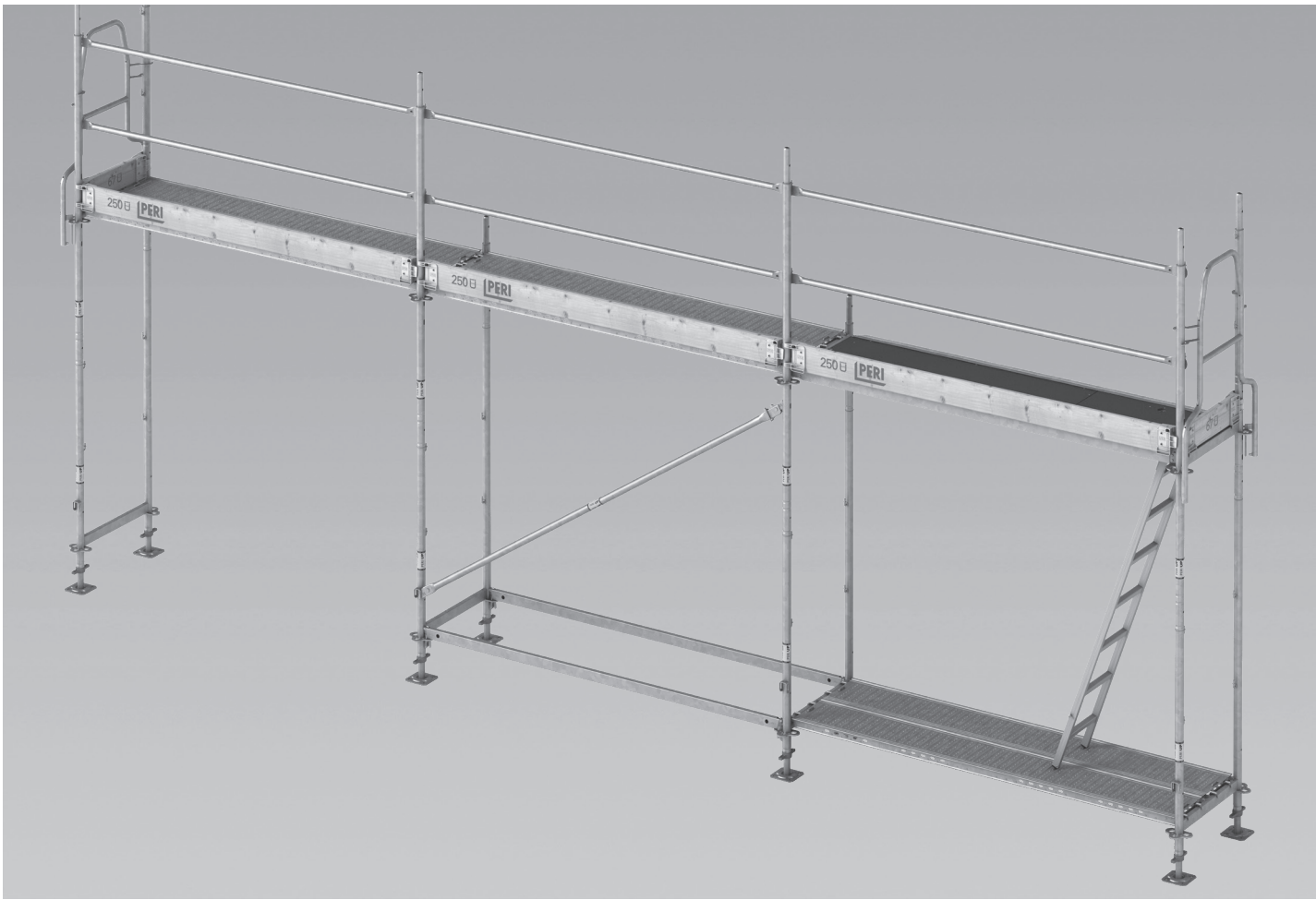
PERI UP Easy

Facade Scaffold 67 and 100 – Frame Variation

Instructions for Assembly and Use – Standard Configuration – Version 1.1



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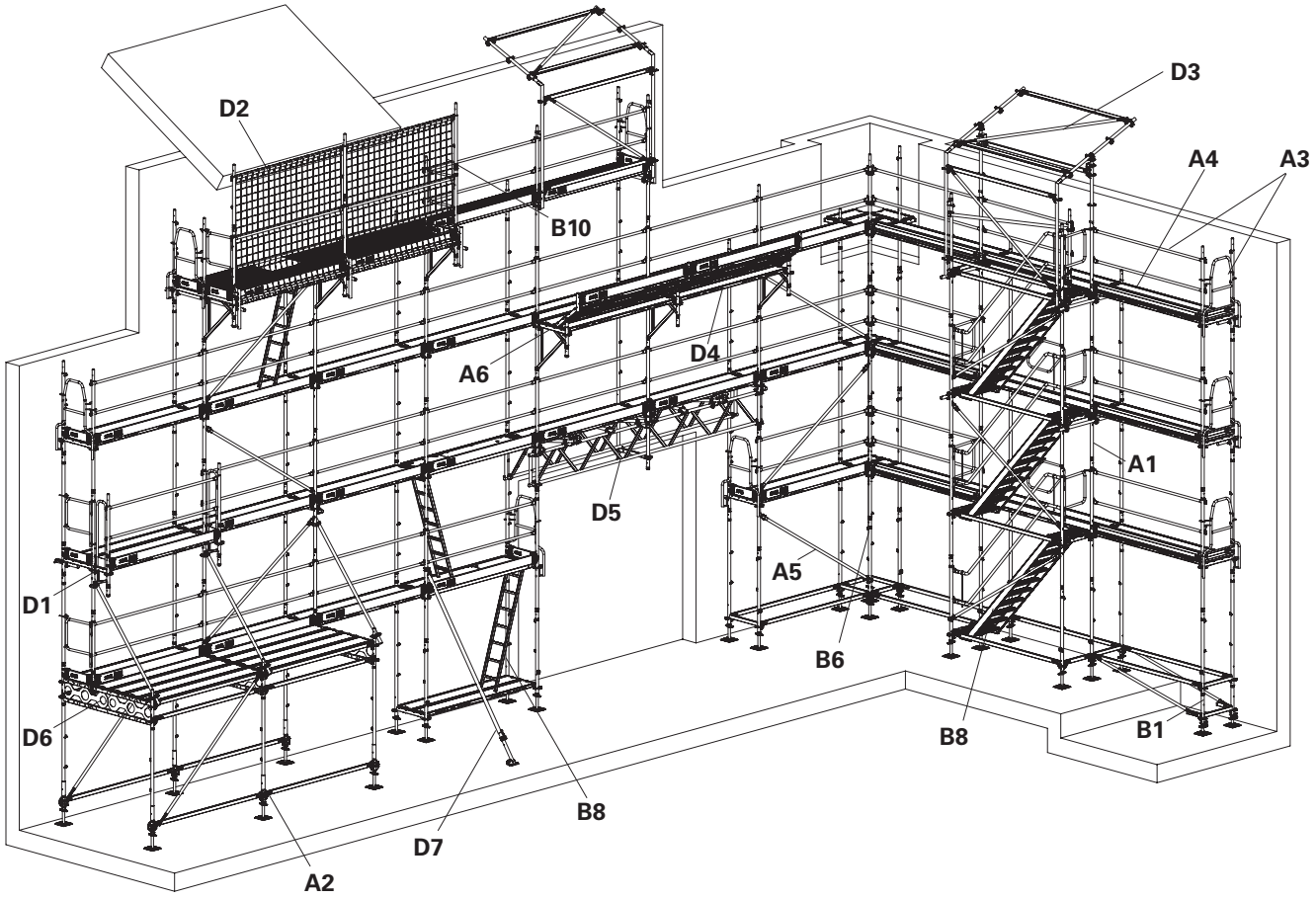
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Overview

Main components



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"Lateral protection" on page 14

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 are featured at the beginning of the section or ahead of the instructions, and are highlighted as follows:

 **Danger**
This sign indicates an extremely hazardous situation, in which case, not following the safety instructions will result in death or serious, irreversible injury.

 **Warning**
This sign indicates a hazardous situation, in which case, not following the safety instructions could result in death or serious, irreversible injury.

 **Caution**
This sign indicates a hazardous situation, in which case, not following the safety instructions could result in minor or moderate injury.

 **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 equipments that are not shown in these illustrations must be incorporated nonetheless.

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

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

Target groups

Scaffolding contractors/contractors
These assembly instructions are intended for contractors who either
- assemble, modify and dismantle the scaffolding, 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, work 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 scaffolding in an understandable form and language.
- Description of the measures for safely assembling, modifying or dismantling the scaffold.
- Naming of the preventive measures to be taken to avoid the risk of persons and objects falling.
- Designation of the safety precautions in the event of changing weather conditions that could adversely affect the safety of the scaffolding, 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 scaffold 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 scaffold system according to EN 12810 and EN 12811.
In addition, these Instructions for Assembly and Use account for verified structures up to 112 m.

These Instructions for Assembly and Use show the assembly with
- a scaffold width of 67 cm,
- with Steel Decks EDS,
- with Toe Board UPF.

The assembly process with
- a scaffold width of 100 cm,
- other decks,
- Toe Board UPY

is carried out in the same way

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 scaffold system is a length-oriented steel scaffold in frame and standard versions comprised of prefabricated components with supplementary components. In these Instructions for Assembly and Use, only the frame variation is considered.
For the standard variation, see the Instructions for Assembly and Use for the PERI UP Easy Facade Scaffold 67 and 100, standard variation.

For use as working scaffold in:
Easy 67:
Load Class 1 – 3
according to EN 12811-1
0.75 – 2.00 kN/m².

Easy 100:
Load Class 1 – 4
according to EN 12811-1
0.75 – 3.00 kN/m².

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.

The standard configuration for clad scaffolds applies to cladding with netting having aerodynamic force coefficients not in excess of cf = 0.6 and cf = 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 χ = 0.7, which assumes a maximum exposure time of 2 years.

Technical data
System width: 67 cm or 100 cm
Decking width: 66 cm or 100 cm
Scaffold bay lengths:
67/100/150/200/250/300 cm

Product description according to EN 12810:

PERI UP Easy 67 EN 12810-3D-SW06/300-H2-B-LS

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

Explanation:
3 = Load Class 3 (LC 3= 2.00 kN/m²)
4 = Load Class 4 (LC 4 = 3.00 kN/m²)
D = decking with drop test suitable as safety scaffold
SW06 = Width Class 06
(0.6 ≤ w < 0.9 m)
SW09 = Width class 09
(0.9 ≤ w < 1.2 m)
300 = bay length ≤ 300 cm
H1/H2 = Height class
B = with cladding
LS = equipment with ladder and stairs

Cleaning and maintenance instructions

Clean the scaffold 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 points should help to keep cleaning and maintenance costs as low as possible.

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

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

Do not use plastic components if fibre reinforcements are exposed.

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

Do not clean components suspended on crane lifting gear.

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

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

Disposal

Dispose of 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 67

Instructions for Assembly and Use:
- PERI UP Easy Facade Scaffold 67 and 100, Standard Variation
- 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 programme overview may be used for assembly. Other components are not permitted. Exceptions are named or must be planned and verified on a project-specific basis.

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

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

Cross-system

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

General
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. However, these Instructions for Assembly and Use do not replace the risk assessment!

Refer to and comply with the safety instructions and permissible loads.

For the application and inspection of PERI products, the current safety regulations and guidelines valid in the respective countries must be observed.

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

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

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

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

Components provided by the contractor must comply with the characteristics stipulated in these Instructions for Assembly and Use and all applicable laws and standards. Unless otherwise indicated, the following applies in particular:
- timber components: strength class C24 for solid wood according to EN 338.
- Scaffold tubes: galvanised steel tubing with minimum dimensions Ø 48.3 x 3.2 mm according to EN 12811-1 2004-03 4.2.1.2.
- Scaffold tube couplings according to EN 74-1 and EN 74-2.

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

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

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

Before and after exceptional occurrences that may have an adverse effect on the safety of the scaffold 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 scaffold 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 scaffold system.

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

Assembly, modification and dismantling work
Assembly, modification or dismantling of scaffold 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 scaffold 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 scaffold 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 scaffolding.



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 20.
The PPE against falling to be used 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. Danger zones must be cordoned off and clearly marked.
- 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 scaffold systems to be used, is responsible for ensuring that the equipment is in good condition.

If the scaffold 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 scaffolding 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.

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

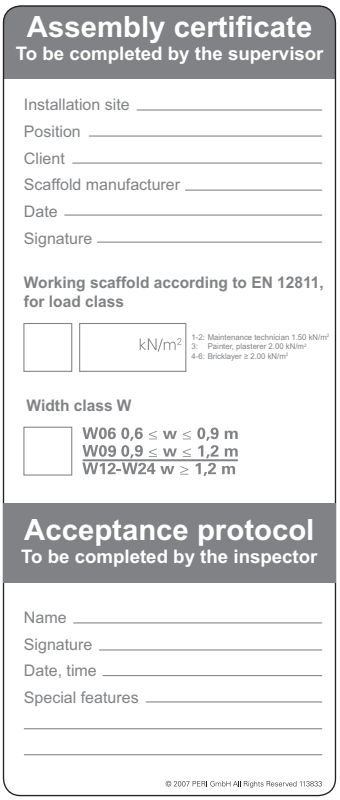
When carrying out the work the following signs must be observed:
If certain parts of the scaffold are not ready for use – especially during assembly, modification and dismantling – a "No Entry" warning sign restricting access must be clearly displayed (see Sign 1).

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

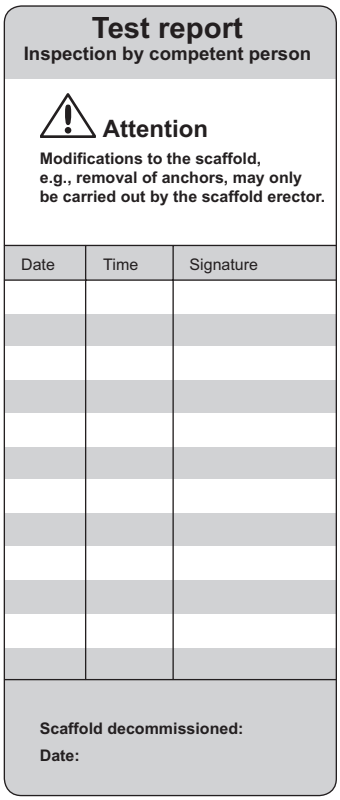
After assembly has been completed, all scaffold entry points must clearly display the designated sign. (Sign 2)
The signs do not replace the inspection log! (Sign 2, rear side)



Sign 1



Sign 2



Sign 2, rear side

Laws and regulations

When assembling, modifying, dismantling and using the scaffolding in Germany, accident prevention regulations and guidelines of the employer's liability insurance associations, as well as national health and safety regulations, must be followed, especially:

- German Product Safety Act (ProdSG)
- Directive 2009/104/EC
- Occupational Health and Safety Act (ArbSchG)
- Operating Safety Regulation (BetrSichV)
- Statutory Accident Insurance (DGUV) Information 201-011
- BGV A1 (Trade Association Regulations)
- TRBS 2121 (Technical Regulations for Operational Safety)
- TRBS 1203 (Technical Regulations for Operational Safety)
- Regulations for Occupational Health and Safety on Construction Sites 30 (RAB 30)

The latest version in each case is applicable.

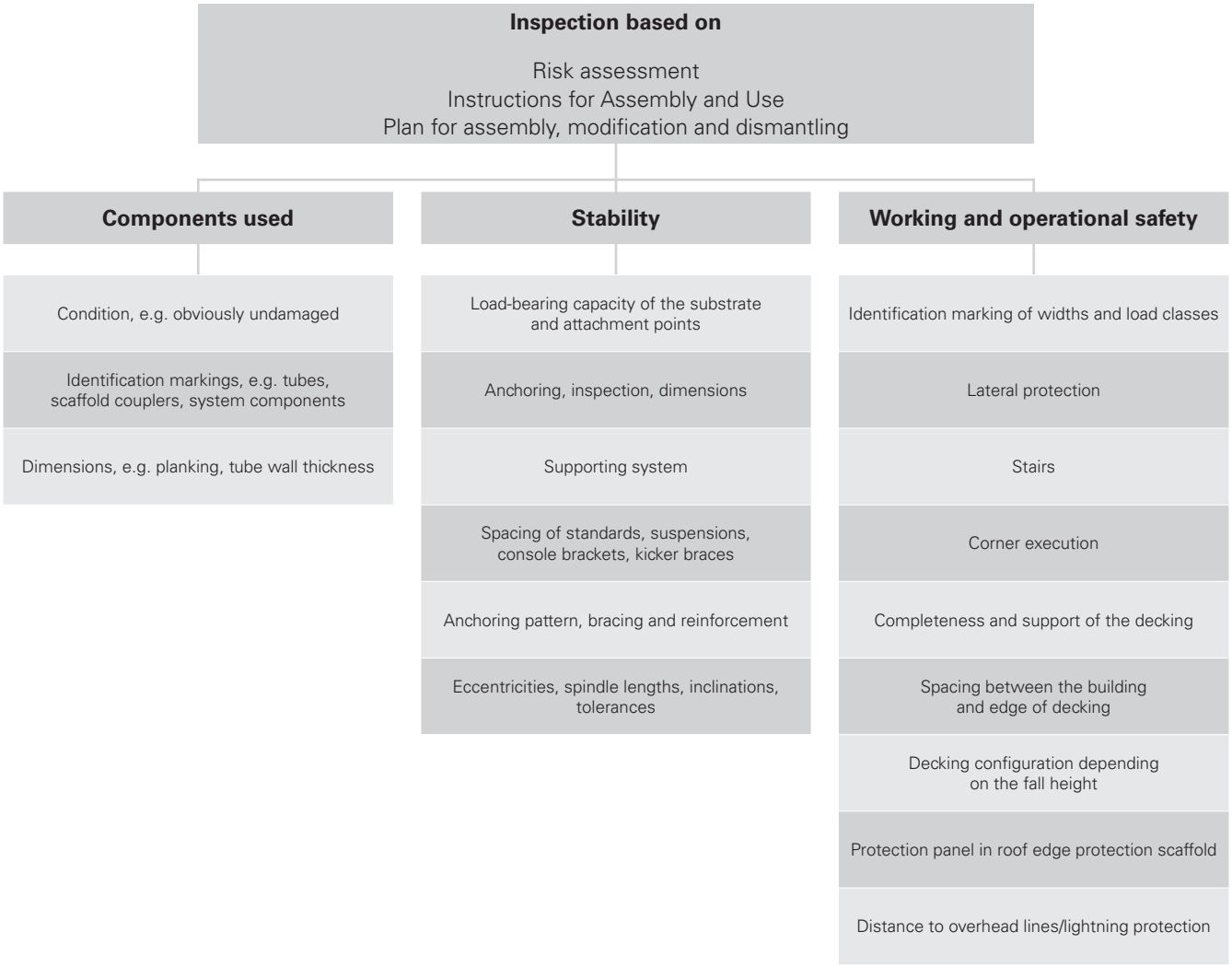
In other countries, ensure that the relevant national guidelines and regulations in the respective current version are complied with!

Inspection, handover and use

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

During the handover, the scaffolding contractor must advise the user of any possible risks involved with non-intended use and 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 scaffolding is 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

General

- Store and transport components in such a way that no unintentional change in their position is possible. Detach lifting accessories and slings 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 incl. 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 so 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, as well as being 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.

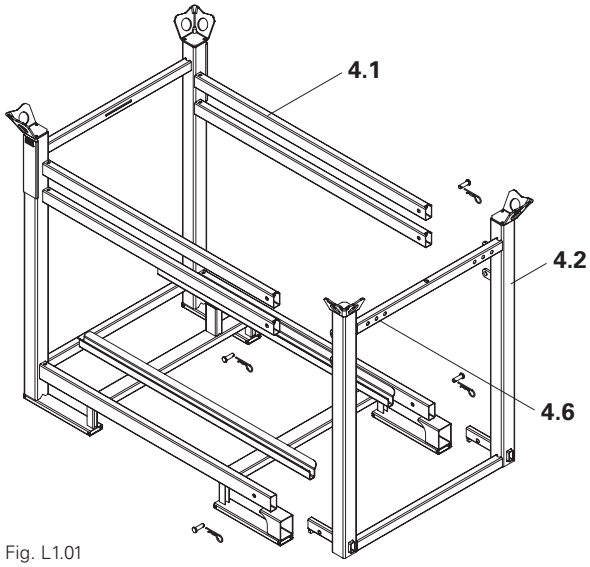


Fig. L1.01

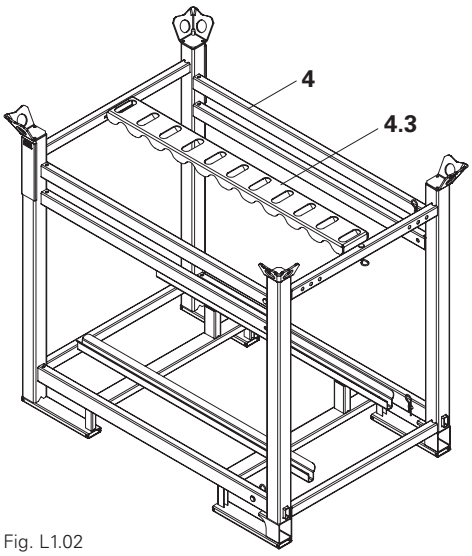


Fig. L1.02

Pallet ESP 67

The Pallet ESP 67 (**4**) consists of a pallet suspension (**4.1**) and a slide-on pallet frame (**4.2**). The securing strip (**4.3**) guarantees safe and stable storage for transportation. (Fig. L1.01 + L1.02)

Do not set down any loads on open pallets. Position additional pallets only on the stacking corners.

Max. number/load-bearing capacity on frame of each pallet:
20 Easy Frame EVF 67 or 100
(**10 Easy Frames respectively on top and bottom cantilevers**)

Crane sling angle ≤ 15°
Four-sling lifting gear ≥ 3.0 m

Max. stacking height:
Storage:

■ without wind load:	4 pallets
■ with working wind load:	3 pallets
transportation by truck:	2 pallets (secured)
Construction site:	2 pallets

Comply with the respective national transport regulations on public roads.

General

1. Release cotter pins (**4.4**) and remove bolts (**4.5**) at the top and bottom on both sides.
2. Place bolts and cotter pins in the holes (**4.6**) of the pallet frame.
3. Pull out the slide-on pallet frame (**4.2**).

→ The Easy Frame EVF can be removed from the opened pallet by hand.

(Fig. L1.01 + L1.02a)

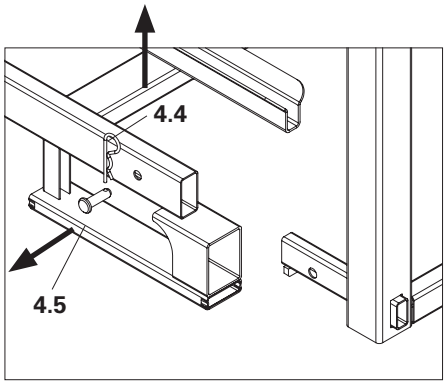


Fig. L1.02a

Load the pallet

For loading or unloading, position the Pallet ESP horizontally or slightly inclined backwards.

1. Place the first Easy Frame EVF simultaneously on the bottom cantilever (**4.7**) and on the bottom support rail (**4.8**) and push it to the end of the frame. The spigot of the Easy Frame (**16.9**) is pointing to the right. (Fig. L1.03)
2. Place the next Easy Frame EVF on the top cantilever, as well as on the top support rail and push it to the rear. The spigot of the Easy Frame (**16.9**) is pointing to the left. (Fig. L1.03a)

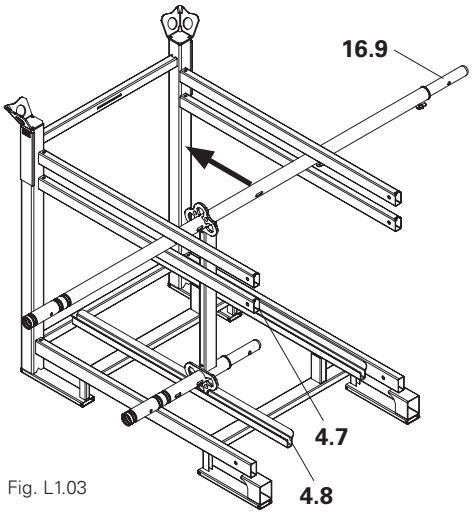


Fig. L1.03

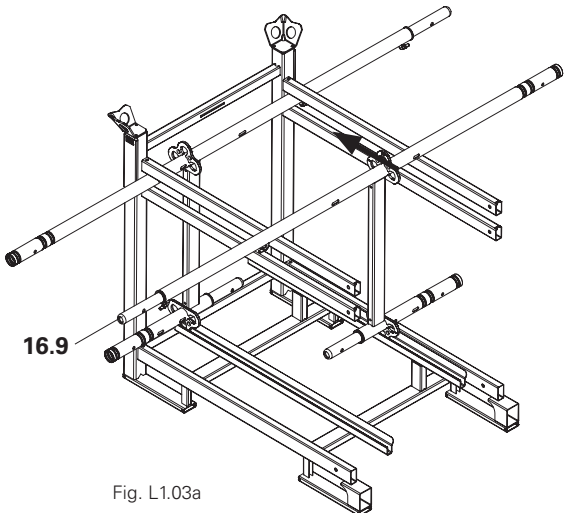


Fig. L1.03a

3. Place additional Easy Frames alternately on the top and bottom cantilevers respectively.
   In both levels, the rosettes overlap on the right and on the left alternately. (Fig. L1.03b)
4. Insert the securing strip (**4.3**) into the groove (**4.9**) and fold it downwards. (Fig. L1.04)
5. Position the pallet frame and mount it with 2 bolts (**4.5**) and cotter pins on the top cantilevers, as well as with 2 bolts (**4.5**) and cotter pins on the pallet frame.

(Fig. L1.05)

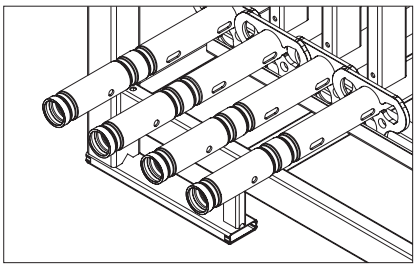


Fig. L1.03b

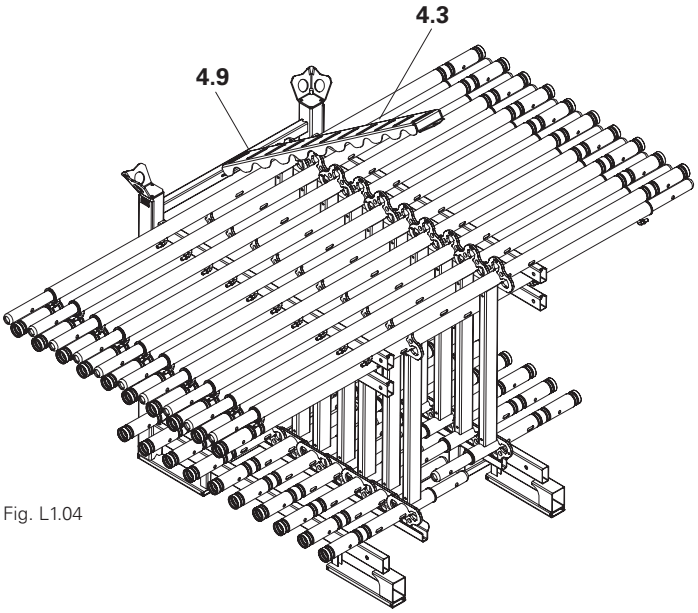


Fig. L1.04

- The bottom cantilevers do not need to be bolted.
- The securing strip doubles up as anti-slip protection. This enables partial filling. The Easy Frame inserted last must be at the top.

Crane and forklift transportation

- The Pallet ESP must always be closed for transport with the forklift or crane, and the pallet frame is secured by means of 4 bolts and cotter pins.
- Always attach the 4-sling lifting gear using the four load-bearing points (**4.10**)!
- Always attach the securing strip (**4.3**) for transportation.
- Length of the 4-sling lifting gear ≥ 3 m.

The pallet can be lifted by the forklift truck or pallet lifting trolley using the short sides.
(Fig. L1.05)

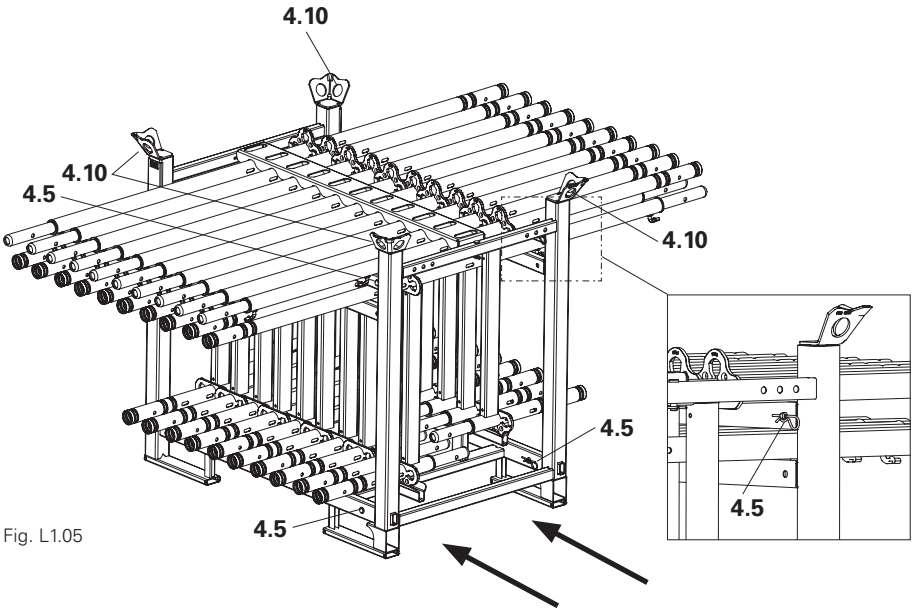


Fig. L1.05

Vertical transportation

Note

Adverse effect on safety levels due to damaged scaffold components!
⇒ Do not drop scaffold components!
⇒ Transport and store scaffold 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.
The respective manufacturer's documentation must be observed at all times!

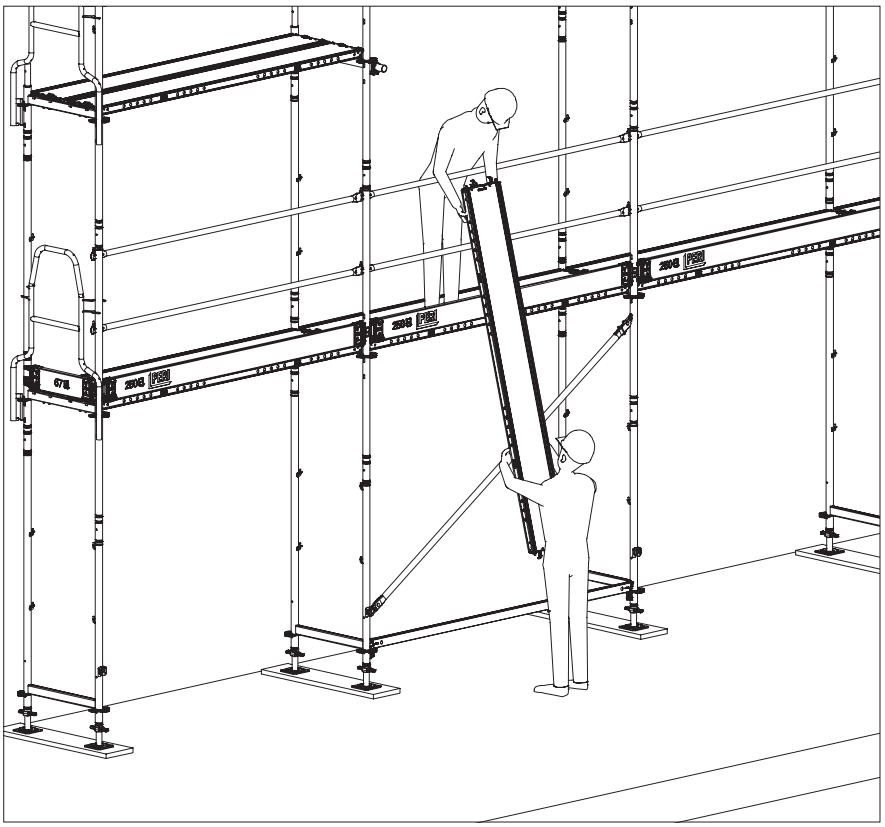


Fig. E.01

Basic scaffolding in the standard configuration

Working situation:
Assembly/dismantling of all scaffold components. (Easy Frame side and end guardrails, decks and ties)

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

The end guardrail for the next scaffold 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)

Comply with the prescribed assembly sequences!

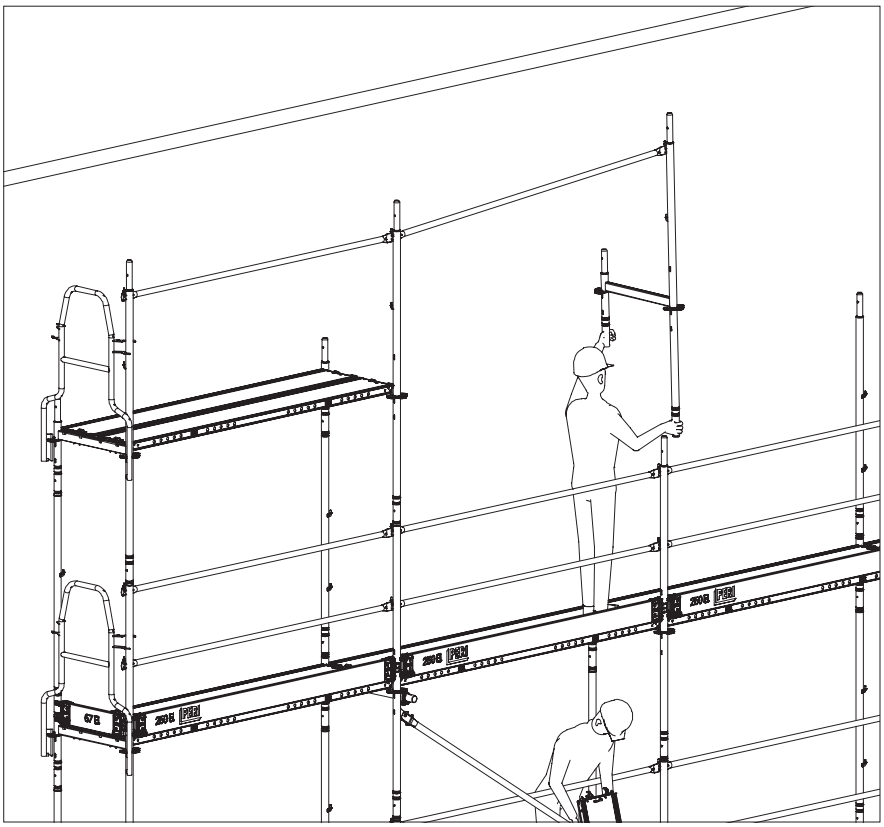


Fig. E.02

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

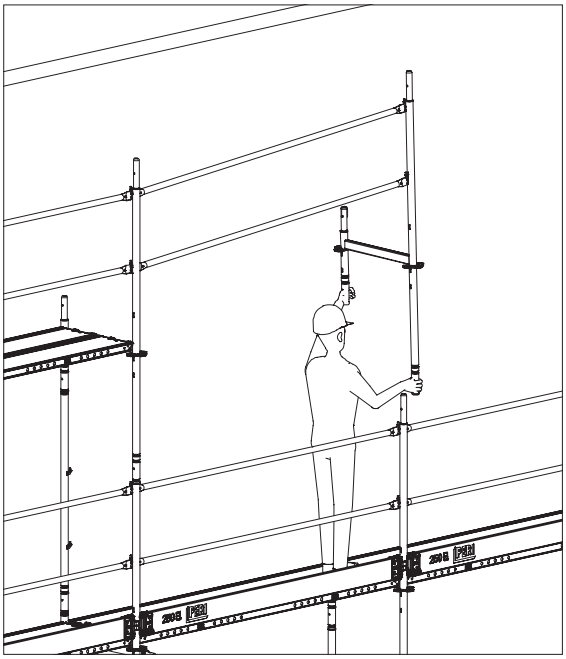


Fig. E.03

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.
- The attachment points shown apply to frame and standard variations.

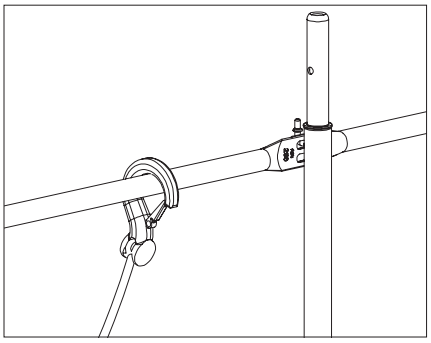


Fig. E.04

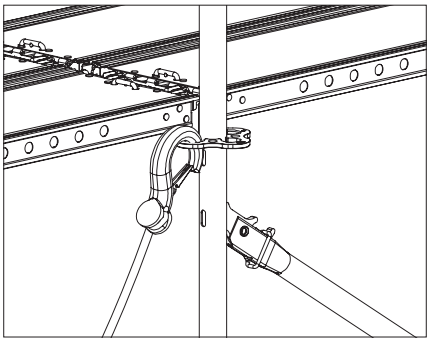


Fig. E.05

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

- which is connected to two Easy Frames EVF
- 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.

¾ rosette
Attachment point:
Every ¾ rosette on Easy Frame EVF and Head Frame EVH,

- which are integrated in the basic scaffold
- and which are completely covered with decking.
- and is installed at a minimum height of 2.0 m above the level being secured.

Easy frame variation

This variation is described in these Instructions for Assembly and Use. The scaffold side that faces the building is always referred to as the inner side of the scaffolding.

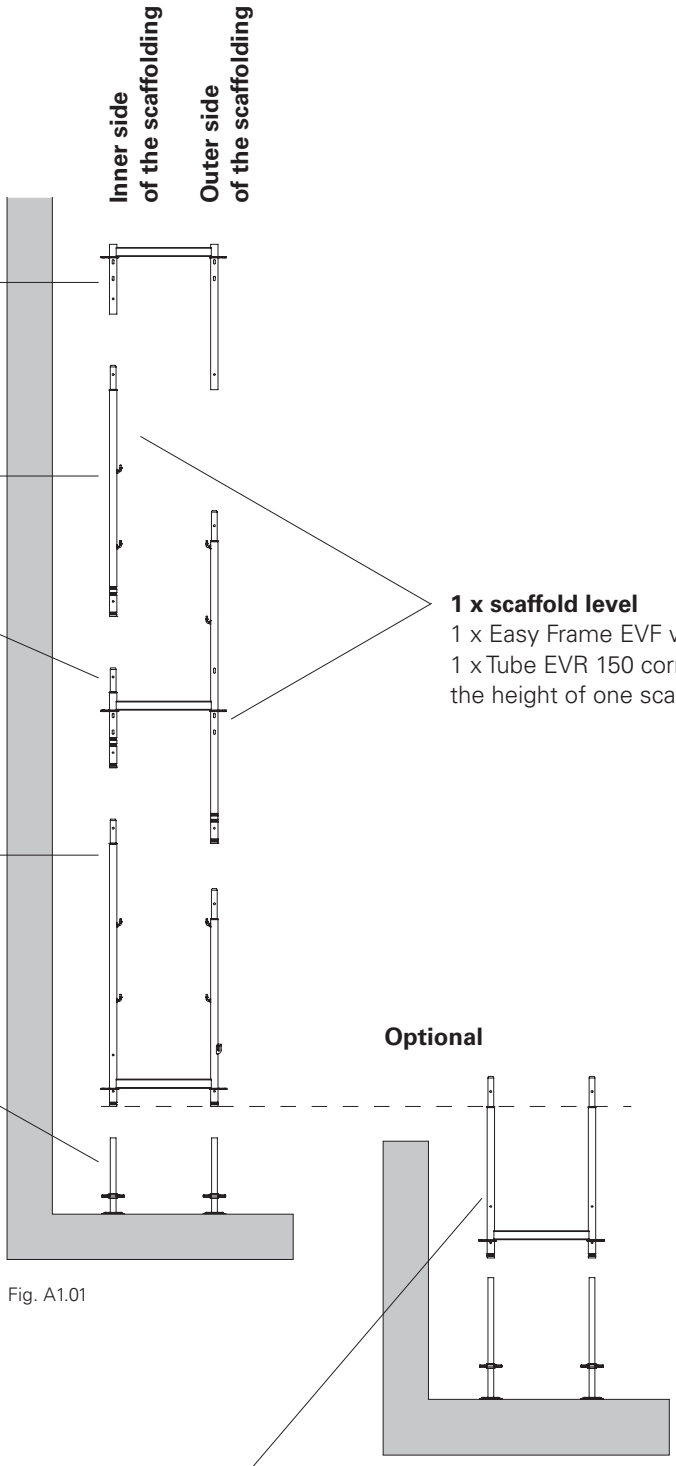


Fig. A1.01

Fig. A1.01a

Head Frame EVH
The long tube (outer tube) forms the outer side of the scaffolding. The short tube (inner tube) forms the inner side of the scaffolding.

Tube EVR 150
Assembly always takes place on the inner side of the scaffolding.

Easy Frame EVF
The long tube (outer tube) forms the outer side of the scaffolding. The short tube (inner tube) forms the inner side of the scaffolding.

Base Frame EVB
The short tube (outer tube) forms the outer side of the scaffolding. The long tube (inner tube) forms the inner side of the scaffolding.

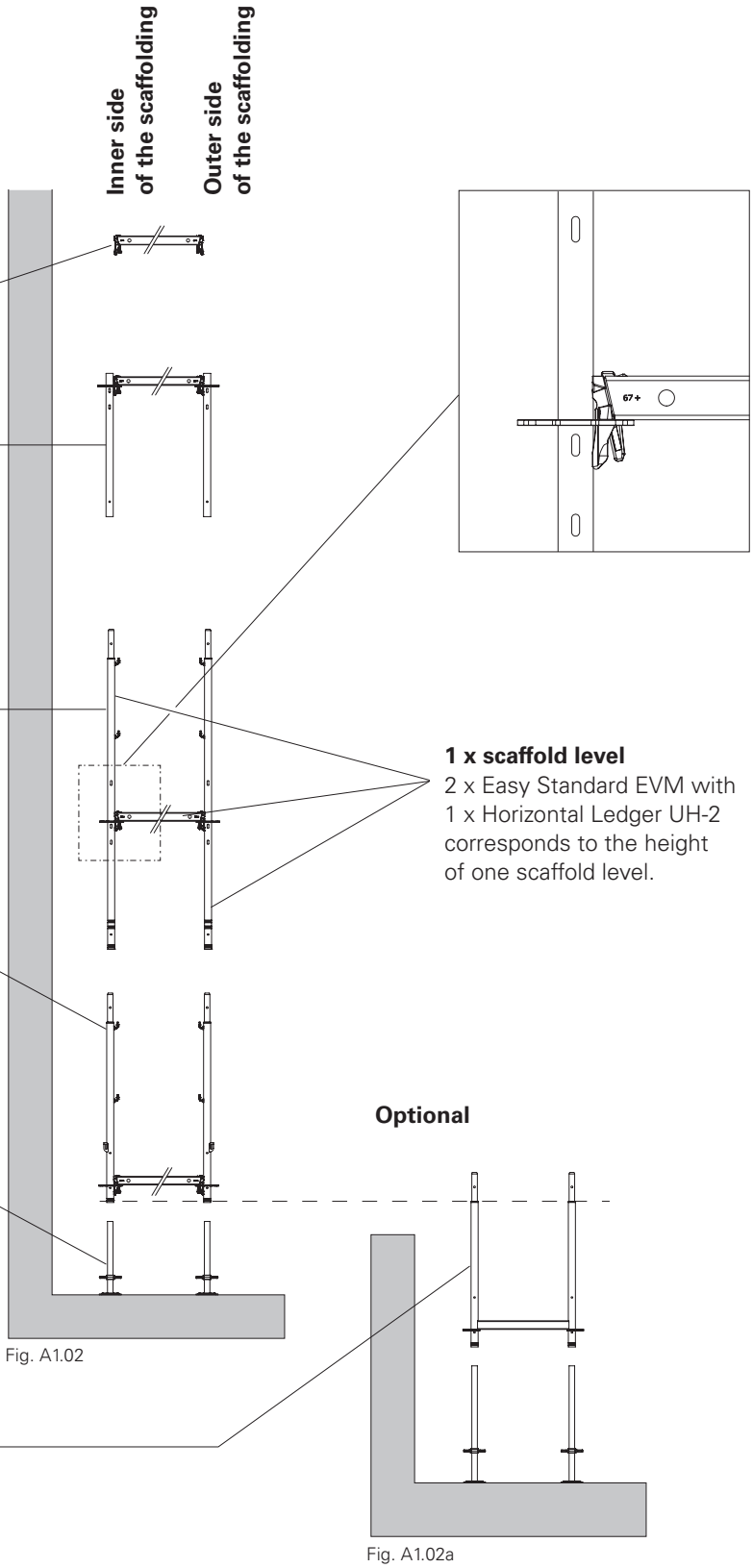
Base Spindles UJB
Available in two different max. spindling lengths (including plate and quick jack nut)

- Base Spindle UJB 38-50/30 with red quick jack nut: max. 35 cm spindling length. (Fig. A1.01)
- Base Spindle UJB 38-80/55 with yellow quick jack nut: max. 60 cm spindling length (Fig. A1.01a)

Optional
Base Compensation EVA
available in 0.50 m and 1.00 m compensation heights. (Fig. A1.01a)

Easy standard variation

For the comprehensive description of the standard variation, see the Instructions for Assembly and Use for the PERI UP Easy Facade Scaffold 67 and 100, standard variation.



Horizontal Ledger UH-2 67/100
as a crossbar.

Top Standard EVT 96
Height = 0.96 m.
The standards can be used on both the inner and outer sides.

Easy Standard EVM 200
Height = 2.00 m.
The standards can be used on both the inner and outer sides.

1 x scaffold level
2 x Easy Standard EVM with 1 x Horizontal Ledger UH-2 corresponds to the height of one scaffold level.

Easy Base Standard EVS 124
Height = 1.24 m.
The standards can be used on both the inner and outer sides.

Base Spindles UJB
see previous page.

Fig. A1.02

Optional

Optional
Base Compensation EVA
available in 0.50 m and 1.00 m compensation heights. (Fig. A1.01a)

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 (**14**) 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.
   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. (Fig. A2.02 – A2.03)

→ Horizontal ledger is installed.

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)

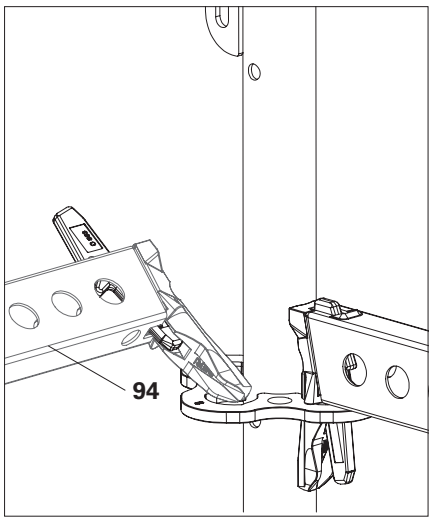


Fig. A2.01

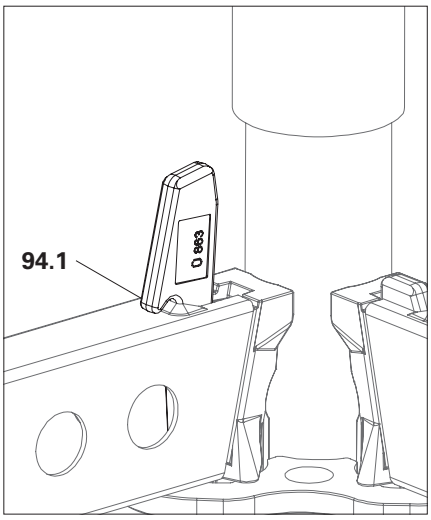


Fig. A2.01a

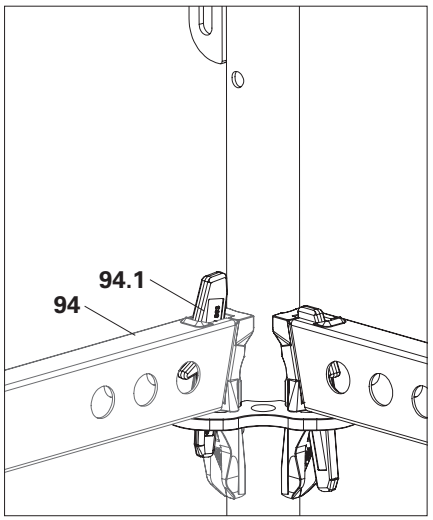


Fig. A2.02

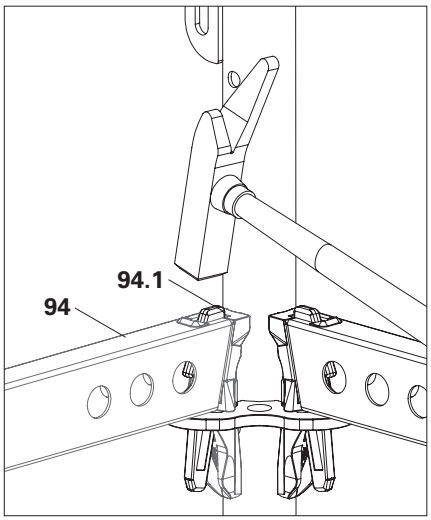


Fig. A2.03

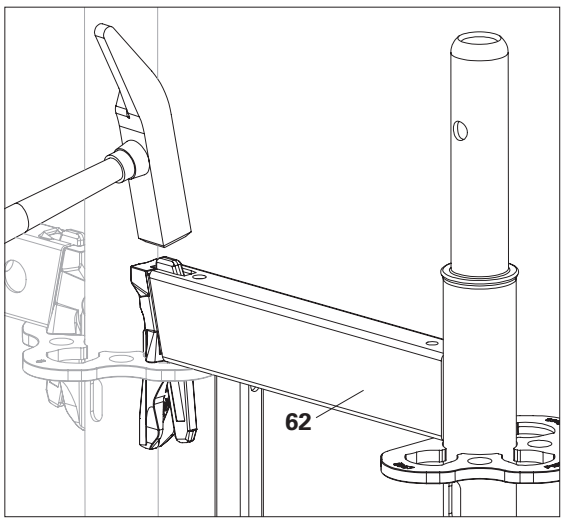


Fig. A2.04

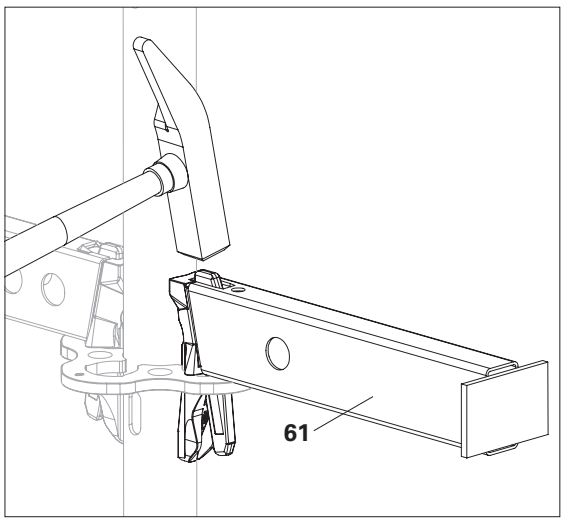


Fig. A2.05

Stair Guardrails EAG

The Stair Guardrail EAG (**77**) is used in conjunction with Locking Pin EAG (**79**) as 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 + 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. Connect both Stair Guardrails EAG with Locking Pins EAG (**79**) through the post holes (**77.3**). (Fig. A3.02)

→ The Stair Guardrail EAG is mounted.

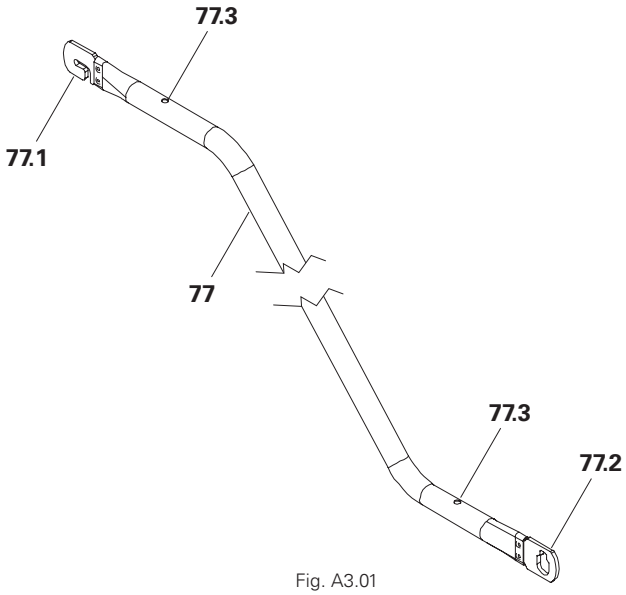


Fig. A3.01

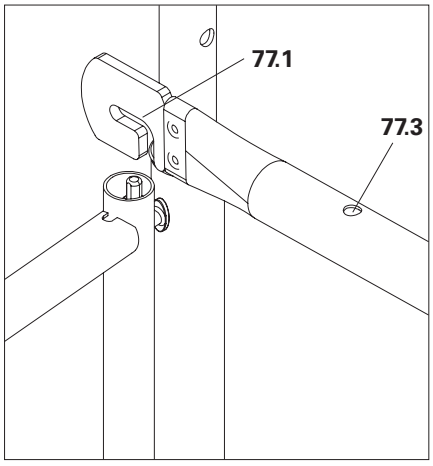


Fig. A3.01a

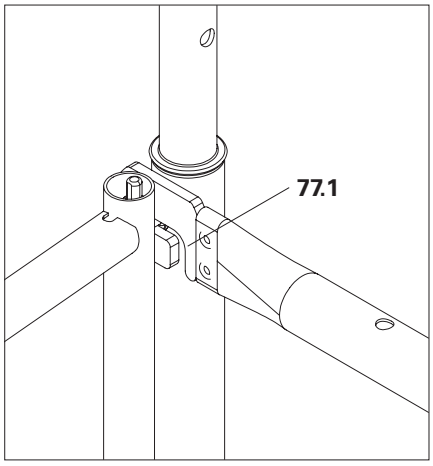


Fig. A3.01b

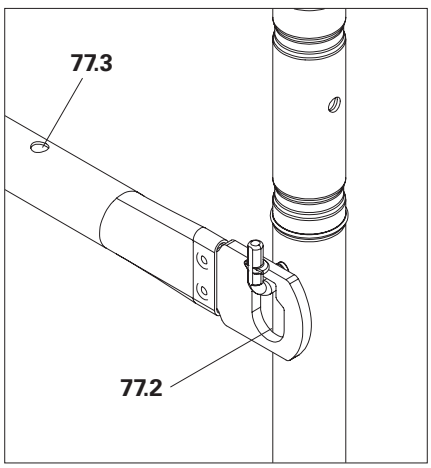


Fig. A3.01c

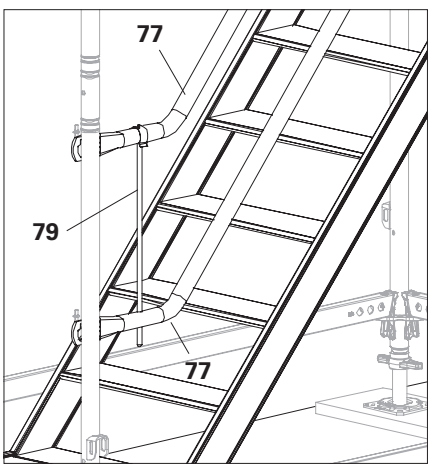


Fig. A3.02

Guardrail connection plate

Guardrail post assembly

1. Turn the connecting pieces (**51.1**) of the guardrail post horizontally and position them on the guardrail hooks. (Fig. A3.03a)
2. Align the slot (**51.2**) with the guardrail hook (**16.1**) and insert.

(Fig. A3.03b)

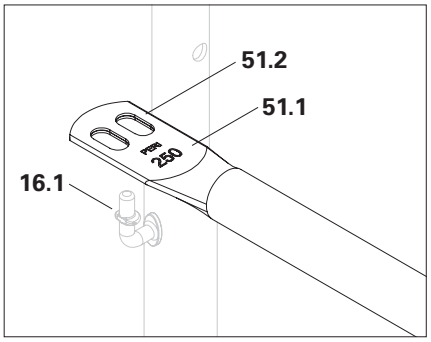


Fig. A3.03a

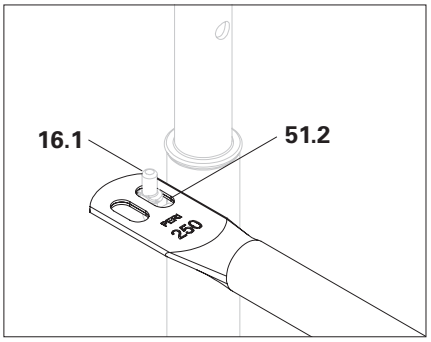


Fig. A3.03b

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

(Fig. A3.03c)

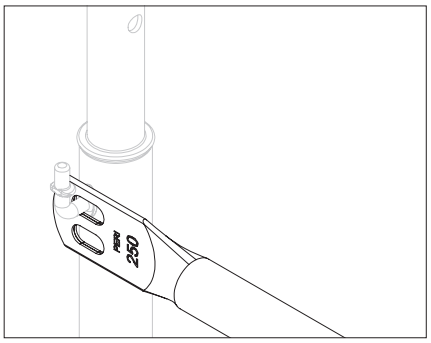


Fig. A3.03c

- For assembly and dismantling, first insert or detach one side, then the other side.
- Assembly on the Easy Frame EVF, Guardrail Post EVP, Tube EVR 150 and standard variation 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 frame and guardrail post" on page 59.

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

If the maximum permissible distance to the building is exceeded, you should fit lateral protection on the inner side of the scaffolding. See Section "Internal lateral protection" on page 31. Observe national laws and regulations.

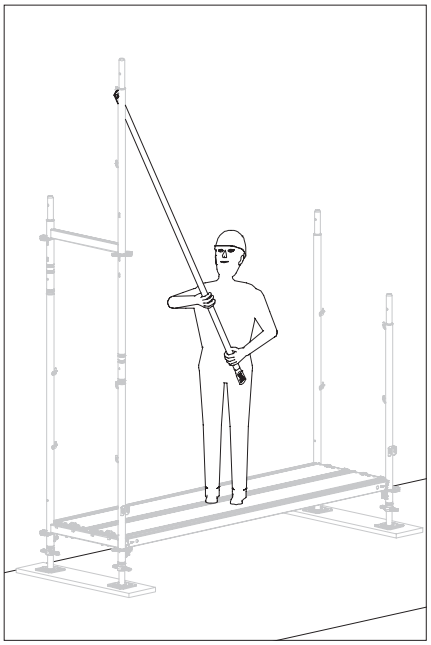


Fig. A3.04a

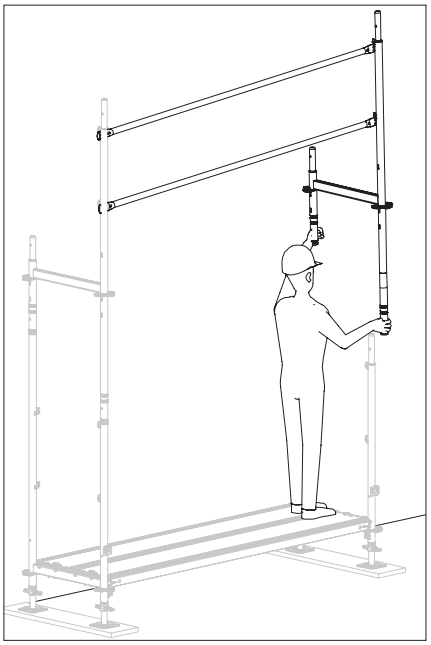


Fig. A3.04b

Wooden toe board/steel toe board

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

Toe Board Wood UPF

Toe Boards UPF are installed correctly if every PERI logo is correctly positioned.

Assembly

1. Insert the Toe Board UPF (**56**) on one side with the end piece on the outer tube (**16.2**) of the Easy Frame EVF.
2. Lower onto the deck.
3. Raise the other side so that the second end piece can be inserted into the other outer tube.

(Fig. A3.05)

4. Lower the toe board onto the deck.

→ The toe board is now installed.
(Fig. A3.06)

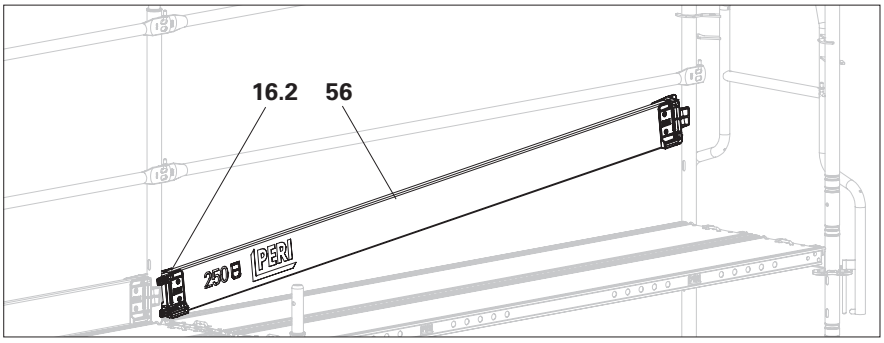


Fig. A3.05

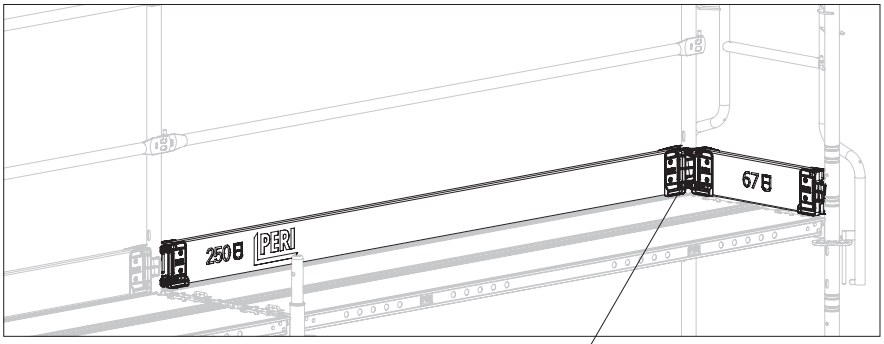


Fig. A3.06

- Assembly on the Easy Frame EVF, Guardrail Post EVP, Tube EVR 150, Easy Standard EVM 200 etc. is carried out in the same way.
- For corners, turn the toe boards so that the retaining lugs (**56.2**) of the end pieces engage with each other. (Fig. A3.06a)

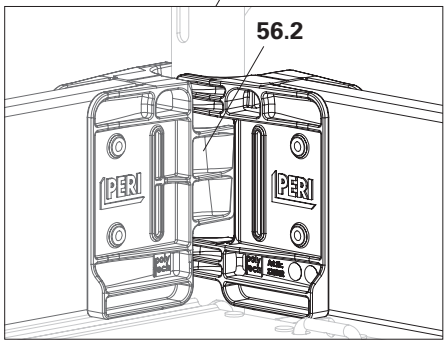


Fig. A3.06a

Toe Board UPY

Using Toe Board 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)

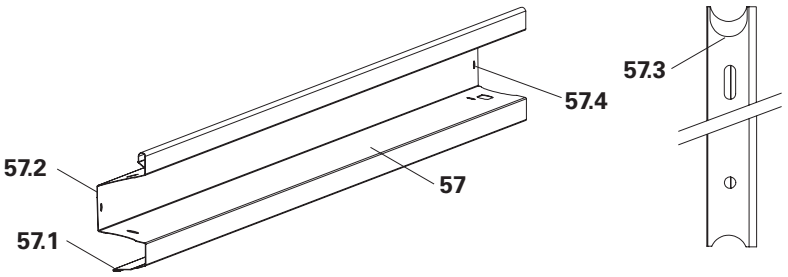


Fig. A3.07

3. Insert Toe Board UPY (**57**) from the inner side of the scaffolding 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 outer tube (**16.2**).
5. Lower the toe board onto the deck.

→ The toe board is installed.

(Fig. A3.08)

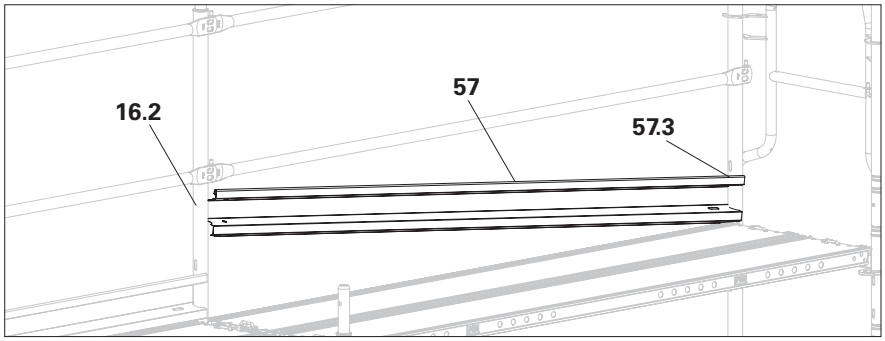


Fig. A3.08

Assembly around a corner:

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

■ On a right-hand corner:

3. Insert Toe Board UPY (**57**) from the outside-left first of all. The larger tube cut-out (**57.3**) is on the left. (Fig. A3.09)
4. Raise the Toe Board UPY on the right-hand side and position it on the inner tube.
5. Lower the toe board onto the deck.

→ The toe board is installed. (Fig. A3.10)

■ On a left-hand corner:

3. Insert Toe Board UPY (**57**) from the outside-left first of all. The larger tube cut-out (**57.3**) is on the left. (Fig. A3.09)
4. Raise the Toe Board UPY (**57a**) which has already been mounted in the bay.
5. Place the Toe Board UPY (**57**) on the outer 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)

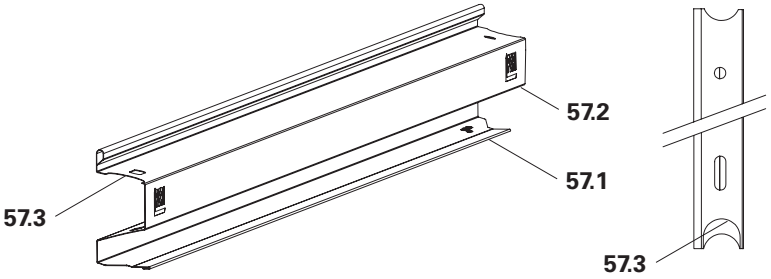


Fig. A3.09

Right corner

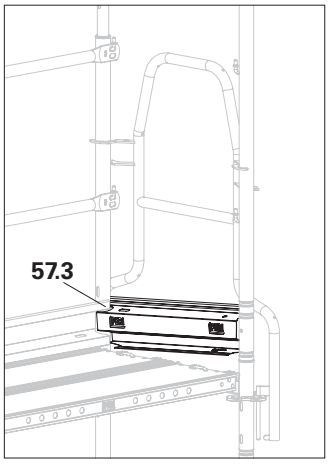


Fig. A3.10

Left corner

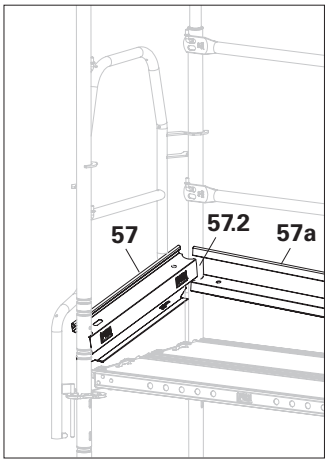


Fig. A3.11

Internal lateral protection

If the maximum permissible distance to the building is exceeded, there is a risk of falling on the inner side of the scaffolding.
In this case, the lateral protection must be installed on the inner side of the scaffolding.
Observe national laws and regulations.

Warning
During assembly, there is a risk of falling on the inner side of the scaffolding.
⇒ Take appropriate measures to prevent falls!

Assembly
1. Turn tube EVR 150 (**18**) so that the guardrail hooks (**18.1**) point inwards. (Fig. A3.12 + A3.12a)
2. Suspend Guardrail Post EPG (**51**) from the top guardrail hook (**18.1**) of the Tube EVR 150.
3. Install intermediate guardrail (**51a**) and Toe Board UPF (**56**).

→ The inner lateral protection is installed.
(Fig. A3.13)

On the upper scaffold level, install the Guardrail Post EVP instead of the Tube EVR 150.

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

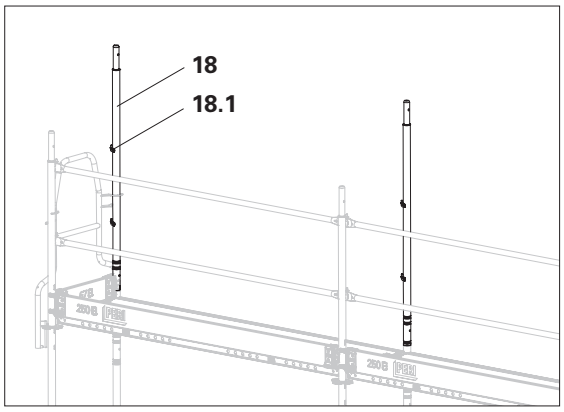


Fig. A3.12

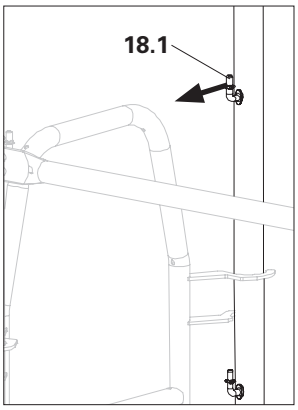


Fig. A3.12a

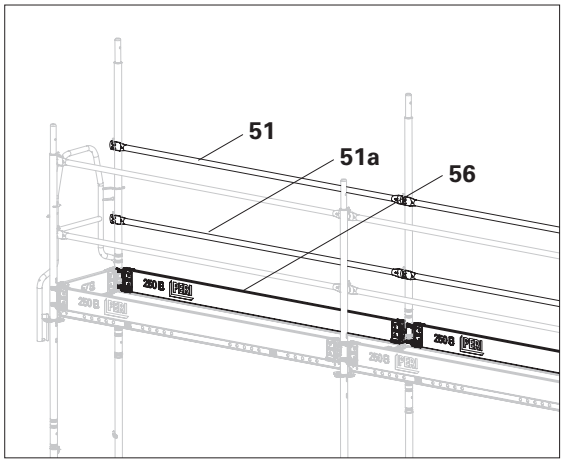


Fig. A3.13

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 scaffolding. (Fig. A3.14a)
2. Swing the leading end guardrail to the left so that the fork (**52.2**) engages around the outer leg (**16.2**). (Fig. A3.14b)

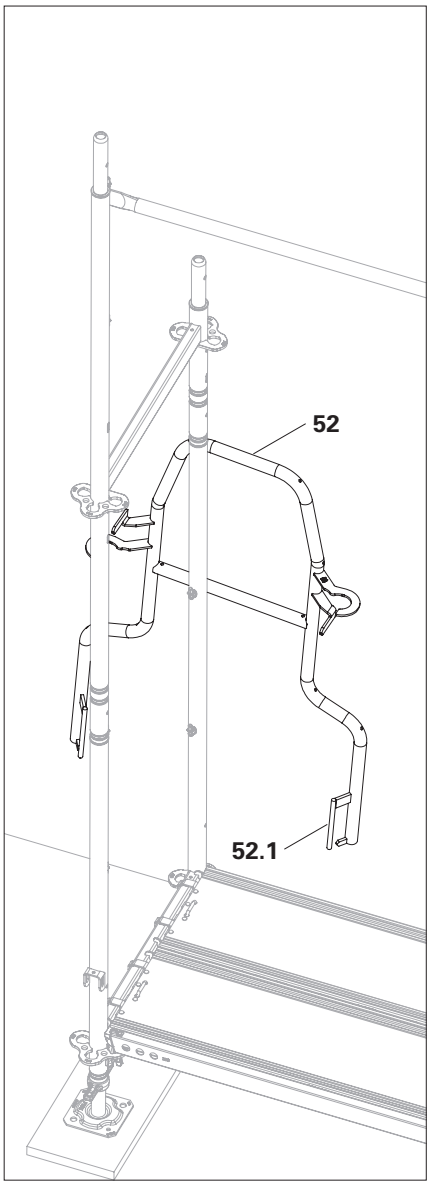


Fig. A3.14a

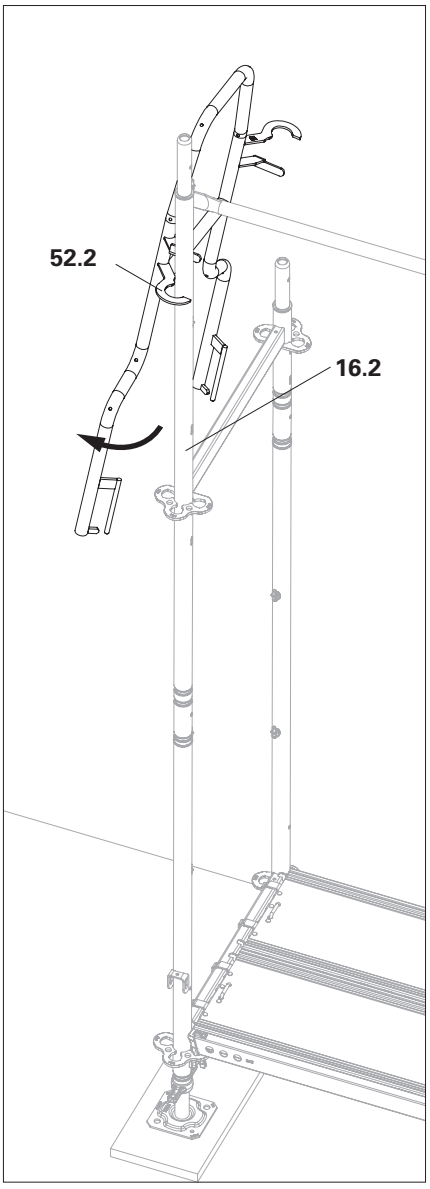


Fig. A3.14b

3. Raise the end guardrail in advance and insert the pegs (**52.1**) into the brace adapter (**16.5**) of the rosette from above. Lower the end guardrail in advance as far as it will go. (Fig. A3.14c)

→ End Guardrail UPA in advance is now installed.

(Fig. A3.14c)

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

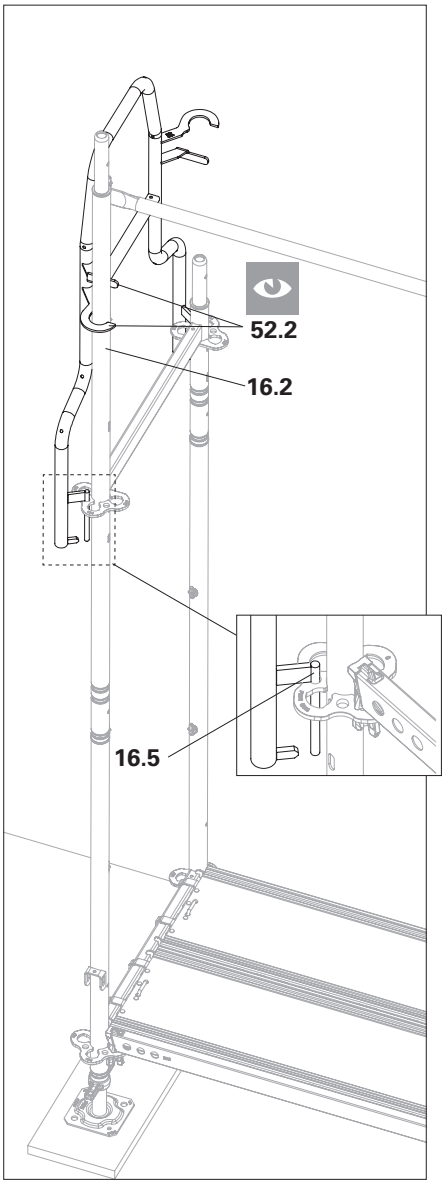


Fig. A3.14c

Does the fork (**52.2**) enclose the outer leg of the Easy frame (**16.2**)?

End Guardrail EPF

Install the End Guardrail EPF (**54**) from a secured position.
Install the Guardrail Post EVP or Easy Standard EVM in such a way that the guardrail hook is pointing towards the middle of the scaffolding.

Assembly

1. Push the fork (**54.1**) onto the tube positioned opposite. (Fig. A3.15a)
2. Attach both slots (**54.2**) to the guardrail hooks. (Fig. A3.15b)
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. A3.16)

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

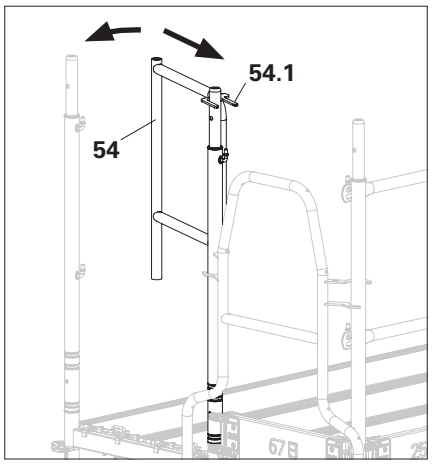


Fig. A3.15a

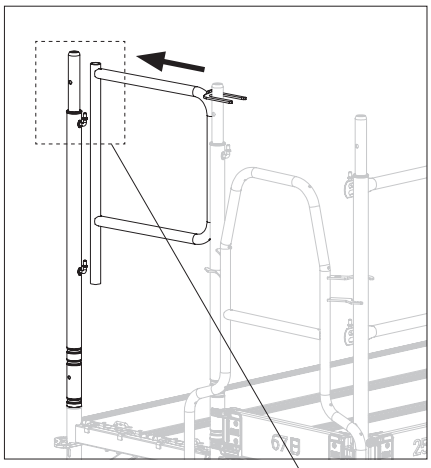
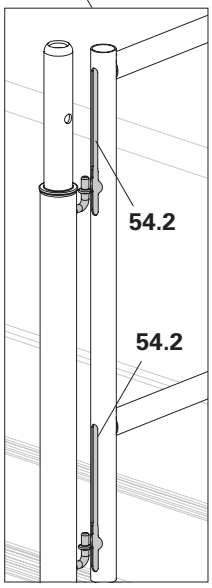


Fig. A3.15b



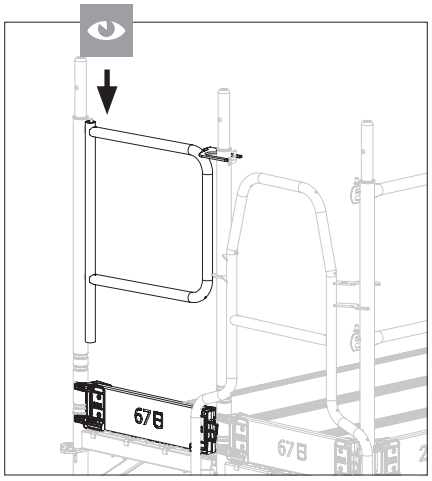


Fig. A3.16

Replacing end guardrails

The End Guardrail in Advance UPA-2 can be replaced with an End Guardrail EPF at every level. On the upper scaffold level, End Guardrail UPA-2 can remain in place until the scaffolding 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. (Fig. A3.17a)
- Once the next scaffold 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. A3.17a + A3.17b)

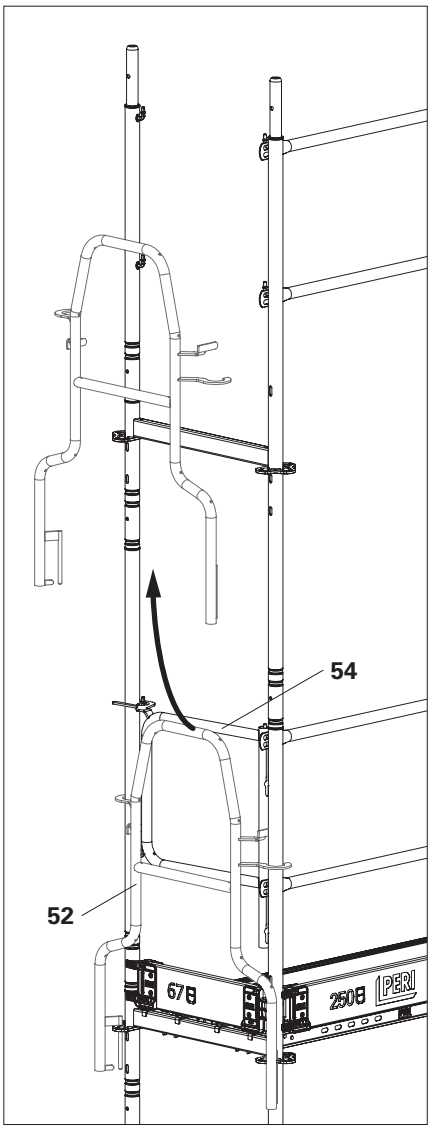


Fig. A3.17a

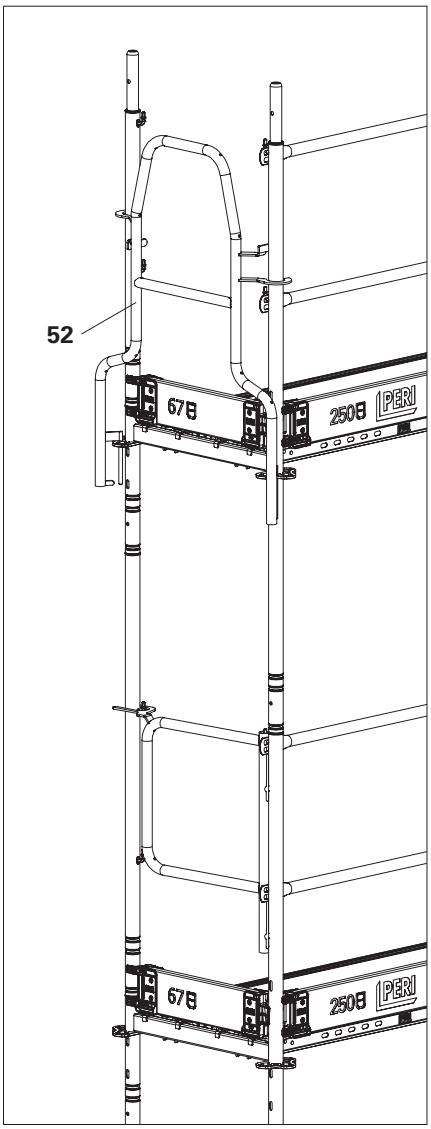


Fig. A3.17b

Decks

Note

Stability compromised without system decking.

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

Various system decks are available for PERI UP Easy:

- For width class W06 ≥ 60 cm
  - Steel Deck EDS 33 (**30**),
  - Aluminium Deck EDA 67 (**31**)
  - Composite Deck EDC 67 (**32**)
  - Combi Deck EDW 67 (**37**).
- For width class W09 ≥ 90 cm
  - Steel Deck EDS 33 (**30**).

All decks have integrated lift locks.

→ Installation of the Steel Deck EDS is shown below.

Aluminium Decks EDA 67 or Steel Decks EDS 33 must be used for scaffolding > 24 m.

Assembly

1. Pick up the deck (**30**) in the centre, tip it laterally on its edge, and lift it over both crossbars (**16.6**).
2. Place the decks one after the other on the crossbars of the Base Frames EVA or Easy Frames EVF.
3. Lift locks (**30.1**) drop beneath the crossbar and secure the deck.

→ The deck is installed.
(Fig. A4.02)

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

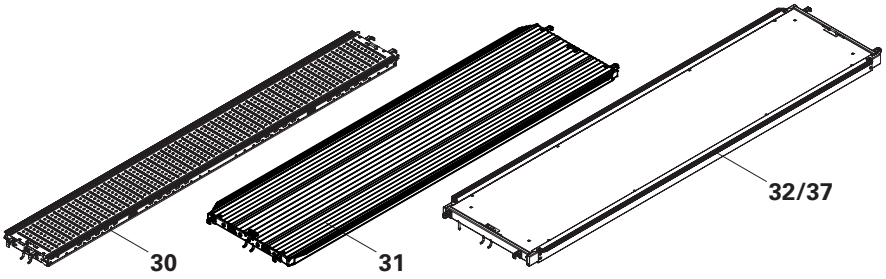


Fig. A4.01

Fig. A4.01a

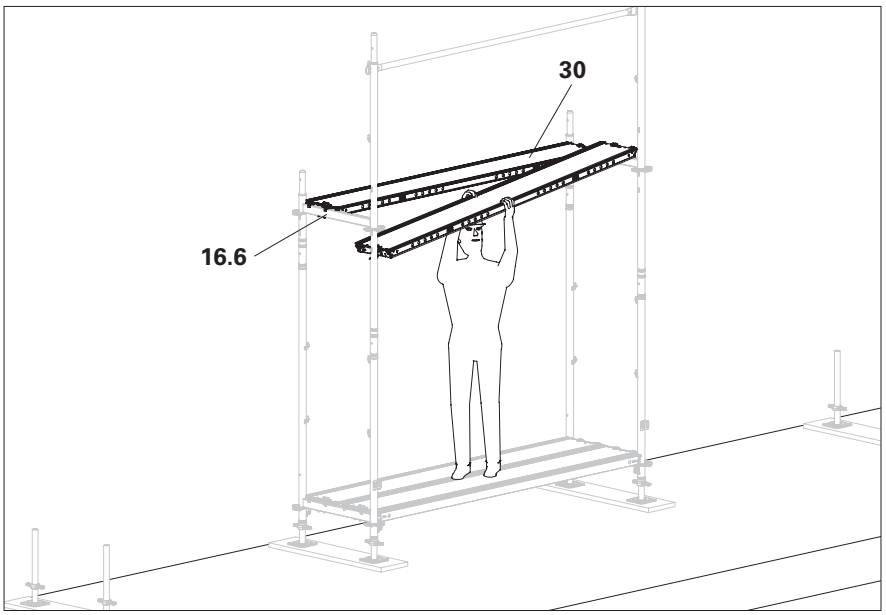


Fig. A4.02

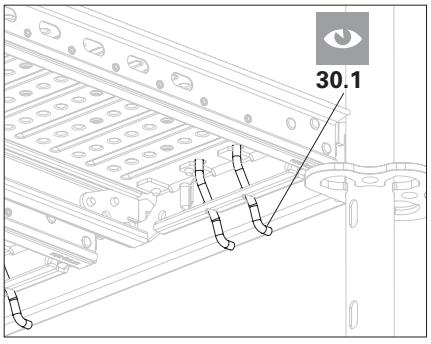


Fig. A4.03

Have all lift locks (**30.1**) on the deck dropped beneath the crossbar?
If not, lift the deck slightly and let it drop into position or operate the lift lock manually. (Fig. A4.03)

Dismantling the decking

1. On one side of the decking, 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 the crossbar (**16.6**). (Fig. A4.04)
4. Lift the deck in the centre, tip it laterally on its edge, and unscrew it in a downwards direction. (not shown)

→ The deck has now been removed

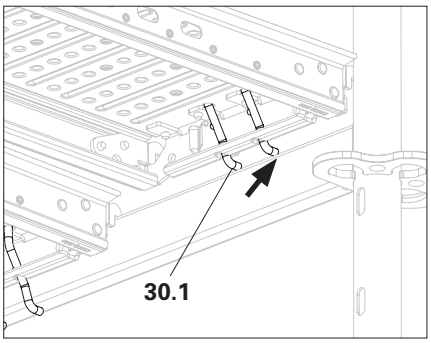


Fig. A4.04

If the deck lock is not pulled out all the way, this side of the deck falls back onto the ledger when the opposite side is lifted.

Internal access

Internal access is not possible for width class W09. See section Scaffold access “External access with staircase” on 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).

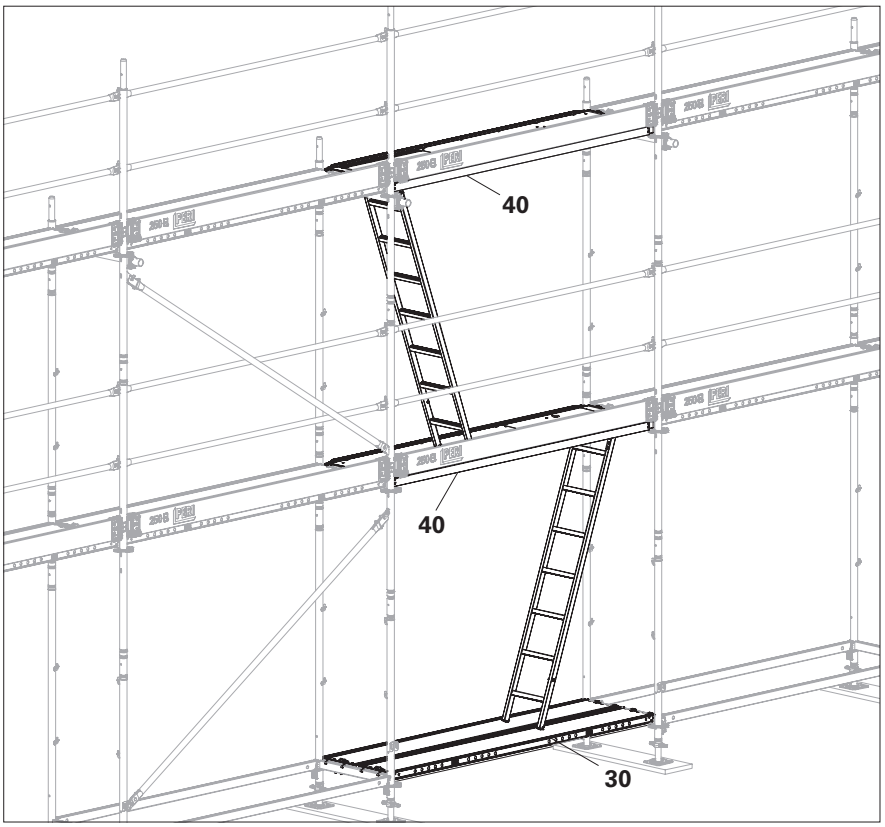


Fig. A4.05

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**) (with attached access ladder) in the basic scaffold.

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 scaffold levels.
   See Section "Decks" on page 36.

→ Access deck is installed.
(Fig. A4.05)

- For system width 100, a front-mounted stair tower must be fitted.
- To lock and unlock the hatch and ladder, hold the spring clip down and guide the hatch or ladder by hand. (Fig. A4.06a)

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.

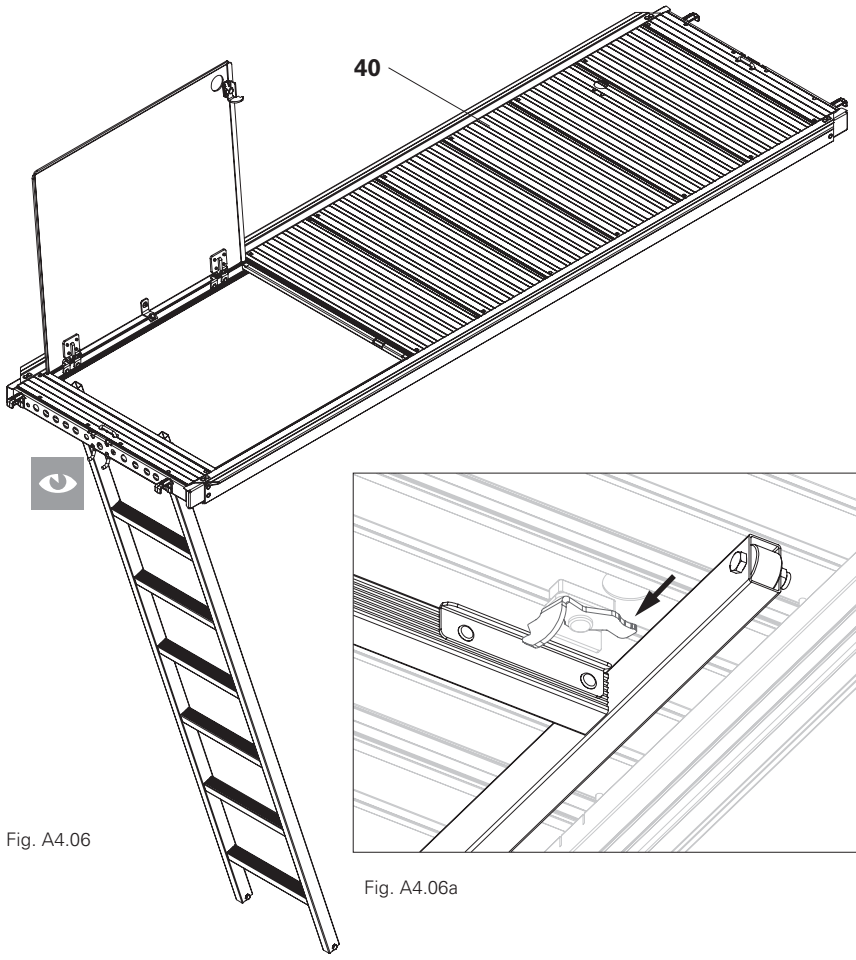


Fig. A4.06

Fig. A4.06a

- 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. A4.06 + A4.07)

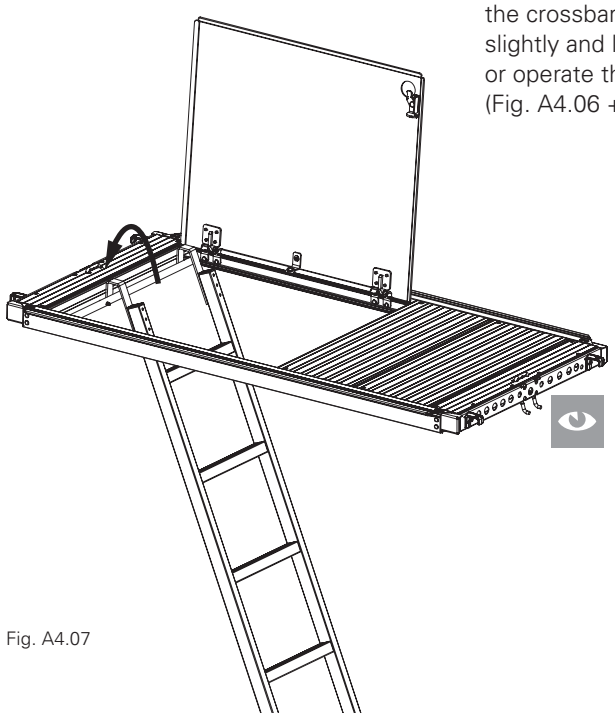


Fig. A4.07

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 diagonal brace may be used to brace a maximum of five scaffold bays. (Fig. A5.01)
- The exact number and position of the horizontal ledgers in the base level and the braces is given in Section tie pattern.

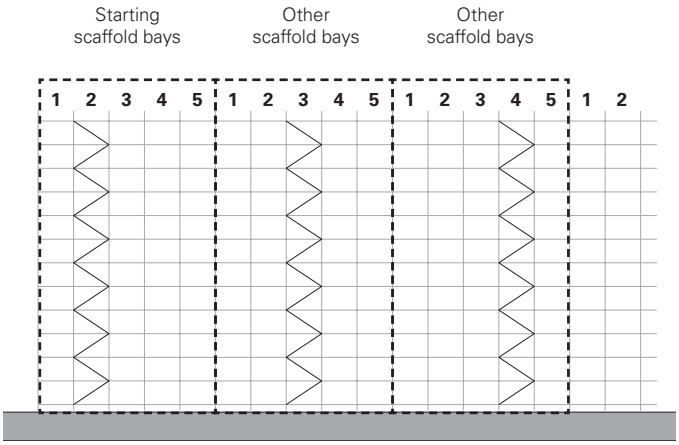


Fig. A5.01

Assembly

1. Attach the fixed brace head (**20.1**) to the slot (**15.7**).
   - In the Base Frame EVB (**15**) see Fig. A5.02+ A5.02a
   - In the Easy Frame EVF (**16**) see Fig. A5.02+ A5.02b

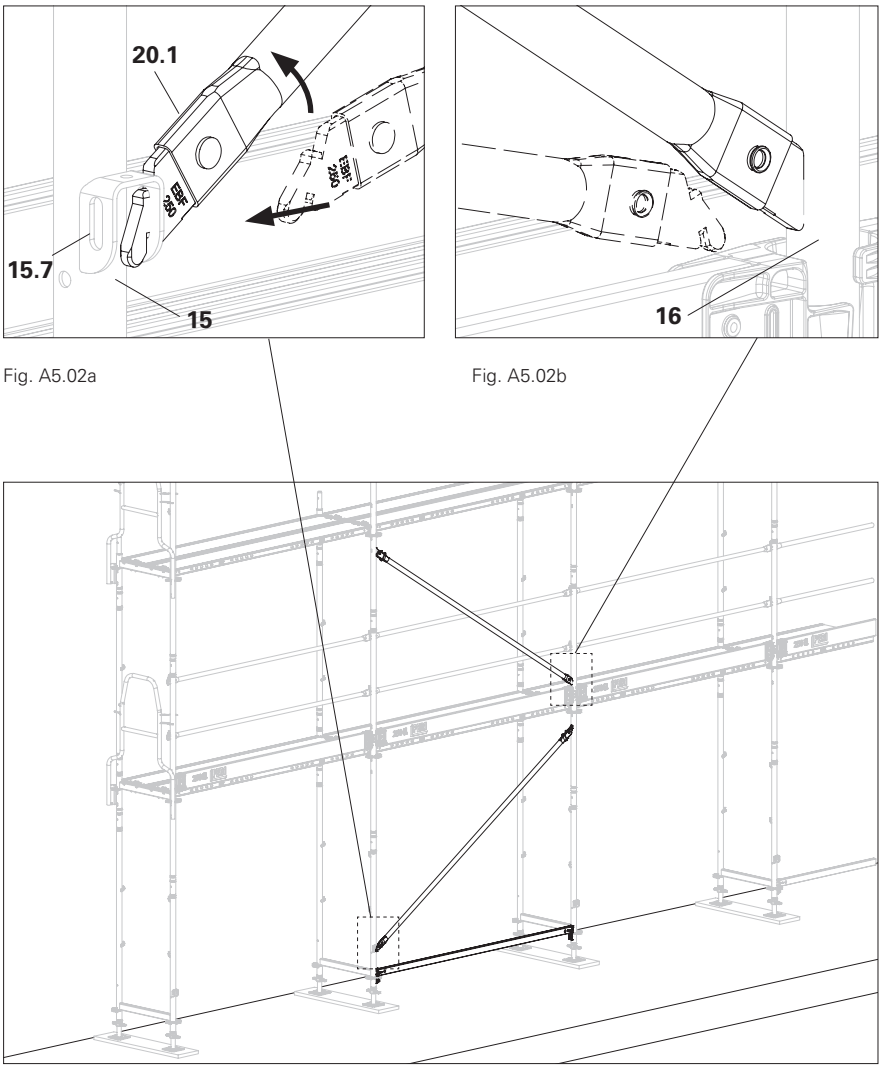


Fig. A5.02a

Fig. A5.02b

Fig. A5.02

2. Lift the Face Brace EBF (**20**) on the other side up to the slot.
3. Push the locking ring (**20.3**) upwards, swivel the Brace Head (**20.2**) and insert into the slot (**16.8**) of the Easy Frame EVF.

(Fig. A5.03)

4. Press the Face Brace EBF (**20**) downwards and secure with the locking ring (**20.3**).

→ The face brace is now installed.
(Fig. A5.04)

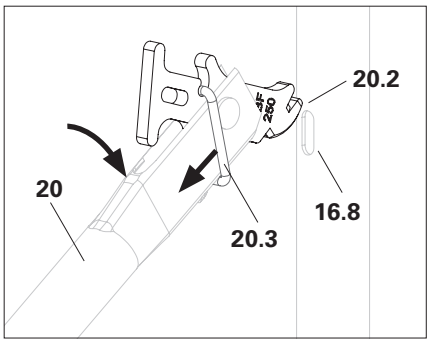


Fig. A5.03

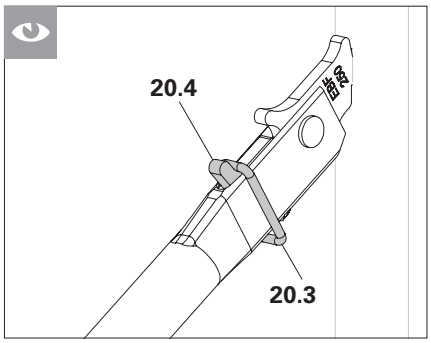


Fig. A5.04

Is the locking ring (**20.3**) at the lower limit stop (**20.4**)? If not, push it as far as possible manually! (Fig. 5.04)

Internal braces

For installation as an internal bracing, mount the Brace Adapter EBA (**24**) on the inner tube at the base level.

Assembly

1. Insert the twist protection (**24.1**) into the positioning hole of the standards.
2. Close the coupling and tighten the screw closure (**24.2**) with 50 Nm.
3. Mount the Face Brace EBF. (Fig. A5.05a)

→ Internal bracing is now installed.
(Fig. A5.05)

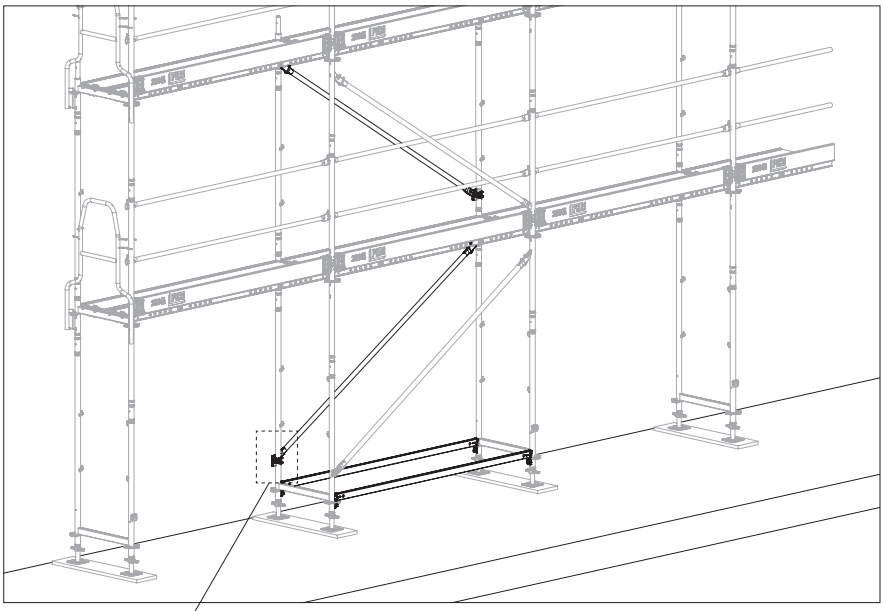


Fig. A5.05

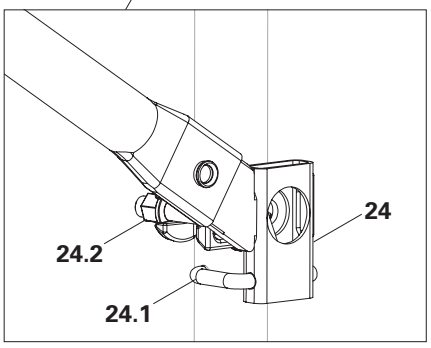


Fig. A5.05a

A6 System component: Console Bracket

General

For PERI UP Easy,
Console Brackets ECM (**62**) (with rosette and 50 cm standard) and Supports UC (**61**) (without rosette and standard) 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 Brackets ECM 67
Console Brackets ECM 100

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

Alternatively:
Supports UC 25 with Decks UDG in 25 cm widths.

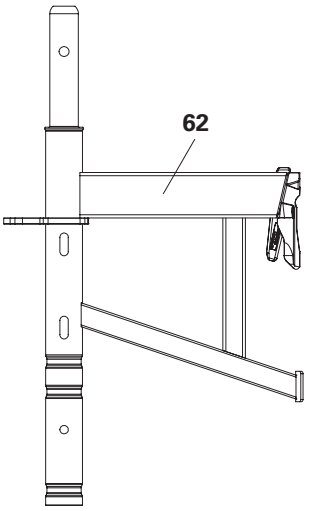


Fig. A6.01

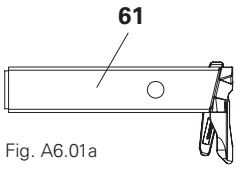


Fig. A6.01a

- Additional anchoring is required to mount the console brackets, see the Section Tie pattern.
- Observe the load classes of the decks, see Section "E1 Load-bearing capacities" on page 160.
- The surface loads or standard loads specified in each case shall apply.

Use as internal console bracket			
Supports	**Bay length**	**Load class**	**F [kN]**
UC 25/33	≤ 3.00 m	LC 3	-
UCS 33	≤ 3.00 m	LC 4	-
Console brackets			
UCB 25	≤ 2.50 m	LC 6	9.1
	3.00 m	LC 5	9.1
ECM 33	≤ 3.00 m	LC 6	6.5
ECM 67*	≤ 3.00 m	LC 3	7.8
ECM 100*	≤ 3.00 m	LC 3	4.1
ECM 33 with Support UC 33*	≤ 3.00 m	LC 3	

Use as external console bracket			
Console brackets	**Bay length**	**Load class**	**F [kN]**
ECM 33	≤ 3.00 m	LC 6	8.9
ECM 33 with protection panel	≤ 3.00 m	LC 3	
ECM 67	≤ 3.00 m	LC 4	5.8
ECM 67 with protection panel	≤ 3.00 m	LC 3	
ECM 100	≤ 3.00 m	LC 3	3.9
ECM 100 with protection panel	≤ 3.00 m	LC 3	

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

Console brackets on the scaffold

- Console brackets are always installed from below!
- See Section "A2 Wedge connections" on page 24

Assembling Console Bracket ECM 33

1. Attach Console Bracket ECM 33 (**62**) to ¾ rosette. The formwork half (**62.2**) must rest against the vertical tube. (Fig. A6.03)
2. Secure the wedge.

→ The console bracket is now mounted. (A6.03a)

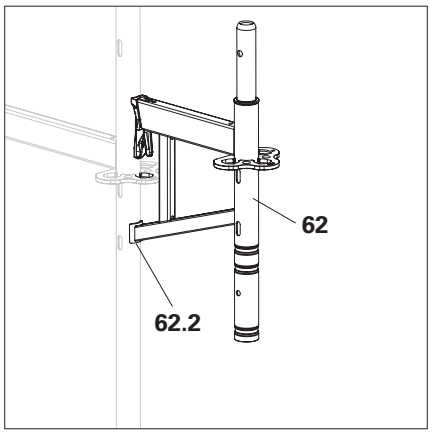


Fig. A6.03

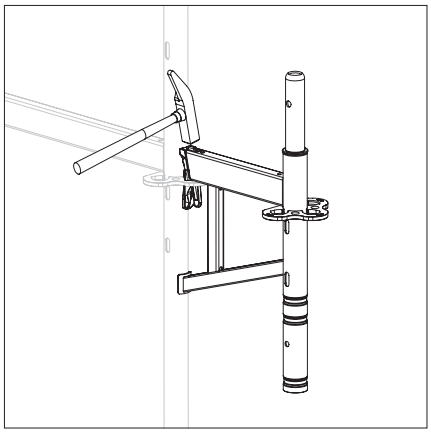


Fig. A6.03a

Console Bracket ECM 67/ECM 100

1. Connect the Console Bracket ECM 67 (**63**) or ECM 100 to the ¾ rosette (**16.4**) of the Easy Frame EVF or the Head Frame EVH parallel to the scaffold.

(Fig. A6.04)

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. A6.04a)

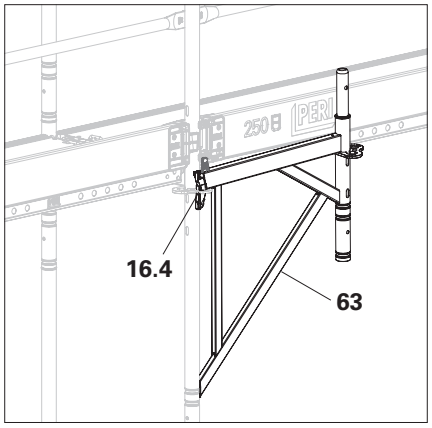


Fig. A6.04

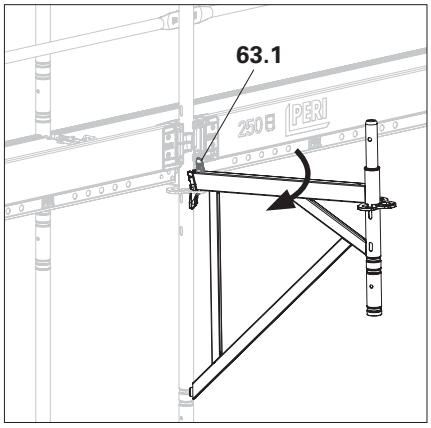


Fig. A6.04a

3. Drop the wedge into the ¾ rosette. Secure the wedge.

→ The console bracket is now mounted. (Fig. A6.04b)

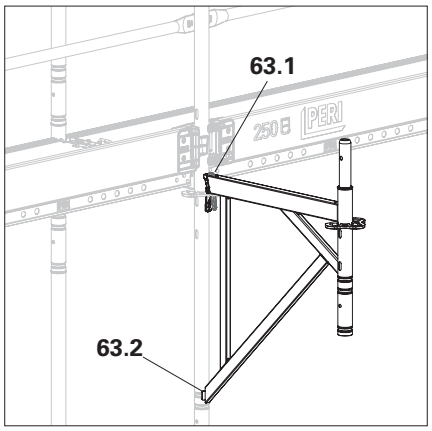


Fig. A6.04b

Console brackets with protection panel posts/ guardrail posts

Position the Protection Panel Post EPS or Guardrail Post EVP on the scaffold before assembling the console bracket, and then mount together.
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 (**63**). (Fig. A6.05)
2. Push Protection Panel Post EPS upwards on the Console Bracket ECM, and then attach it to the Console Bracket ECM. (Fig. A6.06 + A6.07)
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. A6.07)

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)

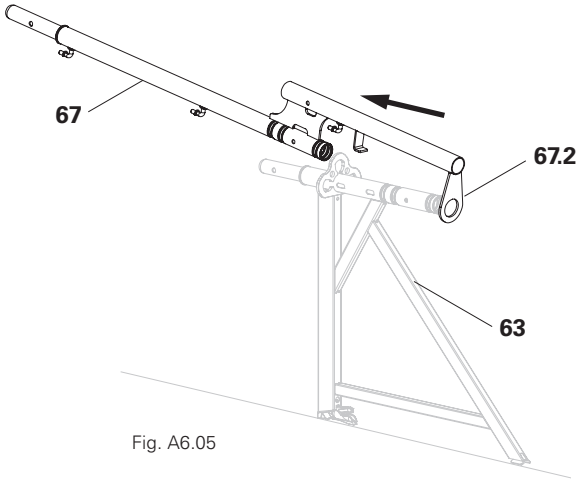


Fig. A6.05

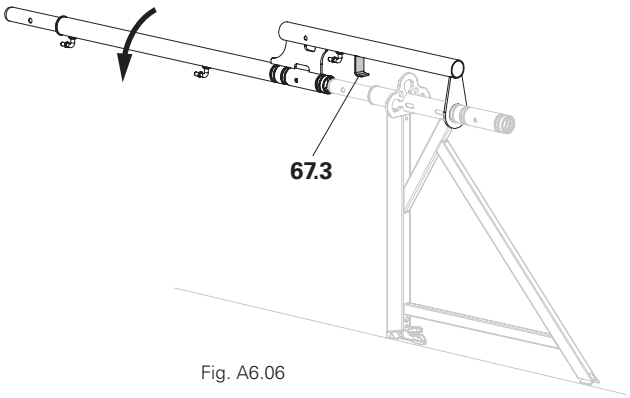


Fig. A6.06

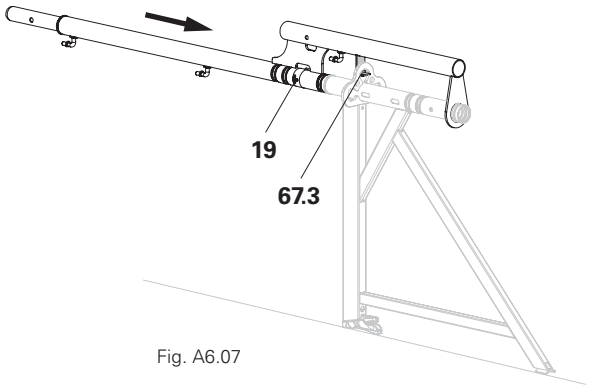


Fig. A6.07

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. A6.08)

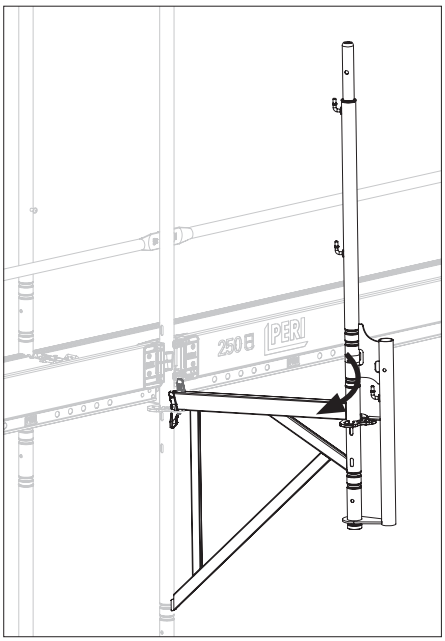


Fig. A6.08

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. A6.02 + A6.02a)
- Mount 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.

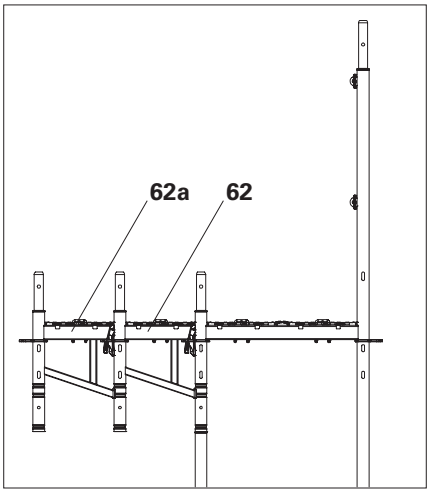


Fig. A6.02

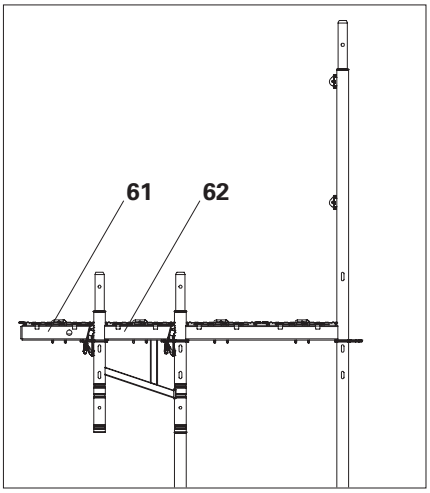


Fig. A6.02a

Assembling the ties on the scaffold

Caution

The Wall Tie Coupler EWC can become detached when subjected to movements, fall to the ground and injure persons below.

⇒ Do not pre-assemble the wall tie coupler.

⇒ Fit the Wall Tie UWT immediately.

Note

- Screw closures for the couplings must be tightened with a torque of 50 Nm!
- Not suitable for single-stem compression-resistant supports.

Wall Tie Holder EWC

Assembly

1. Insert the Wall Tie Coupler EWC (**45**) into the slot (**16.8**) of the Easy Frame EVF or console bracket and turn it 90° downwards. Possible for single-standard and multi-standard wall ties.

→ The wall tie coupler is now installed. (Fig. A7.01 – A7.01b)

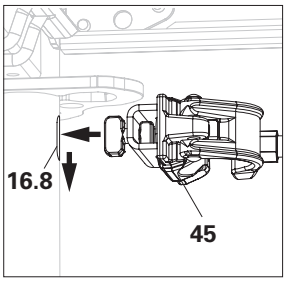


Fig. A7.01

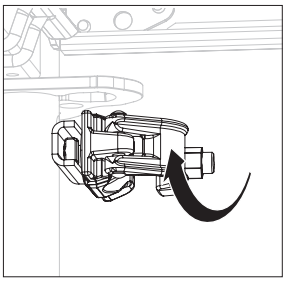


Fig. A7.01a

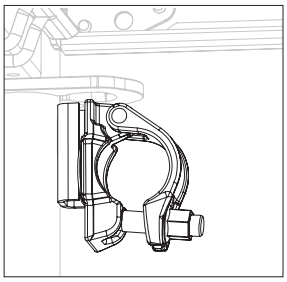


Fig. A7.01b

Wall Tie UWT

Assembly

1. Attach the Wall Tie UWT (**46**) to the eyebolt.
2. Fit the Wall Tie UWT onto the Wall Tie Coupler(s) EWC (**45**).

→ The wall tie is now installed.
(Fig. A7.02 + A7.03)
Standard couplers can also be mounted instead of Wall Tie Couplers EWC.
Possible for single and double wall ties, as well as triangulated ties.

The wall tie coupler can be installed using different slot positions (**16.8**). This results in a range of possible installation angles for the Wall Tie UWT. (Fig. A7.04 – A7.04b)

Fit the Wall Tie UWT (**46**) as close as possible to the crossbar (**16.6**) of the Easy Frame EVF in order to achieve the highest possible clearance height.

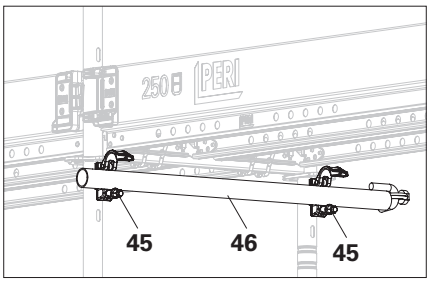


Fig. A7.02

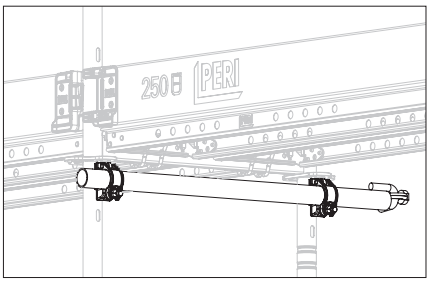


Fig. A7.03

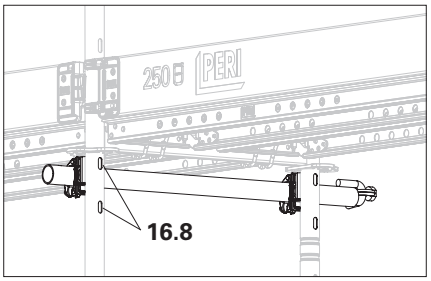


Fig. A7.04

Right or left on the Easy Frame.

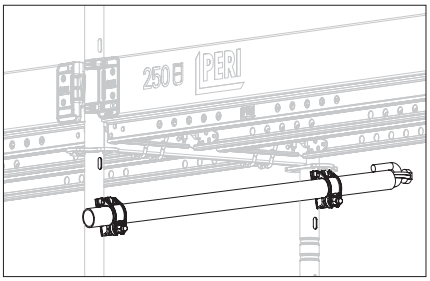


Fig. A7.04a

Vertically inclined. Attention: reduced clearance height!

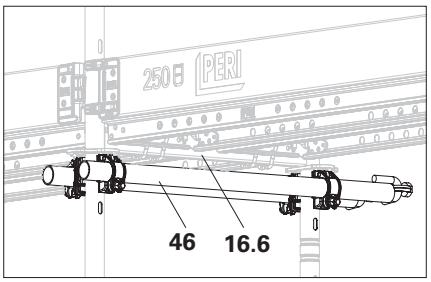


Fig. A7.04b

Both sides on the Easy Frame.

General

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 Tube UPC-T

For closing tube ends with d = 48.3 mm. (Fig. A8.01)

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

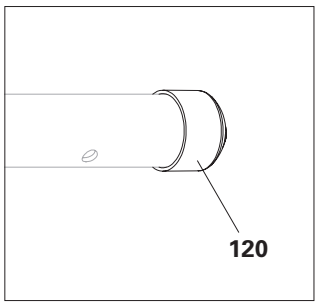


Fig. A8.02

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.

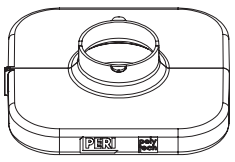


Fig. A8.03

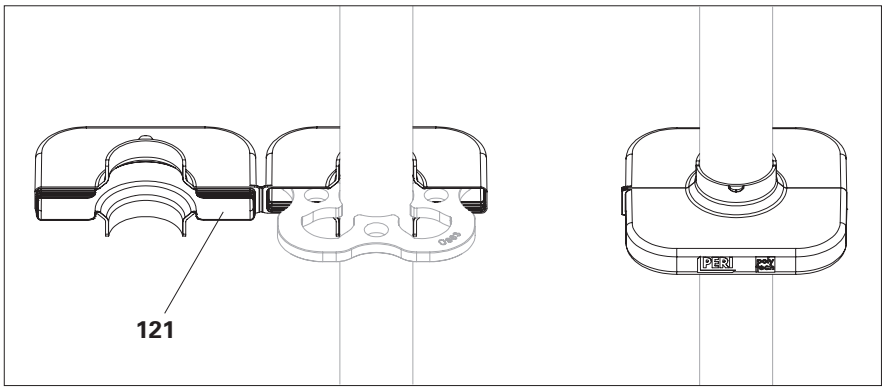


Fig. A8.04

Poly Cover Coupling UPC-C

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

Assembly

1. Clip the Poly Cover Couplings UPC-C (**122**) onto the scaffold standard 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 + A8.07a)

→ The poly cover is mounted.

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

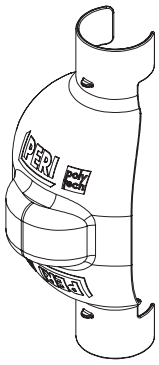


Fig. A8.05

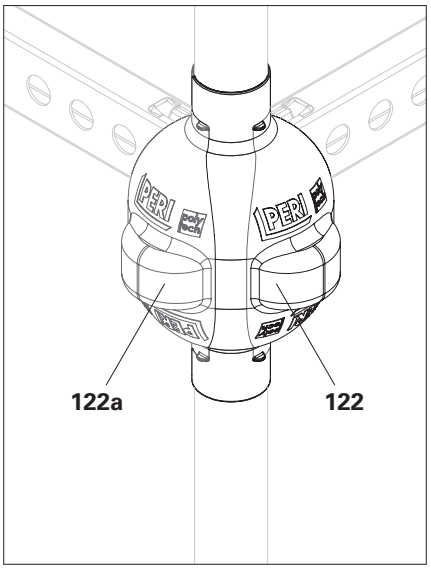


Fig. A8.06

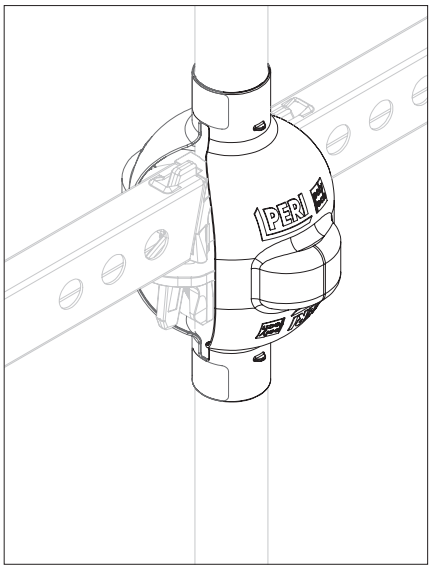


Fig. A8.06a

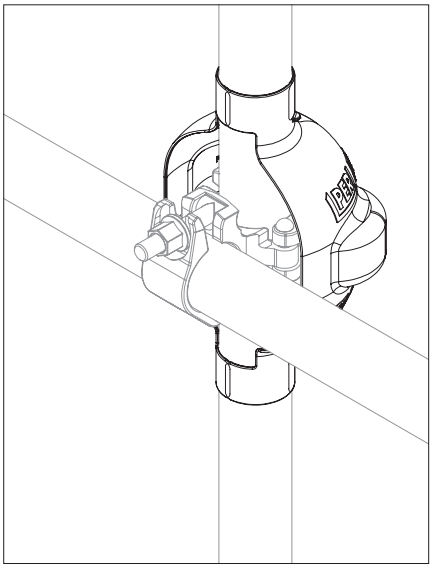


Fig. A8.07

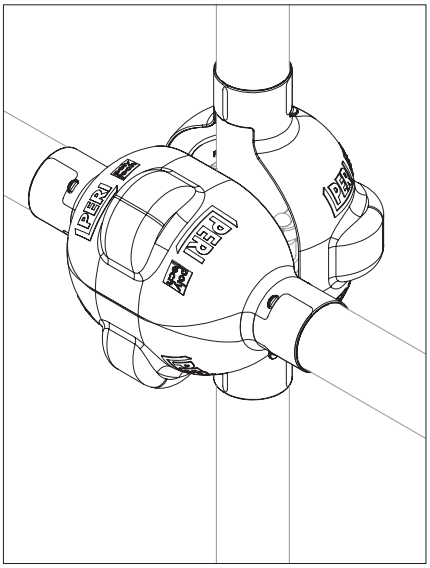


Fig. A8.07a

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)

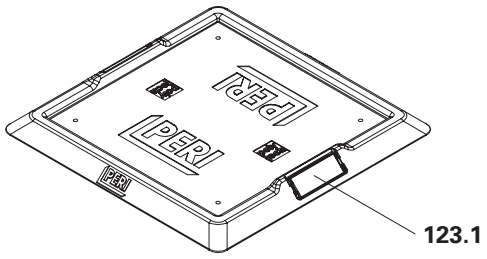


Fig. A8.08

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

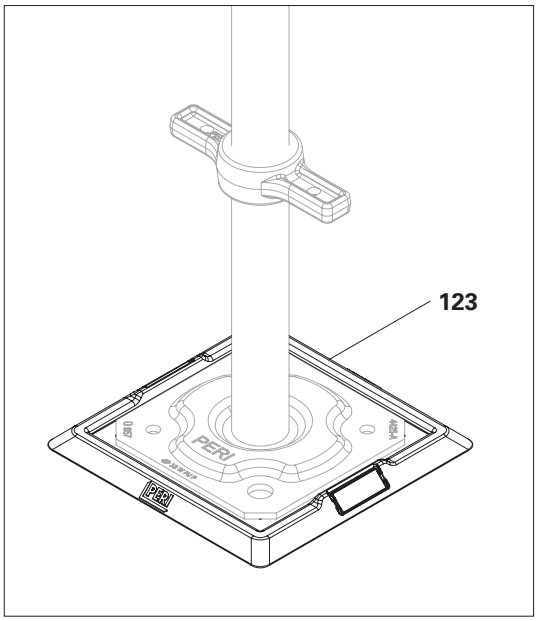


Fig. A8.08a

General

Note

Stability compromised!

⇒ Settlements must be avoided! The scaffold may only be erected on a sufficiently load-bearing substrate, if necessary with load-distributing pads. For the support forces, see Section "F2" or "G2 Support forces".

⇒ 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

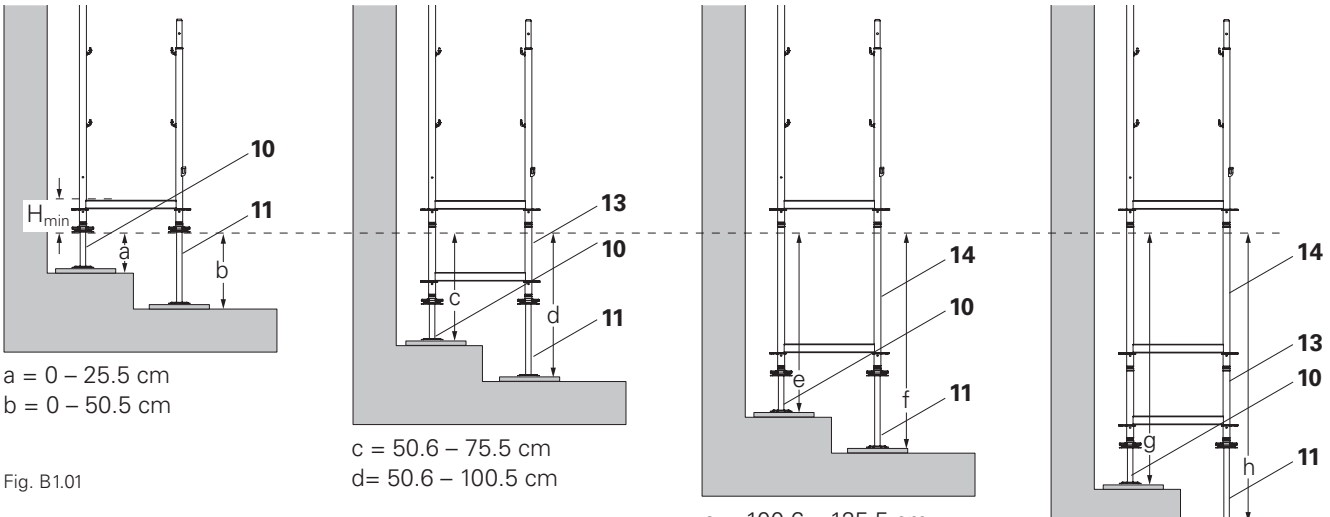
On sloping ground or in the event of changes in height, adjust the scaffold using Base Compensation EVA 50 (**13**) or EVA 100 (**14**) to accommodate the terrain (see Fig. B1.02, next page).

By combining two different Base Compensations EVA (**13/14**) and two different Base Spindles 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. Static proof for transferring forces is to be carried out separately.

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.



a = 0 – 25.5 cm
b = 0 – 50.5 cm

c = 50.6 – 75.5 cm
d= 50.6 – 100.5 cm

e = 100.6 – 125.5 cm
f = 100.6 – 150.5 cm

g = 150.6 – 175.5 cm
h = 150.6 – 200.5 cm

Fig. B1.01

Component combinations for height differences

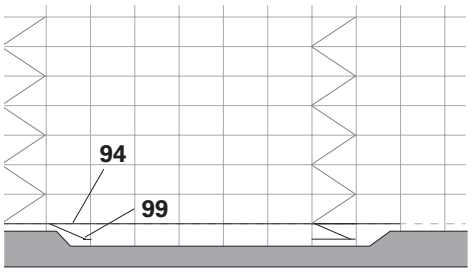
Fig.	Height difference	Base Spindle UJB 38-50/30 (10) (red nut)	Base Spindle UJB 38-80/55 (11) (yellow nut)	Base Compensation EVA 50 (13)	Base Compensation EVA 100 (14)
a	0 – 25.5 cm	X			
b	0 – 50.5 cm		X		
c	50.6 – 75.5 cm	X		X	
d	50.6 – 100.5 cm		X	X	
e	100.6 – 125.5 cm	X			X
f	100.6 – 150.5 cm		X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

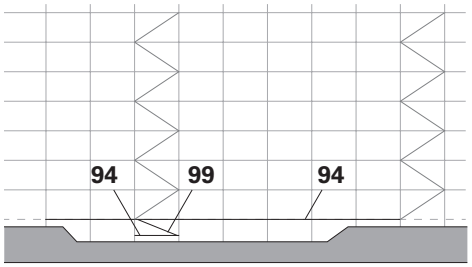
Examples
A Base compensation with Ledger Brace UBL-2 (**99**) and Horizontal Ledger UH-2 (**94**) connected to diagonal.
B Diagonal extended into the base compensation with Ledger Brace UBL-2 (**99**) and horizontal ledgers.
C Base compensations are connected directly to braced bay within 5 bays.
D Base 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.
- Separate static proof is required for other cases

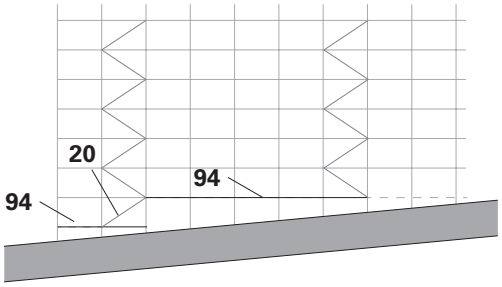
Example A



Example B



Example C



Example D

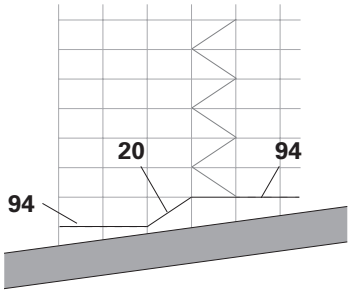


Fig. B1.02

Assembly

1. Mount Horizontal Ledger UH-2 (**94**) on the rosettes of the Base Frame EVB.
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 – B1.05a)

Components

10	Base Spindle UJB 38-50/30
11	Base Spindle UJB 38-80/55
13	Base Compensation EVA 67/50
14	Base Compensation EVA 67/100
15	Base Frame EVB 67
61	Support UC 33
94	Horizontal Ledger UH-2
99	Ledger Brace UBL-2

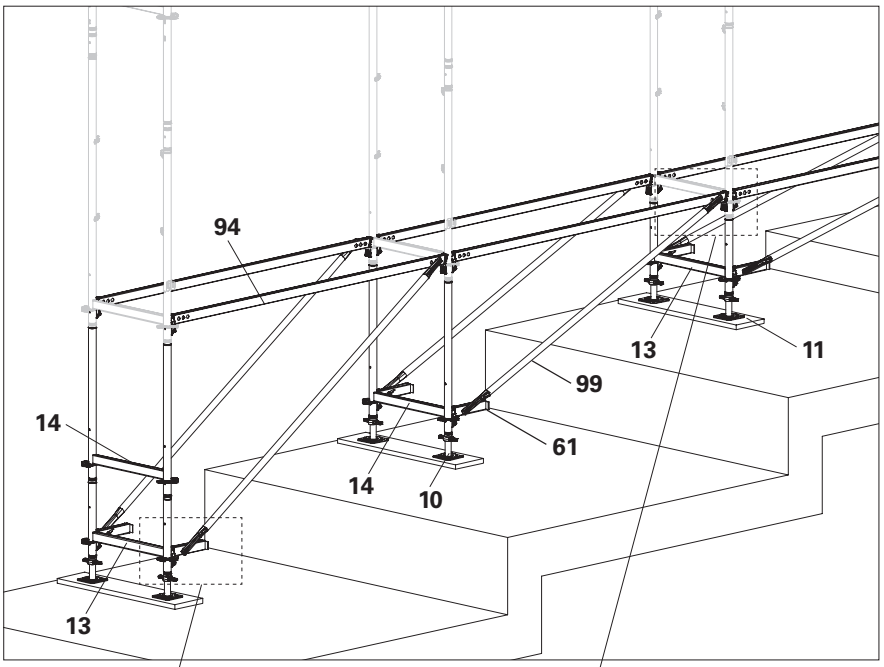


Fig. B1.03

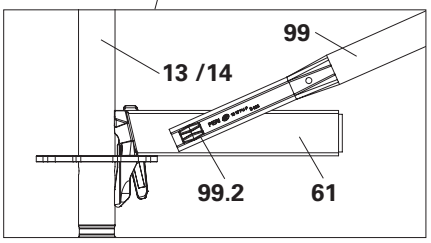


Fig. B1.04

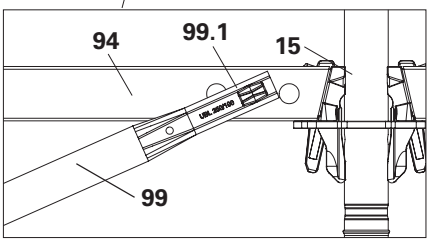


Fig. B1.05

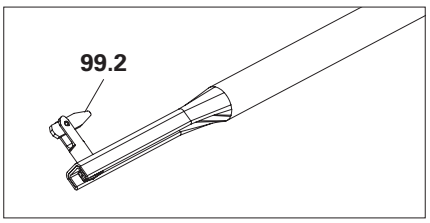


Fig. B1.04a

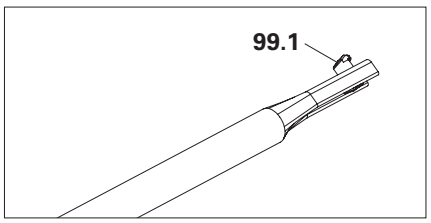


Fig. B1.05a

- Alternatively, the Supports UC 25 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, first mount the ledger brace on the horizontal ledger (**94**), then install together on the base frame (**15**).

B2 First scaffold bay

General

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" on page 52 ff.

1. Set out Horizontal Ledgers UH-2 (**94**) in the longitudinal direction.
2. If necessary, set out load-distributing supports.
3. Set the Base Spindles UJB (**10**) up.

Components

10	Base Spindle UJB 38-50/30
15	Base Frame EVB 67
30	Steel Deck EDS
94	Horizontal Ledger UH-2

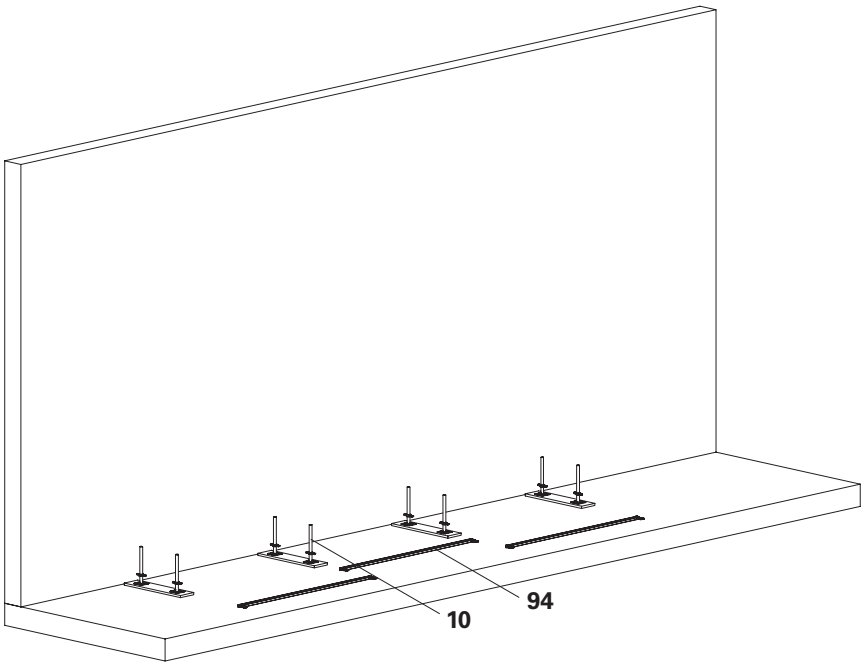


Fig. B2.01

Base frame

- 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!

Assembly

1. Position Base Frame EVB (**15**) on the Base Spindles UJB (**10**). The short tube forms the outside of the scaffolding.
2. Secure with Horizontal Ledger UH-2 (**94**) to prevent it from falling over. (Fig. B2.02)
3. Position the second Base Frame EVB (**15**) and connect it using the Horizontal Ledger UH-2 (**94**).
4. The base level is aligned horizontally by accurately adjusting the Base Spindles UJB (**10**). (Fig. B2.03a)
5. Securely fix the wedges of the Horizontal Ledger UH-2 (**94**) in position with a jarring blow using a hammer.

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

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

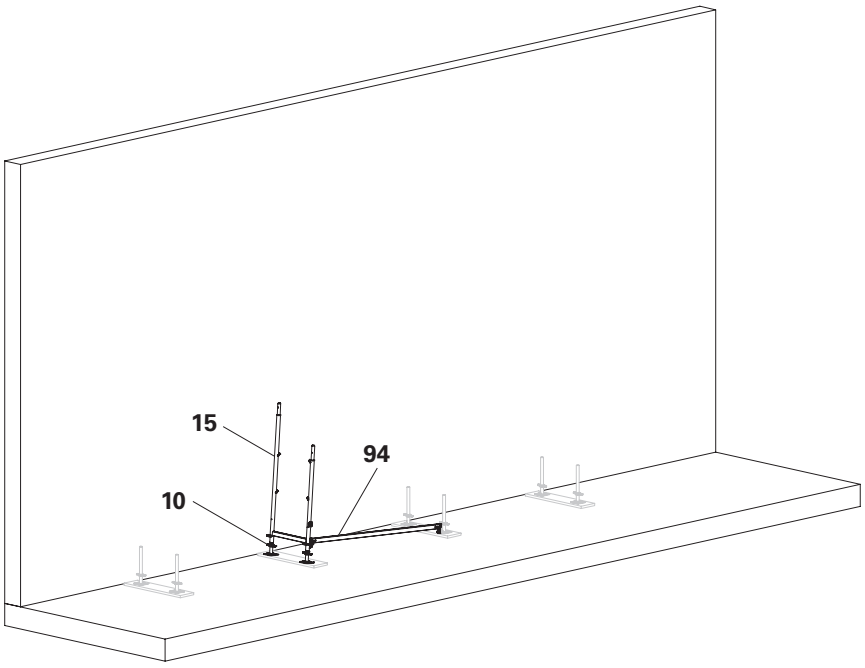


Fig. B2.02

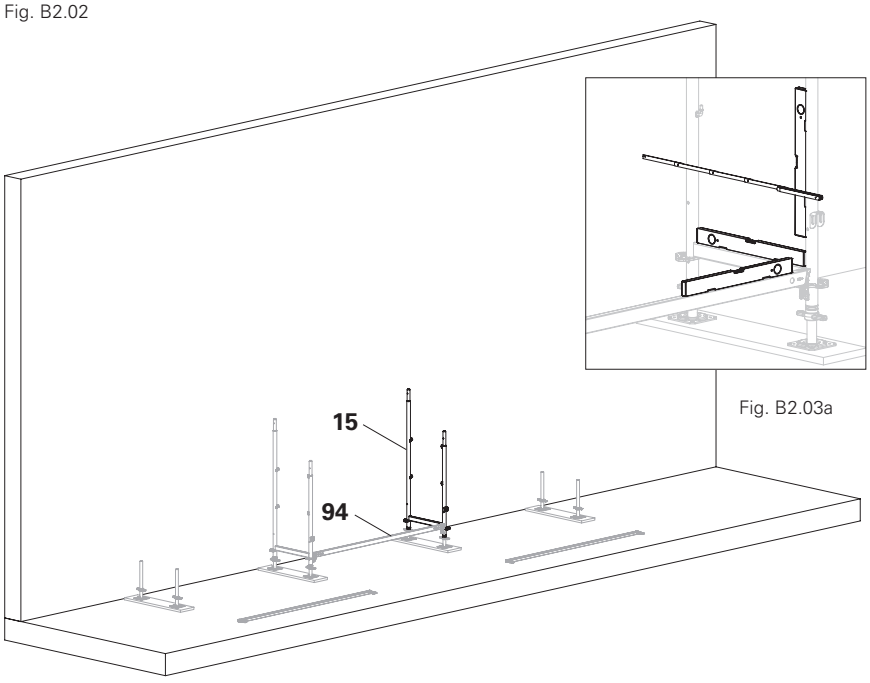


Fig. B2.03a

Fig. B2.03

Assembly aid for the decking

Mount Steel Deck EDS (**30**) on the Base Frame EVB (**15**) as an assembly aid.

Assembly

1. Pick up the deck (**30**) in the centre and place it on the crossbars (**15.6**) of the Base Frame EVB (**15**).

→ The deck is installed.
(Fig. B2.04)

Have both lift locks (**30.1**) dropped beneath the crossbar?
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. This does not apply to bays where access decks are fitted.

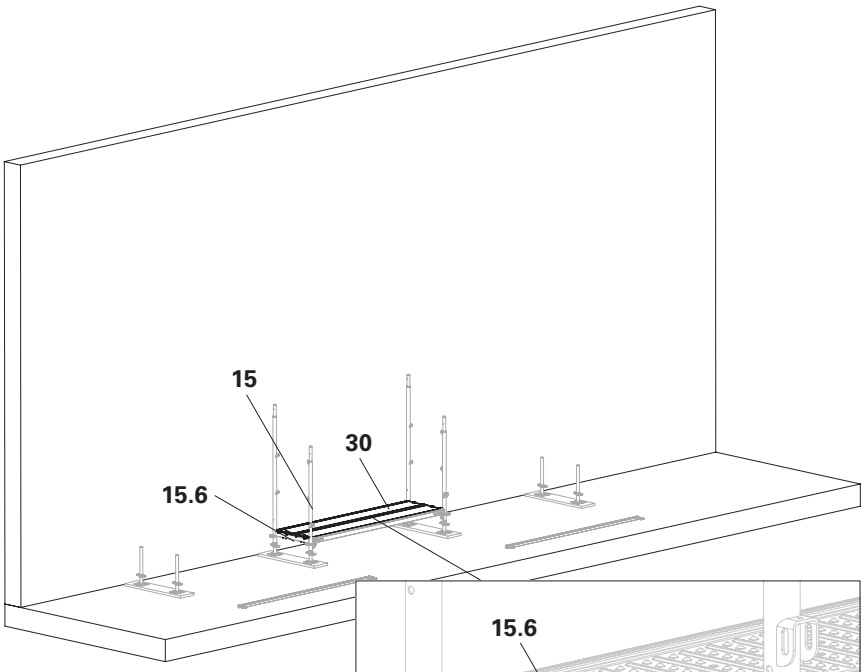


Fig. B2.04

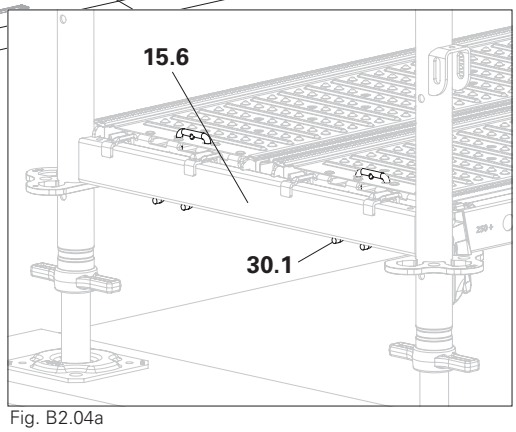


Fig. B2.04a

Easy frame and guardrail post

The Guardrail Post EPG (**51**) is continuously mounted together with the Easy Frame EVF (**16**) from a secure position in the next scaffolding bay.

Assembly

1. Position the Easy Frame EVF (**16**) on the first Base Frame EVB (**15**). The long tube is always on the outer side of the scaffolding. The long tube is inserted first and then the short one.

(Fig. B2.05 + B2.05a)

2. Attach Guardrail Post EPG (**51**) to the upper guardrail hooks (**16.1**) of the attached Easy Frame EVF, see "A3 System components: Lateral protection" on page 26.

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

Components

15	Base Frame EVB 67
16	Easy Frame EVF 67
20	Face Brace EBF
30	Steel Deck EDS
51	Guardrail Post EPG

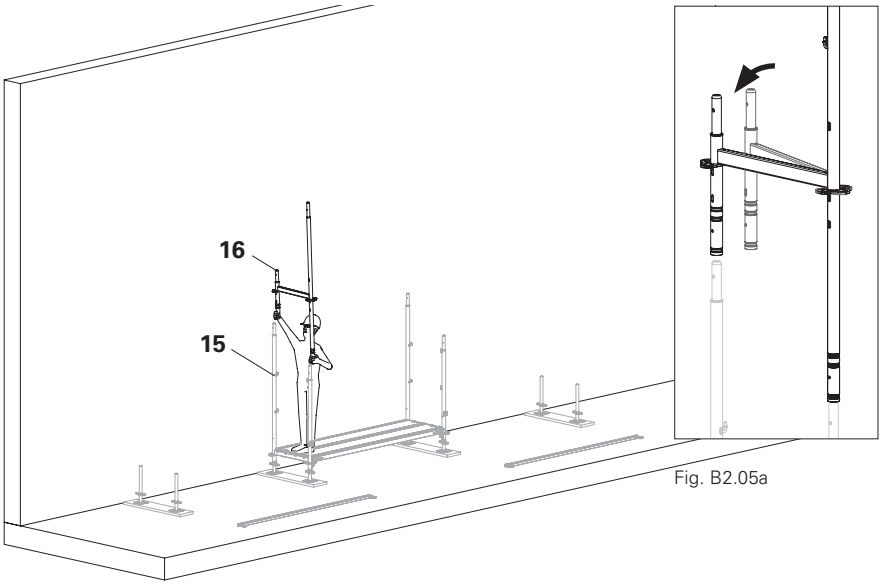


Fig. B2.05a

Fig. B2.05

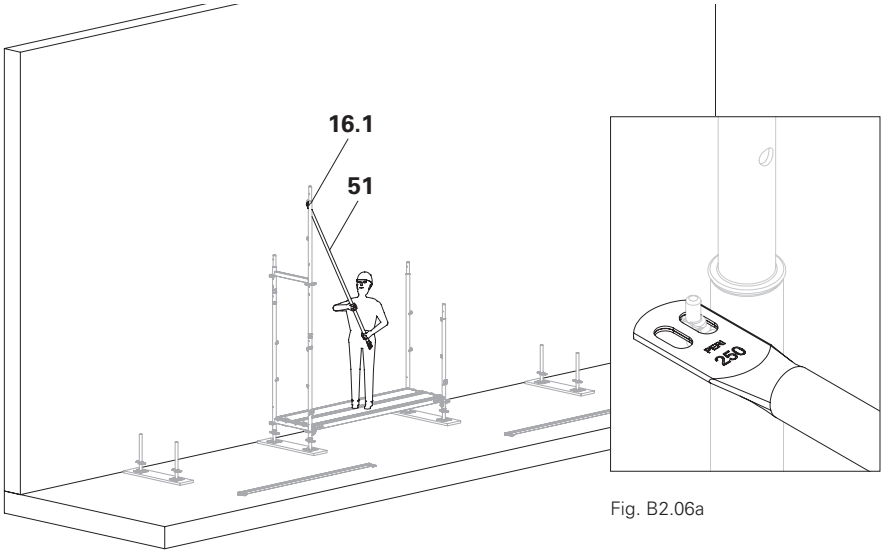


Fig. B2.06a

Fig. B2.06

3. Attach Guardrail Post EPG (**51**) to the guardrail hooks (**16.1**) of the second Easy Frame EVF.
(Fig. B2.07)

Assembly of the Easy Frame EVF can also be carried out in a "double-advanced" manner with guardrails and intermediate guardrails. See Section "A3 System components: Lateral protection" on page 26.

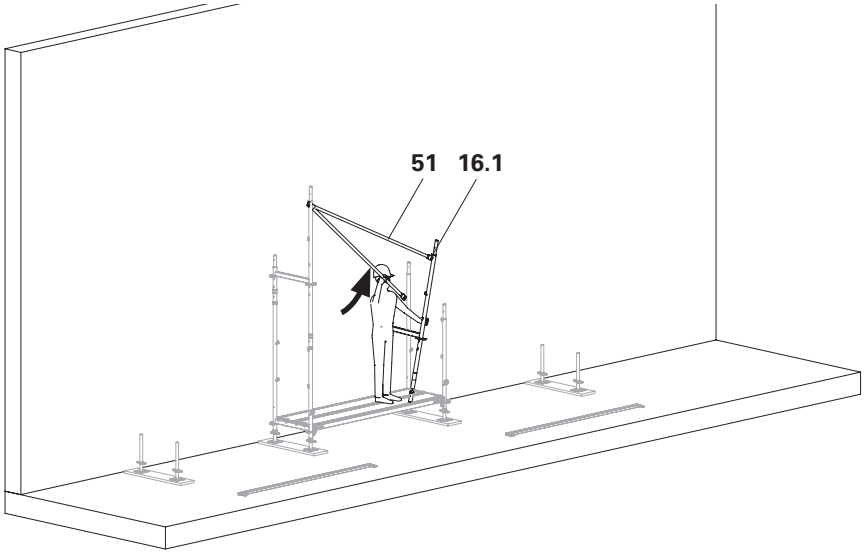


Fig. B2.07

4. Position the second Easy Frame EVF (**16**) together with Guardrail Post EPG (**51**) on the available Base Frame EVB (**15**).
→ The Easy Frame and guardrails are now installed.
(Fig. B2.08)

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

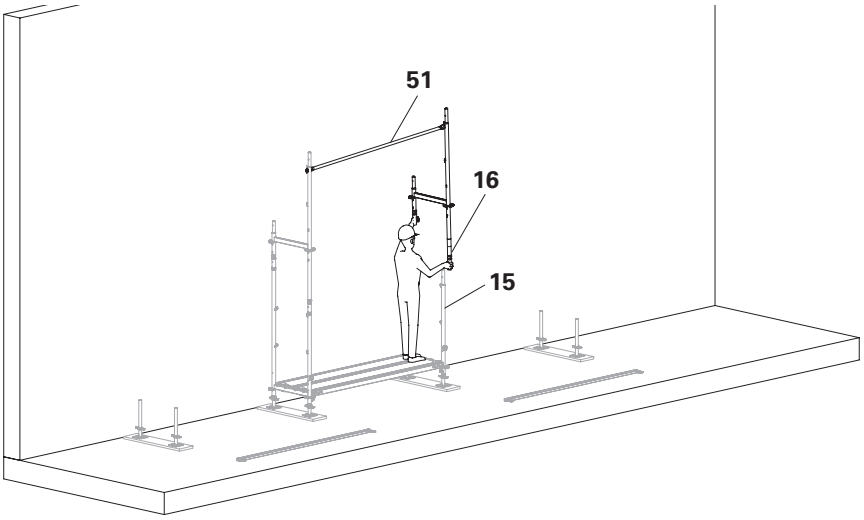


Fig. B2.08

Decks

Note

Stability compromised without system decking.

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

Assembly

1. To install the decks, see "A4 System component: Decks" on page 36.

→ The deck is installed.
(Fig. B2.09)

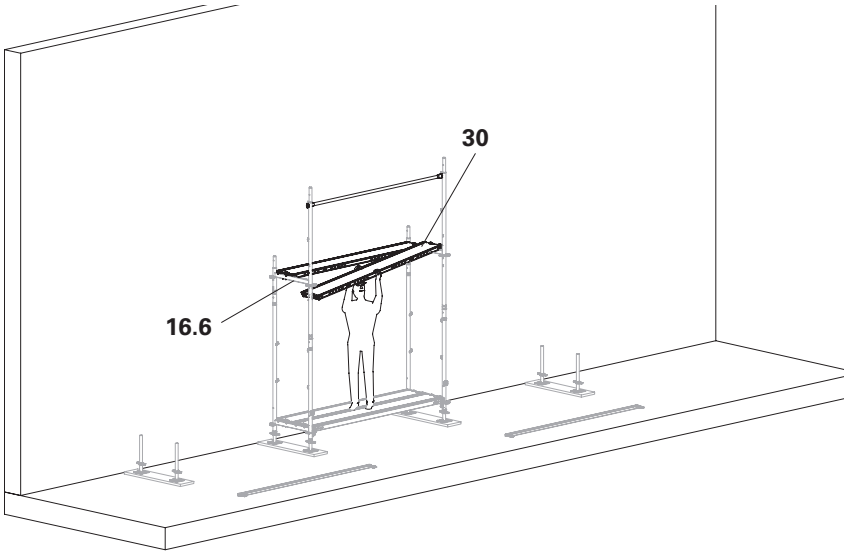


Fig. B2.09

Horizontal Ledgers UH-2 are generally not required on deck levels.
However, some additional fittings require horizontal ledgers in certain positions. See Section Tie pattern.

Face braces

Note

Stability is compromised without diagonal bracing.

⇒ Comply with the anchor pattern specified in Section "F4" or "G4 Tie pattern"!

Assembly

1. To install the Face Brace EBF (**20**), see Section "A5 System component: Diagonal Bracing" on page 40.

→ The face brace is now installed.
(Fig. B2.10)

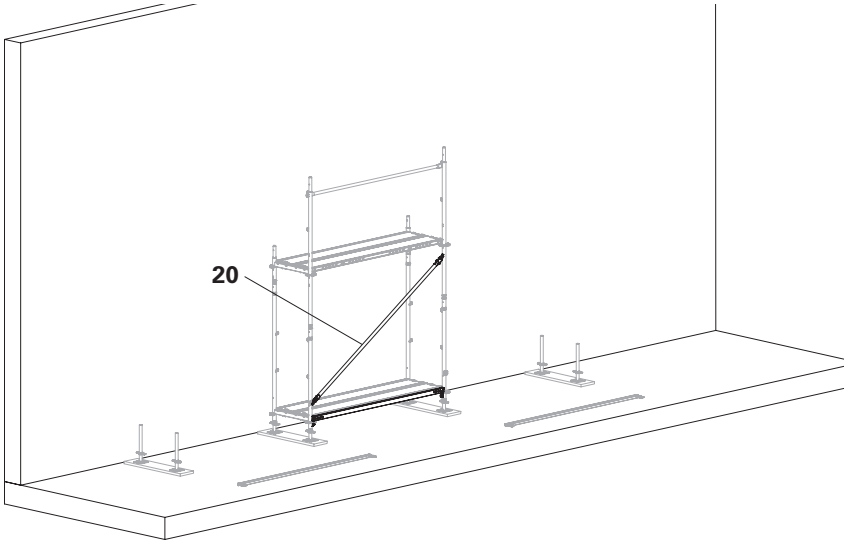


Fig. B2.10

Other scaffold bays

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

Assembly

1. Position additional Base Frames EVB (**15**) on Base Spindles UJB.
2. Connect to existing scaffold bay with horizontal ledger and align.
3. Position decks (**30**) as assembly aids.

➡ If the base level is to be used as a working area, PERI recommends covering the entire level with decking.
(Fig. B3.01)

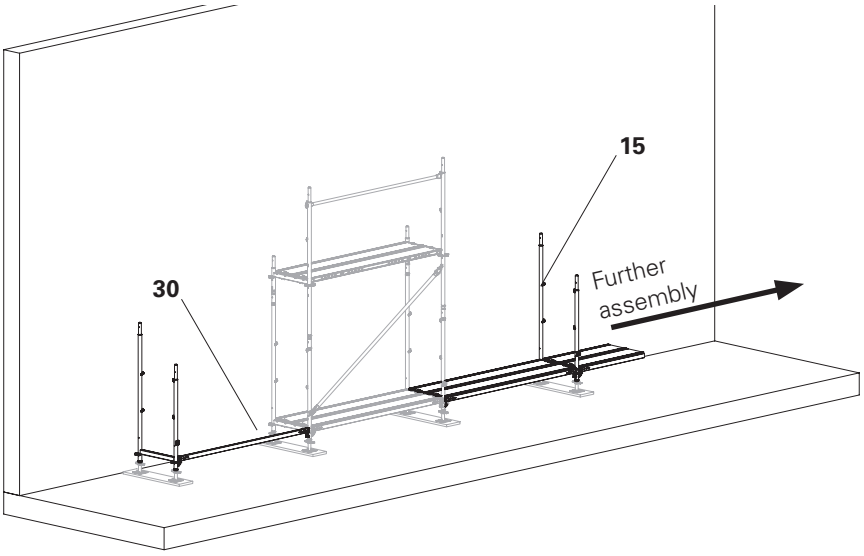


Fig. B3.01

4. Install Guardrail Post EPG (**51**) in the existing scaffold bay and insert together with the Easy Frame EVF (**16**).
5. Install End Guardrail in Advance UPA 67 (**52**) in the edge bay, see "End Guardrail UPA in advance" on page 32.

(Fig. B3.02)

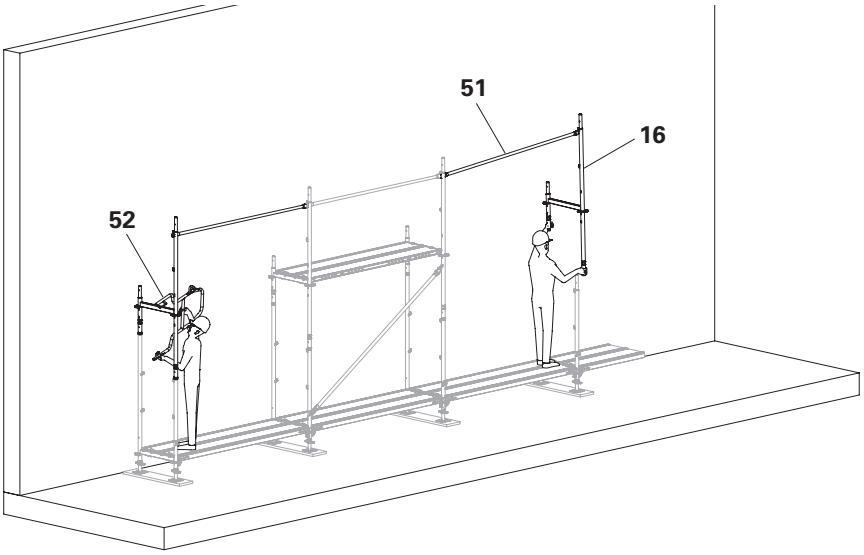


Fig. B3.02

6. Install decks (**30**) in the first scaffold level.
7. Install Access Decks EAW-L (**40**), see "Internal access with access deck" on page 91.

→ Other scaffold bays have been installed.
(Fig. B3.03)

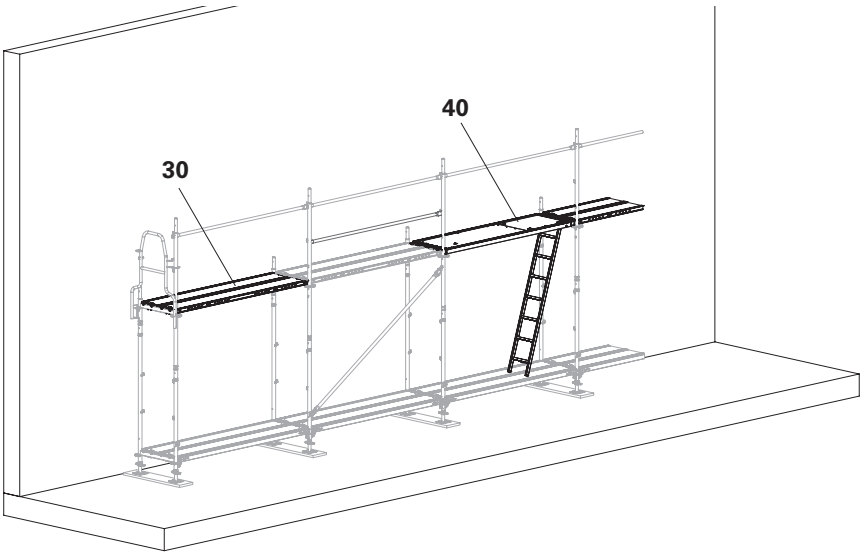


Fig. B3.03

Lateral protection

Ensure that lateral protection is complete in every scaffold bay.

Intermediate guardrail

Assembly
If not already mounted as "double advanced" guardrails:
1. Attach Guardrail EPG (**51a**) as an intermediate guardrail post on both sides, one after the other, on the guardrail hooks, see Section "A3 System components: Lateral protection" on page 26.

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

Toe board

Assembly
1. Fit Toe Board UPF (**56**) on both sides, one after the other onto the standards, see Section "Wooden toe board/steel toe board" on page 28.

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

Toe Board UPY (**57**) can be installed instead of Toe Board UPF, see Section "Wooden toe board/steel toe board" on page 28.
(Fig. B3.05)

Components

15	Base Frame EVB 67
16	Easy Frame EVF 67
30	Steel Deck EDS
40	Access Deck EAW-L
51	Guardrail Post EPG
52	Advance End guardrail UPA 67
56	Toe Board UPF
57	Toe Board UPY

Install intermediate guardrails in the assembly sequence of the scaffolding.

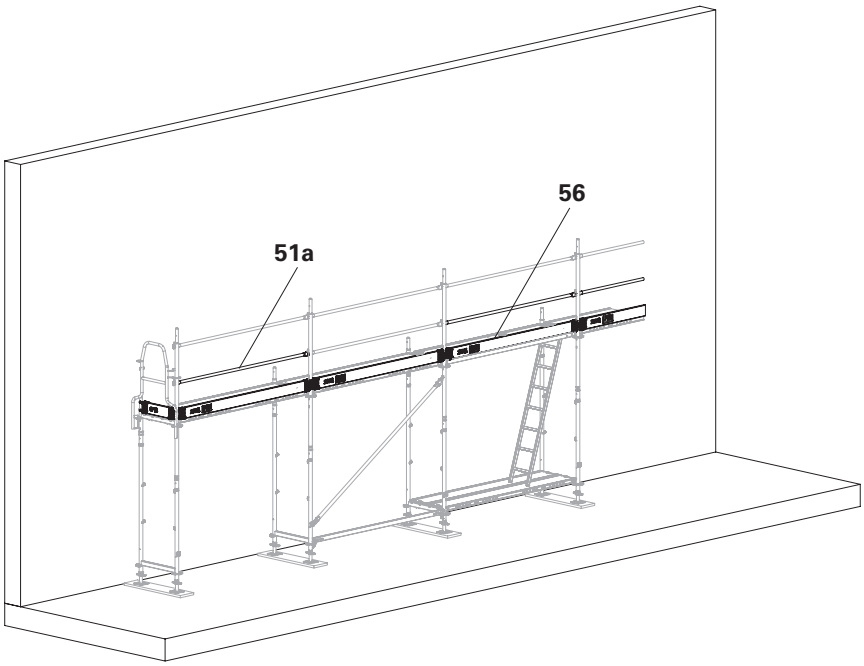


Fig. B3.04

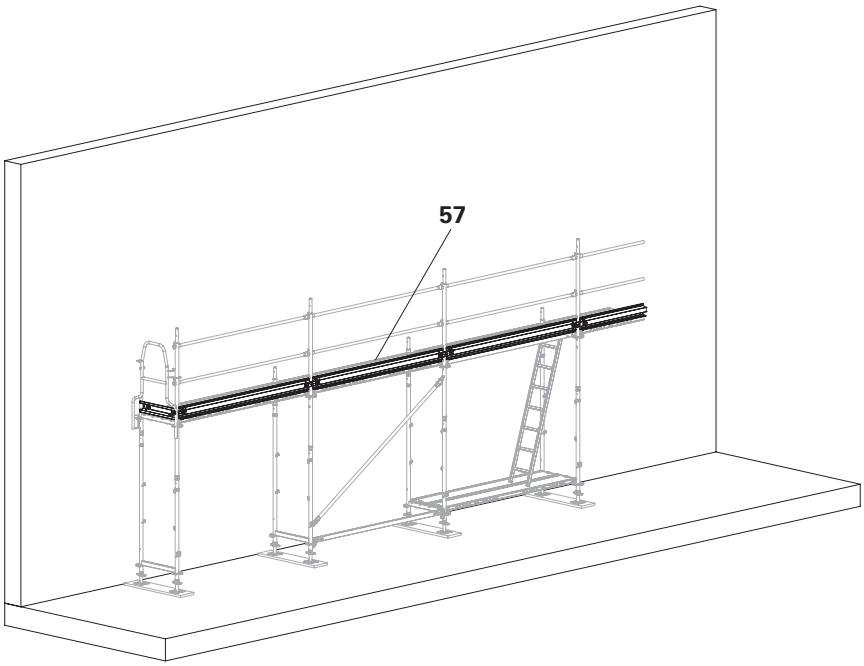


Fig. B3.05

Other levels

Assembly

1. Attach Tubes EVR 150 (**18**) to the inner side of the scaffolding.

(Fig. B4.01)

Turn the guardrail hooks of the Tube EVR (**18**) towards the wall if no inner guardrails are required. This enlarges the clear passage width.

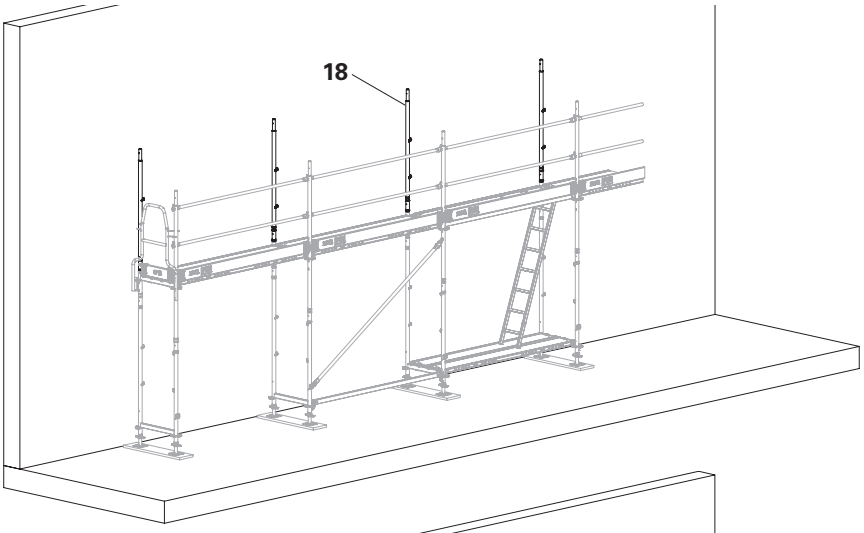


Fig. B4.01

2. Fit the Easy Frame EVF (**16**) and Guardrail EPG (**51**) onto the existing assembly.

(Fig. B4.02)

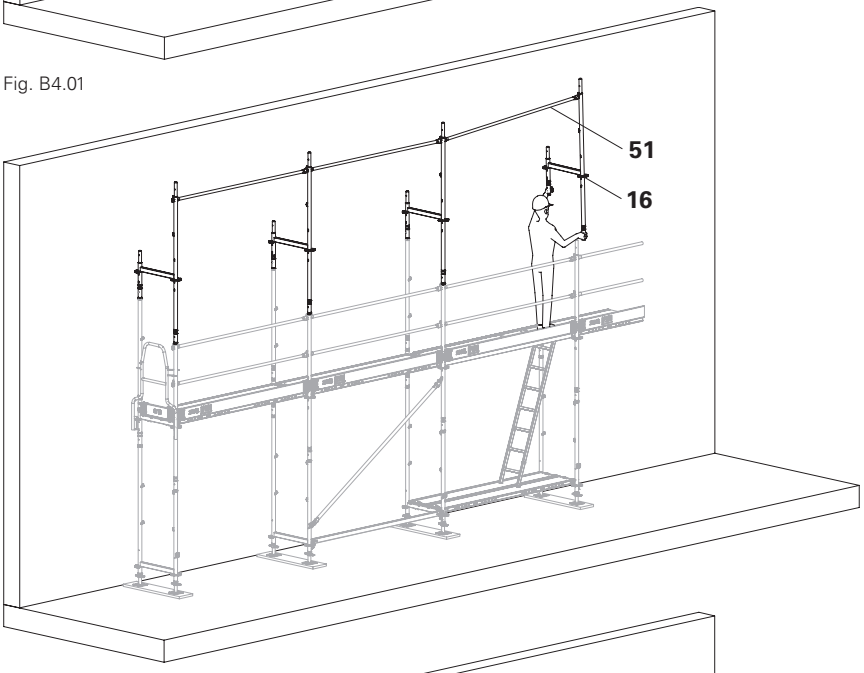


Fig. B4.02

3. Attach End Guardrail in Advance UPA 67 (**52**) to the front side.
4. Install decking (**30**).

(Fig. B4.03)

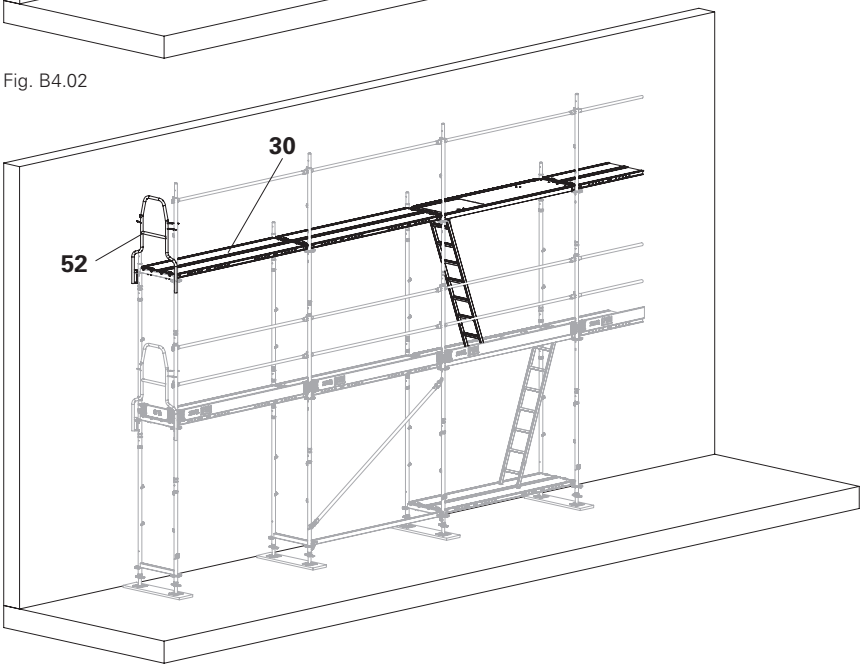


Fig. B4.03

Components

16	Easy Frame EVF 67
18	Tube EVR 150
20	Face Brace EBF
30	Steel Deck EDS
46	Wall Tie UWT
50	Guardrail Post EVP
51	Guardrail Post EPG
52	Advance End guardrail UPA 67
56	Toe Board UPF

5. Fit Face Braces EBF (**20**) in accordance with Section "F4" or "G4 Tie pattern".
(Fig. B4.04)

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

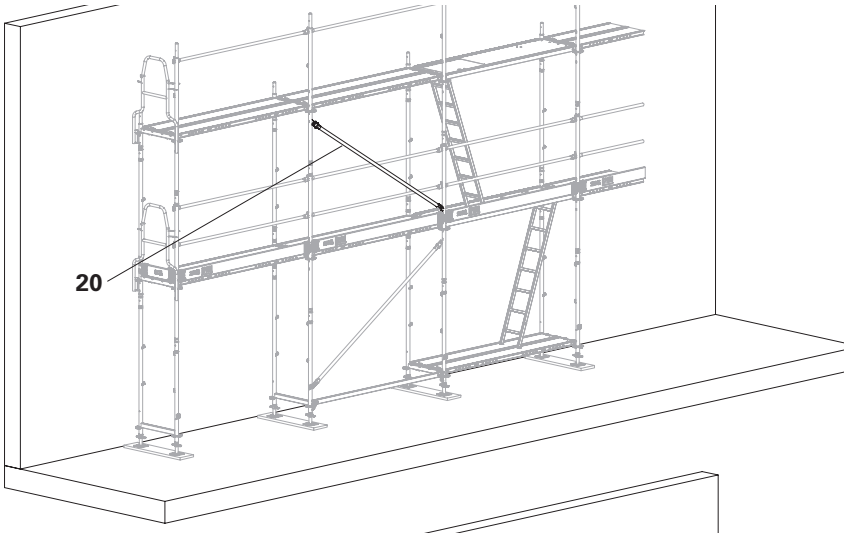


Fig. B4.04

6. Install intermediate guardrail (**51a**) and Toe Board UPF (**56**).
→ The next level is now installed.
(Fig. B4.05)

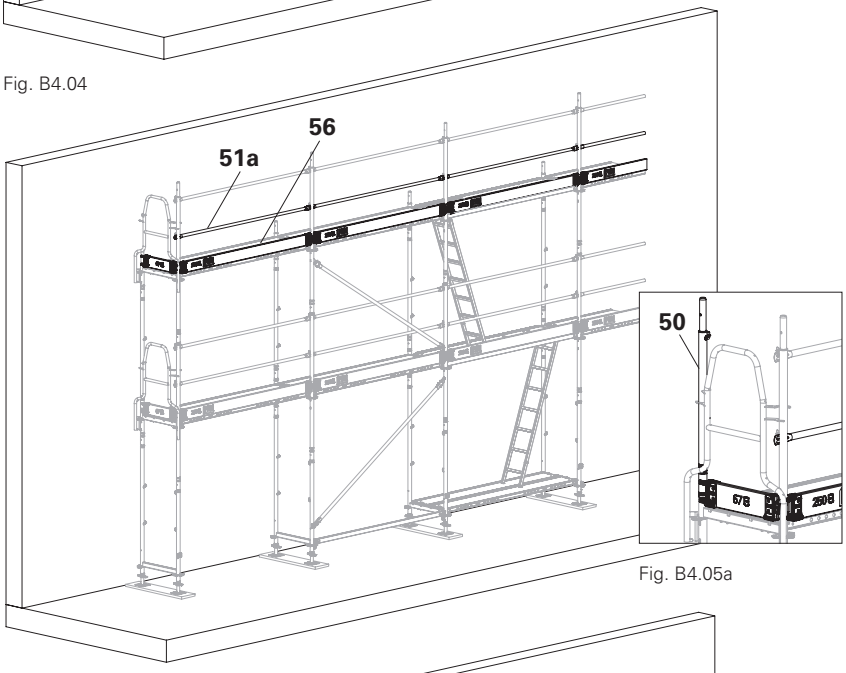


Fig. B4.05a

Fig. B4.05

Repeat assembly steps 1 to 6 until all scaffold levels are complete.

7. On the top scaffold level, add Guardrail Posts EVP (**50**) to the inner side of the scaffolding.
(Fig. B4.05a)

Anchoring
Fit Wall Ties UWT (**46**) continuously in line with the scaffold assembly.
(Fig. B4.06 + B4.06a)

- For information on assembling the anchoring, see Section "A7 System component: Wall Tie Coupler" on page 46.
- Refer to Section "Tie pattern" for the number and position of the ties.

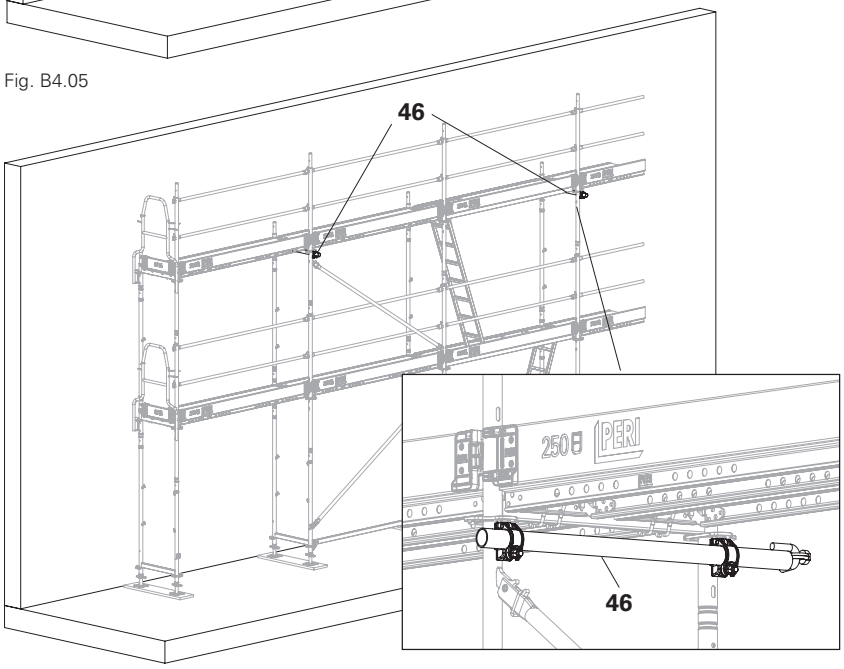


Fig. B4.06

Fig. B4.06a

Disassembly

- 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 Toe Boards UPF (**56**) and intermediate guardrails (**51a**). The top Guardrail Posts EPG (**51**) remain in position as anti-fall protection.

(Fig. B5.01)

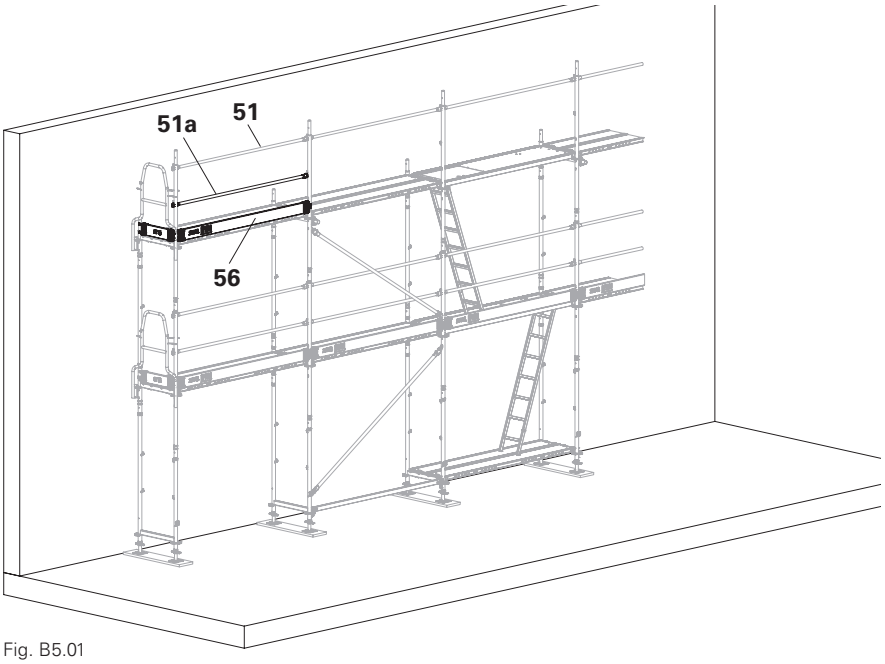


Fig. B5.01

The intermediate guardrail post can also be dismantled together with the guardrail (step 3).

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)

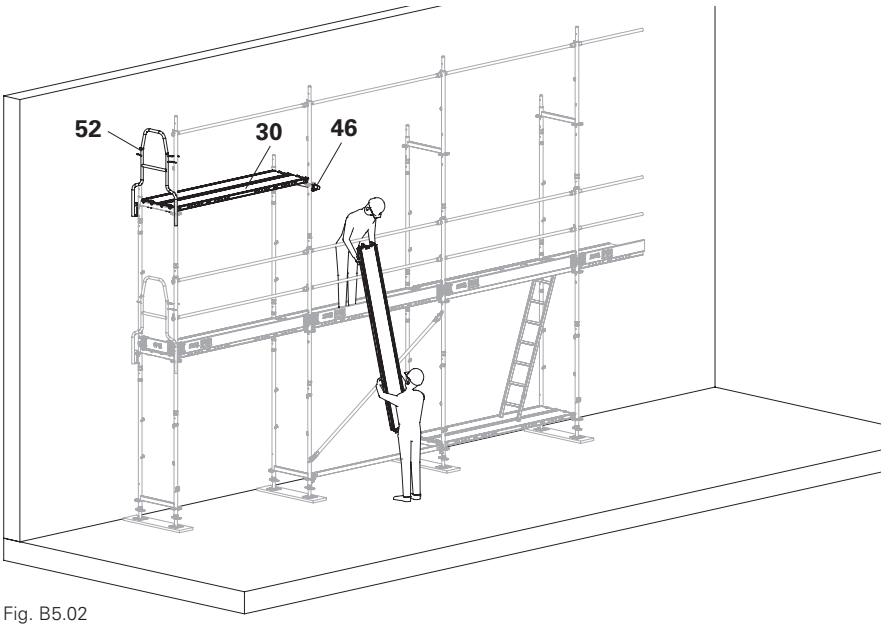


Fig. B5.02

3. Remove the Easy Frame EVF (**16**) together with the top Guardrail Post EPG (**51**) in the reverse order of the assembly sequence.
(Fig. B5.03)

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

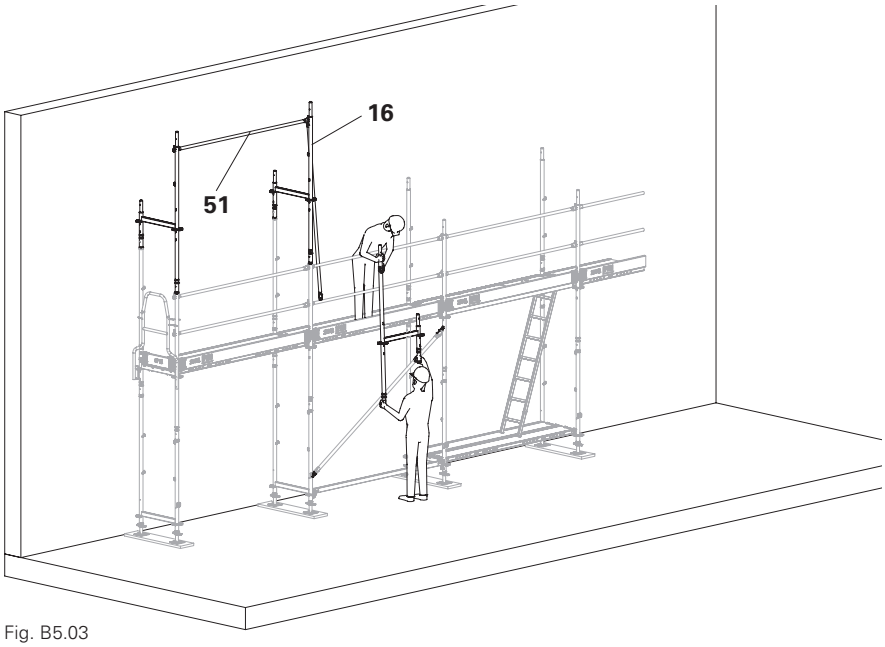


Fig. B5.03

4. Dismantle the Tube EVR (**18**).
(Fig. B5.04)

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

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

Components

16	Easy Frame EVF 67
18	Tube EVR 150
20	Face Brace EBF
30	Steel Deck EDS
46	Wall Tie UWT
51	Guardrail Post EPG
52	Advance End guardrail UPA 67
56	Toe Board UPF

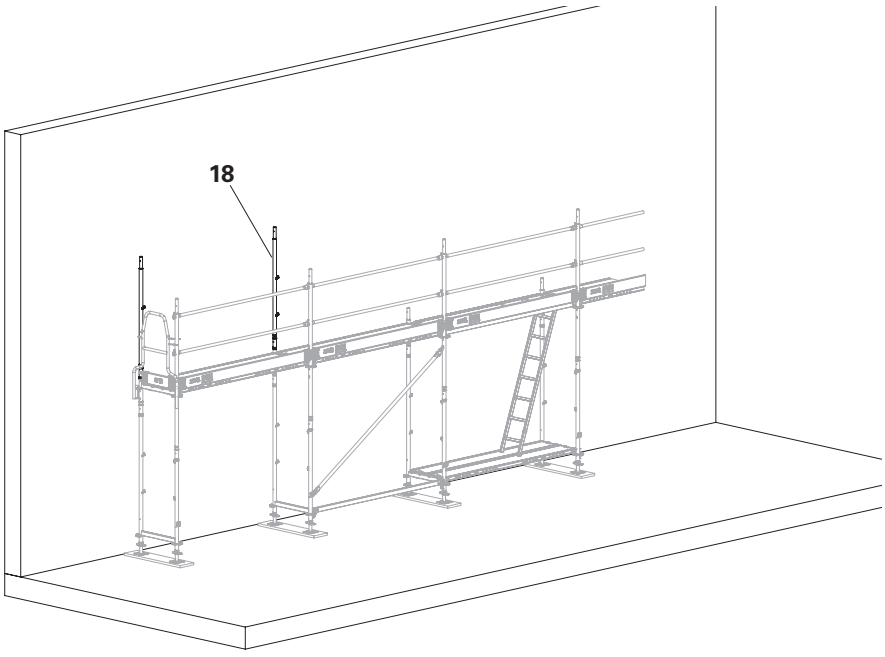


Fig. B5.04

General

- Start the assembly process at the corner.
- Position decks in the base level as assembly aids.

Outside corner

In this version of the assembly process, the decks on the base level are taken out again. (Fig. B6.01a)

Assembly of a continuous scaffold bay

1. Set up the base frame.
2. Fit two Horizontal Ledgers UH-2 (**94a**) into the continuous scaffold bay (**A**). Secure the wedges.
3. Connect the adjacent scaffold 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. B6.01a)
5. Attach Tube EVR 150 (**18**) together with the Easy Frame EVF (**16**). The guardrail hook (**18.1**) on Tube EVR 150 (**18**) points inwards in the direction of the continuous scaffold.
6. Attach the guardrail post (**51**). (Fig. B6.01)

Components

15	Base Frame EVB
16	Easy Frame EVF
18	Tube EVR
20	Face Brace EBF
30	Steel Deck EDS
51	Guardrail Post EPG
52	Advance End guardrail UPA 67
94	Horizontal Ledger UH-2

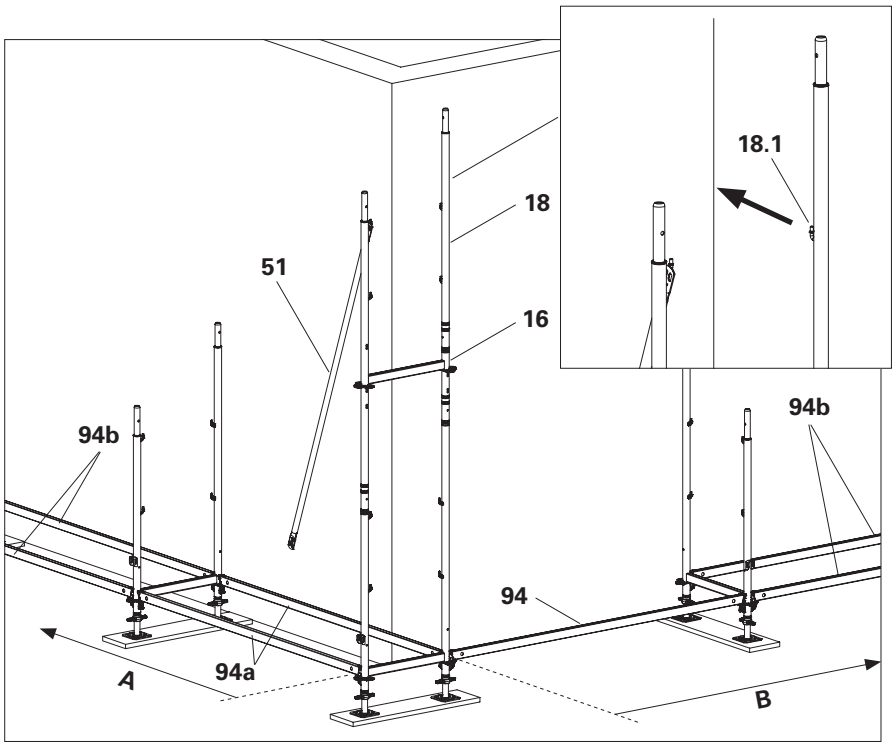


Fig. B6.01

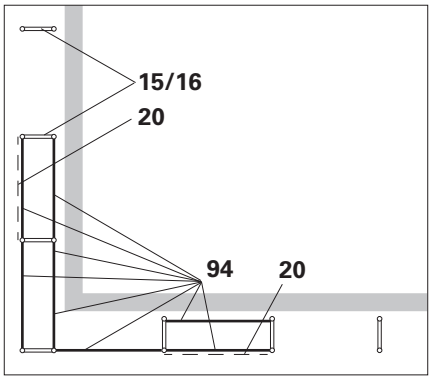


Fig. B6.01a

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

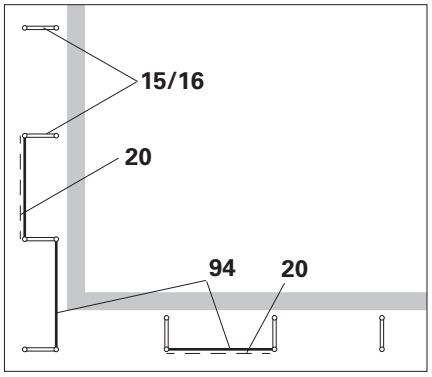


Fig. B6.01b

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

7. Insert the Easy Frame EVF (**16**) with Guardrail Post EPG (**51**) into the next frame column.
8. Fit End Guardrail in Advance UPA 67 (**52**).
9. Fit Horizontal Ledger UH-2 (**94a**) onto the inner side of the continuous scaffold bay. Secure the wedges.

(Fig. B6.02)

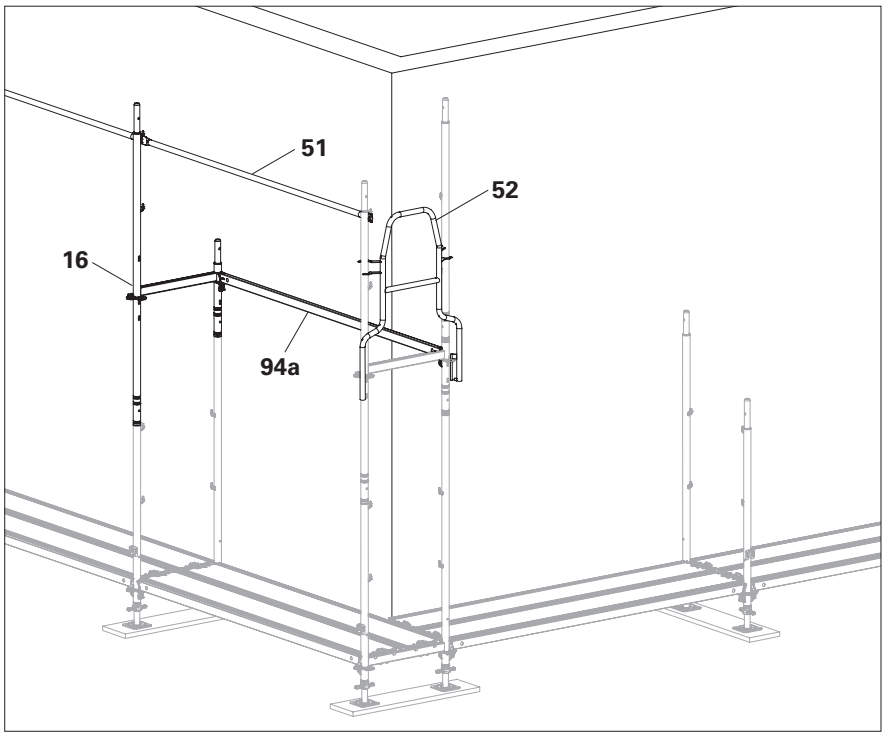


Fig. B6.02

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 + B6.01b.
- One diagonal will suffice in scaffold areas with 5 bays or fewer.

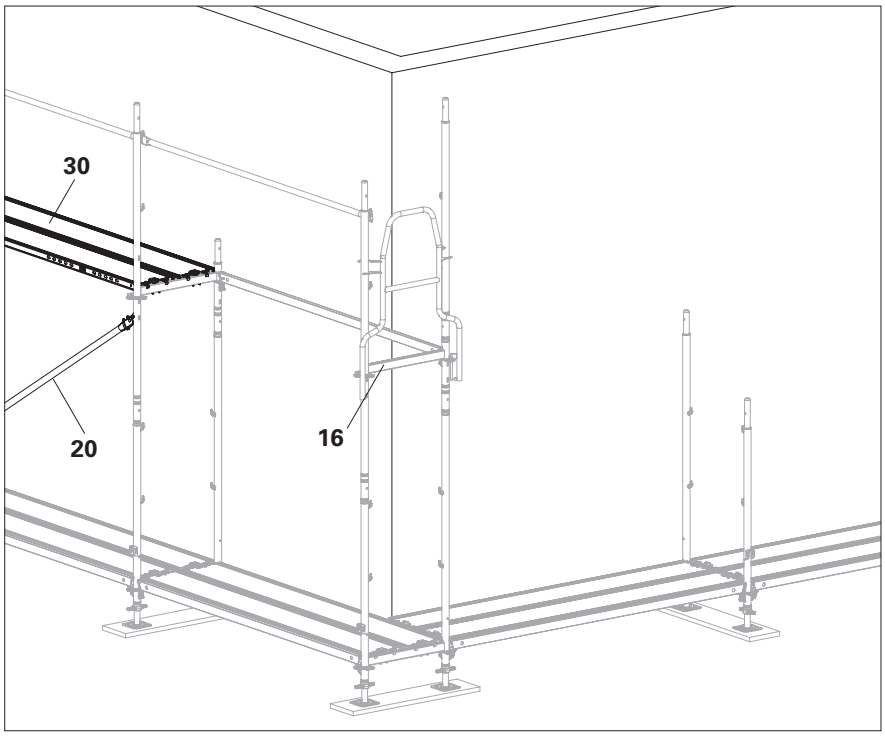


Fig. B6.03

Assembly of the adjacent scaffold bay

1. For the adjacent scaffold bay, attach Guardrail Post EPG (**51**) to the inwardly turned guardrail hooks (**18.1**) of the Tube EVR 150 (**18**) from the level immediately below.
2. For the adjacent scaffold bay, fit Guardrail Post EPG (**51**) together with the Easy Frame EVF (**16**).

(Fig. B6.04)

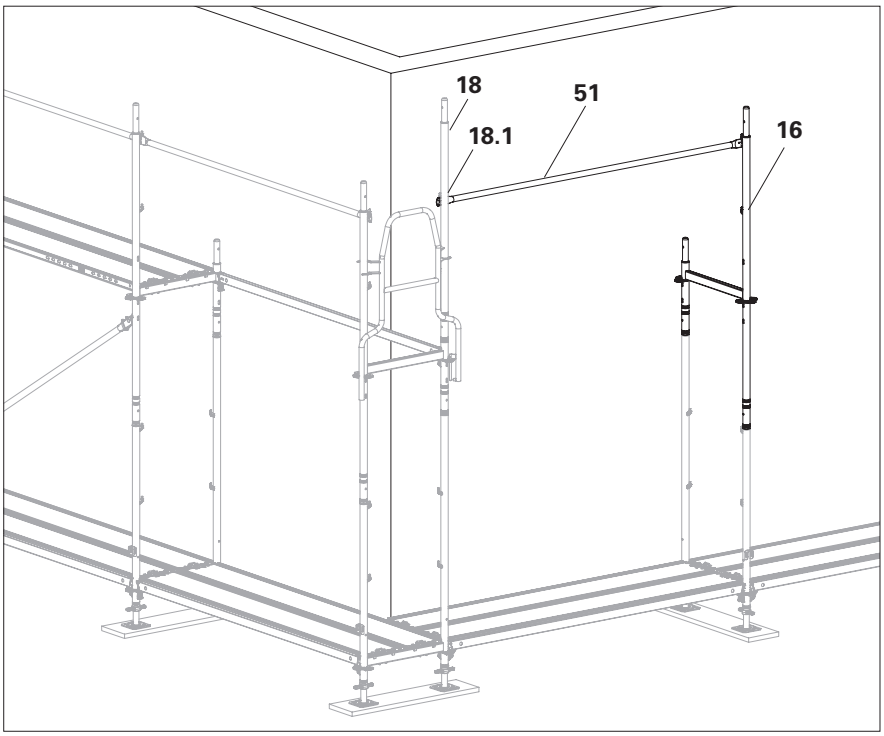


Fig. B6.04

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

(Fig. B6.05)

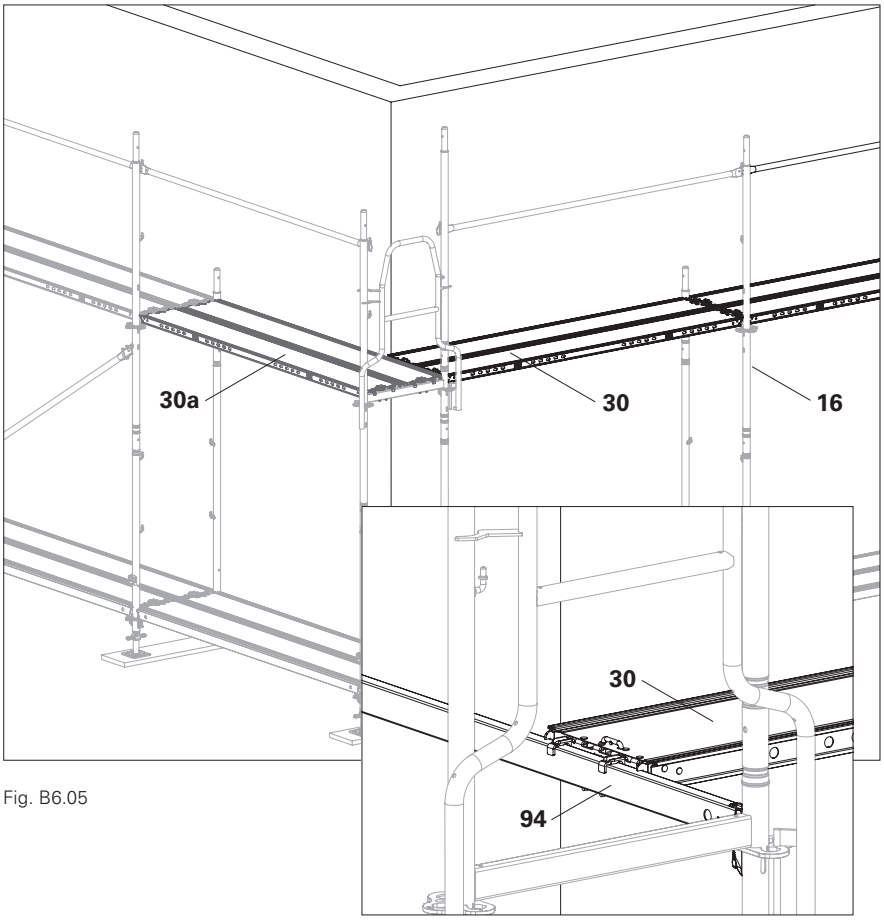


Fig. B6.05

5. Fit Face Brace EBF (**20**).
6. Complete the lateral protection with intermediate guardrails (**51a**) and Toe Boards UPF (**56**).
7. Anchoring:
   Anchor the respective adjacent external corner frame column (**R**) at a height distance of max. 4 m with
   – 2 wall ties, double installation or
   – 1 triangulated tie
   (Fig. B6.06a)

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

Components

16	Easy Frame EVF
18	Tube EVR
20	Face Brace EBF
30	Steel Deck EDS
51	Guardrail Post EPG

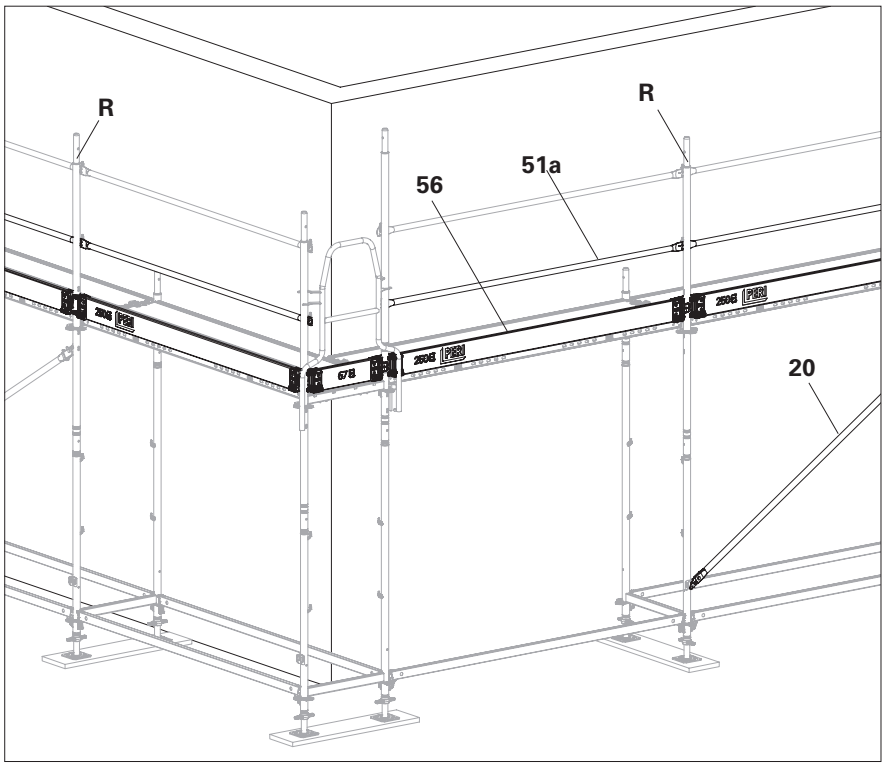


Fig. B6.06

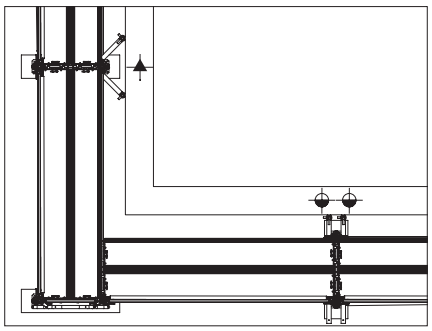


Fig. B6.06a

Inside corner

In this version of the assembly process, the decks on the base level are taken out again. (Fig. B6.07a)

Assembly of the base frame

1. Position two Base Frames EVB (**15**) in the inside corner at a distance that matches the scaffolding width (**67 cm**).
2. Connect the Base Frame EVB in the inside corner with two Horizontal Ledgers UH-2 67 (**98**). Secure the wedges.
3. In each case, connect the next frame column using two Horizontal Ledgers UH-2 (**94**).

(Fig. B6.07 + B6.07a)

Components

15	Base Frame EVB
16	Easy Frame EVF
20	Face Brace EBF
51	Guardrail Post EPG
56	Toe Board UPF
94	Horizontal Ledger UH-2 300
98	Horizontal Ledger UH-2 67

- For the arrangement of horizontal ledgers and face braces, see Fig B6.07a + B6.07b).
- One diagonal will suffice in scaffold areas with 5 bays or fewer.

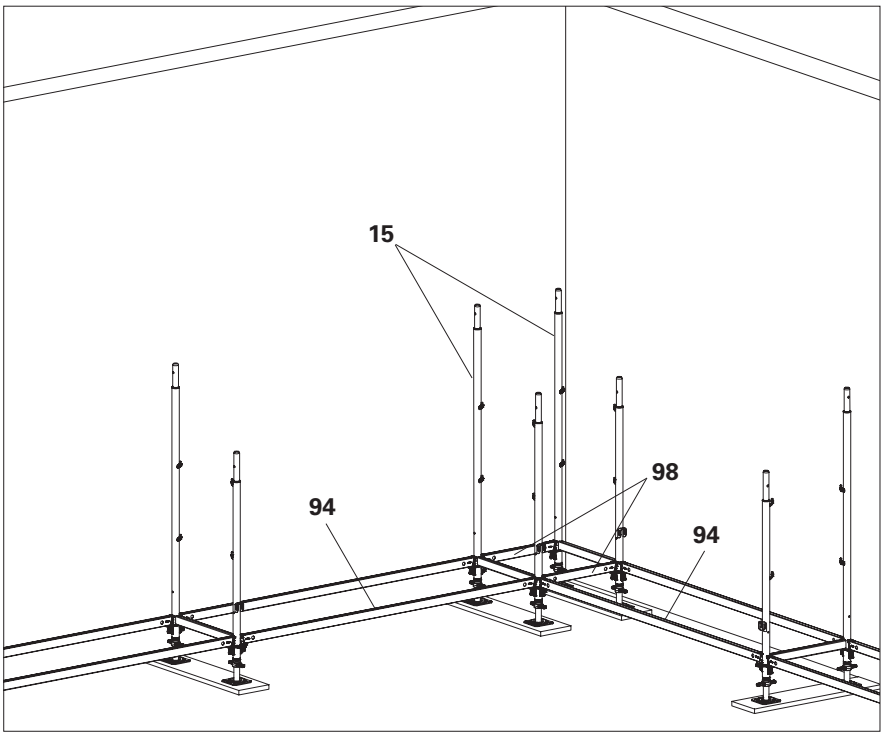


Fig. B6.07

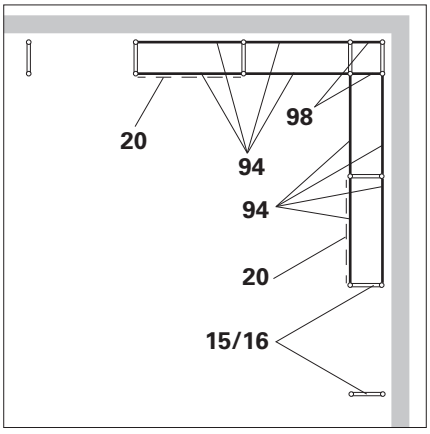


Fig. B6.07a

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

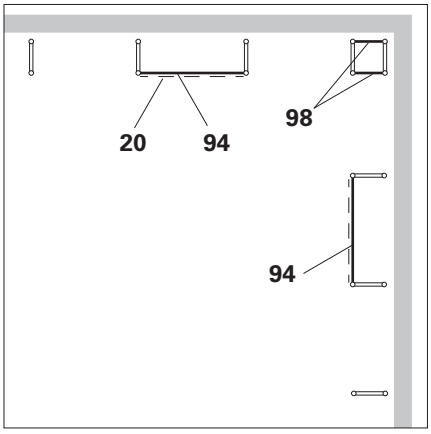


Fig. B6.07b

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

Assembly of the Easy Frame and guardrail posts

1. Position the Easy Frame EVF (**16**) on the Base Frame EVB (**15**) in the corner.
2. Pre-assemble two Guardrail Couplings EPR (**58**) on the outer tube of the second Easy Frame EVF (**16a**).
   – Fit the guardrail hook of the Guardrail Couplings EPR at the same height as the guardrail hook turned by 90° on the Easy frame.
   – The guardrail hook of the Guardrail Couplings EPR subsequently points to the inner side of the scaffolding in the second scaffold bay.
3. Position the pre-assembled Easy Frame EVF (**16a**).
4. Connect the Easy Frame EVF to the Horizontal Ledger UH-2 67 (**98**). Secure the wedges.
5. Attach Guardrail Post EPG (**51**) for the first scaffold bay (**A**) to the guardrail pin of the Easy frame (**16a**) from the level immediately below.
6. Fit the other side of the Guardrail Post EPG onto the Easy Frame EVF (**16b**), and then place in position.

(Fig. B6.08)

7. For the second scaffold bay (**B**), attach the Guardrail Post EPG (**51**) to the Guardrail Coupling EPR (**58**) from the level immediately below.
8. Fit the other side of the Guardrail Post EPG onto the Easy Frame EVF (**16**), and then place in position.

(Fig. B6.09)

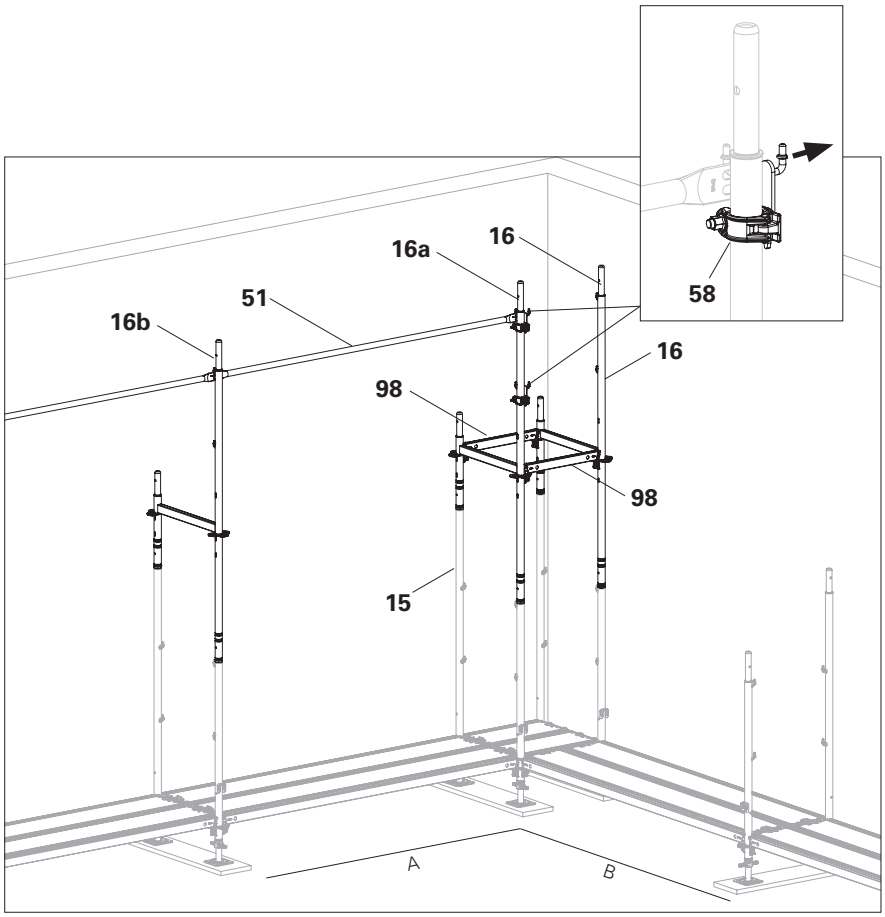


Fig. B6.08

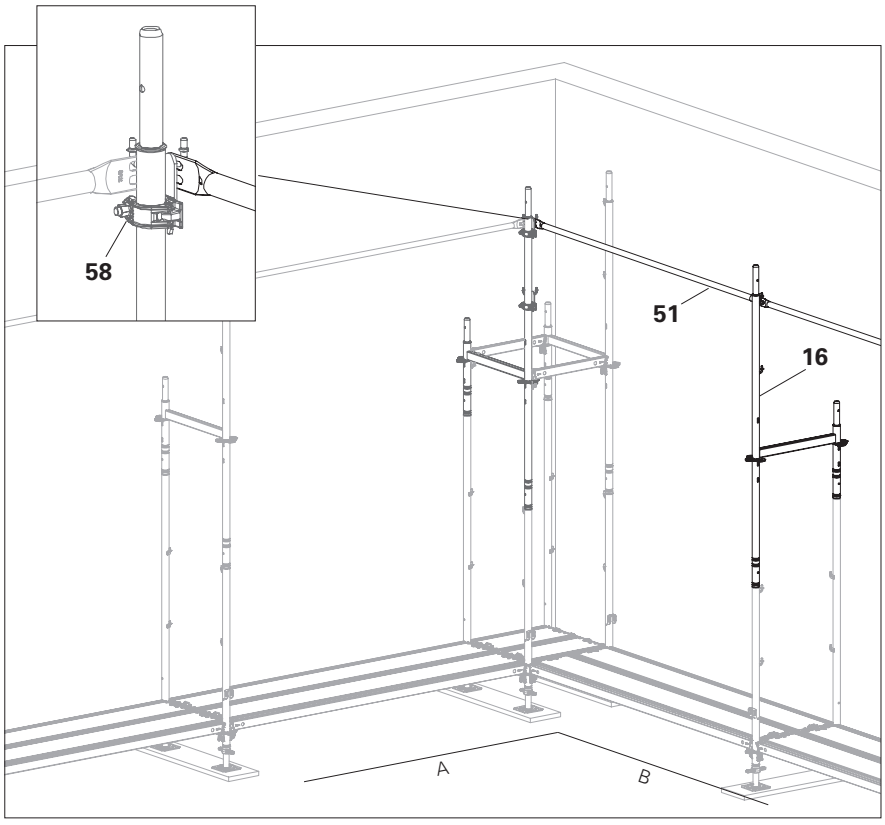


Fig. B6.09

B6 Corner configuration

Assembly of decks and braces

1. Install decks (**30**) in the first and second scaffold bays.
2. Install two Steel Decks EDS 33 x 67 (**35**) or Aluminium Deck EDA 67 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 finished.
(Fig. B6.10)

Components

15	Base Frame EVB
16	Easy Frame EVF
20	Face Brace EBF
30	Steel Deck EDS
35	Steel Deck EDS 33 x 67
51	Guardrail Post EPG
56	Toe Board UPF
58	Guardrail Coupling EPR
98	Horizontal Ledger UH-2 67

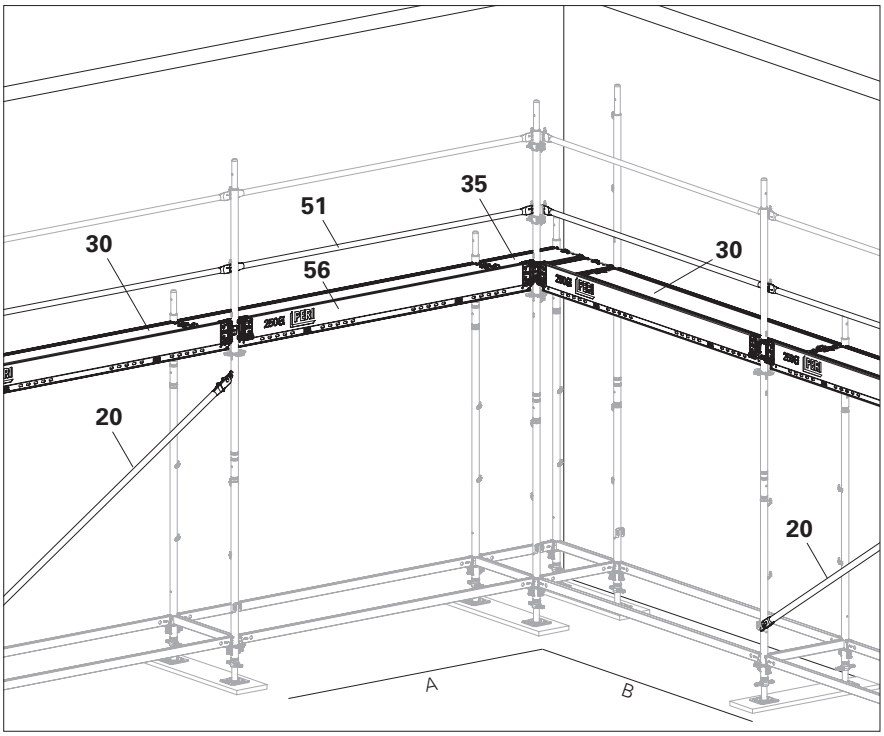


Fig. B6.10

B7 Longitudinal infills

General

- Carry out longitudinal infills in a longitudinal bay. Longitudinal infills in corner areas require project-specific planning.
- Plan the lengths of the adjacent scaffold 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 scaffold level immediately below, see the following Section.
3. Working from the protection of the Advance End guardrail: 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 scaffold level.

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

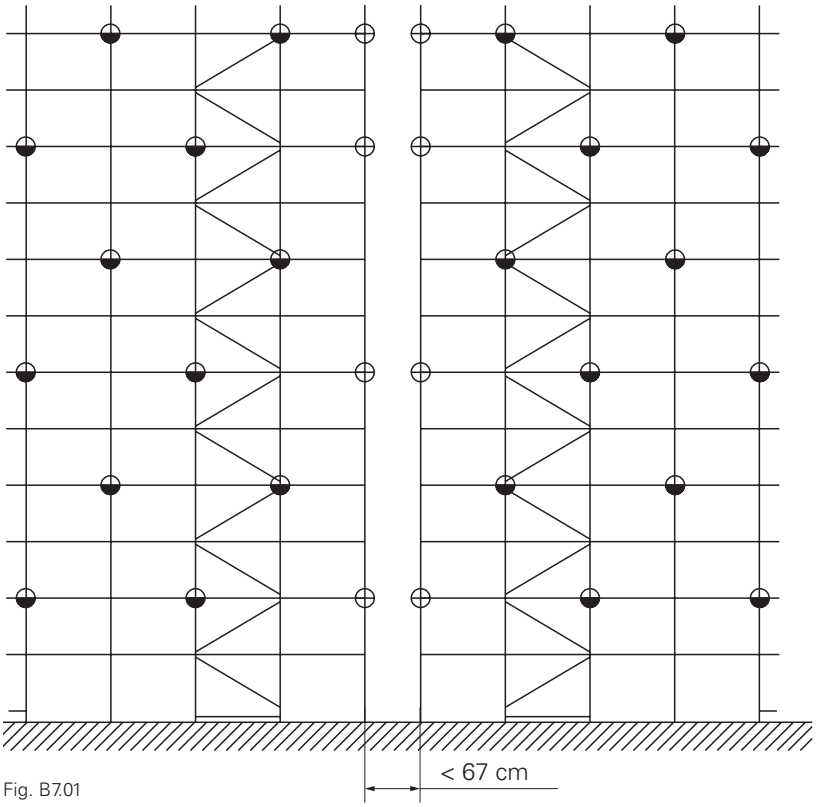


Fig. B7.01

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 scaffold 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 + B7.03a)

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

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

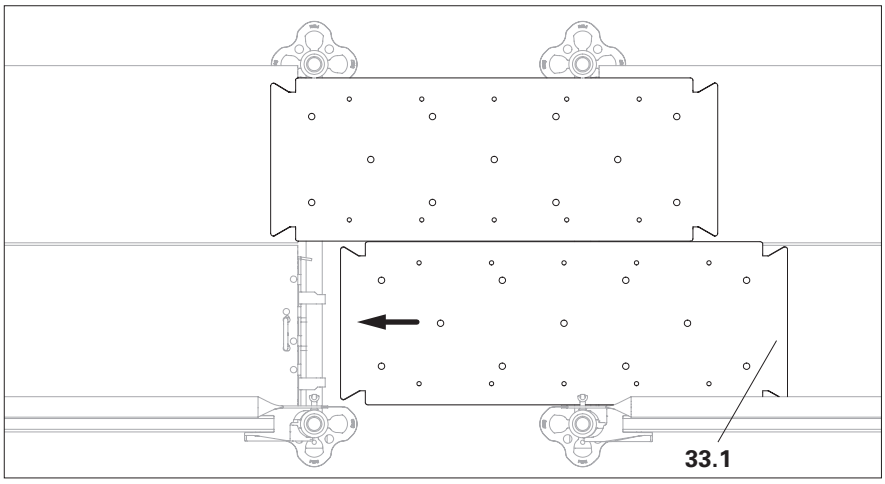


Fig. B7.02

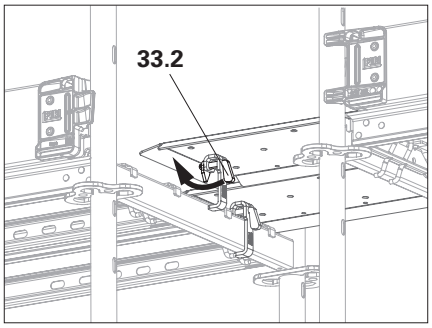


Fig. B7.03

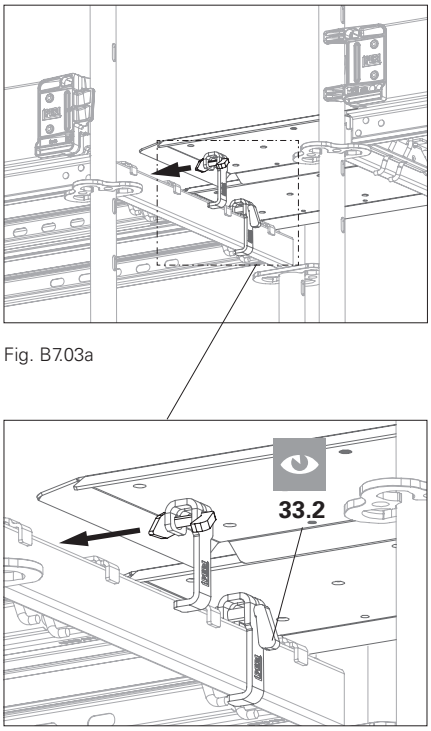


Fig. B7.03a

Guardrail Posts

Variation 1
Fit scaffold tubes onto the outer legs of the Easy frame with standard couplers. (not shown)

Variation 2
1. On one side, fit Guardrail Post EPG 100 or 150 (**51**) onto the guardrail connection plate of the Easy Frame EVF (**16**).
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 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 + B7.05)

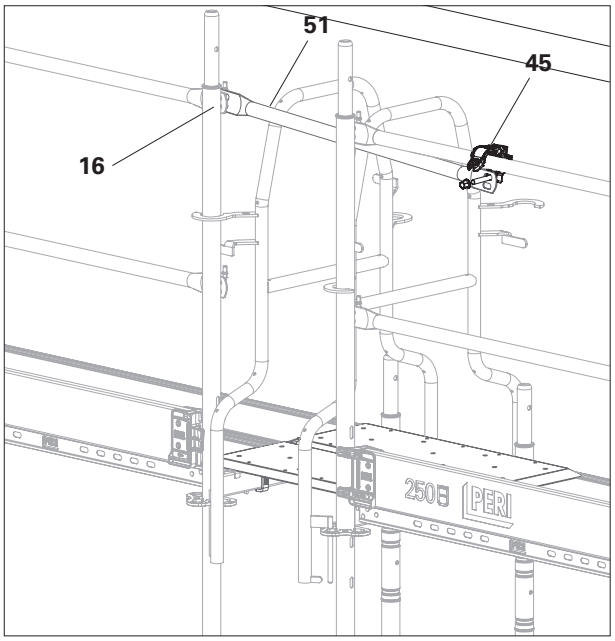


Fig. B7.04

Toe boards

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

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

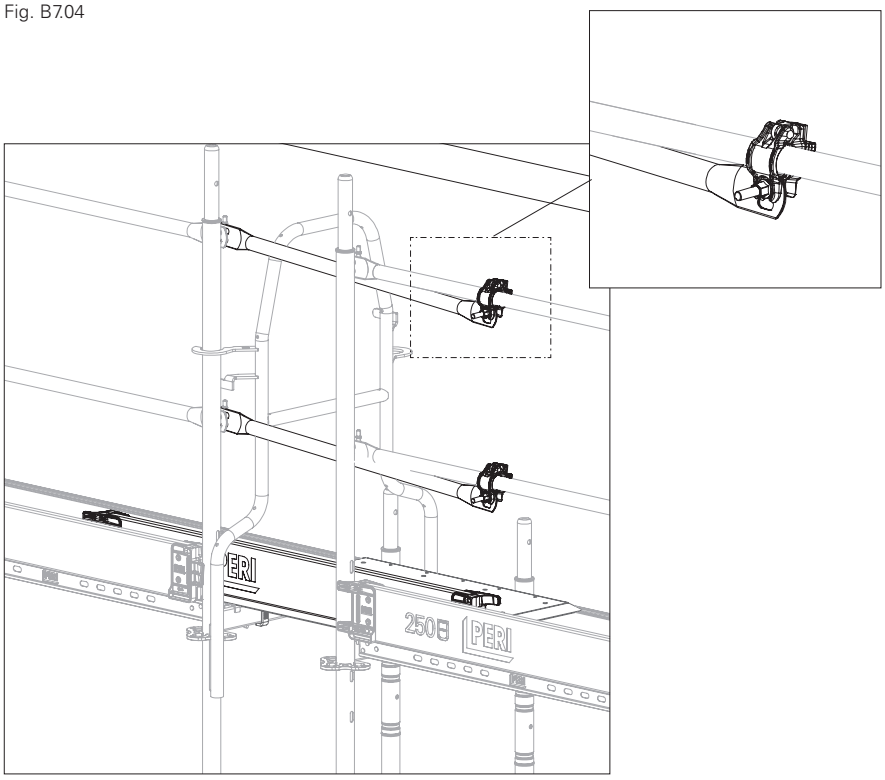


Fig. B7.05

Toe Board Compensation UPY-L

With the Toe Board Compensation UPY-L (**111**) and two Toe Boards 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.

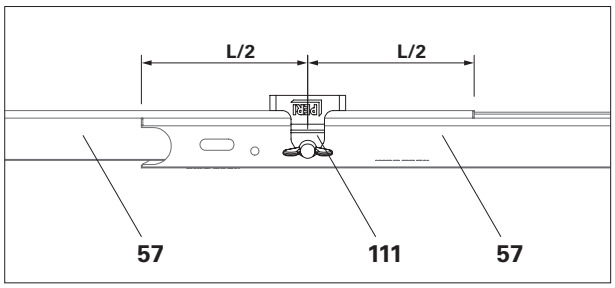


Fig. B7.06

Technical data

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

Assembly

1. Slide the Toe Board Compensation UPY-L (**111**) onto the first Toe Board UPY (**57**). (Fig. B7.07)
2. Slide the second Toe Board UPY (**57**) between the Toe Board UPY and Toe Board Compensation UPY-L in an overlapping position.
3. Pull the boards to the required length between the standards 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)

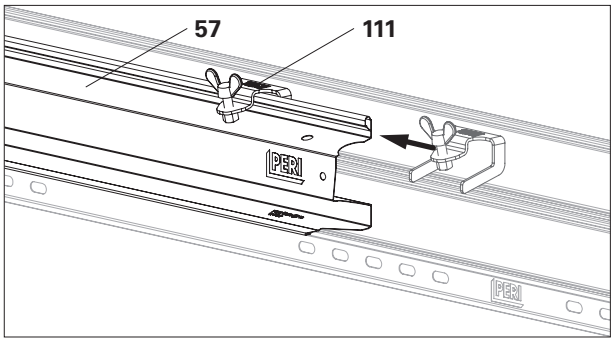


Fig. B7.07

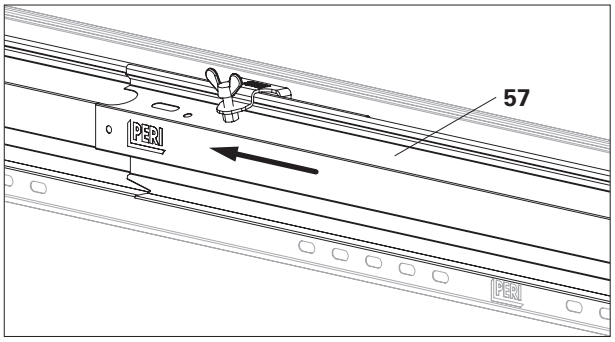


Fig. B7.08

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. B7.09)
Alternatively, close the gap elsewhere on site.

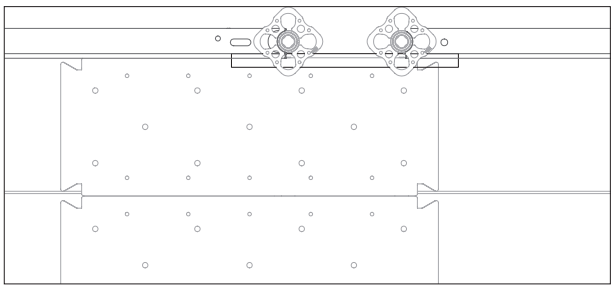


Fig. B7.09

Cover Plate UDP

Cover Plates UDP (**39**) are available for scaffold widths 67 cm, 75 cm and 100 cm.

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

Assembly

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

1. Connect partial scaffolds at the greater distance with Horizontal Ledger UH-2 (**98**).
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 (**98**).
4. Insert the wedge into the clamping part and hammer it tight.

→ Cover plate is installed. (Fig. B7.10 – B7.10b)

Application examples

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

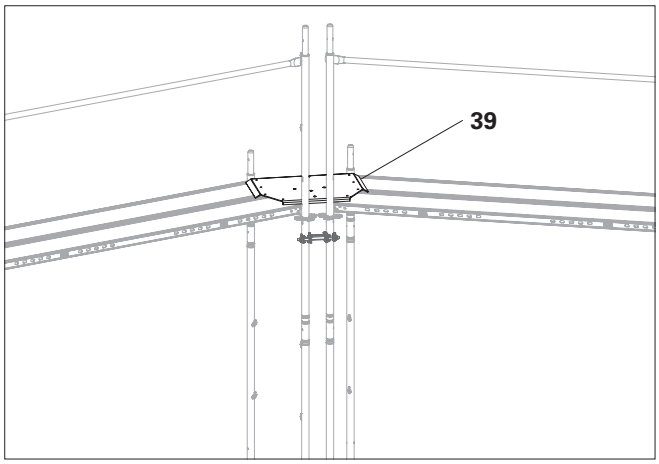


Fig. B7.10

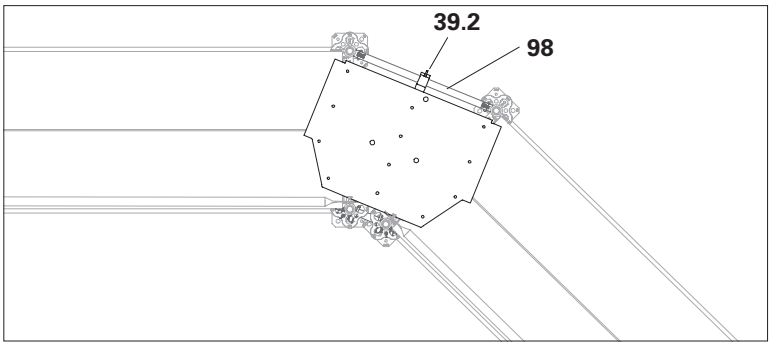


Fig. B7.10a

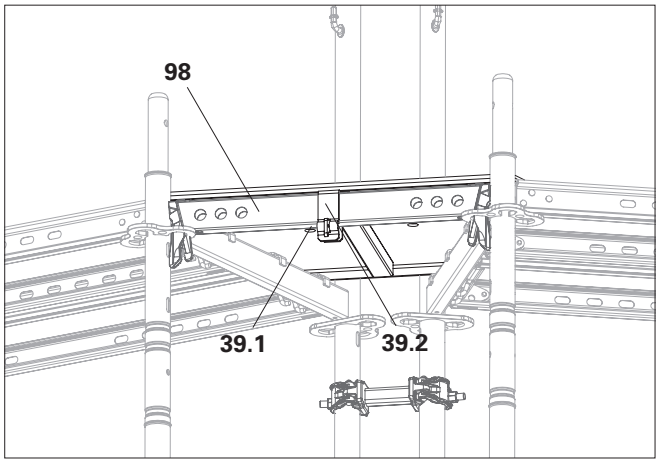


Fig. B7.10b

External access with staircase

The scaffold access can be realised in two ways.
The following section describes the version involving Easy Standard EVM and Stair Guardrail EAG.
For the version with Standard UVR and Horizontal Ledger UH-2, see Section H examples "External access" on page 269.

- Follow the prescribed assembly sequences!
- The scaffold access grows in line with the basic scaffold.
- If all bays in the basic scaffold are to be > LC3, external access must be fitted.
- Do not set any objects down on the scaffold access.

The staircases are intended for scaffold 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.

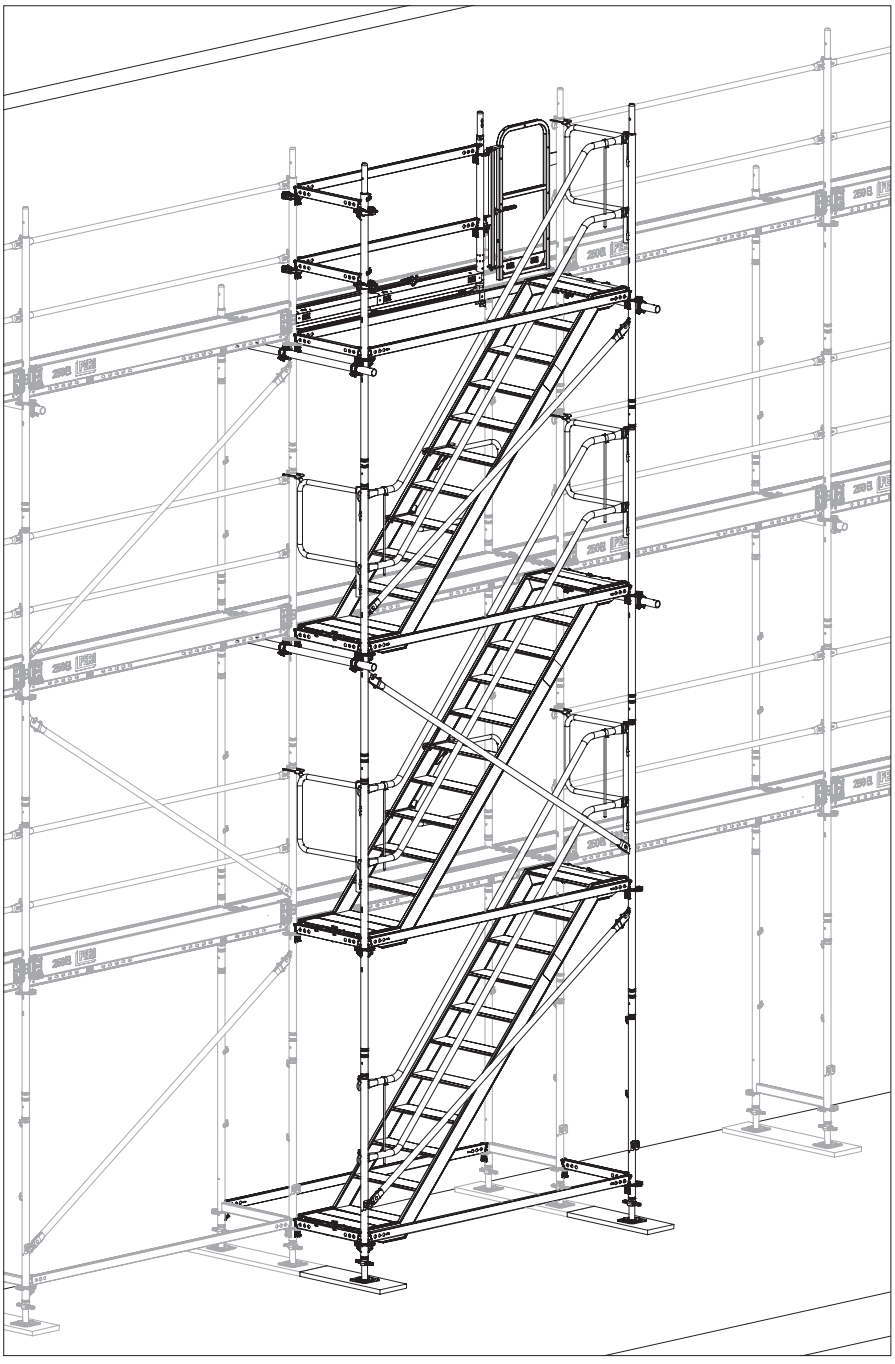


Fig. B8.01

Assembly of the base level

1. Fit Horizontal Ledger UH-2 (**94**) on the inner side of the basic scaffold in the base level. Secure the wedges.
2. Position Base Spindles UJB (**10**) 67 cm apart.
3. Position Easy Base Posts EVS (**23**) on the Base Spindles UJB (**10**).
4. Connect the Easy Base Posts EVS (**23**) to the Base Frame EVB (**15**) with Horizontal Ledgers UH-2 67 (**98**). Do not secure the wedges yet.
5. Connect Easy Base Posts EVS with the Horizontal Ledger UH-2 (**94a**). Do not secure the wedges yet.
6. Horizontally align the base level using a spirit level.
7. Hammer all wedges into place.

→ The base level is now installed. (Fig. B8.02)

Components

10	Base Spindle UJB
23	Easy Base Post EVS 124
94	Horizontal Ledger UH-2
98	Horizontal Ledger UH-2 67

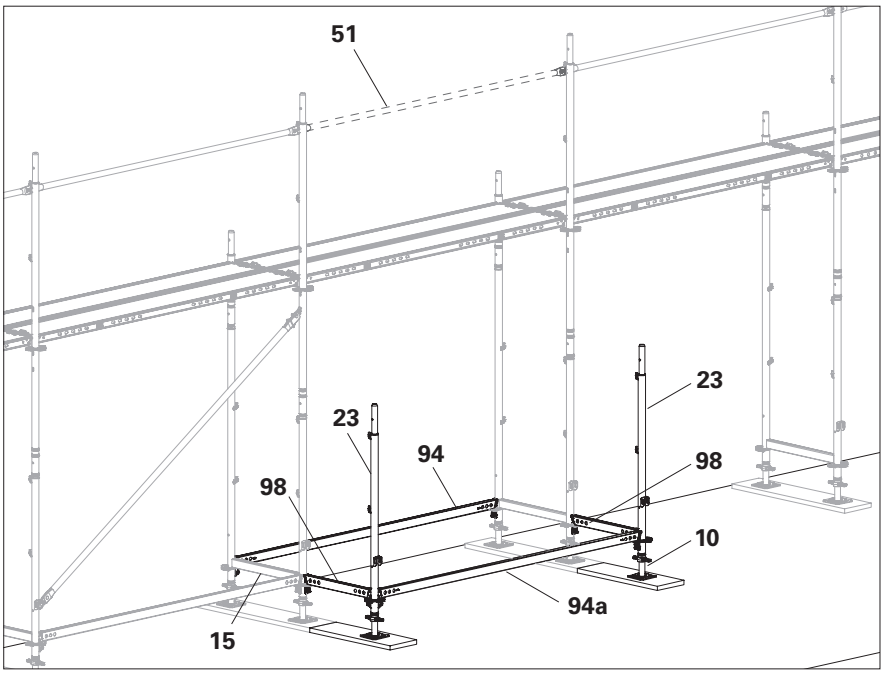


Fig. B8.02

The last step is to fit the guardrail post (**51**) in the access bay from the stair tower. Otherwise it must be re-positioned later according to Section "B9 Scaffold modification" on page 95.

Assembly of the first staircase

1. Pre-assemble End Guardrails EPF (**54**) on an Easy Standard EVM (**22**).
2. Fit Easy Standard EVM (**22**) onto Easy Base Standard EVS (**23**) with a pre-mounted end guardrail (**54**).
3. Fit Horizontal Ledger UH-2 67 (**98**) between Easy Standard (**22**) and base scaffold as an upper stair support. Secure the wedges.
4. Fit the second Easy Standard (**22a**) onto the base standard.

(Fig. B8.03)

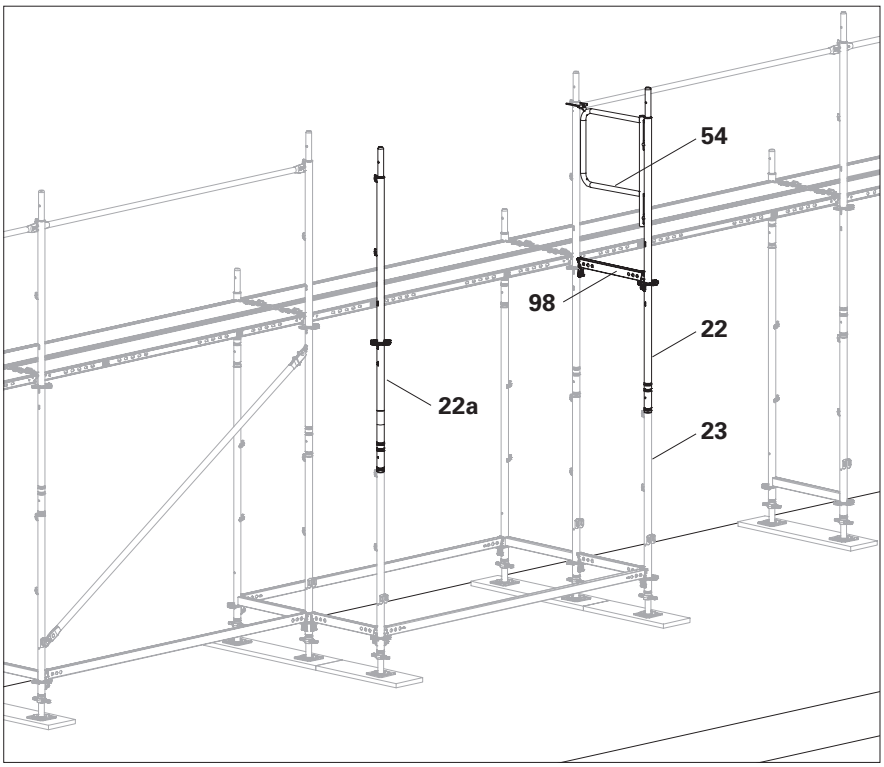


Fig. B8.03

5. Fit two Stair Guardrails EAG (**77**) between the Easy standard (**22**) and base standard (**23a**).
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.
7. Attach Stair Tower UAS/EAS (**76**) firstly to the top Horizontal Ledger UH-2 67 and then to the bottom one.
8. Fit the guardrail post (**51**) in the access bay from the stair tower. (Fig. B8.04)

Components

22	Easy Standard EVM 200
23	Easy Base Post EVS 124
54	End Guardrail EPF 67
76	Stair Tower UAS/EAS
77	Stair Guardrail EAG
79	Locking Pin EAG
98	Horizontal Ledger UH-2 67

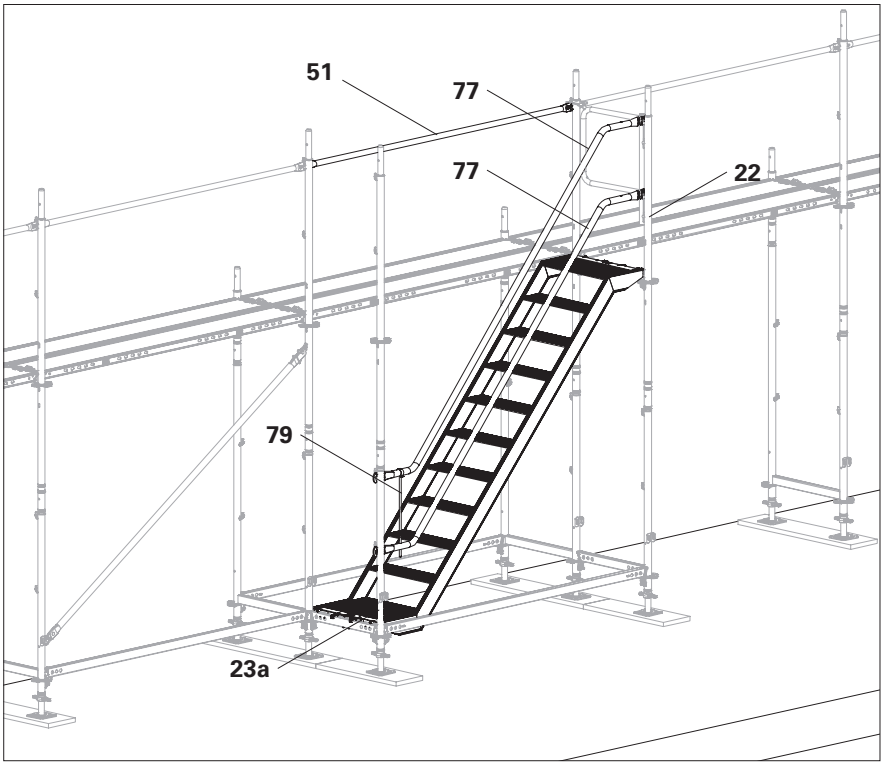


Fig. B8.04

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)

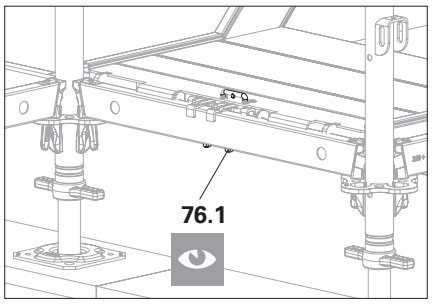


Fig. B8.04a

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

9. Brace both outer legs using a face brace (**20**) and horizontal ledger (**94+ 98**).
10. At the step at the top, connect both Stair Guardrails EAG (**77**) with Locking Pin EAG (**79**).

→ The first staircase is now installed.

- The guardrail post (**51**) of the basic scaffold remains in place until the next stair level is installed.
- To access the upper scaffold level, detach the guardrail post (**51**) on the side of the stair exit, enter the scaffold level and then reattach it straight away.
(Fig. B8.05)

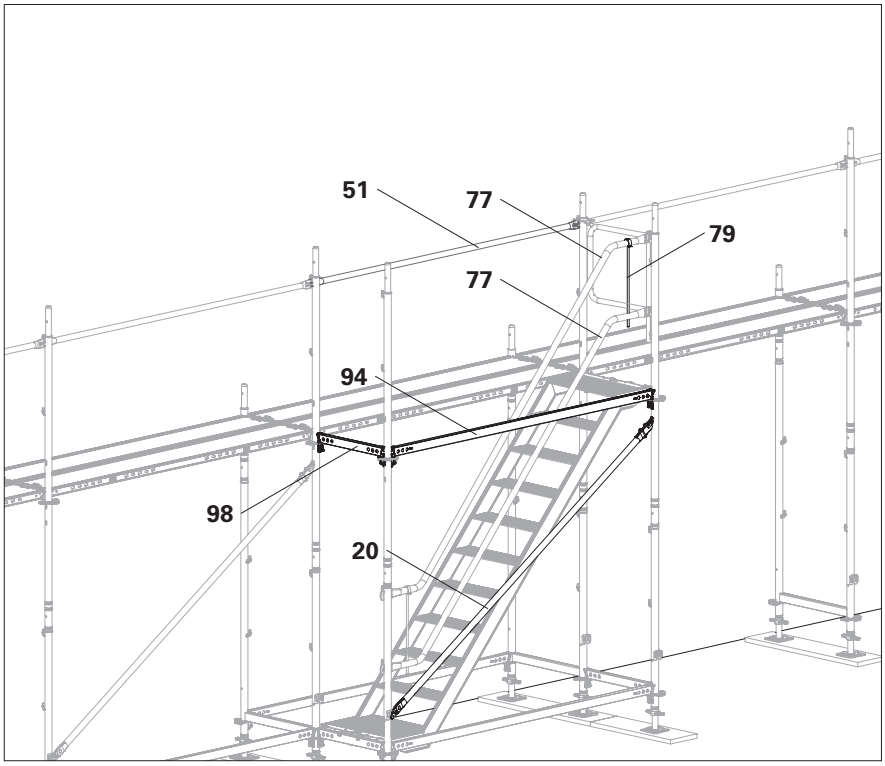


Fig. B8.05

Assembly of additional staircases

1. Attach Tube EVR 150 (**18**) and an Easy Frame EVF (**16**) to the basic scaffold.
2. As described for the base level, fit the Easy Standard EVM (**22**) with pre-mounted end guardrail (**54**) and Horizontal Ledger UH-2 67 (**98**).
3. Install Stair Tower UAS/EAS (**76**) from the staircase below.

(Fig. B8.06)

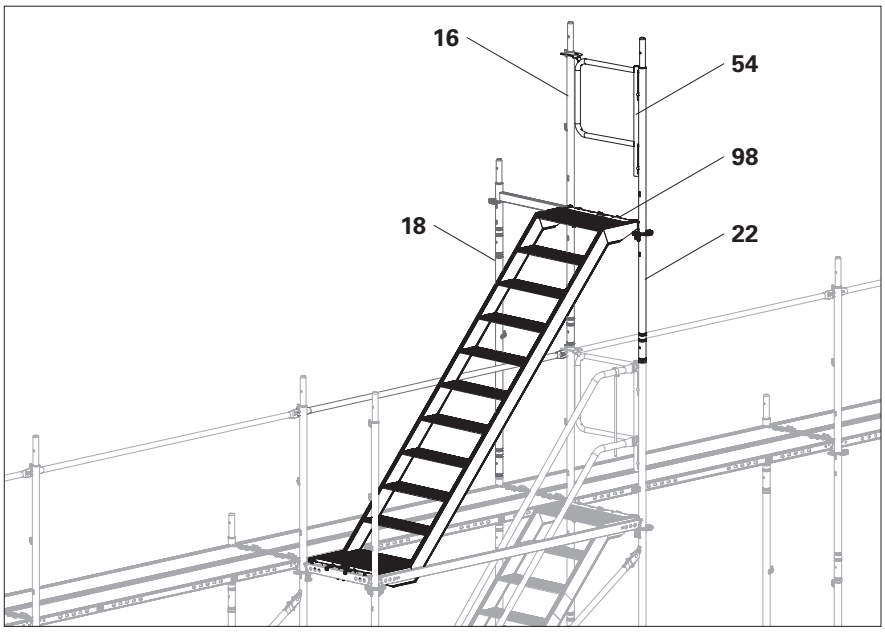


Fig. B8.06

- From the basic scaffold:

4. Fit two Stair Guardrails EAG (**77**) and connect them on the entrance side with a locking pin (**79**).
5. Fit the End Guardrail EPF (**54**).
6. Fit Stair Guardrail UAH-2 (**78**) onto the internal side of the staircase.
7. Remove guardrail (**51**) from the basic scaffold.

(Fig. B8.07)

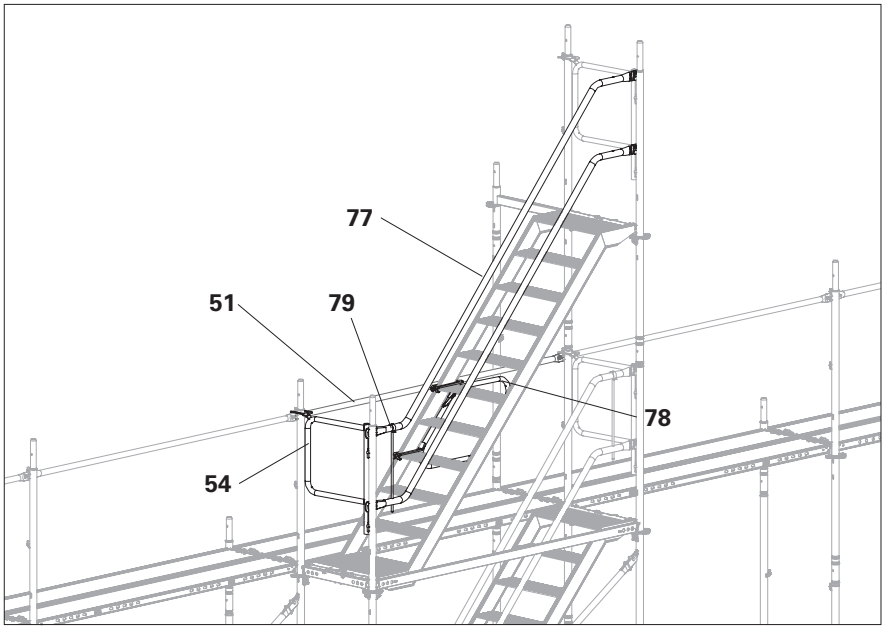


Fig. B8.07

Components

16	Easy Frame EVF
18	Tube EVR 150
22	Easy Standard EVM 200
51	Guardrail Post EPG
54	End Guardrail EPF
76	Stair Tower UAS/EAS
77	Stair Guardrail EAG
78	Stair Guardrail UAH-2
79	Locking Pin EAG
98	Horizontal Ledger UH-2 67

Stair Guardrail UAH cannot be connected to Flex Staircases UAS-2 or Easy Staircases EAS.

Installing an additional scaffold level

1. Complete the lateral protection on the existing scaffold level.
2. Assemble the next scaffold level.
3. Connect the Stair Guardrail EAG (**77**) at the top with a locking pin (**79**).

→ The scaffold level and staircase are now installed.

(Fig. 8.08)

Install additional scaffold levels and staircases in the same way.

The last step is to fit the guardrail post (**51**) in the access bay from the stair tower. Otherwise it must be re-positioned later according to Section "B9 Scaffold modification" on page 95.

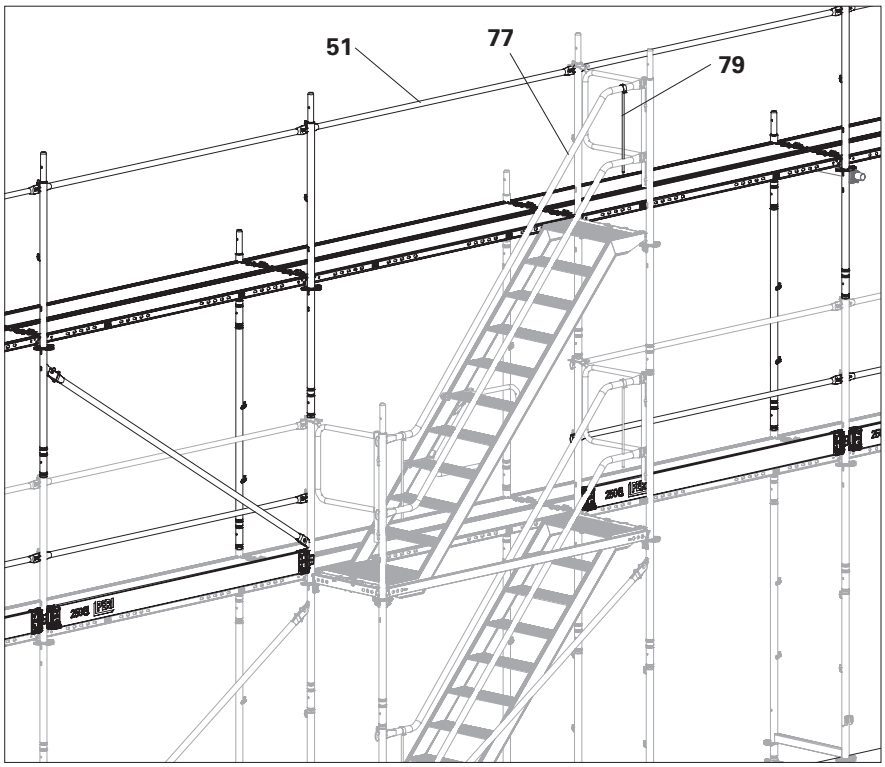


Fig. B8.08

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

Anchoring
Anchor the scaffold staircase in accordance with the tie pattern, see Section "E3 Tie pattern" on page 168. Anchor the two frame columns of the external scaffold access:

- Anchor the Wall Tie UWT (**46**) to both tubes of the Easy Frame EVF (**16**) as well as the Easy Standard EVM (**22**) using one Wall Tie Coupler EWC (**45**) or standard coupler each. (Fig. B8.09)

Components

16 Easy Frame EVF
20 Face Brace EBF
45 Wall Tie Coupler EWC
46 Wall Tie UWT
94 Horizontal Ledger UH-2
98 Horizontal Ledger UH-2 67

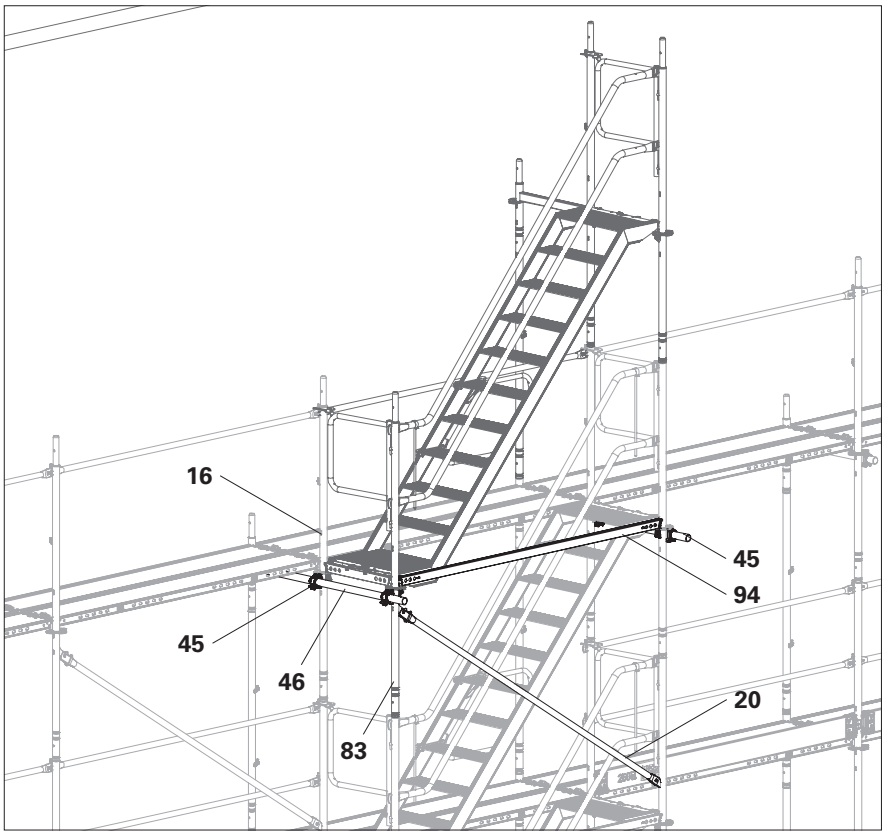


Fig. B8.09

Top staircase
Always anchor and brace the uppermost staircase.

Assemble the uppermost staircase in the same way as an additional staircase, and in addition:

1. Screw two Clamping Rosettes UEV 180° (**100**) to Easy Standard EVM to support two horizontal ledgers (Fig. B8.12).
   – Align the clamping rosettes so that the wedges of the horizontal ledgers do not collide with the guardrail hooks of the Easy standard.
   – Mounting distance 50 cm and 100 cm to the existing rosette.
2. Attach the Easy Standard EVM 200 (**83**) in such a way that the guardrail hooks (**83.1**) point outwards.
3. Connect the Easy standard to the base frame with the Horizontal Ledger UH-2 (**98**).

Components

22	Easy Standard EVM 200
98	Horizontal Ledger UH-2 67
100	Clamping Rosette UEV 180°

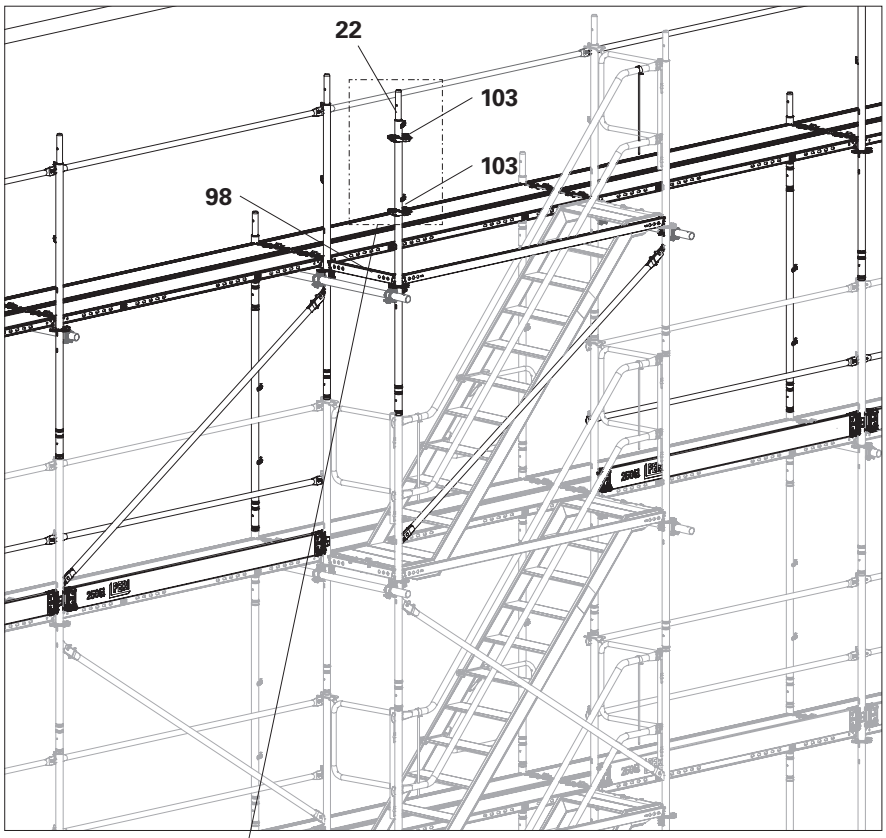
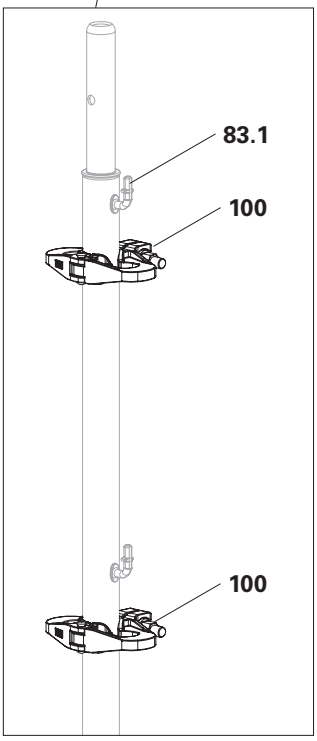


Fig. B8.10



Guardrails

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. Fit a Standard UVR-2 100 (**85**) onto UH Spigot-2.
4. Screw two Clamping Rosettes UEV 90° (**103**) onto the outer leg (**16.2**) of the Easy frame.
5. Attach two Horizontal Ledgers UH-2 225 (**95**) to clamping rosettes (**103**) and standard (**85**) as a guardrail post and intermediate guardrail.
6. Align UH Spigot-2 (**93**) and secure the wedge.
7. Fit Toe Board UPY (**57**).
8. Fit two Horizontal Ledgers UH-2 67 (**98**) into the clamping rosettes (**103**) between the outer leg (**16.2**) and Easy standard (**22**).

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

Components

22	Easy Standard EVM 200
57	Toe Board UPY
85	Standard UVR-2 100
93	UH Spigot-2
94	Horizontal Ledger UH-2 250/300
95	Horizontal Ledger UH-2 175/225
98	Horizontal Ledger UH-2 67
103	Clamping Rosette UEV 90°

There is the option of fitting a Safety Door UPS (**133**).

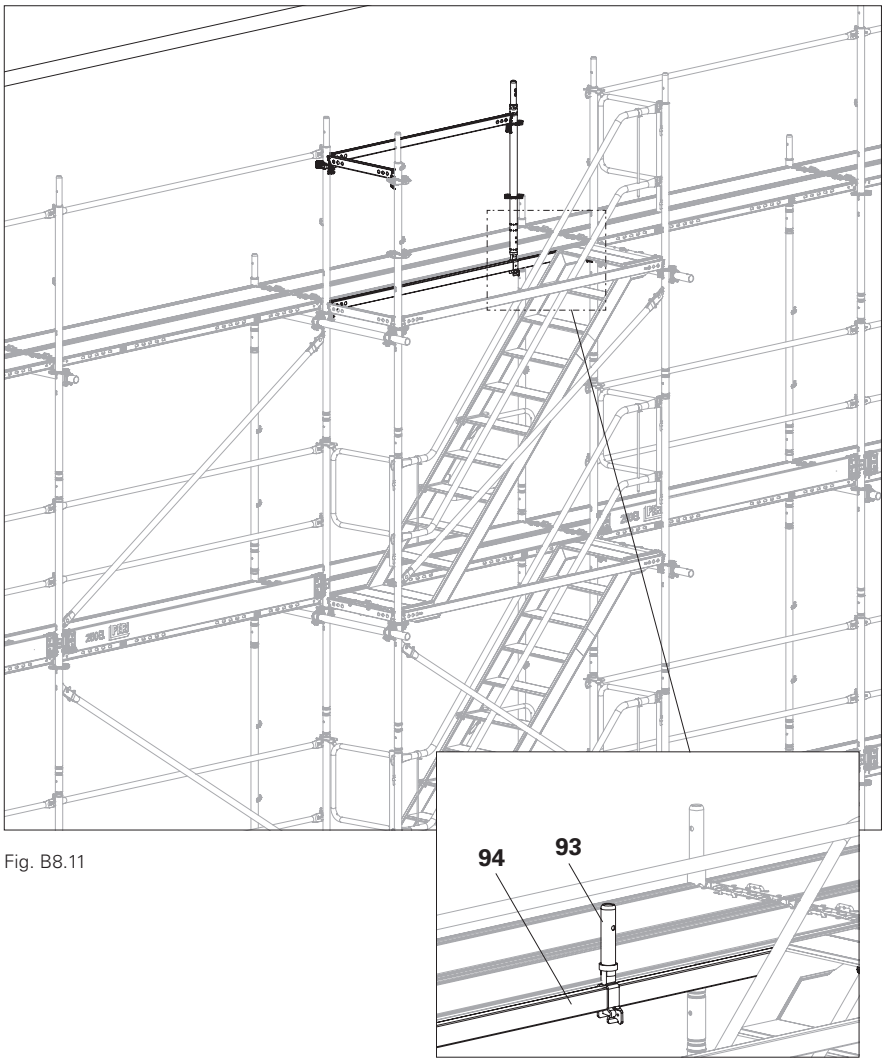


Fig. B8.11

Fig. B8.11a

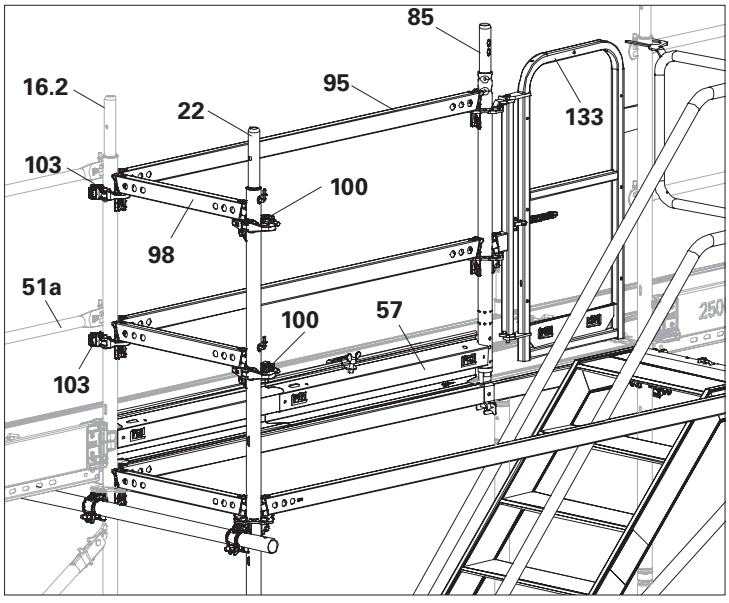


Fig. B8.12

Internal access with 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**) (with attached access ladder) in the basic scaffold.
For 2.00 m bay lengths, install the Entry Platform EAW 200, EAC 200 or EAA 200 and Ladder UAF.

- For system width 100, a front-mounted stair tower must be fitted.
- Internal access using access decks is possible up to Load Class 3 (LC3).
- When not in use, the access hatches must remain closed!

Warning
Open access hatches pose a risk of falling.
⇒ Arrange the access openings alternately!

Caution!
Body parts can become trapped by self-closing access hatches.
⇒ The self-closing hatch should be firmly held during use!
⇒ Take into consideration any other persons waiting to use the hatch!

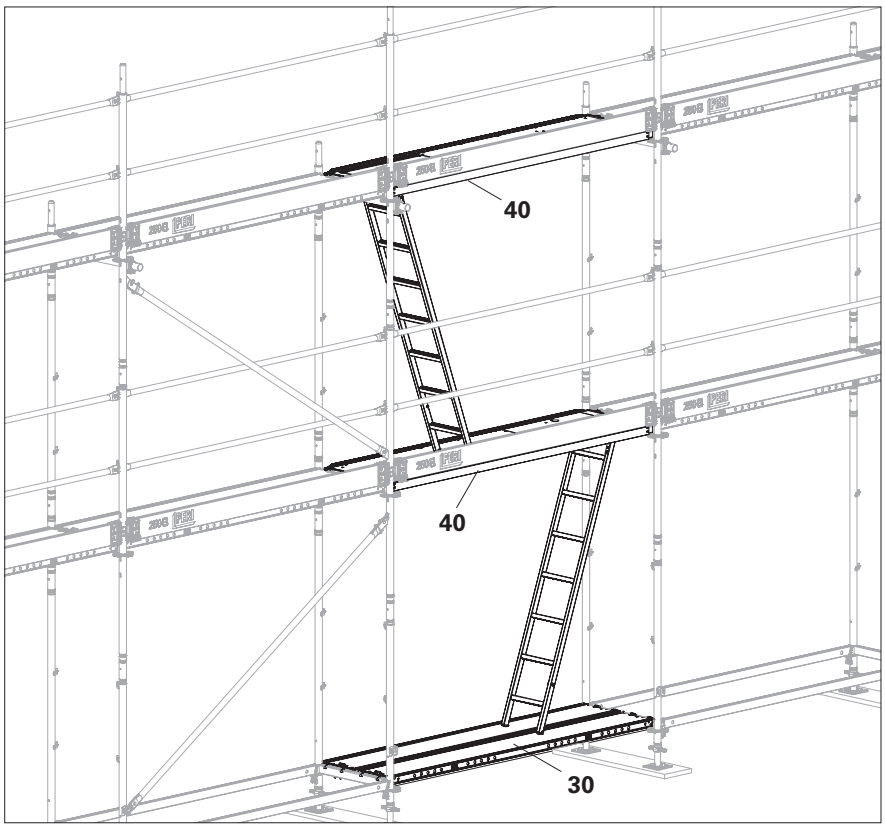


Fig. B8.11

Assembly

1. Fit Decks (**30**) onto the bottom level as a basis for the first ladder.
2. In the following scaffold levels in this bay, install an access deck (**40**) instead of the deck.

→ Access deck is installed.
(Fig. B8.12)

For deck variations, see Section

Components

30	Steel Deck EDS
40	Access Deck EAW-L

Fit an intermediate guardrail in the access bay on the inner side of the scaffold. This serves as an additional handhold when ascending and descending, as well as a stop for the flap.

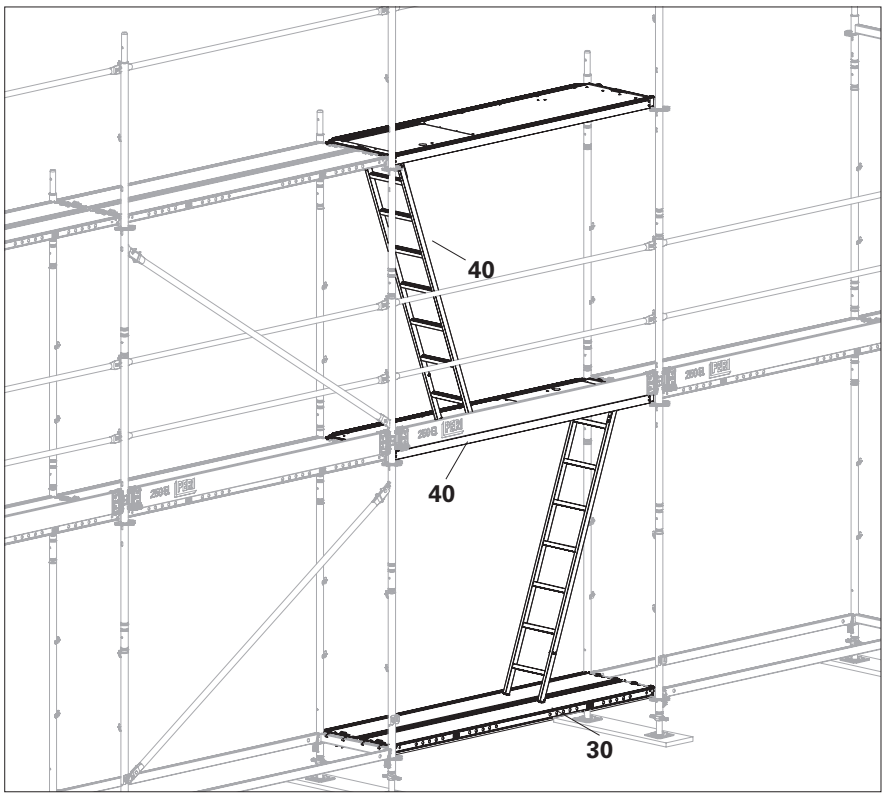


Fig. B8.12

General

- 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 scaffold 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 scaffold bay

From the scaffold bay to be dismantled:
1. Fit a Guardrail Coupling EPR (**58**) onto both Easy Frames 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 temporary Guardrail Post EPG 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)

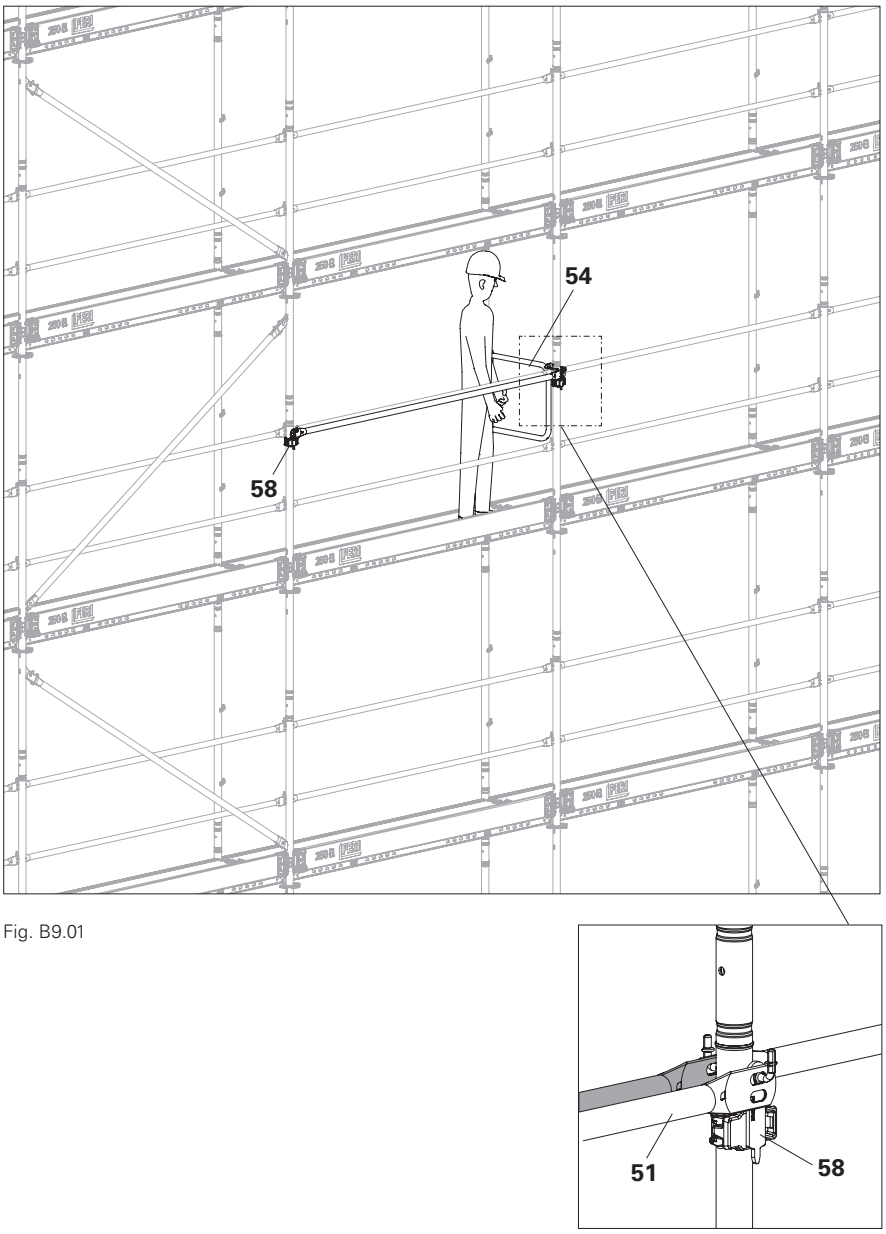


Fig. B9.01

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 for subsequent closure.

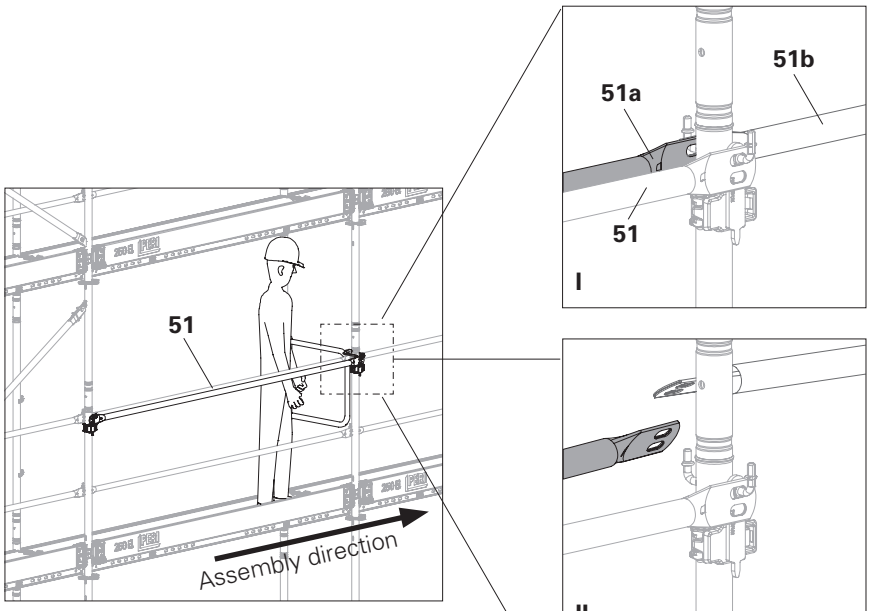


Fig. B9.01a

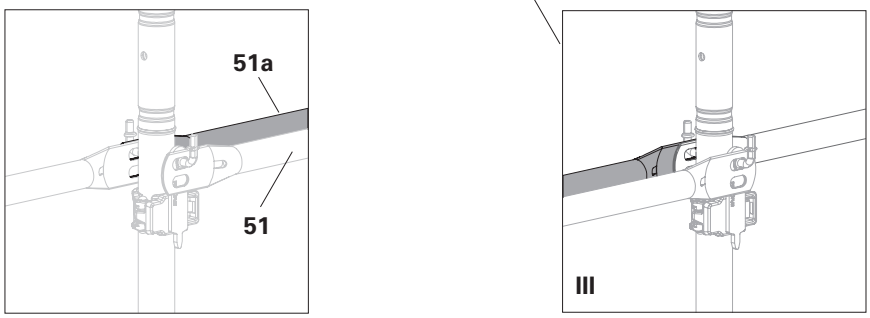


Fig. B9.01b

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

(Fig. B9.01c)

Components

51	Guardrail Post EPG
54	End Guardrail EPF 67
58	Guardrail Coupling EPR

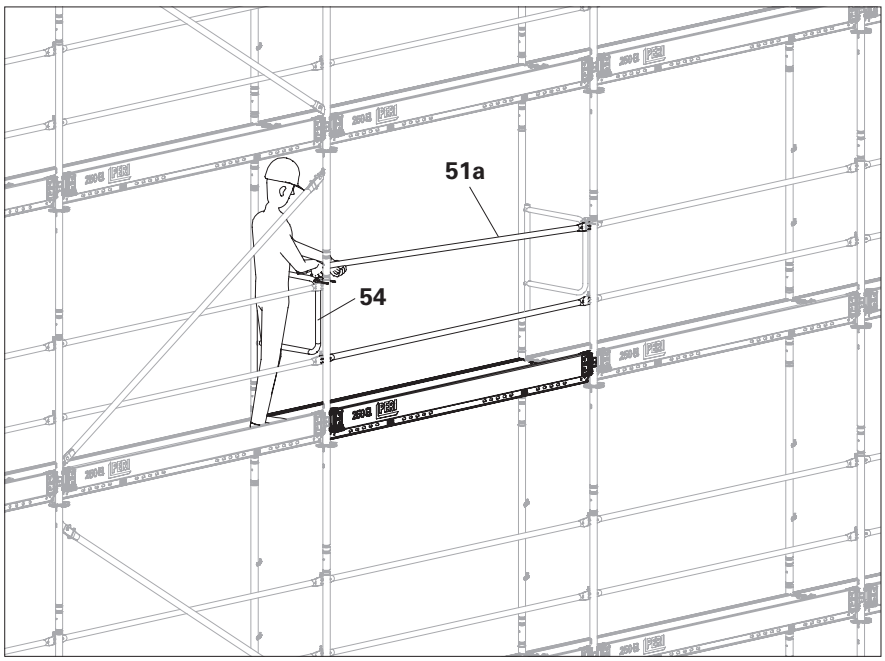


Fig. B9.01c

From the level immediately below:
9. Remove the decks.
10. Install Toe Boards UPF.
→ The scaffold bay is now dismantled. (Fig. B9.01d)

Provide suitable access to cut scaffold level.

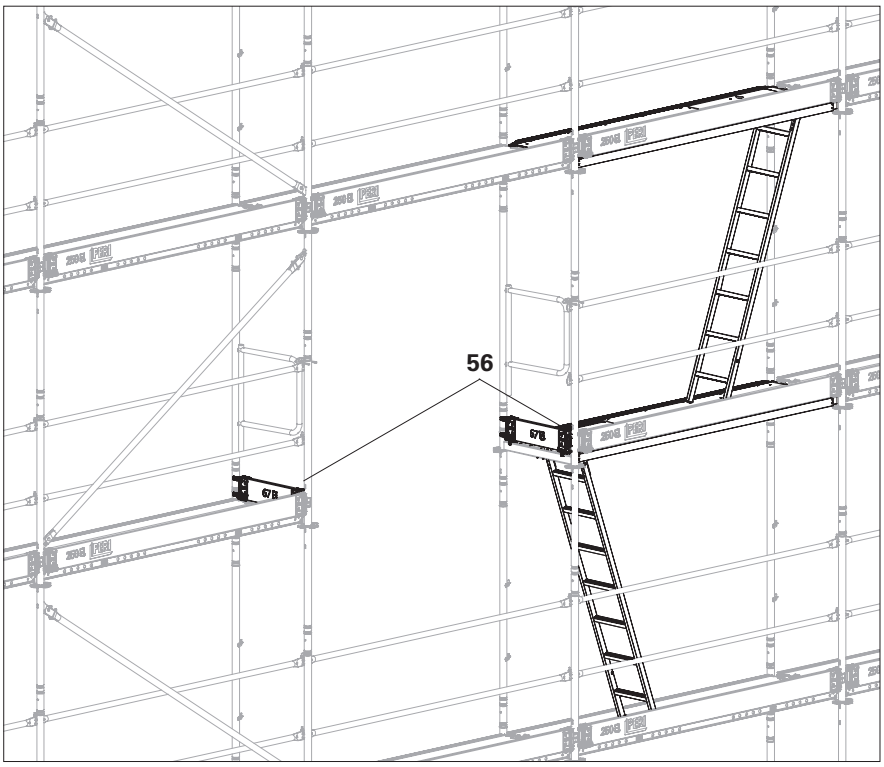


Fig. B9.01d

Closing the scaffold bay

From the level immediately below:
1. Remove the Toe Boards UPF.
2. Install the decks (**30**).

Components

30	Steel Deck EDS
51	Guardrail Post EPG
52	End Guardrail EPF
56	Toe Board UPF
58	Guardrail Coupling EPR

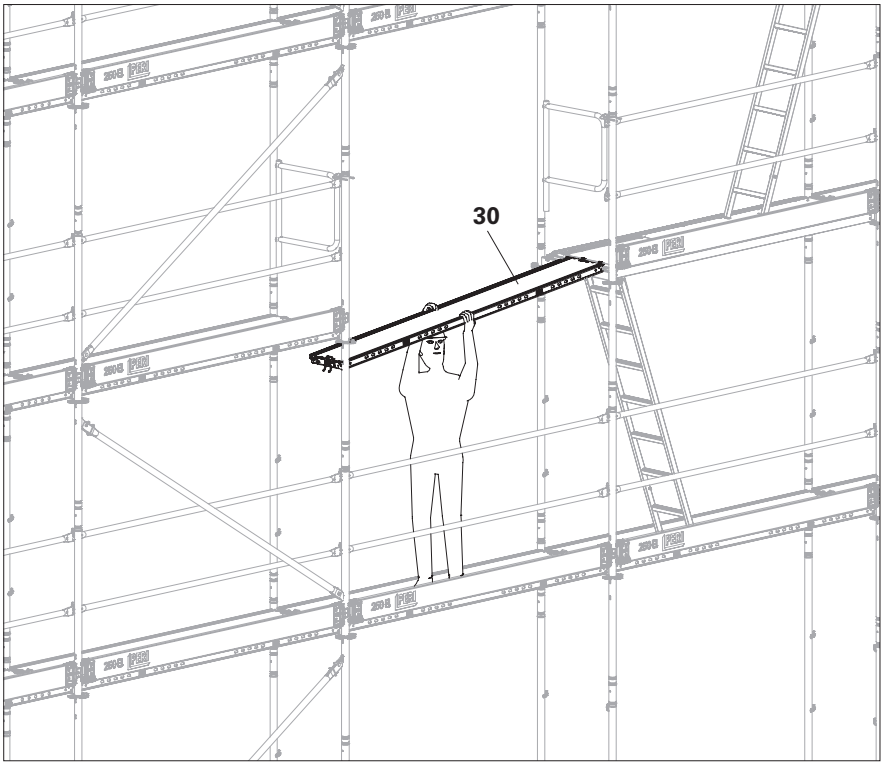


Fig. B9.02

From the adjacent scaffold 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. B9.02a)

From the scaffold bay to be closed:

5. Fit a Guardrail Coupling EPR (**58**) onto both Easy standards 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. B9.02c).
6. Attach a temporary additional Guardrail Post EPG (**51**) to the outside of the Guardrail Couplings EPR.
7. Make suitable amendments to the fitting order of the guardrail posts.

(Fig. B9.02b)

- To remove/re-position, 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 scaffold bay is now closed.

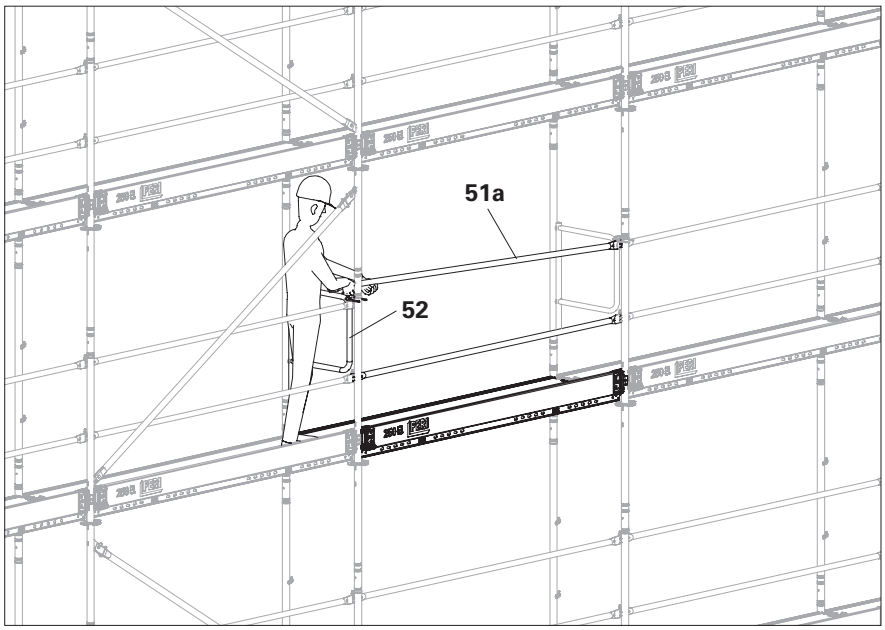


Fig. B9.02a

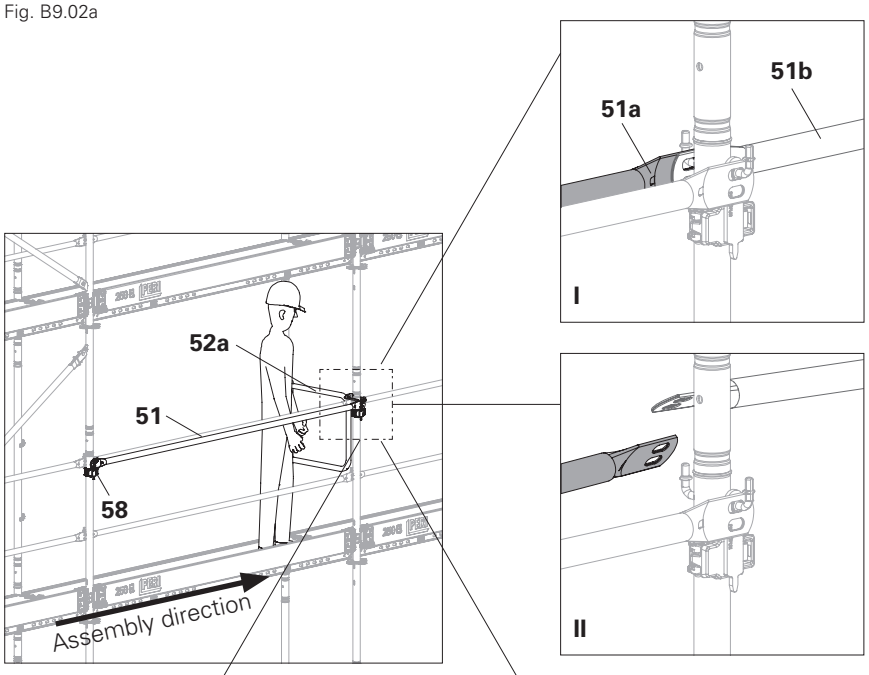


Fig. B9.02b

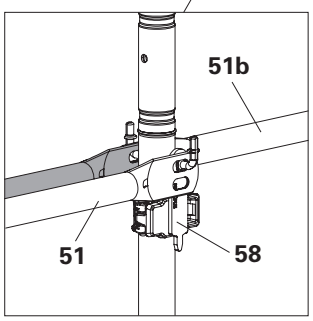


Fig. B9.02c

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. B9.03)

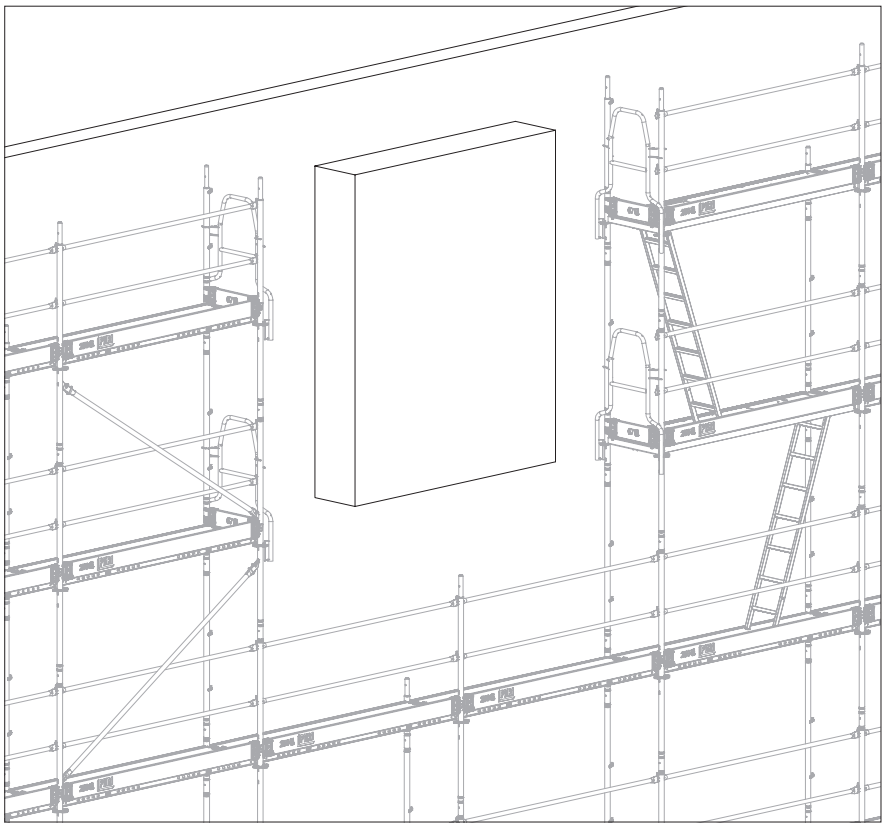


Fig. B9.03

Assembly

1. From the level immediately below, fit Tube EVR 150 (**18**) and Easy Frame EVF (**16**) with Guardrail Post EPG (**51**).
2. Install the decks (**30**).

(Fig. B9.04)

Components

16	Easy Frame EVF 67
18	Tube EVR 150
30	Steel Deck EDS
51	Guardrail Post EPG
52	Advance End Guardrail UPA 67
56	Toe Board UPF

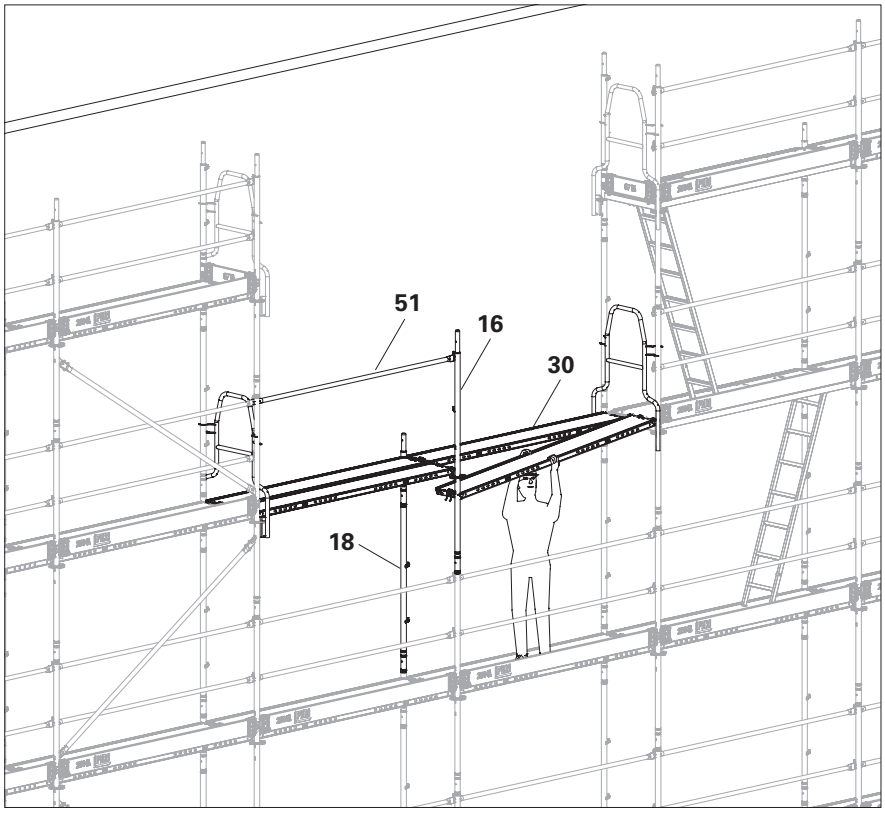


Fig. B9.04

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

(Fig. B9.05)

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 scaffold bays" on page 94 ff.

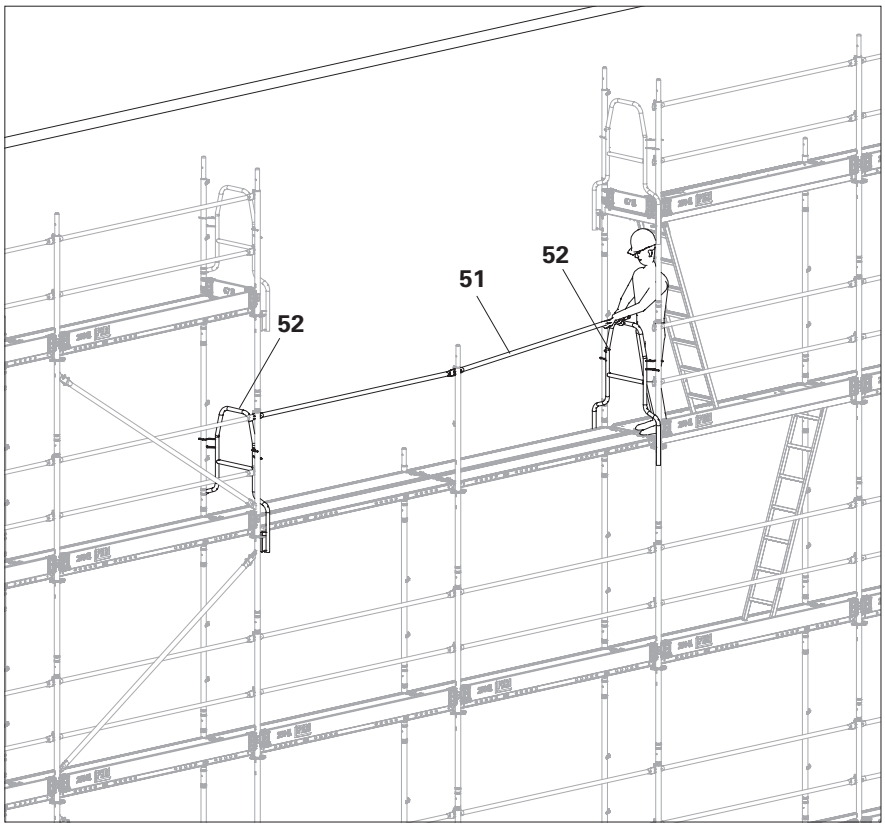


Fig. B9.05

5. Complete the lateral protection with intermediate guardrails (**51a**) and Toe Boards 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. B9.06)

Components

51	Guardrail Post EPG
52	Advance End Guardrail UPA 67
56	Toe Board UPF

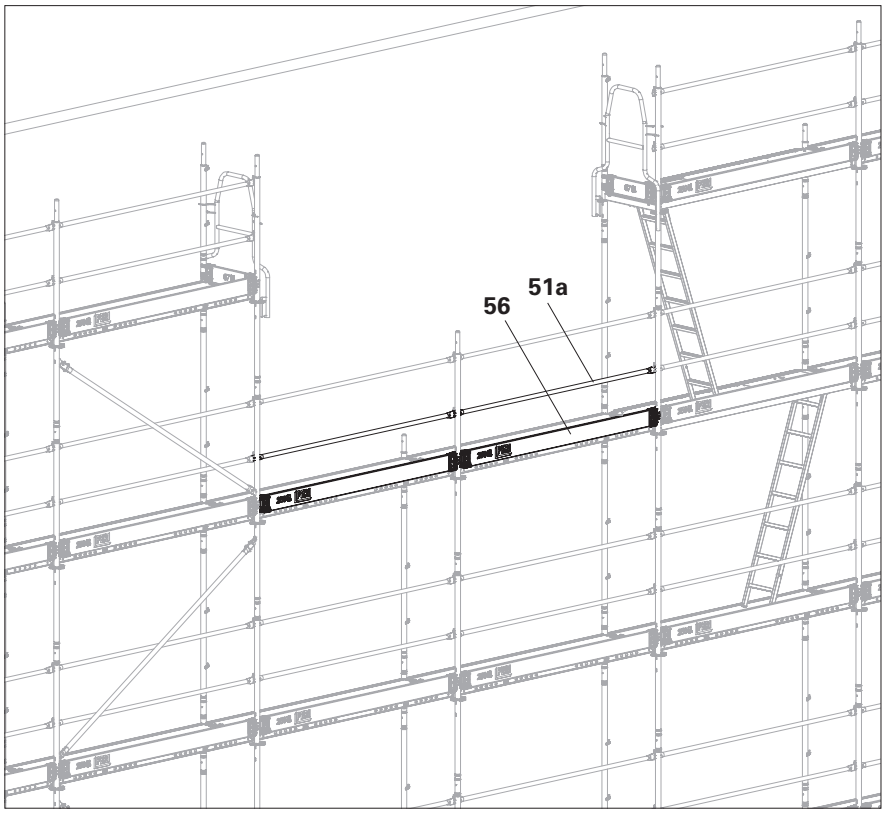


Fig. B9.06

Nets/tarpaulin

Note

Stability compromised!

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

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 $cf_{\perp} \leq 0.6$ and $cf_{\parallel} \leq 0.2$. The nets are to be fastened to the scaffold standards according to the manufacturer's instructions. (Fig. B10.01 + B10.02)

Cladding with tarpaulins

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

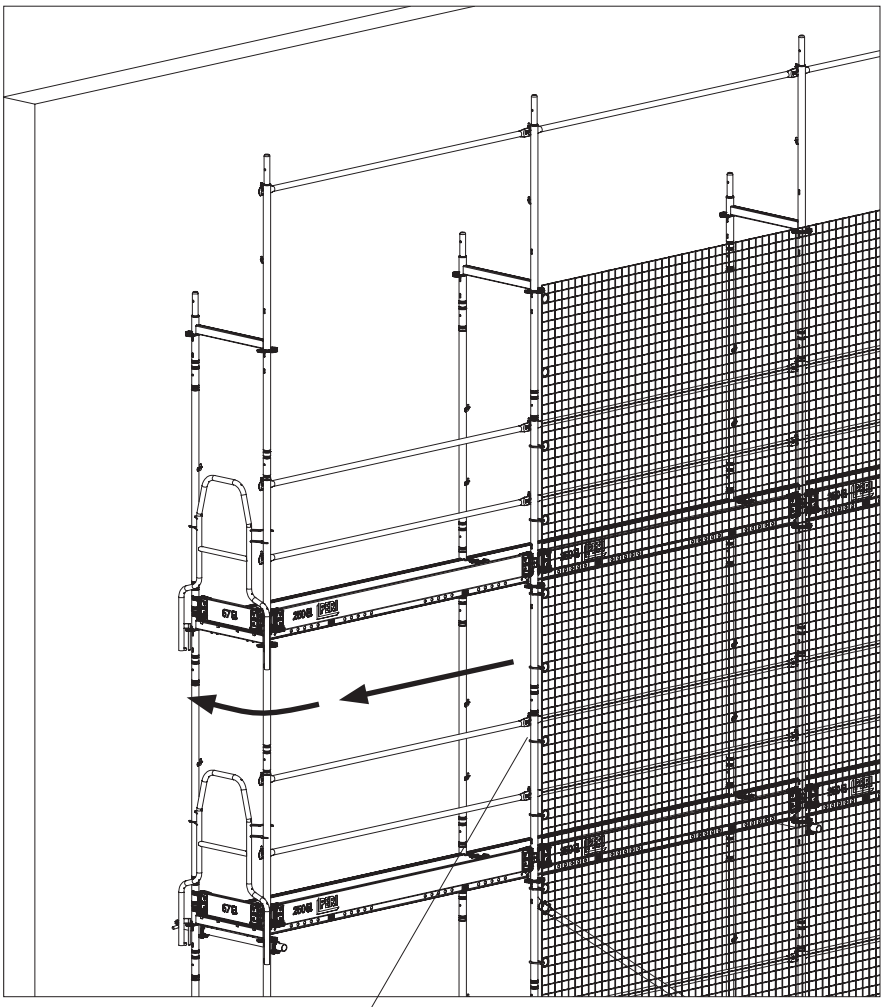


Fig. B10.01

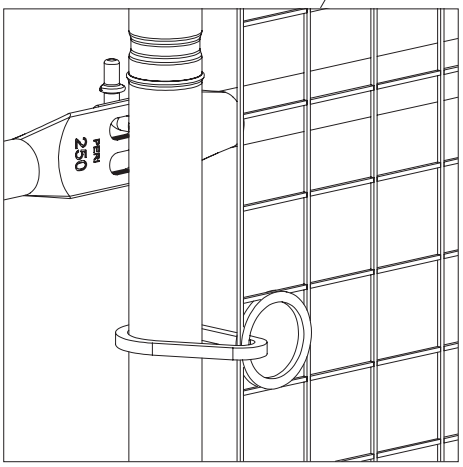


Fig. B10.02

Compatible in 3 dimensions

PERI UP Easy standard variation and PERI UP Flex
Due to coordinated system and component dimensions, the PERI UP Easy facade scaffold can be combined with the PERI UP Flex as a standard or frame variation.
For example, an Easy Frame EVF can be swapped out for one Standard UVR-2 50, UVR-2 200 and a Horizontal Ledger UH-2 in each case.

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

If areas of a PERI UP Easy scaffold are erected using PERI UP Flex scaffolding components, then the following applies for assembly, modification and dismantling operations:
- Instructions for Assembly and Use for PERI UP Flex for these areas,
- the Instructions for Assembly and Use provided here for the areas of the PERI UP Easy scaffolding.

Fit the Horizontal Ledger UH-2 67 as support for the decks.

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.

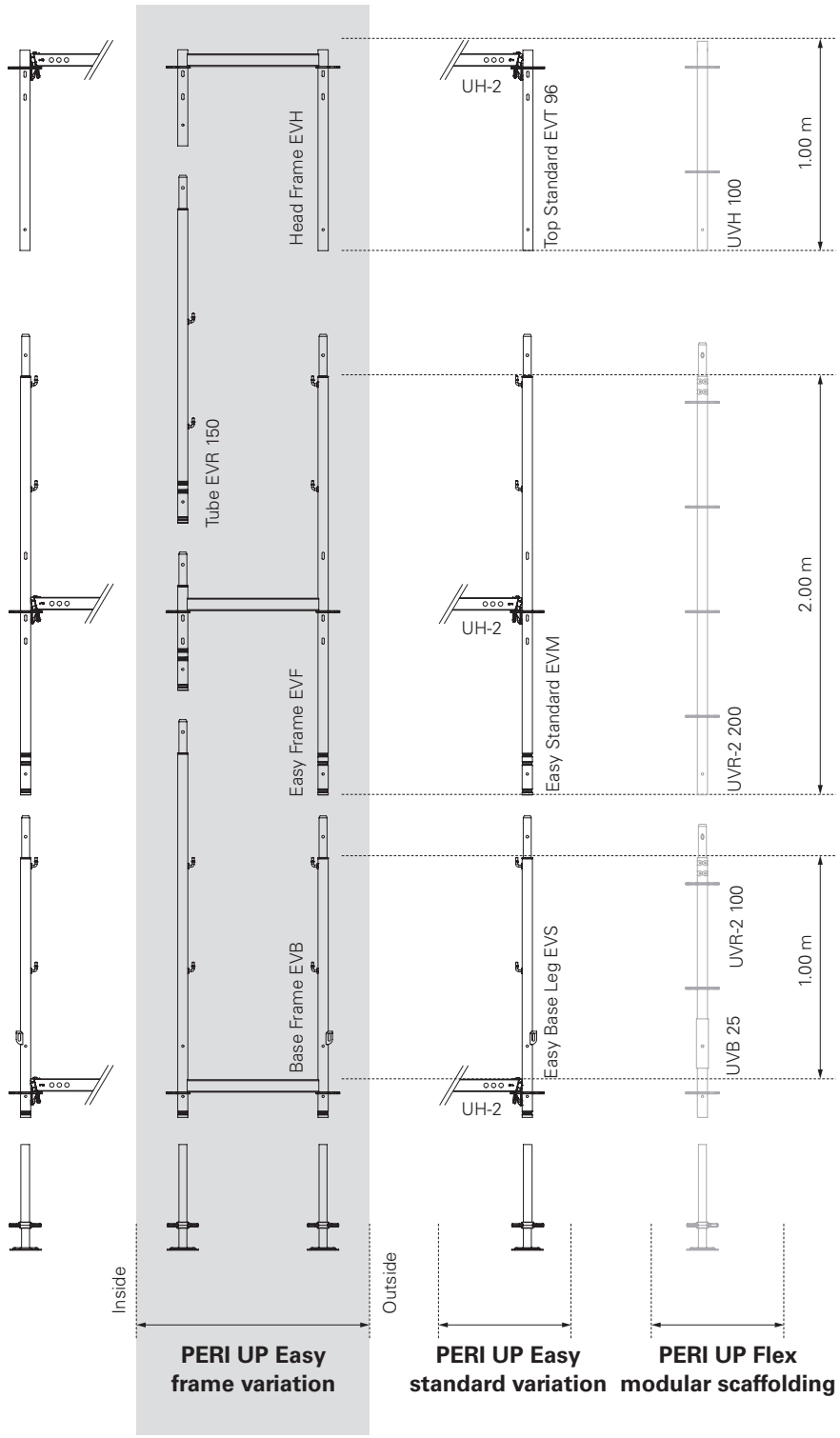


Fig. C1.01

Side-by-side combination

The PERI UP Flex modular scaffolding is connected to the PERI UP Easy facade scaffold using Steel Decks EDS (**30**) or Combi Decks EDW and Guardrail Posts EPG (**51**).
The Flex area is erected as stand-alone scaffold according to the Instructions for Assembly and Use for PERI UP Flex. (Fig. C1.02)

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 Guardrail Posts EPG and intermediate guardrails to the guardrail hooks.
3. On one side, insert steel decks into the crossbar (**16.6**) of the Easy Frame EVF and, on the other side, into the Horizontal Ledger UH-2 67 (**98**).
4. Fit Toe Board UPF.

(Fig. C1.02 + C1.03)

Components

30	Steel Deck EDS
51	Guardrail Post EPG
59	Guardrail Holder EPW
82	Standard UVR-2
98	Horizontal Ledger UH-2 67

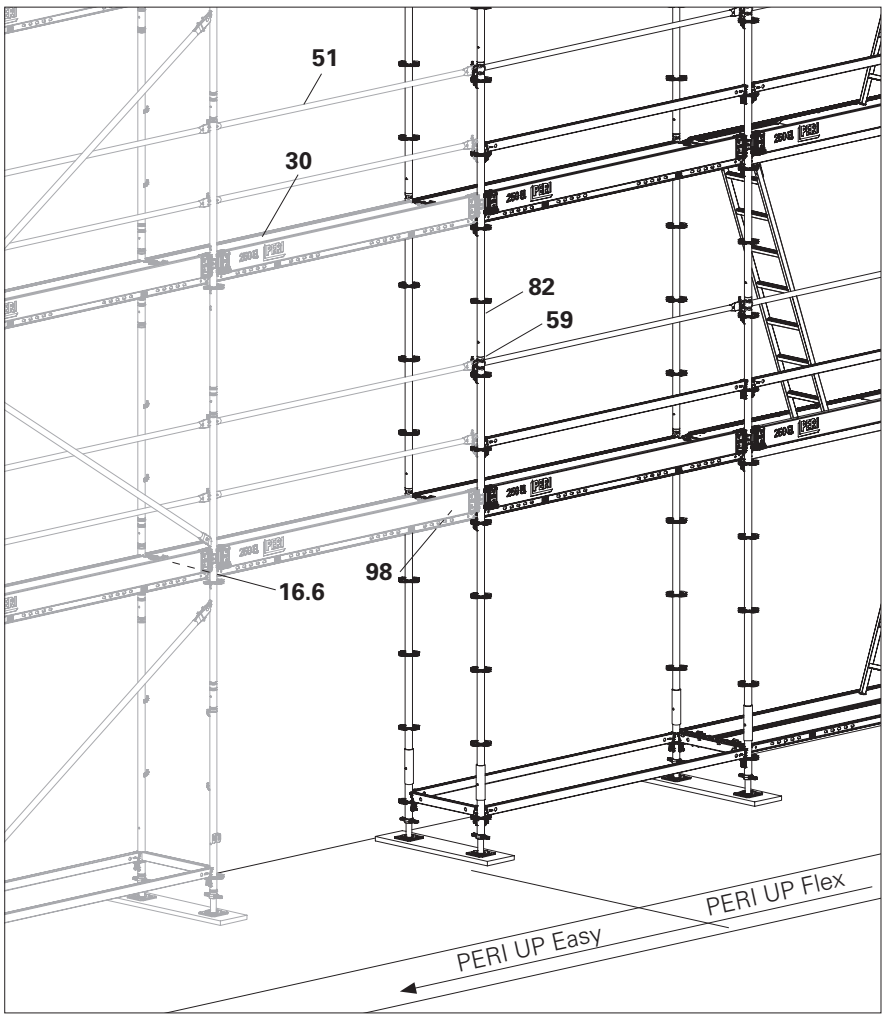


Fig. C1.02

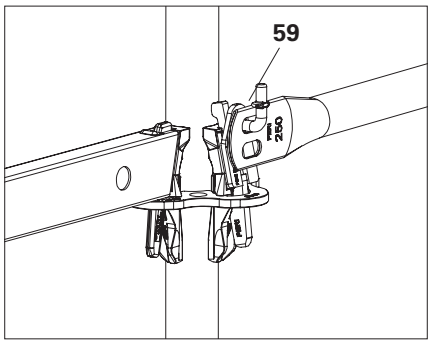


Fig. C1.03

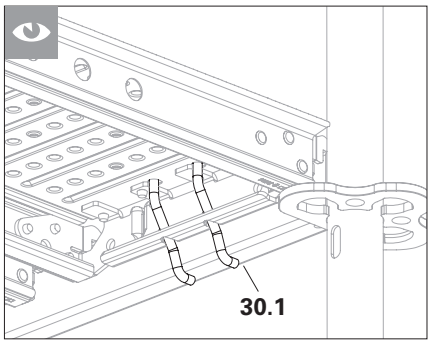


Fig. C1.04

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

1. Fit Standards UVR-2 200 (**83**) onto the inner and outer sides of the Easy Frame EVF (**16**).
2. Fit one Node Brace UBK (**89**) at the transition to the PERI UP Flex. Fit one side (**89.1**) into the rosette of the Easy Frame (**16**) beneath the last deck level of the Easy scaffolding (Fig. C1.05b).
   Fit the other side (**89.2**) into the rosette of the Standard UVR-2 200 (**83**) beneath 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.

(Fig. C1.05)

Components

16 Easy Frame EVF 67
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.

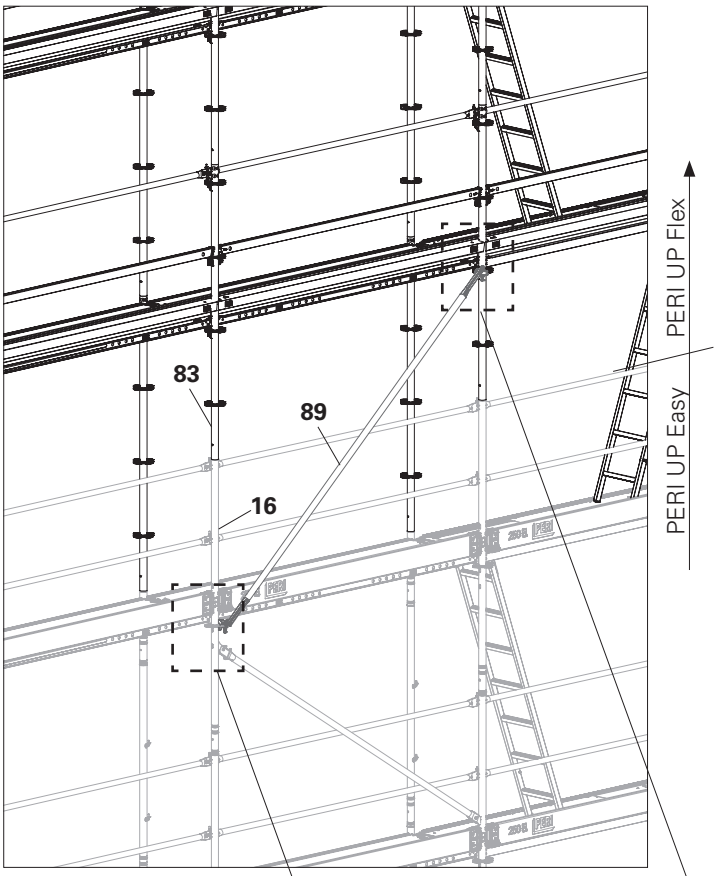


Fig. C1.05

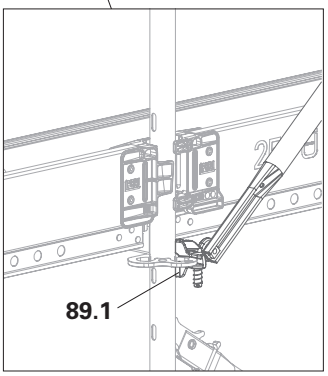


Fig. C1.05b

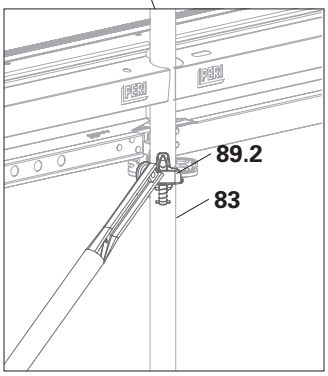


Fig. C1.05a

PERI UP Easy on PERI UP Flex

1. End the flex scaffold at the transition to the Easy scaffold at the inner leg at deck level, at the outer leg 1 m above deck level.
2. Install Horizontal Ledgers UH-2 (**94**) or Guardrail Holders EPW (**59**) and Guardrail Post EPG (**51**) as guardrail posts.
3. Fit a Tube EVR 150 (**18**) onto the inner Standard UVR (**83a**).
4. Fit Easy Frame EVF (**16**) onto Tube EVR (**18**) and Standard UVR (**83**) with a Guardrail Post EPG in advance (**51**).
5. Continue erecting according to the Instructions for Assembly and Use for PERI UP Easy. (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 100 (**85**). The stake-out holes of the standards are used to assemble the Brace Adapter EBA (**24**).
2. Fit the Brace Adapter EBA (**24**). Insert the twist protection into the holes of the Standards UVR.
3. Fit Face Brace EBF (**20**). (Fig. C1.06a – C1.06c)

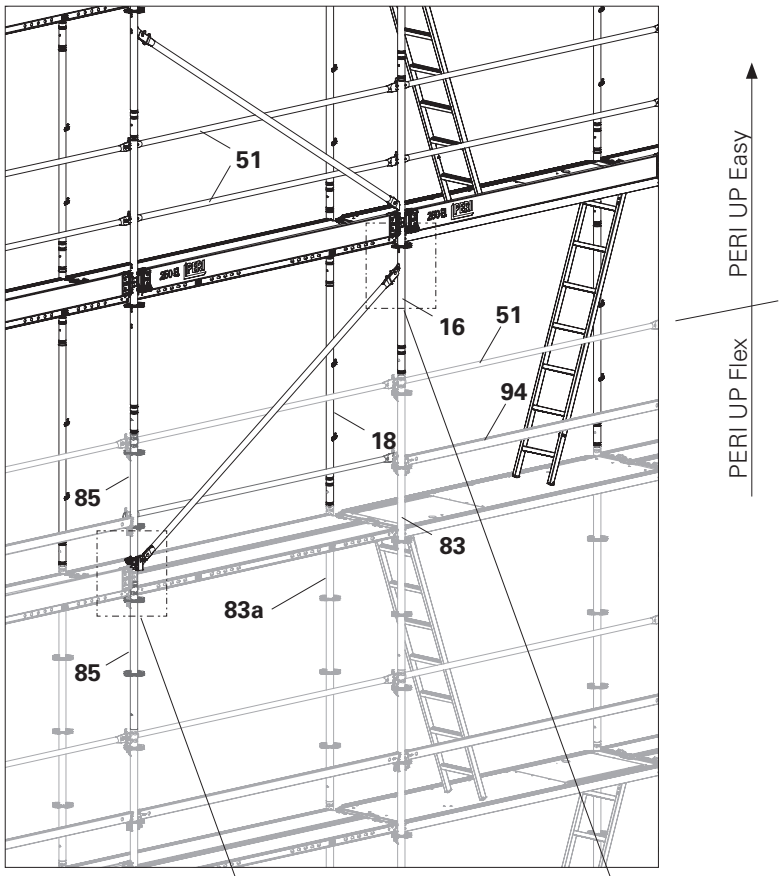


Fig. C1.06

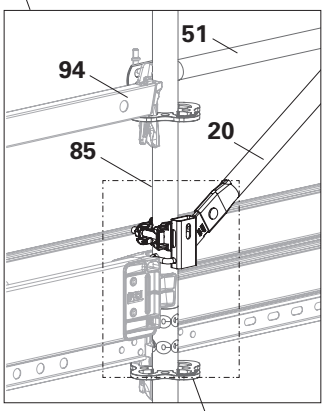


Fig. C1.06a

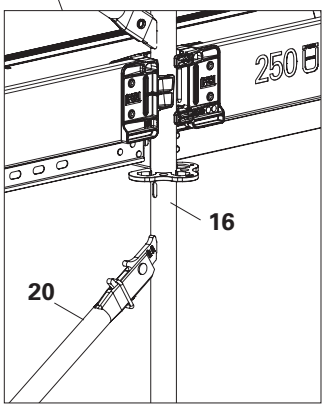


Fig. C1.06b

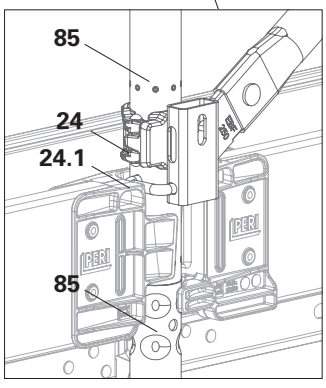


Fig. C1.06c

D1 Console brackets

General

- For the permissible Load Classes, see Section "A6 System component: 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 scaffold levels as internal console brackets.
Steel Decks EDS (**30**) are installed as decks.

The following supports are used:
- Supports UC 33 (**61**)
- Supports UCS 33 (**60**)
- Supports UC 25 (with Decks UDG)

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

All supports and console brackets are attached to the ¾ rosette of the Easy Frame EVF (**16**) or to the Head Frame EVH (**17**) on the top scaffold level.

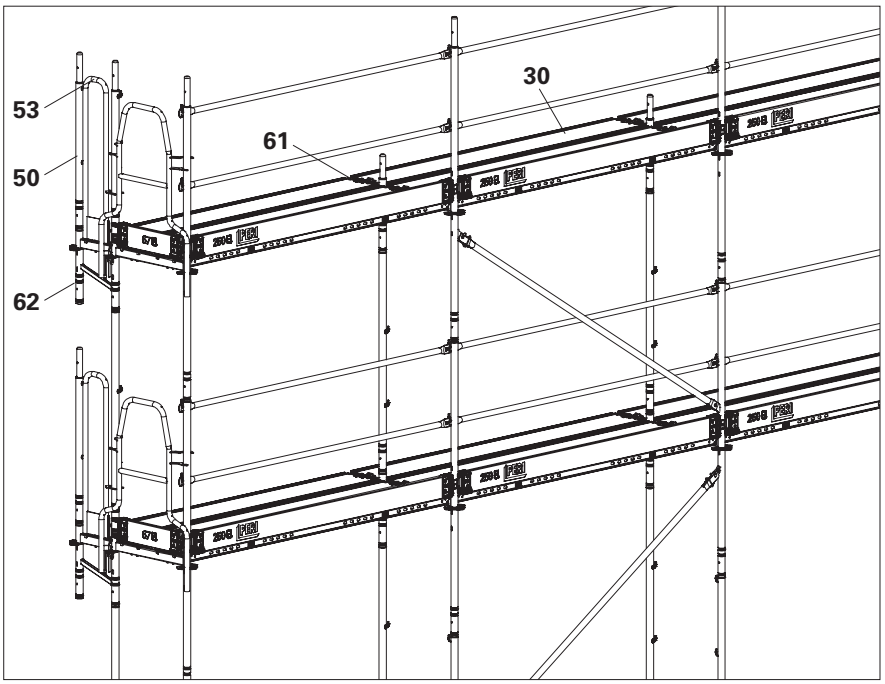


Fig. D1.01

Assembly

1. Fit Console Bracket ECM (**62**) onto the edge frame column with pre-assembled Guardrail Post EVP (**50**). (Fig. D1.02 + D1.02a)
2. Fit Support UC 33 (**61**) 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 Supports UC 33 (**61**). (Fig. D1.03a + D1.03b)

Components

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

Edge frame column with Console Bracket ECM 33

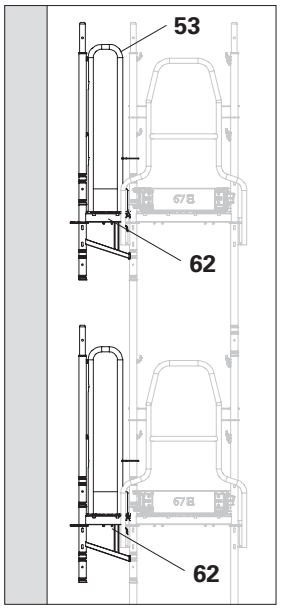


Fig. D1.02

Middle frame column with Support UC 33/25

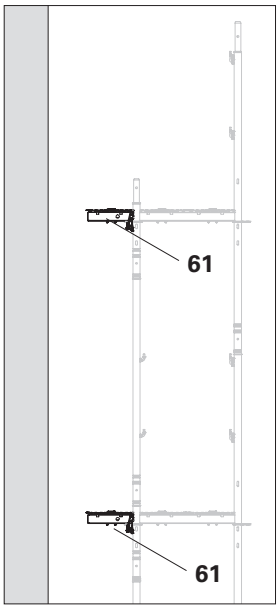


Fig. D1.03

Middle frame column with Console Bracket ECM 33 and guardrail post

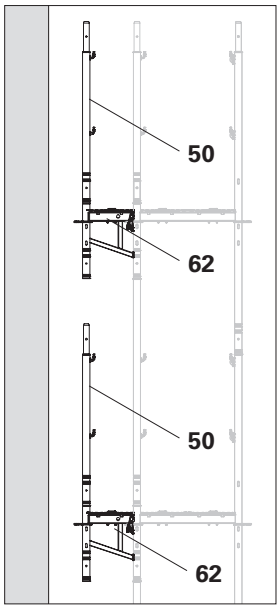


Fig. D1.03a

Edge frame column Middle frame column

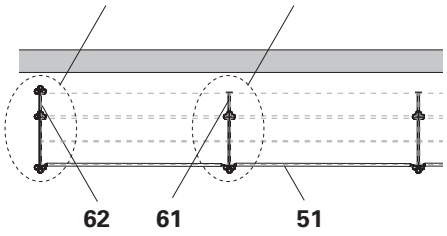


Fig. D1.02a

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

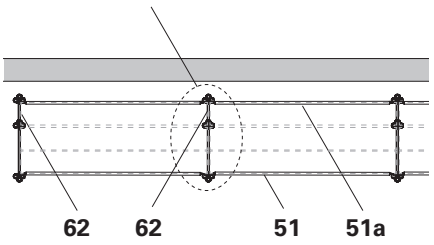


Fig. D1.03b

Internal console brackets with additional support

Additional supports or console brackets can be attached to console brackets.

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.

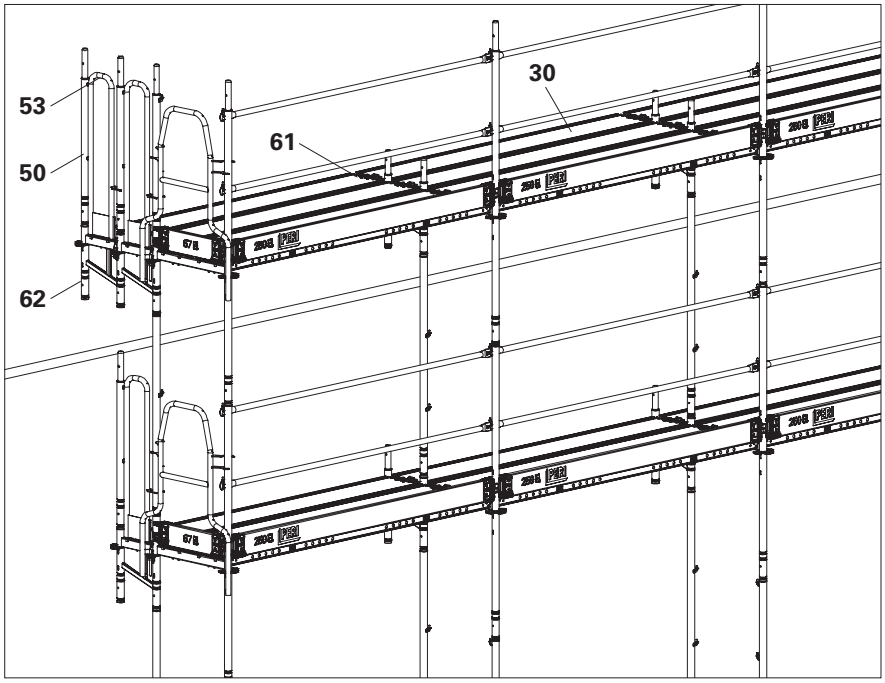


Fig. D1.05

Assembly

1. Fit the first row of Console Brackets ECM 33 (**62**), see internal console brackets. As a result, the scaffold width is 1.0 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 column with pre-assembled Guardrail Post EVP (**50**). (Fig. D1.06 + D1.06a)
   – Fit Support UC 33 (**61**) onto the middle bays. (Fig. D1.06a + D1.07)
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. D1.07a + D1.07b)

Components

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

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

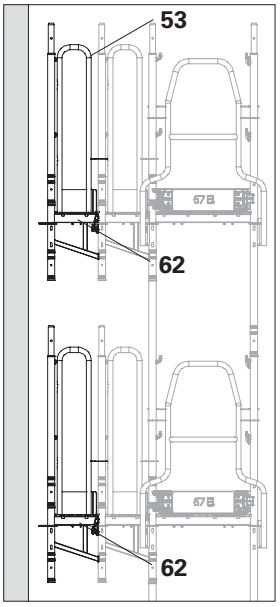


Fig. D1.06

Middle frame column with additional Support UC 33/25.

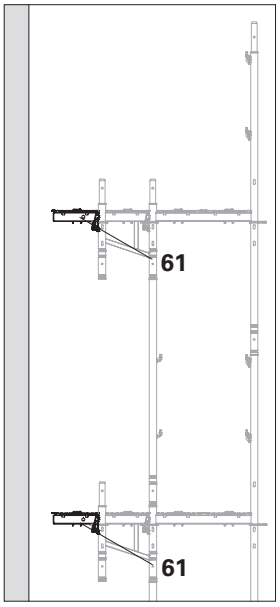


Fig. D1.07

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

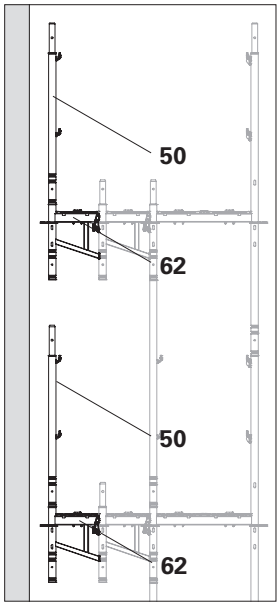


Fig. D1.07a

Edge frame column

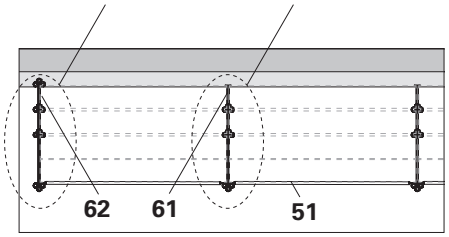


Fig. D1.06a

Middle frame column Alternatively: with inner guardrail (**51a**).

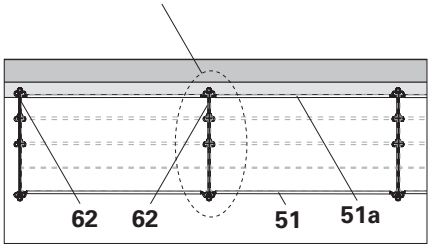


Fig. D1.07b

Dismantling of internal console brackets

To assemble 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.

Dismantling

1. Fit the inner guardrails, see Section "Internal lateral protection" on page 31.
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. D1.08 + D1.09)

Components

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

Middle frame column

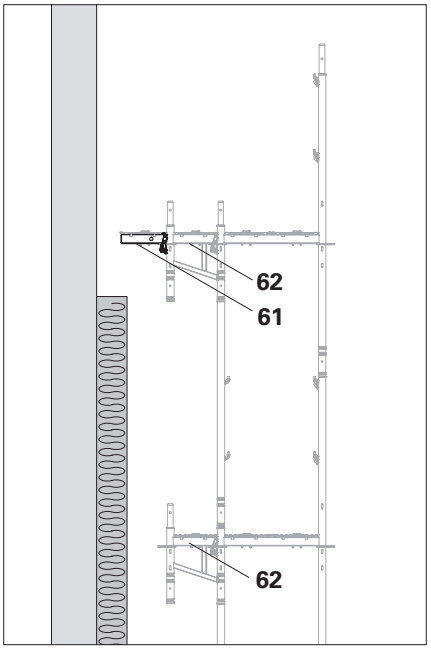


Fig. D1.08

Edge frame column

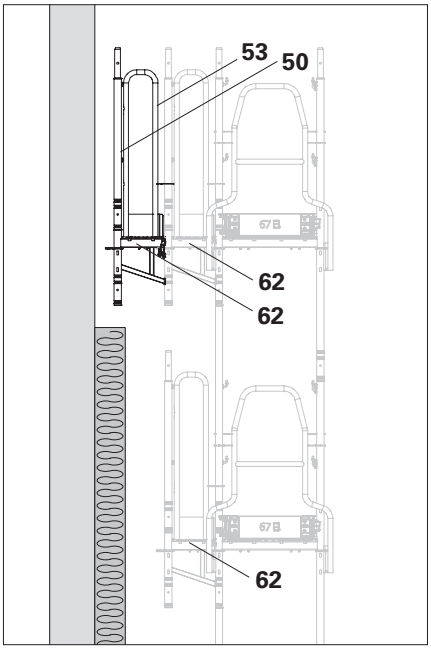


Fig. D1.09

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

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. D1.10)

Free-standing scaffold
Scaffolds that cannot be anchored require a larger erection surface and, if necessary, additional ballasting. See Section "Scaffolding support" on page 267. (Fig. D1.11)

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

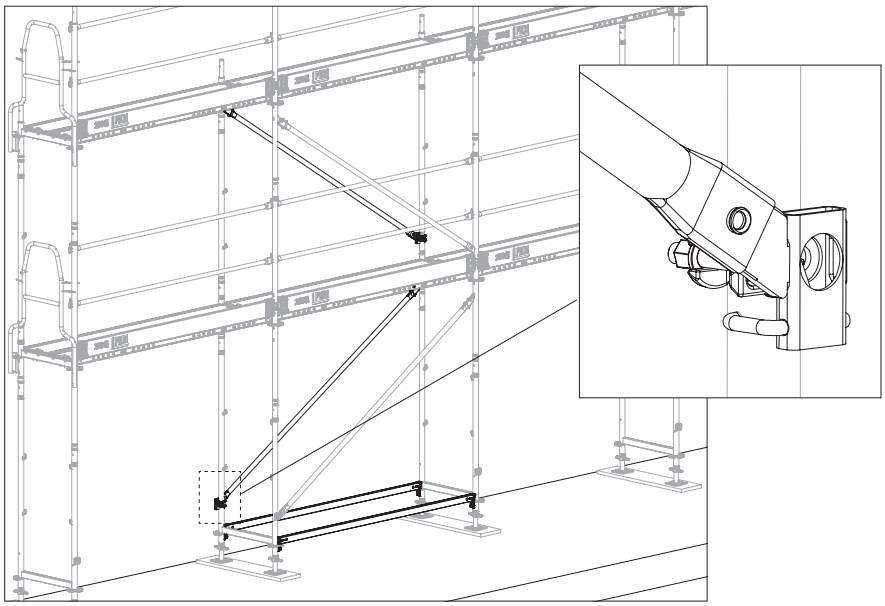


Fig. D1.10

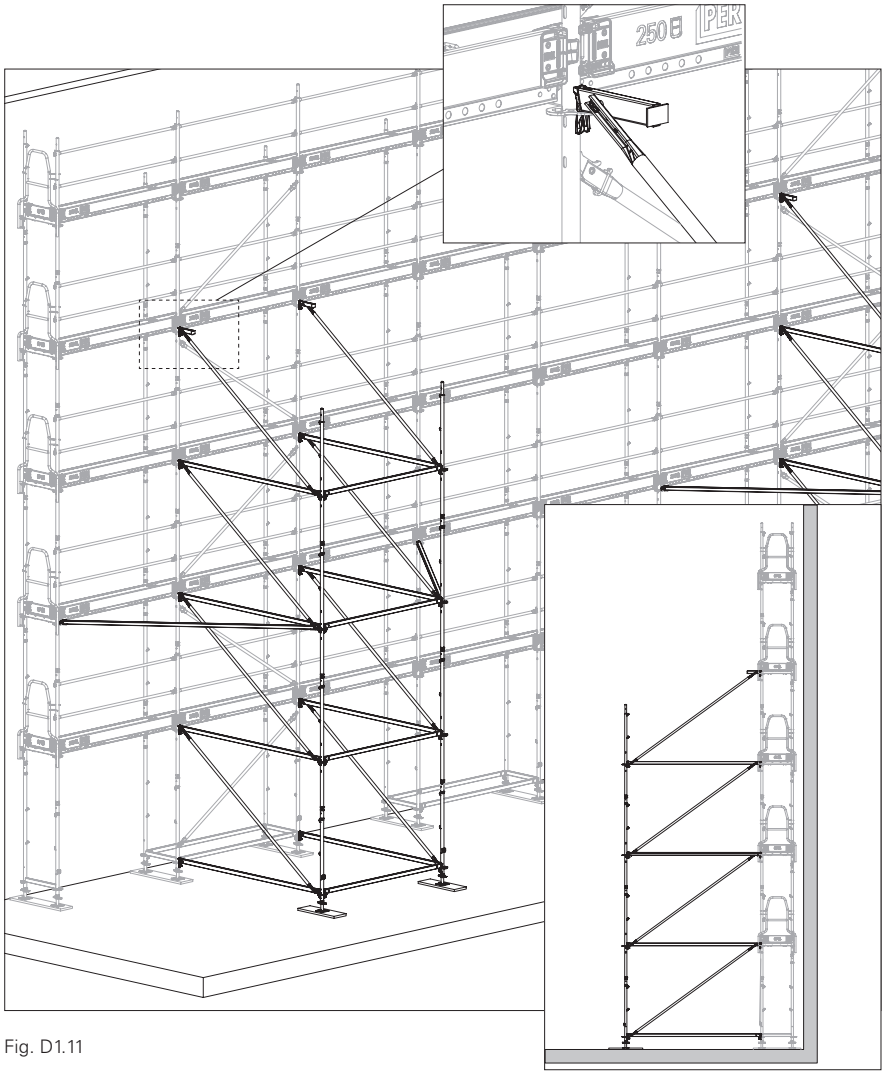


Fig. D1.11

External console brackets

Console brackets can be mounted as external console brackets on just one scaffold 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**)
- Console Bracket ECM 67 (**63**)
- Console Bracket ECM 100 (**64**)

For the permissible Load Classes, see Section "A6 System component: Console Bracket" on page 42.

All supports and console brackets are attached to the ¾ rosette of the Easy Frame EVF (**16**) or to the Head Frame EVH (**17**) on the top scaffold level.

Preparation
Assemble the top level of the basic scaffold with the advanced guardrail.
1. Assemble edge frames with Easy Frame EVF (**16**) and End Guardrail in Advance UPA 67 (**52**).
2. Assemble the middle frame with Head Frame EVH (**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. D1.12)

For frame columns with diagonal ends above: insert the short spigot of the spacer tube (**68**) into the head frame. (Fig. D1.12a)

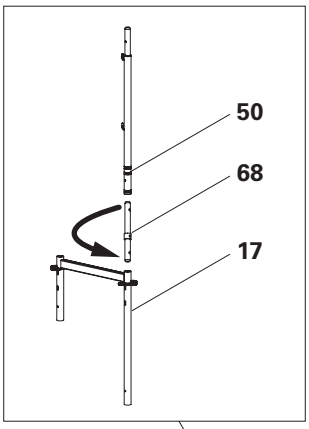


Fig. D1.12a

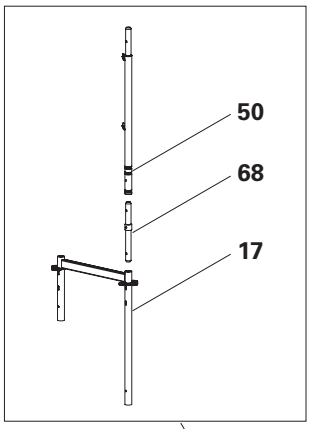


Fig. D1.12b

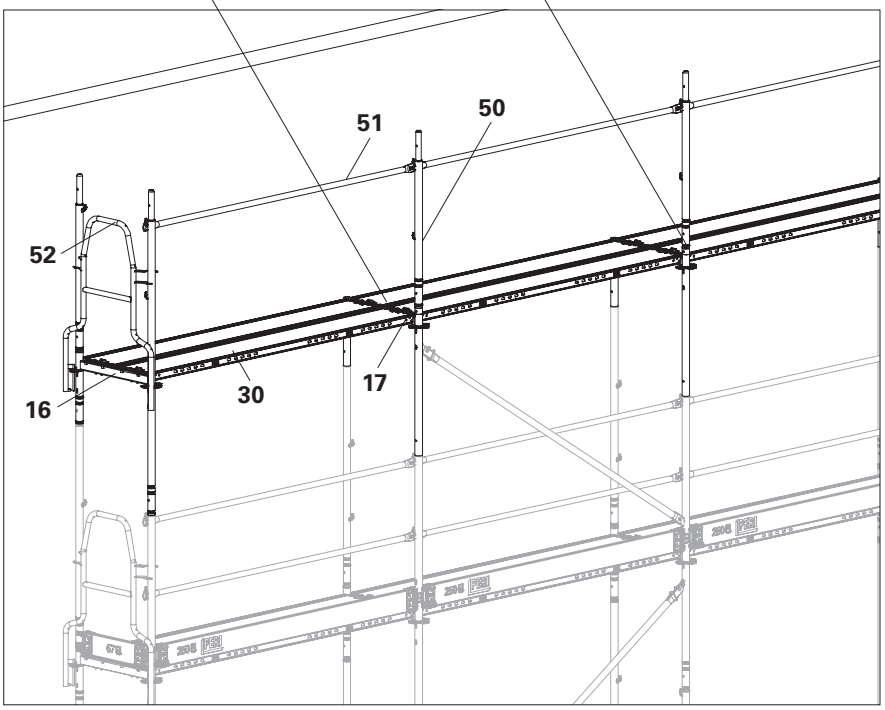


Fig. D1.12

Components

16	Easy Frame EVF 67
17	Head Frame EVH 67
30	Steel Deck EDS
50	Guardrail Post EVP
51	Guardrail Post EPG
52	Advance End Guardrail UPA 67
68	Pin with Spacer Tube URE 4/42

Assembly on the top level or on an intermediate scaffold level

- Assembly takes place from the level immediately below:

1. Fit Console Bracket ECM (**63**) with Guardrail Post EVP (**50**). Secure the wedges. See "A6 System component: Console Bracket" on page 42 ff.
2. Fit the Outer Steel Decks EDS (**30**) and push outwards.
3. Fit the Inner Steel Decks into the console bracket. (Fig. D1.13)
4. Anchoring:

- With Console Brackets ECM 67 (**63**) or Console Brackets ECM 100 (**64**), ensure that each frame column is anchored in the console bracket position:
  - anchor every second frame column to the inner and outer legs of the vertical frames with a Wall Tie UWT (**46**). (Fig. D1.13a + D1.13b)
  - Alternatively, anchor using triangulated ties on the inner leg of the vertical frames. Anchor remaining frame columns with single-standard wall ties.
  - See Section Tie pattern.
- In addition, anchor each frame column using a single-leg Wall Tie UWT in the level directly below for Console Brackets ECM 100 (**64**).

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. D1.13a – D1.13c)

Components

30	Steel Deck EDS
50	Guardrail Post EVP
62	Console Bracket ECM 33
63	Console Bracket ECM 67
64	Console Bracket ECM 100

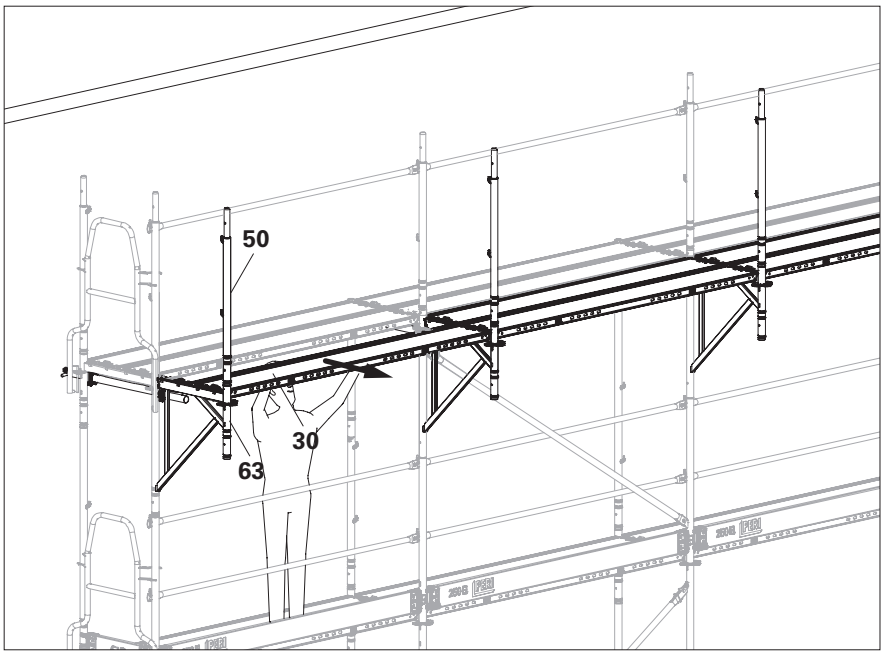


Fig. D1.13

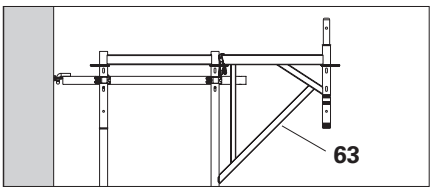


Fig. D1.13a

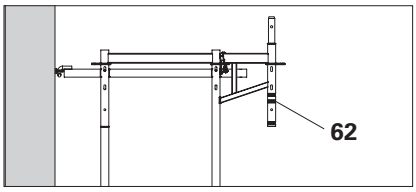


Fig. D1.13c

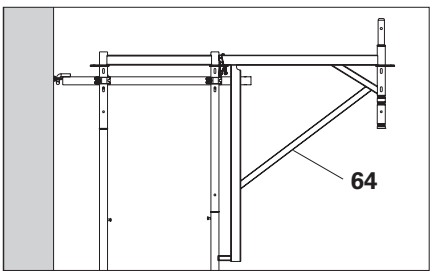


Fig. D1.13b

- 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 67 (**54**).
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. D1.14)

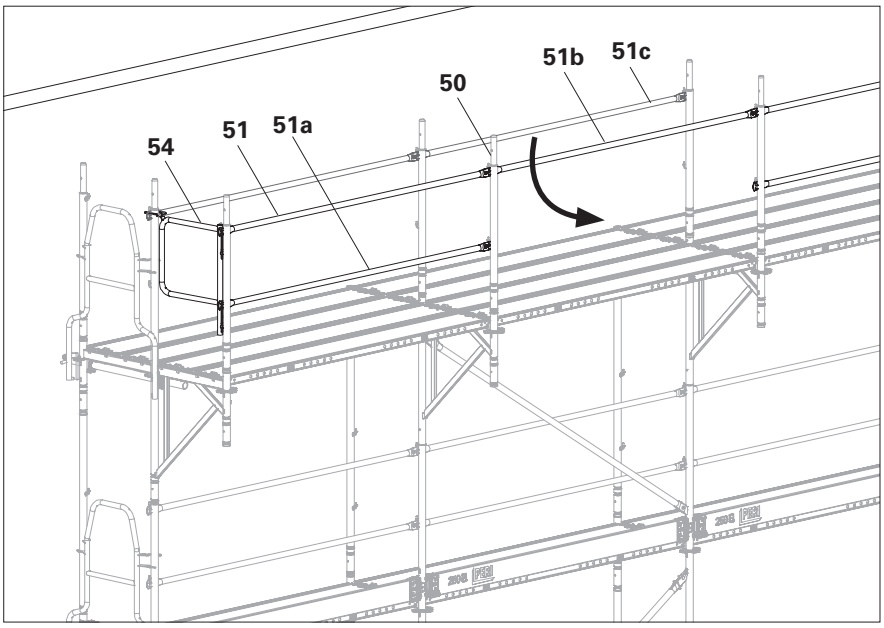


Fig. D1.14

8. Fit Toe Boards UPF (**56**).
9. Dismantle Guardrail Post EVP (**50a**) and spigot with Spacer Tube URE (**68**) from Head Frame EVH.

→ The external console brackets are now installed.

(Fig. D1.15)

Components

50	Guardrail Post EVP
51	Guardrail Post EPG
54	End Guardrail EPF 67
56	Toe Board UPF
68	Pin with Spacer Tube URE 4/42

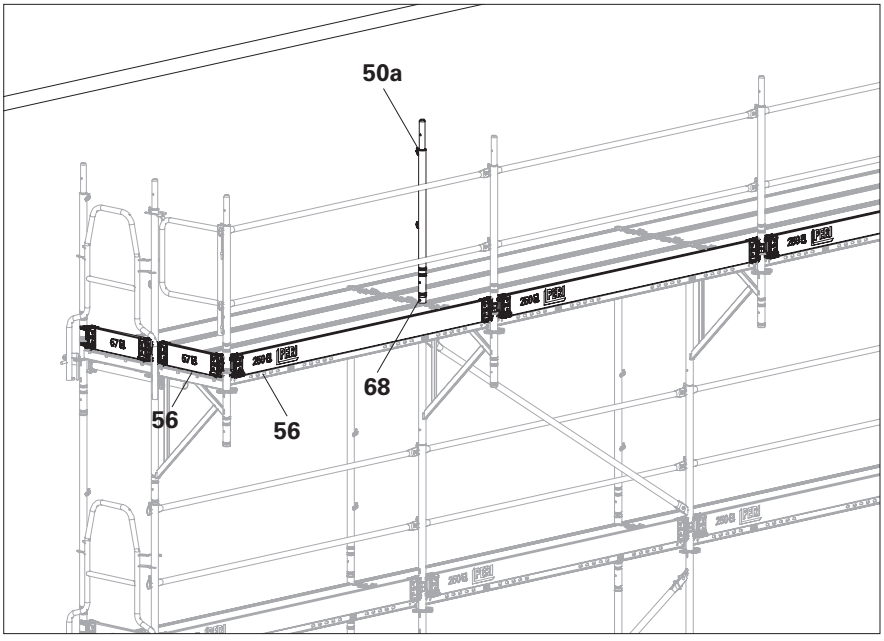


Fig. D1.15

External corner with internal console brackets

The internal console brackets can be installed at the same time on all scaffold 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 scaffold bays.

Take additional anchoring for internal console brackets into account, see Section Tie pattern.

Assembly

1. Attach Supports UC 33 (**61**) and Console Bracket ECM 33 (**62**) from the lower scaffold level to the ¾ rosette. Secure the wedges!
   Arrangement in accordance with Fig. D1.16.
2. Attach Ledger-to-Ledger Coupler UHA-2 (**90**) to the Horizontal Ledger UH-2 (**94a**).
3. Fit Horizontal Ledger UH-2 (**94**) onto the Ledger-to-Ledger Coupler UHA-2 (**90**) and Console Bracket ECM 33 (**62**) in the adjacent scaffold bay. Secure the wedges. (Fig. D1.16)
4. Insert Steel Decks EDS 33 (**30**).

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

Components

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

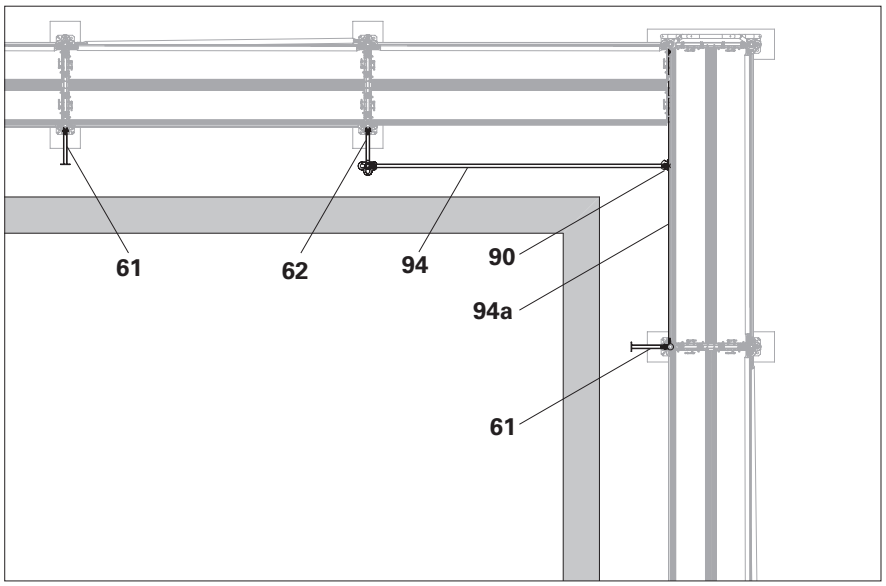


Fig. D1.16

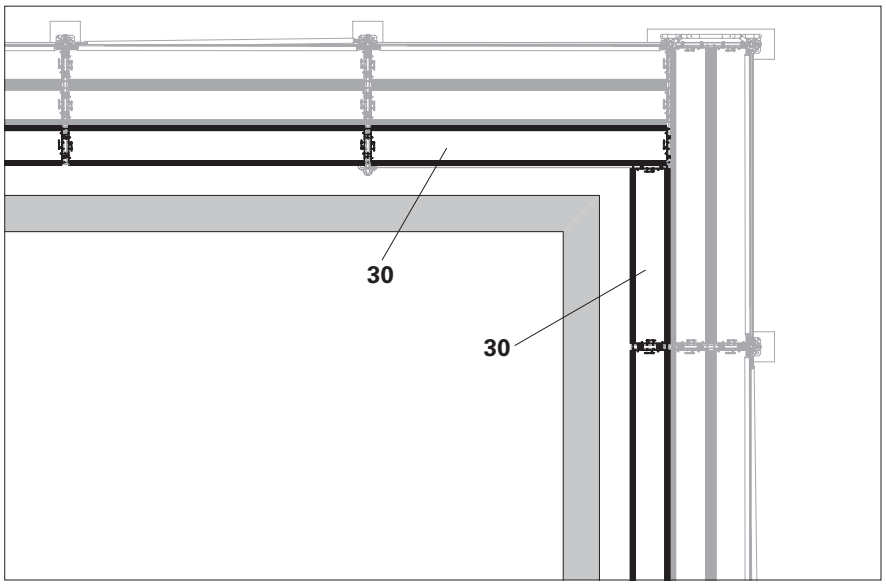


Fig. D1.17

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. D1.18 + D1.18a)

- The Inside Corner Plate EDP can be used for internal 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 scaffold level immediately below:

1. Fit console brackets or supports on the inner side of the scaffolding.
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 standard 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. D1.18 + D1.18a)

Is the bolt securely engaged in the rosette?

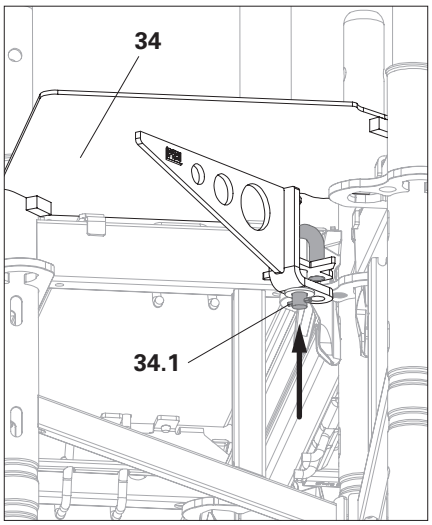


Fig. D1.18

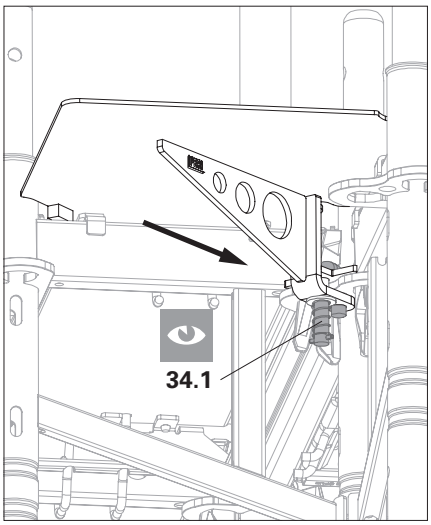


Fig. D1.18a

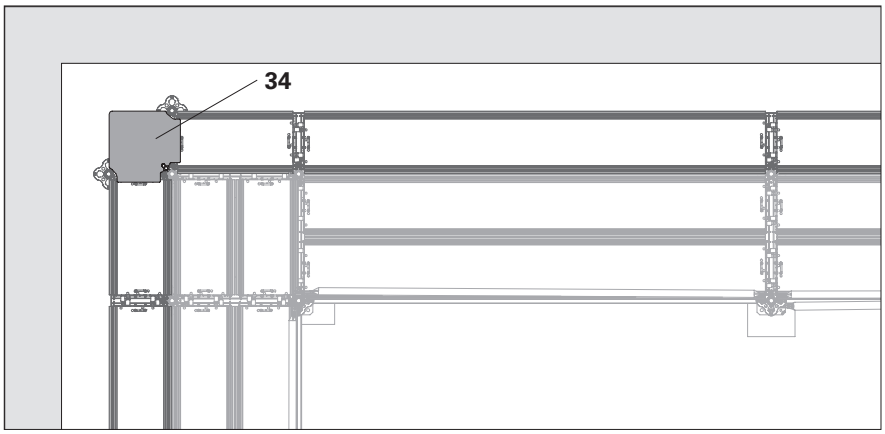


Fig. D1.19

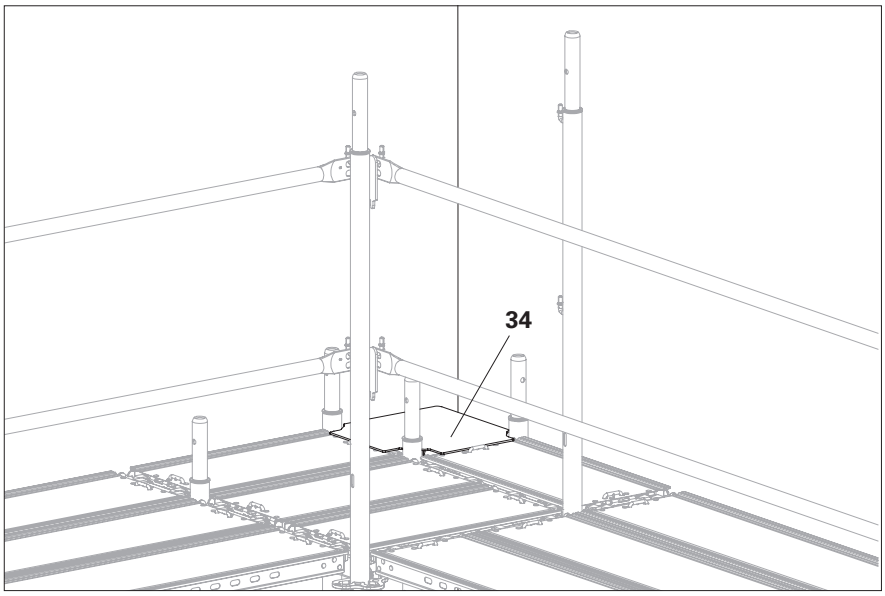


Fig. D1.20

D2 Protection panel

General

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

- Take additional anchoring into account, see Section "F4" or "G4 Tie pattern".
- For the permissible Load Classes, see Section "A6 System component: 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

Assembly

1. Assemble top scaffold level with Easy Frame EVF (**16**) and Guardrail in Advance EPG (**51**). Insert Steel Decks EDS (**30**).
2. Attach the Guardrail Post EVP (**50**) to the outer tube (**16.2**).
3. Securely connect the guardrail post (**50**) and outer tube (**67**) using a locking pin (**19**). (Fig. D2.01)
4. Anchoring:
   - In the protection panel positions, anchor every second frame column with Wall Ties UWT (**46**) to the inner and outer legs; alternatively, anchor with triangulated ties to the inner leg.
   - Anchor remaining frame columns with single-standard wall ties.
- Depending on the equipment variation selected, further anchoring may be required.
  - See Section Tie pattern.

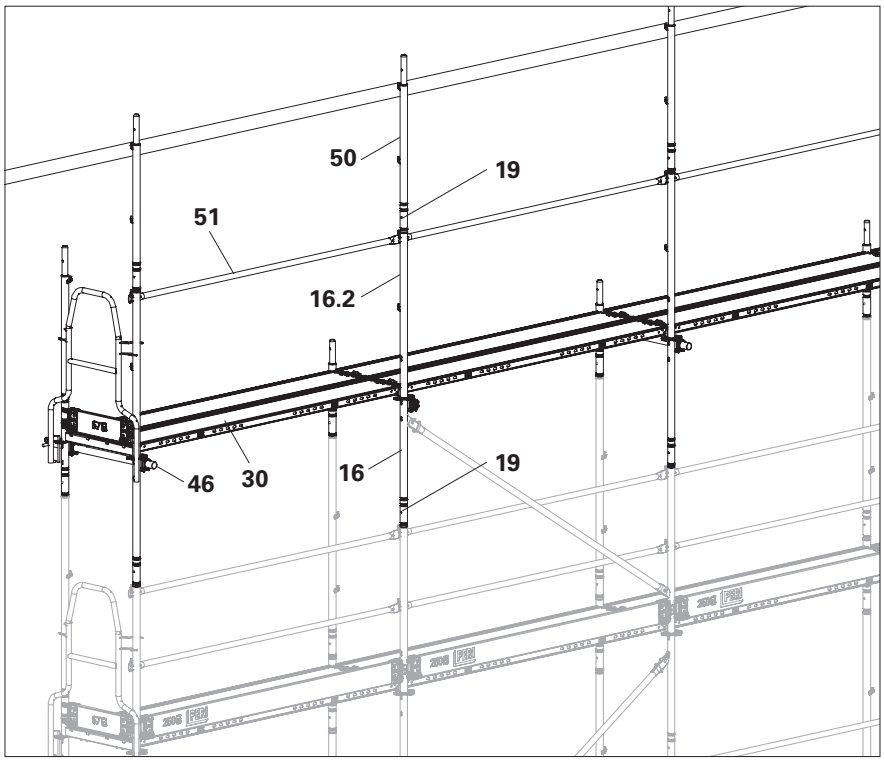


Fig. D2.01

Components

16	Easy Frame EVF 67
30	Steel Deck EDS
46	Wall Tie UWT
50	Guardrail Post EVP
51	Guardrail Post EPG
56	Toe Board UPF
59	Guardrail Holder EPW

Installing the safety net

1. Thread Guardrail Post EPG through the mesh at the top edge of the safety net.
2. Attach Guardrail Post (**51a**) to the top guardrail hooks, 2 m above the deck level.
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 + D2.02a)

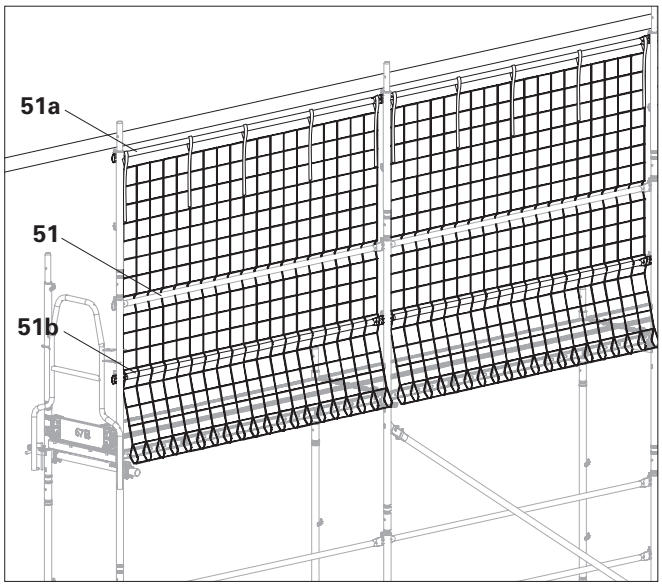


Fig. D2.02

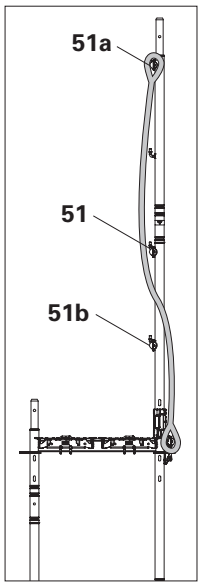


Fig. D2.02a

4. Fit Guardrail Holder EPW (**59**) into the ¾ rosette of the Easy Frame.
5. Thread Guardrail Post 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 Toe Boards UPF (**56**) onto the protection panel.

→ The protection panel is now installed.

(Fig. D2.03)

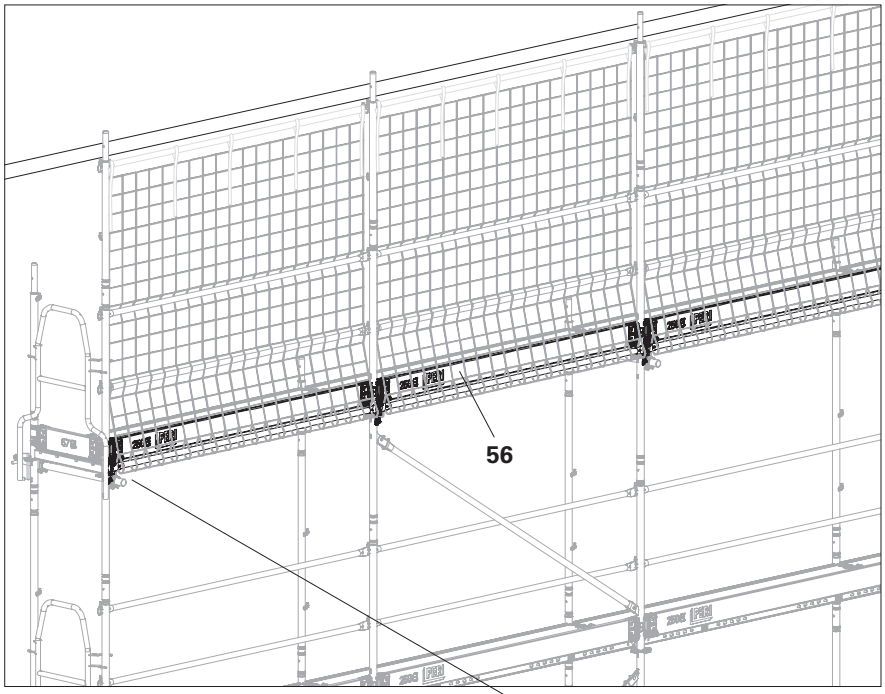


Fig. D2.03

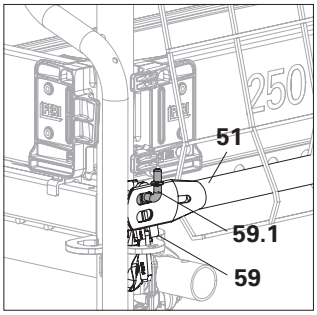


Fig. D2.03a

Safety nets with sewn-on loops or clips are to be installed according to the specifications of the net manufacturer.

Protection panel on external console brackets

Assembly

- From the level immediately below:

1. Assemble the top level of the basic scaffold in the area of the roof overhang with Head Frame EVH (**17**), spigot with Spacer Tube URE (**68**), Guardrail Post EVP 100 (**50**) and Guardrail in Advance EPG (**51**). Assemble edge frames with Easy Frame EVF (**16**).
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 head frame, see Section "External console brackets" on page 112.

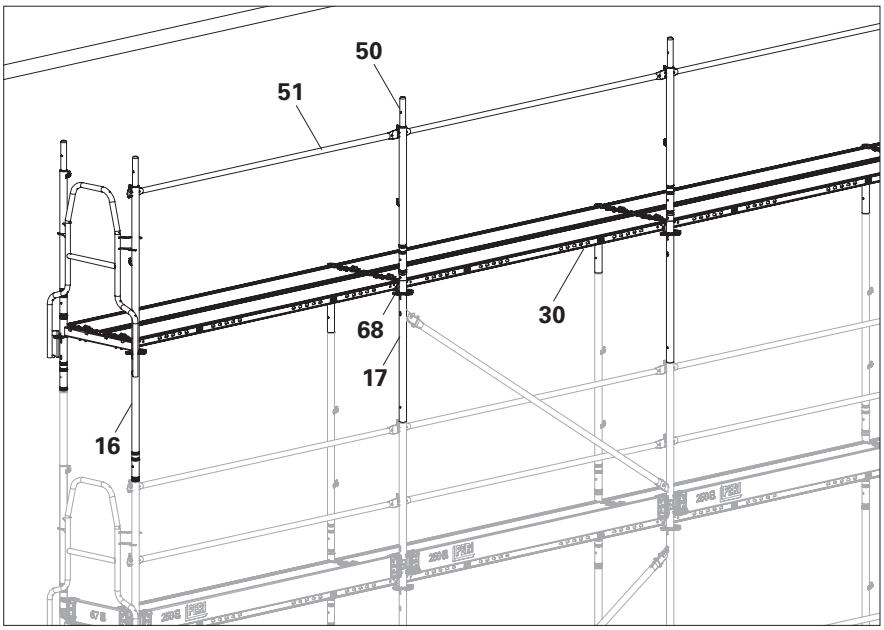


Fig. D2.04

Components

16	Easy Frame EVF 67
17	Head Frame EVH 67
30	Steel Deck EDS
46	Wall Tie UWT
50	Guardrail Post EVP
51	Guardrail Post EPG
62	Console Bracket ECM 33
67	Protection Panel Post EPS
68	Pin with Spacer Tube URE 4/42

Console Bracket ECM 33

1. Fit Console Bracket ECM 33 (**62**) together with the Protection Panel Post EPS (**67**), see Section "A6 System component: Console Bracket" on page 42 ff.
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 Coupling EPR (**58**). (Fig. D2.05a)
4. Attach Steel Decks EDS (**30**).
5. Anchoring:

- Anchor every frame column in the protection panel position.
  - Variation 1: Anchor each frame column to the inner and outer leg of the vertical frames with a wall tie (**46**).
    Variation 2: Anchor frame columns to the inner legs of the vertical frames alternating between single-leg wall ties and triangulated ties. (not shown)
- See Section Tie pattern.

(Fig. D2.05)

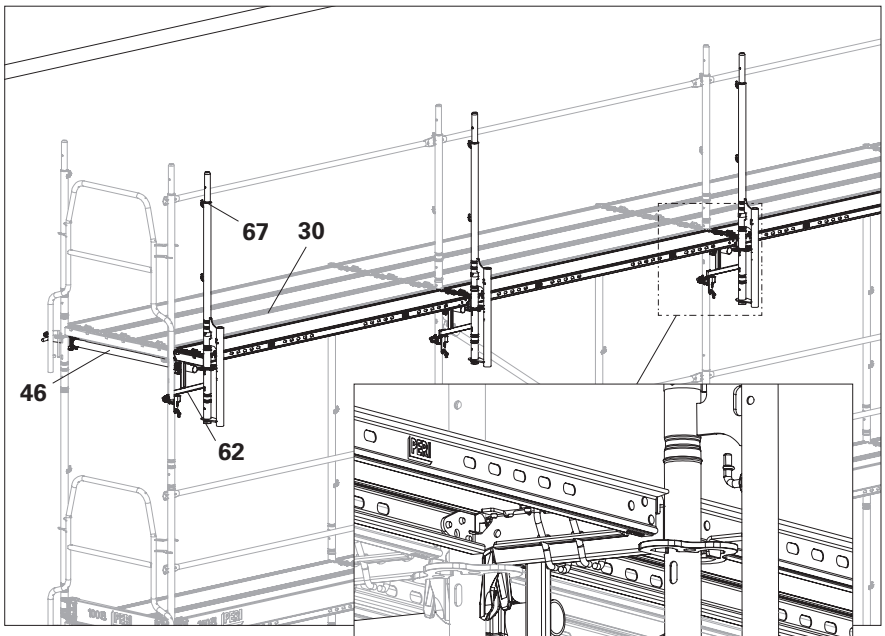


Fig. D2.05

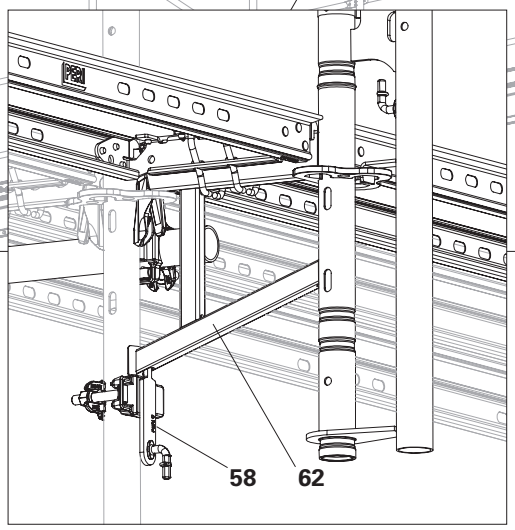


Fig. D2.05a

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

Console Bracket ECM 67 and 100

1. Fit Console Bracket ECM 67 (**63**) together with the Protection Panel Post EPS (**67**), see Section "A6 System component: Console Bracket" on page 42 ff.
2. Securely connect the protection panel post (**67**) and console bracket (**63**) using a locking pin (**19**).
3. Insert Steel Decks EDS (**30**) into the console brackets, and push them outwards.
4. Anchoring:

- Anchor every frame column in the protection panel position.
  - Variation 1: Anchor each frame column to the inner and outer leg of the vertical frames with a wall tie (**46**). (Fig. D2.06)
  - Variation 2: anchor frame columns to the inner legs of the vertical frames alternating between single-leg wall ties and triangulated ties. (not shown)
- Anchor every frame column in the scaffold level directly below using a single-standard wall tie.
- Depending on the equipment variation selected, further anchoring may be required.
  - See Section Tie pattern.

(Fig. D2.06)

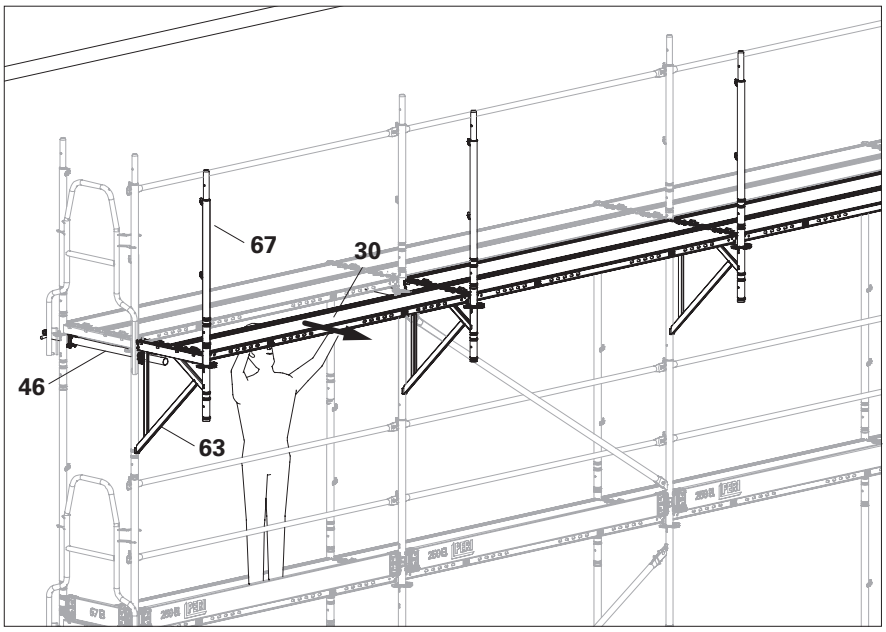


Fig. D2.06

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

D2 Protection panel

Fitting the protection panel
In the case of
Console Brackets ECM 33 and 67,
assembly is carried out in the same way.

- 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 Guardrail Posts 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 Toe Board UPF (**56**) in the edge bays.
5. Remove Guardrail Post EVP (**50**) from the head frame 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. D2.07)

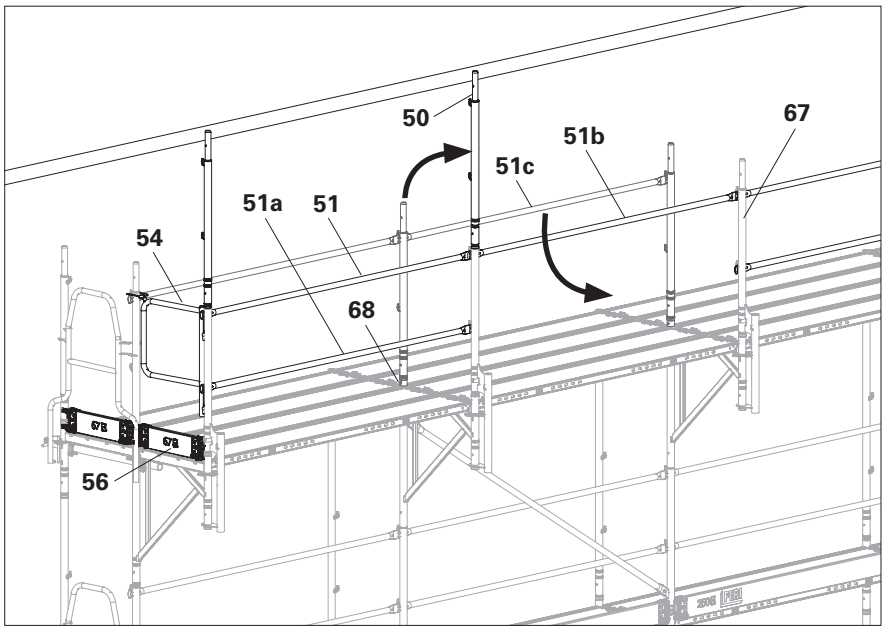


Fig. D2.07

Components

16	Easy Frame EVF 67
30	Steel Deck EDS
46	Wall Tie UWT
50	Guardrail Post EVP
51	Guardrail Post EPG
54	End Guardrail EPF
56	Toe Board UPF
67	Protection Panel Post EPS
68	Pin with Spacer Tube URE 4/42

Installing the safety net

1. Thread Guardrail Post EPG (**51a**) through the mesh at the top edge of the safety net.
2. Attach Guardrail Post (**51a**) to the top guardrail hooks, 2 m above the deck level.
3. As seen from the scaffold, the safety net hangs in front of the guardrail post (**51**) and behind the intermediate guardrail (**51b**).

(Fig. D2.08 + D2.08a)

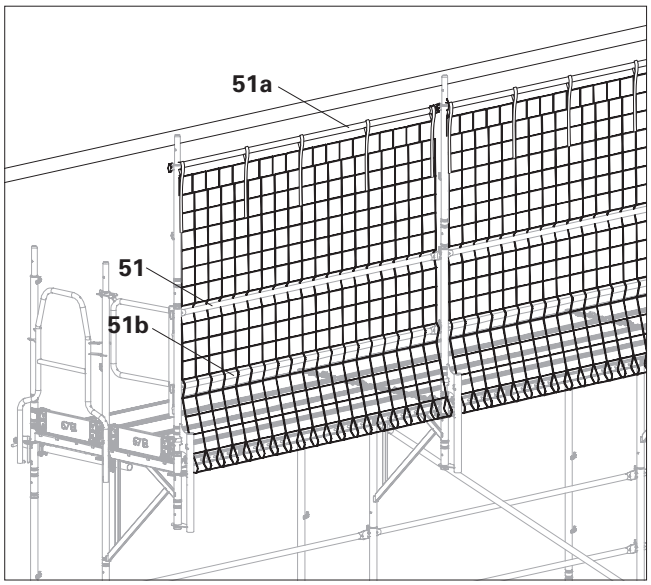


Fig. D2.08

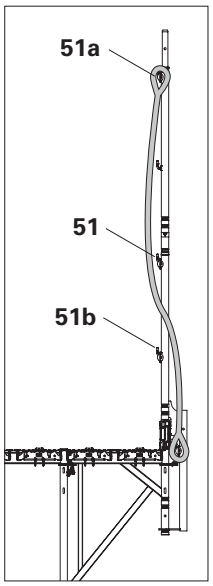


Fig. D2.08a

4. Thread Guardrail Post 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 Toe Boards UPF (**56**).

→ The protection panel is now installed.

(Fig. D2.09)

Safety nets with sewn-on loops or clips are to be installed according to the specifications of the net manufacturer.

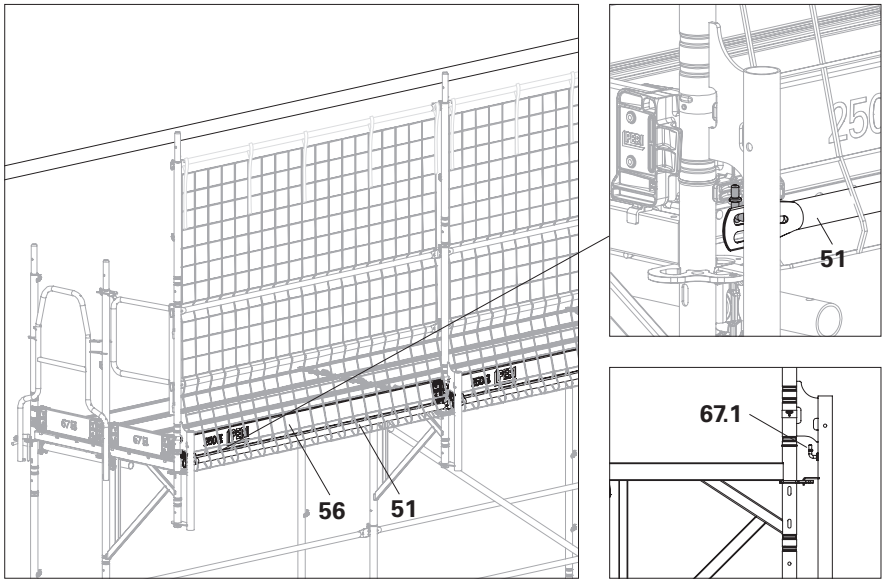


Fig. D2.09

General

The weather protection must be closed on all sides. No more than 10% of the facade should be open.
The tarpaulin side must be completely closed. The front side should also be pulled right around the short 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.
- System width 67 cm with EVW 130:
  - up to scaffold bay length ≤ 250 cm without support.
  - up to scaffold bay length 300 cm with support.
- System width 100 cm with EVW 180:
  - all scaffold bay lengths with support.

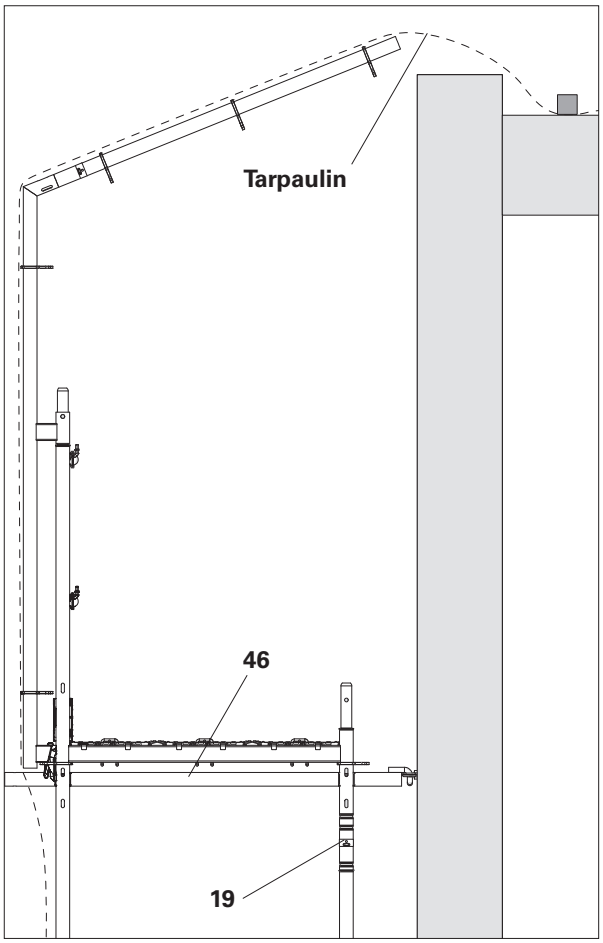


Fig. D3.01

Anchoring

- Take additional anchoring (**46**) into account, see Section "Tie pattern" on page 130.
- From the uppermost anchored level to the next anchored level, securely connect all frame columns to the outer and inner legs using locking pins (**19**). (Fig. D3.01)
- 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 post.

Components

16	Easy Frame EVF
19	Locking Pin Ø 48/57
46	Wall Tie UWT
104	Weather Protection EVW 200-V
105	Weather Protection EVW 130
107	Spindle Head SRU
108	Coupling EVW
109	Top Standard UVH 100

Assembly

Fitting the outer standard and roof standard

1. Fit Weather Protection 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 Weather Protection EVW 200-V on the outer guardrail of the Easy Frame (**16**) with a locking pin (**19**)
3. Fit Weather Protection EVW 130 (**105**) or EVW 180 onto the spigot of EVW 200 and secure it with a locking pin (**19a**).
   → Three-quarters of the rosette must be pointing downwards.

→ The outer standard and roof standard are now installed.

(Fig. D3.02)

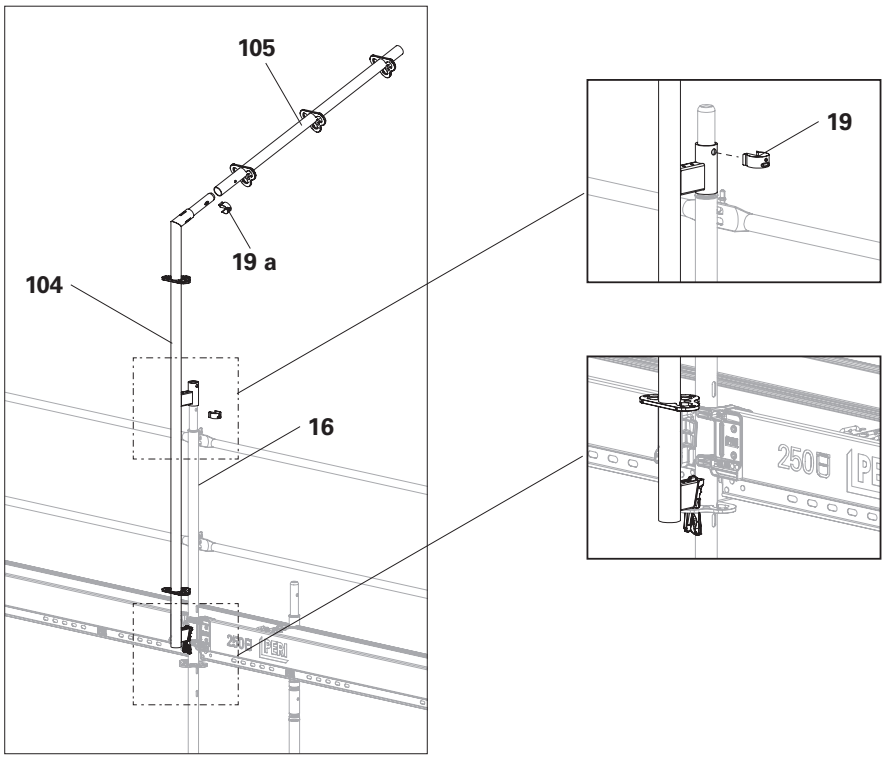


Fig. D3.02

Fitting the inner leg

The inner leg is always required for internal support when the bay is 3 m long or if Weather Protection 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 Coupling EVW (**108**) with a fitting 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 (**109**).

(Fig. D3.03)

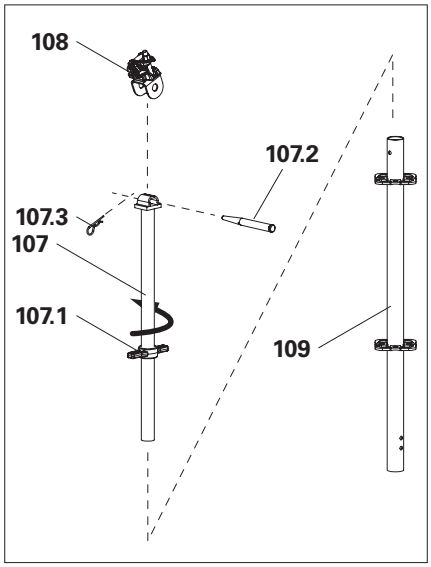


Fig. D3.03

4. Extend the inner leg (**16.3**) of the existing scaffold with a guardrail post (**50**) and secure it with a locking pin (**19**).
(Fig. D3.04)

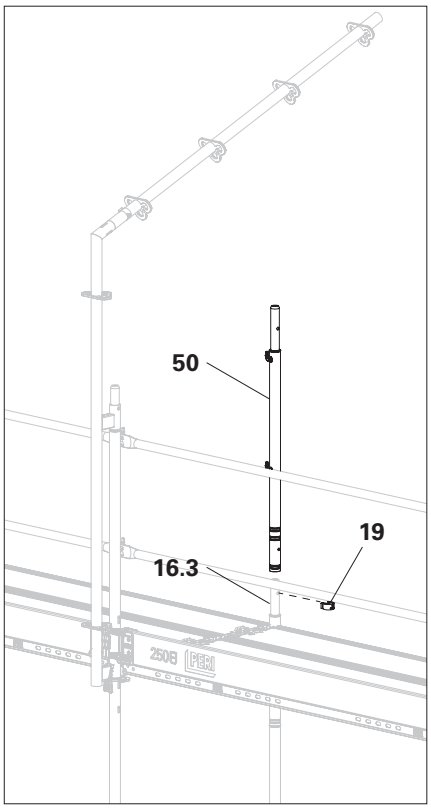


Fig. D3.04

5. Open Coupling EVW (**108**), fit the pre-assembled inner leg onto the roof rail from below and fit Top Standard UVH (**109**) onto the guardrail post (**50**).
6. Secure the top standard with a locking pin (**19**).
7. Screw the quick jack nut (**107.1**) down until the coupling is resting on the roof rail again.
8. Close the coupling around the roof rail and tighten the nut. Tightening torque 50 Nm.

→ The inner leg is now installed.
(Fig. D3.05)

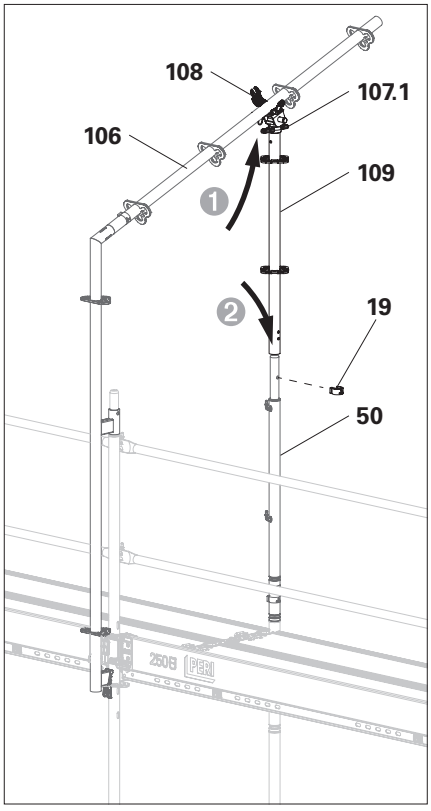


Fig. D3.05

Components

16	Easy Frame EVF
19	Locking Pin Ø 48/57
50	Guardrail Post EVP
106	Weather Protection EVW 180
107	Spindle Head SRU
108	Coupling EVW
109	Top Standard UVH 100
110	Head Spindle Lock UJH

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. D3.06)

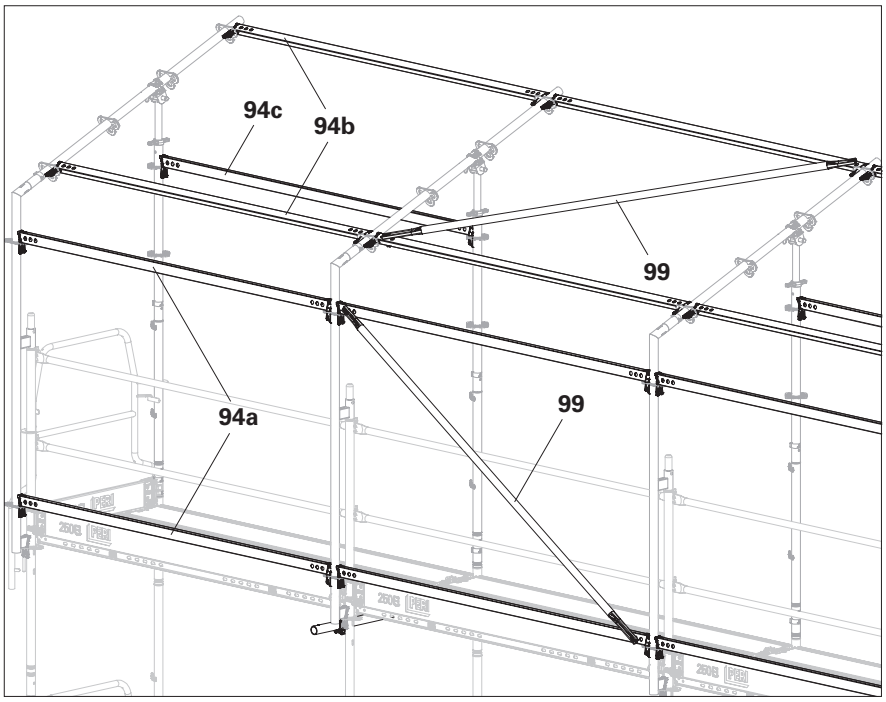


Fig. D3.06

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.

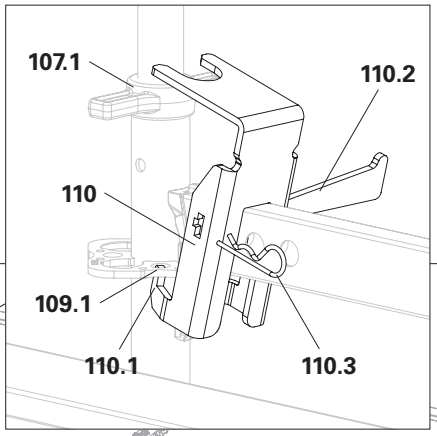


Fig. D3.07a

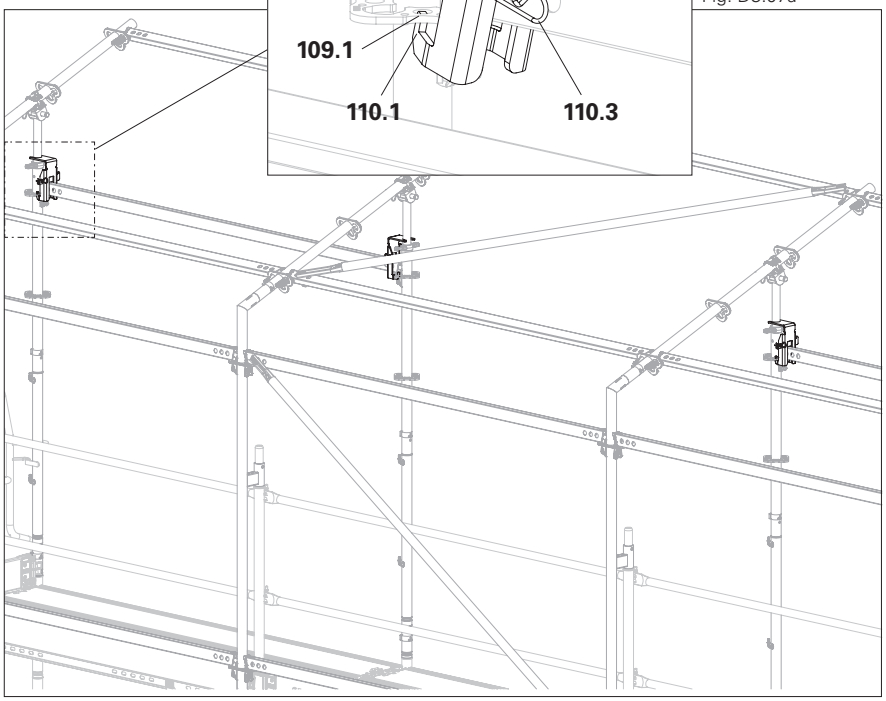


Fig. D3.07

Bracing system width 67 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. 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. D3.08)

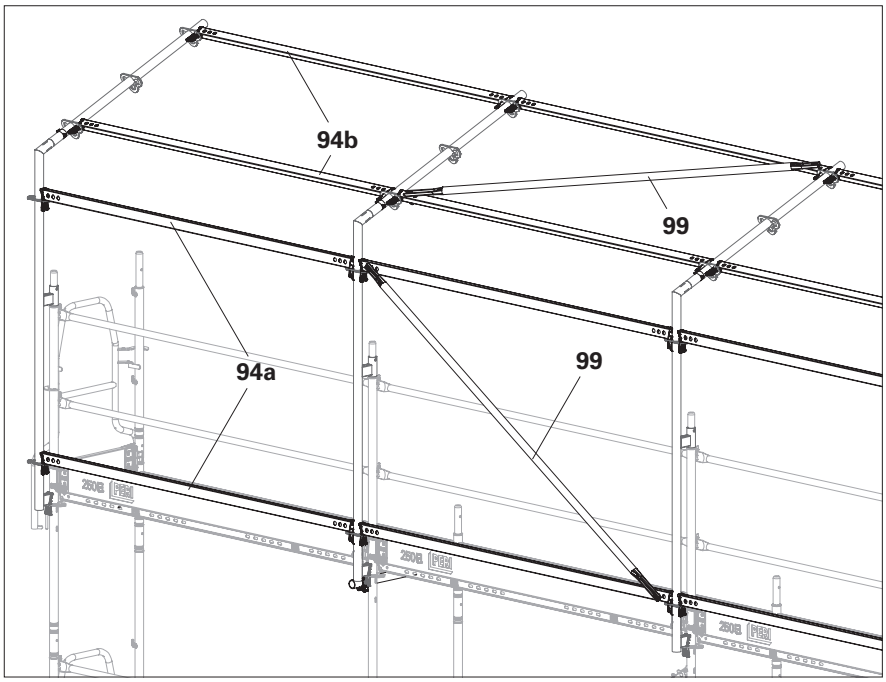


Fig. D3.08

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. D3.09)

If the anchoring or bracing is stronger when the applicable tie pattern is used, then this is the approach that should be taken.
(Fig. D3.09a)

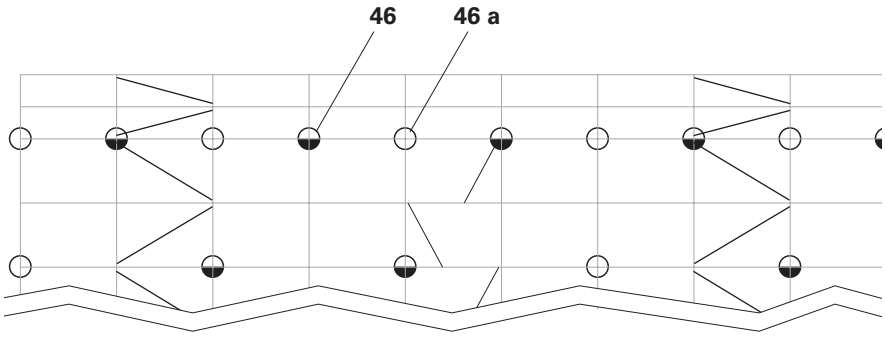


Fig. D3.09

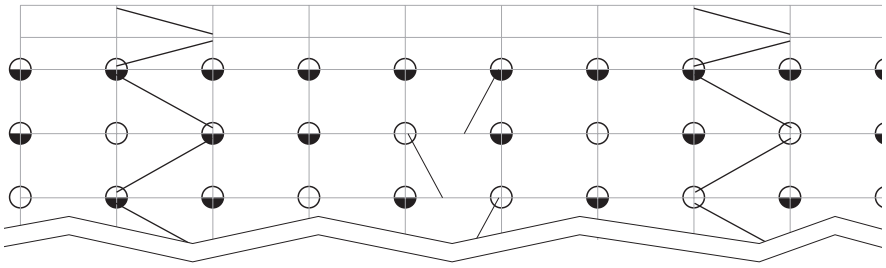


Fig. D3.09a

Keder tracks

The LGS Keder Track URK (**131**) is suitable for tarpaulins with 13 mm keder.
LGS Keder Connector 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 Connector URV (**132**) into the T-groove (**131.1**) of the Keder Track URK and bolt it into place. (Fig. D3.10 + D3.10a)
3. Fit the coupling side (**132.2**) of the keder connection on the pre-assembled keder tracks onto Weather Protection 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. D3.11)

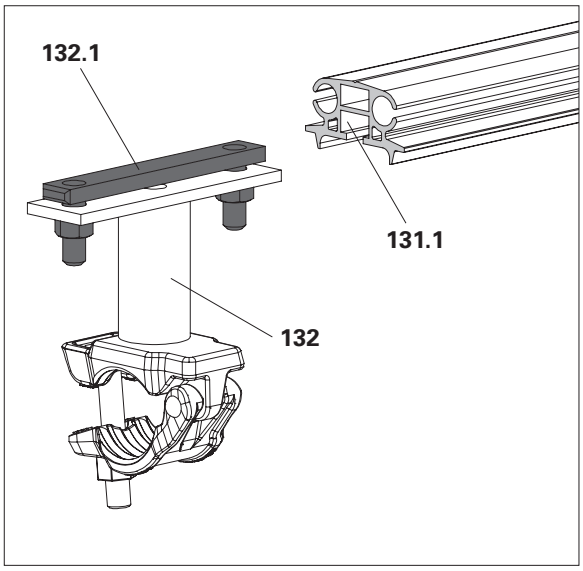


Fig. D3.10

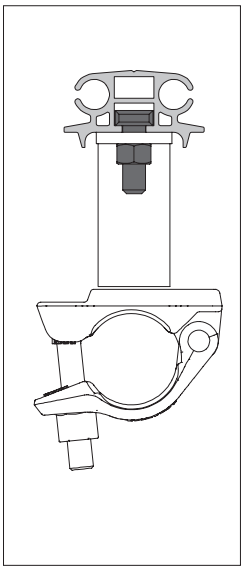


Fig. D3.10a

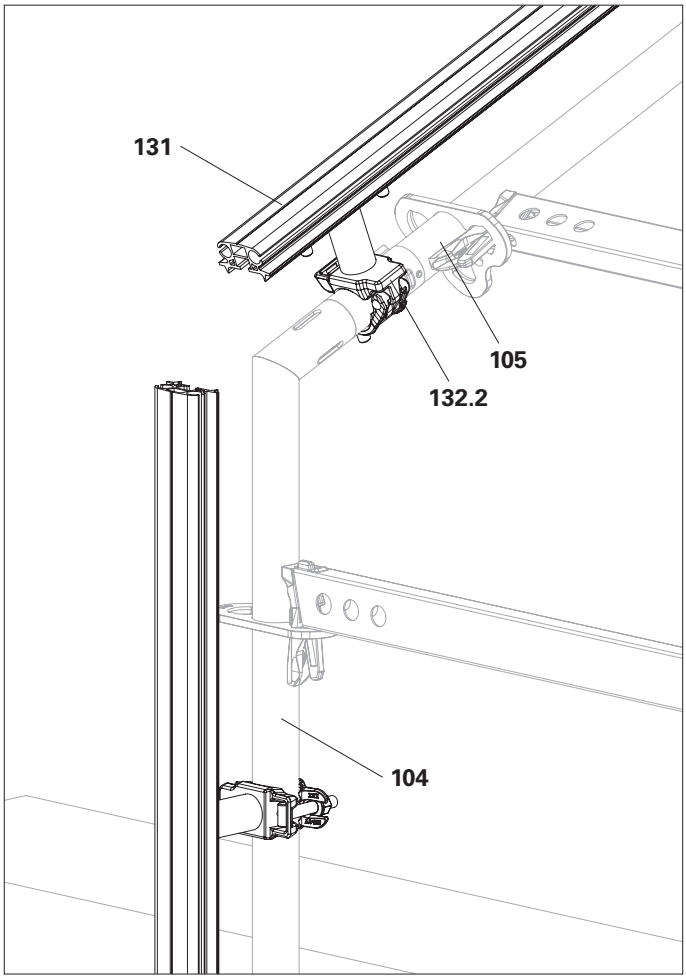


Fig. D3.11

D4 Protection roof

General

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 lower scaffold level, in the protection of the lateral protection installed beforehand.

1. Fit Protection Roof Connector EPC (**66**) into Console Bracket ECM 67 (**63**) and secure with tube clip (**21**) or bolts M10 x 70 and nuts.
2. Fit Console Bracket ECM 67 with attached Protection Roof Connector EPC, see Section "A6 System component: Console Bracket" on page 42 ff.

(Fig. D4.01)

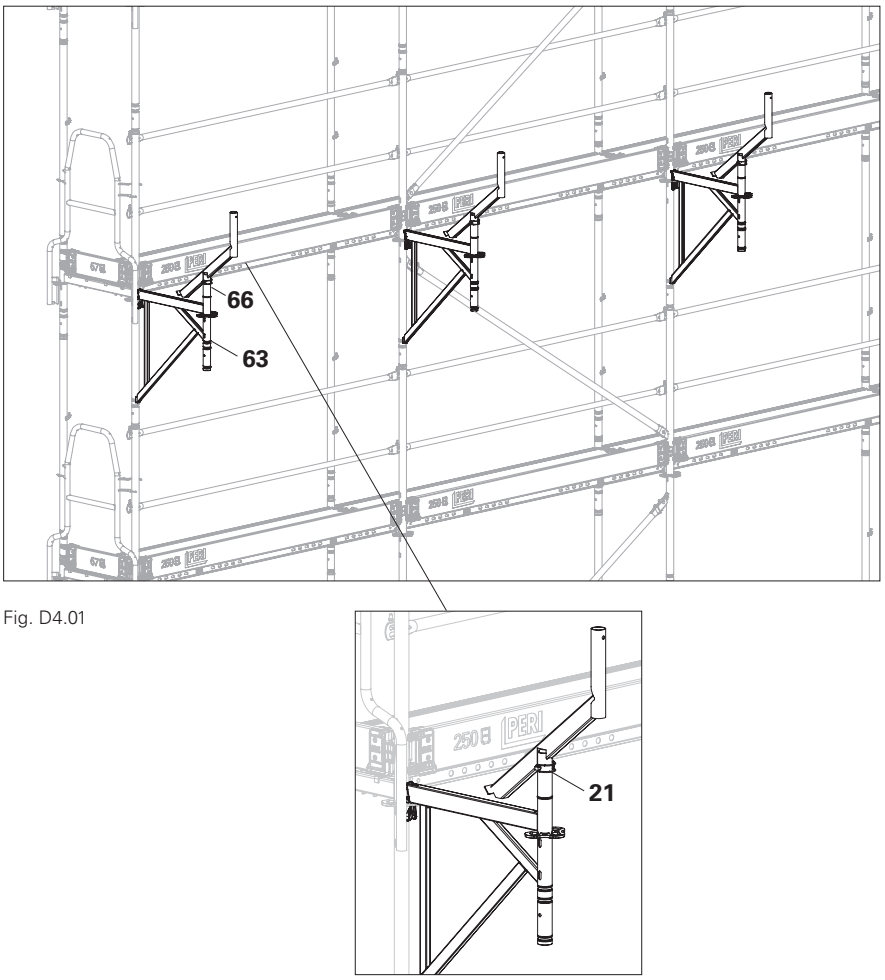


Fig. D4.01

3. Fit the first Steel Deck EDS (**30**) and push it outwards.
4. Fit a second steel deck.
   Alternatively, fit steel decks from level above.

5. Anchoring:
   Anchor every frame column in the protection roof positions:
   – Anchor every second frame column to the inner and outer legs with a Wall Tie UWT (**46**). Alternatively, anchor them on the inner leg using a triangulated tie.
   – Anchor remaining frame columns with single-standard wall ties.
   – See Section "F4" or "G4 Tie pattern".

(Fig. D4.02)

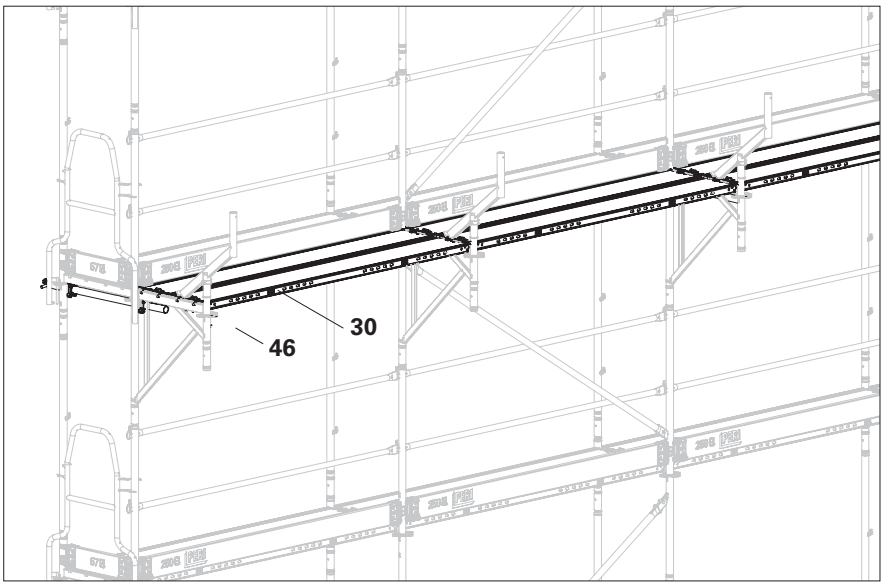


Fig. D4.02

6. Position Steel Decks EDS (**30**) on the Protection Roof Connector EPC.
7. Insert Toe Board UPF (**56**) into Protection Roof Connector EPC and secure with suitable means. (Fig. D4.03a)

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

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

- Depending on the scaffold components or static configuration, install additional measures, e.g. anchoring, in the scaffold 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 installing the decks and toe boards.

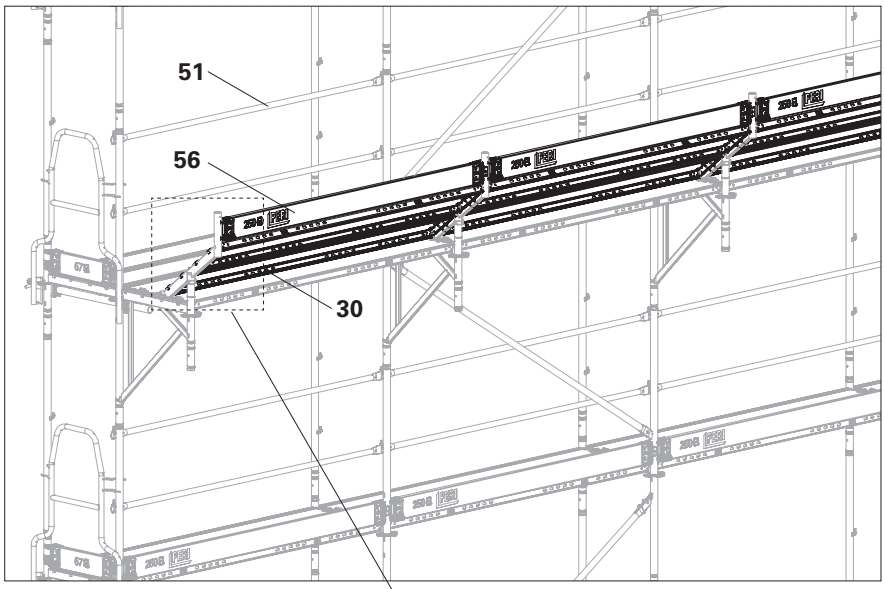


Fig. D4.03

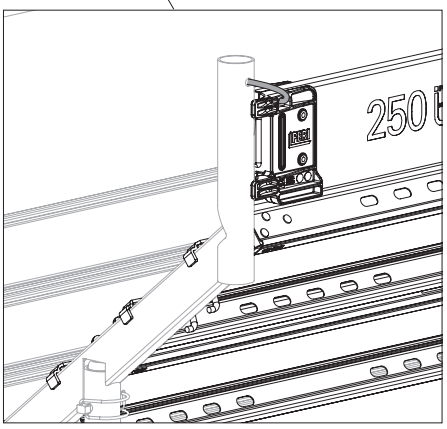


Fig. D4.03a

Components

21	Tube clip 10 x 60
30	Steel Deck EDS
46	Wall Tie UWT
51	Guardrail Post EPG
56	Toe Board UPF
63	Console Bracket ECM 67
66	Protection Roof Connector EPC

General

In order to bridge openings, scaffold bays are built over with formwork girders (**70**), either Steel ULS or Aluminium ULA. Depending on the load, formwork girders with a height of 50 cm or 70 cm can be used individually or in pairs, see Section "Load-bearing capacity of the formwork girders" on page 161 and Section "F3 Bridging" on page 177 or "G3 Formwork girders" on page 231.

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.

Installing bridging

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 + D5.01a)

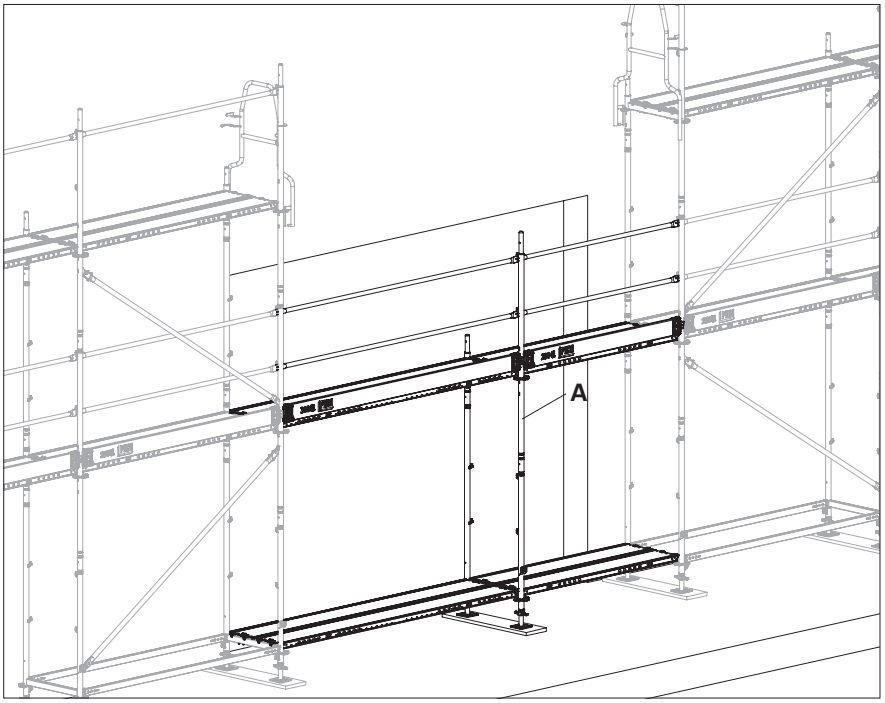


Fig. D5.01

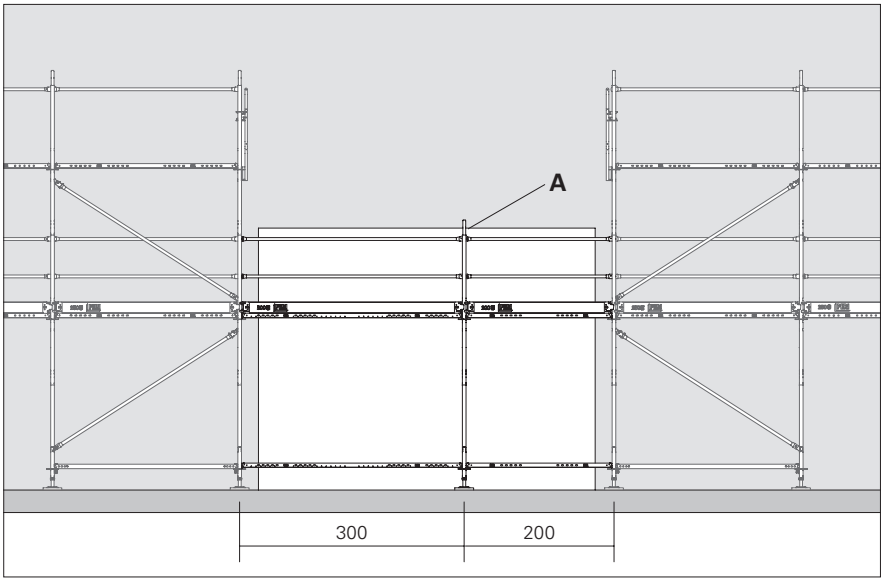


Fig. D5.01a

- From the auxiliary scaffolding:

2. Fit four standard couplers (**48**) onto the right and left of the opening:
   – two on Easy Frame EVF (**16**),
   – two on the Tubes EVR 150 (**18**).
   → Installation height: upper edge of the standard coupler to the lower edge of the rosette of the Easy Frame EVF: 11 cm. (Fig. D5.02a)
3. Position the formwork 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 formwork girders (**70.2**) in the same way.

(Fig. D5.02)

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

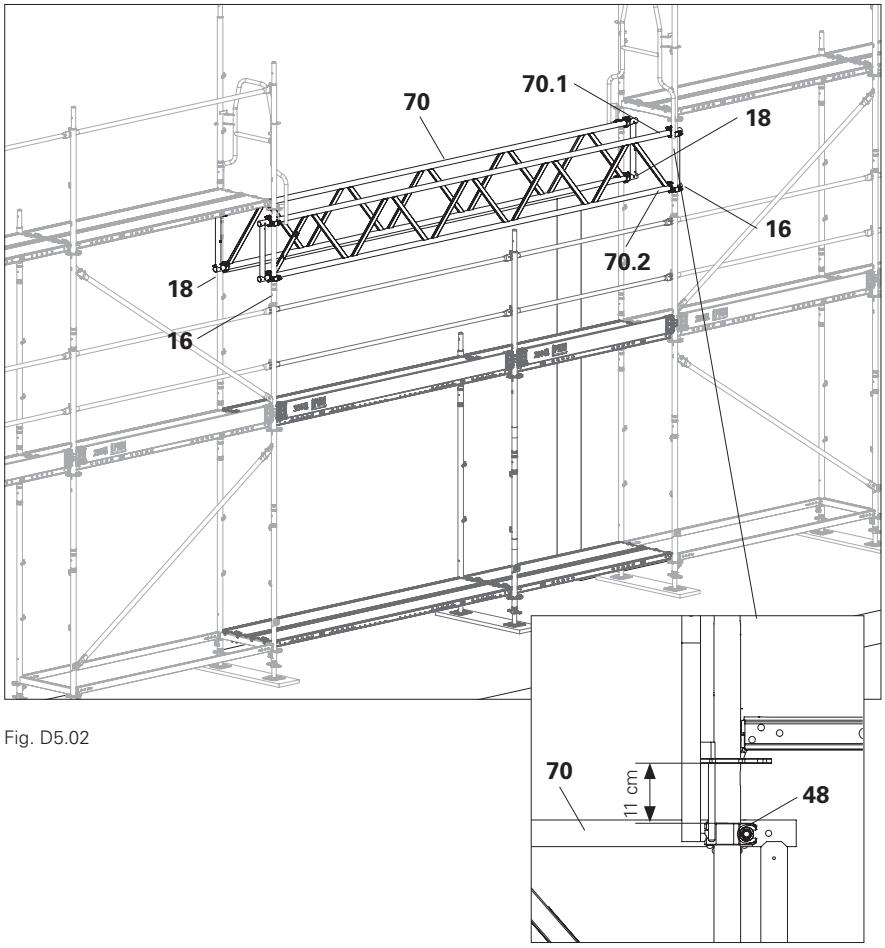


Fig. D5.02

Fig. D5.02a

Components

16	Easy Frame EVF 67
18	Tube EVR 150
48	Standard Coupler RA 48/48
70	Formwork Girder ULS/ULA

5. Position Starter Tube ULB (**71**) on the formwork girders (**70**).
6. Attach Base Frame EVB (**15**) to the starter tube.
7. Install the decks (**30**).

(Fig. D5.03)

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

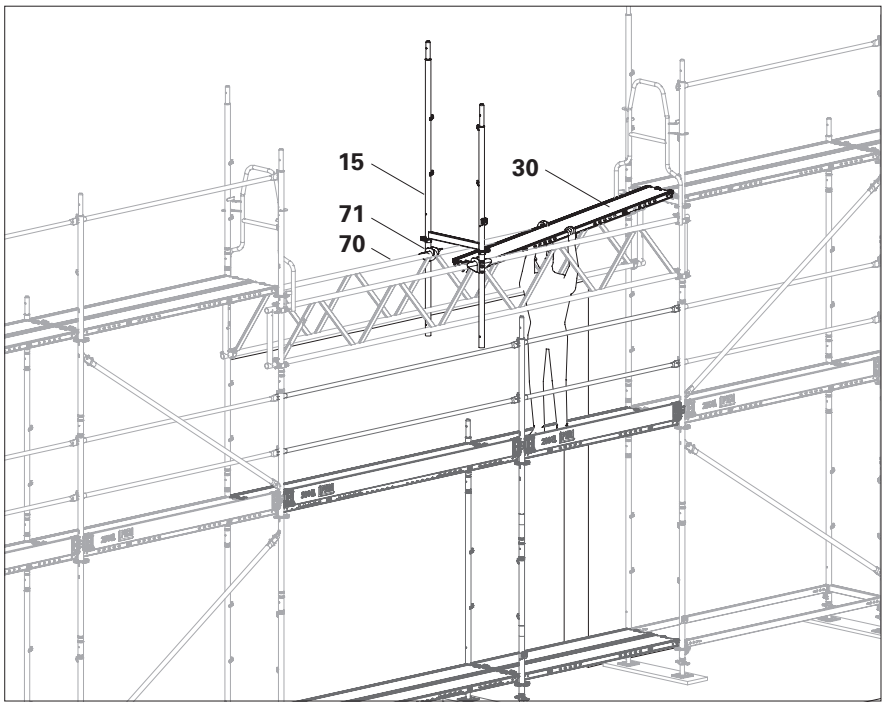


Fig. D5.03

8. Place Coupling Latch UHC 67 (**72**) on both bottom chords (**70.2**) of the formwork girders with the lugs (**72.1**) downwards. Place couplings around the starter tube (**71**), close and tighten.

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

Components

15	Base Frame EVB 67
16	Easy Frame EVF 67
30	Steel Deck EDS
70	Formwork Girder ULS/ULA
71	Starter Tube ULB
72	Coupling Latch UHC

Due to lifting wind forces, fit the Coupling Latch UHC from below.

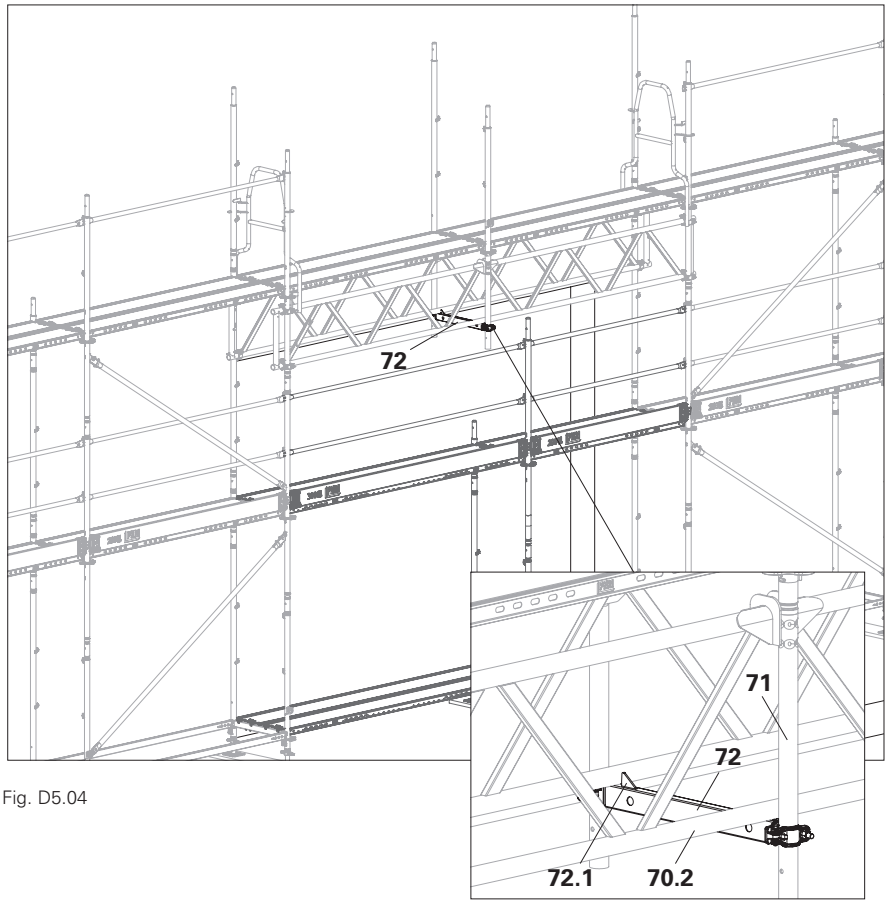


Fig. D5.04

Fig. D5.04a

9. Install the bracing and anchoring from the auxiliary scaffolding (**46**). See "Bracing and anchoring" on page 140 ff.

(Fig. D5.05)

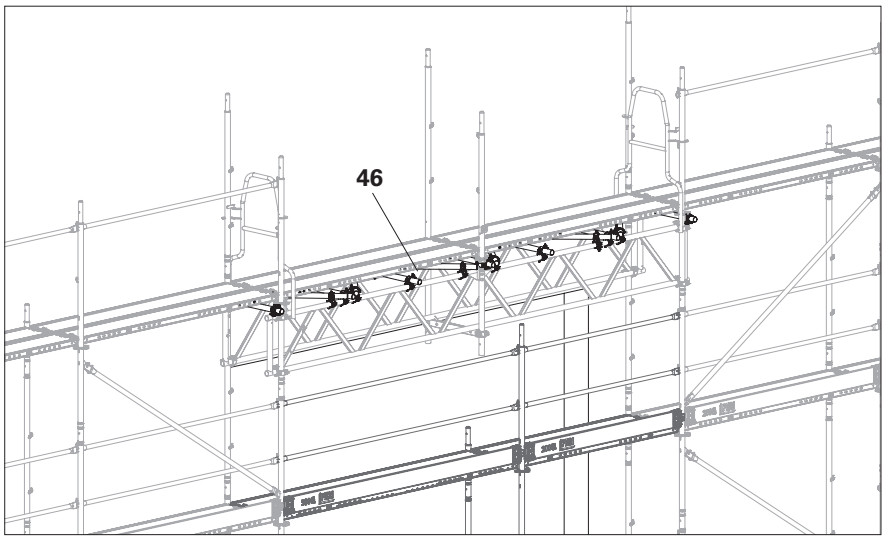


Fig. D5.05

Dismantling the auxiliary scaffolding

1. Install End Guardrail in Advance UPA (**52**) or End Guardrail EPF along the later opening on the basic scaffold.
2. Dismantle the auxiliary scaffolding.

(Fig. D5.06)

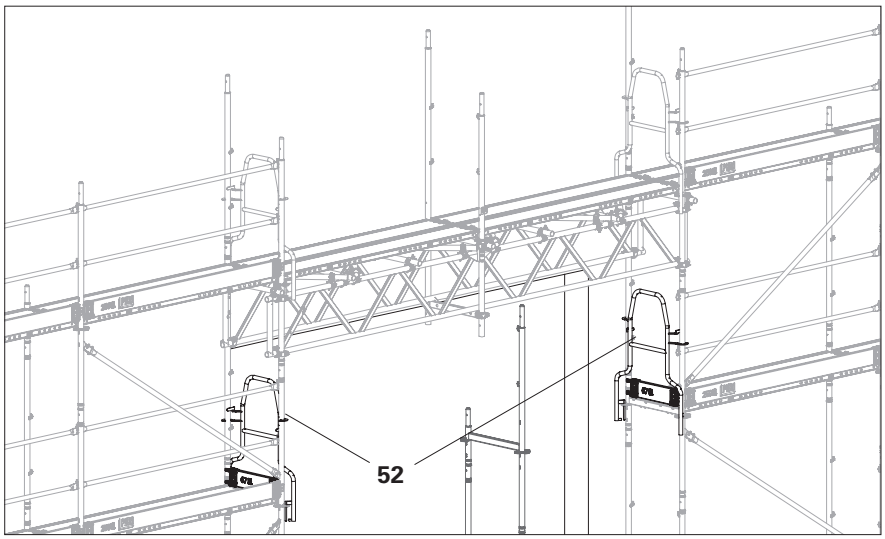


Fig. D5.06

Installing the lateral protection

- From the basic scaffold:

1. Fit Guardrail Posts EPG (**51**).
2. Remove End Guardrail in Advance UPA (**52**) from the bridging position.
3. Complete the lateral protection with intermediate guardrail (**51a**) and Toe Board UPF (**56**).

→ The bridging is now installed.

(Fig. D5.07)

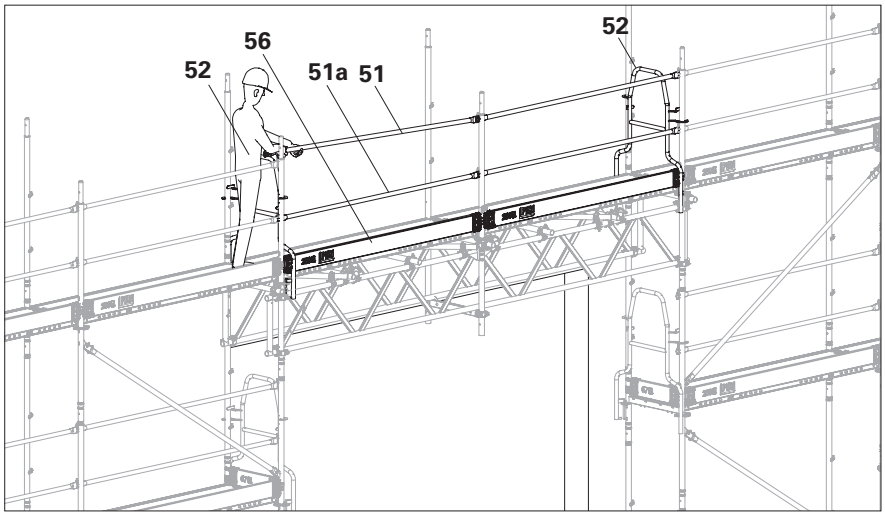


Fig. D5.07

Components

46	Wall Tie UWT
51	Guardrail Post EPG
52	Advance End Guardrail UPA 67
56	Toe Board UPF

Bracing and anchoring

The spacings a_1 – a_3 of the lateral holders are to be selected according to the load stated in "Load-bearing capacity of the formwork girders" on page 161, whilst anchors and braces are installed in accordance with Section "F4" or "G4 Tie pattern".
Execution in accordance with standard configurations in Section E2.

Variation 1
Bracing with scaffold tubes
Brace the top chords of the Formwork Girders ULS/ULA (**70**) with a combination of scaffold tubes and swivel couplings.

1. Mount the scaffold tubes (**75**) on both top chords (**70.1**) of the lattice girders with swivel couplings (**49**) and standard couplers.
2. Attach Wall Tie UWT to the Eyebolt UFE (**44**).
3. Fit Wall Ties UWT (**46**) with standard couplers onto both standards of the base frame (**15**).
4. Fit Wall Ties UWT (**46a**) onto both standards of the Easy Frame EVF.

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

Section A – A

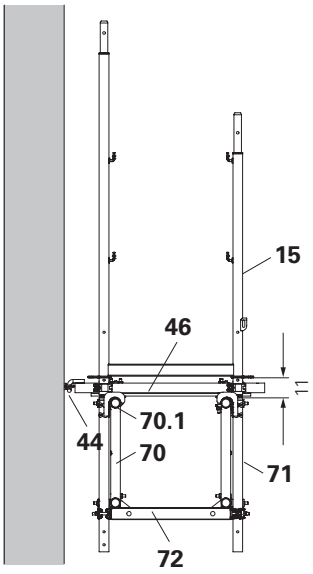


Fig. D5.08

View B

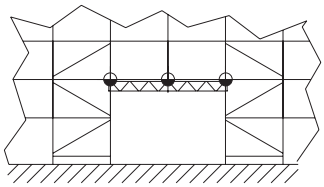


Fig. D5.10

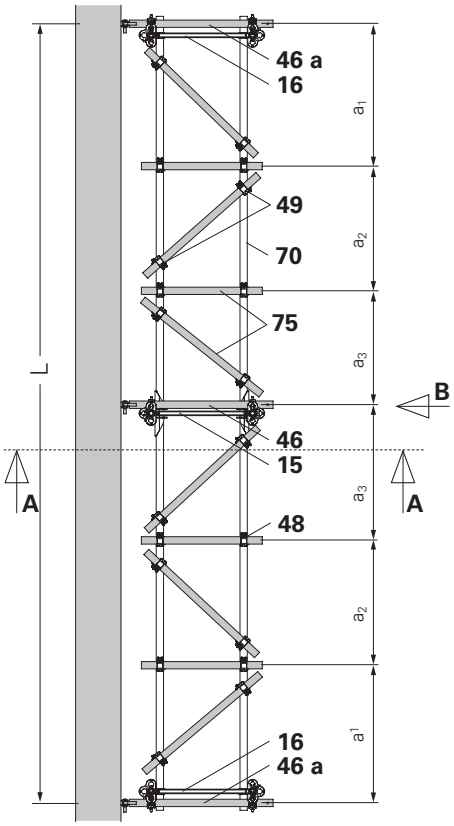


Fig. D5.09

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

1. Attach Wall Tie UWT to the Eyebolt UFE (**44**).
2. Fit Wall Ties UWT (**46**) with standard couplers (**48**) onto both standards of the base frame (**15**).
3. Fit Wall Ties UWT (**46a**) onto both top chords of the formwork girders.
4. Fit Wall Ties UWT (**46b**) onto both standards of the Easy Frame EVF (**16**).

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

Components

15	Base Frame EVB 67
16	Easy Frame EVF 67
44	Eyebolt UFE
46	Wall Tie UWT
48	Standard Coupler RA 48/48
49	Swivel Coupling AF 48/48
70	Formwork Girder ULS/ULA
71	Starter Tube ULB
72	Coupling Latch UHC
75	Scaffold tube

Section A – A

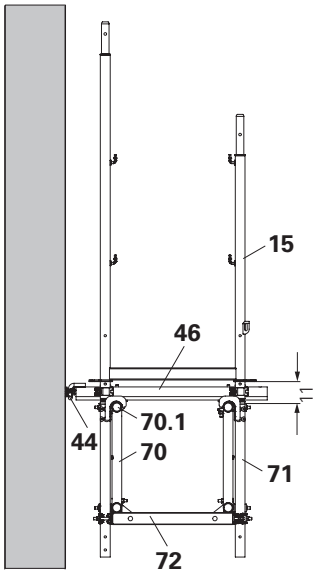


Fig. D5.11

View B

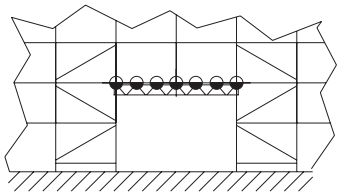


Fig. D5.13

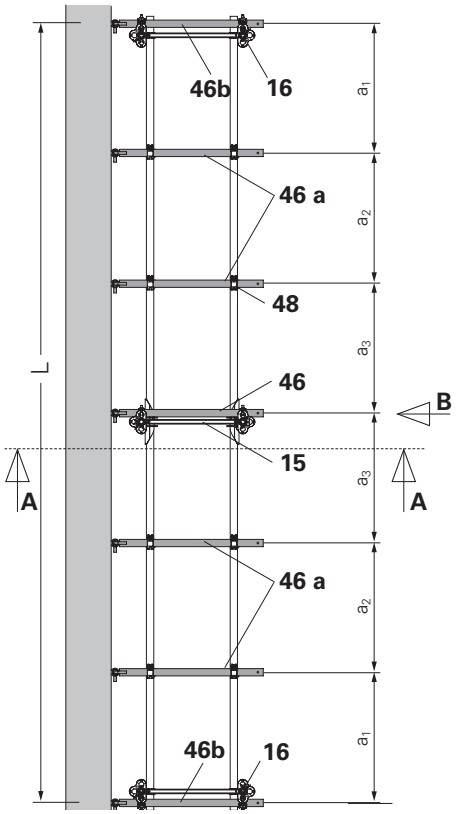


Fig. D5.12

Bridging with 2 x 2 Formwork Girders ULS/ULA

After installing the first formwork girders on the inside, formwork 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 "Load-bearing capacity of the formwork girders" on page 161, whilst anchors and braces are installed in accordance with Section "F4" or "G4 Tie pattern".
- The permissible loads for bridging with 2 x 2 formwork girders are derived from the sum of the permissible loads of the individual girders.

Variation 1
Bracing with scaffold tubes

1. Brace the internal formwork girders with standard couplers (**48**) and scaffold tubes (**75**) beneath the top chords.
2. Attach Wall Tie UWT (**46**) to the Eyebolt UFE.
3. Place Wall Tie UWT (**46**) on the top chords of the top formwork girder (**70**). Fit wall ties onto both standards of the base frame (**15**) with standard couplers.
4. Fit Wall Ties UWT (**46a**) onto both standards of the Easy Frames EVF (**16**).
5. Fit the lattice girders (**70a**) that have been shifted downwards onto the scaffold tubes (**75**) using standard couplers, align them and fit them onto the standards of the Easy Frames EVF (**16**).
6. Slide the scaffold tubes (**75a**) transversely between the top chords of the formwork girders. Fit the scaffold tubes onto the top chords of the outer formwork girders with swivel couplings (**49**).

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

Section A – A

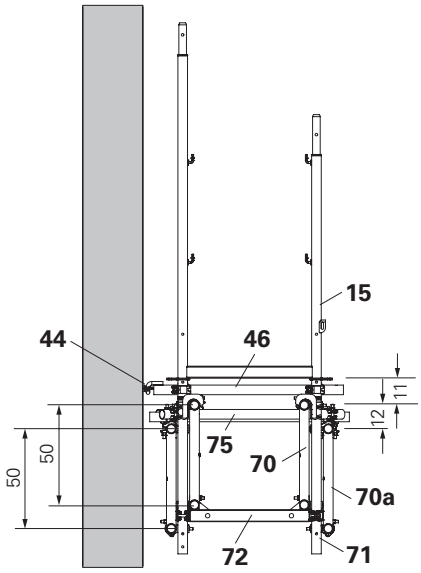


Fig. D5.14

View B

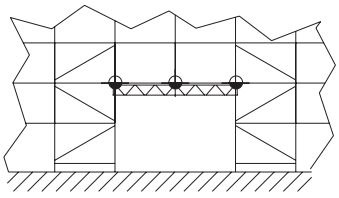


Fig. D5.16

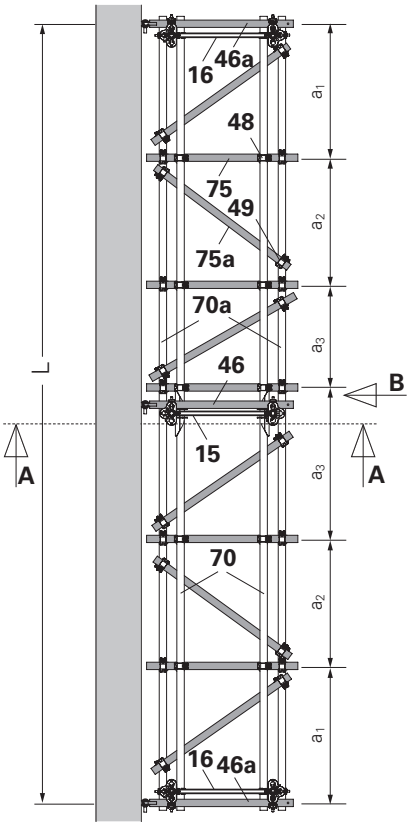


Fig. D5.15

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

1. Attach Wall Tie UWT (**46**) to the Eyebolt UFE.
2. Place Wall Tie UWT (**46**) on the top chords of the top formwork girders (**70**). Fit Wall Ties UWT onto both standards of the base frame (**15**) with standard couplers.
3. Fit Wall Ties UWT (**46a**) beneath the top chords of the formwork girders (**70**).
4. Fit the lattice girders that have been shifted downwards onto the wall ties (**46a**) using standard couplers, align them and fit them onto the standards of the Easy Frames (**16**).
5. Fit Wall Ties UWT (**46b**) onto both standards of the Easy Frame EVF (**16**).

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

Components

15	Base Frame EVF 67
16	Easy Frame EVF 67
44	Eyebolt UFE
46	Wall Tie UWT
48	Standard Coupler RA 48/48
49	Swivel Coupling AF 48/48
70	Formwork Girder ULS/ULA
71	Starter Tube ULB
72	Coupling Latch UHC
75	Scaffold tube

Section A – A

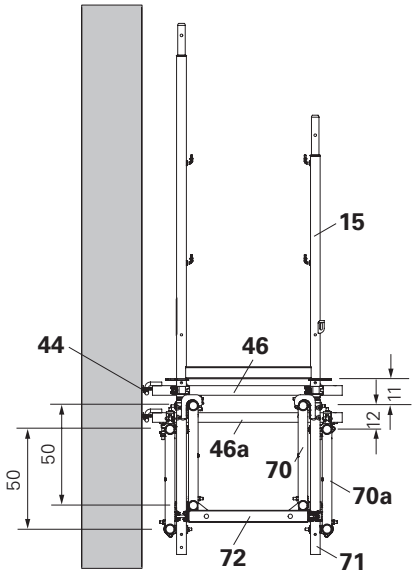


Fig. D5.17

View B

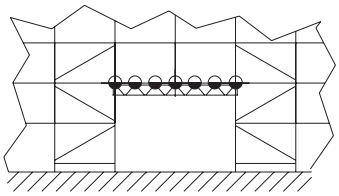


Fig. D5.19

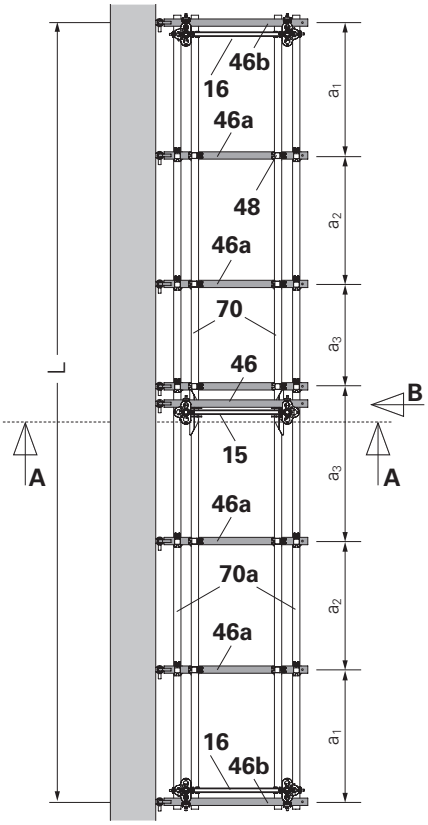


Fig. D5.18

General

Core components for the realisation of pavement gantries are
- Multi Girder ELM 200 (**73**),
- UH-Spigot-2 (**93**),
- Ledger-to-ledger Coupler UHA-2 Half with Spigot (**92**).

(Fig. D6.01)

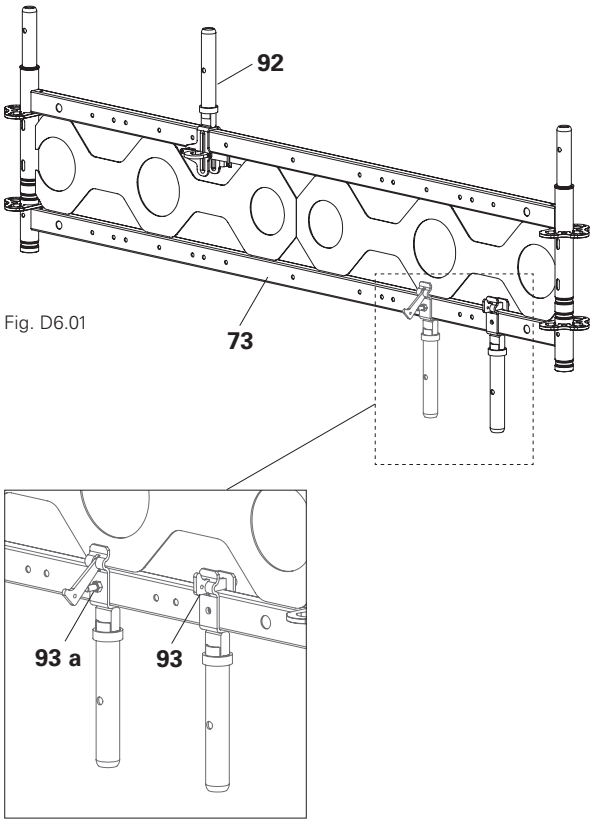


Fig. D6.01

Adjusting the passage width
The multi girder can be attached to:

- both tube ends on Tube EVR 150, Easy Standards EVM 200 or Standards UVR-2,
- a tube end on Tube EVR 150, Easy Standards EVM 200, or Standards UVR-2 and a UH Spigot-2 (**93**) on Top Standard UVH,
- two UH Spigots-2 on Top Standards UVH.

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**).

Components

73	Multi Girder ELM 200
92	Ledger-to-ledger Coupler UHA-2 half with spigot
93	UH Spigot-2

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-to-Ledger Coupler UHA-2 half with spigot (**92**),
- or on two Ledger-to-Ledger Couplers UHA-2 half with spigot (**92**).

To position the scaffold assembly on the top of the Multi Girder ELM (**73**), attach the Ledger-to-Ledger Coupler UHA-2 Half with Spigot (**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. D6.01a + D6.01b)

- 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 67

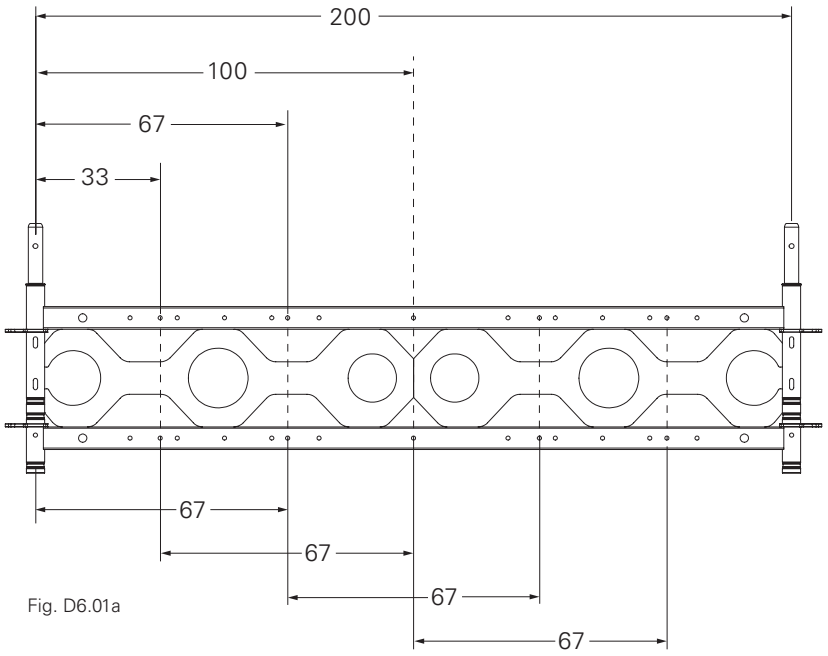


Fig. D6.01a

Combinations for Easy 100

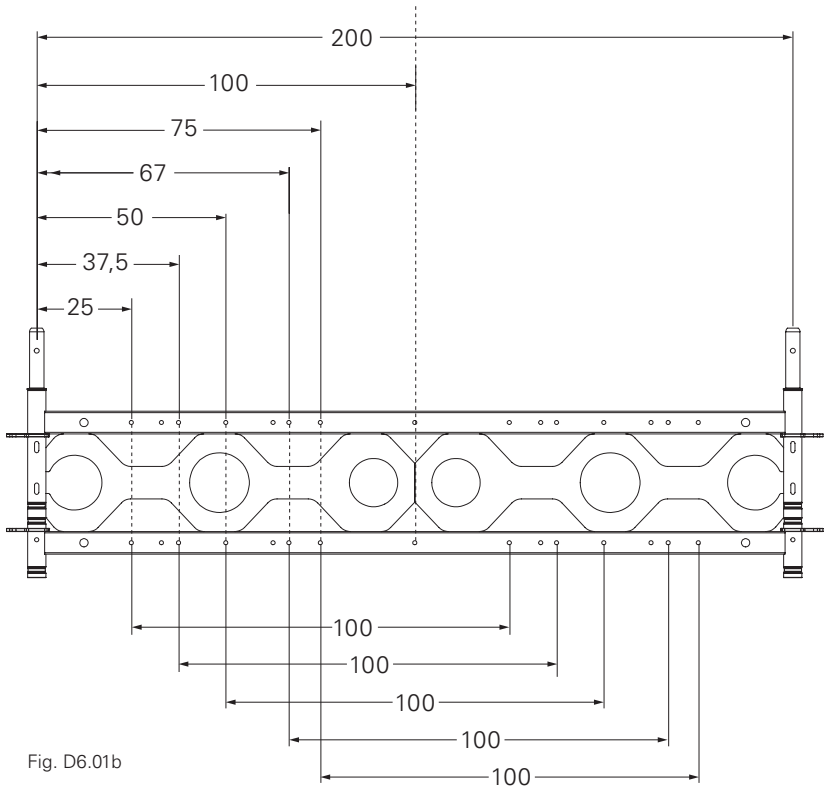


Fig. D6.01b

Adjusting the passage height

Variation 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
Base Spindles 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. D6.02)

Variation 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
Base Spindles UJB 38-80/55
for 60 cm (= max.).

For other combinations,
see Table D6.01.

For the maximum extension lengths, see Section Tie pattern.

Components

10 Base Spindle UJB 38-50/30
11 Base Spindle UJB 38-80/55
18 Tube EVR 150
23 Easy Standard EVM 200
30 Steel Deck EDS
73 Multi Girder ELM 200
80 Base Standard UVB
82 Standard UVR-2
94 Horizontal Ledger UH-2

Variation 1

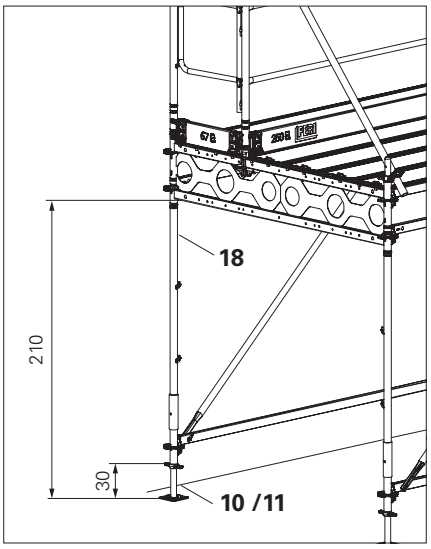


Fig. D6.02

Passage heights			
Standard	**Base spindle**	**Extension range**	**Passage height**
Variation 1 EVR 150 UVR-2 150	UJB 38-50/30	30 cm	2.10 m
	UJB 38-80/55	60 cm	2.40 m
Variation 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 Base Spindles UJB 38-50/30 (**10**) sufficiently so as to realise the required clear passage height.
2. Connect base spindle to Base Standard UVB 25 (**80**), Tube EVR 150 (**18**) and the prepared Multi Girder ELM.
3. Fit additional frame columns.

(Fig. D6.03)

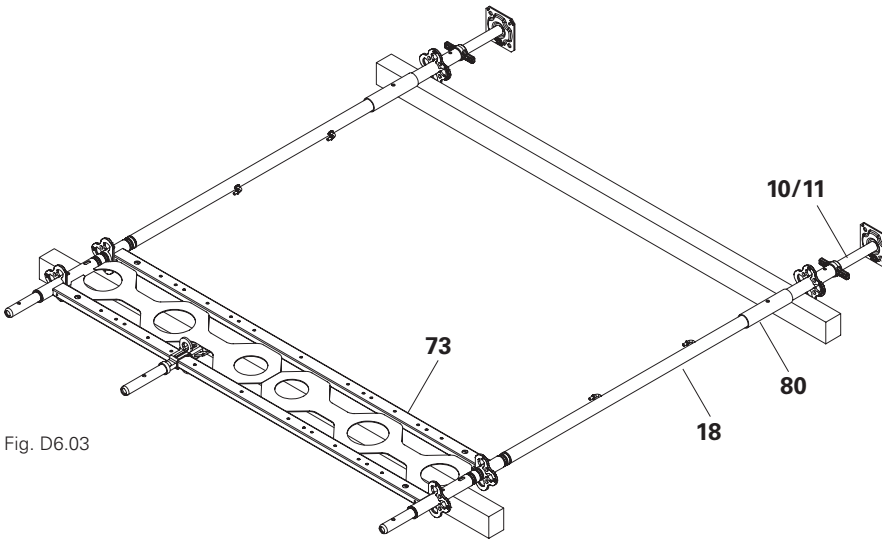


Fig. D6.03

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

Be mindful of loose components during the erection process!

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. D6.04)

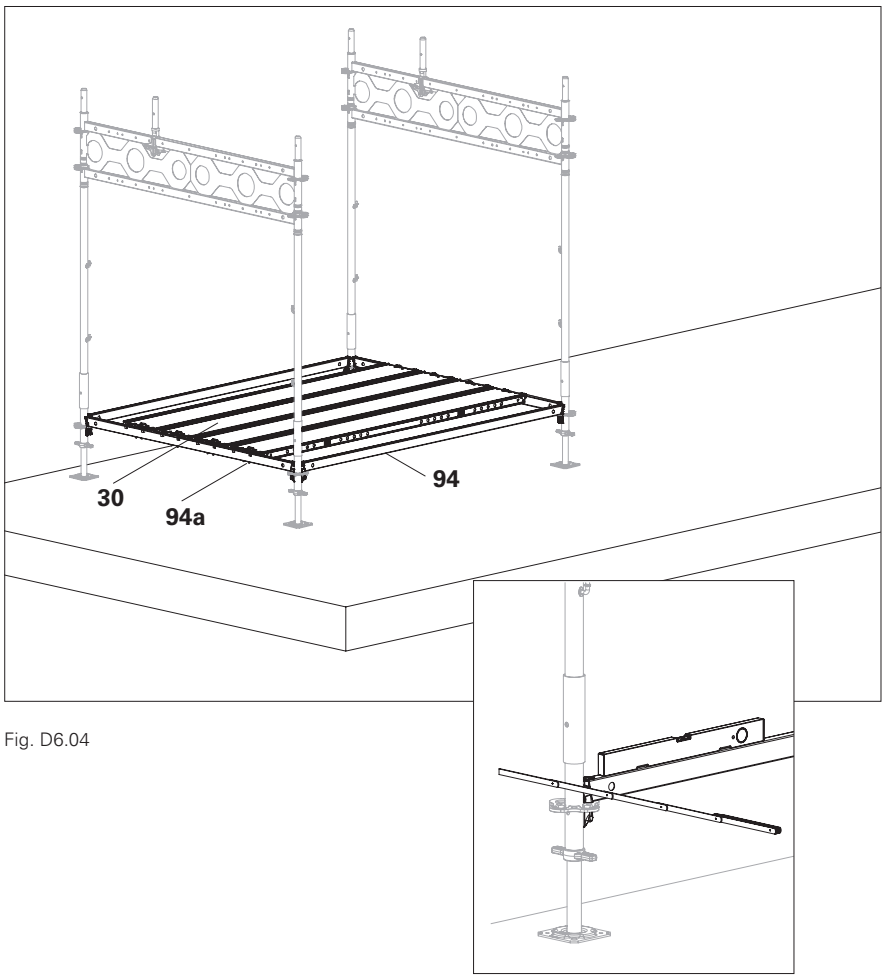


Fig. D6.04

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-to-Ledger Couplers UHA-2 half with spigots (**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. D6.05)

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. D6.05a)

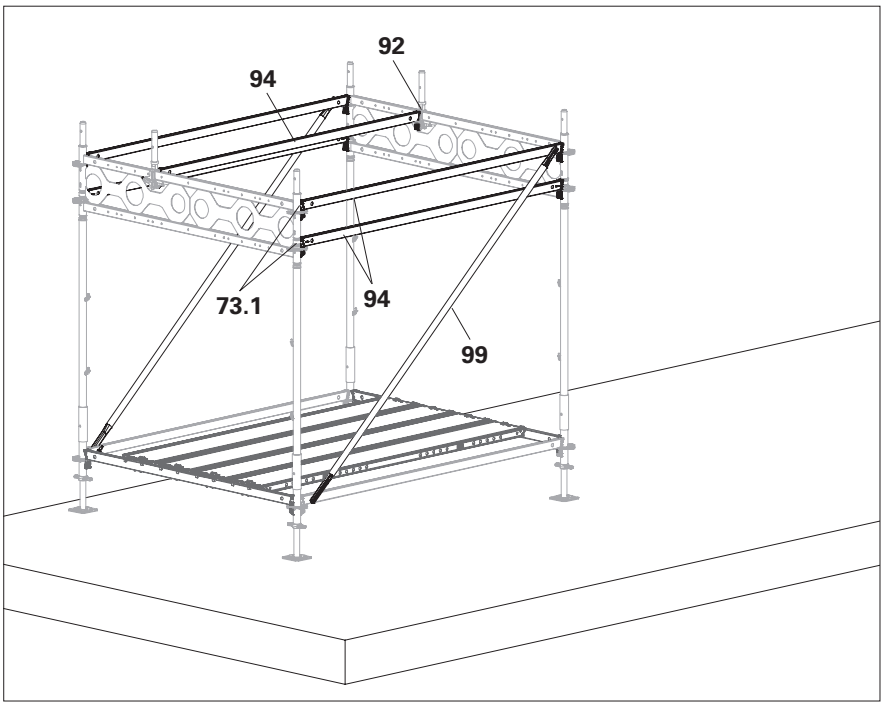


Fig. D6.05

Components

30 Steel Deck EDS
73 Multi Girder ELM 200
92 Ledger-to-ledger Coupler UHA-2 half with spigot
94 Horizontal Ledger UH-2
99 Ledger Brace UBL-2

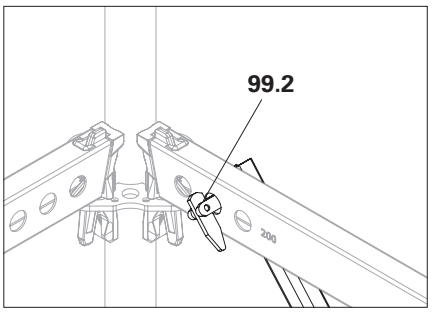


Fig. D6.05a

Erecting additional bays

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**).
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. D6.06)

From a static point of view, Horizontal Ledgers UH-2 and Ledger Braces UBL are not always required, see Section "F4" or "G4 Tie pattern".

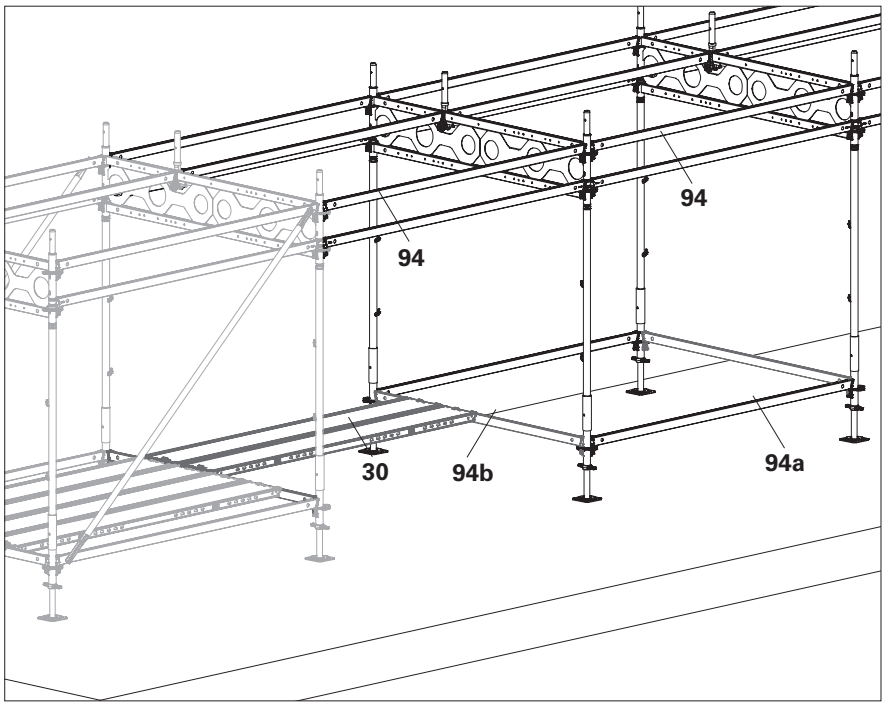


Fig. D6.06

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. D6.07)

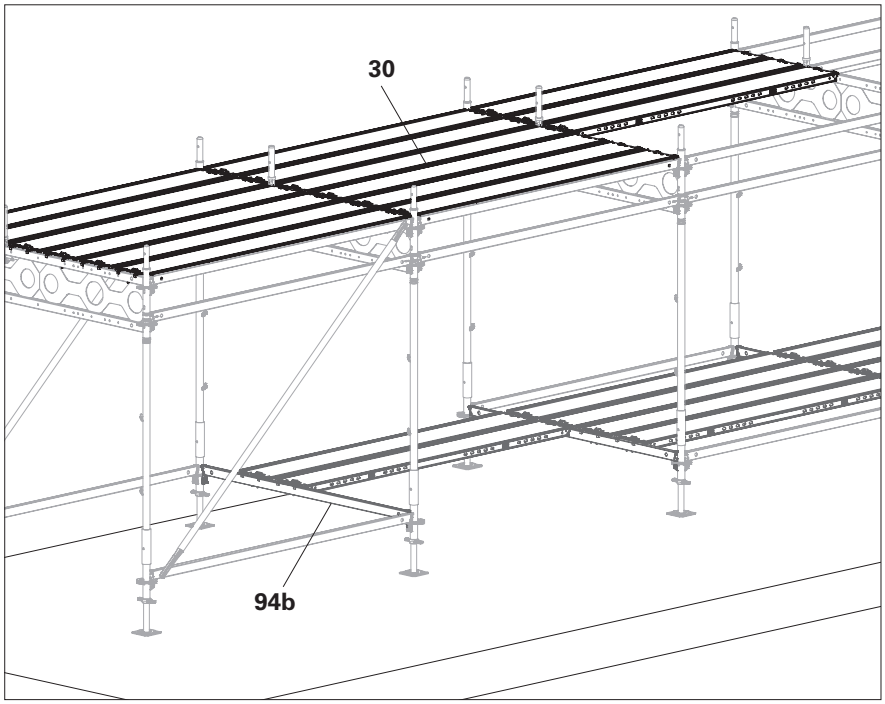


Fig. D6.07

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.

Variation 1
Assembly with the base frame
1. Fit one Base Frame EVB (**15**) onto every frame column.
2. Scaffold erection continues as described in Sections "B2" – "B3".
3. Brace every frame column with scaffold 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. D6.08 + D6.08a)

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.

Components

15	Base Frame EVB
46	Wall Tie UWT
49	Swivel Coupling AF 48/48
49.1	Swivel coupling 38/48
75	Scaffold tube

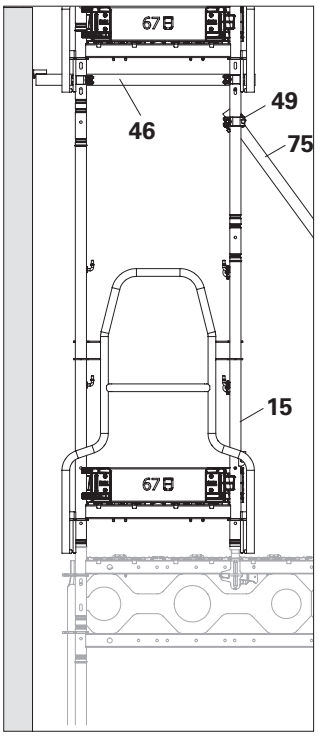


Fig. D6.08a

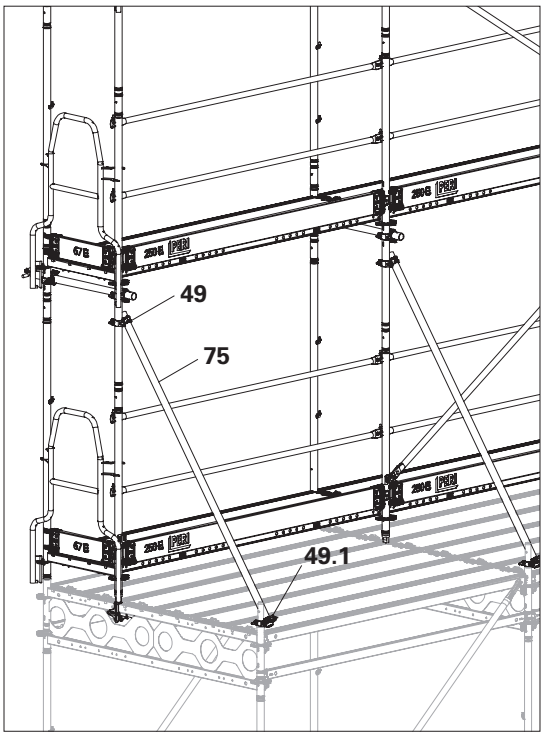


Fig. D6.08

Variation 2
Continue immediately with assembly on the multi girder ELM

1. On every frame column:
   – Attach the Guardrail Post EVP (**50**) to the Ledger-to-Ledger Coupler UHA half with spigot.
   – Attach Tube EVR 150 (**18**) to the multi girder.
   – Fit Guardrail Posts EPG (**51**) onto the Guardrail Post EVP (**50**).
   – Fit Toe Board UPF (**56**).
2. Attach End Guardrail EPF (**54**) to first and last scaffold bays.
3. Assemble Easy Frame EVF (**16**) to all frame columns.
4. Scaffold erection continues as described in Sections "B2" – "B3".
5. Brace every frame column with scaffold 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. D6.09b)
7. Scaffold erection continues in accordance with Section "B4".

→ The scaffold assembly is now installed.

(Fig. D6.09 + D6.09a)

For the quantity and positions of ties, bracing with Horizontal Ledgers UH-2 and braces, see Section "F4" or "G4 Tie pattern".

Components

16	Easy Frame EVF
18	Tube EVR 150
24	Brace Adapter EBA
46	Wall Tie UWT
49	Swivel Coupling AF 48/48
49.1	Swivel coupling 38/48
50	Guardrail Post EVP
51	Guardrail Post EPG
54	End Guardrail EPF
56	Toe Board UPF
75	Scaffold tube

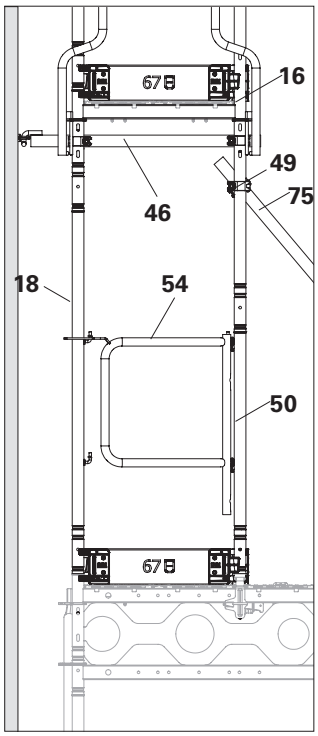


Fig. D6.09a

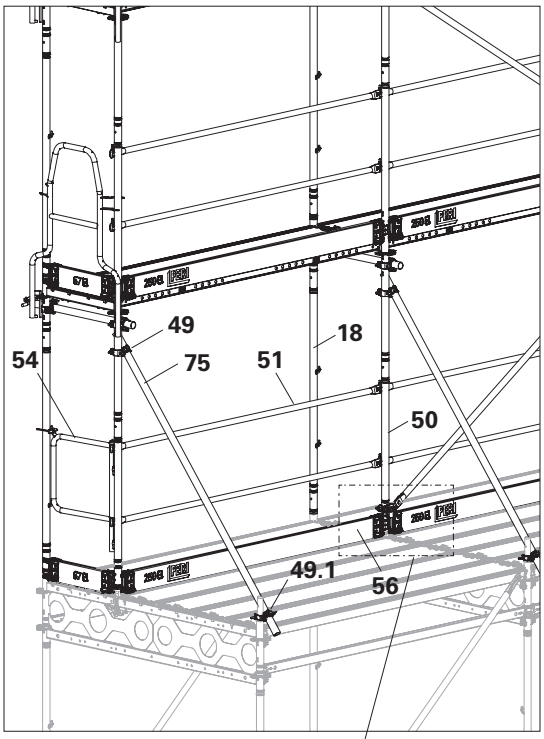


Fig. D6.09

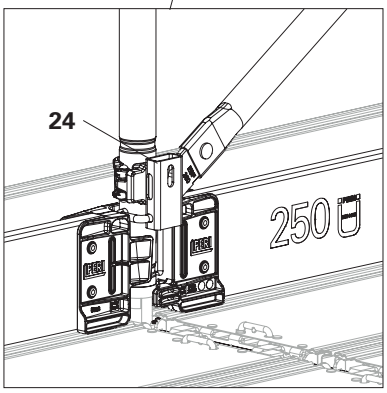


Fig. D6.09b

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 α ≤ 60°.
- The force application must be close to the horizontal ledger. (Fig. D7.01a)

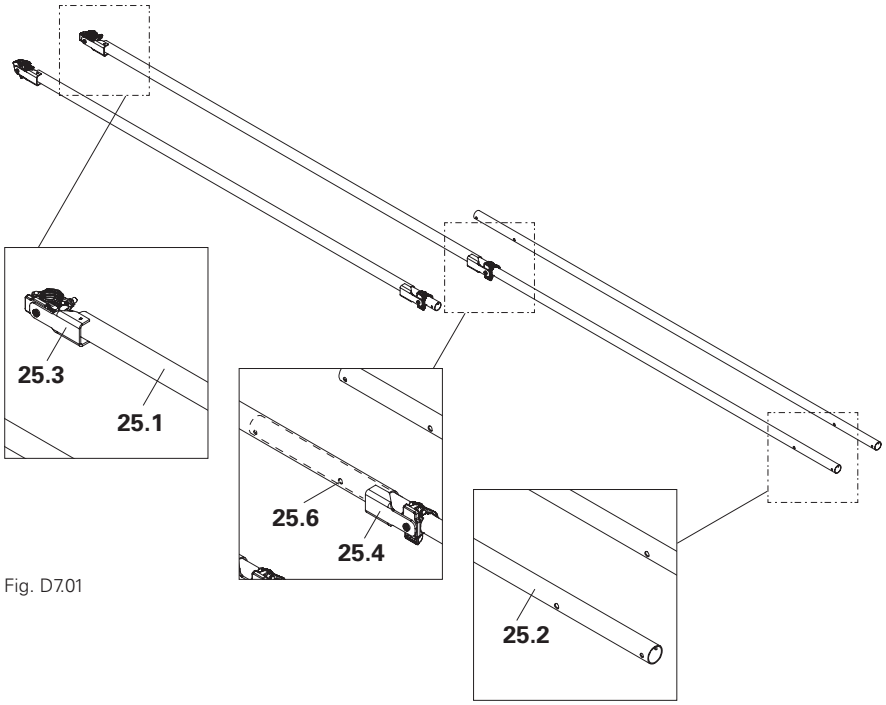


Fig. D7.01

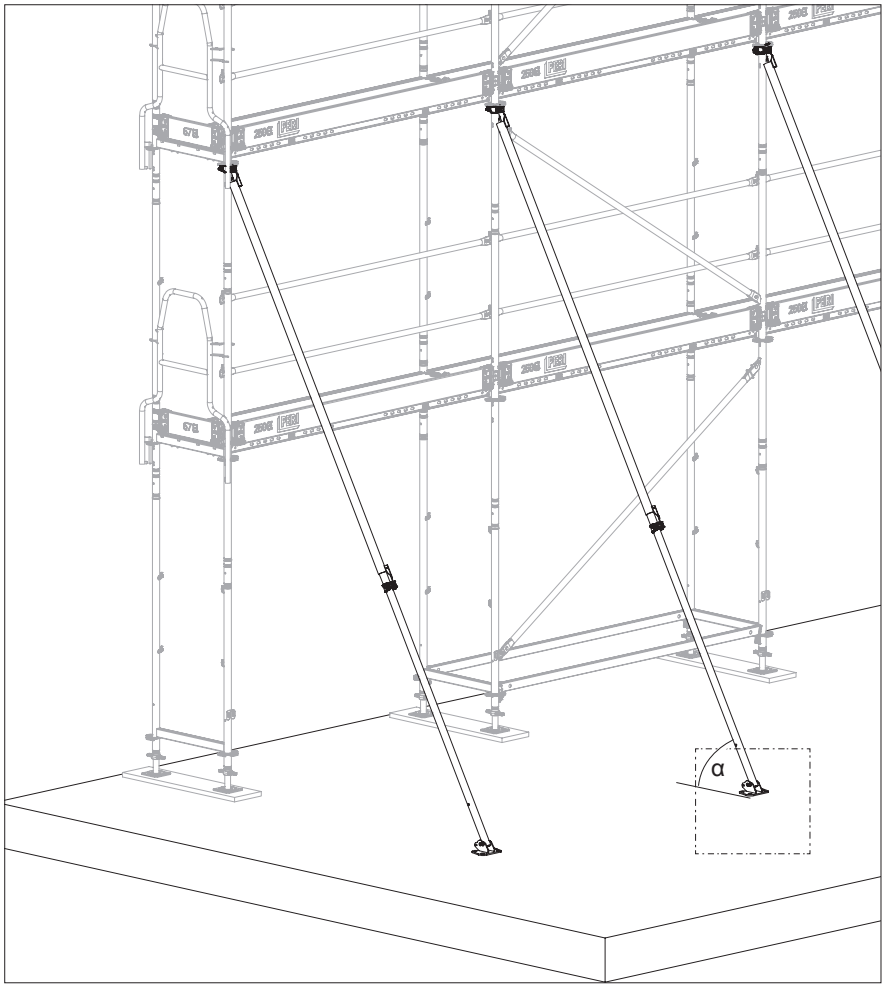


Fig. D7.01a

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)

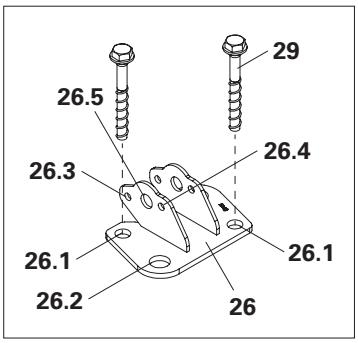


Fig. D7.02

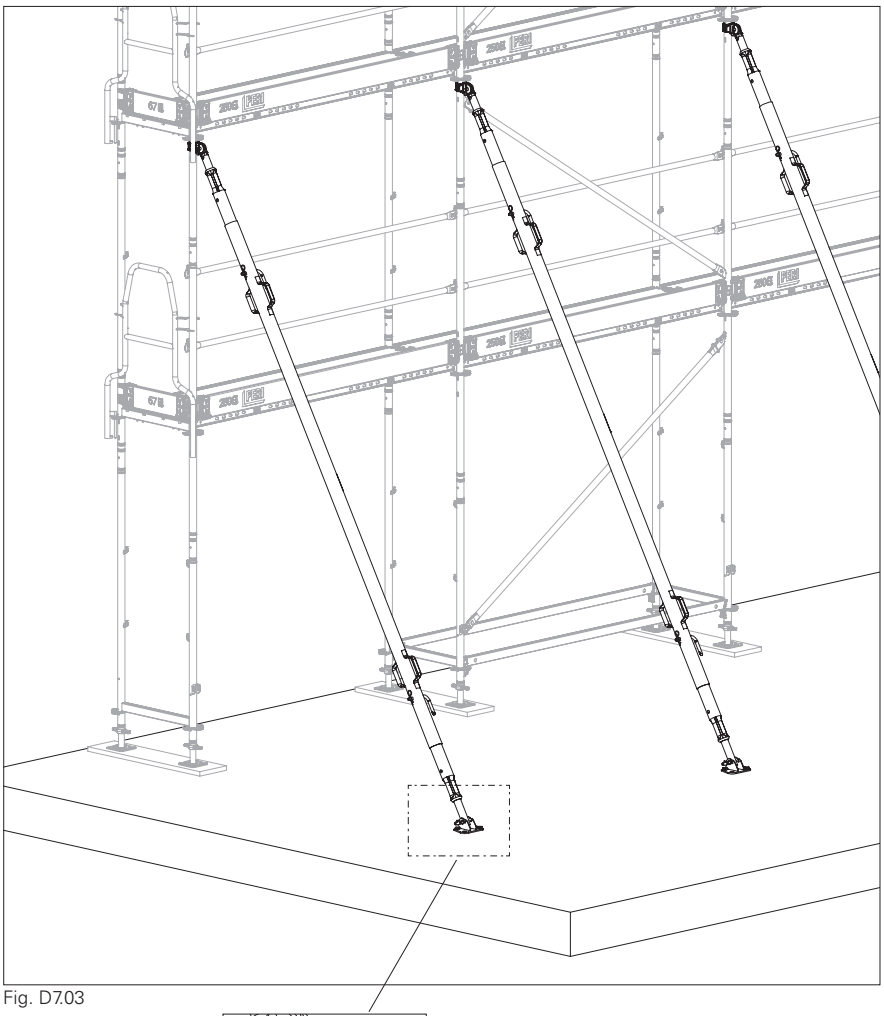
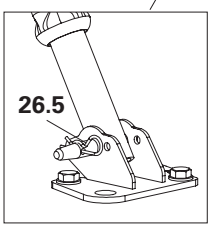


Fig. D7.03



Support on the second scaffold level
Maximum permissible forces at maximum extension of 5.57 m:
Tension: 6.00 kN
Compression: 3.73 kN

Assembly
1. Secure the multi brace on the basic scaffold at the top with an outer tube (**25.1**).
2. Fit the top coupling (**25.3**) onto the outer leg of the Easy Frame (**16**) while positioned on the first scaffold level. 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)

Components

16	Easy Frame EVF
25	Multi Brace EWB
26	Base Plate EWB
27	Bolt M10 x 80-8.8
28	Nut EN 1661 M10-8
29	Tie Bolt PERI 14/20 x 130

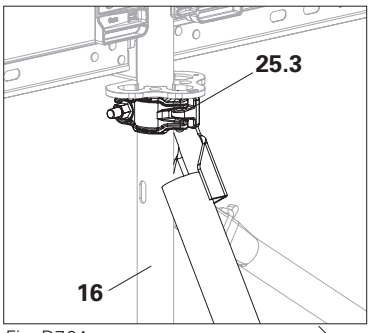


Fig. D7.04a

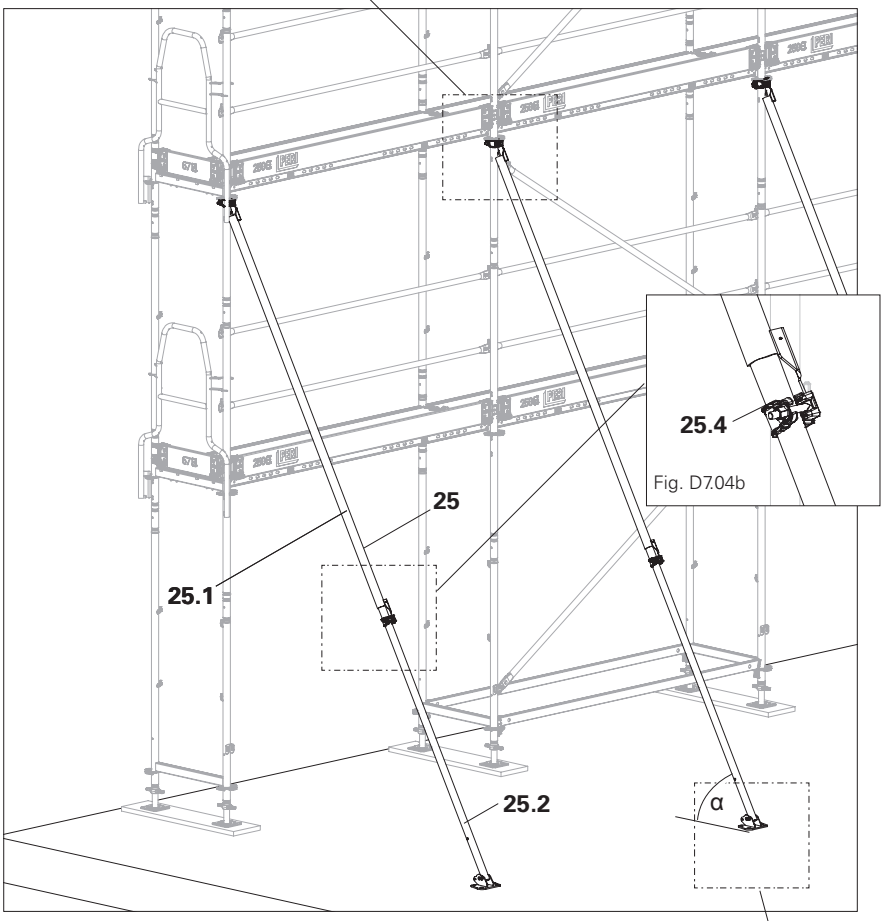


Fig. D7.04b

Fig. D7.04

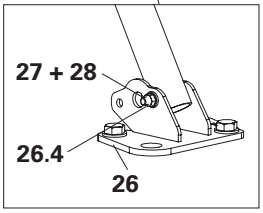


Fig. D7.04c

Support on the third scaffold 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

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 pipe and tighten the coupling.
3. Secure the multi brace on the basic scaffold.
4. Fit the inner tube onto the outer leg of the Easy Frame (**16**) using a swivel coupling (**49**) while positioned on the second scaffold level. Push the coupling as close as possible to the rosette and tighten. (Fig. D7.05a)
5. Loosen the bottom coupling and extend the multi brace until the required support angle of $\alpha \leq 60°$ has been reached. Tighten the bottom coupling.
6. Fit the inner tube (**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. D7.05c)
8. Label the multi brace as an obstacle.

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

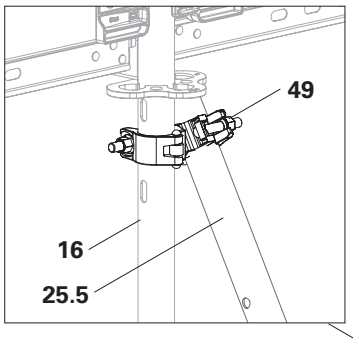


Fig. D7.05a

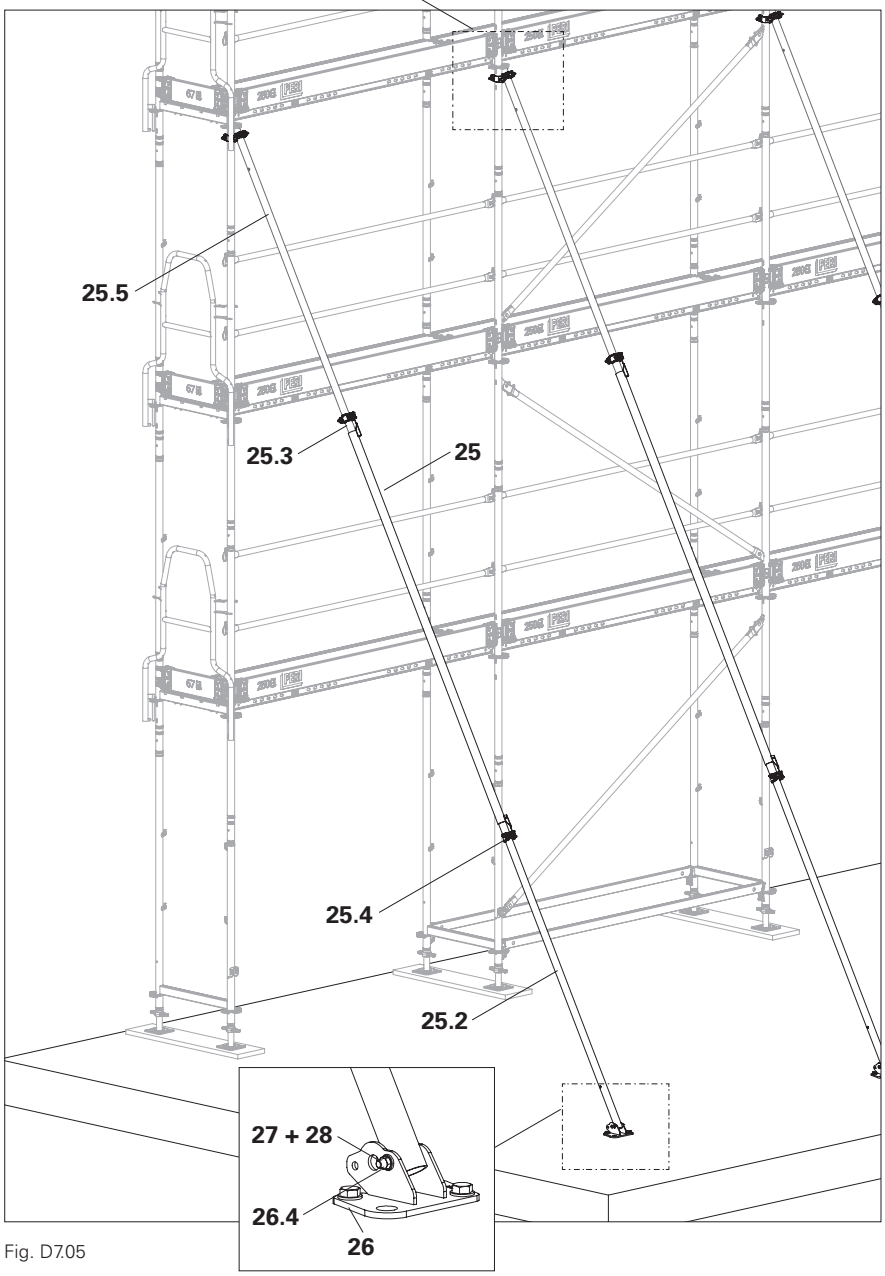


Fig. D7.05

Fig. D7.05c

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 guaranteed!

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 scaffold tube (**75**) onto the multi brace (**25**) by means of a swivel coupling.
2. Fit an inner tube or scaffold tube onto the outer tube of the base frame (**15**) using 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 scaffold tube:
for support on the second scaffold level 2.50 m,
for support on the third scaffold level 4.00 m.

Components

15	Base Frame EVB
25	Multi Brace EWB
26	Base Plate EWB
27	Bolt M10 x 80-8.8
28	Nut EN 1661 M10-8
48	Standard Coupler RA 48/48
49	Swivel Coupling AF 48/48
75	Scaffold tube

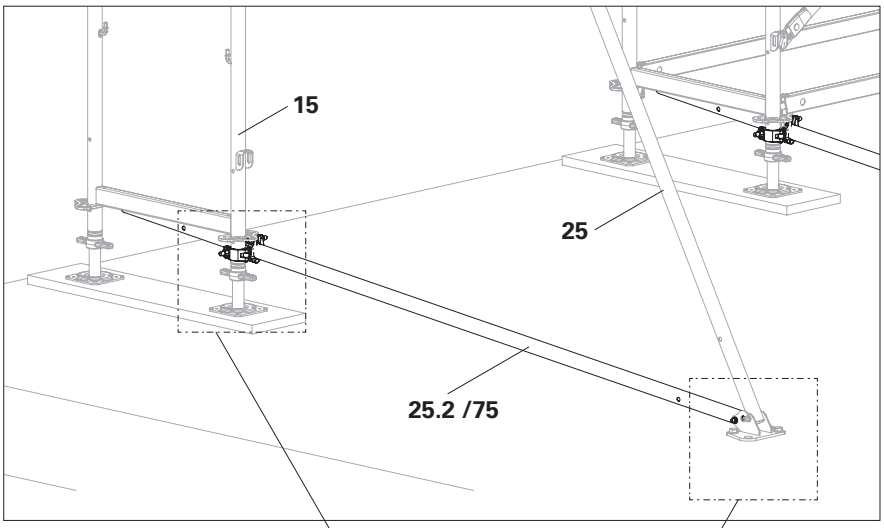


Fig. D7.06

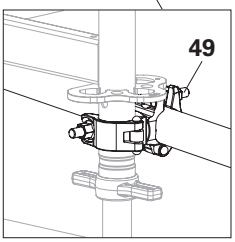


Fig. D7.06a

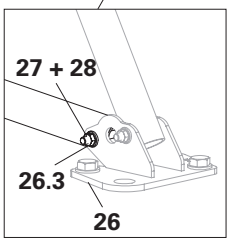


Fig. D7.06b

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!

Assembly
1. Vertically reinforce the multi brace (**25**) with an outer tube (**25.1**). Fit the outer tube onto the base frame (**15**) (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 scaffold tube (**75**) and standard couplers (**48**). (Fig. D7.07a)
3. Label horizontal bracing as an obstacle.

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

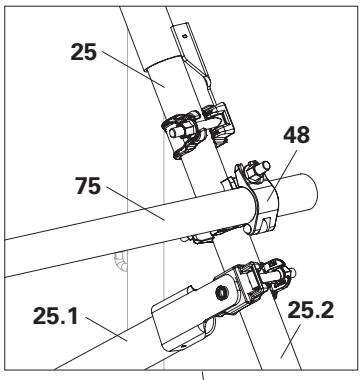


Fig. D7.07a

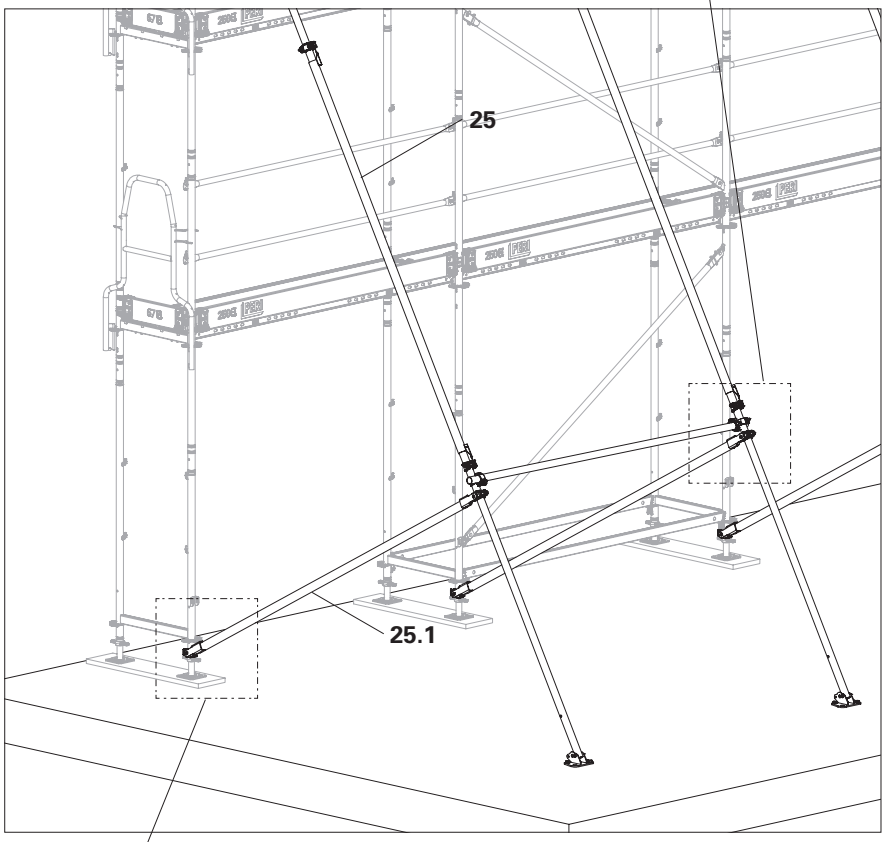


Fig. D7.07

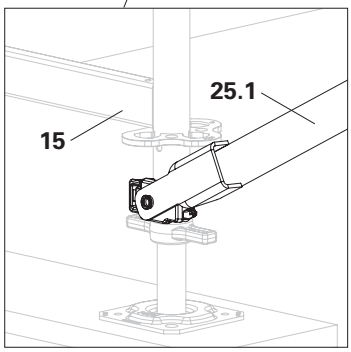


Fig. D7.07b

Push-Pull Prop RS

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

Assembly

1. Fit a Brace Connector HDR-2 (**101**) onto the outer leg of the Easy Frame (**16**) while positioned on the first scaffold level. 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

16	Easy Frame EVF
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

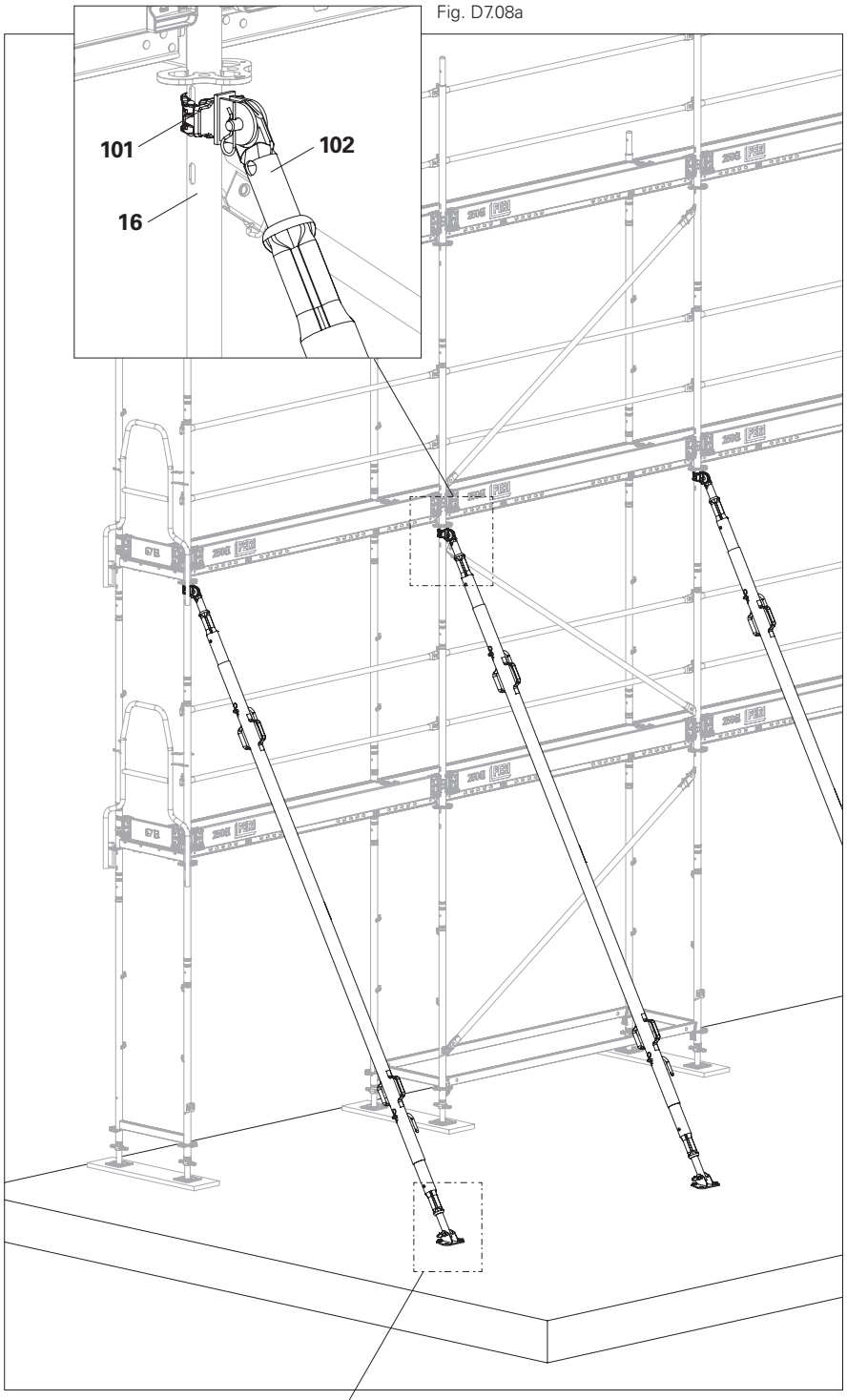


Fig. D7.08

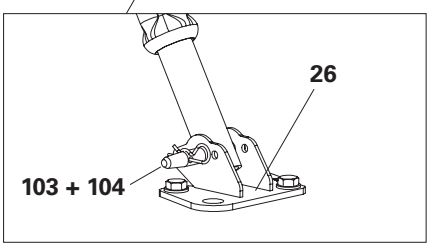


Fig. D7.08b

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
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	22.4	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	25.2	x	x	x	–	–	–	x
	3.00	0.67	28.3	x	x	x	–	–	–	x
Entry Platform EAA	2.00	0.67	17.5	x	x	x	–	–	–	x
Access Deck EAW-2	2.50	0.67	24.1	x	x	x	–	–	–	x
	3.00	0.67	27.3	x	x	x	–	–	–	x
Entry Platform EAW-2	2.00	0.67	15.9	x	x	x	–	–	–	x
Access Deck EAC	2.50	0.67	24.8	x	x	x	–	–	–	x
	3.00	0.67	28.1	x	x	x	–	–	–	x
Entry Platform EAC	2.00	0.67	16.5	x	x	x	–	–	–	x

x = Use permissible
– = Use not permissible

Load-bearing capacity of the formwork 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 girder				Steel lattice girder ULS		Aluminium Formwork Girder ULA HD	
Type	Spacing of the lateral holders*			Individual load in middle of bay	Connecting the chords with bottom chord/top chord	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]	[–]	perm. F [kN]	[–]
Span L = 400 cm							
50/425	200	–	–	15.1	NK/NK	6.3	NK/NK
50/525	200	–	–	15.1	NK/NK	6.3	NK/NK
70/525	200	–	–	20.7	NK/NK	–	–
50/425	100	100	–	30.7	NK/NK	16.3	NK/NK
50/525	100	100	–	30.7	NK/UNK	16.3	NK/NK
70/525	100	100	–	31.1	NK/UNK	–	–
Span L = 500 cm							
50/525	250	–	–	15.1	NK/NK	6.3	NK/NK
50/625	250	–	–	15.1	NK/NK	6.3	NK/NK
50/525	150	100	–	27.2	NK/NK	15.6	NK/NK
50/625	150	100	–	27.4	UNK/NK	15.6	NK/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	3.5	NK/NK
70/625	300	–	–	12.1	NK/NK	–	–
70/825	300	–	–	12.1	NK/NK	5.0	NK/NK
50/625	150	150	–	17.5	NK/NK	11.5	NK/NK
70/625	150	150	–	23.5	NK/UNK	15.7	NK/UNK
50/625	100	100	100	23.2	NK/NK	13.1	NK/NK
70/625	100	100	100	26.8	NK/UNK	–	–
70/825	100	100	100	26.6	NK/UNK	15.9	NK/NK

* see Section "Bracing and anchoring" on page 140 ff

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

- Ties must be installed progressively with the scaffold assembly
- Proof of the load-bearing capacity of the fixing materials between the wall ties and the anchoring base for the tie forces in the tables in Section "F1" or "G1 Tie forces" is required.

Warning

- The structural stability of the scaffold 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 shown in Section "F4" or "G4 Tie pattern"!

- In exceptional cases, anchors 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 scaffolding 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 variations must always be installed (marked in grey in the variations).
- Additional ties, vertical braces and horizontal ledgers (shown in black) are necessary when these variations 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 safety scaffolding etc.

Equipment variation

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

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

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

Basic variation 4
For scaffolds with netting in front of the open facade.
(Fig. E2.02)

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

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

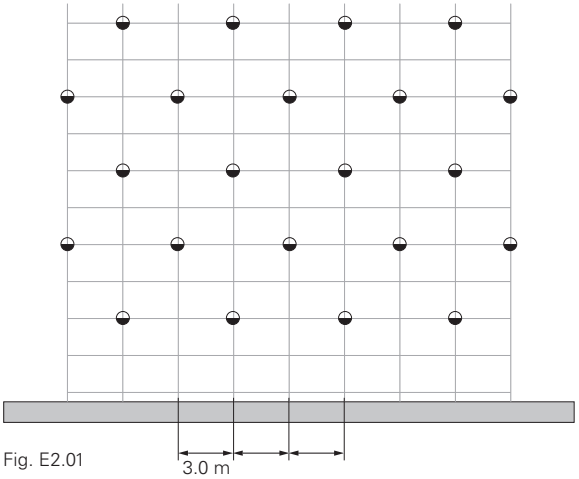


Fig. E2.01

Tie pattern 4 m, offset
Basic variation 4

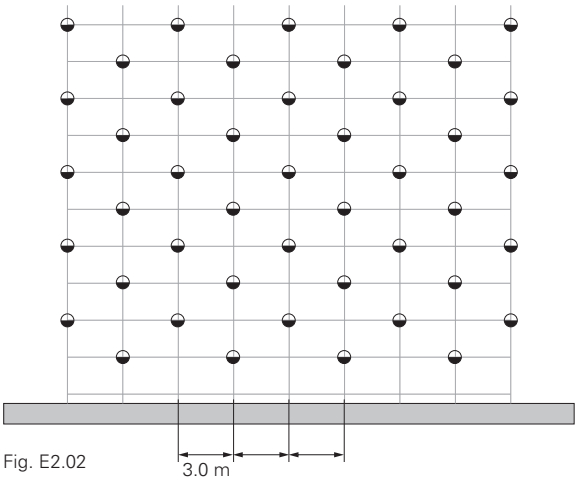


Fig. E2.02

Tie pattern 2 m, offset
Variation 4.4

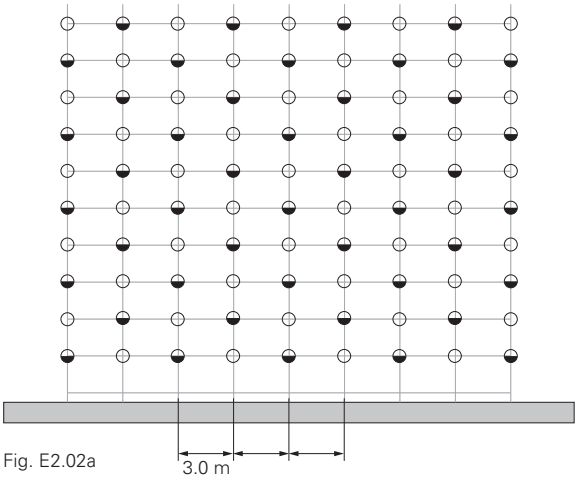


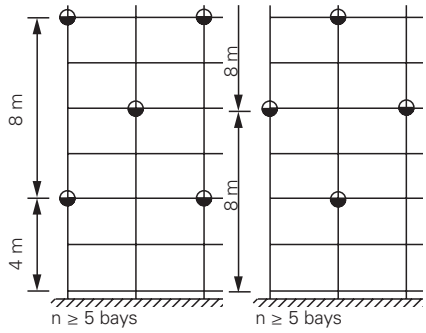
Fig. E2.02a

Scaffolds with an assembly height > 24 m must not deviate from the respective applicable tie pattern.

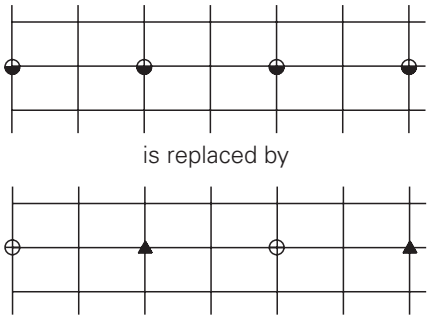
For tie patterns where h ≤24 m, the following applies:

- Scaffold with a maximum structure height of 24 m plus spindle extension length and leg height on base frame of 0.18 m.
- At least two wall ties or one triangulated tie are to be fitted in every tie position.
- For use in Easy 67 for Load Class LC3 Easy 100 for Load Class LC4 Live load on one scaffold 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 variations are permissible:

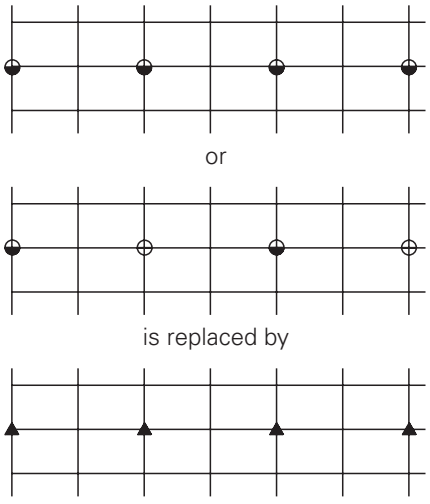
or



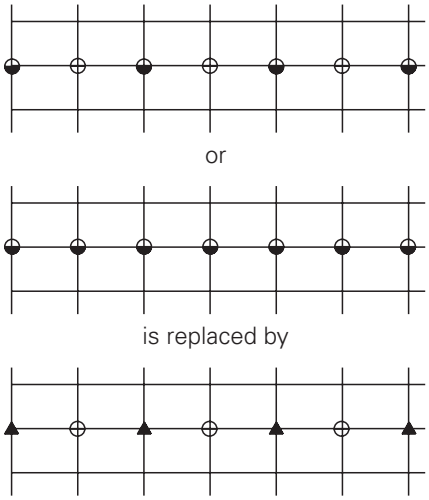
Wall ties replaced by triangulated ties on all levels:
For basic variations 1, 2 and 4 the tie patterns with wall ties (index a) show the alternatives with triangulated ties (index b).
The alternatives are not shown for basic variation 3. In that arrangement the wall ties can be replaced by triangulated 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 variations, 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-standard wall tie
For accommodating tensile and compressive forces at right angles to the facade ($A_{\perp}$).

Fix Wall Tie UWT (**46**) onto the inner tube of the Easy Frame EVF (**16.3**) with a Wall Tie Coupler EWC (**45**) or standard coupler. Use the top slot. (Fig. E2.03 + E2.04)

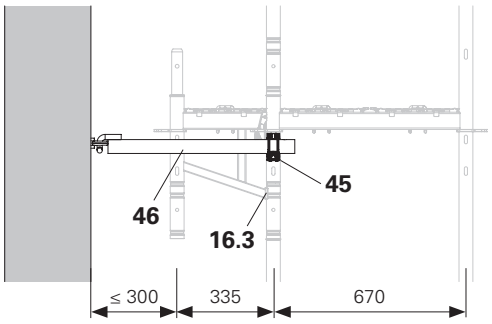


Fig. E2.03 Section

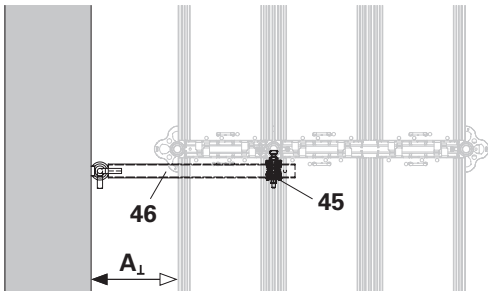
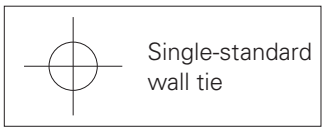


Fig. E2.04 Top view



Wall tie (multi-standard)
For accommodating tensile and compressive forces at right angles and parallel to the facade ($A_{\perp}$, $A_{\parallel}$).

Fix Wall Tie UWT (**46**) onto the inner tube (**16.3**) and outer tube (**16.2**) of the Easy Frame EVF with one Wall Tie Coupler EWC (**45**) or standard coupler each. Use the top slot in each case.

When using the Wall Tie Coupler EWC (**45**), all Console Brackets ECM 33/67/100 can be anchored at the same time. Not required in the standard configuration.
(Fig. E2.05 + E2.06)

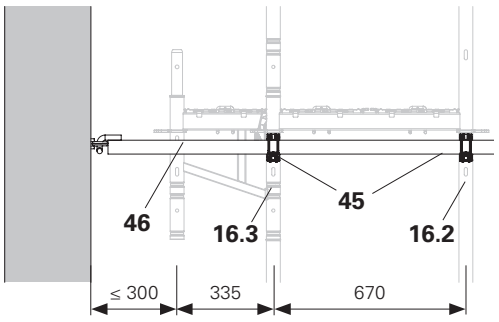


Fig. E2.05 Section

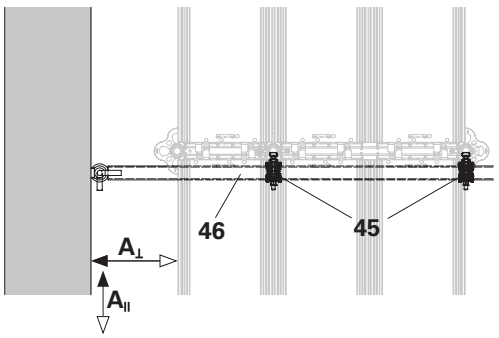
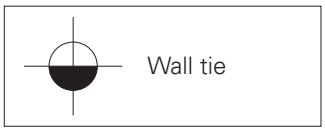


Fig. E2.06 Top view



Components

16	Easy Frame EVF 67
45	Wall Tie Coupler EWC
46	Wall Tie UWT

Triangulated tie
For accommodating tensile 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. Fasten both wall ties to the inner tube (**16.3**) of the Easy Frame EVF with standard couplers (**48**).
(Fig. E2.07 + E2.08)

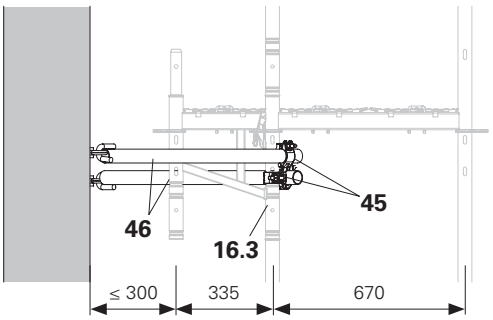


Fig. E2.07 Section

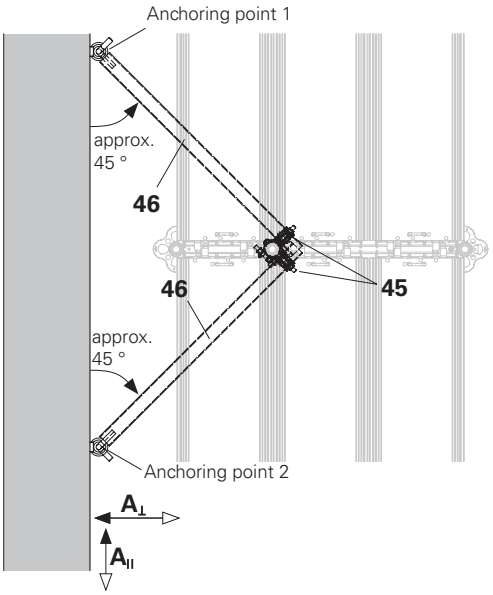


Fig. E2.08 Top view



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

Attach Wall Tie UWT (**46**) to the inner tube (**16.3**) of the Easy Frame EVF with a standard coupler (**48**). The tube end without a hook is positioned obtusely against the wall.
(Fig. E2.09 + E2.10)

Components

16	Easy Frame EVF 67
46	Wall Tie UWT
48	Standard Coupler RA 48/48

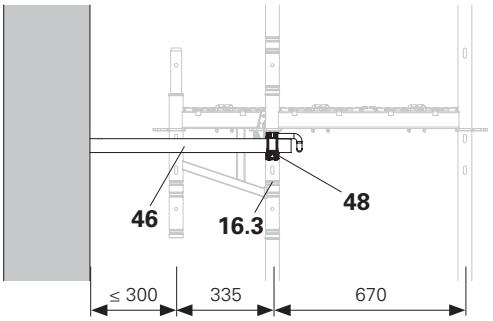


Fig. E2.09 Section

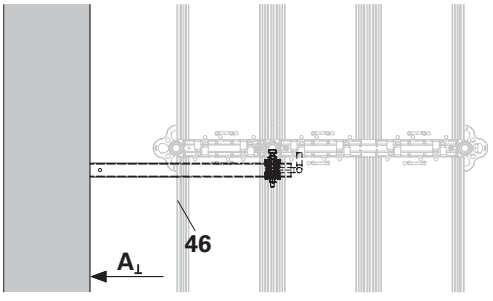
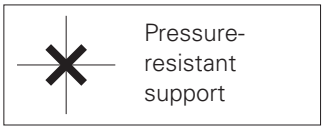


Fig. E2.10 Top view



External scaffold access

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

Select longer Wall Ties UWT (**46**) for additional anchoring of the external scaffold access at right angles and parallel to the facade.

Connect Wall Tie UWT (**46**) to all three standards of the Easy Frame EVF (**16**) and Easy Standard EVM 200 (**22**) with a Wall Tie Coupler EWC (**45**) or standard couplers.
(Fig. E2.11 + E2.12)

Components

16 Easy Frame EVF 67
22 Easy Standard EVM 200
45 Wall Tie Coupler EWC
46 Wall Tie UWT

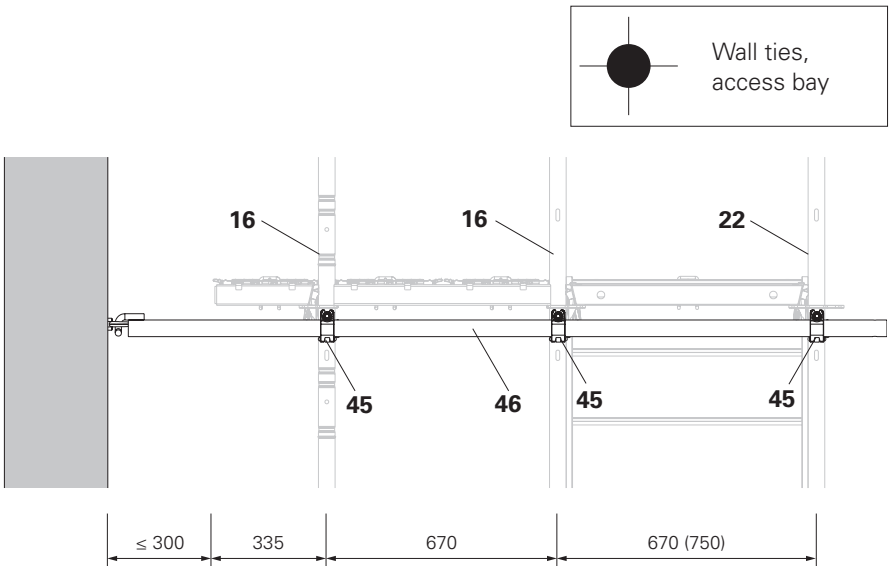


Fig. E2.11

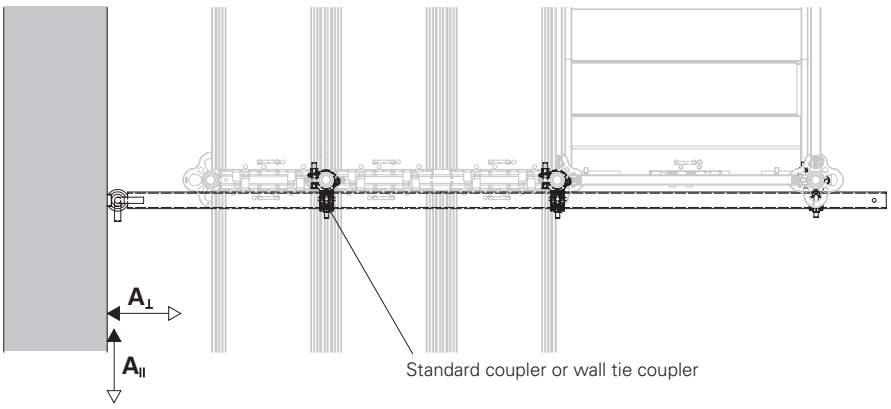


Fig. E2.12

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 connected to the main scaffold and anchored in accordance with the tie patterns as shown.

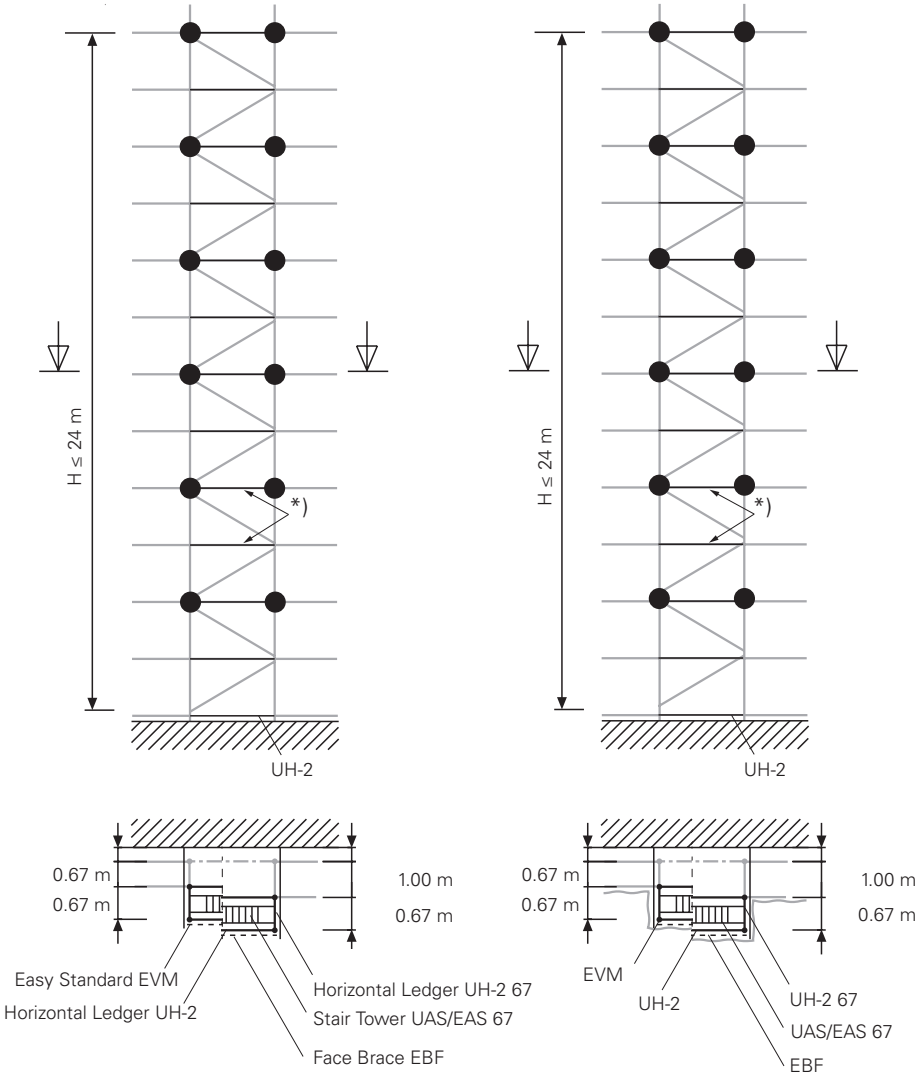
The following rules apply:

- The tie patterns shown apply for all equipment variations.
- The connection of the access bay solely to ¾ rosettes by means of Horizontal Ledgers UH-2 67, Wall Tie Couplers EWC (**45**) or standard couplers, must always be installed in addition to the ties of the main scaffold.
- A tie must be installed in the access bay and this always replaces the tie required in the basic scaffold.

For scaffolds > 24 m, the external stair tower must undergo a structural analysis.

Unclad
Tie pattern 4 m
Standard configuration in front of open and closed facades.

Netting, closed facade
Tie pattern 4 m
Standard configuration in front of closed facade.



*) Horizontal Ledger UH-2 every 2.00 m

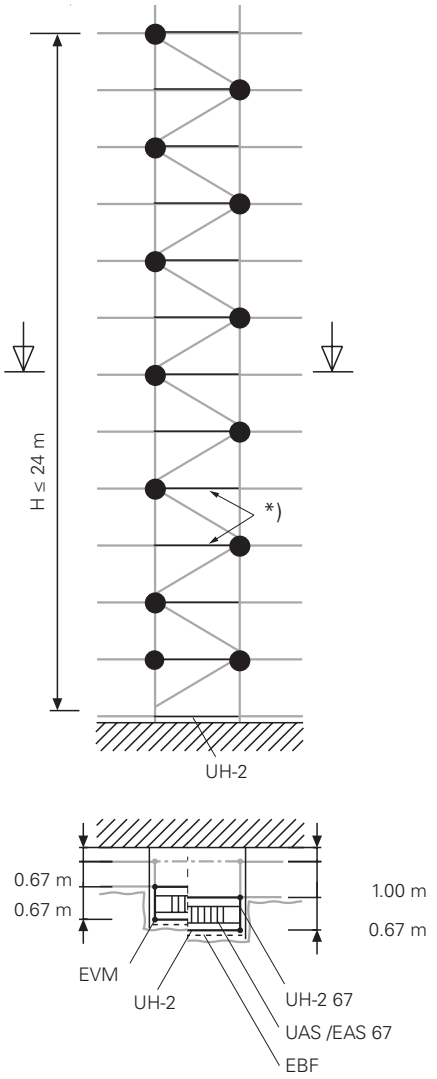
Note: lateral protection components not shown.

Ties, external access:

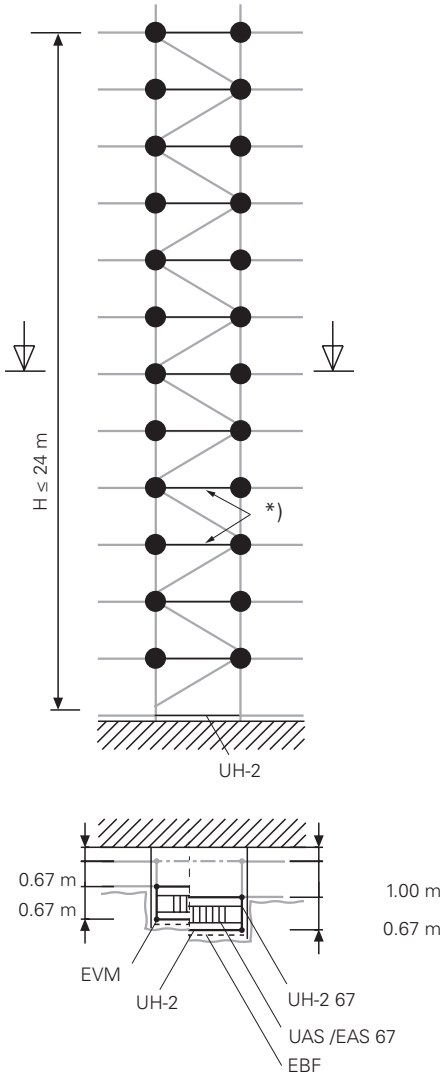
Wall ties, access bay

E3 Tie pattern

Netting, open facade
Tie pattern 4 m, offset.
Standard configuration in front of open facade.



Tarpaulin, open facade
Tie pattern 2 m
Standard configuration in front of open facade.



F1 Tie forces

Anchoring with wall ties

PERI UP Easy 67, use in Load Class 3 (2.0 kN/ m²)								
			Tie forces for (+ = tensile force/– = compressive force) **					
			Standard configuration open facade			Standard configuration closed facade		
			Full-width wall tie					
Tie pattern	Cladding	Bay length [m]	$A_{\perp}$ [kN]		$A_{\parallel}$ [kN]	$A_{\perp}$ [kN]		$A_{\parallel}$ [kN]
8.0 m offset	without	2.00	+/-2.8		1.8*	+/-0.9		1.8*
		2.50	+/-3.2		1.8*	+/-1.1		1.8*
		3.00	+/-3.6		1.8*	+/-1.2		1.8*
	with netting	2.00	not possible			+/-2.3		1.5
		2.50				+/-2.8		1.5
		3.00				+/-3.4		1.5
4.0 m	without	2.00	+/-1.4		1.8*	+/-0.5		1.8*
		2.50	+/-1.6		1.8*	+/-0.5		1.8*
		3.00	+/-1.8		1.8*	+/-0.6		1.8*
	with netting	2.00	not possible			+/-1.1		1.5
		2.50				+/-1.4		1.5
		3.00				+/-1.7		1.5
4.0 m offset	with netting	2.00	+/-3.1		1.8	+/-1.0		1.8
		2.50	+/-3.8		1.8	+/-1.3		1.8
		3.00	+/-4.6		1.8	+/-1.5		1.8
	with tarpaulin	2.00	not possible			not possible		
		2.50						
		3.00						
2.0 m	with tarpaulin	2.00	-4.3	+3.8	1.7	-4.3	+1.2	1.7
		2.50	-5.3	+4.8	1.7	-5.3	+1.5	1.7
		3.00	-6.4	+5.8	1.7	-6.4	+1.8	1.7

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:
$A_n/A_g = 1.0$: closed facade
$A_n/A_g = 0.4 \leq x < 1.0$: open facade

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

* If there is only one full-width wall tie on every third frame column, multiply the value in the table by 1.5.

F1 Tie forces

Anchoring with triangulated ties or single-standard wall ties

PERI UP Easy 67, use in Load Class 3 (2.0 kN/ m²)											
			Tie forces for (**+** = tensile force/**–** = compressive force)								
			Standard configuration open facade						Standard configuration * closed facade		
			Single-standard wall tie		Triangulated tie (per anchoring point)				Single-standard wall tie	Triangulated tie (per anchoring point)	
Tie pattern	Cladding	Bay length [m]	⌖ $A_{\perp}$ [kN]		✦ $A'_{\perp}$ [kN]	✦ $A'_{\parallel}$ [kN]			⌖ $A_{\perp}$ [kN]	✦ $A'_{\perp}$ [kN]	✦ $A'_{\parallel}$ [kN]
8.0 m offset	without	2.00	+/-2.5		+/-2.9	2.9			+/-0.8	+/-2.5	2.5
		2.50	+/-2.9		+/-3.0	3.0			+/-1.0	+/-2.5	2.5
		3.00	+/-3.3		+/-3.0	3.0			+/-1.1	+/-2.5	2.5
	with netting	2.00	not possible						+/-2.3	+/-2.6	2.6
		2.50							+/-2.8	+/-2.6	2.6
		3.00							+/-3.4	+/-2.6	2.6
4.0 m	without	2.00	+/-1.3		+/-2.9	2.9			+/-0.4	+/-2.5	2.5
		2.50	+/-1.4		+/-3.0	3.0			+/-0.5	+/-2.5	2.5
		3.00	+/-1.6		+/-3.0	3.0			+/-0.5	+/-2.5	2.5
	with netting	2.00	not possible						+/-1.1	+/-2.6	2.6
		2.50							+/-1.4	+/-2.6	2.6
		3.00							+/-1.7	+/-2.6	2.6
4.0 m offset	with netting	2.00	+/-2.7		+/-1.9	1.9			+/-0.9	+/-1.7	1.7
		2.50	+/-3.3		+/-2.4	2.4			+/-1.1	+/-2.1	2.1
		3.00	+/-4.0		+/-2.9	2.9			+/-1.3	+/-2.5	2.5
	with tarpaulin	2.00	not possible						not possible		
		2.50									
		3.00									
2.0 m	with tarpaulin	2.00	-4.2	+3.8	+/-2.5	2.5	-4.2	+1.2	+/-2.6	2.6	
		2.50	-5.3	+4.7	+/-3.2	3.2	-5.3	+1.5	+/-3.2	3.2	
		3.00	-6.3	+5.7	+/-3.8	3.8	-6.3	+1.8	+/-3.8	3.8	

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:
$A_n/A_g = 1.0$: closed facade
$A_n/A_g = 0.4 \leq x < 1.0$: open facade

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

F1 Tie forces

Anchoring with wall ties, tie forces for scaffolds H > 24 m

PERI UP Easy 67, Load Class 3, L = 3.0 m						
All tie forces apply to (+ = tensile force/– = compressive force) and to single-leg and full-width wall ties.						
Equipment variation	**1a "A"** unclad scaffolds			**2 a "A"** unclad with internal console brackets		
Max. height	**52 m**			**36 m**		
Tie pattern	**8 m – offset**			**8 m – offset**		
		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]
	0 – 24 m	+/-3.59	2.11	0 – 24 m	+/-3.58	1.71
	24 – 48 m	+/-4.09	2.35	24 – 36 m	+/-3.83	1.85
	48 – 52 m	+/-3.33	1.63			
Max. height	**72 m**			**60 m**		
Tie pattern	**8 m – offset**			**8 m – offset**		
		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]
	0 – 24 m	+/-3.59	2.05	0 – 24 m	+/-3.13	+/-1.76
	24 – 48 m	+/-4.01	2.32	24 – 48 m	+/-3.47	+/-1.92
	48 – 72 m	+/-4.31	2.53	48 – 60 m	+/-3.65	+/-2.01

Equipment variation	**3 "A"** netting in front of closed facade			**4 "A"** netting in front of open facade		
Max. height	**52 m**			**60 m**		
Tie pattern	**8 m – offset**			**4 m – offset**		
		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]
	0 – 24 m	+/-2.84	1.53	0 – 24 m	+/-4.49	2.39
	24 – 48 m	+/-3.24	1.69	24 – 48 m	+/-4.74	2.39
	48 – 52 m	+/-2.89	1.11	48 – 60 m	+/-5.27	1.94
Max. height	**64 m**					
Tie pattern	8 m – offset					
		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]			
	0 – 24 m	+/-2.92	1.56			
	24 – 48 m	+/-3.39	1.77			
	48 – 64 m	+/-3.23	1.66			

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:
$A_n/A_g = 1.0$: closed facade
$A_n/A_g = 0.4 \leq x < 1.0$: open facade

Anchoring with wall ties, anchor tie for scaffolds H > 24 m

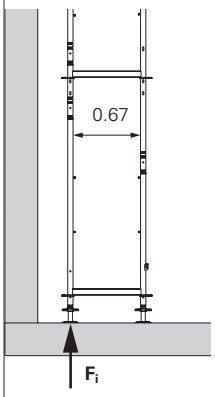
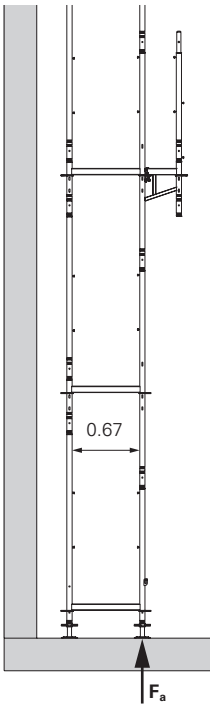
PERI UP Easy 67, Load Class 3, L = 2.5 m						
All tie forces apply to (+ = tensile force/– = compressive force) and to single-leg and full-width wall ties.						
Equipment variation	**1a "A"** unclad scaffolds			**2 a "A"** unclad with internal console brackets		
Max. height	**64 m**			**52 m**		
Tie pattern	**8 m – offset**			**8 m – offset**		
		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]
	0 – 24 m	+/-3.12	2.13	0 – 24 m	+/-3.12	1.75
	24 – 48 m	+/-3.45	2.24	24 – 48 m	+/-3.53	1.95
	48 – 64 m	+/-3.75	2.46	48 – 52 m	+/-2.96	1.45
Max. height	**80 m**			**60 m**		
Tie pattern	**8 m – offset**			**8 m – offset**		
		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]
	0 – 24 m	+/-3.13	2.18	0 – 24 m	+/-3.13	1.76
	24 – 48 m	+/-3.47	2.34	24 – 48 m	+/-3.47	1.92
	48 – 72 m	+/-3.83	2.41	48 – 60 m	+/-3.65	2.01
	72 – 80 m	+/-3.27	2.59			
Max. height	**112 m**					
Tie pattern	**4 m – offset**					
		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]			
	0 – 24 m	+/-2.11	3.26			
	24 – 48 m	+/-1.78	2.44			
	48 – 72 m	+/-1.87	2.61			
	72 – 96 m	+/-1.99	2.68			
	96 – 112 m	+/-2.1	2.85			

Equipment variation	**3 "A"** netting in front of closed facade			**4 "A"** netting in front of open facade		
Max. height	**64 m**			**72 m**		
Tie pattern	**8 m – offset**			**4 m – offset**		
		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]
	0 – 24 m	+/-2.43	1.43	0 – 24 m	+/-3.75	2.36
	24 – 48 m	+/-2.69	1.5	24 – 48 m	+/-4.01	2.13
	48 – 64 m	+/-2.83	1.66	48 – 72 m	+/-4.79	1.85
Max. height	**72 m**					
Tie pattern	8 m – offset					
		⌖ $A_{\perp}$ [kN]	⌖ $A_{\parallel}$ [kN]			
	0 – 24 m	+/-2.44	1.44			
	24 – 48 m	+/-2.71	1.51			
	48 – 72 m	+/-2.93	1.7			

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:
$A_n/A_g = 1.0$: closed facade
$A_n/A_g = 0.4 \leq x < 1.0$: open facade

F2 Support forces

Basic scaffold – Load Class 3

PERI UP Easy 67, use in Load Class 3 (2.0 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	2.5	8.5	7.5	6.4
		3.0	9.8	8.6	7.4
	with internal Console Brackets UC 33	2.5	12.5	11.5	10.4
		3.0	14.4	13.2	12.0
			–	–	–
			–	–	–
	**Outer leg**				
			F_a [kN]	**F_a** [kN]	**F_a** [kN]
	without external console bracket	2.5	9.3	8.3	7.2
		3.0	10.7	9.5	8.3
			additional to F_a [kN]		
	with external console bracket ECM 33	2.5	1.9		
		3.0	2.3		
	with external console bracket ECM 67	2.5	3.8		
		3.0	4.5		
	with external console bracket ECM 100	2.5	5.6		
		3.0	6.7		
	Protection panel (in addition to console bracket or frame)	2.5	0.3		
		3.0	0.3		
	Protection roof on Console Bracket ECM 67 (incl. Console Bracket ECM 67)	2.5	0.8		
		3.0	1.0		
	Protection roof on Console Bracket ECM 100 (incl. Console Bracket ECM 100)	2.5	1.0		
		3.0	1.2		

Leg loads for scaffolds ≥ 24 m
Load Class 3

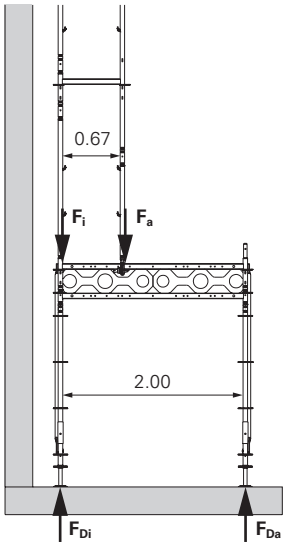
For every 8 m of additional structure height, the following leg loads must be added to the leg loads specified in the following table.

Additional leg load per 8 m of structure height			
Equipment	**Bay length [m]**	**Inner leg F_i [kN]**	**Outer leg F_A [kN]**
without internal console brackets	2.5	1.35	2.20
	3.0	1.50	2.50
with internal console brackets	2.5	1.70	2.20
	3.0	1.85	2.50

Pavement gantries/bridgings

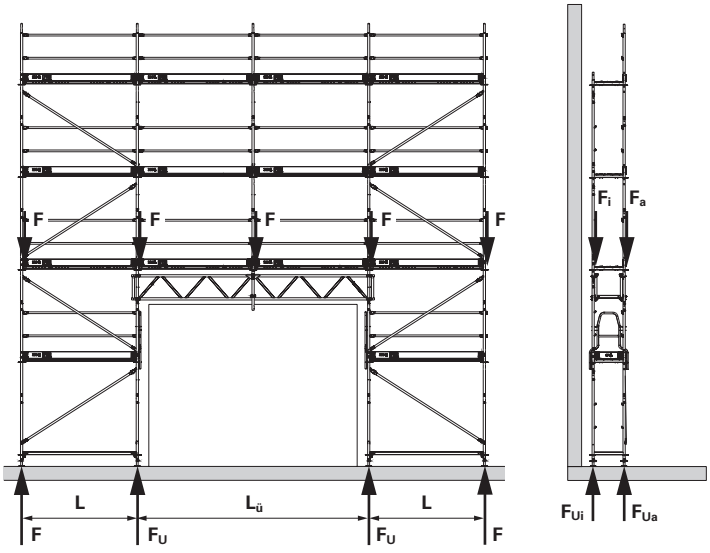
PERI UP Easy 67, use in Load Class 3 (2.0 kN/ m²)

Pavement gantry



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

Bridgings



Bay length L [m]	F_{Ua} [kN]	F_{Ui} [kN]
	$L_ü$ = 4.0 m	
2.50	1.35 x F_a	1.35 x F_i
3.00	1.25 x F_a	1.25 x F_i
	$L_ü$ = 5.0 m	
2.50	1.50 x F_a	1.50 x F_i
3.00	1.40 x F_a	1.40 x F_i
	$L_ü$ = 6.0 m	
2.50	1.70 x F_a	1.70 x F_i
3.00	1.50 x F_a	1.50 x F_i

Select F_a and F_i for appropriate bay length L.

Overview of requirements for formwork girders
Load Class 3

LC3 – 2.00 kN/m²	PERI UP Easy 67: LC3 – 2.0 kN/m² bridging overview																																	
	Span of the formwork girder				5 m												6 m																	
	Formwork girder				Steel ULS								Aluminium ULA				Steel ULS									Aluminium ULA								
	Type				50 /525		50 /625		70 /525		70 /625		50 /525		50 /625		50 /625		70 /625		70 /825			50 /625			70 /625			70 /825				
Spacing of the lateral holders a [cm]					250	100	250	100	250	100	250	100	250	100	250	100	300	150	100	300	150	100	300	150	100	300	150	100	300	150	100		
permissible Individual load in middle of bay [kN]					15.1	27.2	15.1	27.4	20.7	29.1	20.7	29.1	6.30	15.6	6.30	15.6	8.80	17.5	23.2	12.1	23.5	26.8	12.1	23.5	26.6	3.5	11.5	13.1	5.0	15.7	15.9	5.00	15.7	15.9
resulting individual load F to be carried by the formwork girder, depending on bay length and equipment			Individual load F [kN] for bay width		Required number of formwork girders, inside and outside																													
Equipment			2.50 m	3.00 m																														
Inner leg without internal console brackets			8.5	9.8	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	2 x	1 x	2 x	1 x	2 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	–	1 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x
Inner leg with internal console brackets (Support UC 33)			12.5	14.4	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	–	1 x	–	1 x	2 x	1 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	–	2 x	2 x	–	1 x	1 x	–	1 x	1 x
Outer leg without attachment parts			9.3	10.7	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	2 x	1 x	2 x	1 x	2 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	–	1 x	1 x	–	1 x	1 x	–	1 x	1 x
Outer leg with attachment parts in addition to individual load F	with protection panel on outer leg		0.3	0.3	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	2 x	1 x	2 x	1 x	2 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	–	2 x	1 x	–	1 x	1 x	–	1 x	1 x
	and protection roof on console bracket	ECM 67	0.8	1.0	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	–	1 x	–	1 x	2 x	1 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	–	2 x	1 x	–	1 x	1 x	–	1 x	1 x
		ECM 100	1.0	1.2	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	–	1 x	–	1 x	2 x	1 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	–	2 x	2 x	–	1 x	1 x	–	1 x	1 x
	and with one console bracket; only one on any level, possible on the topmost level with protection panel up to a height of 2.0 m	ECM 33	1.9	2.3	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	–	1 x	–	1 x	2 x	1 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	–	2 x	2 x	–	1 x	1 x	–	1 x	1 x
		ECM 67	3.8	4.5	2 x	1 x	2 x	1 x	1 x	1 x	1 x	1 x	–	2 x	–	2 x	–	1 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	–	2 x	2 x	–	2 x	2 x	–	2 x	2 x
		ECM 100	5.6	6.7	2 x	1 x	2 x	1 x	1 x	1 x	1 x	1 x	–	2 x	–	2 x	–	2 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	–	2 x	2 x	–	2 x	2 x	–	2 x	2 x

– not permissible within the standard configuration
1x: permissible, with 1x 2 formwork girders
2x: permissible, with 2x 2 formwork girders

PERI

Overview of equipment variations

Frame variation ≤ 24 m, Load Class 3

LC3 – 2.00 kN/m² — **PERI UP Easy 67: LC3 – 2.0 kN/m²: overview of equipment variations**

Equipment variation		1a/b	1.1	1.2	1.3	1.4	1.5	2 a/b	2.1	2.2	2.3	2.4	2.5	2.6	2.7	3	3.1	3.2	3.3	4 a/b	4.1	4.2	4.3	4.4
Page		182	189	190	191	192	193	194	200	201	202	203	204	205	206	207	212	213	214	215	219	220	221	222
alternatively possible with ▲ tie		188						199												218				
Cladding		without														Netting								Tarpaulin
Facade		open														closed				open				closed / open
Internal Console Brackets UC33		–	–	–	–	–	–	●	●	●	●	●	●	●	●	–	–	●	●	–	–	●	●	●
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 or 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		–	–	–	–	●	●	–	–	–	–	–	–	●	● – topmost level not anchored	–	–	–	–	–	–	–	–	–

– 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

F4 Tie pattern

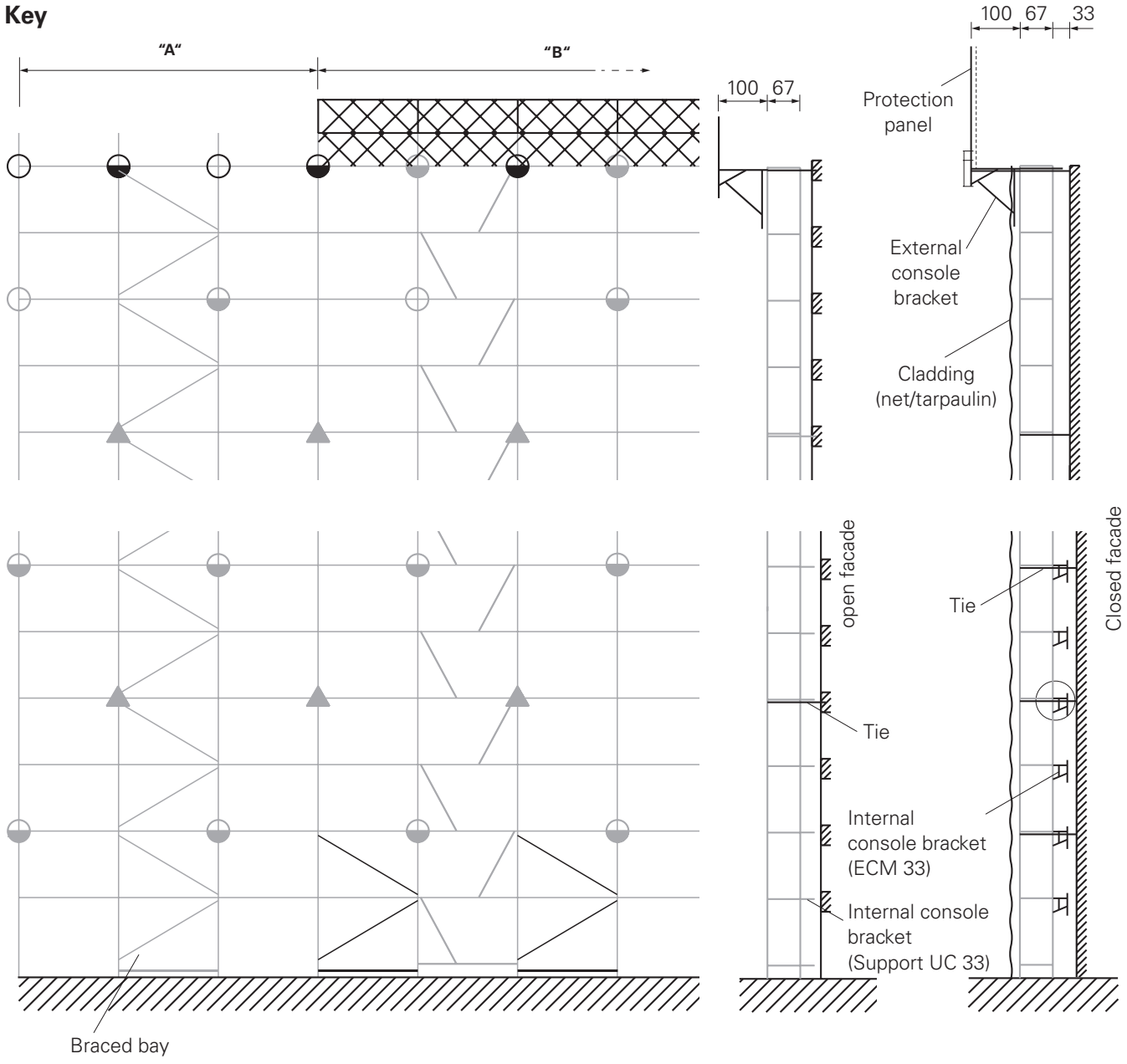
Frame variation > 24 m Load Class 3

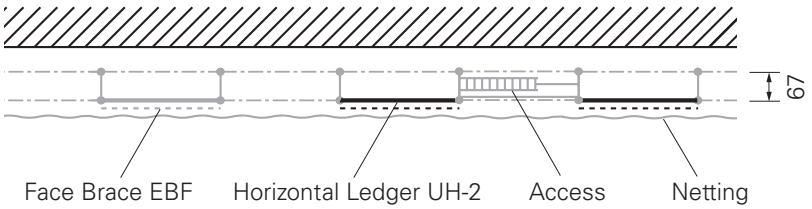
LC3 – 2.00 kN/m²		PERI UP Easy 67: LC3 – 2.0 kN/m²: overview of equipment variations							
		Frame variation > 24 m							
Bay width	Basic variation	1a "A"			2 a "A"		3 "A"		4 a "A"
3.00 m	Scaffold height [m]	52	72	–	36	52	52	64	60
	Page	183	184	–	195	196	208	209	216
2.50 m	Scaffold height [m]	64	80	112	52	60	64	72	72
	Page	185	186	187	197	198	210	211	217
Cladding		without					Netting		
Facade		open					closed		open
Internal Console Brackets UC33		–			●		–		–
Internal Console Bracket ECM 33		–			○		–		–
Protection roof on ECM 67		⊕			⊕		–		–
Protection roof on ECM 100		⊕			⊕		–		–

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

F4 Tie pattern

Key





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

Tie types

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

Ties and bracing shown in grey are already included in the respective basic variation.
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.

F4 Tie pattern

PERI

Meanings of the pictograms



PERI UP Easy 67
Load Class 3 (2.0 kN/m²)



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


without console brackets

Extension console brackets



External console bracket ECM 33 or ECM 67



External console bracket ECM 100



Internal console brackets UC 33 or ECM 33

Protection roof



on Console Bracket ECM 67



on Console Bracket ECM 100

Protection panel


on Easy frame



on External Console Bracket ECM 33



on External Console Bracket ECM 67



on External Console Bracket ECM 100

Pavement gantry



Pavement gantry

Bridging



6 m, with formwork 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)

Attachment parts not shown

Protection roof



on Console Bracket ECM 67

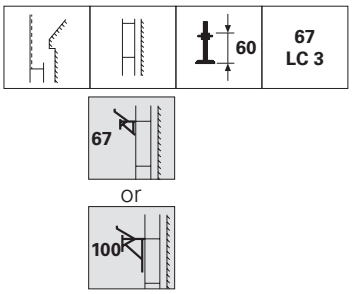


on Console Bracket ECM 100

Equipment variations:
Possible with additional local ties, cf. equipment variation tables.

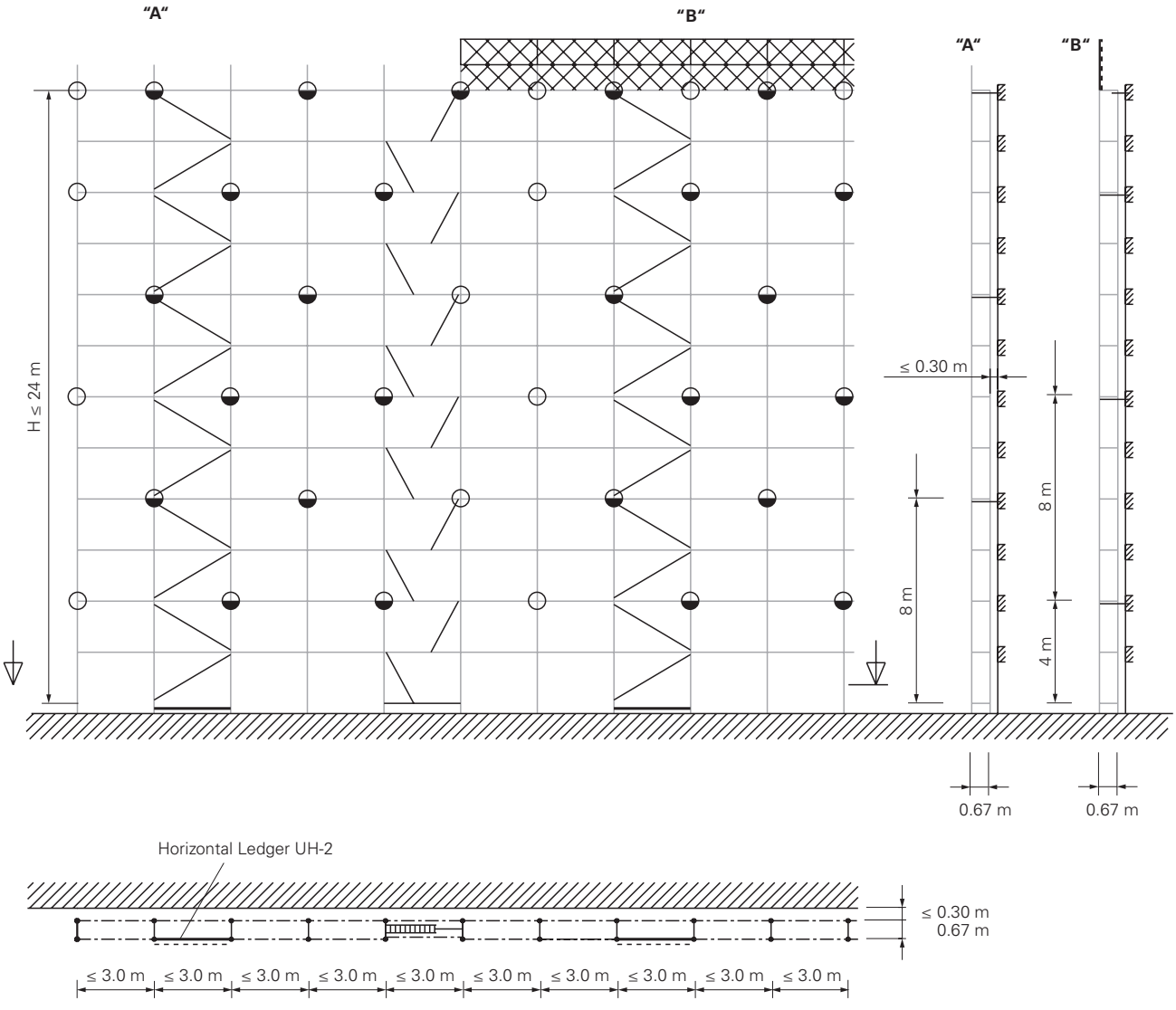
F4 Tie pattern

Graphical tie pattern
Frame variations ≤ 24 m



Basic variation 1a/LC3
Standard configuration:
unclad scaffold in front of open or closed facade.

8 m offset tie pattern



Note: lateral protection components not shown.

Single-standard wall tie
Wall tie

F4 Tie pattern

Frame variation ≤ 52 m

Basic variation 1a/LC3

Bay width 3.00 m
Scaffold height 24 m to 52 m

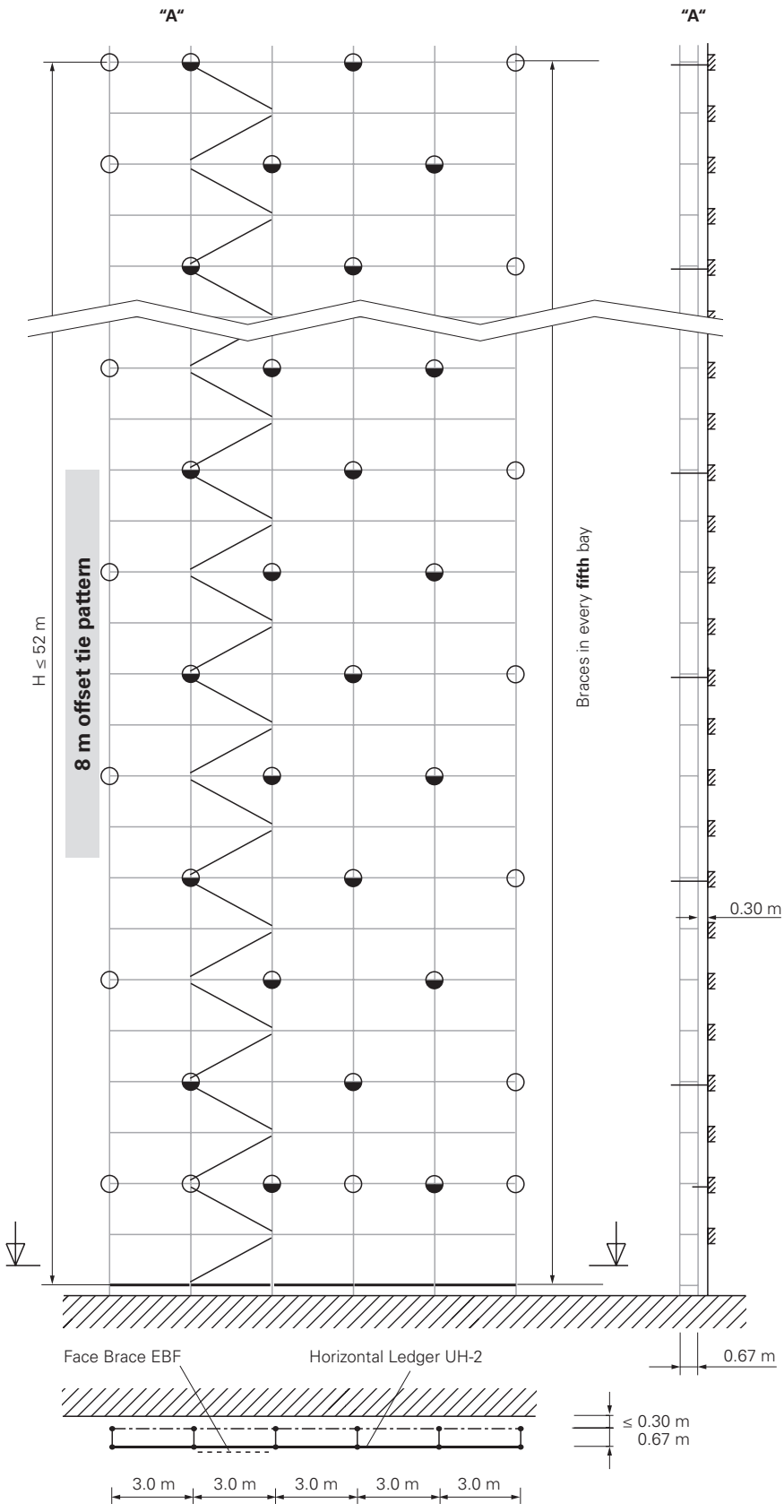
Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 52 m
  - 8 m offset tie pattern,
  - at least two wall ties and a single-leg wall tie at the edge post at every five bays,
  - with 4 m continuous anchoring.

Bracing:
- Face Brace EBF 300-200
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level

Note: lateral protection components not shown.

Single-standard wall tie
Wall tie



F4 Tie pattern

Frame variations ≤ 72 m

Basic variations 1a/LC3

Bay width 3.00 m
Scaffold height 52 m to 72 m

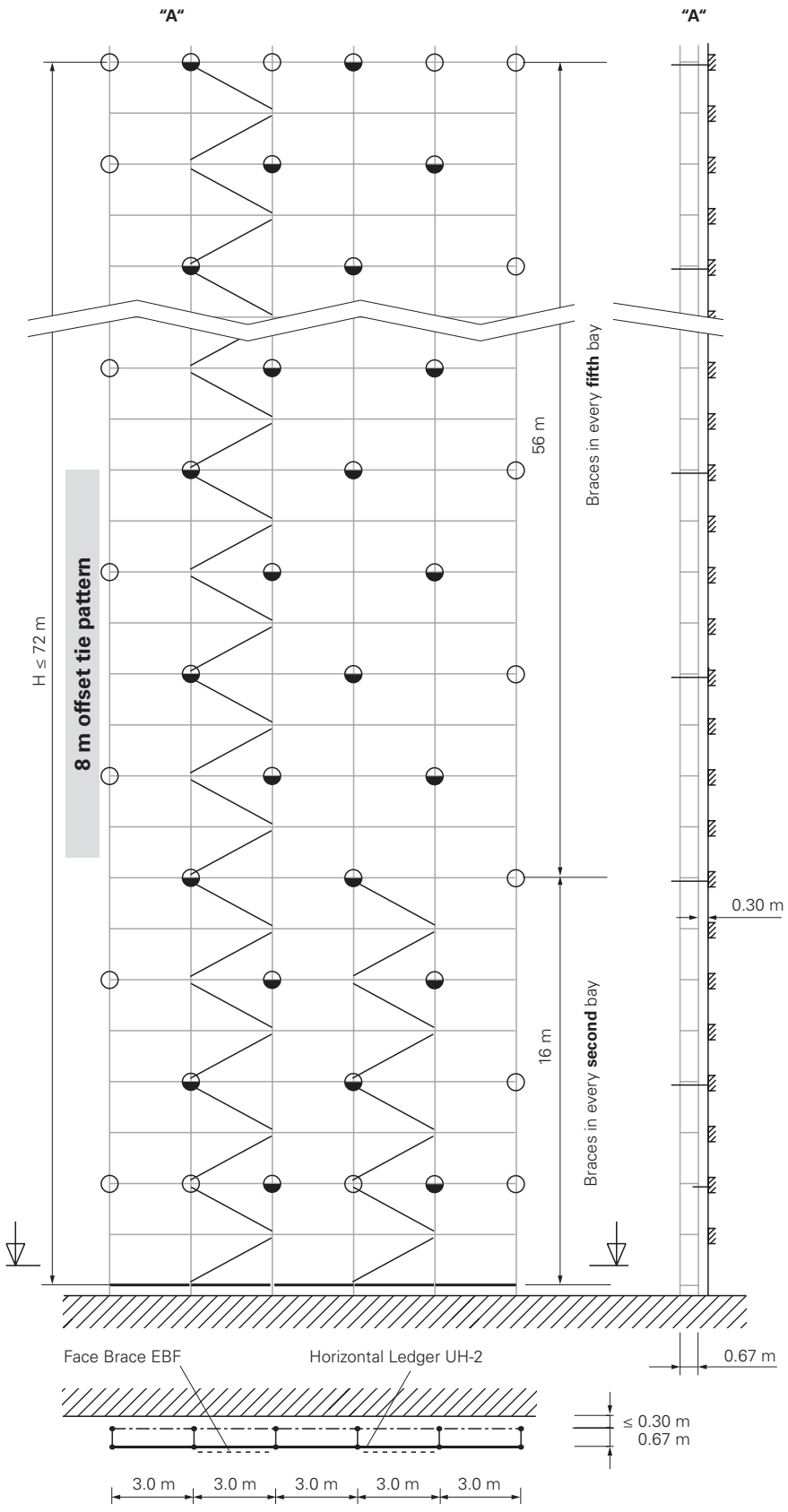
Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 72 m
  - 8 m offset tie pattern,
  - at least two wall ties and a single-leg wall tie at the edge post at every five bays,
  - with 4 m continuous anchoring,
  - continuous anchoring in the topmost level.

Bracing:
- Face Brace EBF 300-200
  - until 8th scaffold level in every second bay,
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level

Note: lateral protection components not shown.

⊕ Single-standard wall tie
⊕ Wall tie



F4 Tie pattern

Frame variation ≤ 64 m

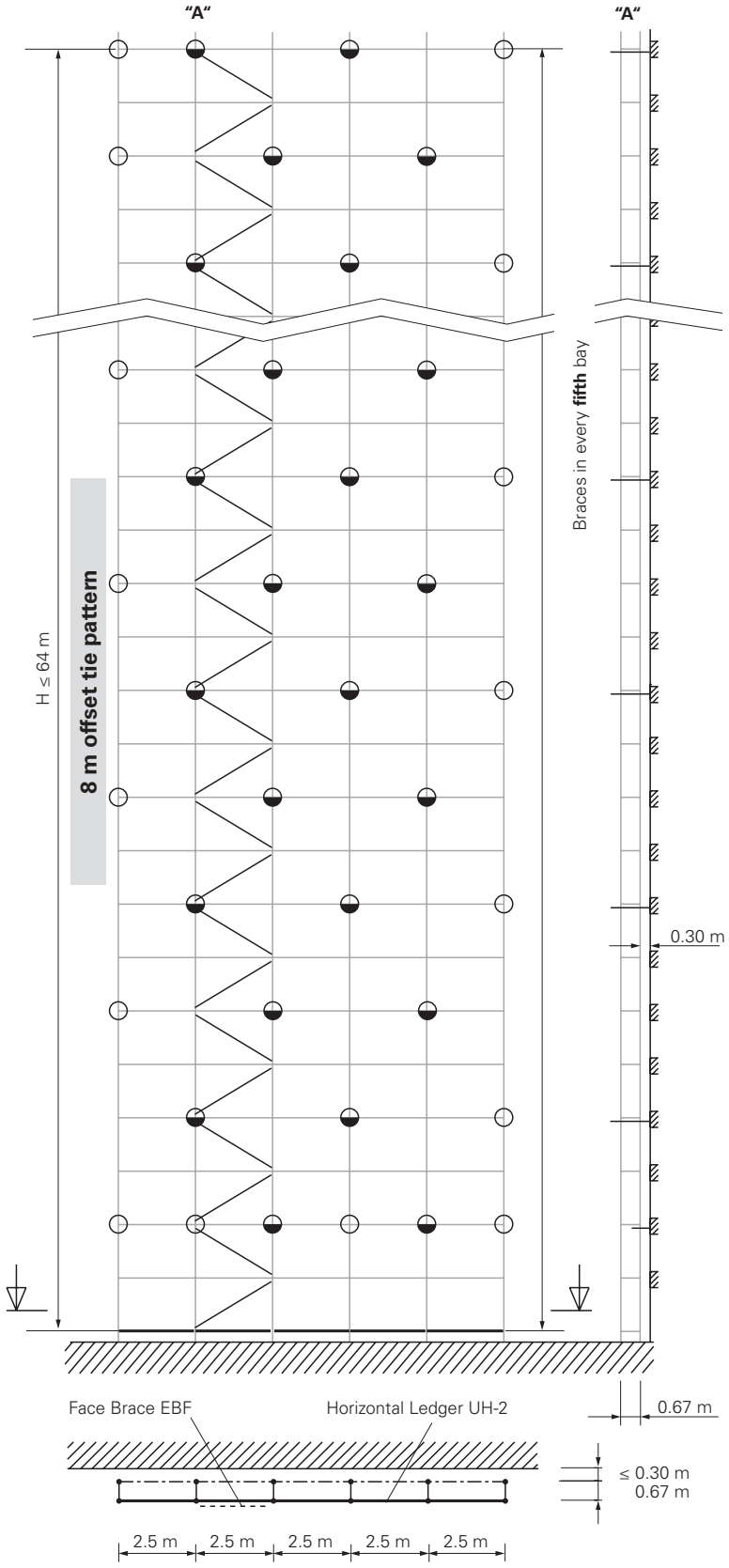
Basic variation 1a/LC3

Bay width 2.50 m
Scaffold height 24 m to 64 m

Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 64 m
  - 8 m offset tie pattern,
  - at least two wall ties and a single-leg wall tie at the edge post at every five bays,
  - with 4 m continuous anchoring.

Bracing:
- Face Brace EBF 250-200
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level



Note: lateral protection components not shown.

Single-standard wall tie
Wall tie

F4 Tie pattern

Frame variation ≤ 80 m

Basic variation 1a/LC3

Bay width 2.50 m
Scaffold height 64 m to 80 m

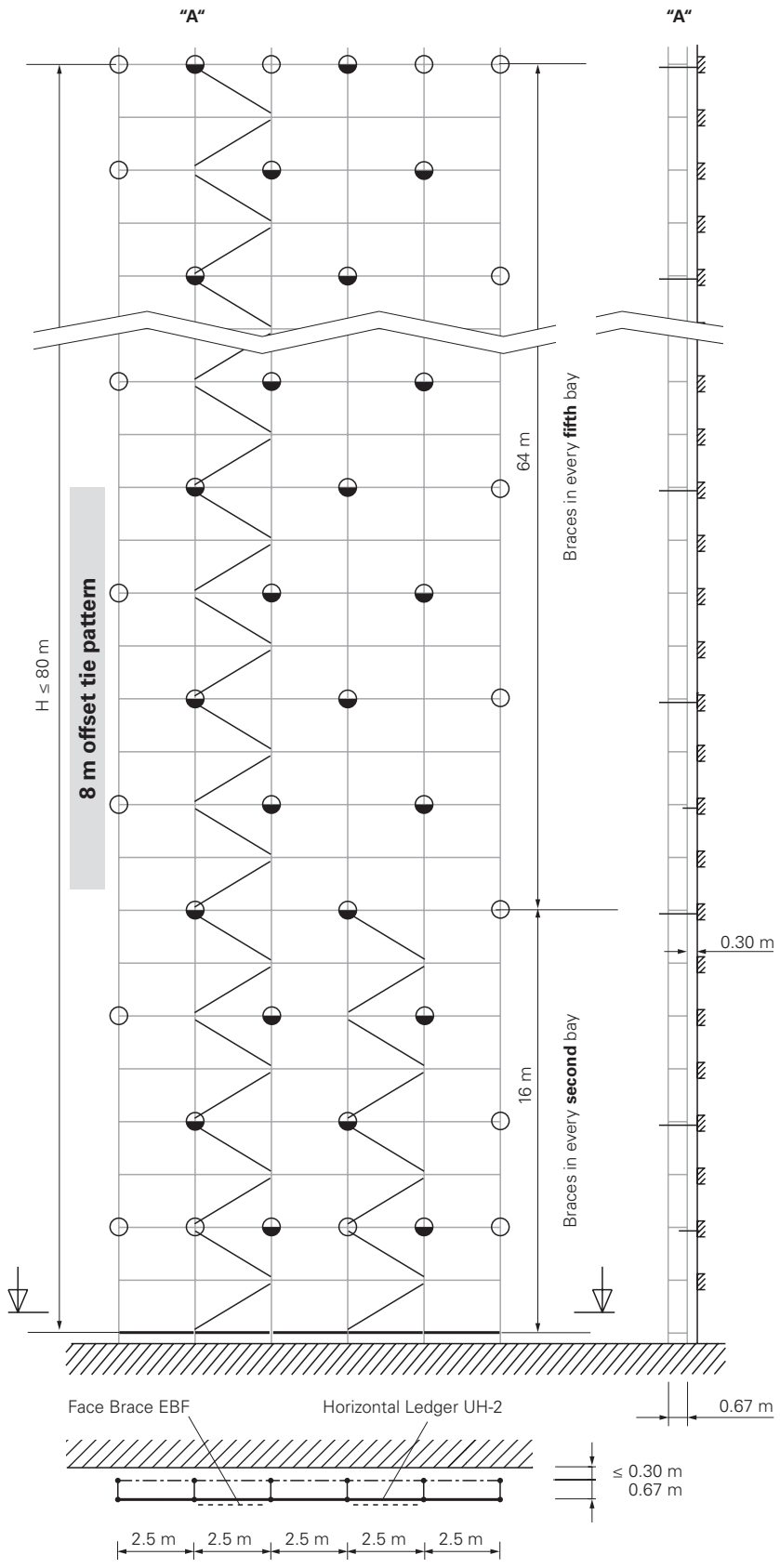
Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 80 m
  - 8 m offset tie pattern,
  - at least two wall ties and a single-leg wall tie at the edge post at every five bays,
  - with 4 m continuous anchoring.

Bracing:
- Face Brace EBF 250-200
  - until 8th scaffold level in every second bay,
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level

Note: lateral protection components not shown.

Single-standard wall tie
Wall tie



F4 Tie pattern

Frame variation ≤ 112 m

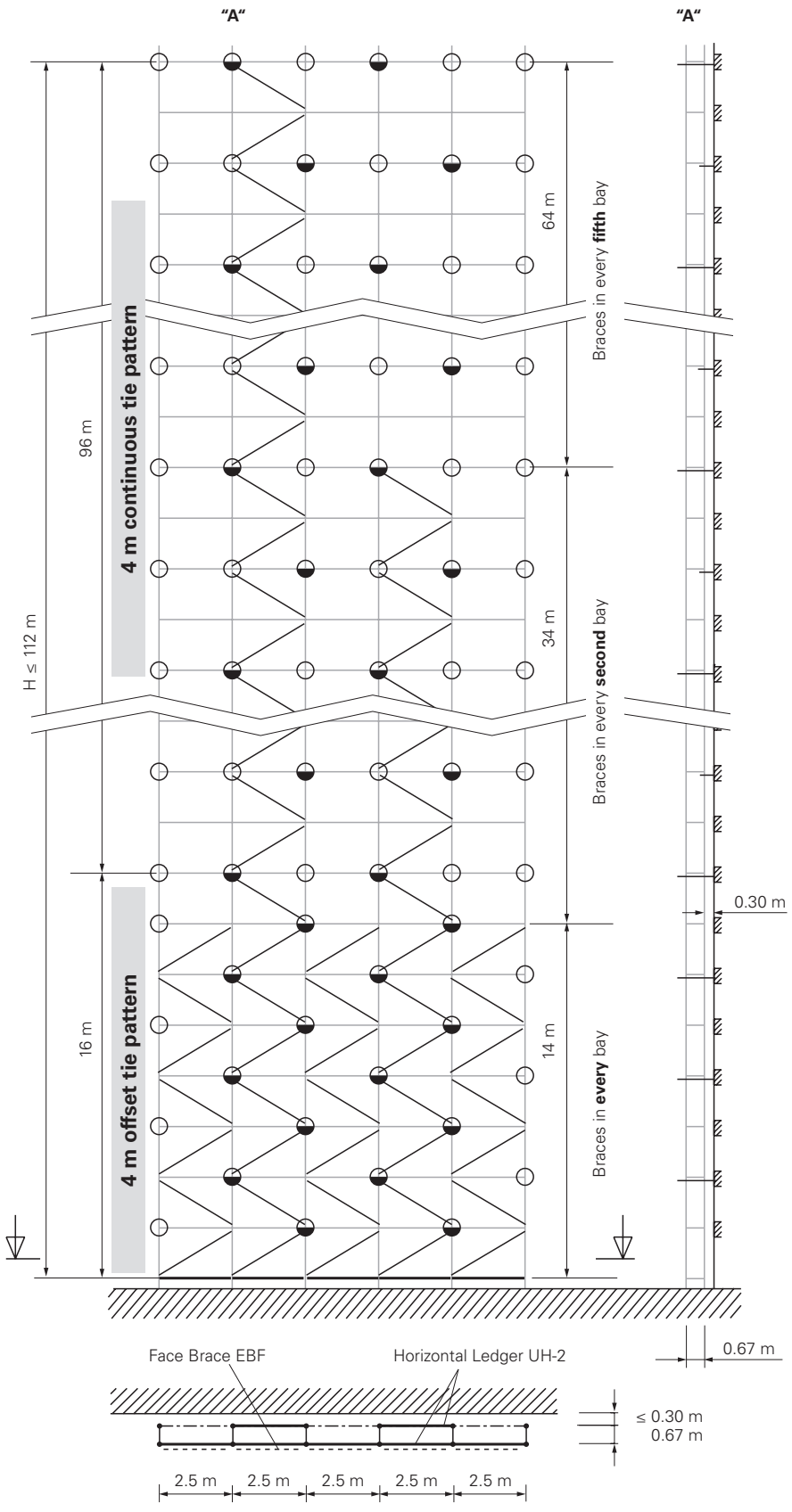
Basic variation 1a/LC3

Bay width 2.50 m
Scaffold height 80 m to 112 m

Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 16 m:
  – 4 m offset tie pattern,
- from 16 – 112 m:
  – 4 m continuous tie pattern, wall ties alternating with single-leg wall ties.

Bracing:
- Face Brace EBF 250-200
  – until 7th scaffold level in every bay,
  – until 24th scaffold level in every second bay,
  – in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  – on the outside of every scaffold bay in the base level
  – on the inside of every second bay in the base level.



Note: lateral protection components not shown.

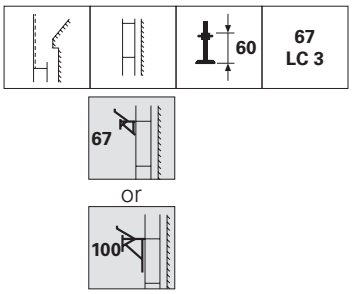
Single-standard wall tie
Wall tie

Easy 67

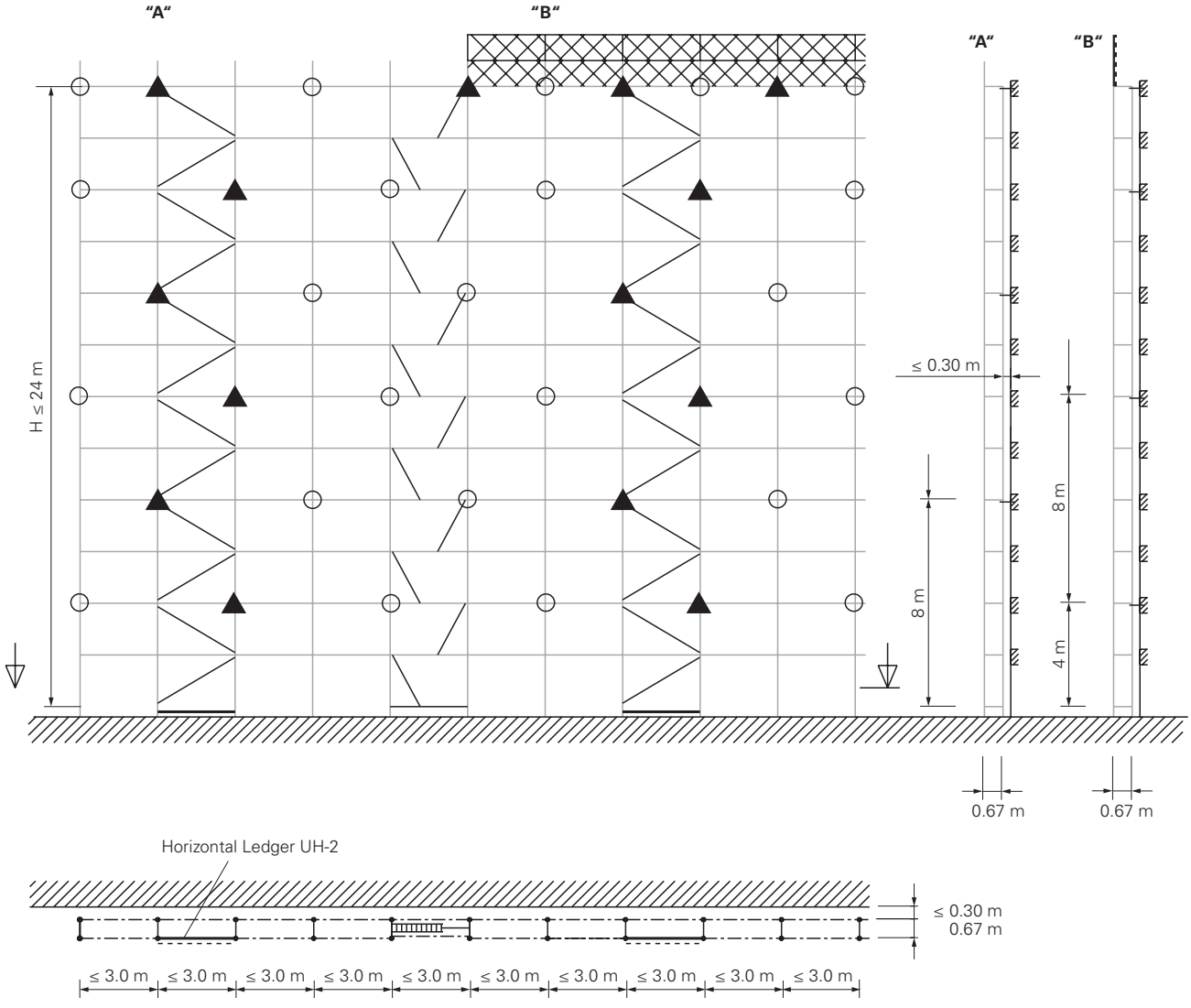
F4 Tie pattern

Frame variation ≤ 24 m

Basic variation 1b/LC3
Standard configuration: unclad scaffold in front of open or closed facade.



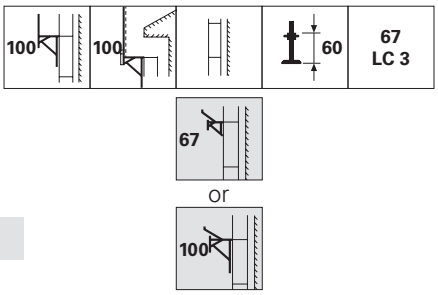
8 m offset tie pattern



Note: lateral protection components not shown.

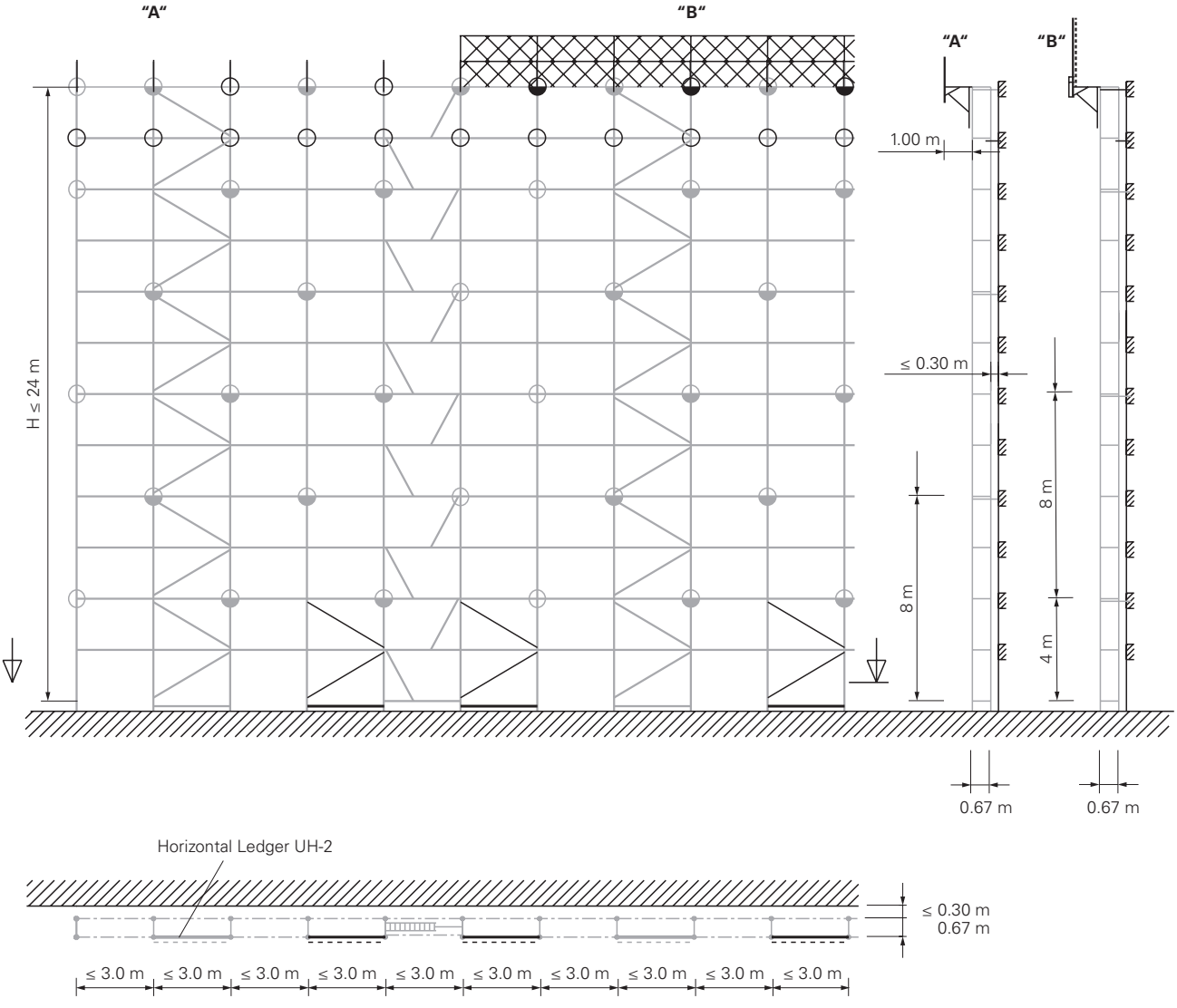
- Single-standard wall tie
- Triangulated tie

Frame variation ≤ 24 m



Variation 1.1/LC3
Standard configuration:
unclad scaffold in front of open or closed facade.

8 m offset tie pattern



Note: lateral protection components not shown.

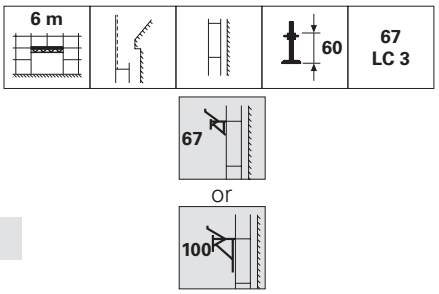
Single-standard wall tie
Wall tie

Easy 67

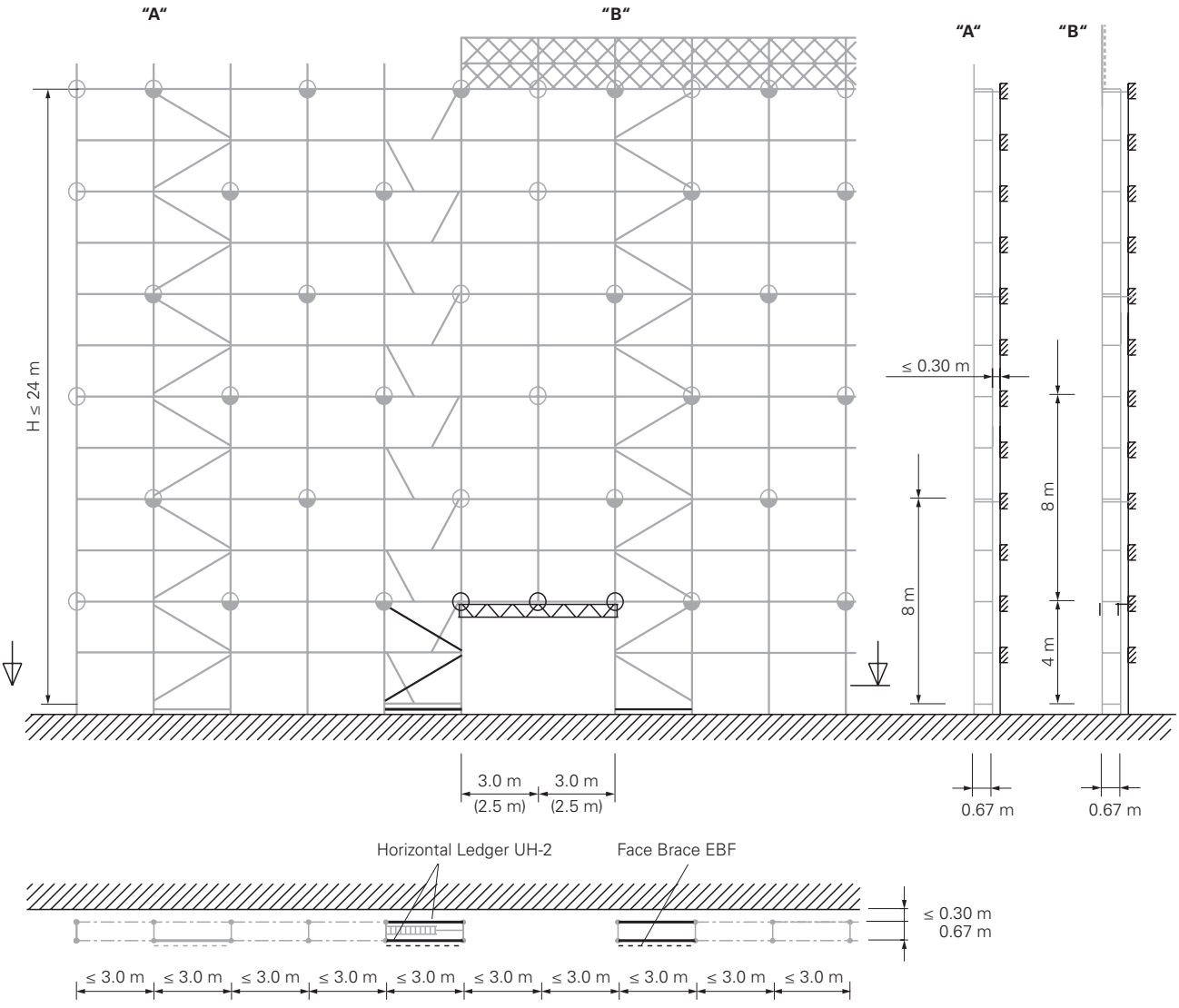
F4 Tie pattern

Frame variation ≤ 24 m

Variation 1.2/LC3 – bridging 6 m (5 m)
Standard configuration:
unclad scaffold in front of open or closed facade.



8 m offset tie pattern



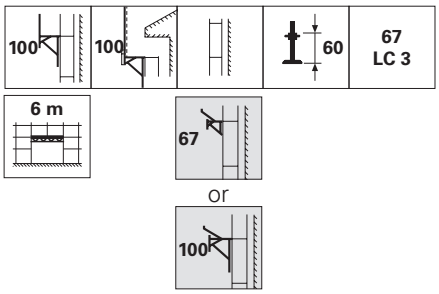
Note: lateral protection components not shown.

⊕ Single-standard wall tie
⊕ Wall tie

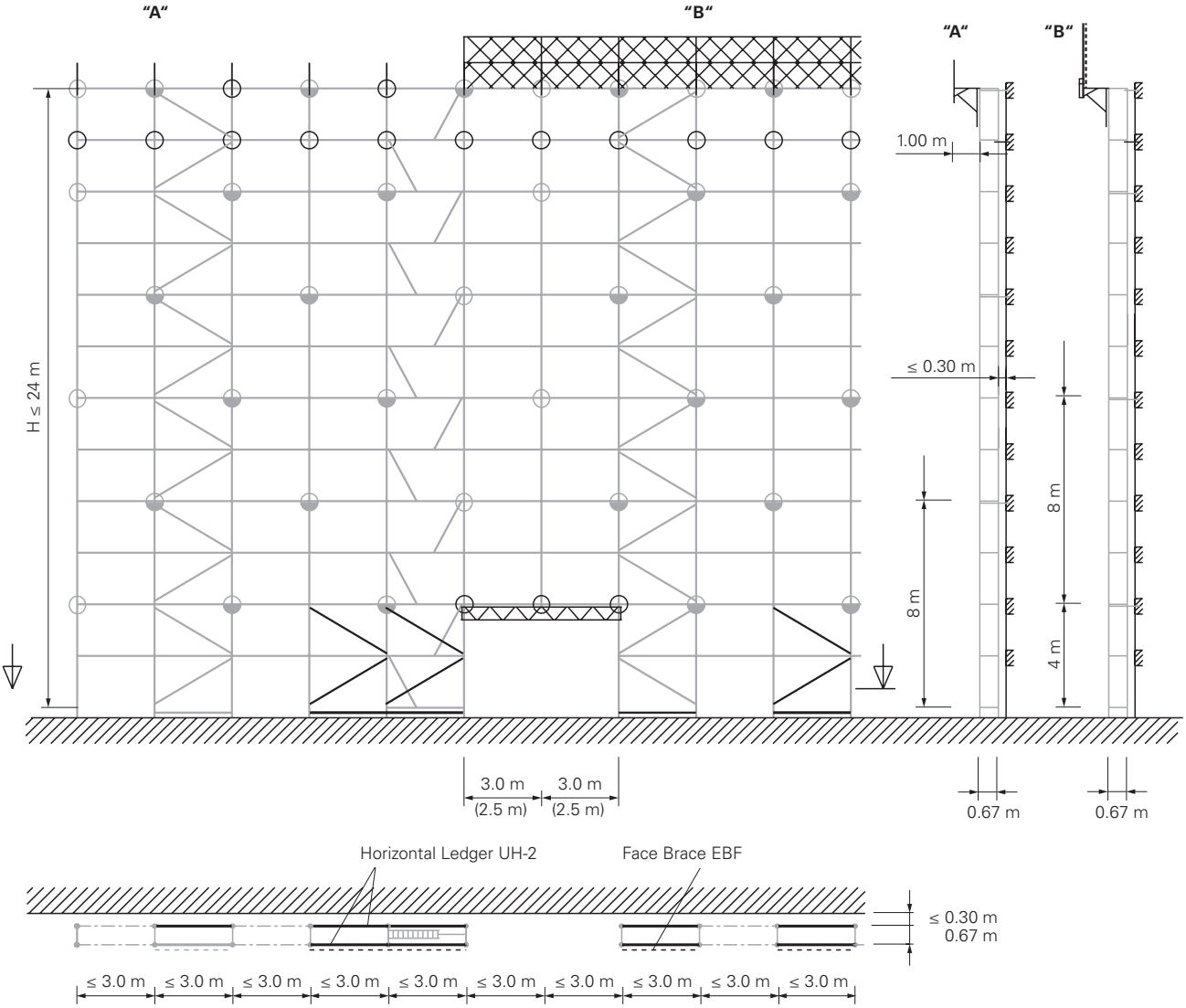
F4 Tie pattern

Frame variation ≤ 24 m

Variation 1.3/LC3 – bridging 6 m (5 m)
Standard configuration:
unclad scaffold in front of open or closed facade.



8 m offset tie pattern

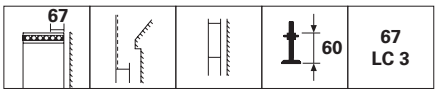


Note: lateral protection components not shown.

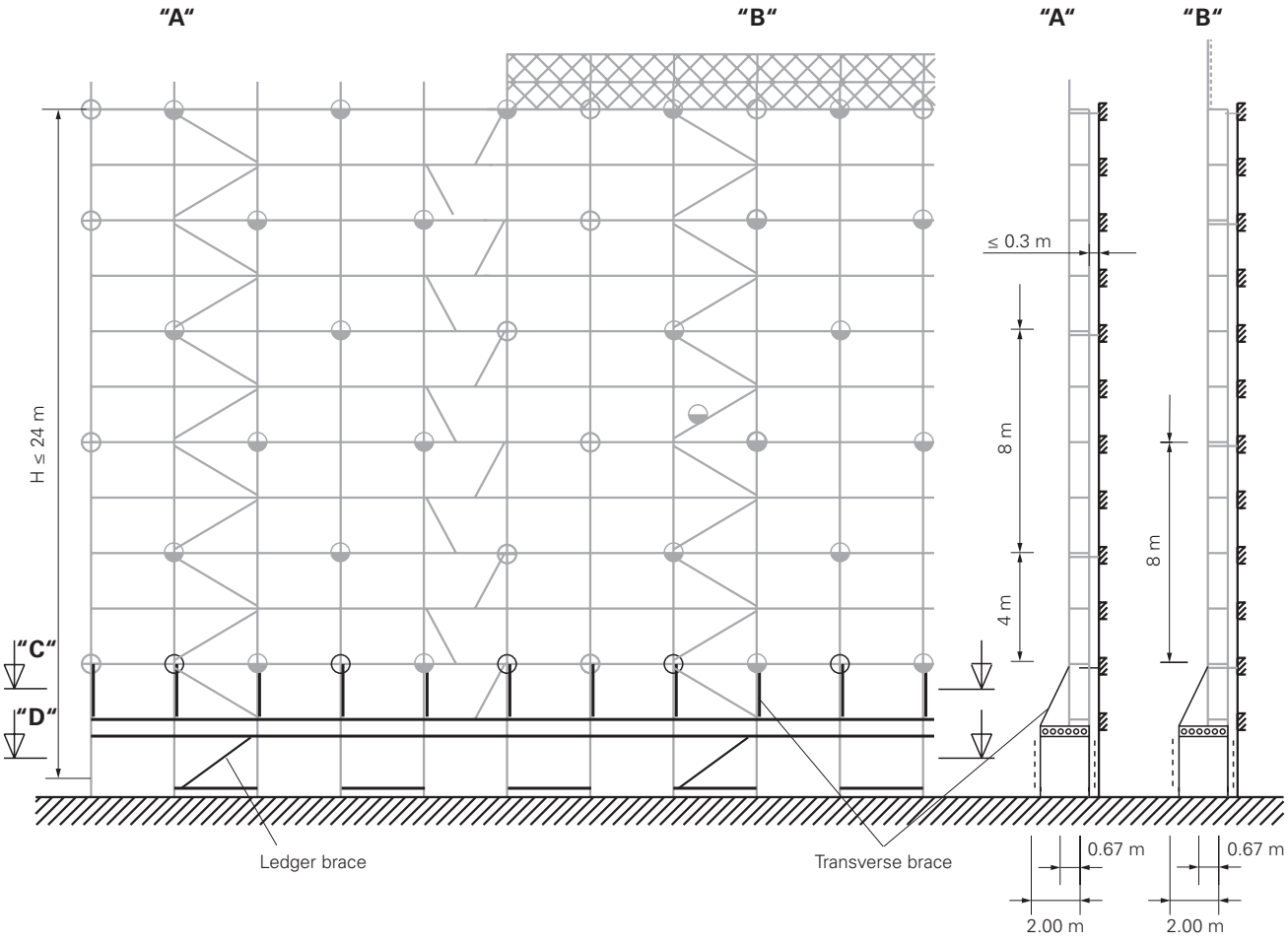
⊕ Single-standard wall tie
⊕ Wall tie

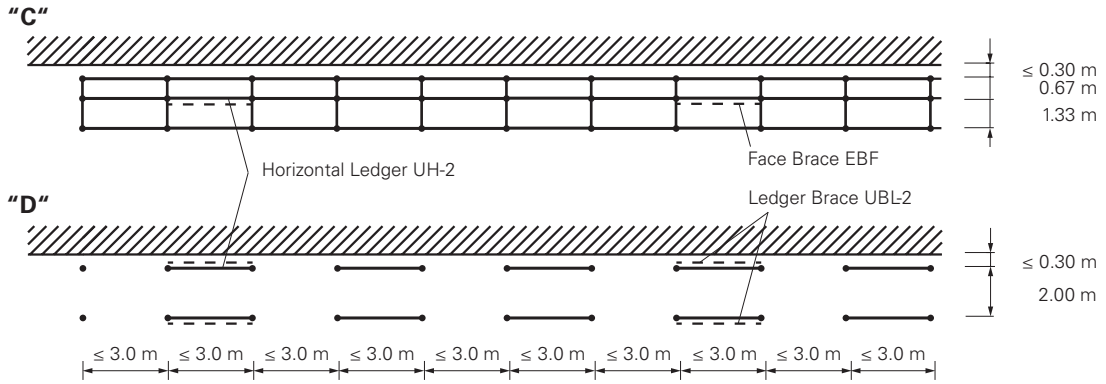
F4 Tie pattern

Frame variation ≤ 24 m



Variation 1.4/LC3, pavement gantry
Standard configuration:
unclad scaffold in front of open or closed facade.





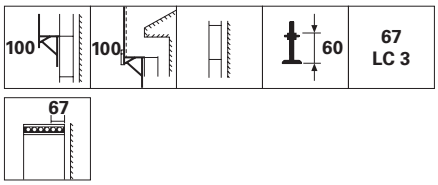
Note: lateral protection components not shown.

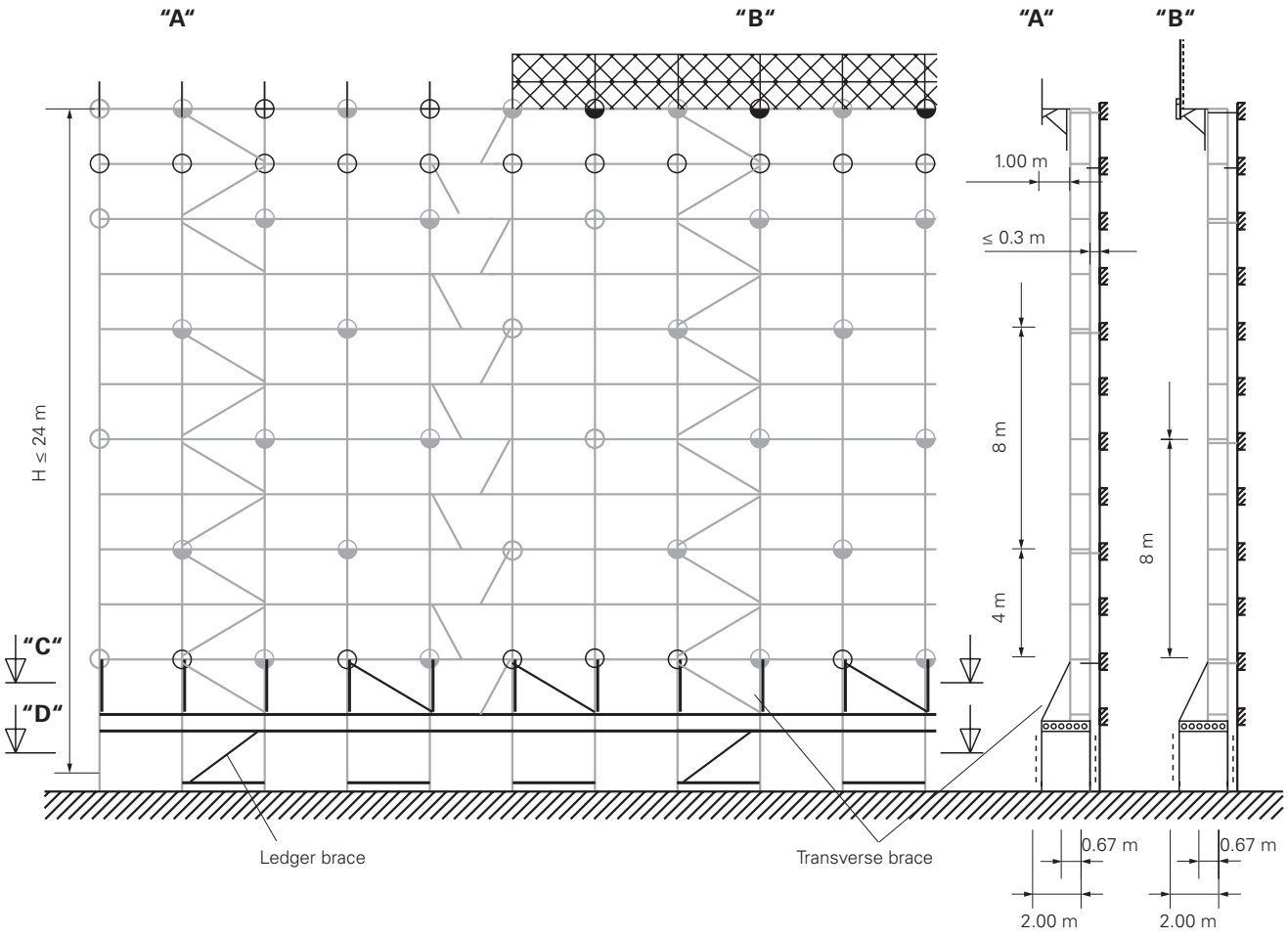
⊕ Single-standard wall tie
⊕ Wall tie

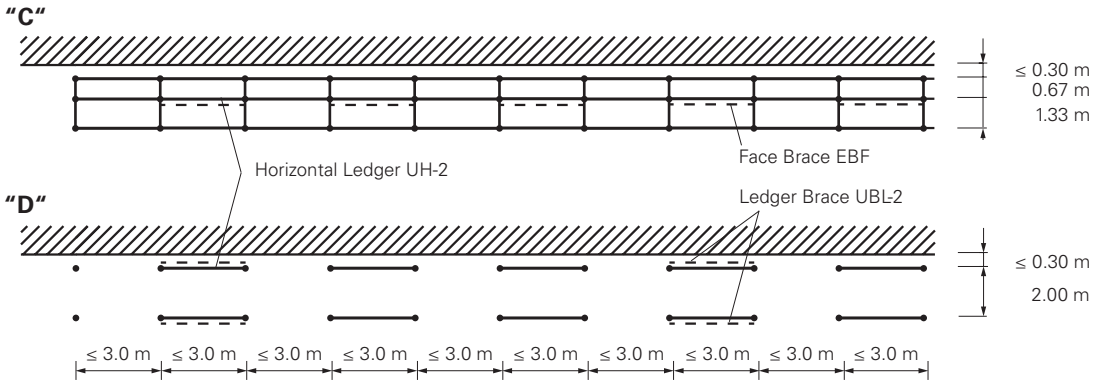
F4 Tie pattern

Frame variation ≤ 24 m

Variation 1.5/LC3, pavement gantry
Standard configuration:
unclad scaffold in front of open or closed facade.







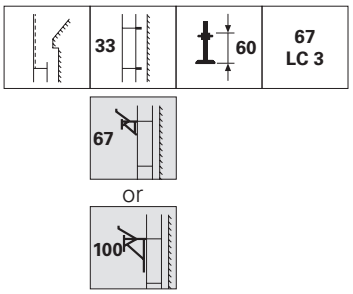
Note: lateral protection components not shown.

Single-standard wall tie
Wall tie

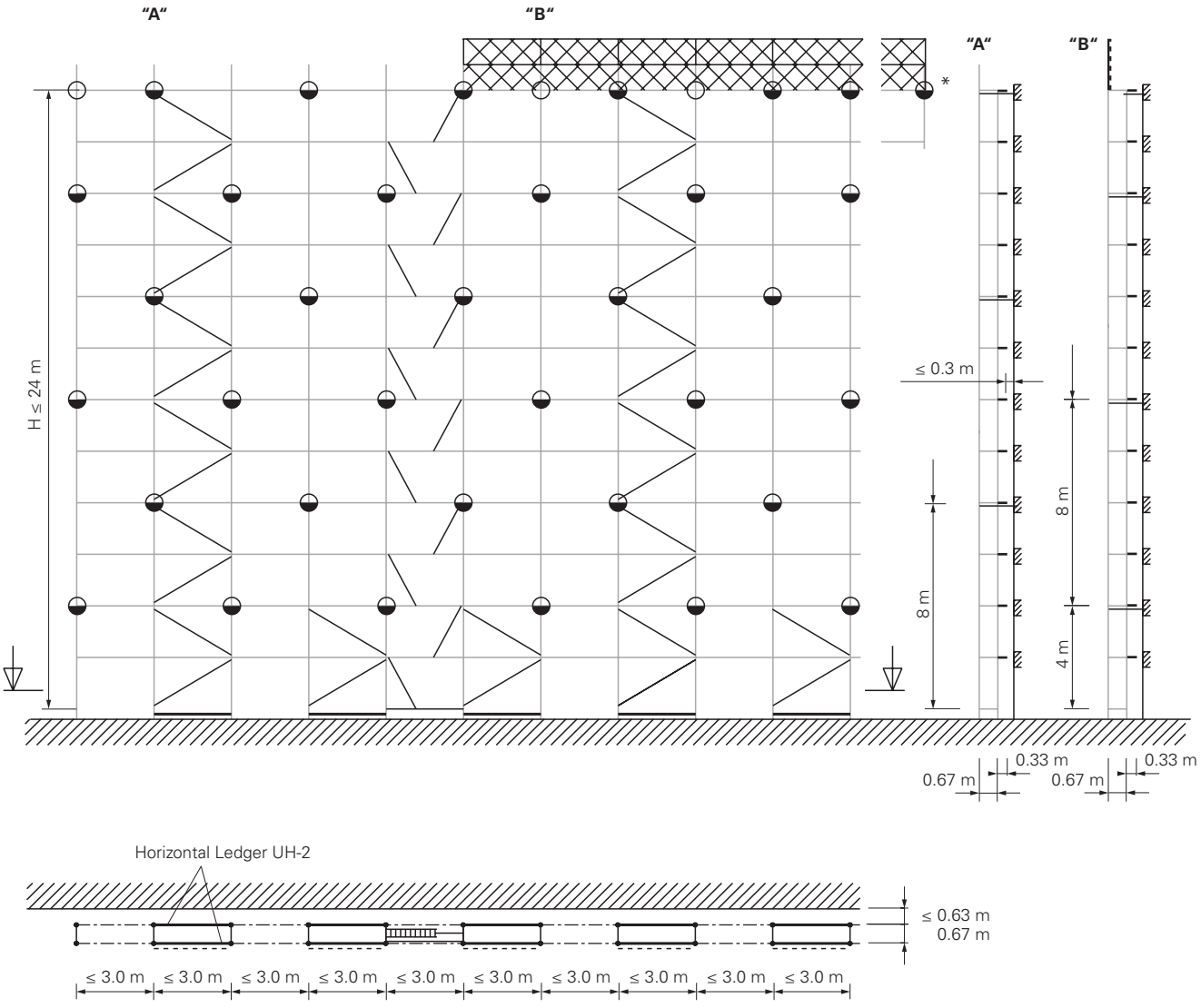
F4 Tie pattern

Frame variation ≤ 24 m

Basic variation 2a/LC3
Standard configuration:
unclad scaffold in front of open or closed facade.



8 m offset tie pattern



Note: lateral protection components not shown.

⊕ Single-standard wall tie
⊕ Wall tie

* For version with protection panel: Anchor the edge post in the uppermost level with the wall tie.

F4 Tie pattern

Frame variation ≤ 36 m

Basic variation 2a/LC3

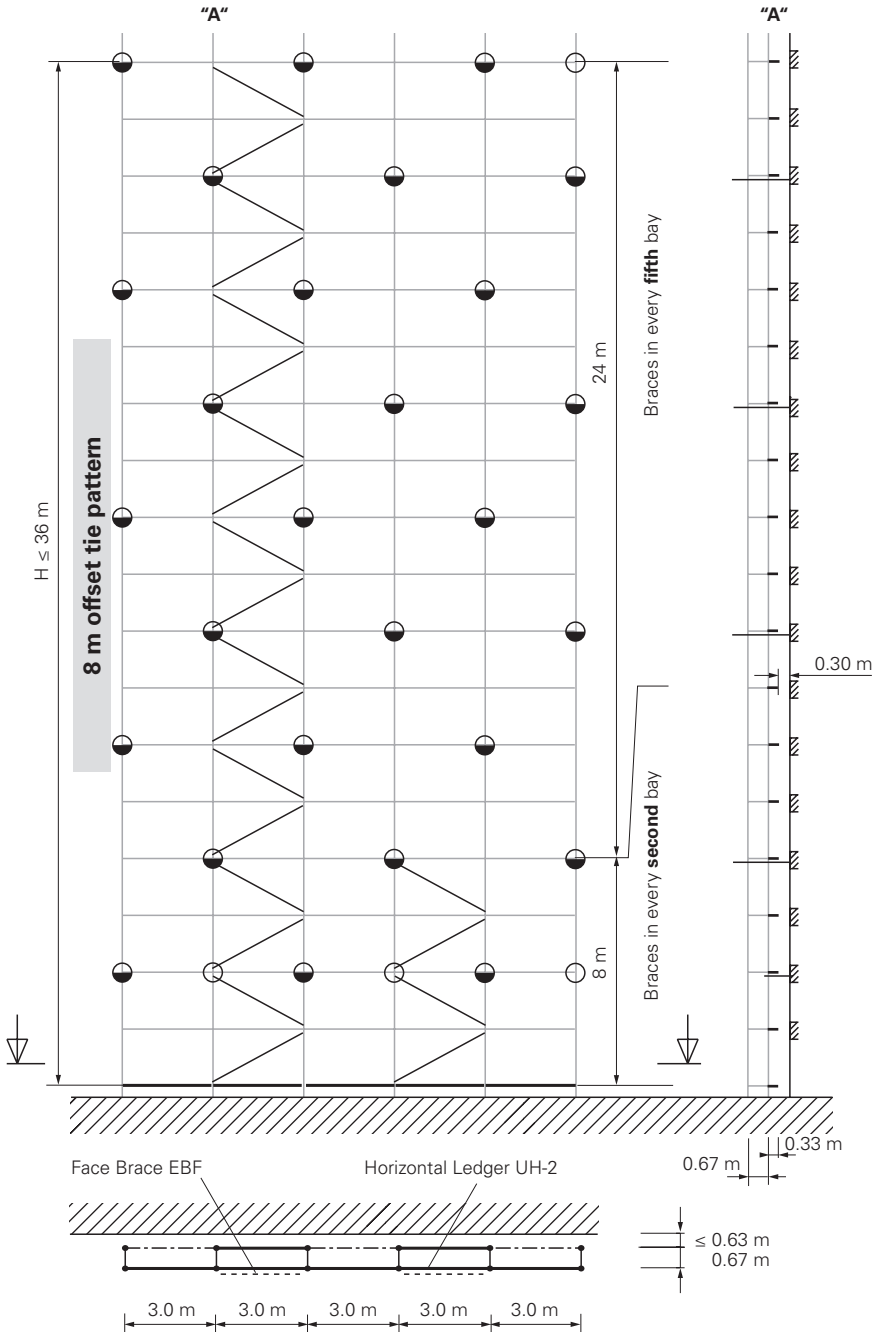
Bay width 3.00 m
Scaffold height 24 m to 36 m

Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 36 m
  - 8 m offset tie pattern,
  - at least two wall ties for every five bays, and a wall tie at the edge post,
  - with 4 m continuous anchoring,
  - edge post retained in topmost level.

Bracing:
- Face Brace EBF 300-200
  - to 4th scaffold level in every second bay,
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level,
  - on the inside of every braced bay in the base level.

Note: lateral protection components not shown.



Single-standard wall tie
Wall tie

Easy 67

F4 Tie pattern

Frame variation ≤ 52 m

Basic variation 2a/LC3

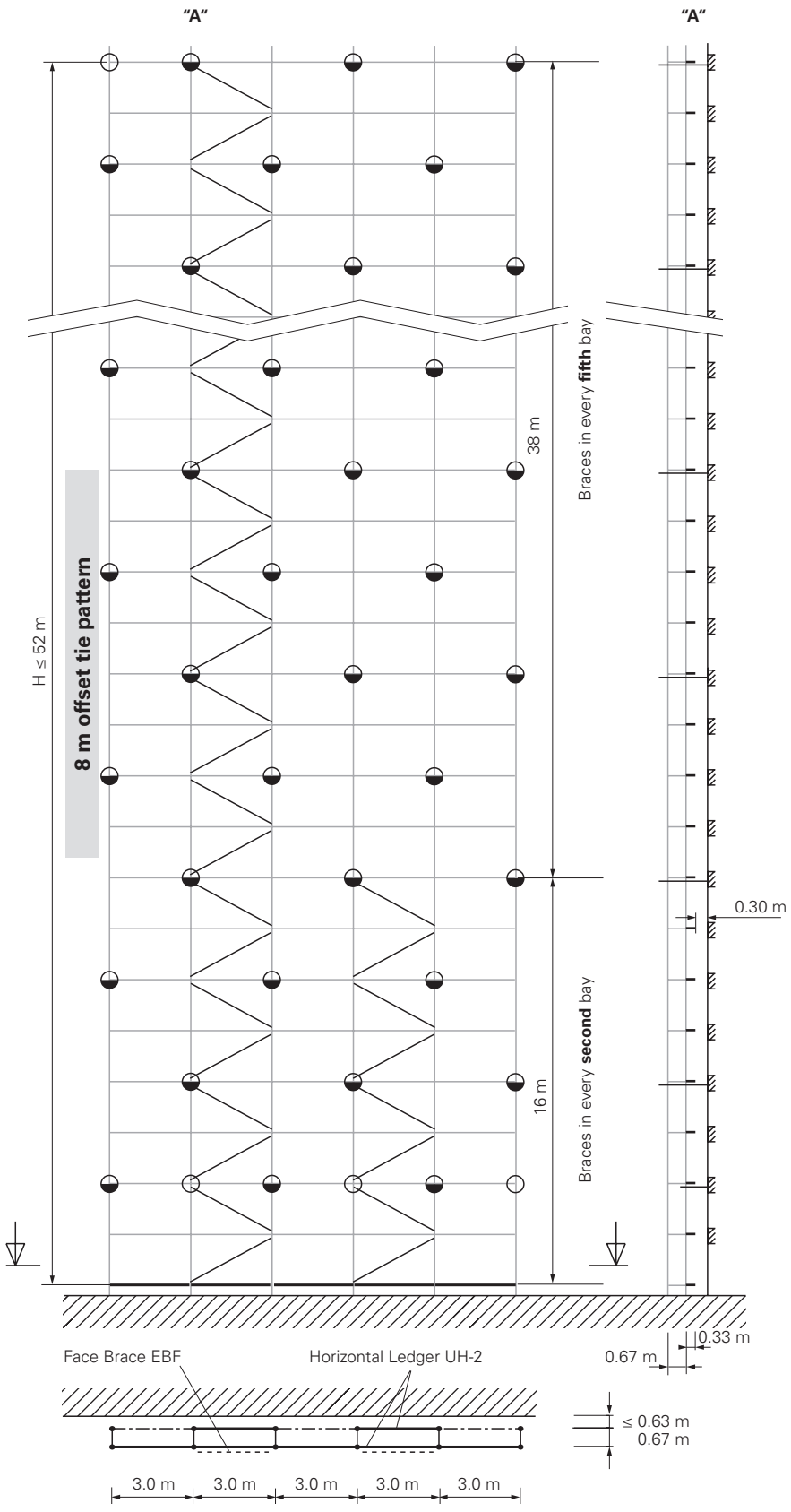
Bay width 3.00 m
Scaffold height 36 m to 52 m

Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 52 m
  - 8 m offset tie pattern,
  - at least two wall ties for every five bays, and a wall tie at the edge post,
  - with 4 m continuous anchoring,
  - edge post retained in topmost level.

Bracing:
- Face Brace EBF 300-200
  - until 8th scaffold level in every second bay,
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level,
  - on the inside of every braced bay in the base level.

Note: lateral protection components not shown.



Single-standard wall tie

Wall tie

F4 Tie pattern

Frame variation ≤ 52 m

Basic variation 2a/LC3

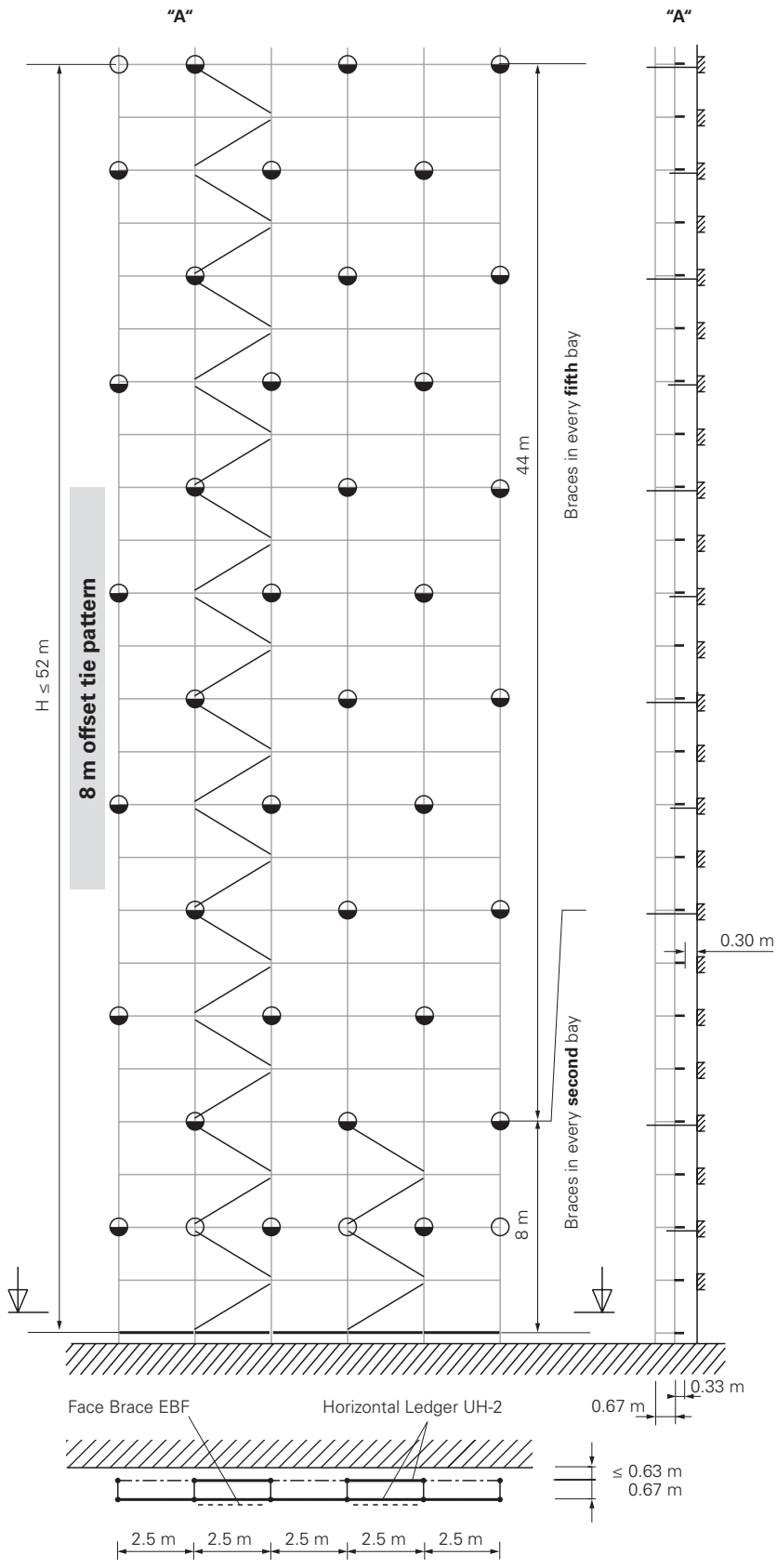
Bay width 2.50 m
Scaffold height 24 m to 52 m

Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 52 m
  - 8 m offset tie pattern,
  - at least two wall ties for every five bays, and a wall tie at the edge post,
  - with 4 m continuous anchoring,
  - anchor the edge post in the topmost scaffold level with a single-leg wall tie.

Bracing:
- Face Brace EBF 250-200
  - to 4th scaffold level in every second bay,
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level,
  - on the inside of every braced bay in the base level.

Note: lateral protection components not shown.



Single-standard wall tie
Wall tie

F4 Tie pattern

Frame variation ≤ 60 m

Basic variation 2a/LC3

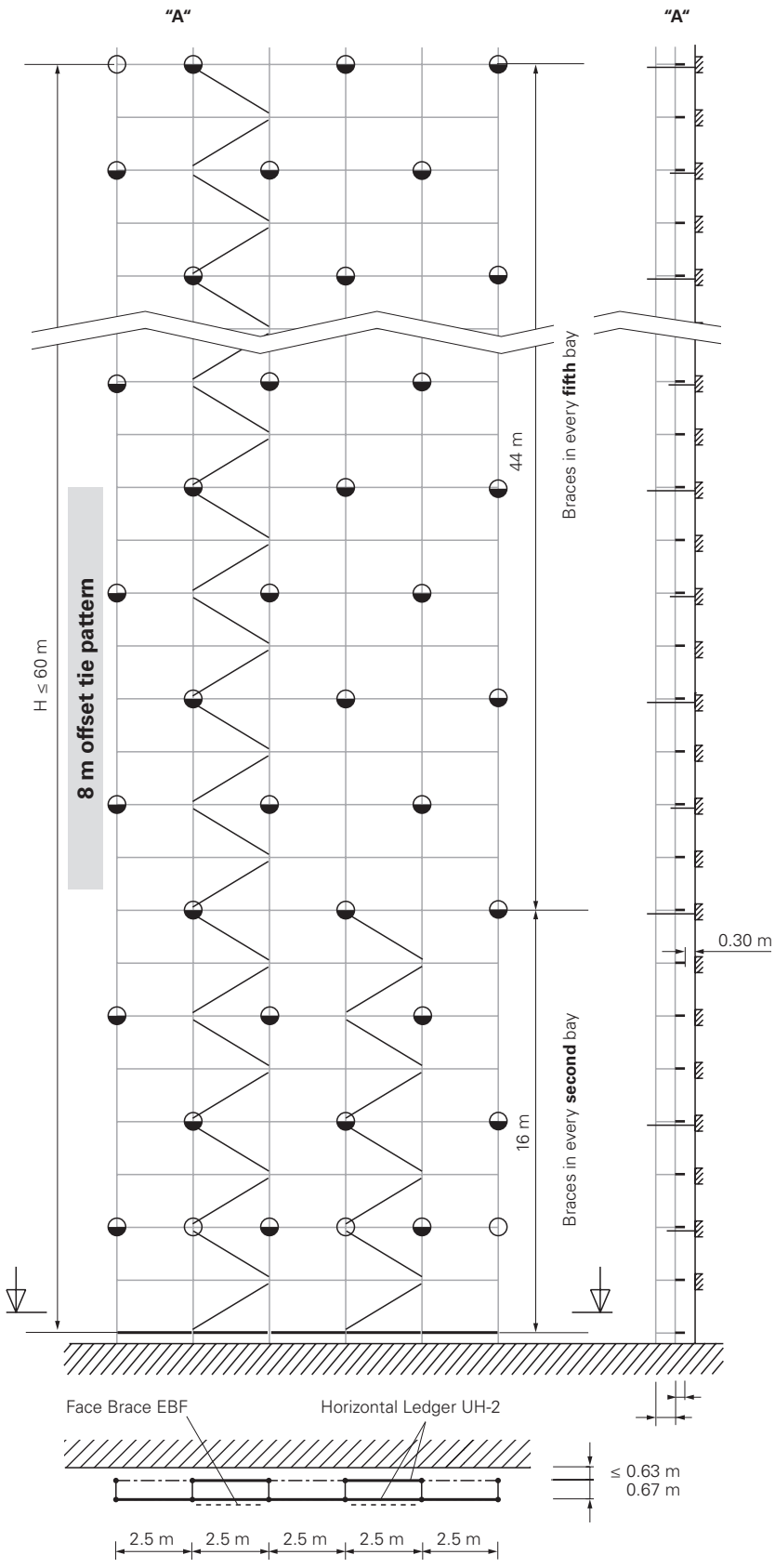
Bay width 2.50 m
Scaffold height 52 m to 60 m

Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 60 m
  - 8 m offset tie pattern,
  - at least two wall ties for every five bays, and a wall tie at the edge post,
  - with 4 m continuous anchoring,
  - anchor the edge post in the topmost scaffold level with a single-leg wall tie.

Bracing:
- Face Brace EBF 250-200
  - until 8th scaffold level in every second bay,
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level,
  - on the inside of every braced bay in the base level.

Note: lateral protection components not shown.



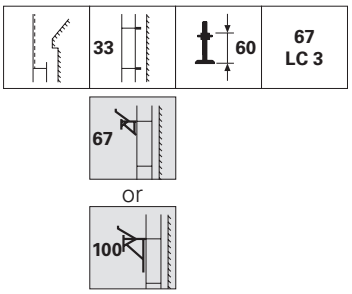
Single-standard wall tie

Wall tie

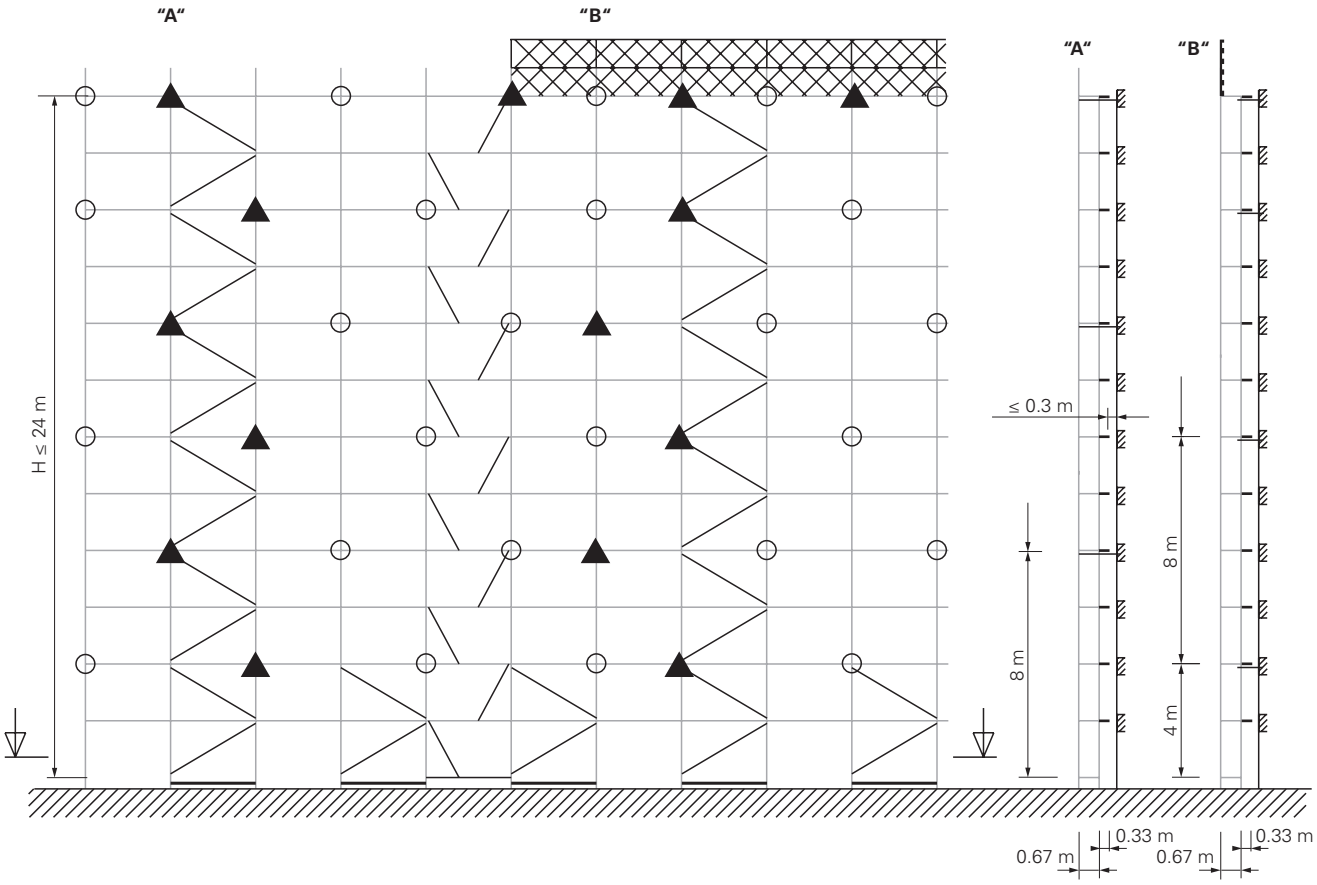
F4 Tie pattern

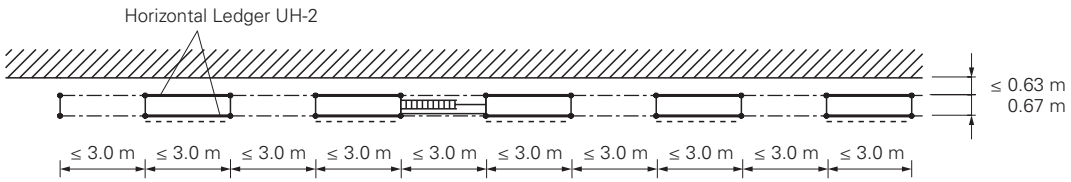
Frame variation ≤ 24 m

Alternative basic variation 2b/LC3
Standard configuration:
unclad scaffold in front of open or closed facade.



8 m offset tie pattern





Note: lateral protection components not shown.

- Single-standard wall tie
- Triangulated tie

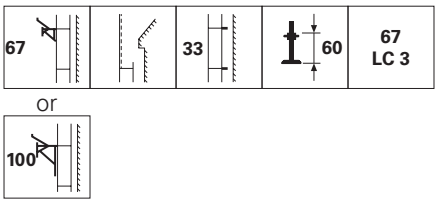
For external console brackets:
In every 5th bay, fit an additional triangulated tie in the scaffold level of the external console bracket. Anchor all remaining frame columns with single-stem wall ties.

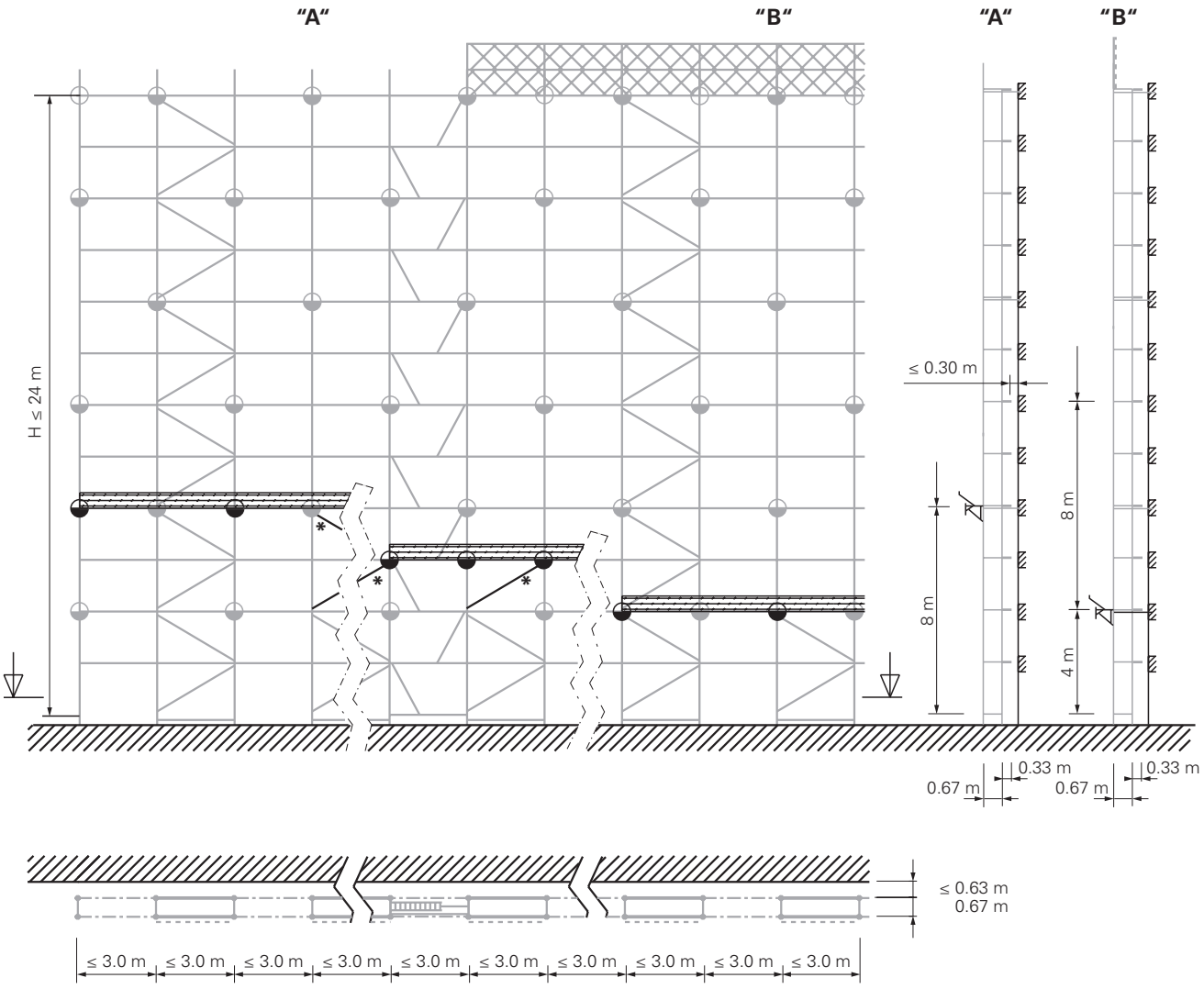
With protection roof:
In every 5th bay, fit an additional triangulated tie in the scaffold level of the protection roof. Anchor all remaining frame columns with single-stem wall ties.

F4 Tie pattern

Frame variation ≤ 24 m

Variation 2.1/LC3
Standard configuration:
unclad scaffold in front of open or closed facade.





Note: lateral protection components not shown.

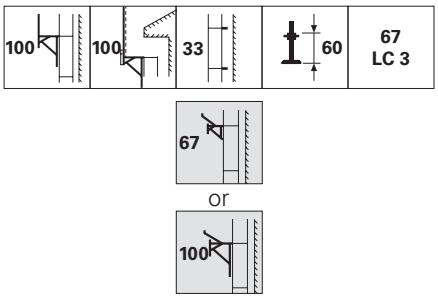
⊕ Single-standard wall tie
⊕ Wall tie

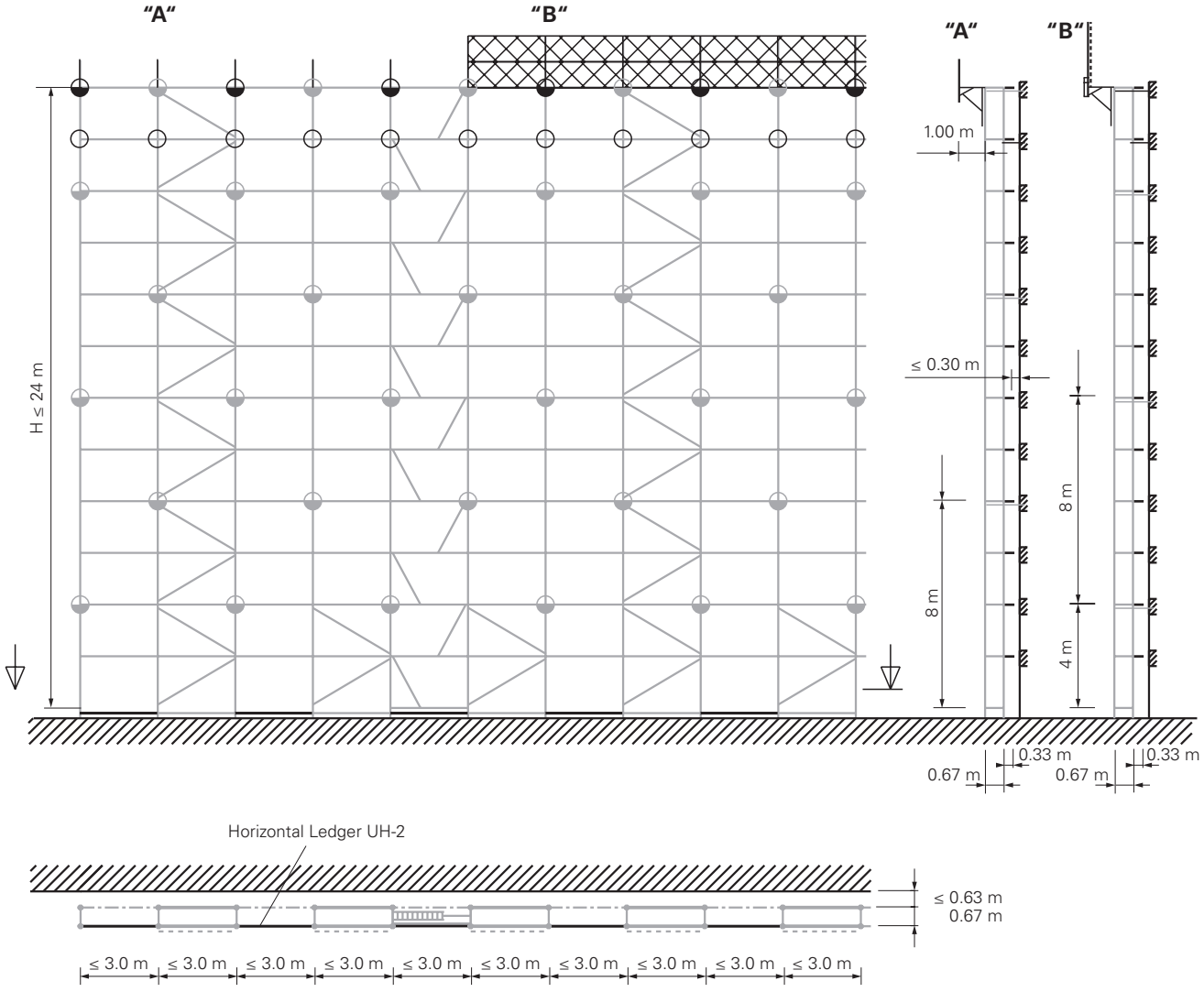
* Always fit diagonal bracing in every 2nd bay up to the protection roof level.

F4 Tie pattern

Frame variation ≤ 24 m

Variation 2.2/LC3
Standard configuration:
unclad scaffold in front of open or closed facade.





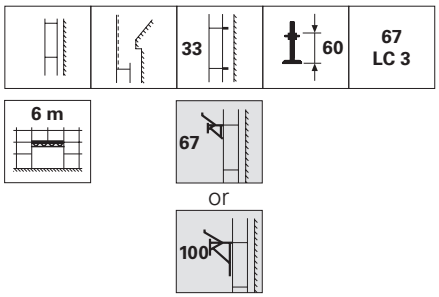
Note: lateral protection components not shown.

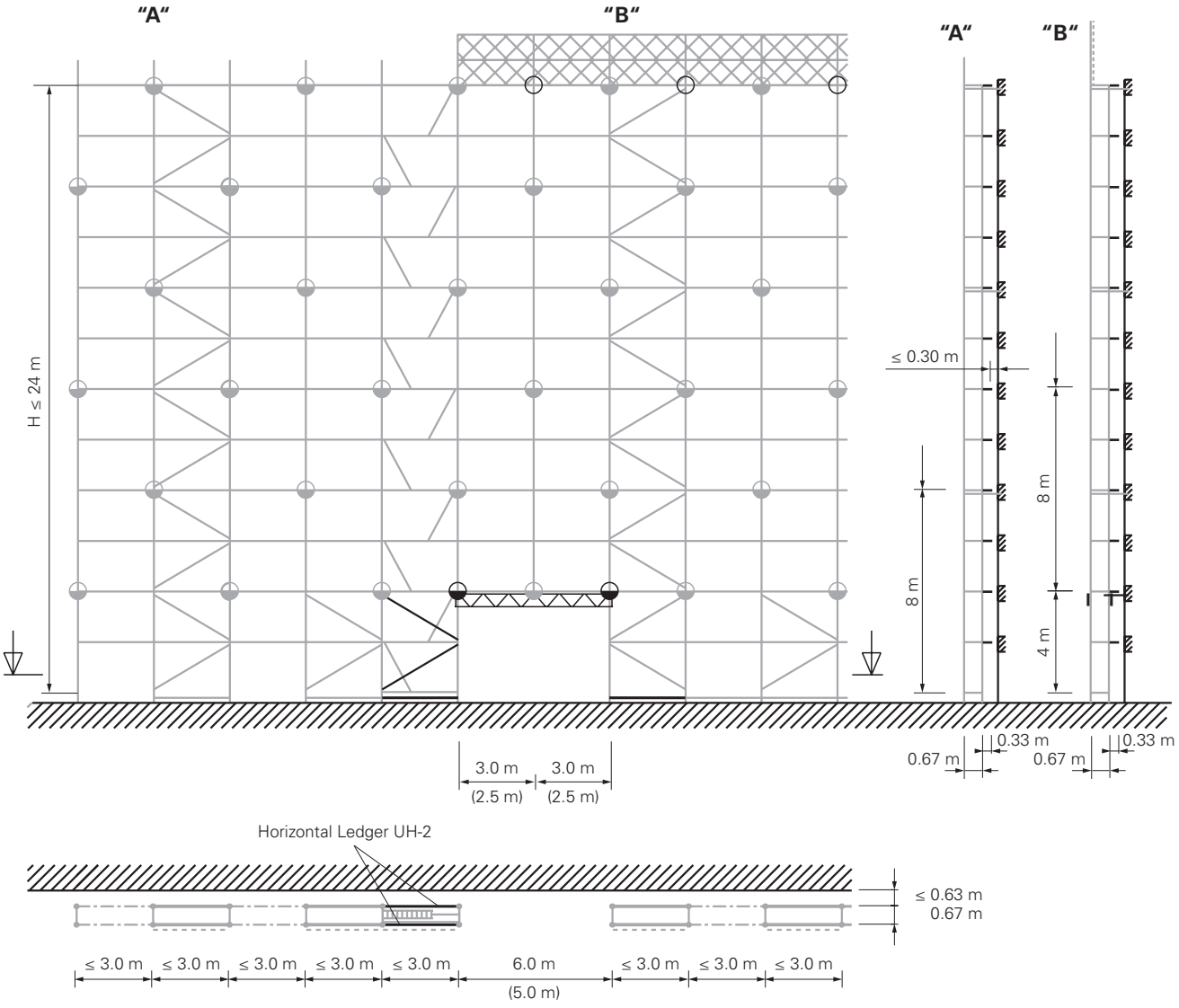
- Single-standard wall tie
- Wall tie

F4 Tie pattern

Frame variation ≤ 24 m

Variation 2.3/LC3 – bridging 6 m (5 m)
Standard configuration:
unclad scaffold in front of open or closed facade.





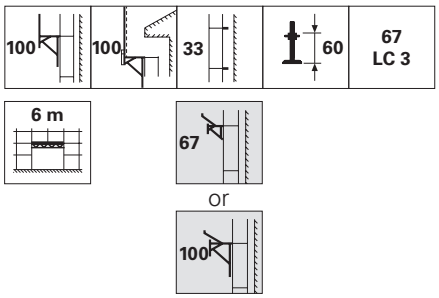
Note: lateral protection components not shown.

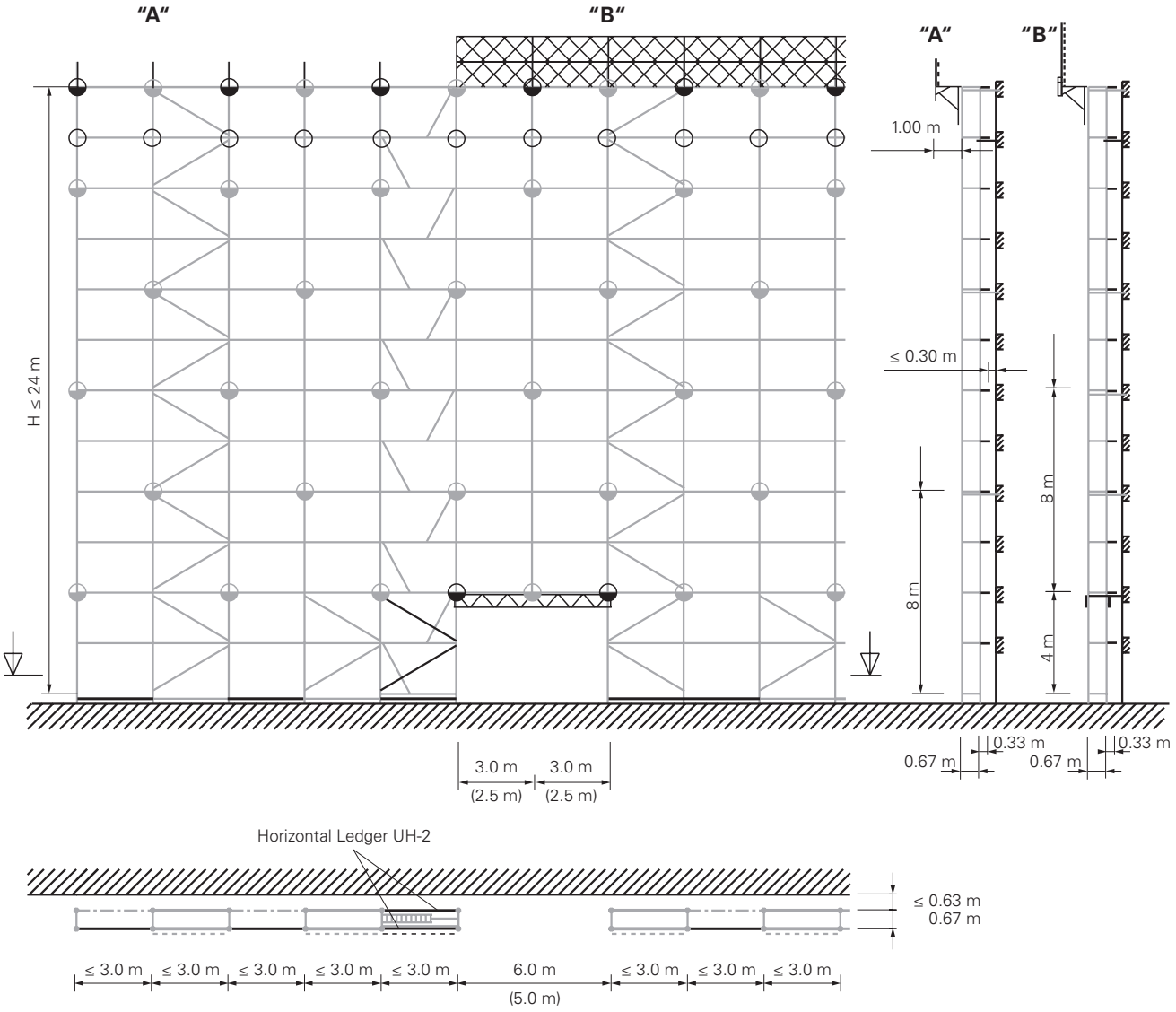
- Single-standard wall tie
- Wall tie

F4 Tie pattern

Frame variation ≤ 24 m

Variation 2.4/LC3 – bridging 6 m (5 m)
Standard configuration:
unclad scaffold in front of open or closed facade.



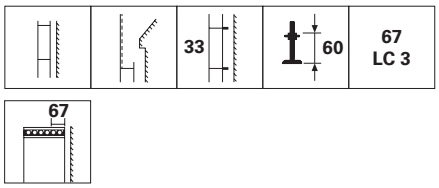


Note: lateral protection components not shown.

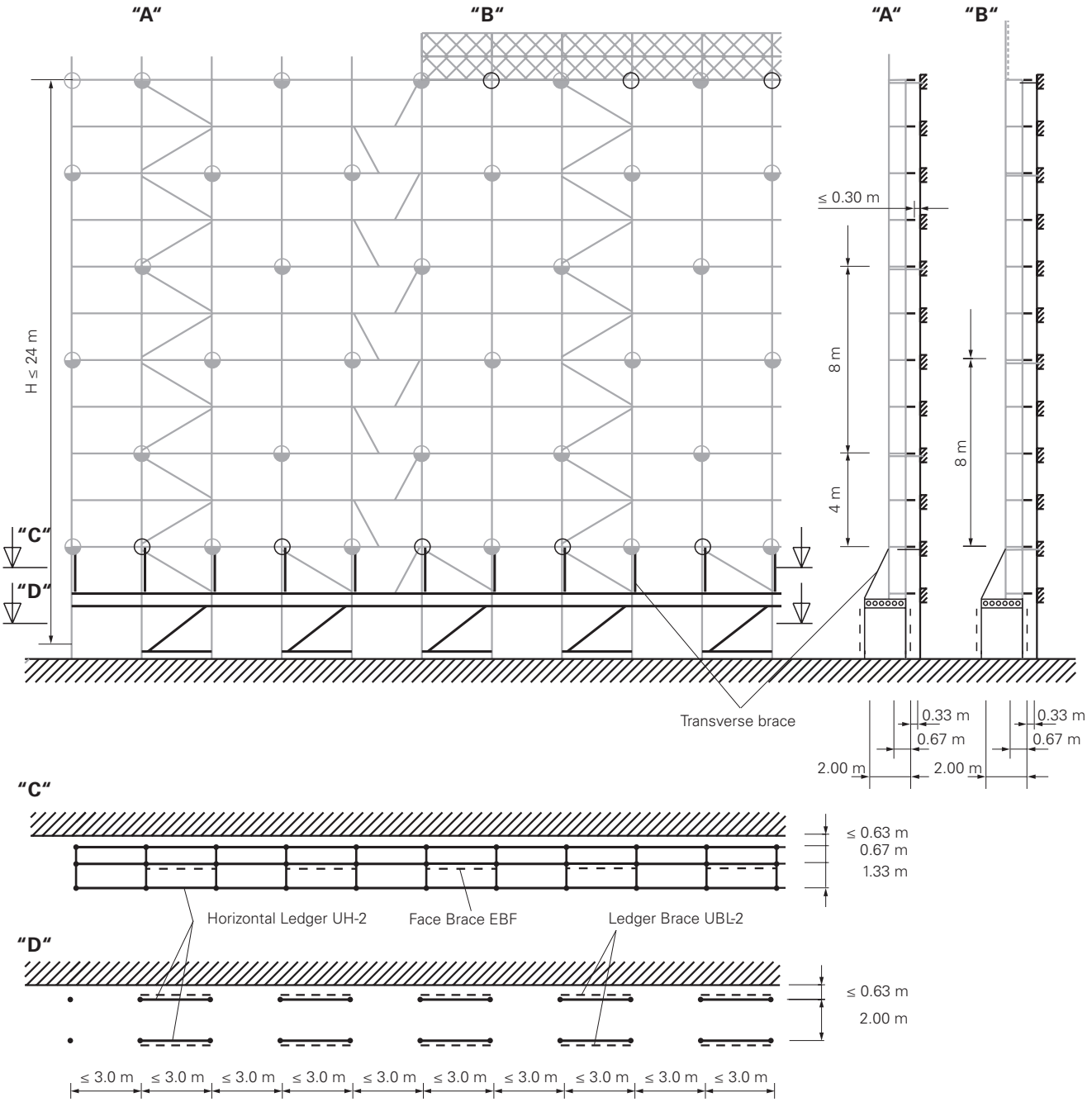
- Single-standard wall tie
- Wall tie

F4 Tie pattern

Frame variation ≤ 24 m



Variation 2.5/LC3, pavement gantry
Standard configuration:
unclad scaffold in front of open or closed facade.



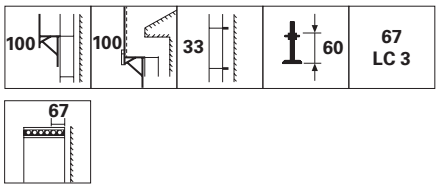
Note: lateral protection components not shown.

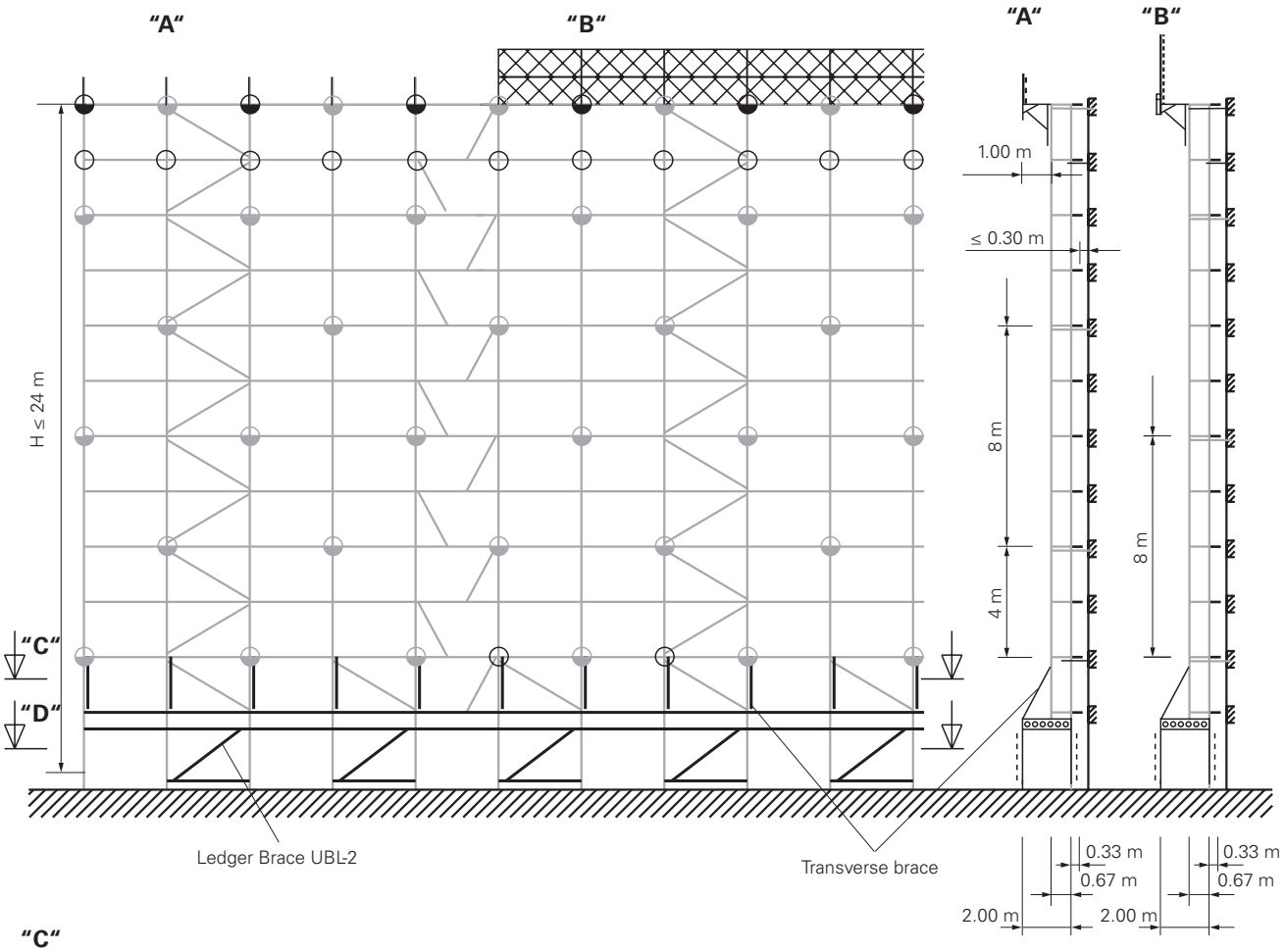
⊕ Single-standard wall tie
⊕ Wall tie

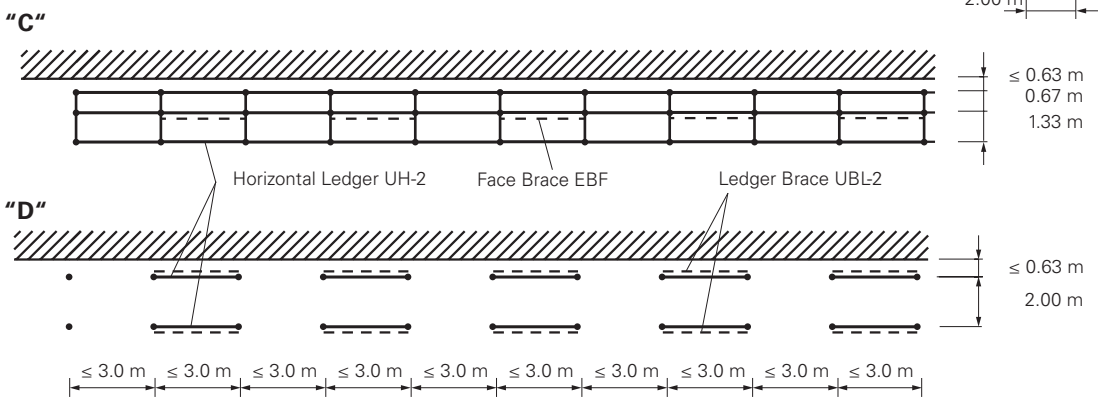
F4 Tie pattern

Frame variation ≤ 24 m

Variation 2.6/LC3, pavement gantry
Standard configuration:
unclad scaffold in front of open or closed facade.







Note: lateral protection components not shown.

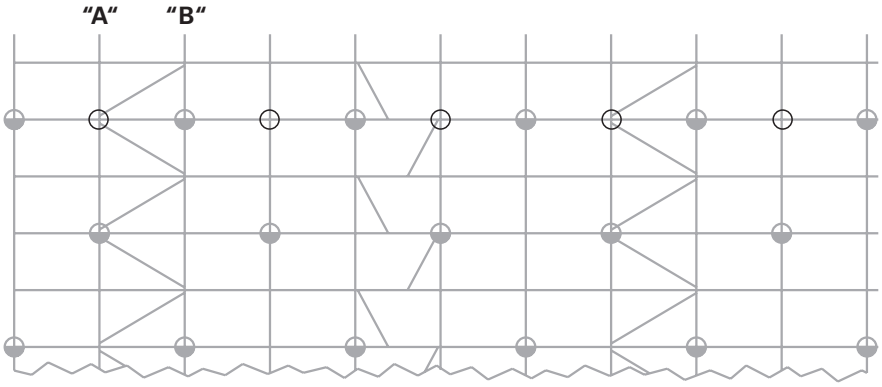
Single-standard wall tie
Wall tie

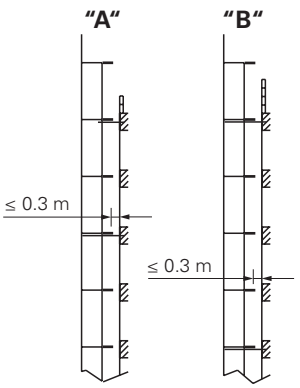
F4 Tie pattern

Frame variation ≤ 24 m

33	67 LC 3

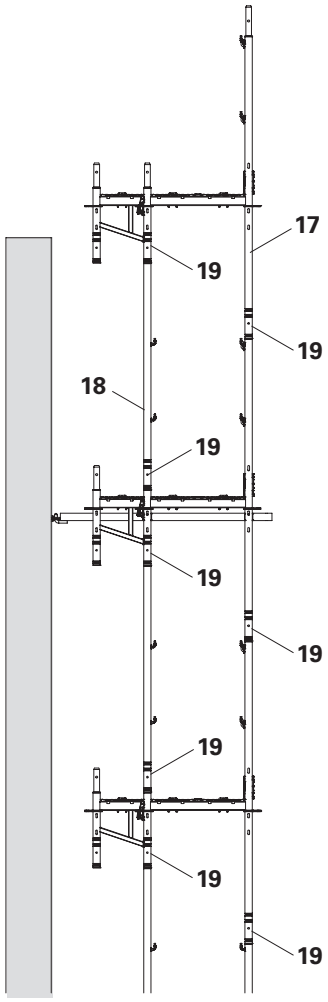
Variation 2.7/LC3, topmost level not anchored
Standard configuration:
unclad scaffold in front of open or closed facade.
Gaps between buildings, uplifting wind forces.

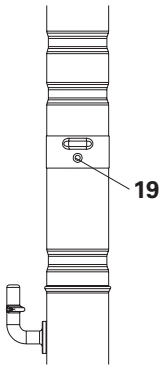




In order to bridge gaps in the building, a maximum of 2 scaffold levels may be realised without any anchoring.

In all frame columns, the 3 topmost Easy Frames EVF (**17**) or as applicable the 3 topmost Tubes EVR 150 (**18**) have to be secured against uplift with Locking Pins Ø 48/57 (**19**) or M10 x 70 bolts and nuts.





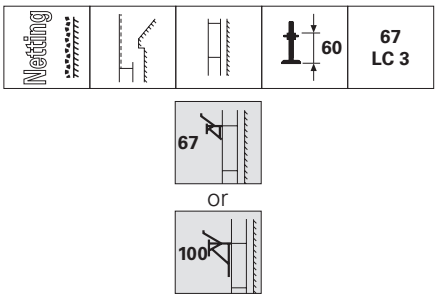
Note: lateral protection components not shown.

⊕ Single-standard wall tie
⊕ Wall tie

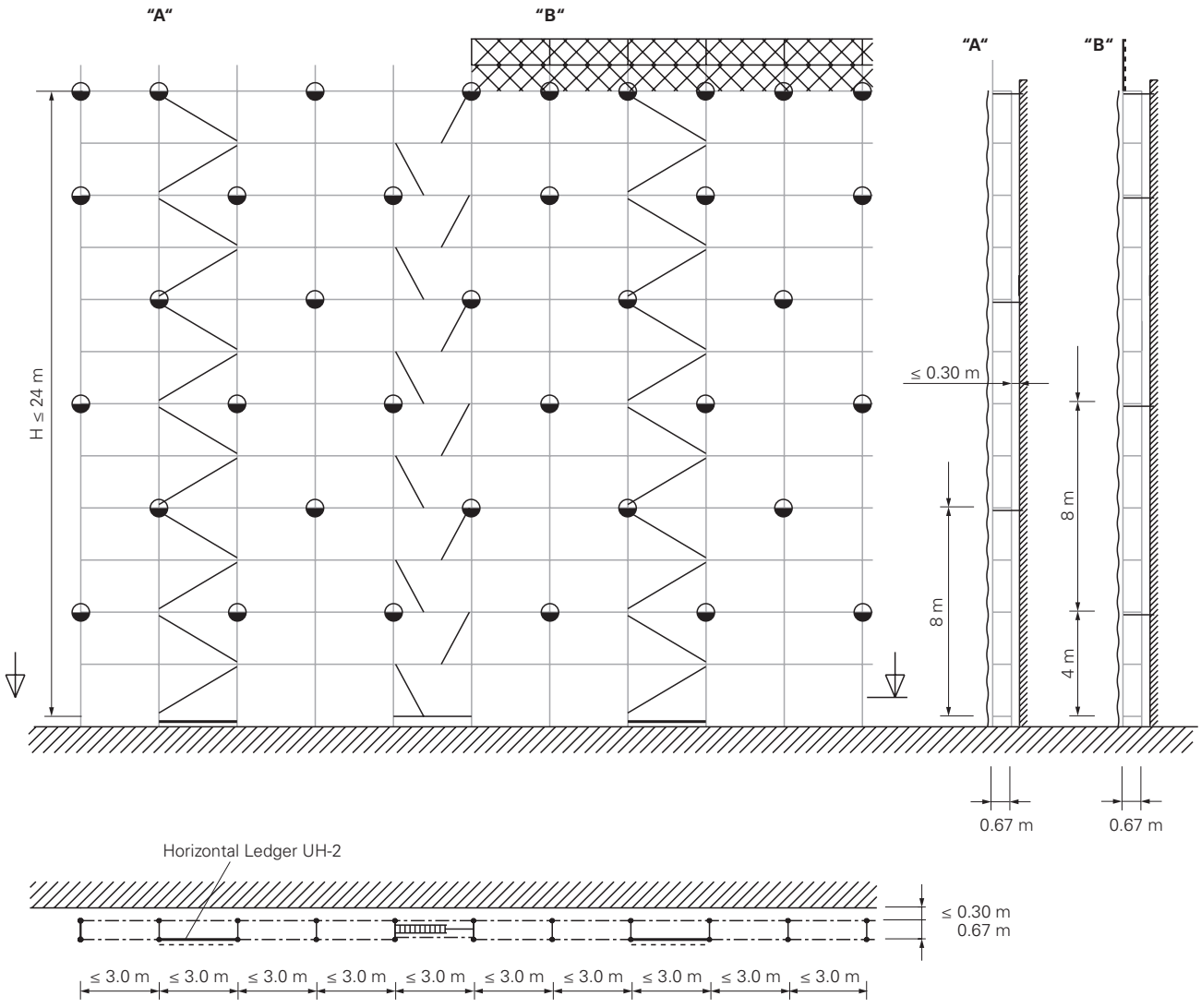
F4 Tie pattern

Frame variation ≤ 24 m

Basic variation 3/LC3
Standard configuration:
netting in front of closed facade.



8 m offset tie pattern



Note: lateral protection components not shown.

Wall tie

Easy 67

F4 Tie pattern

Frame variation ≤ 52 m

Basic variation 3/LC3

Bay width 3.00 m
Scaffold height 24 m to 52 m

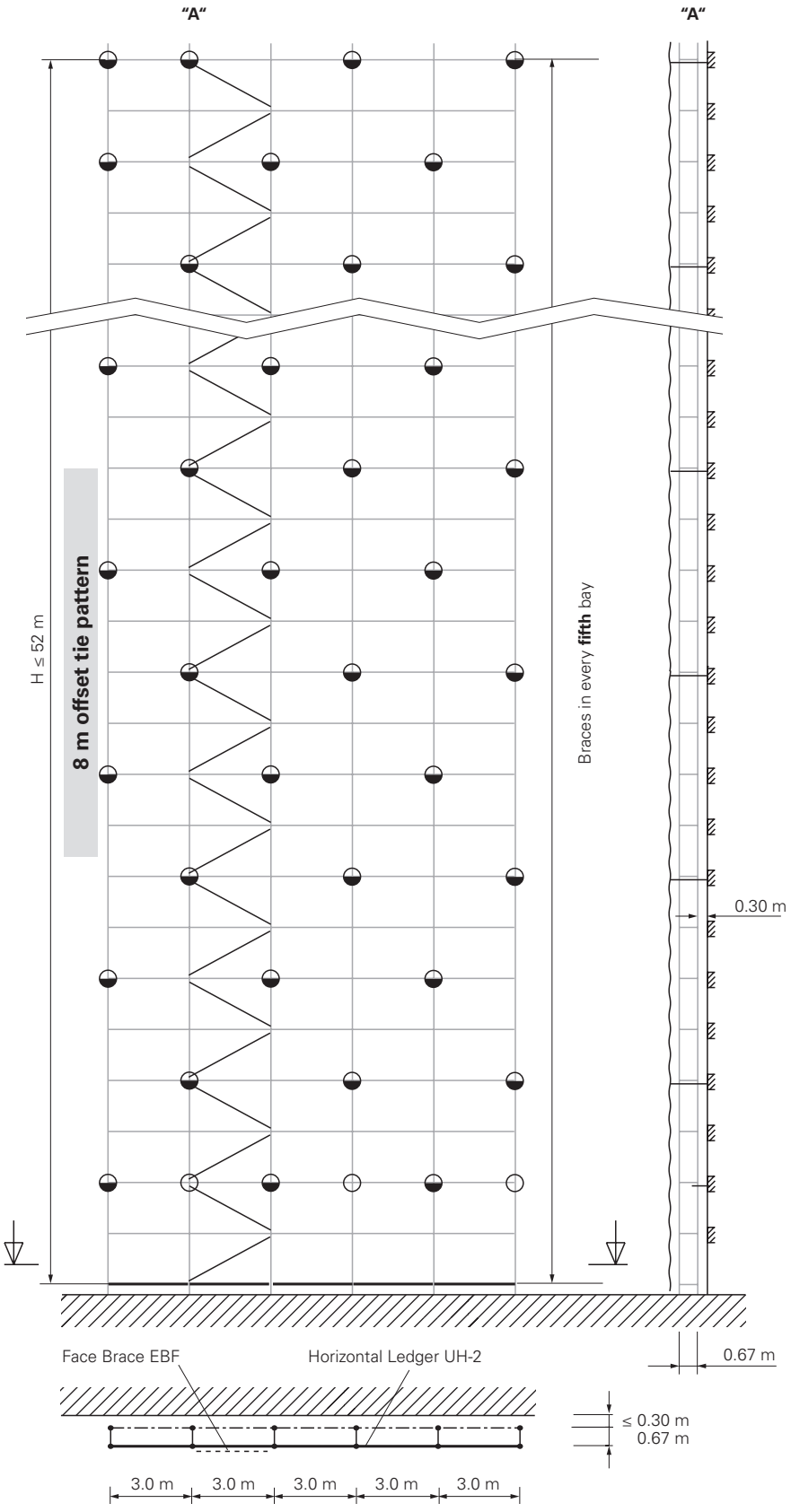
Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 52 m
  - 8 m offset tie pattern,
  - at least three wall ties for every five bays,
  - with 4 m continuous anchoring.

Bracing:
- Face Brace EBF 300-200
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level

Note: lateral protection components not shown.

Single-standard wall tie
Wall tie



F4 Tie pattern

Frame variation ≤ 64 m

Basic variation 3/LC3

Bay width 3.00 m
Scaffold height 52 m to 64 m

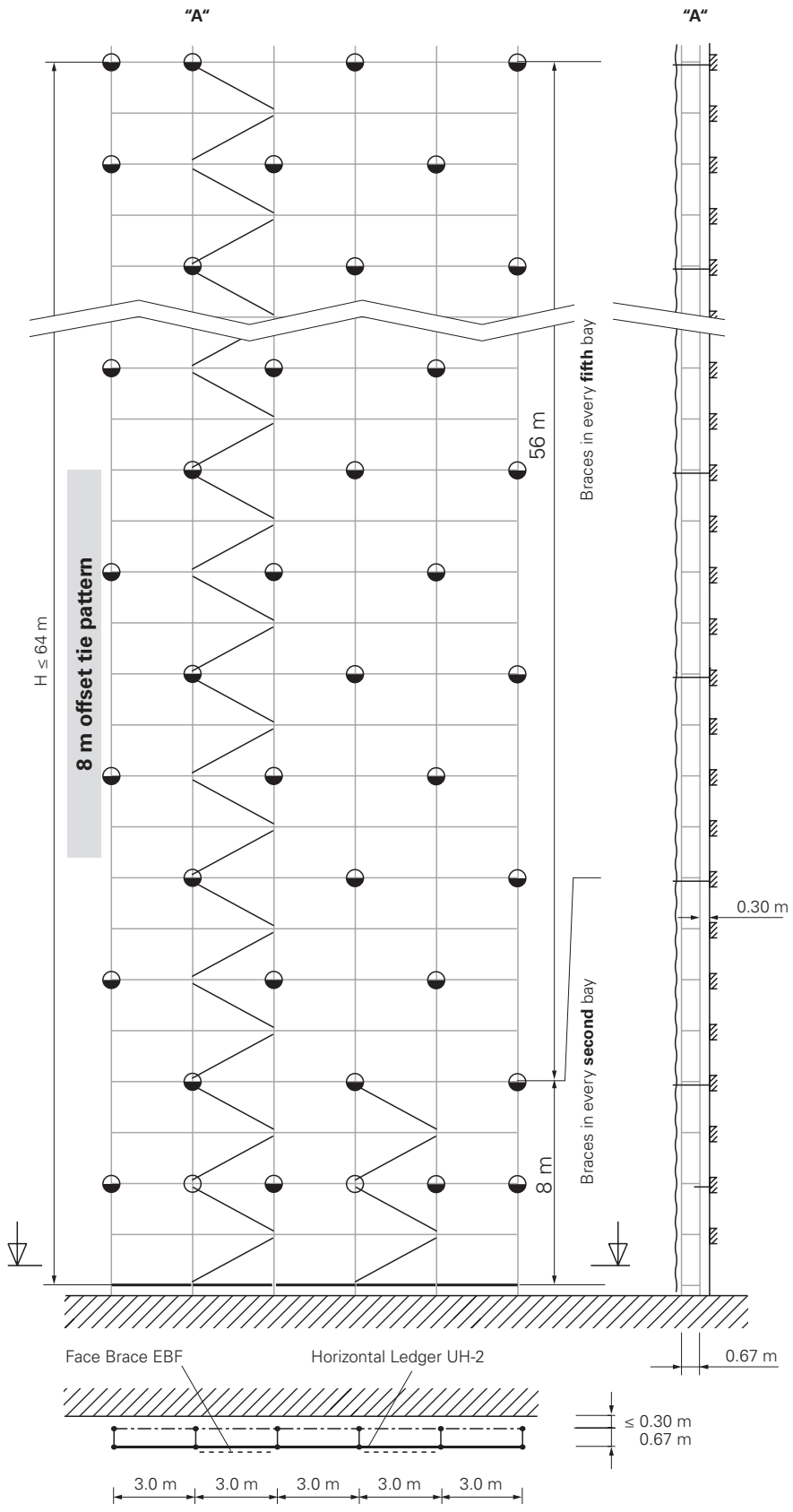
Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 64 m
  - 8 m offset tie pattern,
  - at least three wall ties for every five bays,
  - with 4 m continuous anchoring,
  - anchor the edge post in the topmost scaffold level with a single-leg wall tie.

Bracing:
- Face Brace EBF 300-200
  - to 4th scaffold level in every second bay,
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level

Note: lateral protection components not shown.

Single-standard wall tie
Wall tie



Easy 67

F4 Tie pattern

Frame variation ≤ 64 m

Basic variation 3/LC3

Bay width 2.50 m
Scaffold height 24 m to 64 m

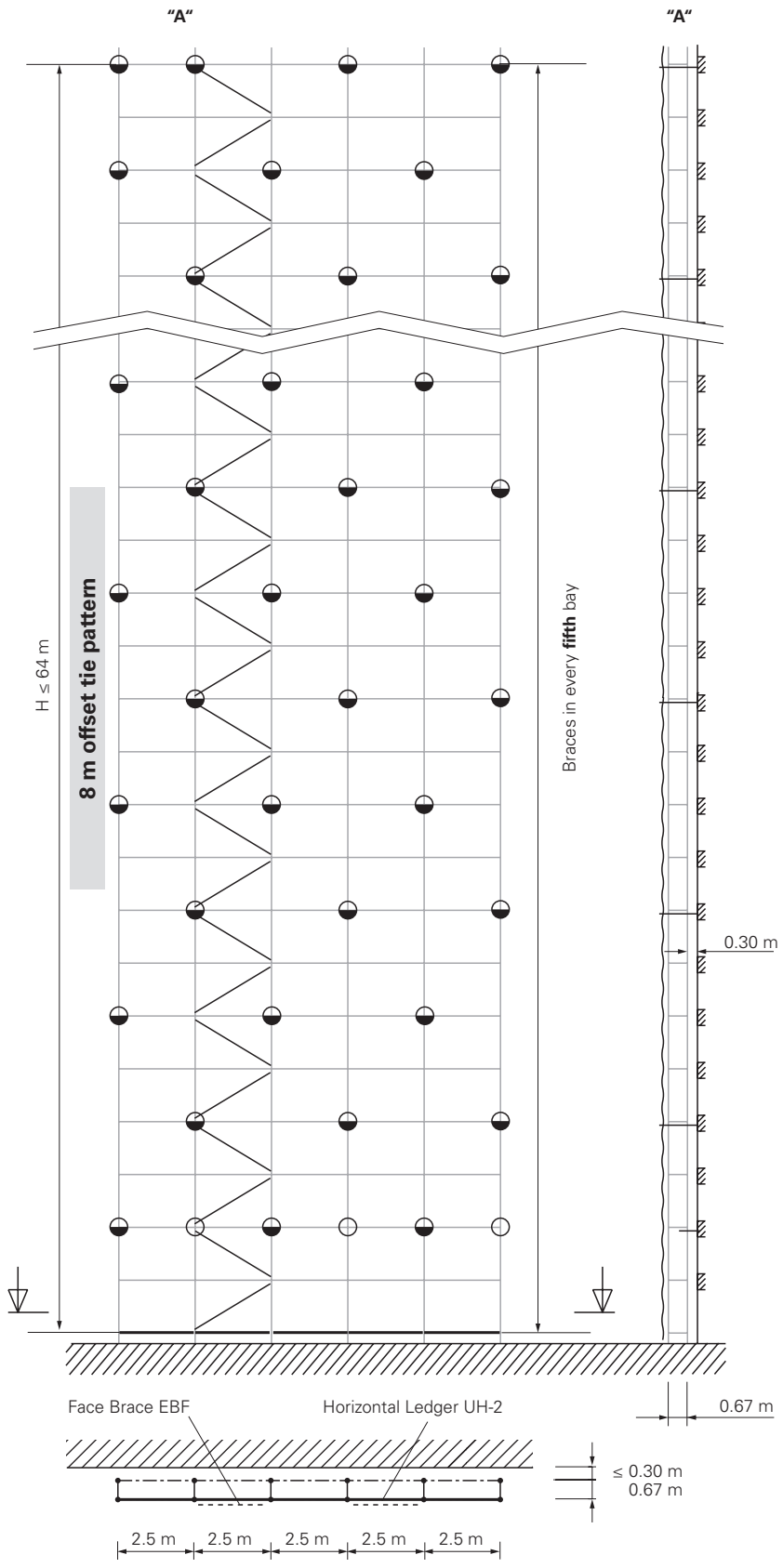
Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 64 m
  - 8 m offset tie pattern,
  - at least three wall ties for every five bays,
  - with 4 m continuous anchoring,
  - anchor the edge post in the topmost scaffold level with a wall tie.

Bracing:
- Face Brace EBF 250-200
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level

Note: lateral protection components not shown.

⊕ Single-standard wall tie
⊕ Wall tie



F4 Tie pattern

Frame variation ≤ 72 m

Basic variation 3/LC3

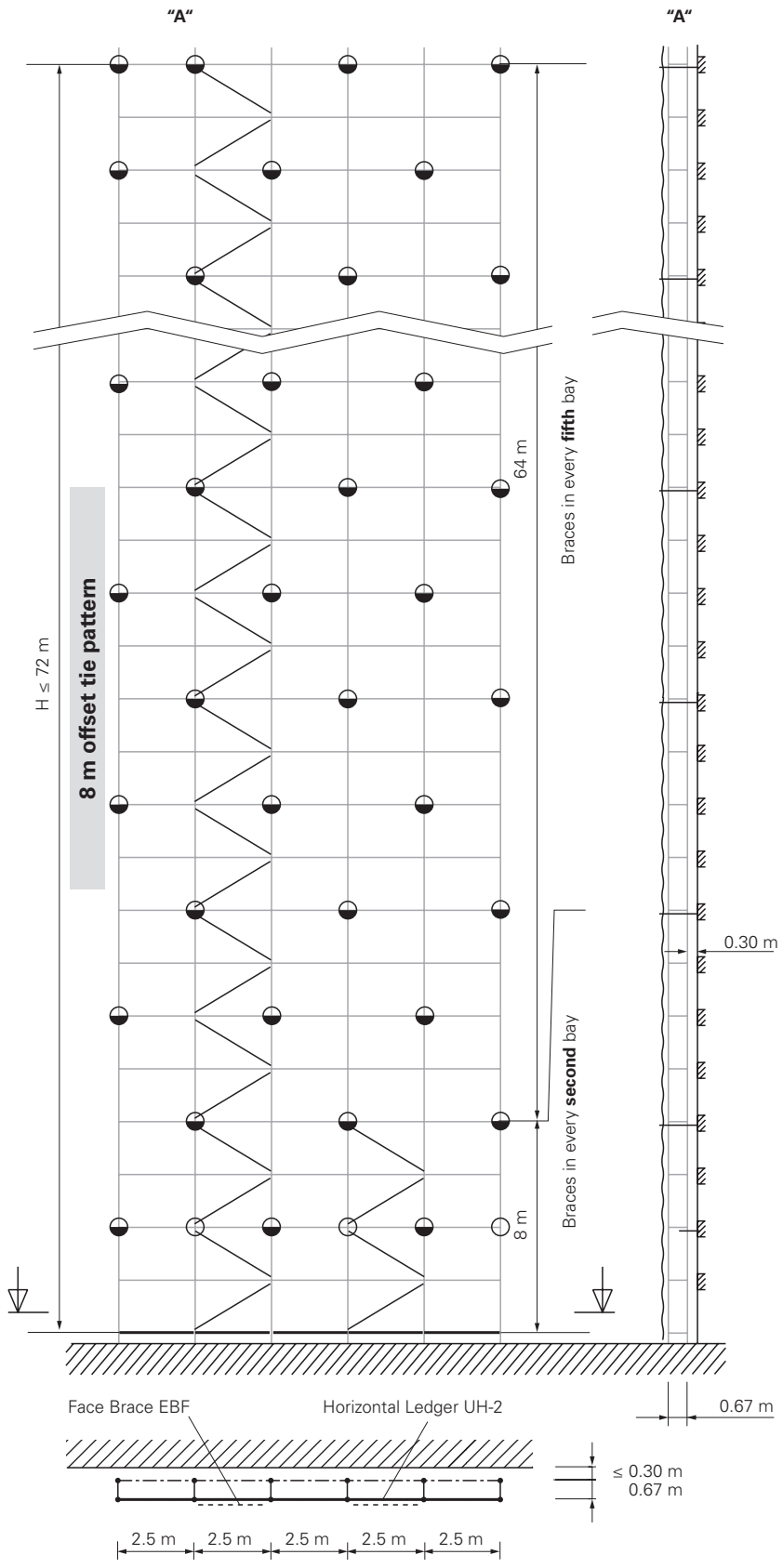
Bay width 2.50 m
Scaffold height 64 m to 72 m

Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 72 m
  - 8 m offset tie pattern,
  - at least three wall ties for every five bays,
  - with 4 m continuous anchoring,
  - anchor the edge post in the topmost scaffold level with a wall tie.

Bracing:
- Face Brace EBF 250-200
  - to 4th scaffold level in every second bay,
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level

Note: lateral protection components not shown.



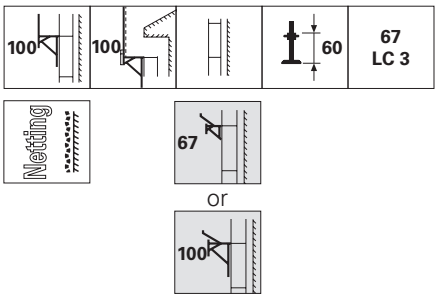
Single-standard wall tie

Wall tie

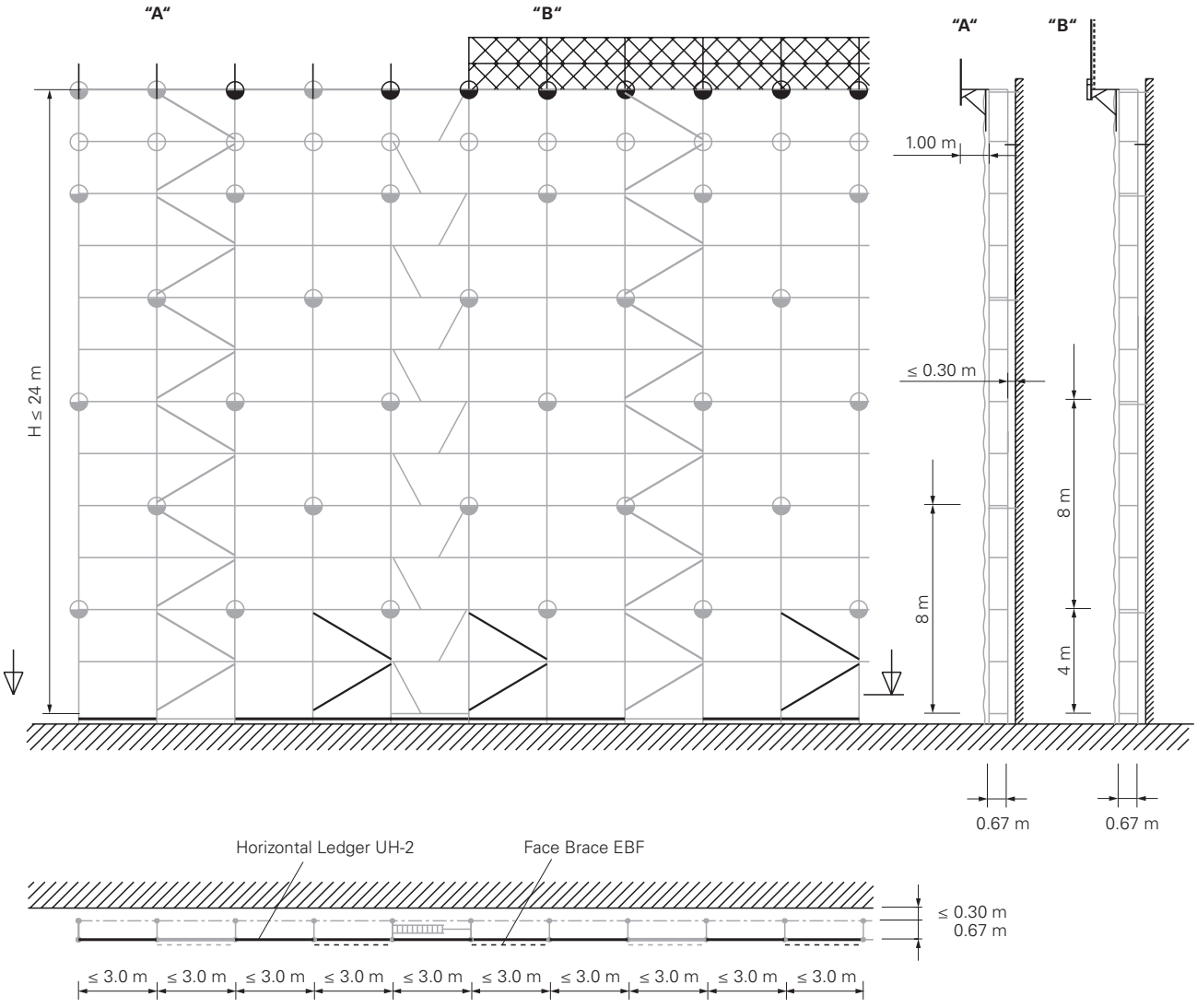
F4 Tie pattern

Frame variation ≤ 24 m

Variation 3.1/LC3
Standard configuration:
netting in front of closed facade.



8 m offset tie pattern



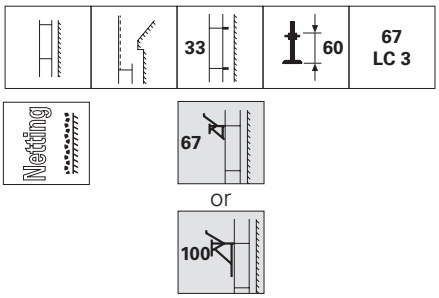
Note: lateral protection components not shown.

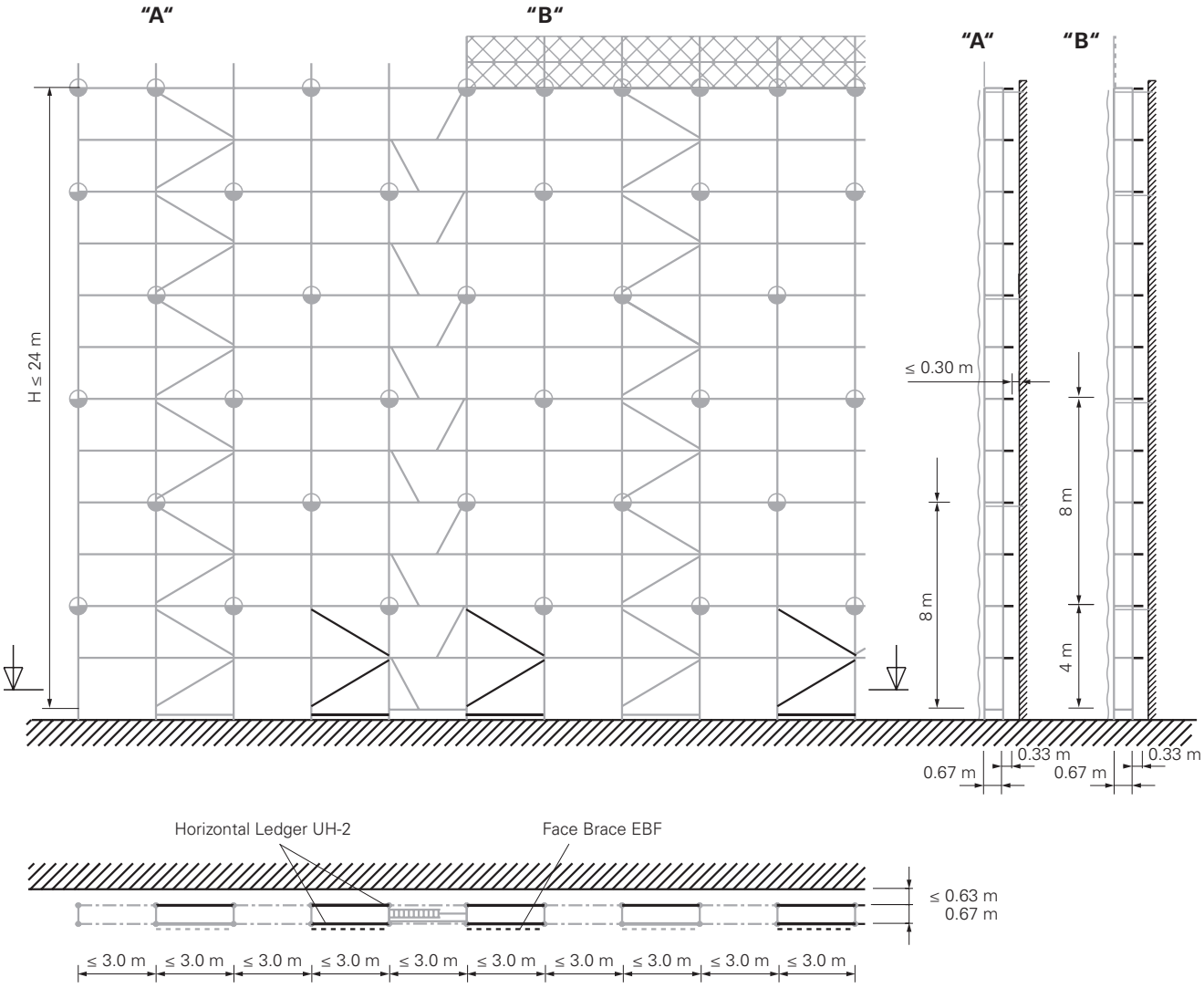
Wall tie

F4 Tie pattern

Frame variation ≤ 24 m

Variation 3.2/LC3
Standard configuration:
netting in front of closed facade.





Note: lateral protection components not shown.

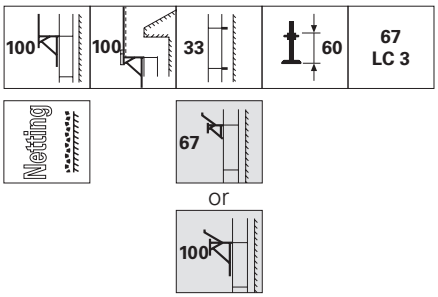
Wall tie

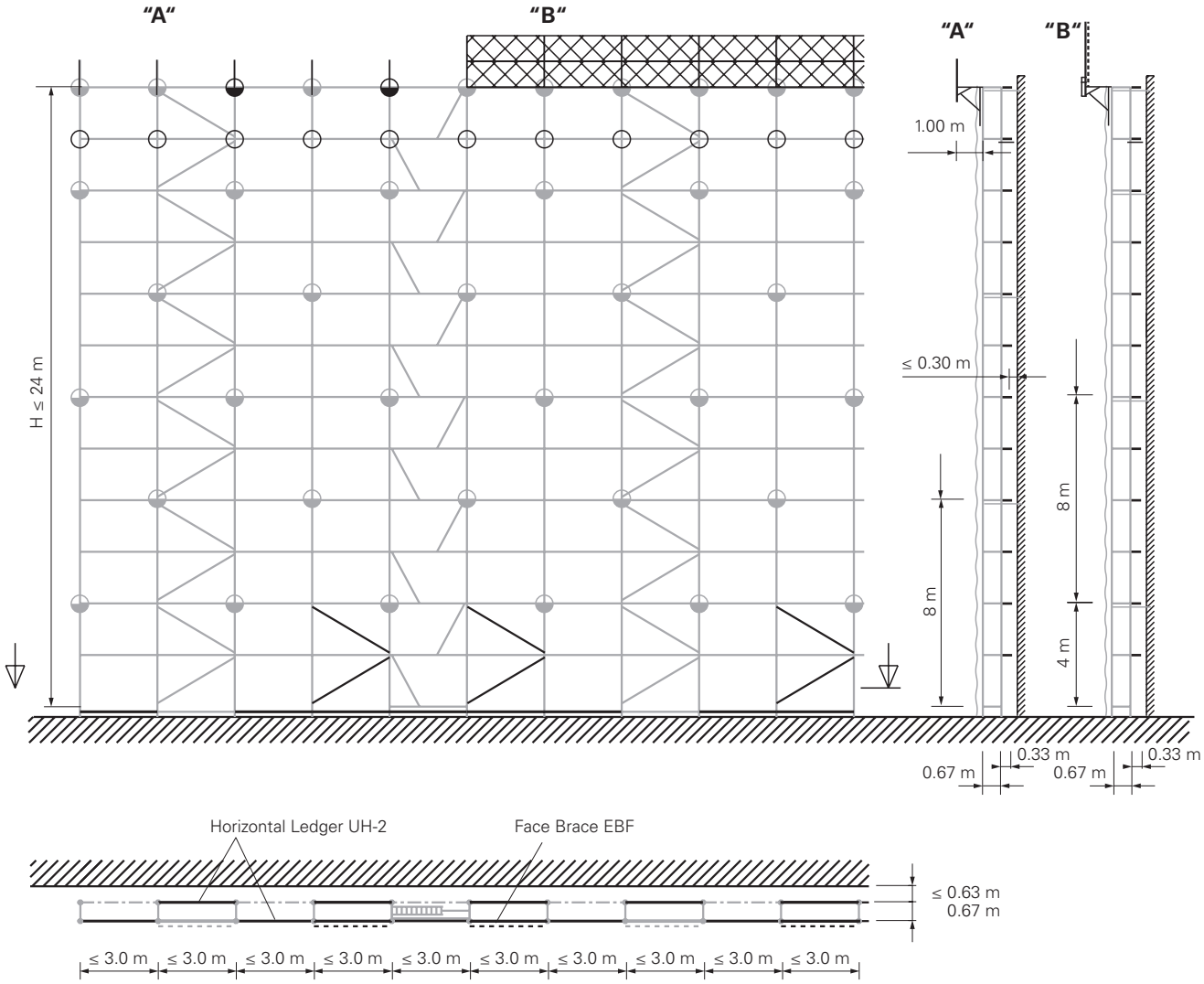
With protection roof:
Fit Horizontal Ledger UH-2 on the outside of all bays

F4 Tie pattern

Frame variation ≤ 24 m

Variation 3.3/LC3
Standard configuration:
netting in front of closed facade.





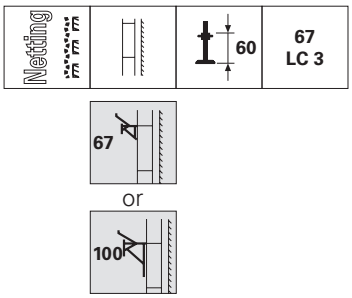
Note: lateral protection components not shown.

Single-standard wall tie
Wall tie

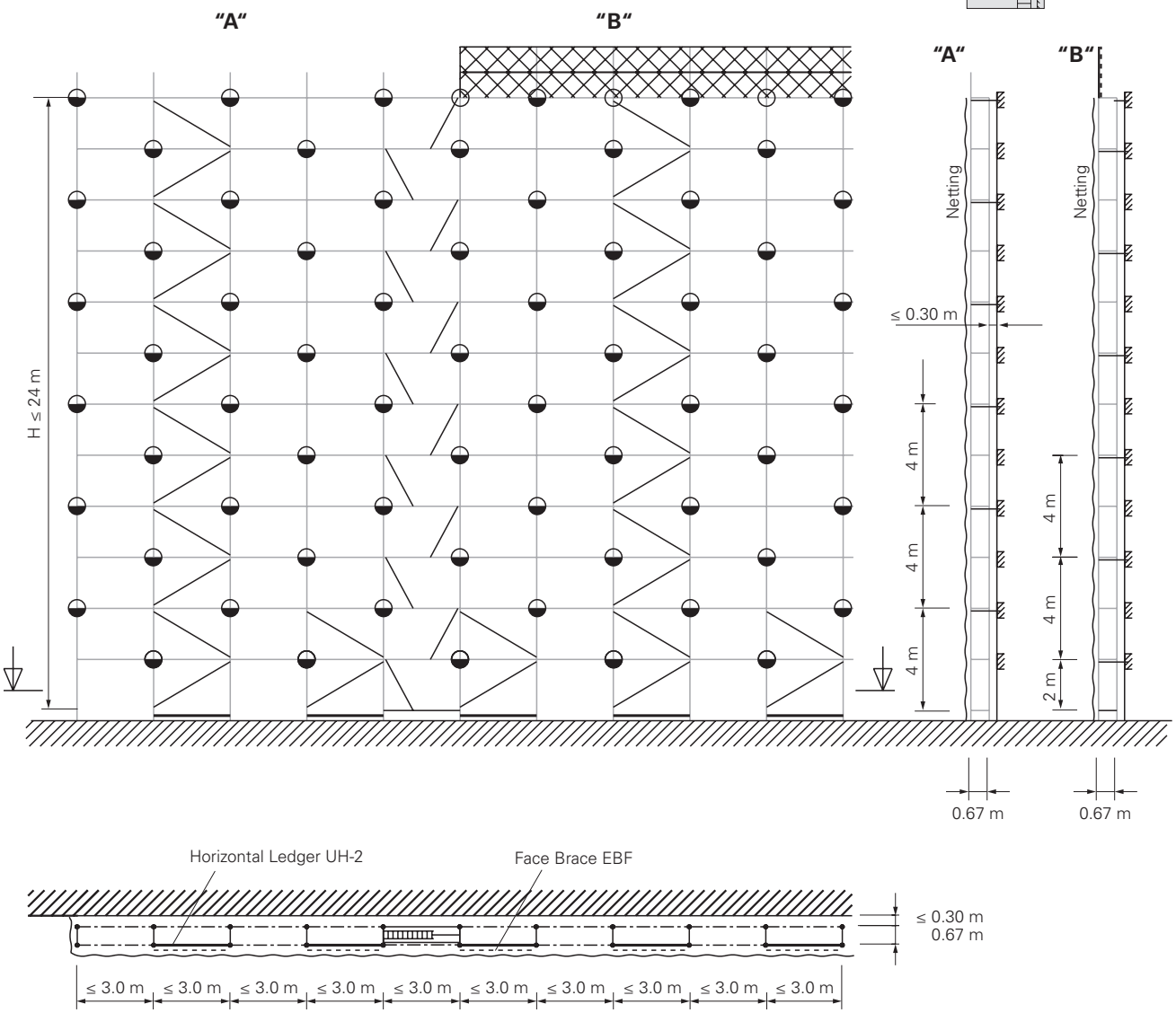
F4 Tie pattern

Frame variation ≤ 24 m

Basic variation 4a/LC3
Standard configuration:
netting in front of open facade.



4 m offset tie pattern



Note: lateral protection components not shown.

⊕ Single-standard wall tie
⊕ Wall tie

F4 Tie pattern

Frame variation ≤ 60 m

Basic variation 4a/LC3

Bay width 3.00 m
Scaffold height 24 m to 60 m

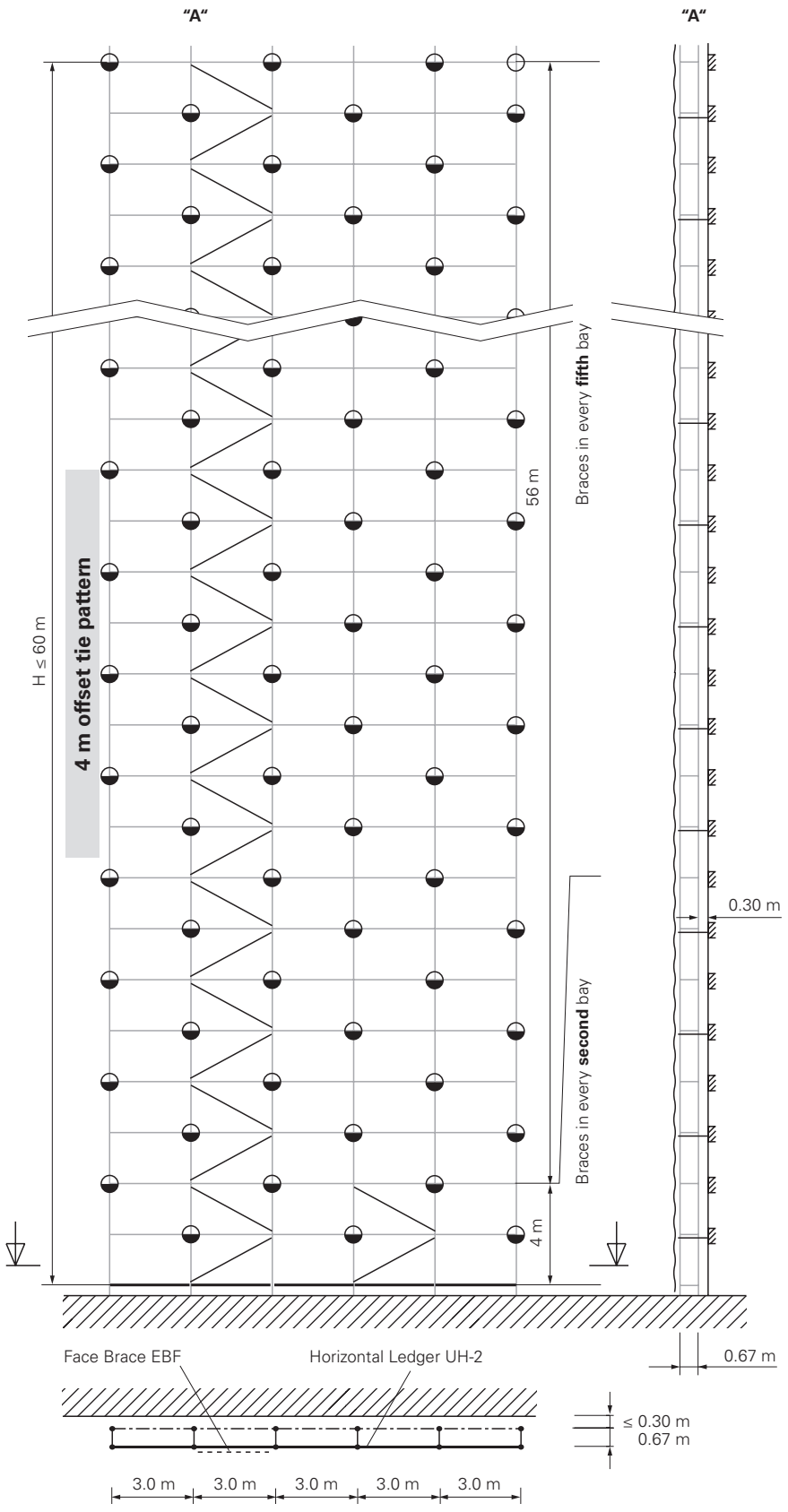
Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 60 m
  - 4 m offset tie pattern,
  - at least three wall ties for every five bays,
  - anchor the edge post in the topmost scaffold level with a single-leg wall tie.

Bracing:
- Face Brace EBF 300-200
  - until 2nd scaffold level in every second bay,
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level

Note: lateral protection components not shown.

Single-standard wall tie
Wall tie



F4 Tie pattern

Frame variation ≤ 72 m

Basic variation 4a/LC3

Bay width 2.50 m
Scaffold height 24 m to 72 m

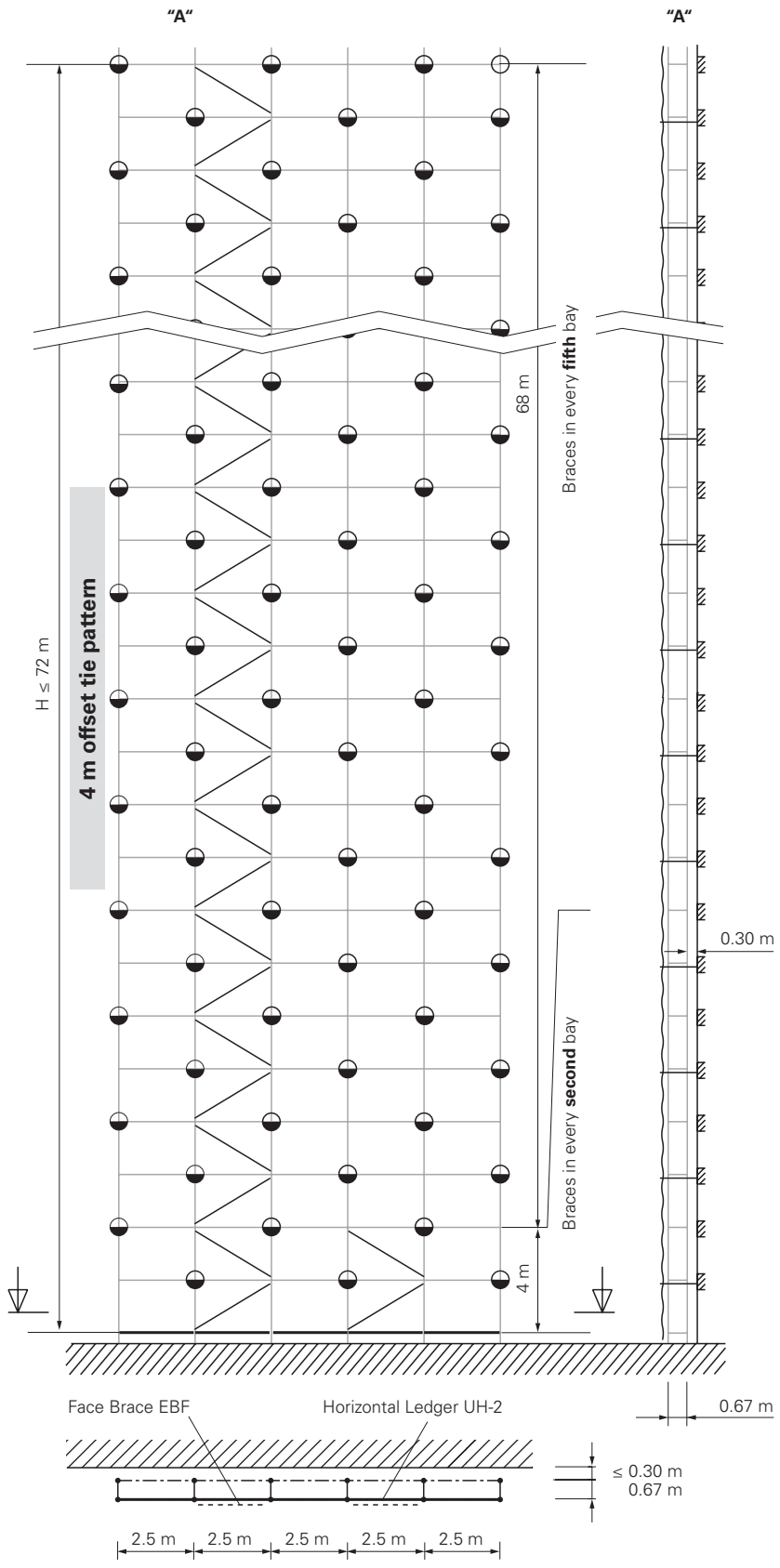
Spindle extension
Max. 30 cm

Tie pattern
- from 0 – 72 m
  - 4 m offset tie pattern,
  - at least three wall ties for every five bays,
  - anchor the edge post in the topmost scaffold level with a single-leg wall tie.

Bracing:
- Face Brace EBF 250-200
  - until 2nd scaffold level in every second bay,
  - in every fifth bay up to topmost scaffold level.
- Horizontal ledger
  - on the outside of every scaffold bay in the base level

Note: lateral protection components not shown.

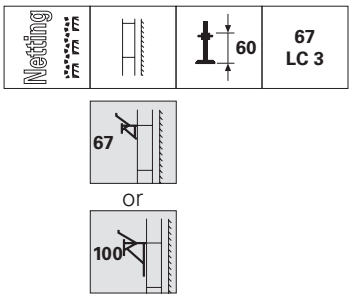
Single-standard wall tie
Wall tie



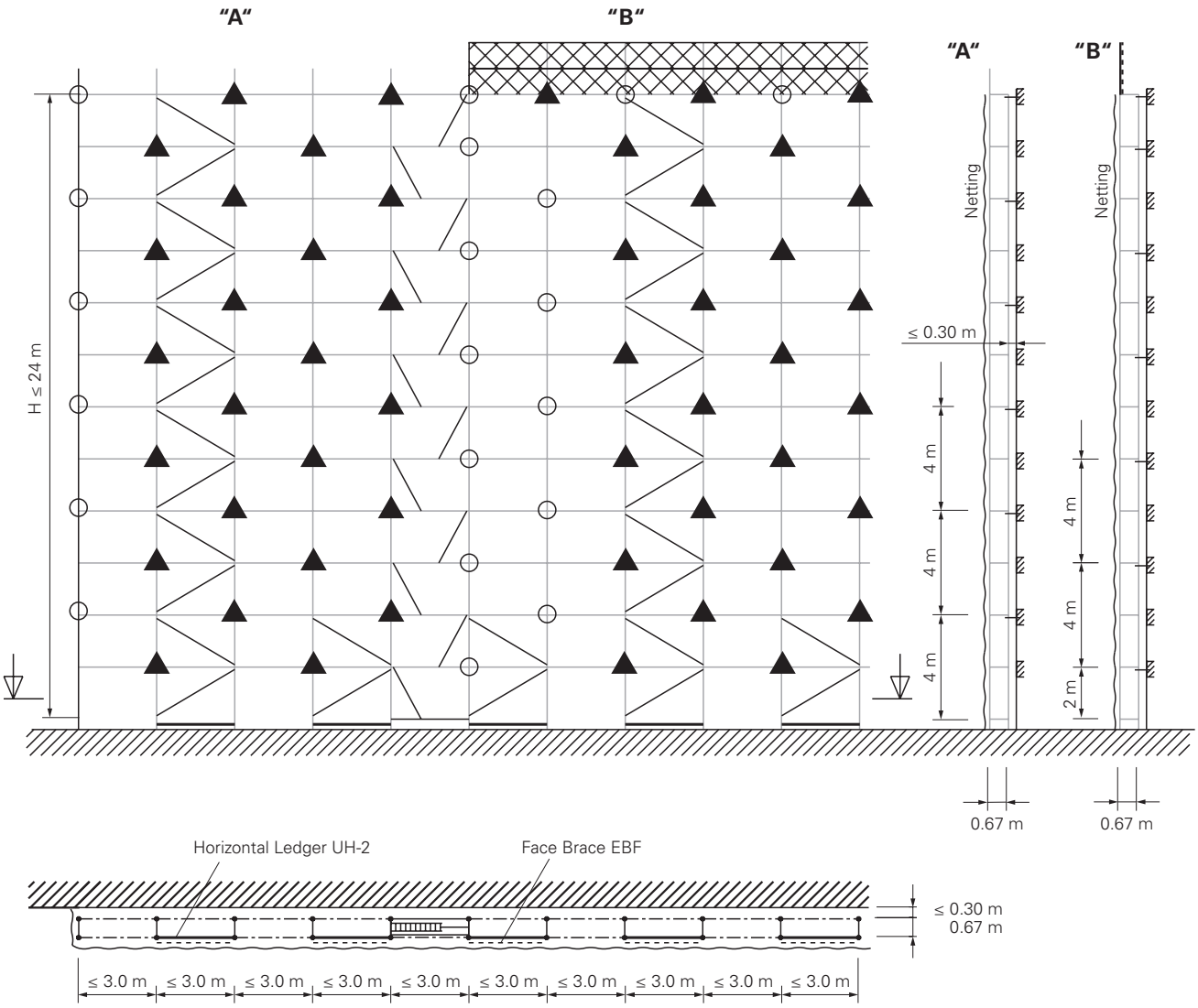
F4 Tie pattern

Frame variation ≤ 24 m

Basic variation 4b/LC3
Standard configuration:
netting in front of open facade.



4 m offset tie pattern



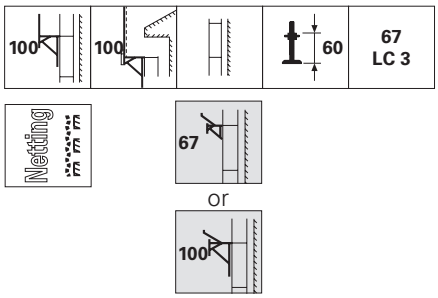
Note: lateral protection components not shown.

- Single-standard wall tie
- Triangulated tie

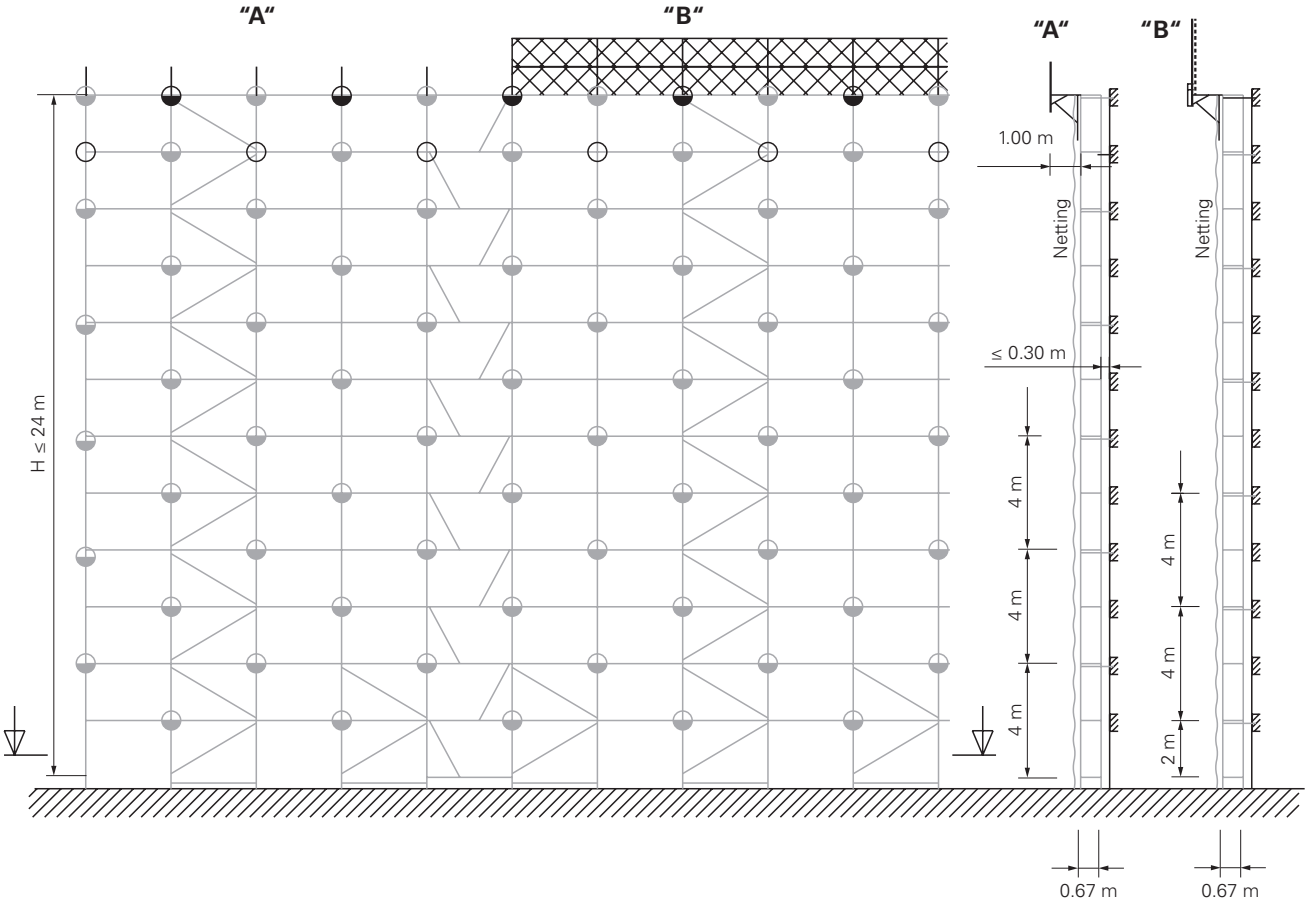
F4 Tie pattern

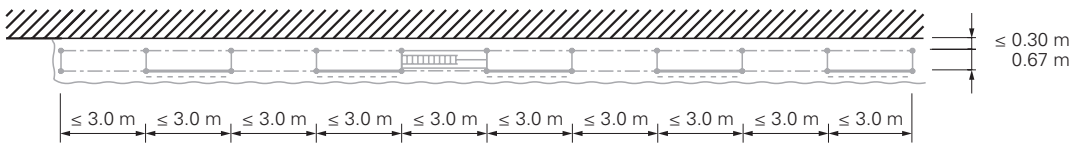
Frame variation ≤ 24 m

Variation 4.1/LC3
Standard configuration:
netting in front of open facade.



4 m offset tie pattern





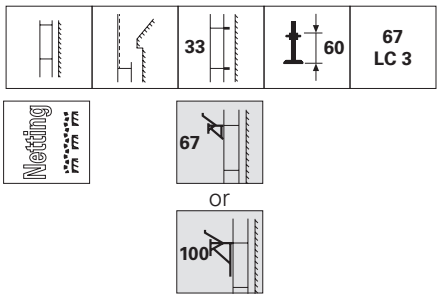
Note: lateral protection components not shown.

Wall tie

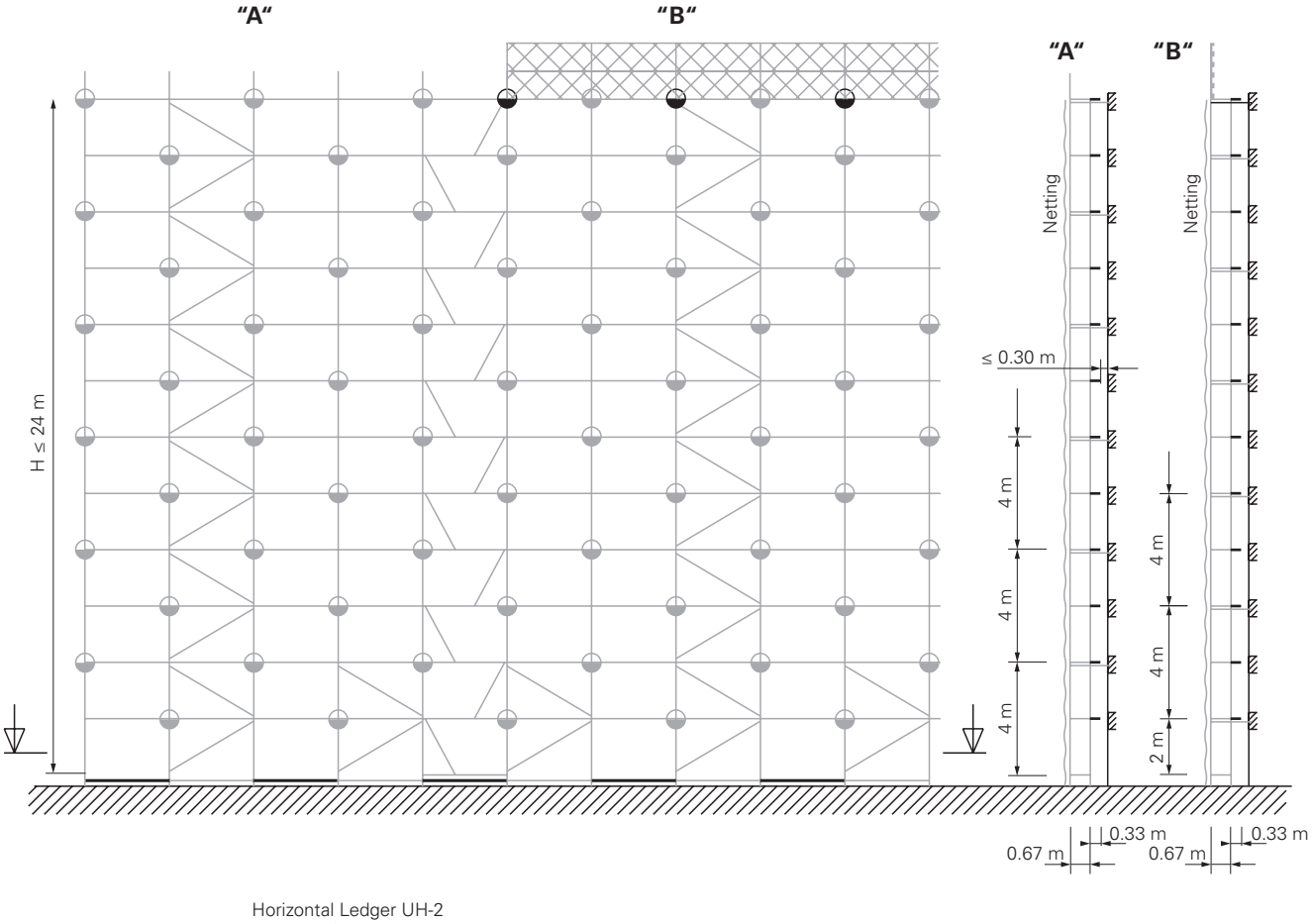
F4 Tie pattern

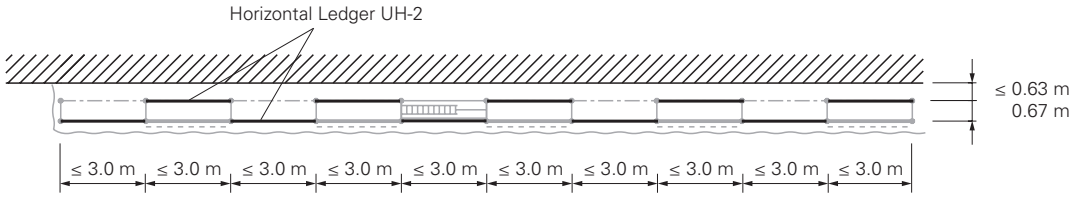
Frame variation ≤ 24 m

Variation 4.2/LC3
Standard configuration:
netting in front of open facade.



4 m offset tie pattern





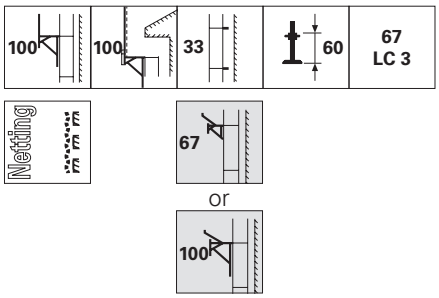
Note: lateral protection components not shown.

Wall tie

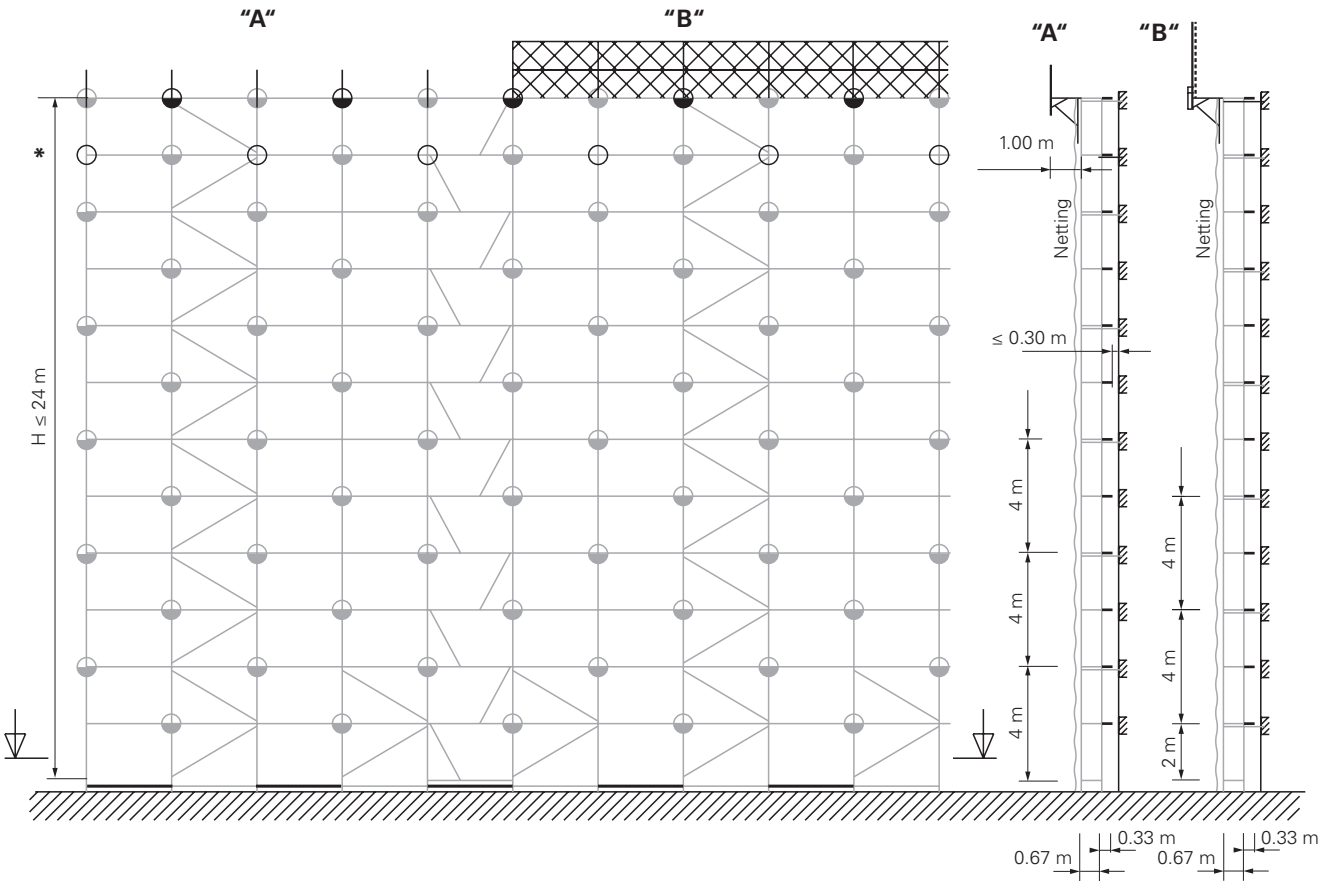
F4 Tie pattern

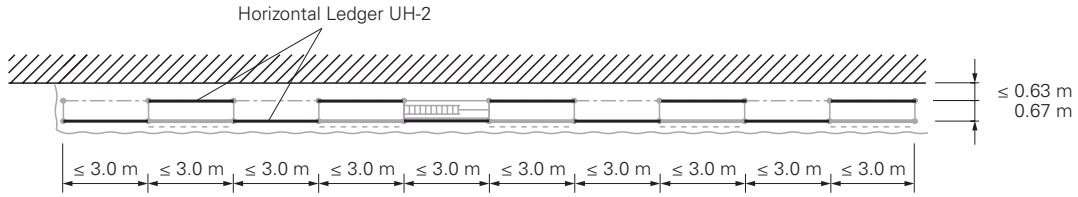
Frame variation ≤ 24 m

Variation 4.3/LC3
Standard configuration:
netting in front of open facade.



4 m offset tie pattern





Note: lateral protection components not shown.

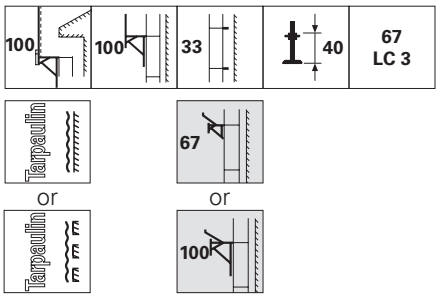
⊕ Single-standard wall tie
⊕ Wall tie

*** With offset tie position (z ≤ 30 cm)**
Anchor the scaffold level immediately below the external console bracket level in each frame with wall ties.

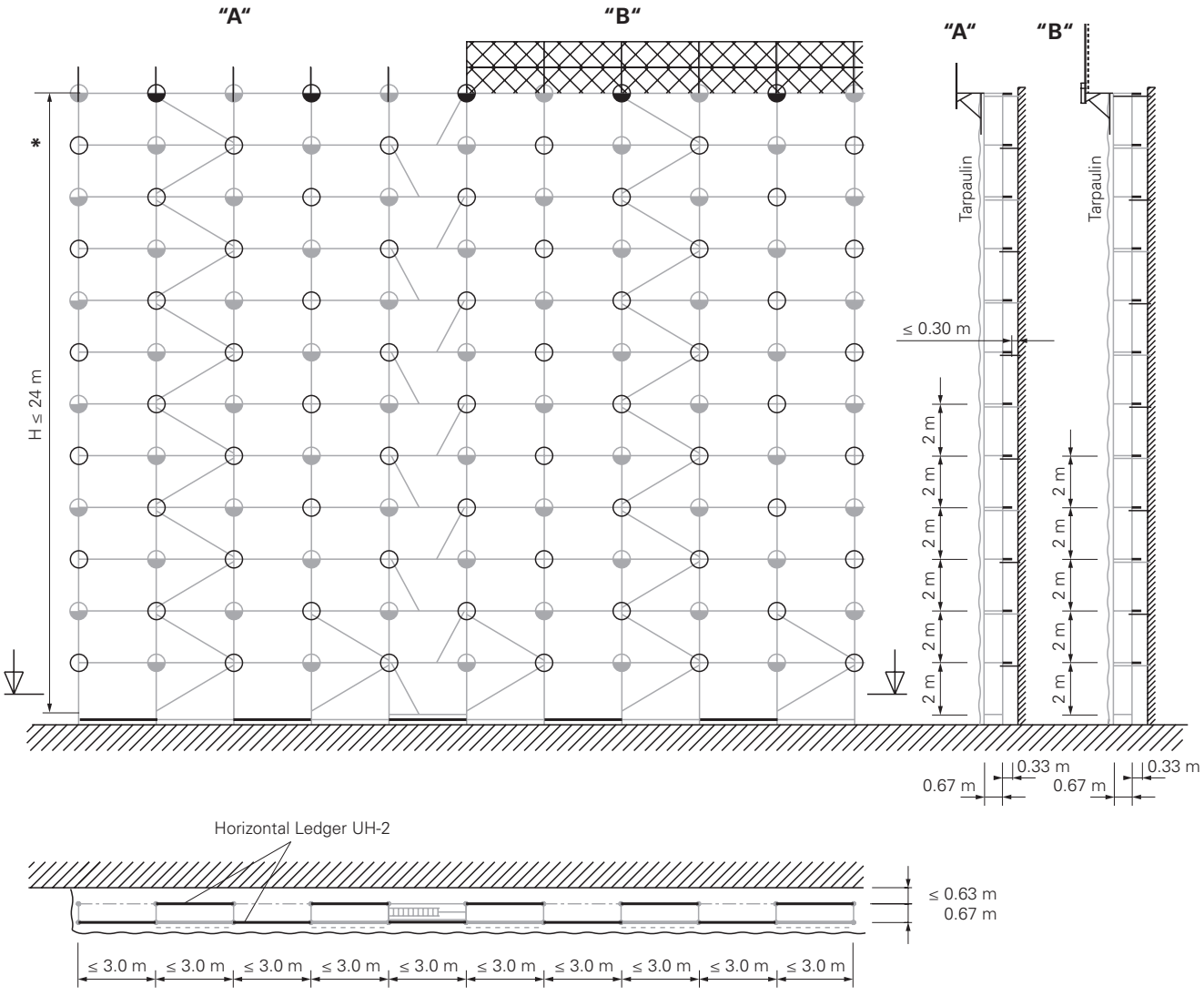
F4 Tie pattern

Frame variation ≤ 24 m

Variation 4.4/LC3
Standard configuration:
Tarpaulin in front of closed or open facade.



2 m tie pattern



Note: lateral protection components not shown.

⊕ Single-standard wall tie
⊕ Wall tie

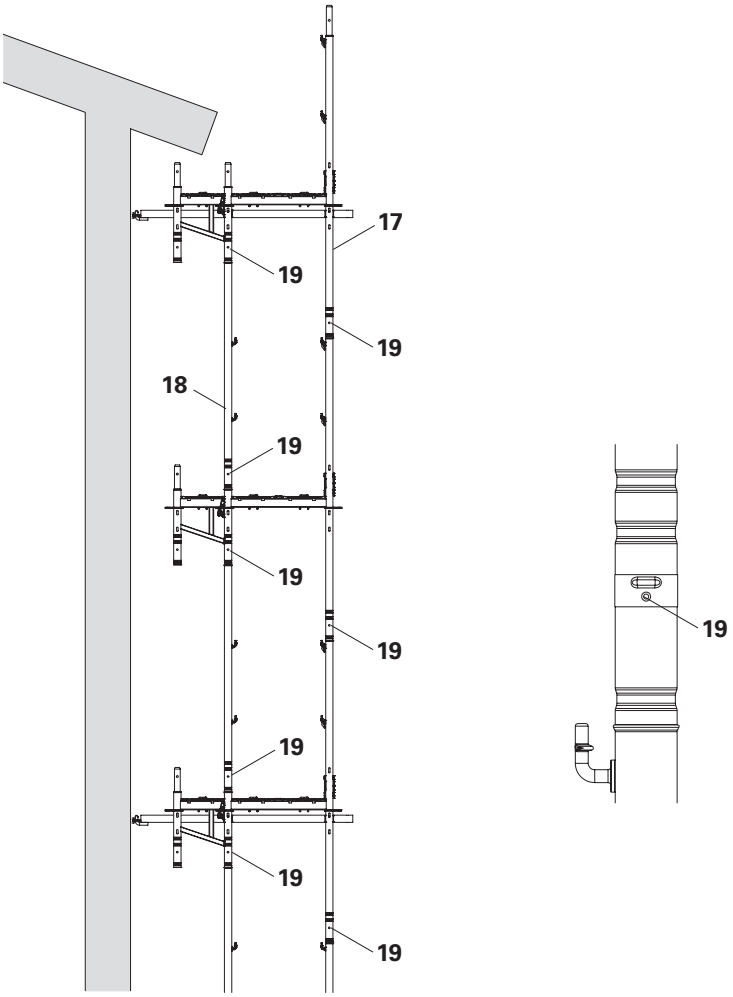
*** With offset tie position (z ≤ 30 cm)**
Anchor the scaffold level immediately below the external console bracket level in each frame with wall ties.

F4 Tie pattern

F5 Uplifting wind forces

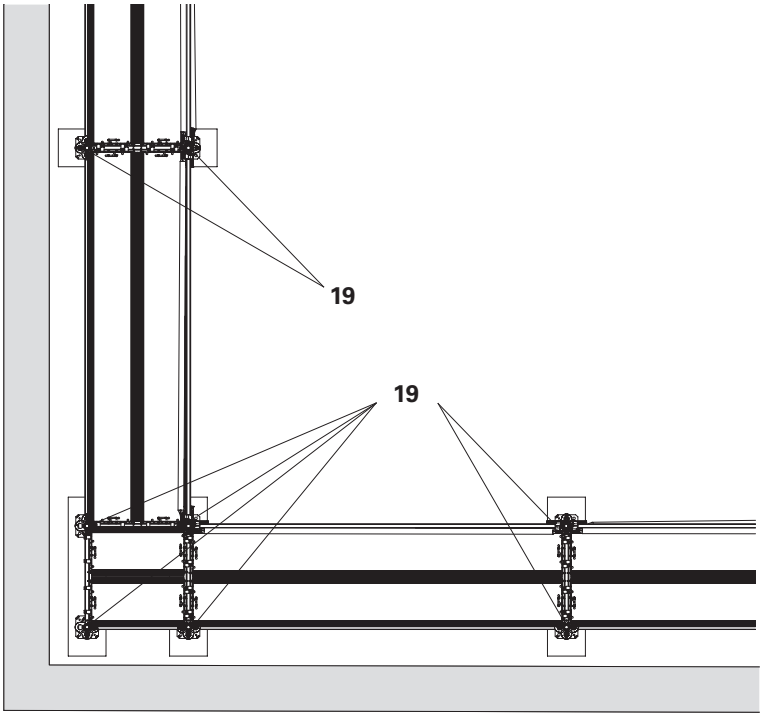
For structures with roof inclination ≤ 20°, secure scaffolds to provide protection against lifting wind forces.

For this, secure all scaffold 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 scaffold 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.

Anchoring with wall ties

PERI UP Easy 100, use in Load Class 4 (3.0 kN/ m²)									
			Tie forces for (+ = tensile force/– = compressive force)						
			Standard configuration for open facade			Standard configuration for *closed facade			
Tie pattern	Cladding	Bay length [m]	Full-width wall tie			Full-width wall tie			
			$A_{\perp}$ [kN]		$A_{\parallel}$ [kN]	$A_{\perp}$ [kN]		$A_{\parallel}$ [kN]	
8.0 m offset	without	2.00	+/-3.3		2.7	+/-1.1		2.7	
		2.50	+/-3.8		2.7	+/-1.3		2.7	
		3.00	+/-4.3		2.7	+/-1.4		2.7	
	with netting	2.00	not possible because of the wind forces			+/-2.5		2.1	
		2.50				+/-3.2		2.1	
		3.00				+/-3.8		2.1	
4.0 m	without	2.00	+/-1.7		2.7	+/-0.6		2.7	
		2.50	+/-1.9		2.7	+/-0.6		2.7	
		3.00	+/-2.2		2.7	+/-0.7		2.7	
	with netting	2.00	not possible			+/-1.3		2.1	
		2.50				+/-1.6		2.1	
		3.00				+/-1.9		2.1	
4.0 m offset	with netting	2.00	+/-3.2		2.2	+/-1.1		2.2	
		2.50	+/-4.0		2.2	+/-1.3		2.2	
		3.00	+/-4.8		2.2	+/-1.6		2.2	
	with tarpaulin	2.00	not possible			not possible			
		2.50							
		3.00							
2.0 m	with tarpaulin	2.00	-4.4	+4.0	3.2	-4.4	+1.1	3.2	
		2.50	-5.5	+5.0	3.2	-5.5	+1.4	3.2	
		3.00	-6.7	+6.0	3.2	-6.7	+1.7	3.2	

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:
$A_n/A_g = 1.0$: closed facade
$A_n/A_g = 0.4 \leq x < 1.0$: open facade

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

Anchoring with triangulated ties or single-standard wall ties

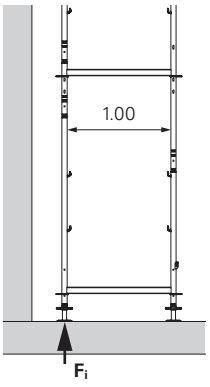
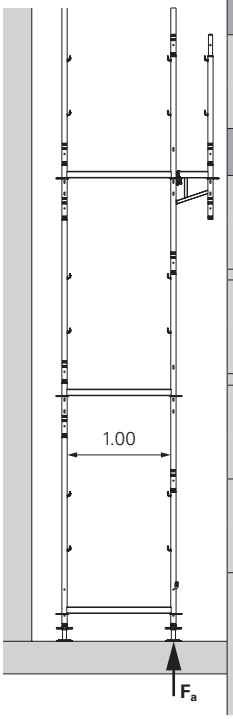
PERI UP Easy 100, use in Load Class 4 (3.0 kN/ m²)									
			Tie forces for (+ = tensile force/– = compressive force)						
			Standard configuration for open facade			Standard configuration for *closed facade			
			Single-standard wall tie	Triangulated tie (per anchoring point)		Single-standard wall tie	Triangulated tie (per anchoring point)		
Tie pattern	Cladding	Bay length [m]	⌖ $A_{\perp}$ [kN]	✦ $A'_{\perp}$ [kN]	✦ $A'_{\parallel}$ [kN]	⌖ $A_{\perp}$ [kN]	✦ $A'_{\perp}$ [kN]	✦ $A'_{\parallel}$ [kN]
8.0 m offset	without	2.00	+/-2.4	+/-3.6	3.6	+/-0.8	+/-3.8	3.8
		2.50	+/-2.8	+/-3.7	3.7	+/-0.9	+/-3.8	3.8
		3.00	+/-3.2	+/-3.8	3.8	+/-1.1	+/-3.8	3.8
	with netting	2.00	not possible because of the wind forces			+/-2.0	+/-3.0	3.0
		2.50				+/-2.5	+/-3.0	3.0
		3.00				+/-3.0	+/-3.0	3.0
4.0 m	without	2.00	+/-1.2	+/-3.6	3.6	+/-0.4	+/-3.8	3.8
		2.50	+/-1.4	+/-3.7	3.7	+/-0.5	+/-3.8	3.8
		3.00	+/-1.6	+/-3.8	3.8	+/-0.5	+/-3.8	3.8
	with netting	2.00	not possible			+/-1.0	+/-3.0	3.0
		2.50				+/-1.3	+/-3.0	3.0
		3.00				+/-1.5	+/-3.0	3.0
4.0 m offset	with netting	2.00	+/-2.7	+/-2.4	2.4	+/-0.9	+/-2.5	2.5
		2.50	+/-3.4	+/-3.0	3.0	+/-1.1	+/-3.2	3.2
		3.00	+/-4.1	+/-3.6	3.6	+/-1.4	+/-3.8	3.8
	with tarpaulin	2.00	not possible			not possible		
		2.50						
		3.00						
2.0 m	with tarpaulin	2.00	-4.0 / +3.6	+/-2.6	2.6	-4.0 / +1.0	+/-2.6	2.6
		2.50	-5.0 / +4.5	+/-3.2	3.2	-5.0 / +1.1	+/-3.2	3.2
		3.00	-6.0 / +5.4	+/-3.9	3.9	-6.0 / +1.3	+/-3.9	3.9

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:
$A_n/A_g = 1.0$: closed facade
$A_n/A_g = 0.4 \leq x < 1.0$: open facade

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

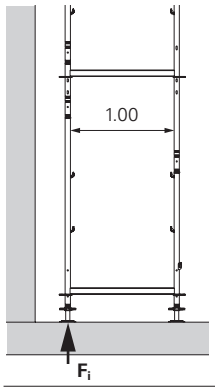
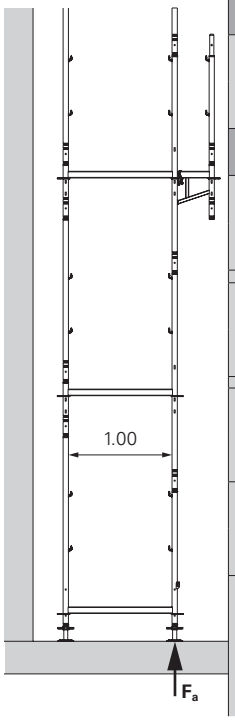
G2 Support forces

Basic scaffold – Load Class 4

PERI UP Easy 100, use 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	2.5	10.9	9.6	8.2
		3.0	12.7	11.3	9.7
	with Internal Console Bracket UC 33	2.5	16.8	14.7	12.6
	with Internal Console Bracket ECM 33	3.0	19.7	17.4	15.0
	**Outer leg**				
			F_a [kN]	**F_a** [kN]	**F_a** [kN]
	without external console bracket	2.5	14.0	11.9	9.9
		3.0	16.4	14.1	11.8
			additional to F_a [kN]		
	with external console bracket ECM 33	2.5	1.9		
		3.0	2.3		
	Protection panel (in addition to console bracket or frame)	2.5	0.3		
		3.0	0.3		
	Protection roof on Console Bracket ECM 67 (incl. Console Bracket ECM 67)	2.5	0.8		
		3.0	1.0		
	Protection roof on Console Bracket ECM 100 (incl. Console Bracket ECM 100)	2.5	1.0		
		3.0	1.2		

G2 Support forces

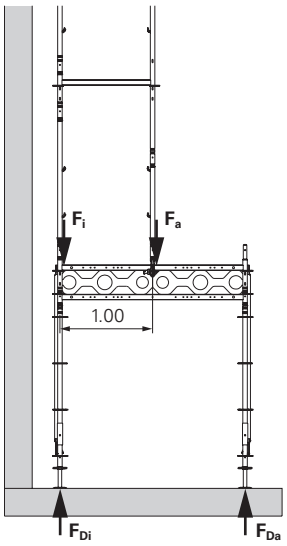
Basic scaffold – Load Class 3

PERI UP Easy 100, use in Load Class 3 (2.0 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	2.5	9.0	7.7	6.3
		3.0	10.5	9.0	7.5
	with Internal Console Bracket UC 33	2.5	13.7	11.6	9.5
	with Internal Console Bracket ECM 33	3.0	15.9	13.6	11.2
	**Outer leg**				
			F_a [kN]	**F_a** [kN]	**F_a** [kN]
	without external console bracket	2.5	12.1	10.1	8.0
		3.0	14.1	11.8	9.5
			additional to F_a [kN]		
	with external console bracket ECM 33	2.5	1.9		
		3.0	2.3		
	Protection panel (in addition to console bracket or frame)	2.5	0.3		
		3.0	0.3		
	Protection roof on Console Bracket ECM 67 (incl. Console Bracket ECM 67)	2.5	0.8		
		3.0	0.9		
	Protection roof on Console Bracket ECM 100 (incl. Console Bracket ECM 100)	2.5	1.0		
		3.0	1.2		

Pavement gantries/bridgings

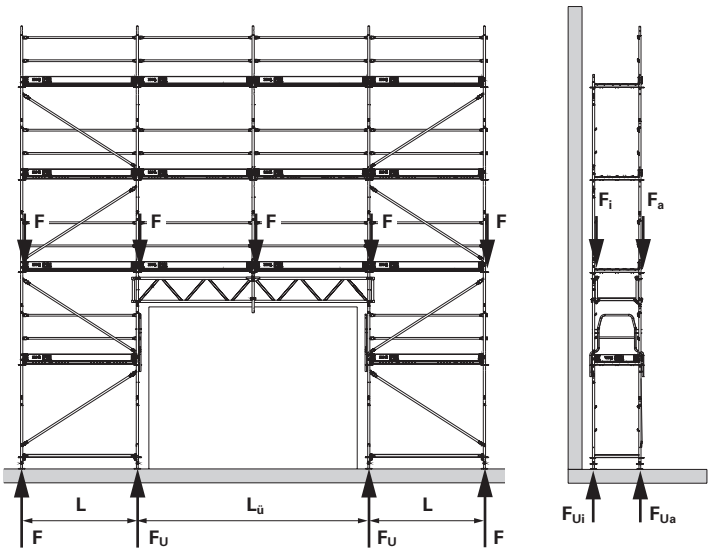
PERI UP Easy 100, use in load class 4 (3.0 kN/m²)

Pavement gantry



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

Bridgings



Bay length L [m]	F_{Ua} [kN]	F_{Ui} [kN]
	$L_ü$ = 4.0 m	
2.50	1.35 x F_a	1.35 x F_i
3.00	1.25 x F_a	1.25 x F_i
	$L_ü$ = 5.0 m	
2.50	1.50 x F_a	1.50 x F_i
3.00	1.40 x F_a	1.40 x F_i
	$L_ü$ = 6.0 m	
2.50	1.70 x F_a	1.70 x F_i
3.00	1.50 x F_a	1.50 x F_i

Select F_a and Fi for appropriate bay length L.

Overview of requirements for formwork girders
Load Class 4

LC4 – 3.00 kN/m²			PERI UP Easy 100: LC4 – 3.0 kN/m² bridging overview																															
	Span of the formwork girder		5 m												6 m																			
	Formwork girder		Steel ULS								Aluminium ULA				Steel ULS									Aluminium ULA									
	Type		50 /525		50 /625		70 /525		70 /625		50 /525		50 /625		50 /625		70 /625		70 /825			50 /625			70 /625			70 /825					
Spacing of the lateral holders a [cm]			250	100	250	100	250	100	250	100	250	100	250	100	300	150	100	300	150	100	300	150	100	300	150	100	300	150	100	300	150	100
Permissible Individual load in middle of bay [kN]			15.1	27.2	15.1	27.4	20.7	29.1	20.7	29.1	6.30	15.6	6.30	15.6	8.80	17.5	23.2	12.1	23.5	26.8	12.1	23.5	26.6	3.5	11.5	13.1	5.0	15.7	15.9	5.00	15.7	15.9
Resulting individual load F to be carried by the formwork girder, depending on bay length and equipment		Individual load F [kN] for bay width	Required number of formwork girders, inside and outside																															
Equipment		2.50 m	3.00 m																															
Inner leg without internal console brackets		10.9	12.7	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	2 x	1 x	2 x	1 x	2 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	–	1 x	1 x	–	1 x	1 x	–	1 x	1 x
Inner leg with internal console brackets		16.8	19.7	2 x	1 x	2 x	1 x	1 x	1 x	1 x	1 x	–	2 x	–	2 x	2 x	1 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	–	2 x	2 x	–	2 x	2 x	–	2 x	2 x
Outer leg without attachment parts		14.0	16.4	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	–	1 x	2 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	–	2 x	2 x	–	2 x	2 x	–	2 x	2 x
Outer leg with attachment parts in addition to individual load F	with protection panel on outer leg	0.3	0.3	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	–	1 x	2 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	–	2 x	2 x	–	2 x	2 x	–	2 x	2 x
	and protection roof on console bracket – ECM 67	0.8	1.0	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	–	1 x	–	1 x	–	1 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	–	2 x	2 x	–	2 x	2 x	–	2 x	2 x
	and protection roof on console bracket – ECM 100	1.0	1.2	1 x	1 x	1 x	1 x	1 x	1 x	1 x	1 x	–	1 x	–	1 x	–	1 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	–	2 x	2 x	–	2 x	2 x	–	2 x	2 x
	and with one console bracket; only one on any level, possible on the topmost level with protection panel up to a height of 2.0 m – ECM 33	1.9	2.3	2 x	1 x	2 x	1 x	1 x	1 x	1 x	1 x	–	2 x	–	2 x	–	2 x	1 x	2 x	1 x	1 x	2 x	1 x	1 x	–	2 x	2 x	–	2 x	2 x	–	2 x	2 x

– not permissible within the standard configuration
1x: permissible, with 1x 2 formwork girders
2x: permissible, with 2x 2 formwork girders

Overview of equipment variations

Frame variation ≤ 24 m, Load Class 4

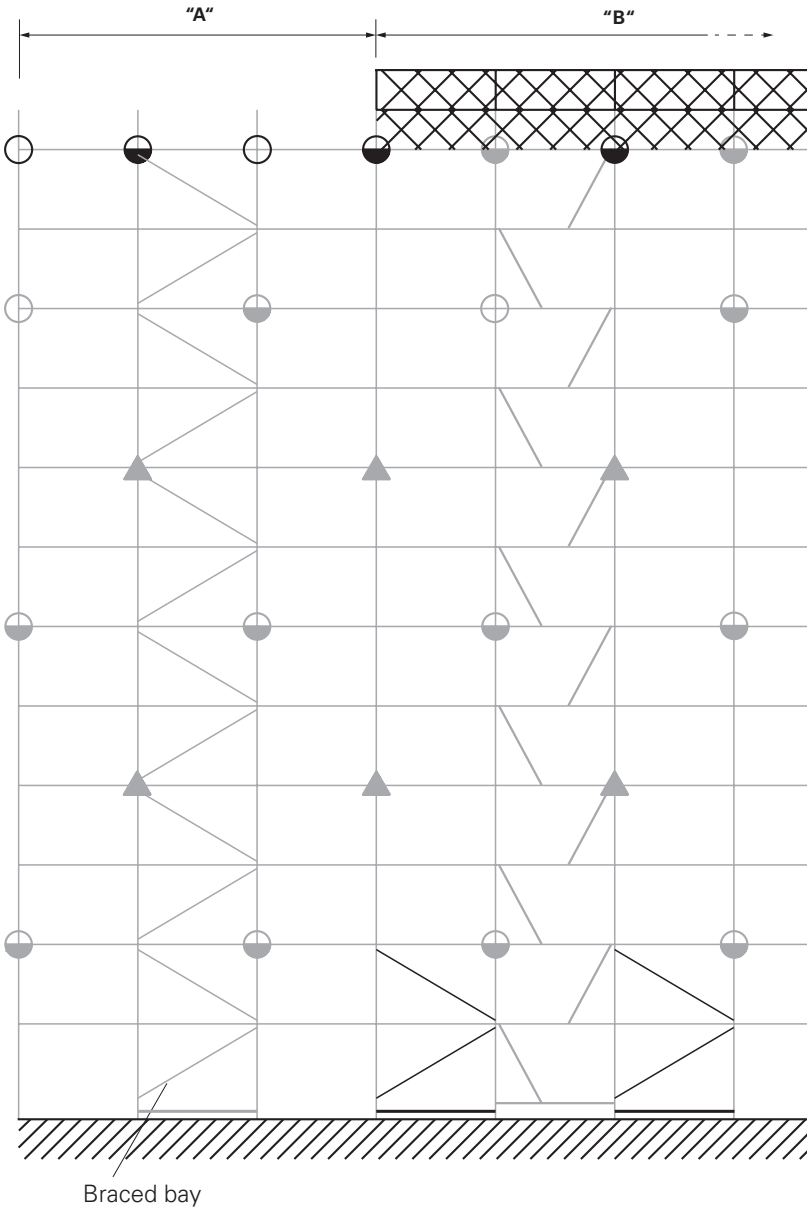
PERI UP Easy 100: LC4 – 3.0 kN/m²: overview of equipment variations

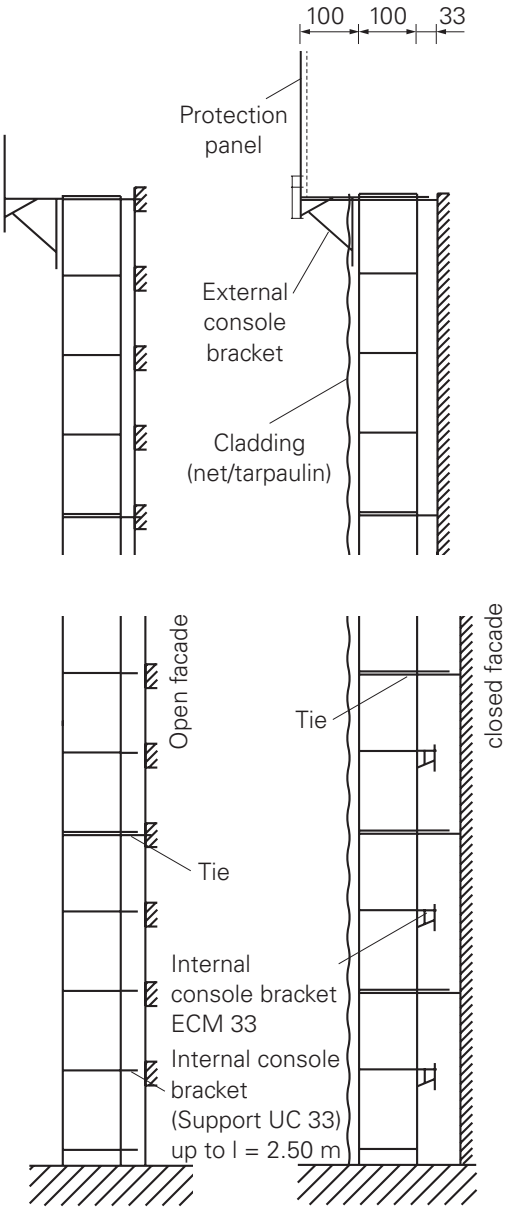
LC4 – 3.00 kN/m²																									
	Page	236	238	239	240	241	242	243	245	246	247	248	249	250	251	252	253	254	255	256	258	259	260	261	
	Alternatively possible with ▲ tie	237						244												257					
Cladding		without														Netting									Tarpaulin
Facade		open														closed				open					closed/ open
Internal Console Brackets ECM 33 or UC 33 for l ≤ 2.50 m		–	–	–	–	–	–	●	●	●	●	●	●	●	●	–	–	●	●	–	–	●	●	–	●
External Console Bracket ECM 33		–	●	–	–	–	●	–	–	●	–	●	–	●	–	–	●	–	●	–	●	–	●	–	●
External Console Bracket ECM 67		–	●	–	–	–	●	–	–	●	–	●	–	●	–	–	●	–	●	–	●	–	●	–	●
External Console Bracket ECM 100		–	●	–	–	–	●	–	–	●	–	●	–	●	–	–	●	–	●	–	●	–	●	–	●
Protection panel on outer leg or console bracket		●	●	●	●	●	●	●	●	●	●	●	●	●	● – topmost level not anchored	●	●	●	●	●	●	●	●	●	●
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		–	–	–	–	●	●	–	–	–	–	–	●	●		–	–	–	–	–	–	–	–	–	–

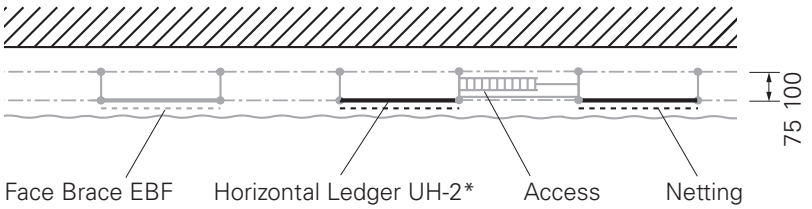
– Not permitted within this structural arrangement
● Possible within this structural arrangement – shown
○ Possible within this structural arrangement – not shown
⊕ Possible with additional local anchoring – not shown
● Possible if scaffold is used in LC3, see Section Easy 67

G4 Tie pattern

Key







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

Tie types

- Single-standard wall tie
- Wall tie
- Triangulated tie

Ties and bracing shown in grey are already included in the respective basic variation.
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.

G4 Tie pattern

Meanings of the pictograms



PERI UP Easy 100
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 UC 33
up to = < 2.50 m



Internal Console Bracket ECM 33

Protection roof



on Console Bracket ECM 67



on Console Bracket ECM 100

Protection panel



on Easy Frame



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 formwork girders

Scaffold with netting



in front of closed facade



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

Scaffold with tarpaulin



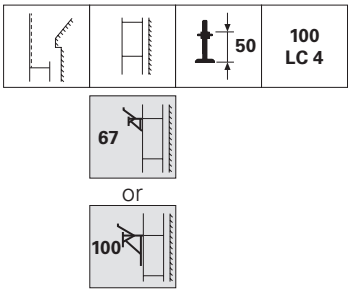
in front of closed facade



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

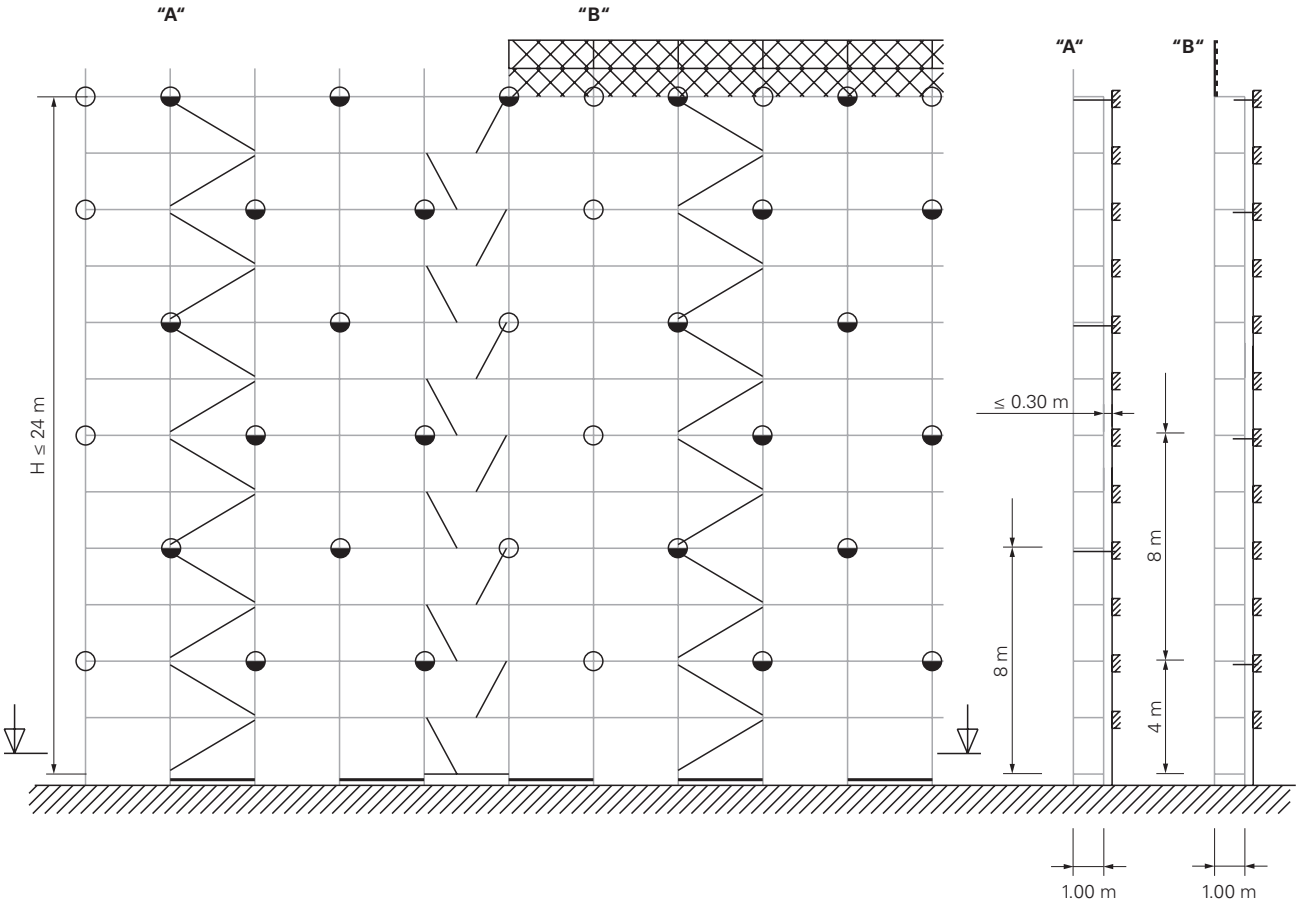
Equipment variations:
possible with additional local ties,
cf. equipment variation tables

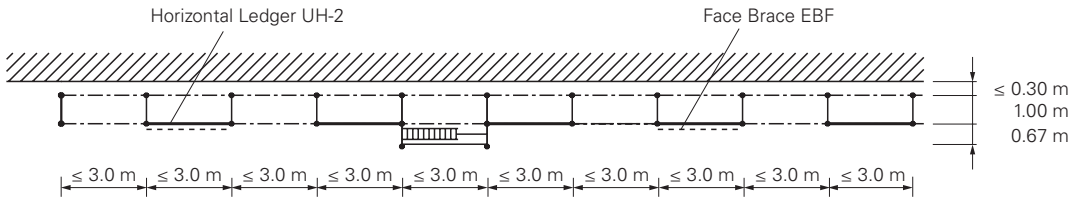
Graphical tie pattern
Frame variation ≤ 24 m



Basic variation 1a/LC4
Standard configuration: unclad scaffold in front of open or closed facade

8 m offset tie pattern





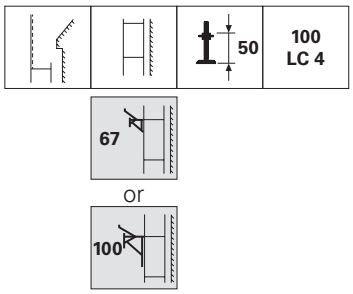
Note: lateral protection components not shown.

- Single-standard wall tie
- Wall tie

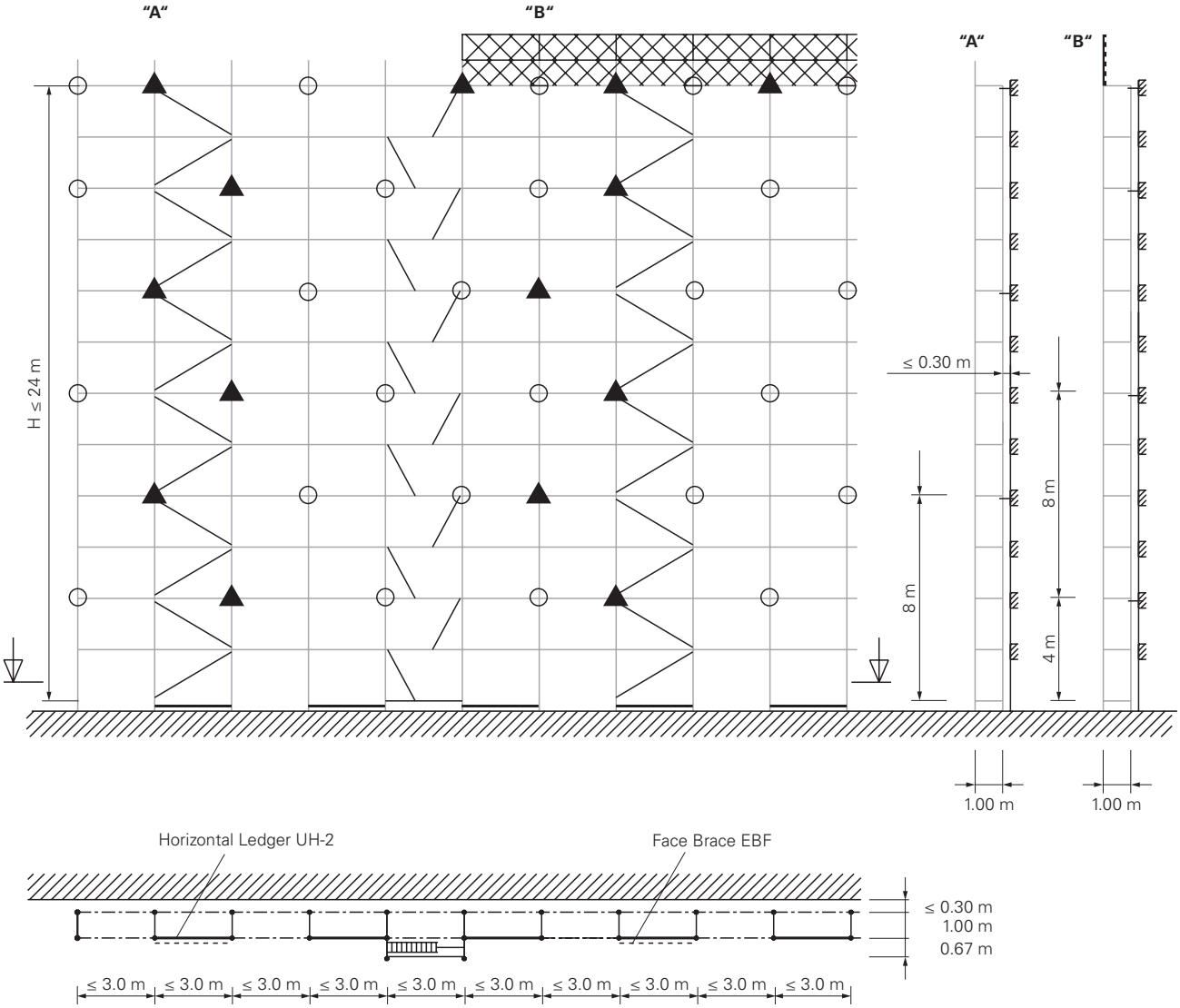
G4 Tie pattern

Frame variation ≤ 24 m

Basic variation 1b/LC4
Standard configuration: unclad scaffold in front of open or closed facade



8 m offset tie pattern



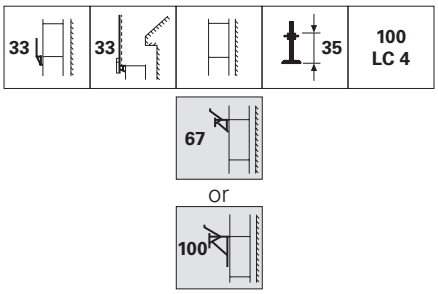
Note: lateral protection components not shown.

⊕ Single-standard wall tie
▲ Triangulated tie

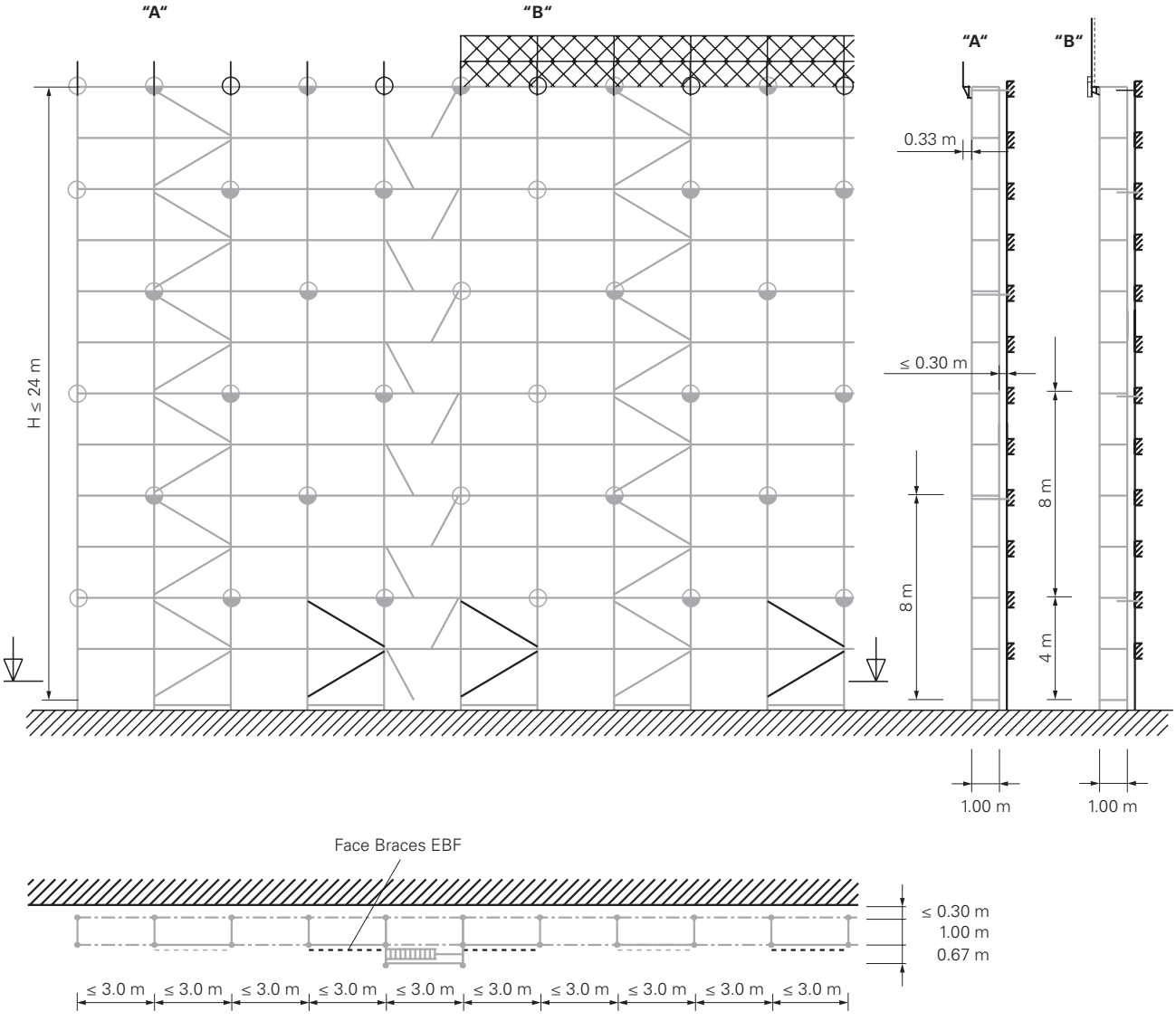
G4 Tie pattern

Frame variation ≤ 24 m

Variation 1.1/LC4
Standard configuration: unclad scaffold in front of open or closed facade



8 m offset tie pattern

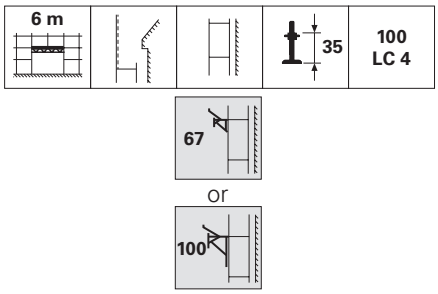


Note: lateral protection components not shown.

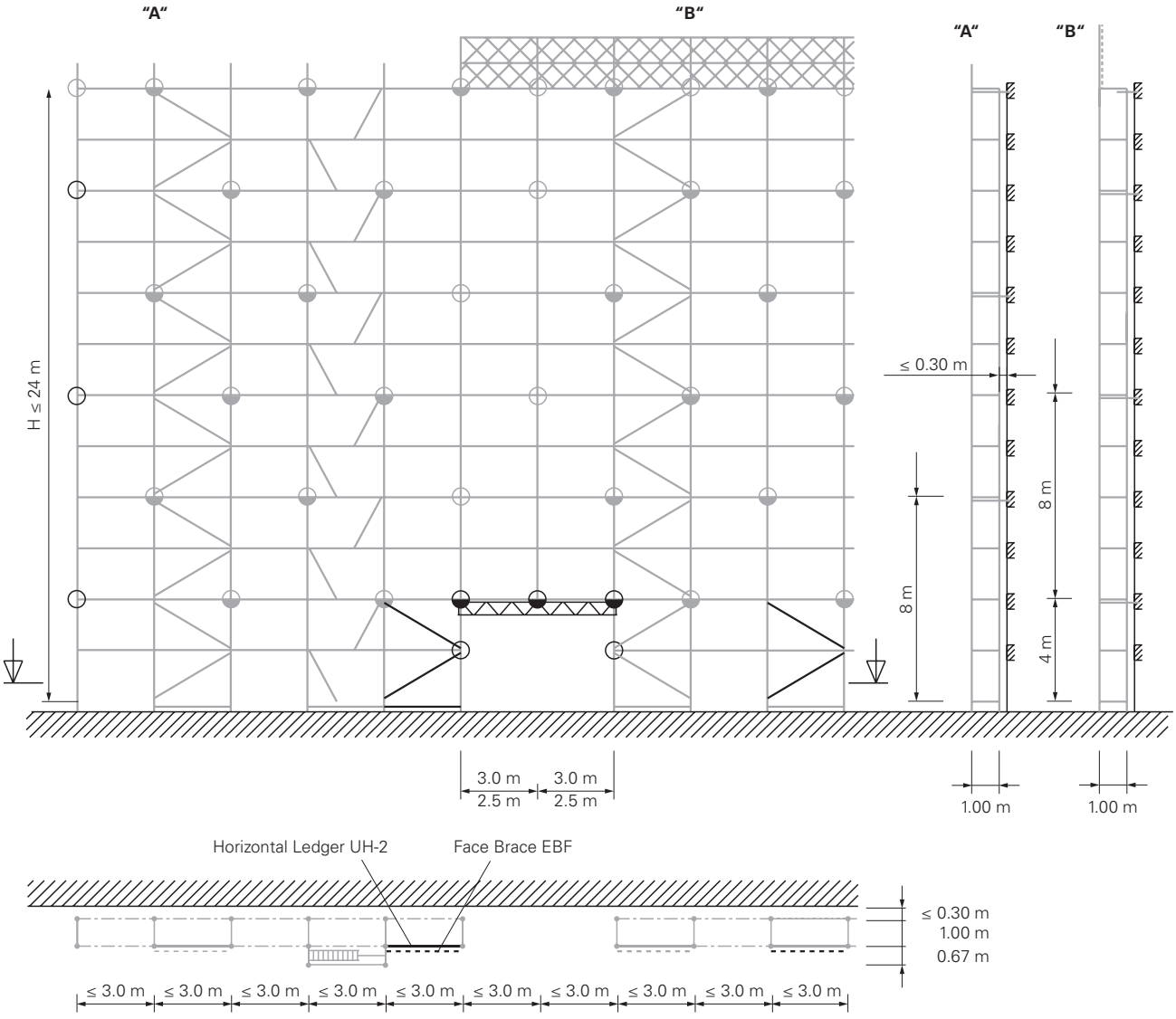
⊕ Single-standard wall tie
⊕ Wall tie

Frame variation ≤ 24 m

Variation 1.2/LC4 – bridging 6 m (5 m)
Standard configuration: unclad scaffold in front of open or closed facade



8 m offset tie pattern



Note: lateral protection components not shown.

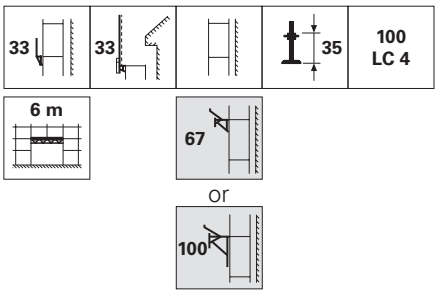
⊕ Single-standard wall tie
⊕ Wall tie

Easy 100

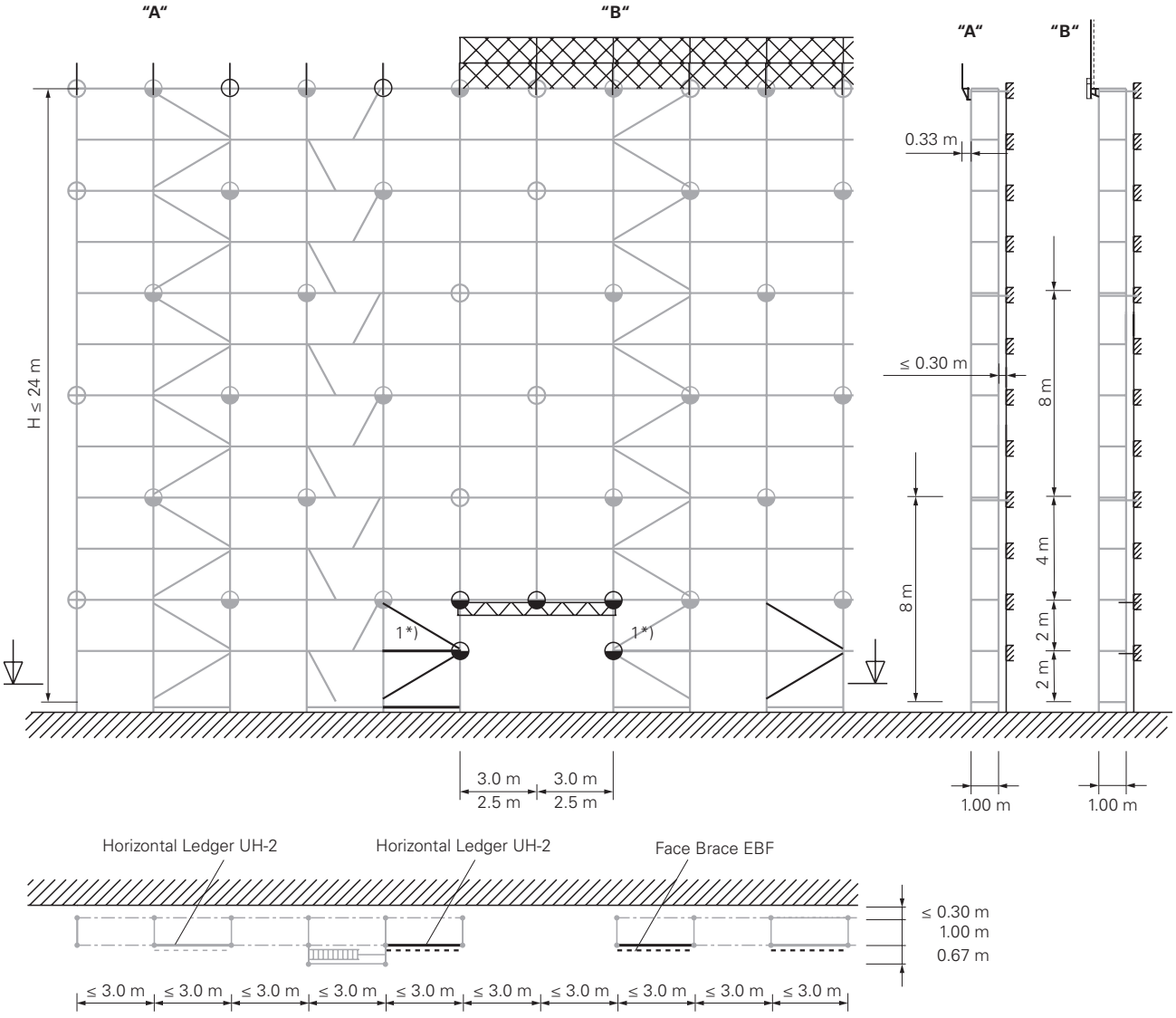
G4 Tie pattern

Frame variation ≤ 24 m

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



8 m offset tie pattern

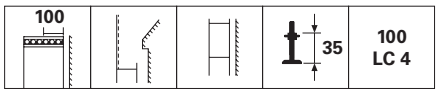


Note: lateral protection components not shown.

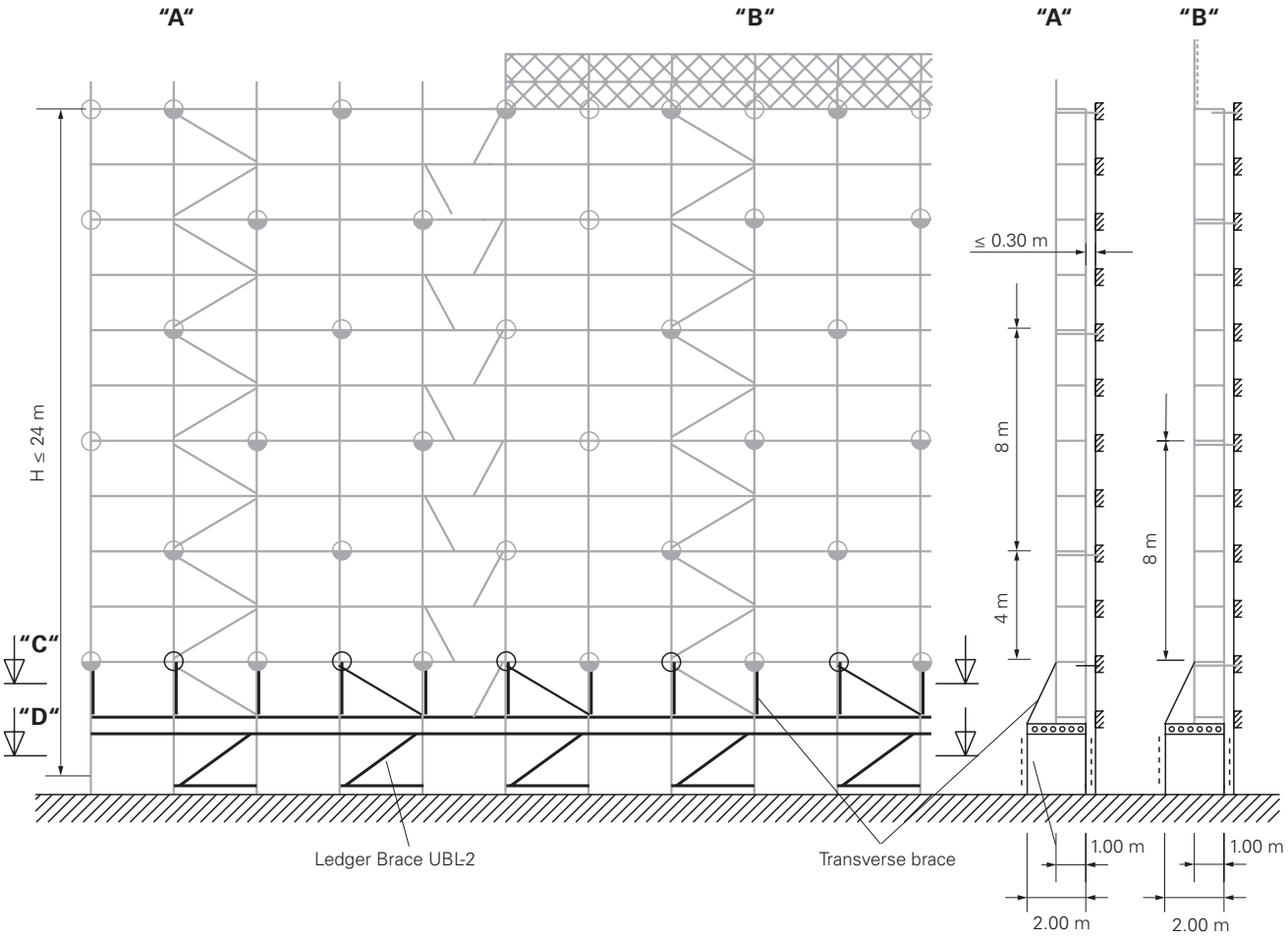
Single-standard wall tie
Wall tie

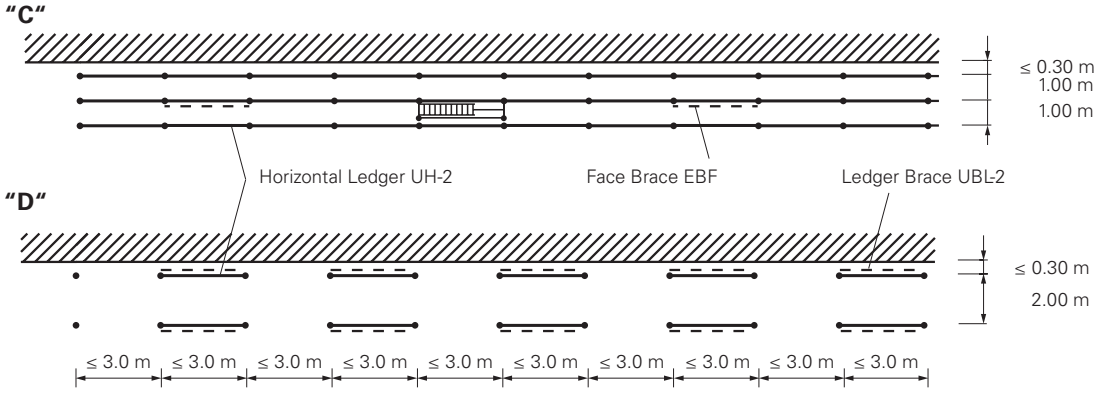
1* If a protection roof is available, the Horizontal Ledger UH-2 must be installed externally as a longitudinal ledger.

Frame variation ≤ 24 m



Variation 1.4/LC4, pavement gantry
Standard configuration:
unclad scaffold in front of open or closed facade





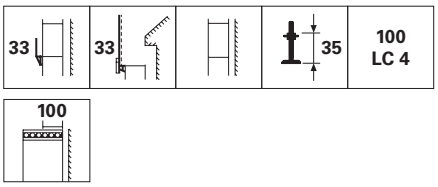
Note: lateral protection components not shown.

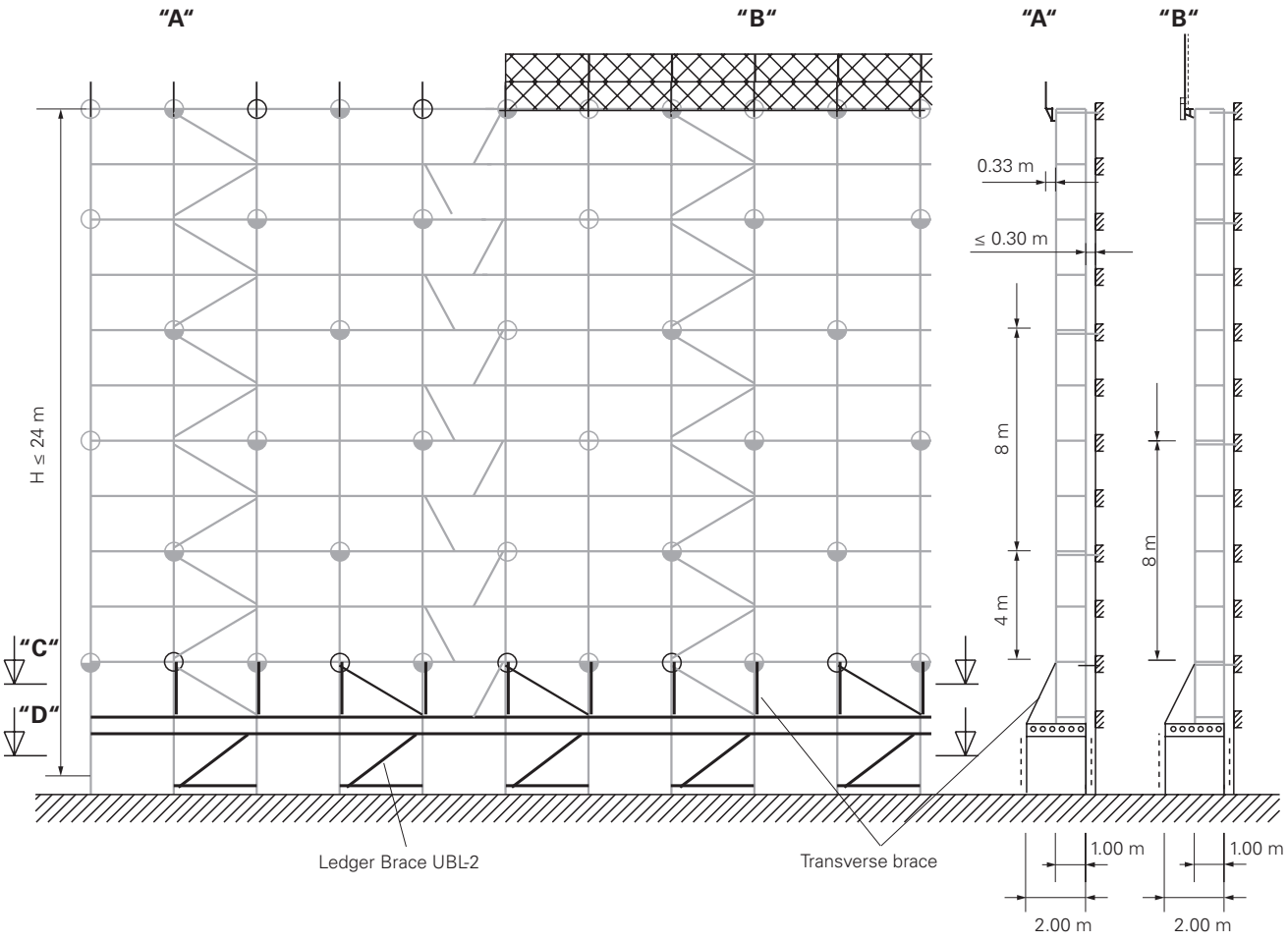
⊕ Single-standard wall tie
⊕ Wall tie

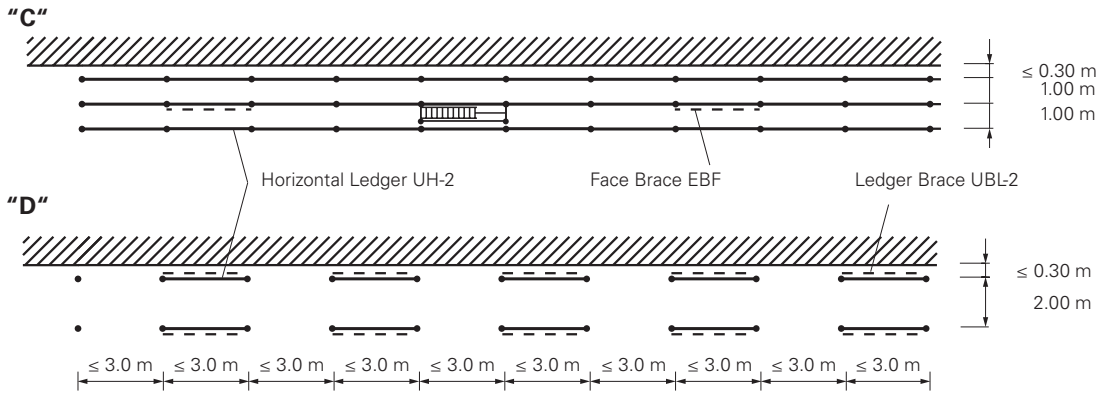
G4 Tie pattern

Frame variation ≤ 24 m

Variation 1.5/LC4, pavement gantry
Standard configuration:
unclad scaffold in front of open or closed facade







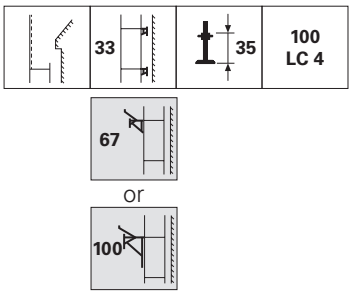
Note: lateral protection components not shown.

⊕ Single-standard wall tie
⊕ Wall tie

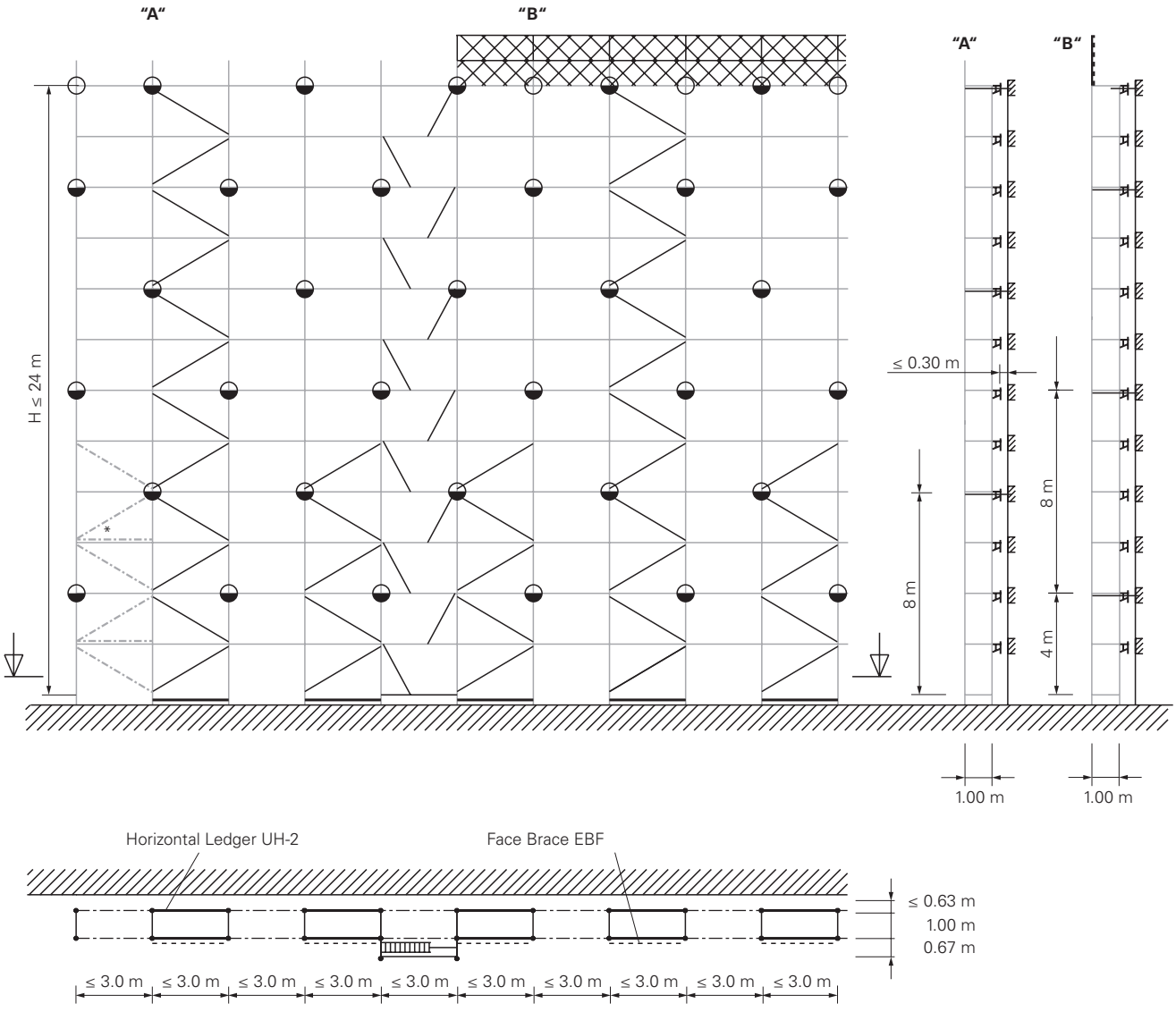
G4 Tie pattern

Frame variation ≤ 24 m

Basic variation 2a/LC4
Standard configuration:
unclad scaffold in front of open or closed facade



8 m offset tie pattern



Note: lateral protection components not shown.

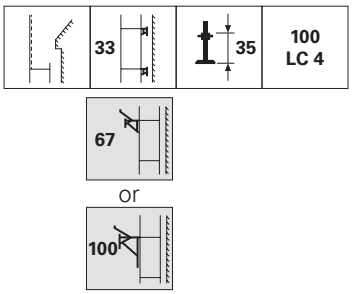
⊕ Single-standard wall tie
⊕ Wall tie

* If diagonal bracing meets at the edge post in an unanchored position, fit a Horizontal Ledger UH-2 at the outer leg.

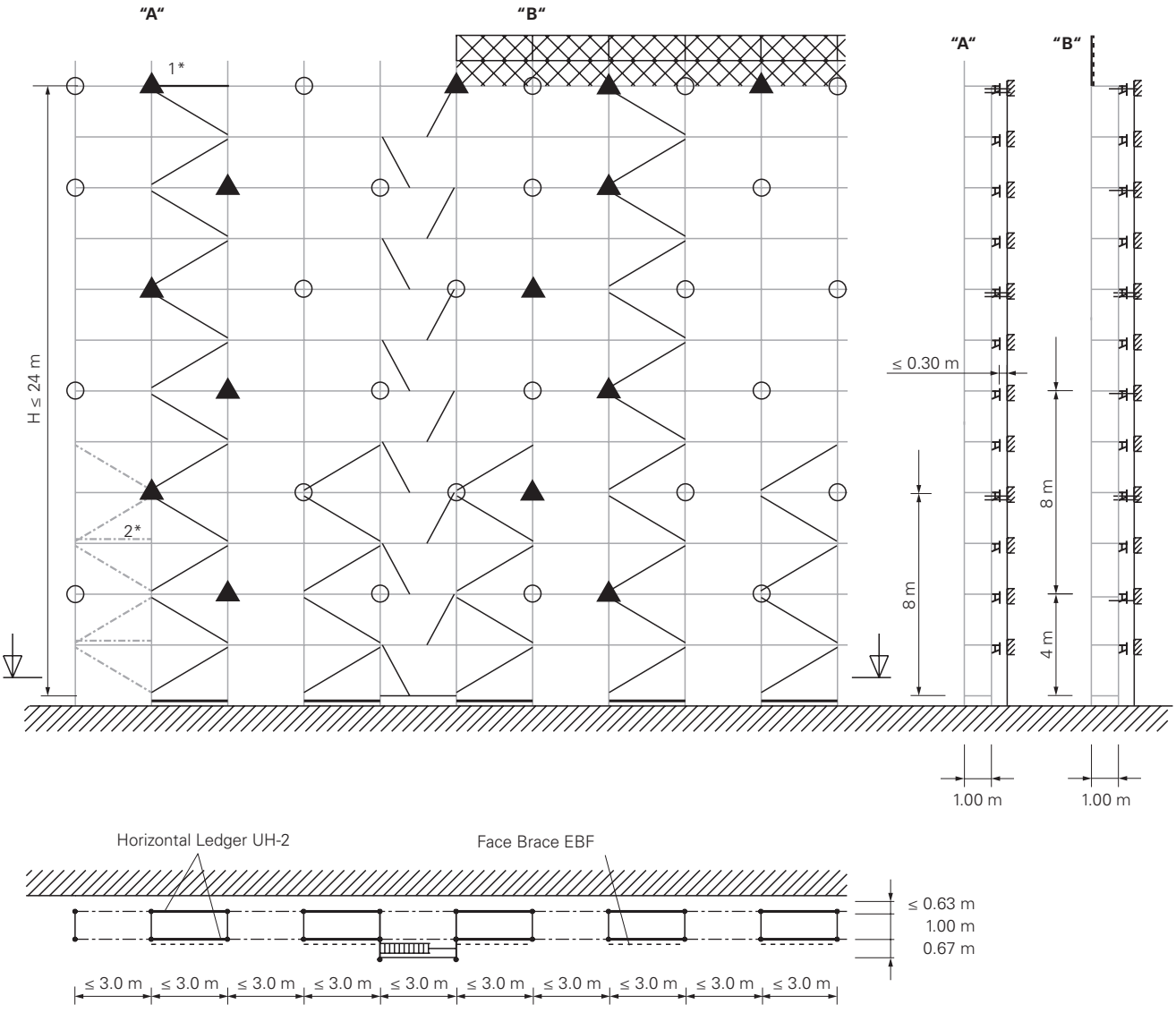
G4 Tie pattern

Frame variation ≤ 24 m

Alternative basic variation 2b/LC4
Standard configuration:
unclad scaffold in front of open or closed facade



8 m offset tie pattern



Note: lateral protection components not shown.

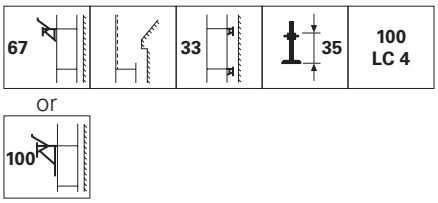
- Single-standard wall tie
- Triangulated tie

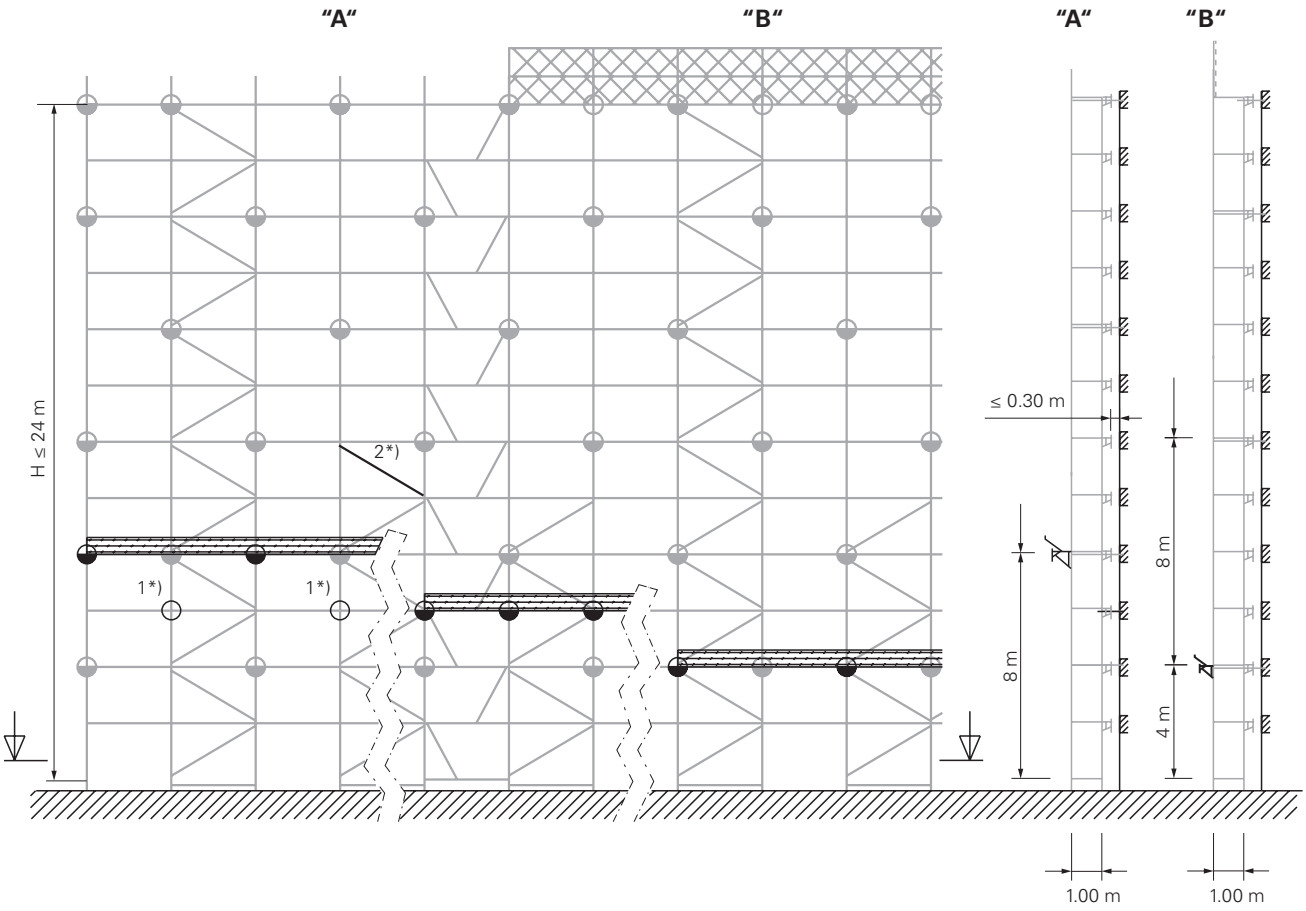
1* A longitudinal ledger (Horizontal Ledger UH-2) only needs to be installed on the inside of the scaffold next to the triangulated tie in the diagonal if the top scaffold level is anchored in an offset configuration.
2* If diagonal bracing meets at the edge post in an unanchored position, fit a Horizontal Ledger UH-2 at the outer leg.

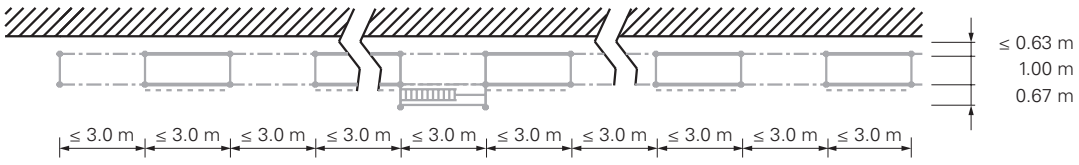
G4 Tie pattern

Frame variation ≤ 24 m

Variation 2.1/LC4
Standard configuration:
unclad scaffold in front of open or closed facade







Note: lateral protection components not shown.

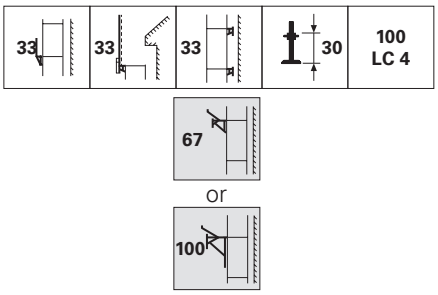
- Single-standard wall tie
- Wall tie

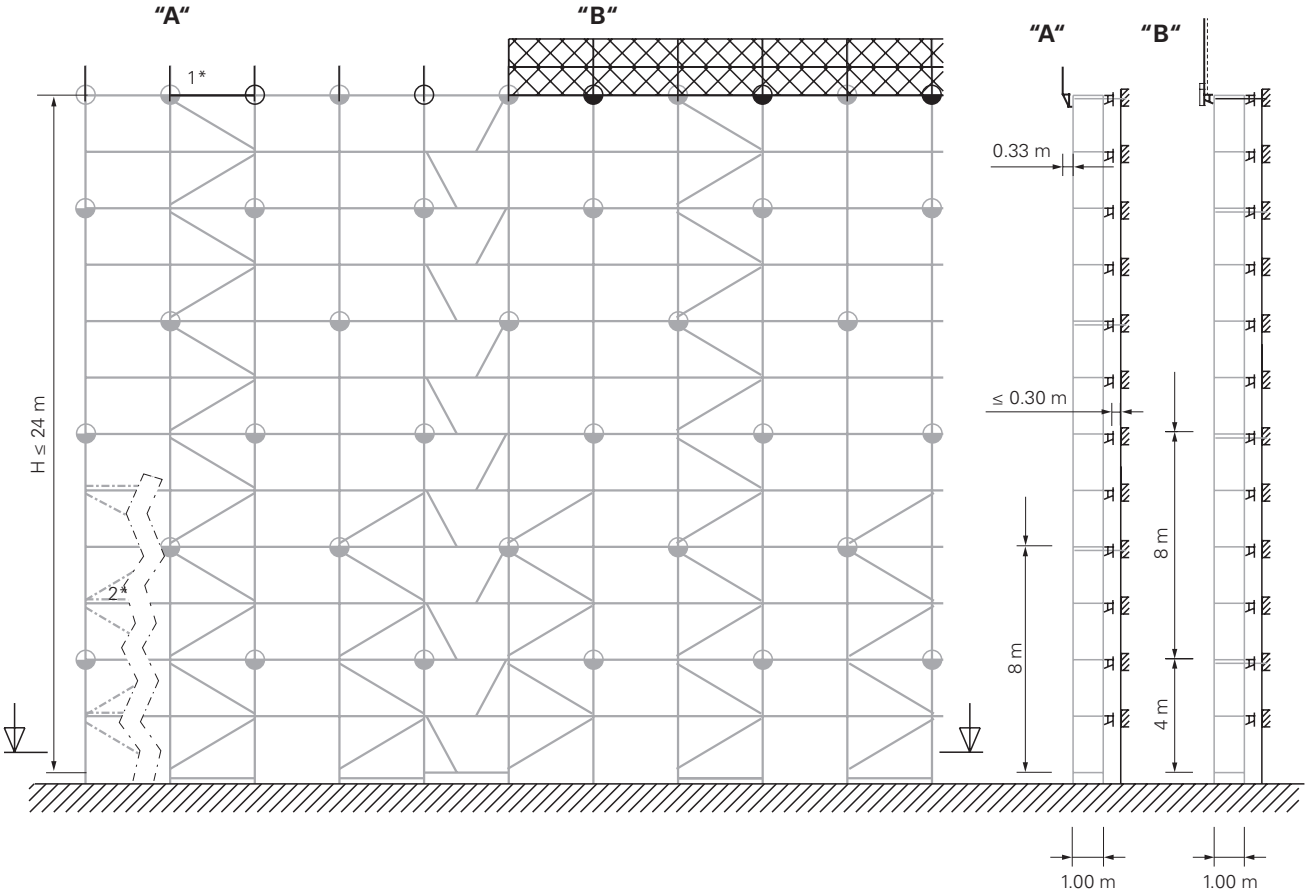
1* Additional anchoring for protection roof on ECM 100
2* Additional vertical braces for offset tie positions + protection roof on ECM 100

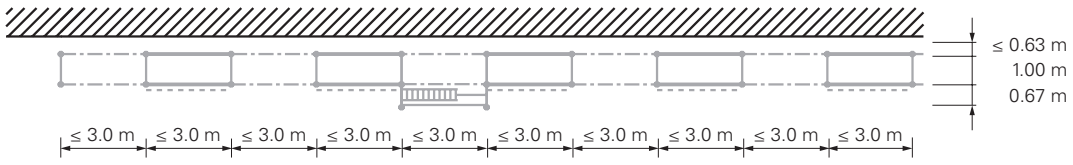
G4 Tie pattern

Frame variation ≤ 24 m

Variation 2.2/LC4
Standard configuration:
unclad scaffold in front of open or closed facade







Note: lateral protection components not shown.

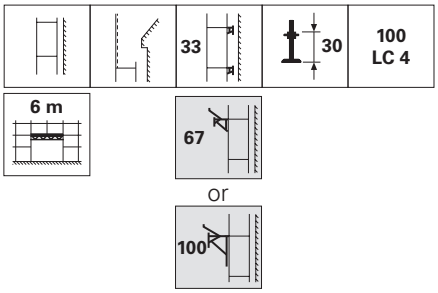
- Single-standard wall tie
- Wall tie

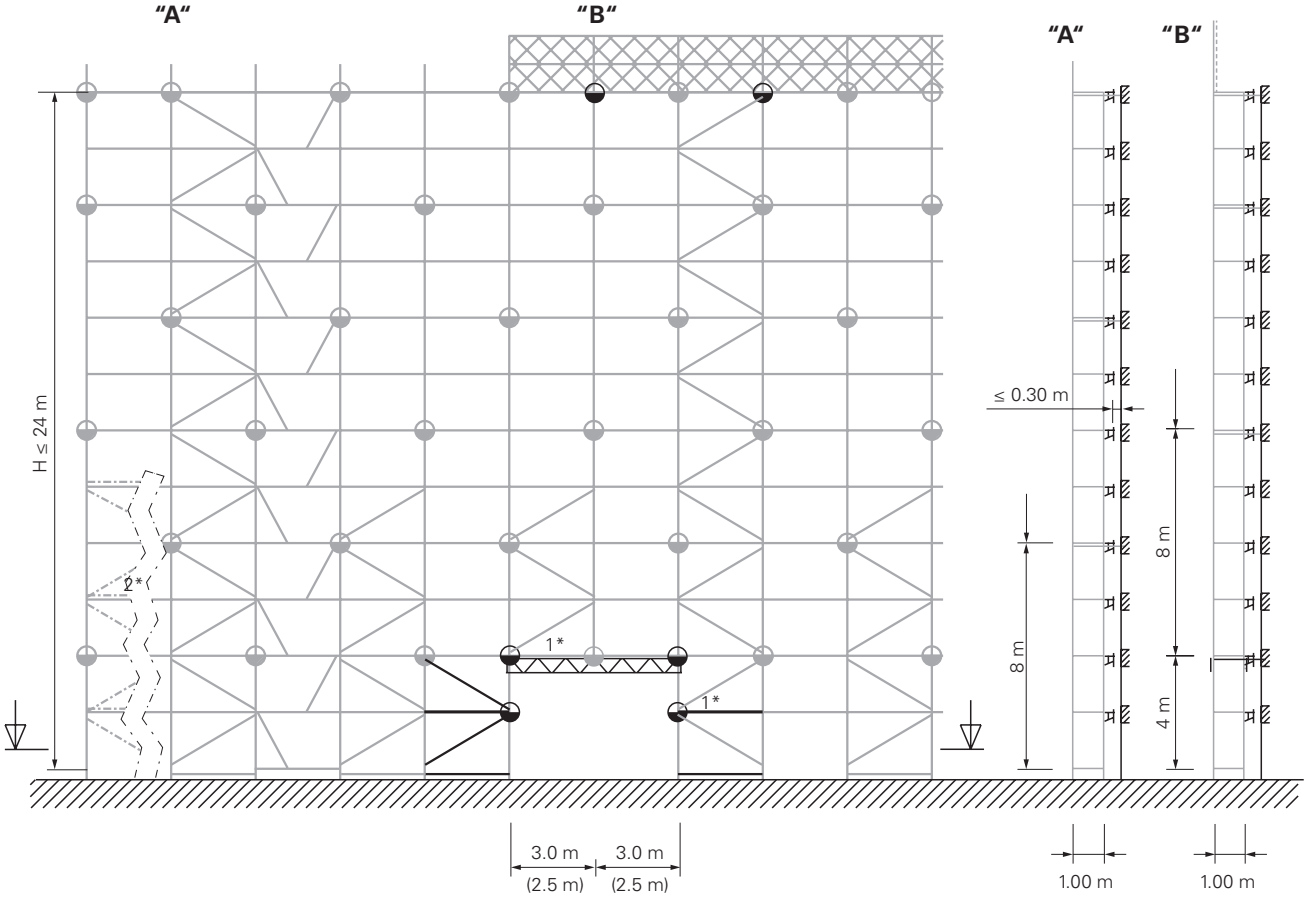
1* In the case of triangulated ties only:
a longitudinal ledger (Horizontal Ledger UH-2) only needs to be installed on the inside of the scaffold next to the triangulated tie in the diagonal if the top scaffold level is anchored in an offset configuration.
2* If diagonal bracing meets at the edge post in an unanchored position, fit a Horizontal Ledger UH-2 at the outer leg.

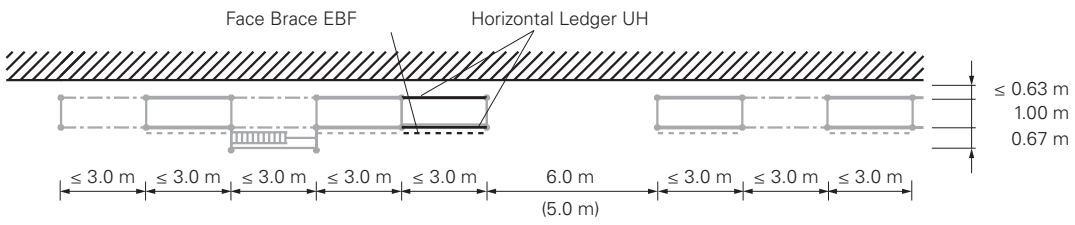
G4 Tie pattern

Frame variation ≤ 24 m

Variation 2.3/LC4 – bridging 6 m (5 m)
Standard configuration:
unclad scaffold in front of open or closed facade







Note: lateral protection components not shown.

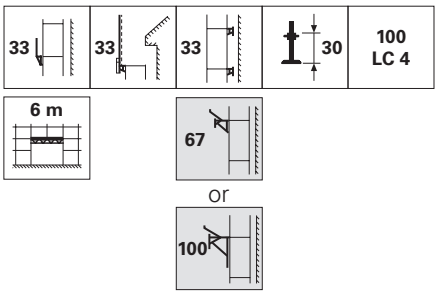
- Single-standard wall tie
- Wall tie

1* If a protection roof is fitted, Horizontal Ledgers UH-2 must be fitted as outer longitudinal ledgers and Formwork Girders ULS (steel).
2* If diagonal bracing meets at the edge post in an unanchored position, fit a Horizontal Ledger UH-2 at the outer leg.

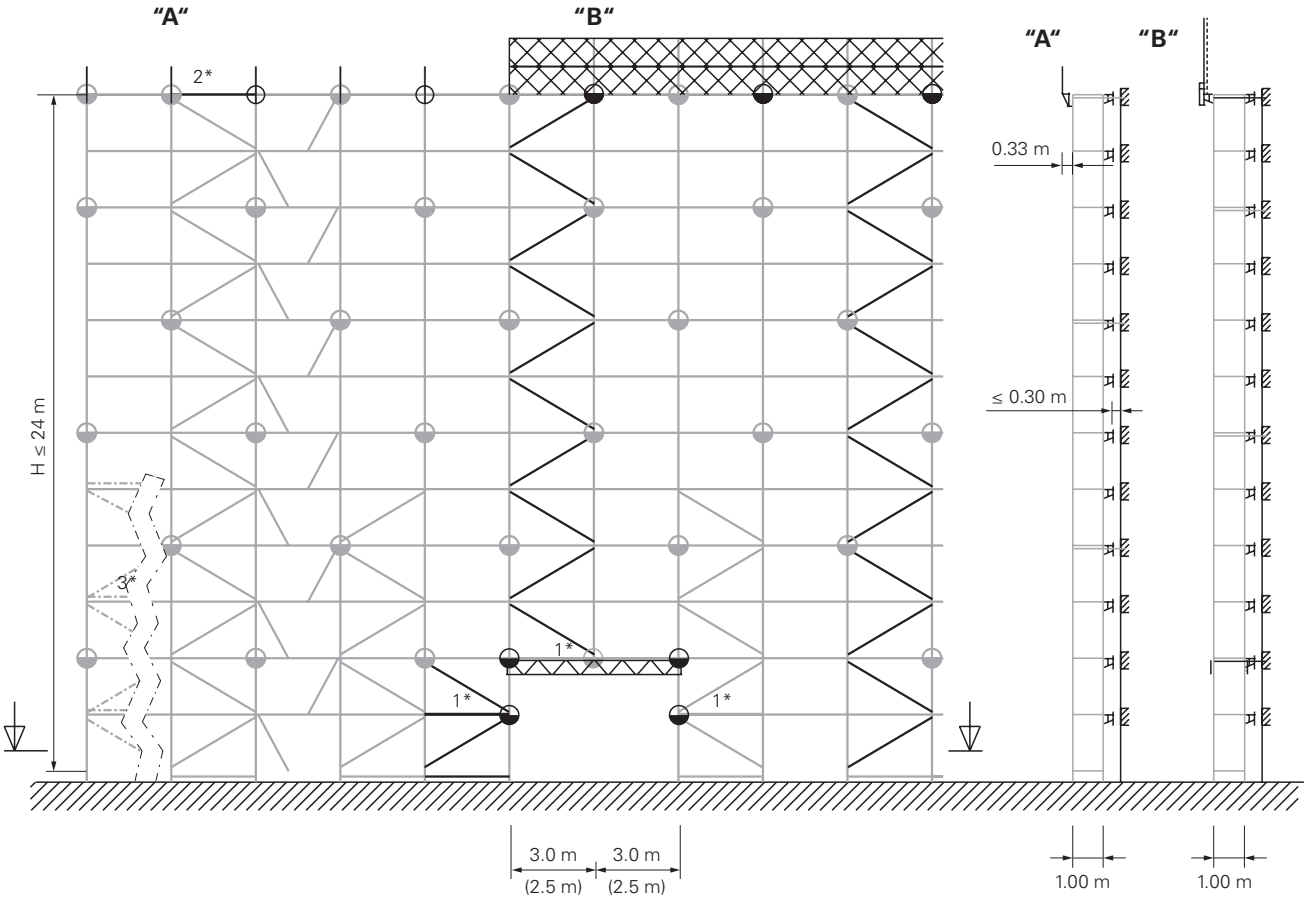
G4 Tie pattern

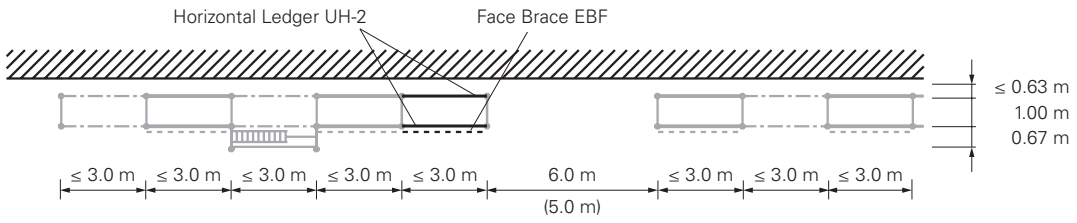
Frame variation ≤ 24 m

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



Contrary to Section "Face braces" on page 40, the arrangement of the diagonals in this tie pattern may only be assigned to 4 scaffold bays in each case.





Note: lateral protection components not shown.

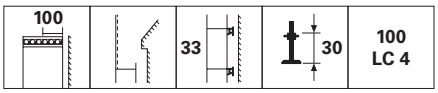
- Single-standard wall tie
- Wall tie

1* If a protection roof is fitted, Horizontal Ledgers UH-2 must be fitted as outer longitudinal ledgers and Formwork Girders ULS (steel).
2* In the case of triangulated ties only: a longitudinal ledger (Horizontal Ledger UH-2) only needs to be installed on the inside of the scaffold next to the triangulated tie in the diagonal if the top scaffold level is anchored in an offset configuration.

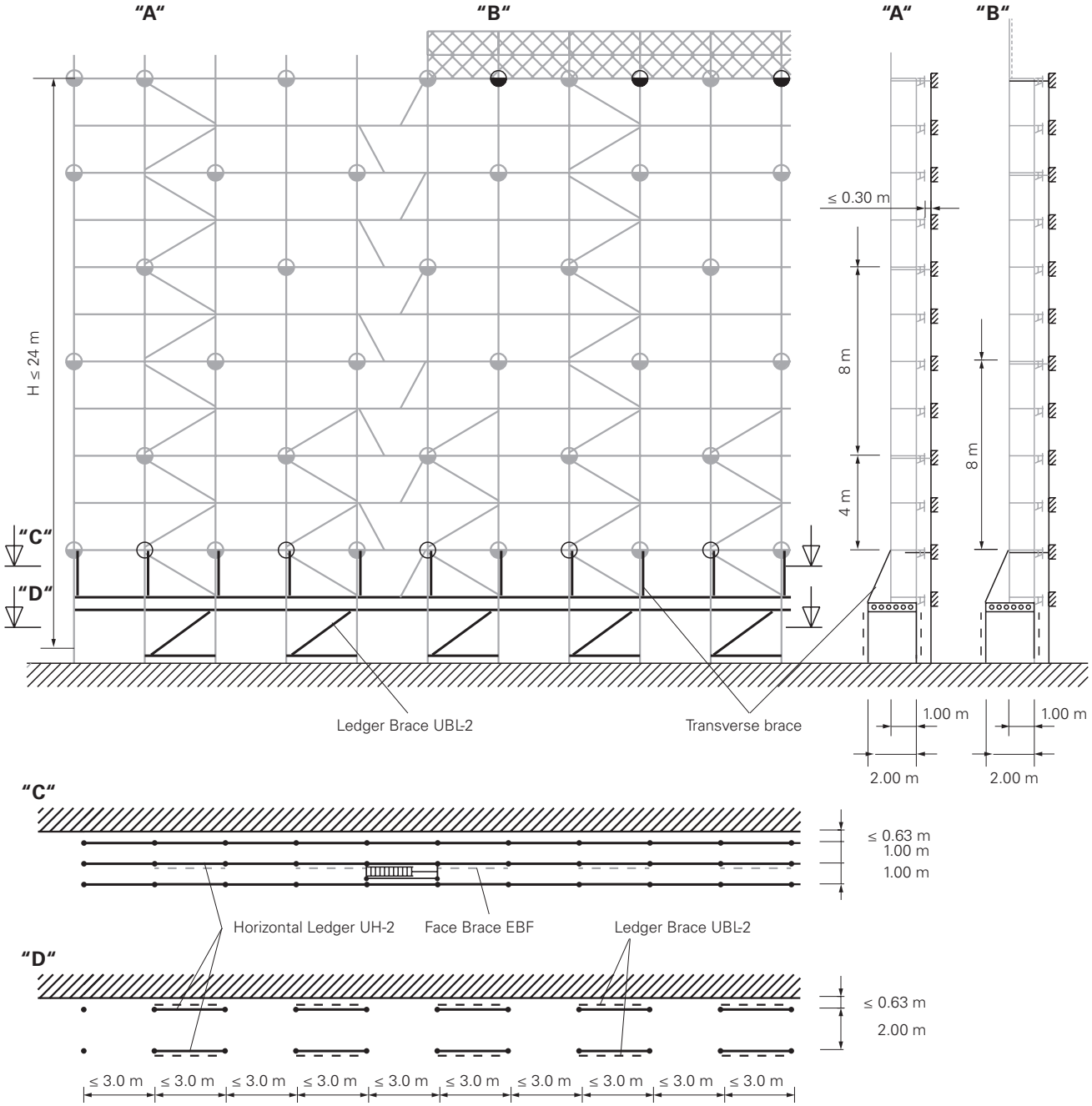
3* If diagonal bracing meets at the edge post in an unanchored position, fit a Horizontal Ledger UH-2 at the outer leg.

G4 Tie pattern

Frame variation ≤ 24 m



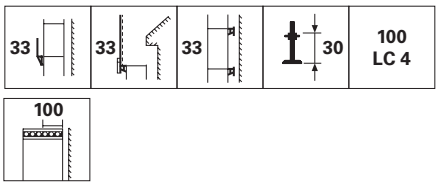
Variation 2.5/LC4, pavement gantry
Standard configuration:
unclad scaffold in front of open or closed facade



Note: lateral protection components not shown.

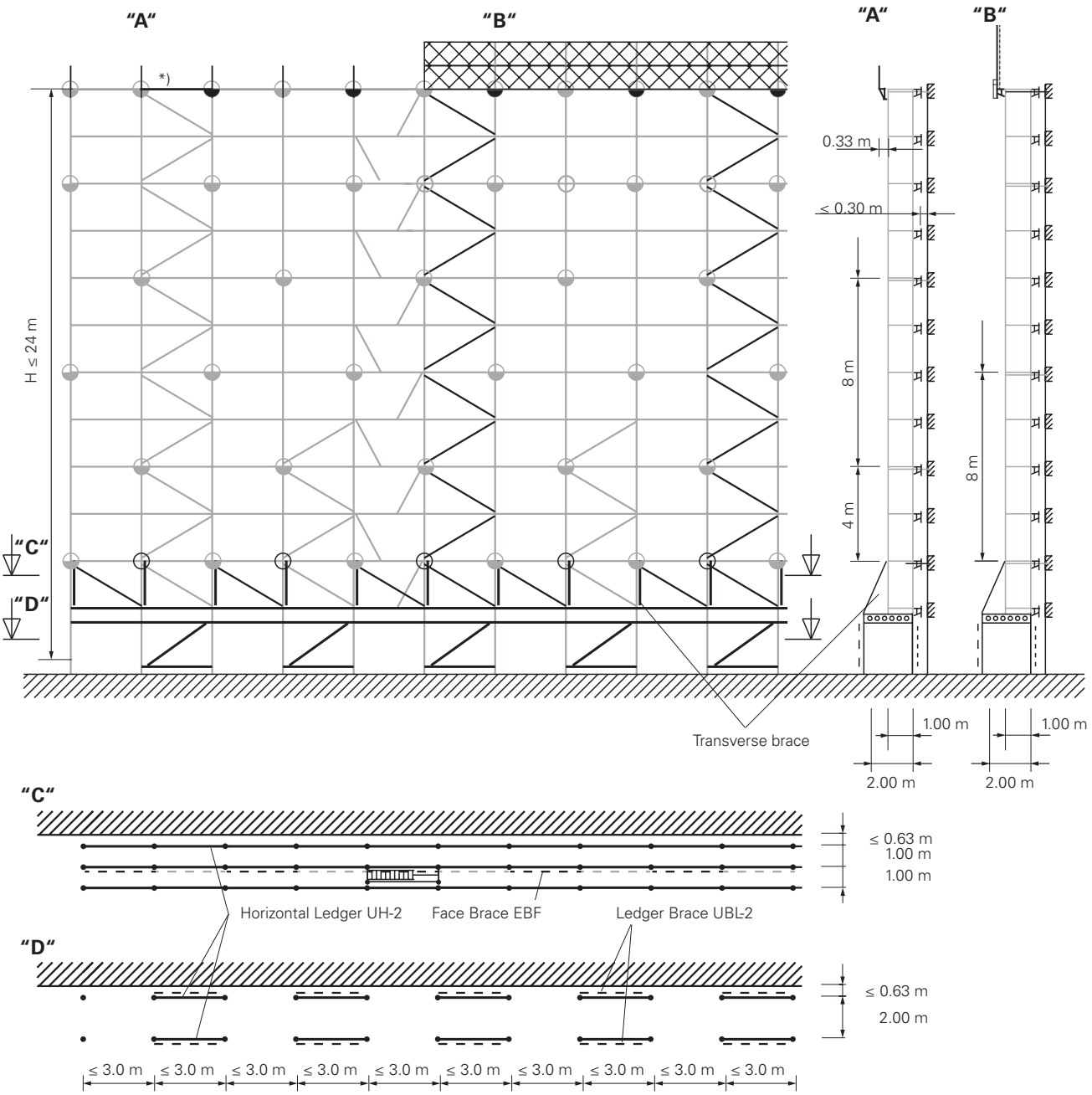
- Single-standard wall tie
- Wall tie

Frame variation ≤ 24 m



Variation 2.6/LC4, pavement gantry
Standard configuration:
unclad scaffold in front of open or closed facade

Contrary to Section "Face braces" on page 40, the arrangement of the diagonals in this tie pattern may only be assigned to 4 scaffold bays in each case.



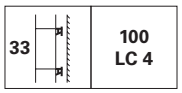
Note: lateral protection components not shown.

- Single-standard wall tie
- Wall tie

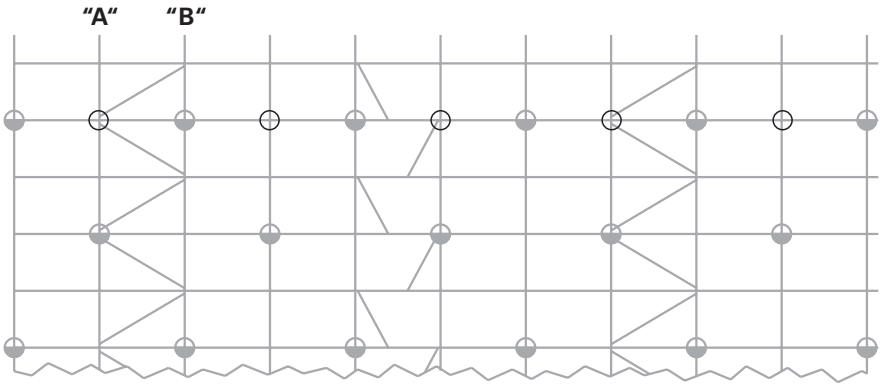
* In the case of triangulated ties only:
a longitudinal ledger (Horizontal Ledger UH-2) only needs to be installed on the inside of the scaffold next to the triangulated tie in the diagonal if the top scaffold level is anchored in an offset configuration.

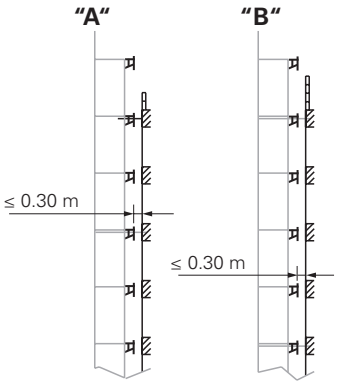
G4 Tie pattern

Frame variation ≤ 24 m



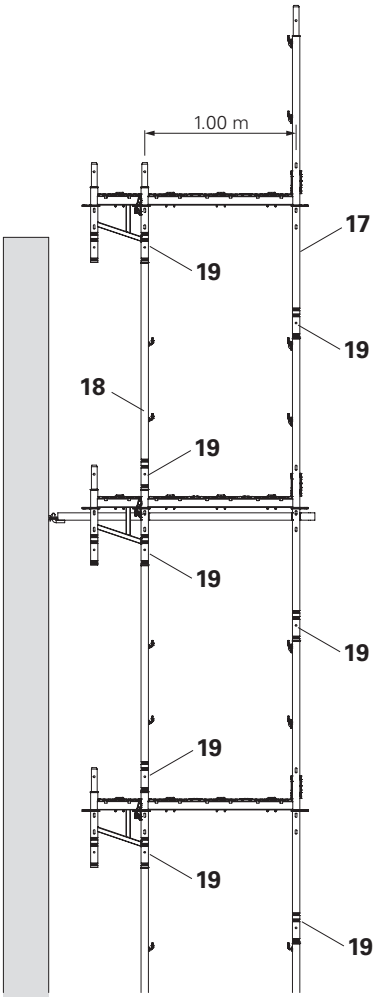
Variation 2.7/LC4, topmost level not anchored
Standard configuration:
unclad scaffold in front of open or closed facade.
Gaps between buildings, uplifting wind forces.

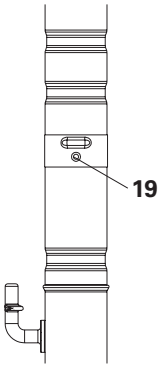




In order to bridge gaps in the building, a maximum of 2 scaffold levels may be realised without any anchoring.

In all frame columns, the 3 topmost Easy Frames EVF (**17**) or as applicable the 3 topmost Tubes EVR 150 (**18**) have to be secured against uplift with Locking Pins Ø 48/57 (**19**) or M10 x 70 bolts and nuts.





Note: lateral protection components not shown.

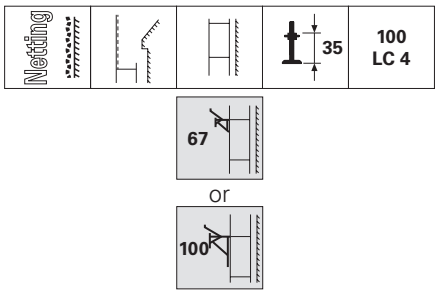
⊕ Single-standard wall tie
⊕ Wall tie

Easy 100

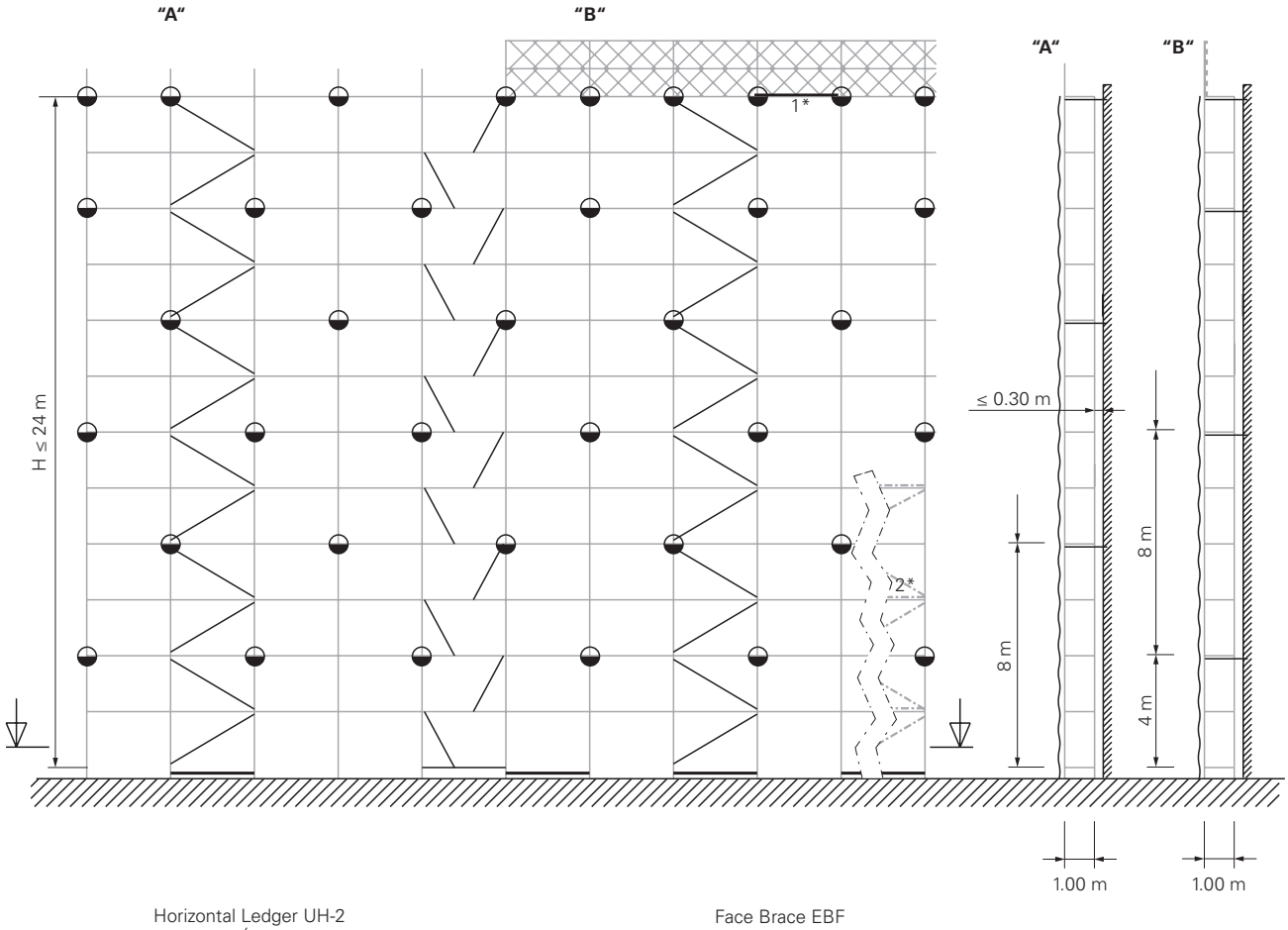
G4 Tie pattern

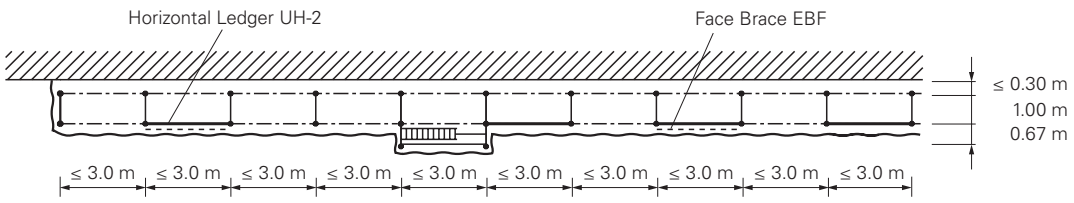
Frame variation ≤ 24 m

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



8 m offset tie pattern





Note: lateral protection components not shown.

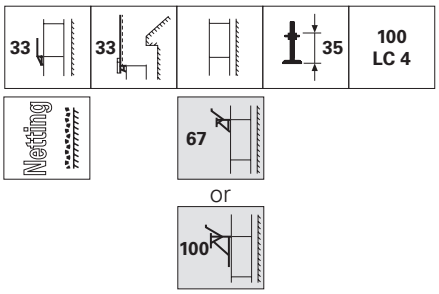
Wall tie

1* In the case of triangulated ties only:
a longitudinal ledger (Horizontal Ledger UH-2) only needs to be installed on the inside of the scaffold next to the triangulated tie in the diagonal if the top scaffold level is anchored in an offset configuration.
2* If diagonal bracing meets at the edge post in an unanchored position, fit a Horizontal Ledger UH-2 at the outer leg.

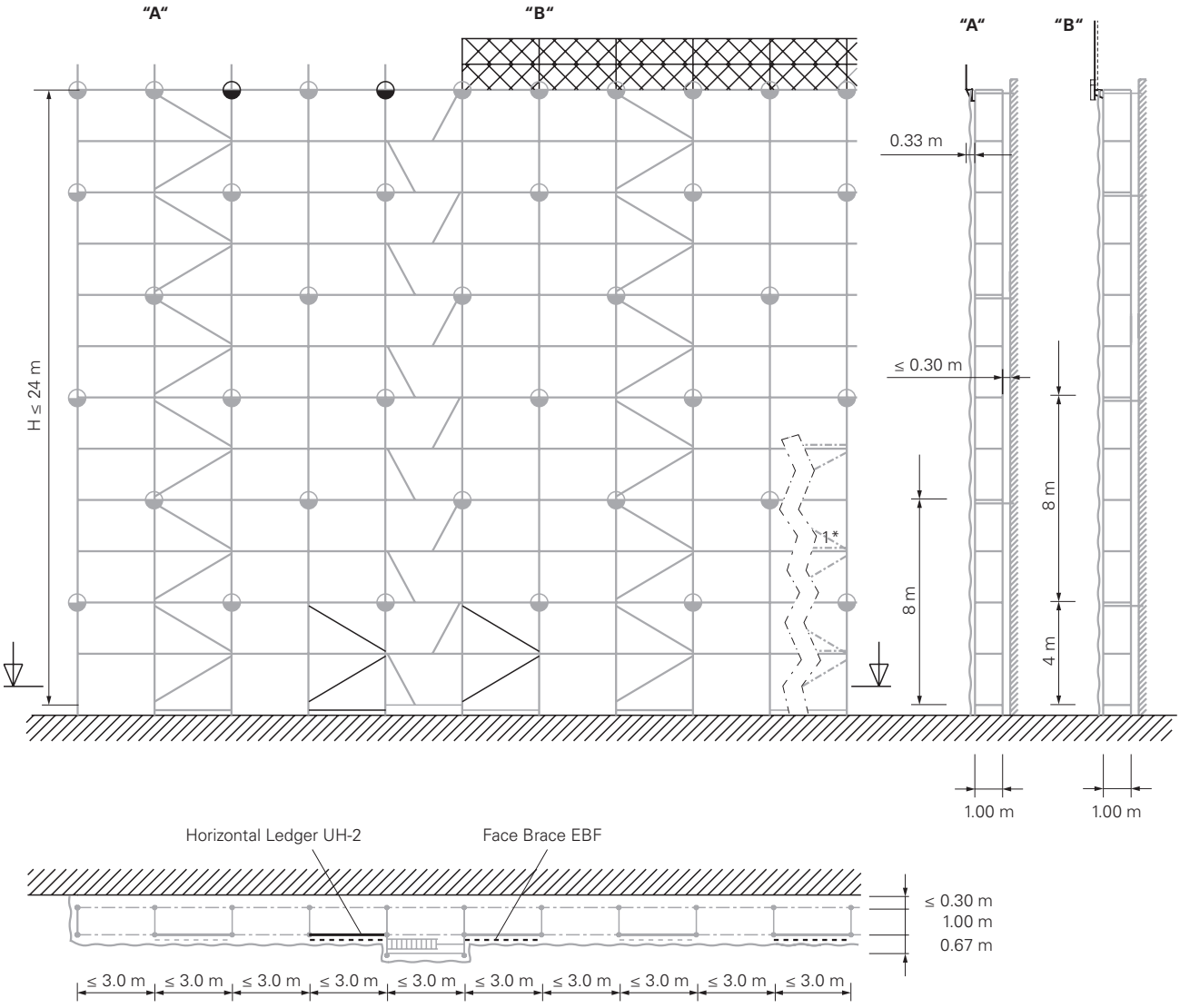
G4 Tie pattern

Frame variation ≤ 24 m

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



8 m offset tie pattern



Note: lateral protection components not shown.

Wall tie

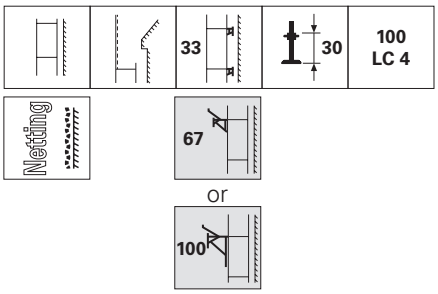
1* If diagonal bracing meets at the edge post in an unanchored position, fit a Horizontal Ledger UH-2 at the outer leg.

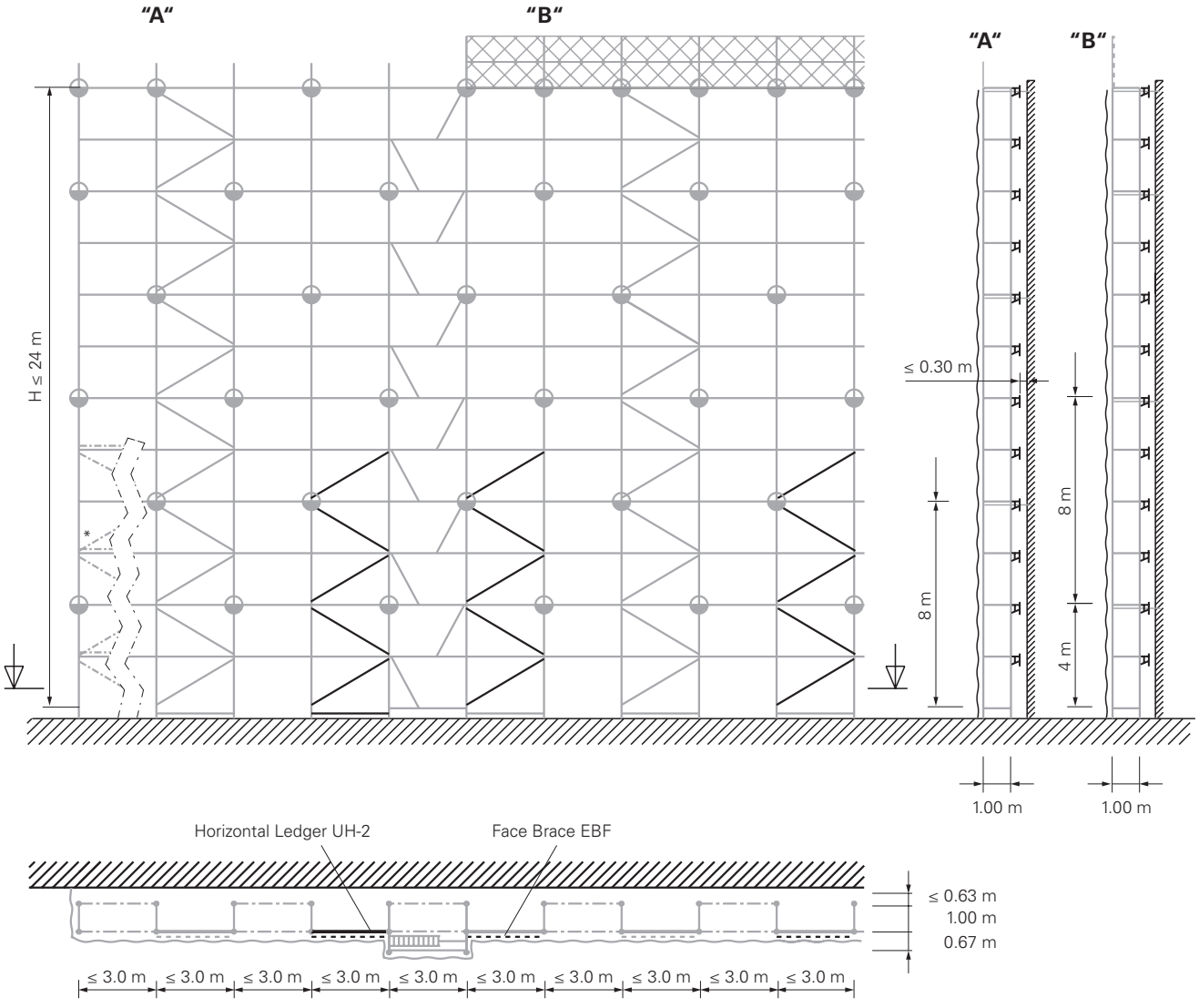
Easy 100

G4 Tie pattern

Frame variation ≤ 24 m

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





Note: lateral protection components not shown.

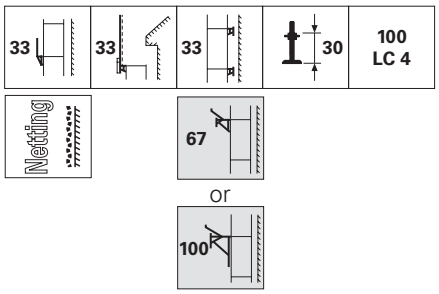
Wall tie

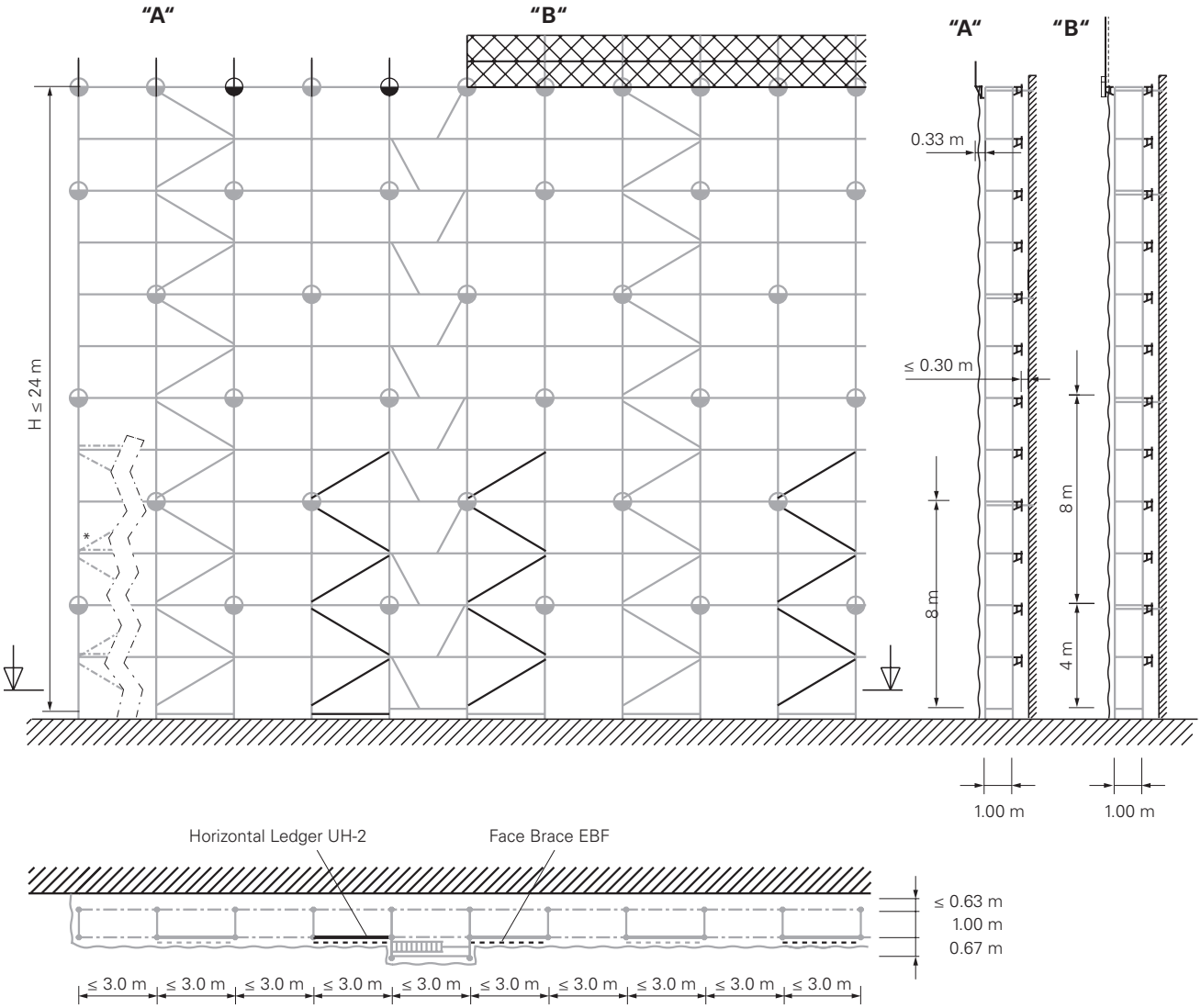
* If diagonal bracing meets at the edge post in an unanchored position, fit a Horizontal Ledger UH-2 at the outer leg.

G4 Tie pattern

Frame variation ≤ 24 m

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





Note: lateral protection components not shown.

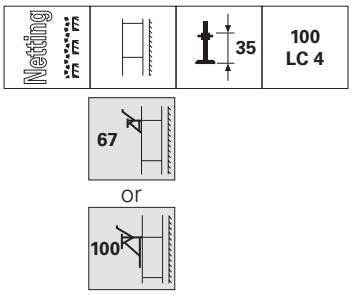
⊕ Single-standard wall tie
⊕ Wall tie

* If diagonal bracing meets at the edge post in an unanchored position, fit a Horizontal Ledger UH-2 at the outer leg.

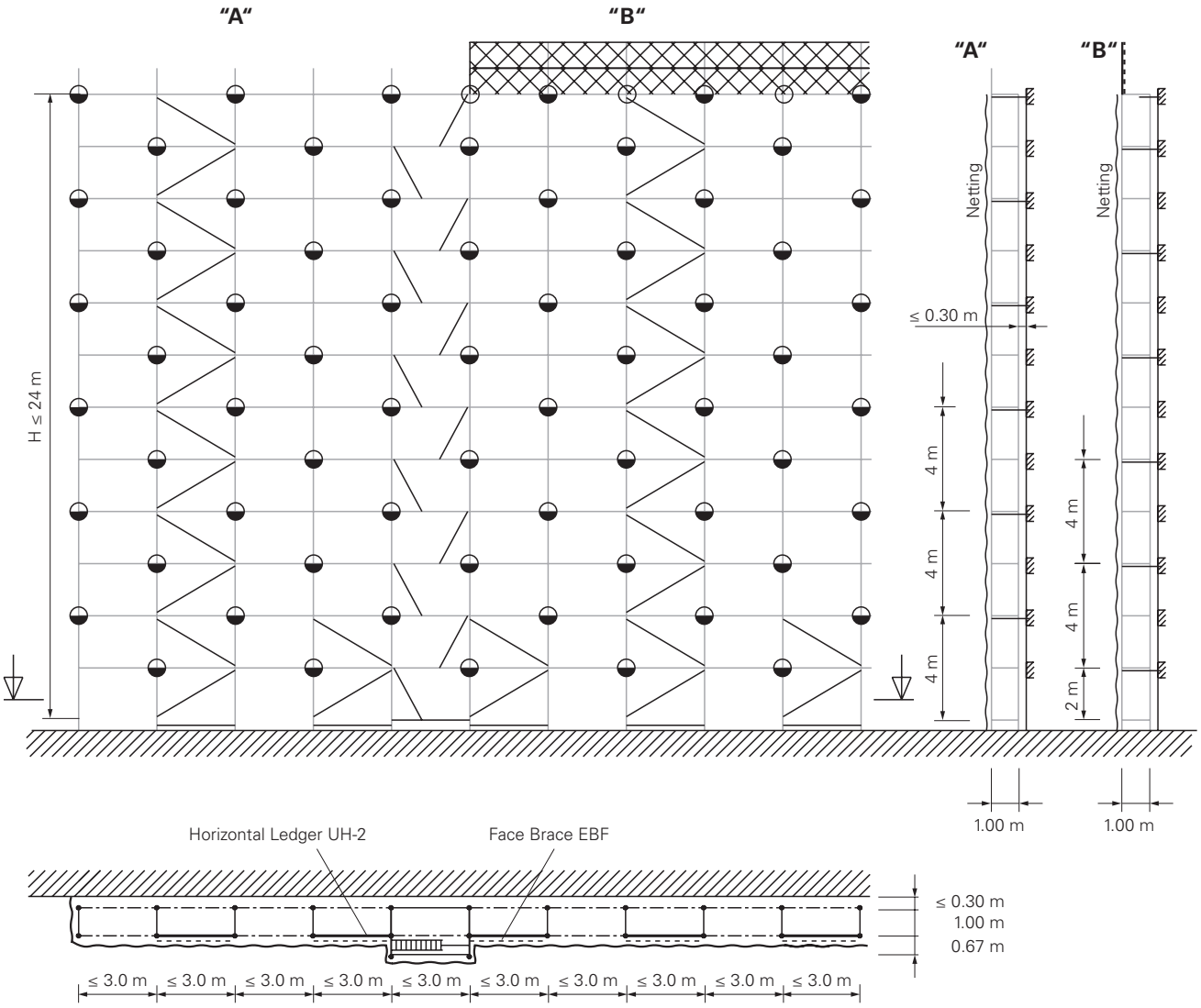
G4 Tie pattern

Frame variation ≤ 24 m

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



4 m offset tie pattern



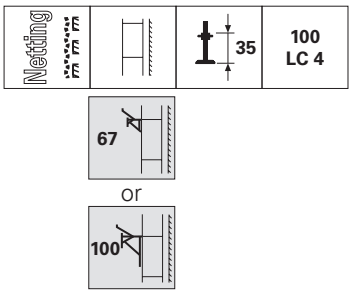
Note: lateral protection components not shown.

⊕ Single-standard wall tie
⊕ Wall tie

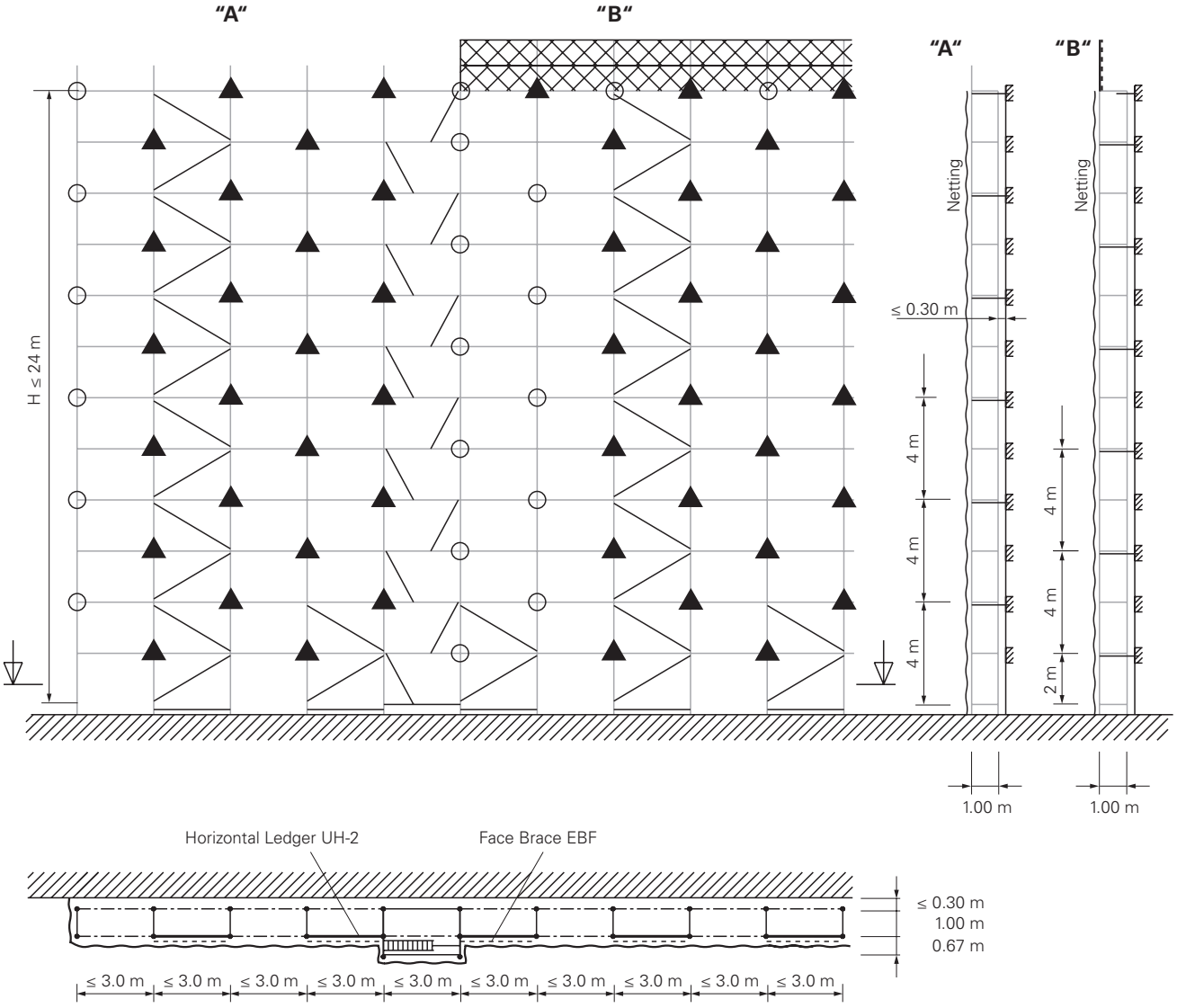
G4 Tie pattern

Frame variation ≤ 24 m

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



4 m offset tie pattern



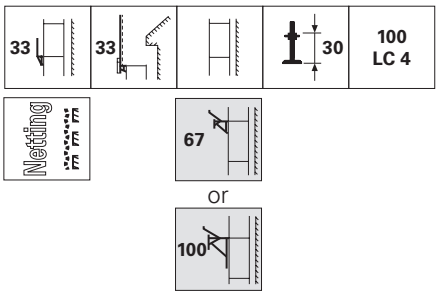
Note: lateral protection components not shown.

- Single-standard wall tie
- Wall tie
- Triangulated tie

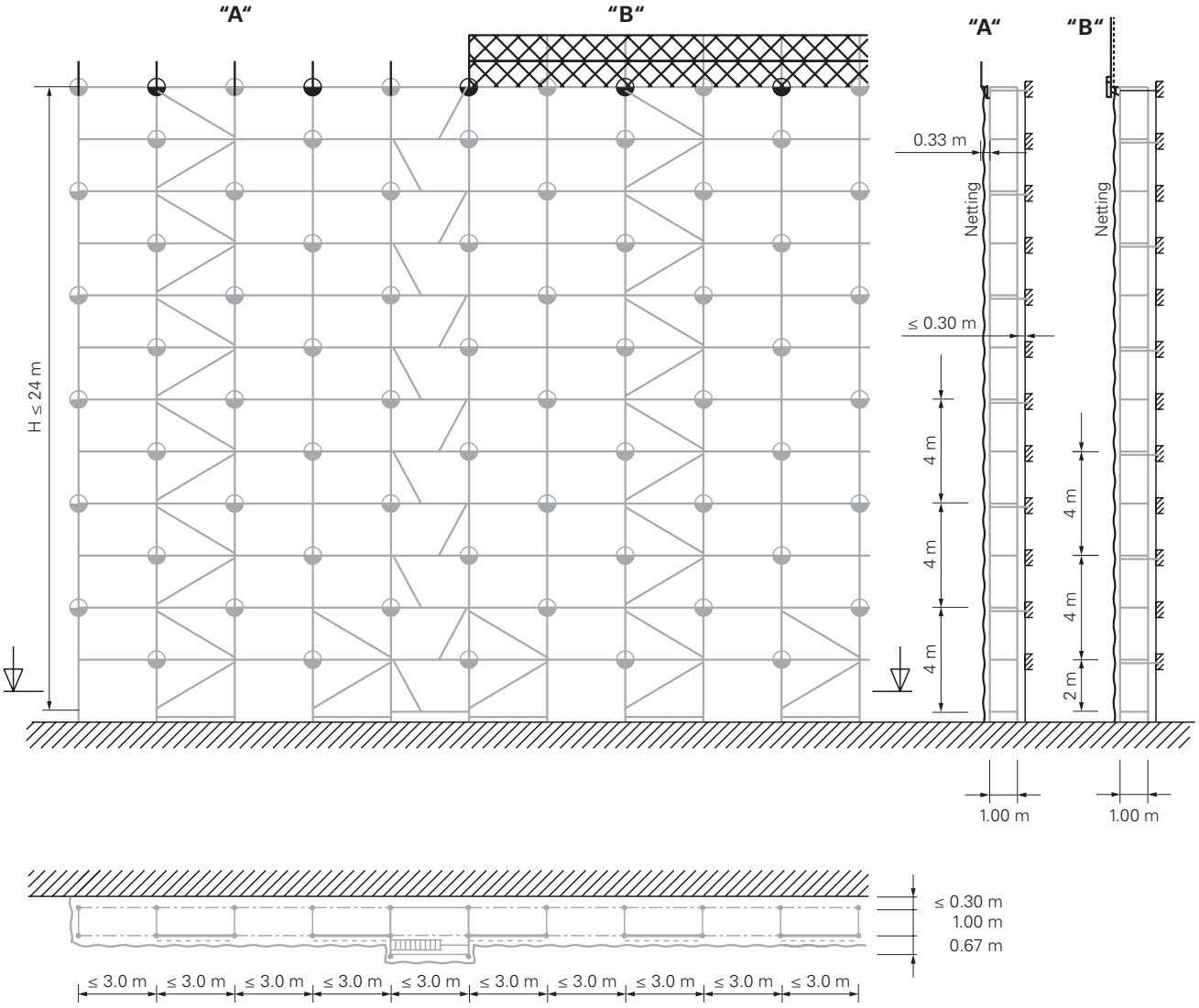
G4 Tie pattern

Frame variation ≤ 24 m

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



4 m offset tie pattern



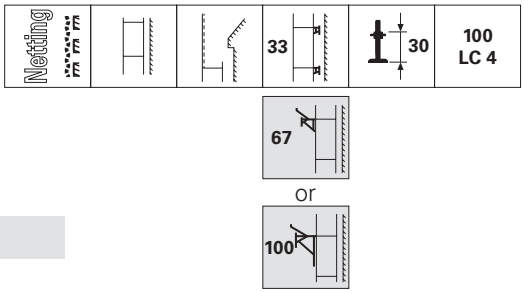
Note: lateral protection components not shown.

Wall tie

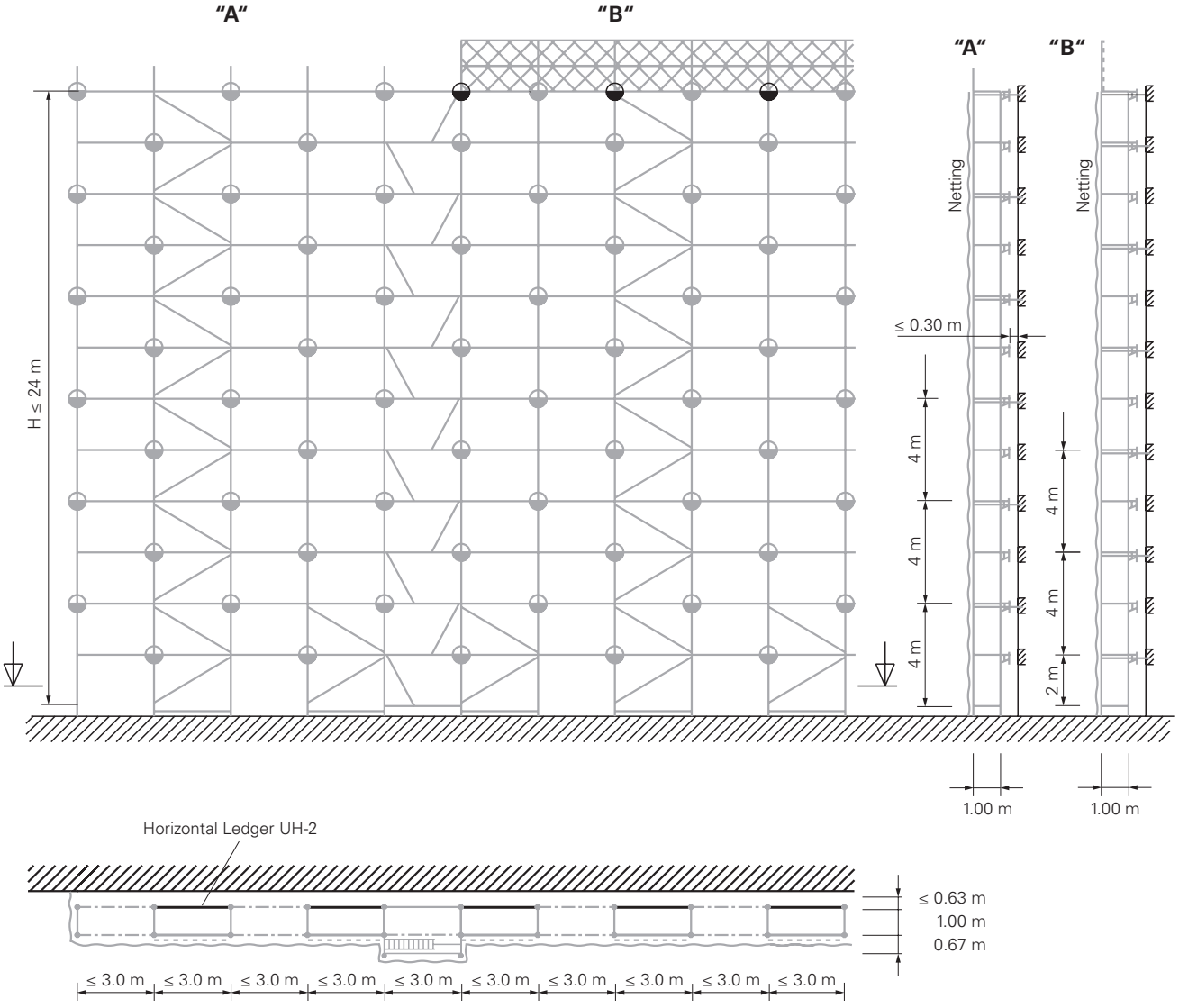
G4 Tie pattern

Frame variation ≤ 24 m

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



4 m offset tie pattern



Note: lateral protection components not shown.

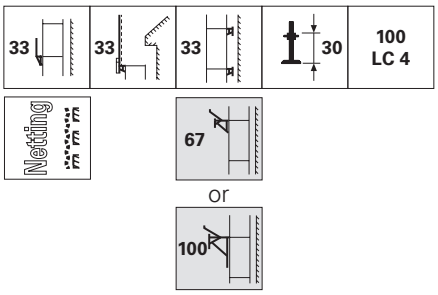
Wall tie

Easy 100

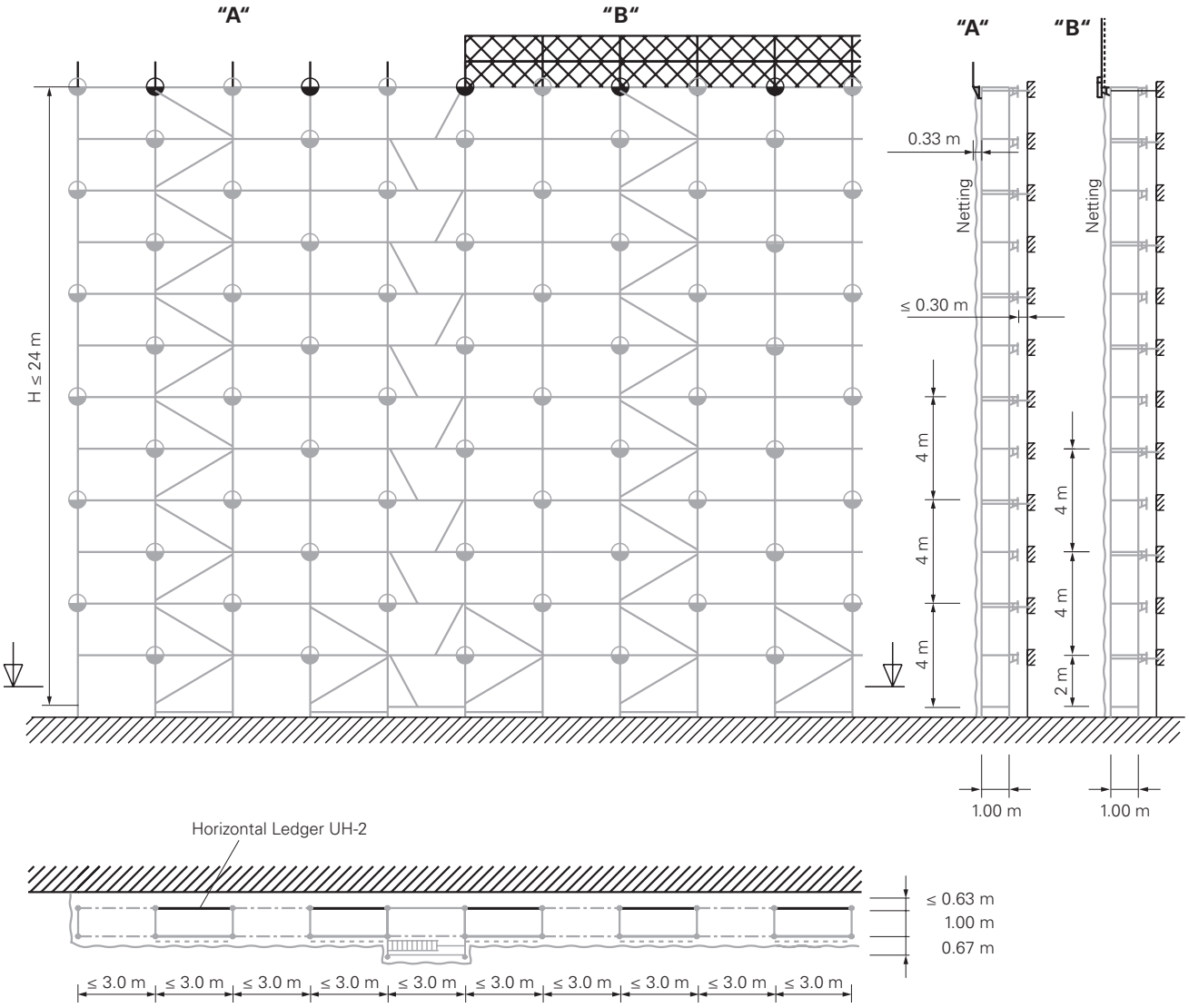
G4 Tie pattern

Frame variation ≤ 24 m

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



4 m offset tie pattern



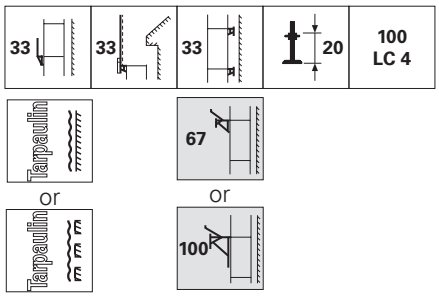
Note: lateral protection components not shown.

Wall tie

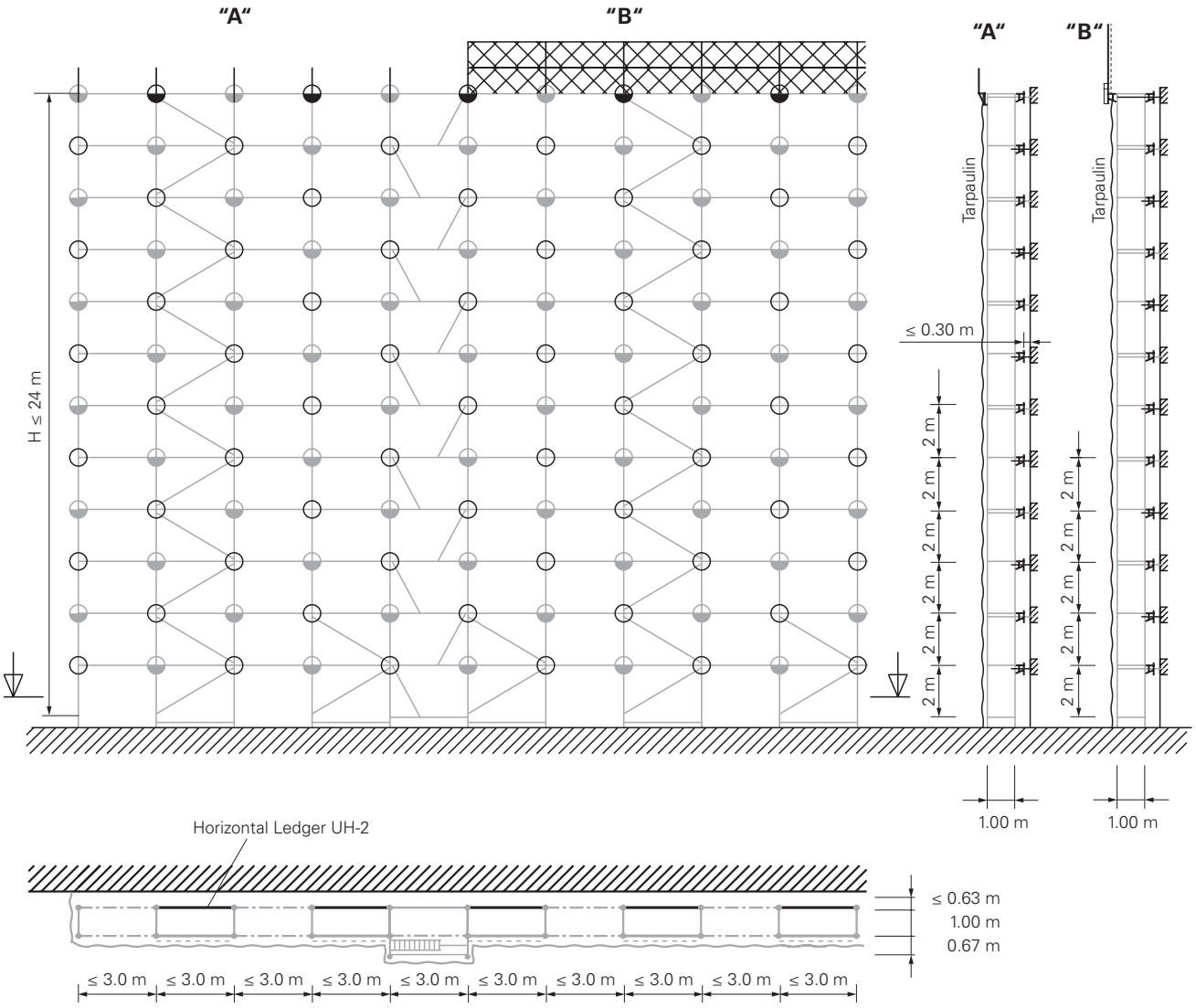
G4 Tie pattern

Frame variation ≤ 24 m

Variation 4.4/LC4
Standard configuration:
Tarpaulin in front of closed or open facade



2 m tie pattern



Note: lateral protection components not shown.

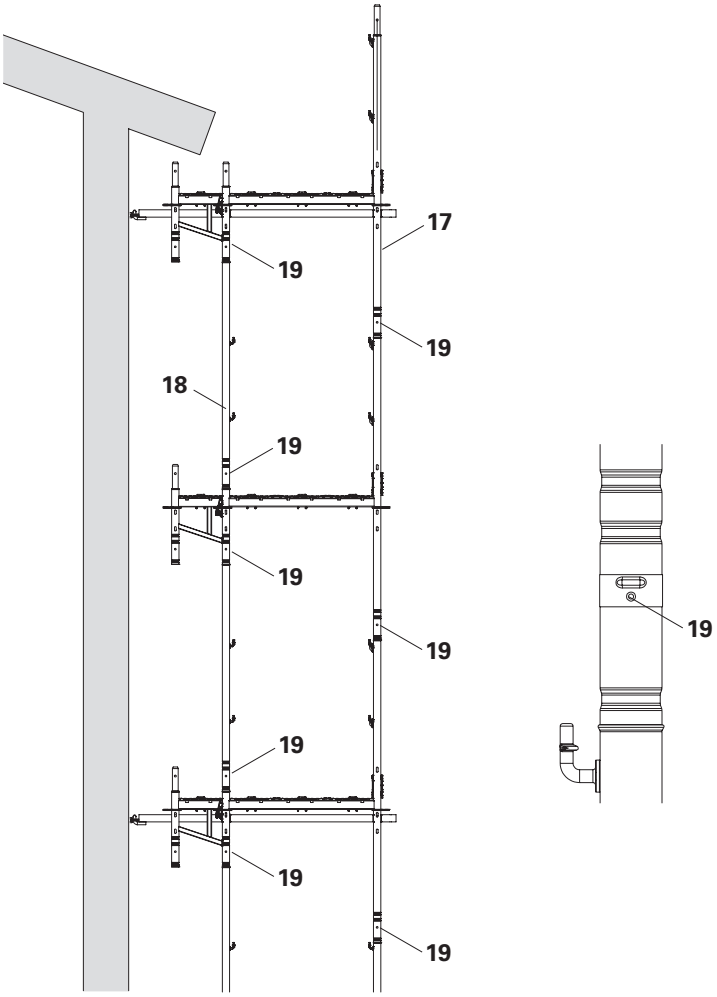
⊕ Single-standard wall tie
⊕ Wall tie

Easy 100

G5 Uplifting wind forces

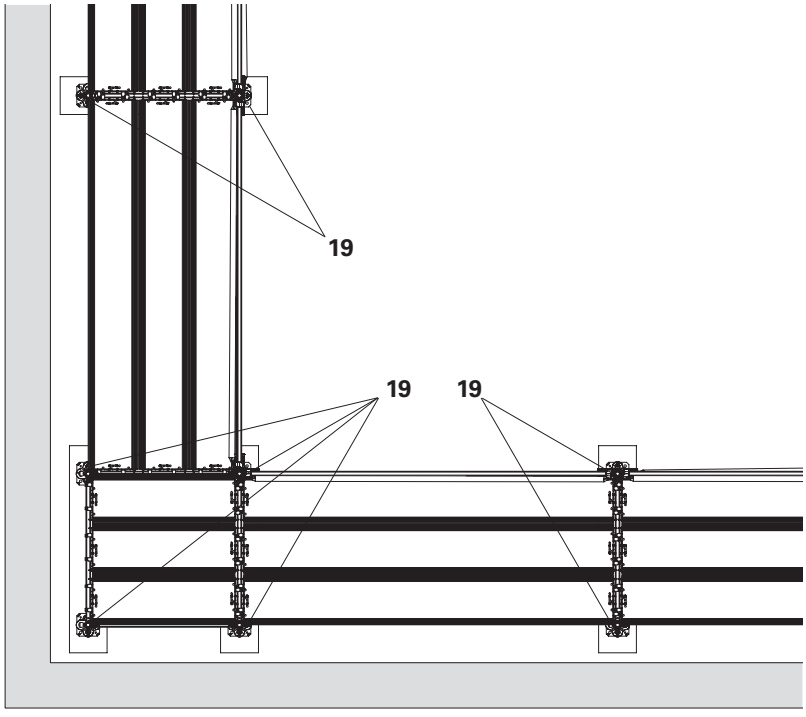
For structures with roof inclination ≤ 20°, secure scaffolds to provide protection against lifting wind forces.

For this, secure all scaffold levels from the highest anchored level to the next anchored level by means of Locking Pins Ø 48/57 (**19**) or bolts and nuts.



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 scaffold levels from the highest anchored level to the next anchored level by means of Locking Pins Ø 48/57 (**19**) or bolts and nuts.



Note: lateral protection components not shown.

H Examples

General

In addition to the standard configuration shown in these Instructions for Assembly and Use, a wide range of structural arrangements are possible.

The following astructural 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!

Executions deviating from the standard configuration require separate statical proof of stability.

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!

Recess construction

Complex building forms can be followed, e.g. with connected console brackets. (Fig. H.01)

To distribute the loads across multiple levels, it is possible to couple console brackets positioned one above the other using a Tube EVR 150 (**18**) or Standard UVR-2 150. These cases require special proof of load-bearing capacity.

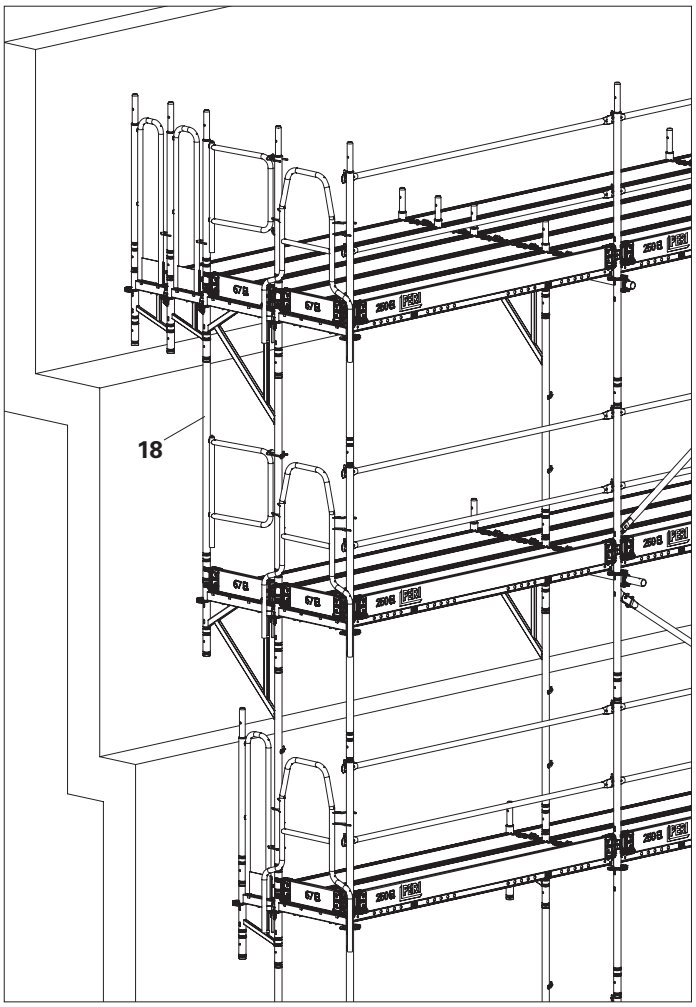


Fig. H.01

Inside corner with external console brackets

The external console brackets can only be installed in any one scaffold level on the Easy Frame EVF or on the topmost scaffold level on the Head Frame EVH.
The following are used for assembly in the inside corner:
- Console Bracket ECM 100 (**64**),
- Steel Decks EDS (**30**).

In addition, the following are required:
- Horizontal Ledger UH-2,
- Ledger-to-Ledger Coupler UHA-2,
- UH-Spigot-2

(Fig. H.02)

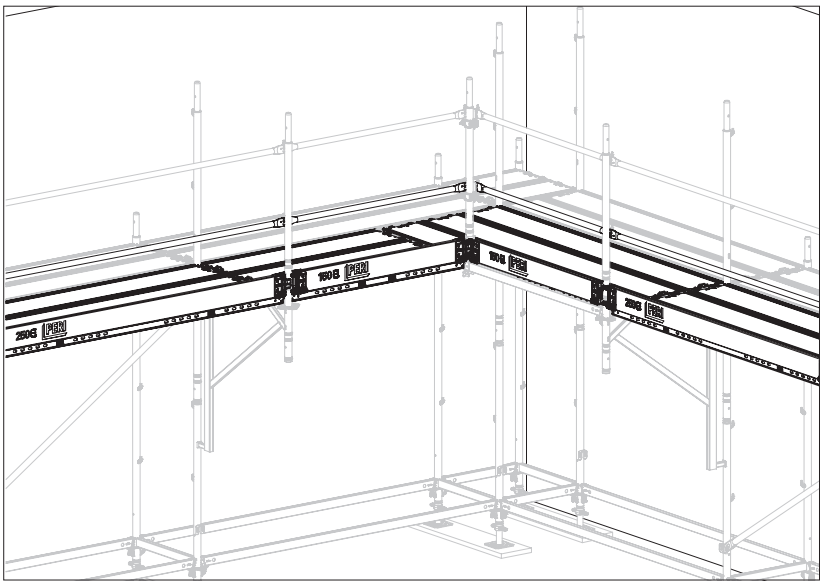


Fig. H.02

External corner with external console brackets

The external console brackets can only be installed in any one scaffold level on the Easy Frame EVF (**16**) or on the topmost scaffold level on the Head Frame EVH (**17**).
The following are used for assembly in the outside corner:
- Console Brackets ECM 33 (**62**),
- Console Brackets ECM 67
- Console Brackets ECM 100
- Steel Decks EDS (**30**).

In addition, the following are required:
- End Guardrail in Advance UPA 67
- End Guardrail EPF 33.

(Fig. H.03)

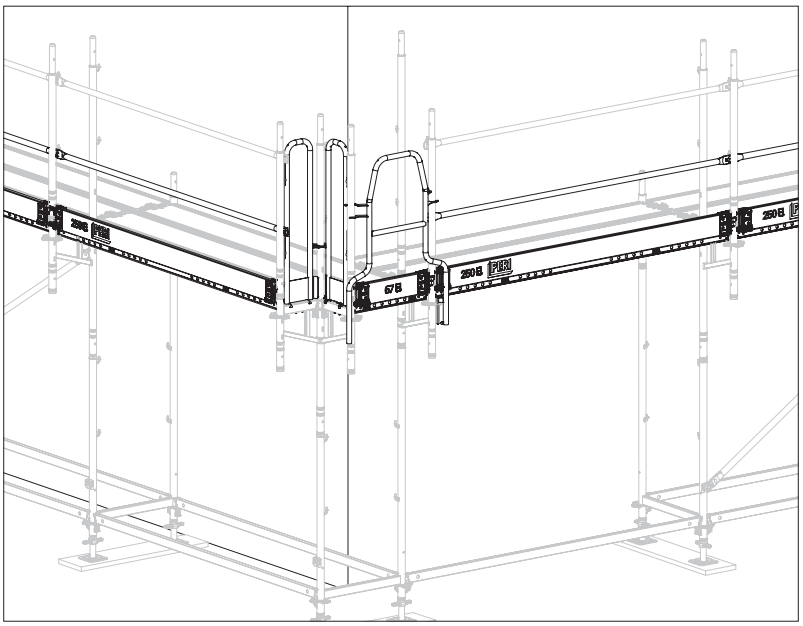


Fig. H.03

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:
- Easy Base Standard EVS 124
- Easy Standard EVM 200,
- Horizontal Ledger UH-2,
- Ledger Brace UBL-2
- Horizontal Brace UBH Flex.

(Fig. H.04 – H.06)

Alternatively, the Standard UVR-2 200 can be used.

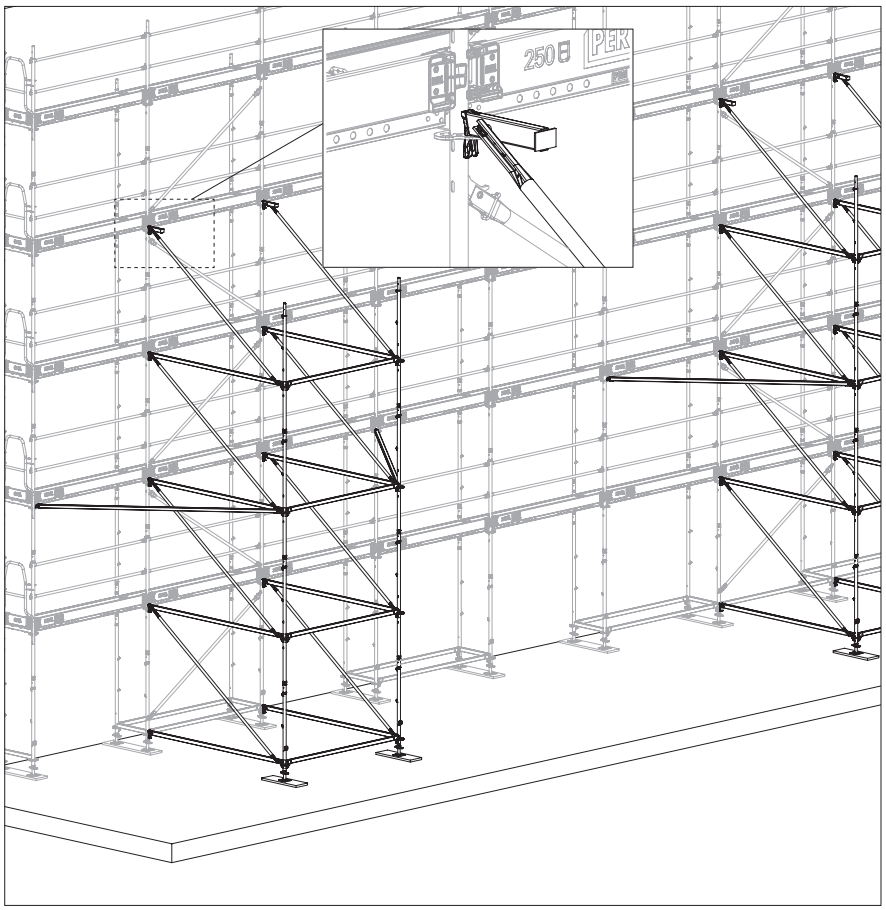


Fig. H.04

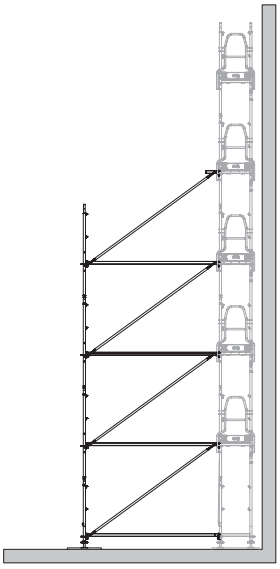


Fig. H.05

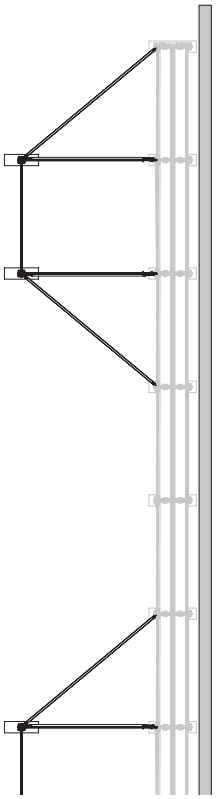


Fig. H.06

Landing platform

Landing platforms can be installed to store materials.
Do not exceed the maximum permissible load!
① = tensile force
② = compressive force
(Fig. H.07 + H.08)

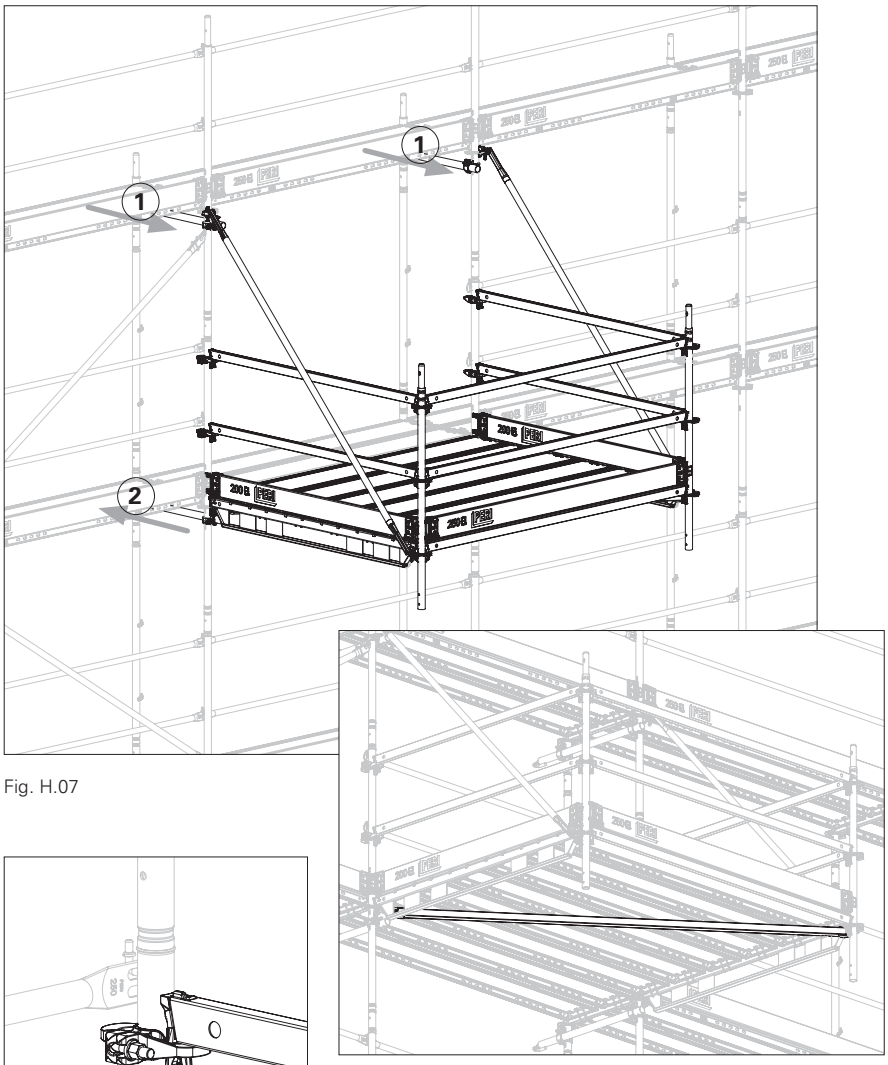


Fig. H.07

Fig. H.08

Variation:
Node braces for vertical bracing can also be installed, supported from the scaffold level immediately below.
① = tensile force
② = compressive force
(Fig. H.09)

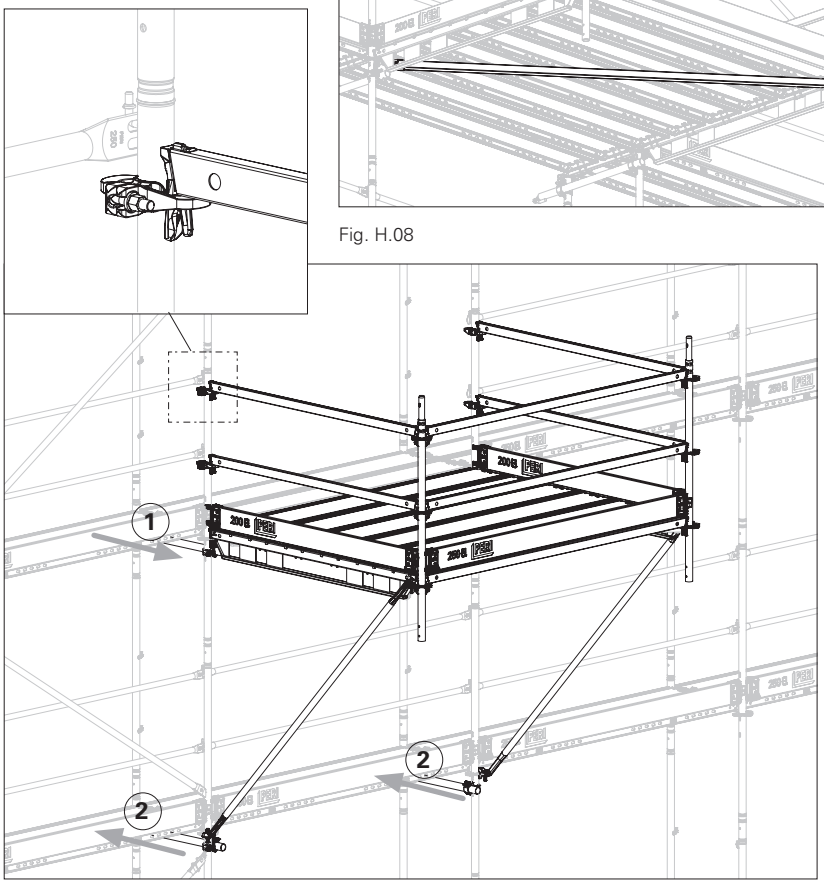


Fig. H.09

External access
with Flex Stair UAS-2 and Standards UVR-2

If required, scaffold access can also be realised with Standards UVR-2 instead of using Easy 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 75.

Depending on the situation and customer requirements
- a Safety Entry Gate UPS can be installed at the entrance to the staircase,
- and a Stair Guardrail UAG at any position on the inner side

of the flight of stairs.
(Fig. H.10)

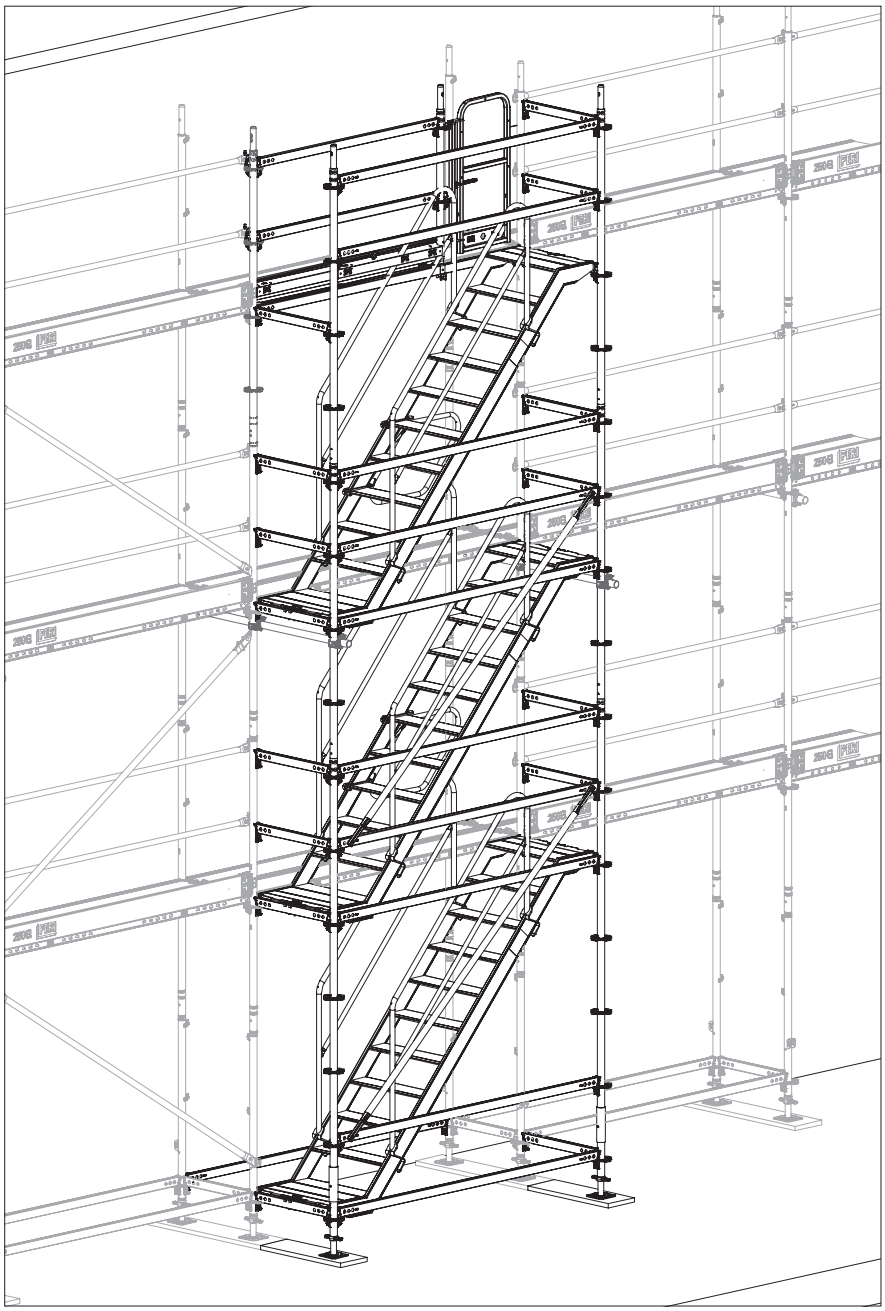


Fig. H.10

Adjusted roof protection

Outreach 33 cm
Height 1.00 m
(Fig. H.11 + H.12)

Lateral protection components not shown.

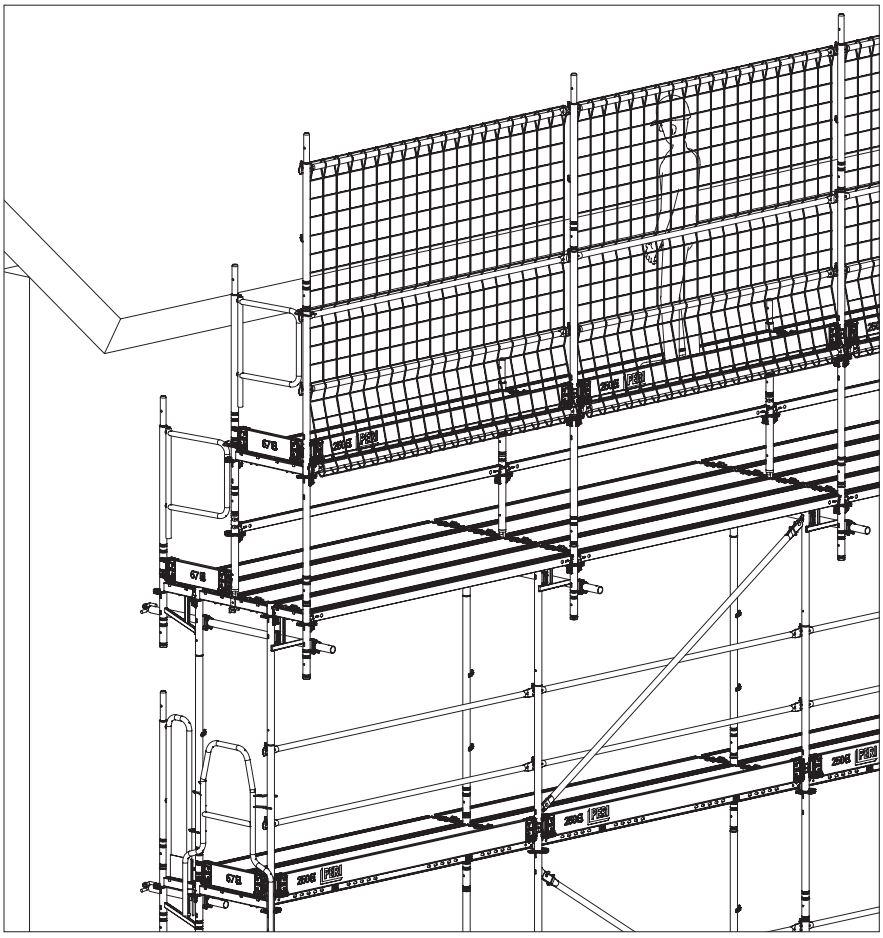


Fig. H.11

Section

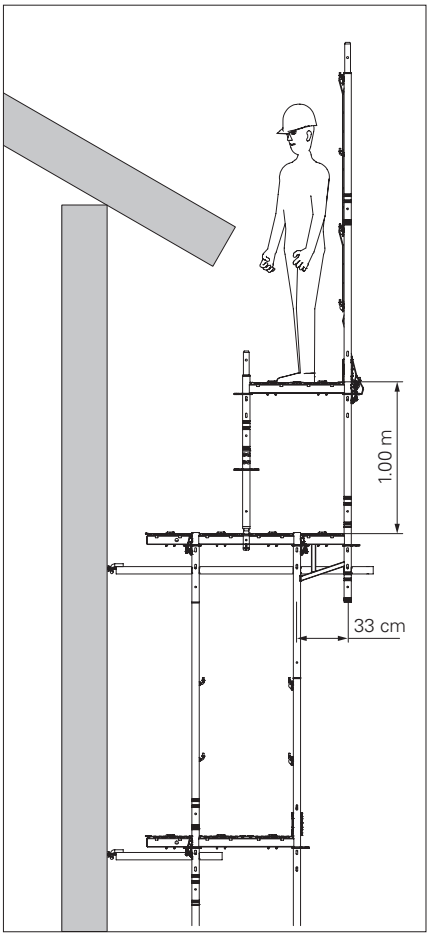


Fig. H.12

Adjusted roof protection

Outreach 67 cm
Height 1.00 m
(Fig. H.13 + H.14)

Lateral protection components not shown.

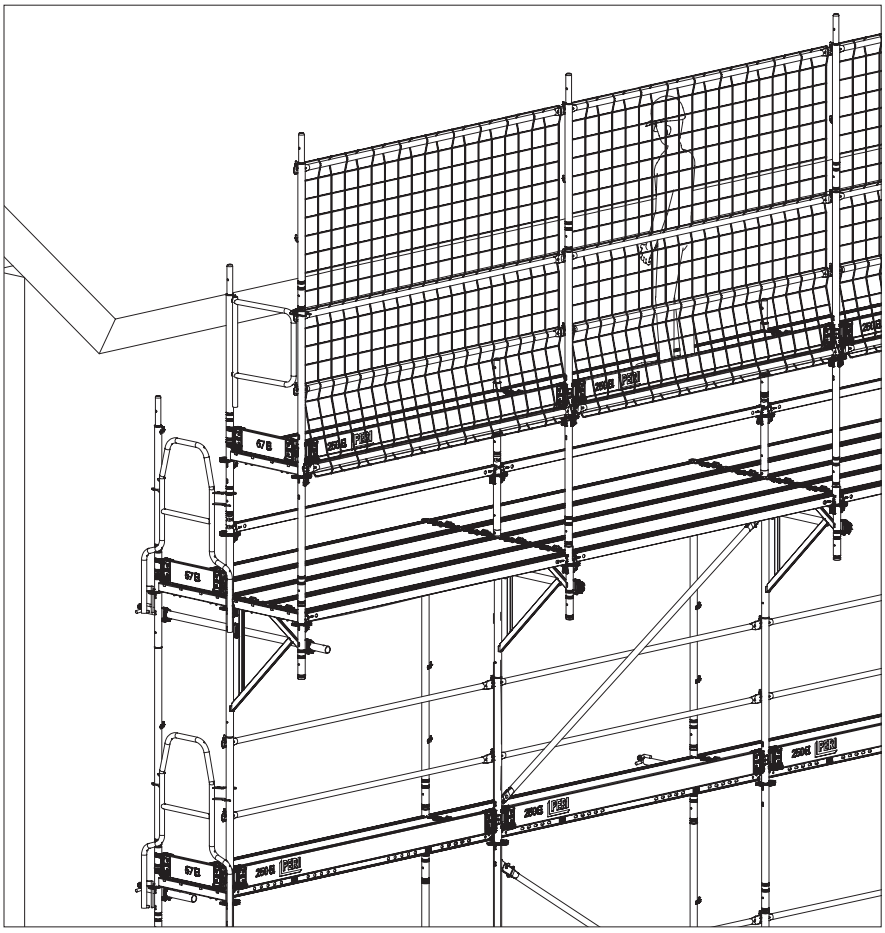


Fig. H.13

Section

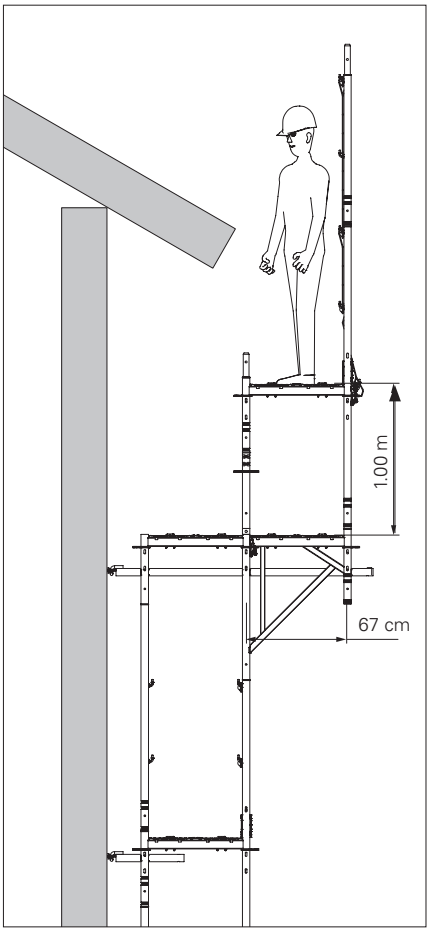


Fig. H.14

Adjusted roof protection

Outreach 33 cm
Height 1.50 m
(Fig. H.15 + H.16)

Lateral protection components not shown.

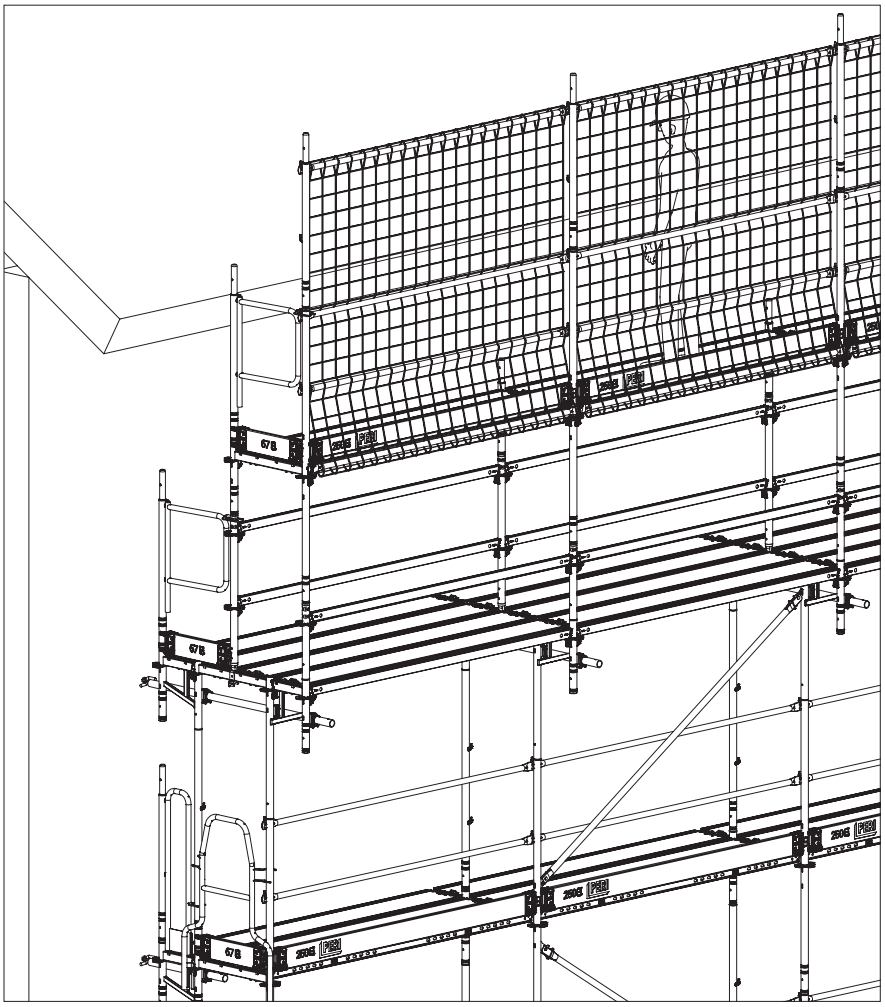


Fig. H.15

Section

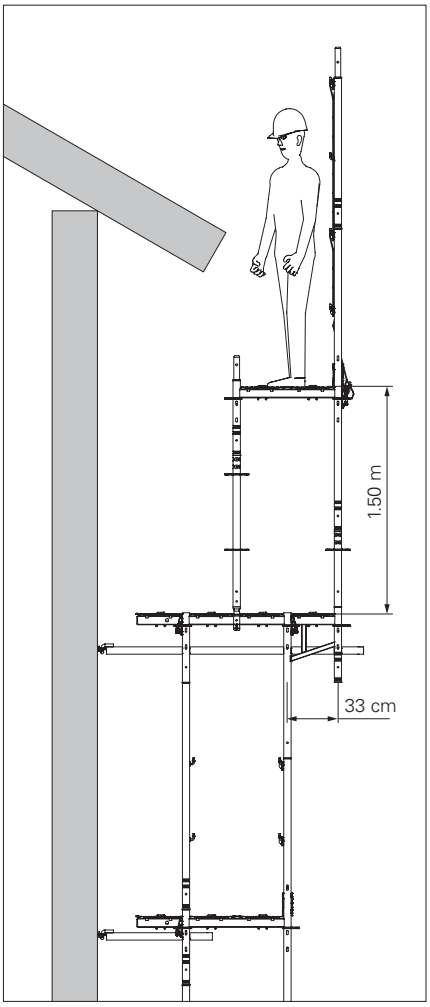


Fig. H.16

Adjusted roof protection

Outreach 67 cm
Height 1.50 m
(Fig. H.17 + H.18)

Lateral protection components
not shown.

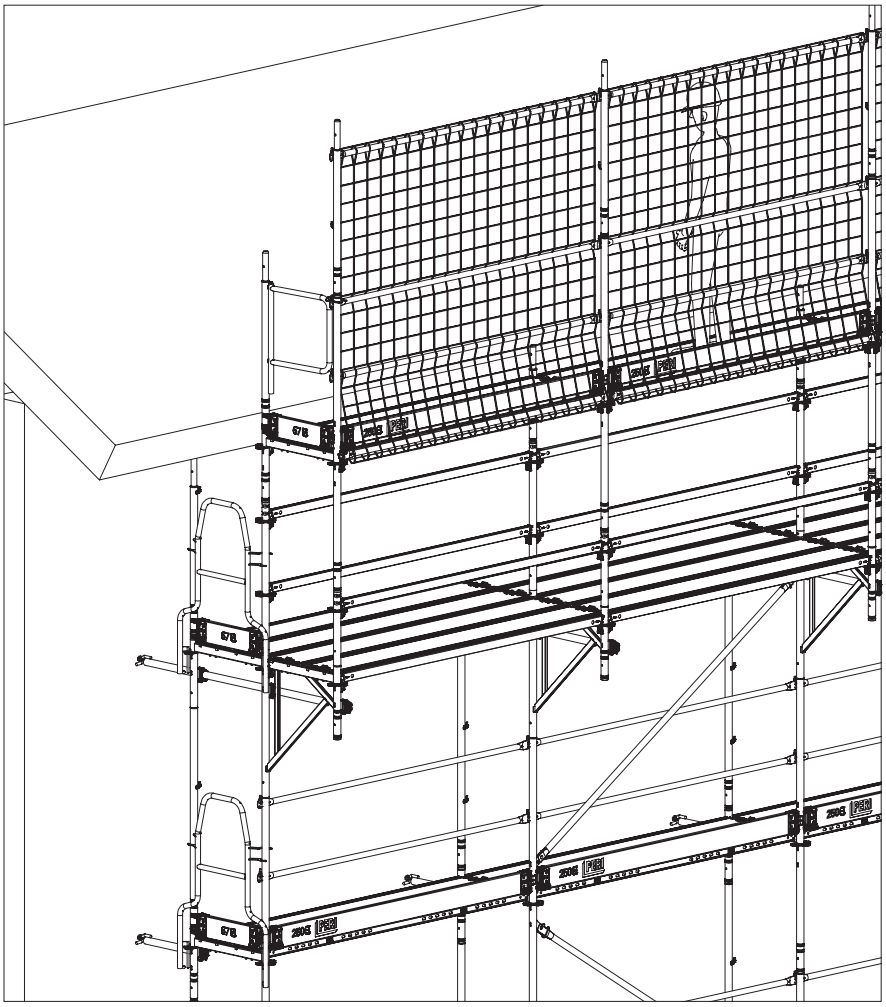


Fig. H.17

Section

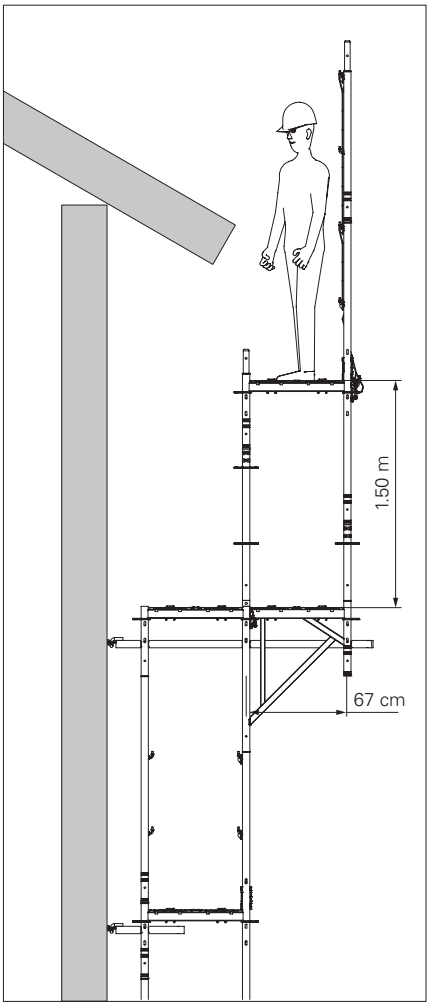


Fig. H.18

Bridging with node braces

With four Node Braces UBK-2 (**87**), one Base Frame EVB (**15**) and four Horizontal Ledgers UH-2 (**94**), it is possible to form bridging without formwork girders.
On the base frame, 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.

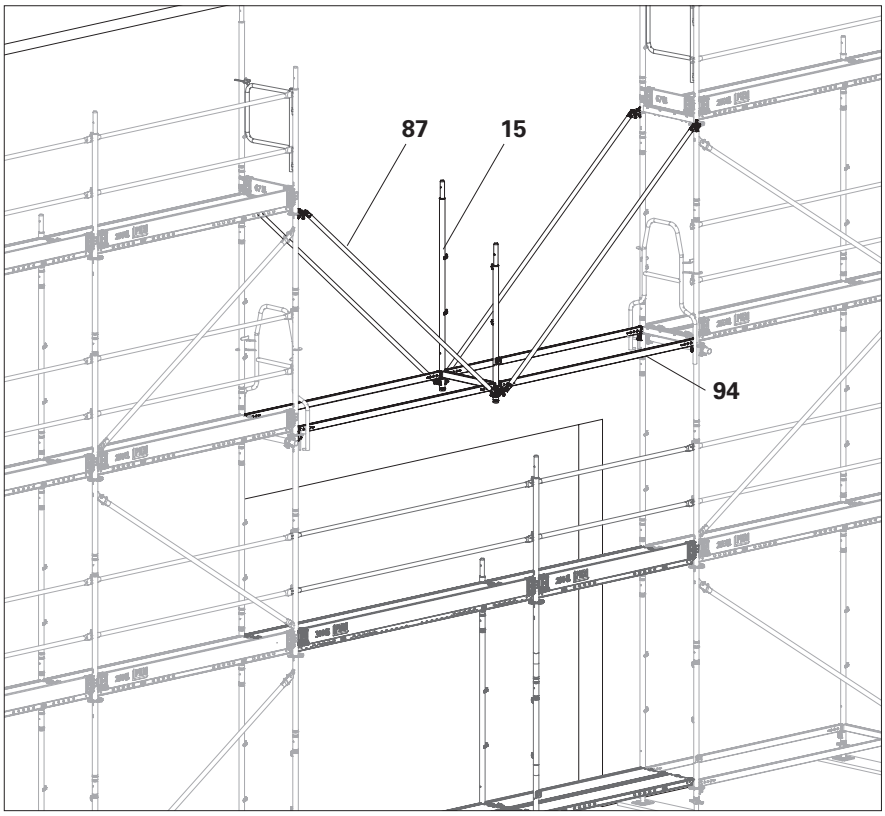


Fig. H.18

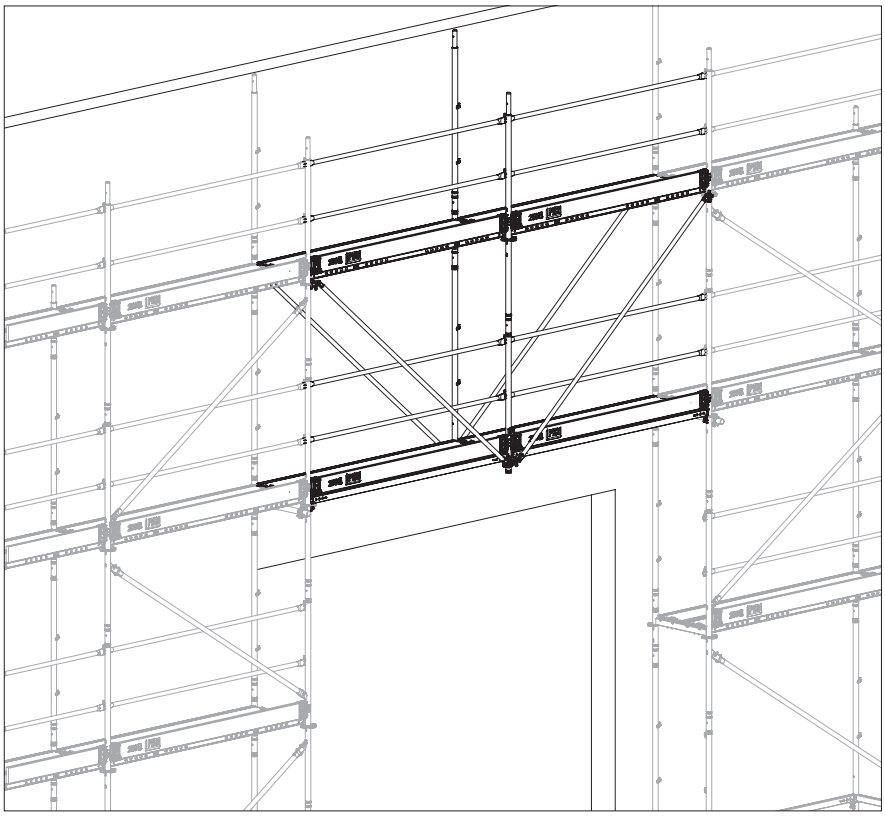
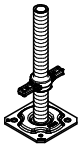
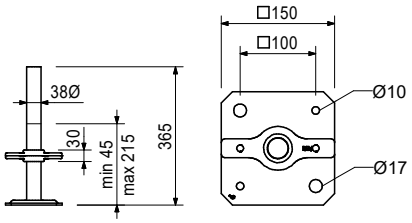


Fig. H.18a

Article no.	Weight kg		
116762	2.830	**Base Spindle UJB 38-36/17**	**Note** With captive quick jack nut.

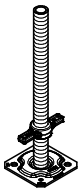


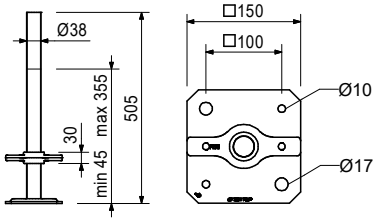


Accessories

100863	1.020	**Spindle Locking UJS**

100411	3.390	**Base Spindle UJB 38-50/30**	**Note** With captive red quick jack nut.

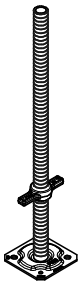


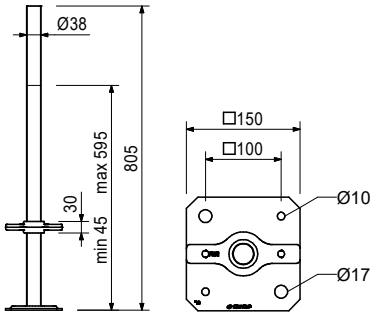


Accessories

100863	1.020	**Spindle Locking UJS**

100242	4.570	**Base Spindle UJB 38-80/55**	**Note** With captive yellow quick jack nut.

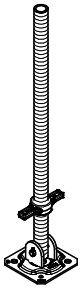


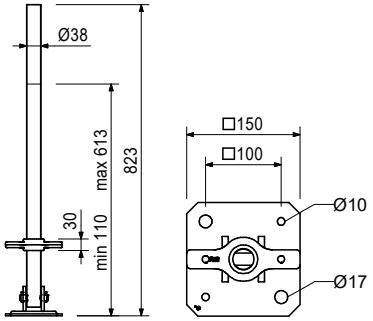


Accessories

100863	1.020	**Spindle Locking UJS**

Article no.	Weight kg		
100159	5.130	**Pivoting Base Spindle UJS 38-80/50**	**Note** With captive yellow quick jack nut.

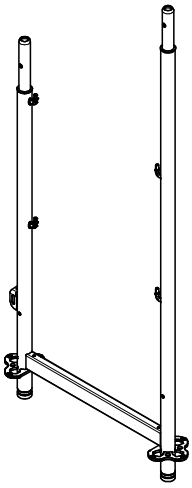


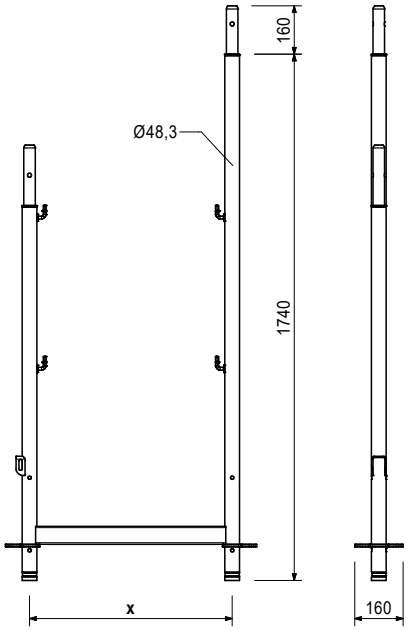


Accessories

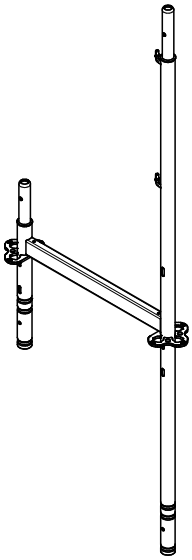
100863	1.020	**Spindle Locking UJS**

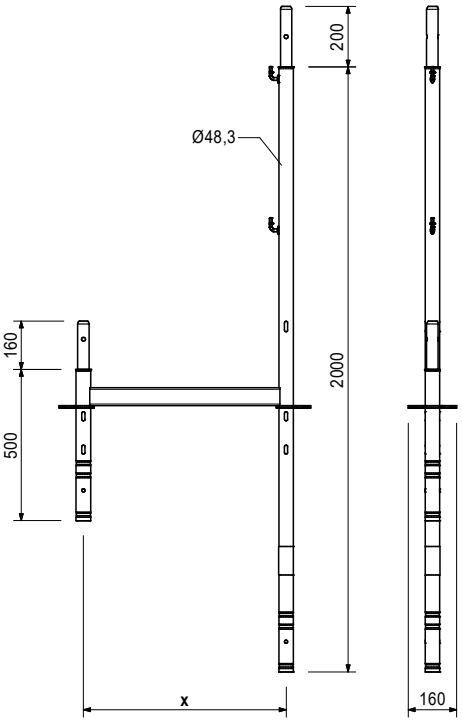
		Base Frame EVB	**X**
130518	13.200	**Base Frame EVB 67**	670
130858	14.200	**Base Frame EVB 100**	1000





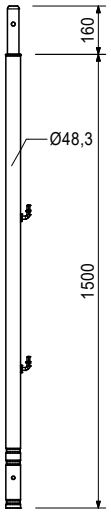
Article no.	Weight kg		
		Easy Frame EVF	**X**
130466	11.500	**Easy Frame EVF 67**	670
130860	12.500	**Easy Frame EVF 100**	1000





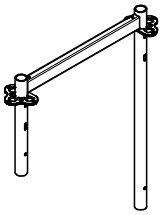
130481	5.130	**Tube EVR 150** Complements Easy Frame EVF

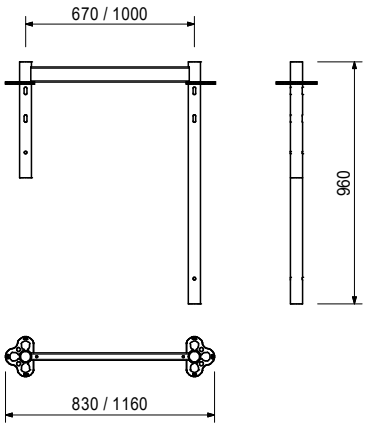




Article no.	Weight kg	
		Head Frame EVH
129314	8.370	**Head Frame EVH 67**
130804	9.390	**Head Frame EVH 100**

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

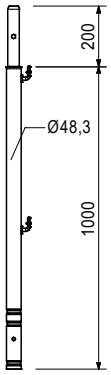




130512	3.720	**Guardrail Post EVP**

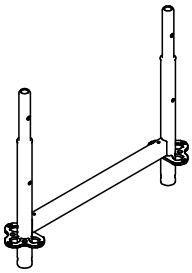
For completing the scaffold in conjunction with Console Brackets ECM or Protection Panel Posts EPS.

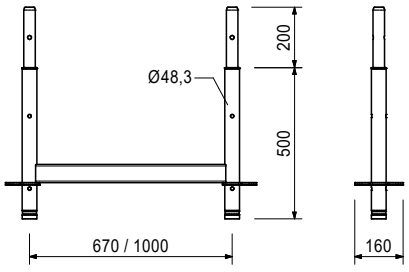




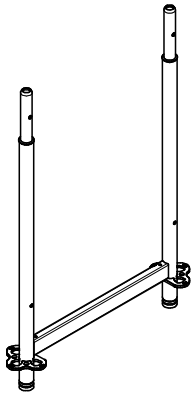
		Base Compensation EVA
130522	7.020	**Base Compensation EVA 67/50**
130854	8.040	**Base Compensation EVA 100/50**

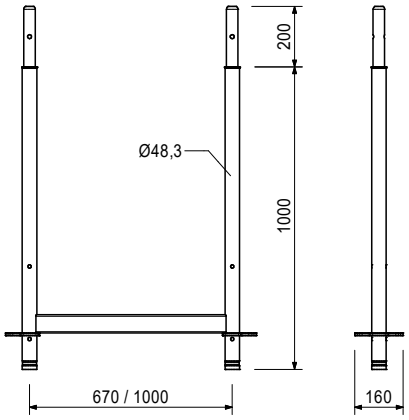
Facilitates height adjustments.



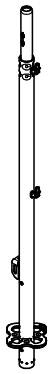


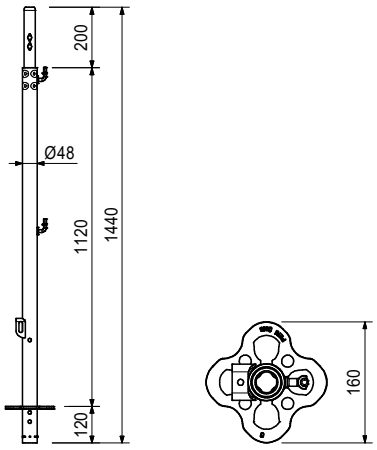
Article no.	Weight kg	
		Base Compensation EVA
130526	10.000	**Base Compensation EVA 67/100**
130856	11.100	**Base Compensation EVA 100/100**



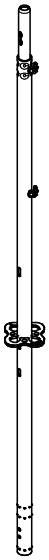


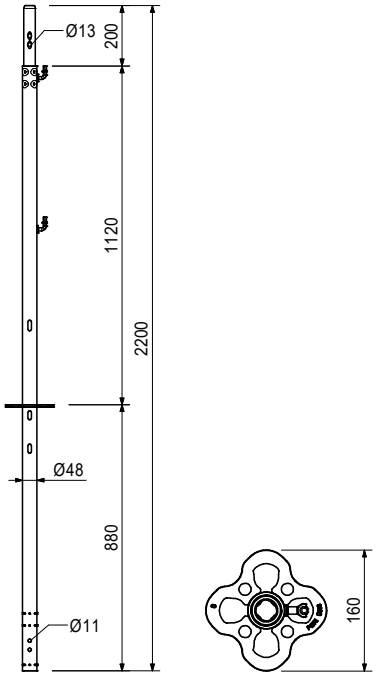
130619	5.260	**Easy Base Standard EVS 124**



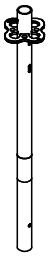


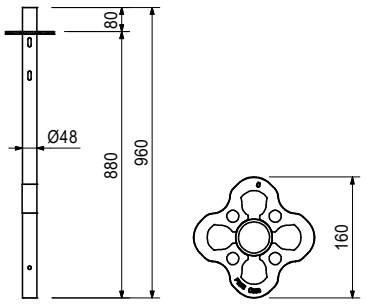
Article no.	Weight kg	
130621	7.450	**Easy Standard EVM 200**





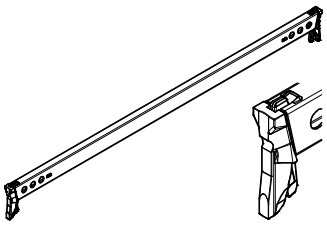
135972	4.310	**Top Standard EVT 96** For completing the top section of the scaffold when using Console Bracket ECM in conjunction with Easy Standard EVM to increase the width of the scaffold.

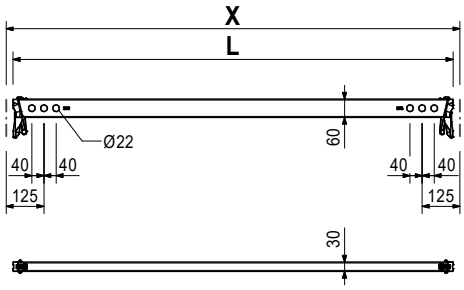




Article no.	Weight kg		L	X
		Horizontal Ledger UH-2		
131995	1.410	**Horizontal Ledger UH-2 25**	204	250
133900	1.590	**Horizontal Ledger UH-2 33**	284	330
131998	2.030	**Horizontal Ledger UH-2 50**	454	500
133903	2.480	**Horizontal Ledger UH-2 67**	624	670
132213	2.690	**Horizontal Ledger UH-2 75**	704	750
132004	3.740	**Horizontal Ledger UH-2 100**	954	1000
132007	4.510	**Horizontal Ledger UH-2 125**	1204	1250
132010	4.680	**Horizontal Ledger UH-2 150**	1454	1500
132013	5.340	**Horizontal Ledger UH-2 175**	1704	1750
132016	6.000	**Horizontal Ledger UH-2 200**	1954	2000
132019	6.660	**Horizontal Ledger UH-2 225**	2204	2250
132025	7.320	**Horizontal Ledger UH-2 250**	2454	2500
132022	8.650	**Horizontal Ledger UH-2 300**	2954	3000

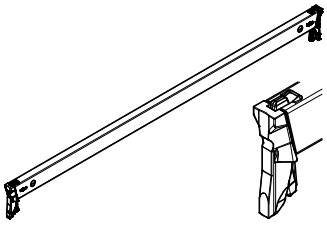
Note
With length marking for easier identification.

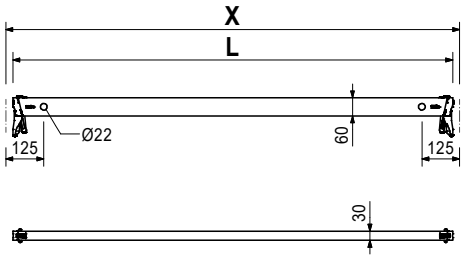




Article no.	Weight kg		L	X
		Horizontal Ledger UH Plus		
414613	1.420	**Horizontal Ledger UH 25 Plus**	204	250
414595	2.070	**Horizontal Ledger UH 50 Plus**	454	500
429982	2.520	**Horizontal Ledger UH 67 Plus**	624	670
414629	2.730	**Horizontal Ledger UH 75 Plus**	704	750
414632	4.390	**Horizontal Ledger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

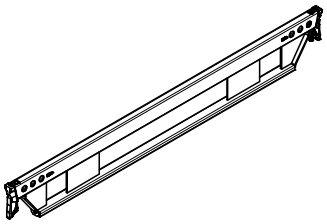
Note
With length marking for easier identification.

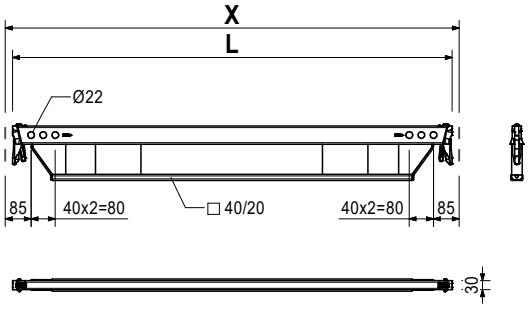




Article no.	Weight kg		L	X
		Horizontal Ledger UHV-2		
137020	9.410	**Horizontal Ledger UHV-2 150**	1454	1500
137025	12.700	**Horizontal Ledger UHV-2 200**	1954	2000
137030	15.200	**Horizontal Ledger UHV-2 250**	2454	2500
137035	18.500	**Horizontal Ledger UHV-2 300**	2954	3000

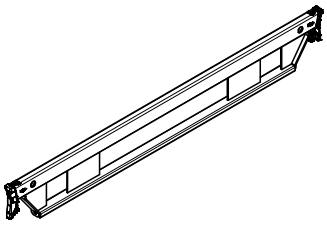
For high loads, e.g. in the case of material storage.

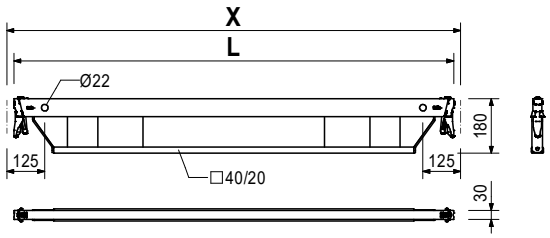




			L	X
		Horizontal Ledger UHV Plus		
414681	10.900	**Horizontal Ledger UHV 150 Plus**	1454	1500
414687	14.700	**Horizontal Ledger UHV 200 Plus**	1954	2000
414691	17.900	**Horizontal Ledger UHV 250 Plus**	2454	2500
414695	21.600	**Horizontal Ledger UHV 300 Plus**	2954	3000

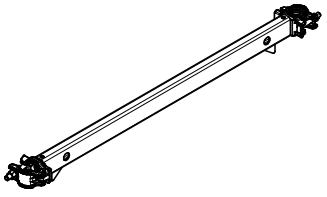
For high loads, e.g. in the case of material storage.

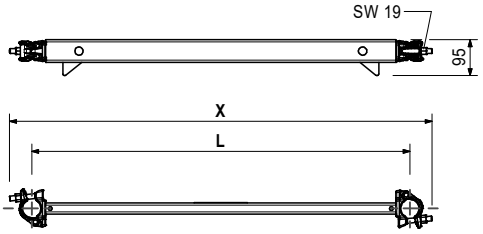




			L	X
		Coupling Latch UHC		
130009	3.410	**Coupling Latch UHC 67**	670	780
127537	5.310	**Coupling Latch UHC 100**	1000	1110

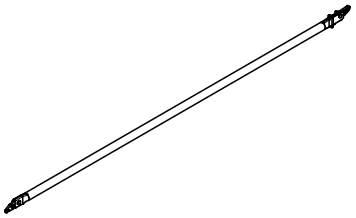
For deck levels at any height and bracing of formwork girders.

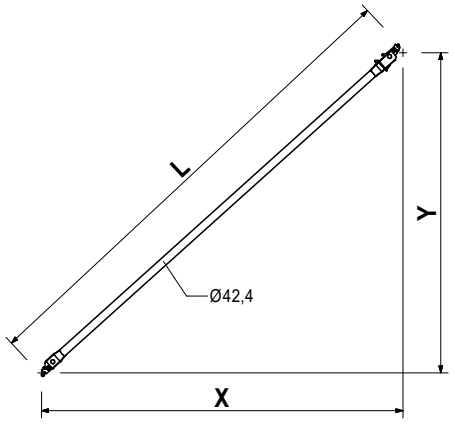




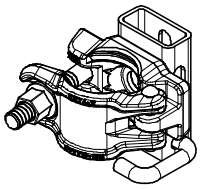
Article no.	Weight kg		L	X	Y
		Face Braces EBF			
130162	5.030	**Face Brace EBF 150/200**	2,216	1,500	2,000
130171	5.750	**Face Brace EBF 200/200**	2,577	2,000	2,000
130180	6.570	**Face Brace EBF 250/200**	2,979	2,500	2,000
130189	7.460	**Face Brace EBF 300/200**	3,406	3,000	2,000

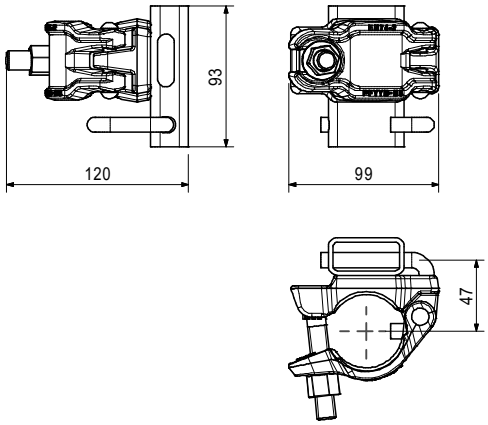
Note
With length marking for easier identification.





131863	1.230	**Brace Adapter EBA** Used for connection of one or two Face Braces EBF.

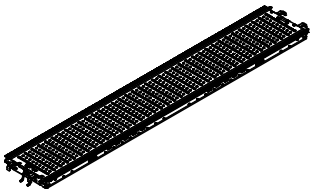


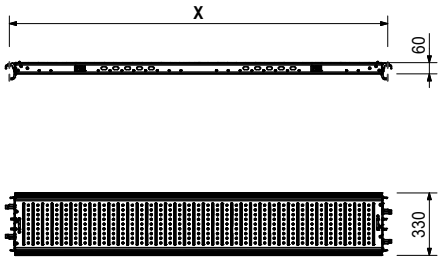


Article no.	Weight kg	Steel Decks EDS 33	X	perm. p [kN/m²]
130450	5.420	**Steel Deck EDS 33 x 67**	670	6.0
130448	7.360	**Steel Deck EDS 33 x 100**	1000	6.0
130445	10.300	**Steel Deck EDS 33 x 150**	1500	6.0
130441	13.300	**Steel Deck EDS 33 x 200**	2000	6.0
130438	16.200	**Steel Deck EDS 33 x 250**	2500	4.5
129272	19.200	**Steel Deck EDS 33 x 300**	3000	3.0

Installation on crossbar of the frame components or on Horizontal Ledger UH.

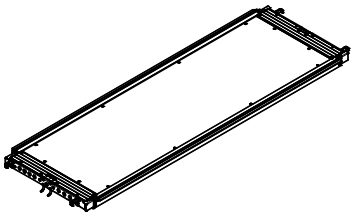
Note
Values correspond with EN 12811-1.

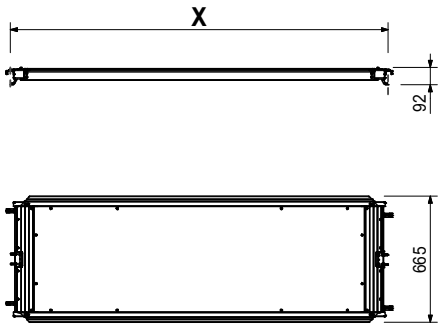




Article no.	Weight kg	Combi Decks EDW-2 67	X	perm. p [kN/m²]
131789	12.100	**Combi Deck EDW-2 67 x 150**	1500	2.0
131791	15.100	**Combi Deck EDW-2 67 x 200**	2000	2.0
131788	18.500	**Combi Deck EDW-2 67 x 250**	2500	2.0
131790	22.400	**Combi Deck EDW-2 67 x 300**	3000	2.0

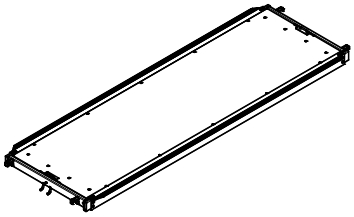
Deck surface made of coated plywood board.

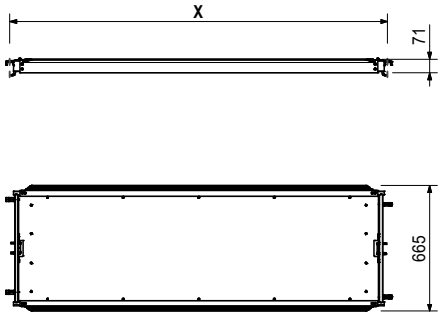




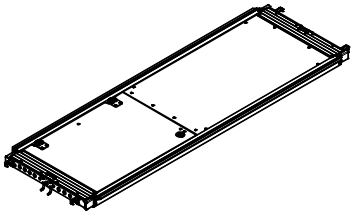
Article no.	Weight kg	Combi Decks EDW	X	perm. p [kN/m²]
130321	13.200	**Combi Deck EDW 150**	1500	2.0
130317	16.300	**Combi Deck EDW 200**	2000	2.0
130313	19.700	**Combi Deck EDW 250**	2500	2.0
130309	22.800	**Combi Deck EDW 300**	3000	2.0

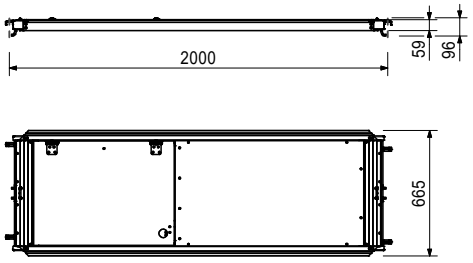
Deck surface made of coated plywood board.





Article no.	Weight kg		
132928	15.900	**Entry Platform EAW-2 67 x 200** Deck surface made of coated plywood board	**Technical data** Load Class 3, 2.0 kN/m²

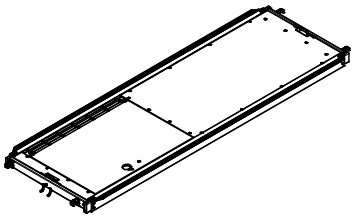


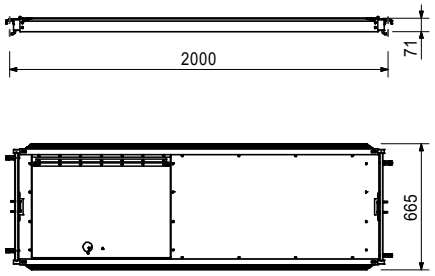


Accessories

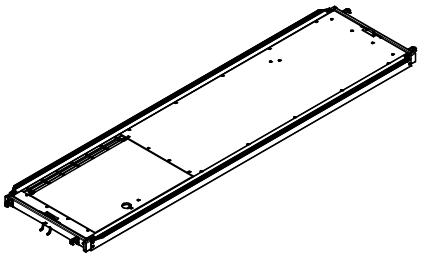
109879	3.820	**Ladder UAF 200, Aluminium**

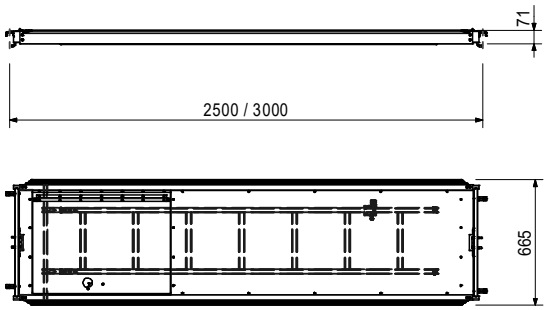
130426	18.400	**Entry Platform EAW 200** Deck surface made of coated plywood board.	**Technical data** Load Class 3, 2.0 kN/m².





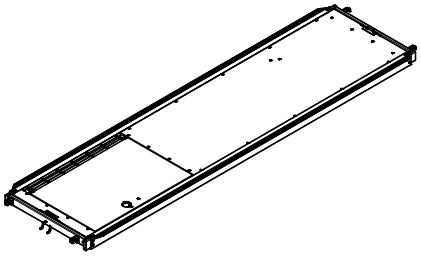
		Access Decks EAW-2, 67	**Technical data**
133286	24.100	**Access Deck EAW-2 67 x 250-L**	Load Class 3, 2.0 kN/m²
133285	27.300	**Access Deck EAW-2 67 x 300-L**	
		Deck surface made of coated plywood board.	

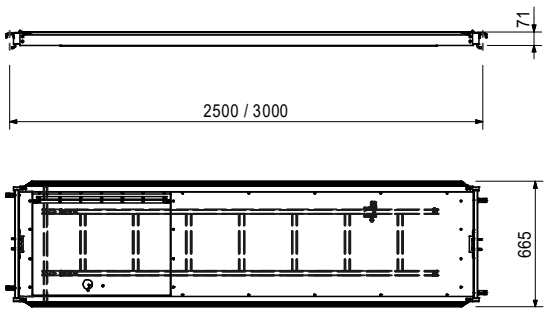




Article no.	Weight kg		
		Access Decks EAW	**Technical data**
130431	25.800	**Access Deck EAW-L 250**	Load Class 3, 2.0 kN/m²
130425	29.200	**Access Deck EAW-L 300**	

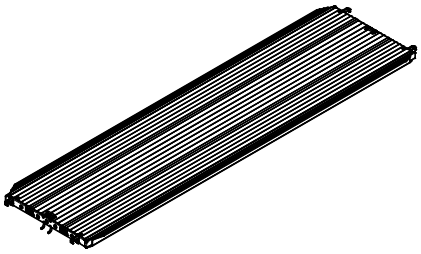
Deck surface made of coated plywood board.

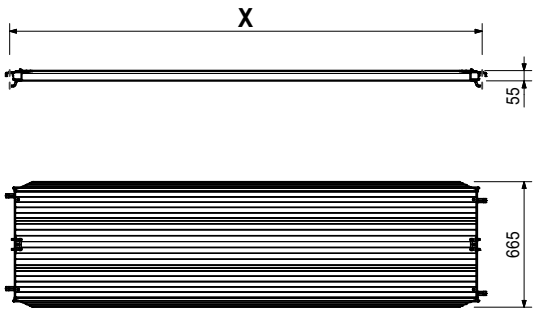




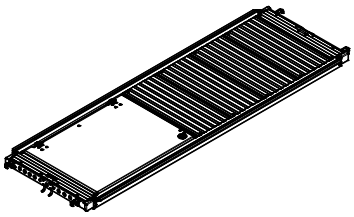
			X	perm. p [kN/m²]
		Aluminium Deck EDA 67		
133525	6.360	**Aluminium Deck EDA 67 x 67**	670	6.0
133524	8.420	**Aluminium Deck EDA 67 x 100**	1000	3.0
133523	11.500	**Aluminium Deck EDA 67 x 150**	1500	3.0
133522	14.700	**Aluminium Deck EDA 67 x 200**	2000	3.0
133521	17.800	**Aluminium Deck EDA 67 x 250**	2500	3.0
133492	21.000	**Aluminium Deck EDA 67 x 300**	3000	2.0

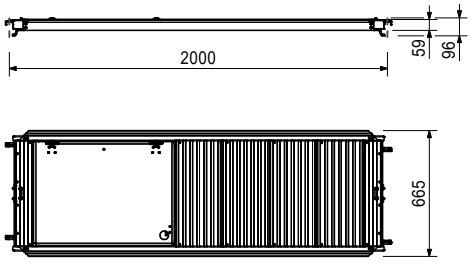
Deck surface made of aluminium profiles.





132882	17.500	**Entry Platform EAA 67 x 200**	**Technical data**
		Deck surface made of aluminium profiles.	Load Class 3, 2.0 kN/m²





Accessories

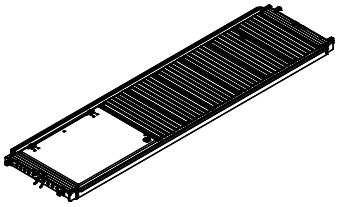
109879	3.820	**Ladder UAF 200, Aluminium**

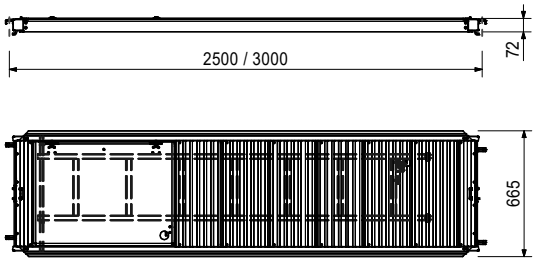
Article no.	Weight kg	
		Access Decks EAA 67
133289	25.200	**Access Decks EAA 67 x 250-L**
133287	28.300	**Access Decks EAA 67 x 300-L**

Deck surface made of aluminium profiles.

Technical data

Load Class 3, 2.0 kN/m²





Article no.	Weight kg	
		Composite Deck EDC 67
135376	12.500	**Composite Deck EDC 67 x 150**
135375	15.600	**Composite Deck EDC 67 x 200**
135374	19.200	**Composite Deck EDC 67 x 250**
135365	23.200	**Composite Deck EDC 67 x 300**

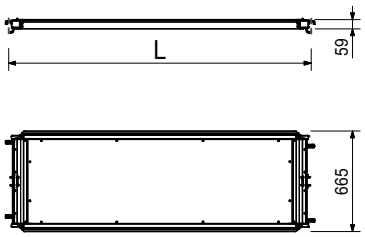
Deck surface made of glass-fibre reinforced plastic.

L
1500
2000
2500
3000

Technical data

Load Class 3, 2.0 kN/m²



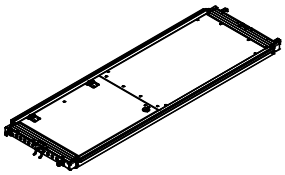


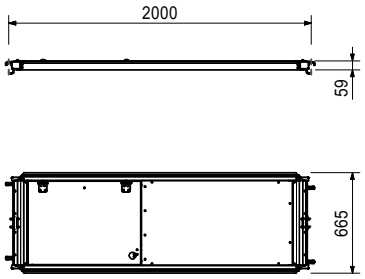
Article no.	Weight kg	
135369	16.500	**Entry Platform EAC 67 x 200**

Deck surface made of glass-fibre reinforced plastic.

Technical data

Load Class 3, 2.0 kN/m²





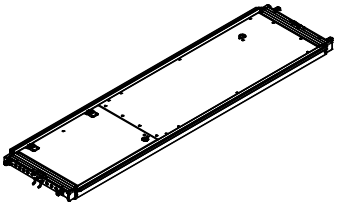
Accessories

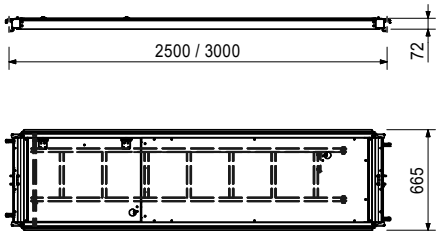
109879	3.820	**Ladder UAF 200, Aluminium**

Article no.	Weight kg	
		Access Decks EAC 67
135368	24.800	**Access Decks EAC 67 x 250-L**
135367	28.100	**Access Decks EAC 67 x 300-L**

Deck surface made of glass-fibre reinforced plastic.

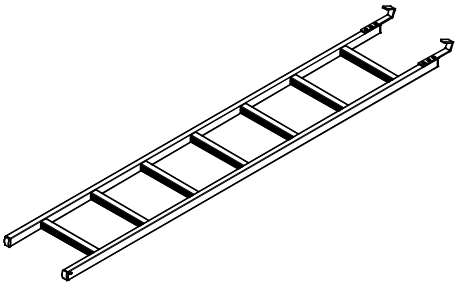
Technical data
Load Class 3, 2.0 kN/m²

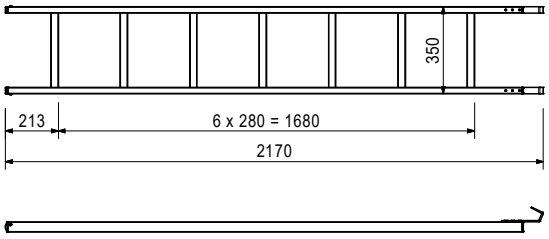




109879	3.820	**Ladder UAF 200, Aluminium**

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

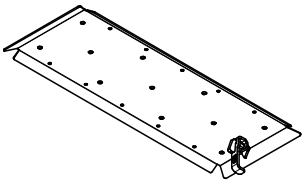


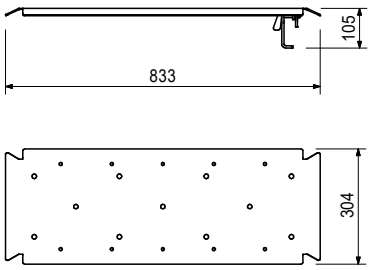


134539	6.270	**Deck Compensation EDL 33**

For compensation lengths of up to 67 cm.

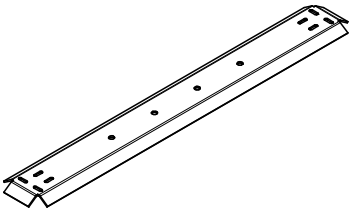
Note
Load Class 4, 3.0 kN/m².

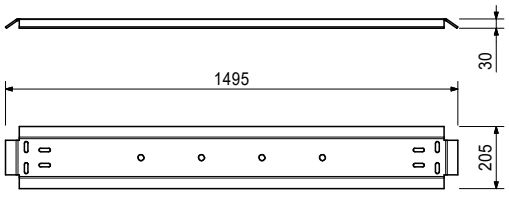




136925	4.250	**Cover Plate UDB 20 x 150**

Note
Load class 3, 2.0 kN/m²

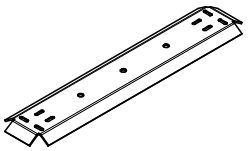


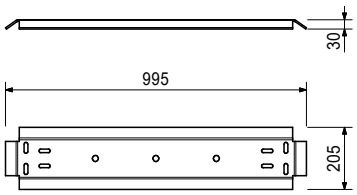


Accessories

137279	0.100	**Hex nut ISO 4032 M10-8, galv. SW17**
137252	0.200	**FLRD screw M 10 x 60 DIN 603, 8.8, galv.**

Article no.	Weight kg		
136927	2.780	**Cover Plate UDB 20 x 100**	**Note** Load class 3, 2.0 kN/m²



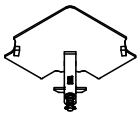


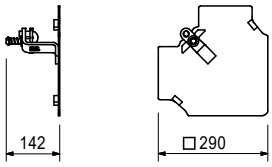
Accessories

137252	0.200	**FLRD screw M 10 x 60 DIN 603, 8.8, galv.**
137279	0.100	**Hex nut ISO 4032 M10-8, galv. SW17**

		Inside Corner Plates EDP	**L**
134549	2.800	**Inside Corner Plate 25**	290
134552	4.940	**Inside Corner Plate 33**	378

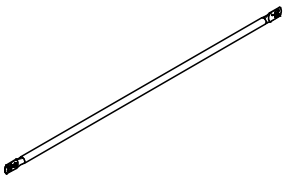
Note
Load Class 4, 3.0 kN/m².

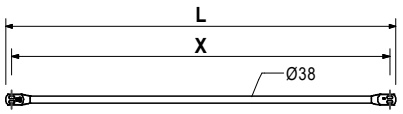




		Guardrail Posts EPG	**L**	**X**
130191	1.150	**Guardrail Post EPG 67**	735	670
130193	1.680	**Guardrail Post EPG 100**	1065	1000
130195	2.480	**Guardrail Post EPG 150**	1565	1500
130197	3.280	**Guardrail Post EPG 200**	2065	2000
130199	4.090	**Guardrail Post EPG 250**	2565	2500
130201	4.890	**Guardrail Post EPG 300**	3065	3000

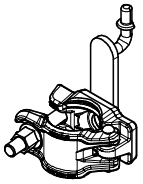
Note
With length marking for easier identification.

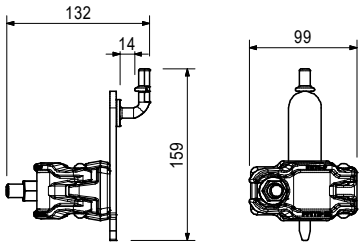


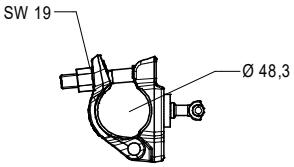


Article no.	Weight kg
130434	1.100

Guardrail Coupling EPR
For installing the Guardrail Posts EPG
on the scaffold standards at any height.



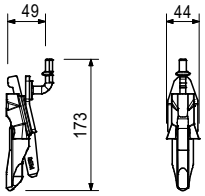




130562	0.623	**Guardrail Holder EPW**

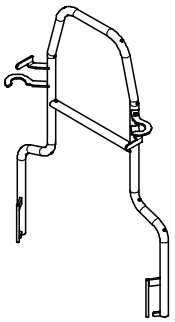
For installing the Guardrail Posts EPG to rosettes.

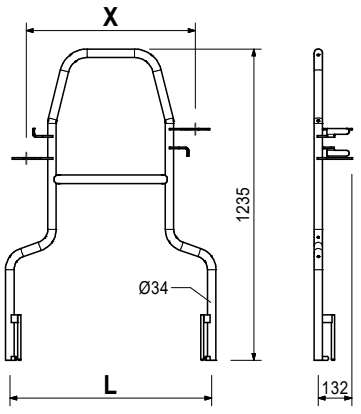




			L	X
		End Guardrail in Advance UPA-2		
134100	6.730	**End Guardrail in Advance UPA-2 67**	801	670
134104	8.100	**End Guardrail in Advance UPA-2 100**	1131	1000

Assembly in advance.



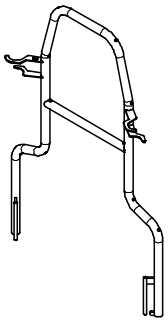


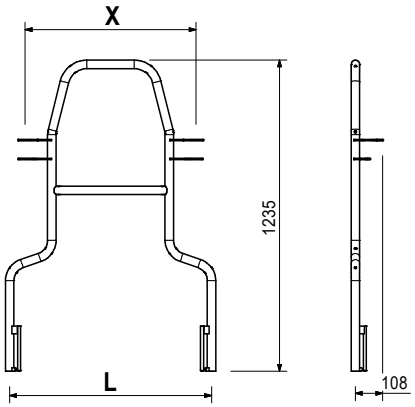
Article no.	Weight kg	
		End Guardrail in Advance UPA
130476	6.230	**End Guardrail in Advance UPA 67**
130583	7.600	**End Guardrail in Advance UPA 100**

Assembly in advance.

L	X
801	670
1131	1000

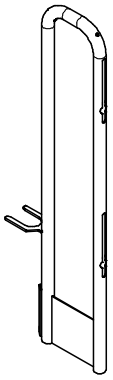
Note
Toe board wood/toe board steel not integrated.

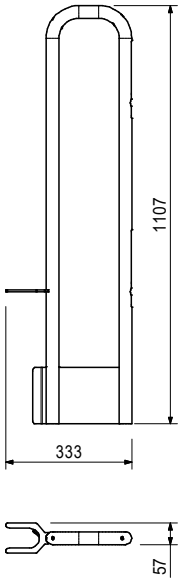




Article no.	Weight kg	
130233	4.480	**End Guardrail EPF 33**

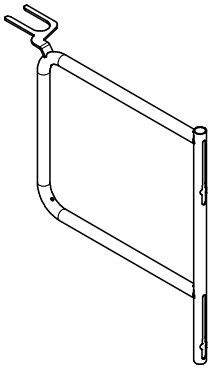
Assembly not in advance.

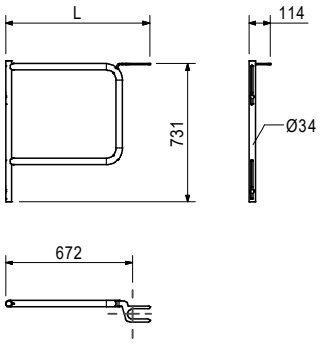




Article no.	Weight kg		
		End Guardrail EPF	**L**
130228	3.630	**End Guardrail EPF 67**	683
130225	4.660	**End Guardrail EPF 100**	1013

Assembly not in advance.

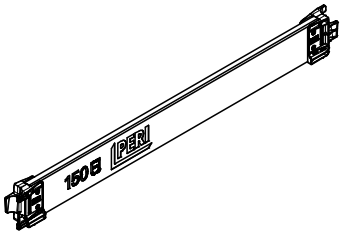


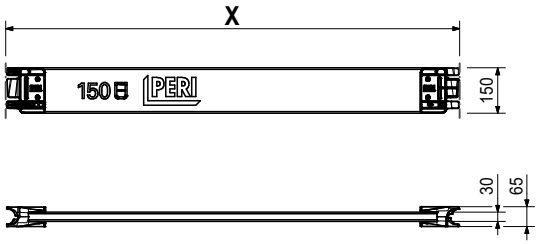


		Toe boards Wood UPF	**X**
129490	1.180	**Toe board Wood UPF 50**	500
129492	1.550	**Toe board Wood UPF 67**	670
129496	2.250	**Toe board Wood UPF 100**	1000
129498	3.320	**Toe board Wood UPF 150**	1500
129500	4.390	**Toe board Wood UPF 200**	2000
129502	5.460	**Toe board Wood UPF 250**	2500
129504	6.520	**Toe board Wood UPF 300**	3000

Note

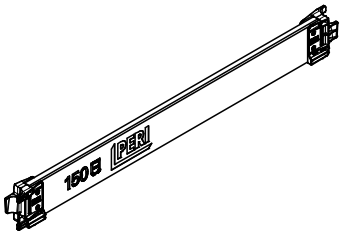
- Default surface: painted yellow.

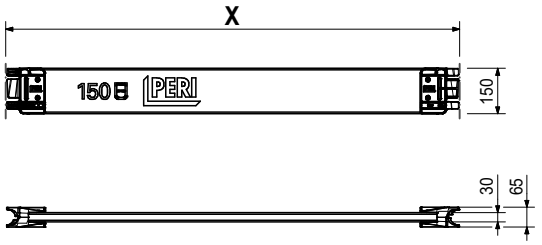




		Toe Boards Wood UPF-C	**X**
132555	1.180	**Toe Board Wood UPF 50-C**	500
132556	1.550	**Toe Board Wood UPF 67-C**	670
132557	1.720	**Toe Board Wood UPF 75-C**	750
132558	2.250	**Toe Board Wood UPF 100-C**	1000
132559	3.320	**Toe Board Wood UPF 150-C**	1500
132560	4.390	**Toe Board Wood UPF 200-C**	2000
132561	5.460	**Toe Board Wood UPF 250-C**	2500
132562	6.520	**Toe Board Wood UPF 300-C**	3000

Customised toe board wood design in RAL colour scheme possible on request.

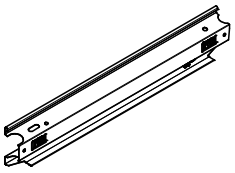


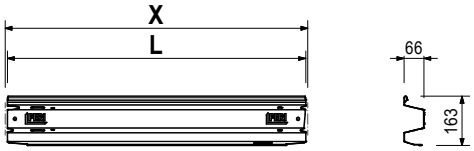


Article no.	Weight kg		L	X
		Steel Toe Boards UPY		
132592	0.414	**Steel Toe Board UPY 25**	236	250
110213	0.929	**Steel Toe Board UPY 50**	486	500
129947	1.280	**Steel Toe Board UPY 67**	656	670
110073	1.960	**Steel Toe Board UPY 100**	986	1000
110160	2.990	**Steel Toe Board UPY 150**	1486	1500
110176	4.030	**Steel Toe Board UPY 200**	1986	2000
110208	5.060	**Steel Toe Board UPY 250**	2486	2500
110211	6.090	**Steel Toe Board UPY 300**	2986	3000

Note

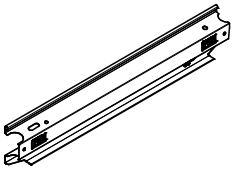
- Default surface: galvanised and painted in yellow.

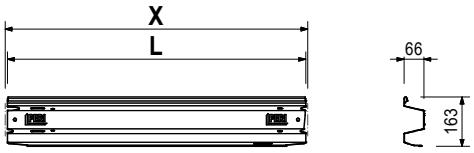




Article no.	Weight kg		L	X
		Toe Boards Steel UPY-C		
134643	0.414	**Toe Board Steel UPY 25-C**	236	250
134642	0.929	**Toe Board Steel UPY 50-C**	486	500
134641	1.280	**Toe Board Steel UPY 67-C**	656	670
134640	1.450	**Toe Board Steel UPY 75-C**	736	750
134639	1.960	**Toe Board Steel UPY 100-C**	986	1000
134638	2.480	**Toe Board Steel UPY 125-C**	1236	1250
134637	2.990	**Toe Board Steel UPY 150-C**	1486	1500
134636	4.030	**Toe Board Steel UPY 200-C**	1986	2000
134635	5.060	**Toe Board Steel UPY 250-C**	2486	2500
134634	6.090	**Toe Board Steel UPY 300-C**	2986	3000

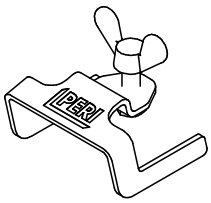
Customised toe board steel design in RAL colour scheme possible on request.

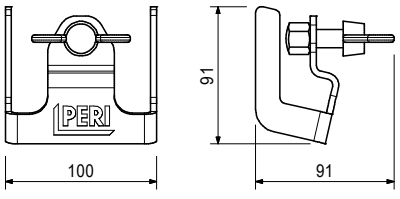




134542	0.606	**Toe Board Compensation UPY-L**	

Connection component for connection of 2 x Toe Boards UPY.

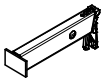


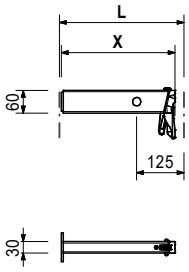


Article no.	Weight kg		
		Supports UC	
115959	1.160	**Support UC 25**	
130390	1.360	**Support UC 33**	

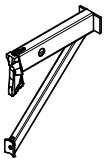
L	X
250	223
330	301

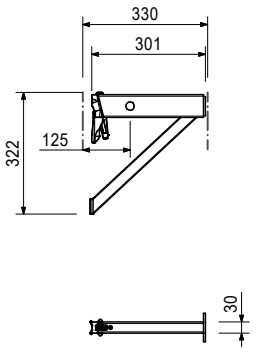
Note
Small console brackets with limit stop for fixing the decks in place.



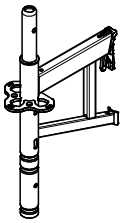


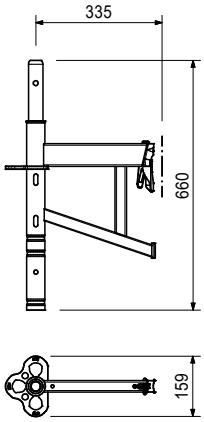
Article no.	Weight kg	
136050	1.880	**Support UCS 33**



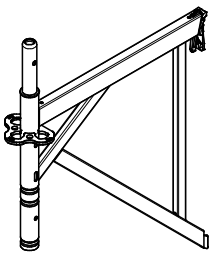


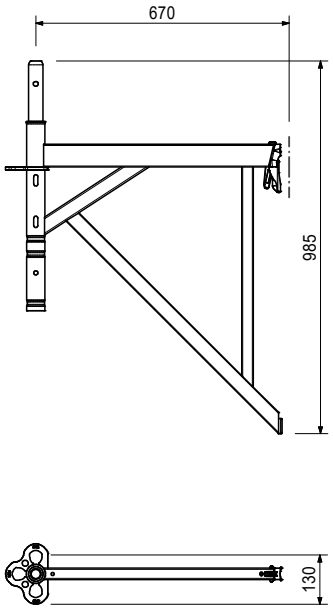
Article no.	Weight kg	
130378	4.550	**Console Bracket ECM 33**



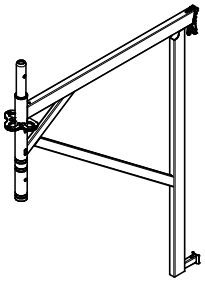


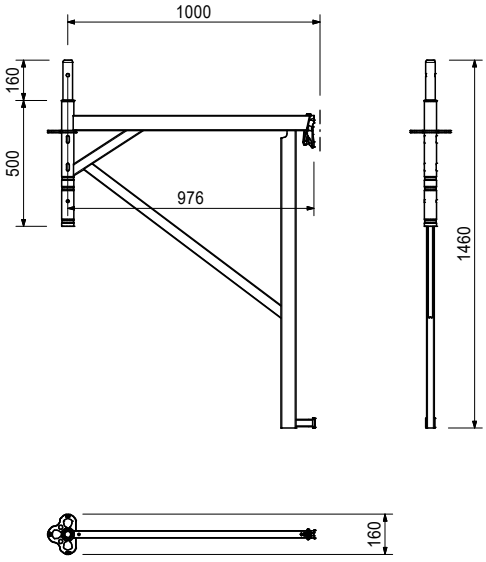
Article no.	Weight kg	
130372	7.430	**Console Bracket ECM 67**



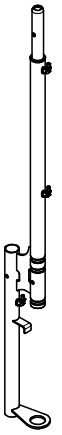


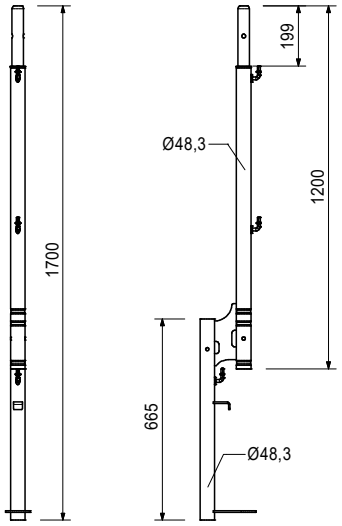
Article no.	Weight kg	
130365	11.200	**Console Bracket ECM 100**





Article no.	Weight kg	
130532	6.640	**Protection Panel Post EPS** For assembling a protection panel.



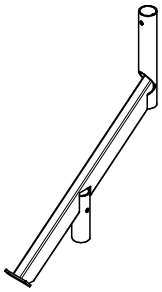


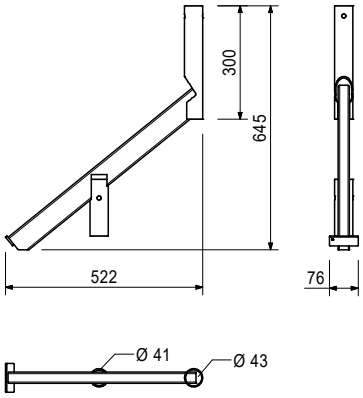
Accessories

130512	3.720	**Guardrail Post EVP**

130385	2.970	**Protection Roof Connector EPC** For assembling a protection roof.

Note
Alternative accessories:
100719 Bolt ISO 4014 M10 x 70-8.8

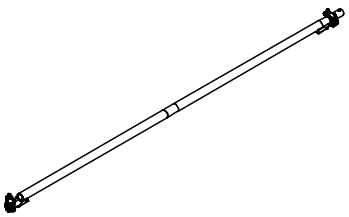


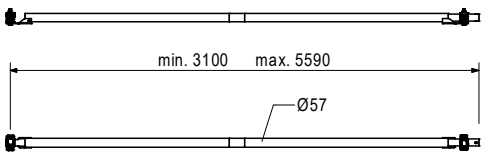


Accessories

123480	0.080	**Tube clip 10 x 60, galv.**

131093	23.700	**Multi Brace EWB**

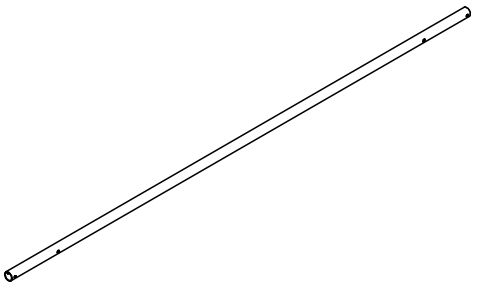


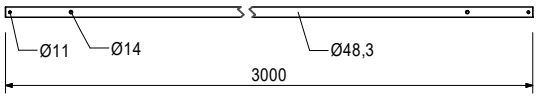


Accessories

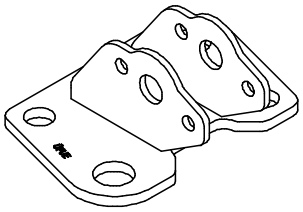
131097	1.700	**Base plate for EWB**

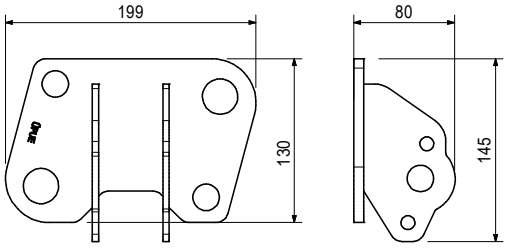
Article no.	Weight kg	
131092	9.090	**Scaffold support, coated** Can be used as an additional inner tube for the EWB Multi Brace if required.





131097	1.700	**Base plate for EWB**

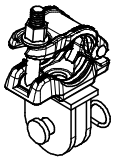


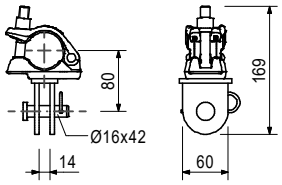


Accessories

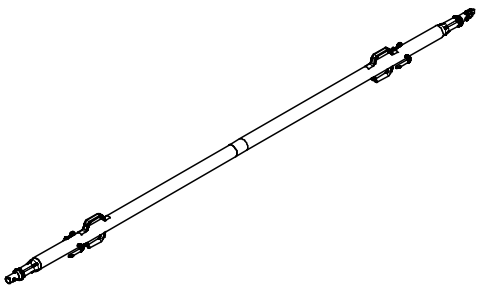
710593	0.062	**Bolt ISO 4014 M10 x 80-8.8, galv.**
112786	0.015	**Nut EN 1661 M10-8, galv.**

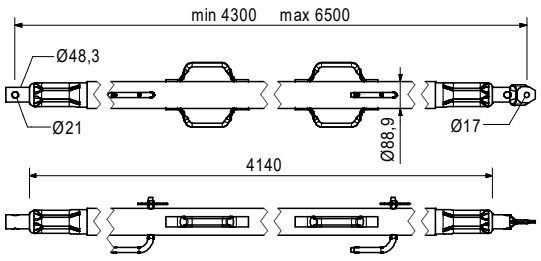
131723	1.440	**Brace Connector HDR-2** For connecting push-pull props and kicker braces to components with Ø 48 mm.	**Complete with** 1 pc. 027170 bolt Ø 16 x 42, galv. 1 pc. 018060 cotter pin 4/1, galv.



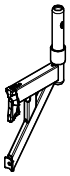


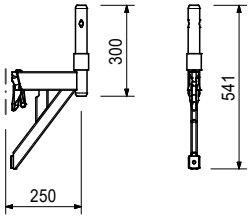
117469	39.900	**Push-pull prop RS 650, galv.** Extension length L = 4.30 – 6.50 m. For aligning PERI formwork systems and precast concrete elements.	**Note** See PERI Design Tables for permissible load.



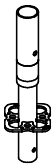


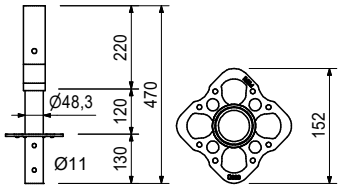
Article no.	Weight kg	
134005	2.710	**Console Bracket UCB 25**



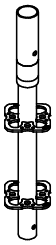


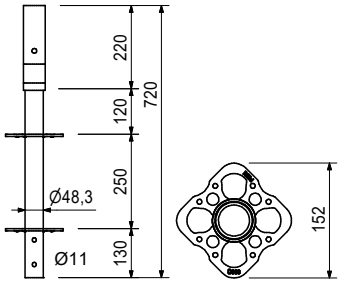
133499	2.270	**Base Standard UVB 25** For assembly on the base spindles directly. Can also be used as 25 cm standard.



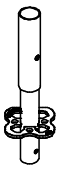


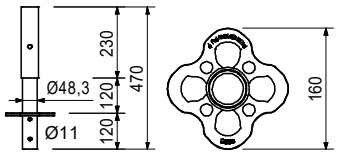
135187	3.590	**Base Standard UVB 50** For assembling on the base spindles directly.





100014	2.470	**Base Standard UVB 24** For assembling on the base spindles directly.

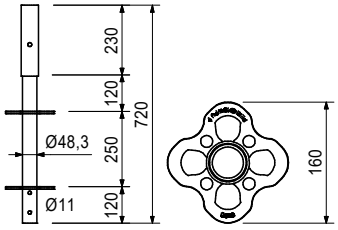




Article no.	Weight kg	
117194	3.980	**Base Standard UVB 49**

For assembling on the base spindles directly.
Reduces necessary spindle extensions with 25 cm rosette spacing.

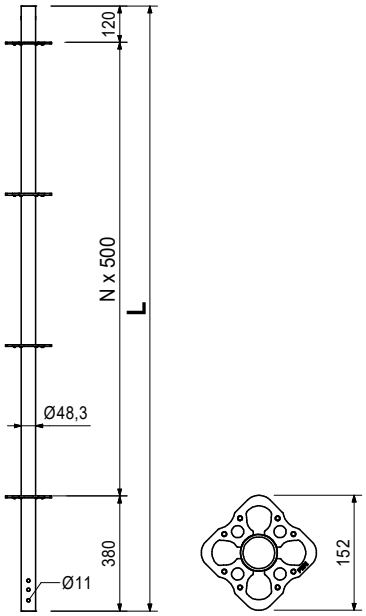




Article no.	Weight kg	Top Standards UVH-2	L
132123	2.100	**Top Standard UVH-2 50**	500
132194	4.210	**Top Standard UVH-2 100**	1000
132196	6.060	**Top Standard UVH-2 125**	1250
132198	6.310	**Top Standard UVH-2 150**	1500
132200	8.420	**Top Standard UVH-2 200**	2000
132202	10.500	**Top Standard UVH-2 250**	2500

Without pin for mounting head spindles.

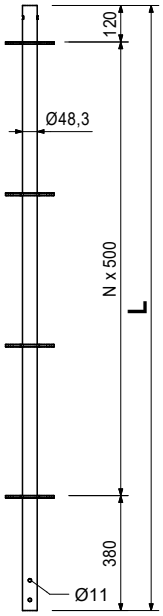


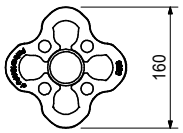


Article no.	Weight kg		
		Top Standards UVH	**L**
401309	2.510	**Top Standard UVH 50**	500
400000	4.610	**Top Standard UVH 100**	1000
417195	7.600	**Top Standard UVH 125**	1250
400003	6.920	**Top Standard UVH 150**	1500
400005	9.240	**Top Standard UVH 200**	2000
400007	11.500	**Top Standard UVH 250**	2500

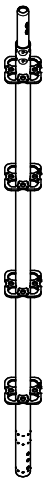
Without pin for mounting head spindles.

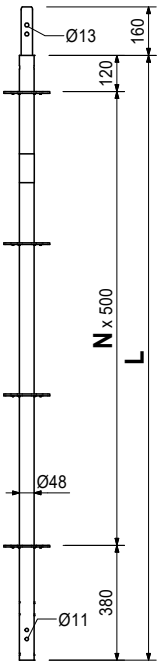


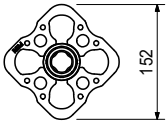




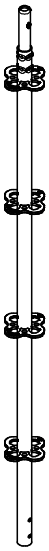
		Standards UVR-2	**L**
132219	2.490	**Standard UVR-2 50**	500
132224	4.350	**Standard UVR-2 100**	1000
132229	6.190	**Standard UVR-2 150**	1500
132234	8.040	**Standard UVR-2 200**	2000
132239	11.700	**Standard UVR-2 300**	3000

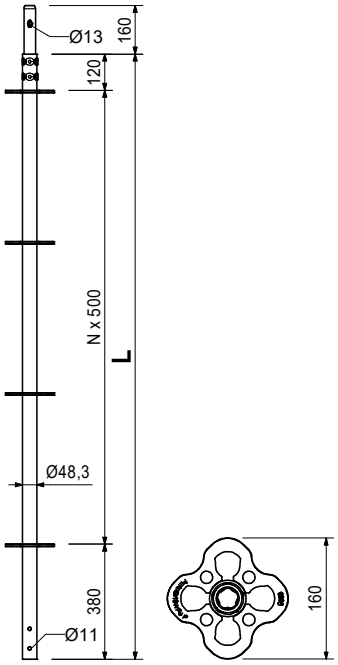






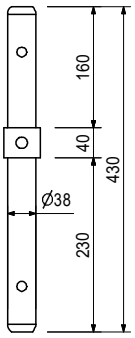
Article no.	Weight kg	Standards UVR	L
402859	3.080	**Standard UVR 50**	500
401306	5.380	**Standard UVR 100**	1000
402860	7.690	**Standard UVR 150**	1500
400009	10.000	**Standard UVR 200**	2000
400012	14.700	**Standard UVR 300**	3000
400013	19.200	**Standard UVR 400**	4000





105372	1.340	**Spigot w. Spacer Tube 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.

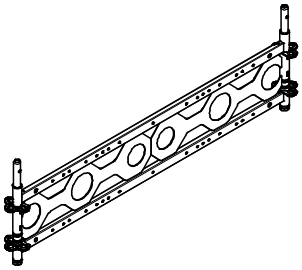


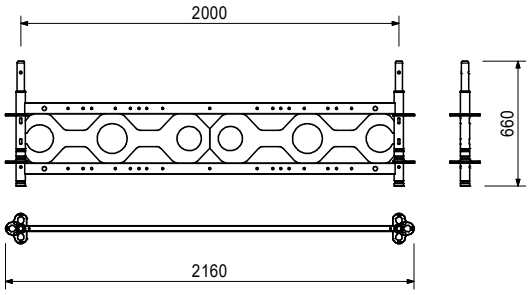


Accessories

780356	0.011	**Nut ISO 7040 M10-8, galv.**
100719	0.060	**Bolt ISO 4014 M10 x 70-8.8**

Article no.	Weight kg	
131368	25.800	**Multi Girder ELM** e.g. suitable for execution of pavement gantries!

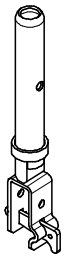


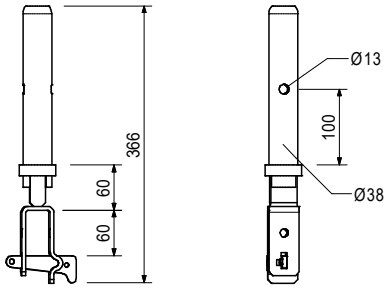


Accessories

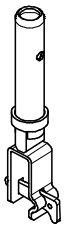
130681	1.360	**UH Spigot-2**
130684	2.020	**Ledger-To-Ledger Coupler UHA-2 half with pin**

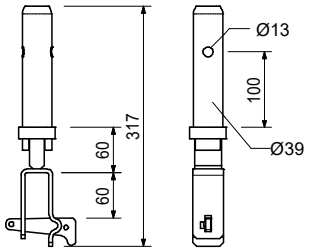
130681	1.360	**UH Spigot-2**



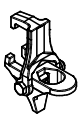


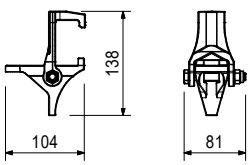
409764	1.250	**UH Spigot**





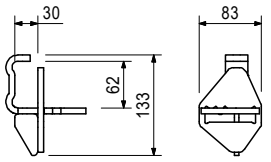
136582	0.829	**Ledger-to-Ledger Coupler UHA-2** For connecting horizontal ledgers at right-angles.



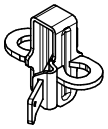


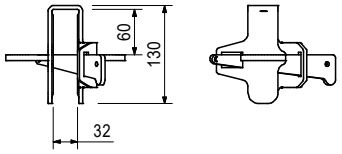
Article no.	Weight kg	
401731	0.841	**Ledger-to-Ledger Coupler UHA** For connecting horizontal ledgers at right-angles.



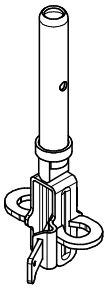


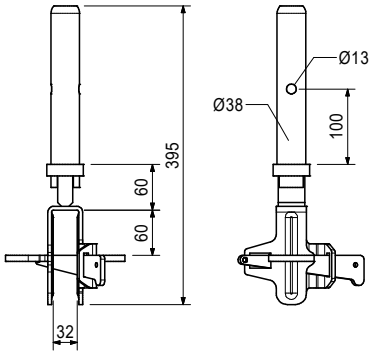
410793	1.090	**Ledger-to-Ledger Coupler UHA half**



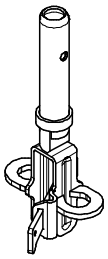


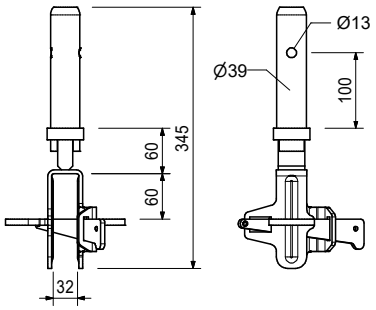
130684	2.020	**Ledger-To-Ledger Coupler UHA-2 half with pin**



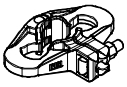


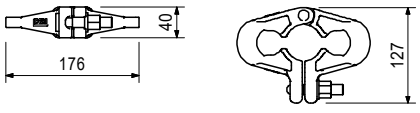
410792	1.900	**Ledger-to-Ledger Coupler UHA Half with Pin**



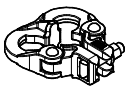


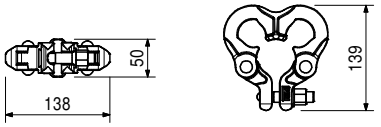
116306	1.700	**Clamping Rosette UEV 180°**





Article no.	Weight kg	
126453	1.630	**Clamping Rosette UEV 90°**

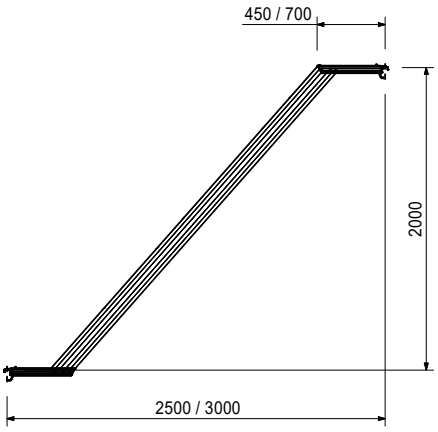




		Easy Staircase EAS 67
134553	27.000	**Easy Staircase EAS 67 x 250/200**
134554	29.600	**Easy Staircase EAS 67 x 300/200**

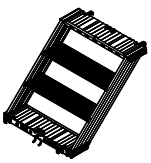
Technical data
Permissible load 2.0 kN/m2.
Class B according to DIN EN 12811-1.

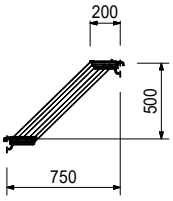




134555	10.700	**Easy Staircase EAS 67 x 75/50**
		Fit onto Horizontal Ledger UH

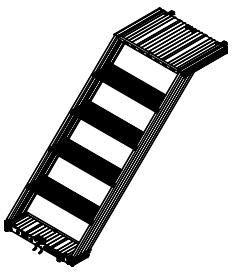
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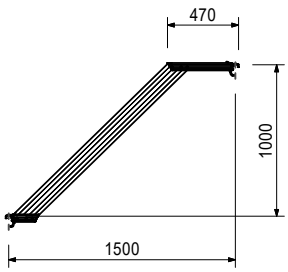




134559	16.500	**Easy Staircase EAS 67 x 150/100 T**
		Fit onto Horizontal Ledger UH

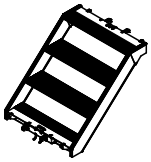
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Class B according to DIN EN 12811-1.

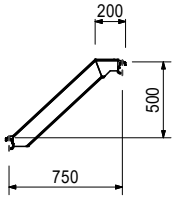




Article no.	Weight kg	
435769	9.330	**Stair Tower UAS 67 x 75/50** Suitable for PERI UP Easy 67.

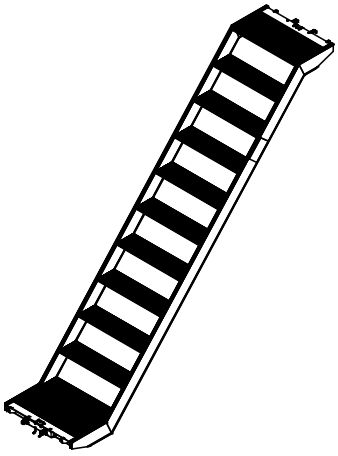
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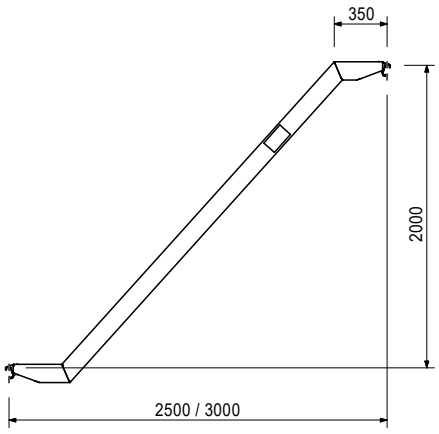




		Staircases UAS 67
435027	26.100	**Staircase UAS 67 x 250/200**
435026	30.600	**Staircase UAS 67 x 300/200**
		Suitable for PERI UP Easy 67.

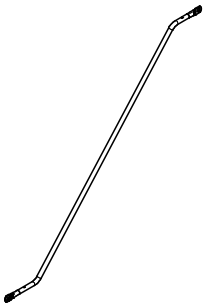
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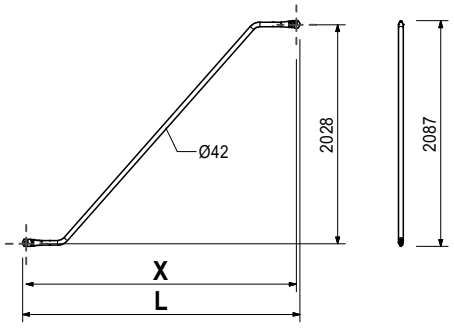




		Stair Guardrails EAG
124561	7.180	**Stair Guardrail EAG 250/200**
124558	8.180	**Stair Guardrail EAG 300/200**
		Suitable for external scaffold access in conjunction with Easy Standard.

L	X
2565	2500
3065	3000

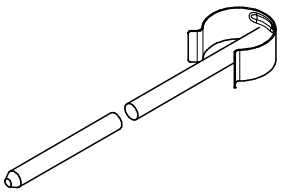


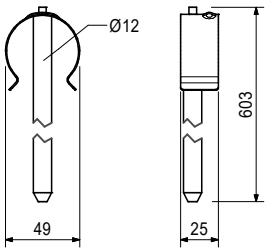


Accessories

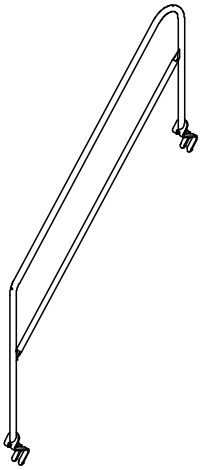
133705	0.549	**Locking Pin EAG**

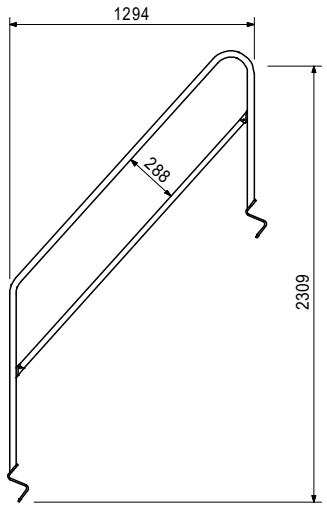
Article no.	Weight kg	
133705	0.549	**Locking Pin EAG**





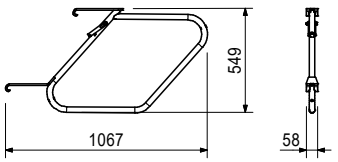
100742	10.000	**Stair Guardrail UAG** Suitable for Staircases UAS and EAS as internal and external guardrails.



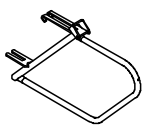


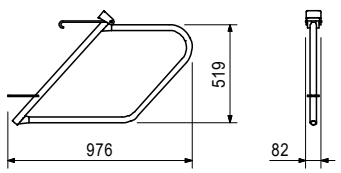
133543	4.510	**Stair Guardrail UAH-2** For fixing to the stringers of the Staircases UAS, UAS-2 and EAS.



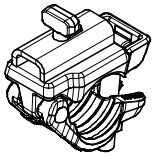


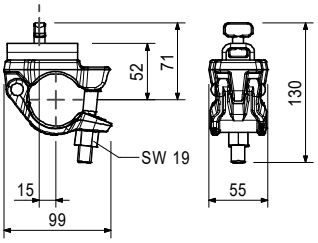
100830	4.970	**Stair Guardrail UAH** For fixing to the stringers only of Staircases UAS.





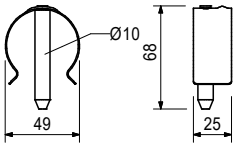
Article no.	Weight kg	
130964	1.020	**Wall Tie Holder EWC**



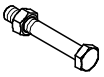


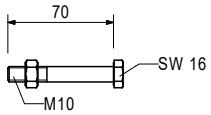
111053	0.059	**Locking pin Ø 48/57** As tension-proof connection of standards with a diameter of 48 up to 57 mm.



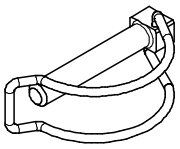


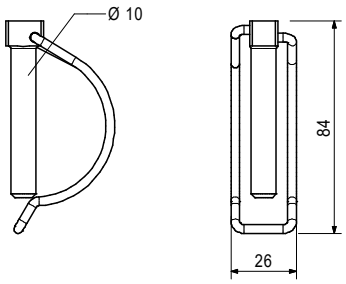
100719	0.060	**Bolt ISO 4014 M10 x 70-8.8** As tension-proof connection of standards at suspended scaffolds and formwork girders.



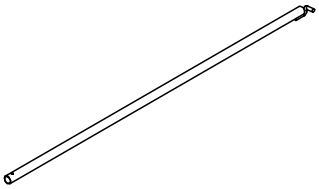


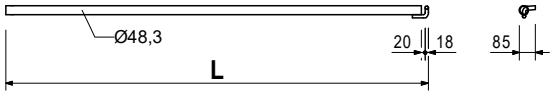
123480	0.080	**Tube clip 10 x 60, galv.**





Article no.	Weight kg		
		Wall Tie UWT	**L**
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

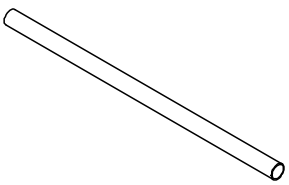


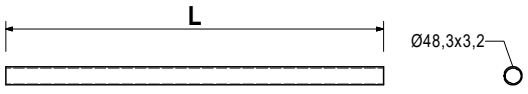


		Eyebolts UFE	**Note**
100693	0.169	**Eyebolt UFE 12/90**	With marking for screw-in depth.
100694	0.190	**Eyebolt UFE 12/120**	
100695	0.250	**Eyebolt UFE 12/190**	
		For assembly of the Wall Tie UWT. Required Wall Insert UFI 14.	

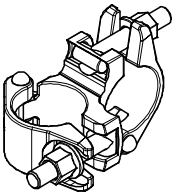
		Wall Insert UFI
100696	0.007	**Wall Insert UFI 14/70**
100697	0.009	**Wall Insert UFI 14/100**
100698	0.010	**Wall Insert UFI 14/135**

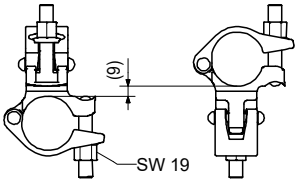
		Steel scaffold tubes Ø 48.3 x 3.2	**L**
026415	3.550	**Steel scaffold tube Ø 48.3 x 3.2, special length**	
026417	0.000	**Cutting costs for scaffold tubes**	
026411	3.550	**Steel scaffold tube Ø 48.3 x 3.2, L = 1.0 m**	1000
026412	7.100	**Steel scaffold tube Ø 48.3 x 3.2, L = 2.0 m**	2000
026413	10.650	**Steel scaffold tube Ø 48.3 x 3.2, L = 3.0 m**	3000
026414	14.200	**Steel scaffold tube Ø 48.3 x 3.2, L = 4.0 m**	4000
026419	17.750	**Steel scaffold tube Ø 48.3 x 3.2, L = 5.0 m**	5000
026418	21.600	**Steel scaffold tube Ø 48.3 x 3.2, L = 6.0 m**	6000



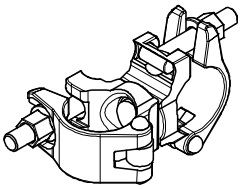


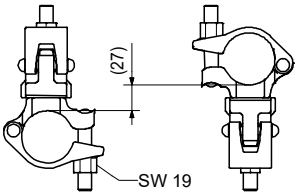
Article no.	Weight kg	
017020	1.120	**Standard Coupler RA 48/48, galv.** For scaffold tubes Ø 48 mm.



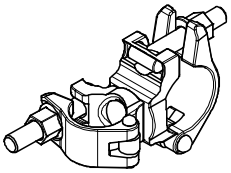


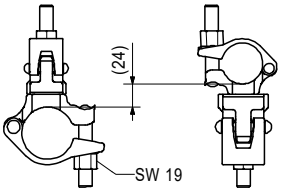
017010	1.400	**Swivel Coupling SW 48/48, galv.** For scaffold tubes Ø 48 mm.



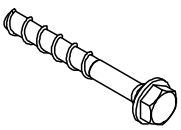


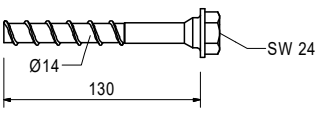
102400	1.100	**Red. Swivel Coupling RS 38/48, galv.** For scaffold tubes Ø 48 and Ø 38 mm.





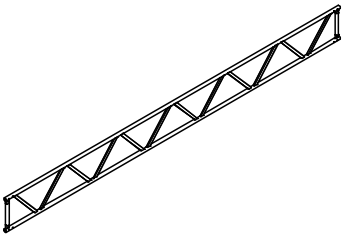
124777	0.210	**Tie Bolt PERI 14/20 x 130** For temporary fixing to reinforced concrete components.	**Note** Take the PERI Data Sheet into consideration! Hole Ø 14 mm.

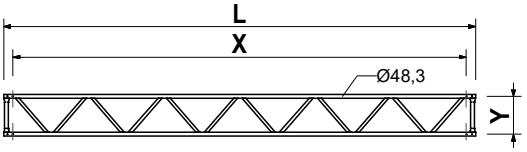




		Formwork Girder Steel ULS	**L**	**X**	**Y**
100330	41.700	**Formwork Girder Steel ULS 50/425**	4,250	4,000	500
100336	50.900	**Formwork Girder Steel ULS 50/525**	5,250	5,000	500
100339	60.200	**Formwork Girder Steel ULS 50/625**	6,250	6,000	500
100185	54.800	**Formwork Girder Steel ULS 70/525**	5,250	5,000	700
100183	64.500	**Formwork Girder Steel ULS 70/625**	6,250	6,000	700
100852	83.600	**Formwork Girder Steel ULS 70/825**	8,250	8,000	700

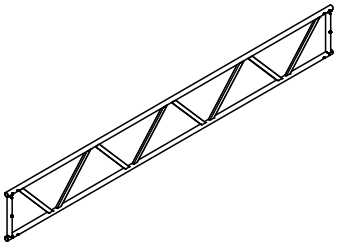
For bridging of openings.
For system-independent application.

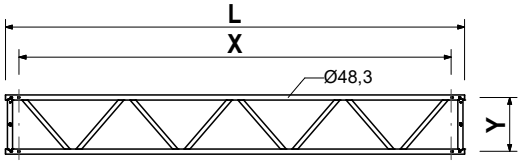




Article no.	Weight kg		L	X	Y
		Formwork Girder Aluminium ULA			
101656	18.300	**Formwork Girder Aluminium ULA 50/425 HD**	4,250	4,000	500
101657	22.400	**Lattice Girder Aluminium ULA 50/525 HD**	5,250	5,000	500
101658	26.400	**Lattice Girder Aluminium ULA 50/625 HD**	6,250	6,000	500
101659	37.300	**Lattice Girder Aluminium ULA 70/825 HD**	8,250	8,000	700

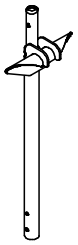
For bridging of openings.
For system-independent application.

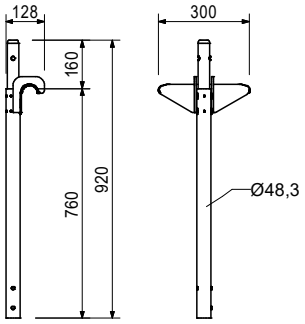




100529	5.260	**Starter Tube ULB 50/70, galv.** For Formwork Girders ULS and ULA.

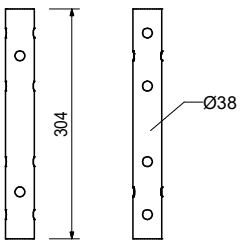
Note
Only to be used for system-independent formwork girder assembly.





100301	0.969	**Spigot ULT 32** Single pin for connection of tubes Ø 48.3 x 3.2 mm, e.g. formwork girders or top standards without interlock.





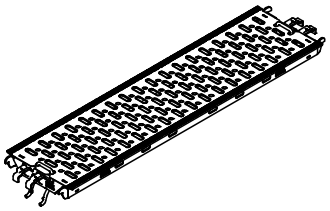
Accessories

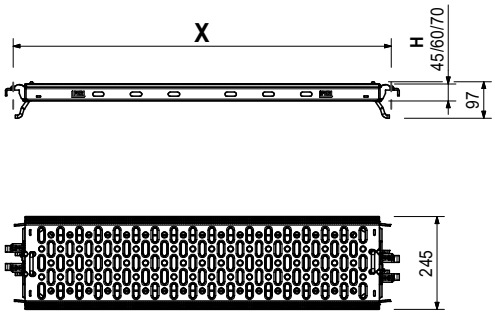
111053	0.059	**Locking pin Ø 48/57**
100719	0.060	**Bolt ISO 4014 M10 x 70-8.8**

Article no.	Weight kg	Steel Decks UDG-2	X	perm. p [kN/m²]
132479	3.190	**Steel Deck UDG-2 25 x 50**	500	6.0
132483	3.960	**Steel Deck UDG-2 25 x 67**	670	6.0
132488	4.320	**Steel Deck UDG-2 25 x 75**	750	6.0
132492	5.450	**Steel Deck UDG-2 25 x 100**	1000	6.0
132502	6.590	**Steel Deck UDG-2 25 x 125**	1250	6.0
132505	7.730	**Steel Deck UDG-2 25 x 150**	1500	6.0
132508	10.500	**Steel Deck UDG-2 25 x 200**	2000	6.0
132511	12.900	**Steel Deck UDG-2 25 x 250**	2500	4.5
132515	15.800	**Steel Deck UDG-2 25 x 300**	3000	3.0

Length X: 500 – 1,500 with H of 45 mm
Length X: 2,000 – 2,500 with H of 60 mm
Length X: 3,000 with H of 70 mm

Note
Values correspond with EN 12811-1

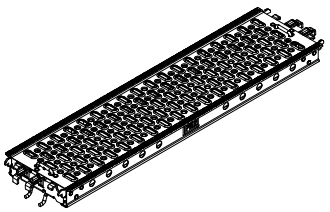


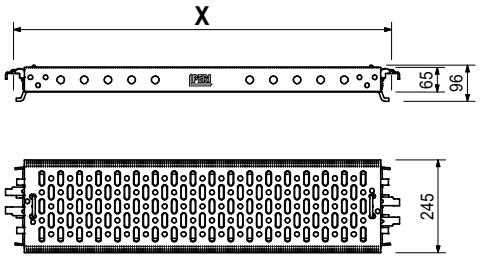


Article no.	Weight kg	Steel Decks UDG 25	X	perm. p [kN/m²]	max. p [kN/m²]
424124	3.880	**Steel Deck UDG 25 x 50**	500	6.0	40.0
432858	4.810	**Steel Deck UDG 25 x 67**	670	6.0	40.0
424121	5.260	**Steel Deck UDG 25 x 75**	750	6.0	40.0
424118	6.630	**Steel Deck UDG 25 x 100**	1,000	6.0	40.0
424115	8.010	**Steel Deck UDG 25 x 125**	1,250	6.0	28.4
424112	9.410	**Steel Deck UDG 25 x 150**	1,500	6.0	19.6
424109	12.200	**Steel Deck UDG 25 x 200**	2,000	6.0	10.9
423771	14.900	**Steel Deck UDG 25 x 250**	2,500	4.5	6.9
424915	17.700	**Steel Deck UDG 25 x 300**	3,000	3.0	4.7

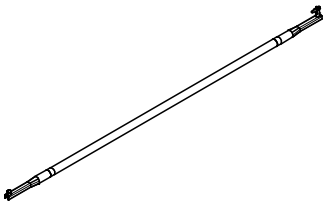
Fit onto Horizontal Ledgers UH.

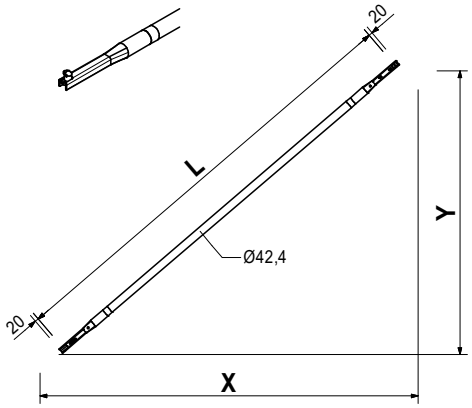
Note
Values corresponding to EN 12811-1.
max. p = max. possible surface load without deflection restriction.





Article no.	Weight kg		L	X	Y
		Ledger Brace UBL-2			
132771	2.140	**Ledger Brace UBL-2 100/50**	901	1,000	500
132773	2.830	**Ledger Brace UBL-2 100/100**	1,250	1,000	1,000
132775	3.680	**Ledger Brace UBL-2 100/150**	1,677	1,000	1,500
132777	4.600	**Ledger Brace UBL-2 100/200**	2,136	1,000	2,000
132779	3.030	**Ledger Brace UBL-2 150/50**	1,347	1,500	500
132781	3.530	**Ledger Brace UBL-2 150/100**	1,601	1,500	1,000
132783	4.230	**Ledger Brace UBL-2 150/150**	1,953	1,500	1,500
132785	5.040	**Ledger Brace UBL-2 150/200**	2,358	1,500	2,000
132787	5.330	**Ledger Brace UBL-2 175/200**	2,500	1,750	2,000
132789	3.970	**Ledger Brace UBL-2 200/50**	1,820	2,000	500
132791	4.360	**Ledger Brace UBL-2 200/100**	2,016	2,000	1,000
132793	4.940	**Ledger Brace UBL-2 200/150**	2,305	2,000	1,500
132795	5.640	**Ledger Brace UBL-2 200/200**	2,658	2,000	2,000
132797	4.450	**Ledger Brace UBL-2 225/50**	2,062	2,250	500
132808	4.800	**Ledger Brace UBL-2 225/100**	2,236	2,250	1,000
132810	5.980	**Ledger Brace UBL-2 225/200**	2,829	2,250	2,000
132812	5.250	**Ledger Brace UBL-2 250/100**	2,462	2,500	1,000
132814	5.730	**Ledger Brace UBL-2 250/150**	2,705	2,500	1,500
132816	6.340	**Ledger Brace UBL-2 250/ 200**	3,010	2,500	2,000
132827	5.920	**Ledger Brace UBL-2 300/50**	2,795	3,000	500
132829	6.180	**Ledger Brace UBL-2 300/100**	2,926	3,000	1,000
132831	6.590	**Ledger Brace UBL-2 300/150**	3,133	3,000	1,500
132833	7.120	**Ledger Brace UBL-2 300/200**	3,400	3,000	2,000

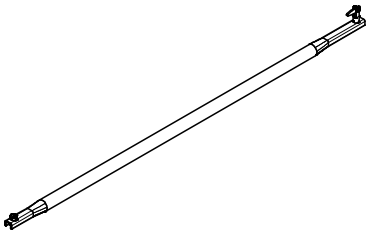


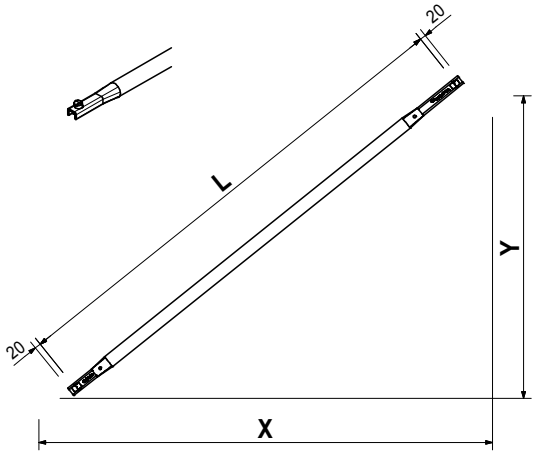


Article no.	Weight kg	Ledger Brace UBL	L	X	Y
415156	2.660	**Ledger Brace UBL 100/50**	901	1,000	500
415513	4.640	**Ledger Brace UBL 100/150**	1,677	1,000	1,500
415157	5.810	**Ledger Brace UBL 100/200**	2,136	1,000	2,000
407867	3.790	**Ledger Brace UBL 150/50**	1,347	1,500	500
400055	4.440	**Ledger Brace UBL 150/100**	1,601	1,500	1,000
402846	5.340	**Ledger Brace UBL 150/150**	1,953	1,500	1,500
400057	6.380	**Ledger Brace UBL 150/200**	2,358	1,500	2,000
409034	6.740	**Ledger Brace UBL 175/200**	2,500	1,750	2,000
404391	5.000	**Ledger Brace UBL 200/50**	1,820	2,000	500
400059	5.510	**Ledger Brace UBL 200/100**	2,016	2,000	1,000
402862	6.240	**Ledger Brace UBL 200/150**	2,305	2,000	1,500
400061	7.150	**Ledger Brace UBL 200/200**	2,658	2,000	2,000
430282	5.620	**Ledger Brace UBL 225/50**	2,062	2,250	500
430283	6.070	**Ledger Brace UBL 225/100**	2,236	2,250	1,000
417689	7.580	**Ledger Brace UBL 225/200**	2,829	2,250	2,000
400063	6.640	**Ledger Brace UBL 250/100**	2,462	2,500	1,000
402861	7.260	**Ledger Brace UBL 250/150**	2,705	2,500	1,500
400065	8.050	**Ledger Brace UBL 250/200**	3,010	2,500	2,000
404762	7.490	**Ledger Brace UBL 300/50**	2,795	3,000	500
400067	7.830	**Ledger Brace UBL 300/100**	2,926	3,000	1,000
404766	8.360	**Ledger Brace UBL 300/150**	3,133	3,000	1,500
400069	9.040	**Ledger Brace UBL 300/200**	3,400	3,000	2,000

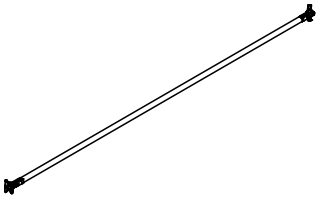
They are attached using holes in the horizontal ledgers.

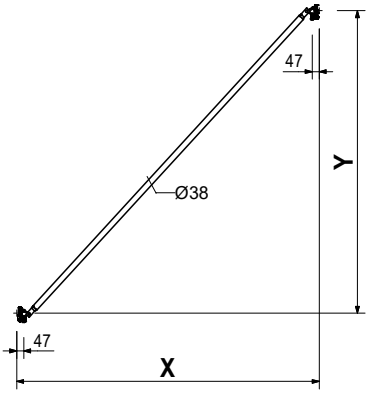
Note
With length marking for easier identification.



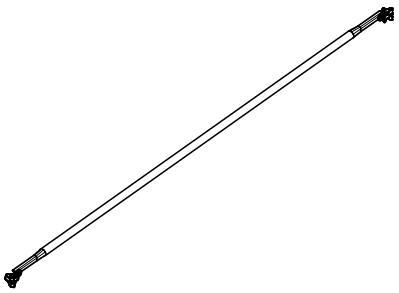


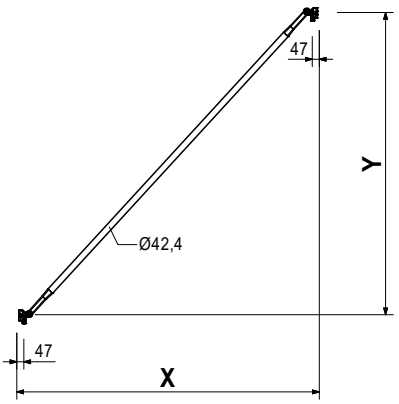
Article no.	Weight kg		L	X	Y
		Node Brace UBK-2			
133418	4.980	**Node Brace UBK-2 75/200**	2,190	750	2,000
133421	5.130	**Node Brace UBK-2 100/200**	2,285	1,000	2,000
133424	3.900	**Node Brace UBK-2 125/100**	1,625	1,250	1,000
133427	5.320	**Node Brace UBK-2 125/200**	2,401	1,250	2,000
133430	4.240	**Node Brace UBK-2 150/100**	1,821	1,500	1,000
133433	4.840	**Node Brace UBK-2 150/150**	2,152	1,500	1,500
133436	5.550	**Node Brace UBK-2 150/200**	2,539	1,500	2,000
133439	4.990	**Node Brace UBK-2 200/100**	2,246	2,000	1,000
133442	5.490	**Node Brace UBK-2 200/150**	2,521	2,000	1,500
133445	6.100	**Node Brace UBK-2 200/200**	2,860	2,000	2,000
133448	5.790	**Node Brace UBK-2 250/100**	2,696	2,500	1,000
133451	6.210	**Node Brace UBK-2 250/150**	2,930	2,500	1,500
133454	6.740	**Node Brace UBK-2 250/200**	3,226	2,500	2,000
133457	6.620	**Node Brace UBK-2 300/100**	3,131	3,000	1,000
133460	6.980	**Node Brace UBK-2 300/150**	3,356	3,000	1,500
133463	7.440	**Node Brace UBK-2 300/200**	3,625	3,000	2,000





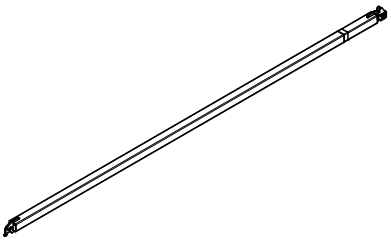
Article no.	Weight kg		L	X	Y
		Node Brace UBK			
424170	6.770	**Node Brace UBK 75/200**	2,190	750	2,000
412926	6.980	**Node Brace UBK 100/200**	2,285	1,000	2,000
415354	5.210	**Node Brace UBK 125/100**	1,625	1,250	1,000
412765	7.250	**Node Brace UBK 125/200**	2,401	1,250	2,000
400981	5.700	**Node Brace UBK 150/100**	1,821	1,500	1,000
400973	6.570	**Node Brace UBK 150/150**	2,152	1,500	1,500
400572	7.590	**Node Brace UBK 150/200**	2,539	1,500	2,000
400985	6.780	**Node Brace UBK 200/100**	2,246	2,000	1,000
406630	7.500	**Node Brace UBK 200/150**	2,521	2,000	1,500
400573	8.380	**Node Brace UBK 200/200**	2,860	2,000	2,000
400989	7.930	**Node Brace UBK 250/100**	2,696	2,500	1,000
406624	8.530	**Node Brace UBK 250/150**	2,930	2,500	1,500
400574	9.300	**Node Brace UBK 250/200**	3,226	2,500	2,000
400993	9.120	**Node Brace UBK 300/100**	3,131	3,000	1,000
400575	10.300	**Node Brace UBK 300/200**	3,625	3,000	2,000

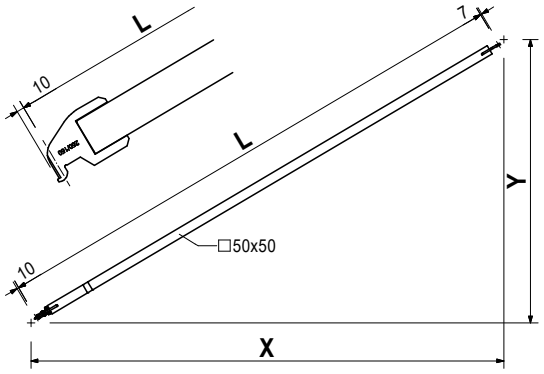




Article no.	Weight kg	Horizontal Brace UBH Flex	L	X	Y
114912	6.660	**Horizontal Brace UBH Flex 150/150**	2,042	1,500	1,500
124097	7.780	**Horizontal Brace UBH Flex 200/150**	2,422	2,000	1,500
114916	8.740	**Horizontal Brace UBH Flex 200/200**	2,749	2,000	2,000
124101	9.000	**Horizontal Brace UBH Flex 250/150**	2,838	2,500	1,500
114920	9.840	**Horizontal Brace UBH Flex 250/200**	3,123	2,500	2,000
114928	10.800	**Horizontal Brace UBH Flex 250/250**	3,456	2,500	2,500
124105	10.300	**Horizontal Brace UBH Flex 300/150**	3,279	3,000	1,500
114924	11.000	**Horizontal Brace UBH Flex 300/200**	3,528	3,000	2,000
114932	11.900	**Horizontal Brace UBH Flex 300/250**	3,826	3,000	2,500
114936	12.900	**Horizontal Brace UBH Flex 300/300**	4,163	3,000	3,000

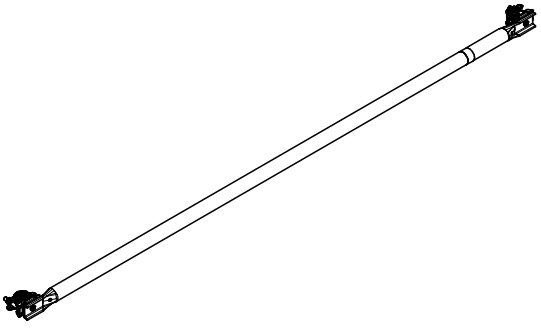
For horizontal bracing of towers.
Can also be used underneath UDG Decks.

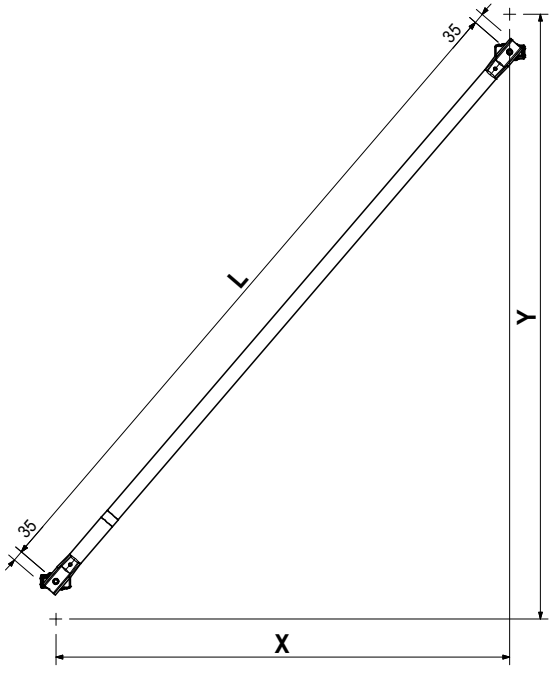




Article no.	Weight kg	Coupler Braces UBC-2	L	X	Y
131750	7.330	**Coupler Brace UBC-2 67-100/200**	1,750	670	2,000
131726	9.020	**Coupler Brace UBC-2 150/200**	2,305	1,500	2,000
131741	10.100	**Coupler Brace UBC-2 200/200**	2,657	2,000	2,000
131744	11.300	**Coupler Brace UBC-2 250/200**	3,052	2,500	2,000
131747	12.500	**Coupler Brace UBC-2 300/200**	3,473	3,000	2,000

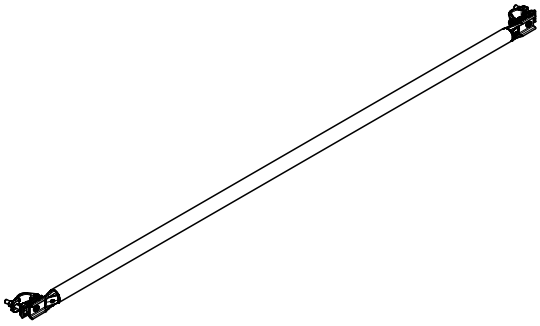
For special applications.
For connecting scaffold tubes Ø 48 mm.

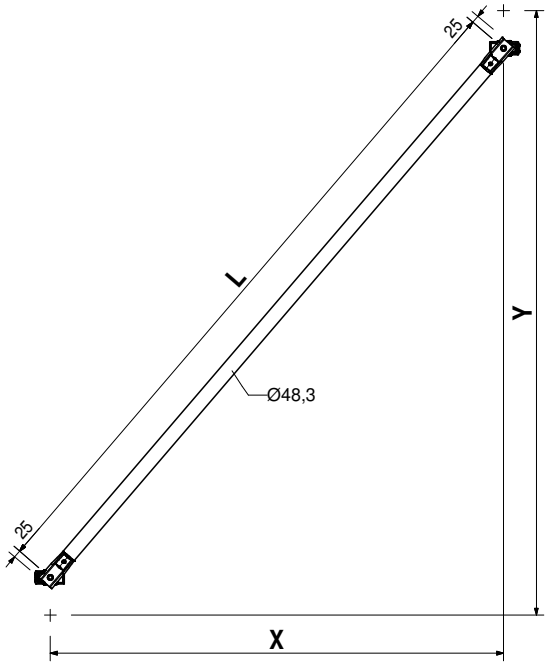




Article no.	Weight kg	Coupler Braces UBC	L	X	Y
400416	9.520	**Coupler Brace UBC 150/200**	2,305	1,500	2,000
400419	10.800	**Coupler Brace UBC 200/200**	2,657	2,000	2,000
400422	12.200	**Coupler Brace UBC 250/200**	3,052	2,500	2,000
400425	13.700	**Coupler Brace UBC 300/200**	3,473	3,000	2,000

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

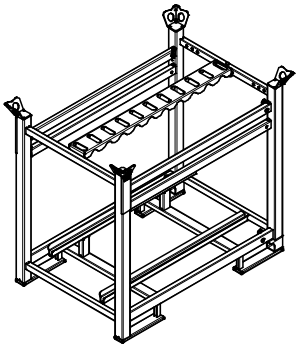


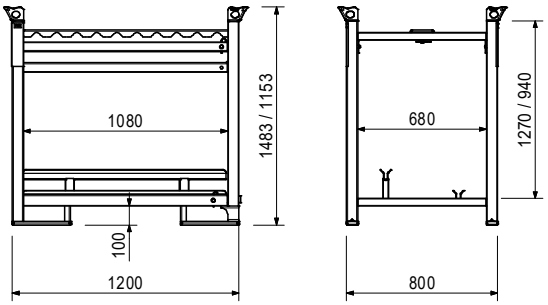


Article no.	Weight kg	Post Pallets ESP
131135	64.900	**Post Pallet ESP 67**
131329	71.900	**Post Pallet ESP 100**

For stacking and transporting
max. 20 Easy Frames EVF.

Note
Delivery unit: 6 pieces.





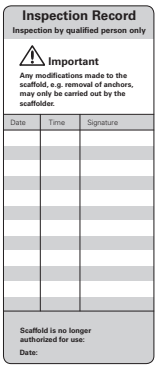
Article no.	Weight kg	
113832	0.035	**PERI UP Scaffold Tag** For cordoning off scaffolding areas not yet authorised for use. With the exception of inserting the PERI UP Assembly Certificates.

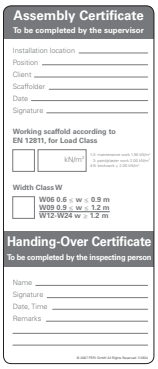


		PERI UP Assembly Certificates
113833	0.005	**PERI UP Assembly Certificate, D**
113834	0.005	**PERI UP Assembly Certificate, EX**
113829	0.005	**PERI UP Assembly Certificate, F**
113835	0.005	**PERI UP Assembly Certificate, CDN**
113836	0.005	**PERI UP Assembly Certificate, ES**
113837	0.005	**PERI UP Assembly Certificate, PT**
113838	0.005	**PERI UP Assembly Certificate, PL**
113839	0.005	**PERI UP Assembly Certificate, CZ**
115739	0.005	**PERI UP Assembly Certificate, TR**
115729	0.005	**PERI UP Assembly Certificate, SK**

Inserted into the PERI UP Scaffold Tag.

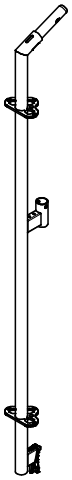
Note
Front: Assembly certificate for the approval of scaffolding.
Rear side:
Inspection log

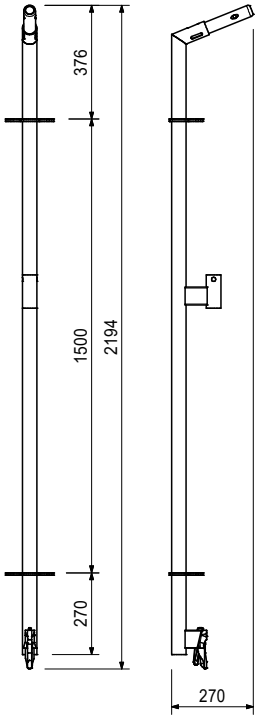




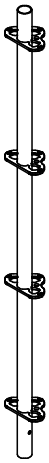
Article no.	Weight kg
133753	9.290

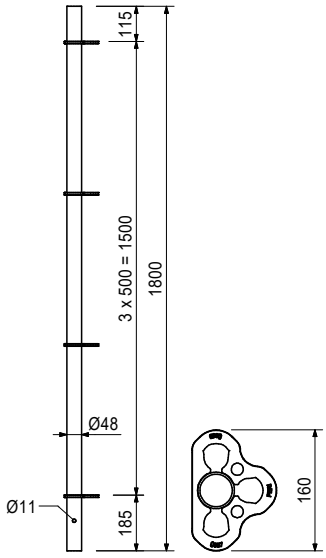
Weather Protection EVW 200-V
Standard on uppermost level in conjunction with Weather Protection EVW 130 or 180. Used together with tarpaulin coverings against the effects of the weather.





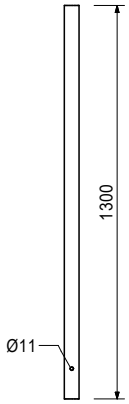
133742	7.200	**Weather Protection Legs EVW 180**





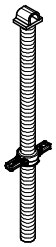
Article no.	Weight kg	
133743	3.940	**Weather Protection Legs EVW 130**

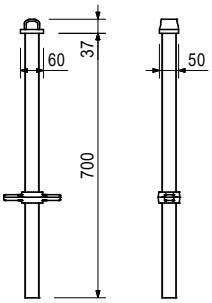




109630	4.240	**Spindle Head SRU** For connecting SRU and SRZ steel walers on shoring systems.

Note
With captive quick jack nut.



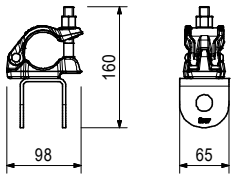


Accessories

104031	0.462	**Fitting Pin Ø 21 x 120**
018060	0.014	**Cotter pin 4/1, galv.**

133757	1.200	**Coupling EVW** In conjunction with Weather Protection EVW 180.





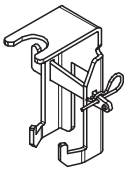
Accessories

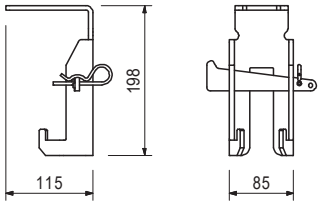
104031	0.462	**Fitting Pin Ø 21 x 120**
018060	0.014	**Cotter pin 4/1, galv.**

Article no.	Weight kg
109563	1.460

Head Spindle Locking UJH
Connects head spindles, section spindles and spindle head with Horizontal Ledgers UH during repositioning.

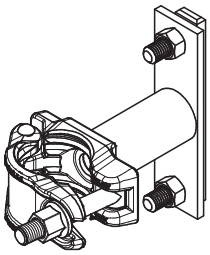
Complete with
1 pc. 018060 cotter pin 4/1, galv.
Technical data
Permissible load 2.1 kN.

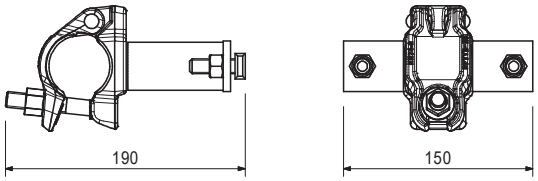




126009	1.630

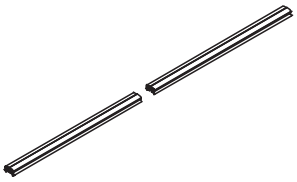
LGS Keder Connector URV
For fixing Keder Tracks URK to scaffold components with tube Ø 48.3 mm.

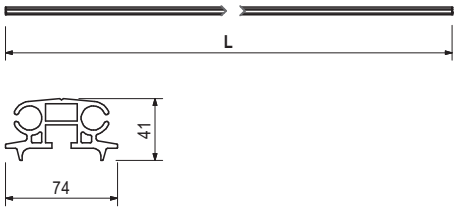




		LGS Keder Tracks URK	**L**
127501	3.530	**LGS Keder Track URK 150**	1500
127500	7.050	**LGS Keder Track URK 300**	3000
126071	14.100	**LGS Keder Track URK 600**	6000

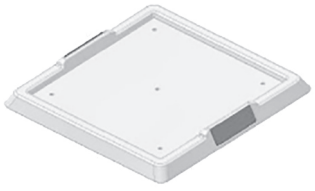
Track for drawing keder tarpaulins into scaffold constructions.





134177	0.186

Spindle Lining UES
The protective underlay for base spindles protects sensitive base decks from damage by the base spindle plate.



Article no.	Weight kg	
134175	0.065	**Poly Cover Coupling UPC-C**



133907	0.015	**Poly Cover Tube UPC-T**



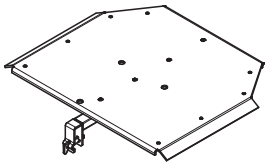
134176	0.098	**Poly Cover Rosette UPC-R**

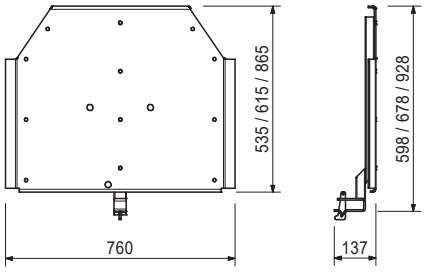


136832	0.000	**Cover Plate UDP 67**

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

Technical data
Load Class 3, 2.0 kN/m²





The optimal system for all projects and every requirement



Wall formwork



Column formwork



Slab formwork



Climbing systems



Bridge formwork



Tunnel formwork



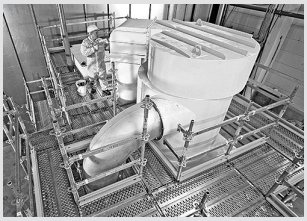
Shoring



Working scaffolds



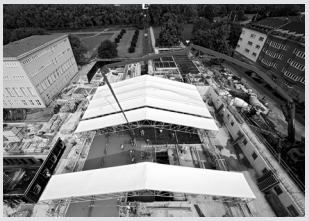
Working scaffolds facade



Working scaffolds industry



Means of access



Safety scaffolds



Safety systems



System-independent accessories



Services

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EN dk Version 1.0 | DO-22-0117483 © PERI Danmark A/S