

PERI UP Cladding

Instructions for Assembly and Use – Standard Configuration - Version 1.0



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Overview

Main assemblies



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Overview

Key



Arrows

- \rightarrow
- Arrow representing a reaction of an action*

Arrow representing an action

- Arrow representing forces
- * If not identical to the action arrow.

Safety instruction categories

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

A Danger

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

A Warning

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

A Caution

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

Note

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

Format of the safety instructions



Signal word

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

Dimensions

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

Conventions

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

Notes on illustrations

The illustration on the front cover of these instructions is understood to be a system representation only. The assembly steps presented in these Instructions for Assembly and Use are shown in the form of examples with only one component size. They are valid for all component sizes contained in the standard configuration.

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

Target groups

Contractors

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

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

Safety and Health Protection Coordinator*

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

Competent person

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

Competent persons qualified to carry out inspections

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

Qualified personnel

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

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

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

⇒

- 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

Regular assembly

These Instructions for Assembly and Use describe the standard assembly and the intended use of PERI UP Cladding.

When using PERI UP Cladding, the tie patterns described in the respective Instructions for Assembly and Use of the basic scaffold must be used for scaffolds with enclosure tarpaulins.

All deviations from the standard configuration, both for PERI UP Cladding and the scaffolding system used, require a project-specific proof of stability.

Features

PERI UP Cladding is a system for enclosing PERI scaffolding systems. It mainly consists of

- Connecting elements for PERI UP Flex, PERI UP Easy and PER UP Easy EVOTOP
- Vertically mounted support rails
- Enclosure panels made of translucent polycarbonate

Product advantages

PERI UP Cladding can also be retrofitted to a scaffolding system at any time. Sophisticated connection parts enable adaptation to complex building shapes. PERI UP Cladding can be opened or closed in a simple, safe way by removing or installing panels. In addition, the system offers the possibility of installing keder panels and ballast panels for free-standing scaffolds.

Technical data

- System heights: Panels 1.00 and 2.00 m Support rails 1.0 and 2.0 m
- System widths:
 0.50 m, 0.67 m, 0.75 m, 1.00 m,
 1.50 m, 2.00 m, 2.50 m, 3.00 m.
- Permissible loads: PERI UP Cladding is not intended to carry vertical loads.
- Temperature range Metal parts: -40°C - + 60°C
 Plastic parts: -40°C - + 80°C
- Fire protection class B1
- Sound reduction index according to DIN EN ISO 10140-2 for a standard panel CPP 250 is 22 dB.

Intended use

- PERI UP Cladding serves as an enclosure system for protecting
 - staff and the building from the effects of weather
 - the work area from unauthorised access
 - uninvolved persons (passers-by) from noise, dirt, falling objects
 - the environment from dirt and dust

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

Foreseeable misapplications

- Discharge of loads not permitted by the system.
- Use as burglar-resistant building element according to DIN 1627. (Not verified.)
- Assembly, use and disassembly in an orientation, position or location not specified or shown in the standard assembly.



Cleaning and maintenance instructions

In order to maintain the value and operational readiness of the cladding element over the long term, clean the panels after each use.



The contractor must ensure that the personal protective equipment required for cleaning, maintenance and repair work such as

- Safety helmet,
- Safety shoes,
- Safety gloves,
- Safety glasses,

is available and used as intended.

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

Use standard household cleaning agents based on surfactants with max. 5% surfactants.

Do not use abrasive cleaners or cleaners containing solvents. Cleaning tools must be adapted to the respective surfaces of the components so that they are not damaged.

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.

Disposal

Carry out disposal in accordance with the relevant national regulations.

Materials separated according to type are mostly recyclable.

Warranty and labelling

Constant use and environmental influences affect the ageing and wear process of work equipment. All work equipment must be inspected regularly by the contractor, regardless of the choice of material.

In spite of the reliable properties of PERI UP Cladding, the components can be affected after a fall or after great force and are therefore excluded from a warranty.

PERI therefore recommends that contractors carry out a visual inspection with regard to deformations or material anomalies on a regular basis and replace defective components if necessary.

It is therefore recommended to check the components after a very high number of uses or after about 5 years.

Recurring inspections and use

The system components must be checked by the contractor and the proper condition ascertained. The components must be free of damage (especially cracks or brittle areas). The components may only be used if the material is in good condition.

PERI

Additional technical documentation

Approvals:

- Z-8.1 970 PERI UP Easy 100
- Z-8.1 957 PERI UP Easy 67
- Z-8.22 863 PERI UP Flex

Instructions for Assembly and Use:

- PERI UP Easy Facade Scaffold 67 and 100, Standard Variant
- PERI UP Easy Facade Scaffold 67 and 100, Frame Variant
- PERI UP Easy EVOTOP
- PERI UP Flex Facade Scaffold 75 and 100
- PERI UP Flex Stair 75
- 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 and explicitly reflected in the assembly instructions. All components listed in the program overview may be used for assembly. Other components are not permitted. Exceptions are named or must be planned and verified on a project-specific basis.

Additional wind attack surfaces due to icing are not taken into account. Snow and ice loads are not taken into account. The use of other products and spare parts is not allowed.

Changes to PERI components are not permitted.

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

Cross-system

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

General information

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

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

Observe and comply with the safety instructions and permissible loads.

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

Materials and working areas are to be inspected before each use and assembly for:

- damage,
- stability and
- function.

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

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

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

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

Nails and wood screws must not protrude. Only allow other connecting components to protrude to the extent that is necessary. If necessary, mark protruding components or fit them with protective material. Secure all bolts with cotter pins and all screws with nuts. Before and after extraordinary events that may have damaging effects on the safety of the system, the contractor must immediately

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

Exceptional events could be:

- accidents, fire, explosions, collisions,
- Iong periods of non-use,
- natural events, e.g. heavy rainfall, heavy snowfall, significant icing, storms or earthquakes.
- Suitable measures could be:
- removing nets/tarpaulin,
- clearing snow and ice,
- reducing live loads,
- securing loose materials.

Assembly, modification and dismantling work

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

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

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



The contractor must ensure that the personal protective equipment required for the assembly, modification or dismantling of the system, e.g.

- Safety helmet,
- Safety shoes,
- Safety gloves,
- Safety glasses,

is available and used as intended.

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



If personal protective equipment against falling from a height (PPE) is required or specified in local regulations, the contractor must determine appropriate attachment points on the basis of the risk assessment.

The PPE to be used to prevent falling is determined by the contractor.

The contractor must

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

Use

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

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

When systems are used in publicly accessible areas,

- measures to prevent unauthorised use, e.g. enclosure of access areas, must be taken.
- Measures are taken against injuries caused by bumping against protruding components, e.g. assembly of protective components.

Always keep the contact surfaces of the system free of dirt, objects, snow and ice.

Close off the system in extreme weather conditions.



System-specific

The load-distributing support used, such as planking, must match the respective substrate. If multiple layers are required, planks are to be arranged crosswise.

It must be ensured that the 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.

Hammer the wedges with a 500 g hammer with a jarring blow.

Anchoring

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

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

If necessary, additional measures must be implemented.

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

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

Inspecting the anchoring

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

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

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

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

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



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



Identification marking

When carrying out the work the following identification markings must be observed:

If certain parts of the scaffold are not ready for use - especially during assembly, modification and dismantling a "No Entry" warning sign restricting access must be clearly displayed (see Sign 1).

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



Gerüstersteller			
Datum			
Unterschrift			
Arbeitsgerüst nach EN 12811, für Lastklasse			
KIN/ITI ² 3: Males, Putzarb. 2,00 kN/m ² 4-6: Maurerarb. ≥ 2,00 kN/m ²			
$\begin{tabular}{ c c c c c } \hline Breitenklasse W & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$			
Abnahmeprotokoll auszufüllen vom Prüfer			
Name			
Unterschrift			
Datum, Uhrzeit			
Besonderheiten			

auszufüllen vom Aufs

Aufstellort Position Auftraggeber ____ After assembly has been completed, all scaffold entry points must clearly display the designated sign. (Sign 2) The marking does not replace the test report! (Sign 2, rear side)

e Person

Montageprotokoll szufüllen vom Aufsichtführenden	Prüfu	Prüfprotokoll Prüfung durch befähigte Person		
fstellort sition ftraggeber rüstersteller tum tum	Verän z.B. Ei dürfer durch	Achtu derungen a ntfernen de n nur vom G geführt wei	ng m Gerüst, r Verankerungen, Serüstersteller den.	
	Datum	Uhrzeit	Unterschrift	
beitsgerüst nach EN 12811, · Lastklasse				
kN/m² +2: Wartungsarb. 1,50 kN/m² 3: Males, Putzarb. 2,00 kN/m² 4-6: Maurerarb. ≥ 2,00 kN/m²				
eitenklasse W				
$ \begin{array}{c} W06 \ 0,6 \leq w \leq 0,9 \ m \\ \hline W09 \ 0,9 \leq w \leq 1,2 \ m \\ \hline W12 \ W24 \ w \geq 1,2 \ m \end{array} $				
Abnahmeprotokoll auszufüllen vom Prüfer				
me				
tum. Uhrzeit				
sonderheiten	Gerüs Datun	t stillgelegt n:	:	
09 70077 BEBI (700hil Al Blahan Brannind (1909)	Sign 2, rea	r side		

Sign 1

Laws and regulations

When assembling, modifying, dismantling and using the scaffolds 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:

Sign 2

- 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.

Inspection based on

Handover of a usage plan.



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

Risk assessment Instructions for assembly and use Plan for assembly, modification and dismantling **Components used** Stability Working and operational safety Identification marking of widths and load Load-bearing capacity of the substrate and at-Condition, e.g. obviously undamaged tachment points classes Identification markings, e.g. tubes, scaffold cou-Anchoring, inspection, dimensions Lateral protection plers, system components Dimensions, e.g. planking, tube wall thickness Supporting system Stairs Spacing of standards, suspensions, console Corner execution brackets, kicker braces Anchoring pattern, bracing and reinforcement Completeness and support of the decking Spacing between the building and edge of

Eccentricities, spindle lengths, inclinations, tolerances

PERI UP Cladding Instructions for Assembly and Use – standard configuration

decking

Decking configuration depending on the fall height

Protection panel in roof edge protection scaffold

Distance to overhead lines/lightning protection

Source: based on TBBS 2121 Part 1

Storage and transportation

General information

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

During the relocation procedure

- ensure that components are picked up and set down in such a way that unintentional falling over, falling apart, sliding, falling down or rolling is avoided.
- always use ropes to guide components or assemblies that are susceptible to wind when moving them with a crane.
- no one is allowed to remain under the suspended load.
- the access areas on the construction site must be free of obstacles and tripping hazards and must also be slip-resistant.
- the substrate must be able to sufficiently bear loads for transport.
- if possible, use original PERI storage and transport systems, e.g. crate pallets, pallets or stacking devices.

PER

A1 Safety during assembly

Vertical transportation

Note

Adverse effect on safety levels due to damaged components!

- \Rightarrow Do not drop the components!
- ⇒ Transport and store components in a way that poses no risk of damage to the components.
- For assembly, modification and disassembly work, guardrails and intermediate guardrails must be installed at all times in the material acceptance bay. If double-advanced guardrail posts are used, every bay is a material acceptance bay.
- Vertical transportation must be carried out under the supervision of site personnel in all situations.

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

Observe the respective manufacturer's documentation!



PFR

Fig. A1.01

A1 Safety during assembly

Verified attachment points

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

All attachment points require the following:

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





Attachment point:

Each Horizontal Ledger UH Plus or UH-2

- which is freely accessible for the lifting gear,
- and is installed at a maximum height of 1.0 m above the deck level,
- and which is wedged on two rosettes of 2 standards.
 The standards must be butt-jointed at least 0.5 m below the deck level.



Fig. A1.03 Rosette

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



Fig. A1.04 **Guardrail post** Attachment point: Each Guardrail Post EPG,

- which is connected to two Standards UVR, UVR-2, UVH or UVH-2
- and both the guardrail post and the intermediate guardrail (UH-Plus or UH-2) are installed
- and is mounted a maximum 1.0 m above the deck level.

The standards must be butt-jointed at least 0.5 m below the deck level.

A1 Safety during assembly

Attachment points in the system

۲

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

General information

- The use of personal protective equipment to prevent falling from a height is regulated in the project-related risk assessment that has been prepared by the contractor (user).
- When using personal protective equipment to prevent falling from a height, all valid standards and safety regulations are to be taken into consideration by the contractor.
- Each scaffold assembly is to be secured against tipping by the user.
- The application concerns assembly, reconstruction and dismantling.
- The specified heights for permissible attachment points apply only in relation to the component. The respective employer risk assessment regulates the attachment points to be used for the person.

Requirements

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



Attachment points

Standard ends approx. 2 m below the assembly level:

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



PFRI

Fig. A1.06

Attachment points

Standard ends approx. 1.5 m below the assembly level:

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



Fig. A1.07

Attachment points

Standard ends approx. 1 m below the assembly level:

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



Fig. A1.08

Attachment points

Standard ends approx. 0.5 m below the assembly level:

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

A2 Component overview

PERI

Pos. no.	Component name	Article no.
Support rail	S	
1	Support Rail CVR 200	138470
2	Support Rail CVR 100	138473
3	Support Rail Keder CVK 200	138474
4	Support Rail Keder CVK 100	138475
5	Girder Rail Ballast CVB 200	138476
6	Support Rail Ballast CVB 100	138477
Panels		
11	Panel CPP 50	138532
12	Panel CPP 67	138533
13	Panel CPP 75	138534
14	Panel CPP 100	138535
15	Panel CPP 150	138536
16	Panel CPP 200	138537
17	Panel CPP 250	138538
18	Panel CPP 300	138539
Corners		
21	Multi-corner CPC 200	138499
22	Multi-corner CPC 100	138506
Keder tarpa	iulins	
23	LGS Keder Track URK 600	126071
24	Rail URV	126083
25	HEX. NUT ISO 4032-M12-8-VZ	710330
26	SCREW ISO 4014-M12X050-8.8-VZ	72817
27	WOOD SCREW 8x20 TK-TX30 HKG	024550
28	TH SCREW M08X045MUDIN 603-4.8VZ	710295
29	Keder tarpaulin	-
30	Wooden panel	-
Accessorie	S	
31	Horizontal Ledger UH-2 25	131995
32	Support UC 25	115959
33	Multi-console Bracket CEB	138481
34	Adapter CEA	138490
35	Ledger-to-ledger Coupler UHA-2	136582
36	Ledger-to-ledger Coupler UHA-2 Half with Spigot	130684
37	Top Standard UVH-2 100	132194
38	Clamping Rosette UEV 90°	126453
39	Horizontal Ledger UH-2 250	132025
40	Horizontal Ledger UH-2 50	131998
41	Construction Site Door CED	138603
42	Steel Deck UDG-2 150	132505
43	Horizontal Ledger UH-2 67	133903
44	Wood screw 5x20 TK-TX20 HSX	111437
45	Coupling connection for UH30/60	137211
Packaging r	material	
54	PS foam spacer	-

A3 Tool list

Tool name	Article no.
Scaffold ratchet AF 19/22	796061
Socket wrench AF 19	
Carpenter's hammer with magnet, 500 g	727193

A4 Storage and transportation

Panels

- Stack the CPP panels on a wooden pallet.
- Stacking height max. 22 pieces.
- Assemble the stack so that the Washers CAW (17.3) lie exactly on top of each other. (Fig. C4.01 + Fig. A4.01a)
- Depending on the panel and pallet size, 2 or 3 stacks can be assembled next to each other on the pallet.
- For 2 or 3 stacks on a pallet, insert 2 spacers 12x12x85 cm of polystyrene foam (54) between each stack. (Fig. A4.02a)
- For each transport, place grooved squared timbers 8x9x105 cm on the panel stacks and secure with straps or tensioning straps. (Fig. A4.03b)

Pallet dimensions

Completely packed: Width: 105 cm Height: 104 cm Lengths: 150, 200, 250, 300 cm.



Fig. A4.02

A4 Storage and transportation

Plastic covers

Plastic covers are available for fully packed pallets.

Material

Hollow chamber profile sheets made of black polypropylene, 2 mm thick, UV resistant.

Assembly

Fit the plastic covers, position the squared timber and strap the pallet around the squared timber with steel or nylon straps. (Fig. A4.03 - Fig. A4.03b)

Forklift and crane transport

A Warning

With long pallets, there is an increased risk of tipping over during transport with forklifts. People can be hit and injured.

⇒ Keep lifting height as low as possible.

 \Rightarrow Take curves slowly.

Fully packed and strapped pallets can be moved by forklift or crane.

Apply slings so they cannot slip, observe the permissible suspension angles and load capacities according to the manufacturer's instructions.

Stacking height max. 2 pallets. Only stack pallets with the same load

Truck transport

Attach bracing only to the squared timbers and brace at each squared timber. (Fig. A4.04) Observe the national road traffic regulations

Article Pallet Number Number Weight* **Panel** CPP number of panels Stack [cm] [kg] 300 138539 300 22 1 513.6 250 138538 250 22 1 426.3 200 138537 200 22 1 339.2 150 138536 150 22 1 264.2 138535 200 2 100 44 324.3 75 138534 150 44 2 242.8 67 138533 200 66 3 318.3 50 138532 150 66 3 229.2

Tab. A4.01

*Weight including wooden pallet, plastic cover, squared timbers and strapping.

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Fig. A4.03b



Fig. A4.04

B1 System structure





B2 Support rail

PERI

Support rails

Support rails can only be installed from bottom to top.

Support rails are available in 3 versions and 2 heights.

Girder Formwork CVR 200 (1) Girder Formwork CVR 100 (2) Support Rail Keder CVK 200 (3) Support Rail Keder CVK 100 Support Rail Ballast CVB 200 (5) Support Rail Ballast CVB 100

Consisting of:

Centring pin (1.1) Support UC 25 CAC – as suspension (1.2) – Scaffolding support (5.6) Handrail support (1.3) Wedge (1.4) Keder profile (3.5) Single components 1.1 to 1.4 are present on all support rails







2





3

5

B3 Panels



Panels CPP

CPP panels are available in 8 different lengths: 50, 67, 75, 100, 150, 200, 250, 300 cm. The height is always 1 m.

CPP panels are translucent, colour neutral, UV resistant.

Consisting of: Handrail (17.1) Tab (17.2) Washer CAW (17.3)



Fig. B3.01a

B4 Corners

Multi-corner CPC

Multi-corners can only be installed from top to bottom.

Multi corners are available in 2 heights: Multi-corner CPC 200 (21) (Fig. B4.01) Multi-corner CPC 100 (22) (Fig. B4.02)

The Multi-corner CPC is available both as an inside corner (Fig. B4.01) as well as an outside corner (Fig. B4.01a). The multi-corner folds up for transport.

Consisting of:

Corner profile (21.1) Overlap (21.2) Support (21.3)





Fig. B4.01a

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Fig. B4.02

B5 Multi-console bracket

PERI

Multi-console Bracket CEB

Multi-console Brackets CEB (**33**) are used, for example, to create floor ends. Assembly side (Fig. B5.01) Outside (Fig. B5.01a)

The assembly on the base frame is done with a Horizontal Ledger UH-2 25 (**31**). (Fig. B5.02) The use of longer horizontal ledgers is not permitted.

Consisting of: Plate (**33.1**) Quarter rosette (**33.2**) Bore 9 mm (**33.3**) Oblong hole 13 x 28 mm (**33.4**)



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Fig. B5.01a



Fig. B5.02

General information

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The base frame on which the PERI UP Cladding is mounted must be approved for use with enclosure tarpaulins and anchored according to the tie pattern required for this purpose. For assembly and anchoring of the basic framework, see the Instructions for Assembly and Use and See chapter "Static design" on page 64ff.

The assembly of the PERI UP Cladding is shown here on an Easy facade scaffold. Deviating assembly work for a PERI UP Flex See chapter "Assembly on PERI UP Flex" on page 34.

Components

- 1 Girder Formwork CVR 200
- 17 Panel CPP 250
- 24 Rail URV
- 25 HEX NUT ISO 4032-M12-8-VZ
- 32 Support UC 25
- 33 Multi-console Bracket CEB
- 38 Clamping Rosette UEV 90°

Scaffolding connections

- 1. Mount Supports UC 25 (**32**) supports on the outer legs of the scaffold at deck level. Secure the wedges.
- Mount Clamping Rosette UEV 90°
 (38) on the outer leg at a height of max. 50 cm and tighten with 50 Nm. (Fig. C1.01a + Fig. C1.01b).
- 3. Mount the UC 25 (**32a**) supports in the clamping rosettes. Secure the wedges. (Fig. C1.01)

The height positioning of the support rails is done via the upper Support UC 25 (**32**). Therefore mount the lower Support UC 25 (**32a**) between 48 cm and 49.5 cm in height.



If the assembly of a floor finish is planned, install the multi-console brackets in this work step, See chapter "Floor finish" on page 33.



Fig. C1.01b

38

32a

Support Rails CVR

Always mount the support rails from the bottom to the top.

 Insert Support Rail CVR 200 (1) from above (Fig. C1.02a) into Supports UC 25 (32 + 32a) and set to stop at upper support (32). (Fig. C1.02b) The lower Support UC25 (32b) should be not be in contact with the support point of the rail.

Alternatively:

For the assembly of scaffold supports, mount Support Rail Keder CVK 200. For the assembly of scaffold supports, mount Support Rail Ballast CVB 200.



Fig. C1.02





Fig. C1.02a

Fig. C1.02b

Panels CPP

PERI recommends assembling from top to bottom.

- Place Panel CPP (17) with the 4 lugs (17.2) from the inside in a secured position on the handrail receptacle (1.3) of the support rails. (Fig. C1.04 + Fig. C1.05)
- 2. Press the panel onto the support rail.
- 3. Swing up the wedges (**1.4**), lock the lugs and secure with a jarring blow. (Fig. C1.06)



Fig. C1.03





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Fig. C1.04



Fig. C1.05

Fig. C1.06

Floor finish

Wooden panel

- 1. Connect Multi-console Bracket CEB (33) to
- Horizontal Ledger UH-2 25 (**31**) and mount it in base position on the basic frame with the oblong holes facing upwards.
- 2. Cut the wooden panel (**30**) to follow the floor contour.
- 3. Hold the wooden panel against the Multi-console Bracket CEB (**33**) and pre-drill 9 mm 2 x through the multi-console bracket.
- 4. Tighten 2 x from the outside with a truss-head screw M8x45 and nut (**28**).

Alternatively:

Screw tight from the inside with suitable truss-head screws (**27**) and washers. Screws must not protrude on the outside.

Keder tarpaulin

Fit a keder tarpaulin for compliance with fire protection class B1.

1. Connect Multi-console Bracket CEB (33) to

Horizontal Ledger UH-2 25 (**31**) and mount it in base position on the basic frame with the oblong holes facing upwards.

- 2. Insert one Base Rail URV (24) per multi-console bracket into the groove of the LGS Keder Rail URK.
- 3. Screw the keder track with inserted Rail URV through the elongated holes (33.1) of the multi-console bracket with nuts (25).
- Pull the keder tarpaulin (29) into the groove of the LGS Keder Track URK (23).
- 5. Wrap the keder tarpaulin and weigh it down with sandbags or similar.





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Fig. C1.07

Fig. C1.08





Assembly on PERI UP Flex

Assemble Supports UC 25 (**32**) in the existing rosettes of the outer stems instead of Clamping Rosette 90°(**38**). Hammer all wedges into place. The rest of the construction is done in the same way.



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If the corner bays are clad with PERI UP Cladding on the front side, then build up the outer leg of the basic scaffold from Standards UVR-2 (46). (Fig. C2.01)

In the corner area of an Easy or Evotop basic scaffold, mount the intermediate spars last.

→

- The scaffold bays forming the inner corner may be max. 2.5 m long.
- Alternatively, for 3 m long scaffolding bays, max. wind pressure 0.65 kN/m².
- Select Panels CPP for corner bays 50 cm shorter than bay length.

Components

- 1 Girder Formwork CVR 200
- 16 Panel CPP 200
- 21 Multi-corner CPC 200
- 32 Support UC 25
- 33 Multi-console Bracket CEB
- 35 Ledger-to-ledger Coupler UHA-2
- 38 Clamping Rosette UEV 90
- 39 Horizontal Ledger UH-2 250

Scaffolding connections

- 1. Mount one
 - Clamping Rosette UEV 90° (**38**) above each deck level on each of the 3 outer legs, height See chapter "Scaffolding connections" on page 30.
- Mount the Horizontal Ledger UH-2 (**39a**) in clamping rosettes. Do not secure the wedges yet.
- 3. Mount Horizontal Ledgers UH-2 (**39**) on the outside of the rosettes at the corner bays in the basic frame at deck level. Secure the wedges. (Fig. C2.01)



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Fig. C2.01
- Mount Ledger-to-ledger Couplers (35) at a distance of 50 cm from Horizontal Ledger UH-2 (39 + 39a). The ledger-to-ledger coupler must face outwards.
- 5. Mount the UC 25 (**32**) support in Ledger-to-Ledger Coupler UHA-2. Do not secure the wedges yet. (Fig. C2.02)

->

Do not pre-assemble the ledger-toledger coupler but instead assemble supports or horizontal ledgers immediately. Ledger-to-ledger couplers are

otherwise not secured.



Fig. C2.02

Support Rails CVR

Always mount the support rails from the bottom to the top.

1. Assemble the Girder Formwork CVR 200 (1) on the UC 25 supports. (Fig. C2.03)

Alternatively: Assemble Support Rail Keder CVK 200 or Support Rail Ballast CVKB 200.



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Fig. C2.03

Multi-corner CPC

Multi-corner CPC must be assembled from top to bottom.

1. Fold Multi-corner CPC 200 (**21**) behind the support rails. (Fig. C2.04 + Fig. C2.04a)



Fig. C2.04

- 2. Open the multi-corner and place the 2 x 4 supports (**21.1**) from the inside onto the handrail (**1.3**) of the support rails.
- 3. Press the multi-corner against the support rail.
- 4. Swing up the wedges (**1.4**) and lock the lugs and secure with jarring blow. (Fig. C2.05 + Fig. C2.05a)



Fig. C2.05



Fig. C2.05a

Bracing

-

Only required:

- For PERI UP Easy and PERI UP Easy EVOTOP.
- When the UC 25 support is assembled on a horizontal ledger (39) which is assembled in a clamping rosette (38).
- Brace Support UC 25 (32) of a corner leg with additional Horizontal Ledgers UH-2 50 (40) and Ledger-to-ledger couplers UHA-2 (35). Distance to parallel horizontal ledger 15.5 cm. (Fig. C2.06 + Fig. C2.06a)
- 2. Tighten all wedges of Supports UC 25 and Horizontal Ledgers UH-2.



Fig. C2.06

View from inside



Fig. C2.06a

Floor finish

- Connect Multi-console Bracket CEB

 (33) to Horizontal Ledger UH-2 25
 (31) and assemble in base position and Ledger-to-Ledger Coupler UHA-2
 (35) as close as possible to the corner. (Fig. C2.07 + Fig. C2.07a)
- 2. Close the bottom end with a keder tarpaulin or wooden panel (**30**), See chapter "Floor finish" on page 33. (Fig. C2.08)



Fig. C2.07



Fig. C2.07a



Fig. C2.08

General information

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If an inside corner follows at an outside corner in the same bay, then build up the outer leg of the base frame from Standards UVR-2 (46). (Fig. C3.02a)

Components

- 1 Girder Formwork CVR 200
- 12 Panel CPP 67
- 17 Panel CPP 250
- 32 Support UC 25
- 33 Multi-console Bracket CEB
- 38 Clamping Rosette UEV 90°
- **39** Horizontal Ledger UH-2 250

Scaffolding connections

- Mount a Clamping°Rosette°UEV°90°
 (38) on the corner post at a height of 50 cm above each deck level.
- 2. Mount 2 Supports UC 25 (**32**) each on the rosettes at deck level and on the clamping rosettes. Secure the wedges. (Fig. C3.01 + Fig. C3.01a)

Support rails

Always mount the support rails from the bottom to the top.

Assemble the Support Rail CVR 200

 to Supports UC 25 (32).
 (Fig. C3.02)

Alternatively: Assemble Support Rail Keder CVK 200 or Support Rail Ballast CVKB 200.





Fig. C3.02

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C3 Outside corner

Multi-corner CPC

Multi-corner CPC must be assembled from top to bottom.

- 1. Fold Multi-corner CPC 200 (**21**) behind the support rails. (Fig. C3.03 + Fig. C3.03a)
- 2. Open the multi-corner and place the 2 x 4 supports (**21.1**) from the inside onto the handrail (**1.3**) of the support rails.
- 3. Press the multi-corner against the support rail.
- Swing up the wedges (1.4) and lock the lugs and secure with jarring blow. (Fig. C3.04 + Fig. C3.04a)



Fig. C3.03



Fig. C3.04

C3 Outside corner

Floor finish

- Mount Multi-console Bracket CEB

 (33) in the basic position with Horizontal Ledger UH-2 25 (31) to the rosette of the corner post.
 (Fig. C3.05)
- 2. Close the bottom end with a keder tarpaulin or wooden panel (**30**), See chapter "Floor finish" on page 33. (Fig. C3.06)



Fig. C3.05



Fig. C3.06

General information

- Level out as much as possible with panels (17). Close remaining areas with wooden panels (30) or keder tarpaulins.
- Even in height compensation areas, always mount all support rails from bottom to top. Later assembly below is not possible.
- Mount the wooden panels in such a way that they are held on the ground with their own weight and wind load.

Components

- 1 Girder Formwork CVR 200
- 2 Girder Formwork CVR 100
- 12 Panel CPP 67
- **17** Panel CPP 250
- 31 Horizontal Ledger UH-2 25
- 32 Support UC 25
- **33** Multi-console Bracket CEB
- **38** Clamping Rosette UEV 90°
- **39** Horizontal Ledger UH-2 250
- **40** Horizontal Ledger UH-2 50
- 44 Wood screw 5x20 TK-TX20 HSX

Basic scaffold

Depending on the type of scaffold, a Horizontal Ledger UH-2 (**39**) must be fitted in the panel bay which adjoins the transition bay. (Fig. C4.03)







Fig. C4.02



Fig. C4.03

Panel bays

For height compensation over one metre

- Assemble Supports UC 25 (32) on the standards (37) in the rosette of the standard (37.1) or Clamping Rosette UEV 90° (38) for Support Rails CVR 100. (Only one frame column shown).
- Remaining area below the panel: Mount Multi-console Bracket CEB (33) to Horizontal Ledger UH-2 25 (31) to standard (37). (Fig. C4.04)
- 3. Cut the wooden panel below the panel to bay length. Cut the height to size from the top edge of the multi-console bracket to the floor. The wooden panel must not protrude beyond the upper edge of the multi-console bracket.
- 4. Tighten cut-to-size wooden panel (**30**) on multi-console brackets (**33**) with wood screw 5x20 TK-TX20 HSX. (Fig. C4.04a)



Fig. C4.04



Fig. C4.04a

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Transitional framework

When a panel bay abuts a transition bay.

- Mount Supports UC 25 (32) on the standard in the rosette of the standard (37.1) or Clamping Rosette UEV 90° (38) for Support Rails CVR 100.
- Fit a Ledger Coupler UHA-2 (35) with Horizontal Ledger UH-2 25 (31) and Multi-console Bracket CEB (33) to Horizontal Ledger UH-2 250 (39). (Fig. C4.05)
- 3. Cut the wooden panel (**30**) below the last panel bay approx. 5 cm longer than the bay length. Cut the height to size from the top edge of the multi-console bracket to the floor. The wooden panel must not protrude beyond the upper edge of the multiconsole bracket.
- 4. Fit the wooden panel (**30**) to the recessed console bracket. (Fig. C4.05a)

Transition bay

- 1. Cut the wooden panel of the transition panel (**30a**) approx. 5 cm narrower than the panel length.
- 2. Cut the height of the wooden panel for the total height of the height compensation, following the floor contour.
- Mount the wooden panel on one side on the support rail (17) of the transition frame. On the other side, tighten to multi-console brackets (33a) with wood screw 5x20 TK-TX20 HSX. (Fig. C4.05b)



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Fig. C4.05







Fig. C4.05b

Wooden panel bay

For height compensation below one metre

- 1. Mount the multi-console brackets (**33a**) with Horizontal Ledger UH-2 25 (**31a**) on the standard. (Fig. C4.06)
- 2. Cut the wooden panel (**30b**) to the bay length. Cut the height to size from the top edge of the multi-console bracket to the floor. The wooden panel must not protrude beyond the upper edge of the multi-console bracket.
- 3. Tighten wooden panel (**30b**) on multi-console bracket with wood screw 5x20 TK-TX20 HSX. (Fig. C4.07a)





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Fig. C4.06





Fig. C4.07





- Support rails can only be mounted from bottom to top. Therefore, plan the division of the support rails exactly before starting the installation.
- 1. Mount the Support Rails CVR 100 (2) in the filler area.
- 2. Mount additional Support Rails CVR 200 (**1**) above. (Fig. C4.08)

Panels

1. Fit Panels CPP (**17**) from top to bottom. (Fig. C4.09)



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Fig. C4.09

C5 Longitudinal infill

General information

With PERI UP Cladding, longitudinal infill in the base frame can be largely enclosed with system components.

- For longitudinal infill from 50 cm, use panels and only close remaining areas with wooden boards.
- Use wooden panels with thicknesses between 18 mm to 21 mm.
- Assemble the wooden panels from the bottom to the top.
- PERI recommends cutting the wooden panels to match the support rail height (usually 2 m).

Assembly

- 1. Mount the Support Rails CVR on the frame columns that form the bridging bay.
- 2. Cut the wooden panels (**30**) to size (clear width dimension between the wedge locks minus 1 cm) and press them against the support rails from the inside. Place each panel on the panel mounted below and hold it in place. (Fig. C5.01)
- Place 8 x Adapter CEA (34) with contact plate (34.1) against wooden plate and insert the intermediate plate (34.2) into the handrail support (1.3) of the support rail. Swivel up the wedge (1.4) and knock the adapter CEA tight. (Fig. C5.02 + Fig. C5.02a)
- 4. Tighten Adapters CEA with 3 x wooden screws 5x20 TK-TX20 HSX each (**44**).

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Longitudinal infill can also be formed with keder tarpaulins. See the following chapter.





Fig. C5.03



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Fig. C5.02



Fig. C5.02a

C6 Keder tarpaulin

General information

Instead of Panels CPP(**17**), PERI UP Cladding can also be used with keder tarpaulins (**29**) for enclosure. This can be done in parts, e.g. as longitudinal infill, or as a whole.

⇒

- As keder tarpaulins do not have a bracing effect, the bay with the keder tarpaulin must be braced with horizontal ledgers (39).
- If there are several consecutive bays with keder tarpaulins, the bracing in the first and last keder tarpaulin bay is sufficient.
- PERI recommends every 5th bay.

Assembly

- Mount Support Rail Keder CVK 200

 (3) instead of Support Rails CVR on the frame columns on which a keder tarpaulin is mounted.
- 2. On all Supports UC 25 (**32**) that are assigned to the keder tarpaulin bay, mount Ledger-toledger Coupler UHA-2 (**35**) as close

as possible to the support rail. 3. Assemble Horizontal Ledgers UH-2 250 (**39**), secure wedges with hammer blow.

(Fig. C6.01a) 4. Draw in the keder tarpaulin. (Fig. C6.02)



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C6 Keder tarpaulin

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- PERI recommends equipping the keder tarpaulin with eyelets on the upper side and fixing it in position.
- If the installation of a horizontal ledger is not possible, e.g. for longitudinal infill: Assemble coupling connection for UH 30/60, art. no. 137211, instead of Ledger-to-ledger Coupler UHA-2 and brace with scaffolding tubes.

C7 Building door

General information

The installation shown is an example and may vary depending on the project. PERI recommends using a 2.50 m wide scaffolding bay, as described in this chapter, for assembly of the Construction Site Door CED.

Components

- 1 Girder Formwork CVR 200
- 32 Support UC 25
- 34 Adapter CEA
- 35 Ledger-to-ledger Coupler UHA-2
- **36** Ledger-to-ledger Coupler
- UHA-2 Half with spigot
- 37 Top Standard UVH-2 100
- **39** Horizontal Ledger UH-2 250
- **40** Horizontal Ledger UH-2 50
- 41 Construction Site Door CED
- 42 Steel Deck UDG-2 150
- 43 Horizontal Ledger UH-2 67

Pre-assembly

- Assemble one Horizontal Ledger UH-2 (39) each on the outer side of the scaffold at the deck level of the base layer and the first scaffolding level.
- 2. Mount the Ledger-to-ledger Coupler UHA-2 Half with pin (**36**) on the horizontal ledger. The position depends on the construction door used.
- 3. Attach Top Standard UVH-2 100 (**37**). (Fig. C7.01).
- 4. Fit 2 x Horizontal Ledgers UH-2 50 (40) and 2 x

Horizontal Ledgers UH-2 67 (**43**). 5. Mount Ledger-to-

- ledger Coupler UHA-2 (**35a**) and Support UC 25 support (**32a**) for support rails on horizontal ledgers and standards.
- Mount additional ledger-to-ledger coupler (**35b**) and Support UC 25 (**32b**) as support for Steel Deck UDG-2. (Fig. C7.02)



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Fig. C7.02

C7 Building door

- 7. Insert Steel Deck UDG-2 (42).
- 8. Fit the Support Rail CVR 200 (**1a**) on the side on which the door stop will later be located. (Fig. C7.03)



The clear dimension between the support rails is 1.33 m for the installation of Construction Site Door CED.



Fig. C7.03

C7 Building door



- Raise the construction site door (41) and secure it against falling over. Fit the second support rail (1b) on the opening side. (Fig. C7.04)
- 2. Do not fix the door until the panel above it has been installed, otherwise there will be a collision with the door frame.
- 3. Place 8 x Adapter CEA (**34**) with contact plate (**34.1**) against door and insert the intermediate plate (**34.2**) into the handrail support (**1.3**) of the support rail.
- 4. Swivel up the wedge (1.4) and knock the adapter CEA tight. (Fig. C7.05)



In case of increased safety requirements or if the construction site door is always installed in the same way, Adaptors CEA can be riveted or screwed to the building door.







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Fig. C7.04a



Fig. C7.05

C8 Open and close scaffolding bays

General information

With PERI UP Cladding, it is possible to remove and reinstall CPP Panels CPP at any desired position from a secured position.

For better visibility, the basic framework is not shown.

Opening the scaffolding bay

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Before opening scaffolding bays, make sure that the lateral protection is fully assembled.

Assembly

- Loosen the panel (17) underneath the panels to be removed. To do this, open the upper pair of wedges (1.4) and fold them down. Open lower wedge pair (1.4a) only.
- 2. Pull up the panel on the upper side. (Fig. C8.01 - Fig. C8.01c)



Fig. C8.01c

C8 Open and close scaffolding bays

- 3. Open and fold down both wedge pairs (1.4) of the panel (17a) to be removed.
- 4. Pull the panel to be removed and lift it upwards. (Fig. C8.02 - Fig. C8.02b)
- 5. Press the panel underneath back against the support rails and hammer all wedges into place.
- 6. If necessary, remove more panels above.

Closing the scaffolding bay

- Install panels from top to bottom. See chapter "B3 Panels" on page 26.
- 2. Before fitting the last panel: Detach the panel directly below. To do this, open the upper pair of wedges and fold them down. Open lower wedge pair only.
- 3. Pull up the panel on the upper side.
- 4. Install the last panel.
- 5. Press the panel underneath back against the support rails and hammer all wedges into place.



Fig. C8.02a



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Fig. C8.02



Fig. C8.02b

D1 Exterior stair tower

General information

The enclosure of an external stair tower essentially consists of a combination of inside and outside corners, See chapter "C2 Inside corner" on page 36 and "C3 Outside corner" on page 42

- Always assemble the outer legs of the stair tower with Standard UVR-2.
- For anchoring, See chapter "E3 Tie pattern" on page 74.

Basic scaffold



- The scaffolding bays immediately adjacent to the stair tower may be max.
 2.5 m in length
- Alternatively, for 3 m long scaffolding bays, max. wind pressure 0.65 kN/m².

Assembly

Assemble the intermediate guardrails in the adjoining scaffolding bays as horizontal ledgers (**39**) when assembling the basic scaffold.

Otherwise:

- 1. Screw the Clamping Rosette UEV 90° (**38**) to the outer legs.
- 2. Attach Horizontal Ledgers UH-2 250 (**39**) and secure wedges with hammer blow.
- 3. Unhook the intermediate guardrails.



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Fig. D1.01

D1 Exterior stair tower

Installing PERI UP Cladding

Mounting the Support Rails CVR

- 1. Mount Ledger-to-ledger Coupler UHA-2 on horizontal transoms at a distance of 50 cm.
- 2. Mount Support UC 25 on ledgerto-ledger couplers and rosettes. Secure the wedges.
- 3. Mount the support rails from the bottom to the top. (Fig. D1.02)

Assembling Multi-corner CPC

Multi-corner CPC must be assembled from top to bottom.

- 1. Fold Multi-corners CPC 200 (**21**) behind the support rails.
- Open the multi-corner and place the 2 x 4 supports (21.1) from the inside onto the handrail (1.3) of the support rails. (Fig. D1.03)
- 3. Press the multi-corner against the support rail.
- 4. Swing up the wedge (**1.4**) and lock the lugs and secure with a jarring blow. (Fig. D1.04) See also , "C2 Inside corner" on page 36 and "C3 Outside corner" on page 42.



Fig. D1.02





Fig. D1.04

D1 Exterior stair tower

Fitting the bracing

- Mount a Horizontal Ledger UH-2 50 (40) on Horizontal Ledger UHA (35) at both inside corners. Distance "A" approx. 15.5 cm between the horizontal ledgers.
- Close remaining lateral gap between the support rails with wooden plate (**30**) and Adapter CEA. (Fig. D1.05 + Fig. D1.05a)

Assembling Panels CCP

PERI recommends assembling from top to bottom.

In inner corner bays, select panels 50 cm shorter than the bay length.

- 1. Place Panel CPP 200 (**17**) with the 4 lugs from the inside onto the handrail of the support rails.
- 2. Press the panel onto the support rail.
- 3. Swing the wedge up, lock the lugs and secure with a jarring blow, See chapter "Panels CPP" on page 32..
- Install wooden panels in remaining areas, See chapter "C5 Longitudinal infill" on page 51.







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Fig. D1.05a



Fig. D1.06

D2 Scaffolding support

General information

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- The assembly shown is an example and not to be understood as assembly instructions.
- Scaffolding support always requires project-specific planning with proof of stability.

For base scaffolds that cannot be anchored, external scaffold support can be assembled with PERI UP Cladding. To do this, mount the Support Rails CVR (**5**) instead of Support Rails CVR. Connect the scaffold support with Support UC 25 (**32**). (Fig. D2.01 + Fig. D2.01a)





Fig. D2.01

E1 Tie forces

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Anchoring with wall ties

For permissible load class see respective tie pattern			Tie forces for (+ = tension force/- = compressive force)				
			Standard co Partly ope	onfiguration en facade	Standard configuration closed facade		
			Full-width wall tie				
Tie pattern	Cladding	Bay length [m]	+ A_ [kN]	+ A, [kN]	+ A, [kN]	+ A, [kN]	

Easy 67 or Flex 75, 2 m tie pattern with tarpaulin

2.0 m	Cladding	2.00	-4.4	+4.0	1.7	-4.4	+2.7	1.7
		2.50	-5.5	+4.9	1.7	-5.5	+3.4	1.7
		3.00	-6.6	+5.9	1.7	-6.6	+4.1	1.7

Easy standard 100 or EVOTOP 100, 2 m tie pattern with tarpaulin

2.0 m	Cladding	2.00	-4.4	+4.0	3.2	-4.4	+2.8	3.2
		2.50	-5.5	+5.0	3.2	-5.5	+3.5	3.2
		3.00	-6.7	+6.0	3.2	-6.7	+4.1	3.2

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

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

 $\frac{A_n}{A_g} = 0.4$: open facade

E2 Support forces

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In addition to the standards loads specified in the respective Instructions for Assembly and Use, the weight of the PERI UP Cladding must also be taken into account on the outer leg.

For scaffolds with bay length 3.0 m: Add 0.57 kN per scaffold layer.

For scaffolds with bay length 2.5 m:

Add 0.50 kN per scaffold layer.

In the following table, the support forces for 24 m scaffold height are given as an example.

PERI UP Easy frame variant 67	Inner leg with Console Bracket ECB 33	13.6 kN
Bay length 3.00 m	Outer leg without additional parts	16.8 kN
PERI UP Easy frame variant 100	Inner leg with Console Bracket ECB/ECM 33	19.7 kN
Bay length 3.00 m	Outer leg without additional parts	23.3 kN
PERI UP Easy stem variant 67	Inner leg with Console Bracket ECM 33	13.6 kN
Bay length 3.00 m	Outer leg without additional parts	18.9 kN
PERI UP Easy EVOTOP 100	Inner leg with Console Bracket ECM 33	22.7 kN
Bay length 3.00 m	Outer leg without additional parts	24.0 kN
PERI UP Flex 75	Inner leg without console bracket	9.1 kN
Bay length 2.50 m	Outer leg without additional parts	16.5 kN
PERI UP Flex 75	Inner leg with Console Bracket UCB 25	14.5 kN
Bay length 2.50 m	Outer leg without additional parts	16.5 kN
PERI UP Flex 100	Inner leg without console bracket	11.7 kN
Bay length 2.50 m	Outer leg without additional parts	20.8 kN

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100 LC 4

±_____20

33

PERI UP Easy 100 - frame variant ≤ 24 m

Standard configuration: Cladding in front of closed or open facade





* With wind \leq 0.65 kN/m², 3 m bay length also possible.

Note: lateral protection components not shown.



67 LC 3

<u>t</u>_

40

33

PERI UP Easy 67 - frame variant ≤ 24 m

Standard configuration: Cladding in front of closed or open facade.





^{*} With wind \leq 0.65 kN/m², 3 m bay length also possible.

Note: lateral protection components not shown.



67 LC 3

t

33

40



Standard configuration: Cladding in front of closed or open facade.





^{*} With wind \leq 0.65 kN/m², 3 m bay length also possible.

Note: lateral protection components not shown.

✤ Single-leg wall tie



100 LC 4

<u>†</u> 20

33

EVOTOP – variant ≤ 24 m

Standard configuration: Cladding in front of closed or open facade.



* With wind \leq 0.65 kN/m², 3 m bay length also possible.

Note: lateral protection components not shown.

- 🔶 Wall tie

Tie pattern **E3**



75 LC 3

1[†]₄0

PERI UP Flex 75 ≤ 24 m

Standard configuration: Cladding in front of closed or open facade





Note: lateral protection components not shown.



75 LC 3

tj

20

25

PERI UP Flex 75 ≤ 24 m

Standard configuration: Cladding in front of closed or open facade.





Note: lateral protection components not shown.

Tie pattern **E3**



100 LC 4

1[†]₄0

PERI UP Flex $100 \le 24 \text{ m}$

Standard configuration: Cladding in front of closed or open facade





Note: lateral protection components not shown.
E3 Tie pattern



External scaffold access

PERI UP Easy Cladding

Anchor the outer legs of the stair tower with wall ties.

The following rules apply:

- The tie patterns shown apply for all equipment variations.
- Always install the ties in an access bay. They always replace the ties in the access bay that are necessary for the basic scaffold.

PERI UP Easy EVOTOP PERI UP Flex

The wall ties do not have to be extended up to the outer leg of the stair tower. It is sufficient to anchor the inner and outer legs of the basic scaffold. The stair tower is connected with Horizontal Ledgers UH-2 in accordance with the applicable Instructions for Assembly and Use.

The following rules apply:

- The tie patterns shown apply for all equipment variations.
- Always install the ties in an access bay. They always replace the ties in the access bay that are necessary for the basic scaffold.

PERI UP Easy Cladding Tie pattern 2 m.

Standard configuration in front of open and closed facades.

PERI UP Easy EVOTOP Cladding Tie pattern 2 m. Standard configuration in fr

Standard configuration in front of open and closed facades.





*) Horizontal Ledger UH-2 every 2.00 m

Note: lateral protection components not shown.

EBF

The scaffolding bay next to the external access ladder must be max. 2.50 m. Bay width 3.00 m only with wind load ${\leq}0.65$ kN/m².

🔶 Wall tie

Three-legged wall tie

Tie pattern **E3**

PERI UP Flex Cladding Tie pattern 2 m. Standard configuration in front of open and closed facades.



*) Horizontal Ledger UH-2 every 2.00 m

Note: lateral protection components not shown. The scaffolding bay next to the external access ladder must be max. 2.50 m. Bay width 3.00 m only with wind load ≤ 0.65 kN/m².



Standard Rail.









Vertical Rail for the use of "Keder Tarpaulin", length 2.0 m.







B [mm] L [mm] 175 2026



Vertical Rail for the use of "Keder Tarpaulin", length 1.0 m.





Art no.	Weight [kg]		B [mm]	L [mm]		
138476	11.600	Rail Ballast CVB 200	175	2026		

Vertical Rail for attachment of a Ballast Scaffolding, length 2.0 m.





Art no.	Weight [kg]			B [mm]	L [mm]
138477	6.830	Rail Ballast CVB 100		175	1026
Vertical Ra	il for attachme	nt of a Ballast Scaffolding, length 1.0 m.			
			175 175	139	









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550 1015

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Art no.	Weight [kg]		L [mm]	X [mm]
		Ledgers UH-2		
131995	1.400	Ledger UH-2 25	204	250
133900	1.590	Ledger UH-2 33	284	330
131998	2.030	Ledger UH-2 50	454	500
133903	2.470	Ledger UH-2 67	624	670
132213	2.680	Ledger UH-2 75	704	750
132004	3.730	Ledger UH-2 100	954	1000
132007	4.500	Ledger UH-2 125	1204	1250
132010	4.670	Ledger UH-2 150	1454	1500
132013	5.330	Ledger UH-2 175	1704	1750
132016	5.990	Ledger UH-2 200	1954	2000
132019	6.650	Ledger UH-2 225	2204	2250
132025	7.310	Ledger UH-2 250	2454	2500
132022	8.640	Ledger UH-2 300	2954	3000

Notes

With length marking for easier identification.





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

Notes

With length marking for easier identification.



Art no.	Weight [kg]		L [mm]	X [mm]
115959	1.160	Support UC 25	250	223

Notes

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





Art no.	Weight [kg]		B [mm]	L [mm]
138481	1.580	Multi-Bracket CEB	180	184

For fixing Timber and Kederrails as a bottom finish.















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Accessory (not included)

111437 0.004 Wood Screw 5x20 SK-TX25 HSX

Art no.	Weight [kg]	
136582	0.831	Ledger to Ledger Coupler UHA-2

For connecting horizontal ledgers at right-angles.







Art no.	Weight [kg]	
137211	1.600	Coupling UH 30/60

Horizontal and vertical connection of Scaffold Tube 48 mm to UH Ledger.





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

Without spigot for supporting head spindles.





Art no.	Weight [kg]	
		Top Standards UVH
401309	2.510	Top Standard UVH 50
400000	4.610	Top Standard UVH 100
400003	6.920	Top Standard UVH 150
400005	9.230	Top Standard UVH 200
400007	11.500	Top Standard UVH 250

Without spigot for supporting head spindles.





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L [mm]

		•	
Art no.	Weight [kg]		L [mm]
132196	6.070	Top Standard UVH-2 125	1250
Without sp	bigot for suppo	rting head spindles.	

Art no.	Weight [kg]		L [mm]			
417195	7.590	Top Standard UVH 125	1250			
Without spigot for supporting head spindles. Reduces necessary spindle extensions due to rosette spacing of 25 cm.						



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









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

Without spigot to accommodate head spindles.





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Art no.	Weight [kg]		
126453	1.630	Rosett Coupler UEV 90°	
	(

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87

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

Length X: 500 - 1500 with H of 45 mm Length X: 2000 - 2500 with H of 60 mm Length X: 3000 with H of 70 mm

Notes

Values correspond to EN 12811-1







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

Assembly onto Horizontal Ledgers UH.

Notes

Values correspond to EN 12811-1.









Art no.	Weight [kg]	
727193	0.790	Carpenters Hammer w. Magnet

The optimal System for every Project and every Requirement



Wall Formwork



Column Formwork



Slab Formwork



Climbing Systems



Bridge Formwork



Tunnel Formwork



Shoring Systems



Construction Scaffold



Facade Scaffold



Safety Systems





System-Independent Accessories



Services

Access



Protection Scaffold

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