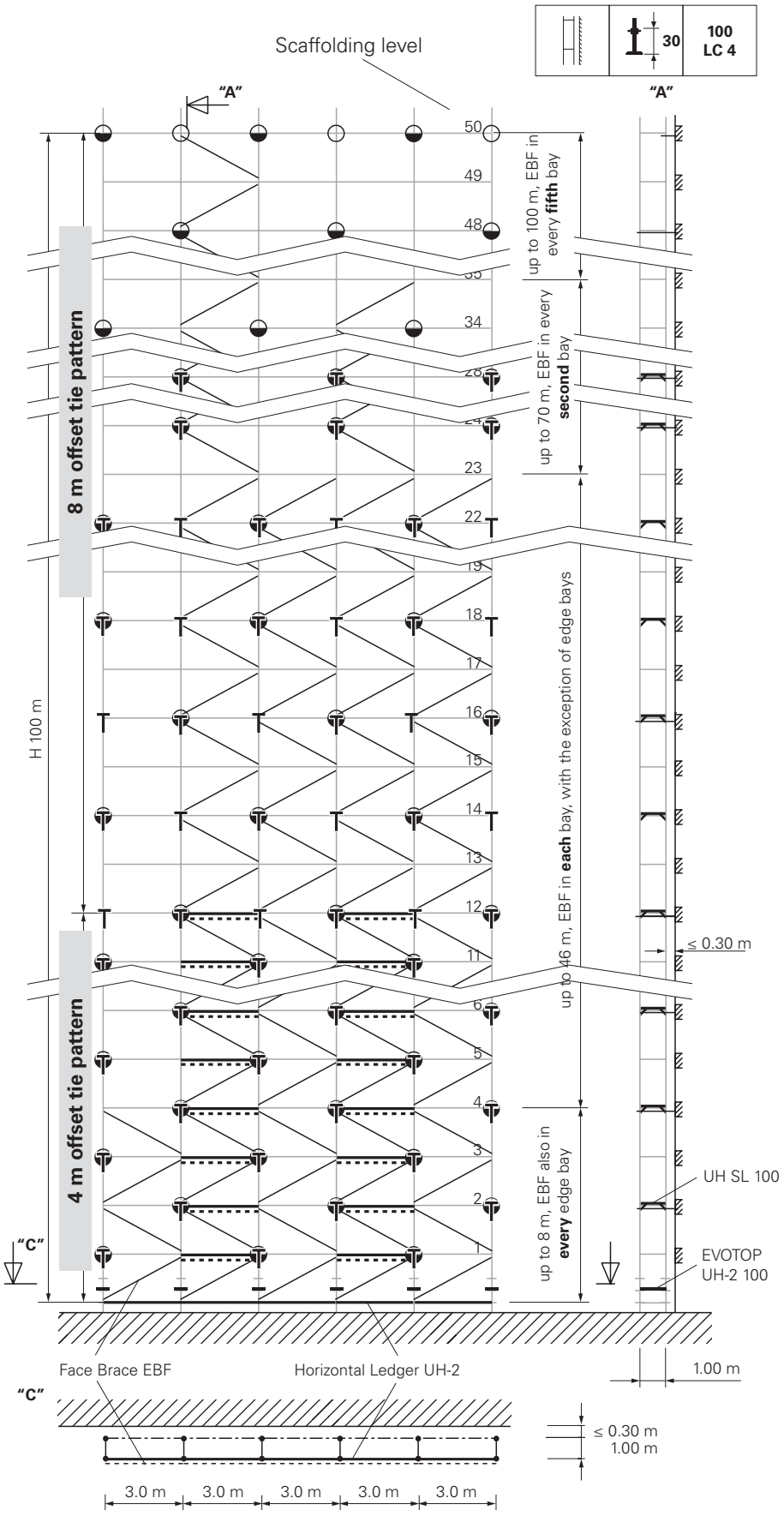
Tie pattern
- 4 m offset up to 24 m,
- 8 m offset up to 100 m,
- per tie position, anchor every second frame column with a wall tie,
- Anchor the topmost scaffolding level in each frame column with a single-standard wall tie at the very least.

Bracing:
- Face Brace EBF 300-200
  - in every fifth bay up to topmost scaffolding level,
  - in every second bay up to the 35th scaffolding level,
  - in every bay with the exception of edge bays, up to the 23rd scaffolding level,
  - in every edge bay up to the 4th scaffolding level.
- Horizontal Ledger UH-2
  - on the outside of every scaffolding bay in the base level,
  - on the outside and inside of every second bay in scaffolding level 1-12,
- Ledger EVOTOP UH-2 100 on Easy base standard in the lower ¾ rosette in each frame column.
- Ledger EVOTOP UH-2 SL 100
  - in scaffolding level 1 - 11 on anchored frame column,
  - in scaffolding level 12, 14, 16, 18, 20, 22 on each frame column,
  - in scaffolding level 24, 26, 28, on anchored frame column.

Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

Note: lateral protection components not shown.

- Single-leg wall tie
- Wall tie
- T Ledger EVOTOP UH SL 100
- ---- Diagonal in top view



E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III

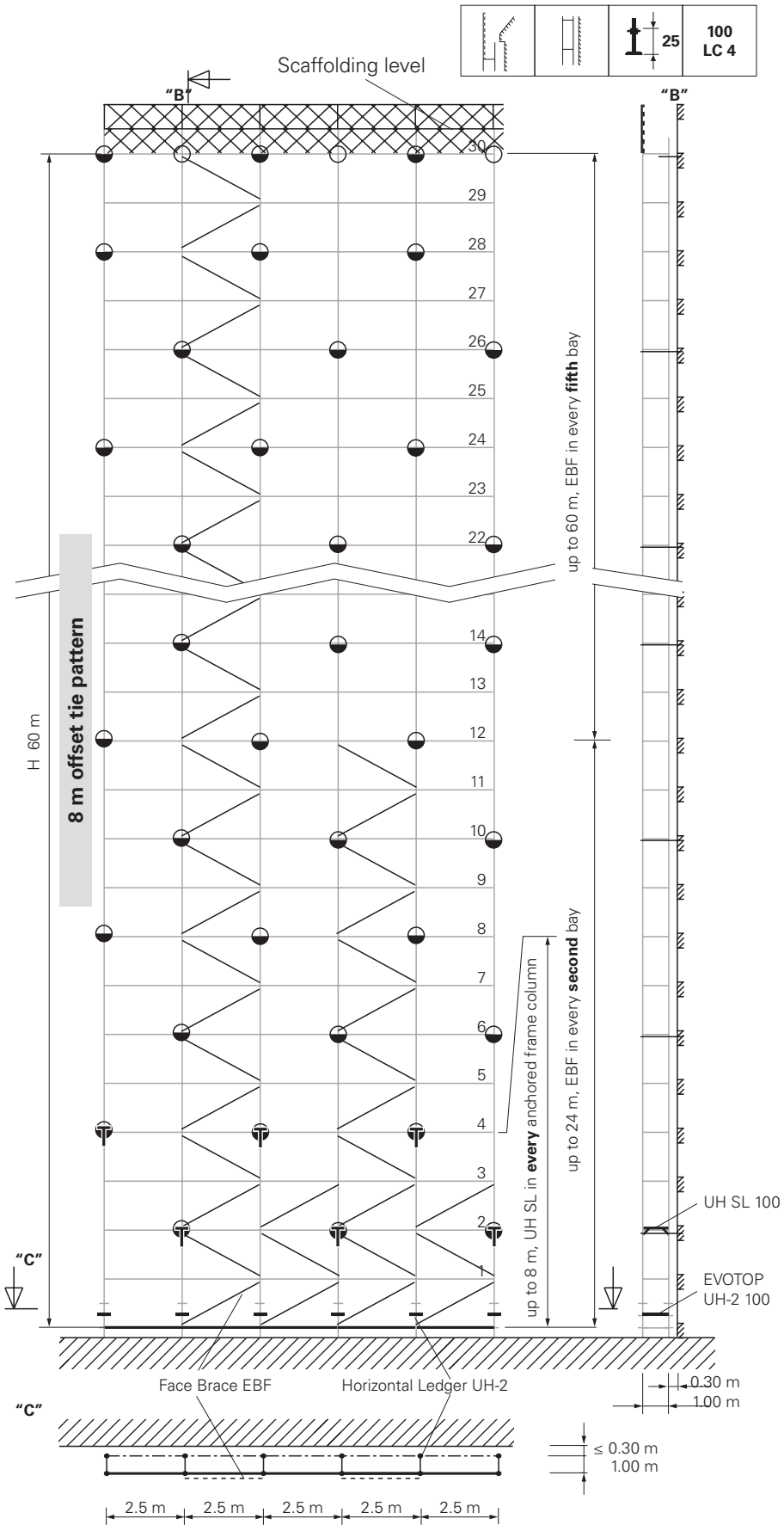
Basic variant 1a "B"/LC4

Bay width 2.50 m
Scaffold height 60 m

Spindle extension
Max. 25 cm.

Tie pattern
- 8 m offset tie pattern,
- per tie position, anchor every second frame column with a wall tie.
- Anchor the topmost scaffolding level in each frame column with a single-standard wall tie at the very least.

Bracing:
- Face Brace EBF 250-200
  - in every bay (with the exception of edge bays) up to the 3rd scaffolding level
  - in every second bay up to the 12th scaffolding level,
  - in every fifth bay up to topmost scaffolding level.
- Horizontal Ledger UH-2 (longitudinal ledger)
  - on the outside of every scaffolding bay in the base level.
- Ledger EVOTOP UH-2 100
  - on the EVOTOP base standard in the lower ¾ rosette-2 in each frame column.
- Ledger EVOTOP UH SL 100
  - in scaffolding level 2, 4, in each anchored frame column.



Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

Note: lateral protection components not shown.

- Single-leg wall tie
- Wall tie
- T Ledger EVOTOP UH SL 100
- ---- Diagonal in top view

E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III

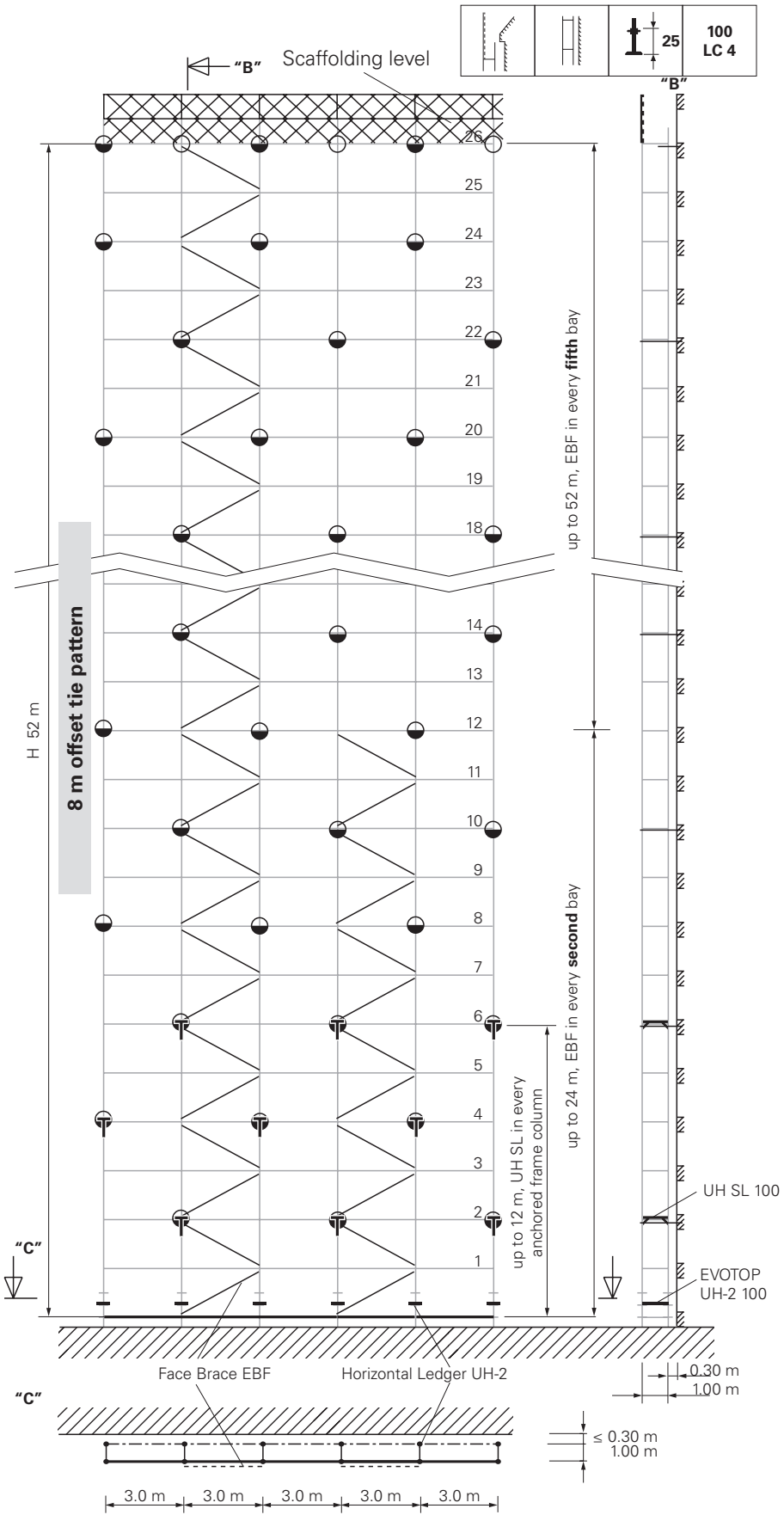
Basic variant 1a "B"/LC4

Bay width 3.00 m
Scaffold height 52 m

Spindle extension
Max. 25 cm.

Tie pattern
- 8 m offset tie pattern,
- per tie position, anchor every second frame column with a wall tie.
- Anchor the topmost scaffolding level in each frame column with a single-standard wall tie at the very least.

Bracing:
- Face Brace EBF 300-200
  - in every second bay up to the 12th scaffolding level,
  - in every fifth bay up to topmost scaffolding level.
- Horizontal Ledger UH-2 (longitudinal ledger)
  - on the outside of every scaffolding bay in the base level.
- Ledger EVOTOP UH-2 100
  - on the EVOTOP base standard in the lower ¾ rosette-2 in each frame column.
- Ledger EVOTOP UH SL 100
  - in scaffolding level 2, 4, 6 on each anchored frame column.



Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

Note: lateral protection components not shown.

- Single-leg wall tie
- Wall tie
- T Ledger EVOTOP UH SL 100
- ---- Diagonal in top view

E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III

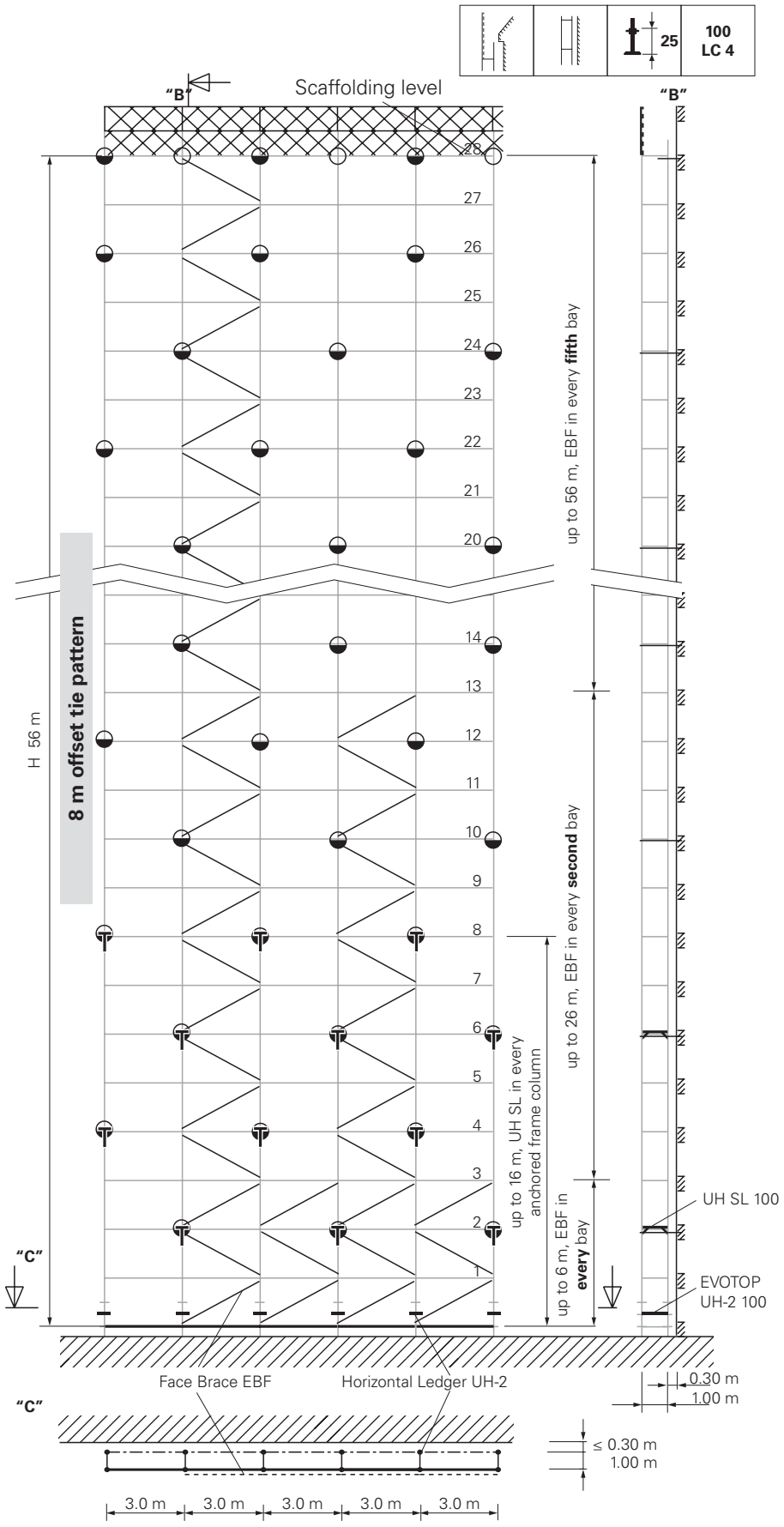
Basic variant 1a "B"/LC4

Bay width 3.00 m
Scaffold height 56 m

Spindle extension
Max. 25 cm.

Tie pattern
- 8 m offset tie pattern,
- per tie position, anchor every second frame column with a wall tie.
- Anchor the topmost scaffolding level in each frame column with a single-standard wall tie at the very least.

Bracing:
- Face Brace EBF 300-200
  - in every bay (with the exception of edge bays) up to the 3rd scaffolding level
  - in every second bay up to the 13th scaffolding level,
  - in every fifth bay up to topmost scaffolding level.
- Horizontal Ledger UH-2 (longitudinal ledger)
  - on the outside of every scaffolding bay in the base level.
- Ledger EVOTOP UH-2 100
  - on the EVOTOP base standard in the lower ¾ rosette-2 in each frame column.
- Ledger EVOTOP UH SL 100
  - in scaffolding level 2, 4, 6, 8 on each anchored frame column.



Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

Note: lateral protection components not shown.

- Single-leg wall tie
- Wall tie
- T Ledger EVOTOP UH SL 100
- ---- Diagonal in top view

E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III

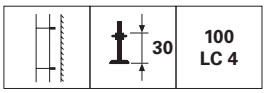
Basic variant 2a "A"/LC4

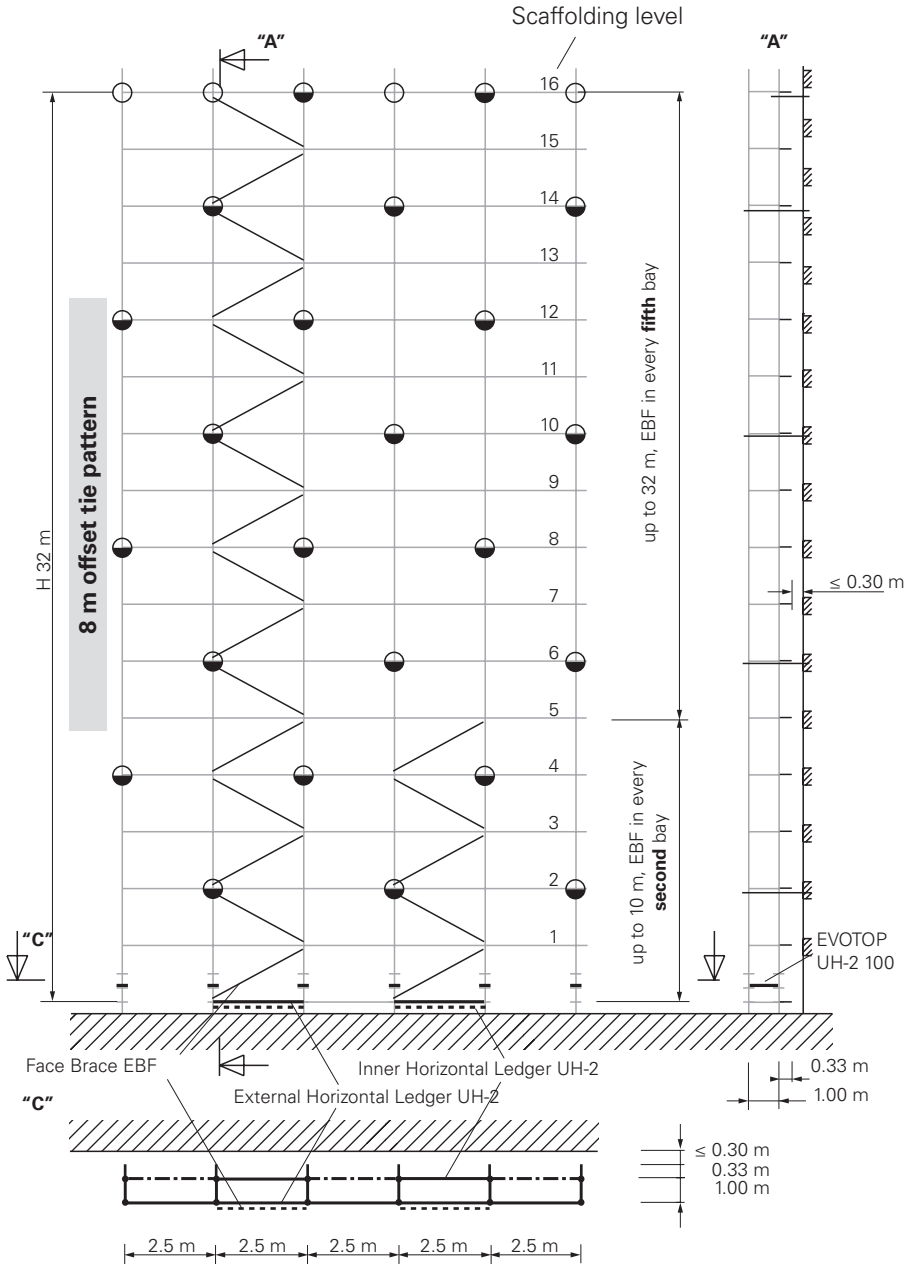
Bay width 2.50 m
Scaffold height 32 m

Spindle extension
Max. 30 cm.

Tie pattern
- Offset 8 m,
- per tie position, anchor every second frame column with a wall tie,
- anchor the topmost position in each frame column with a single-standard wall tie at the very least.

Bracing:
- Face Brace EBF 250-200
  - in every fifth bay up to topmost scaffolding level,
  - in every second bay up to the 5th scaffolding level.
- Horizontal Ledger UH-2
  - on the inside and outside in diagonal bays in the base level.





Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

Note: lateral protection components not shown.

⊕ Single-leg wall tie
⊕ Wall tie
---- in top view: diagonal
in view: horizontal ledger on inside

E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III

Basic variant 2a "A"/LC4

Bay width 2.50 m
Scaffold height 72 m

Spindle extension
Max. 30 cm.

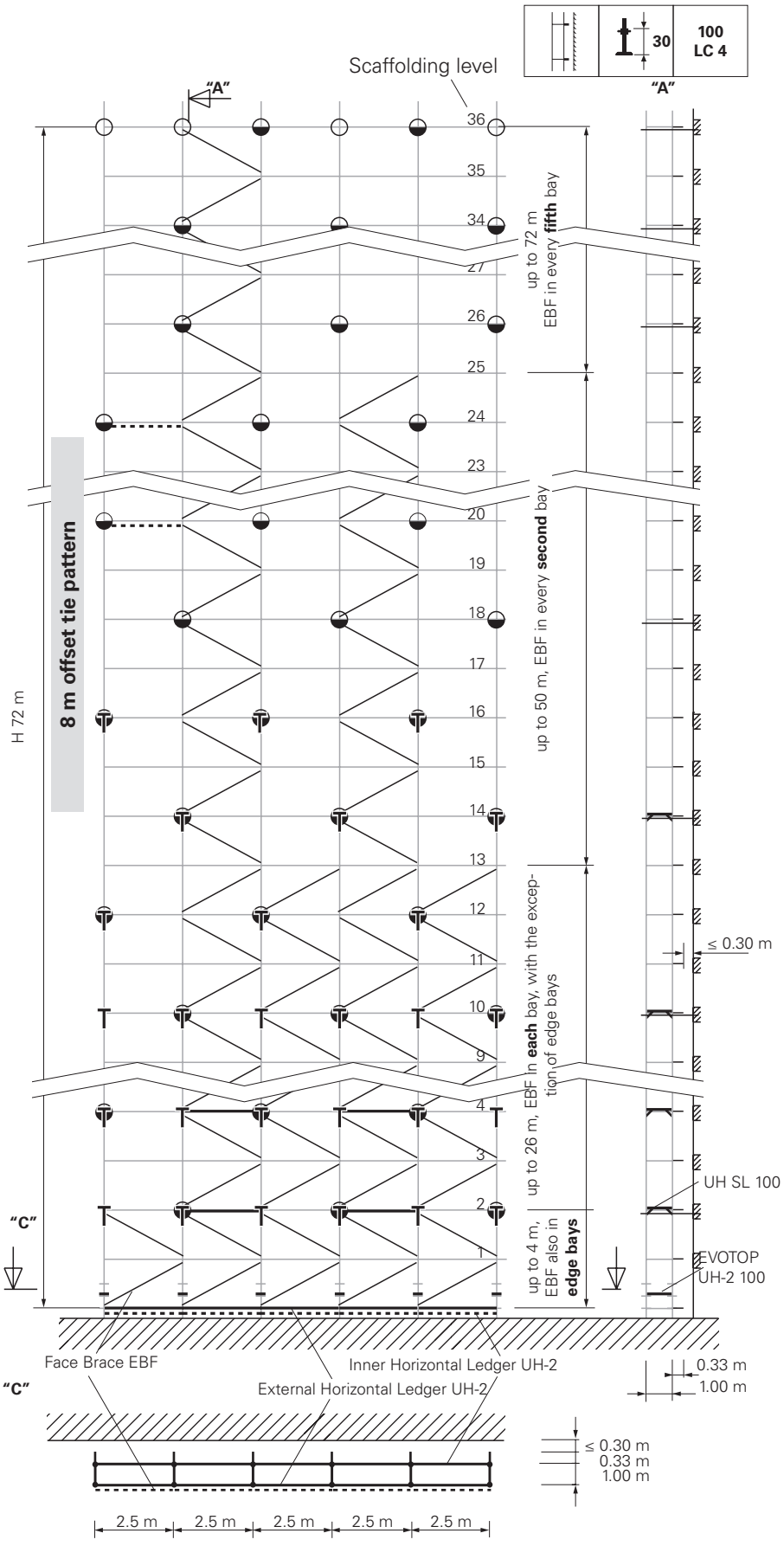
Tie pattern
- Offset 8 m,
- per tie position, anchor every second frame column with a wall tie,
- anchor the topmost position in each frame column with a single-standard wall tie at the very least.

Bracing:
- Face Brace EBF 250-200
  - in every 5th bay, up to topmost scaffolding level,
  - in every 2nd bay, up to 25th scaffolding level,
  - in each bay, up to the 13th scaffolding level, with the exception of edge bays,
  - up to the second scaffolding level, even in edge bays.
- Horizontal Ledger UH-2
  - on the inside and outside of every scaffolding bay in the base level,
  - in every second bay on the outside of the 2nd and 4th scaffolding level,
  - from scaffolding level 18 upwards, on the inside of each anchored edge post.
- Ledger EVOTOP UH-2 100
  - on the EVOTOP base standard in the lower ¾ rosette-2 in each frame column.
- Ledger EVOTOP UH SL 100
  - On scaffolding level 2, 4, 6, 8, 10, on each frame column,
  - in scaffolding level 12, 14, 16, on each anchored frame column.

Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

Note: lateral protection components not shown.

Wall tie
T Ledger EVOTOP UH SL 100
---- in top view: diagonal
in view: horizontal ledger on inside



E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III

Basic variant 2a "A"/LC4

Bay width 2.50 m
Scaffold height 92 m

Spindle extension
Max. 30 cm.

Tie pattern
- offset by 4 m up to 12th scaffolding level,
- above that, offset 8 m,
- per tie position, anchor every second frame column with a wall tie.
- anchor the highest scaffolding level in each frame column with a wall tie.

Bracing:
- Face Brace EBF 250-200
  - in every 5th bay, up to topmost scaffolding level,
  - in every 2nd bay, up to 35th scaffolding level,
  - in each bay, up to the 23rd scaffolding level, with the exception of edge bays,
  - up to the 12th scaffolding level, even in edge bays.
- Horizontal Ledger UH-2
  - on the inside and outside of every scaffolding bay in the base level,
  - in every second bay up to the 11th scaffolding level, on the inside and outside, [although a horizontal ledger must be connected to each standard]*,
  - in every second bay on the outside of scaffolding level 12, 14,
  - from scaffolding level 18 upwards, on the inside of each anchored edge post.
- Ledger EVOTOP UH-2 100
  - on the EVOTOP base standard in the lower ¾ rosette-2 in each frame column.
- Ledger EVOTOP UH SL 100
  - on each anchored frame column in scaffolding level 1 - 11,
  - on each frame column in scaffolding levels 12, 14, 16, 18, 20,
  - on each anchored frame column in scaffolding level 22, 24, 26.

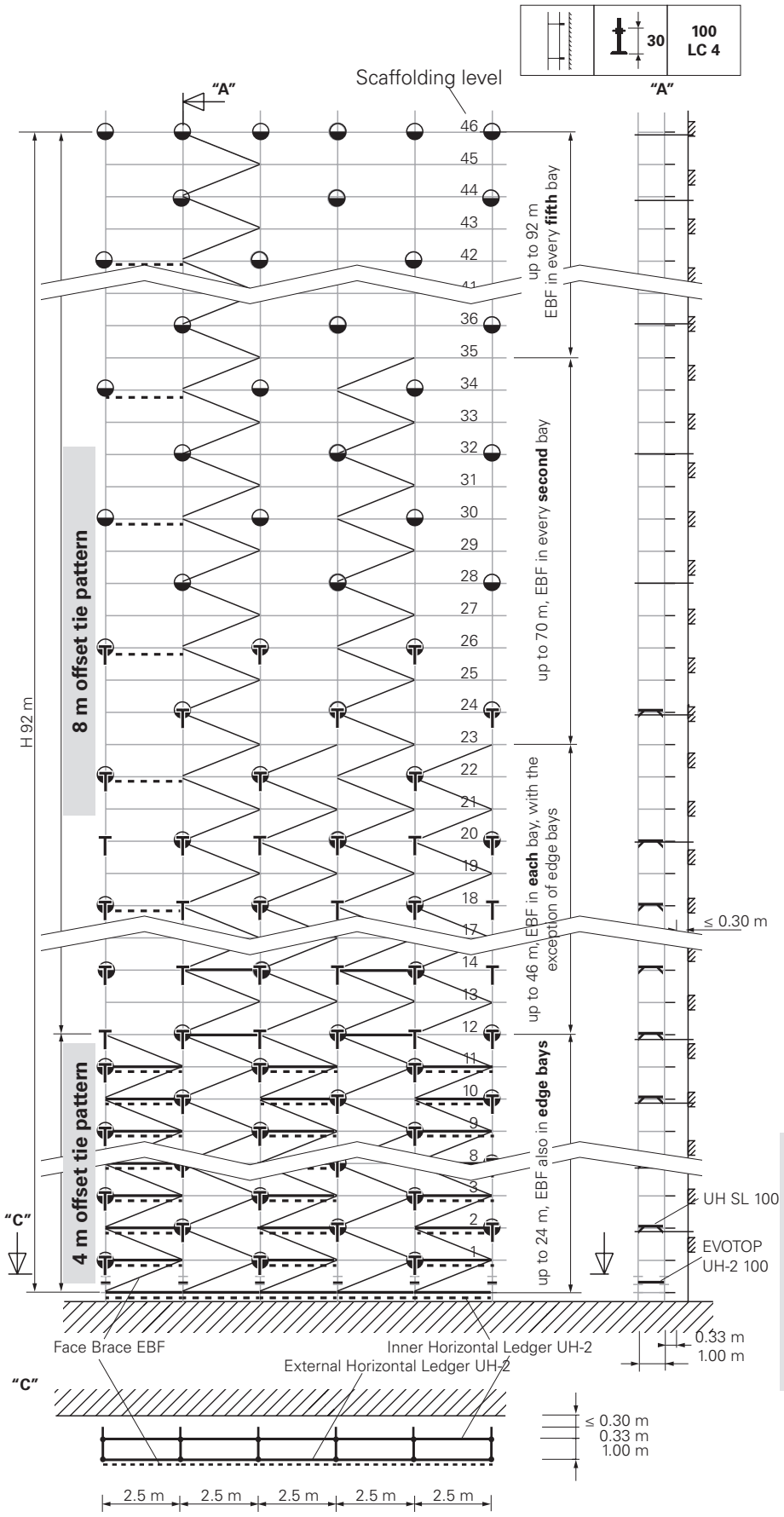
Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

Note: lateral protection components not shown.

Wall tie

T Ledger EVOTOP UH SL 100

---- in top view: diagonal
in view: horizontal ledger on inside



E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III

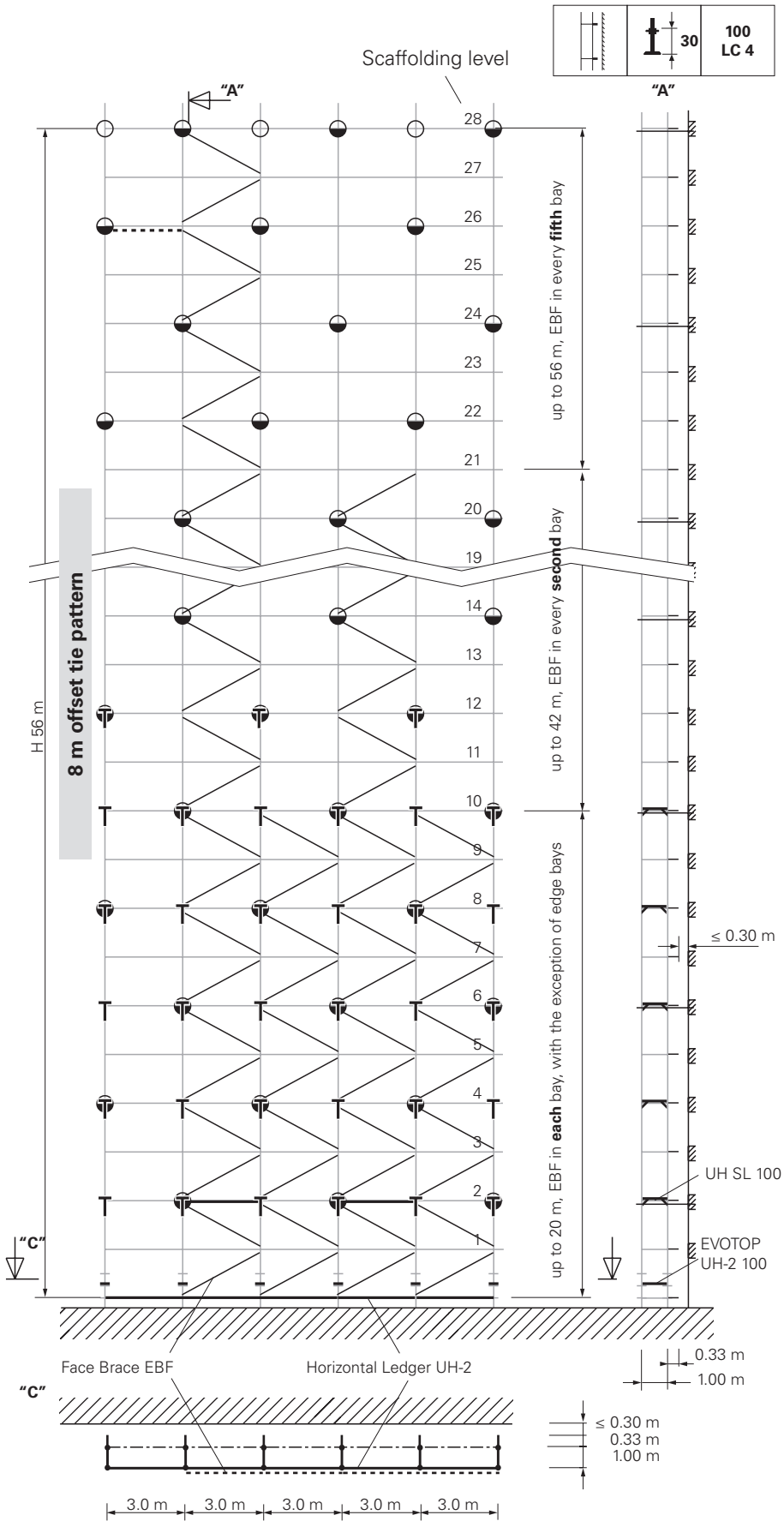
Basic variant 2a "A"/LC4

Bay width 3.00 m
Scaffold height 56 m

Spindle extension
Max. 30 cm.

Tie pattern
- Offset 8 m,
- Per tie position, anchor every second frame column with a wall tie,
- Anchor the topmost scaffolding level in each frame column with a single-standard wall tie at the very least.

Bracing:
- Face Brace EBF 300-200
  - in every fifth bay up to topmost scaffolding level,
  - in every second bay up to the 21st scaffolding level,
  - in every bay with the exception of edge bays. up to the 10th scaffolding level.
- Horizontal Ledger UH-2
  - on the outside of every scaffolding bay in the base level,
  - on the outside of every second bay on scaffolding level 2,
  - on the inside of the anchored edge post on scaffolding levels ≥ 24
- Ledger EVOTOP UH-2 100 on Easy base standard in the lower ¾ rosette in each frame column.
- Ledger EVOTOP UH-2 SL 100
  - on each frame column on scaffolding levels 2, 4, 6, 8 and 10 and on the anchored frame column on scaffolding level 12.



Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

Note: lateral protection components not shown.

- Single-leg wall tie
- Wall tie
- T Ledger EVOTOP UH SL 100
- ---- in top view: diagonal

E6 Tie pattern

EVOTOP – variant > 24 m
- with Steel Deck EDS 33
- Wind Zone 2, Terrain Category III

Basic variant 2a "A"/LC4

Bay width 3.00 m
Scaffold height 72 m

Spindle extension
Max. 30 cm.

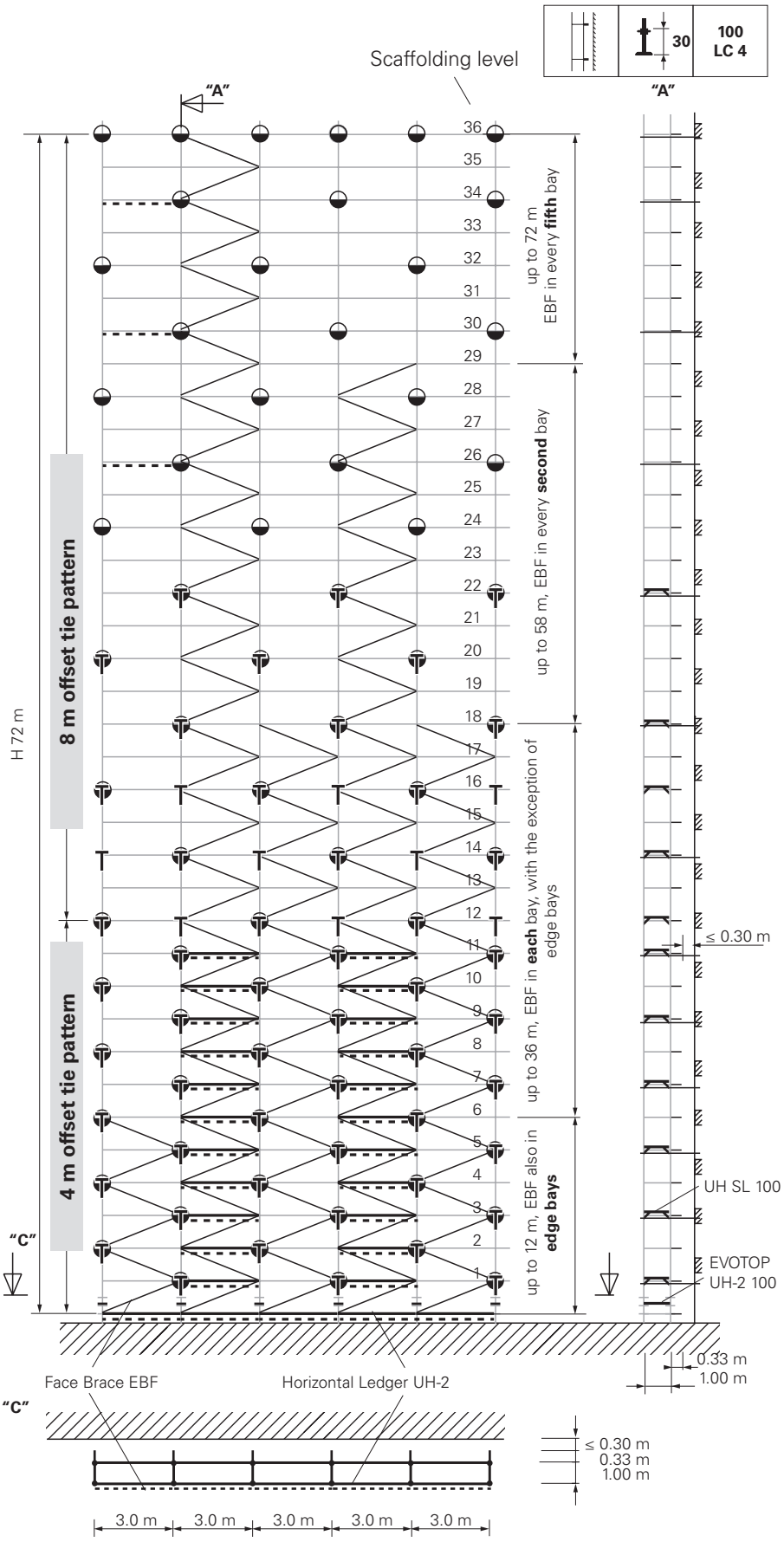
Tie pattern
- offset by 4 m up to 10th scaffolding level,
- above that, offset 8 m,
- per tie position, anchor every second frame column with a wall tie.
- anchor the highest scaffolding level in each frame column with a wall tie.

Bracing:
- Face Brace EBF 300-200
  - in every 5th bay, up to topmost scaffolding level,
  - in every 2nd bay, up to 29th scaffolding level,
  - in each bay, up to the 18th scaffolding level, with the exception of edge bays,
  - up to the 6th scaffolding level, even in edge bays.
- Horizontal Ledger UH-2
  - on the inside and outside of every scaffolding bay in the base level,
  - in every second bay up to the 11th scaffolding level, on the outside and inside,
  - from scaffolding level 24 upwards, on the inside of each anchored edge post.
- Ledger EVOTOP UH-2 100
  - on the EVOTOP base standard in the lower ¾ rosette-2 in each frame column.
- Ledger EVOTOP UH SL 100
  - on each anchored frame column in scaffolding level 1 - 12,
  - on each frame column in scaffolding levels 14, 16,
  - on each anchored frame column in scaffolding levels 18, 20 and 22.

Also anchor the basic scaffold in the area of an external scaffold access point in the tie pattern **"4 m"**. See "External scaffold access" on page 169.

Note: lateral protection components not shown.

Wall tie
T Ledger EVOTOP UH SL 100
---- in top view: diagonal
in view: horizontal ledger on inside

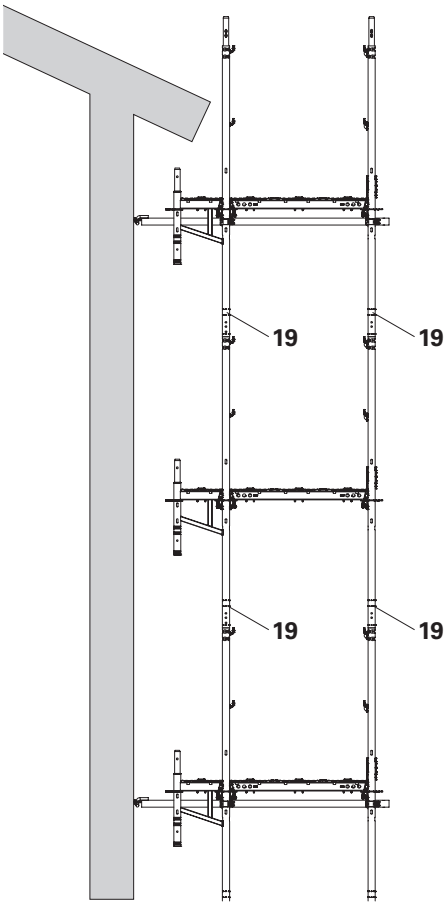


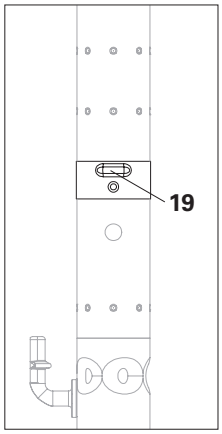
Statics

E7 Lifting wind forces

For structures with roof inclination ≤ 20°, secure scaffolds to provide protection against lifting wind forces.

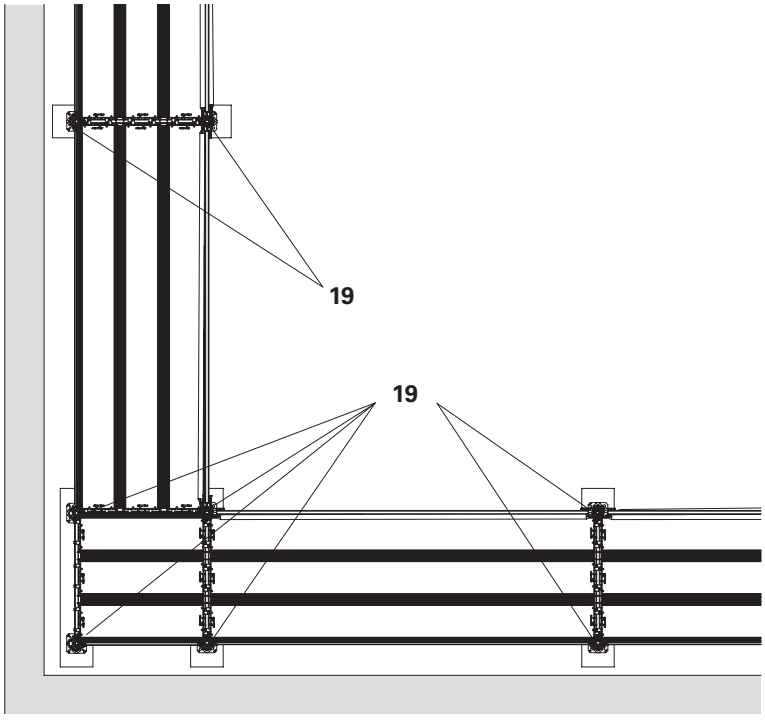
For this, secure all scaffolding levels from the highest anchored level to the next anchored level by means of Locking Pins Ø 48/57 (**19**).





For structures with internal corners, secure scaffolds to provide protection against lifting wind forces.

- At the very least, secure the frame columns in the building corner, as well as the next frame column in each case.
- Secure all scaffolding levels from the highest anchored level to the next anchored level by means of Locking Pins Ø 48/57 (**19**) or M10 x 70 bolts and nuts.



Note: lateral protection components not shown.

F1 Examples

General information

In addition to the standard configuration shown in these Instructions for Assembly and Use, a wide range of structural arrangements are possible.

The following structural arrangements are not covered by the standard configuration.
They are examples only and are not to be understood as assembly instructions in any way.
Installation instructions must be prepared for these structural arrangements by the contractor and the scaffolding team is to be briefed on the content!

Designs deviating from the standard configuration require separate structural proof of stability from the contractor.

Warning
In the following examples, assembly situations can arise whereby there is a risk of falling.
⇒ Use personal protective equipment to prevent falling from a height (PPE)!
⇒ Use the verified attachment points!

Scaffolding support

On structures that do not allow anchoring, scaffolding support can be attached to the scaffold.
Continuously install scaffolding support in line with basic scaffold assembly.

If required, the support bays with Horizontal Ledgers UHV-2 and decks can be used as ballast support, for example, if pressure support is not possible. Do not exceed the maximum permissible load!

For assembly of the scaffolding support, the following are also required:
- Standard EVOTOP EVM 200,
- Horizontal Ledger UH-2,
- Ledger Brace UBL-2
- Horizontal Brace UBH Flex.

(Fig. F1.01 – Fig. F1.01b)

Alternatively, the Standard UVR-2 200 can be used.

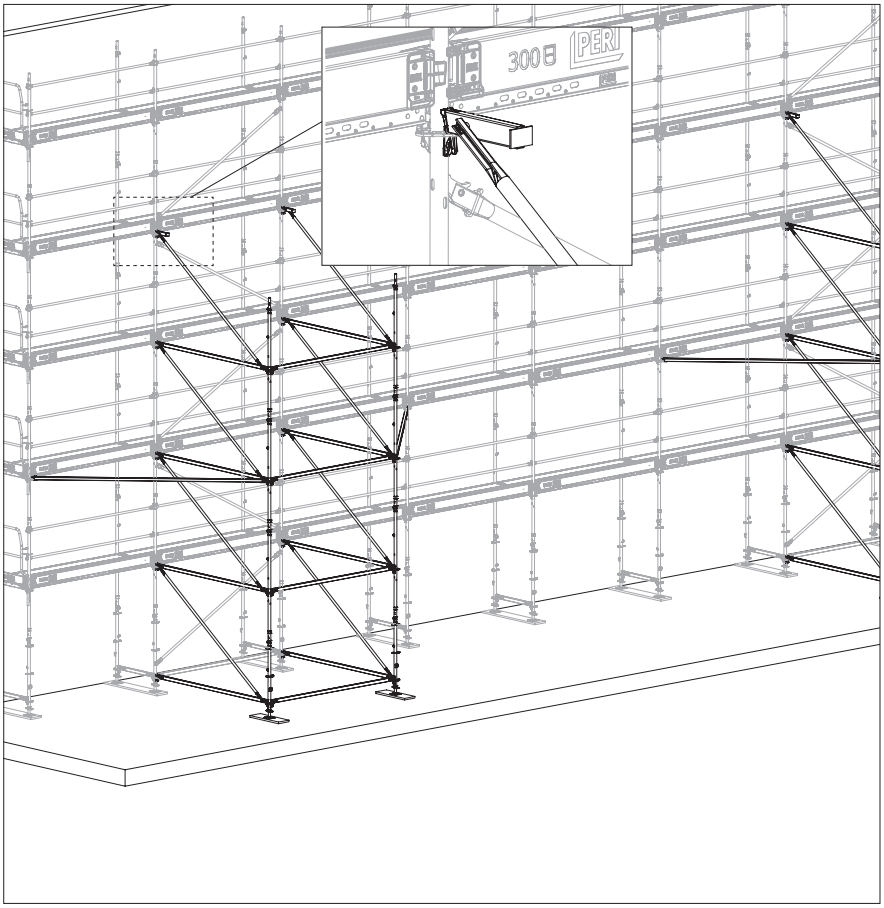


Fig. F1.01

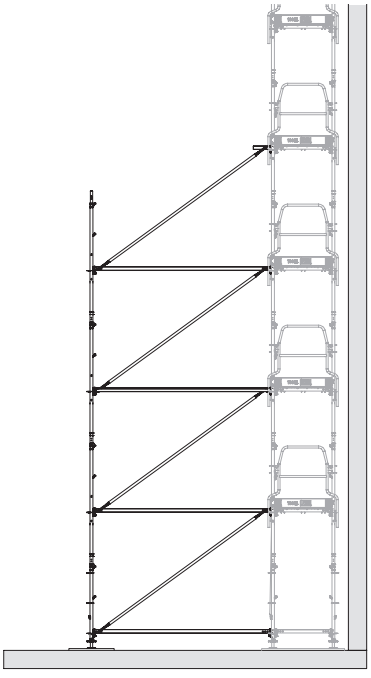


Fig. F1.01a

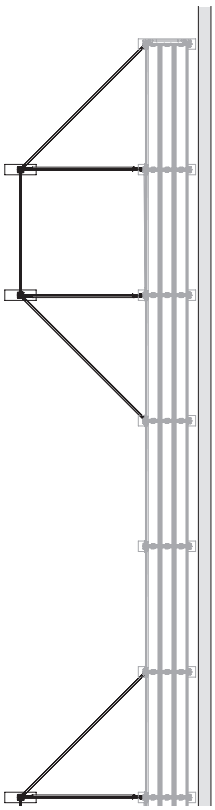


Fig. F1.01b

Landing platform

Landing platforms can be installed to store materials.
Do not exceed the maximum permissible load!
① = tension force
② = compressive force
(Fig. F1.02 + Fig. F1.03)

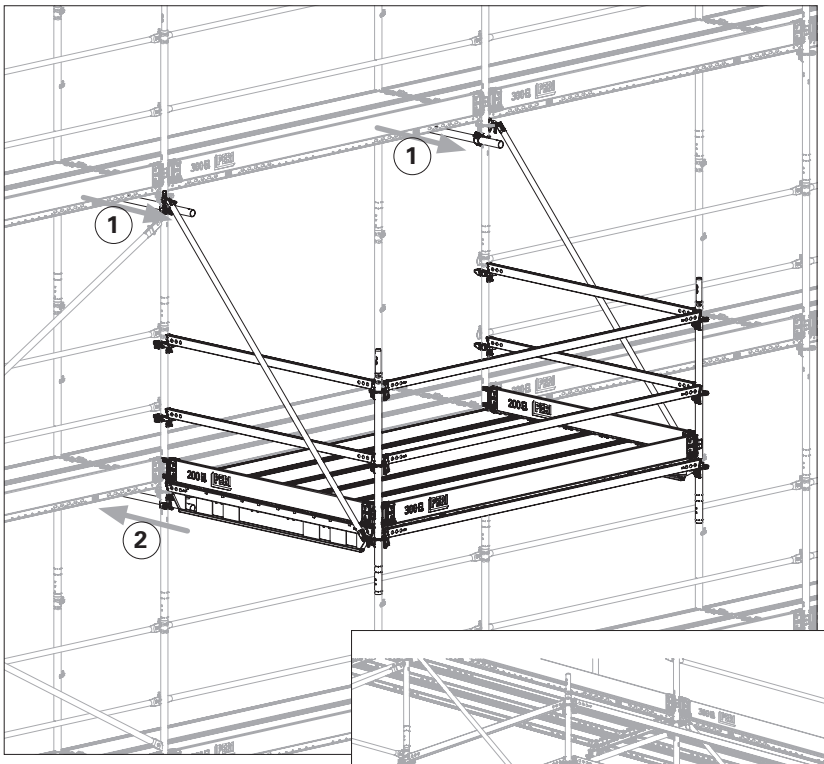


Fig. F1.02

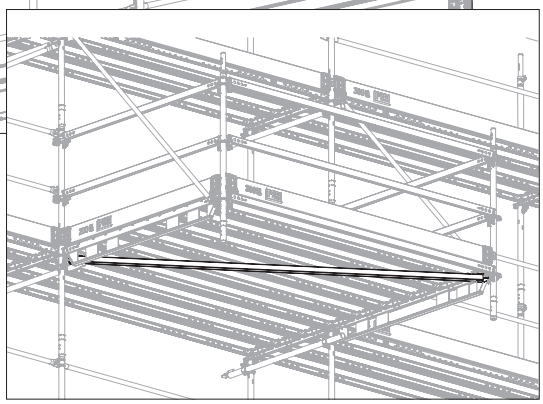


Fig. F1.03

Variant:
Node braces for vertical bracing can also be installed, supported from the scaffolding level immediately below.
① = tension force
② = compressive force
Fig. F1.04

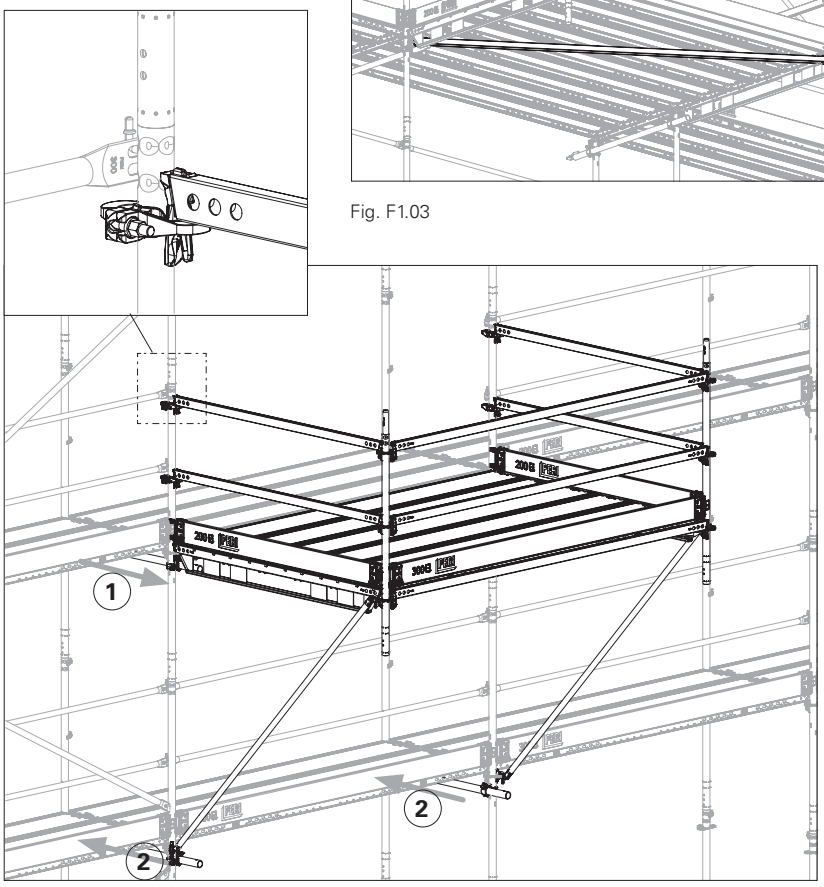


Fig. F1.04

External access
with Staircase EAS/UAS-2 and Standards UVR-2

If required, scaffold access can also be realised with Standards UVR-2 instead of using EVOTOP standards.
Horizontal Ledgers UH-2 are installed as lateral protection.
In terms of lateral protection, it is sufficient to simply wedge the horizontal ledgers into the rosette of the stair post.

In addition, the horizontal ledger can be installed on the Easy standard using a screw-on rosette. From a structural point of view, however, this is not necessary.

To assemble the scaffold access, the following are also required:
- Standard UVR-2 300,
- Standard UVR-2 200,
- Horizontal Ledger UH-2 67/75.

Depending on the situation and customer requirements
- a Safety Entry Gate UPS can be installed at the entrance to the staircase,
- a Stair Guardrail UAG at any position on the inner side.

(Fig. F1.05)

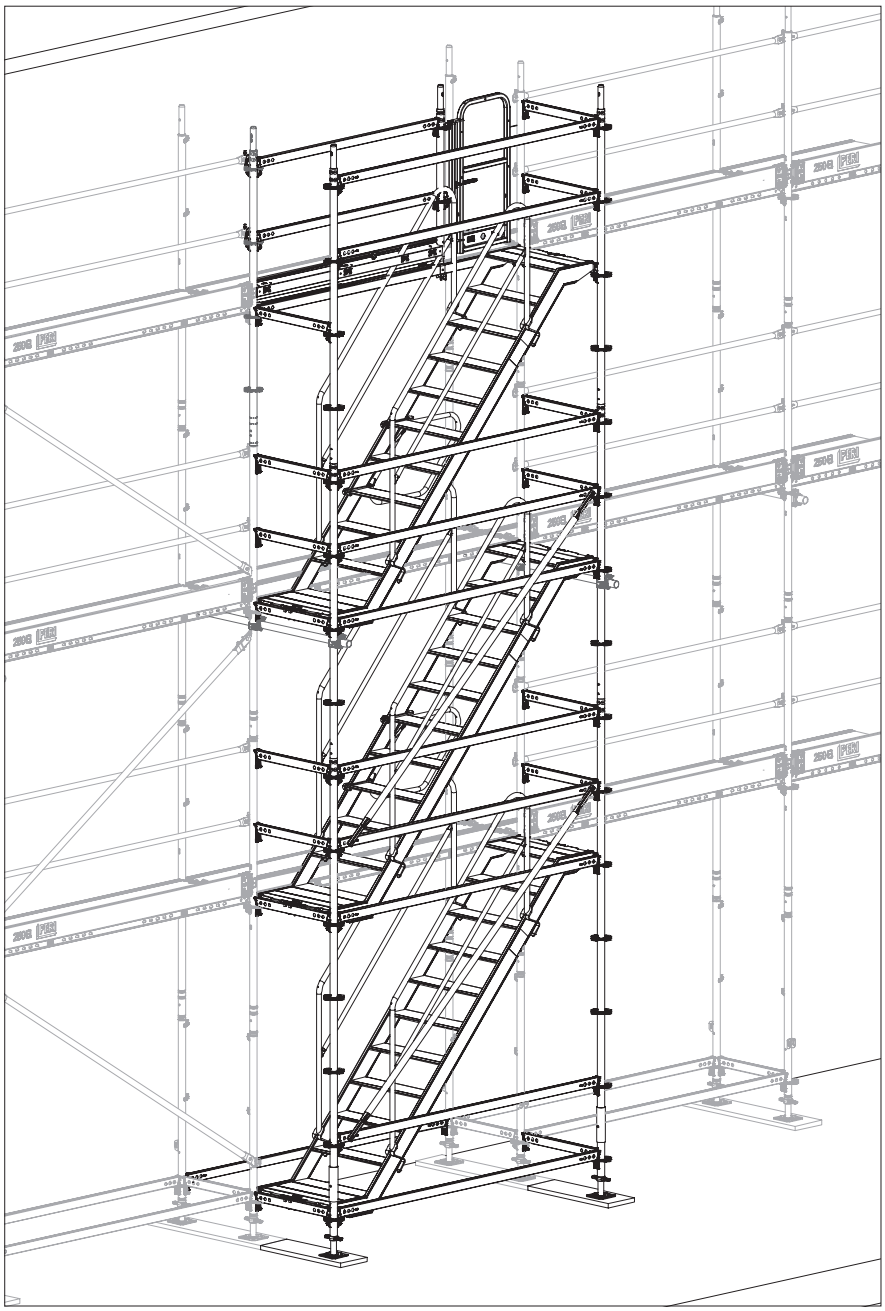


Fig. F1.05

Adjusted roof protection

Outreach 33 cm,
Height 1.00 m.
(Fig. F1.06 + F1.06a)

Lateral protection components not shown.

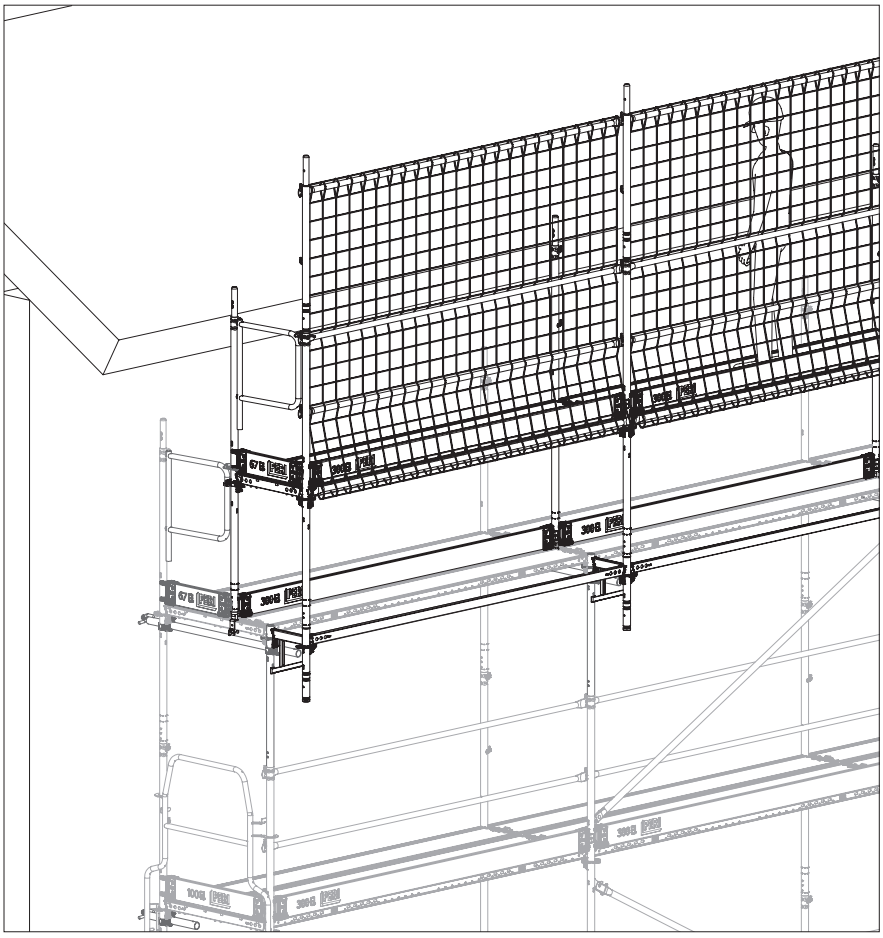


Fig. F1.06

Section

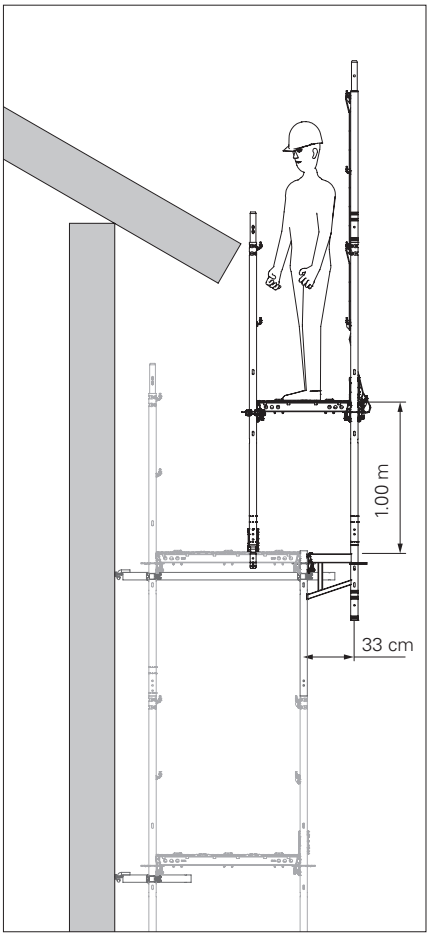


Fig. F1.06a

Adjusted roof protection

Outreach 67 cm,
Height 1.00 m.
(Fig. F1.07 + F1.07a)

Lateral protection components not shown.

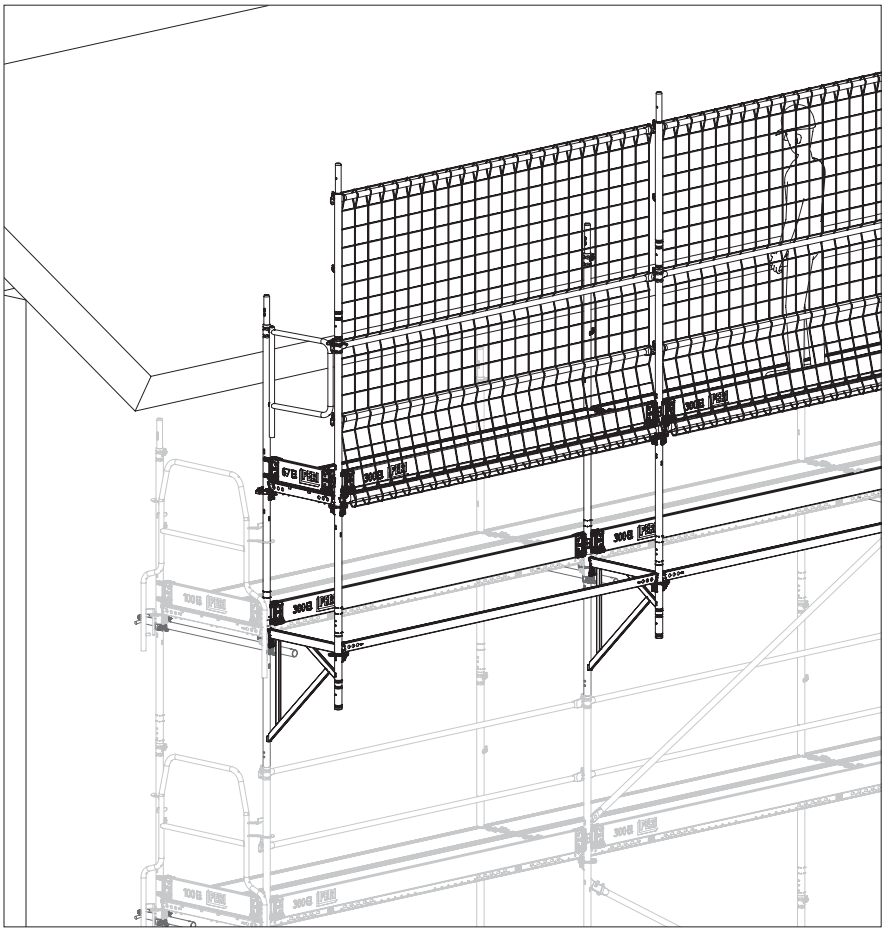


Fig. F1.07

Section

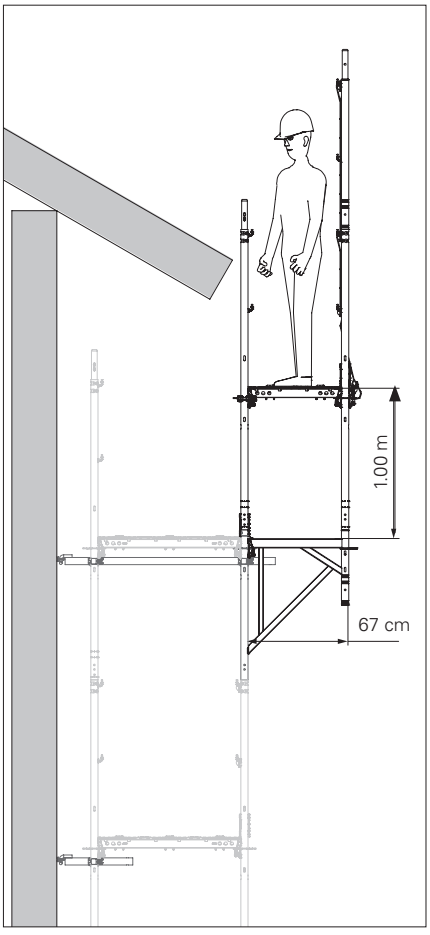


Fig. F1.07a

Adjusted roof protection

Outreach 33 cm,
Height 1.50 m.
(Fig. F1.08 + F1.08a)

Lateral protection components not shown.

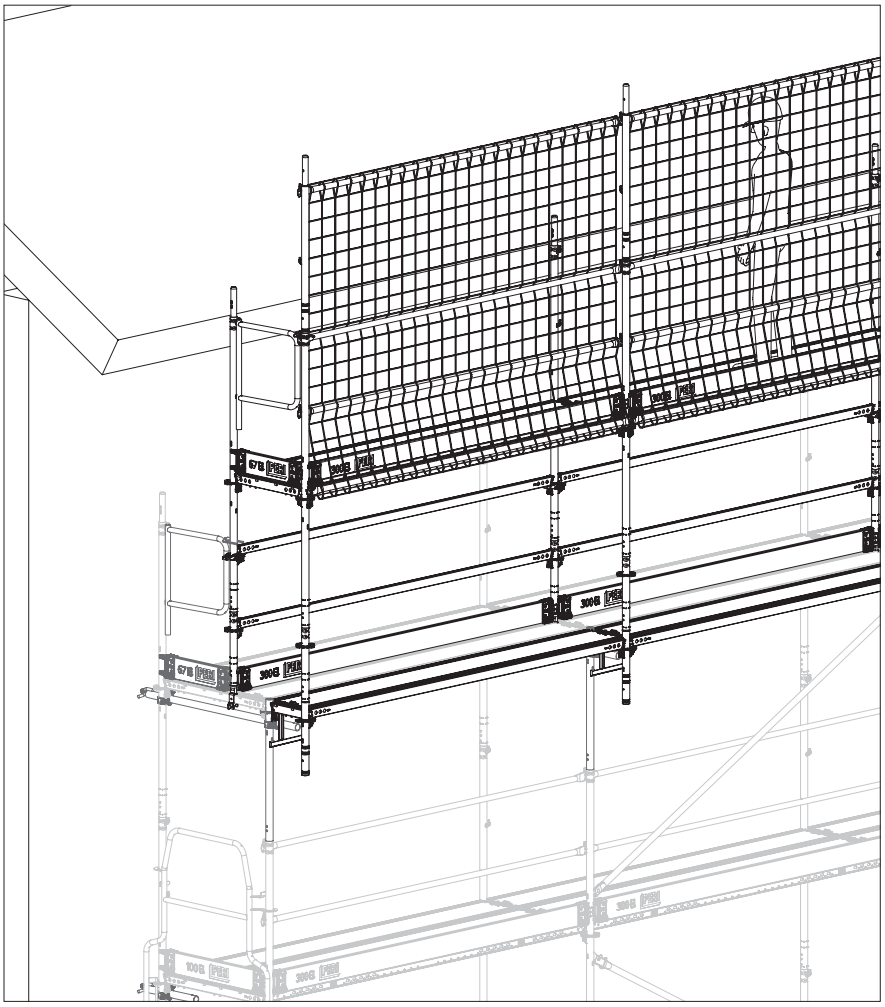


Fig. F1.08

Section

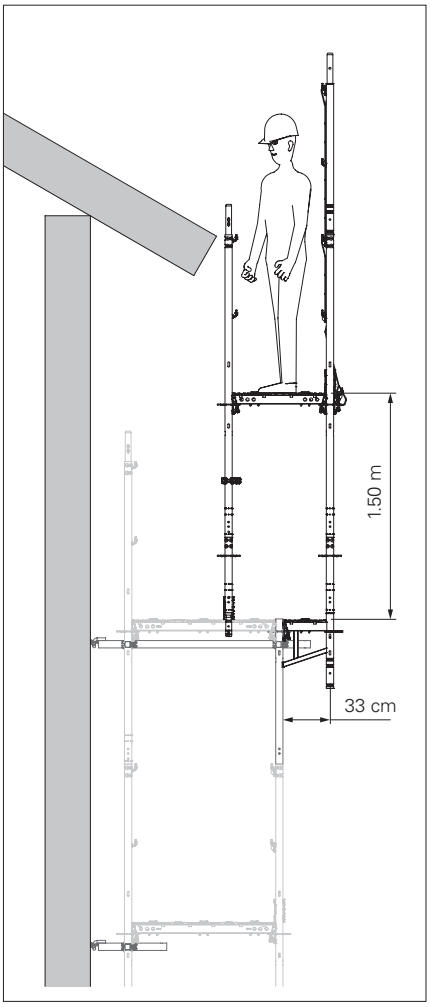


Fig. F1.08a

Adjusted roof protection

Outreach 67 cm,
Height 1.50 m.
(Fig. F1.09 + F1.09a)

Lateral protection components not shown.

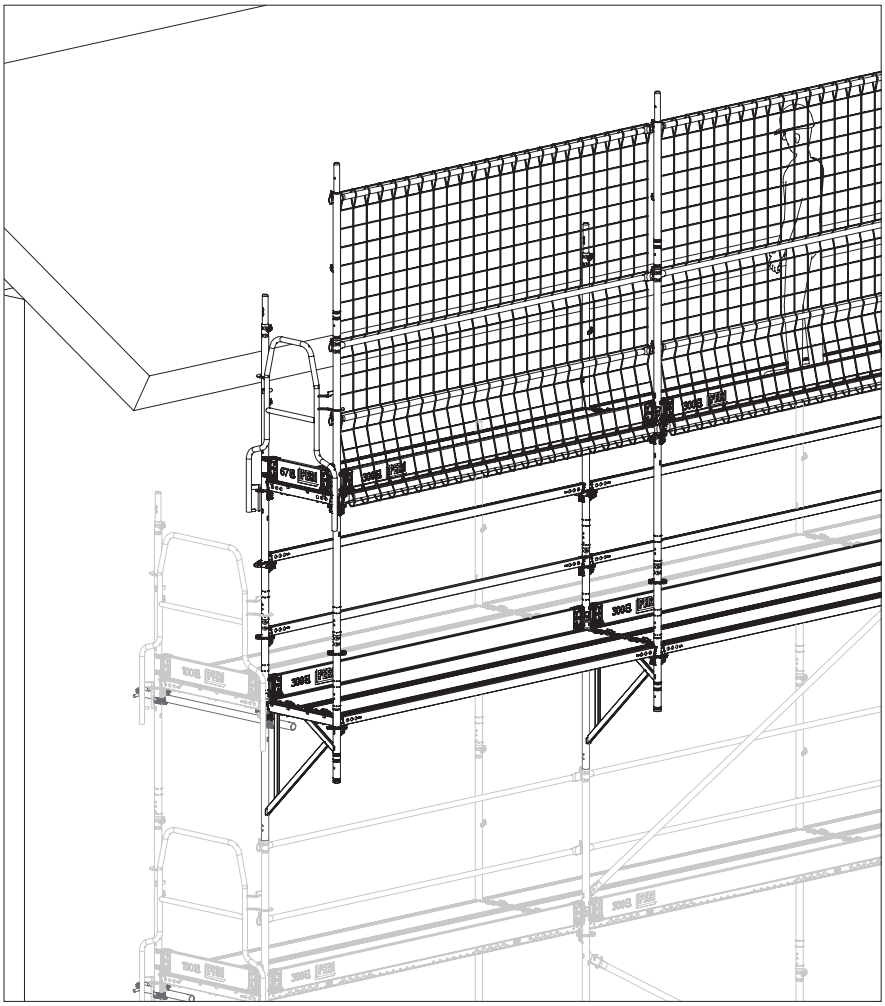


Fig. F1.09

Section

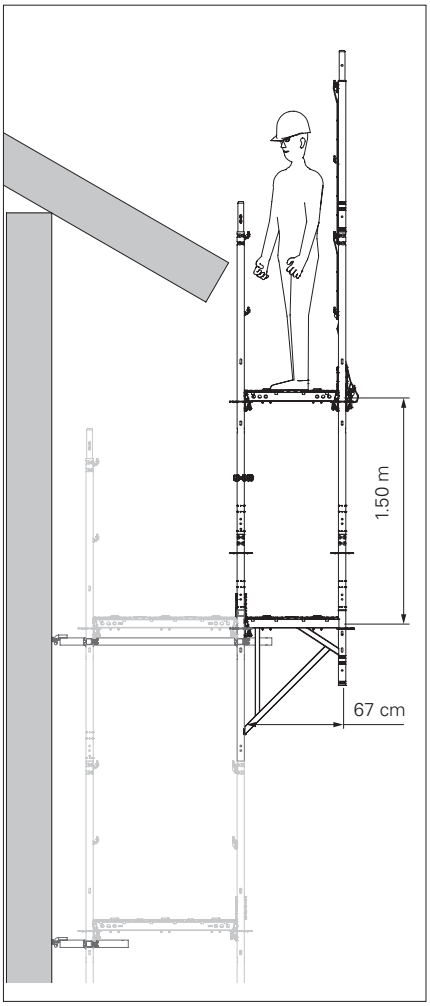


Fig. F1.09a

Bridging with node braces

Bridging without lattice girders can be realised with four Node Braces UBK-2 (**87**), four Horizontal Ledgers UH-2 (**94**) and a base unit consisting of 2 x Base Standards EVOTOP EVS 124 (**23**) and Ledger EVOTOP UH-2 100 (**16**).
On the base unit, further assembly of the scaffold takes place as described.

Up to a bridging width of 3 m, the bridging can be formed from the basic scaffold.
Auxiliary scaffolding is also required.

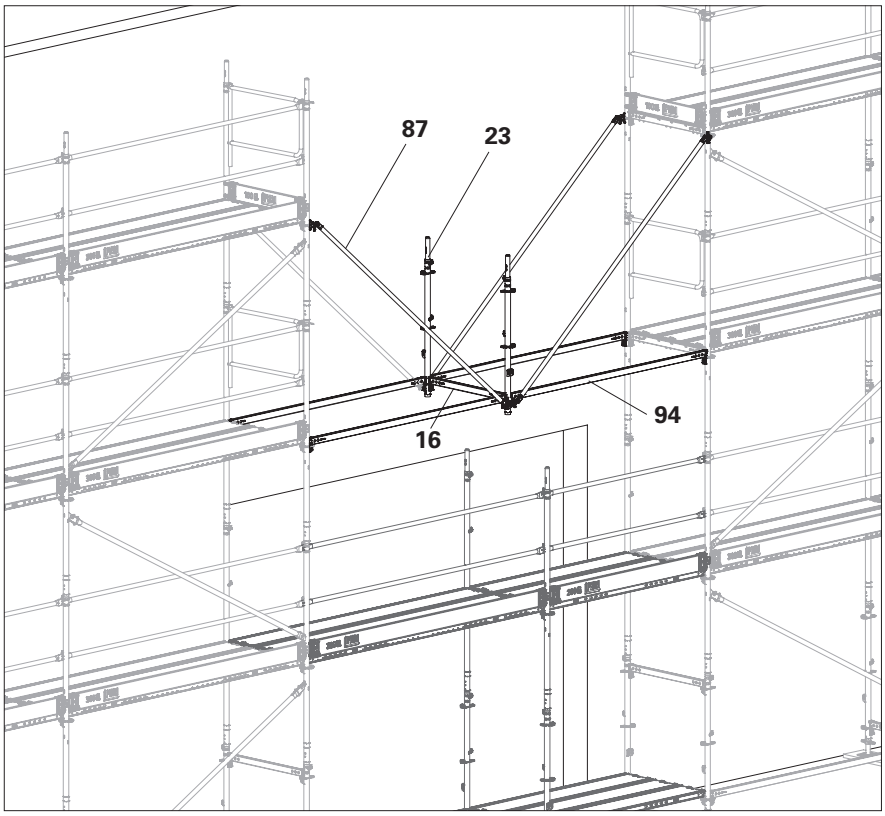


Fig. F1.10

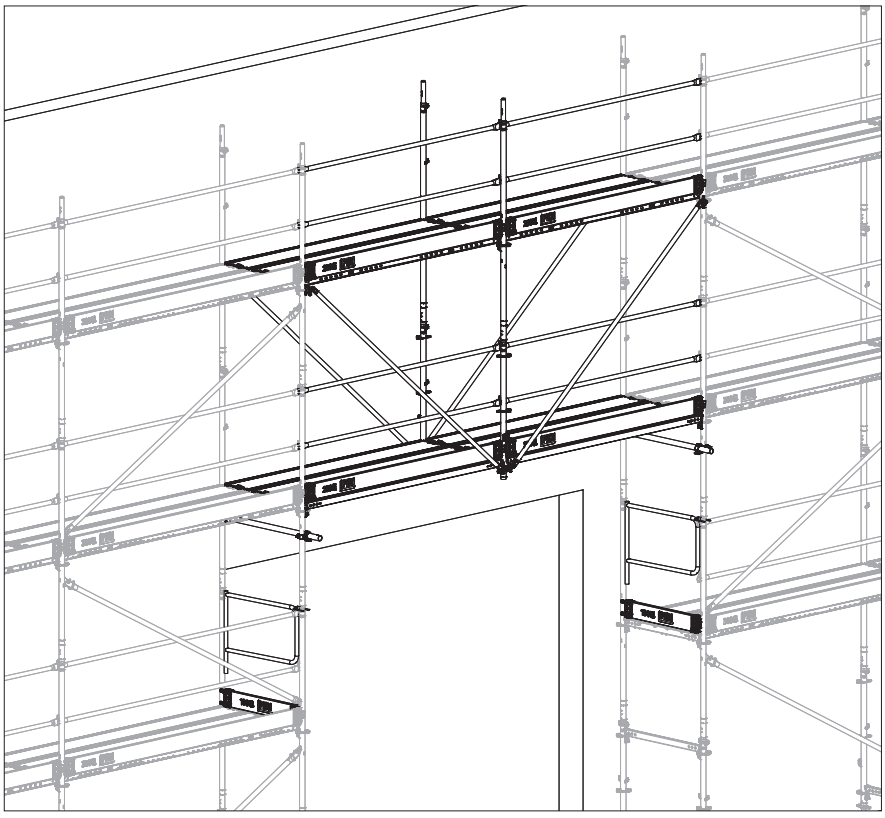
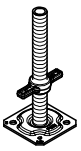


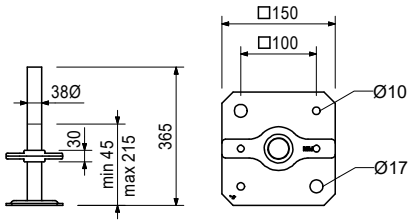
Fig. F1.10a

Art no.	Weight [kg]	
116762	2.830	**Adj.Base Plate UJB Ø38mm 36/17**

Notes

With captive quick jack nut.





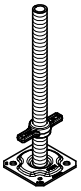
Accessory (not included)

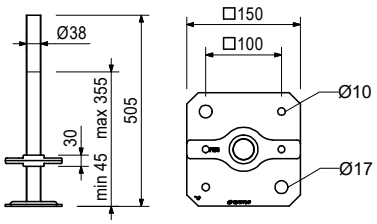
100863	1.020	**Handle Locking UJS**

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

Notes

With captive red quick jack nut.





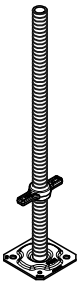
Accessory (not included)

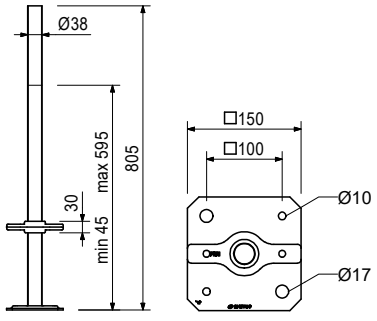
100863	1.020	**Handle Locking UJS**

Art no.	Weight [kg]	
100242	4.570	**Adj.Base Plate UJB Ø38mm 80/55**

Notes

With captive yellow quick jack nut.





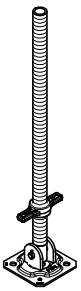
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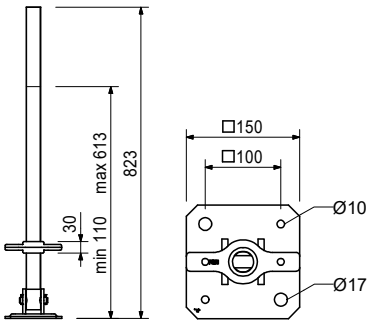
100863	1.020	**Handle Locking UJS**

Art no.	Weight [kg]	
100159	5.220	**Adj.Base Plate UJS Ø38mm 80/50**

Notes

With captive yellow quick jack nut.





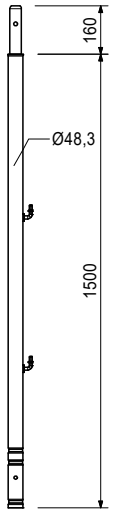
Accessory (not included)

100863	1.020	**Handle Locking UJS**

Art no.	Weight [kg]	
130481	5.280	**Tube EVR 150**

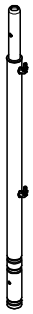
Complements Easy Frame EVF.

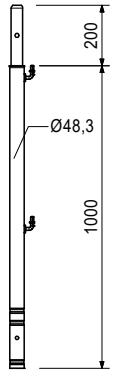




Art no.	Weight [kg]	
130512	3.880	**Guardrail Post EVP**

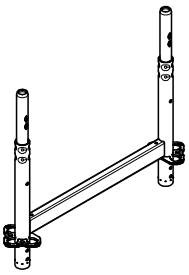
For completing the scaffold in conjunction with Console Brackets ECM or Protection Panel EPS.

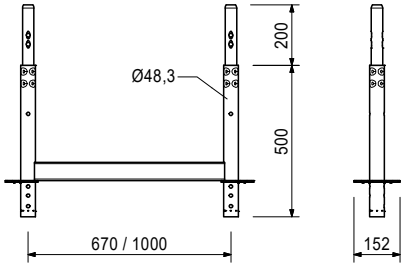




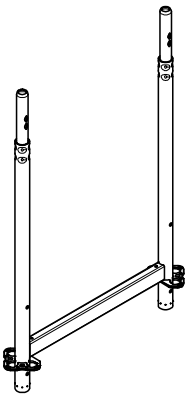
Art no.	Weight [kg]	
		Base Compensations EVA
130522	7.010	**Base Compensation EVA 67/50**
130854	8.030	**Base Compensation EVA 100/50**

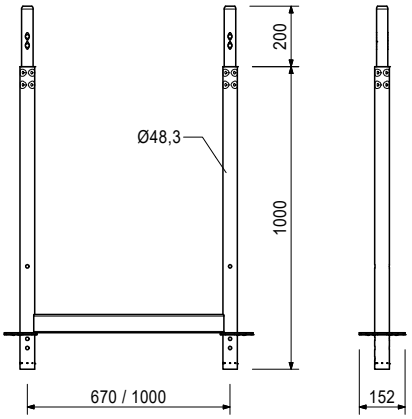
Facilitates height adjustments.





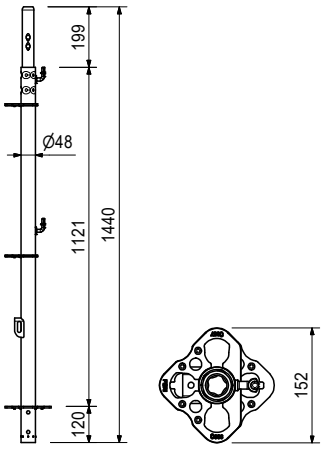
Art no.	Weight [kg]	
		Base Compensations EVA
130526	10.100	**Base Compensation EVA 67/100**
130856	11.100	**Base Compensation EVA 100/100**



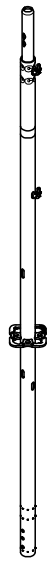


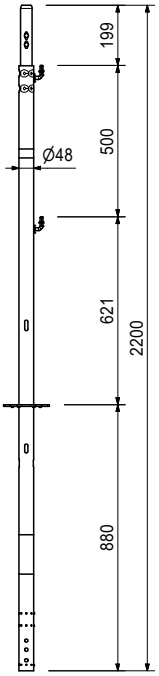
Art no.	Weight [kg]	
137514	6.500	**Base Standard EVOTOP EVS 124**

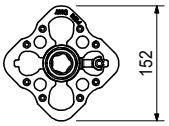




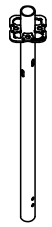
Art no.	Weight [kg]	
137509	8.500	**Standard EVOTOP EVM 200**

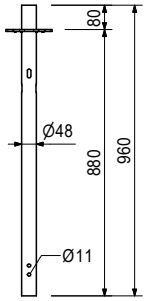


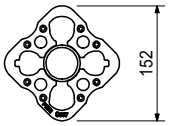




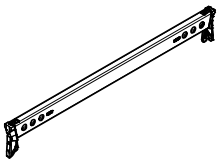
Art no.	Weight [kg]	
137517	3.730	**Top Standard EVOTOP EVT 96**

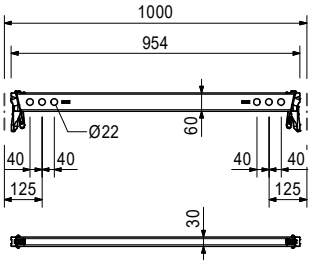




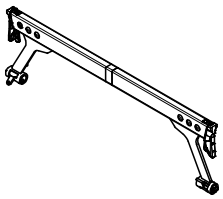


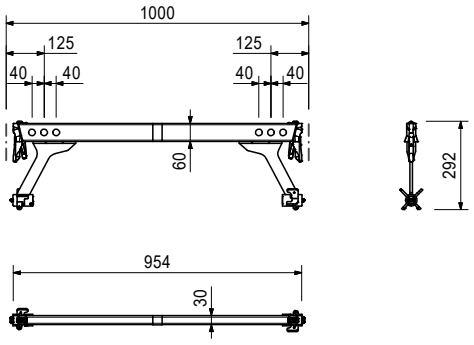
Art no.	Weight [kg]	
137911	3.750	**Ledger EVOTOP UH-2 100**





Art no.	Weight [kg]		
137595	5.950	**Ledger EVOTOP UH-SL 100**	

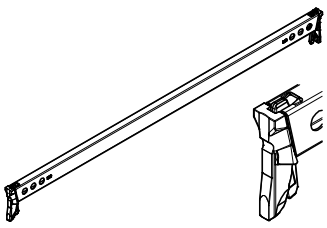


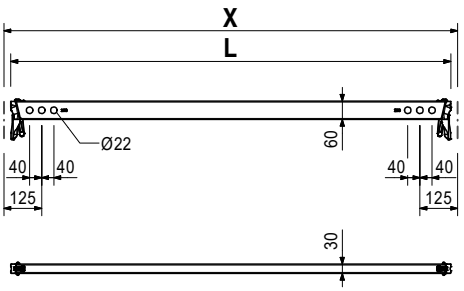


Art no.	Weight [kg]		L [mm]	X [mm]
		Horizontal Ledgers UH-2		
131995	1.400	**Horizontal Ledger UH-2 25**	204	250
133900	1.590	**Horizontal Ledger UH-2 33**	284	330
131998	2.030	**Horizontal Ledger UH-2 50**	454	500
133903	2.470	**Horizontal Ledger UH-2 67**	624	670
132213	2.680	**Horizontal Ledger UH-2 75**	704	750
132004	3.730	**Horizontal Ledger UH-2 100**	954	1000
132007	4.500	**Horizontal Ledger UH-2 125**	1204	1250
132010	4.670	**Horizontal Ledger UH-2 150**	1454	1500
132013	5.330	**Horizontal Ledger UH-2 175**	1704	1750
132016	5.990	**Horizontal Ledger UH-2 200**	1954	2000
132019	6.650	**Horizontal Ledger UH-2 225**	2204	2250
132025	7.310	**Horizontal Ledger UH-2 250**	2454	2500
132022	8.640	**Horizontal Ledger UH-2 300**	2954	3000

Notes

With color coding for length identification.

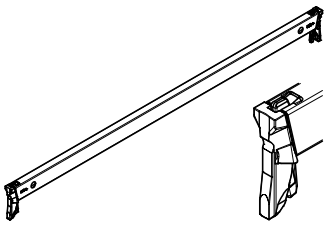


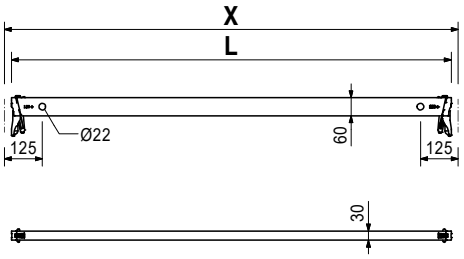


Art no.	Weight [kg]		L [mm]	X [mm]
		Horizontal Ledgers UH Plus		
414613	1.430	**Horizontal Ledger UH 25 Plus**	204	250
414595	2.080	**Horizontal Ledger UH 50 Plus**	454	500
429982	2.520	**Horizontal Ledger UH 67 Plus**	624	670
414629	2.740	**Horizontal Ledger UH 75 Plus**	704	750
414632	4.470	**Horizontal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

Notes

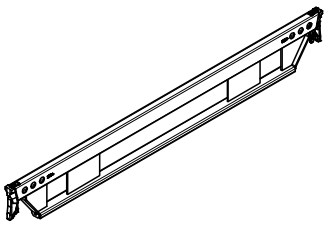
With length marking for easier identification.

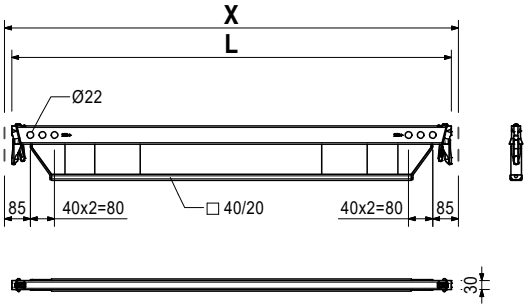




Art no.	Weight [kg]		L [mm]	X [mm]
		Horizontal Ledgers UHV-2		
137020	8.720	**Horizontal Ledger UHV-2 150**	1454	1500
137025	11.700	**Horizontal Ledger UHV-2 200**	1954	2000
137030	14.000	**Horizontal Ledger UHV-2 250**	2454	2500
137035	17.000	**Horizontal Ledger UHV-2 300**	2954	3000

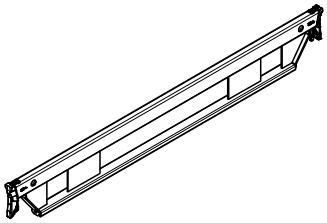
For high loads, e.g. in the case of material storage.

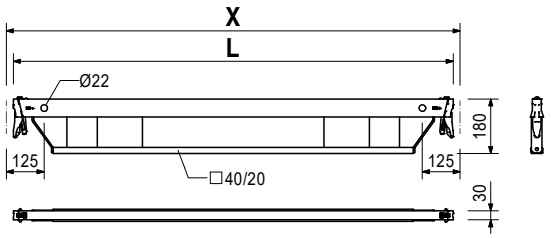




Art no.	Weight [kg]		L [mm]	X [mm]
		Horizontal Ledgers UHV Plus		
414681	11.000	**Horizontal Ledger UHV 150 Plus**	1454	1500
414687	14.900	**Horizontal Ledger UHV 200 Plus**	1954	2000
414691	18.100	**Horizontal Ledger UHV 250 Plus**	2454	2500
414695	21.800	**Horizontal Ledger UHV 300 Plus**	2954	3000

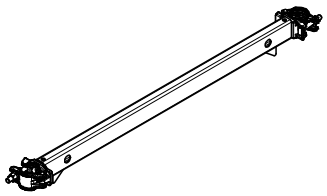
For high loads, e.g. in the case of material storage.

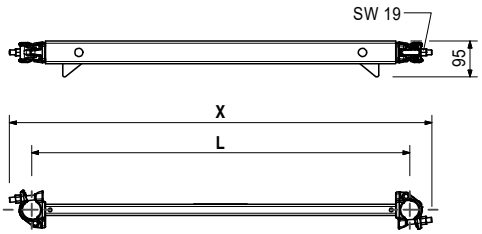




Art no.	Weight [kg]		L [mm]	X [mm]
		Coupling Ledgers UHC		
130009	3.410	**Coupler Ledger UHC 67**	670	780
127537	5.310	**Coupler Ledger UHC 100**	1000	1110

For bracing of formwork girders.

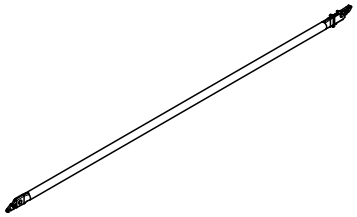


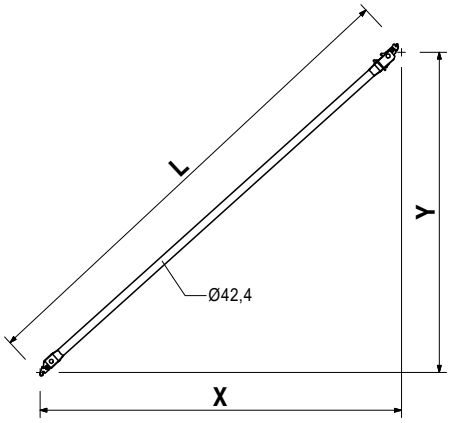


Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Face Braces EBF			
130162	5.030	**Face Brace EBF 150/200**	2216	1500	2000
130171	5.750	**Face Brace EBF 200/200**	2577	2000	2000
130180	6.570	**Face Brace EBF 250/200**	2979	2500	2000
130189	7.460	**Face Brace EBF 300/200**	3406	3000	2000

Notes

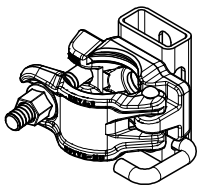
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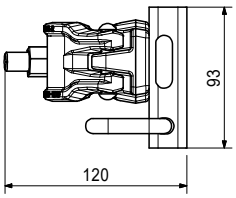


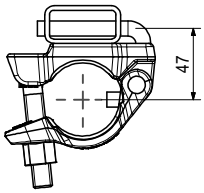


Art no.	Weight [kg]	
131863	1.230	**Brace Adapter EBA**

Used for connection of one or two Face Braces EBF.





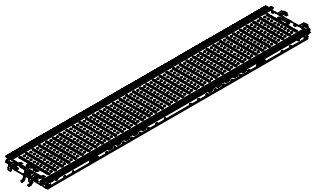


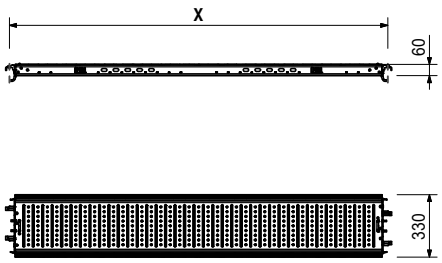
Art no.	Weight [kg]		X [mm]	zul. p [kN/m²]
		Steel Decks EDS 33		
130450	5.420	**Steel Deck EDS 33x67**	670	6
130448	7.360	**Steel Deck EDS 33x100**	1000	6
130445	10.300	**Steel Deck EDS 33x150**	1500	6
130441	13.300	**Steel Deck EDS 33x200**	2000	6
130438	16.200	**Steel Deck EDS 33x250**	2500	4.5
129272	19.200	**Steel Deck EDS 33x300**	3000	3

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

Notes

Values correspond with EN 12811-1.





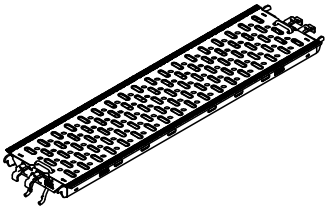
PERI UP Easy EVOTOP 100

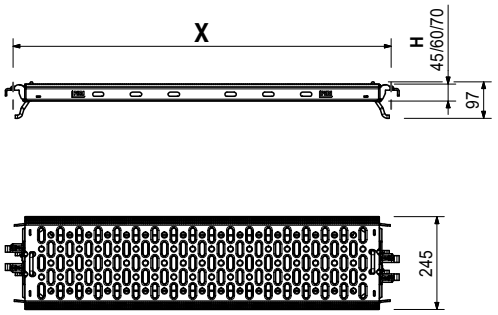
Art no.	Weight [kg]		X [mm]	zul. p [kN/m²]
		Steel Decks UDG-2		
138607	2.200	**Steel Deck UDG-2 25x25**	250	6
132479	3.190	**Steel Deck UDG-2 25x50**	500	6
132483	3.960	**Steel Deck UDG-2 25x67**	670	6
132488	4.320	**Steel Deck UDG-2 25x75**	750	6
132492	5.450	**Steel Deck UDG-2 25x100**	1000	6
132502	6.590	**Steel Deck UDG-2 25x125**	1250	6
132505	7.730	**Steel Deck UDG-2 25x150**	1500	6
132508	10.500	**Steel Deck UDG-2 25x200**	2000	6
132511	12.900	**Steel Deck UDG-2 25x250**	2500	4.5
132515	15.800	**Steel Deck UDG-2 25x300**	3000	3

Length X: 50 - 150 with H of 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.



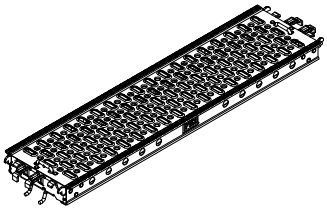


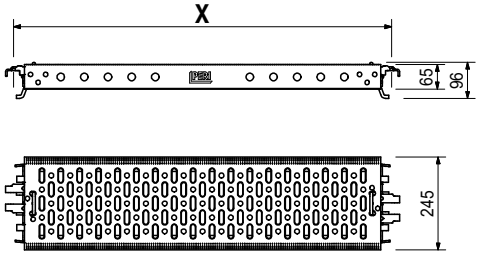
Art no.	Weight [kg]		X [mm]	zul. p [kN/m²]
		Steel Decks UDG 25		
424124	3.810	**Steel Deck UDG 25x 50**	500	6
432858	4.810	**Steel Deck UDG 25x 67**	670	6
424121	5.180	**Steel Deck UDG 25x 75**	750	6
424118	6.550	**Steel Deck UDG 25x100**	1000	6
424115	7.940	**Steel Deck UDG 25x125**	1250	6
424112	9.330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

Assembly onto Horizontal Ledgers UH.

Notes

Values correspond to EN 12811-1.



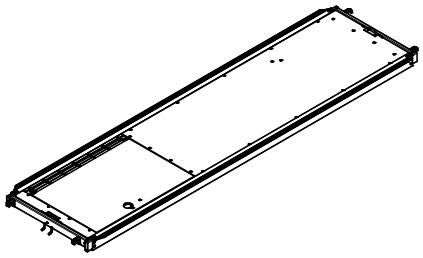


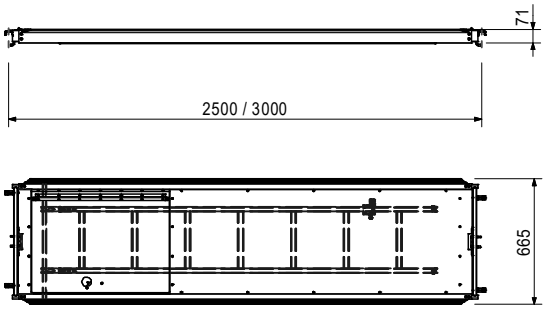
Art no.	Weight [kg]	
		Ladder Accesses EAW-2 67
133286	24.100	**Ladder Access EAW-2 67x250**
133285	27.300	**Ladder Access EAW-2 67x300**

Deck surface made of coated plywood sheet.

Notes

Load class 3, 2.0 kN/m².



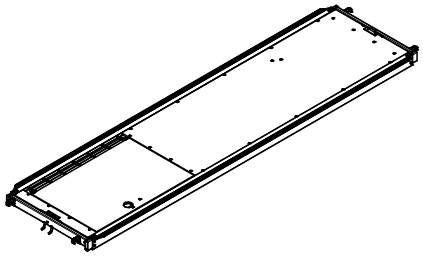


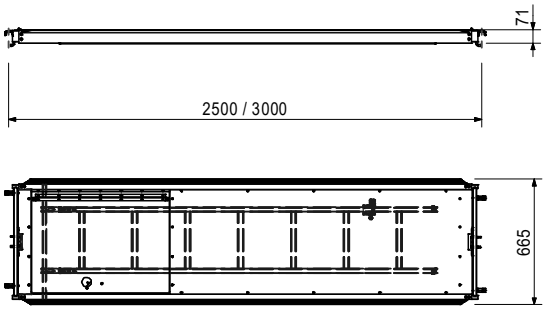
Art no.	Weight [kg]	
		Ladder Accesses EAW 67
430431	25.800	**Ladder Access EAW 67x250**
430425	29.200	**Ladder Access EAW 67x300**

Deck surface made of coated plywood sheet.

Notes

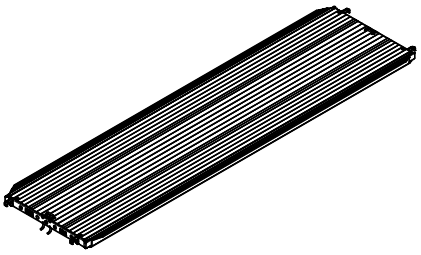
Load class 3, 2.0 kN/m².

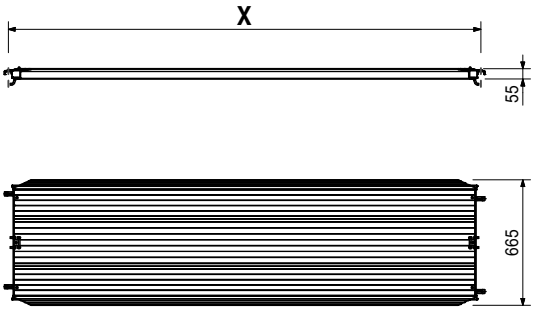




Art no.	Weight [kg]		X [mm]	zul. p [kN/m²]
		Alu Decks EDA 67		
133525	6.360	**Alu Deck EDA 67x67**	670	6
133524	8.420	**Alu Deck EDA 67x100**	1000	6
133523	11.500	**Alu Deck EDA 67x150**	1500	6
133522	14.700	**Alu Deck EDA 67x200**	2000	4.5
133521	17.800	**Alu Deck EDA 67x250**	2500	4.5
133492	21.000	**Alu Deck EDA 67x300**	3000	2

Deck surface made of aluminium profiles.



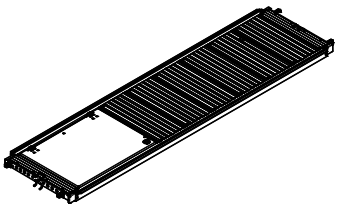


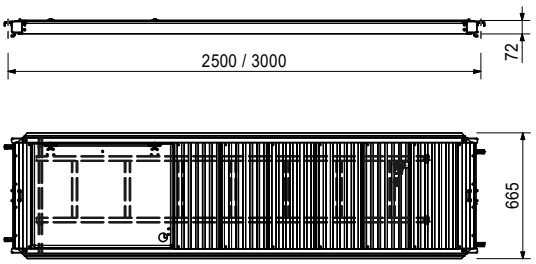
Art no.	Weight [kg]	
		Ladder Accesses EAA 67
133289	25.200	**Ladder Access EAA 67x250**
133287	28.300	**Ladder Access EAA 67x300**

Deck surface made of aluminium profiles.

Notes

Load class 3, 2.0 kN/m².



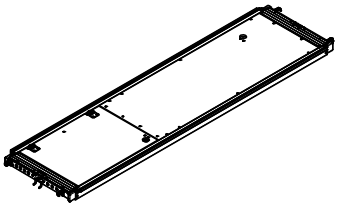


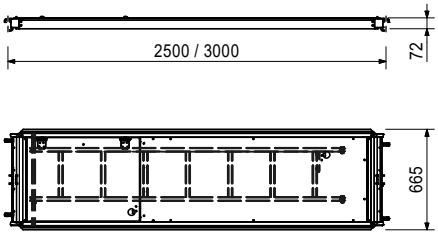
Art no.	Weight [kg]	
		Ladder Decks EAC 67
135368	24.800	**Ladder Deck EAC 67x250**
135367	28.100	**Ladder Deck EAC 67x300**

Deck surface made of glass-fibre reinforced plastic.

Notes

Load class 3, 2.0 kN/m².



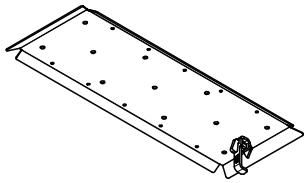


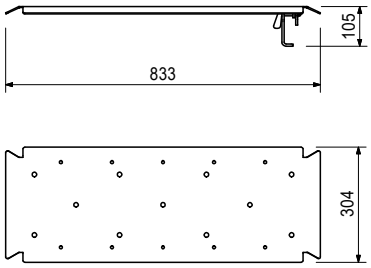
Art no.	Weight [kg]	
134539	6.270	**Compensation Deck EDL 33**

For compensation lengths of up to 67 cm.

Notes

Load Class 4, 3.0 kN/m²

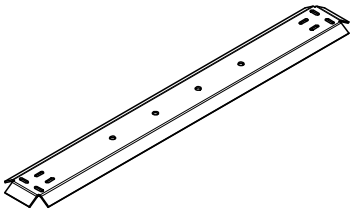


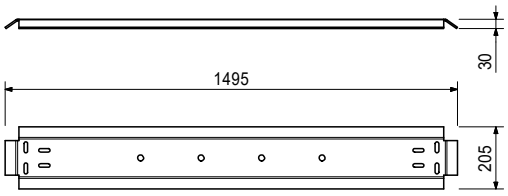


Art no.	Weight [kg]	
136925	4.250	**Cover Board UDB-A 20x150**

Notes

Load Class 3, 2.0 kN/m².



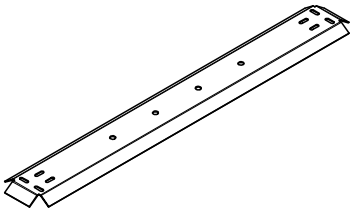


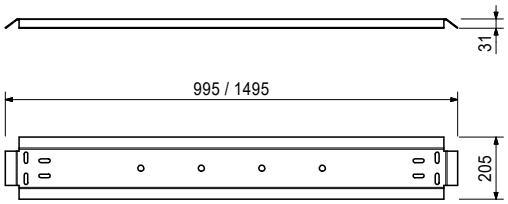
Accessory (not included)

137252	0.050	**Screw DIN603-M10x060-8.8-ga**
137279	0.012	**Hex-Nut ISO4032-M10-8-vz-SW17**

Art no.	Weight [kg]	
		Cover Boards UDB-S 20
437447	5.410	**Cover Board UDB-S 20x100**
437449	8.280	**Cover Board UDB-S 20x150**

For gridless bridging.

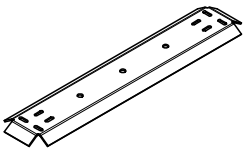


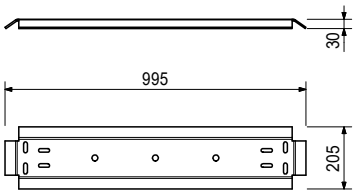


Art no.	Weight [kg]	
136927	2.780	**Cover Board UDB-A 20x100**

Notes

Load Class 3, 2.0 kN/m².





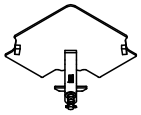
Accessory (not included)

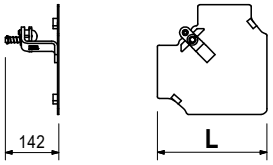
137252	0.050	**Screw DIN603-M10x060-8.8-ga**
137279	0.012	**Hex-Nut ISO4032-M10-8-vz-SW17**

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

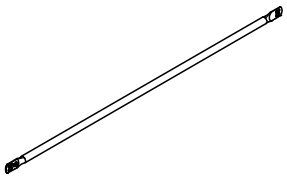


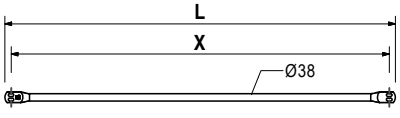


Art no.	Weight [kg]		L [mm]	X [mm]
		Guardrails EPG		
130191	1.150	**Guardrail EPG 67**	735	670
130193	1.680	**Guardrail EPG 100**	1065	1000
130195	2.480	**Guardrail EPG 150**	1565	1500
130197	3.280	**Guardrail EPG 200**	2065	2000
130199	4.090	**Guardrail EPG 250**	2565	2500
130201	4.890	**Guardrail EPG 300**	3065	3000

Notes

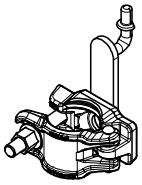
With length marking for easier identification.

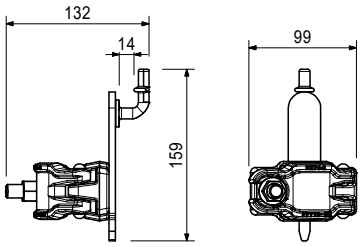


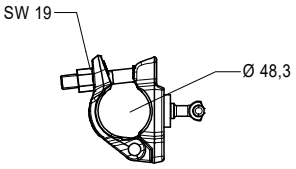


Art no.	Weight [kg]	
130434	1.100	**Guardrail Coupler EPR**

For installing the Guardrails EPG on the scaffold standards at any height.



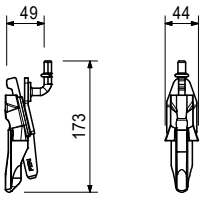




Art no.	Weight [kg]	
130562	0.623	**Guardrail Holder EPW**

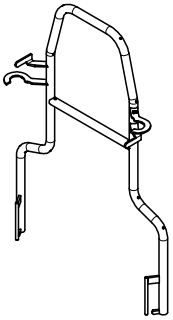
For mounting the Guardrails EPG to rosettes.

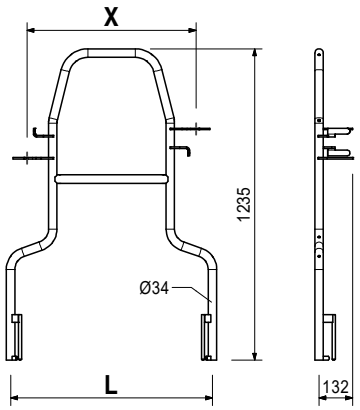




Art no.	Weight [kg]		L [mm]	X [mm]
		Advance Guardrails UPA-2		
134100	6.730	**Advance Guardrail UPA-2 67**	801	670
134104	8.100	**Advance Guardrail UPA-2 100**	1131	1000

Assembly in advance.



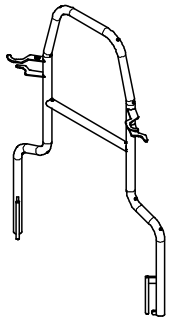


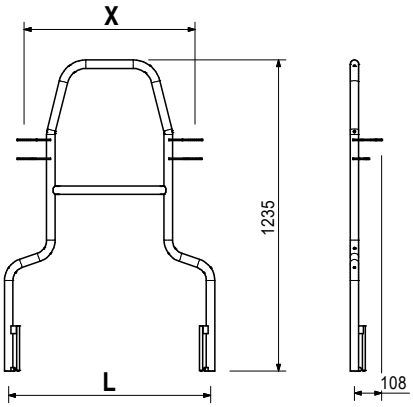
Art no.	Weight [kg]		L [mm]	X [mm]
		Advance Guardrails UPA		
130476	6.230	**Advance Guardrail UPA 67**	801	670
130583	7.600	**Advance Guardrail UPA 100**	1131	1000

Assembly in advance.

Notes

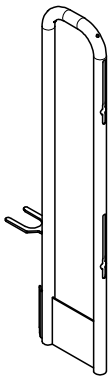
Toe board wood / toe bord steel not integrated.

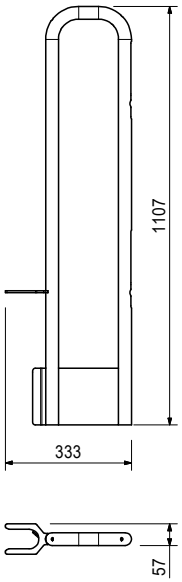




Art no.	Weight [kg]		L [mm]
130233	4.480	**End Guardrail EPF 33**	358

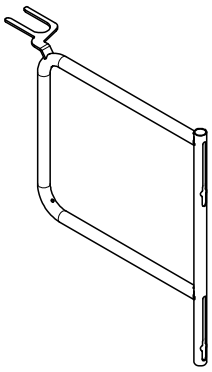
Assembly not in advance.

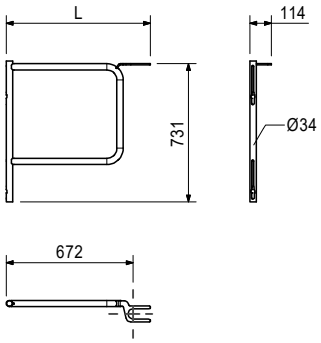




Art no.	Weight [kg]		L [mm]
		End Guardrails EPF	
130228	3.630	**End Guardrail EPF 67**	683
130225	4.660	**End Guardrail EPF 100**	1013

Assembly not in advance.

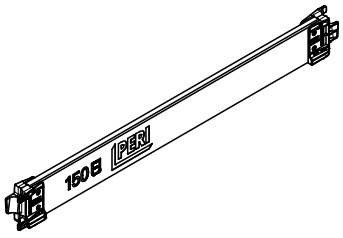


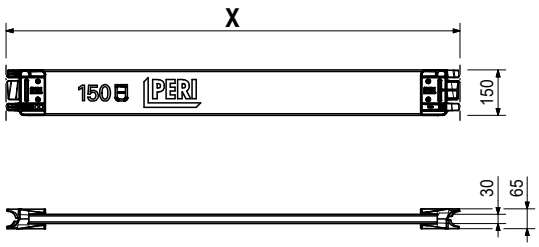


Art no.	Weight [kg]		L [mm]	X [mm]
		Toeboards Wood UPF		
129490	1.180	**Toeboard Wood UPF 50**	495	500
129492	1.550	**Toeboard Wood UPF 67**	665	670
129494	1.720	**Toeboard Wood UPF 75**	745	750
129496	2.250	**Toeboard Wood UPF 100**	995	1000
129498	3.320	**Toeboard Wood UPF 150**	1495	1500
129500	4.390	**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

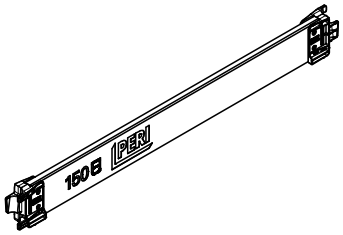
Surface, painted yellow.

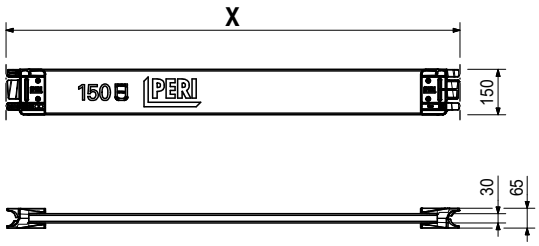




Art no.	Weight [kg]		X [mm]
		Toeboards Wood UPF-C	
132555	1.180	**Toeboard Wood UPF-C 50**	500
132556	1.550	**Toeboard Wood UPF-C 67**	670
132557	1.720	**Toeboard Wood UPF-C 75**	750
132558	2.250	**Toeboard Wood UPF-C 100**	1000
132559	3.320	**Toeboard Wood UPF-C 150**	1500
132560	4.390	**Toeboard Wood UPF-C 200**	2000
132561	5.460	**Toeboard Wood UPF-C 250**	2500
132562	6.520	**Toeboard Wood UPF-C 300**	3000

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

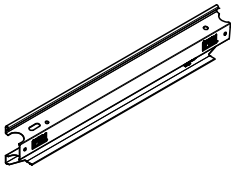


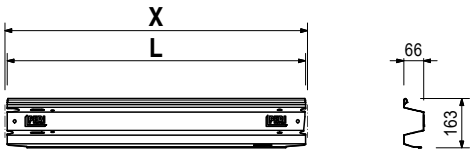


Art no.	Weight [kg]		L [mm]	X [mm]
		Toeboards Steel UPY		
132592	0.413	**Toeboard Steel UPY 25**	236	250
110213	0.927	**Toeboard Steel UPY 50**	486	500
129947	1.280	**Toeboard Steel UPY 67**	656	670
110073	1.960	**Toeboard Steel UPY 100**	986	1000
110160	2.990	**Toeboard Steel UPY 150**	1486	1500
110176	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.



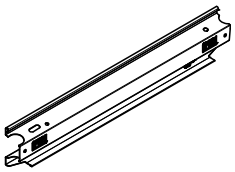


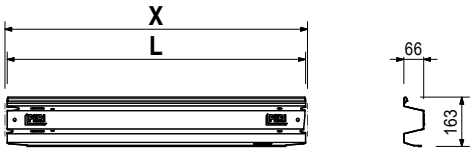
Accessory (not included)

134542	0.606	**Toeboard Compensation UPY-L**

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
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

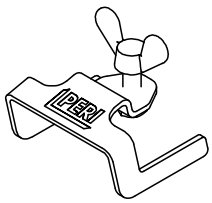
Customised toeboard steel design in RAL colour scheme possible on request.

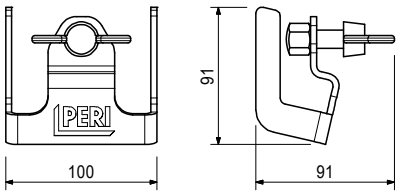




Art no.	Weight [kg]	
134542	0.606	**Toeboard Compensation UPY-L**

Connecting component for connecting of 2 x Toeboards UPY.

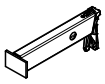


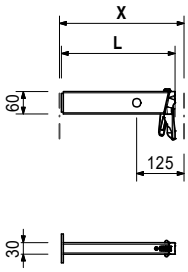


Art no.	Weight [kg]		L [mm]	X [mm]
		Supports UC		
115959	1.160	**Support UC 25**	223	250
130390	1.360	**Support UC 33**	301	330

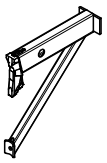
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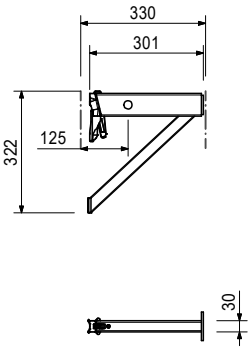
Small console brackets with limit stop for fixing the decks in place.



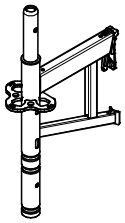


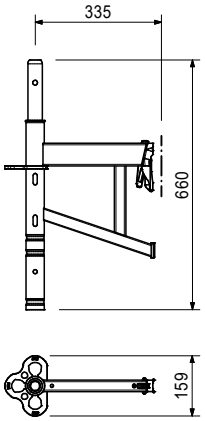
Art no.	Weight [kg]	
136050	1.880	**Deck Support UCS 33**



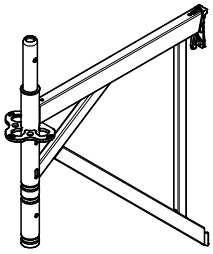


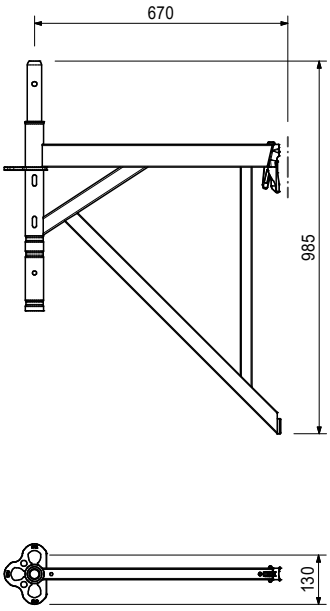
Art no.	Weight [kg]	
130378	4.680	**Console Bracket ECM 33**



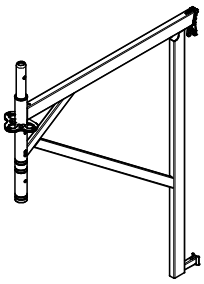


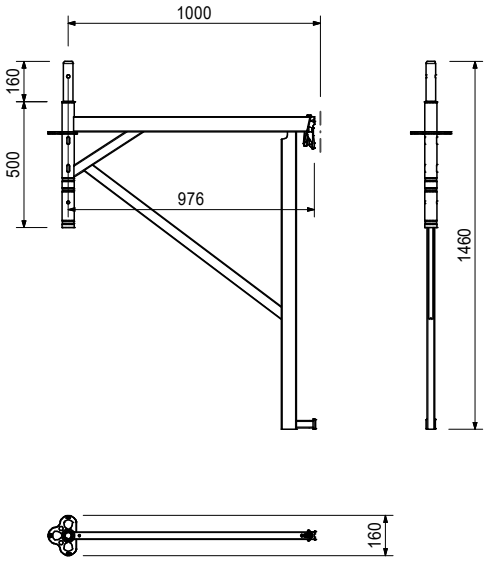
Art no.	Weight [kg]	
130372	7.570	**Console Bracket ECM 67**





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

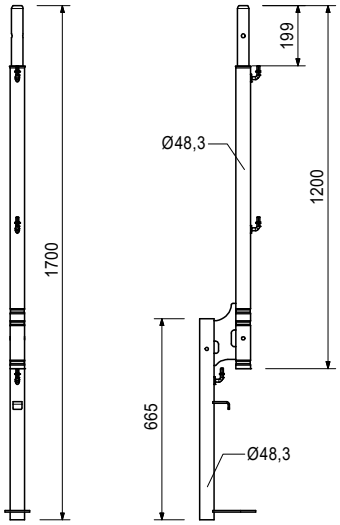




Art no.	Weight [kg]	
130532	6.640	**Protection Panel Post EPS**

For installing a protection panel.





Accessory (not included)

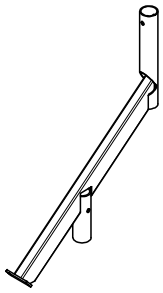
130512	3.880	**Guardrail Post EVP**

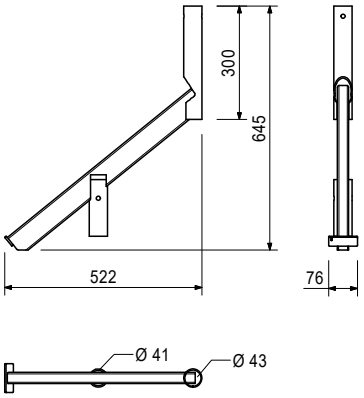
Art no.	Weight [kg]	
130385	2.970	**Connection Protect Panel EPC**

For installing a protection roof.

Notes

Alternative accessories:
100719 Screw ISO4014-M10x070-8.8

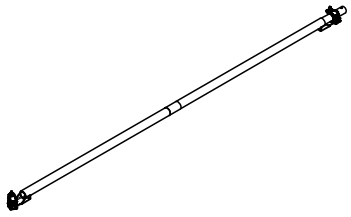


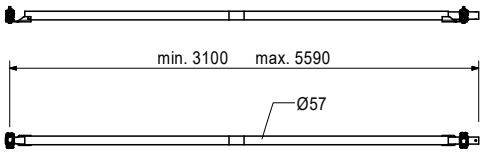


Accessory (not included)

123480	0.080	**Tube Clip 10x60mm coat**

Art no.	Weight [kg]	
131093	23.700	**Multi Brace EWB**



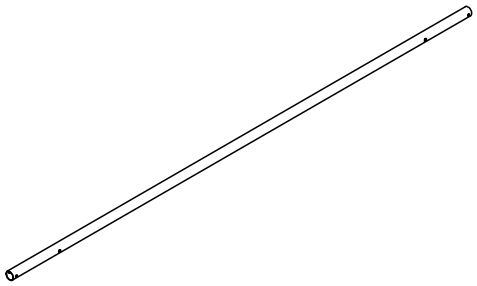


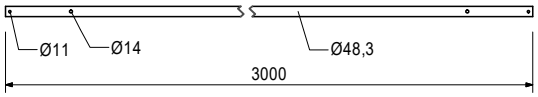
Accessory (not included)

131097	1.700	**Base Plate for EWB**

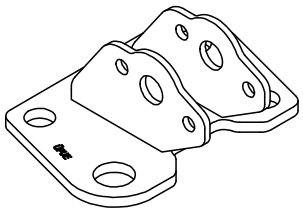
Art no.	Weight [kg]	
131092	9.090	**Scaffold Support coat**

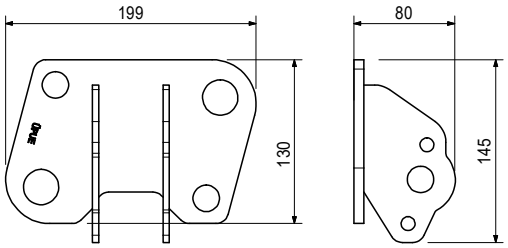
Can be used as an additional inner tube for Multi Brace EWB, if required.





Art no.	Weight [kg]	
131097	1.700	**Base Plate for EWB**



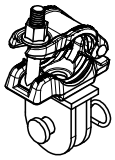


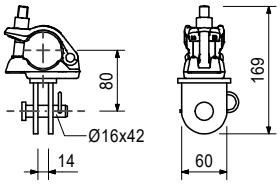
Accessory (not included)

710593	0.062	**Screw ISO4014-M10x080-8.8-ga**
112786	0.015	**Hex-Nut EN1661-M10-8-ga**

Art no.	Weight [kg]	
131723	1.440	**Brace Connector HDR-2**

For connecting push-pull props and kicker braces to components Ø 48 mm.





Consists of

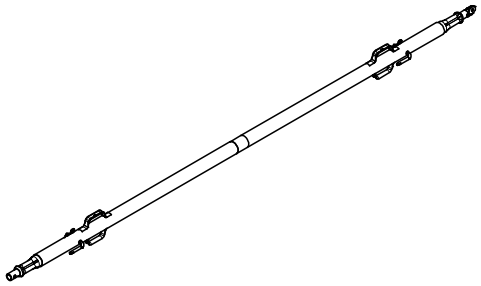
1 pc 027170 Pin Ø16x42mm ga
1 pc 018060 Cotter Pin 4/1 ga

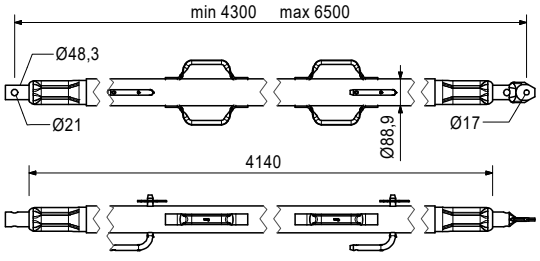
Art no.	Weight [kg]	
117469	39.900	**Push-Pull Prop RS 650 ga**

Extension length L = 4.30 – 6.50 m.
For aligning PERI Formwork Systems and precast concrete elements.

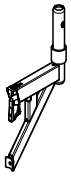
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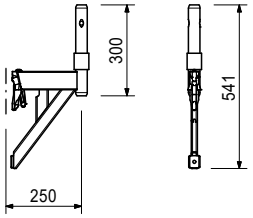
Permissible load see PERI Design Tables.





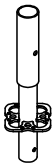
Art no.	Weight [kg]	
134005	2.710	**Console Bracket UCB 25**

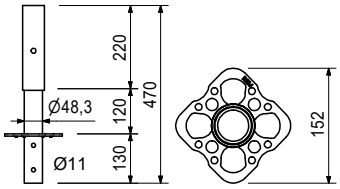




Art no.	Weight [kg]	
133499	2.260	**Base Standard UVB 25**

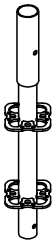
For fitting onto the base spindles directly.
Can also be used as 25 cm standard.

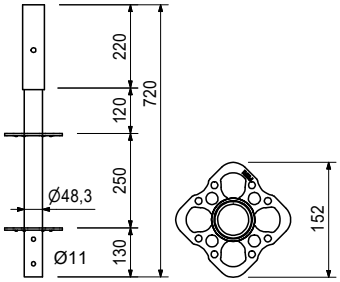




Art no.	Weight [kg]	
135187	3.580	**Base Standard UVB 50**

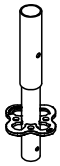
For fitting onto the base spindles directly.
Can also be used as 50 cm standard.

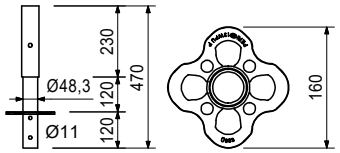




Art no.	Weight [kg]	
400014	2.470	**Base Standard UVB 24**

For fitting onto the base spindles directly.

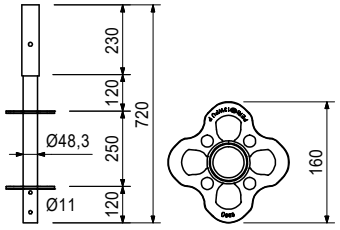




Art no.	Weight [kg]	
417194	3.980	**Base Standard UVB 49**

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

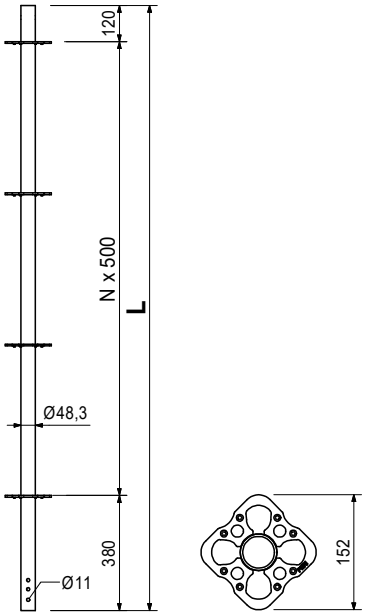




Art no.	Weight [kg]		L [mm]
		Top Standards UVH-2	
132123	2.100	**Top Standard UVH-2 50**	500
132194	4.210	**Top Standard UVH-2 100**	1000
132198	6.320	**Top Standard UVH-2 150**	1500
132200	8.420	**Top Standard UVH-2 200**	2000
132202	10.500	**Top Standard UVH-2 250**	2500

Without spigot for supporting head spindles.

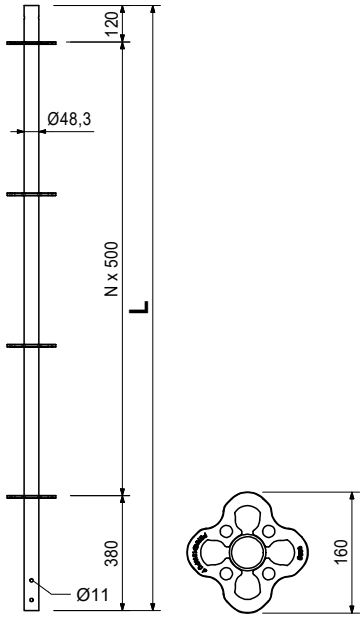




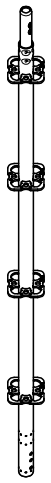
Art no.	Weight [kg]		L [mm]
		Top Standards UVH	
401309	2.510	**Top Standard UVH 50**	500
400000	4.610	**Top Standard UVH 100**	1000
400003	6.920	**Top Standard UVH 150**	1500
400005	9.230	**Top Standard UVH 200**	2000
400007	11.500	**Top Standard UVH 250**	2500

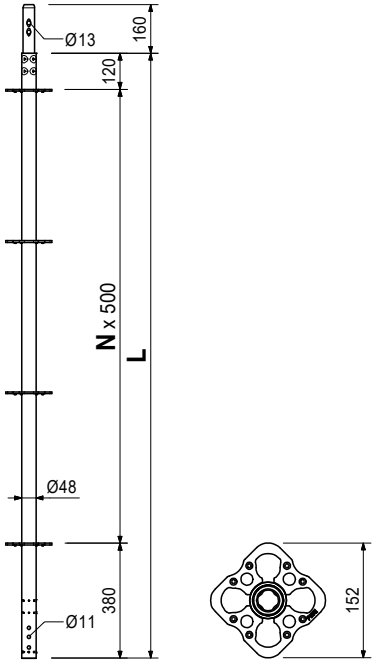
Without spigot for supporting head spindles.



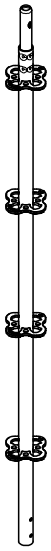


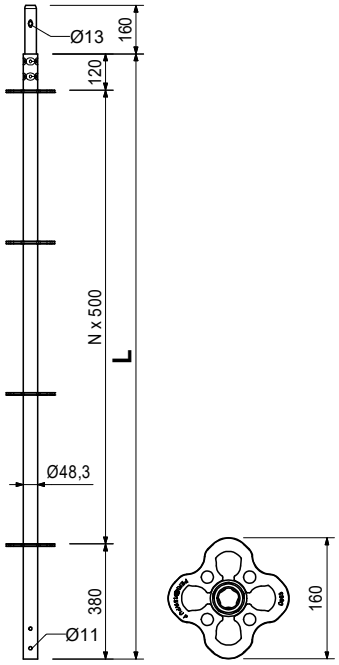
Art no.	Weight [kg]		L [mm]
		Standards UVR-2	
132219	2.490	**Standard UVR-2 50**	500
132224	4.340	**Standard UVR-2 100**	1000
132229	6.190	**Standard UVR-2 150**	1500
132234	8.030	**Standard UVR-2 200**	2000
132239	11.700	**Standard UVR-2 300**	3000





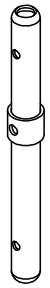
Art no.	Weight [kg]		L [mm]
		Standards UVR	
402859	3.080	**Standard UVR 50**	500
401306	5.380	**Standard UVR 100**	1000
402860	7.690	**Standard UVR 150**	1500
400009	9.990	**Standard UVR 200**	2000
400012	14.700	**Standard UVR 300**	3000
400013	19.200	**Standard UVR 400**	4000

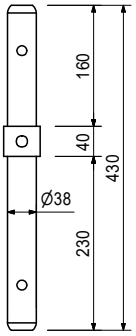




Art no.	Weight [kg]	
105372	2.500	**Spigot w. Spacer URE 4/42**

For attaching to Element Collar URP, Connector ULS Flex and Head Frame EVH. Spacer tube enables further installation in the system grid.



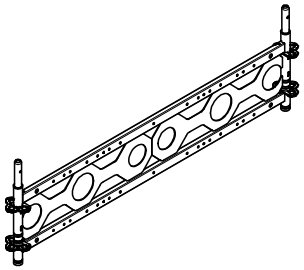


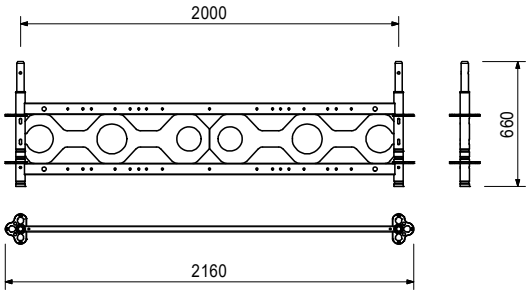
Accessory (not included)

100719	0.060	**Screw ISO4014-M10x070-8.8-ga-N**
780356	0.011	**Hex-Nut ISO7040-M10-8-ga**

Art no.	Weight [kg]	
131368	26.400	**Multi Girder ELM**

e.g. suitable for the use of pavement gantries!

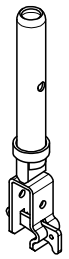


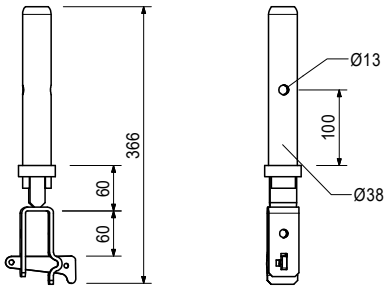


Accessory (not included)

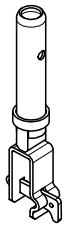
130681	1.500	**UH-Spigot-2**
130684	2.020	**Ledger Bracket UHA-2 half Spi.**

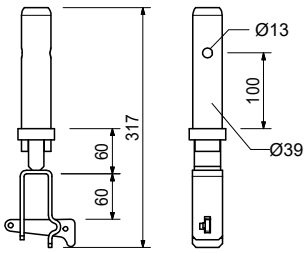
Art no.	Weight [kg]	
130681	1.500	**UH-Spigot-2**





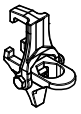
Art no.	Weight [kg]	
409764	1.220	**UH-Spigot**

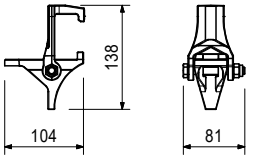




Art no.	Weight [kg]	
136582	0.831	**Ledger Bracket UHA-2**

For connecting horizontal ledgers at right-angles.

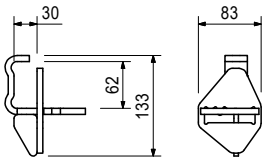




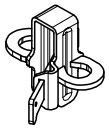
Art no.	Weight [kg]	
401731	0.841	**Ledger Bracket UHA**

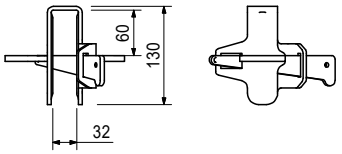
For connecting horizontal ledgers to horizontal ledgers at right-angles.



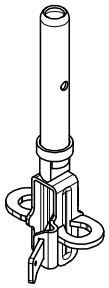


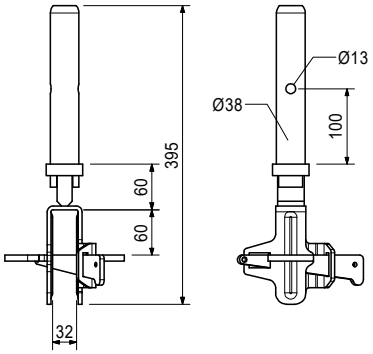
Art no.	Weight [kg]	
110793	1.090	**Ledger Bracket UHA half**



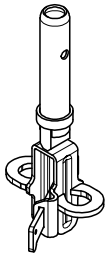


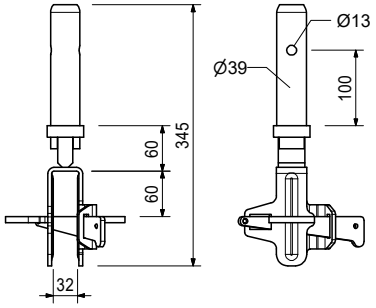
Art no.	Weight [kg]	
130684	2.020	**Ledger Bracket UHA-2 half Spi.**



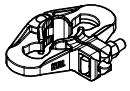


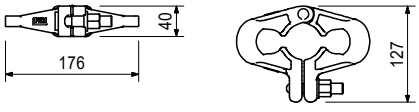
Art no.	Weight [kg]	
410792	1.880	**Ledger Bracket UHA half Spigot**



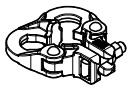


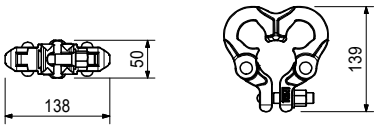
Art no.	Weight [kg]	
116306	1.700	**Rosett Coupler UEV 180°**





Art no.	Weight [kg]	
126453	1.650	**Rosett Coupler UEV 90°**



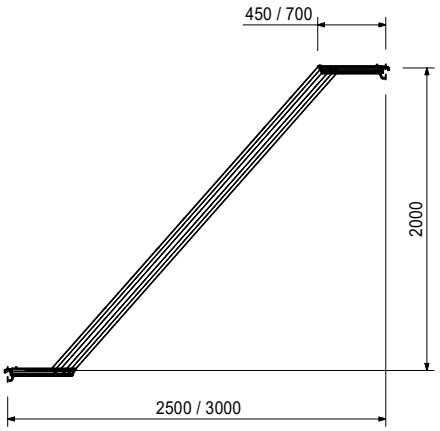


Art no.	Weight [kg]	
		Easystairs EAS 67
134553	26.600	**Easystairs EAS 67x250/200**
134554	29.600	**Easystairs EAS 67x300/200**

Notes

Permissible load 2.0 kN/m².
Class B according to DIN EN 12811-1.



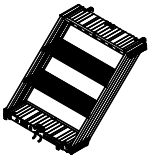


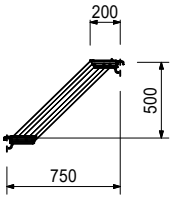
Art no.	Weight [kg]	
134555	10.300	**Easystairs EAS 67x75/50**

Fit onto Horizontal Ledger UH.

Notes

Permissible load 2.0 kN/m².
Class B according to DIN EN 12811-1.



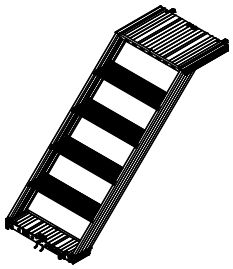


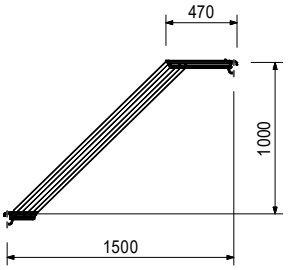
Art no.	Weight [kg]	
134559	16.100	**Easystairs EAS 67x150/100T**

Fit onto Horizontal Ledger UH.

Notes

Permissible load 2.0 kN/m².
Class B according to DIN EN 12811-1.



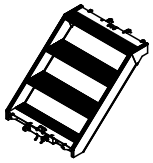


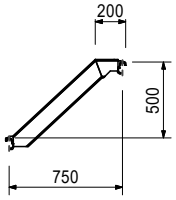
Art no.	Weight [kg]	
435769	9.330	**Staircase UAS 67x75/50**

Suitable for PERI UP Easy 67.

Notes

Permissible load 2.0 kN/m².



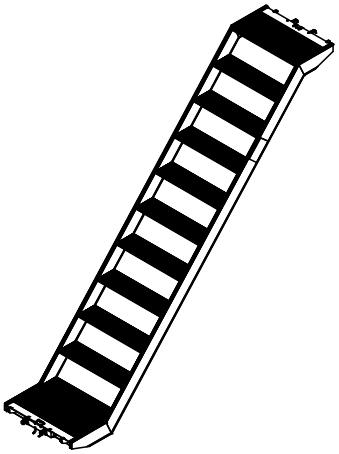


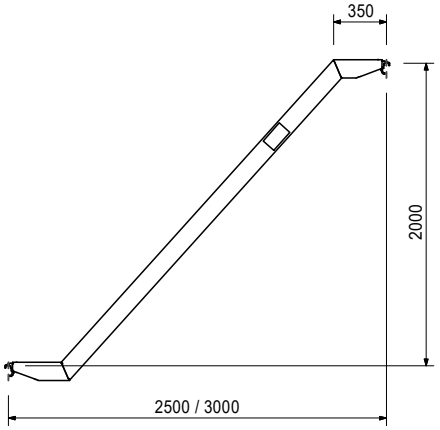
Art no.	Weight [kg]	
		Staircases UAS 67
435027	26.100	**Staircase UAS 67x250/200**
435026	30.600	**Staircase UAS 67x300/200**

Suitable for PERI UP Easy 67.

Notes

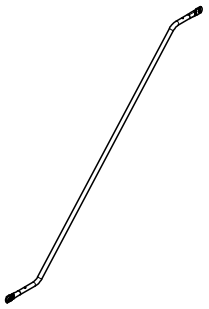
Permissible load 2.0 kN/m².

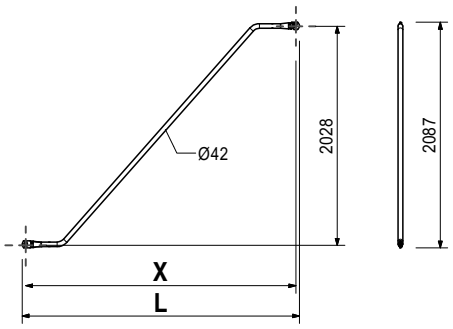




Art no.	Weight [kg]		L [mm]	X [mm]
		Stair Guardrails EAG		
124561	7.180	**Stair Guardrail EAG 250/200**	2565	2500
124558	8.180	**Stair Guardrail EAG 300/200**	3065	3000

Suitable for external scaffold access in conjunction with Easy Standard.

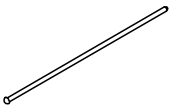


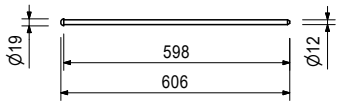


Accessory (not included)

133705	0.538	**Locking Pin EAG**

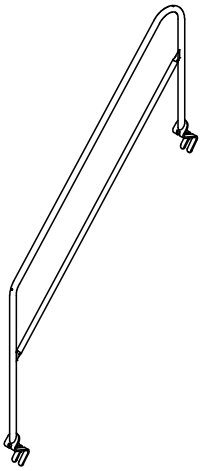
Art no.	Weight [kg]	
133705	0.538	**Locking Pin EAG**

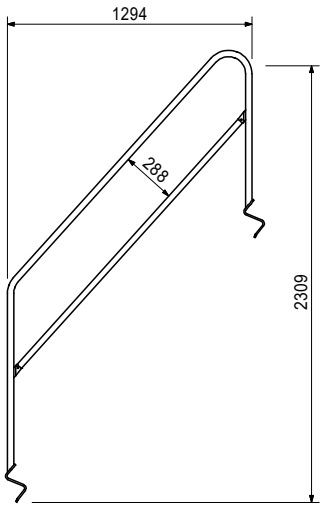




Art no.	Weight [kg]	
100742	10.000	**Stair Guardrail UAG**

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

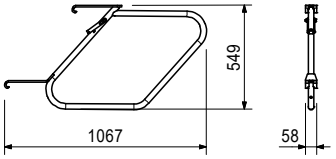




Art no.	Weight [kg]	
133543	4.510	**Stair Guardrail UAH-2**

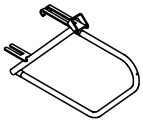
For fixing to the stringers of the Staircases UAS, UAS-2 and EAS.

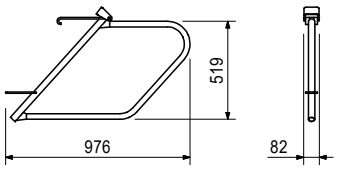




Art no.	Weight [kg]	
400830	4.970	**Stair Guardrail UAH Inside**

For fixing to the stringers of the Staircases UAS.

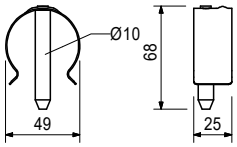




Art no.	Weight [kg]	
111053	0.059	**Locking Pin Ø48-57mm**

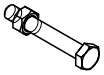
As tension-proof connection of standards with a diameter of 48 up to 57 mm.

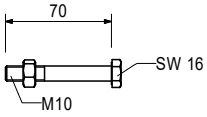




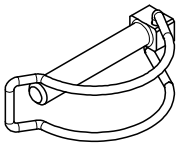
Art no.	Weight [kg]	
100719	0.060	**Screw ISO4014-M10x070-8.8-ga-N**

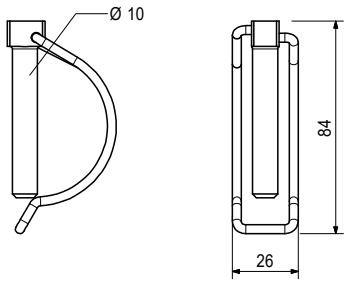
As tension-proof connection of standards at suspended scaffolds and formwork girders.



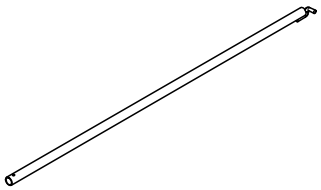


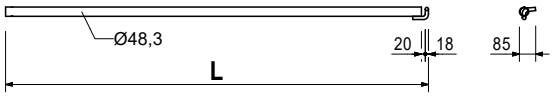
Art no.	Weight [kg]	
123480	0.080	**Tube Clip 10x60mm coat**





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





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

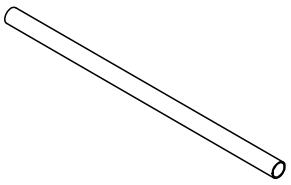
For assembly of the Wall Tie UWT.
Required Wall Insert UFI 14.

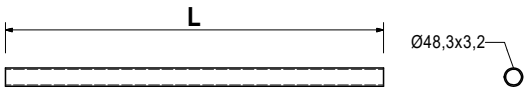
Notes

With marking for screw-in depth.

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

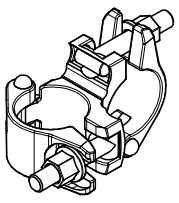
Art no.	Weight [kg]		L [mm]
		Scaff. Tubes 48.3x3.2mm ga	
026417	0.000	**Cutting Costs Scaffold Tube**	1
026411	3.550	**Scaff. Tube 48.3x3.2mm 1m ga**	1000
026412	7.100	**Scaff. Tube 48.3x3.2mm 2m ga**	2000
026413	10.650	**Scaff. Tube 48.3x3.2mm 3m ga**	3000
026414	14.200	**Scaff. Tube 48.3x3.2mm 4m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

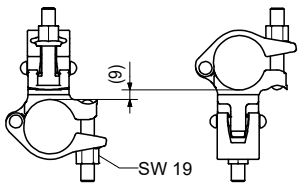




Art no.	Weight [kg]	
017020	1.120	**Standard Coupl. RA Ø48/48mm ga**

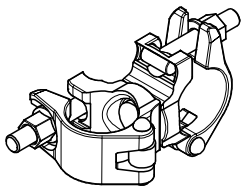
For Scaffold Tubes Ø 48 mm.

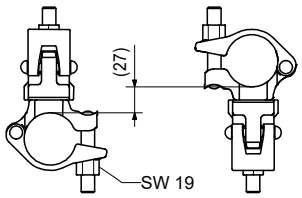




Art no.	Weight [kg]	
017010	1.400	**Swivel Coupler SW Ø48/48mm ga**

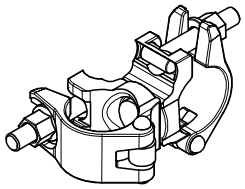
For Scaffold Tubes Ø 48 mm.

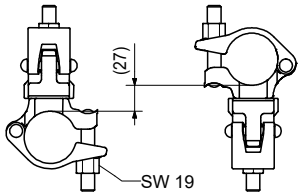




Art no.	Weight [kg]	
102400	1.100	**Swiv.Coup. EN74 RS Ø38/48mm ga**

For scaffold tubes Ø 48 mm and Ø 38 mm.



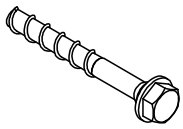


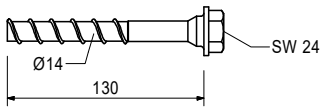
Art no.	Weight [kg]	
124777	0.210	**Anchor Bolt SW24 Ø14/20x130mm**

For temporary attachment to reinforced concrete components.

Notes

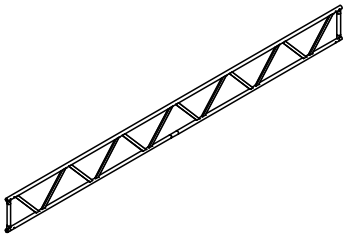
Take the PERI Data Sheet into consideration!
Hole Ø 14 mm.

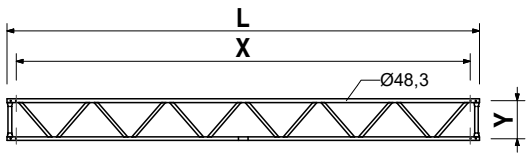




Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Latt. Girders Steel ULS			
100330	41.700	**Latt. Girder Steel ULS 50/425**	4250	4000	500
100336	50.900	**Latt. Girder Steel ULS 50/525**	5250	5000	500
100339	60.200	**Latt. Girder Steel ULS 50/625**	6250	6000	500
100185	54.800	**Latt. Girder Steel ULS 70/525**	5250	5000	700
100183	64.500	**Latt. Girder Steel ULS 70/625**	6250	6000	700
100852	83.600	**Latt. Girder Steel ULS 70/825**	8250	8000	700

For bridging of openings.
For system-independent application.



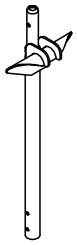


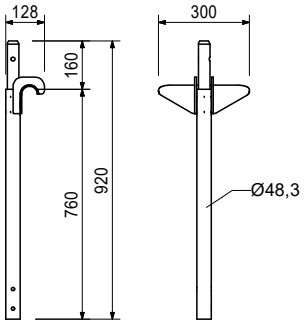
Art no.	Weight [kg]	
100529	6.710	**Starter Tube ULB 50/70**

For Lattice Girders ULS and ULA.

Notes

Only to be used for system-independent formwork girder assembly.

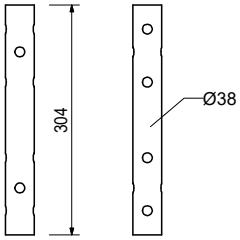




Art no.	Weight [kg]	
100301	0.969	**Spigot ULT 32**

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)

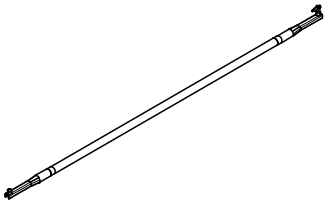
100719	0.060	**Screw ISO4014-M10x070-8.8-ga-N**
111053	0.059	**Pin Ø48-57mm**

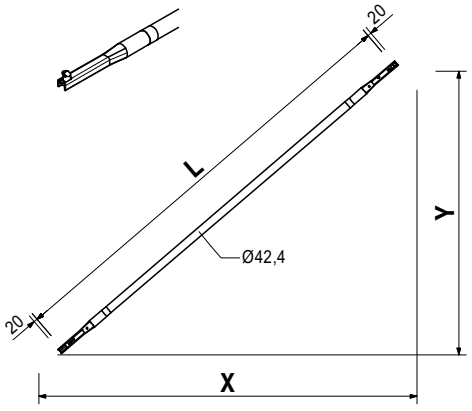
Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Ledger Braces UBL-2			
132771	2.130	**Ledger Brace UBL-2 100/50**	901	1000	500
132773	2.830	**Ledger Brace UBL-2 100/100**	1250	1000	1000
132775	3.680	**Ledger Brace UBL-2 100/150**	1677	1000	1500
132777	4.600	**Ledger Brace UBL-2 100/200**	2136	1000	2000
132779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

Suspension in holes of the Horizontal Ledgers.

Notes

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



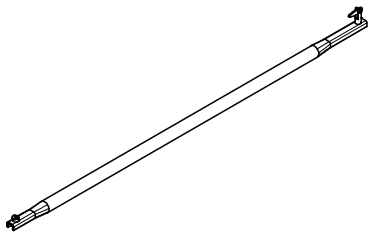


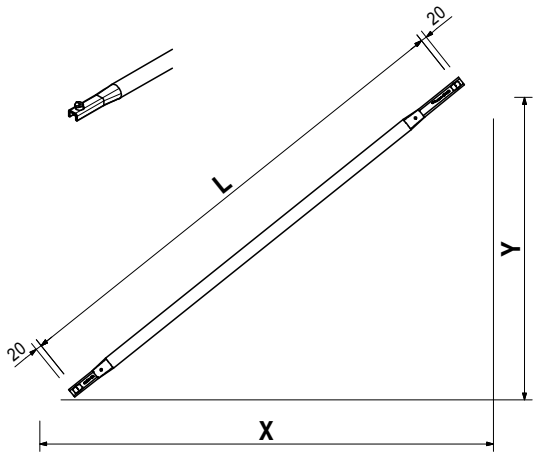
Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Ledger Braces UBL			
415156	2.660	**Ledger Brace UBL 100/50**	901	1000	500
415513	4.640	**Ledger Brace UBL 100/150**	1677	1000	1500
415157	5.810	**Ledger Brace UBL 100/200**	2136	1000	2000
407867	3.790	**Ledger Brace UBL 150/50**	1347	1500	500
400055	4.440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

Suspension in holes of the Horizontal Ledgers.

Notes

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

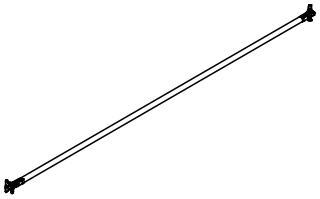


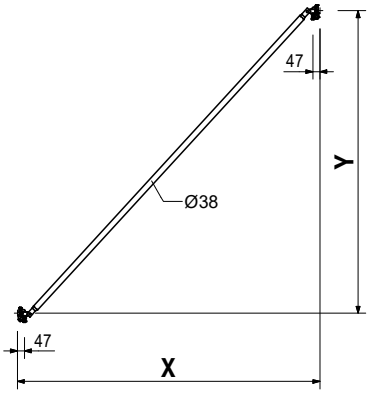


Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Node Braces UBK-2			
133418	4.980	**Node Brace UBK-2 75/200**	2190	750	2000
133421	5.130	**Node Brace UBK-2 100/200**	2285	1000	2000
133424	3.900	**Node Brace UBK-2 125/100**	1625	1250	1000
133427	5.320	**Node Brace UBK-2 125/200**	2401	1250	2000
133430	4.240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

Notes

With color coding for length identification.

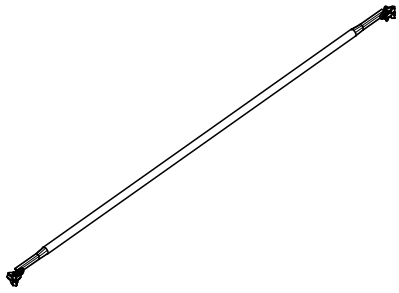


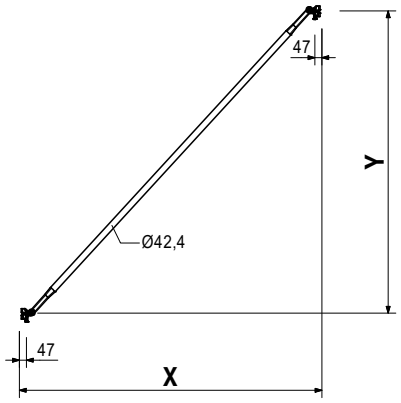


Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Node Braces UBK			
424170	6.780	**Node Brace UBK 75/200**	2190	750	2000
412926	6.990	**Node Brace UBK 100/200**	2285	1000	2000
415354	5.220	**Node Brace UBK 125/100**	1625	1250	1000
412765	7.260	**Node Brace UBK 125/200**	2401	1250	2000
400981	5.710	**Node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

Notes

With color coding for length identification.



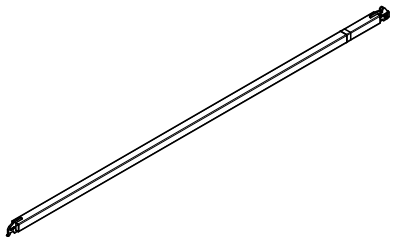


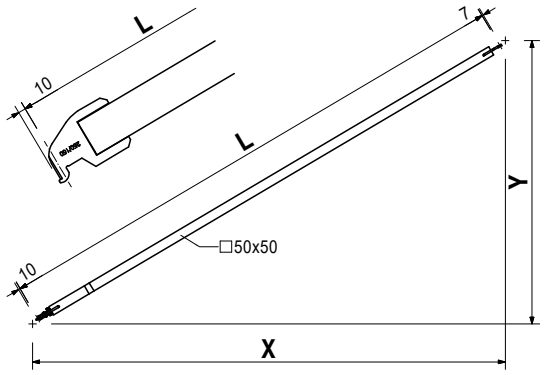
Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		H-Braces UBH Flex			
114912	6.660	**H-Brace UBH Flex 150/150**	2042	1500	1500
124097	7.780	**H-Brace UBH Flex 200/150**	2422	2000	1500
114916	8.740	**H-Brace UBH Flex 200/200**	2749	2000	2000
124101	9.000	**H-Brace UBH Flex 250/150**	2838	2500	1500
114920	9.840	**H-Brace UBH Flex 250/200**	3123	2500	2000
114928	10.800	**H-Brace UBH Flex 250/250**	3456	2500	2500
124105	10.300	**H-Brace UBH Flex 300/150**	3279	3000	1500
114924	11.000	**H-Brace UBH Flex 300/200**	3528	3000	2000
114932	11.900	**H-Brace UBH Flex 300/250**	3826	3000	2500
114936	12.900	**H-Brace UBH Flex 300/300**	4163	3000	3000

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

Notes

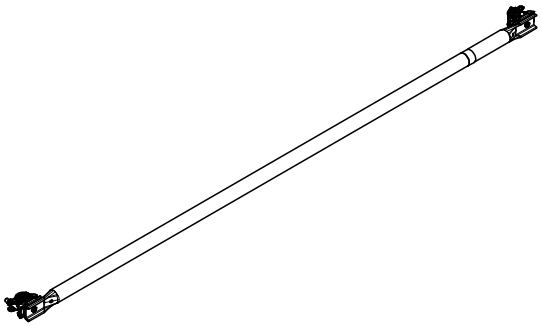
With color coding for length identification.

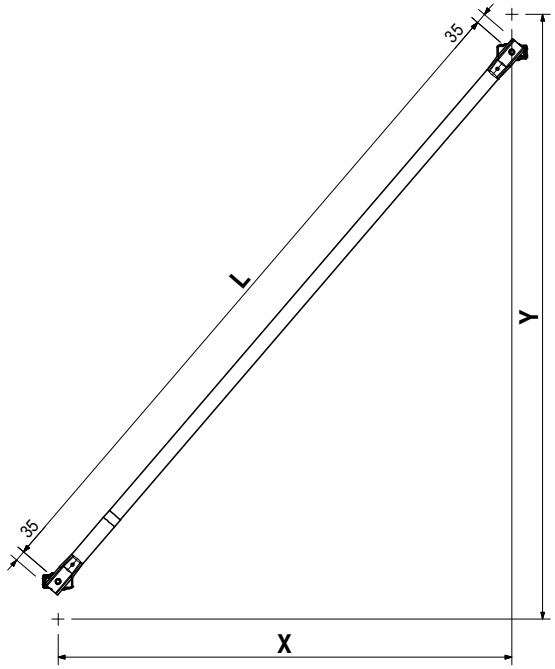




Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Coupler Braces UBC-2			
131750	7.330	**Coupler Brace UBC-2 67-100/200**	1750	670	2000
131726	9.020	**Coupler Brace UBC-2 150/200**	2305	1500	2000
131741	10.100	**Coupler Brace UBC-2 200/200**	2657	2000	2000
131744	11.300	**Coupler Brace UBC-2 250/200**	3052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

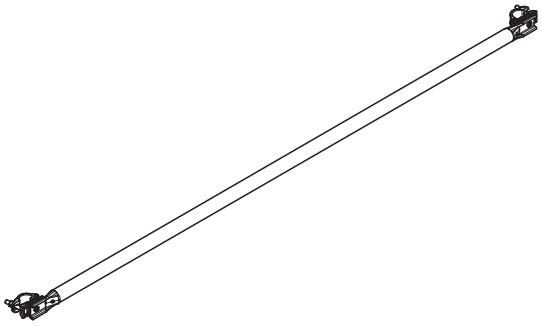
For special applications.
For connecting scaffold tubes Ø 48 mm.

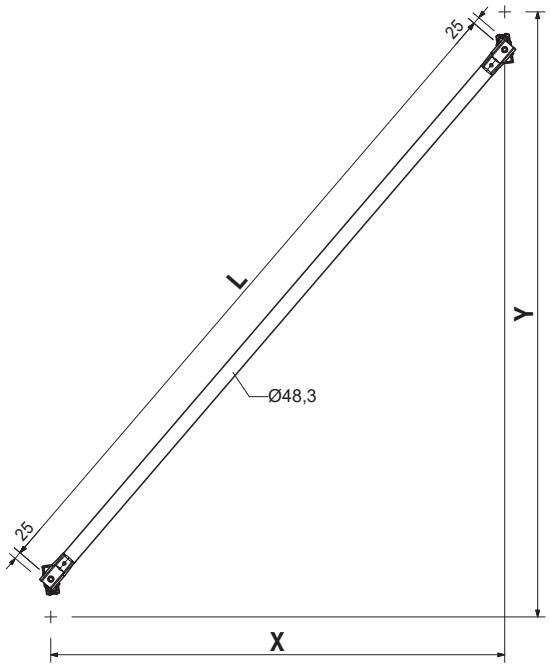




Art no.	Weight [kg]		L [mm]	X [mm]	Y [mm]
		Coupler Braces UBC			
400416	9.730	**Coupler Brace UBC 150/200**	2305	1500	2000
400419	11.000	**Coupler Brace UBC 200/200**	2657	2000	2000
400422	12.400	**Coupler Brace UBC 250/200**	3052	2500	2000
400425	13.900	**Coupler Brace UBC 300/200**	3473	3000	2000

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





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

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

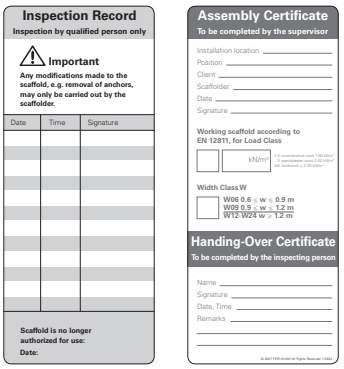


Art no.	Weight [kg]	
		PERI UP Ass. Certificates
113835	0.005	**PERI UP Ass. Certificate CDN**
113839	0.005	**PERI UP Ass. Certificate CZ**
113833	0.005	**PERI UP Ass. Certificate D**
113836	0.005	**PERI UP Ass. Certificate ES**
113834	0.005	**PERI UP Ass. Certificate Ex**
113829	0.005	**PERI UP Ass. Certificate F**
113838	0.005	**PERI UP Ass. Certificate PL**
113837	0.005	**PERI UP Ass. Certificate PT**
115729	0.005	**PERI UP Ass. Certificate SK**
115739	0.005	**PERI UP Ass. Certificate TR**

Inserted into the PERI UP Assembly Certificate Tag.

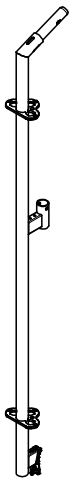
Notes

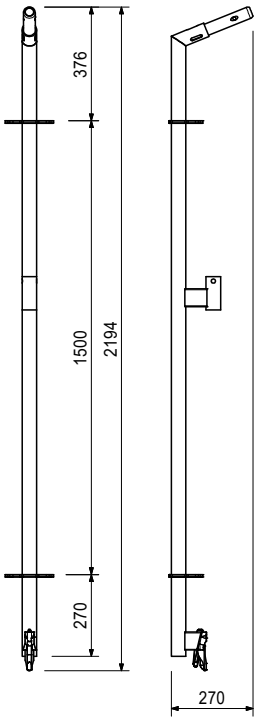
Front:
Assembly certificate for the approval of scaffolding.
Back:
Inspection record.



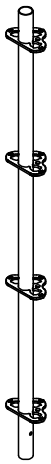
Art no.	Weight [kg]	
133753	9.290	**Weatherprotection EVW 200-V**

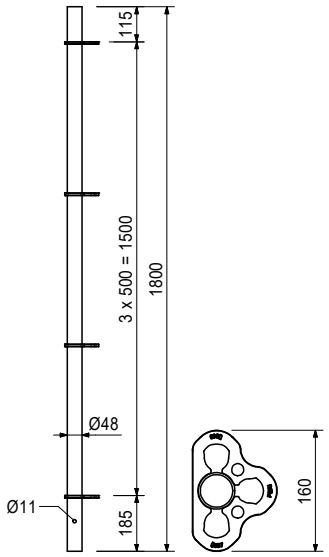
Standard on uppermost level in conjunction with Weather Protection EVW 130 or 180. Used together with tarpaulin coverings against the effects of the weather.





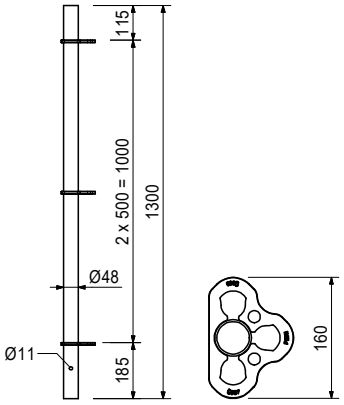
Art no.	Weight [kg]		L [mm]
133742	7.200	**Weatherprotection EVW 180**	1800





Art no.	Weight [kg]		L [mm]
133745	5.240	**Weatherprotection EVW 130**	1300





Accessory (not included)

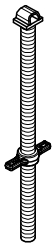
109630	4.240	**Spindle Head SRU**
133757	1.200	**Coupler EVW**

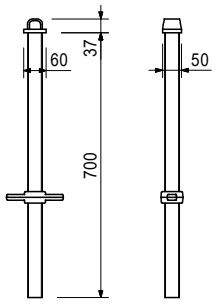
Art no.	Weight [kg]	
109630	4.240	**Spindle Head SRU**

For connecting the Steel Walers SRU on shoring scaffolds.

Notes

With captive quick jack nut.



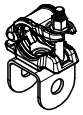


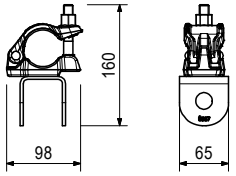
Accessory (not included)

104031	0.462	**Fitting Pin Ø21x120mm**
018060	0.014	**Cotter Pin 4/1 ga**

Art no.	Weight [kg]	
133757	1.200	**Coupler EVW**

In combination with Weather Protection EVW 180.





Accessory (not included)

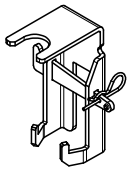
104031	0.462	**Fitting Pin Ø21x120mm**
018060	0.014	**Cotter Pin 4/1 ga**

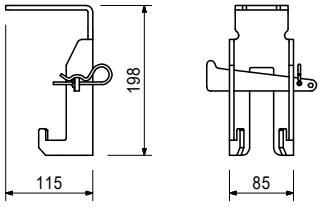
Art no.	Weight [kg]	
109563	1.460	**Head Spindle Locking UJH**

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

Notes

Permissible load 2.1 kN.



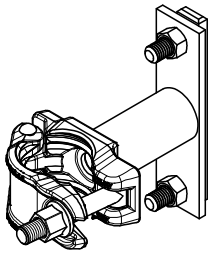


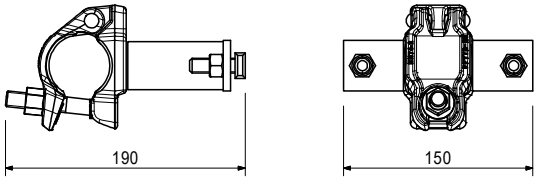
Consists of

018060 Cotter Pin 4/1 ga 1 pc

Art no.	Weight [kg]	
126009	1.630	**Keder Connection LGS URV**

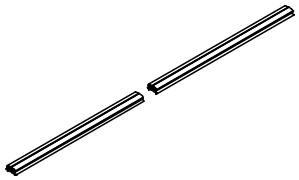
For fixing Keder Rails LGS URK to scaffold components with tube Ø 48.3 mm.

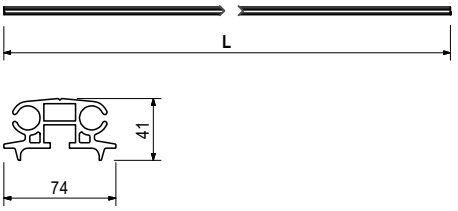




Art no.	Weight [kg]		L [mm]
		LGS Keder Rails URK	
127501	3.530	**Keder Rail LGS URK 150**	1500
127500	7.050	**Keder Rail LGS URK 300**	3000
126071	14.100	**Keder Rail LGS URK 600**	6000

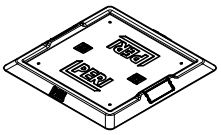
Track for drawing keder tarpaulins into scaffold constructions.





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]	
134175	0.065	**Poly Cover Coupling UPC-C**

Surface: Yellow fluorescent (RAL 1026).



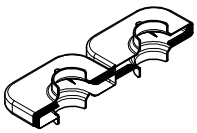
Art no.	Weight [kg]	
133907	0.015	**Poly Cover Tube UPC-T**

Surface: Yellow fluorescent (RAL 1026).



Art no.	Weight [kg]	
134176	0.098	**Poly Cover Rosette UPC-R**

Surface: Yellow fluorescent (RAL 1026).

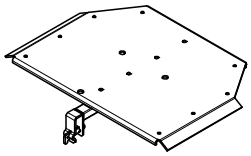


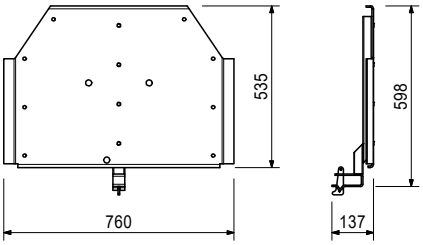
Art no.	Weight [kg]	
136832	6.820	**Bottom Sheeting UDP 67**

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.





The optimal System for every Project and every Requirement



Wall Formwork



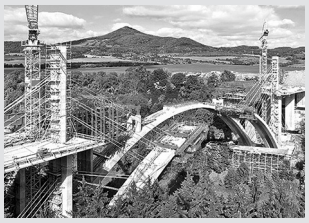
Column Formwork



Slab Formwork



Climbing Systems



Bridge Formwork



Tunnel Formwork



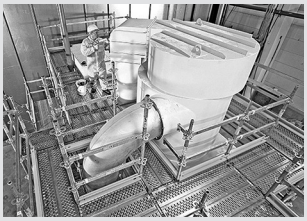
Shoring Systems



Construction Scaffold



Facade Scaffold



Industrial Scaffold



Access



Protection Scaffold



Safety Systems



System-Independent Accessories



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PERI DK
Forskalling Stillads Rådgivning
Greve Main 26
2670 Greve
Danmark
Telefon +45 43453627
peri@peri.dk
www.peri.dk

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