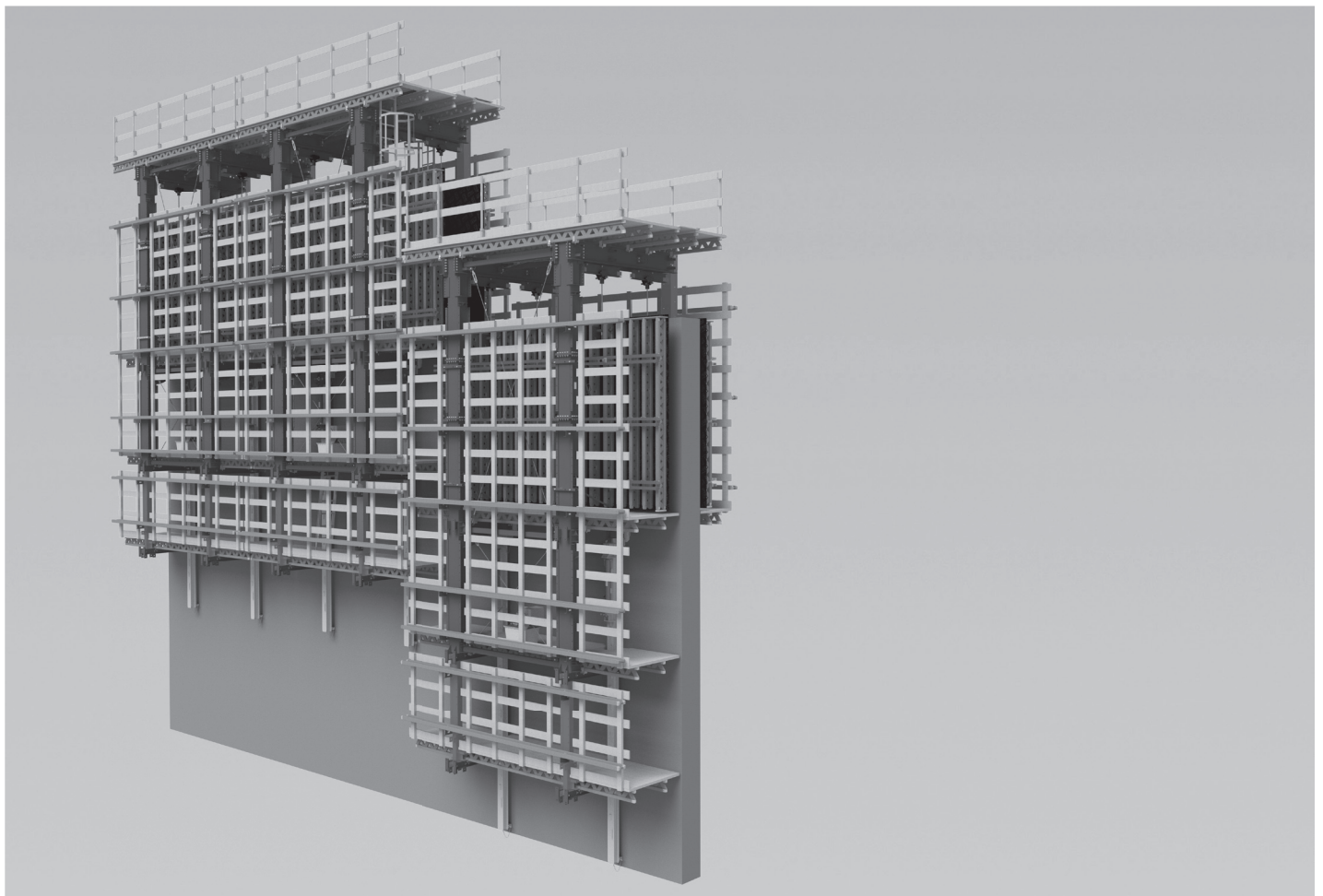


ACS G Self-Climbing System

Instructions for Assembly and Use – standard configuration – Version 1.1



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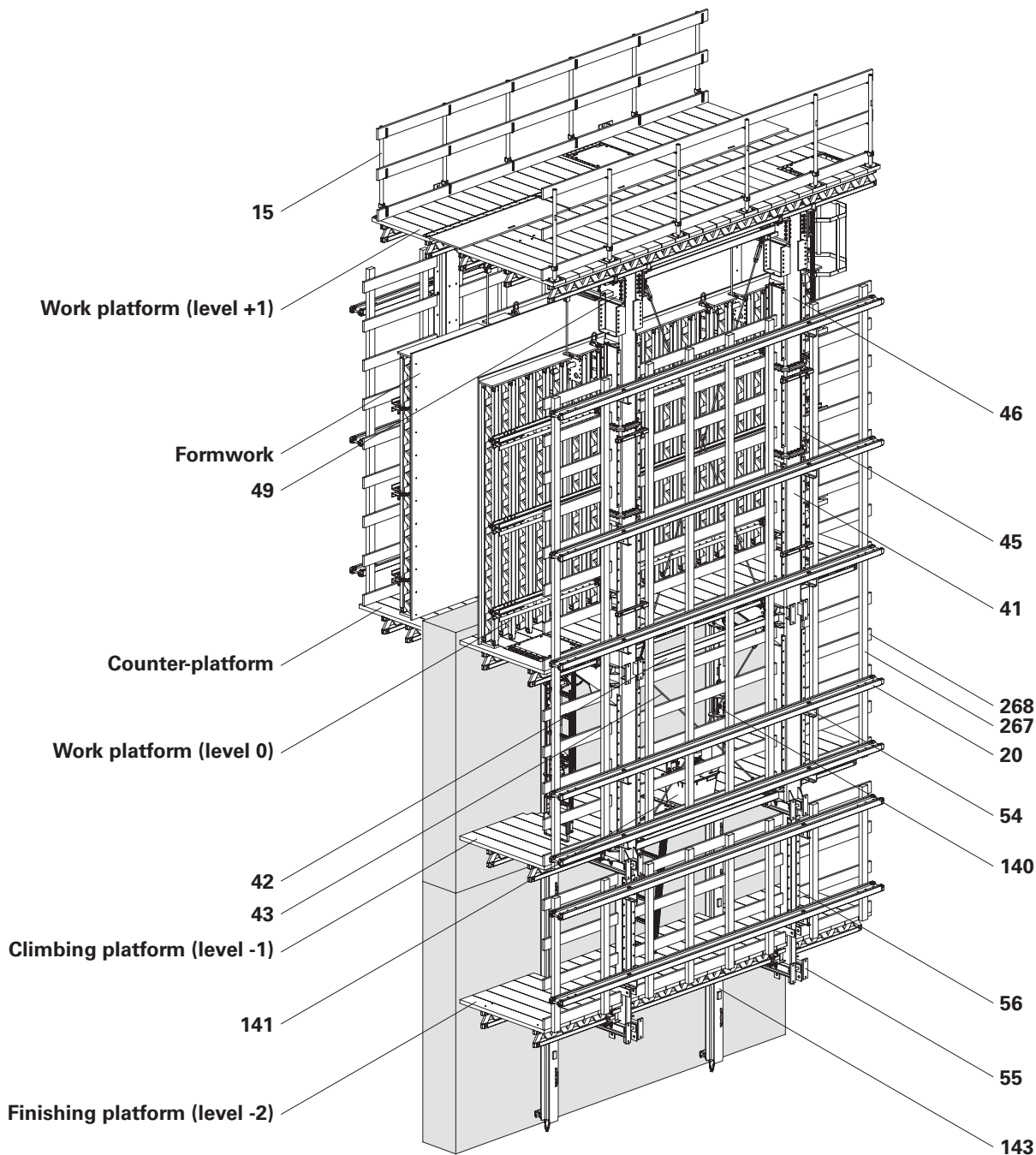
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Main components



- 15 Guardrail Post PD 8
- 20 Girder VT 20
- 41 Console Bracket ACS-G
- 42 Compression strut for Cross Bracing ACS
- 43 Diagonal Bracing DW 15 ACS

- 45 Vertical Post Intermediate 1200 ACS
- 46 Vertical Post Top 2100 ACS
- 49 Gallows 3325 ACS-G
- 54 Ladder Cage Connection VT 20 ACS

- 55 Finishing Platform Beam 1365 ACS-G
- 56 Finishing Platform Vertical 2350 ACS-G
- 140 Climbing Device ACS 100
- 141 Hydraulic Unit ACS 100
- 143 Climbing Rail ACS
- 267 Counter-batten
- 268 Ladder cage

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)

Observe additional documentation

Arrows

Arrow representing an action

Arrow representing a reaction of an action*

Arrow representing forces

* If not identical to the action arrow.

Safety instruction categories

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

Danger

This sign indicates an extremely hazardous situation which, if not avoided, will result in death or serious, irreversible injury.

Warning

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

Caution

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

Note

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

Format of the safety instructions

Signal word

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

Dimensions

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

Conventions

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

Notes on illustrations

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

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

Terminology

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

Target groups

Contractors

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

- assemble, modify or dismantle the climbing systems, or
- use them, e.g. for pouring concrete, or
- allow them to be used for other operations, e.g. carpentry or electrical work.

The 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

(construction site coordinator)

- is appointed by the contractor,
- must be on site for all work,
- prepares and updates the plan for assembly, modification and dismantling,
- prepares and updates the plan for use of the climbing formwork 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

Climbing 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 climbing system in an understandable form and language.
- Description of the measures for safely assembling, modifying or dismantling the climbing system.

- Designation of the preventive measures to be taken to avoid the risk of persons and objects falling.
- Designation of the safety precautions in the event of changing weather conditions that could adversely affect the safety of the system, as well as the personnel concerned.
- Details regarding permissible loads.
- Description of all other risks and dangers associated with assembly, modification or dismantling operations.



- **Ensure that the relevant national guidelines and regulations in the respective current version are complied with!**
- **If no country-specific regulations are available, PERI recommends that you proceed according to German guidelines and regulations.**
- **A competent person must be on site when any work is carried out on the climbing system as well as during the climbing procedure.**

* 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.

Additional technical documentation

- PERI Structural Design Information for self-climbing systems
- Approvals:
 - Z-21.6-1766
 - Z-21.6-1767
- Instructions for Assembly and Use for VARIO GT 24 Girder Wall Formwork
- Instructions for Use:
 - Crane Splice 24
 - Lifting Beam 9 t
 - Pallets and stacking devices
 - PERI Bio Clean
- Assembly instructions for ACS 100 Climbing Device and Hydraulics
- PERI Design Tables – Formwork and Shoring
- User information for concrete cones with sealing compound-3
- Manufacturer documentation:
 - Filter pump CE
 - Makita DDF451
 - Hydraulic unit
 - Trolley
- Safety data sheet hydraulic oil
- Chain hoist

Product description

Regular assembly

These Instructions for Assembly and Use describe the assembly of the Self-Climbing System ACS G as a self-climbing formwork system. The climbing unit shown is an example and consists of

- one work platform (level +1) including suspended external and internal formwork,
- one work platform (level 0),
- climbing platform and finishing platform,
- Hydraulic Unit ACS,
- Climbing Device ACS 100,
- Climbing Rail ACS,
- one pair of climbing shoes per concreting section.

The system is a bracket-like frame construction and is designed as shoring in accordance with DIN EN 12812: 2008-12 to support wall formwork.

A climbing unit consists of 2 console discs with cantilever beams, platform beams and struts, which are connected to the platforms (work platform, climbing platform and finishing platform).

The platforms consist of planking mounted on girders. The work and climbing platforms are mounted on the cantilever beams of the console bracket. The finishing platform is mounted on the finishing platform beam.

The climbing formwork is formed by connecting the suspended formwork and the climbing scaffold. This is then moved as a climbing unit by making use of the hydraulic self-climbing climbing devices.

Features

- Self-Climbing System ACS G with suspended formwork that is open at the top for straightforward reinforcement configuration.
- Stable work platforms carry heavy loads, e.g. for the purposes of material storage.
- The climbing units consisting of formwork and platforms are moved using the integrated hydraulic system.
- Simultaneous climbing of several climbing units ensures fewer open edges thus resulting in increased workplace safety.
- Crane-independent, fast working operations.
- Large console bracket distances reduce the need for climbing ties and thus reduce the number of obstructions in the wall.
- Finishing platforms allow easy dismantling of recoverable tie parts.
- Safe load transfer into the structure via climbing rail, climbing shoe and climbing tie.
- Weather-independent working. Platforms with optional enclosures protect staff from the effects of the wind and weather.
- Economical use generally from 25 concreting sections upwards.

Technical data

- Formwork height up to 5.1 m.
- Up to four climbing units can be coupled with each hydraulic unit. Two units can be coupled using a special-purpose remote control device.
- Project-specific planning will determine the total weight.
- Temperature range: -20 °C to +45 °C.

Intended use

- Formwork scaffolding in building construction projects.
- To form in-situ concrete walls.
- To provide anti-fall protection for site personnel.
- To protect workers from falling objects.
- To protect workers against the effects of the weather (only with enclosure).

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

Foreseeable misuse

- Transportation of loads and persons.

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 a misapplication with a potential safety risk, e.g. risk of falling.

Only PERI original components may be used. The use of other products and spare parts is not allowed and represents a misapplication with associated safety risks.

Changes to PERI components are not permitted.

Only ever use approved and calculated components.

Operation with damaged or incomplete load-carrying equipment is not permissible.

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



- The description of the assembly and operation of the assemblies and components in these Instructions for Assembly and Use is intended as an example.
- For use on the construction site, a project-specific assembly plan is required.
- The project-related assembly plan from PERI is binding for assembly operations.

Cleaning and maintenance instructions

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

Some repair work will be inevitable due to the working conditions.

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

Spray components of the climbing system that are exposed to concrete contamination with concrete release agent before each use; this makes them easier and faster to clean.

Spray the concrete release agent very thinly and evenly.

Do not spray work platforms and access routes with concrete release agent – slip hazard.

Spray the climbing system with water immediately after concreting; this avoids any time-consuming and costly cleaning operations.

When used continuously, spray the formlining elements with concrete release agent immediately after striking; then clean by means of a scraper, brush or rubber lip scraper.

Important: do not clean formlining made of plywood with high-pressure equipment. This could result in the formlining being damaged.

Fix recesses and built-in parts with double-headed nails; as a result, the nails can easily be removed later, and damage to the formlining is largely avoided.

Close all unused tie holes with plugs; this eliminates any subsequent cleaning or repair work.

Tie holes accidentally blocked with concrete are cleared by means of a steel pin from the formlining side.

When placing bundles of reinforcement bars or other heavy objects on horizontally stored formwork elements, suitable support, e.g. squared timbers, is to be used: this prevents impressions and damage to the formlining to a large extent.

Internal concrete vibrators should be fitted with rubber caps if possible; as a result, any damage to the formlining is reduced if the internal vibrator is accidentally inserted between the reinforcement and formlining.

Mechanical components, e.g. climbing rails in the sliding area of the climbing shoes, spindles or gear mechanisms, must be cleaned of dirt or concrete residue before and after use, and then greased with a suitable lubricant.

Never clean powder-coated components, e.g. elements and accessories, with a steel brush or hard metal scraper; this ensures that the powder-coating remains intact.

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.



Wear suitable protective equipment when cleaning components with high water pressure, such as:

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

RFID transponder

Individual components are equipped with an RFID transponder. RFID transponders combine hardware with additional software to create a smart product.

Depending on the component and digital solution, this makes it possible to:

- Open technical documents.
- View maintenance plans.
- Track information on transport and logistics.



For more information, see “RFID LA Tag Mounting Kit User Information”.

Cross-system



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

General information

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

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

Observe and comply with the safety instructions and permissible loads.

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

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

- damage,
- stability and
- functional 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 throw anything off them.

Components provided by the contractor must comply with the requirements stipulated in these Instructions for Assembly and Use and all applicable laws and standards. Unless otherwise indicated, the following applies in particular:

- Timber components:
Strength class C24 for solid wood according to DIN EN 338:2016-07.
- Scaffolding tubes:
Galvanised steel tubes with minimum dimension \varnothing 48.3 x 3.2 mm according to DIN EN 12811-1:2004-03 4.2.1.2.
- Scaffolding tube couplings:
according to DIN EN 74-1:2022-09 and DIN EN 74-2:2022-09.
- Wood screws:
The wood screws are selected on a project-specific basis. Observe project-specific requirements for the fasteners.

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 if required, 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 exceptional occurrences that may have an adverse effect on the safety of the climbing 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 climbing 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 climbing 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 climbing 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 Instructions for Assembly and Use, the contractor must create installation instructions in order to guarantee safe assembly, modification and dismantling of the climbing unit.



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

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

is available and used as intended.

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



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 climbing systems to be used, is responsible for ensuring that the equipment is in good condition.

If the climbing 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 be then coordinated.

Notes for use

- Working areas must remain free of any tripping hazards.
- Do not walk on components and assembly units, always ensure that they are in a secure position.
- Always keep components and assembly units free of dirt, ice and snow. In wet weather conditions in particular, there is an increased risk of slipping.
- Always keep work platforms clean.
- Do not remain in the danger zone created by the moving parts.
- Avoid installing working areas and access routes in danger zones.
- Cordon off danger zones.
- Ensure that the guardrails and edge covers are fully installed.

System-specific



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

Make sure that the guardrails and/or edge covers at building openings and projections are fully installed before accessing the climbing system. Before accessing the climbing system, check that the platform decking is complete and check for any danger zones.

Strike concreting sections only when the concrete has sufficiently hardened and the person in charge has given the go-ahead for striking to take place.

Anchoring is to take place only if the anchorage has sufficient concrete strength.

Inspection of the anchoring and associated components must be carried out by the party responsible.

As a result of the relocation procedure, falling edges are formed between the platforms. Such affected areas are to be cordoned off.

Building materials or tools must not be transported as part of the relocation operation. Exceptions to this can be determined through the operational working and assembly instructions.

The transport of persons during the relocation process is strictly prohibited. This does not apply to the operating personnel required for relocation operations.

Working areas at great heights are to be secured by means of appropriate measures to prevent objects from falling down.

The enclosure of the platform or mounting of additional surfaces exposed to the wind changes the degree of stability and must be rechecked. If necessary, additional measures must be implemented.

Use a guide rope to ensure that assembly units suspended from the crane are fully under control when being moved.

Welding and/or abrasive cutting work must not be carried out on the platforms.

Reliable lightning conduction must be ensured by the contractor.

Assembly work

The contractor must ensure that the user has an appropriate and sufficient number of tools, lifting equipment and slings, suitable and sufficient space for assembly and storage as well as adequate crane capacity at his disposal.

During the transportation procedure, only use the specified attachment points for components.

Avoid standing under suspended loads. If work under suspended loads cannot be avoided, come up with suitable safety measures and apply them. Avoid standing between a fixed object and an object that is drawing near.

Secure interim assembly states by means of temporary supports in order to prevent any items from toppling over.

The contractor must make a level assembly area with sufficient load-bearing capacity available.

Unexpected hazards can always arise when assembly work is carried out. Assess the degree of risk in each individual case and, if necessary, take measures to prevent or minimise the risk.

If guardrails cannot be used or have to be removed due to operational reasons, safety equipment must be installed in its place in order to prevent falls from any height.

If the use of anti-fall equipment is deemed to be inappropriate, personal protection equipment (PPE) can be used if suitable fixing points are available.

Site personnel are forbidden to remain in areas below where assembly work is being carried out, unless the danger zone has been provided with sufficient protection against falling, overturned, sliding or rolling objects and masses. Cordon off and clearly mark any danger zones and check that these are in place and complete every time work is commenced.

Do not walk on components and assembly units.

Find a secure standing position next to the components or assembly units. Use assembly scaffolds.

Always keep components and assembly units free of dirt, ice and snow.

Access

Safe access to all working areas must be guaranteed at all times.

Hatches and openings to accessible working areas must be kept closed during working operations.

Use walkways, stairs, stair towers or site lifts as access routes. Ladders are suitable for use as passageways in exceptional cases only.

Ladders must not be connected to each other for more than two levels and should be offset against one another.

Ladders must be secured on the outer side by means of appropriate anti-fall equipment such as ladder cages or safety nets.

Building edges at passages and openings in accessible areas must be secured.

In case of danger, it must be ensured that working areas can be vacated via emergency escape routes or rescue equipment.

It must also be ensured that at least one emergency escape route or piece of rescue equipment can still be used if the power supply fails.

Determine and apply all appropriate measures.

Throughout the entire relocation procedure, ensure that site personnel can still use the emergency escape route.

In case the access hatches are blocked when retracting the formwork, ensure that site personnel can still use the emergency escape route.

Protection against falling components

Work activities may not be carried out simultaneously on areas positioned on top of each other if the lower working areas are not protected against falling objects.

Avoid installing working areas and access routes in danger zones.

If this is not possible due to work procedures, suitable protective measures must be available to provide protection against falling objects. This also applies to work that only takes a short period of time.

Safety nets (mesh size ≤ 2 cm) and platform planking are considered to be suitable means and are to be installed very close to the structure (distance ≤ 5 cm).

Secure tools and material to prevent them from falling down. Remove concrete residue and other dirt as soon as possible, at the latest before the next climbing cycle. The platforms are to be kept clean at all times.

Operational working areas at great heights are to be secured by means of appropriate structural measures to prevent objects from falling down.

Components that are likely to become unstable components

Secure components that are likely to become unstable with suitable means, e.g. using push-pull props, or leave them attached to the crane until the tipping hazard has been eliminated.

Loitering in the tipping range is prohibited. Draw attention to and clearly mark any danger zones.

If necessary, cordon off the danger zones with suitable means. Check that safety signs and barriers are in place before commencing work.

Climbing procedure

Take into consideration the permissible wind speed limit for the climbing procedure.

Personnel, building materials or tools must not be transported as part of the relocation operation. Exceptions to this can be determined through the operational working and assembly instructions on the basis of a corresponding risk analysis.

The climbing procedure must be monitored by a competent and qualified person.

During the climbing procedure, clamping and crushing hazards are brought about by moving components.

The individuals carrying out the climbing procedure must be fully informed about all possible hazards.

All persons who are not required to carry out the climbing procedure must leave the danger zones.

When climbing with the hydraulic climbing device, specifications regarding the arrangement of the hydraulic hoses must be observed. If the standard arrangement is not possible, an authorised person must determine a safe and secure alternative.

As a result of the moving procedure, open edges are formed between the platforms as well as at building openings. If work is carried out in this area, site personnel must be protected to prevent them from falling, e.g. with temporary anti-fall protection or by having them wear PPE.

Secure all resulting shearing edges by means of covers. Cordon off danger zones during the climbing procedure.

In case of a malfunction, lower the platform to the next possible position. Personnel are to leave the climbing unit in a safe and secure manner and a person who is authorised to give instructions is to be notified immediately.

The climbing system cannot be mounted for the next concreting section until the required concrete strength has been achieved.

Maintenance and repairs

The components of the climbing system are to be inspected before every use to ensure that they are in flawless condition.

Only flawless materials may be used. Have the climbing units checked monthly for signs of damage by competent persons who are authorised to give instructions.

Remove any loose concrete residue.

Immediately remove any dirt that impairs functionality. Remove and replace damaged components.

In case of overload or damage, stop work on and under the platforms, determine the cause, set down and replace damaged components.

If the maximum permissible wind speed has been exceeded, temperatures are outside the area of application or after any extraordinary event has taken place such as a fire or earthquake, the functionality and load-bearing capacity of all safety components as well as the supporting structure must be checked.

Safety components:

- A visual inspection is to be carried out by authorised personnel before each climbing procedure.
- Before each climbing procedure or each assembly procedure, a functionality check is carried out by qualified personnel.
- If parts need to be replaced, only PERI original components may be used.
- Repairs are to be carried out by qualified PERI personnel only.
- In the case of overloading or recurrent damage, stop work operations on and under the platforms, determine the cause and rectify.

Supporting structure:

- A visual inspection is to be carried out by authorised personnel before initial use.
- Only PERI original components are to be used for repairs or replacement.
- In the case of overloading or recurrent damage, stop work operations on and under the platforms, determine the cause and rectify.

Other components:

- Repairs are carried out by authorised personnel and the person authorised to give instructions is to be informed.
- In the event of frequently recurring damage, determine the cause and remedy it.
- Route hydraulic lines and power cables in such a way that they cannot be disconnected or sheared off, and that they do not pose a tripping hazard.

Hydraulic components

Visual inspections are to be carried out by authorised personnel at regular intervals.

Qualified personnel are to carry out a functionality check before every working cycle or before assembly takes place.

If any defects are discovered, repairs are only allowed to be carried out by qualified personnel.

Hydraulic hoses have an expiry date. Observe the manufacturer-specific information.

Do not suspend any objects from the hydraulic hoses.

Observe the manufacturer-specific information regarding inspection and maintenance of the hydraulic unit.

For correct use and disposal of the hydraulic oil, observe the manufacturer-specific instructions.

Thicken spilled hydraulic oil immediately with oil binder and mop it up.



Wear safety goggles and suitable protective gloves when working on the hydraulic system.



PERI recommends the use of an oil pan to collect hydraulic oil from the hydraulic unit.



Note

Always switch off the power to the hydraulic unit and prevent it from being switched on again as soon as the moving procedure involving the climbing system has been completed.

This safety measure also applies to the following:

- Assembly.
- Maintenance.
- Repairs.
- Inspections.
- Disassembly.

Approval for use is the responsibility of the operating personnel.

Electrical components



Danger

High electric voltage at the hydraulic unit!

Death or serious injury can result from an electric shock.

- ⇒ Connection only by qualified personnel.
- ⇒ Only qualified personnel may carry out work and repairs on the electrical components of the systems.
- ⇒ Only approved, undamaged and tested connecting cables should be used.

Only operate the hydraulic unit using the current and voltage specified on the type plate.

Do not suspend any objects from the electrical lines.

Storage and transportation

Store and transport components in such a way that no unintentional change in their position is possible. Detach load-lifting accessories and lifting gear from the lowered components only if they are in a stable position and no unintentional change is possible.

Do not drop the components.

Use PERI lifting accessories and lifting gear and only those load-bearing points provided on the component.

During the relocation procedure

- ensure that components are picked up and set down in such a way that unintentional falling over, falling apart, sliding, falling down or rolling is avoided.
- no one is allowed to remain under the suspended load.

Pre-assembled assemblies should always be guided with ropes when moving them by crane.

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.



Note

In the case of hydraulic components, follow the instructions found in the Assembly Instructions for "ACS 100 Climbing Device and Hydraulics".

Component overview and tool list



Pos. no.	Component name	Art. no.
	System components	
14	Guardrail Post Holder Multi	126088
15	Guardrail Post PD 8	019040
16	Guardrail Post RCS 226	109720
17	Guardrail Post RCS/SRU 184	114328
18	IPE 200, special length	
20	Girder VT 20	
21	Formwork Girder GT 24	
30	Push-Pull Prop RS	
41	Console Bracket ACS-G	057053
42	Compression strut for Cross Bracing ACS	
43	Diagonal Bracing DW 15 ACS	057083
44	Clamp GT 24 ACS	057038
45	Vertical Post Intermediate 1200 ACS	057067
46	Vertical Post Top 2100 ACS	057016
47	HV-Bolt Set M20x75	057021
48	Gallows 1430 ACS-G	057059
49	Gallows 3325 ACS-G	057058
50	Panel Beam 1110 ACS	057040
51	Counterplate 100x100x10 ACS	057073
52	Trolley HTP	
53	Connector AV ACS	057051
54	Ladder Cage Connection VT 20 ACS	057039
55	Finishing Platform Beam 1365 ACS-G	057057
56	Finishing Platform Vertical 3300 ACS-G	057056
	Finishing Platform Vertical 2350 ACS-G	057055
57	Platform Post 5900 IPBL 240 ACS	057032
58	Platform Beam 870-1170 ACS	057072
	Platform Beam 570-870 ACS	057033
59	Supporting Spindle ACS	057034
60	Adapter DW 20 ACS	057049
61	Kicker Brace AV	028110
62	Wedge headpiece	028060
63	Clamp VT 20 ACS	057037
64	Bolt 25 x 180	710894
65	Plain washer 18 DIN 434	710880
	Climbing technology	
140	Climbing Device ACS 100	051738
141	Hydraulic Unit ACS 100	
142	Remote Controller ACS 100	
143	Climbing Rail ACS	
144	Spacer, cpl.	051736
145	Ledger ACS	051729
146	Pressure Point Spindle M42 ACS	057054

Pos. no.	Component name	Art. no.
149	Expander ACS	051737
159	Plain bearing grease	
	Tie technology	
160	Climbing Shoe-2 I ACS	057875
161	Climbing Shoe II ACS	051726
162	Climbing Shoe IV ACS	057568
163	Tie Tube ACS, right	051727
164	Tie Tube ACS, left	051774
165	Tie Shoe-V ACS	057567
166	Tie Shoe-H ACS	057566
167	Climbing tie	
168	Screw-On Cone M30/DW 26	057257
169	Threaded Anchor Plate DW 26	030870
170	Climbing Cone-2 M30/DW 20	030920
171	Threaded Anchor Plate DW 20	030860
172	Tie Rod DW 20	030700
173	Anchor Positioning Plate M30	029380
174	Hex. wood screw DIN 571 6 x 20	029440
175	Positioning Screw M30	029450
176	Leading Tie Plate ACS 399	057869
177	Anchor Positioning Stud M30	026450
178	Wire nail 3 x 80	710312
179	Bolt ISO 4017 M30 x 80-10.9	123843
180	Cyl. bolt ISO 4762 M30 x 110-10.9	051728
181	Bolt Ø 35 x 525 ACS	057570
182	Bolt Ø 30 x 280 ACS	057569
199	KK Concrete Cone M30-80/52	031653
	Fastener	
200	Torx 6 x 40	024540
201	Torx 6 x 60	024470
202	Torx 6 x 80	024690
203	Squared timber angle connector 90°	123478
204	Torx 5 x 20	111437
205	Spax 6 x 20	129711
206	Cotter pin 4/1	018060
207	Cotter pin 5/1	022230
208	Bolt ISO 4017 M16 x 110-8.8	710233
209	Washer ISO 7089 200 HV, A 16	711074
210	Nut ISO 7040 M16-8	070890
211	Bolt ISO 4014 M16 x 90-8.8	721729
212	Washer ISO 7094 100 HV, A 16	113349
213	Nut ISO 4032 M16-8	710229
214	Bolt ISO 4017 M16 x 50-8.8	710252
215	Betomax 20	090003

Component overview and tool list



Pos. no.	Component name	Art. no.	Pos. no.	Component name	Art. no.
216	Suspended Tube 530 ACS	057050		Ladder access	
217	Hex. Nut DW 20, AF 36/60	030580	280	Hatch-2 RCS 55 x 60 foldable	126431
218	Formwork Suspension VARIO GT24, Ø 60	125823	281	Bolt ISO 4017 M12 x 40-8.8	710224
219	Binding wire		282	Nut ISO 7040 M12-8	710381
220	Formwork tie		283	Ladder 180/6	051410
221	F.H. bolt DIN 603 M8 x 200 MU	024390	284	Ladder 220/6	051420
222	F.H. bolt DIN 603 M8 x 100 MU	710240	285	End Ladder 180/2	103724
225	Washer ISO 7089 200 HV, A 8	780354	286	Ladder Base 30, adjustable	109105
226	Washer ISO 7093 200 HV, A 8	710342	287	Ladder base	051460
227	Torx 6 x 100	024950	288	Ladder Hook	103718
232	F.H. bolt DIN 603 M8 x 60 MU	710326	289	Ladder Safety Cage 75	104132
233	F.H. bolt DIN 603 M8 x 70 MU	024140	290	Ladder Safety Cage 150	051450
238	F.H. bolt DIN 603 M8 x 45 MU	710295	291	L-Angle RCS 120 x 120 x 200	110289
239	F.H. bolt DIN 603 M8 x 65 MU	710709	292	Washer ISO 7089 200 HV, A 14	725574
240	Bolt ISO 4014 M20 x 130-8.8	711078	293	Bolt ISO 4014 M12 x 80-8.8	710220
241	Nut ISO 7042 M20-8	130341	294	Washer ISO 7094 100 HV, A 12	113348
242	Screw ISO 4014 M8 x 100-8.8	710285	295	Nut ISO 4032 M12-8	104526
243	Bolt ISO 4014 M20 x 180-8.8	113766		Tools/aids	
244	Nut ISO 7042 M8-8			Hammer 500 g	
245	Hex. wood screw DIN 571 8 x 60	024270		Open-End Wrench AF 27	
246	Fire hose		300	Cordless Screwdriver-Set ACS	133372
251	Spax 6 x 70-SK-TX30		301	Tool Set ACS	051761
252	Spax 5 x 40		302	Service Box Hydraulics	115581
	Timber components		303	Crane Splice 24	070760
260	Deck support		304	Lifting Beam 9 t	127320
261	Platform decking			Transport container	
262	Planking			Crate Pallets 80 x 120	065068
263	Toe board			Pallets RP-2	103434
264	Guardrail board			Pallets RP-2	103429
266	Safety net			Hardware Boxes 80 x 120	025660
267	Counter-batten				
268	Ladder cage				
269	Shim VT 20				
270	Formlining				
271	Squared timber				
272	Wooden wedge				
273	Formwork unit				
274	Squared timber 6/6				
275	Squared timber 8/8				
276	Board 4 x 10 cm				
277	Profiled timber				
278	Hinged hatch				

Component overview and tool list



Tool list

Tool name	Article no.
Hammer 500 g	
Open-End Wrench AF 27	
Cordless Screwdriver-Set ACS	133372
Tool Set ACS	051761
Service Box Hydraulics	115581

General tightening torques

Unless otherwise indicated, PERI recommends the following guide values for screw connections as “hand-tightened” tightening torques $M_{A,hand-tightened}$. These guide values are based on DIN EN 15048-1:2016-09 with minimum Safety Factor 3 against breakage.

Quality class	Quality 4.6		Quality 8.8 and 10.9
	Lightly oiled	MoS2	Undefined
Screw M8	8 Nm	6.6 Nm	8 Nm
Screw M10	16 Nm	13.0 Nm	16 Nm
Screw M12	30 Nm	23.0 Nm	30 Nm
Screw M16	65 Nm	54.0 Nm	65 Nm
Screw M20	100 Nm		100 Nm
Screw M24	150 Nm		150 Nm
Screw M30	260 Nm		260 Nm
Screw M36	350 Nm		350 Nm

Tightening torques have been determined for the following components:

Scaffold tube coupling	50 Nm
HV-Bolt Set M20x75 -10.9	see Section: Component-specific tightening torques
HV-Bolt Set M20x90 -10.9	see Section: Component-specific tightening torques

Component-specific tightening torques

! **Note**

- Component-specific tightening torques apply to the following components.
- Do not exceed or fall below component-specific tightening torques.

Vertical Post Top 2100 ACS

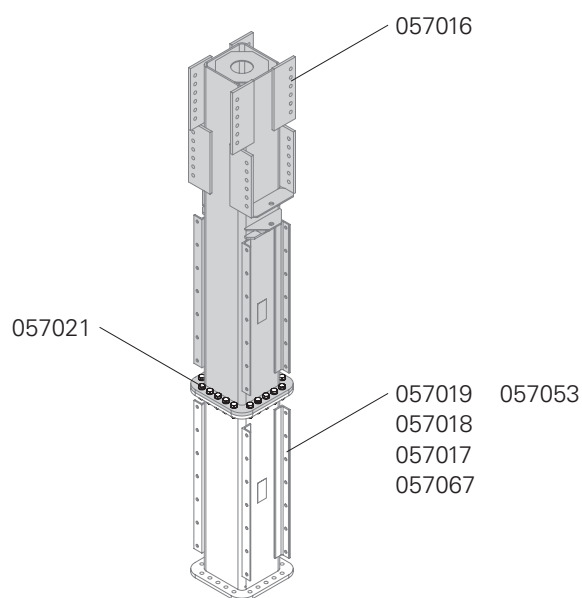


Fig. 01

		Quantity	Tightening torque [Nm]	
			Step 1	Step 2
Components (article number)	Vertical Post Top 2100 ACS (057016)	1	–	–
	Vertical Post Intermediate ACS (057019, 057018, 057017, 057067)	1	–	–
	Console Bracket ACS-G (057053)	1	–	–
Fastener (article number)	HV-Bolt Set M20x75 -10.9 (057021)	20	60	100
Note	No additional lubrication of the screw connection!			

Tab. 01

Console Bracket ACS-G

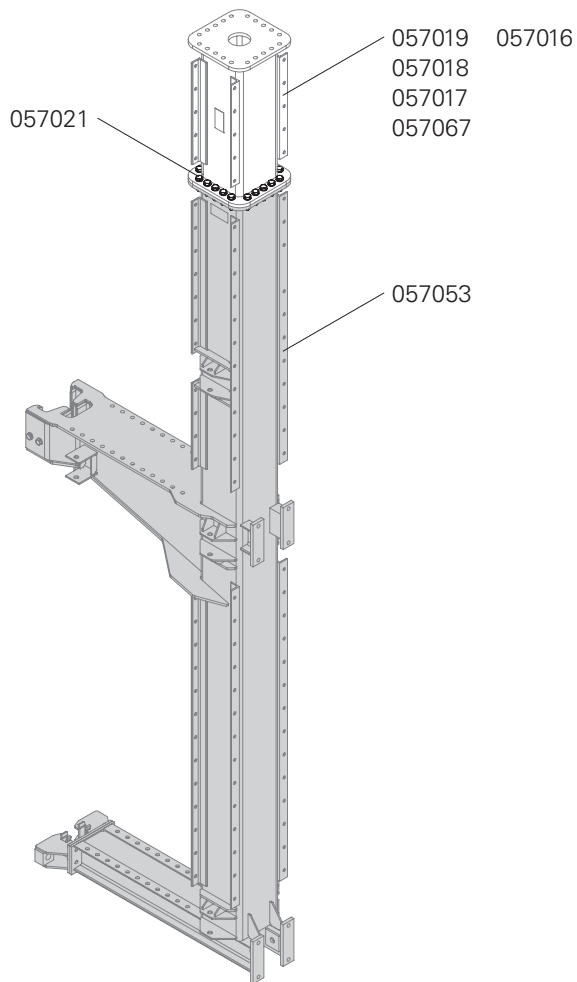


Fig. 02

		Quantity	Tightening torque [Nm]	
			Step 1	Step 2
Components (article number)	Console Bracket ACS-G (057053)	1	–	–
	Vertical Post Intermediate ACS (057019, 057018, 057017, 057067)	1	–	–
	Vertical Post Top 2100 ACS (057016)	1	–	–
Fastener (article number)	HV-Bolt Set M20x75 -10.9 (057021)	20	60	100
Note	No additional lubrication of the screw connection!			

Tab. 02

Climbing unit

The assembly process for the climbing units is determined by the

- Concreting height.
- Type of formwork.
- Type of guardrail.

The climbing unit and climbing rails (**143**) are supported by climbing shoes (**161**), which are mounted on sections of the structure that have already been assembled.

The work platform (level 0), climbing platform (level -1) and the gallows with the formwork system are mounted on the console bracket (**41**). An optional work platform (level +1) can be mounted on the gallows (**49**).

The finishing platform (level -2) is suspended below the climbing platform (level -1).

The hydraulic unit is positioned on the climbing platform (level -1).

The hydraulic unit and climbing devices are operated from the climbing platform (level -1).

The guardrail consists of guardrail boards or is designed as a closed enclosure.

The following variants are execution examples.

Variant 1

With work platform on opposite side

- Gallows 3325 ACS-G with work platform (level +1).
- VARIO formwork on the console bracket side and opposite side.
- Suspended work platform (level 0) on the opposite side.
- Concreting height (h_g) = 3.6 m. (Fig. A1.01)

Main components

- 15** Guardrail Post PD 8
 - 20** Girder VT 20
 - 41** Console Bracket ACS-G
 - 45** Vertical Post Intermediate 1200 ACS
 - 46** Vertical Post Top 2100 ACS
 - 47** HV-Bolt Set M20x75
 - 49** Gallows 3325 ACS-G
 - 50** Panel Beam 1110 ACS
 - 52** Trolley HTP
 - 53** Connector AV ACS
 - 54** Ladder Cage Connection VT 20 ACS
 - 55** Finishing Platform Beam 1365 ACS-G
 - 56** Finishing Platform Vertical 2350 ACS-G
 - 57** Platform Post 5900 IPBL 240 ACS
 - 58** Platform Beam 570-870 ACS
 - 59** Supporting Spindle ACS
 - 61** Kicker Brace AV
 - 140** Climbing Device ACS 100
 - 141** Hydraulic Unit ACS 100
 - 143** Climbing Rail ACS
 - 144** Spacer, cpl.
 - 146** Pressure Point Spindle M42 ACS
 - 161** Climbing Shoe-II ACS
 - 164** Tie Tube ACS, left
 - 167** Climbing tie
 - 267** Counter-batten
 - 268** Ladder cage
 - 269** Shim VT 20
 - 273** Formwork unit
 - 278** Hinged hatch
-

A1 System overview

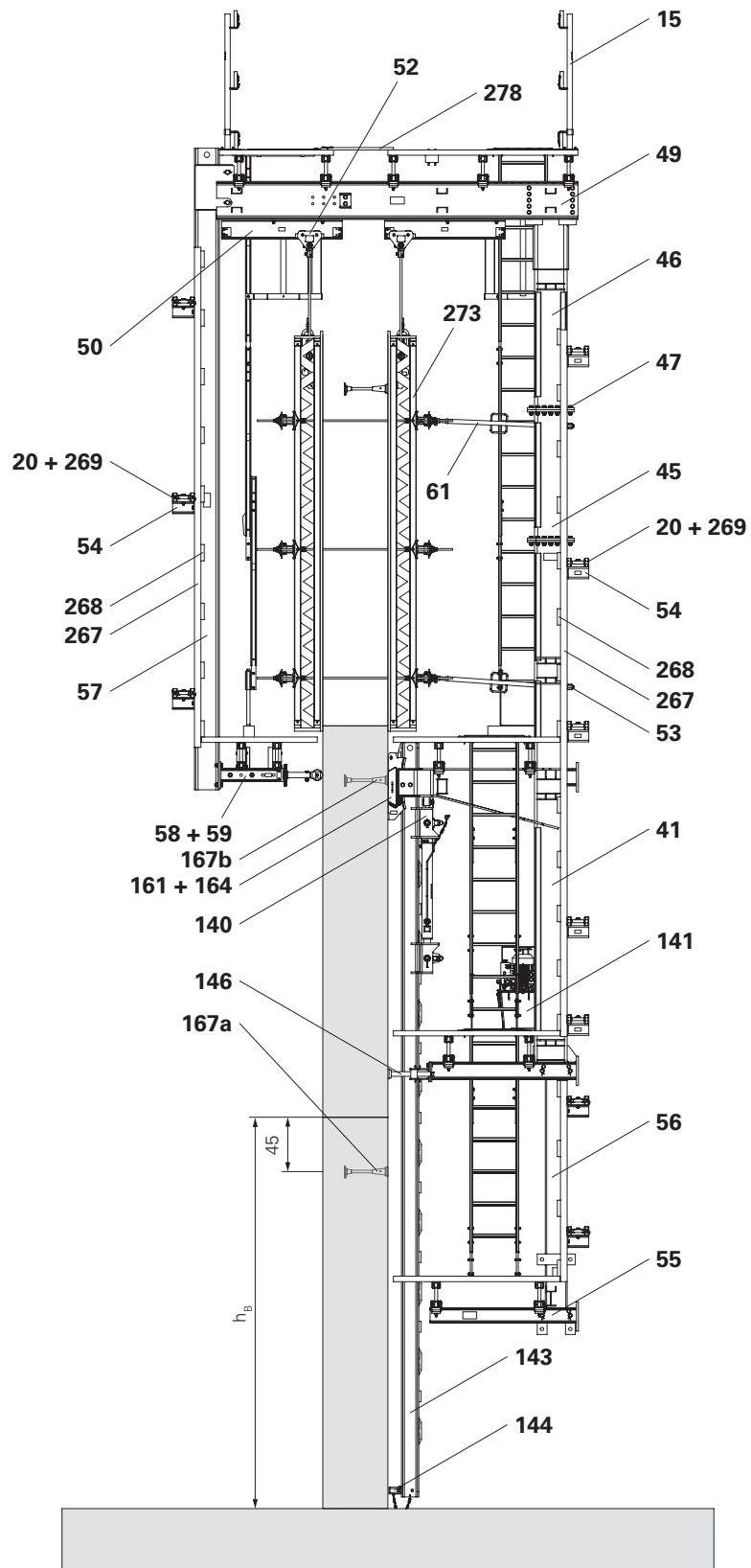


Fig. A1.01

A1 System overview

Variant 2

With formwork on the opposite side

- Gallows 3325 ACS-G with work platform (level +1).
- VARIO formwork on the console bracket side and opposite side.
- Concreting height (h_B) = 3.6 m. (Fig. A1.02)

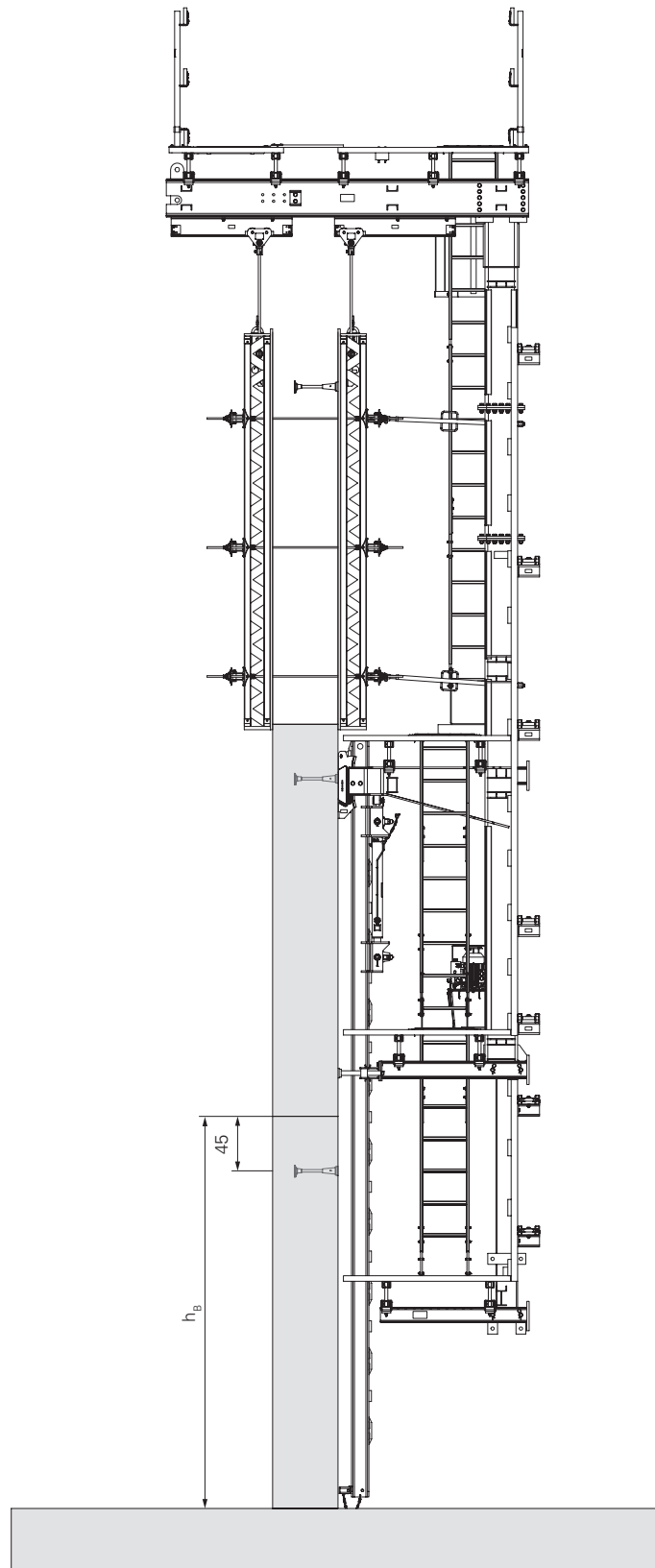


Fig. A1.02

Variant 3

Without formwork on the opposite side

- Gallows 1430 ACS-G with work platform (level +1).
- VARIO formwork on the console bracket side.
- Concreting height (h_B) = 3.6 m. (Fig. A1.03)

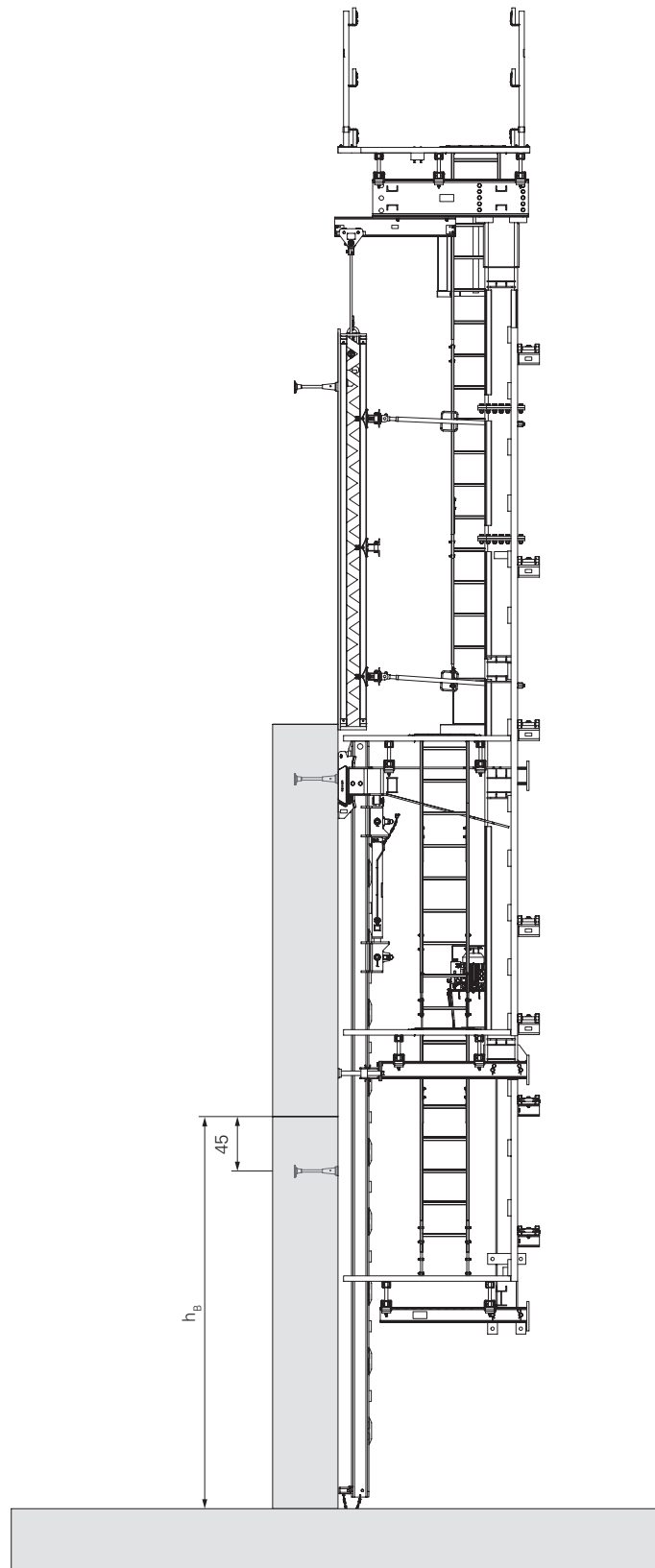


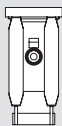
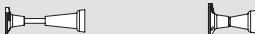
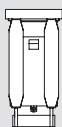
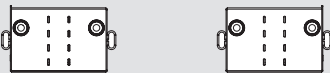
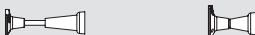

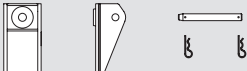
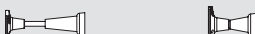

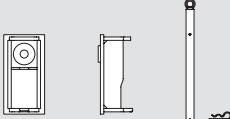
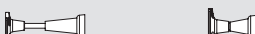
Fig. A1.03

Climbing shoes

Functions of the climbing shoe

- Guides and supports the Climbing Rail ACS.
- The climbing unit is attached to the climbing shoes.
- It takes vertical loads and transfers them into the structure by way of the anchoring.
- It takes horizontal loads and transfers them into the structure by way of the anchoring.

The respective application determines the type of climbing shoes used.

Climbing shoe – tie components arrangement		
Climbing shoe	Tie components	Climbing tie ²⁾
Climbing Shoe-2 I ACS 		Climbing cone or screw-on cone 
Climbing Shoe II ACS 	Tie Tube ACS, left + right ¹⁾ 	Climbing cone or screw-on cone 
Climbing Shoe IV ACS 	Tie Shoe-H ACS 	Climbing cone or screw-on cone 
Climbing Shoe IV ACS 	Tie Shoe-V ACS 	Climbing cone or screw-on cone 

¹⁾ Always use Tie Tube ACS left + right in pairs.

²⁾ For the screws for fixing the components to the climbing tie, see table A3.03.

Tab. A2.01

A2 Climbing shoes and climbing mechanism

Climbing Shoe-2 I ACS

The Climbing Shoe-2 I ACS is screwed directly onto the climbing tie.
(Fig. A2.01)

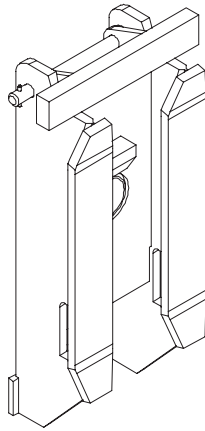


Fig. A2.01

Climbing Shoe II ACS

The Climbing Shoe II ACS is designed for heavier loads. It is pushed onto Tie Tube ACS, this enables axial compensation.
(Fig. A2.02 + A2.03)



Note

Always use Tie Tube ACS right and Tie Tube ACS left in pairs. This stops the Climbing Shoe II ACS from sliding out of the Tie Tube ACS.
(Fig. A2.03)

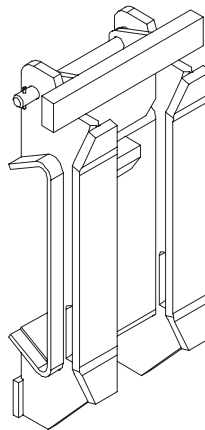


Fig. A2.02

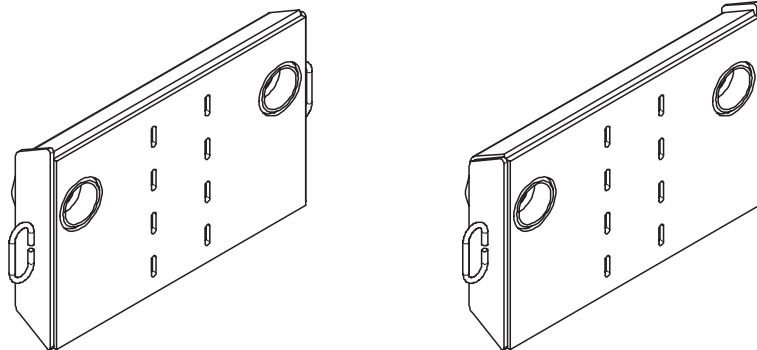


Fig. A2.03

Climbing Shoe IV ACS

Climbing Shoe IV ACS, in combination with Tie Shoe-H ACS, allows the climbing shoe to be tilted by $+7^\circ$.

This allows climbing over a wall offset in structures with wall offsets.

(Fig. A2.04)

For further information, see section "Climbing with wall offsets" on page 138.

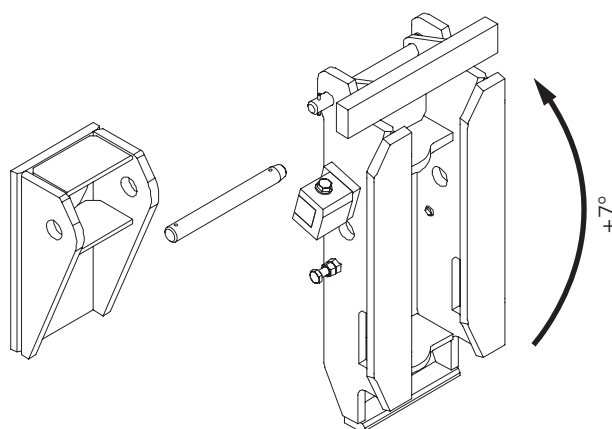


Fig. A2.04

Climbing Shoe IV ACS, in combination with Tie Shoe-V ACS, allows the climbing shoe to be rotated by $\pm 15^\circ$.

This makes it possible to climb structures with a rounded geometry.

(Fig. A2.05)

For further information on rounded structures, see section "Round building structure" on page 145.

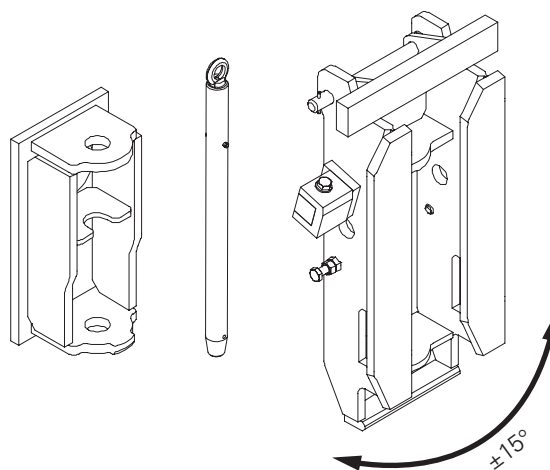


Fig. A2.05

Climbing device and hydraulics

The components of the climbing device and the hydraulics are described in detail in the assembly instructions for the "ACS 100 Climbing Device and Hydraulics". These include:

- Climbing Device ACS 100
- Hydraulic Unit ACS 100
- Remote Controller ACS 100
- Climbing Rail ACS
- Critical climbing height



Only use Instructions for Assembly and Use in conjunction with the assembly instructions for the "ACS 100 Climbing Device and Hydraulics".

General information

The anchoring is used for fixing the climbing shoe. Different tie systems are used, depending on the climbing shoe used, the forces that occur and the wall thickness.

Climbing tie

The climbing tie transfers horizontal and vertical forces into the structure. There are two variants of climbing ties.

One climbing tie consists of:

- Screw-on Cone M30/DW 26 (**168**)
Threaded Anchor Plate DW 26 (**169**)
(Fig. A3.01)

or

- Climbing Cone-2 M30/DW 20 (**170**)
Threaded Anchor Plate DW 20 (**171**)
Tie Rod DW 20 (**172**)
(Fig. A3.02)

Note

The anchoring is selected according to the project-specific requirements.

The climbing tie is also referred to as a leading tie during the assembly process for the next concreting section.

Influencing factors

Figure A3.03 + A3.05 + A3.06 and table A3.01 provide an overview of the influencing factors.

Climbing tie variants

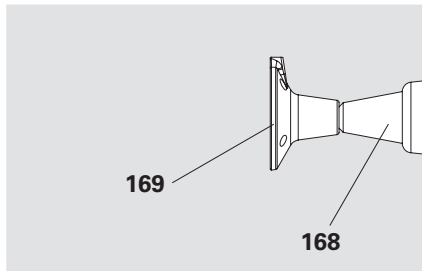


Fig. A3.01

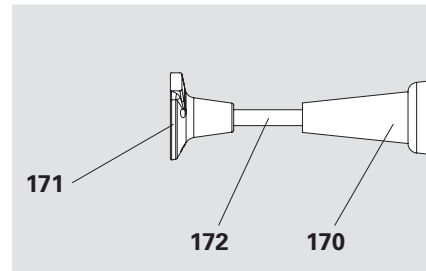


Fig. A3.02

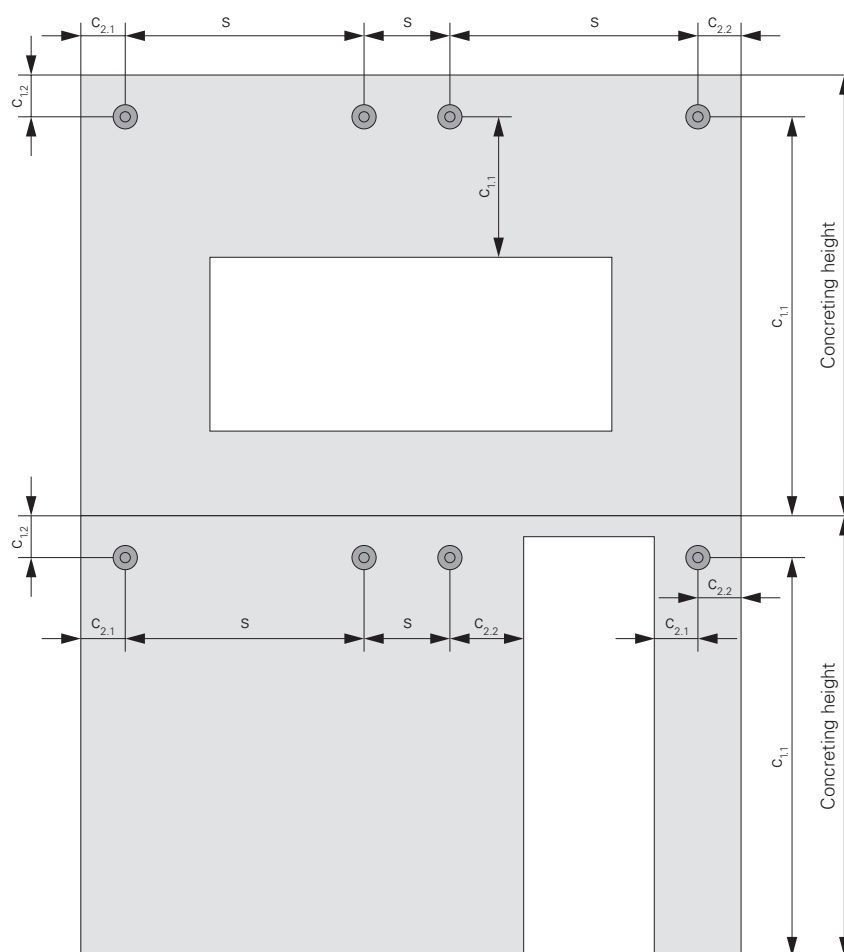


Fig. A3.03

Overview of the influencing factors	
Wall thickness	D
Anchoring depth	h
Edge distance to the upper concrete joint	$C_{1,2}$
Edge distance to the openings below	$C_{1,1}$
Distance to side edge	$C_{2,1}$, $C_{2,2}$
Centre distance between two climbing ties	s
Concreting height	h_B

Tab. A3.01

Safety instructions

Danger

If the anchoring is installed or operated incorrectly, the climbing unit may collapse!

A collapsing climbing unit can cause serious injuries or even death.

- ⇒ Each climbing unit must have its own anchoring.
- ⇒ Loosening or removing the anchoring must only be possible from the load transfer side.
- ⇒ Do not install two cones against each other. (Fig. A3.04)
- ⇒ For minimum edge distances c , minimum wall thickness D and other constructional requirements, refer to the separate PERI product information and the project-specific planning and do not fall short of these. (Fig. A3.06)
- ⇒ Do not apply a load to the anchoring until the anchor base has sufficient load-bearing capacity.

Note

- If $h_1 + h_2 > D$:
Use an offset arrangement for the anchoring. (Fig. A3.05 + A3.06)
- Use an anchoring variant that meets the structural or design requirements.
- Observe the following component approvals:
 - Z-21.6-1766
 - Z-21.6-1767

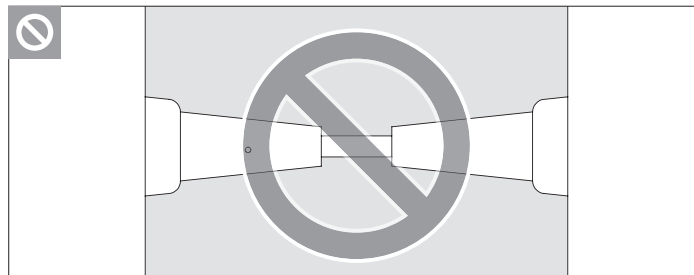


Fig. A3.04

Top view

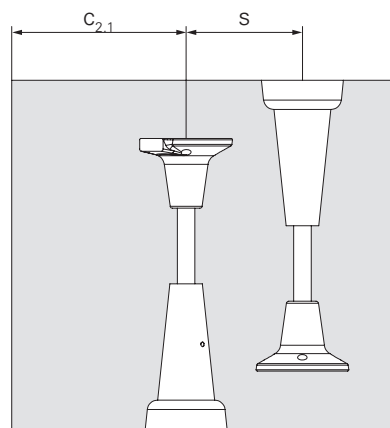


Fig. A3.05

Lateral view

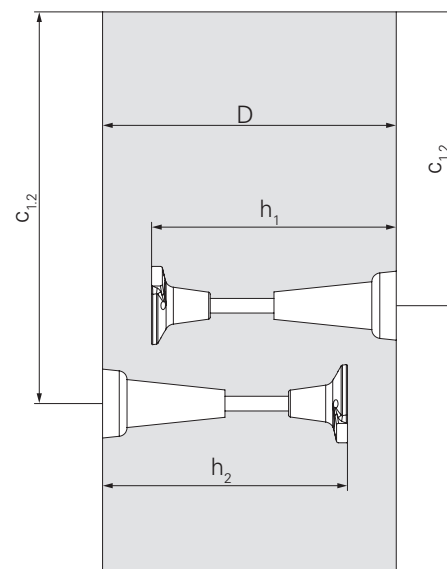


Fig. A3.06

Assembly information

The tie systems are installed on the inside of the formlining. Tables A3.02 and A3.03 show the permissible combinations of tie systems and their fixings.



Note

- Damaged tie components must not be used.
- Always screw the Threaded Anchor Plate DW 26 onto the Screw-On Cone M30/DW 26 as far as it will go.
- Always screw the Tie Rod DW 20 into the Threaded Anchor Plate DW 20 and the Climbing Cone-2 M30/DW 20 as far as it will go.

The threaded anchor plate and tie rod remain in the wall after the concreting process. They are lost tie components. The cones are unscrewed after concreting and can be used again once they have been inspected.



Carefully grease the surfaces of the climbing cone that come into contact with concrete and the internal thread for the tie rod with suitable grease. This simplifies the process of removing the recoverable climbing cones.

Inspecting the anchoring

Checking the tie components

- Tie rod:
 - Length
 - Welding spatter
 - Bending
- Climbing cone/screw-on cone:
 - Stiff threads
 - Deformed cone cup
 - Rough or scratched cone surface

Checking the assembly work

- Height
- Distance s to each other
- Anchoring depth h
- Alignment according to specifications

Verification of the tie forces

Verification of the transfer of the horizontal and vertical reaction forces into the structure and down to the subsoil must be carried out by the client.

Acceptance protocol



Note

- Check that the anchoring has been installed correctly (position and anchoring depth in accordance with planning specifications) prior to concreting, and log this.
- If cone types with differing installation lengths are used, each anchoring point must be checked and logged prior to concreting.
- Keep records for concrete strength verification.
- The acceptance protocol must be available on the construction site throughout the construction process and must be presented upon request.



Anchoring and reinforcement measures can be checked at the same time.

Tie systems in general

Permissible combination of tie systems							
Climbing shoe	Tie Tube ACS ¹⁾	Climbing tie		Tie rod		Threaded Anchor Plate	
	Tie Tube ACS right and Tie Tube ACS left	Climbing Cone-2 M30/DW 20	Screw-On Cone M30/DW 26	DW 20	B 20	DW 20	DW 26
Climbing Shoe-2 I ACS		x		x	(x)	x	
			x				x
Climbing Shoe II ACS	x	x		x	(x)	x	
	x		x				x
Climbing Shoe IV ACS Tie Shoe-H ACS Ø 30 x 280 ACS		x		x	(x)	x	
			x				x
Climbing Shoe IV ACS Tie Shoe-V ACS Ø 35 x 525 ACS		x		x	(x)	x	
			x				x

Standard: x

Optional: (x)

¹⁾ Always use tie tubes in pairs.

Tab. A3.02

Permissible fixing combination of leading tie to formwork			
Climbing shoe	Fixing the leading tie		
	Leading Tie Plate ACS 399	Anchor Positioning Plate M30 and Positioning Screw M30	Anchor Positioning Stud M30
Climbing Shoe-2 I ACS		x	(x) ²⁾
Climbing Shoe II ACS	x	x	
Climbing Shoe IV ACS		x	(x) ²⁾

Standard: x

Optional: (x)

²⁾ Ideally, secure the climbing cone with Anchor Positioning Plate M30.

Tab. A3.03

Fixing the tie components to climbing ties		
Component	Permitted screw type	Tightening torque
Climbing Shoe-2 I ACS	Cyl. bolt ISO 4762 M30 x 110-10.9	Screw the component onto the climbing tie without play.
Tie Tube ACS	Cyl. bolt ISO 4762 M30 x 110-10.9	
Tie Shoe ACS	Bolt ISO 4017 M30 x 80-10.9	

Tab. A3.04

Tie rod

PERI supplies the tie rod cut to length. The tie rod is delivered to the construction site together with the threaded anchor plates.

The length L of the tie rod is calculated for Climbing Shoe-2 I or Climbing Shoe IV according to the following formula:

$$L = h_{nom} - 77 \text{ mm}$$

The length L of the tie rod is calculated for Climbing Shoe II according to the following formula:

$$L = h_{nom} - 85 \text{ mm}$$

Tolerance: 0 to +5 mm
(Fig. A3.07 + A3.08)

Leading tie for Climbing Shoe-2 I and Climbing Shoe IV

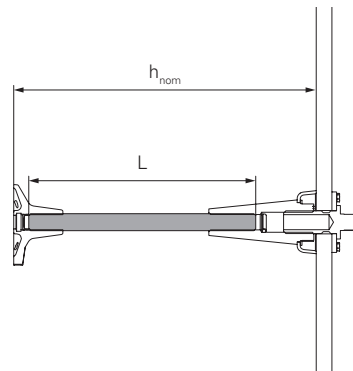


Fig. A3.07

Leading tie for climbing shoe II

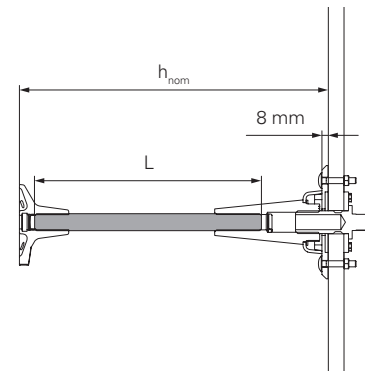


Fig. A3.08

Tie system for Climbing Shoe-2 I

Components

160	Climbing Shoe-2 I ACS
170	Climbing Cone-2 M30/DW 20
171	Threaded Anchor Plate DW 20
172	Tie Rod DW 20
173	Anchor Positioning Plate M30
174	Hex. wood screw DIN 571 6 x 20
175	Positioning Screw M30
180	Cyl. bolt ISO 4762 M30 x 110-10.9
270	Formlining



After assembly, the components 170 – 172 form the climbing tie (**167**).

Installing the climbing tie

1. Align the Anchor Positioning Plate M30 (**173**) on the formlining (**270**) and secure it with hex. wood screw DIN 571 6 x 20 (**174**).
2. Screw the Tie Rod DW 20 (**172**) into the Climbing Cone-2 M30/DW 20 (**170**) as far as it will go.
3. Screw the Threaded Anchor Plate DW 20 (**171**) onto the Tie Rod DW 20 (**172**) as far as it will go.
4. Screw the climbing ties onto the formlining with the Positioning Screw M30 (**175**).

(Fig. A3.09)



Checking the assembly work

- Height
- Distance to each other
- Anchoring depth h
- Alignment according to specifications
- Climbing cone greased

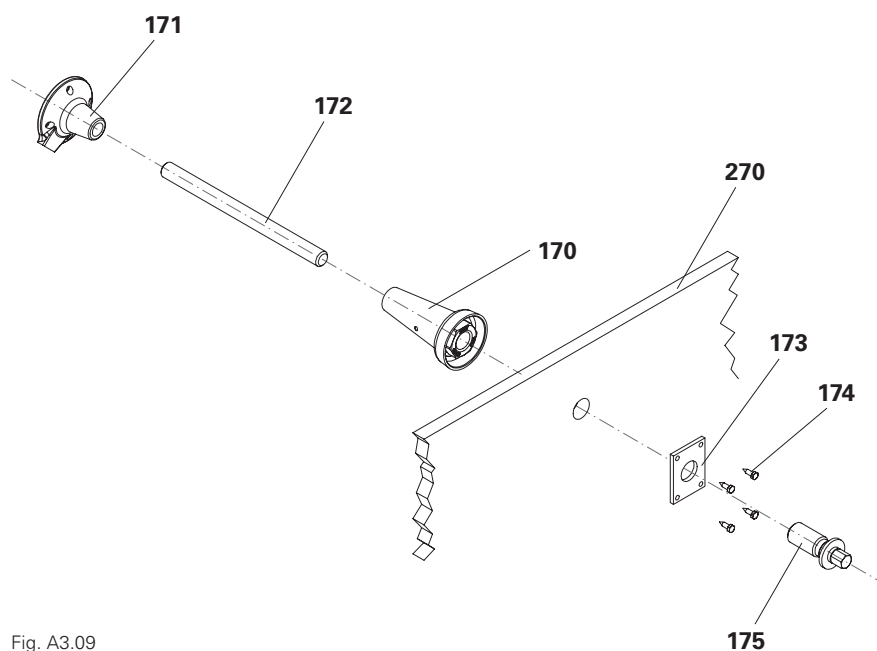


Fig. A3.09

Installing the climbing shoe

1. Screw Climbing Shoe-2 I ACS (**160**) with cyl. bolt ISO 4762 M30 x 110-10.9 (**180**) to climbing tie (**167**). (Fig. A3.10)



- The bearing surface for the climbing shoe must be level.
- The climbing shoe must lie flush with the concrete wall.

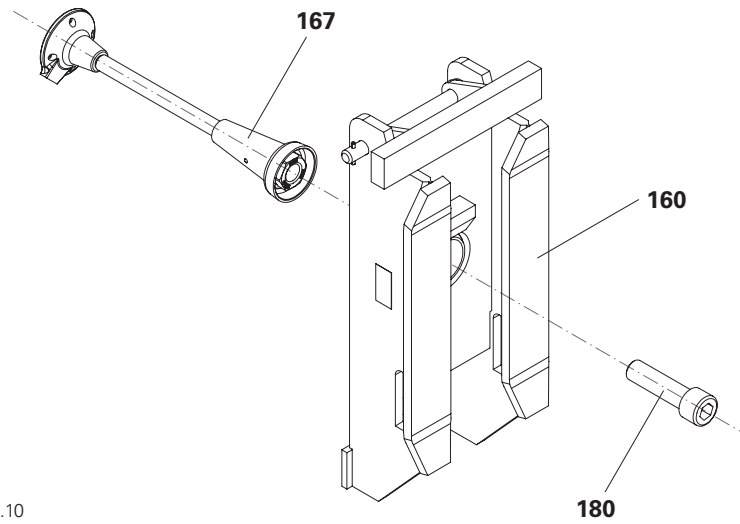


Fig. A3.10

Tie system for climbing shoe II

Components

161	Climbing Shoe-II ACS
163	Tie Tube ACS, right
164	Tie Tube ACS, left
170	Climbing Cone-2 M30/DW 20
171	Threaded Anchor Plate DW 20
172	Tie Rod DW 20
173	Anchor Positioning Plate M30
174	Hex. wood screw DIN 571 6 x 20
175	Positioning Screw M30
176	Leading Tie Plate ACS 399
180	Cyl. bolt ISO 4762 M30 x 110-10.9
201	Torx 6 x 60
238	F.H. bolt DIN 603 M8 x 45 MU
270	Formlining

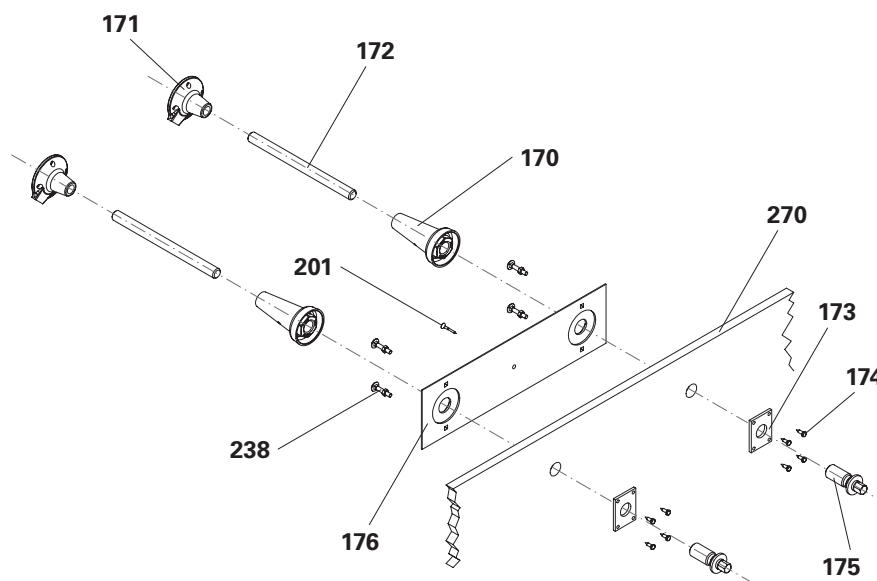


Fig. A3.11

The process for fitting the Leading Tie Plate ACS 399 (**176**) and Anchor Positioning Plate M30 (**173**) is described in the section "Preparing the formwork" on page 108.



After assembly, the components 170 – 172 form the climbing tie (**167**).

Installing the climbing tie

1. Screw the Tie Rod DW 20 (**172**) into the Climbing Cone-2 M30/DW 20 (**170**) as far as it will go.
2. Screw the Threaded Anchor Plate DW 20 (**171**) onto the Tie Rod DW 20 (**172**) as far as it will go.
3. Screw the climbing ties onto the formlining with the Positioning Screw M30 (**175**).

(Fig. A3.11)



Checking the assembly work

- Height
- Distance to each other
- Anchoring depth h
- Alignment according to specifications
- Climbing cone greased

Installing the climbing shoe

1. Screw tie tubes (163) and (164) with Cyl. bolt ISO 4762 M30 x 110-10.9 (180) to climbing tie (167).
2. Slide Climbing Shoe II ACS (161) onto tie tube (163) or (164), align and fix with clamping screw (161.1). (Fig. A3.12 + A3.13)



Note

- The bearing surface for the tie tube must be level.
- The tie tube must lie flush with the concrete wall.
- The end plates (163.1 + 164.1) of the two tie tubes (163 + 164) must point towards or away from each other. (Fig. A3.14)

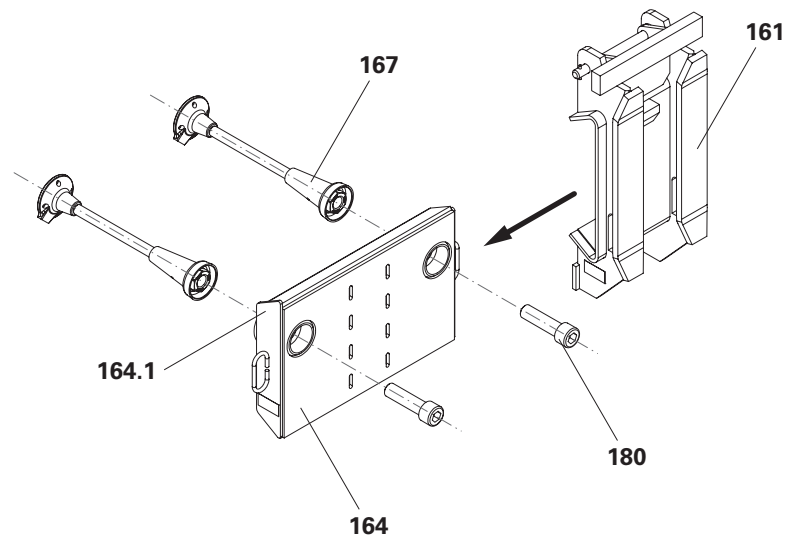


Fig. A3.12

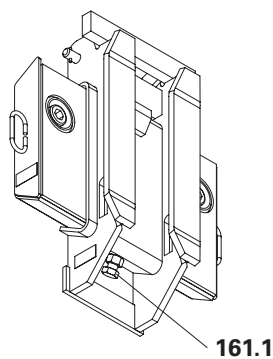


Fig. A3.13

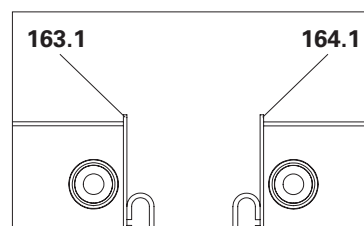


Fig. A3.14a

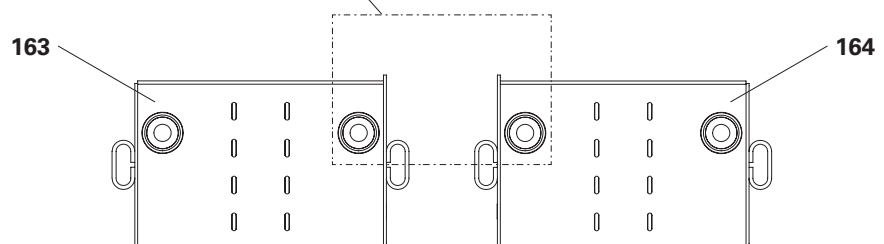


Fig. A3.14

Tie system for rotatable Climbing Shoe IV

Components

- 162** Climbing Shoe IV ACS
- 165** Tie Shoe-V ACS
- 170** Climbing Cone-2 M30/DW 20
- 171** Threaded Anchor Plate DW 20
- 172** Tie Rod DW 20
- 173** Anchor Positioning Plate M30
- 174** Hex. wood screw DIN 571 6 x 20
- 175** Positioning Screw M30
- 179** Bolt ISO 4017 M30 x 80-10.9
- 181** Bolt \varnothing 35 x 525 ACS
- 207** Cotter pin 5/1
- 270** Formlining

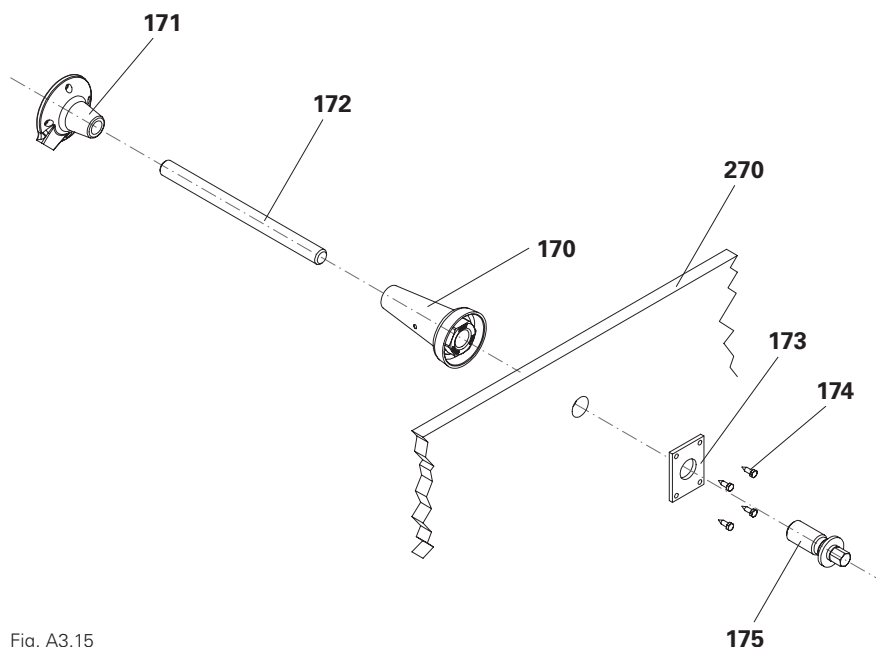


Fig. A3.15



After assembly, the components 170 – 172 form the climbing tie (**167**).

Installing the climbing tie

1. Align the Anchor Positioning Plate M30 (**173**) on the formlining (**270**) and secure it with hex. wood screw DIN 571 6 x 20 (**174**).
2. Screw the Tie Rod DW 20 (**172**) into the Climbing Cone-2 M30/DW 20 (**170**) as far as it will go.
3. Screw the Threaded Anchor Plate DW 20 (**171**) onto the Tie Rod DW 20 (**172**) as far as it will go.
4. Screw the climbing ties onto the formlining with the Positioning Screw M30 (**175**).

(Fig. A3.15)



Checking the assembly work

- Height
- Distance to each other
- Anchoring depth h
- Alignment according to specifications
- Climbing cone greased

Installing the climbing shoe

1. Screw Tie Shoe-V ACS (165) with bolt ISO 4017 M30 x 80-10.9 (179) to climbing tie (167).
 2. Slide Climbing Shoe IV ACS (162) onto Tie Shoe-V ACS (165).
 3. Fasten them with bolts \varnothing 35 x 525 (181) and secure with cotter pins 5/1 (207).
- (Fig. A3.16)



Note

- The bearing surface for the tie shoe must be level.
- The tie shoe must lie flush with the concrete wall.

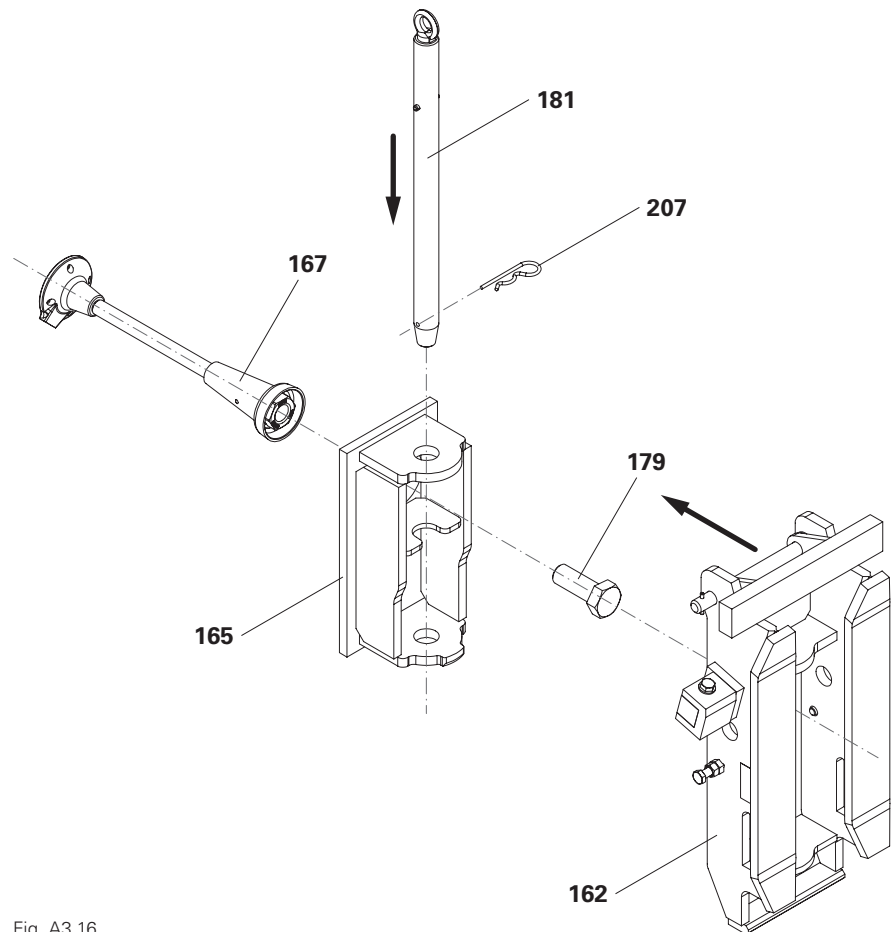


Fig. A3.16

Tie system for pivotable Climbing Shoe IV

Components

- 162** Climbing Shoe IV ACS
- 166** Tie Shoe-H ACS
- 170** Climbing Cone-2 M30/DW 20
- 171** Threaded Anchor Plate DW 20
- 172** Tie Rod DW 20
- 173** Anchor Positioning Plate M30
- 174** Hex. wood screw DIN 571 6 x 20
- 175** Positioning Screw M30
- 179** Bolt ISO 4017 M30 x 80-10.9
- 182** Bolt \varnothing 30 x 280 ACS
- 207** Cotter pin 5/1
- 270** Formlining

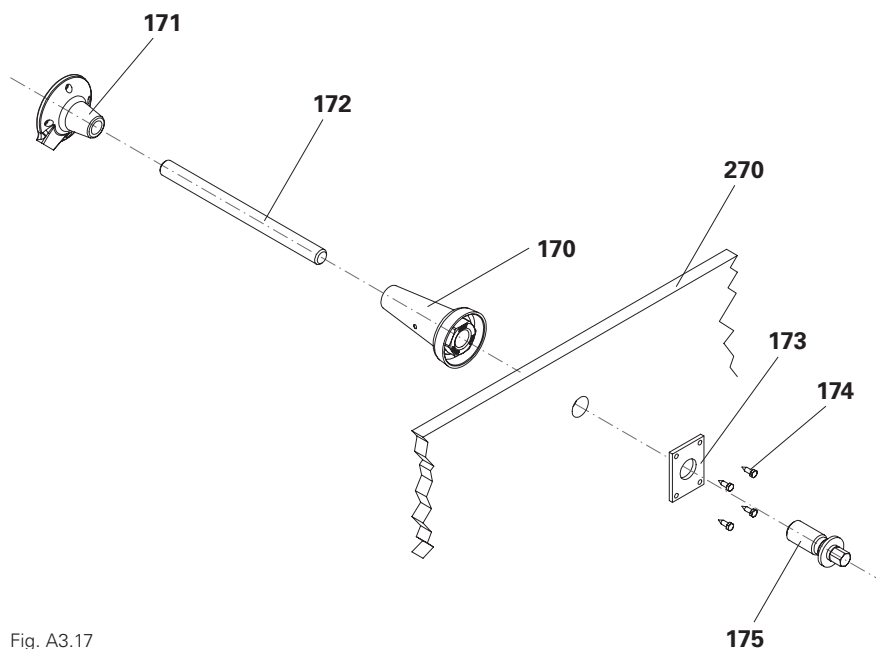


Fig. A3.17



After assembly, the components 170 – 172 form the climbing tie (**167**).

Installing the climbing tie

1. Align the Anchor Positioning Plate M30 (**173**) on the formlining (**270**) and secure it with hex. wood screw DIN 571 6 x 20 (**174**).
2. Screw the Tie Rod DW 20 (**172**) into the Climbing Cone-2 M30/DW 20 (**170**) as far as it will go.
3. Screw the Threaded Anchor Plate DW 20 (**171**) onto the Tie Rod DW 20 (**172**) as far as it will go.
4. Screw the climbing ties onto the formlining with the Positioning Screw M30 (**175**).

(Fig. A3.17)



Checking the assembly work

- Height
- Distance to each other
- Anchoring depth h
- Alignment according to specifications
- Climbing cone greased

Installing the climbing shoe

1. Screw the Tie Shoe-H ACS (166) to the Climbing Tie (167) using bolt ISO 4017 M30 x 80-10.9 (179).
 2. Slide Climbing Shoe IV ACS (162) onto the Tie Shoe-H ACS (166).
 3. Fasten them with bolts \varnothing 30 x 280 (182) and secure with two cotter pins 5/1 (207).
- (Fig. A3.18)



Note

- The bearing surface for the tie shoe must be level.
- The tie shoe must lie flush with the concrete wall.

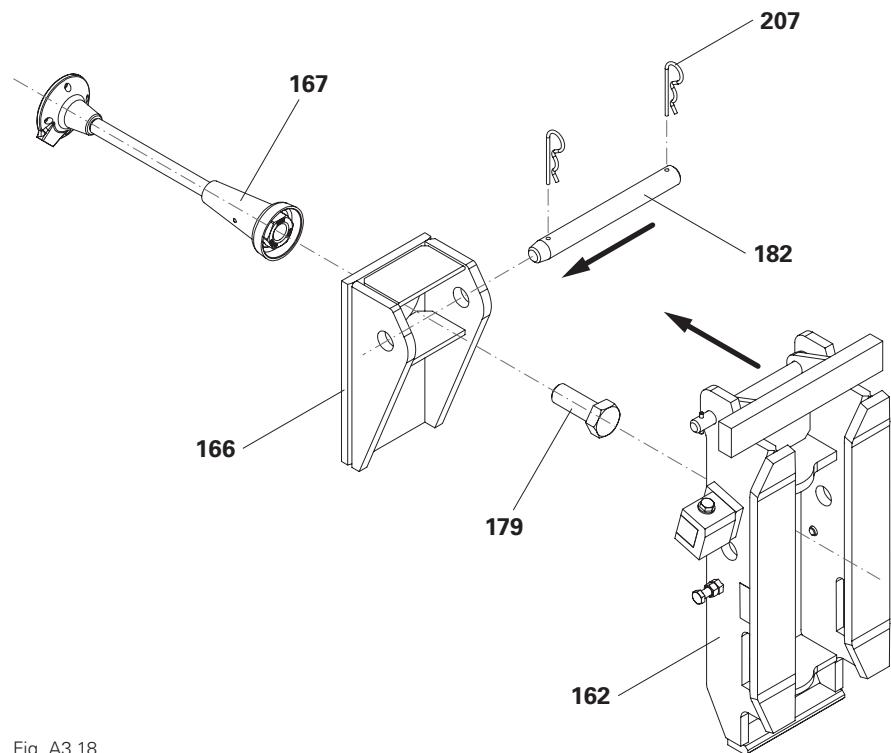


Fig. A3.18

Screw-On Cone M30/DW 26

The Screw-On Cone M30/DW 26 (**168**) can also be used as a climbing tie. It is installed and used in the same way as the Climbing Cone-2 M30/DW 20 as described on the previous pages.



The same instructions for assembly and safety apply!

Components

- | | |
|------------|-----------------------------|
| 168 | Screw-On Cone M30/DW 26 |
| 169 | Threaded Anchor Plate DW 26 |

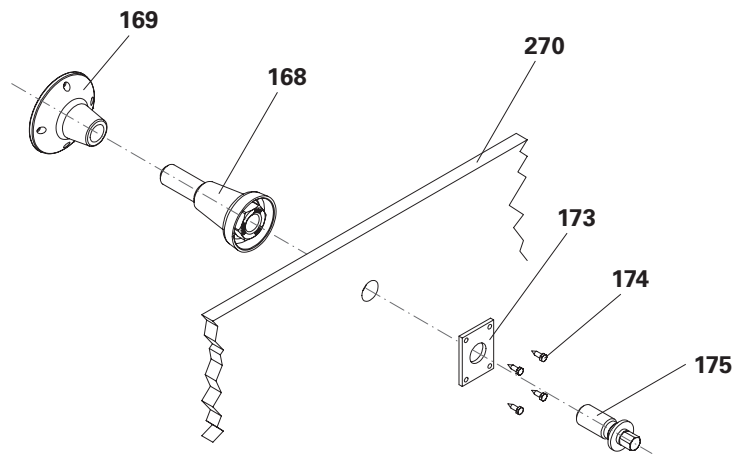


Fig. A3.19

Assembly

1. Screw the Threaded Anchor Plate DW 26 (**169**) onto the Screw-On Cone M30/DW 26 (**168**) as far as it will go.

(Fig. A3.19)

Additional assembly positions

Formwork elements are usually delivered to the construction site prefabricated by PERI, including all drill holes. Add further assembly positions if required.

Components per tie

- | | | |
|------------|------------------------------|----|
| 173 | Anchor Positioning Plate M30 | 1x |
| 174 | Hex. wood screw 6 x 20 | 4x |

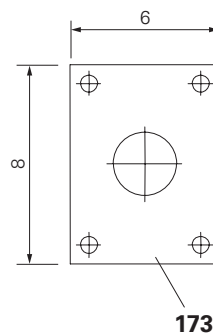


Fig. A3.20

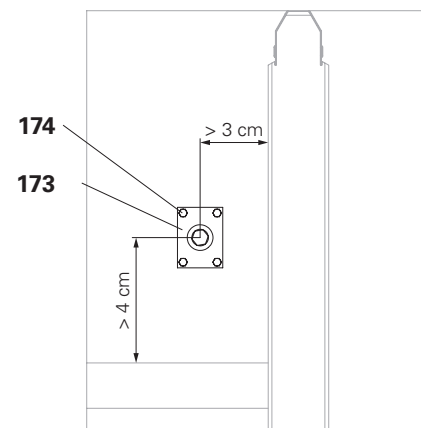


Fig. A3.21

Assembly

1. Check the required space for the Anchor Positioning Plate M30 (**173**). Lateral spacings of 3 cm or 4 cm are required. (Fig. A3.20 + A3.21)
2. Determine the assembly position and drill \varnothing 32 mm hole from the front of the formwork.
3. Install Anchor Positioning Plate M30 (**173**) on the rear side of the formwork with hex. wood screw 6 x 20, AF 10 (**174**).

Assembly of the climbing tie with Anchor Positioning Stud M30

If space is limited, install the climbing tie with Anchor Positioning Stud M30. Climbing cones or screw-on cones can be used as climbing ties. The assembly shown in the example involves the screw-on cone.

Components per tie

167	Climbing tie	1x
177	Anchor Positioning Stud M30	1x
178	Wire nail 3 x 80	4x

Assembly

1. Fix the Anchor Positioning Stud M30 (**177**) to the marked position with wire nails 3 x 80 (**178**). (Fig. A3.22)
2. Bend the wire nails over on the back of the formlining.
3. Screw pre-assembled climbing ties (**167**) onto the Anchor Positioning Stud M30 (**177**) and tighten. (Fig. A3.23 + A3.24)



Checking the assembly work

- Height
- Distance to each other
- Anchoring depth h
- Alignment according to specifications
- Screw-on cone greased

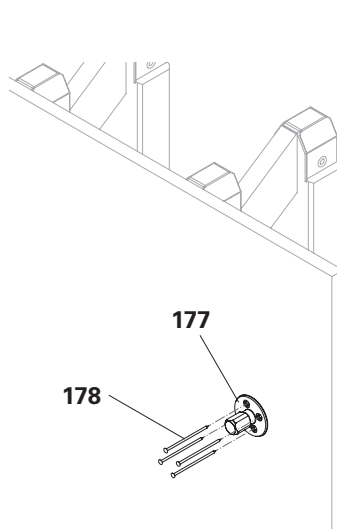


Fig. A3.22

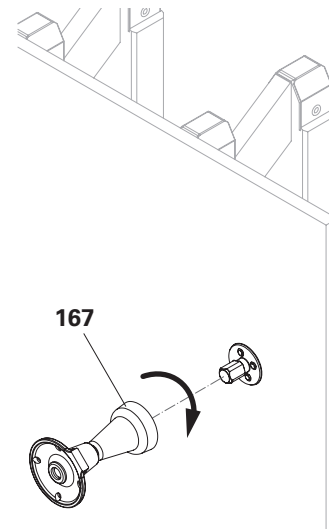


Fig. A3.23



- A more stable fixing is achieved by fitting the Anchor Positioning Plate M30. In this case, the distance between the hole and the formwork struts must be sufficient.
- Firmly connect the Threaded Anchor Plate DW 26 (**169**) to the reinforcement to ensure a secure position.

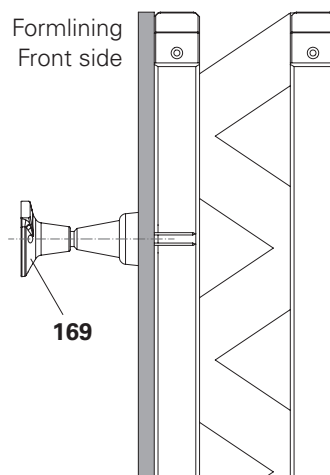


Fig. A3.24

Disassembly process with Anchor Positioning Plate M30

Detaching the formwork

1. Release Positioning Screw M30 (175) and remove.
 2. Detach the formwork from the wall and retract it.
- (Fig. A3.25)

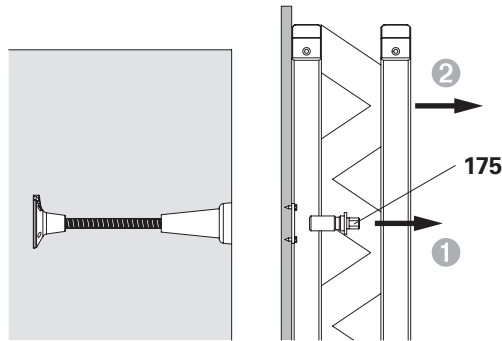


Fig. A3.25

Removing the climbing cone

After climbing into the next concreting section, the climbing cone is removed from the finishing platform.

1. Unscrew the Climbing Cone-2 M30/DW 20 (170) with a ratchet wrench and socket AF 46.
- (Fig. A3.26)

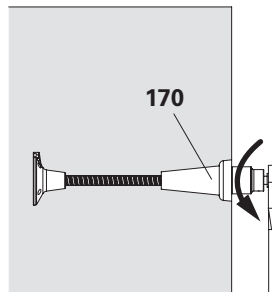


Fig. A3.26

Removal with Anchor Positioning Stud M30

Detaching the formwork

1. Straighten wire nails $\text{Ø} 3 \times 80$ (178).
 2. Detach the formwork from the wall.
→ Pull wire nails $\text{Ø} 3 \times 80$ (178) out of the formlining.
 3. Retract the formwork.
- (Fig. A3.27)

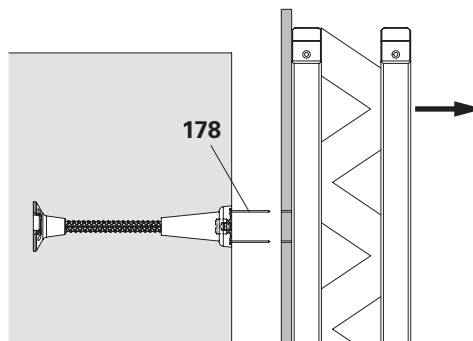


Fig. A3.27

4. Bend wire nails $\text{Ø} 3 \times 80$ (178) over in order to protect hands.
 5. Remove Anchor Positioning Stud M30 (177) using Allen key AF 14.
- (Fig. A3.28)

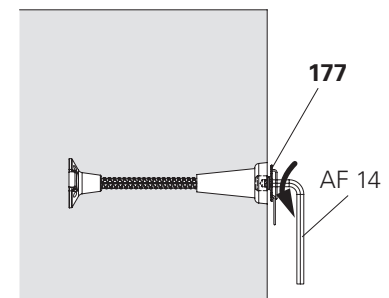


Fig. A3.28

Removing the climbing cone

After climbing into the next concreting section, the climbing cone is removed from the finishing platform.

1. Unscrew the Climbing Cone-2 M30/DW 20 (170) with a ratchet wrench and socket AF 46.
- (Fig. A3.29)

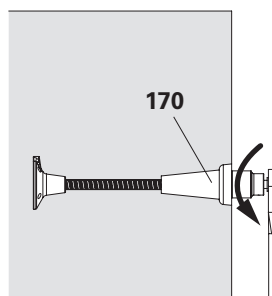


Fig. A3.29

Aligning climbing shoes

Use a spirit level or a plumb bob to align the Climbing Shoes ACS with the lower climbing shoe.

Tolerances

- Climbing Shoe-2 I: ± 2 mm (Fig. A3.29)
- Tie tube: ± 2 cm (Fig. A3.30)
- Climbing Shoe II: ± 2 mm (Fig. A3.31)
- Climbing Shoe IV: ± 2 mm (Fig. A3.32)

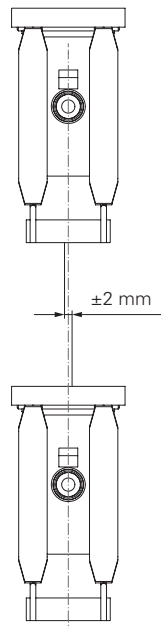


Fig. A3.29

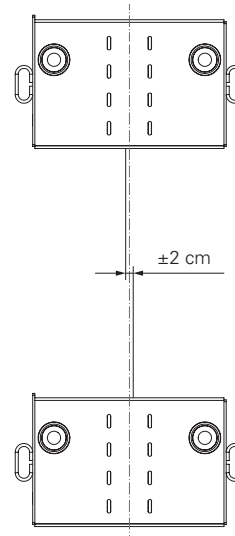


Fig. A3.30

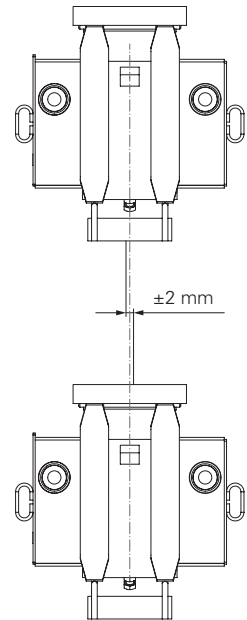


Fig. A3.31

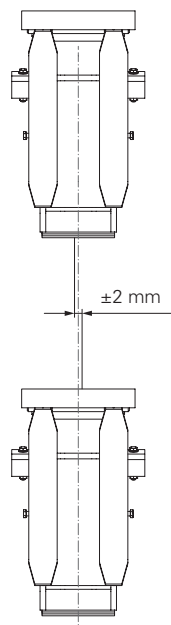


Fig. A3.32

Operating status: Working

All work on the climbing unit:

- Cleaning formwork, carrying out reinforcement work, closing formwork, concreting and striking, inspection and maintenance.
→ Platforms must be freely accessible for the required work to be carried out.
- Move the formwork forwards and backwards.
- Dynamic wind pressure: $q \leq 0.25 \text{ kN/m}^2$.



Note

Loads are evenly distributed.

Operating status: Climbing

Move the climbing unit with the hydraulic climbing device.

- Retract the formwork.
- Remove non-planned loads from the platforms.
- Operating personnel required for climbing usually work on the climbing platforms.
- Dynamic wind pressure:
 $q \leq 0.12 \text{ kN/m}^2$.



Only the operating personnel are allowed to be on the climbing unit during the climbing process.

Non-operational

During longer work breaks, overnight.

- Dynamic wind pressure:
 $q \leq 0.5 \text{ kN/m}^2$.
- Move the formwork into the concreting position and secure it with formwork ties so that it is tension and compression-proof.
- Remove materials and equipment from the platforms.
- If the permissible wind loads are exceeded, carry out a visual inspection of all parts and a functional test of all safety-relevant parts.

Storm

In the event of a storm warning.

- Dynamic wind pressure:
 $q > 0.5 \text{ kN/m}^2$.
- Accessing the platforms is prohibited during storms.
- In the event of sudden storms or lightning hazards, only put the safety measures in place if this does not pose a danger to personnel. Otherwise leave the climbing units immediately.
- If a storm warning has higher wind speeds than originally stated, the site management must be informed. Remove any enclosure tarpaulins that may be attached.
- The wind speed to be assumed in the event of a storm depends on the height of operation, wind zone and terrain category. Take into consideration country-specific standards and regulations.
- Move the formwork into the concreting position and secure it with formwork ties so that it is tension and compression-proof.
- Remove materials and equipment from the platforms.
- On the instructions of authorised site personnel, the climbing unit can be climbed down to the previous storey. For this, additional instructions are required. Remove materials and equipment from the platforms.
- Once the storm has passed, carry out a visual inspection of all parts and a functional test of all safety-relevant parts.

Overview of exemplary live loads

Combination of possible permissible live loads							
Platform	Work				Climbing	Non-operational	Storm
Concreting platform (level +1)	150 kg/m ²	–	–	–	–	–	–
Intermediate formwork platform (level +0.5)	–	150 kg/m ²	–	–	–	–	–
Work platform (level 0)	150 kg/m ²	150 kg/m ²	–	240 kg/m ² ²⁾	–	150 kg/m ²	150 kg/m ²
Climbing platform (level -1) ¹⁾	7.5 kN	7.5 kN	150 kg/m ² + 7.5 kN	7.5 kN ²⁾	7.5 kN	7.5 kN	7.5 kN
Finishing platform (level -2)	–	–	–	–	–	–	–
Dynamic wind pressure q ³⁾	≤ 0.25 kN/m ²				≤ 0.12 kN/m ²	≤ 0.5 kN/m ²	> 0.5 kN/m ²
Formwork position	Retracted or concreting position				Retracted	Concreting position	Concreting position

¹⁾ Live load evenly distributed on the platform.
²⁾ Live load valid for the USA.
³⁾ The values for the dynamic wind pressure q can vary from project to project and are definitive in these cases.

Tab. A4.01

Installing the climbing unit

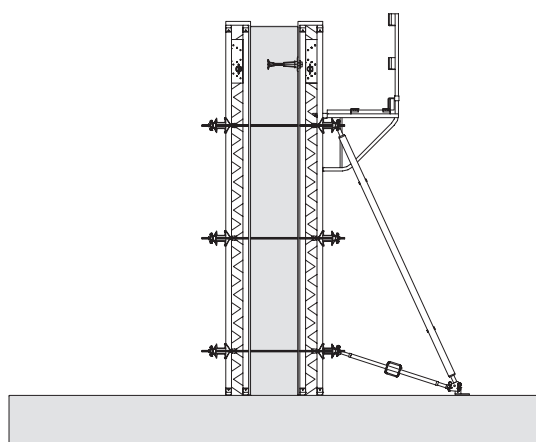


Fig. A5.01

Precondition

The starter is concreted, hardened and approved for the further work steps. (Fig. A5.01)

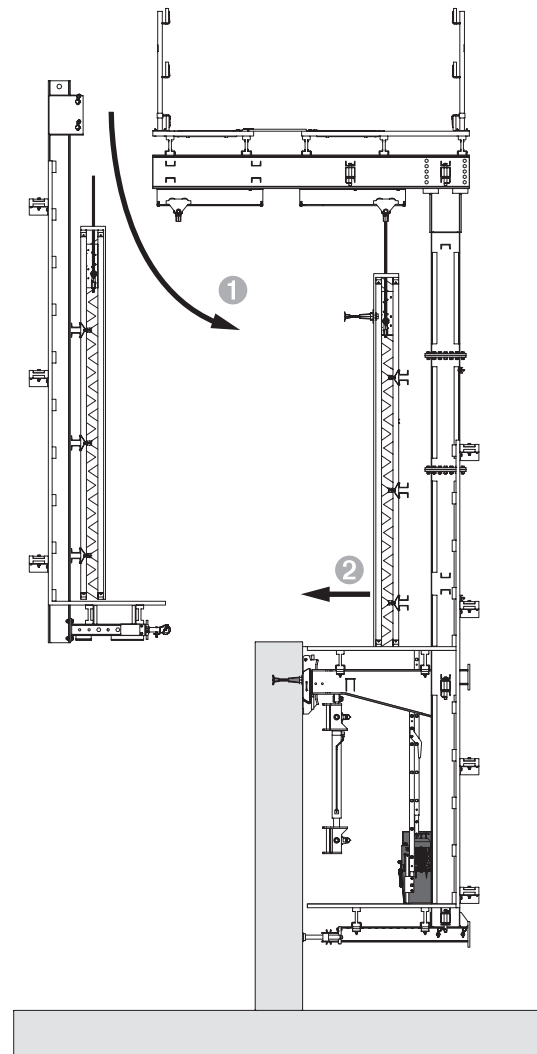


Fig. A5.02

1st Work cycle

Attach climbing unit without finishing platform onto the 1st concreting section and support it with a pressure point spindle. Attach the opposite side. Fit the formwork. Set and reinforce the climbing ties. Close the formwork and concrete the 2nd section.

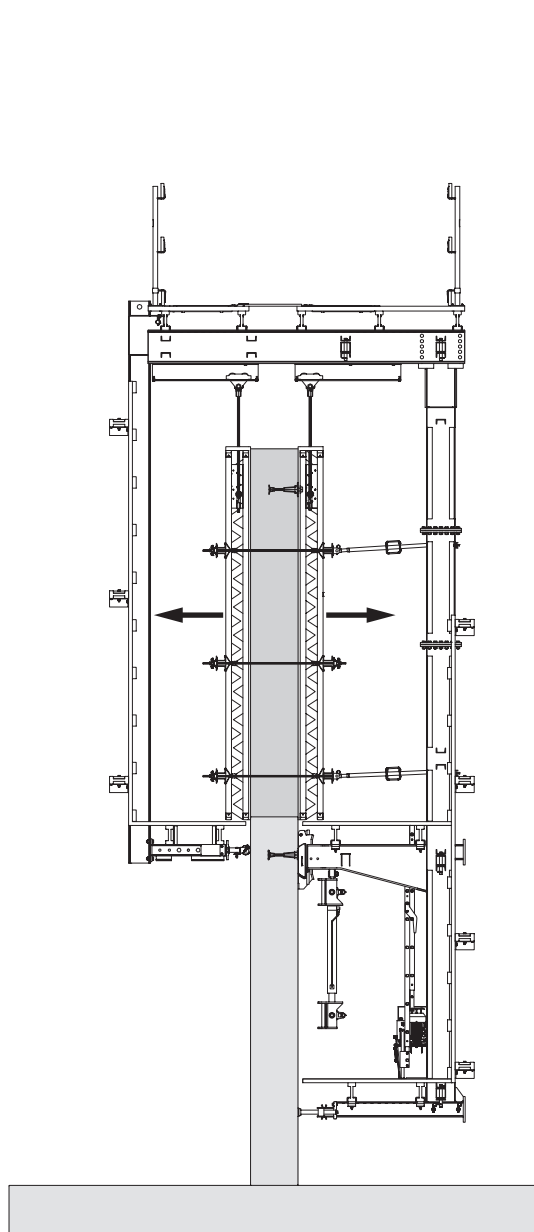


Fig. A5.03

2nd Work cycle

Retract the formwork. Install the hydraulic system and put it into operation.

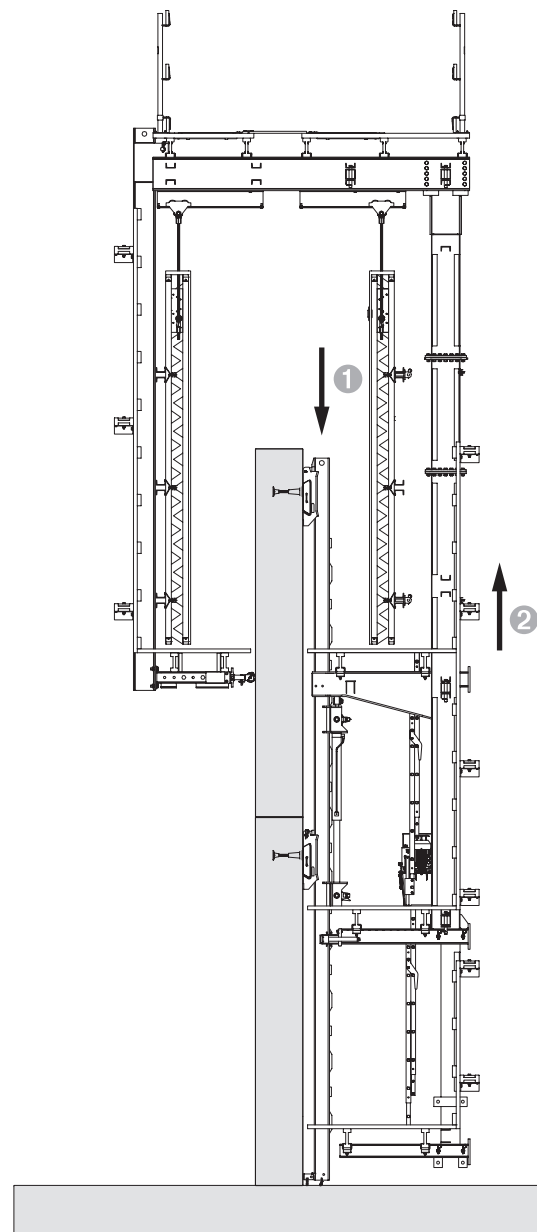


Fig. A5.04

3rd Work cycle

Attach climbing shoe to climbing tie and insert climbing rail. Retract the pressure point spindle and move the climbing unit to the 2nd concreting section. Prop with the pressure point spindle and attach the finishing platform.

Concreting the standard section

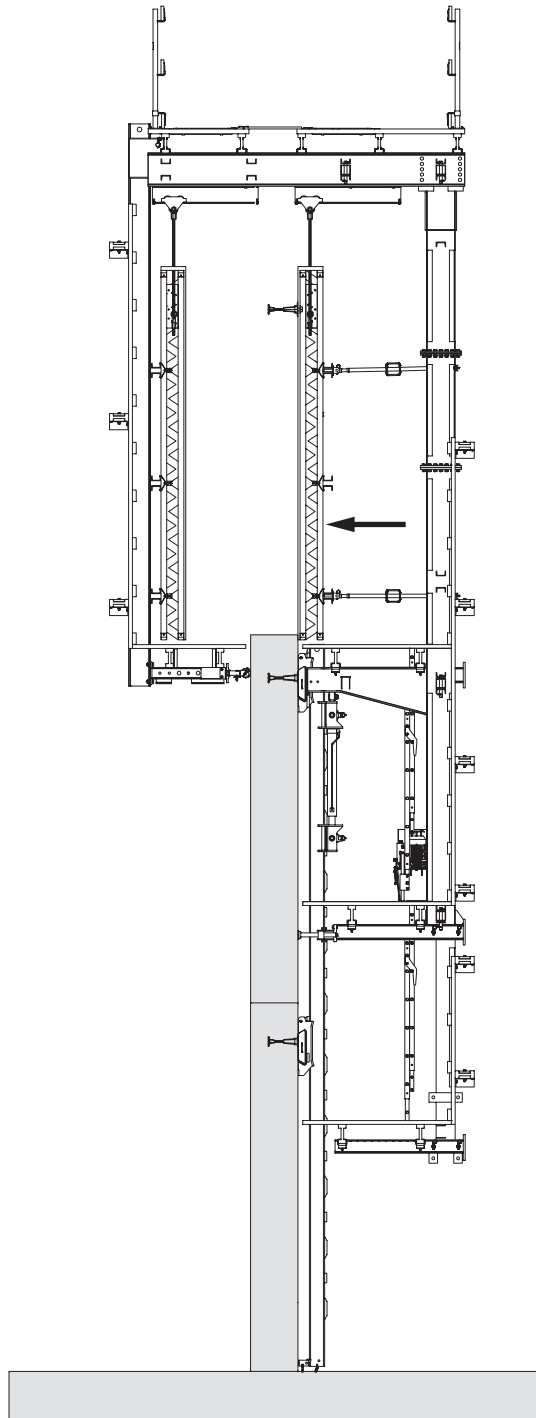


Fig. A5.05

4th Work cycle

Set and reinforce the climbing ties. Close the formwork and concrete the 3rd section.

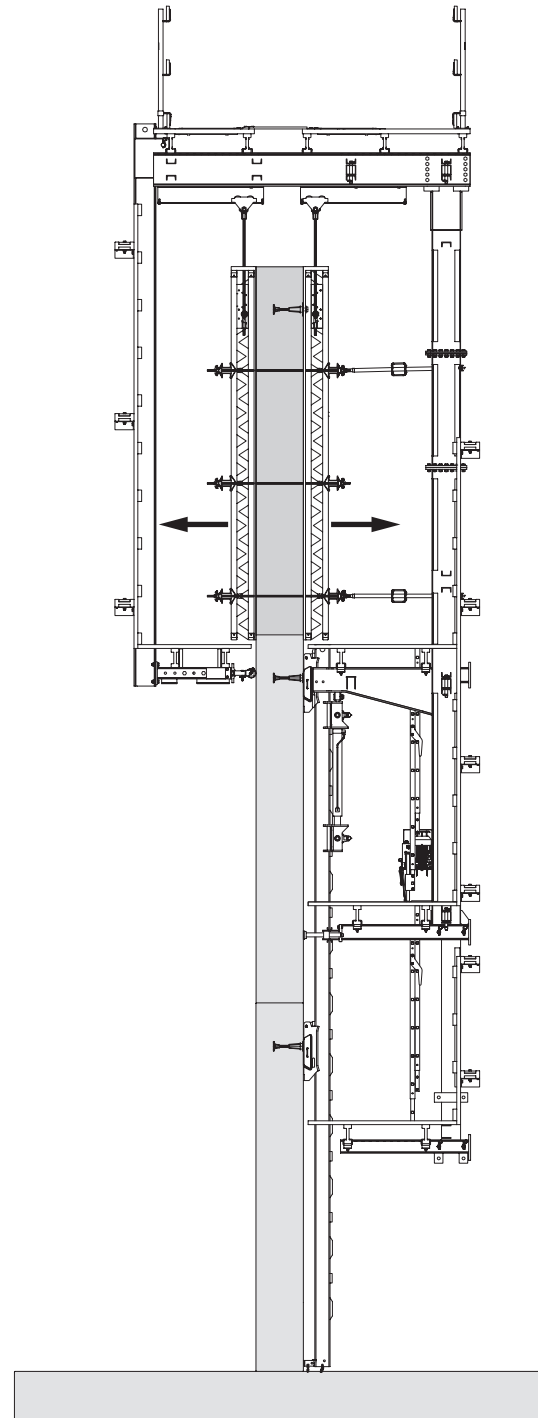


Fig. A5.06

5th Work cycle

Retract the formwork.

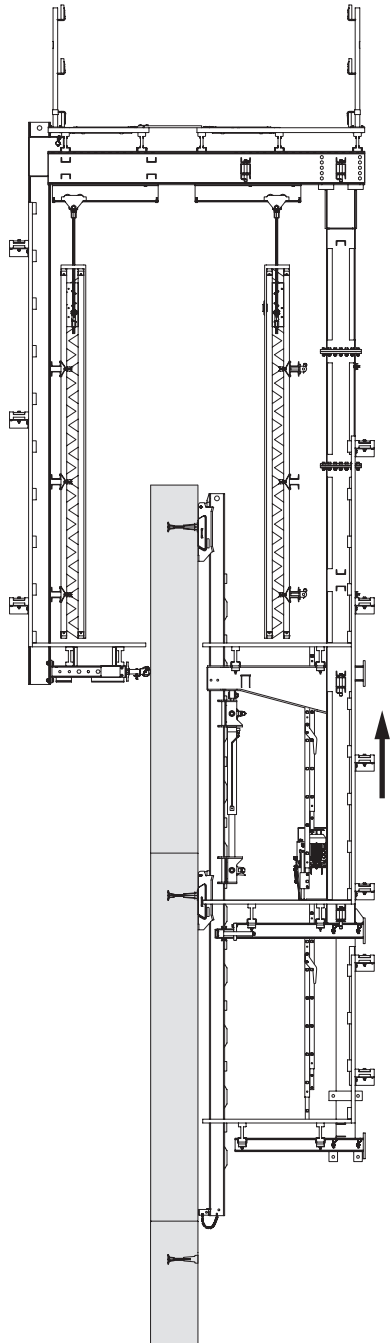


Fig. A5.07

6th Work cycle

Attach climbing shoe to climbing tie. Climb climbing rail into the 3rd concreting section. Remove the trailing climbing shoe and climbing cone, close with concrete cones. Climb climbing unit into the 3rd concreting section.

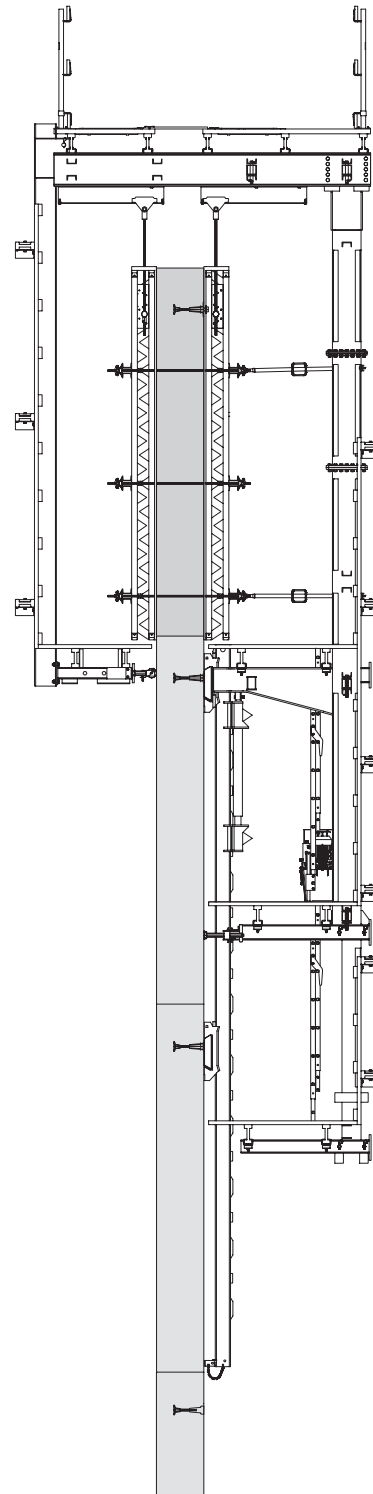


Fig. A5.08

7th Work cycle

Set and reinforce the climbing ties. Close the formwork and concrete the 4th section.

8th Work cycle

Work cycles 5 – 7 are repeated.

Preparing for assembly

Measures prior to assembly

- Check the completeness of the technical documentation:
 - Assembly plans
 - Formwork
 - Climbing systems (all levels and sections)
 - General arrangement drawings
 - Formwork
 - Climbing systems
 - Hydraulic plan
 - Parts list
- Site personnel to familiarise themselves with the system using the available documentation.



- The project-related assembly plan from PERI is binding for assembly operations.
- Refer to the project-related assembly plan for the installation positions of the components.
- Prepare a level assembly surface with sufficient load-bearing capacity.
- A crane or other lifting device with sufficient load-bearing capacity is required for the assembly process.
- Secure interim assembly states correctly by means of temporary supports in order to prevent any items from toppling over.

- Bolts that are fitted vertically should be screwed in from top to bottom.
- For bolts that are fitted horizontally, no fitting direction is prescribed. PERI recommends that you always fit the bolts in the same direction.
- All bolts must be secured using the appropriate cotter pins.



- Reserve an adequate space for temporary storage of components and assemblies.
- Properly aligned and calibrated attachment aids will ensure that the assembly process is swift and straightforward.

Load-bearing capacity



Attach assemblies to the crane at specified attachment points, filler pins or with lifting straps.



Note

- Observe the project-specific weight of the assemblies.
- Use round slings with the appropriate load capacity.
- Always attach components and assemblies to the crane in a positive-locking manner.
- PERI recommends using the Lifting Beam 9 t whenever possible.

Safety instructions



Danger

Heavy moving components can fall down or overturn!

During assembly, there is a risk of hands and other body parts being crushed.

- ⇒ Do not stand under suspended loads.
- ⇒ Use guide ropes when moving components.
- ⇒ Maintain an appropriate safety distance.
- ⇒ Do not stand between moving elements.

Attachment points

Attachment points for crane

- The size of climbing units may be restricted by the permissible load of the attachment point. For this, determine the weight of the elements during the planning phase.
- Specify the weight of the climbing units or assemblies in the general arrangement drawings.
- Use component and project-specific attachment points.
- In the case of assemblies or missing attachment points, take a trial-and-error approach to determining the attachment points that will ensure that the load is correctly positioned.
- In the case of supplied parts, use the attachment points specified by the manufacturer.
- Observe the load-bearing capacity of the attachment points.
- Use climbing beam or compression brace.

General information

- Platform decks and guardrails must be professionally designed and structurally verified in accordance with the applicable safety regulations.
- None of the decks on any of the platforms are designed to act as safety scaffolds. If decks are to act as safety scaffolds, these must be designed and verified accordingly for the specific project. See DIN 4420-1:2004-03 and DIN EN 12811-1:2004-03.
- The material quality must comply with the applicable standards.
- Avoid – or at least cover – tripping hazards, unnecessary recesses and gaps in the deck.
- Close openings for assembly, transport, etc. after completing the work.
- The distance between the lowest decking and the structure must not exceed 5 cm. Gaps in the deck must not exceed 2 cm.
- Fix immovable covering over any gaps between the decks of adjacent platforms when work is being carried out, or use safety nets with a mesh size of max. 2 cm.
- Cover any openings in the decking that are required for normal working procedures with suitable immovable materials.
- For safe operation of tie points, mount intermediate platforms if necessary.



- For M8 truss-head screws, pre-drill the platform beam with a \varnothing 9 mm hole.
- For \varnothing 8 wood screws, pre-drill the deck support with a \varnothing 5 mm hole.
- In the case of Torx 6 x 80, do not pre-drill the deck support.

Platform decking of the work platform

Working scaffold of Load Class 4.
Max. load 240 kg/m² according to DIN EN 12811-1:2004-03, Table 3.
Solid wood strength class C24 or softwood grade S10 according to DIN EN 338:2016-07. Minimum dimensions of the planking: t x w = 4 x 24 cm or 4.5 x 20 cm.

PERI recommends bolting the individual planks to transverse squared timber at the cantilever arm and in the centre of the bay if the plank thickness is less than 45 mm.
Minimum dimensions:
t x w = 4 x 12 cm.

Alternatively:
Solid wood strength class C16 according to DIN EN 338:2016-07. Minimum dimensions of the planks:
t x w = 5 x 24 cm.

Platform deck of the climbing platform, finishing platform, concreting platform

Working scaffold of Load Class 2.
Max. load 150 kg/m² according to DIN EN 12811-1:2004-03, Table 3.
Solid wood strength class C24 or softwood grade S10 according to DIN EN 338:2016-07. Minimum dimensions of the planking: t x w = 4 x 20 cm.

PERI recommends bolting the individual planks to transverse squared timber at the cantilever arm and in the centre of the bay if the plank thickness is less than 45 mm. Minimum dimensions:
t x w = 4 x 12 cm.

Alternatively:
Solid wood strength class C16 according to DIN EN 338:2016-07.
Minimum dimensions of the planks:
t x w = 5 x 24 cm.



Note

When using planking with a lower strength class or plywood board, static verification is required.

B2 Platform decking and guardrail

Depending on the structural requirements, Formwork Girders GT 24, Girders VT 20 or Beams IPE are used as deck supports.

Formwork Girder GT 24 as deck support

When using Formwork Girders GT 24, a distinction is made between a

- Single girder position.
- Double girder position.

The platform decking is placed on the Formwork Girders GT 24 (**21**) directly and bolted to each formwork girder. (Fig. B2.01 + B2.02)

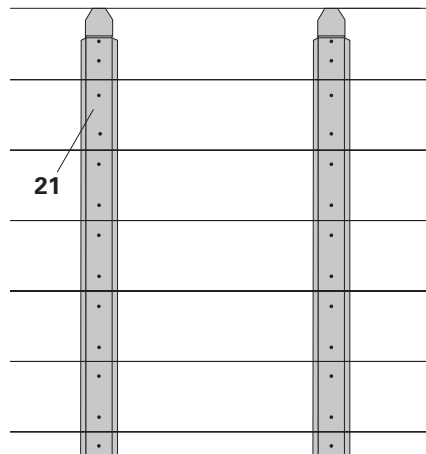


Fig. B2.01

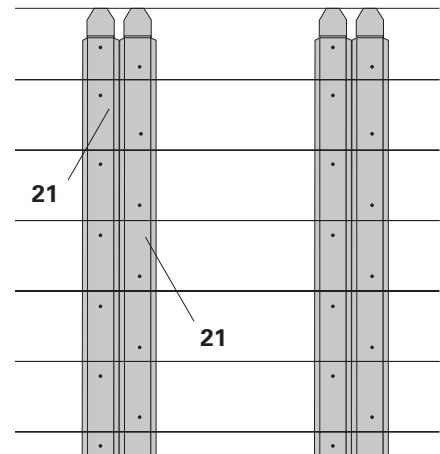


Fig. B2.02

Fixing the platform beams

Variant 1

1. For each support point, slide 2x Clamps GT 24 ACS (**44**) onto the Formwork Girder GT 24 (**21**).
2. Place the Formwork Girder GT 24 (**21**) on the cantilever beams of the Console Bracket ACS-G.
3. Slide the Clamps GT 24 ACS (**44**) over the cantilever beams and screw them tight. (Fig. B2.03)

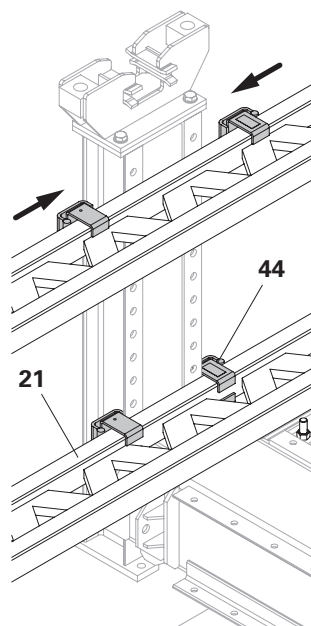


Fig. B2.03

View from above

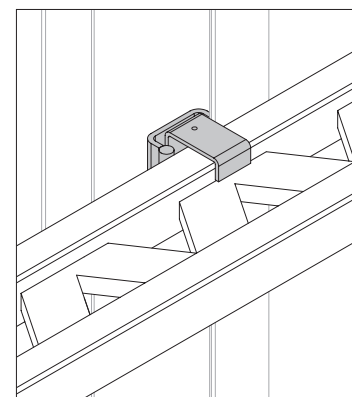


Fig. B2.04a

View from below

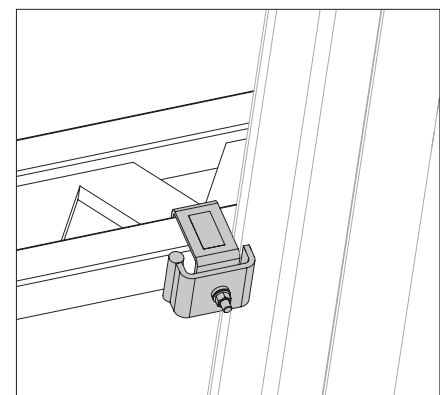


Fig. B2.04b

Figures B2.04a and B2.04b show the Clamp GT 24 ACS as an example.

B2 Platform decking and guardrail

Variant 2

The Formwork Girders GT 24 (**21**) are placed on the deck supports and fastened to metal components on the deck support with truss-head screws, shown here with metal lugs as an example.

The number of fasteners relates to one supporting point respectively.

Single girder position

Attach with 2x F.H. Bolt DIN 603 M8 x 100 MU (**222**) + washer (**225**).

(Fig. B2.05)

Double girder position

Attach with 2x F.H. Bolt DIN 603 M8 x 200 MU (**221**) + washer (**225**).

(Fig. B2.06)

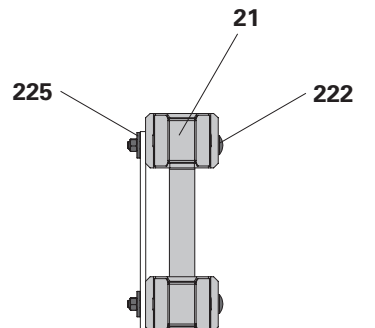


Fig. B2.05

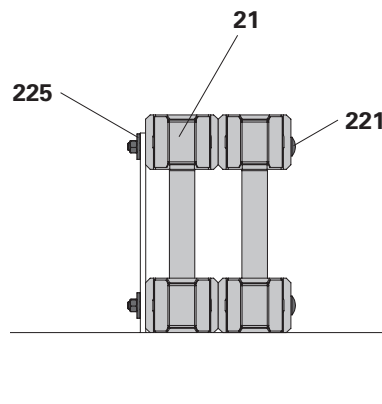


Fig. B2.06

Beam IPE as platform beam

The Beams IPE are manufactured in a project-specific manner and are furnished with all the necessary holes for assembly.

To assemble the platform decking, an intermediate layer of timber is screwed onto the Beam IPE. The platform decking is placed on the intermediate layer and screwed down.

(Fig. B2.07)

Components

- 18** IPE 200, special length
- 65** Plain Washer 18 DIN 434
- 202** Torx 6 x 80
- 213** Nut ISO 4032 M16-8
- 214** Bolt ISO 4017 M16 x 50-8.8
- 226** Washer ISO 7089-16 200 HV
- 239** F.H. bolt DIN 603 M8 x 65 MU
- 251** Spax 6 x 70-SK-TX30
- 262** Planking
- 276** Board 4 x 10 cm

Assembly

1. Place the Beam IPE 200 (**18**) on the cantilever beams of the Console Bracket ACS-G or finishing platform girder.
2. Screw the Beam IPE 200 (**18**) down tight by fixing a bolt ISO 4017 M16 x 50-8.8 (**214**), washer ISO 7089-16 200 HV (**226**), plain washer 18 DIN 434 (**65**) and nut ISO 4032 M16-8 (**213**) to each hole.
3. Place the board 4 x 10 cm (**276**) on Beam IPE 200 (**18**) and secure with F. H. bolt DIN 603 M8 x 65, MU (**239**).
4. Lay out the planking (**262**) and screw down with Spax 6 x 70-SK-TX30 (**251**).

(Fig. B2.07a)

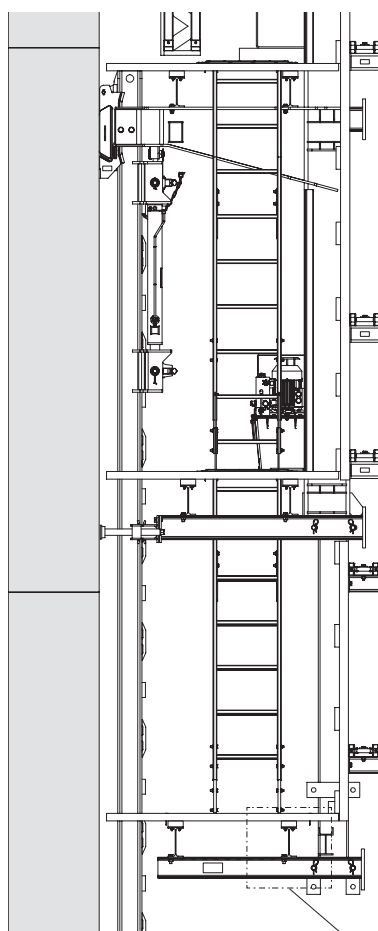


Fig. B2.07

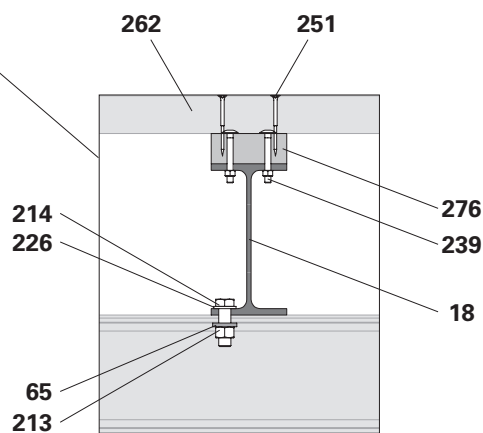


Fig. B2.07a

Platform decking

Assembly

Screw down each piece of planking (262) at each intersection with a platform beam (260) using 2x Torx 6 x 80 (202).

$e = 120 \text{ mm}$.

(Fig. B2.08 + B2.09)



- Prevent cantilevered planking and platform beams from lifting off using suitable fasteners.
- Fit multi-layer plywood sheets in the cantilever area.
- In mitred and cut-out areas, where support for the planking on both sides is not guaranteed, fit multi-layer plywood sheets.
- Fit compensation planks in the centre of the platform. (Planking $w < 24 \text{ cm}$)

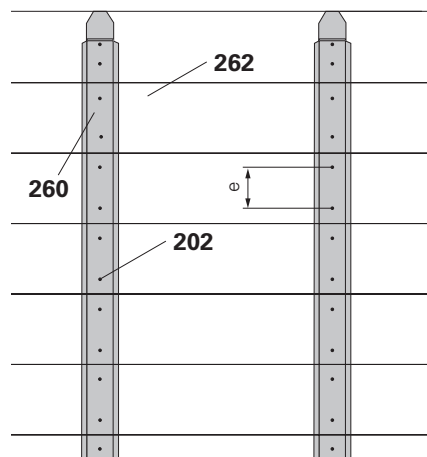


Fig. B2.08

Top view

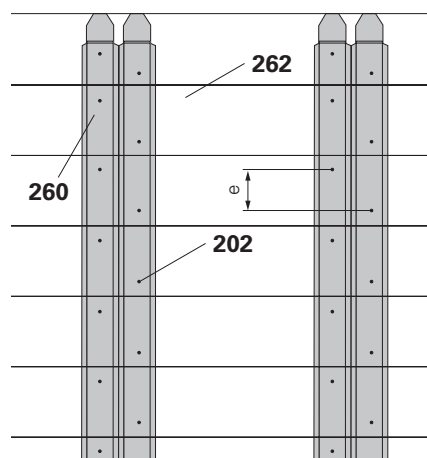


Fig. B2.09

Top view

Toe boards

Requirements:

Toe boards made of solid wood C24.
Minimum dimensions t/w = 3/15 cm.

Components

202 Torx 6 x 80

263 Toe board

267 Counter-batten

Assembly

1. Align toe board (**263**) on the inside of the counter-batten (**267**).
2. Screw toe board (**263**) onto the counter-batten (**267**) using Torx 6 x 80 (**202**).

(Fig. B2.10)

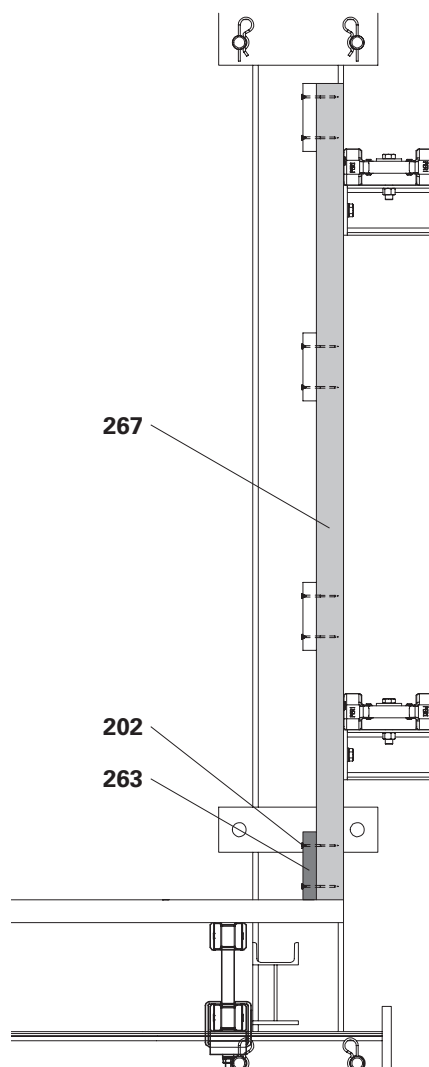


Fig. B2.10

B2 Platform decking and guardrail

Alternative 1

1. Screw down the toe board (263) with end-to-end squared timber 6/6 cm (274) and screws Torx 6 x 80 (202) and Torx 6 x 100 (227) at a distance of approx. 50 cm.

(Fig. B2.11)

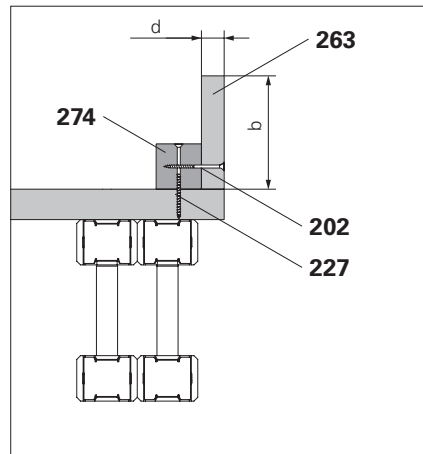


Fig. B2.11

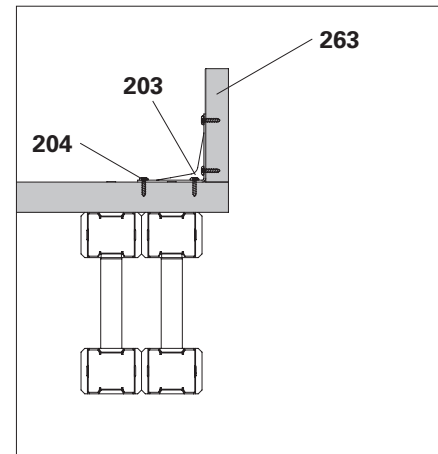


Fig. B2.12

Alternative 2

1. Screw the 90° squared timber angle connector (203) at a distance of approx. 1 m to the toe board (263) with 4x Torx 5 x 20 (204). Screw each squared timber angle connector to the platform decking with 4x Torx 5 x 20 (204).

(Fig. B2.12 + B2.13)

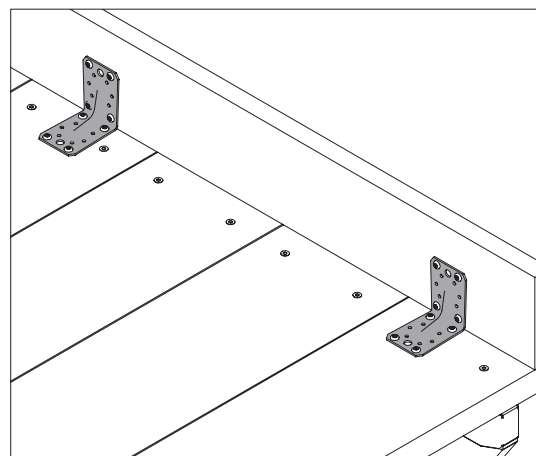


Fig. B2.13

Guardrail

General requirements

Guardrails and lateral protection must be fitted according to valid safety regulations.

Guardrails must be fitted onto all leading edges and on all platform levels.

High working positions must be secured in order to prevent objects falling to the ground. To this end, fit safety nets or lateral protection with closed protection panels.

The following can be used as lateral protection:

- Guardrail boards.
- Squared timber with enclosure made of netting, tarpaulin, plywood or trapezoidal metal sheeting.

(Fig. B2.14)



Note

Never climb on the guardrail, always use a ladder.

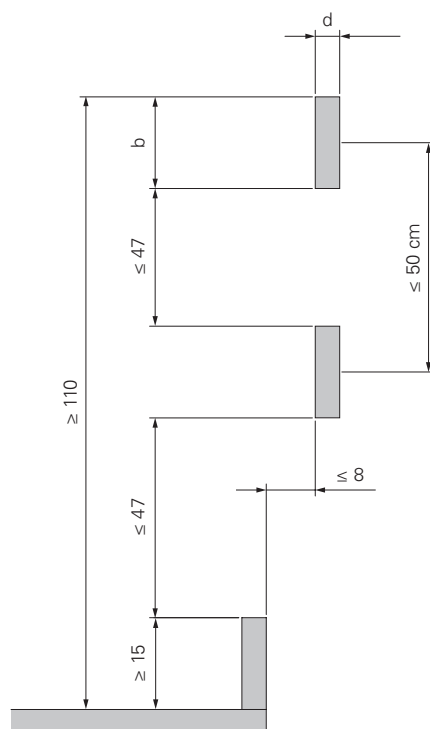


Fig. B2.14

Ladder cage with guardrail boards

Requirements:

Guardrail boards (264) made of solid wood C24

Dimensions t/w = 3/15, 4/12 or 5/12 cm.

Components

-
- 202 Torx 6 x 80
 - 264 Guardrail board
 - 267 Counter-batten
-

Assembly

1. Align guardrail board (264) on the inside of the counter-batten (267).
2. Screw guardrail board (264) onto the counter-batten (267) using Torx 6 x 80 (202).

(Fig. B2.15)

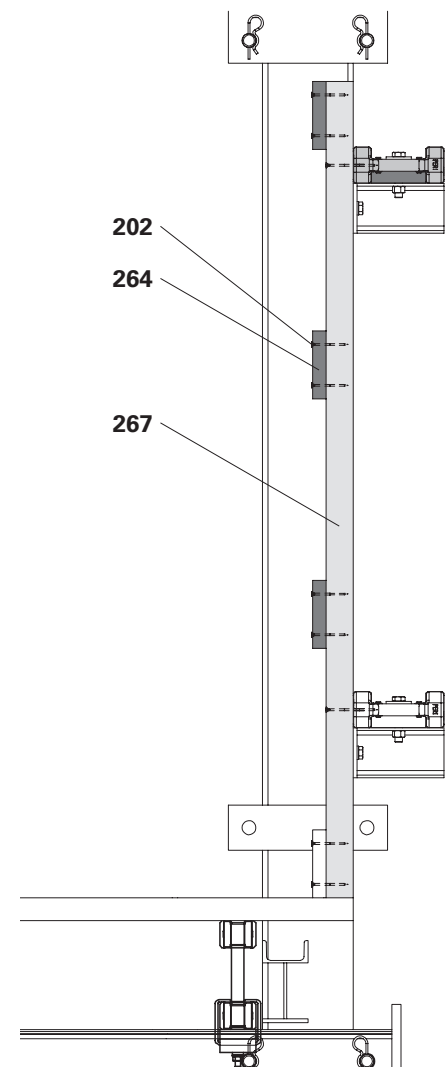


Fig. B2.15

Girder VT 20 for the ladder cage

When carrying out the assembly process for the ladder cage, two Shims VT 20 (**269**) are required for each Girder VT 20 for lining between Girder VT 20 (**20**) and the Ladder Cage Connection VT 20 ACS (**54**). (Fig. B2.16)



For assembly of the Girders VT 20 (**20**) on the Ladder Cage Connection VT 20 ACS (**54**), see: "Installing the ladder cage" on page 81.

"Assembling the rear section" on page 99.

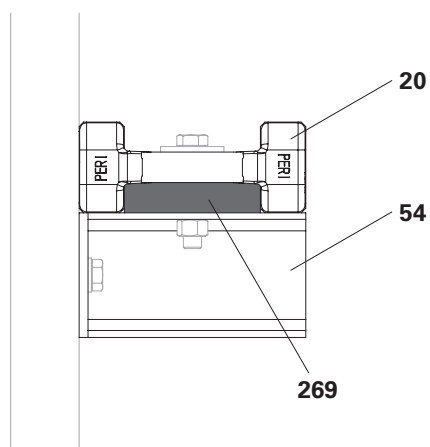


Fig. B2.16

B2 Platform decking and guardrail



Components

- 20** Girder VT 20
- 200** Torx 6 x 40
- 269** Shim VT 20

Preparing for assembly

1. Saw 2x board 300 x 118 x 27 mm as a Shim VT 20 (**269**) for the Girder VT 20 (**20**).
2. To attach Girder VT 20 (**20**) to Ladder Cage Connection VT 20 ACS, mark the holes for the installation position.
(Tab. B2.01+ Fig. B2.17)
3. Place the Shim VT 20 (**269**) in the Girder VT 20 (**20**) and align it centrally at the installation position.
4. Screw the Shim VT 20 (**269**) onto the Girder VT 20 (**20**) with Torx 6 x 40 (**200**).
(Fig. B2.18)
5. Drill an Ø 18 mm hole through Shim VT 20 (**269**) and Girder VT 20 (**20**) at the installation position.
(Fig. B2.19)

Installation position for Shim VT 20	
Console bracket spacing	c
Console Bracket ACS-G	$\frac{1}{2} c + 18.5$
Finishing Platform Vertical ACS-G	$\frac{1}{2} c + 8.5$
Platform Post 5900 IPBL 240 ACS	$\frac{1}{2} c + 6$

Tab. B2.01

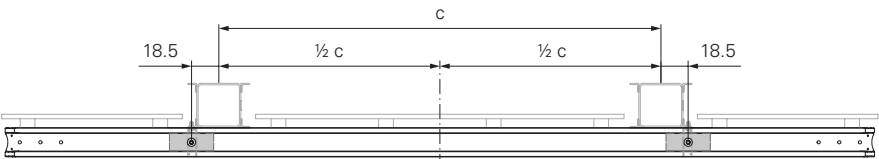


Fig. B2.17a

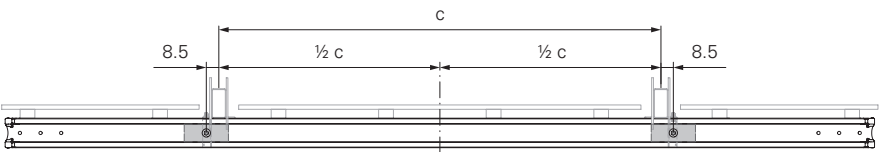


Fig. B2.17b

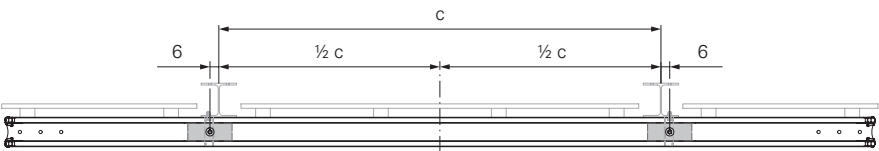


Fig. B2.17c

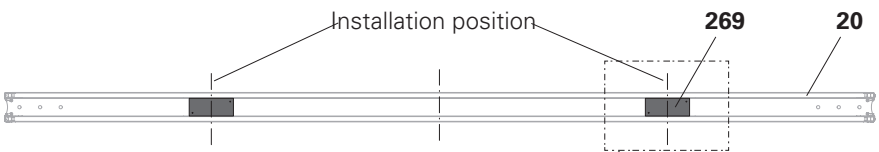


Fig. B2.18

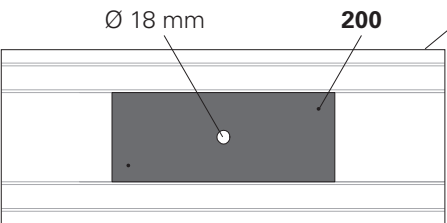


Fig. B2.19

Fitting safety nets

1. Attach the safety net (**266**) according to the manufacturer information.
2. Guide the lower edge of the safety nets to the front edge of the platform decking.
3. Ensure that there is a sufficient overlap with other parts of the enclosure. (Fig. B2.20)



- Mesh size for enclosure nets ≤ 20 mm.
- Distance between guardrail boards $a \leq 50$ cm.

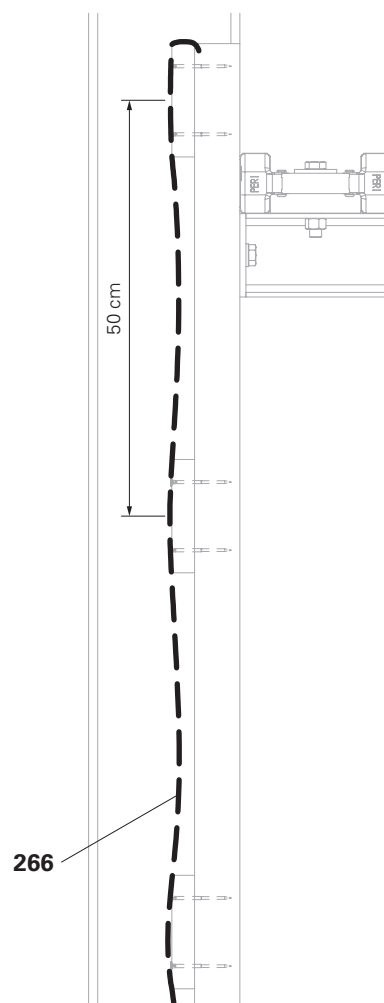


Fig. B2.20

Lateral protection

Lateral protection is always necessary if leading edges are formed.

The execution of the lateral protection is individually adapted to the requirements and geometry of the platforms. The assembly of the lateral protection is described individually for each platform in the following sections.

Temporary lateral protection

Leading edges are formed during the attachment, moving and disassembly processes. Safeguard these leading edges with temporary anti-fall protection, e.g. with the Guardrail Post PD 8.

Components

- 15** Guardrail Post PD 8
- 245** Hex. wood screw DIN 571 8 x 60
- 252** Spax 5 x 40
- 264** Guardrail board
- 272** Wooden wedge

Assembly

1. Screw Guardrail Post PD 8 (**15**) with Hex. wood screw 8 x 60 (**245**) onto the platform decking.
2. Back guardrail boards (**264**) with wooden wedges (**272**).
3. Fit the guardrail boards and screw them to the Guardrail Post PD 8 (**15**) with Spax 5 x 40 (**252**).

(Fig. B2.21)

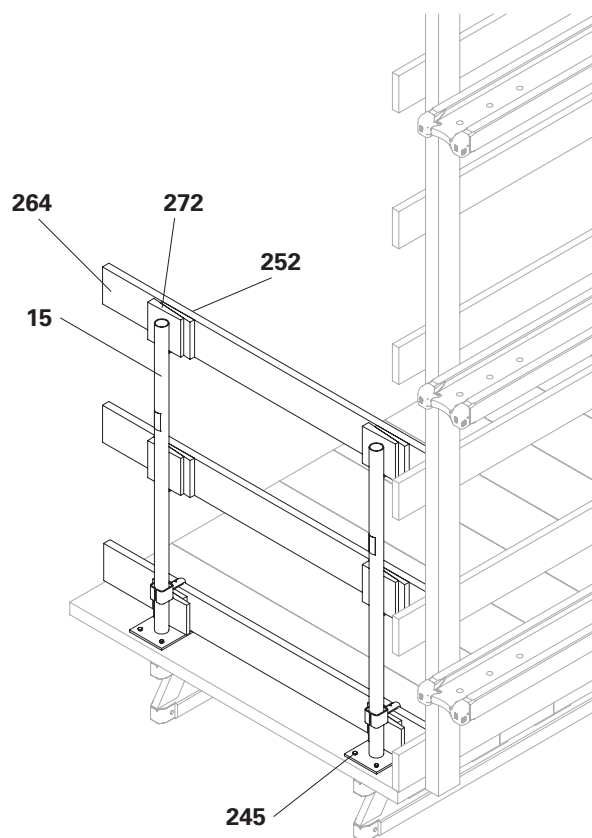


Fig. B2.21

B3 Assembling the ladder access

Fitting the descent hatch

Components

200	Torx 6 x 40	20x
280	Hatch-2 RCS 55 x 60 foldable	1x

Assembly

1. Saw a 57 x 72 cm recess at the assembly position.
(Fig. B3.01)
2. Place the hatch (**280**) in the recess.
3. Screw the hatch frame to the platform decking with Torx 6 x 40 (**200**) screws.
(Fig. B3.02)



- Minimum plank width: $w_{min} > 10$ cm.
If the minimum plank width is not reached, move the descent hatch to the side.
- If the plank can only be fixed to one platform beam, fit a transition piece in order to fix the planking.
(Fig. B3.03)

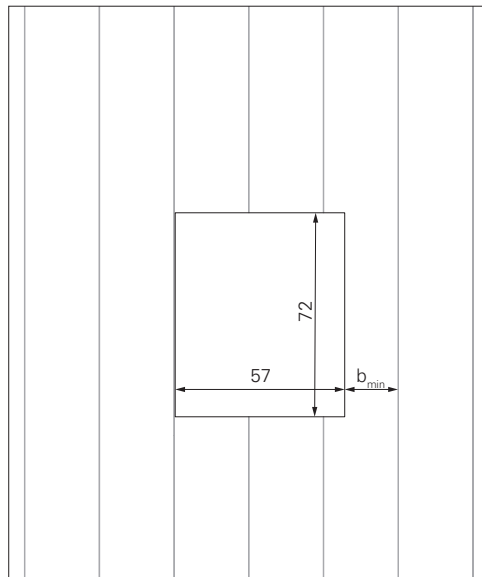


Fig. B3.01

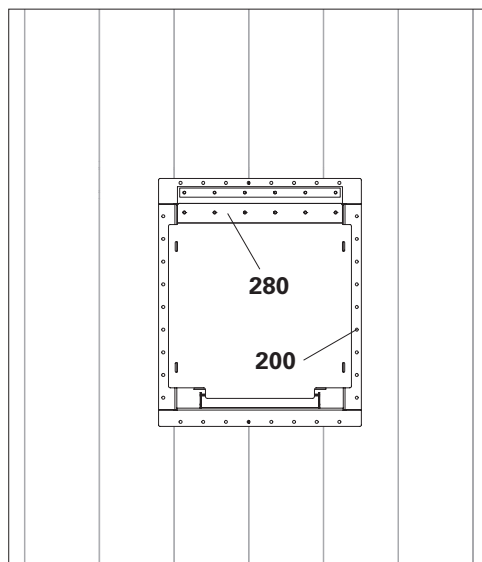


Fig. B3.02

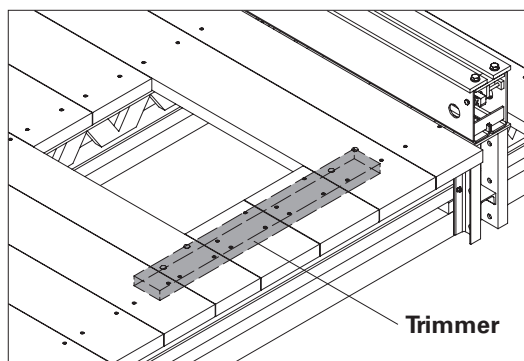


Fig. B3.03

B3 Assembling the ladder access

Fitting the ladder



Do not use the ladder until it is securely attached at the top and bottom, and the ladder cage has been mounted. The required ladder elements are specific to the project.

Components

- 200** Torx 6 x 40
- 281** Bolt ISO 4017 M12 x 40-8.8
- 282** Nut ISO 7042 M12-8
- 283** Ladder 180/6
- 284** Ladder 220/6
- 285** End Ladder 180/2
- 286** Ladder Base 30, adjustable
- 288** Ladder Hook
- 289** Ladder Safety Cage 75
- 290** Ladder Safety Cage 150

Pre-assembly of ladder

- Permanently mounted ladder:
 1. Push top ladder 220/6 (**284**) with the connector (**284.1**) as far as possible into the lower ladder 180/6 (**283**).
 2. Secure the bottom ladder to the connecting piece using the 4 bolts M12 x 40 and nuts (**281+ 282**) which have been provided.
 3. Install the ladder base (**286**) in the same manner with 4x bolts M12 x 40 (**281**) and nuts onto the connecting piece (**283.1**) of the lower ladder. (Fig. B3.04)
- Lower ladder as hook-in ladder:
 1. Secure the ladder hook (**288**) to the 2 bottom holes on the ladder rail using the 4 bolts M12 x 25 and nuts (**288.1+ 288.2**) which have been provided.
 2. Securely mount the ladder base (**286**). See above.
 3. Attach hook-in ladder to the top ladder. (Fig. B3.05 + B3.06)

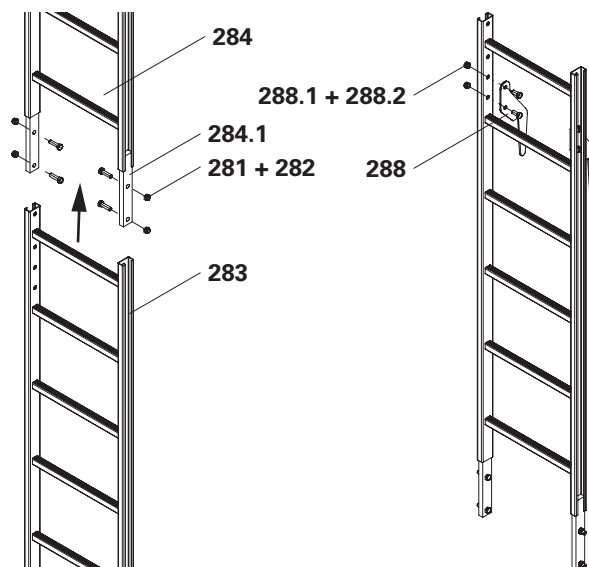


Fig. B3.05

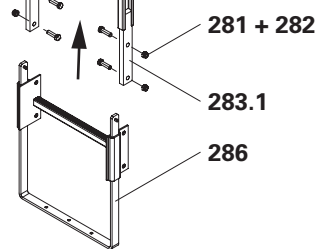


Fig. B3.04



The rungs of the hook-in ladder and top ladder must be positioned at the same height. If they are not, screw the ladder hooks into the correct drill holes.

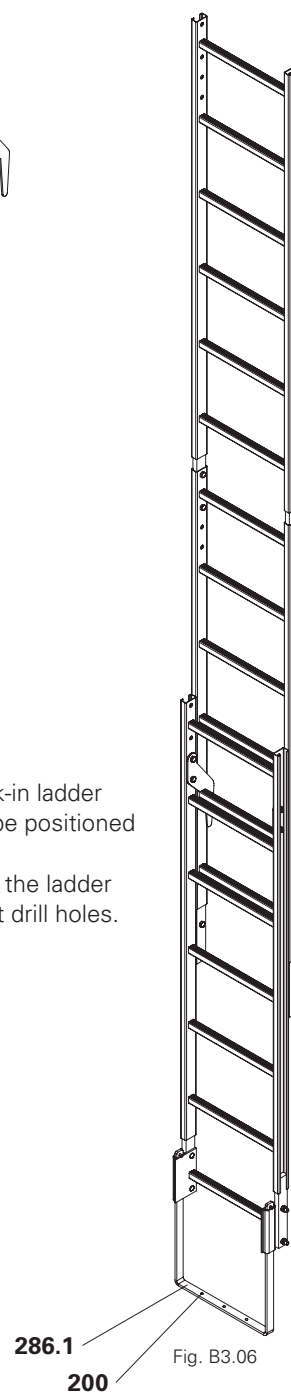


Fig. B3.06

B3 Assembling the ladder access

Fitting the ladder on the hatch

1. Open the hatch cover (280.1) and lift in the ladder using the crane. Lower ladder through hatch opening (280).
2. Fix ladder to the hatch from above using 2 bolts M12 x 40 and nuts (281 + 282).

(Fig. B3.07)

Alternatively:

Attaching the End Ladder 180/2

1. Open the hatch cover (280.1).
2. Lift pre-assembled ladders (283 + 285) with the crane into the hatch (280) and lower so that the top rung of the ladder lies in the U-section of the hatch.

(Fig. B3.08)

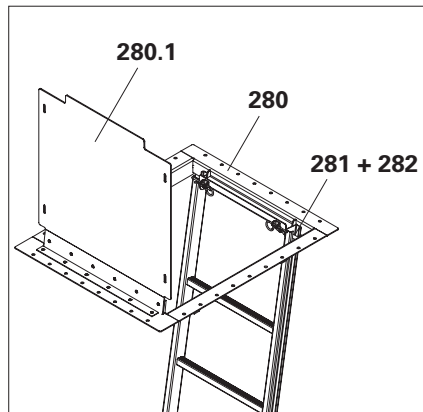


Fig. B3.07

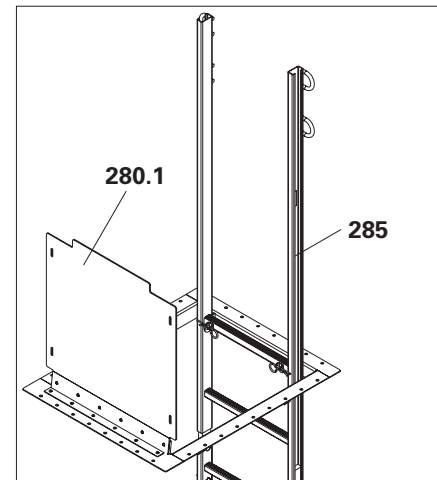


Fig. B3.08

Fixing the Ladder Base

1. Pull out the bracket (286.1) of the ladder base (286) as far as the platform decking. Secure the bracket to the platform decking using 3 Torx 6 x 40 screws (200).

Installing the ladder cage



- The distance from the platform decking to the ladder cage ranges from 2.2 m to 3.0 m.
- The opening between two ladder cages must not exceed 50 cm.
- Fly in the ladder cage with the finishing platform, as it does not fit through the hatch and must be mounted from below.

1. Pull the ladder cage (289) upwards using a rope, move it into position and hold it there.
2. Slightly loosen 4x bolts M12 x 25 on the clamping plate (289.1), position clamping plate on the ladder rail (284), turn and tighten bolts.

(Fig. B3.09)

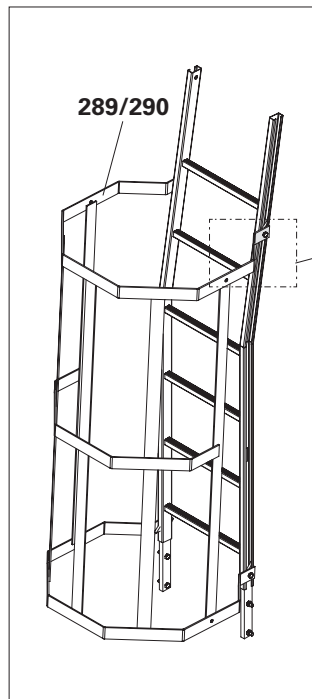
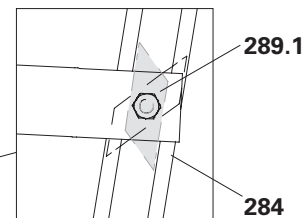
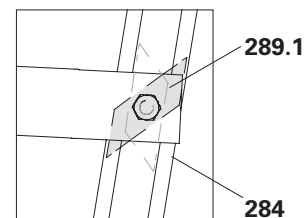


Fig. B3.09



Insertion position



Clamping length



- Fit the ladder in accordance with local standards and regulations.
- Maximum inclination $\alpha < 15^\circ$.

General information

The Console Bracket ACS-G brings the work platform (level 0) and climbing platform (level -1) together into a single structure.

The work platform (level 0) is the main platform of the climbing unit. The formwork is operated and reinforcement work carried out from the work platform (level 0).

The work platform (level 0) is usually circumferential. From the work platform (level 0) you have access to the concreting platform (level +0.5) or the work platform (level +1) above and the climbing platform (level -1) below. (Fig. B4.01)

The climbing platform (level -1) is located beneath the work platform (level 0). The hydraulic system is installed on the climbing platform. The climbing devices and the hydraulic unit are operated from there.

The climbing platform (level -1) is usually circumferential. From there you have access to the work platform (level 0) above and the finishing platform (level -2) below. (Fig. B4.02)

Recommended platform decking distance

- To the structure 5 cm.
- To adjacent platforms 5 cm
(25 mm shorter than the formwork on both the left and right).



Do not install planking that is narrower than 10 cm at the edge of the platform decking.

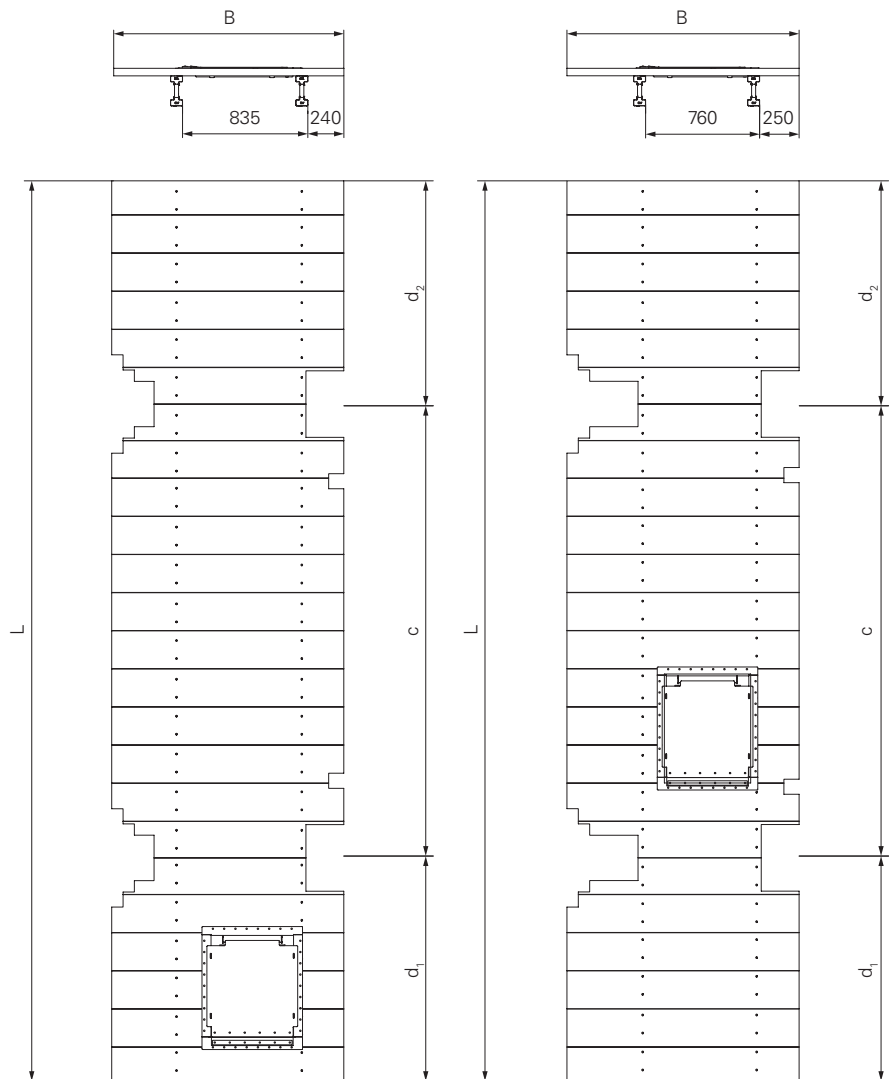


Fig. B4.01

Fig. B4.02

Platform parameters	
L	Climbing unit length
B	Work platform width
c	Console bracket spacing
d	Cantilever

Assembling platforms

Components

- 21** Formwork Girder GT 24
- 41** Console Bracket ACS-G
- 42** Compression strut for Cross Bracing ACS
- 43** Diagonal Bracing DW 15 ACS
- 44** Clamp GT 24 ACS
- 202** Torx 6 x 80
- 262** Planking



- As assembly aids, prepare two squared timbers with a stop aid. The dimension c corresponds to the bracket spacing. Lay out the squared timbers at the assembly area and align them parallel to each other.
- Height of the squared timbers > 25 cm.
- Height of the stops ≤ 4.5 cm.



Caution

Heavy components can tip over!
There is a risk of bruising on the arms and legs.
⇒ Prop up the Console Bracket ACS-G (41) temporarily.

Assembly

1. Set the Console Bracket ACS-G (41) down on its rear side while observing the console bracket spacing. (Fig. B4.03)
2. Bolt the compression strut for Cross Bracing ACS (42) at the installation position with the fixing materials provided.
Make sure that the connection lugs are positioned correctly. (Fig. B4.04)

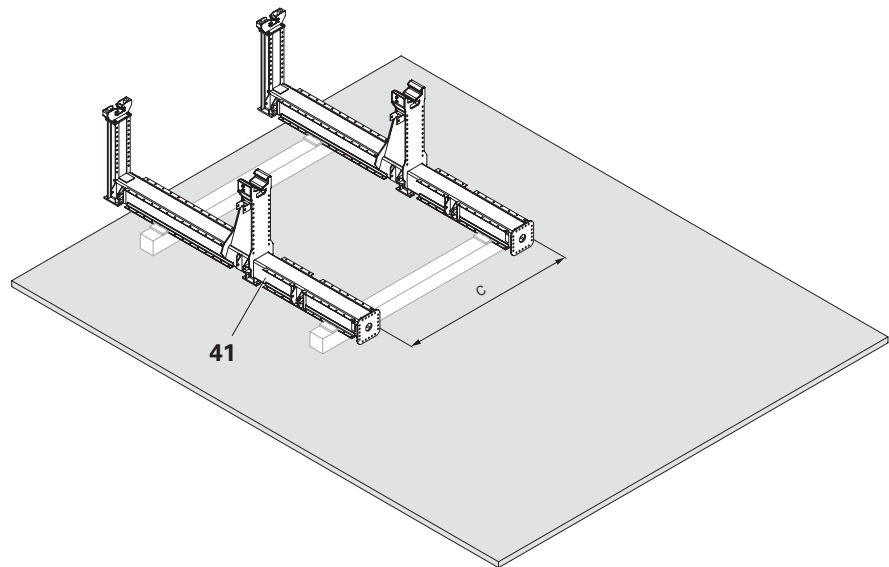


Fig. B4.03

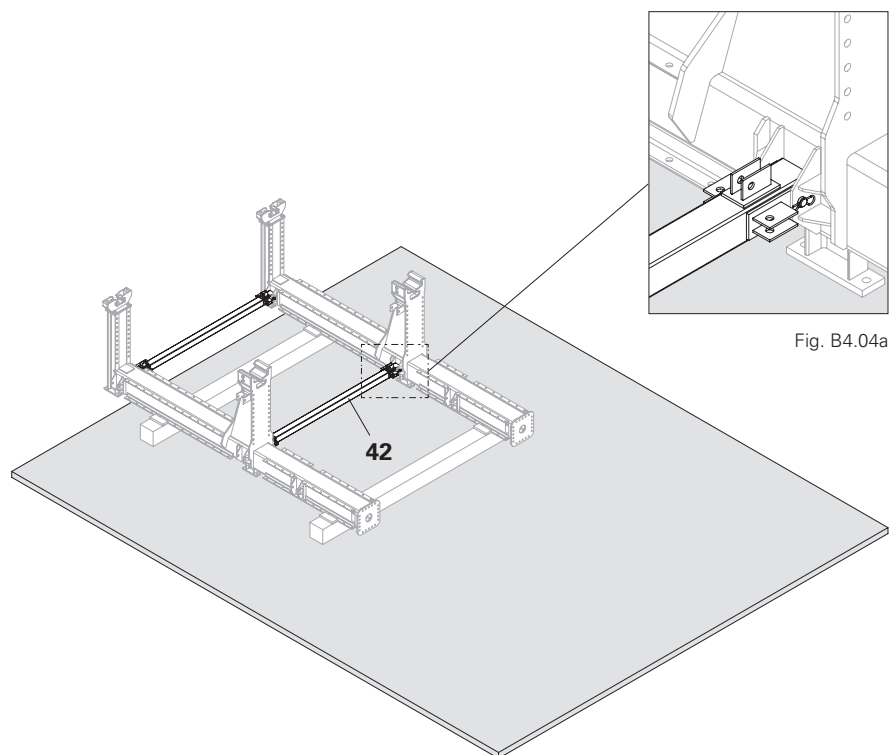


Fig. B4.04a

Fig. B4.04

B4 Installing the Console Bracket ACS-G

3. Remove Tie Rod DW 15 from Diagonal Bracing DW 15 ACS (**43**) and replace it with a project-specific Tie Rod DW 15 (**43.2**).
4. Screw the Diagonal Bracing DW 15 ACS (**43**) onto the compression strut for Cross Bracing ACS (**42**) with the fixing materials provided.
5. Measure the diagonal bracing and align the Console Brackets ACS-G (**41**) if necessary.
6. Tension cross bracing with Turnbuckle CB.

(Fig. B4.05)

7. Slide 4x Clamps GT 24 ACS (**44**) onto the Formwork Girder GT 24 (**21**).
8. Lift the Formwork Girder GT 24 (**21**) into the Console Bracket ACS-G (**41**), align it and screw it onto the Console Bracket ACS-G (**41**) with the Clamp GT 24 ACS (**44**).

(Fig. B4.06)

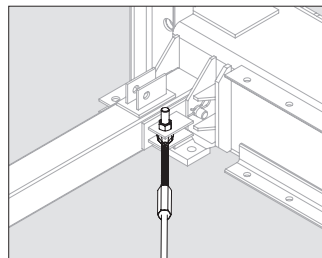


Fig. B4.05a

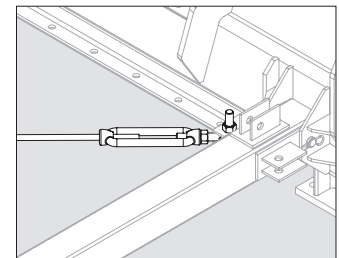


Fig. B4.05b

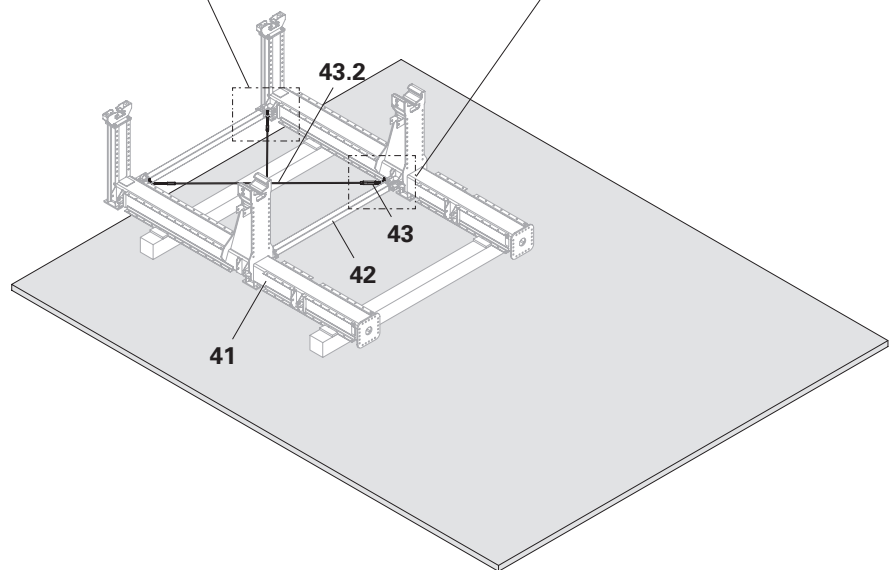


Fig. B4.05

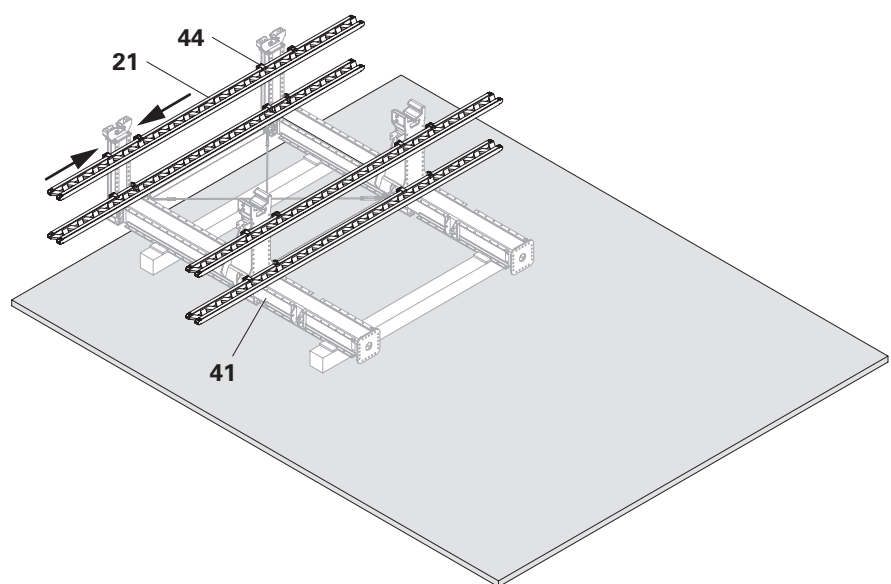


Fig. B4.06

B4 Installing the Console Bracket ACS-G

- 9. Saw the planking to length.
- 10. Saw recesses in the platform decking for the work platform (level 0). (Fig. B4.07 – B4.10).



The dimensions $x_1 - x_5$ are project-specific.

Platform decking for work platform (level 0)

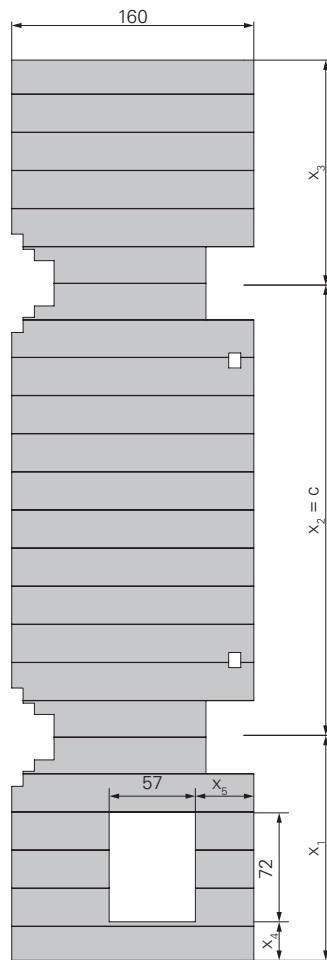


Fig. B4.07

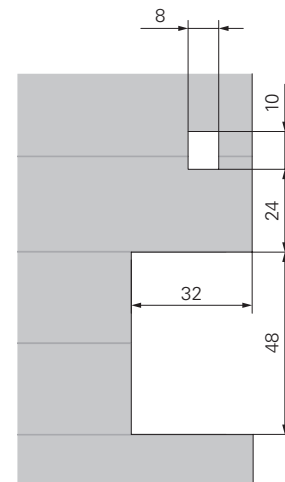


Fig. B4.08

Climbing Shoe-2 I ACS

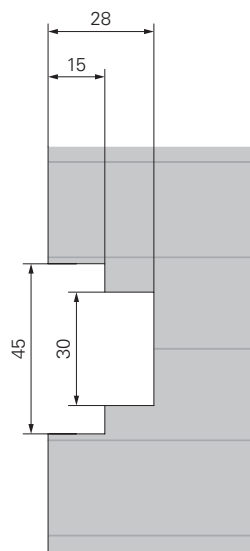


Fig. B4.09

Climbing Shoe II ACS

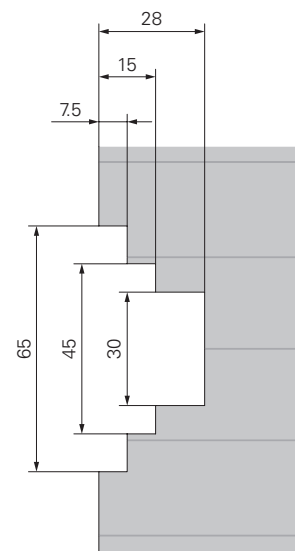


Fig. B4.10

B4 Installing the Console Bracket ACS-G



11. Saw recesses in the platform decking for the climbing platform (level -1).
(Fig. B4.11 – B4.14).



The dimensions $x_1 - x_5$ are project-specific.

Platform decking for climbing platform (level -1)

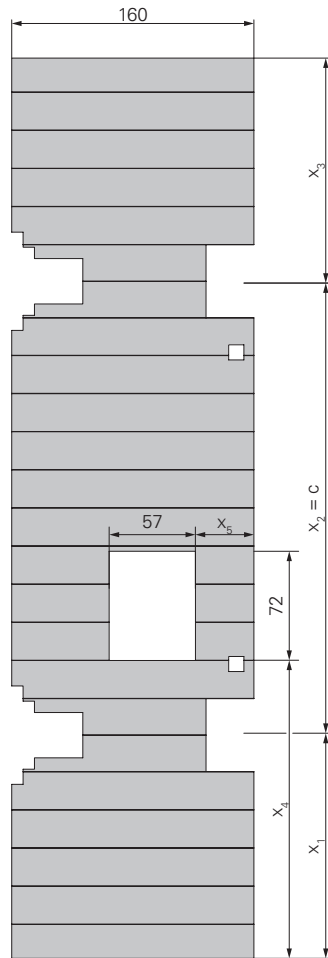


Fig. B4.11

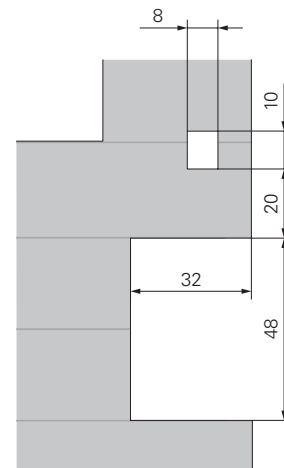


Fig. B4.12

Climbing Shoe-2 I ACS

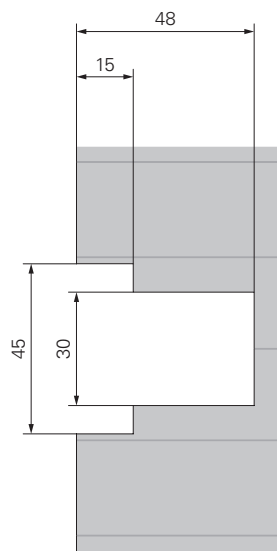


Fig. B4.13

Climbing Shoe II ACS

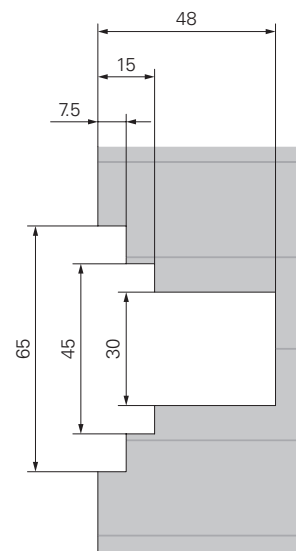


Fig. B4.14

B4 Installing the Console Bracket ACS-G

12. Place the planking (**262**) on the Formwork Girders GT 24, align them and screw them tight with 2x Torx 6 x 80 (**202**) for each girder. (Fig. B4.15)
13. Fit the hatch (**280**), see "Fitting the descent hatch" on page 67. (Fig. B4.16)



- If necessary, fix the planking at the descent hatch as well as at the transition piece.
- Place the Formwork Girder GT 24 of the climbing platform so far back that the lower climbing head of Climbing Device ACS 100 can extend fully.

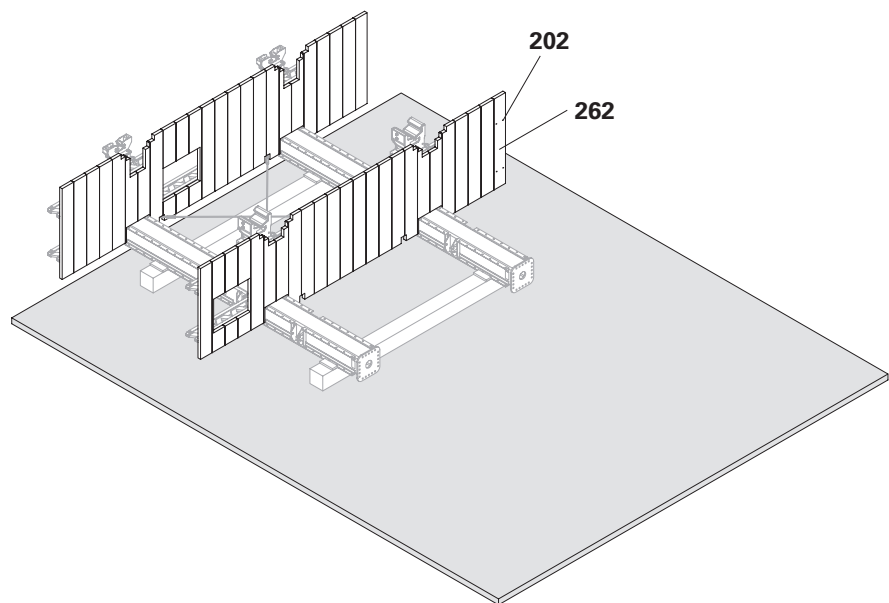


Fig. B4.15

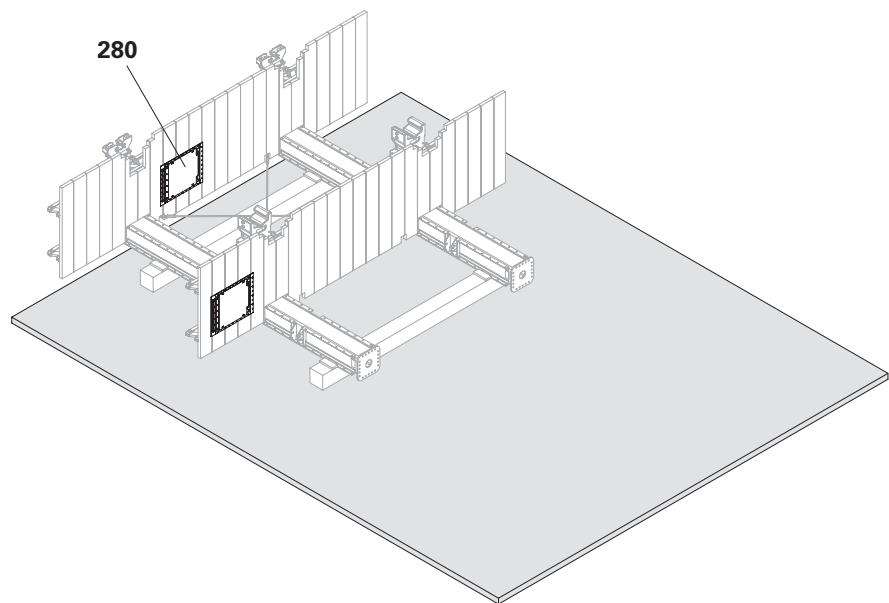


Fig. B4.16

B5 Installing the posts and gallows

Installing the vertical post intermediate

Components per console bracket

- 45 Vertical Post Intermediate 1200 ACS
- 47 HV-Bolt Set M20x75



Note

Observe the component-specific tightening torque, see Page 22.

Assembly

1. Screw the Vertical Post Intermediate 1200 ACS (45) onto the head end of the Console Bracket ACS-G (41) with the HV-Bolt Set M20x75 (47). (Fig. B5.01)

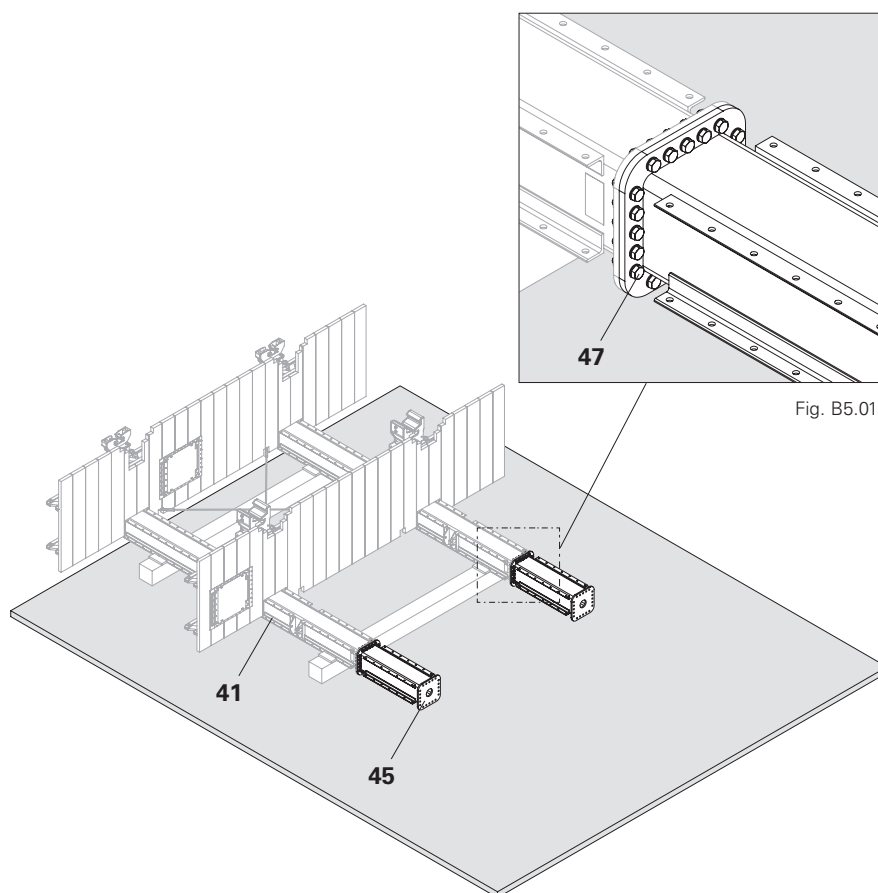


Fig. B5.01

Fitting the vertical post top

Components per console bracket

- 46 Vertical Post Top 2100 ACS
- 47 HV-Bolt Set M20x75



Note

Observe the component-specific tightening torque, see Page 21.

Assembly

1. Screw the Vertical Post Top 2100 ACS (46) onto the Vertical Post Intermediate 1200 ACS (45) with the HV-Bolt Set M20x75 (47). (Fig. B5.02)



Support the Vertical Post Top 2100 ACS (46) with additional squared timber.

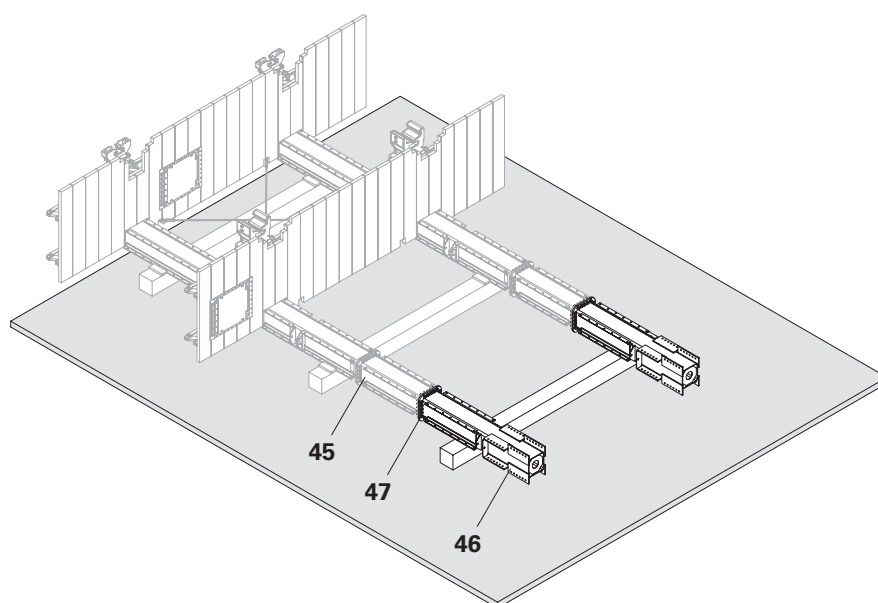


Fig. B5.02

Installing the gallows

Variant 1

By using long gallows for assembly, it is possible to install two formwork units. One formwork unit on the console bracket side and one formwork unit on the opposite side.

Components

- 42** Compression strut for Cross Bracing ACS
- 43** Diagonal Bracing DW 15 ACS
- 49** Gallows 3325 ACS-G
- 50** Panel Beam 1110 ACS
- 51** Counterplate 100x100x10 ACS
- 52** Trolley HTP
- 60** Adapter DW 20 ACS
- 64** Bolt 25 x 180
- 207** Cotter pin 5/1
- 208** Bolt ISO 4017 M16 x 110-8.8
- 209** Washer ISO 7089 200 HV, A 16
- 210** Nut ISO 7040 M16-8

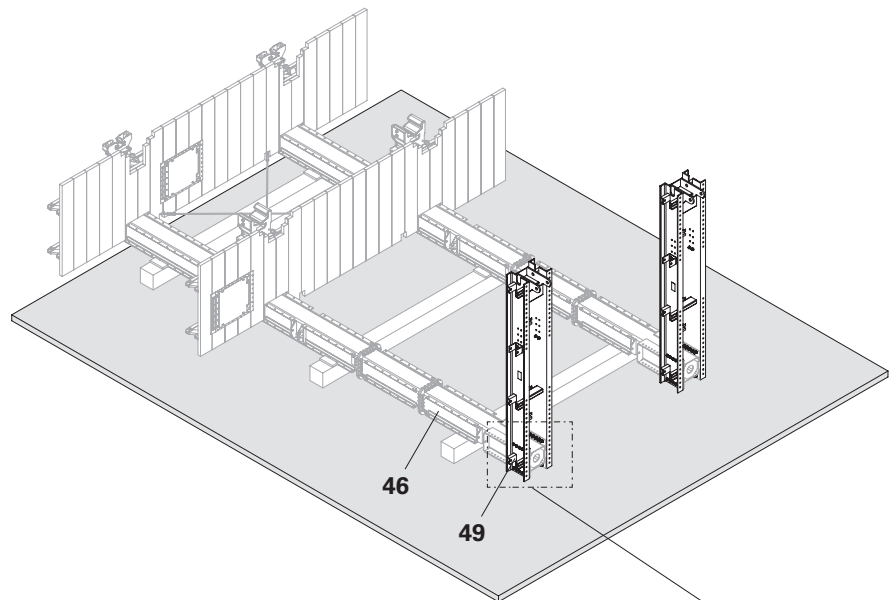


Fig. B5.03

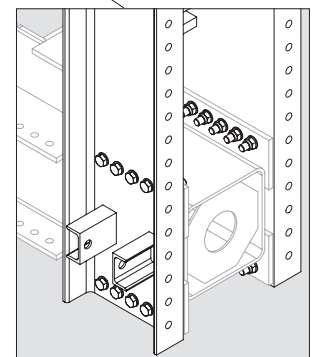


Fig. B5.03a

Assembly

1. Screw the Gallows 3325 ACS-G (**49**) onto the Vertical Post Top 2100 ACS (**46**) with the fixing materials provided. (Fig. B5.03)
2. Bolt the compression strut for Cross Bracing ACS (**42**) at the installation position with bolt 25 x 180 (**64**) and cotter pin 5/1 (**207**). Make sure that the connection lugs are positioned correctly. (Fig. B5.04)

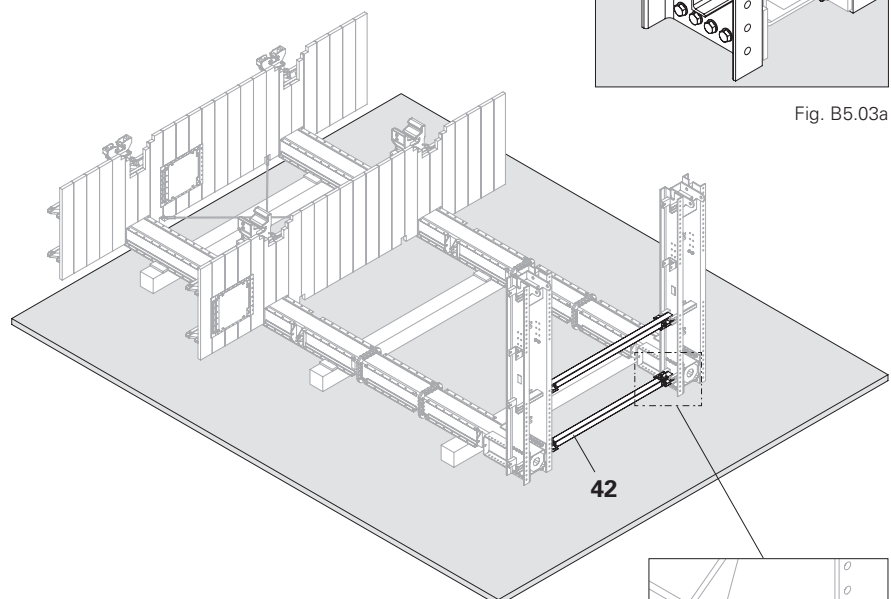


Fig. B5.04

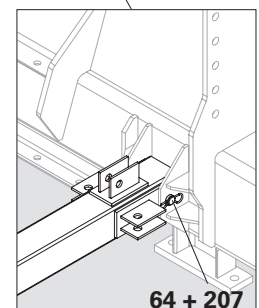


Fig. B5.04a

B5 Installing the posts and gallows

3. Remove Tie Rod DW 15 from Diagonal Bracing DW 15 ACS (**43**) and replace it with a project-specific Tie Rod DW 15 (**43.2**).
4. Screw the Diagonal Bracing DW 15 ACS (**43**) onto the compression strut for Cross Bracing ACS (**42**) with the fixing materials provided.
5. Calibrate the diagonal bracing and tension the cross connector with Turnbuckle CB.

(Fig. B5.05)

6. For each set of Gallows 3325 ACS-G (**49**), screw 2x Panel Beams 1110 ACS (**50**) into the installation position of Gallows 3325 ACS-G (**49**) with 2x Counterplate 100x100x10 ACS (**51**), 4x Bolt ISO 4017 M16 x 110-8.8 (**208**), Washer ISO 7089 200 HV, A 16 (**209**) and Nut ISO 7040 M16-8 (**210**) in each case. Ensure that the installation position is correct.

(Fig. B5.06 + B5.07)

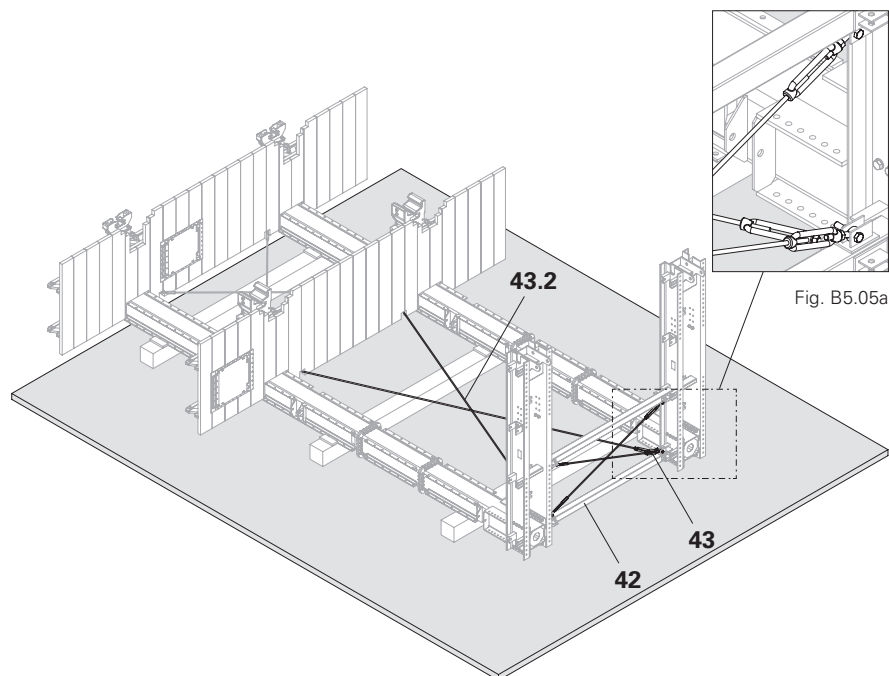


Fig. B5.05

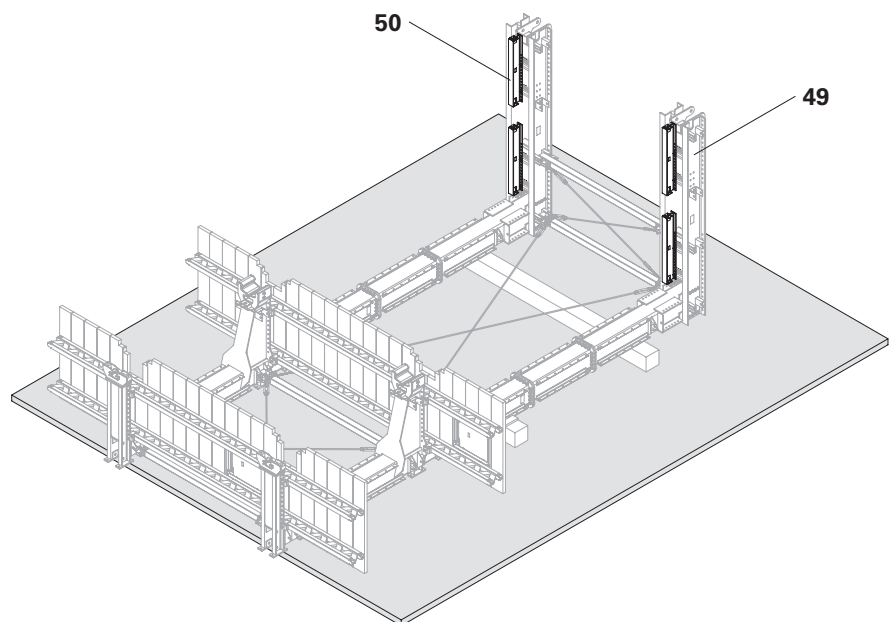


Fig. B5.06

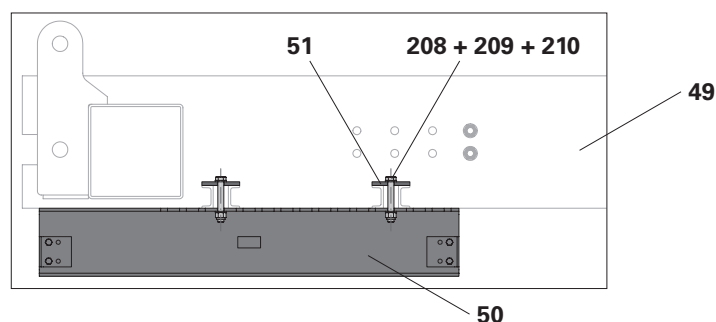


Fig. B5.07

B5 Installing the posts and gallows

7. Spindle out the clevis load bar (52.1) from the Trolley HTP (52) and slide the Trolley HTP (52) onto the Panel Beam 1110 ACS (50).
 8. Tighten the clevis load bar (52.1) until the rollers (52.2) are in contact with the flange of the Panel Beam 1110 ACS (50).
 9. Turn the clevis load bar (52.1) back one turn.
- (Fig. B5.08 – B5.12)

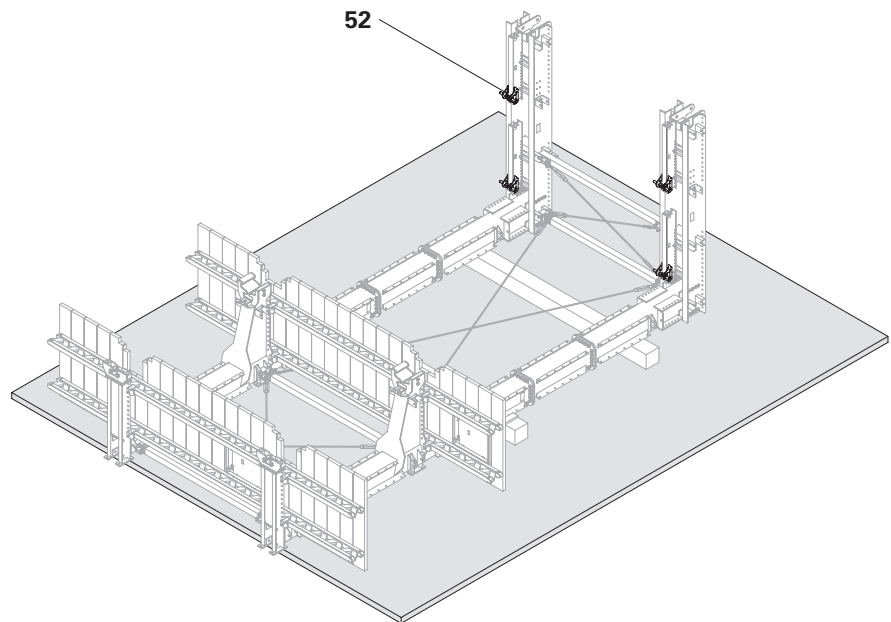


Fig. B5.08

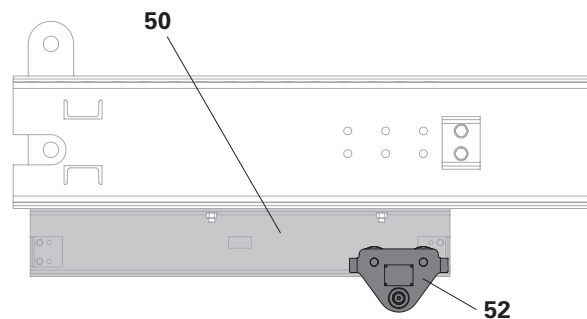


Fig. B5.09

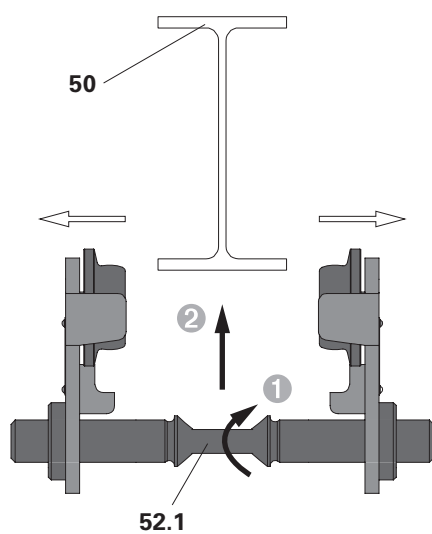


Fig. B5.10

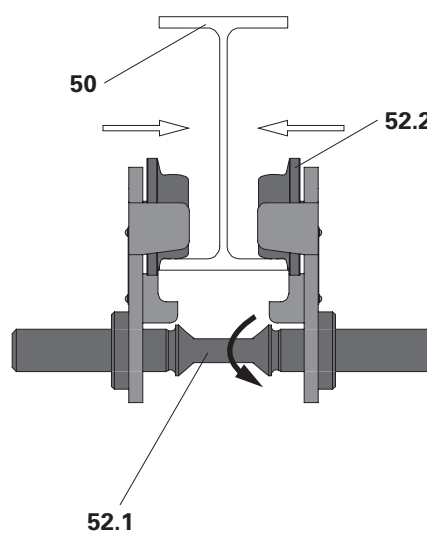


Fig. B5.11

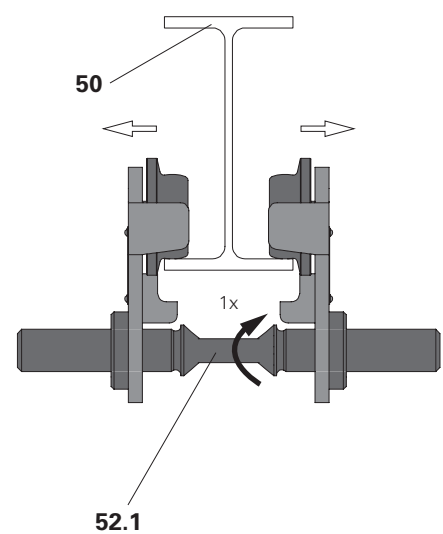


Fig. B5.12

B5 Installing the posts and gallows

10. Screw Adapter DW 20 ACS (**60**) onto the clevis load bar (**52.1**) of Trolley HTP (**52**).
(Fig. B5.13)

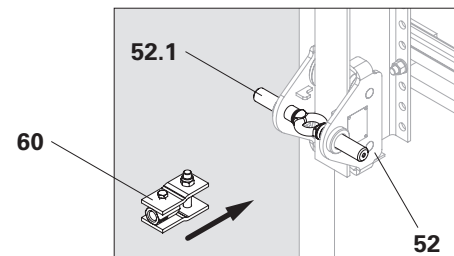


Fig. B5.13a

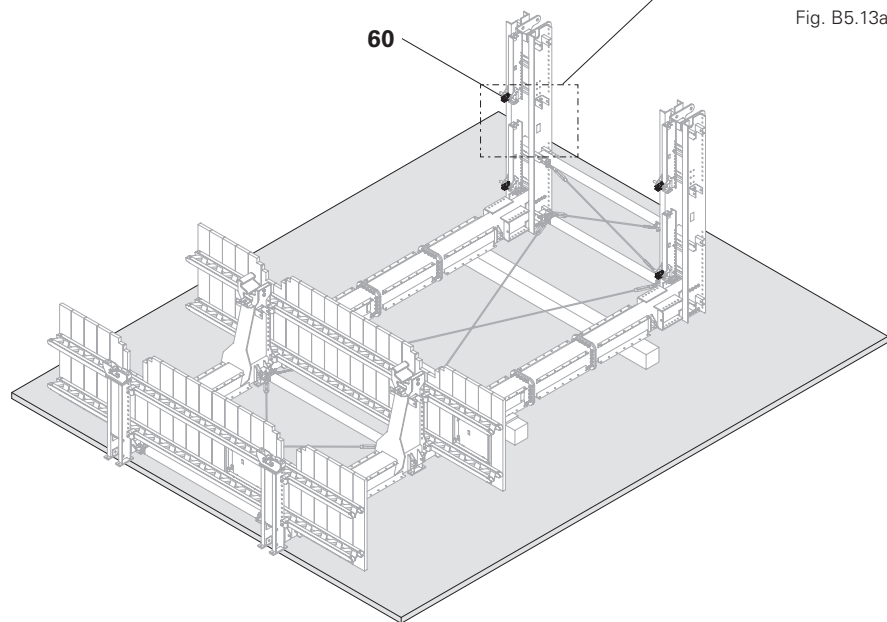


Fig. B5.13

Variant 2

By using short gallows for assembly, it is possible to install one formwork unit on the console bracket side. (Fig. B5.14)
The assembly process corresponds to that of variant 1.

Components

- 42** Compression strut for Cross Bracing ACS
- 43** Diagonal Bracing DW 15 ACS
- 48** Gallows 1430 ACS-G
- 50** Panel Beam 1110 ACS
- 51** Counterplate 100x100x10 ACS
- 52** Trolley HTP
- 60** Adapter DW 20 ACS
- 64** Bolt 25 x 180
- 207** Cotter pin 5/1
- 208** Bolt ISO 4017 M16 x 110-8.8
- 209** Washer ISO 7089 200 HV, A 16
- 210** Nut ISO 7040 M16-8

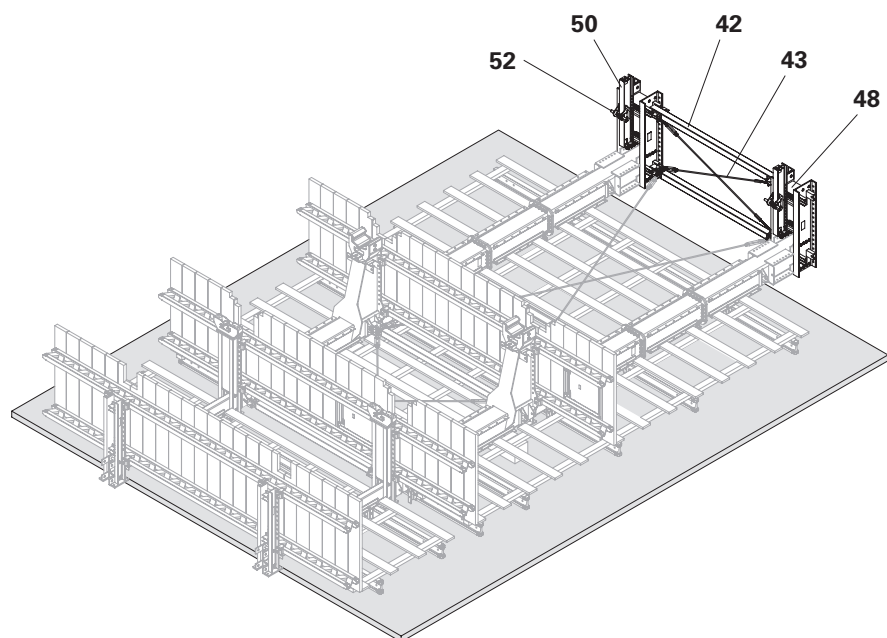


Fig. B5.14

B6 Installing the ladder cage



Installing the ladder cage

Components

- 20** Girder VT 20
- 53** Connector AV ACS
- 54** Ladder Cage Connection VT 20 ACS
- 211** Bolt ISO 4014 M16 x 90-8.8
- 212** Washer ISO 7094 100 HV, A 16
- 213** Nut ISO 4032 M16-8
- 269** Shim VT 20

Assembly

1. Bolt the Connector AV ACS (**53**) at the installation position with the fixing materials provided.
2. Bolt the Ladder Cage Connection VT 20 ACS (**54**) at the installation position with the fixing materials provided. (Fig. B6.01)
3. Prepare Girder VT 20 (**20**) with Shim VT 20 (**269**). See "Girder VT 20 for the ladder cage" on page 63.
4. Screw the Girder VT 20 (**20**) onto the Ladder Cage Connection VT 20 ACS (**54**) using Bolt ISO 4014 M16 x 90-8.8 (**211**), Washer ISO 7094 100 HV A 16 (**212**) and Nut ISO 4032 M16-8 (**213**). (Fig. B6.02 + B6.03)

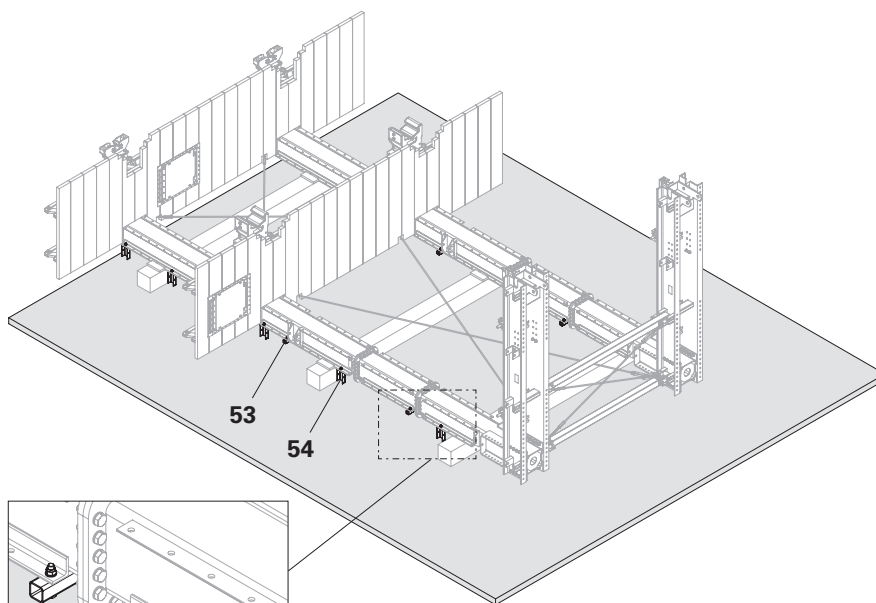


Fig. B6.01

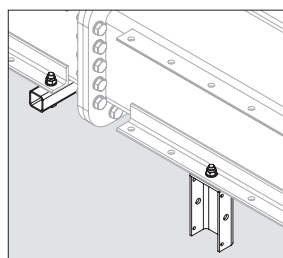


Fig. B6.01a

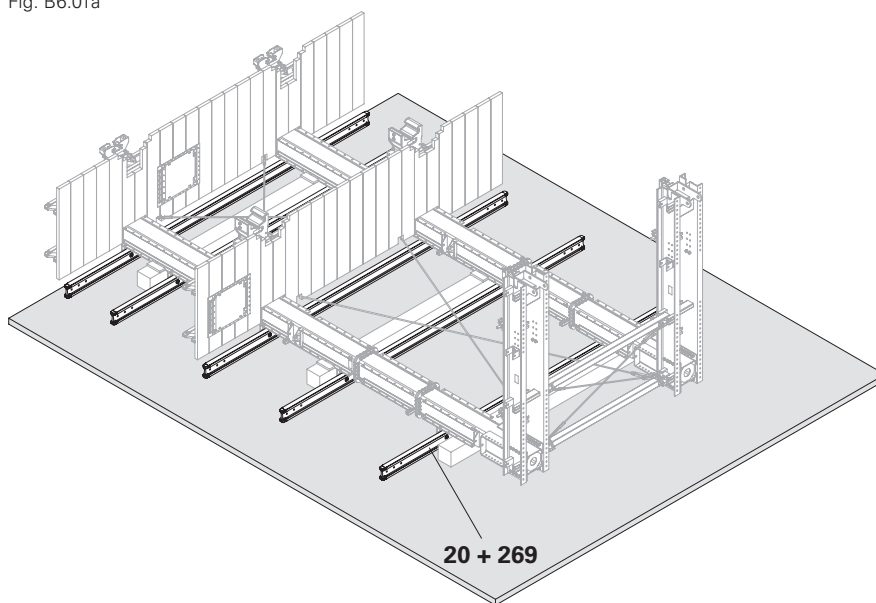


Fig. B6.02

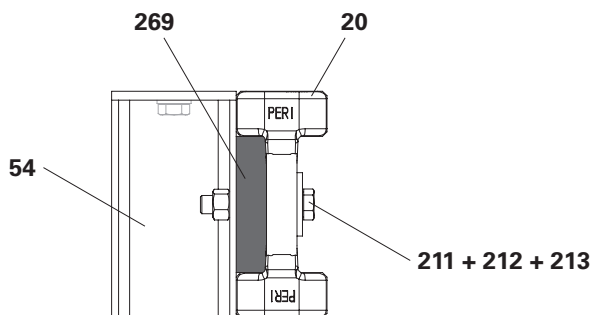


Fig. B6.03

B6 Installing the ladder cage

Components

- 202** Torx 6 x 80
- 227** Torx 6 x 100
- 267** Counter-batten
- 268** Ladder cage

Assembly

1. Screw the counter-batten (**267**) onto the Girder VT 20 (**20**) with Torx 6 x 100 (**227**). (Fig. B6.04)
2. Screw the ladder cage (**268**) onto the counter-batten (**267**) using Torx 6 x 80 (**202**). (Fig. B6.05)



The lowest guardrail board on each platform serves as a toe board. It must rest on the platform decking!

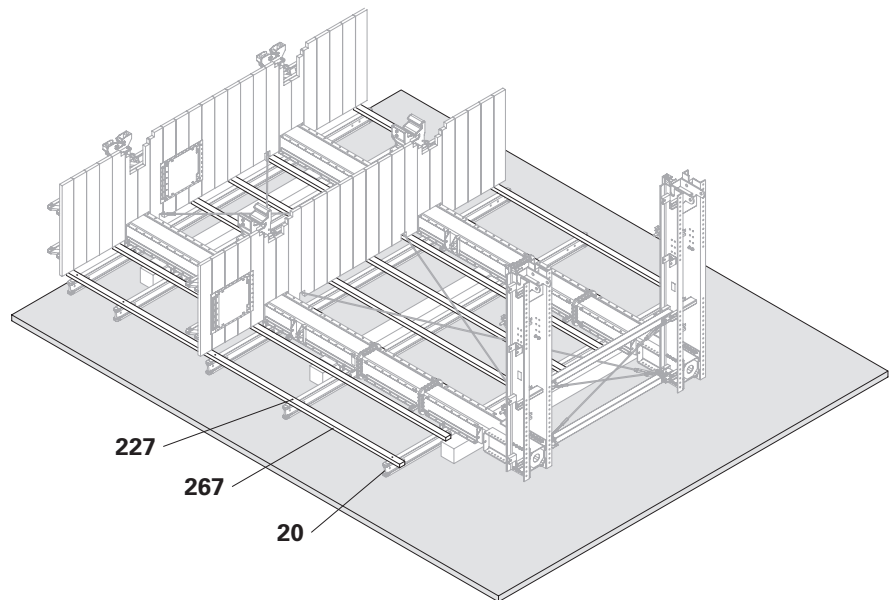


Fig. B6.04

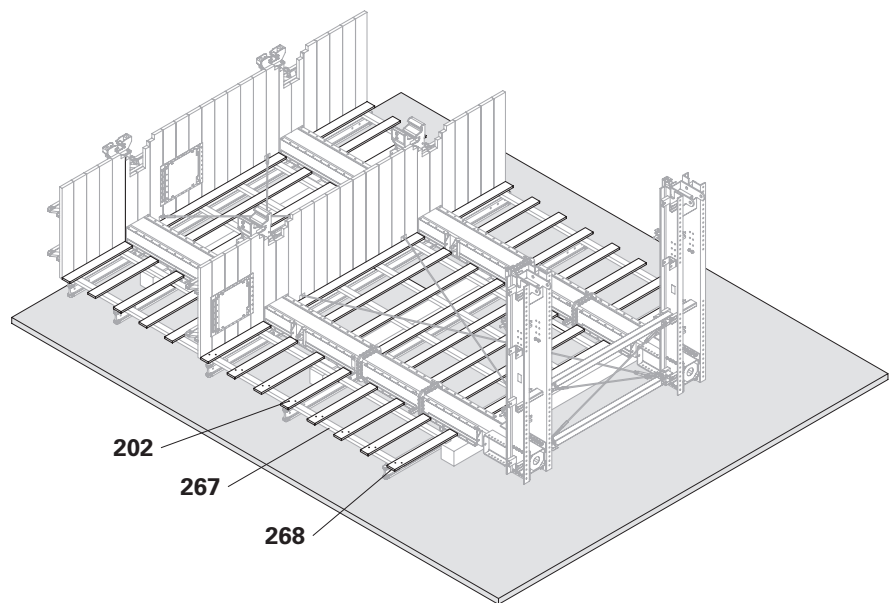


Fig. B6.05

B7 Installing the work platform (level +1)

General information

The work platform (level +1) is located above the work platform (level 0). Reinforcement and concreting work is carried out from here.

The work platform (level +1) is usually circumferential. From there you have access to the concreting platform (level +0.5) or the work platform (level 0) below. The concreting platform is not required for low concreting heights.

The work platform (level +1) consists of two platform sections with a ladder cage. There is an opening between the two platform sections that is closed entirely with hinged hatches.

Both platform sections are pre-assembled and then attached to the gallows of the climbing unit.

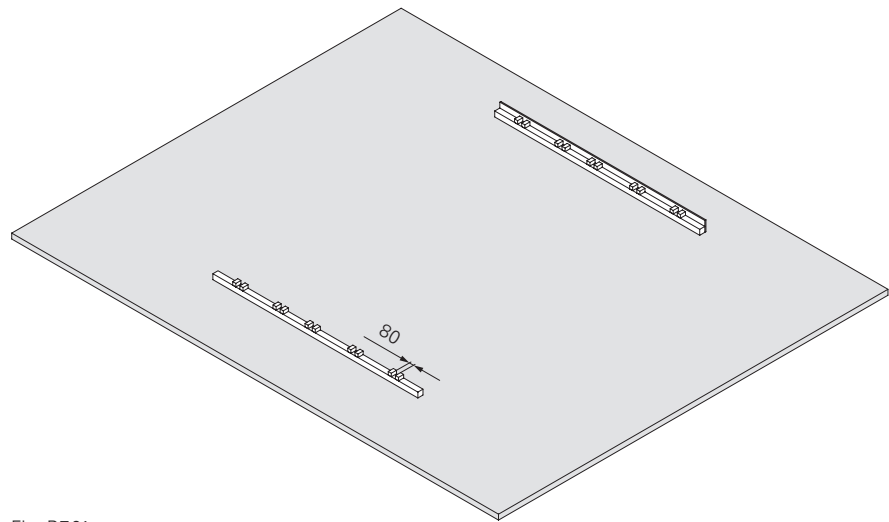


Fig. B7.01



Note

The hinged hatch may only be opened for reinforcement and concreting work.

Recommended platform decking distance

To adjacent platforms 5 cm
(25 mm shorter than the formwork on both the left and right).

Pre-assembling the platform sections



As assembly aids, prepare two squared timbers with a stop aid. Lay out the squared timbers at the assembly area and align them parallel to each other. (Fig. B7.01)

B7 Installing the work platform (level +1)



Installing the base sections

Components

- 21** Formwork Girder GT 24
- 44** Clamp GT 24 ACS
- 202** Torx 6 x 80
- 262** Planking
- 280** Hatch-2 RCS 55 x 60 foldable

1. Slide 4x Clamps GT 24 ACS (**44**) onto the Formwork Girder GT 24 (**21**).
2. Place the Formwork Girders GT 24 (**21**) on the squared timbers. The Clamps GT 24 ACS (**44**) hang down.
- (Fig. B7.02)
3. Saw the planking (**262**) to length.
4. Place the planking (**262**) on the Formwork Girders GT 24 (**21**), align them and screw them tight with 2x Torx 6 x 80 (**202**) for each girder.
- (Fig. B7.03)
5. Fit the hatch (**280**), see "Fitting the descent hatch" on page 67.
- (Fig. B7.04)



- If necessary, fix the planking at the descent hatch as well as at the transition piece.
- Do not fit planking in the area of the gallows.

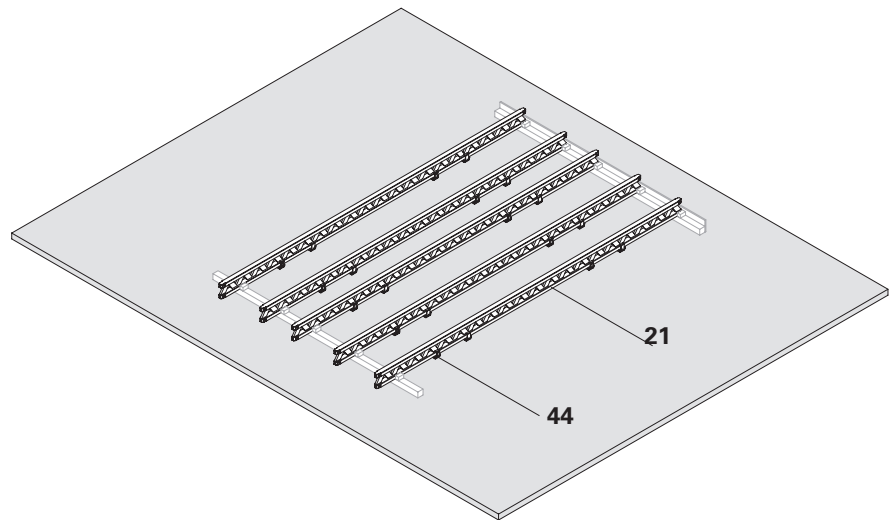


Fig. B7.02

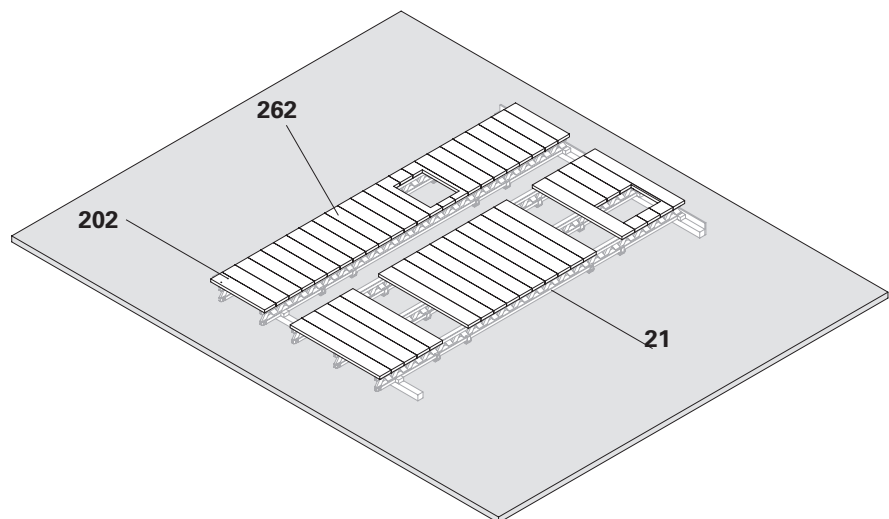


Fig. B7.03

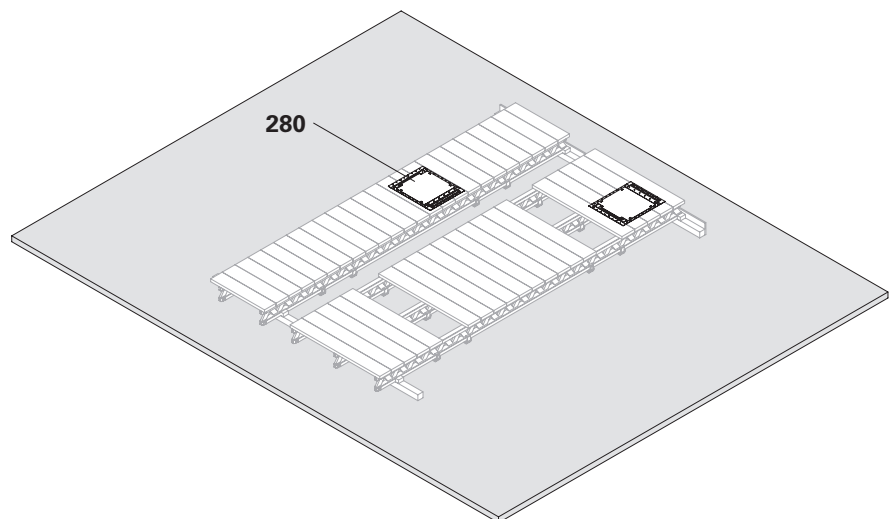


Fig. B7.04

B7 Installing the work platform (level +1)



Fitting the hinged hatches

Components

- 201** Torx 6 x 60
- 204** Torx 5 x 20
- 225** Washer ISO 7089 200 HV, A 8
- 246** Fire hose
- 277** Profiled timber
- 278** Hinged hatch

1. Screw the profiled timber (**277**) at the installation position onto the platform decking using Torx 6 x 60 (**201**).
2. Position the hinged hatch (**278**) at a distance of 10 mm from the profiled timber (**277**).
3. Mark the edge of the hinged hatch on the platform decking.
➔ When assembling the platform sections, align the hinged hatch with this marking.
4. Place the fire hose (**246**) over the middle of the profiled timber (**277**) and hinged hatch (**278**).
5. Screw the fire hose (**246**) onto the profiled timber (**277**) and hinged hatch (**278**) at a distance of 15 cm with Torx 5 x 20 (**204**) and Washer ISO 7089 200 HV, A 8 (**225**).

(Fig. B7.05 + B7.06 + B7.06a)

Note

Make sure that the support for the hinged hatches on both platform sections is sufficiently large and of equal size.

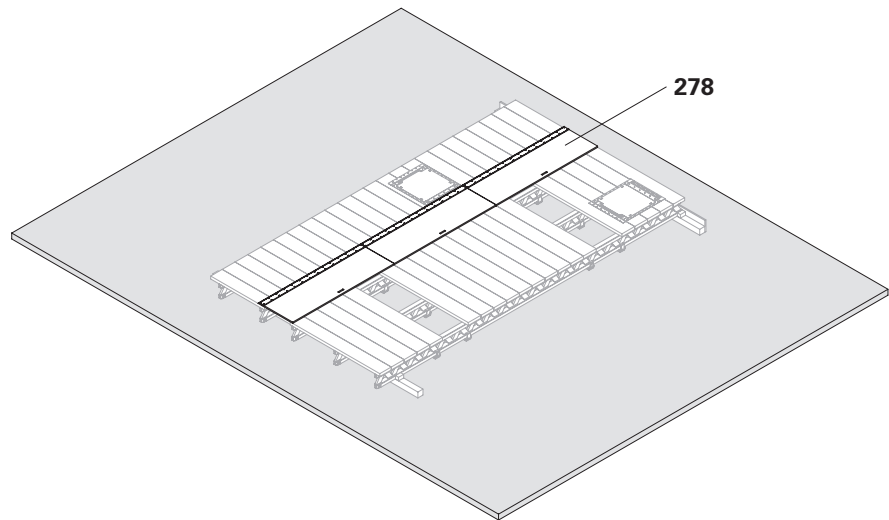


Fig. B7.05

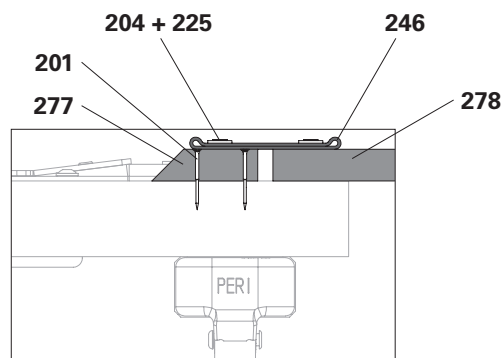


Fig. B7.06a

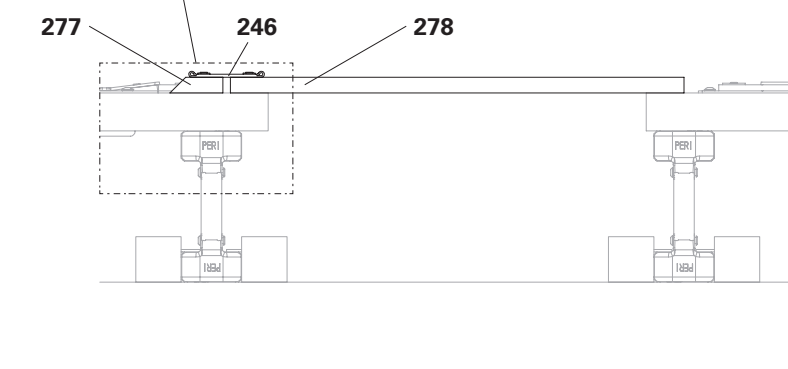


Fig. B7.06

B7 Installing the work platform (level +1)

Installing the ladder cage

Components

- 15** Guardrail Post PD 8
- 233** F.H. bolt DIN 603 M8 x 70 MU
- 252** Spax 5 x 40
- 263** Toe board
- 264** Guardrail board
- 272** Wooden wedge

1. Drill $\varnothing 9$ mm holes in the platform decking at the installation position for Guardrail Post PD 8 (**15**).
2. Screw Guardrail Post PD 8 (**15**) onto the platform decking with F.H. Bolt DIN 603 M8 x 70 MU (**233**).
3. Attach toe boards (**263**) and guardrail boards (**264**) to Guardrail Post PD 8 (**15**) and place wooden wedges (**272**) behind them.
4. Screw the boards onto the Guardrail Post PD 8 (**15**) with Spax 5 x 40 (**252**).

(Fig. B7.07)

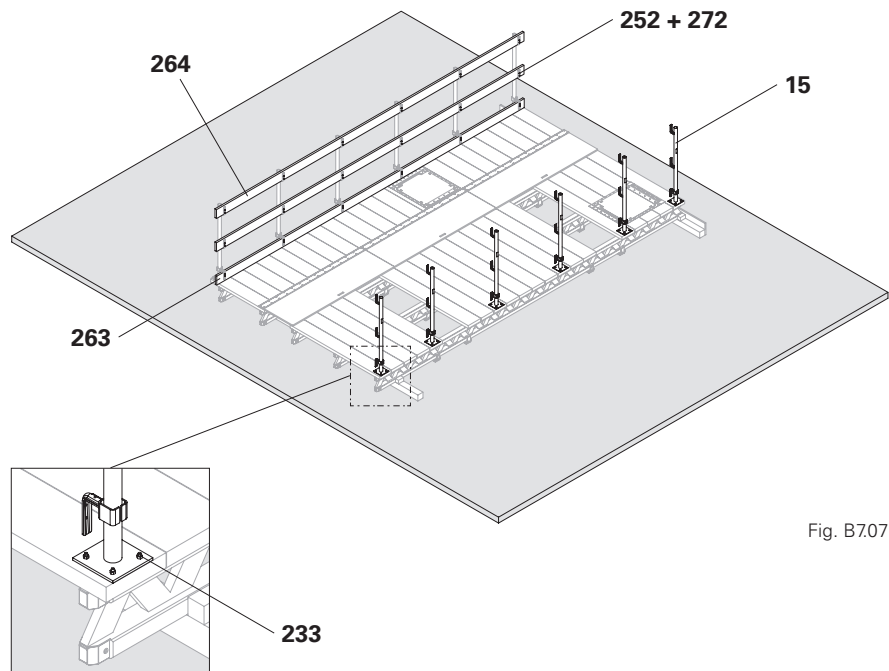


Fig. B7.07

Fig. B7.07a

B7 Installing the work platform (level +1)

Assembling the platform sections

Assembly

1. Mark the installation position of the Formwork Girder GT 24 (**21**) for the two platform sections on Gallows 3325 ACS-G (**49**).
2. Attach the platform section on the console bracket side to the crane.
3. Lift the platform section on the console bracket side into the installation position of Gallows 3325 ACS-G (**49**), align it and screw it onto the Gallows 3325 ACS-G (**49**) with the Clamps GT 24 ACS (**44**).

(Fig. B7.08)

4. Attach the rear side of the opposite platform section to the crane.
5. Lift the opposite platform section into the installation position of Gallows 3325 ACS-G (**49**), align it and screw it onto the Gallows 3325 ACS-G (**49**) with the Clamps GT 24 ACS (**44**).

(Fig. B7.09)



Make sure that the hinged hatches rest neatly on the platform decking of the platform section on the console bracket side. Note the marking!

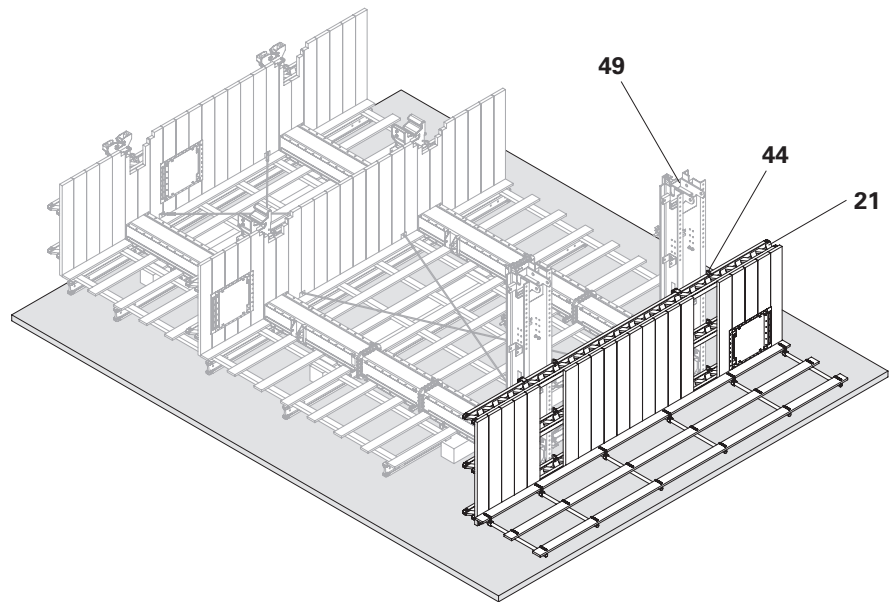


Fig. B7.08

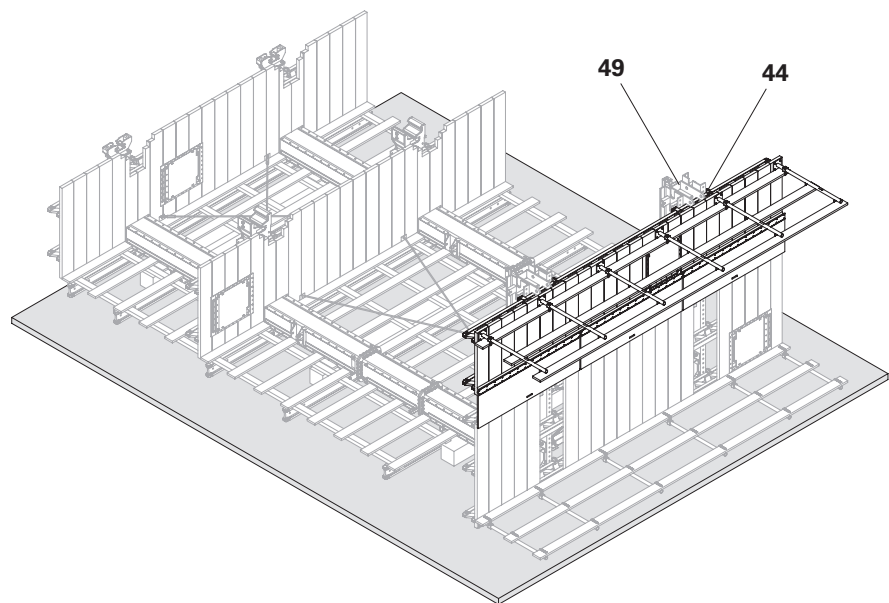


Fig. B7.09

B8 Completing the climbing unit

To complete the climbing unit, carry out the following assembly steps.

Components

- 140** Climbing Device ACS 100
- 146** Pressure Point Spindle M42 ACS

Installing the Climbing Device ACS 100

Attach the Climbing Device ACS 100 (**140**). See the Assembly Instructions for the 'ACS 100 Climbing Device and Hydraulics'.
(Fig. B8.01)

Fitting the ladder

Fit the ladder for the work platform and climbing platform. See "Fitting the ladder" on page 68.
(Fig. B8.01)

Fitting the pressure point spindle

1. Screw 2x Pressure Point Spindles M42 ACS (**146**) into each cantilever beam (level -1) (**41.2**) of the Console Bracket ACS-G (**41**).
2. Adjust Pressure Point Spindle M42 ACS (**146**).
The projection towards the front edge of the platform decking is 5 cm.
(Fig. B8.01)

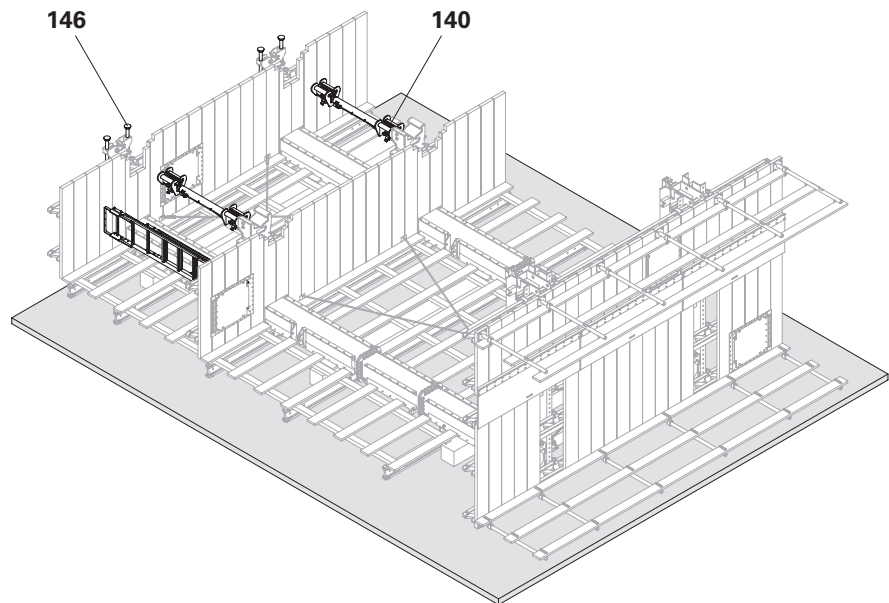


Fig. B8.01

General information

The counter-platform is suspended on the opposite side of the climbing unit. The formwork units on the opposite side are operated and anchored from here. If necessary, reinforcement work is also carried out from here. The counter-platform is usually circumferential.

Recommended platform decking distance

- To the structure 5 cm.
- To adjacent platforms 5 cm
(**25 mm shorter than the formwork on both the left and right**).



- As assembly aids, prepare two squared timbers with a stop aid. The dimension c corresponds to the bracket spacing. Lay out the squared timbers at the assembly area and align them parallel to each other.
- Height of the squared timbers > 25 cm.
- Height of the stops \leq 4.5 cm.

Assembling the platform sections

Components

-
- 21** Formwork Girder GT 24
 - 58** Platform Beam ACS
 - 59** Supporting Spindle ACS
 - 202** Torx 6 x 80
 - 222** F.H. bolt DIN 603 M8 x 100 MU
 - 262** Planking
 - 269** Shim VT 20
-

Assembling the base section

1. Lay out the Platform Beam ACS (**58**) in the bracket spacing. (Fig. B9.01)

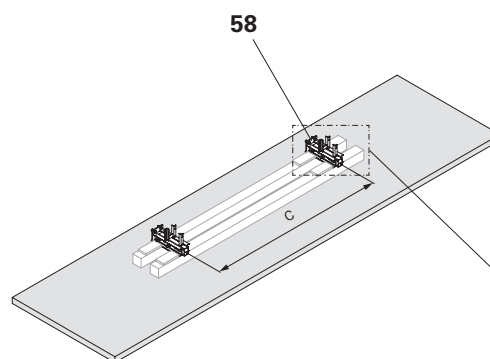


Fig. B9.01

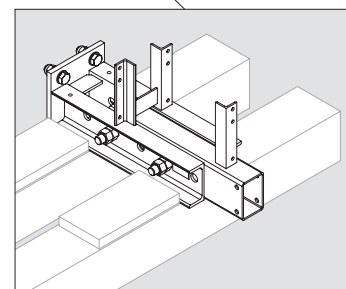


Fig. B9.01a

B9 Installing the counter-platform

2. Slide the base end of the Supporting Spindle ACS (59) into the Platform Beam ACS (58) and screw it to the front side of the Platform Beam ACS (58) with the fixing materials supplied. (Fig. B9.02 + B9.02a)
3. Place the Formwork Girders GT 24 (21) on the Platform Beams ACS (58) as girders and align them.
4. Pre-drill the Formwork Girders GT 24 (21) with $\varnothing 9$ mm holes and screw them to the Platform Beams ACS (58) with F.H. bolts DIN 603 M8 x 100 MU (222). (Fig. B9.03)



- Line the Formwork Girder GT 24 with a shim (269) on both sides. (Fig. B9.04)
- A shim is not required when Girder VT 20 is used.

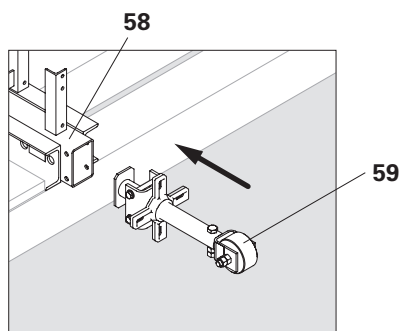


Fig. B9.02a

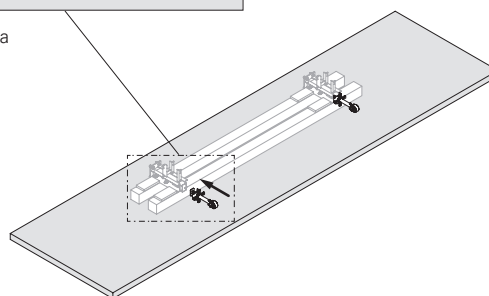


Fig. B9.02

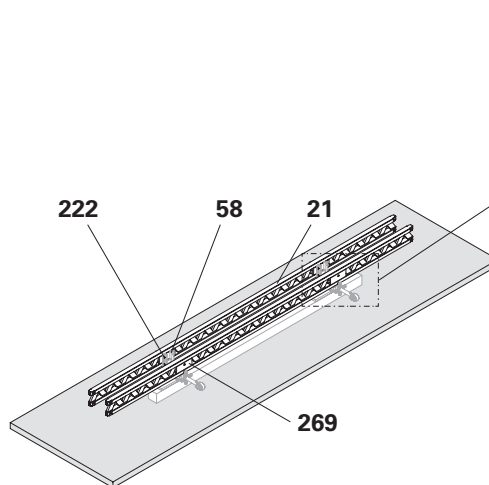


Fig. B9.03

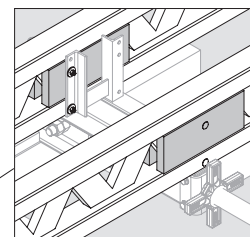


Fig. B9.03a

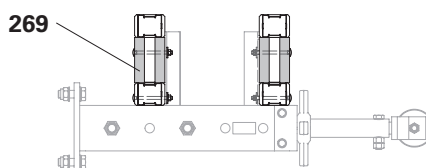


Fig. B9.04

B9 Installing the counter-platform

5. Saw the planking (262) to length.
6. Place the planking (262) on the Formwork Girders GT 24 (21), align them and screw them tight with 2x Torx 6 x 80 (202) for each girder.
7. Saw recesses in the platform decking for the Platform Post 5900 IPBL 240 ACS. (Fig. B9.05 + B9.06)



The dimensions $x_1 - x_3$ are project-specific.

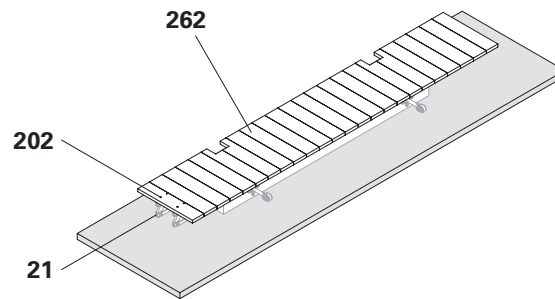


Fig. B9.05

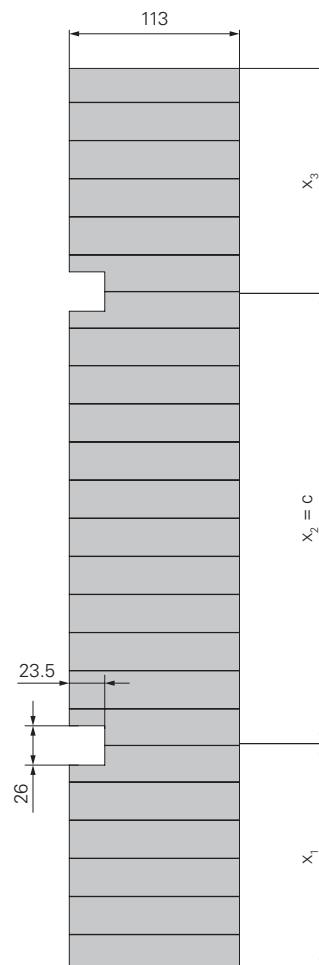


Fig. B9.06

B9 Installing the counter-platform



Components

- 20** Girder VT 20
- 54** Ladder Cage Connection VT 20 ACS
- 57** Platform Post 5900 IPBL 240 ACS
- 211** Bolt ISO 4014 M16 x 90-8.8
- 212** Washer ISO 7094 100 HV, A 16
- 213** Nut ISO 4032 M16-8
- 269** Shim VT 20

Assembling the rear section

1. Place the Platform Post 5900 IPBL 240 ACS (**57**) on squared timbers while observing the console bracket spacing. (Fig. B9.07)
2. Bolt the Ladder Cage Connection VT 20 ACS (**54**) at the installation position with the fixing materials provided. (Fig. B9.08 + B9.08a)

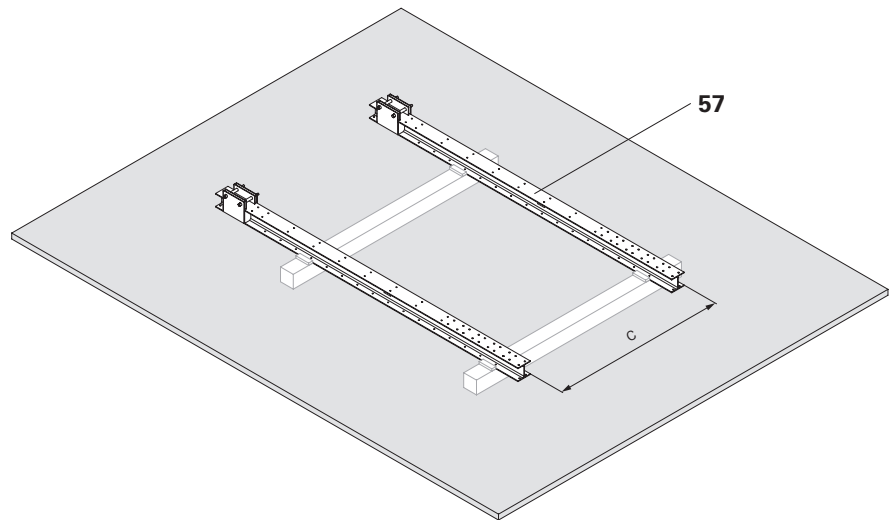


Fig. B9.07

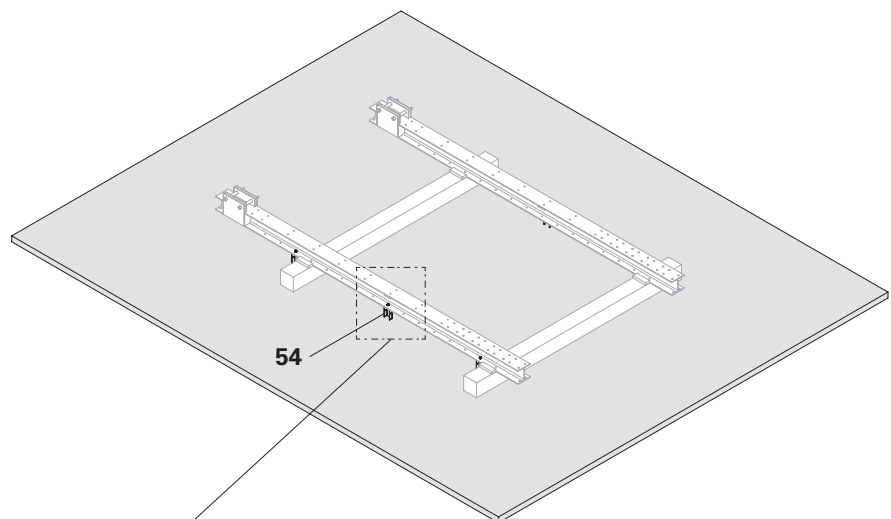


Fig. B9.08

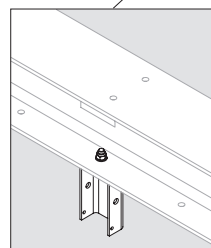


Fig. B9.08a

B9 Installing the counter-platform

3. Prepare Girder VT 20 (**20**) with Shim VT 20 (**269**). See "Girder VT 20 for the ladder cage" on page 63.
4. Screw the Girder VT 20 (**20**) onto the Ladder Cage Connection VT 20 ACS (**54**) using Bolt ISO 4014 M16 x 90-8.8 (**211**), Washer ISO 7094 100 HV A 16 (**212**) and Nut ISO 4032 M16-8 (**213**). (Fig. B9.09 + B9.09a)

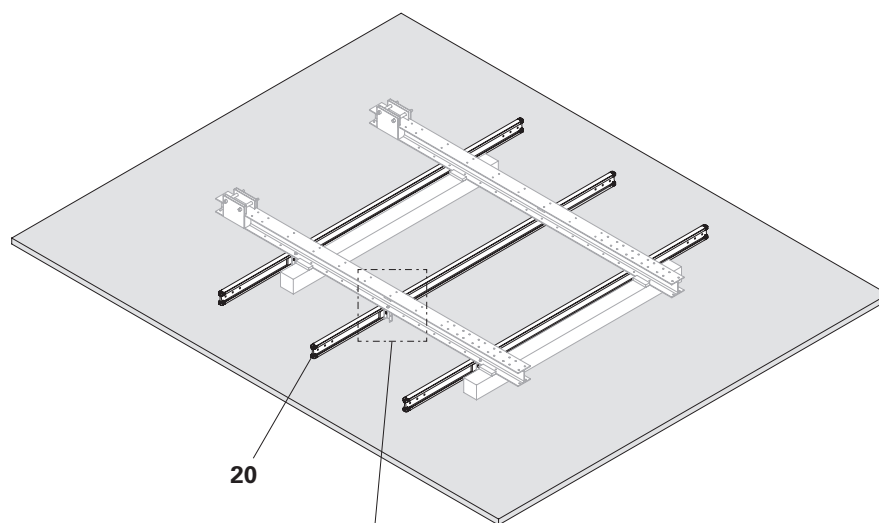


Fig. B9.09

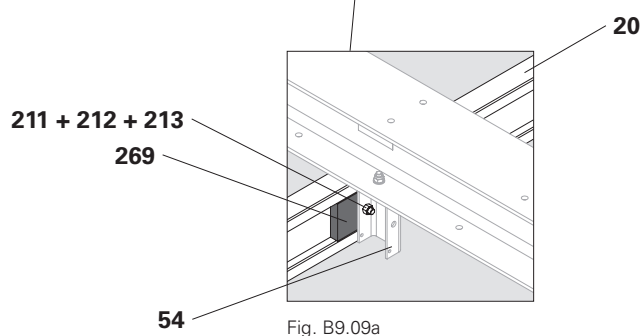


Fig. B9.09a

B9 Installing the counter-platform

Connecting the platform sections

Assembly

1. Attach the base section on the front of the Platform Beam ACS (58) to the crane and position it above the Platform Posts 5900 IPBL 240 ACS (57).
2. Screw both assemblies together with the fixing materials supplied.
(Fig. B9.10 + B9.10a)

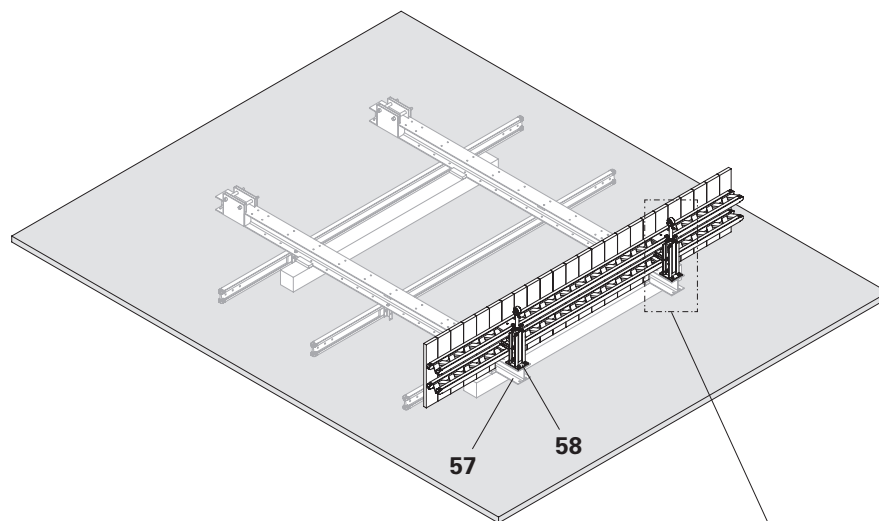


Fig. B9.10

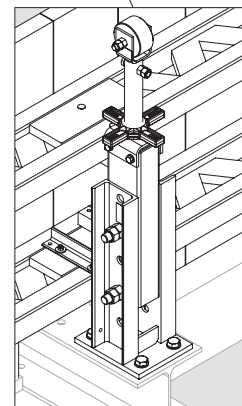


Fig. B9.10a

B9 Installing the counter-platform

Components

- 202** Torx 6 x 80
- 227** Torx 6 x 100
- 267** Counter-batten
- 268** Ladder cage

Installing the ladder cage

1. Screw the counter-batten (**267**) onto the Girder VT 20 (**20**) with Torx 6 x 100 (**227**). (Fig. B9.11)
2. Screw the ladder cage (**268**) onto the counter-batten (**267**) using Torx 6 x 80 (**202**). (Fig. B9.12)



The lowest guardrail board serves as a toe board. It must rest on the platform decking!

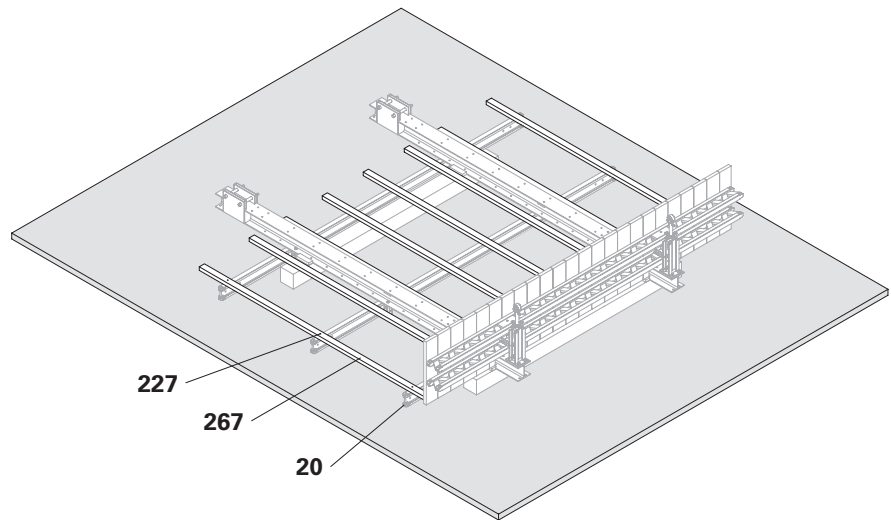


Fig. B9.11

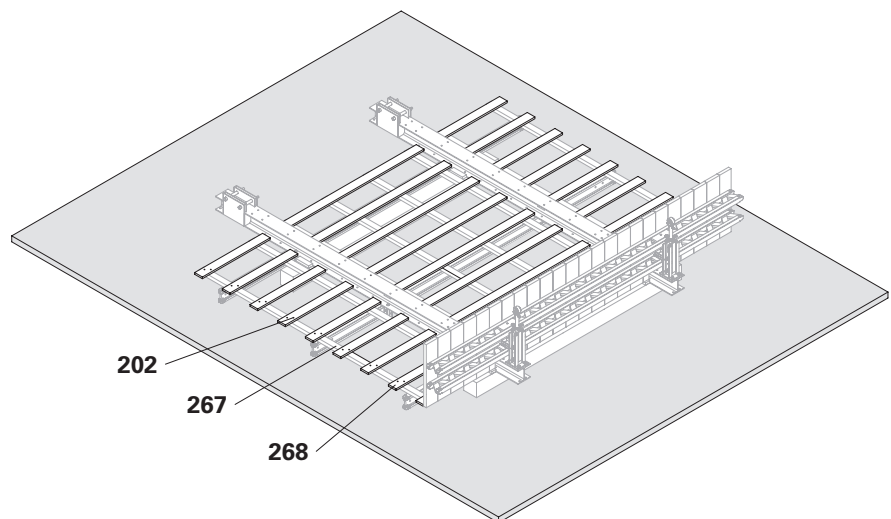


Fig. B9.12

B10 Installing the finishing platform (level -2)

General information

The finishing platform is beneath the climbing platform. The climbing shoes and the finishing climbing cones are removed from that position. If necessary, the tie holes are closed with concrete cones.

The finishing platform is usually circumferential. From here, you have access to the climbing platform above.

Recommended platform decking distance

- To the structure 5 cm.
- To adjacent platforms 5 cm
(25 mm shorter than the formwork on both the left and right).

Assembling the platform sections



- As assembly aids, prepare two squared timbers with a stop aid. The dimension c corresponds to the bracket spacing. Lay out the squared timbers at the assembly area at the distances specified and align them parallel to each other.
- Height of the squared timbers > 25 cm.
- Height of the stops \leq 4.5 cm.

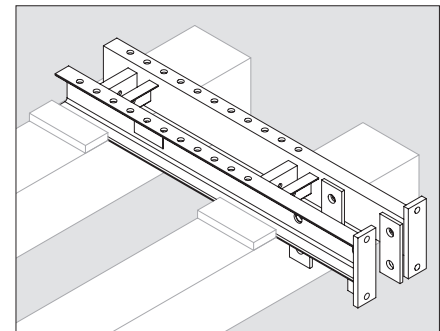


Fig. B10.01a

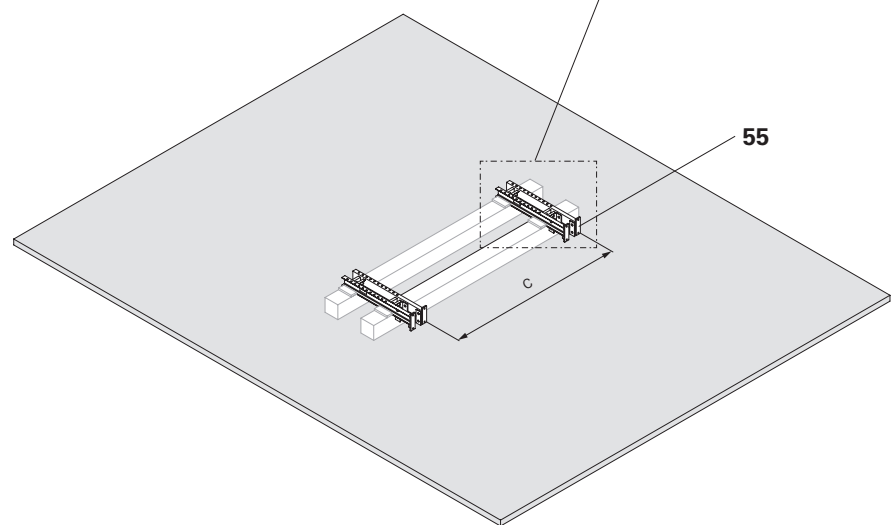


Fig. B10.01

Components

- 21 Formwork Girder GT 24
- 44 Clamp GT 24 ACS
- 55 Finishing Platform Beam 1365 ACS-G
- 202 Torx 6 x 80
- 262 Planking

Assembling the base section

1. Set the Finishing Platform Beam 1365 ACS-G (55) down on the squared timbers while observing the console bracket spacing. (Fig. B10.01 + B10.01a)

B10 Installing the finishing platform (level -2)

- Slide 4x Clamps GT 24 ACS (**44**) onto each Formwork Girder GT 24 (**21**).
- Place the Formwork Girder GT 24 (**21**) on the Finishing Platform Beam 1365 ACS-G (**55**), align it and screw it onto the Finishing Platform Beam 1365 ACS-G (**55**) with the Clamps GT 24 ACS (**44**).
(Fig. B10.02 + B10.02a)
- Saw the planking (**262**) to length.
- Place the planking (**262**) on the Formwork Girders GT 24 (**21**), align them and screw them tight with 2x Torx 6 x 80 (**202**) for each girder.
(Fig. B10.03)

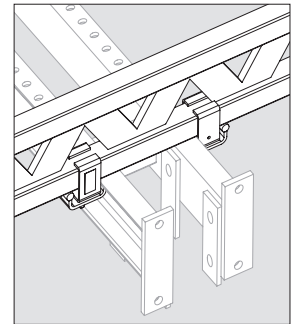


Fig. B10.02a

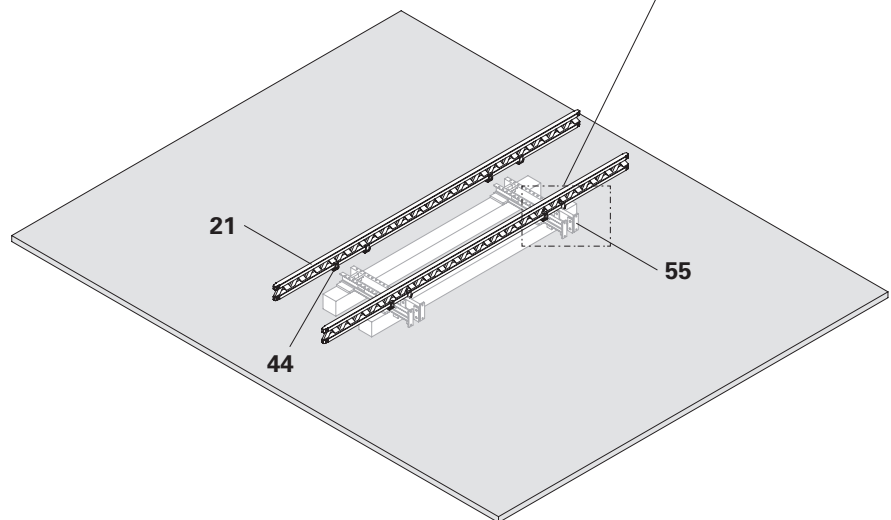


Fig. B10.02

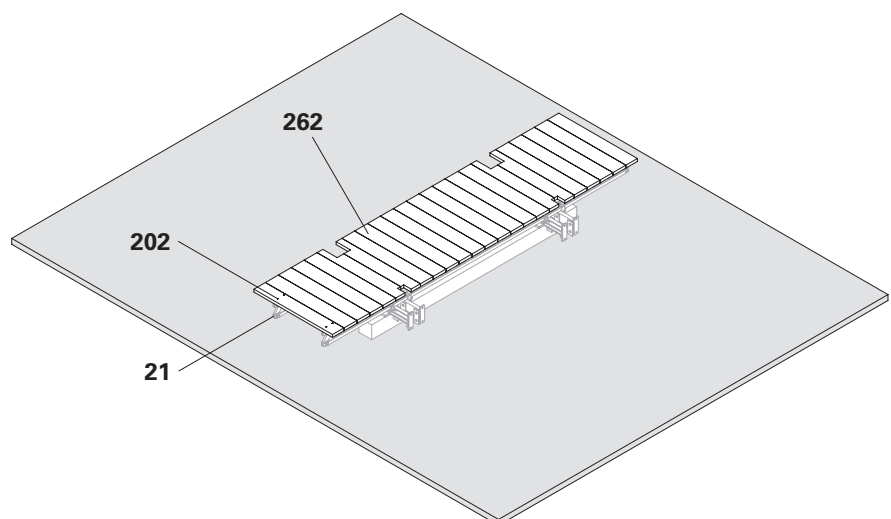


Fig. B10.03

B10 Installing the finishing platform (level -2)



6. Saw cut-outs in the platform decking.
(Fig. B10.04 + B10.05)



The dimensions $x_1 - x_3$ are project-specific.

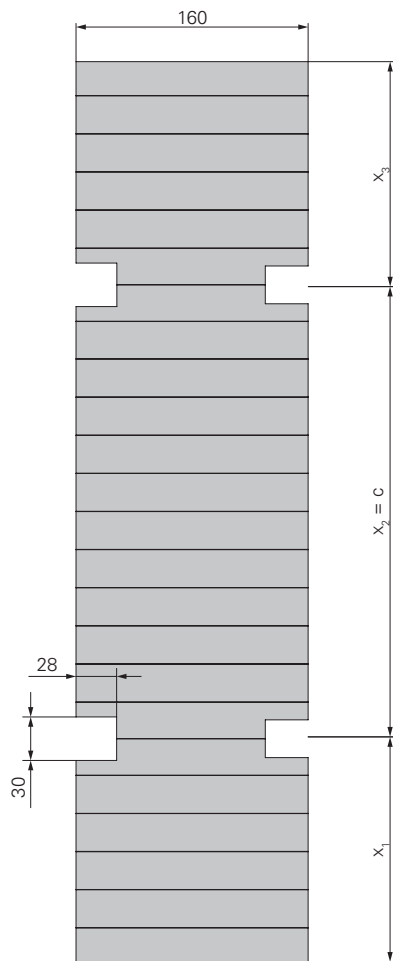


Fig. B10.04

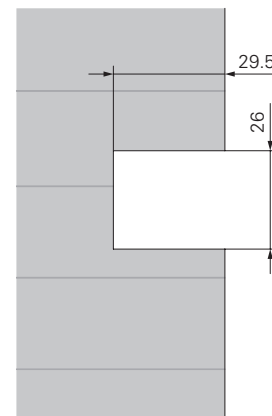


Fig. B10.05

B10 Installing the finishing platform (level -2)

Components

- 20** Girder VT 20
- 54** Ladder Cage Connection VT 20 ACS
- 56** Finishing Platform Vertical ACS-G
- 211** Bolt ISO 4014 M16 x 90-8.8
- 212** Washer ISO 7094 100 HV, A 16
- 213** Nut ISO 4032 M16-8
- 269** Shim VT 20

Assembling the rear section

1. Place the Finishing Platform Vertical ACS-G (**56**) on the squared timbers while observing the console bracket spacing c . (Fig. B10.06)
2. Bolt the Ladder Cage Connection VT 20 ACS (**54**) at the installation position with the fixing materials provided. (Fig. B10.07 + B10.07a)

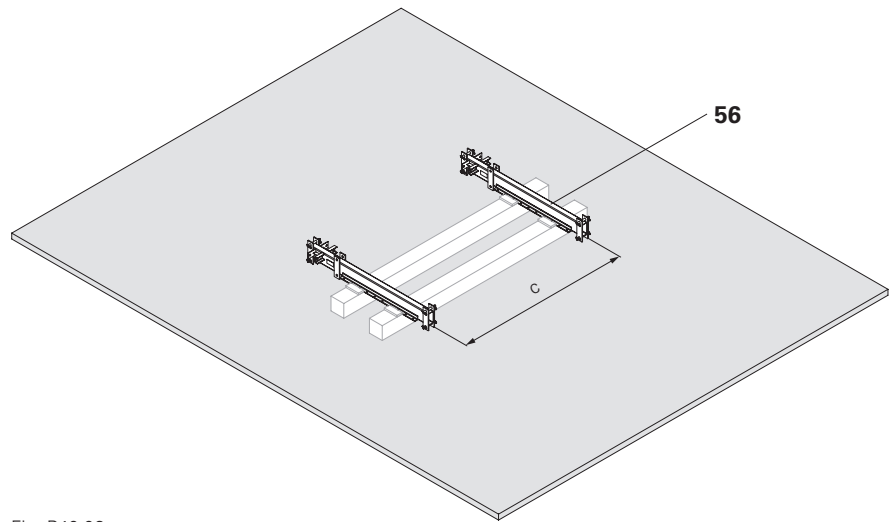


Fig. B10.06

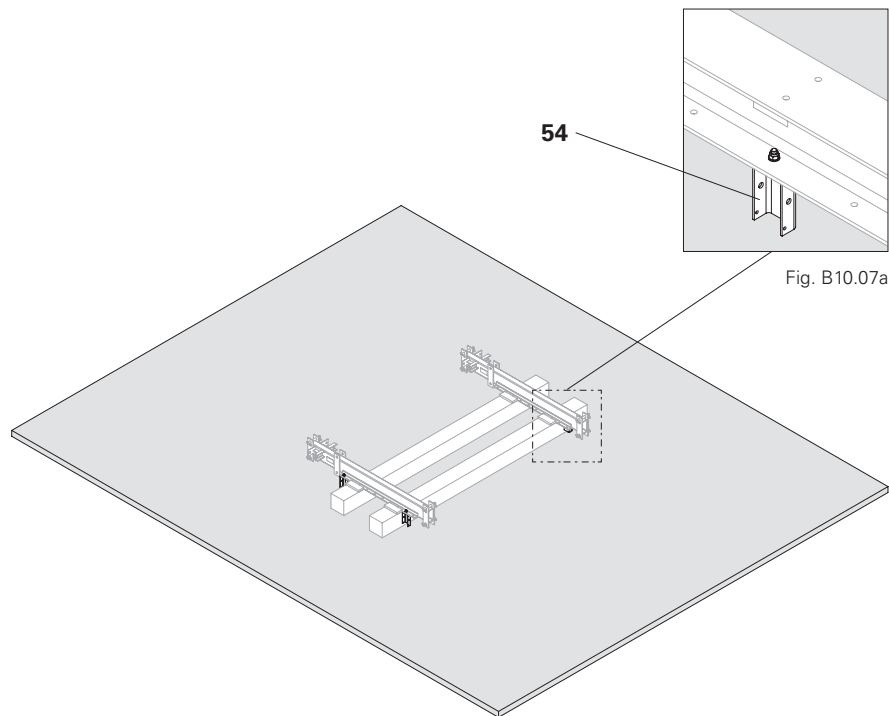


Fig. B10.07

B10 Installing the finishing platform (level -2)

3. Prepare Girder VT 20 (20) with Shim VT 20 (269). See "Girder VT 20 for the ladder cage" on page 63.
4. Screw the Girder VT 20 (20) onto the Ladder Cage Connection VT 20 ACS (54) using Bolt ISO 4014 M16 x 90-8.8 (211), Washer ISO 7094 100 HV A 16 (212) and Nut ISO 4032 M16-8 (213).

(Fig. B10.08 + B10.08a)

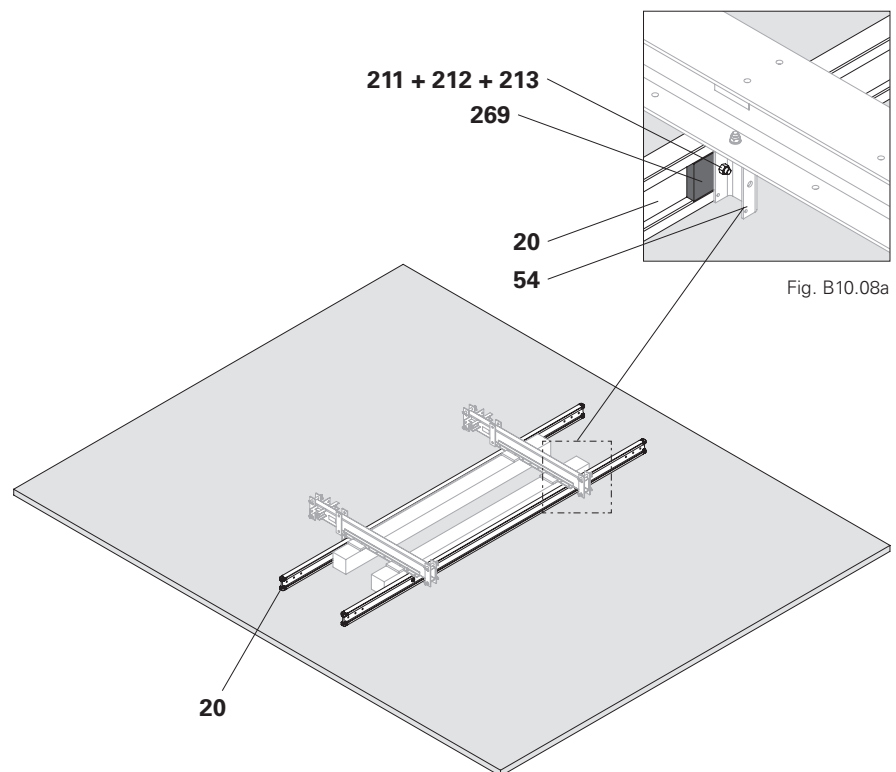


Fig. B10.08

Connecting the platform sections

Assembly

1. Attach the base section on the front of the Finishing Platform Beam 1365 ACS (55) to the crane and position it above the Finishing Platform Verticals ACS-G (56).
2. Connect both assemblies together with the fixing materials supplied. (Fig. B10.09 + B10.10)

Figure B10.10 shows the connection of the two assemblies on the rear side (view rotated by 180°).

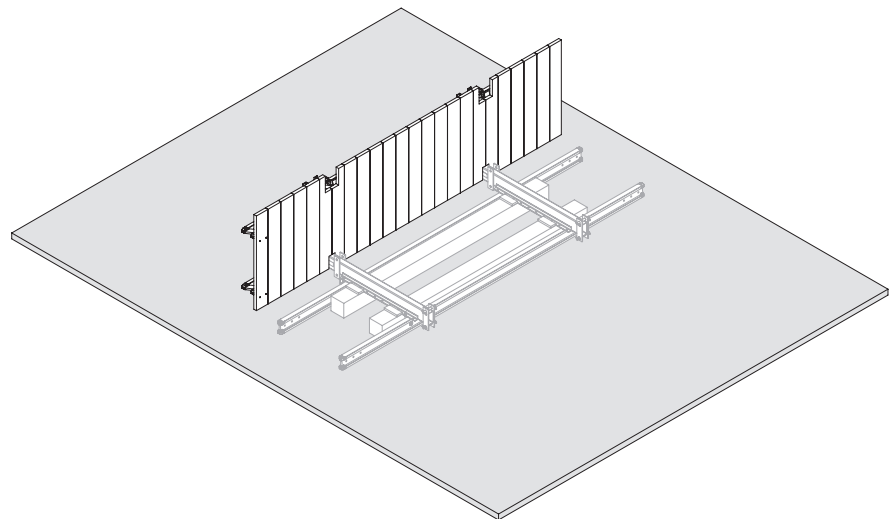


Fig. B10.09

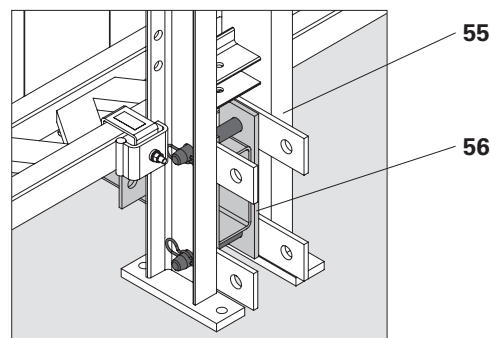


Fig. B10.10

B10 Installing the finishing platform (level -2)

Components

- 202** Torx 6 x 80
- 227** Torx 6 x 100
- 267** Counter-batten
- 268** Ladder cage

Installing the ladder cage

5. Screw the counter-batten (**267**) onto the Girder VT 20 (**20**) with Torx 6 x 100 (**227**). (Fig. B10.11)
6. Screw the ladder cage (**268**) onto the counter-batten (**267**) using Torx 6 x 80 (**202**). (Fig. B10.12)



The lowest guardrail board serves as a toe board. It must rest on the platform decking!

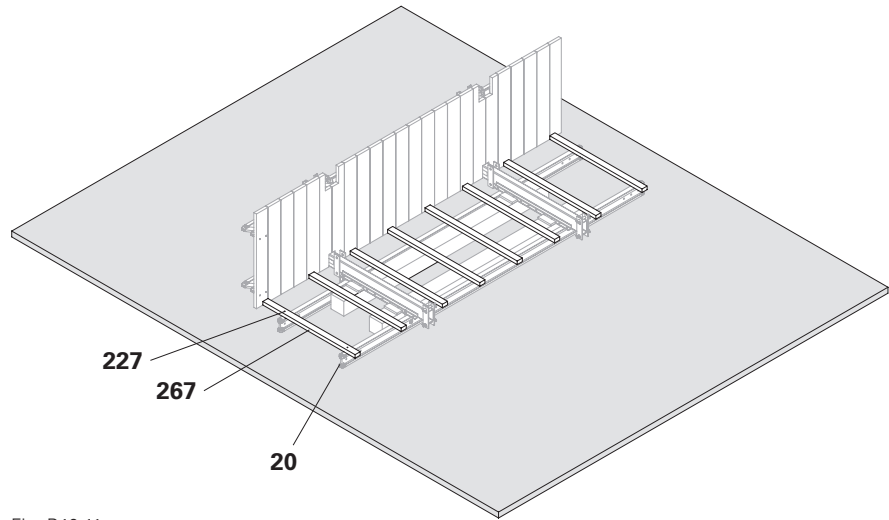


Fig. B10.11

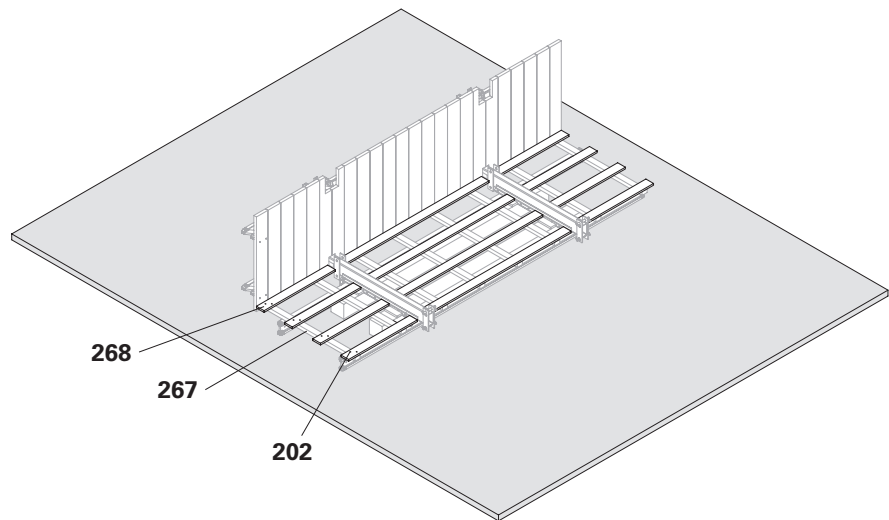


Fig. B10.12

General information

The structure of the climbing units on building edges corresponds to the structure of a normal climbing unit.

The difference is

- the cantilever arm is longer.
- the additional assembly of the lateral protection.

Implementation

For climbing units on building edges, one climbing unit is mounted flush with the building edge.

The second climbing unit is mounted offset towards the edge of the structure and has a longer cantilever arm. This projection facilitates the transition to the adjacent climbing unit.

The work, climbing and finishing platforms are built in the same manner. (Fig. B11.01 + B11.02)

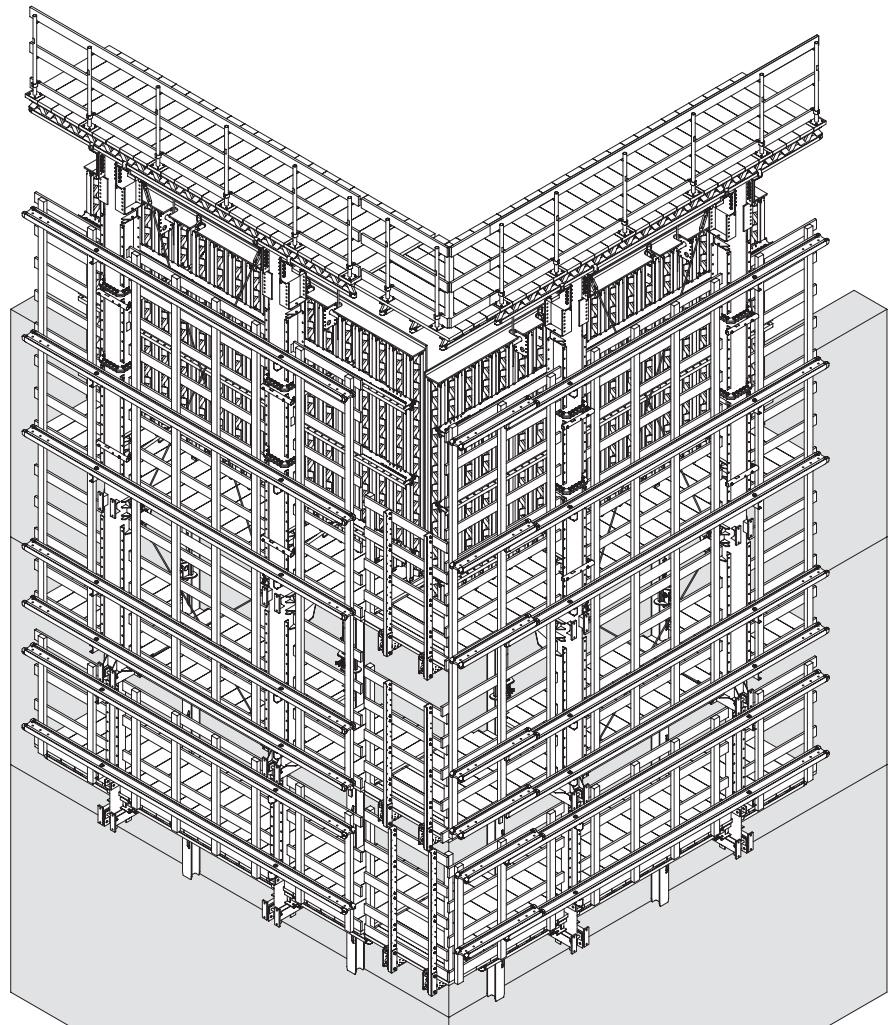


Fig. B11.01

B11 Corner platforms

Corner platforms level 0 to level -2

Figure B11.02 shows the corner platforms of two climbing units as viewed from above. The work platform (level +1) is not shown.

The lateral protection for the work platform (level 0), climbing platform (level -1) and finishing platform (level -2) is installed in the same way.

Corner platform level +1

The corner platforms have Gallows 1430 ACS-G and the work platforms (level +1) are adapted to suit the building edge found in each project.

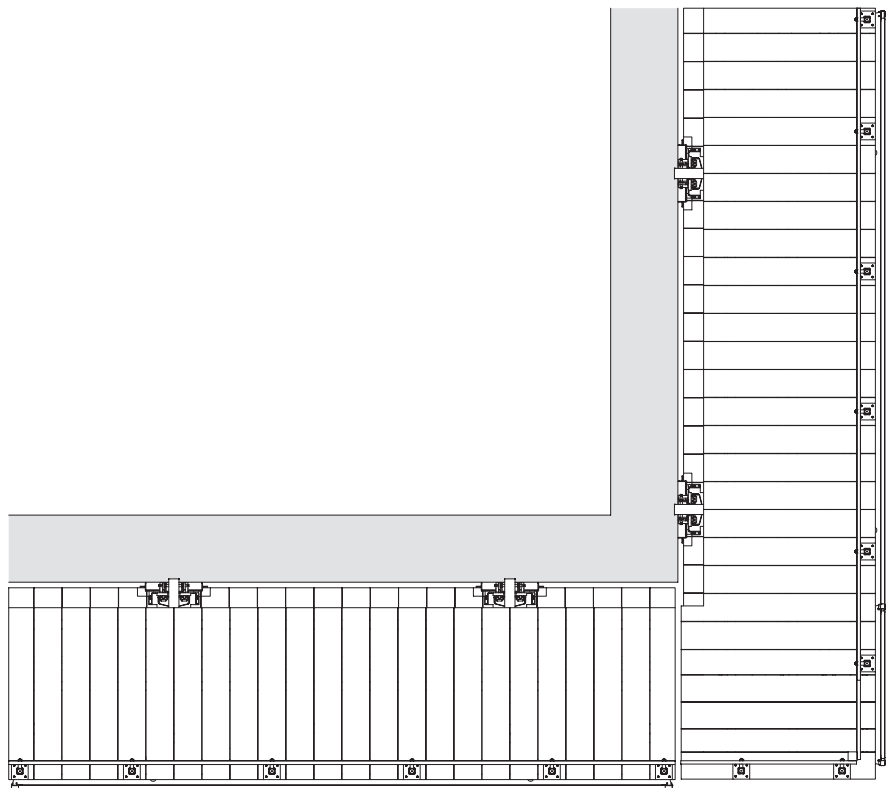


Fig. B11.02

Lateral protection variant 1

Components

- 14** Guardrail Post Holders Multi
- 17** Guardrail Post RCS/SRU 184
- 203** Squared timber angle connector 90°
- 204** Torx 5 x 20
- 232** F.H. bolt DIN 603 M8 x 60 MU
- 240** Bolt ISO 4014 M20 x 130-8.8
- 241** Nut ISO 7042 M20-8
- 242** Screw ISO 4014 M8 x 100-8.8
- 244** Nut ISO 7042 M8-8
- 263** Toe board
- 264** Guardrail board

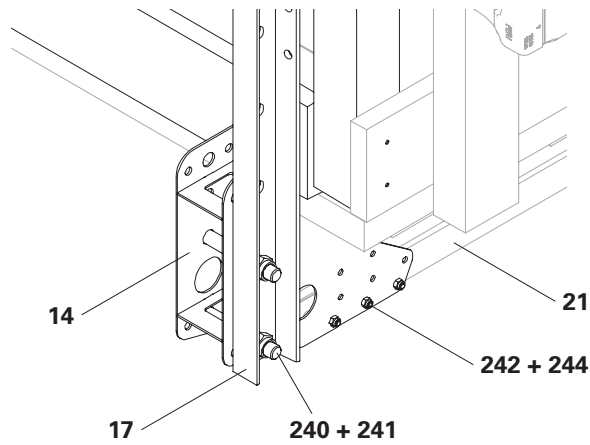


Fig. B11.03

Assembly

1. Slide the guardrail post holder multi (**14**) onto the Formwork Girder GT 24 (**21**) as far as it will go.
2. Pre-drill the Formwork Girder GT 24 (**21**) with \varnothing 9 mm. Fix Guardrail Post Holder Multi (**14**) to Formwork Girder GT 24 (**21**) using bolt ISO 4014 M8 x 100-8.8 (**242**) and nut M8 (**244**).
3. Screw the Guardrail Post RCS/SRU 184 (**17**) to the Guardrail Post Holder Multi (**14**) using bolt ISO 4014 M20 x 130-8.8 (**240**) and nut M20 (**241**).

(Fig. B11.03)

4. Saw the guardrail boards (**264**) to size. Pre-drill the boards with \varnothing 9 mm holes.

B11 Corner platforms

5. Screw the guardrail boards (264) onto Guardrail Post RCS 184 (17) with F.H. bolts DIN 603 M8 x 60 MU (232).
6. Cut the toe board (263) to size and screw it to the platform decking with 90° squared timber angle connectors. (not shown)

Connecting the ladder cage and lateral protection

Connect the ladder cage and lateral protection in order to improve the stability of the guardrail.

Components

- 201 Torx 6 x 60
- 275 Squared timber 8/8

Assembly

1. Saw a piece of squared timber 8/8 (275) to length. The squared timber must run all the way from the lower edge of the toe board to the upper edge of the ladder cage.
 2. Screw squared timber 8/8 (275) with 2x Torx 6 x 60 (201) per board to the ladder cage and toe board.
 3. Screw squared timber 8/8 (275) with 2x Torx 6 x 60 (201) per board to lateral protection and toe board.
- (Fig. B11.04)

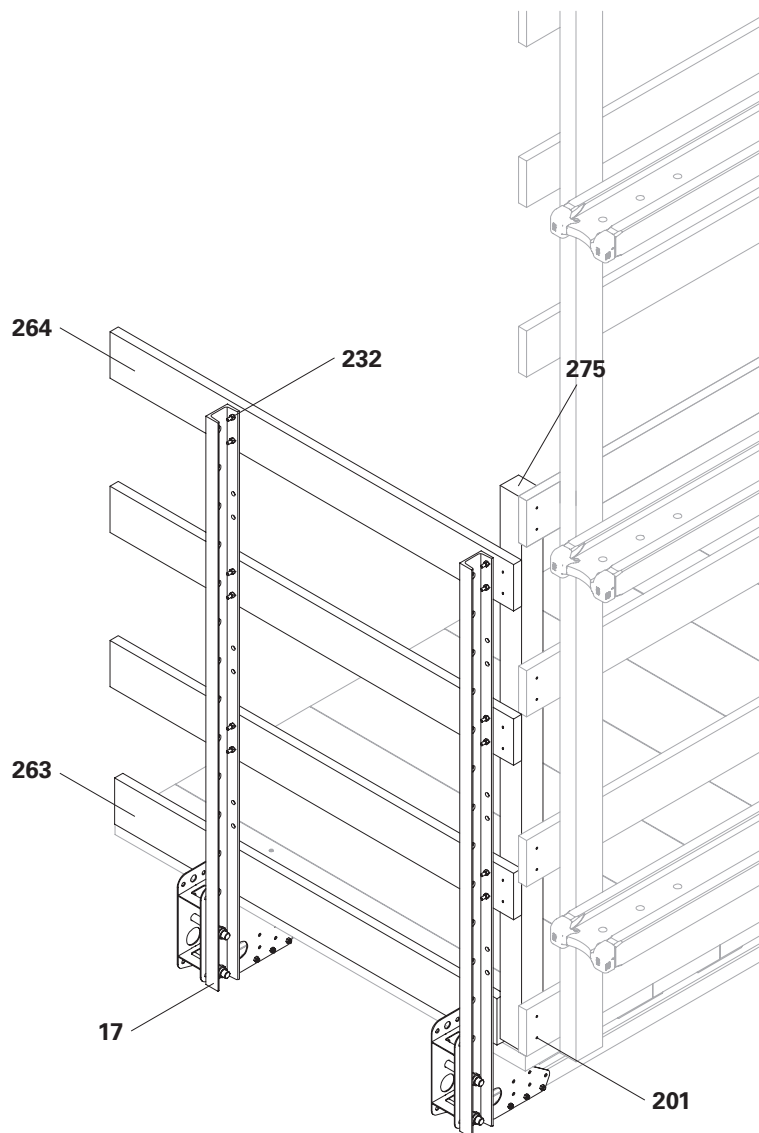


Fig. B11.04

Lateral protection variant 2

Components

- 14** Guardrail Post Holders Multi
- 16** Guardrail Post RCS 226
- 203** Squared timber angle connector 90°
- 204** Torx 5 x 20
- 232** F.H. bolt DIN 603 M8 x 60 MU
- 241** Nut ISO 7042 M20-8
- 242** Screw ISO 4014 M8 x 100-8.8
- 243** Bolt ISO 4014 M20 x 180-8.8
- 244** Nut ISO 7042 M8-8
- 263** Toe board
- 264** Guardrail board

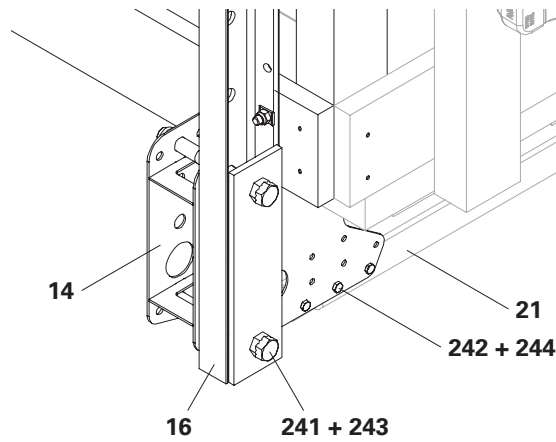


Fig. B11.05

Assembly

1. Slide the guardrail post holder multi (**14**) onto the Formwork Girder GT 24 (**21**) as far as it will go.
2. Pre-drill the Formwork Girder GT 24 (**21**) with \varnothing 9 mm. Fix Guardrail Post Holder Multi (**14**) to Formwork Girder GT 24 (**21**) using bolt ISO 4014 M8 x 100-8.8 (**242**) and nut M8 (**244**).
3. Screw the Guardrail Post RCS 226 (**16**) to the Guardrail Post Holder Multi (**14**) using bolt ISO 4014 M20 x 180-8.8 (**243**) and nut M20 (**241**).

(Fig. B11.05)

B11 Corner platforms

4. Saw the guardrail boards (264) to size. Pre-drill the boards with \varnothing 9 mm holes.
5. Screw guardrail boards (264) with F.H. bolts DIN 603 M8 x 60 MU (232) to Guardrail Post RCS 226 (16).
6. Cut the toe board (263) to size and screw it to the platform decking with 90° squared timber angle connectors. (not shown)

Connecting the ladder cage and lateral protection

Connect the ladder cage and lateral protection in order to improve the stability of the guardrail.

Components

- 201 Torx 6 x 60
- 275 Squared timber 8/8

Assembly

1. Saw a piece of squared timber 8/8 (275) to length. The squared timber must run all the way from the lower edge of the toe board to the upper edge of the ladder cage.
 2. Screw squared timber 8/8 (275) with 2x Torx 6 x 60 (201) per board to the ladder cage and toe board.
 3. Screw squared timber 8/8 (275) with 2x Torx 6 x 60 (201) per board to lateral protection and toe board.
- (Fig. B11.06)

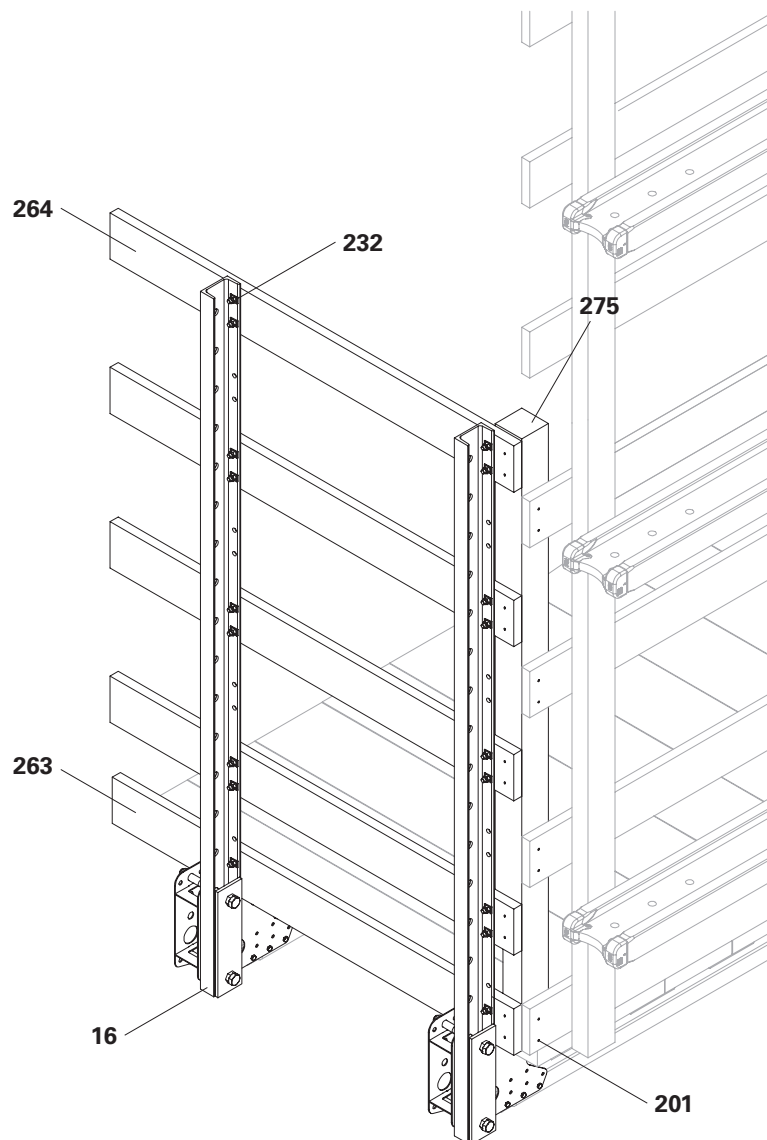


Fig. B11.06

Preparing the formwork

Formwork units are usually delivered to the construction site by PERI in a pre-assembled state. The assembly of formwork units is not the subject of these instructions.

When using Climbing Shoe II ACS, the Leading Tie Plate ACS 399 must also be mounted on the formlining.

Components

170	Climbing Cone-2 M30/DW 20
173	Anchor Positioning Plate M30
174	Hex. wood screw DIN 571 6 x 20
175	Positioning Screw M30
176	Leading Tie Plate ACS 399
201	Torx 6 x 60
238	F.H. bolt DIN 603 M8 x 45 MU

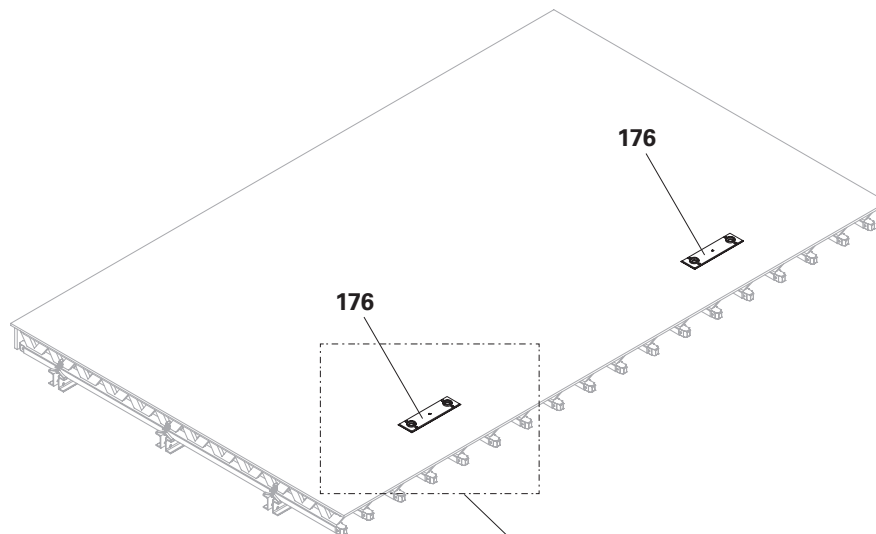


Fig. C1.01

Assembly

1. Place the formwork unit on squared timbers with the formlining facing upwards.
2. Remove the plastic caps from the pre-drilled tie holes.
3. Place the Leading Tie Plate ACS 399 (176) on the formlining (270) and align it congruently with the tie holes.
4. Temporarily fix the Leading Tie Plate ACS 399 (176) with Torx 6 x 60 (201).
5. Mark the holes for the truss-head screws and drill $\varnothing 9$ mm holes.
6. Screw down the Leading Tie Plate ACS 399 (176) with F.H. bolt DIN 603 M8 x 45 MU (238).

(Fig. C1.01 + C1.01a)

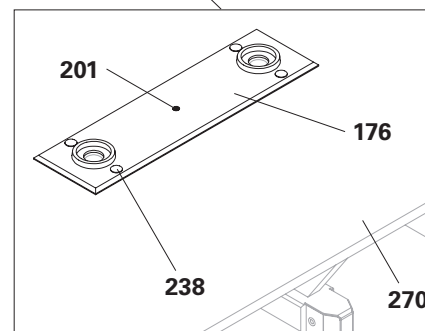


Fig. C1.01a

C1 First concreting section

7. Turn the formwork unit and place it on the formlining. Support the formwork unit so that the leading tie plates (176) are freely accessible.
 8. For precise assembly of the Anchor Positioning Plate M30 (173), hold the Climbing Cone-2 M30/DW 20 (170) against the Leading Tie Plate ACS 399 (176).
 9. Screw down the Climbing Cone-2 M30/DW 20 (170) from the opposite side with the Positioning Screw M30 (175) and the Anchor Positioning Plate M30 (173).
 10. Align the Anchor Positioning Plate M30 (173) and screw it onto the formlining with wood screw 6 x 20 (174).
 11. Remove Climbing Cone-2 M30/DW 20 (170) and Positioning Screw M30 (175).
- (Fig. C1.02 + C1.02a)

Lateral view

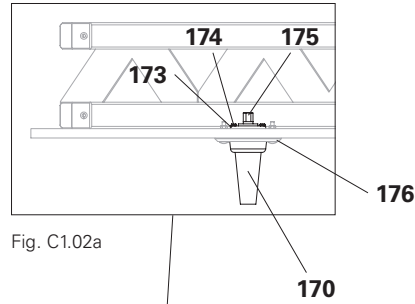


Fig. C1.02a

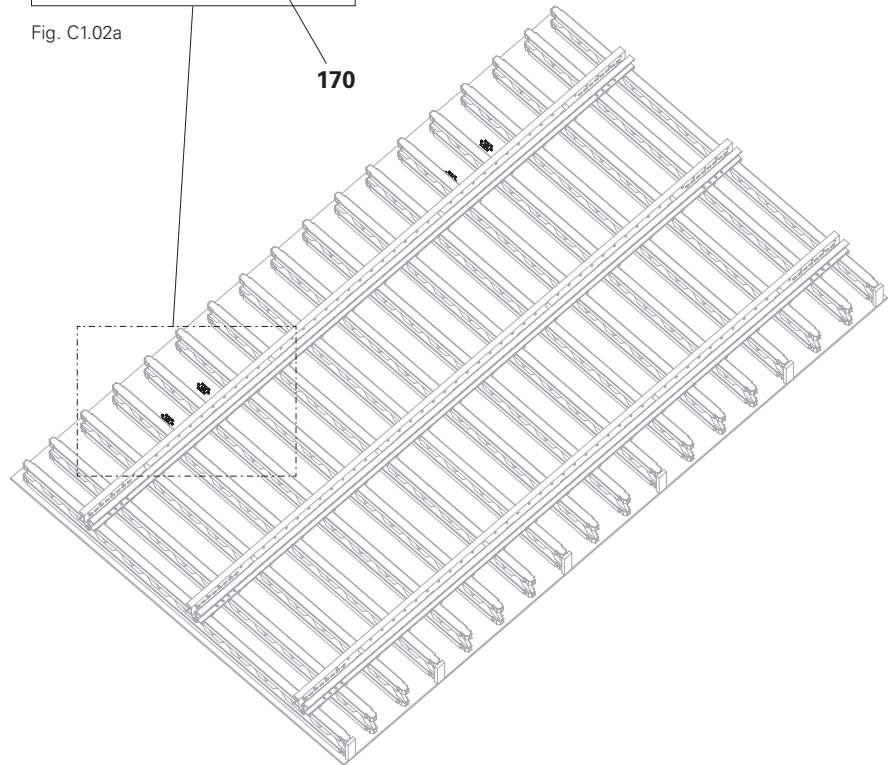


Fig. C1.02

! Note

- Attach the formwork unit to the 9 t liftingbeam with two crane splices 24 to ensure that the lifting and transport processes are carried out safely.
- If a 9 t lifting beam is not used, fit a compression brace between the crane splices 24.

C1 First concreting section

Concreting the starter

1. Position formwork for the first concreting section.
 2. Carry out the reinforcement work.
 3. Attach the climbing ties (**167**) to the positioning formwork and, if necessary, to the closing formwork.
 4. Close the formwork and fit the formwork ties.
 5. Concrete the starter.
- (Fig. C1.03 + C1.03a)

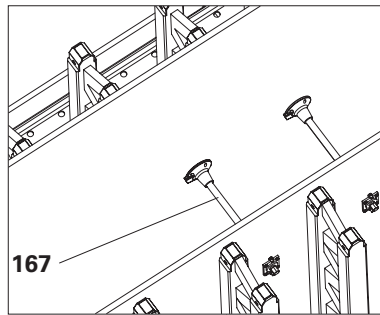


Fig. C1.03a

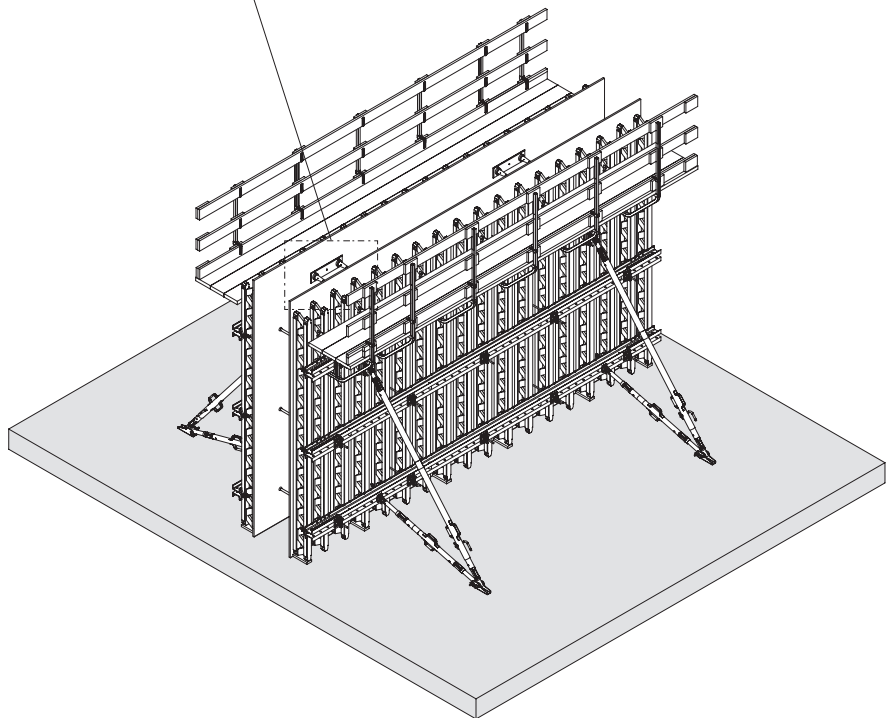


Fig. C1.03

C2 Installing the anchoring

Precondition



Note

First concreting section is hardened and can be struck.

Removing the formwork

1. Remove Positioning Screws M30 (175).
2. Remove the formwork ties.
3. Attach the closing formwork to the crane.
4. Remove the Push-Pull Props RS (30) from the closing formwork.
5. Fly out the closing formwork and store it temporarily at the installation site.
6. Attach the primary formwork to the crane.
7. Remove the Push-Pull Props RS (30) from the primary formwork.
8. Fly out the primary formwork and store it temporarily at the installation site.

(Fig. C2.01 + C2.01a)

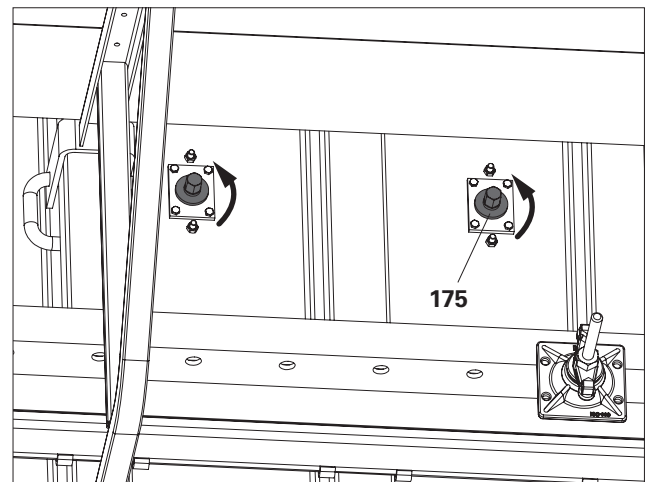


Fig. C2.01a

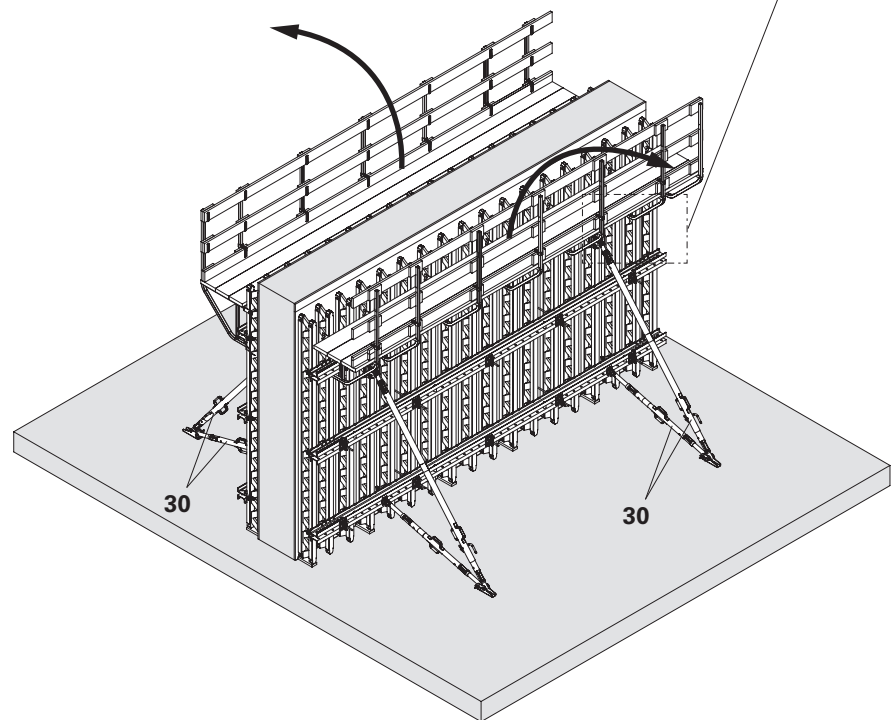


Fig. C2.01

Installing the tie tube and climbing shoe



Note

- The Tie Tubes ACS on the right and left must only be used in pairs.
- The cylinder screws (**180**) must be tightened without play.

Components

- 161** Climbing Shoe-II ACS
- 163** Tie Tube ACS, right
- 164** Tie Tube ACS, left
- 180** Cyl. bolt ISO 4762 M30 x 110-10.9

Assembly

1. Screw the Tie Tube ACS on the right (**163**) and Tie Tube ACS on the left (**164**) onto the climbing ties using two cylinder bolts M30 x 110 (**180**) in each case.
2. Slide the Climbing Shoes II ACS (**161**) onto the Tie Tubes ACS (**163 + 164**).
3. Position Climbing Shoes II ACS (**161**) so they correspond to the console bracket spacing of the climbing unit.
4. Fix Climbing Shoes II ACS (**161**) with the clamping screw (**161.1**) on the Tie Tubes ACS (**163 + 164**).

(Fig. C2.02)

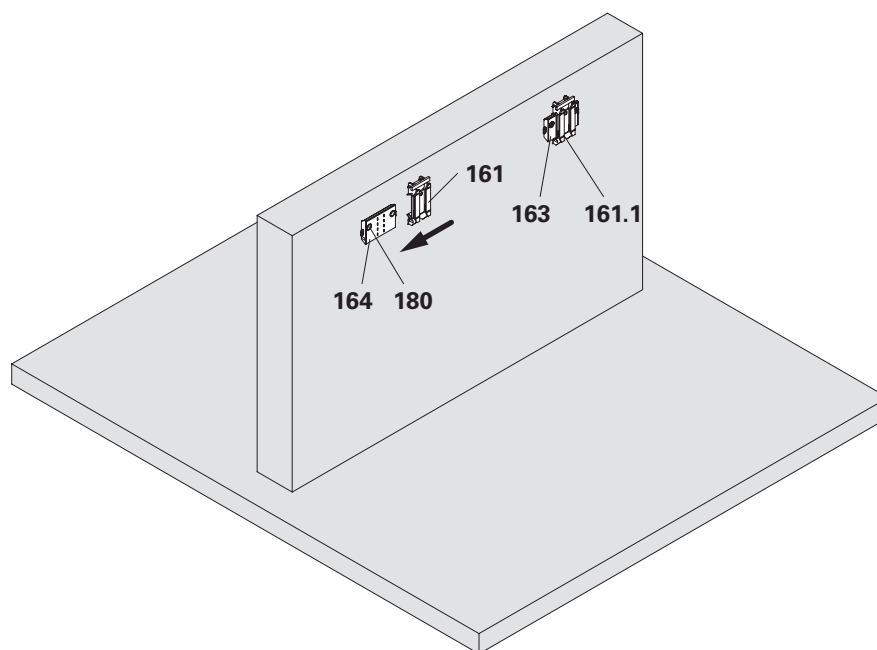


Fig. C2.02

Precondition

- The climbing unit with work platform (level +1), work platform (level 0) and climbing platform (level -1) has been installed.
- The counter-platform and finishing platform (level -2) are pre-assembled.
- The ladder descent is prepared for final assembly.

General information



- Use long two-sling lifting gear to attach the assembly.
- Minimum chain length L:
 $L \geq \text{distance between attachment points}$
- Ideal chain length L:
 $1.5x \text{ to } 2x \text{ console bracket spacing } c$
- Alternatively, make use of a 9 t lifting beam.

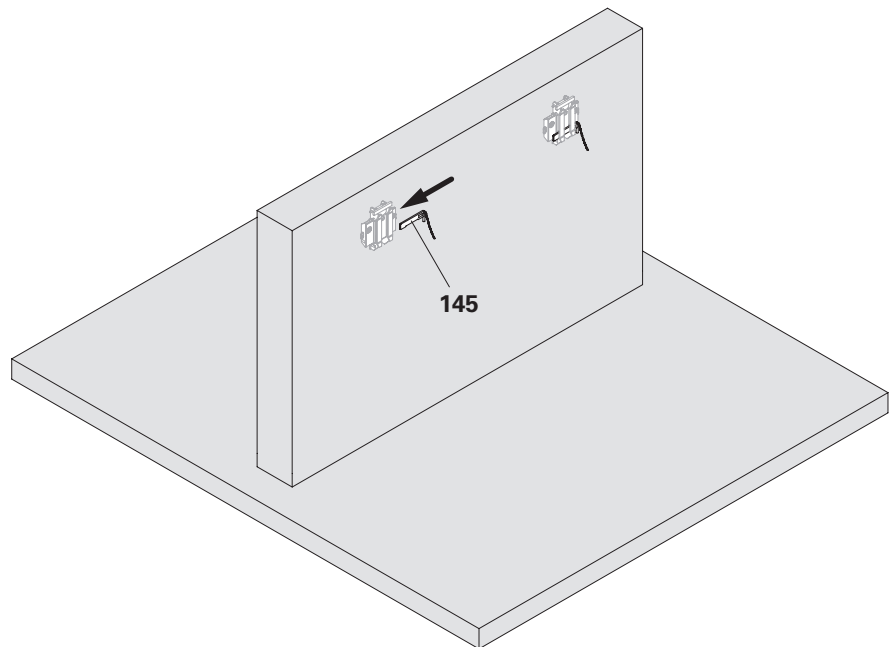


Fig. C3.01

Preparation

Components

- 145** Ledger ACS
- 219** Binding wire

Assembly

1. Install temporary anti-fall protection as lateral protection, e.g. with a Guardrail Post PD 8 and guardrail board.
 On both sides in the case of the first climbing unit that is attached, on the open side on all other climbing units.
2. Insert Ledger ACS (**145**) into Climbing Shoe II (**161**).

(Fig. C3.01)

3. Fold the swing ledger (**161.2**) upwards and fix it temporarily to the reinforcement with binding wire (**219**).

(Fig. C3.02)

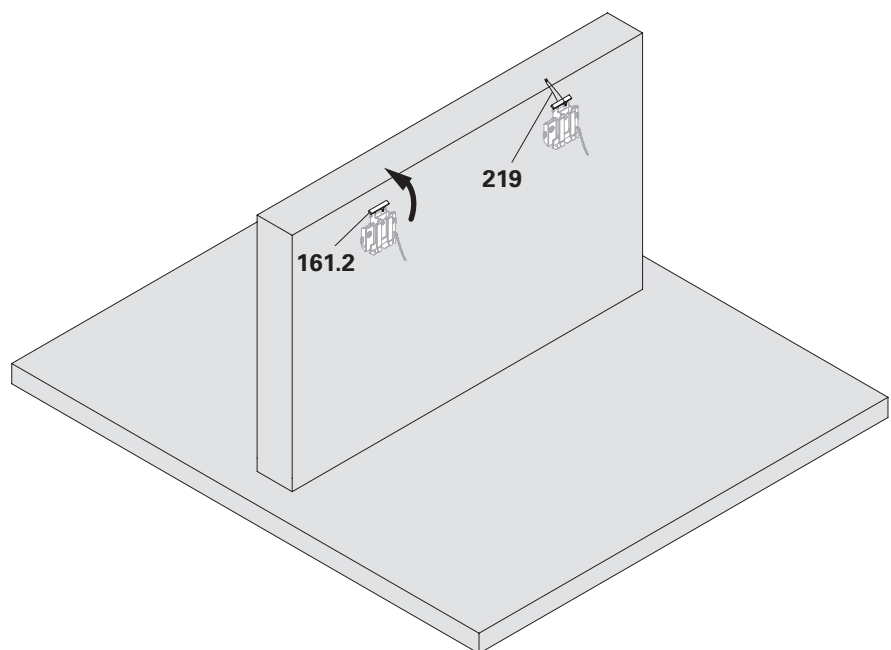


Fig. C3.02



Has the Ledger ACS engaged fully in the recess of the climbing shoe?

C3 Mounting the climbing unit



Installing the formwork

Components

- 215** Betomax 20
- 216** Suspended Tube 530 ACS
- 217** Hex. Nut DW 20,
AF 36/60
- 273** Formwork unit

Assembly

1. Place the console bracket side of the formwork unit (**273**) on the ladder cage of the climbing unit.
→ Make sure that the formwork unit is in contact with the platform decking of the work platform (level 0)!
 2. Temporarily fix the Steel Waler SRU of the formwork unit (**273.1**) to the vertical post intermediate (**45**).
- (Fig. C3.03 + C3.04)



Prop up the formwork unit at the lower end with timber wedges. This means that the formwork unit is ready to be moved after it has been attached without the need for any further measures.

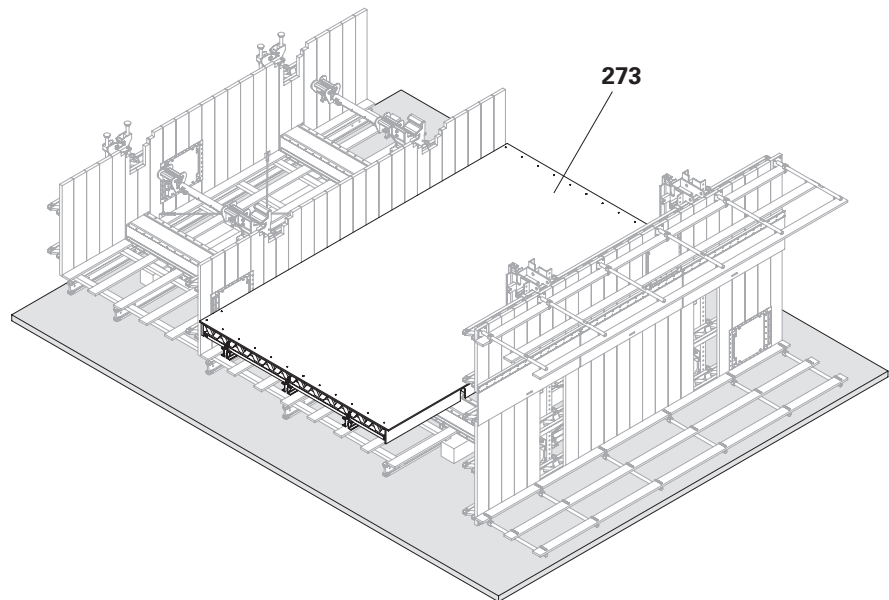


Fig. C3.03

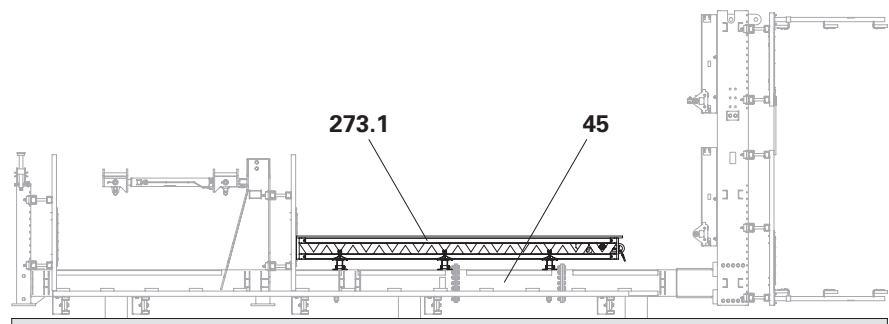


Fig. C3.04

C3 Mounting the climbing unit

3. Screw Hexagon Nut DW 20, AF 36/60 (**217a**) onto Betomax 20 (**215**).
4. Slide Betomax 20 (**215**) through the hole in Suspended Tube 530 ACS (**216**).
5. Screw Hexagon Nut DW 20, AF 36/60 (**217b**) onto Betomax 20 (**215**). (Fig. C3.05)
6. Screw Betomax 20 (**215**) into Adapter DW 20 ACS (**60**).
7. Screw Hexagon Nuts DW 20, AF 36/60 (**217a + 217b**) onto Suspended Tube 530 ACS (**216**). (Fig. C3.05 + C3.06)
8. Temporarily fix the Trolley HTP (**52**) to the Vertical Post Top 2100 ACS (**46**). (Fig. C3.07)

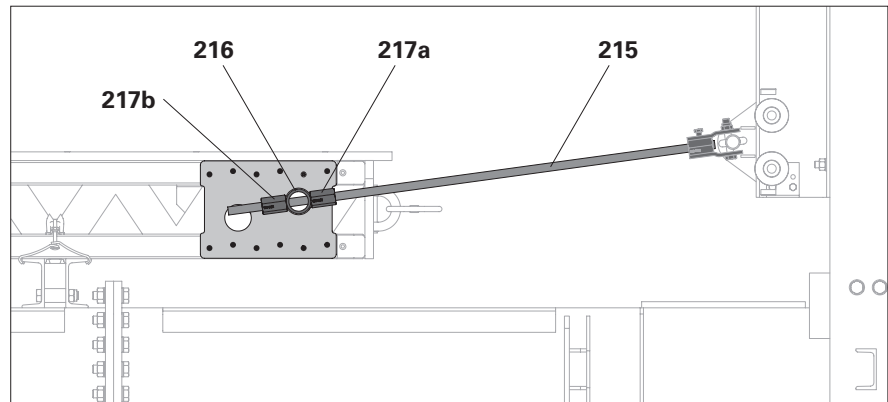


Fig. C3.05

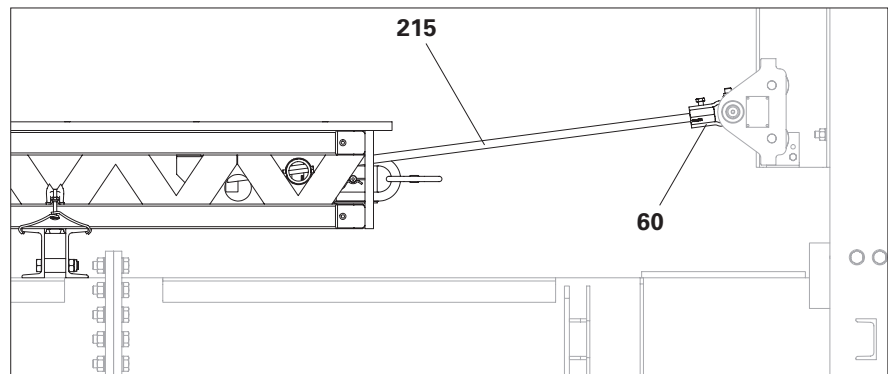


Fig. C3.06

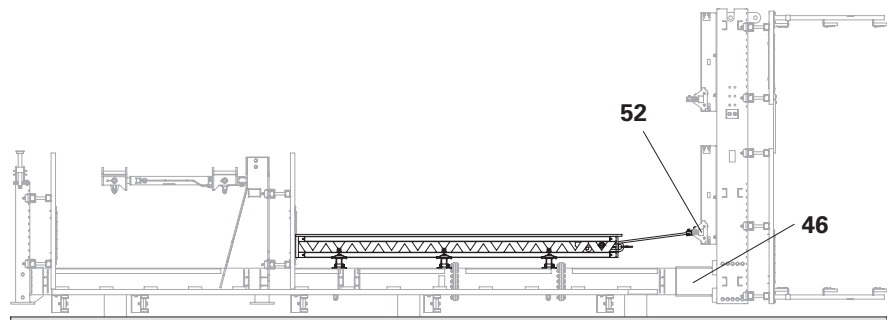


Fig. C3.07

C3 Mounting the climbing unit

Fitting Suspended Tube 530 ACS

If the formwork unit is not prepared for an installation process involving Suspended Tube 530 ACS, carry out the following additional work.

Fig. C3.09a – C3.09c shows the design variants for the assembly of Formwork Suspension VARIO GT24, Ø 60 (218).

Components

- | | |
|------------|--------------------------------------|
| 200 | Torx 6 x 40 |
| 216 | Suspended Tube 530 ACS |
| 218 | Formwork Suspension VARIO GT24, Ø 60 |

Assembly

1. Remove screws (216.1) from Suspended Tube 530 ACS (216).
2. Slide the Suspended Tube 530 ACS (216) through the Formwork Girders GT 24 (21) at the installation position.
3. Slide 2x Formwork Suspension VARIO GT24, Ø 60 (218) onto Suspended Tube 530 ACS (216).
4. Position the formwork suspension (218) and screw them down with 12x Torx 6 x 40 (200).
5. Secure Suspended Tube 530 ACS (216) with screw (216.1).

(Fig. C3.08)

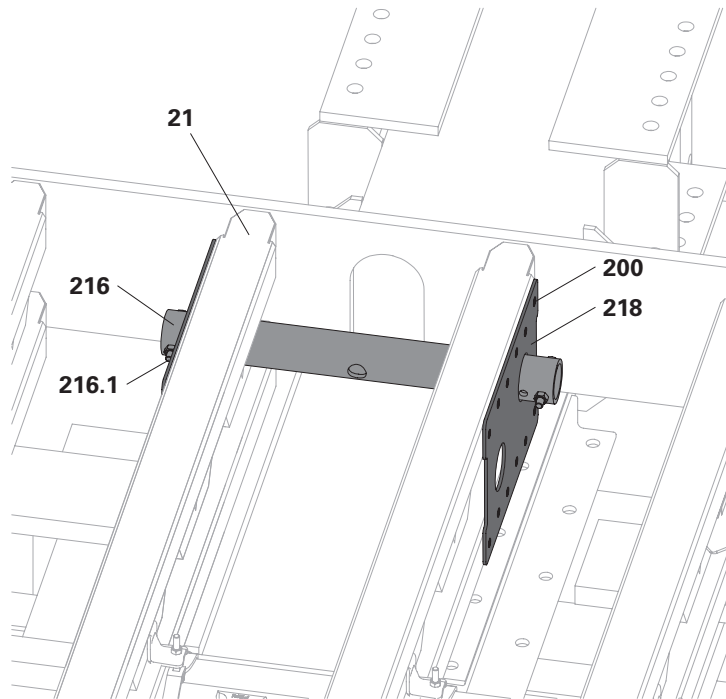


Fig. C3.08



Use Torx 6 x 40 or Torx 6 x 60.

Permissible installation positions

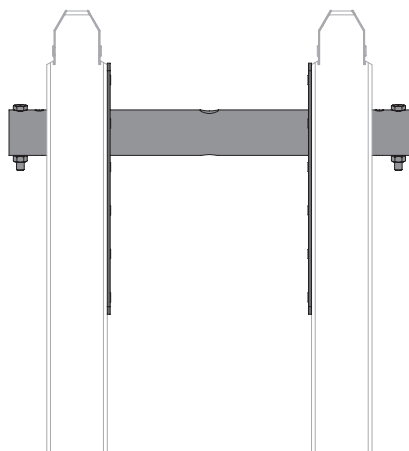


Fig. B9.06a

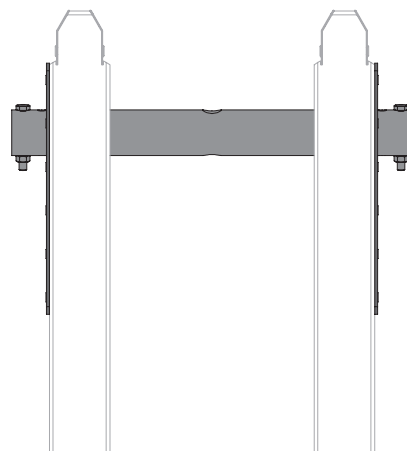


Fig. B9.06b

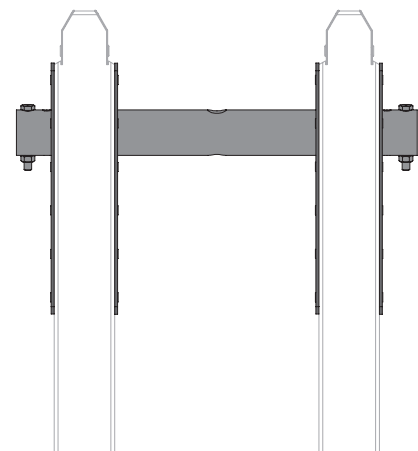


Fig. B9.06c

Mounting procedure



Note

Do not mount climbing units until the required concrete strength has been reached.

Placing the hydraulic unit in position

1. Loop a round sling around the gallows between the panel beam and the vertical post top and attach it to the crane.
2. Erect the climbing unit and set it down on the ground.
3. Place the hydraulic unit (**141**) on the climbing platform and fix it to the platform decking.

(Fig. C3.10)

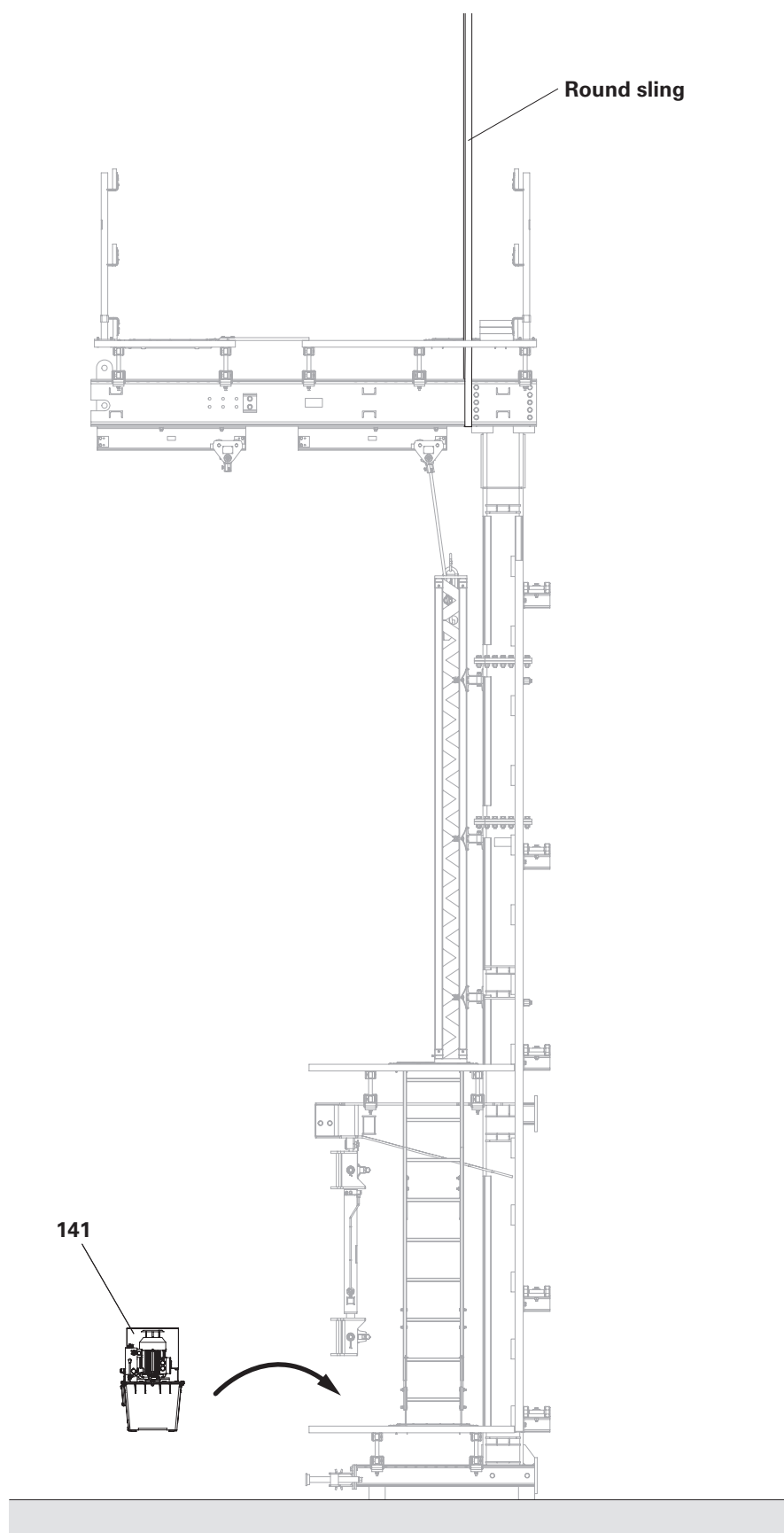


Fig. C3.10

C3 Mounting the climbing unit

Mounting the climbing unit

1. Position the climbing unit above the Climbing Shoes II ACS (161).
2. Slowly lower the climbing unit and feed the heads of the cantilever beam (level 0) (41.1) into the Climbing Shoes II ACS (161).
3. Lower the climbing unit until the heads of the cantilever beam (level 0) (41.1) are resting fully on the Ledger ACS (145).
- (Fig. C3.11 + C3.11a)
4. Check that the climbing unit is aligned vertically.
5. If necessary, adjust the climbing unit vertically with the Pressure Point Spindles M42 ACS (146).
- (Fig. C3.11b)
6. Fix the chain of Ledger ACS (145) to Formwork Girder GT 24 (21).
7. Fold the swing ledger (161.2) downwards.
8. Add in the missing platform decking for the work platform (level +1).
- (Fig. C3.11a)



- Is the head of the cantilever beam (level 0) resting fully on the Ledger ACS?
- Is the swing ledger folded down?
- Are all Pressure Point Spindles M42 ACS (146) on the wall?

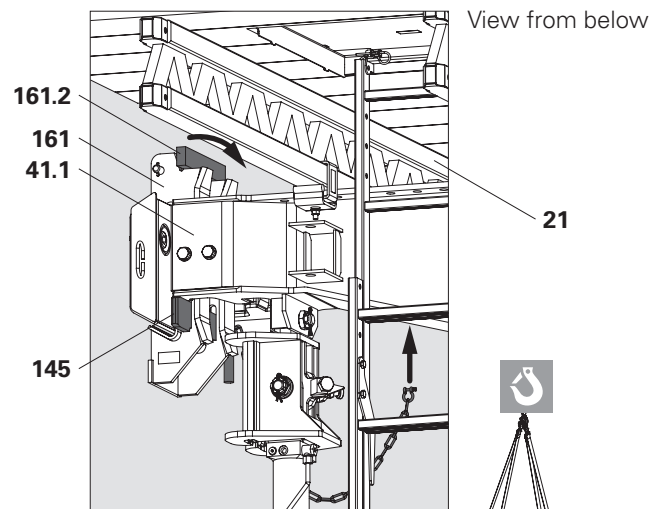


Fig. C3.11a

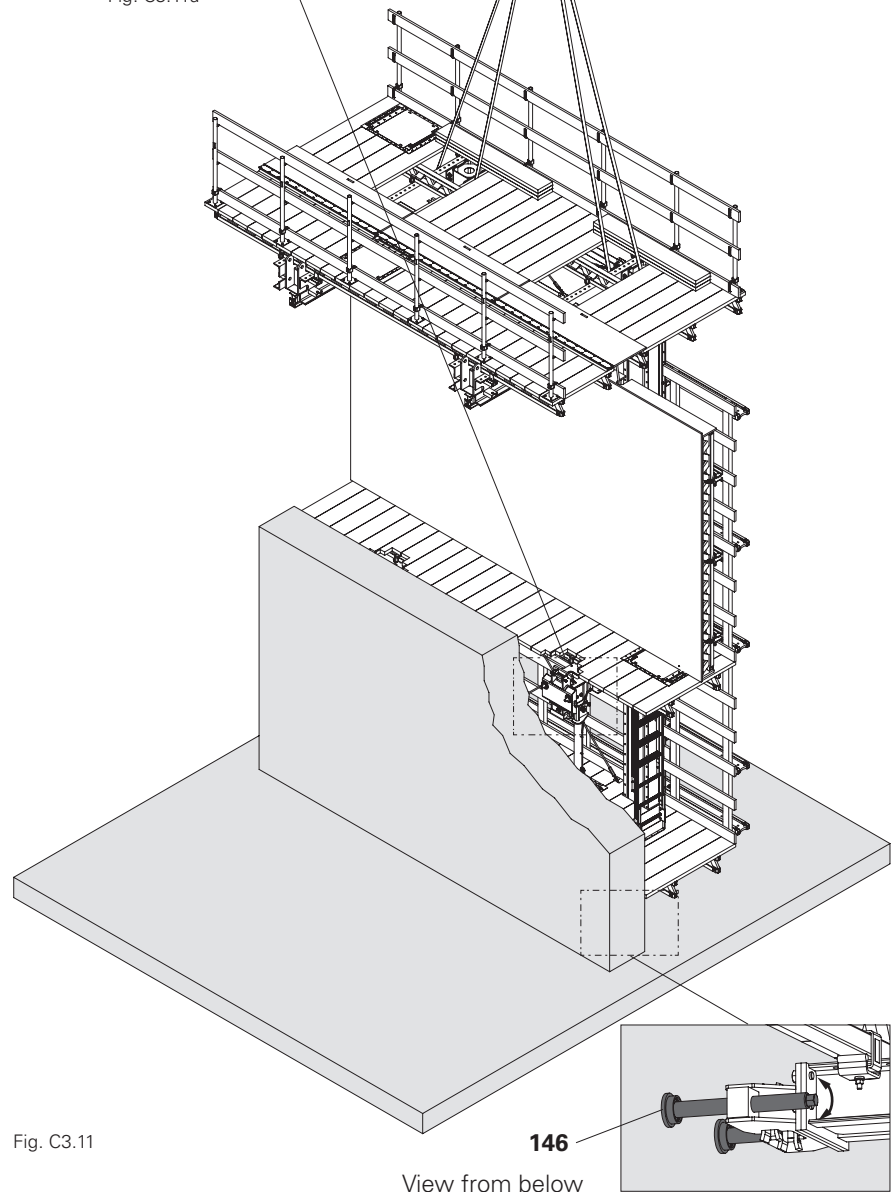


Fig. C3.11

Fig. C3.11b

C3 Mounting the climbing unit

Aligning the formwork

1. Detach the formwork unit on the console bracket side (**273**) from the vertical post intermediate.
2. Undo Hex. Nut DW 20 (**217a**).
3. Align the formwork unit with Hex. Nut DW 20 (**217b**).
4. Place Hex Nuts DW 20 (**217a + 217b**) onto Suspended Tube 530 ACS (**216**) and screw them tight.

(Fig. C3.12)



Make sure that the formwork unit hangs freely and is not propped up by the platform decking.

PERI recommends the following values:

- Formwork overlap of 5 cm at the final concreting section.
- Distance between lower edge of formwork and platform decking of 10 cm.

(Fig. C3.13)

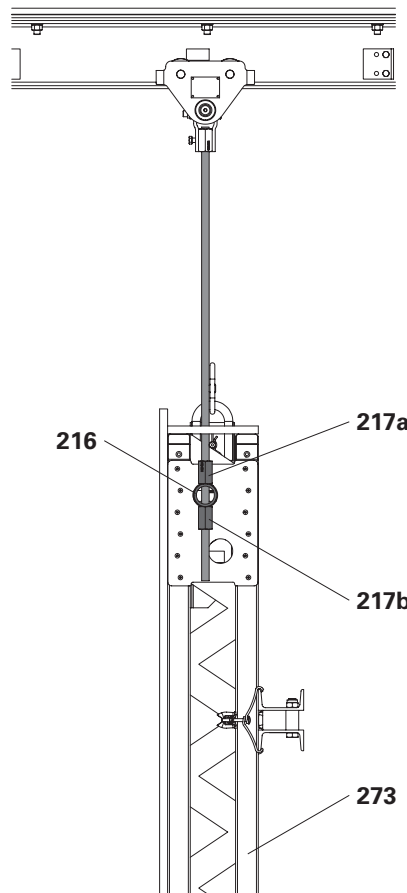


Fig. C3.12

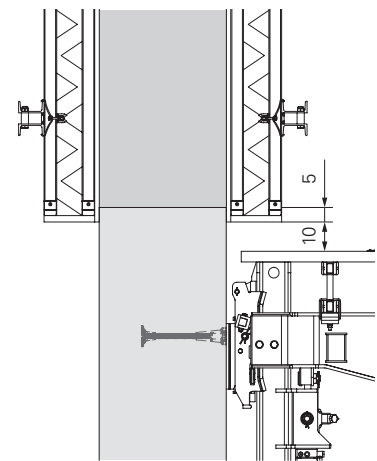


Fig. C3.13

C4 Attaching the counter-platform



Installing the formwork

Components

- 215** Betomax 20
- 216** Suspended Tube 530 ACS
- 217** Hex. Nut DW 20, AF 36/60
- 273** Formwork unit

Assembly

1. Place the opposite side of the formwork unit (**273**) on the ladder cage of the counter-platform.
➔ Make sure that the formwork unit is in contact with the platform decking!
2. Temporarily fix the Steel Waler SRU of the opposite side of the formwork unit (**273**) to the Platform Post 5900 IPBL 240 ACS (**57**). (Fig. C4.01)
3. Screw Hexagon Nut DW 20, AF 36/60 (**217a**) onto Betomax 20 (**215**).
4. Slide Betomax 20 (**215**) through the hole in Suspended Tube 530 ACS (**216**).
5. Screw Hexagon Nut DW 20, AF 36/60 (**217b**) onto Betomax 20 (**215**).
6. Screw Hexagon Nuts DW 20, AF 36/60 (**217a + 217b**) onto Suspended Tube 530 ACS (**216**). (Fig. C4.02)

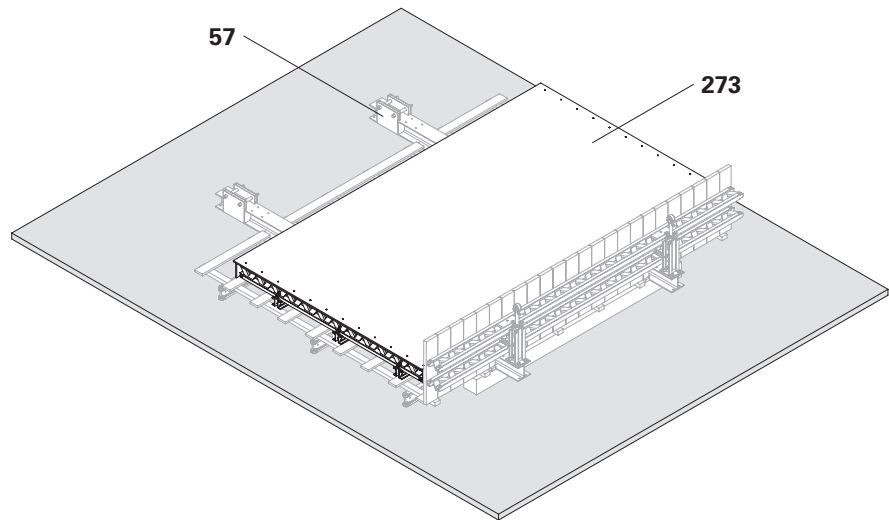


Fig. C4.01

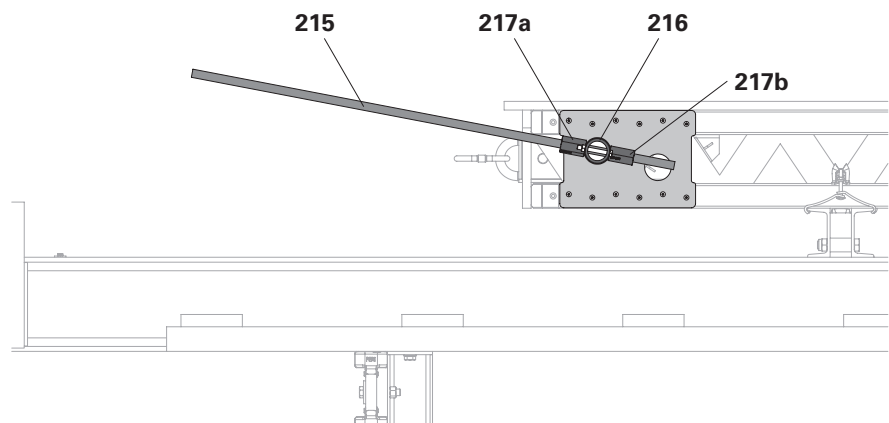


Fig. C4.02



Prop up the formwork unit at the lower end with timber wedges. This means that the formwork unit is ready to be moved after it has been attached without the need for any further measures.

C4 Attaching the counter-platform

Mounting procedure



Note

- Use a lifting platform to attach the counter-platform safely.
- To mount the counter-platform, attach it to the 9 t lifting beam.
- If a 9 t lifting beam is not used, fit a compression brace between the platform posts.

Assembly

1. Attach the crane hooks to the holes of Platform Post 5900 IPBL 240 ACS (57).
 2. Fly in the counter-platform and bolt it to the Gallows 3325 ACS-G (49) with the fixing materials provided.
- (Fig. C4.03 + C4.03a)

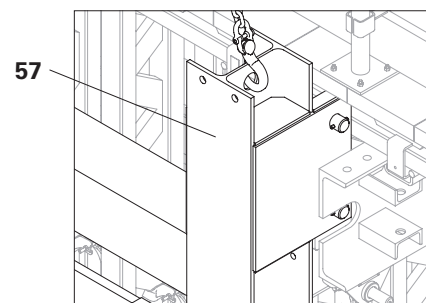


Fig. C4.03a

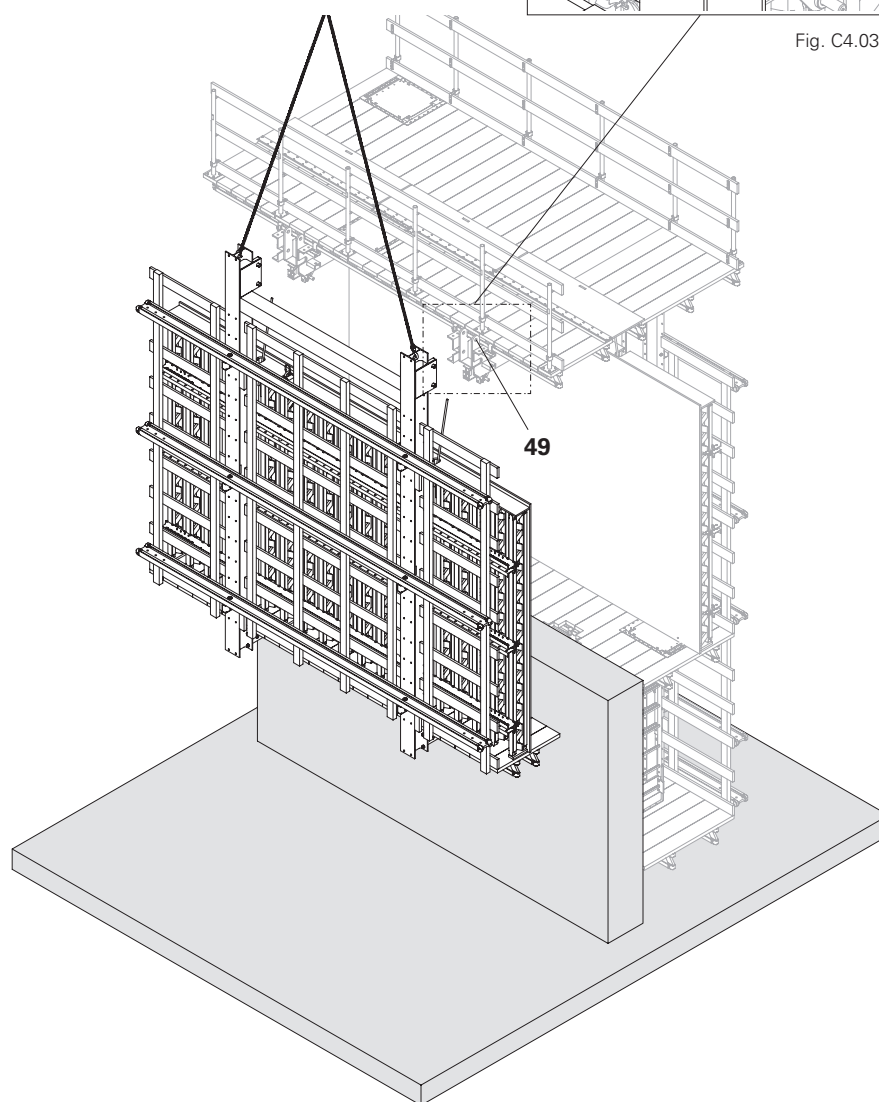


Fig. C4.03

C4 Attaching the counter-platform

Aligning the formwork

1. Screw Betomax 20 (**215**) into Adapter DW 20 ACS (**60**).
 2. Detach the opposite side of the formwork unit (**273**) from the Platform Post 5900 IPBL 240 ACS.
 3. Undo Hex. Nut DW 20 (**217a**).
 4. Align the formwork unit with Hex. Nut DW 20 (**217b**).
 5. Place Hex Nuts DW 20 (**217a + 217b**) onto Suspended Tube 530 ACS (**216**) and screw them tight.
- (Fig. C4.04)



Make sure that the formwork unit hangs freely and is not propped up by the platform decking. PERI recommends the following values:

- Formwork overlap of 5 cm at the final concreting section.
- Distance between lower edge of formwork and platform decking of 10 cm.

(Fig. C4.05)

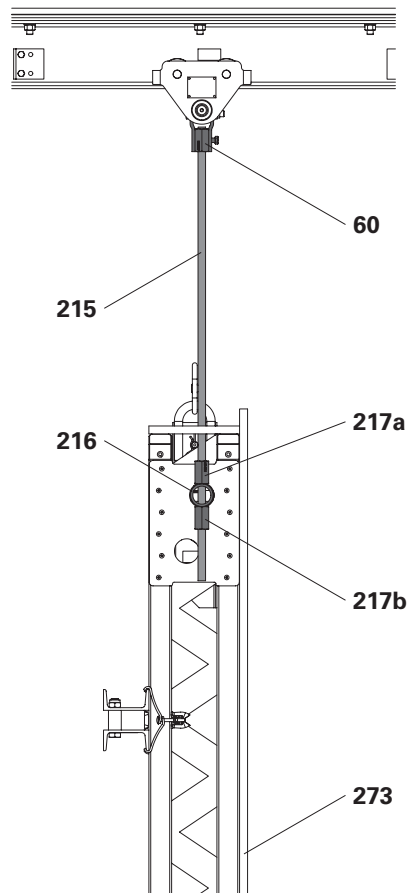


Fig. C4.04

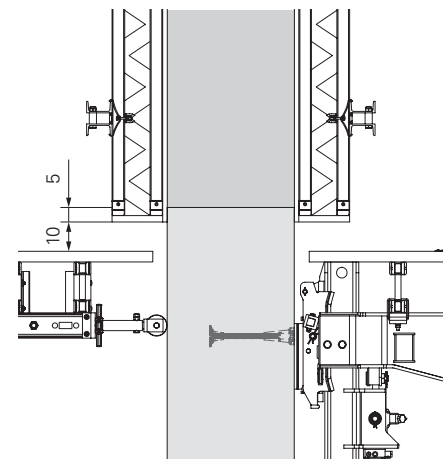


Fig. C4.05

General information



Danger

- Risk of crushing to the body or body parts when closing the formwork!
 - ⇒ Do not linger behind the formwork units.
 - ⇒ Do not reach between adjacent formwork units.
- Unsecured formwork units may shift on their own!
 - This can lead to serious injuries or even death.
 - ⇒ Secure formwork units, for example, by tying them to the Console Bracket ACS-G or Platform Post 5900 IPBL 240 ACS.

Moving the formwork unit

Guide the formwork unit backwards and forwards from both sides.

Formwork in climbing position

1. Unbolt the Kicker Brace AV 140 (61) at the Connection AV ACS (53), fold it towards the formwork unit (273) and fix it in place.
 2. Retract the formwork unit (273).
 3. Secure the formwork unit (273).
 - ➔ Do not tie the formwork unit to the ladder cage!
- (Fig. C5.01)

Formwork in concreting position

1. Move the formwork unit (273) forwards.
 2. Bolt the Kicker Brace AV 140 (61) to the Connection AV ACS (53).
 3. Align the formwork unit with Kicker Brace AV 140 (61) vertically.
- (Fig. C5.02)

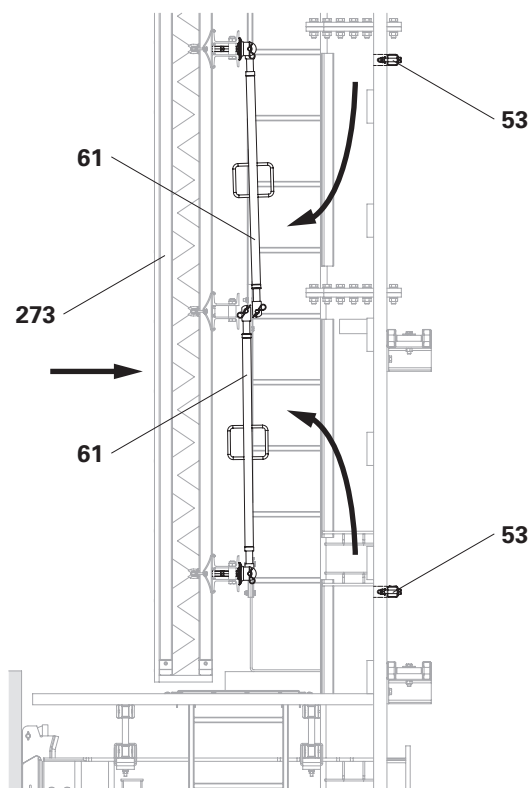


Fig. C5.01

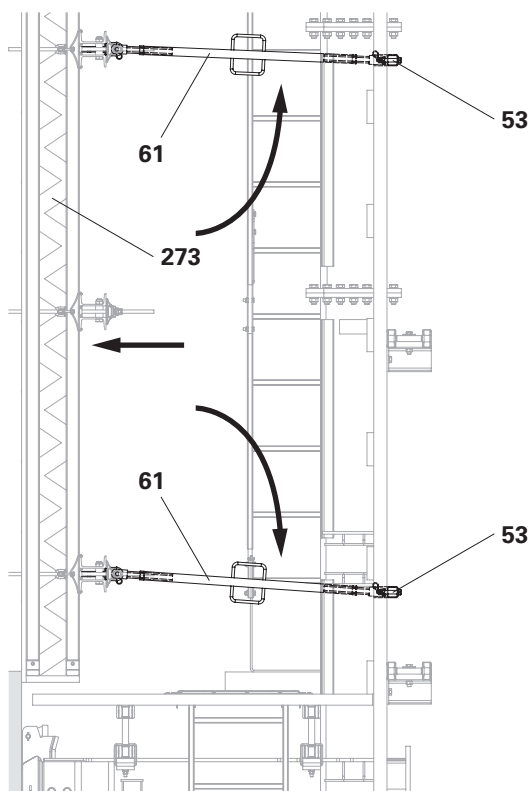


Fig. C5.02

Work to be carried out

- Install and commission the hydraulic system.
- Carry out reinforcement work for the second concreting section.



Note

The following work is only applicable in combination with the Assembly Instructions for "ACS 100 Climbing Device and Hydraulics".

Installing the hydraulic system

This includes the following work:

- Lay and connect the power cable for the hydraulic unit.
- Lay and connect hydraulic hoses along the ladder cage and platform beam.
- Connect the remote control.
- Fill the hydraulic unit with hydraulic oil.
- Bleed the hydraulic system and put it into operation.

(Fig. C6.01 + C6.02)

For a detailed description of these tasks, see the Assembly Instructions for "ACS 100 Climbing Device and Hydraulics".



While the hydraulic system is being installed and commissioned, carry out the reinforcement work for the next concreting section.

Carrying out reinforcement work and pouring concrete

1. Attach climbing ties to the primary and closing formwork.
2. Move the primary formwork forwards.
3. Move the closing formwork forwards, secure it and fit the formwork ties.
4. Concrete the second section.

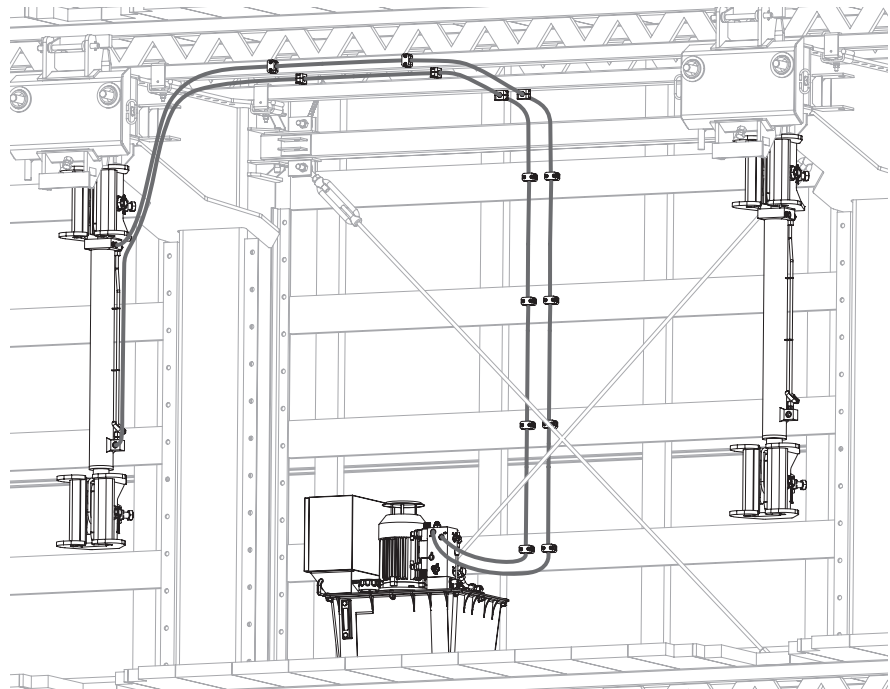


Fig. C6.01

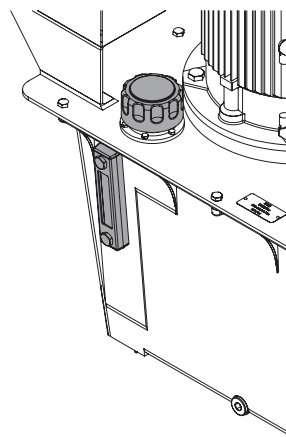


Fig. C6.02

Installing the Climbing Rail ACS

Striking the second concreting section

1. Remove the formwork ties.
2. Remove Positioning Screw M30.
3. Move the formwork unit back.

Installing the anchoring

1. Fit Tie Tube ACS and Climbing Shoe II ACS onto the climbing tie of the second concreting section.

Installation preparations for Panel Beam 1110 ACS

1. Remove the platform decking of the work platform (level +1) above the Gallows 3325 ACS-G.
2. Loosen the screws (208) from Panel Beam 1110 ACS (50) and slide Panel Beam 1110 ACS (50) to the side.

→ The Climbing Rail ACS (143) has space between Panel Beam 1110 ACS (50) and Gallows 3325 ACS-G (49).

(Fig. C6.03)

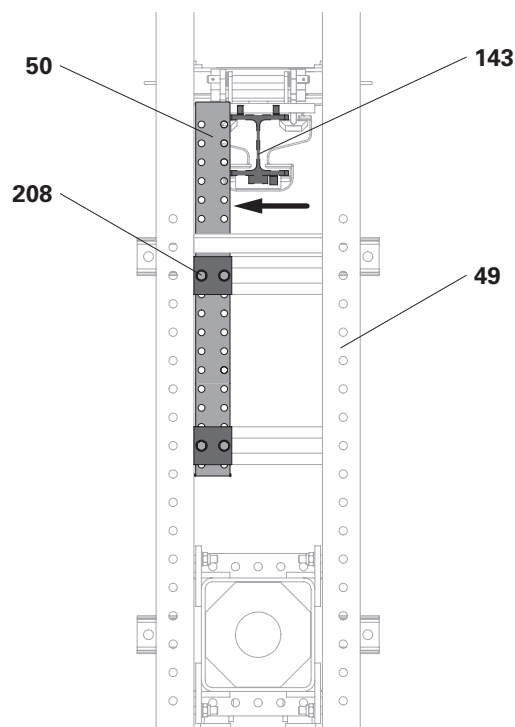


Fig. C6.03

Installation preparations for Panel Beam 1110 IPB 160 ACS

1. Remove the platform decking of the work platform (level +1) above the Gallows 3325 ACS-G.
2. Remove the screw (406a).
3. Undo the screws (406b) and rotate Counterplate 100 x 100 x 15 ACS (68).

4. Swing the Panel Beam 1110 IPB 160 ACS (67) to the side.

→ The Climbing Rail ACS (143) has space between Panel Beam 1110 IPB 160 ACS (67) and Gallows 3325 ACS-G (49).

(Fig. C6.04)



Prop up the formwork unit with timber wedges. This will make the following work easier.

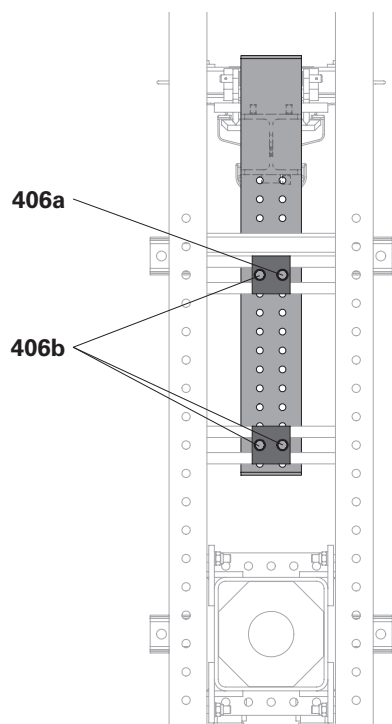


Fig. C6.04a

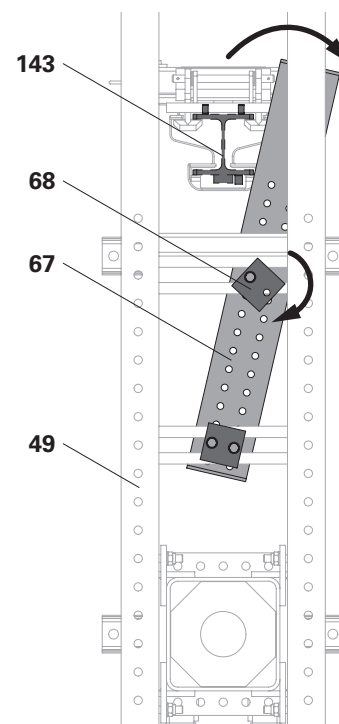


Fig. C6.04b



Danger

Heavy components that can fall down!
Risk of serious injury or death from falling off the climbing rail.

- ⇒ Fold the swing ledger (161.2) all the way down.
- ⇒ The support noses (143.1) of the Climbing Rail ACS (143) must rest fully on the swing ledger (161.2). (Fig. C6.05 + C6.05a)



Caution

Heavy moving parts!
During assembly, there is a risk of hands and other body parts being crushed.

- ⇒ Guide the Climbing Rail ACS with a rope.
- ⇒ Do not move the Climbing Rail ACS onto the top or bottom climbing head.
- ⇒ Make sure clothing does not get caught up in the catch blocks.
- ⇒ Ensure a safe and secure position.

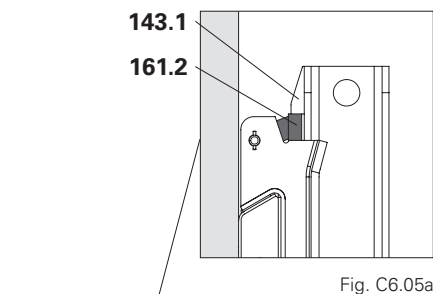


Fig. C6.05a

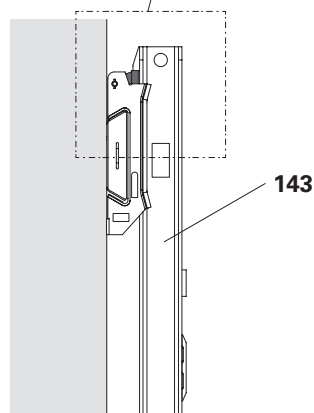


Fig. C6.05

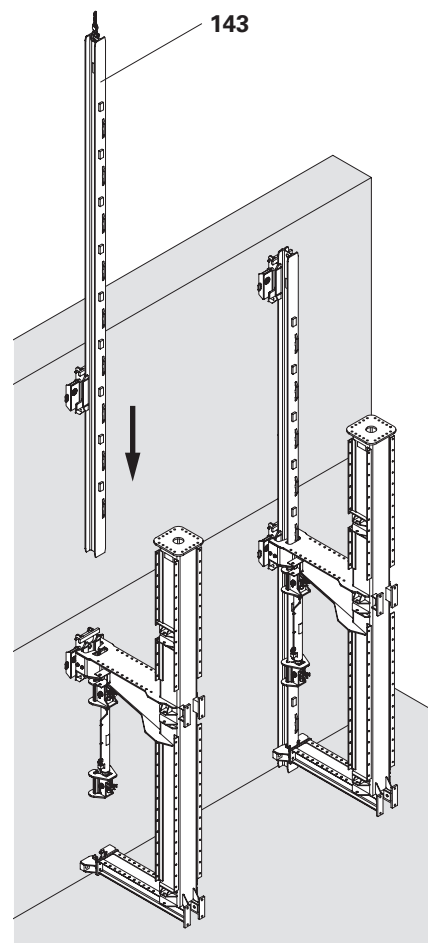


Fig. C6.06

Installation

1. Lower the Climbing Rail ACS and slide it between the Panel Beam 1110 ACS and Gallows 3325 ACS-G.

➔ Note the installation position of the Climbing Rail ACS.

(Fig. C6.06)



- For further information, see the Assembly Instructions for the 'ACS 100 Climbing Device and Hydraulics'.
- In the interests of providing a clearer overview, a simplified representation is shown in Fig. C6.06.

C6 Second concreting section

Concluding work on Panel Beam 1110 ACS

1. Slide the Panel Beam 1110 ACS (50) into the installation position and tighten the screws (208).

2. Complete the platform decking on the work platform (level +1).

Fig. C6.07 shows the Climbing Rail ACS (143) and the Panel Beam 1110 ACS (50) after installation.

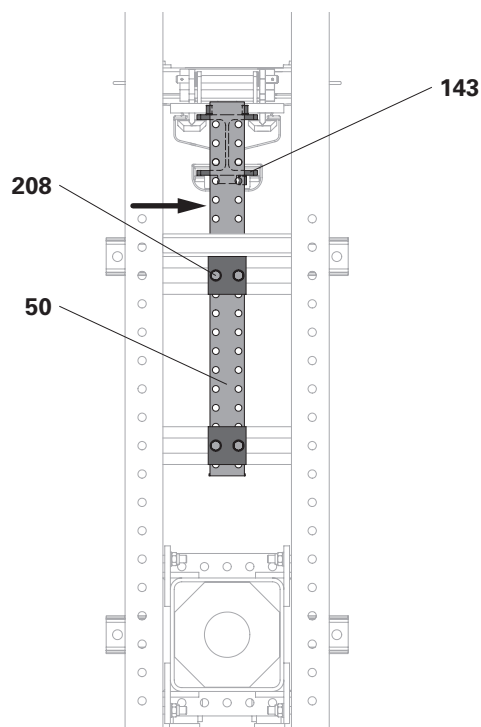


Fig. C6.07

Concluding work on Panel Beam 1110 IPB 160 ACS

1. Rotate Panel Beam 1110 IPB 160 ACS (67) and Counterplate 100 x 100 x 15 ACS (68) into the installation position.

2. Fit and tighten the screws (406).

3. Complete the platform decking on the work platform (level +1).

Fig. C6.08 shows the Climbing Rail ACS (143) and the Panel Beam 1110 IPB 160 ACS (67) after installation.

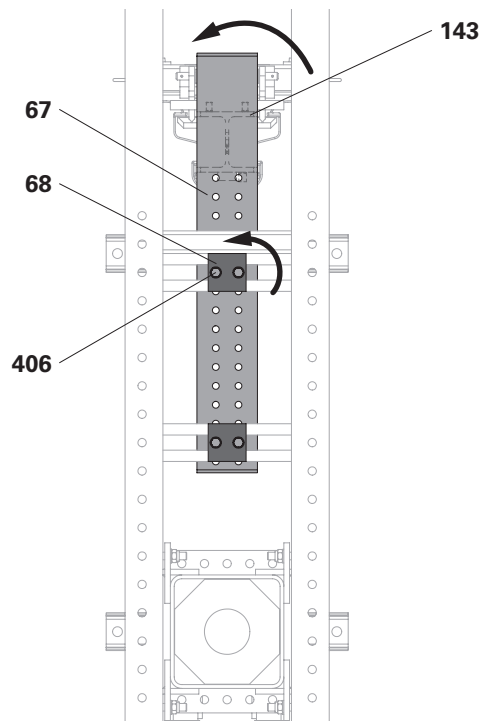


Fig. C6.08

Attaching the finishing platform

Preparing for the climbing procedure

Note

- Do not remain in the danger zone created by the moving parts.
- Cordon off leading edges formed between the platforms. If necessary, put on PPE.
- When operating the climbing unit, only personnel required for climbing are allowed on the platform.
- Personnel, building materials or tools must not be transported with the climbing unit when it is moved.
- Approval for climbing is given by the operating personnel.

1. Fold up the spacer (144) at the end of the Climbing Rail ACS (143).
→ The Expander ACS (149) pulls the spacer (144) towards the climbing rail (143) and thus prevents it from slipping when it is in a relieved state.

(Fig. C6.09)

2. Secure danger zones at the ends of the platforms.

Note

- Risk of collision: The Pressure Point Spindles M42 ACS (146) must be retracted entirely when operating the climbing unit so it is possible to move past the climbing shoes without a collision occurring. The climbing unit is propped up on the Climbing Rail ACS during the climbing process.
- The spacer (144) must support the Climbing Rail ACS (143) when the climbing unit is operated, otherwise there is a risk of overloading the Climbing Rail ACS (143).

3. Turn the Pressure Point Spindles M42 ACS (146) back in a counter-clockwise direction as far as they will go.
→ The climbing unit is propped up exclusively by the Climbing Rail ACS (143).

(Fig. C6.10)

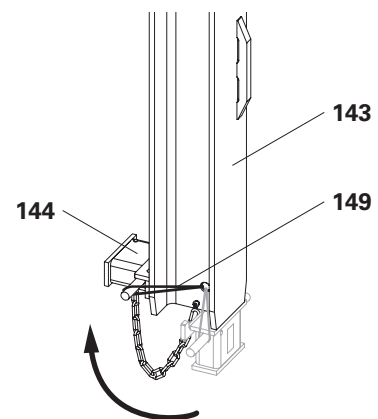


Fig. C6.09

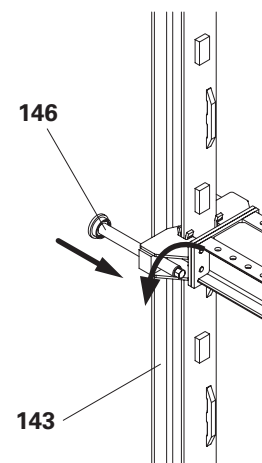


Fig. C6.10

Carrying out the climbing procedure

The manner in which the hydraulic system and the climbing devices are operated is not described here in order to provide a clear description of the climbing procedure. See the Assembly Instructions for the "ACS 100 Climbing Device and Hydraulics" in this regard.

! Note

- Avoid tilting the climbing unit during the climbing operation.
- Check the position of the catch and cam after each cylinder stroke.
 - The red marking flag for the catch points downwards.
 - The cam is in the central position.

1. Set the switch units in all the climbing heads to "Climbing the platform" (Fig. C6.11)
2. Extend the hydraulic cylinder by approx. 10 cm. Pull the Ledger ACS out of the climbing shoes.
3. Climb the climbing unit until the finishing platform can be placed beneath the climbing unit.
4. Place the finishing platform beneath the climbing unit.
5. Couple the finishing platform to the climbing unit with the fixing materials provided. (Fig. C6.12)

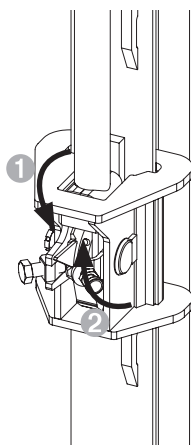


Fig. C6.11

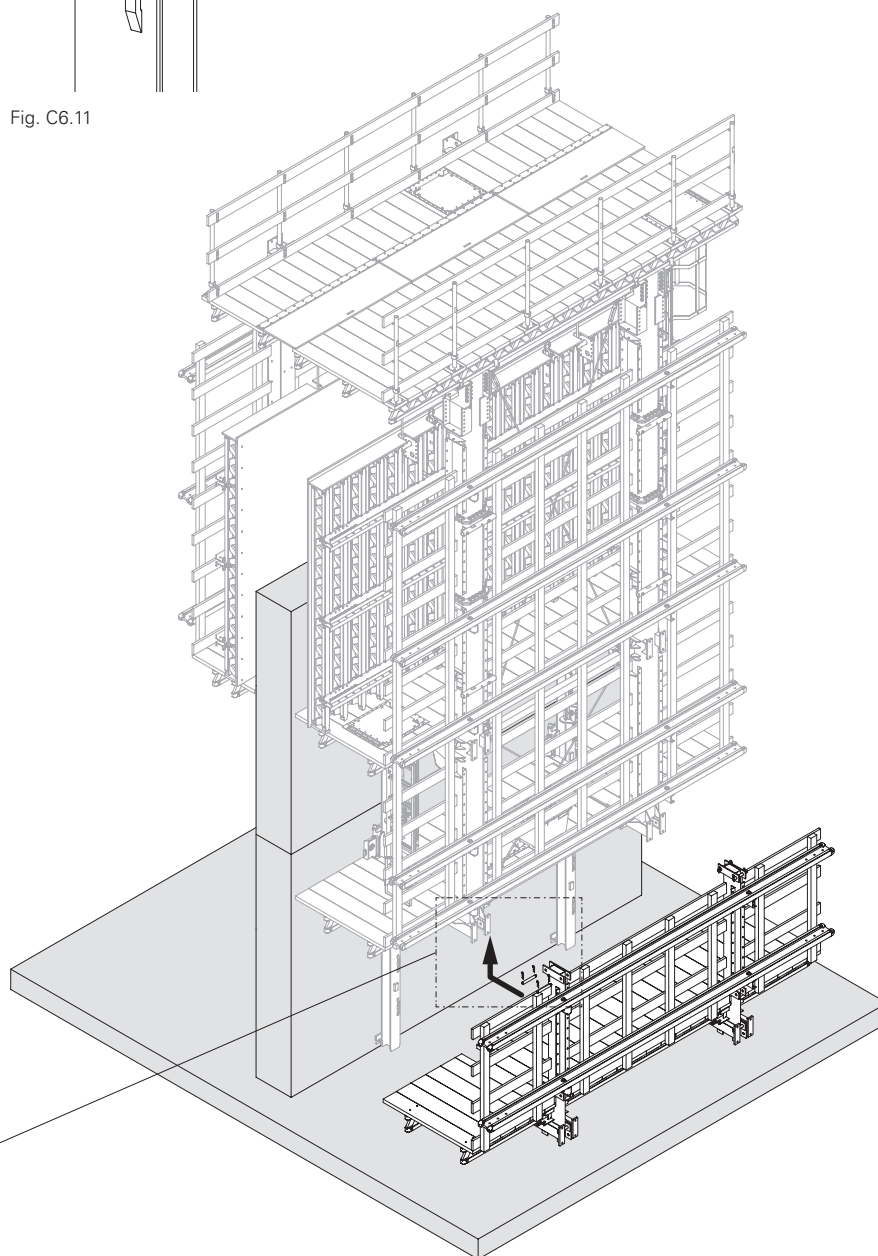


Fig. C6.12

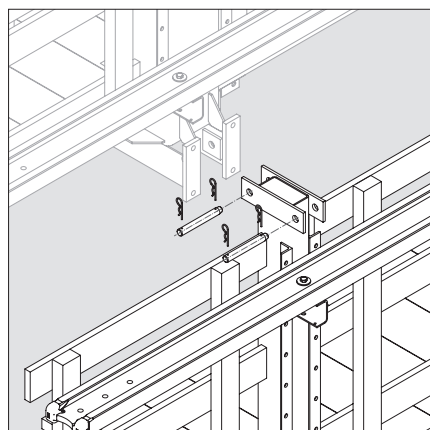


Fig. C6.12a

C6 Second concreting section

6. Climb to the end position.
7. Insert the Ledger ACS into the Climbing Shoe II and place the climbing unit on the Ledger ACS.
8. Rotate the Pressure Point Spindles M42 ACS (**146**) in a clockwise direction and align the climbing unit vertically.
 - The climbing unit is propped up by the structure.
 - The Climbing Rail ACS (**143**) swings freely and is not subjected to any load.

(Fig. C6.13)

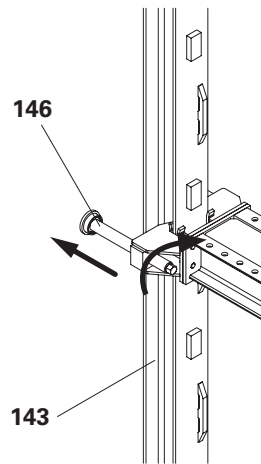


Fig. C6.13

Fitting the ladder

Fit the ladder between the climbing platform and the finishing platform. See "Fitting the ladder" on page 68. (Fig. C6.14)

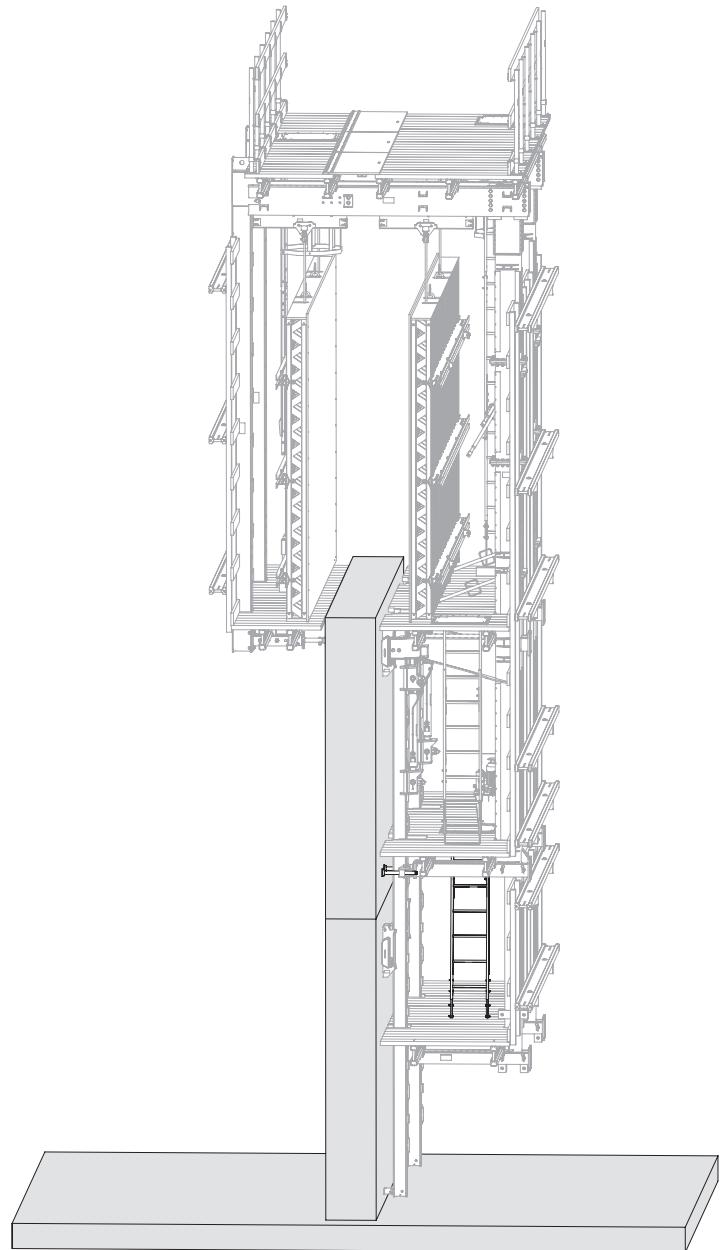


Fig. C6.14

Concreting cycle

1. Clean the formwork unit and spray with release agent, e.g. PERI Bio-Clean.
2. Fit the climbing tie.
3. Move the primary formwork forwards.
4. Carry out reinforcement work.



Danger

Risk of crushing to the body or body parts when closing the formwork!
⇒ Do not linger behind the formwork units.
⇒ Do not reach between adjacent formwork units.

5. Move the closing formwork forwards.
 6. Align, connect and anchor the formwork units.
 7. Concrete the section.
- (Fig. D1.01)

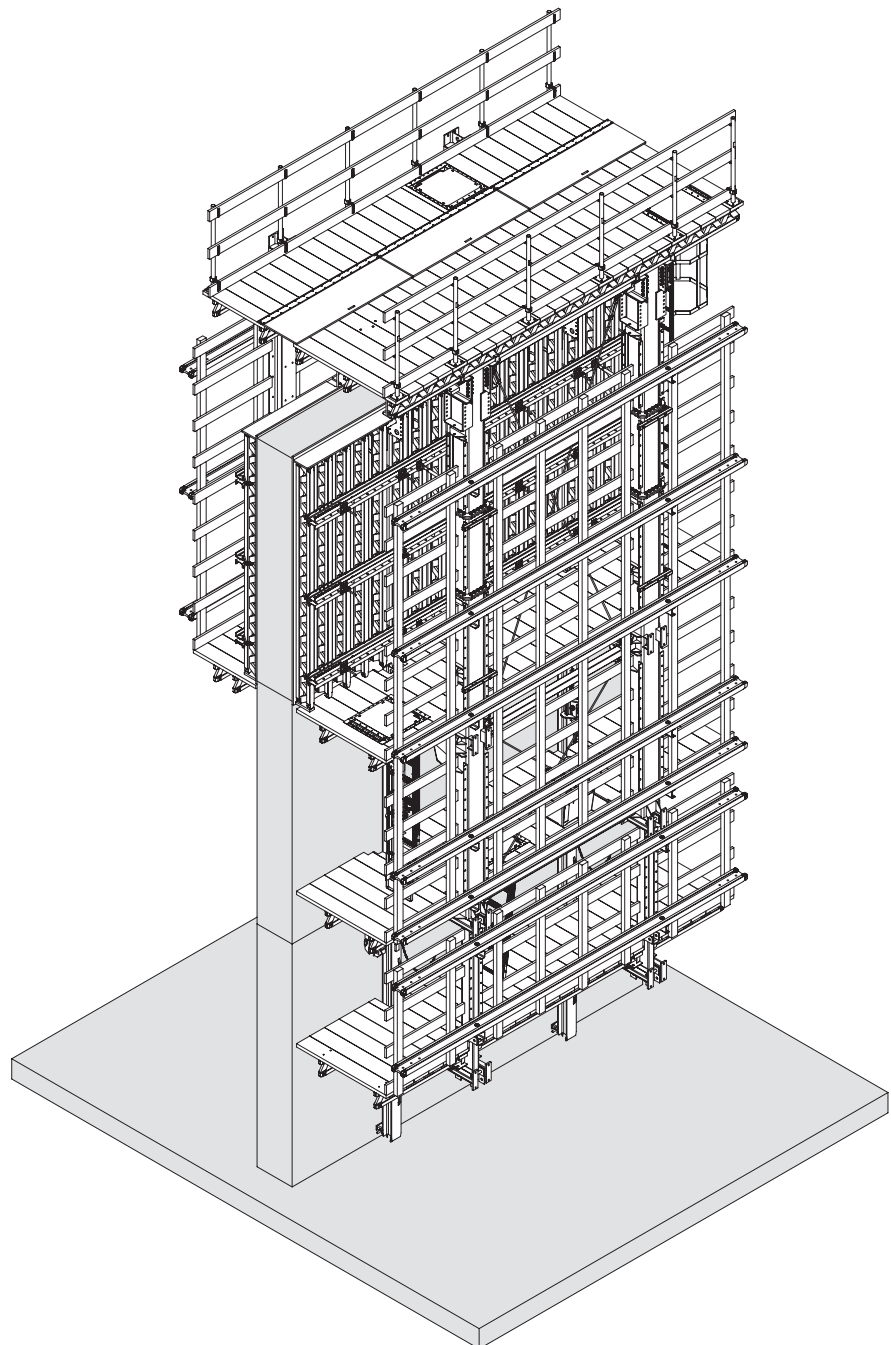


Fig. D1.01

Climbing cycle

! Note

- Only climb to the next concreting section when the required concrete strength has been reached.
- To operate the climbing rail and climbing unit, move the formwork to the rear end position and secure it on site.

Preparing for the climbing procedure

1. Remove formwork ties and connecting parts of the formwork units.
2. Remove Positioning Screw M30. The Leading Tie Plate ACS 399 stays on the formwork.

Keep reusable parts for the next assembly process and stow them safely:

- Positioning screws M30
- Formwork tie
- Wingnut pivot plates

3. Retract the primary formwork and the closing formwork.
4. Fit Tie Tube ACS and Climbing Shoe II ACS onto the climbing tie.

Climbing the climbing rail



- An observer on the work platform (level +1) issues instructions and is responsible for ensuring that all instructions are carried out correctly.
- Check the position of the catch and cam after each cylinder stroke.
 - The red marking flag for the catch points upwards.
 - The cam is in the central position.

1. Set all switch units in the climbing heads to "Climb rail" (Fig. D2.01)

! Note

- Position the climbing shoes so that the climbing rails can pass through unhindered.
- After climbing the climbing rail, make sure that
 - the swing ledger is folded down all the way.
 - the support noses of the Climbing Rail ACS are resting fully on the swing ledger.

2. Climb the Climbing Rail ACS (143) to the end position.
3. Fold the spacer (144) upwards. (Fig. D2.02)

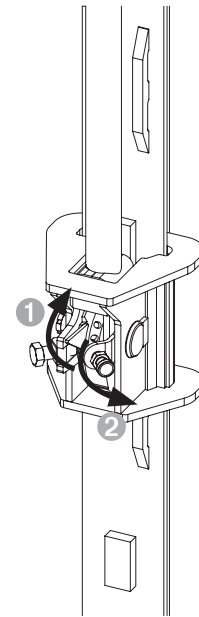


Fig. D2.01

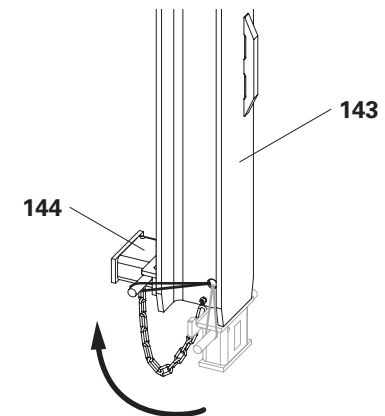


Fig. D2.02

D2 Moving the climbing unit

Preparatory work

1. Remove climbing shoes and tie tubes that are no longer required.
2. Remove the climbing cones.
3. Close the tie holes.
4. Remove the deck covers between the climbing units.
5. Temporarily secure exposed leading edges.

Climbing the climbing unit



Is the spacer folded up and supporting the climbing rail?

1. Retract the Pressure Point Spindle M42 ACS (**146**). (Fig. D2.03)
2. Set the switch units in all the climbing heads to "Climbing the platform". (Fig. D2.04)

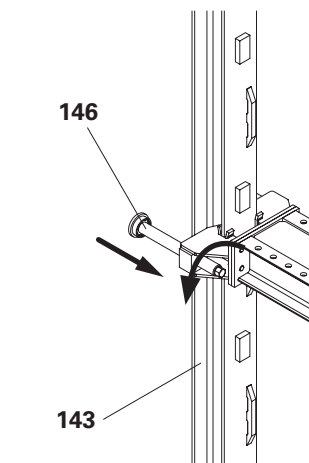


Fig. D2.03

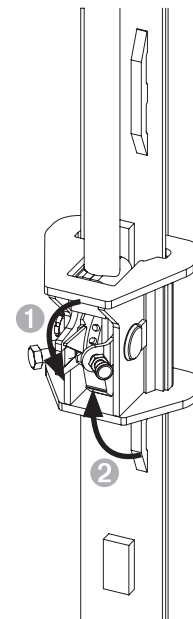


Fig. D2.04



Check the position of the catch and cam after each cylinder stroke.

- The red marking flag for the catch points downwards.
- The cam is in the central position.

First stroke

3. Extend the hydraulic cylinder by approx. 10 cm. Pull Ledger ACS (**145**) out of the climbing shoes (**161**).
4. Climb the climbing unit to the end position.

Final stroke

5. Insert Ledger ACS (**145**) into Climbing Shoe II (**161**). (Fig. D2.05)
6. Set the climbing unit down on the Ledger ACS (**145**).
7. Extend the Pressure Point Spindle M42 ACS (**146**) until the Climbing Rail ACS (**143**) swings freely and relieve the pressure on the Climbing Rail ACS (**143**). (Fig. D2.06)

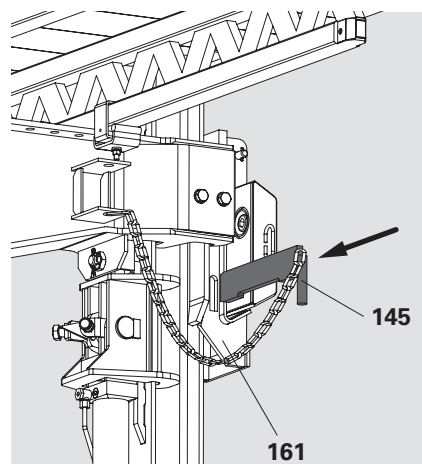


Fig. D2.05

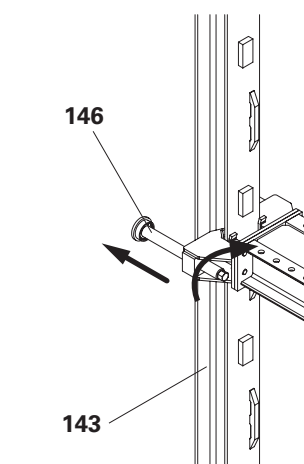


Fig. D2.06

D2 Moving the climbing unit

The climbing unit has climbed one concreting section and the subsequent work can be carried out.
(Fig. D2.07)

Concluding work

1. Remove the temporary guardrail at the end of the platforms.
2. Fit the deck covers between the climbing units.

For each subsequent concreting section, all the steps from the **concreting cycle** and **climbing cycle** are repeated.

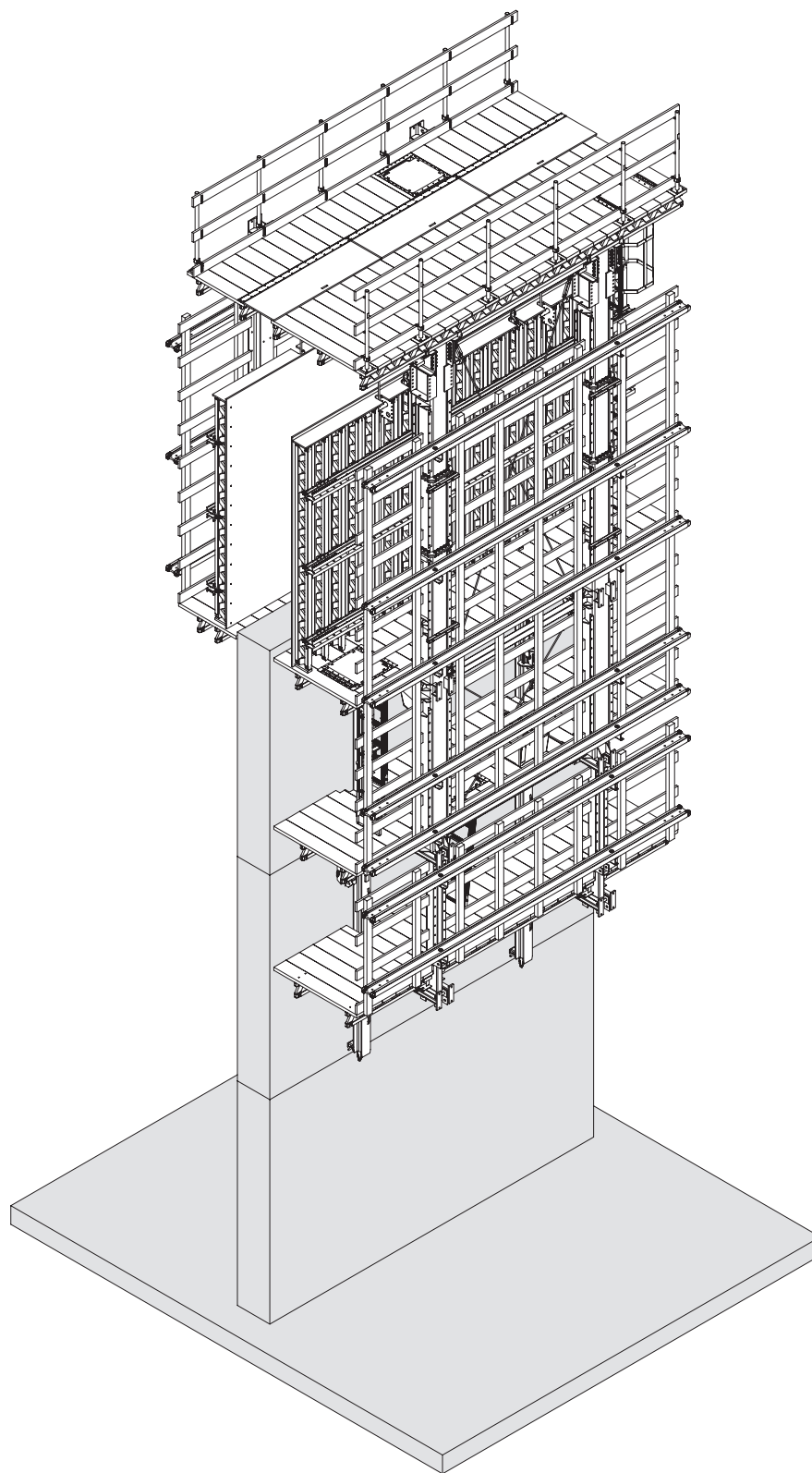


Fig. D2.07

D2 Moving the climbing unit

Removing the climbing cones

Components

- 168** Screw-On Cone M30/DW 26
- 170** Climbing Cone-2 M30/DW 20
- 199** KK Concrete Cone M30-80/52

Disassembly

1. Loosen the cone with a ring wrench AF 46 and unscrew it completely. (Fig. D2.08)

Closing tie holes

If necessary, seal the tie hole with KK Concrete Cone M30-80/52 (**199**) and PERI sealing compound so it is watertight. See the Instructions for Assembly and Use for concrete cones and concrete adhesives. (Fig. D2.09)

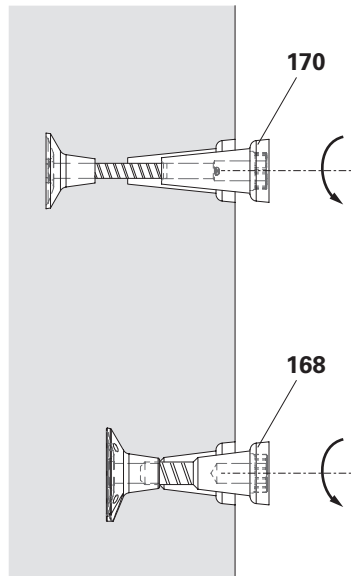


Fig. D2.08

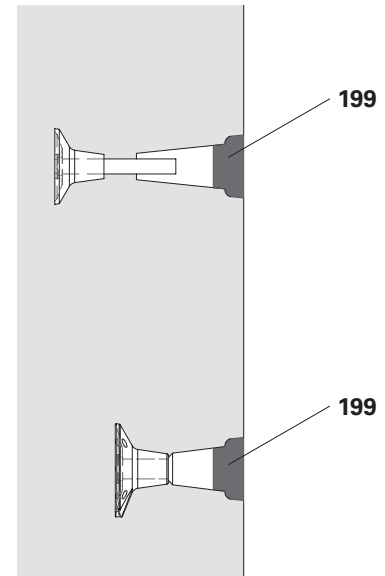


Fig. D2.09

Wall offsets

When concreting wall offsets, the formwork is moved further forward, creating an offset in the new concreting section. (Fig. D3.01 + D3.01a)

The following parameters have an influence on the climbing procedure in the case of wall offsets:

- Concreting height
- Wall offset
- Climbing rail length
- Upper edge distance of the climbing tie.

Therefore, other combinations of climbing shoes and further measures for climbing in the case of wall offsets are possible, or may even be necessary.

Concreting section before the wall offset



Fit a piece of squared timber into the formwork before concreting the last section before the wall offset.

The resulting edge forms the stop for the formwork in the next concreting section.

(Fig. D3.02 + Tab. D3.01)



Overlap OL	min. 5 cm
Edge height A_{min}	OL + 1 cm
Wall offset B	max. 20 cm

Tab. D3.01

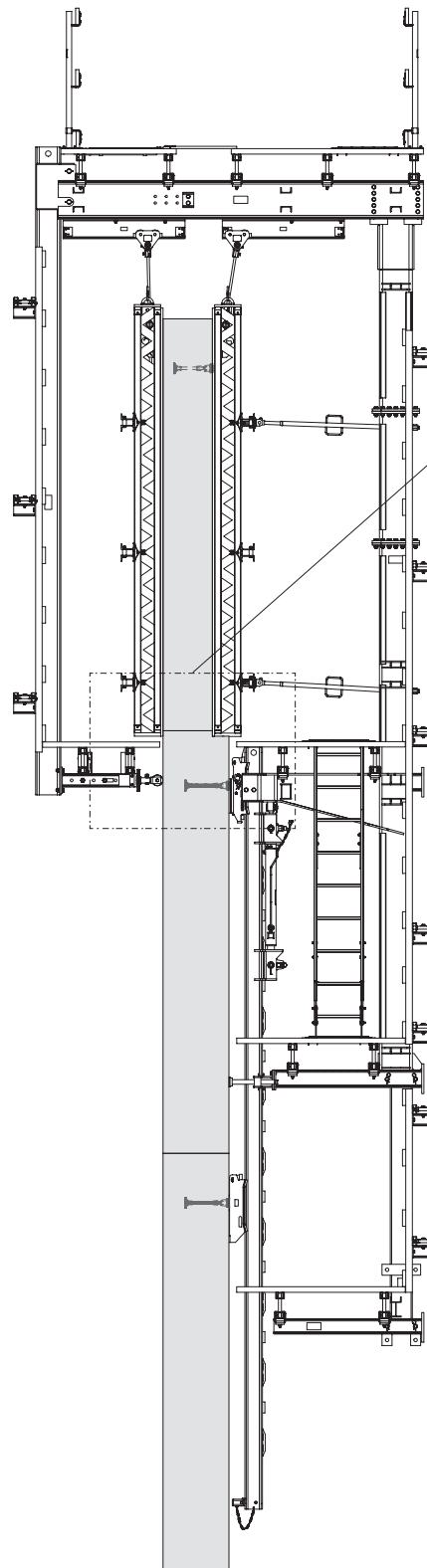


Fig. D3.01

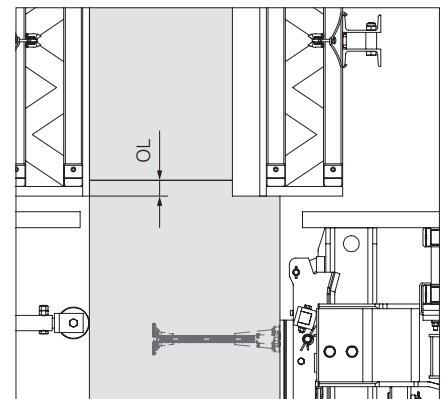


Fig. D3.01a

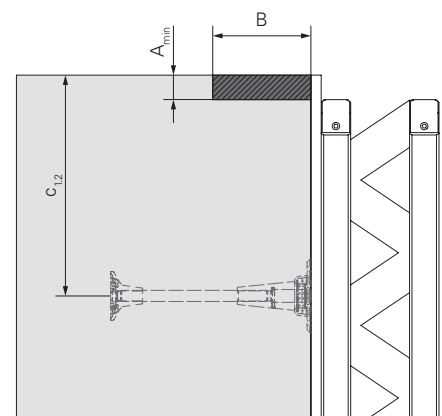


Fig. D3.02

Concreting section after wall offset

Precondition

- The climbing unit and climbing rail are hanging on the last climbing shoe before the wall offset.
- The leading ties are installed.

Reconfiguring the formwork

1. Move the formwork unit (**273**) around the offset further forward.
 2. Position and support the formwork unit (**273**) with Kicker Brace AV (**61**).
 4. Concrete the section.
- (Fig. D3.03)

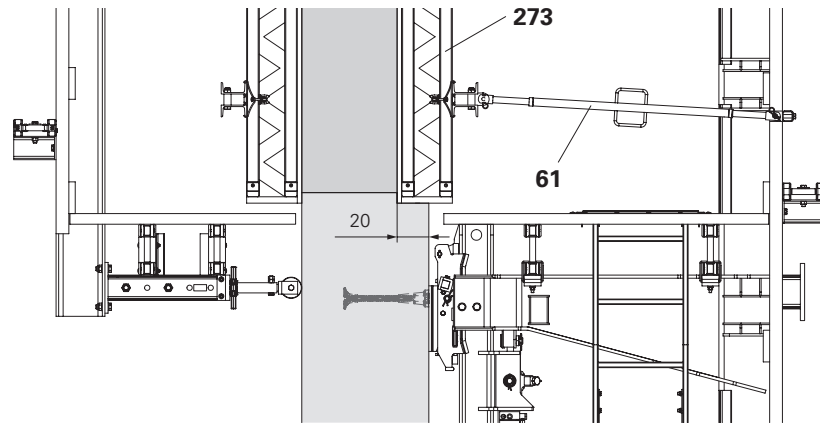


Fig. D3.03

Climbing with wall offsets

Two different climbing shoes are used for climbing in the case of wall offsets:

- Climbing Shoe-2 I ACS
- Climbing Shoe IV ACS in combination with the Tie Shoe H ACS

Fig. D3.04 shows how the different climbing shoes are used and the position of the climbing rail in the individual climbing sections.



It is also possible to climb wall offsets with the Climbing Shoe II ACS.

Precondition

- The climbing unit and climbing rail are hanging on the last climbing shoe before the wall offset.
- The first concreting section after the wall offset has been concreted, cured and released for climbing.

Components

-
- 143** Climbing Rail ACS
 - 160** Climbing Shoe-2 I ACS
 - 162** Climbing Shoe IV ACS
 - 166** Tie Shoe-H ACS
 - 167** Climbing tie
-

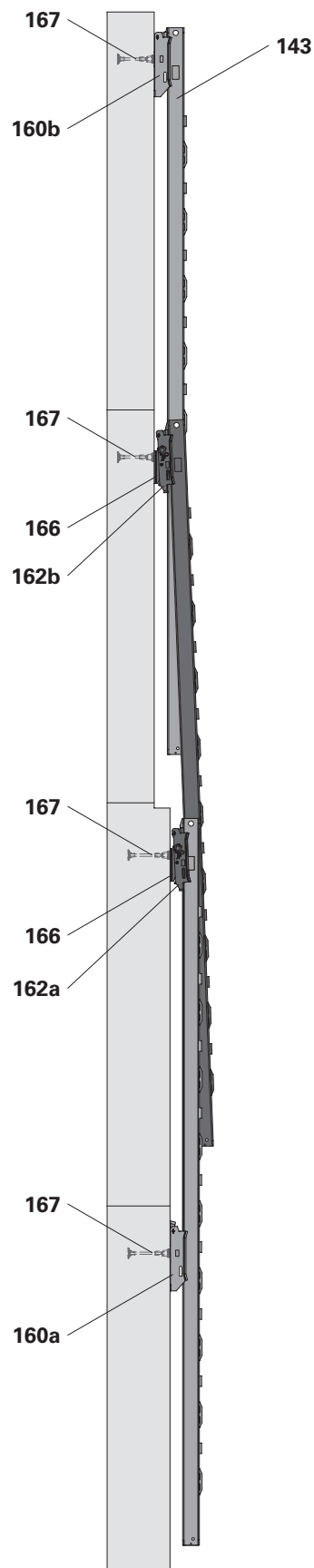


Fig. D3.04

Climbing the climbing rail

The manner in which the hydraulic system and the climbing devices are operated is not described here in order to provide a clear description of the climbing procedure. See the Assembly Instructions for the "ACS 100 Climbing Device and Hydraulics" in this regard.



Warning

- Heavy moving parts!
Body parts can get trapped, resulting in injuries.
 - ⇒ Do not reach into pinch points when pivoting the climbing rail.
 - ⇒ Make sure clothing does not get caught up in the catch blocks.
- Risk of injury due to unforeseen climbing rail movements!
⇒ Walk away from the pivoting range in front of and behind the climbing rail.

Climbing

1. Fit Tie Shoe-H ACS (**166**) and Climbing Shoe IV ACS (**162b**).
2. Climb the Climbing Rail ACS (**143**) until it is clear of Climbing Shoe-2 I ACS (**160a**).
 - The Climbing Rail ACS is only held and guided in the Climbing Shoe IV ACS (**162a**), the rail guides in the cantilever beams and in the climbing heads of the Climbing Unit ACS 100 (**140**).
3. Pivot climbing unit with Pressure Point Spindles M42 ACS (**146**) backwards and continue to climb the climbing rail (**143**) up to the Climbing Shoe IV ACS (**162b**).

(Fig. D3.05)

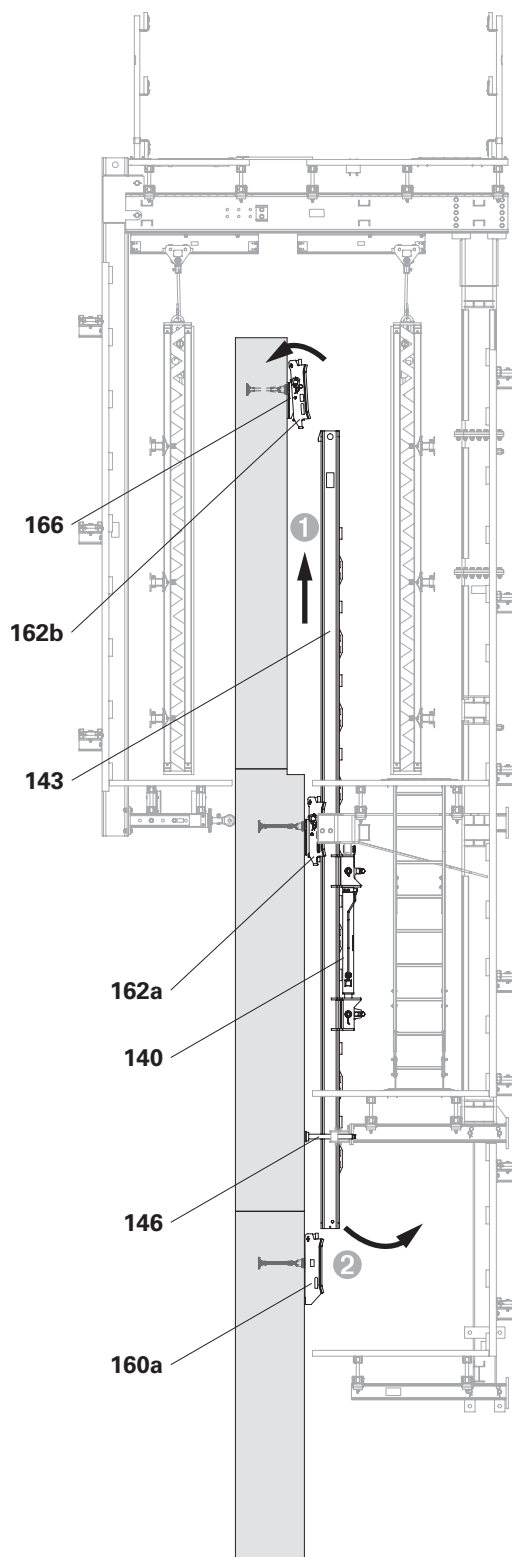


Fig. D3.05



Danger

Fall hazard for components or personnel!

Climbing over the wall offset increases the distance between the platform decking and the structure.

⇒ Close gaps between the platform decking and the structure.

PERI recommends that you install a hinged cover for this purpose.
(Fig. D3.06a)



- Make sure that the swing ledger of Climbing Shoe IV ACS (**162a**) is folded upwards.
- Readjust the Supporting Spindle ACS (**59**).
- Readjust the Pressure Point Spindles M42 ACS (**146**) and set the climbing unit at an angle.
- If necessary, prop up the Pressure Point Spindles M42 ACS (**146**) with a piece of squared timber (**271**).

4. Insert the Climbing Rail ACS (**143**) into the Climbing Shoe IV ACS (**162b**) and attach it.
(Fig. D3.06)



- Is the swing ledger of the climbing shoe (**162b**) folded down all the way?
- Are the support noses of the Climbing Rail ACS resting fully on the swing ledger?

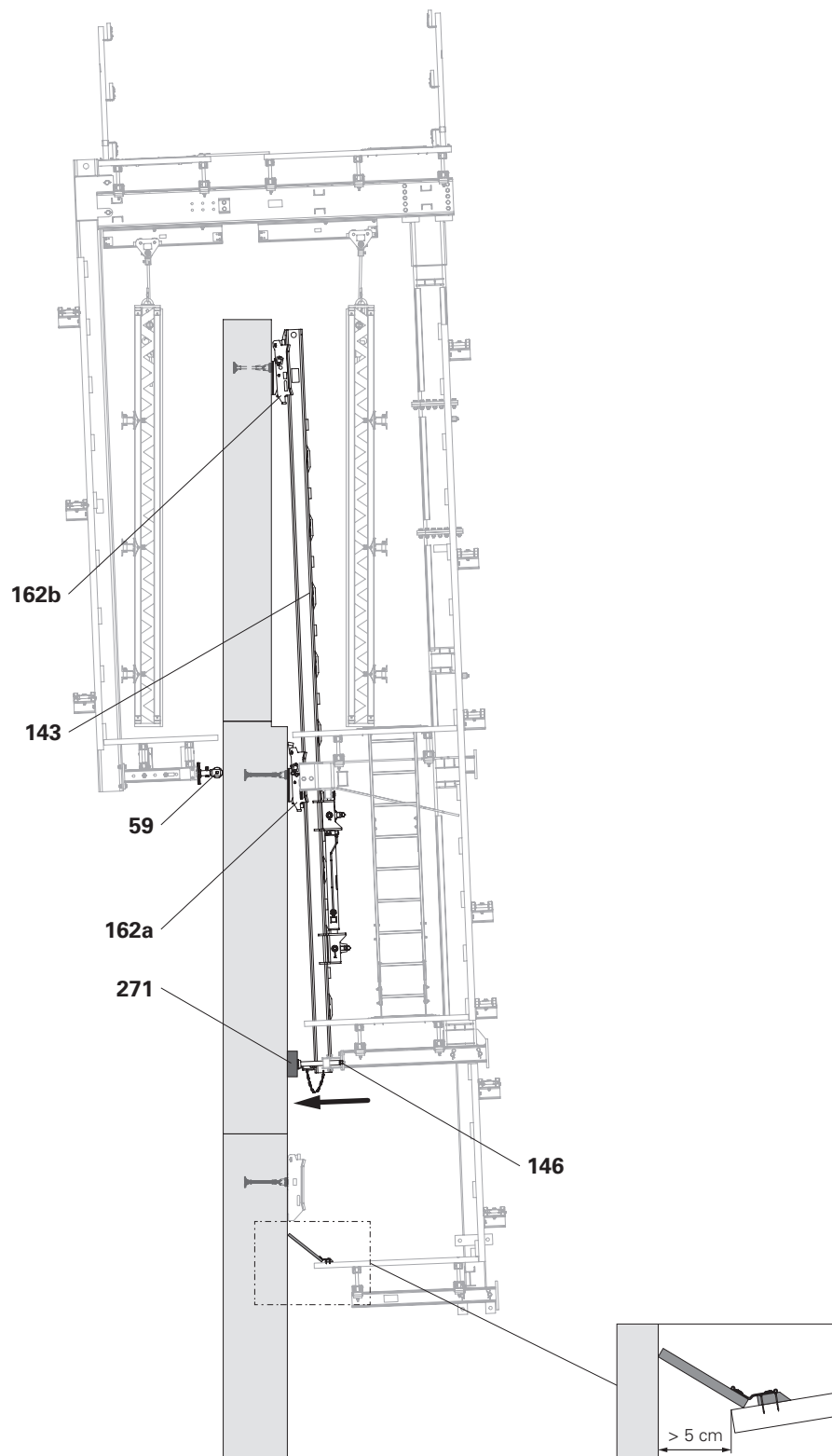


Fig. D3.06

Fig. D3.06a

Climbing the climbing unit

Warning

Risk of injury due to unforeseen formwork unit movements!

⇒ Retract the formwork and fix it to the vertical post intermediate or the platform post on the opposite side.

Note

- To prevent the climbing rail (143) from bending when the climbing unit is operated, line the climbing rail at the lower end with a piece of squared timber (271a) before starting the climbing operation.
- Attach the squared timber (271a) to the climbing rail (143) with a chain.

Implementation

1. Retract the Pressure Point Spindles M42 ACS (146).
2. Climb the unit into the next section and attach it to Climbing Shoe IV ACS (162b).
3. Extend the Pressure Point Spindles M42 ACS (146) and support the climbing unit. If necessary, prop it up with squared timber (271b).

(Fig. D3.07)



Has the Ledger ACS engaged fully in the climbing shoe?

Positioning the formwork unit

Given the fact that the climbing unit hangs at an angle above the wall offset, align the formwork vertically.

1. Fit the leading tie.
2. Move the formwork unit forwards and align it vertically with Kicker Brace AV.
3. Connect and anchor the formwork units.
4. Concrete the second section after the wall offset.

(Fig. D3.07)

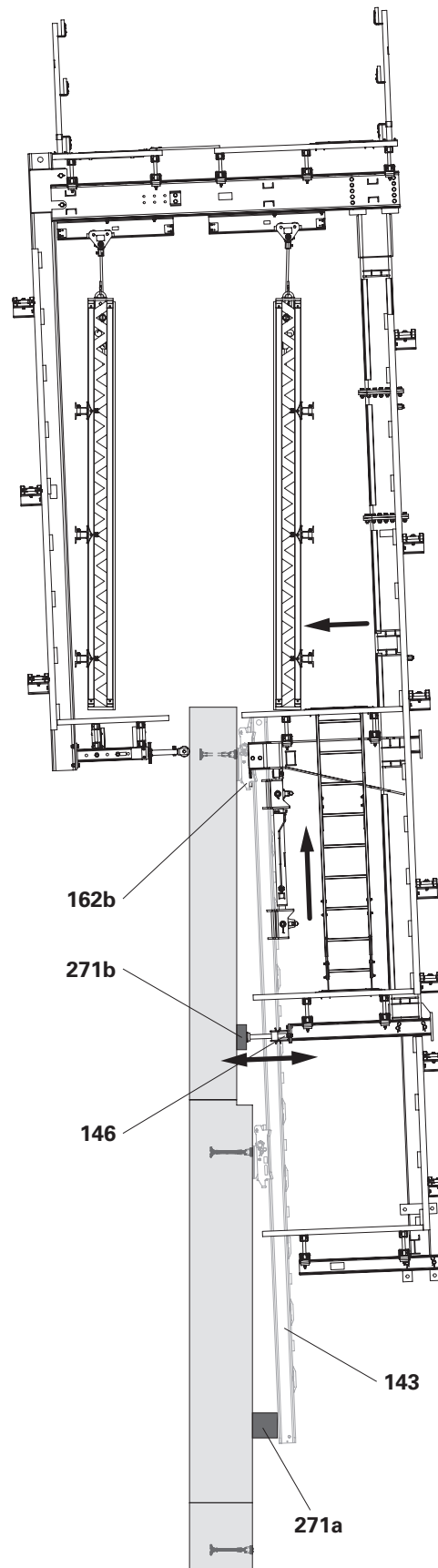


Fig. D3.07

Climbing the climbing rail

1. Fit Climbing Shoe-2 I ACS (**160b**).
 2. Climb Climbing Rail ACS (**143**).
 3. As soon as the Climbing Rail ACS (**143**) has climbed over the wall offset, pivot in the Climbing Rail ACS (**143**) and the climbing unit.
 4. Keep climbing with the Climbing Rail ACS (**143**) and attach it to Climbing Shoe-2 I ACS (**160b**).
- If necessary, readjust the Pressure Point Spindles M42 ACS (**146**) so that the climbing rail (**143**) can move into the Climbing Shoe-2 I ACS (**160b**).

(Fig. D3.08)



- Is the swing ledger of the climbing shoe (**160b**) folded down all the way?
- Are the support noses of the Climbing Rail ACS resting fully on the swing ledger?



Note

After climbing over the wall offset, close the gap from the counter-platform decking in the manner that the project requires. (Fig. D3.08a)

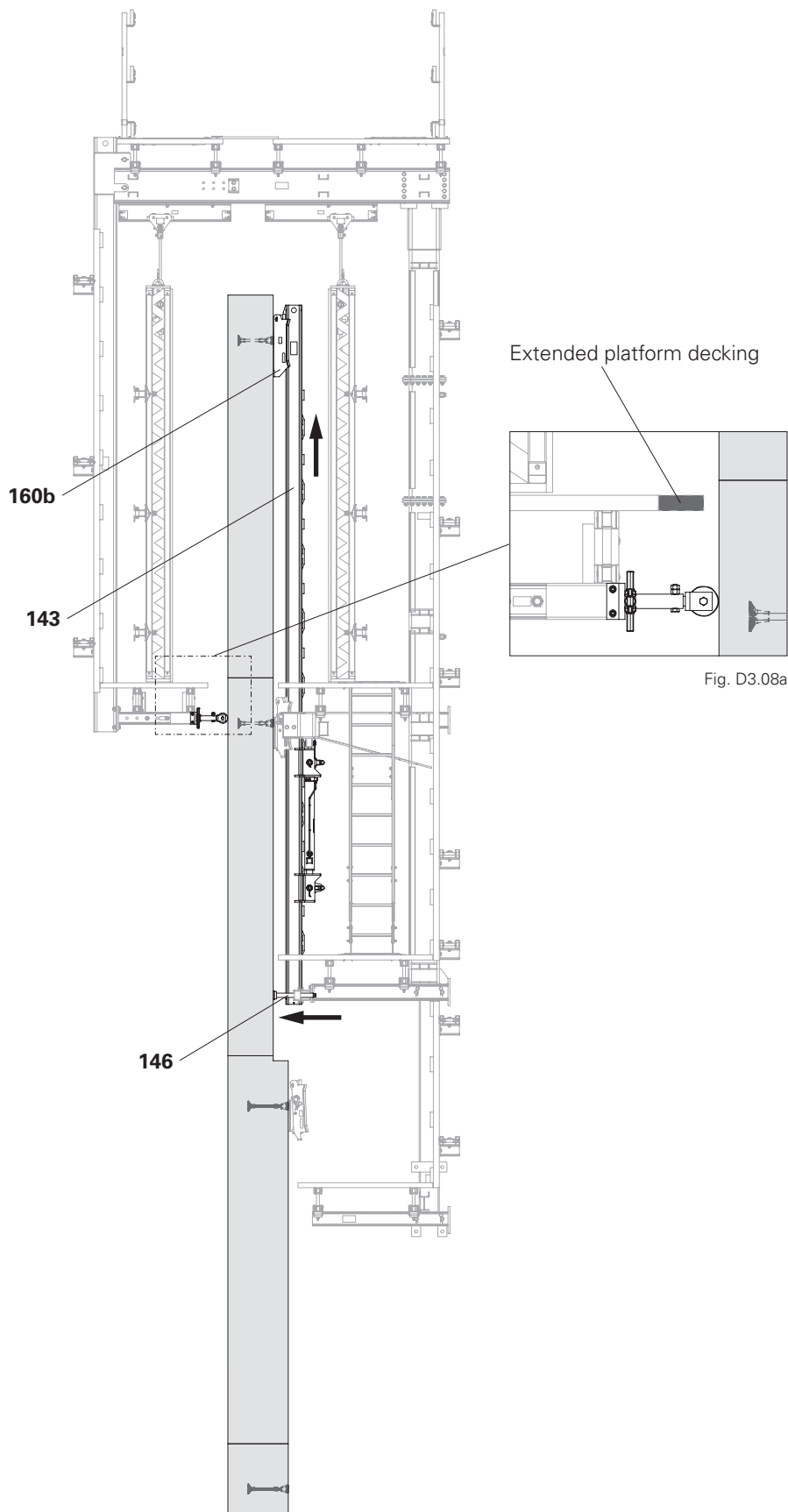


Fig. D3.08a

Fig. D3.08

Climbing the climbing unit

1. Retract the Pressure Point Spindles M42 ACS (**146**).
 2. Climb the climbing unit into the next section and attach it to Climbing Shoe-2 I ACS (**160b**).
 3. Extend the Pressure Point Spindles M42 ACS (**146**) and support the climbing unit.
- (Fig. D3.09)



Has the Ledger ACS engaged fully in the climbing shoe?

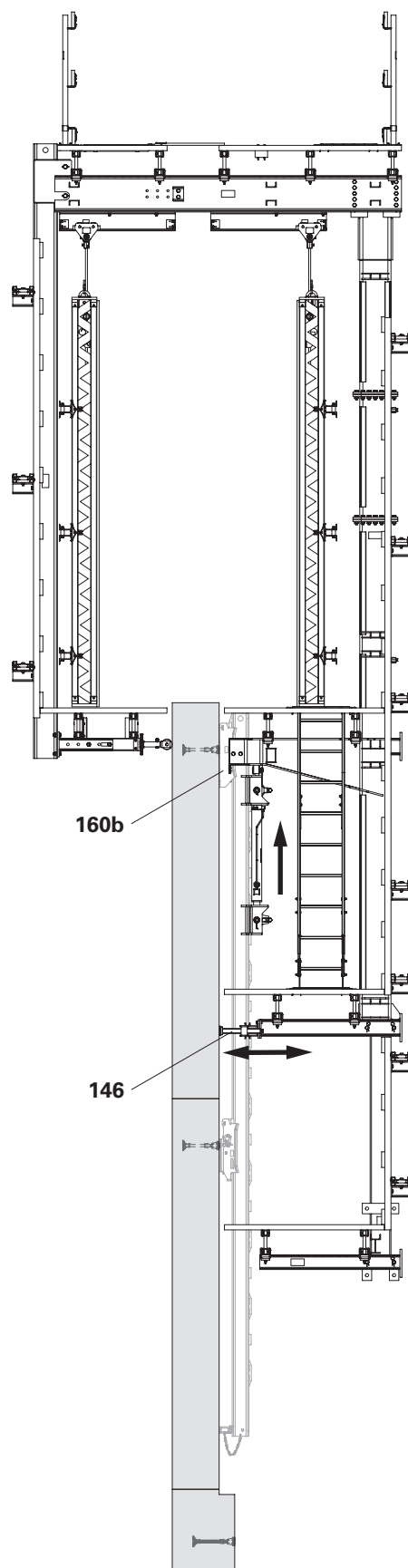


Fig. D3.09

Positioning the formwork unit

1. Fit the leading tie.
2. Move the formwork unit forwards and align it vertically with Kicker Brace AV (61).
3. Connect and anchor the formwork units.
4. Concrete the section.
(Fig. D3.10)

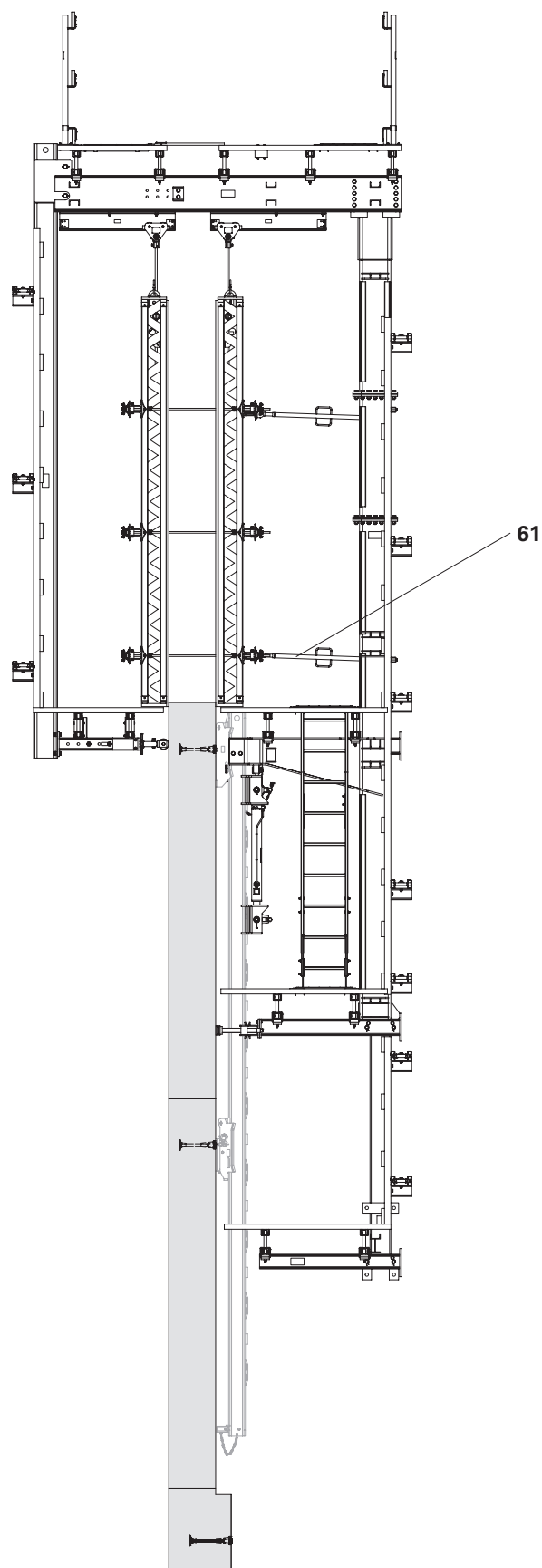


Fig. D3.10

Round building structure

- Arrange the Console Brackets ACS-G so they are parallel to each other so that the formwork units can be moved back and forth.
- The Climbing Shoe IV ACS, in combination with Tie Shoe-V ACS, compensates for angles of $\pm 15^\circ$.
- The radius R of the structure significantly influences the maximum possible console bracket spacing c .

Figure D3.11 shows the structure of the work platform as viewed from above.



- The platform decking runs parallel to the building contour at a distance of 5 cm.
- The maximum distance between adjacent platform decks is 5 cm.

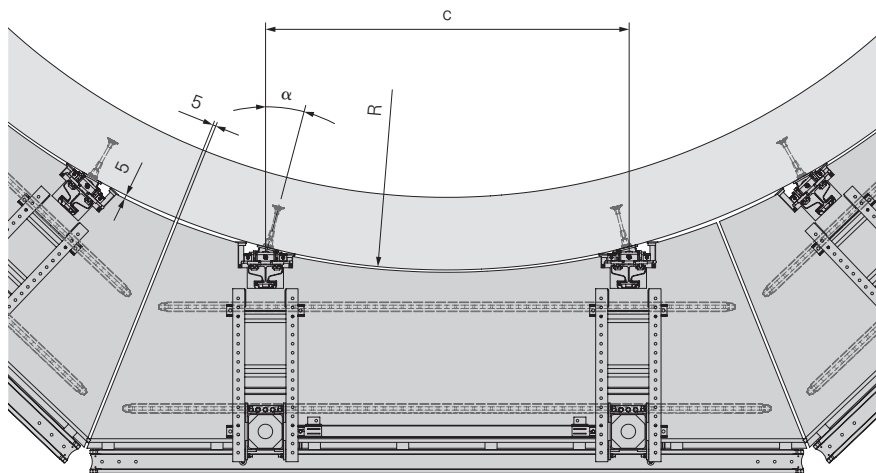


Fig. D3.11

General information



Danger

- Risk of falling from unsecured building edges!
A fall can result in serious injury or even death.
 - ⇒ Install temporary guardrails.
 - ⇒ Use personal protective equipment to prevent falling from a height (PPE).
- During the disassembly process, components could fall to the ground and hit people below!
This can lead to serious injuries or even death.
 - ⇒ Remove or secure all loose parts.
 - ⇒ Cordon off danger zones.



Note

The following work is only applicable in combination with the Assembly Instructions for "ACS 100 Climbing Device and Hydraulics"



- Disassembly is carried out individually for each climbing unit.
- Place the climbing unit and dismantled assemblies on squared timber.
- Have a sufficiently large disassembly area ready.

Disassembling the hydraulic system

Disassembly

1. Remove hydraulic lines and seal all connection points with plugs.
2. Fix the hydraulic unit to the platform decking.
3. For dismantling and removal of the hydraulic system, see assembly instructions "ACS 100 Climbing Device and Hydraulics".

Disassembling the formwork

Disassembly

1. Remove the planking of the work platform (level +1) in the area near the gallows.
 2. Remove the ladder from the counter-platform.
 3. Move the formwork back, place it on the ground and fix it to the vertical post intermediate or platform post.
 4. Detach the formwork from the trolley.
 5. Slide the panel beam on the console bracket side to the side.
- (Fig. E1.01)

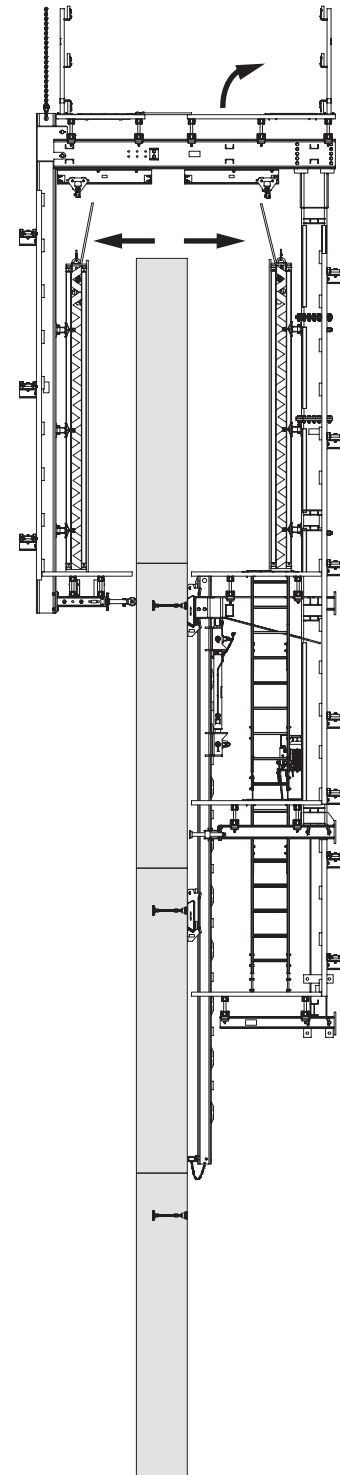


Fig. E1.01

E2 Lifting out the climbing unit

Lifting the counter-platform out

Lifting out

1. Attach the counter-platform to the crane.
2. Detach the counter-platform from the gallows and fly it out.
3. Set the counter-platform down and disassemble it.

(Fig. E2.01)

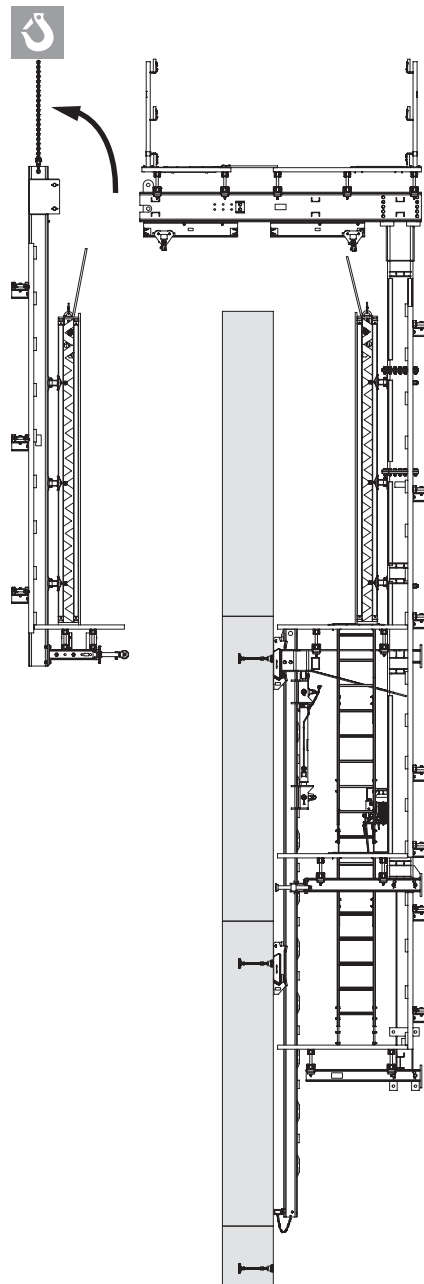


Fig. E2.01

E2 Lifting out the climbing unit

Lifting the climbing unit out

Lifting out

1. Set all climbing devices (140) to the "Neutral" position.
2. Remove the spacer (144).
3. Attach the climbing rail (143) to the crane and pull it upwards and out. (Fig. E2.02)
4. Unscrew the finishing climbing shoes and tie tubes. Remove climbing ties and seal tie points with concrete cones.
5. Detach the ledger chain from the Platform Beam GT 24.
6. Loop a round sling around the galleys at the back of the vertical post top and attach the climbing unit to the crane.
7. Unhook the climbing unit, lower it to the ground and let it hang from the crane. (Fig. E2.03)

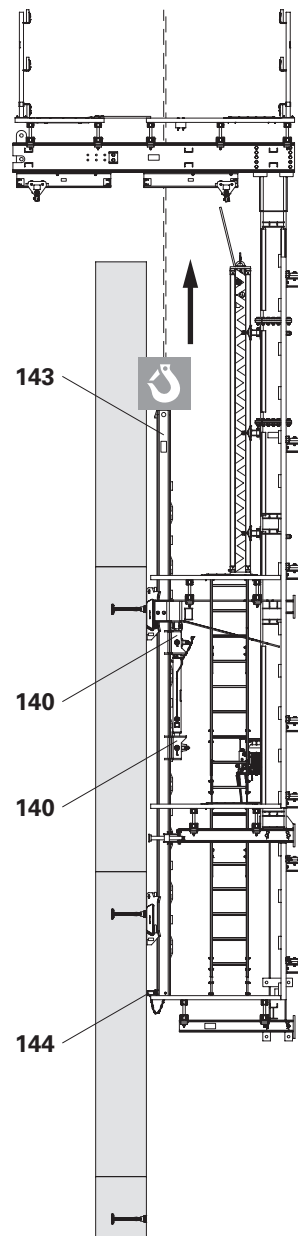


Fig. E2.02

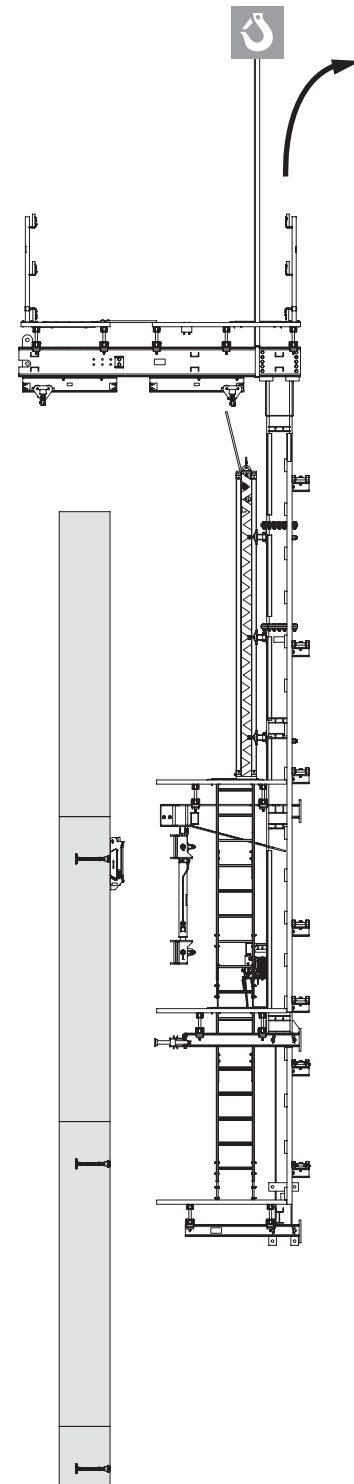


Fig. E2.03

E3 Removing the climbing unit

Dismantling assemblies

Warning

Heavy components at risk of falling over!

Body parts can get trapped, resulting in injuries.

- ⇒ Do not linger in the danger zone.
- ⇒ Do not reach into pinch points.
- ⇒ Attach components to the crane for removal, the crane lifting gear must not sag.
- ⇒ Secure components to prevent them from falling over.

Disassembly

1. Disconnect the finishing platform from the climbing unit and remove it. (Fig. B3.01)
2. Lower the climbing unit to the ground and let it hang from the crane.
3. Lift out the hydraulic unit. (Fig. E3.02)
4. Lay the climbing unit on its rear side.
5. Remove the climbing devices (140).
6. Remove the ladder from the climbing platform.
7. Lift out and dismantle the formwork unit.
8. Disconnect and dismantle both assemblies of the work platform (level +1).
9. Attach the gallows to the crane, unscrew it from the console bracket and dismantle.
10. Attach the climbing platform (level -1) to the crane, unscrew it from the console bracket and dismantle.
11. Attach the work platform (level 0) to the crane, unscrew it from the console bracket and dismantle. (Fig. E3.03)

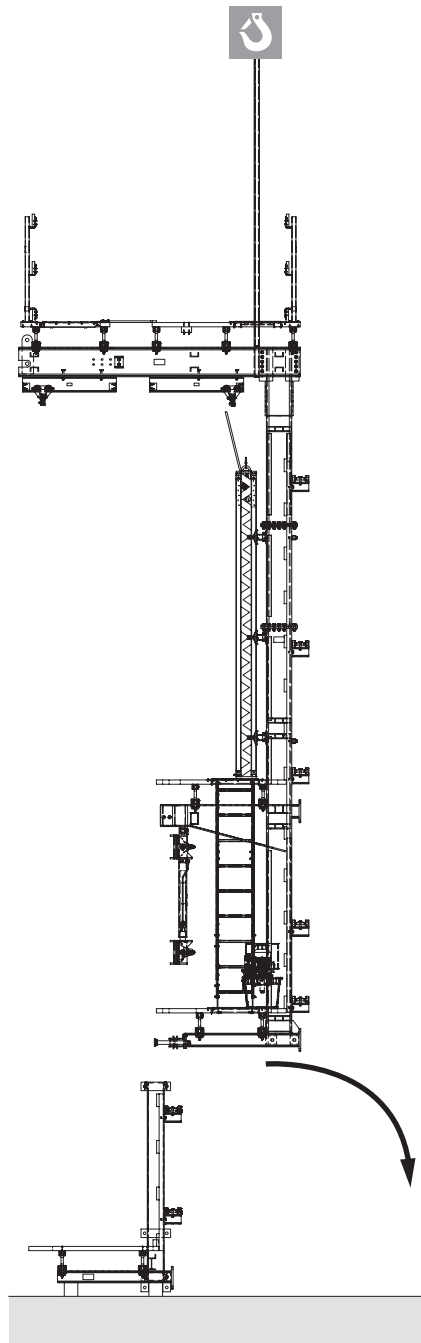


Fig. E3.01

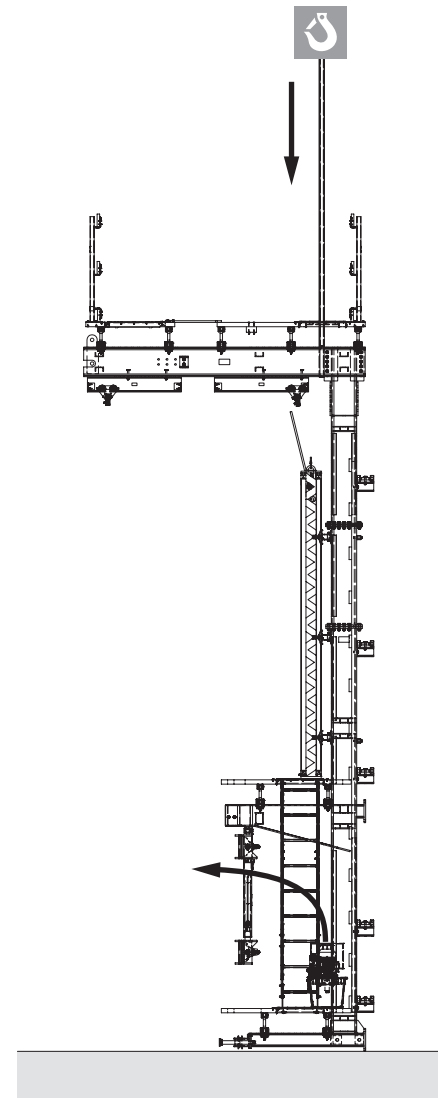


Fig. E3.02

E3 Removing the climbing unit

12. Temporarily secure console bracket disc 1 to prevent it from tipping over.
13. Attach console bracket disc 2 to the cantilever beam (level 0) and the vertical post top to the crane and unscrew the Ladder Cage Connection VT 20.
14. Lay console bracket disc 2 on its side and disassemble.
15. Attach console bracket disc 1 to the cantilever beam (level 0) and the vertical post top to the crane and unscrew the Ladder Cage Connection VT 20.
16. Lay console bracket disc 1 on its side and disassemble.
17. Remove the ladder cage.

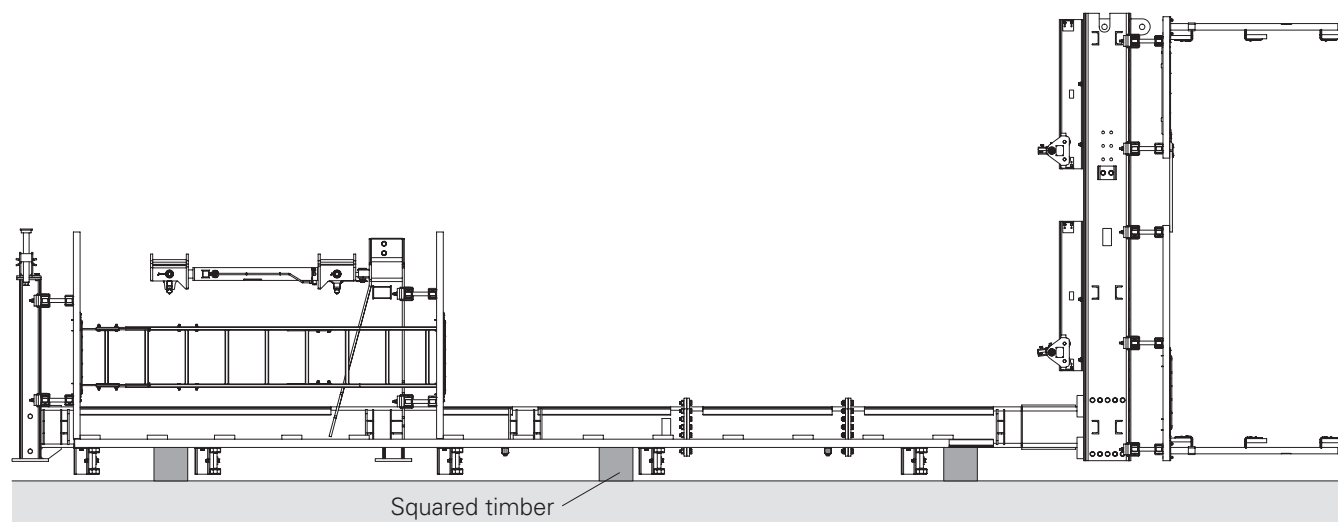


Fig. E3.03

E3 Removing the climbing unit

Concluding work

The following work is carried out using a crane cage.

Removing the uppermost tie point

1. Unscrew climbing shoes and tie tubes.
2. Remove the climbing ties.
3. Seal tie points with concrete cones.

Disposal

The disposal of components and materials must be arranged by a person authorised to do so.



- Separate materials correctly and according to type.
- Dispose of materials according to local regulations and guidelines.
- Dispose of hydraulic oil in accordance with the applicable environmental regulations. The safety data sheet for the hydraulic oil must be taken into consideration when disposing of the hydraulic oil.

F1 Maintenance plan



Hydraulic unit	
For a more detailed list, see the Assembly Instructions for the "ACS 100 Climbing Device and Hydraulics"	
Interval	Check and remedy defects
Prior to starting work	<ul style="list-style-type: none"> ■ Hydraulic oil level ■ Hydraulic oil temperature ■ External leaks ■ Working and control pressures ■ Noises and vibrations
Weekly	<ul style="list-style-type: none"> ■ Equipment fixings ■ Hoses (chafing, kinks)
Monthly	External condition of the hydraulic system (dirt, damage)
Quarterly	<ul style="list-style-type: none"> ■ Condition of the hydraulic oil ■ Filter element
Yearly	Check for deposits and rust formation, remedy if necessary.

Climbing device	
For a more detailed list, see the Assembly Instructions for the "ACS 100 Climbing Device and Hydraulics"	
Interval	Check and remedy defects
Prior to starting work	Check ease of movement and function: <ul style="list-style-type: none"> ■ Catches ■ Cams
	Check for damage, deformation and cracks: <ul style="list-style-type: none"> ■ Climbing heads ■ Hydraulic cylinder
	Spray with penetrating oil and check for ease of movement: <ul style="list-style-type: none"> ■ Locking pins ■ Spring pressure pieces

Tab. F1.01

Tie Tube Climbing shoe Climbing rail	
Interval	Check and remedy defects
Before each climbing operation	Spacer: Expander and chain
Monthly	Cleaning and greasing: <ul style="list-style-type: none"> ■ Sliding surfaces of the climbing rails ■ Sliding surfaces of the climbing shoes
	Clean, grease and check for ease of movement: <ul style="list-style-type: none"> ■ Gravity pivot plate of the climbing shoes
	Check for damage, deformation and cracks: <ul style="list-style-type: none"> ■ Connecting links and catches on the climbing rails ■ Climbing shoes and tie tubes
Climbing unit	
Interval	Check and remedy defects
Before each climbing operation	<ul style="list-style-type: none"> ■ Tighten the screw connections on the couplings. ■ Check all other bolt connections.
Monthly	Cleaning and greasing: <ul style="list-style-type: none"> ■ Sliding surfaces ■ Spindles
	Check all timber components for signs of damage and replace if necessary.
	Check steel structure for deformations and damage and have it replaced if necessary.
Every 6 months	Repair or renew the corrosion prevention on the steel parts.

Tab. F1.02

Self-climbing System ACS-R

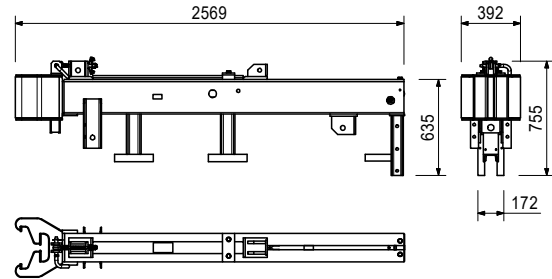
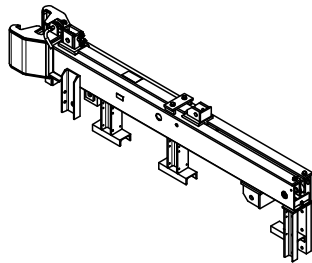


Art no.	Weight [kg]	
051701	271.000	Main Platf. Beam w.Car./M-Dr.

For fixing Decking Supports GT 24 or Beam IPE and Angle Profile L200x100 (special).

Notes

Used to connect Strongback 255 or 365 by means of Strongback Adapter 50 or 200.



Consists of

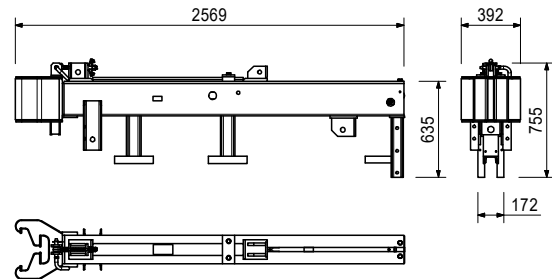
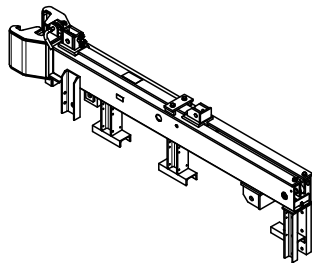
- 1 pc 51704 Carriage ACS cpl
- 1 pc 51705 Mechanical Drive ACS / A-M

Art no.	Weight [kg]	
051702	293.000	Main Platf. Beam w.Car./H-Dr.

For fixing Decking Supports GT 24 or Beam IPE and Angle Profile L200x100 (special).

Notes

Used to connect Strongback 255 or 365 by means of Strongback Adapter 50 or 200.



Consists of

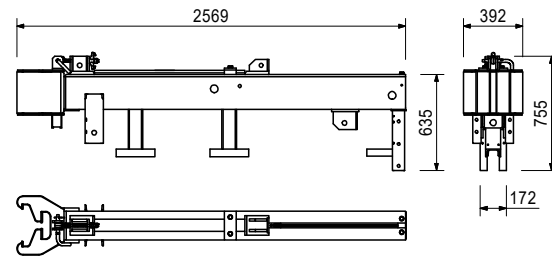
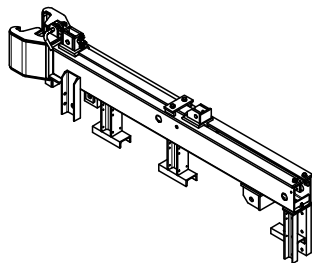
- 1 pc 051704 Carriage ACS cpl
- 1 pc 051706 Hydraulic Drive ACS / A-H

Art no.	Weight [kg]	
051700	259.000	Main Platform Beam ACS w. Car.

For fixing Decking Supports GT 24 or Beam IPE and Angle Profile L200x100 (special).

Notes

Used to connect Strongback 255 or 365 by means of Strongback Adapter 50 or 200.



Consists of

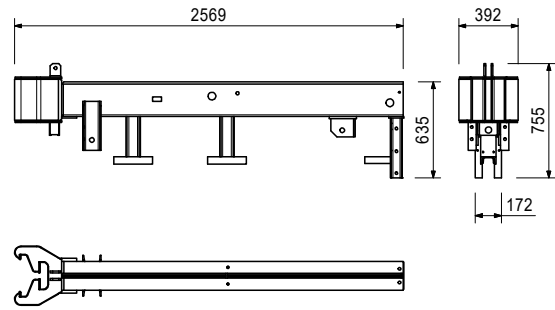
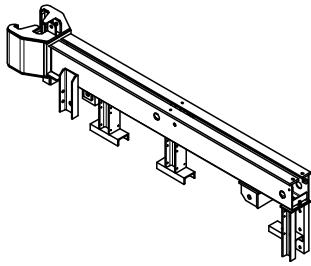
- 1 pc 051704 Carriage ACS cpl

Self-climbing System ACS-R



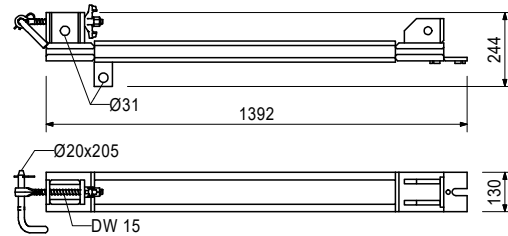
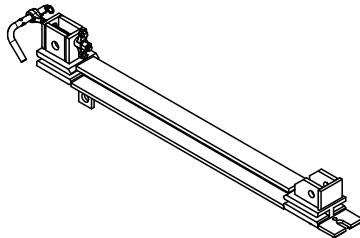
Art no.	Weight [kg]	
051703	204.000	Main Platform Beam ACS

For fixing Decking Supports GT 24 or Beam IPE and Angle Profile L200x100 (special).



Art no.	Weight [kg]	
051704	51.900	Carriage ACS cpl

Serves for retracting the formwork.

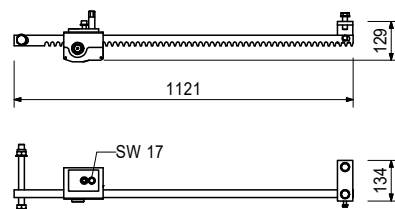
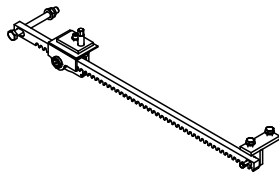


Consists of

- 1 pc 037160 Pin Ø20x205mm ga
- 1 pc 037150 Tie Yoke DW15
- 1 pc 030100 Wingnut DW15 ga
- 1 pc 018060 Cotter Pin 4/1 ga

Art no.	Weight [kg]	
051705	13.100	Mechanical Drive ACS / A-M

Serves as a mechanical drive for the carriage ACS.



Consists of

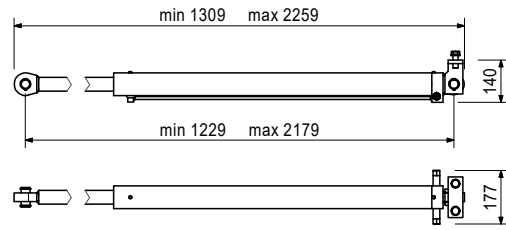
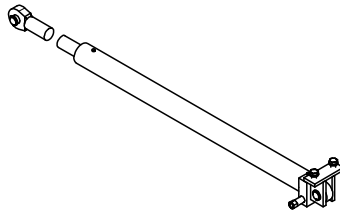
- 2 pc 710225 Screw ISO4017-M16x045-8.8-ga
- 2 pc 711074 Washer ISO7089-16-200HV-ga
- 1 pc 706462 Screw ISO4014-M20x200-8.8-ga
- 1 pc 781053 Hex-Nut ISO7040-M20-8-ga
- 1 pc 706454 Washer ISO7089-20-200HV-ga
- 1 pc 710593 Screw ISO4014-M10x080-8.8-ga
- 1 pc 780356 Hex-Nut ISO7040-M10-8-ga
- 1 pc 706461 Screw ISO4762-M12x035-8.8-ga
- 1 pc 780702 Washer ISO7089-12-200HV-ga

Self-climbing System ACS-R



Art no.	Weight [kg]	
051706	34.700	Hydraulic Drive ACS / A-H

Serves as a hydraulic drive for the Carriage.

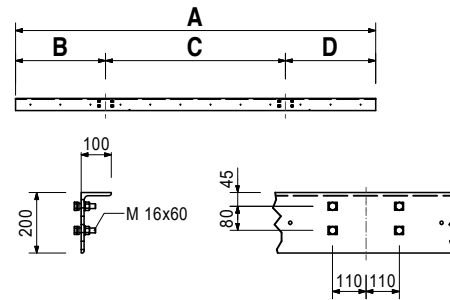
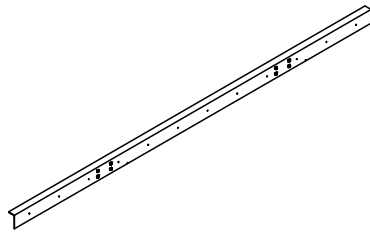


Consists of

- 2 pc 710225 Screw ISO4017-M16x045-8.8-ga
- 2 pc 711074 Washer ISO7089-16-200HV-ga
- 2 pc 706466 Pin Ø30x64mm ACS
- 4 pc 706465 Spring Washer DIN471-30x1.5
- 2 pc 706464 Drive Connector ACS

Art no.	Weight [kg]	
051708	24.600	Spacer Profile ACS 2-Br. per m

When ordering, specify the total length A, the cantilever arm B and the bracket spacing C, as well as the specify the control dimension D.



Consists of

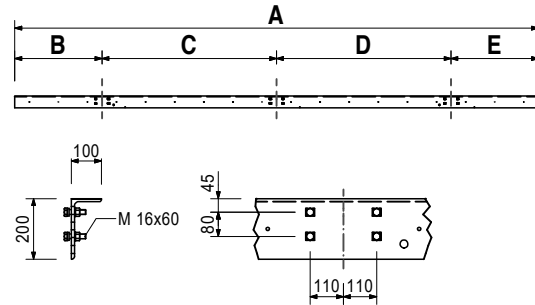
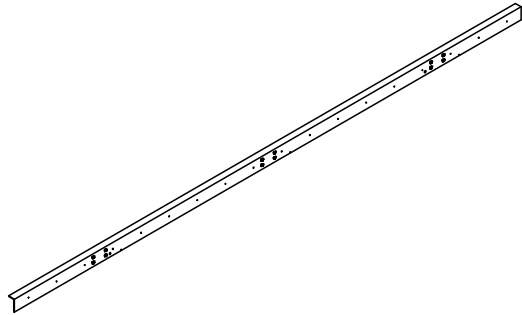
- 8 pc 710299 Screw ISO4014-M16x060-8.8-ga
- 8 pc 710229 Hex-Nut ISO4032-M16-8-ga
- 8 pc 711074 Washer ISO7089-16-200HV-ga
- 8 pc 710880 Washer DIN434-18-ga

Self-climbing System ACS-R



Art no.	Weight [kg]	
051709	25.400	Spacer Profile ACS 3-Br. per m

When ordering, specify the total length A, the cantilever arm B and the bracket spacing C and D, as well as the specify the control dimension E.

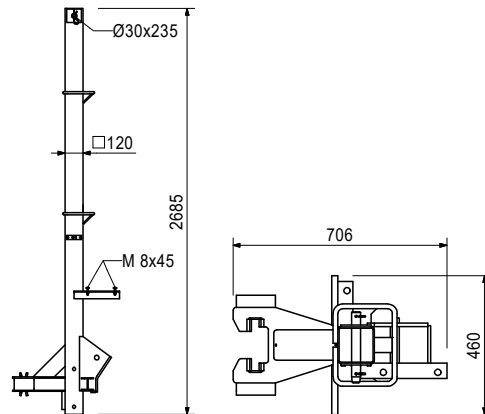
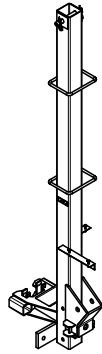


Consists of

- 12 pc 710299 Screw ISO4014-M16x060-8.8-ga
- 12 pc 710229 Hex-Nut ISO4032-M16-8-ga
- 12 pc 711074 Washer ISO7089-16-200HV-ga
- 12 pc 710880 Washer DIN434-18-ga

Art no.	Weight [kg]	
051710	83.500	Vertical Strut ACS

For fixing to Main Platform Beam ACS.



Accessory (not included)

051711	20.800	Sliding Unit ACS
051712	4.540	Compression Spindle ACS cpl
051713	2.360	Plywood Platform ACS-R

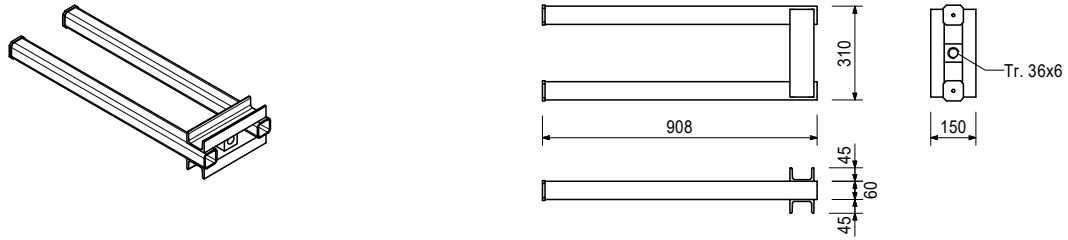
Consists of

- 1 pc 706372 Pin ACS Ø30x235mm coat
- 2 pc 022230 Cotter Pin 5/1 ga
- 3 pc 710295 Screw DIN603-M08x045-4.8-ga-Nu

Self-climbing System ACS-R

Art no.	Weight [kg]	
051711	20.800	Sliding Unit ACS

For assembling in Vertical Strut ACS. Adjustable compression point.



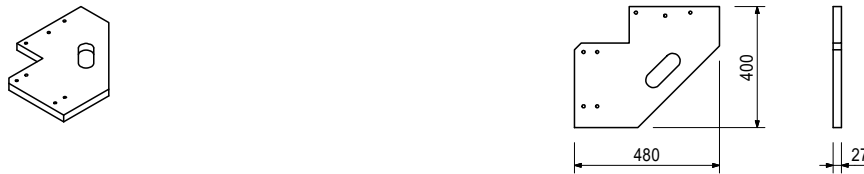
Art no.	Weight [kg]	
051712	4.540	Compression Spindle ACS cpl

For adjusting the ACS Sliding Piece, Width across flats Wrench size SW24.



Art no.	Weight [kg]	
051713	2.360	Plywood Platform ACS-R

Bonded plywood. For fitting to Vertical Strut.

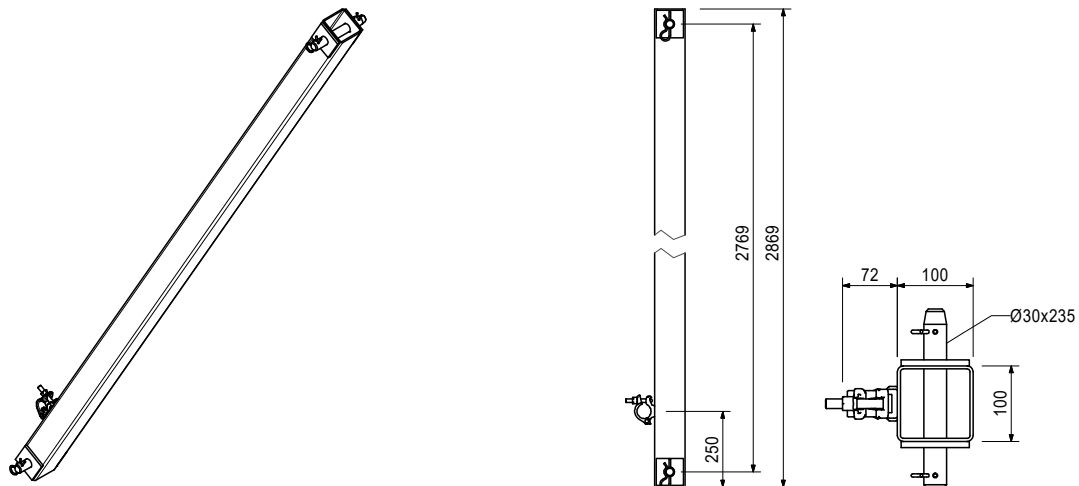


Accessory (not included)

710295	0.028	Screw DIN603-M08x045-4.8-ga-Nu
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Art no.	Weight [kg]	
051714	38.800	Compression Strut ACS

For the bracing of Sliding Units ACS.



Consists of

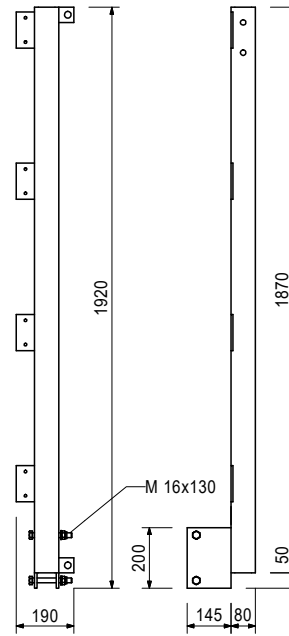
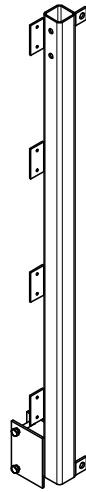
- 2 pc 706372 Pin ACS Ø30x235mm coat
- 4 pc 022230 Cotter Pin 5/1 ga

Self-climbing System ACS-R



Art no.	Weight [kg]	
051707	26.300	Guardrail Post Main Platf. ACS

For fixing to Main Platform Beam ACS.



Accessory (not included)

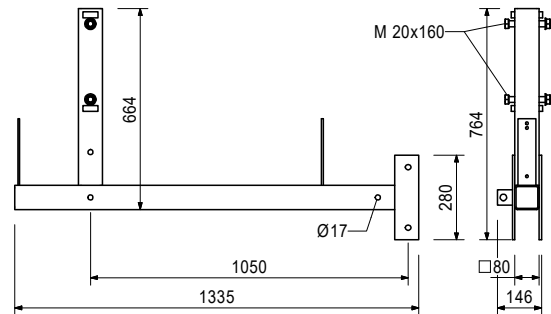
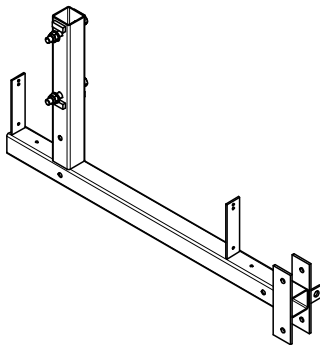
113762	0.884	Guardrail Conn. Plate ACS/SCS
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Consists of

- 2 pc 710232 Screw ISO4014-M16x130-8.8-ga
- 2 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 2 pc 711074 Washer ISO7089-16-200HV-ga

Art no.	Weight [kg]	
051716	23.100	Main Cantilever Beam ACS

For fixing to Vertical Strut ACS. For fixing Decking Supports GT 24 and Beams IPE.



Consists of

- 2 pc 781054 Screw ISO4014-M20x160-8.8-ga
- 2 pc 781053 Hex-Nut ISO7040-M20-8-ga
- 2 pc 706454 Washer ISO7089-20-200HV-ga

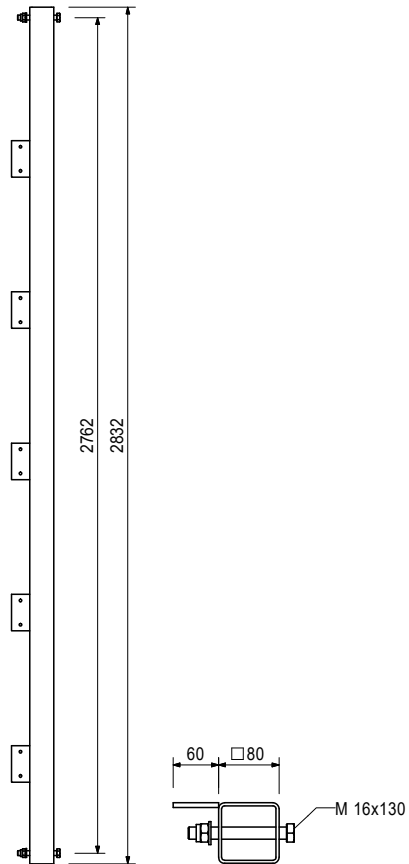
Self-climbing System ACS-R



Art no. Weight [kg]

051715 28.300 **Guardrail Post KB ACS 283**

For Main Cantilever Beam ACS.



Accessory (not included)

113762 0.884 **Guardrail Conn. Plate ACS/SCS**

Consists of

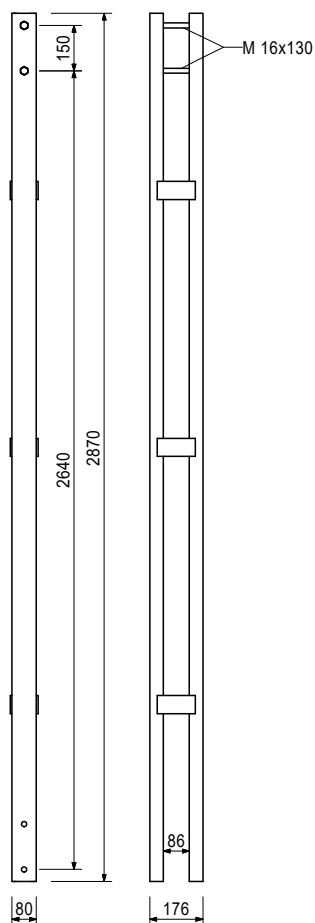
- 2 pc 710232 Screw ISO4014-M16x130-8.8-ga
- 2 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 2 pc 711074 Washer ISO7089-16-200HV-ga

Self-climbing System ACS-R



Art no.	Weight [kg]	
051717	52.800	Platform Post ACS 500

For fixing to Main Cantilever Beam ACS. Serves for suspending the Finishing Platform.

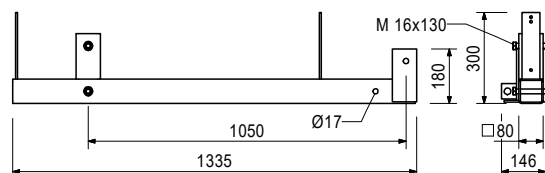
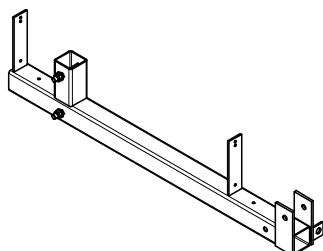


Consists of

- 2 pc 710232 Screw ISO4014-M16x130-8.8-ga
- 2 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 2 pc 711074 Washer ISO7089-16-200HV-ga

Art no.	Weight [kg]	
051720	17.200	Lower Cantilever Beam ACS

For fixing Decking Supports GT 24 and Beams IPE.



Consists of

- 2 pc 710232 Screw ISO4014-M16x130-8.8-ga
- 2 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 2 pc 711074 Washer ISO7089-16-200HV-ga

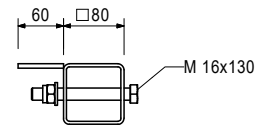
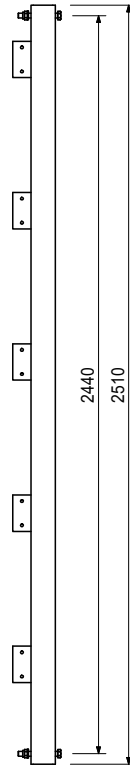
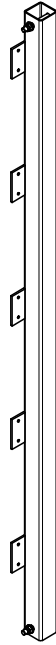
Self-climbing System ACS-R



Art no. Weight [kg]

051718 25.300 **Guardrail Post NB ACS 251**

For fixing between Main Cantilever Beam ACS and Lower Cantilever Beam ACS.



Accessory (not included)

113762 0.884 **Guardrail Conn. Plate ACS/SCS**

Consists of

- 2 pc 710232 Screw ISO4014-M16x130-8.8-ga
- 2 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 2 pc 711074 Washer ISO7089-16-200HV-ga

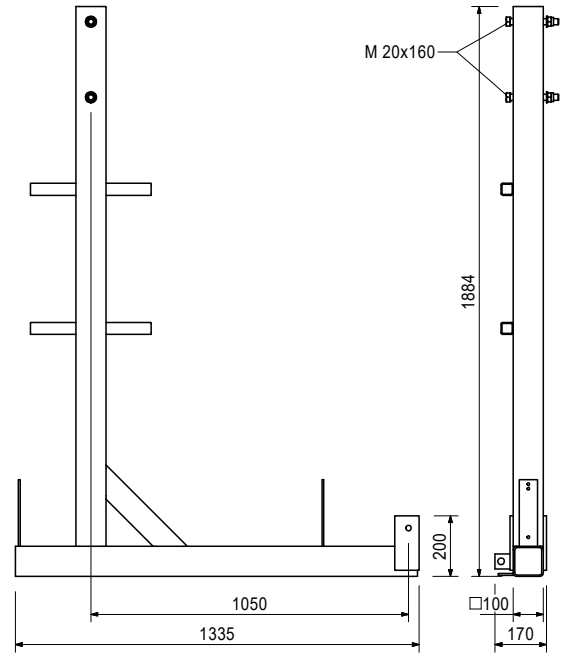
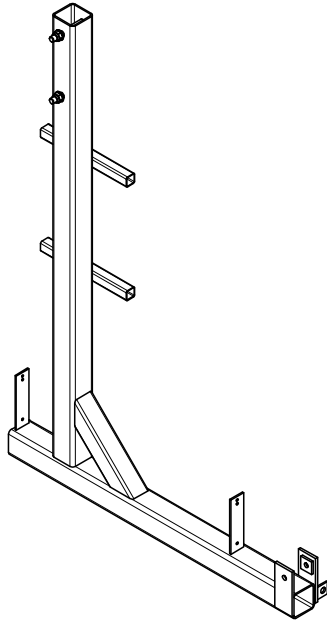
Self-climbing System ACS-R



Art no. Weight [kg]

051721 54.700 **Lower Cantilever Beam ACS 360**

For fixing to Vertical Struit ACS in case of system structure without Climbing Platform. For fixing Decking Supports GT 24 and Beams IPE.



Consists of

- 2 pc 781054 Screw ISO4014-M20x160-8.8-ga
- 2 pc 781053 Hex-Nut ISO7040-M20-8-ga
- 2 pc 706454 Washer ISO7089-20-200HV-ga

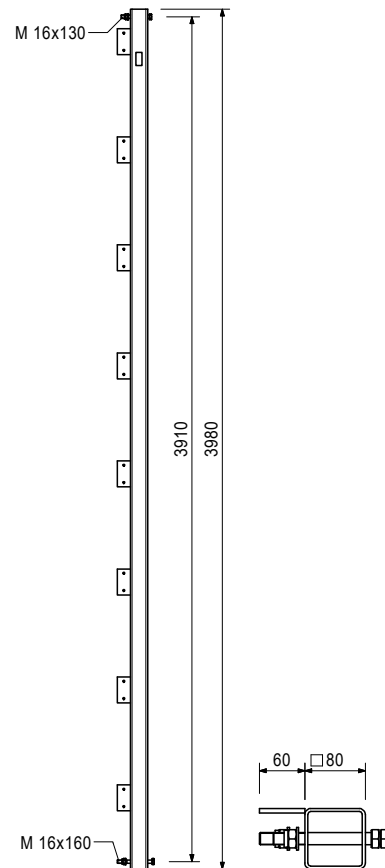
Self-climbing System ACS-R



Art no. Weight [kg]

051719 39.900 **Guardrail Post NB ACS 398**

For fixing between Crossbeam ACS and Lower Cantilever Beam ACS 360.



Accessory (not included)

113762 0.884 **Guardrail Conn. Plate ACS/SCS**

Consists of

- 1 pc 780155 Screw ISO4014-M16x160-8.8-ga
- 1 pc 710232 Screw ISO4014-M16x130-8.8-ga
- 2 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 2 pc 711074 Washer ISO7089-16-200HV-ga

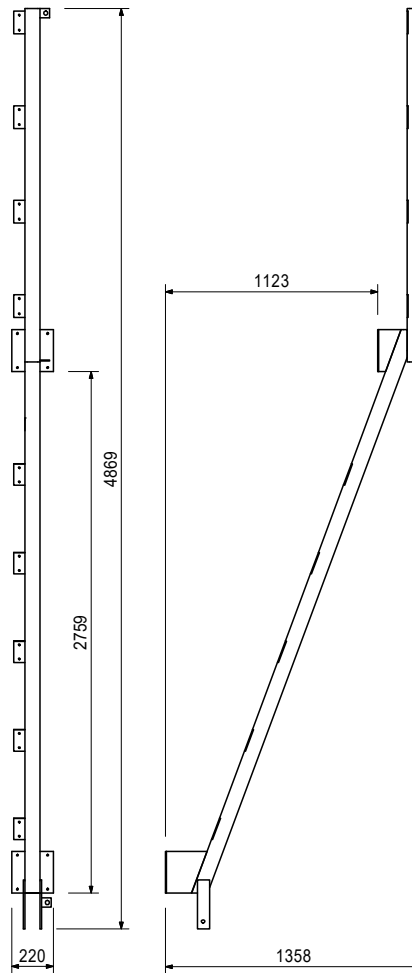
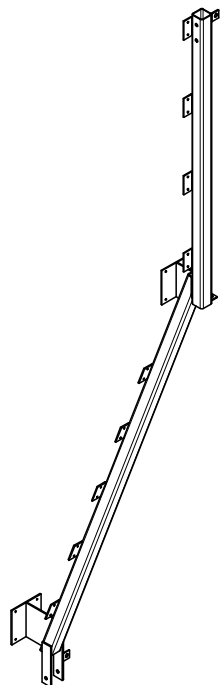
Self-climbing System ACS-R



Art no. Weight [kg]

051722 67.800 **Cantilever Post KB ACS**

Additional guardrail post for fixing to the Decking Supports of the Main and Climbing Platform at Climbing Platform Beam ACS.



Accessory (not included)

113762 0.884 **Guardrail Conn. Plate ACS/SCS**

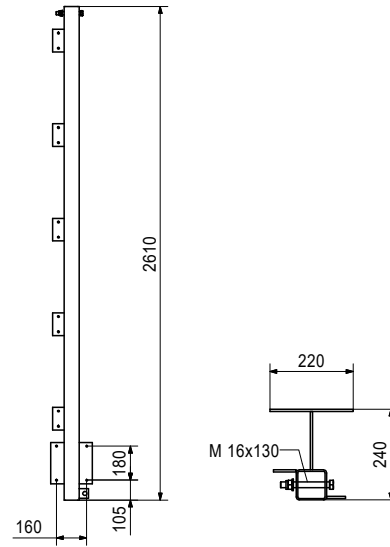
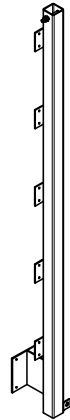
Self-climbing System ACS-R



Art no. Weight [kg]

051723 30.000 **Cantilever Post NB ACS 261**

Additional guardrail post for fixing to the Cantilever Post Climbing Platform ACS and Decking Supports of the Lower Cantilever Beam ACS.



Accessory (not included)

113762 0.884 **Guardrail Conn. Plate ACS/SCS**

Consists of

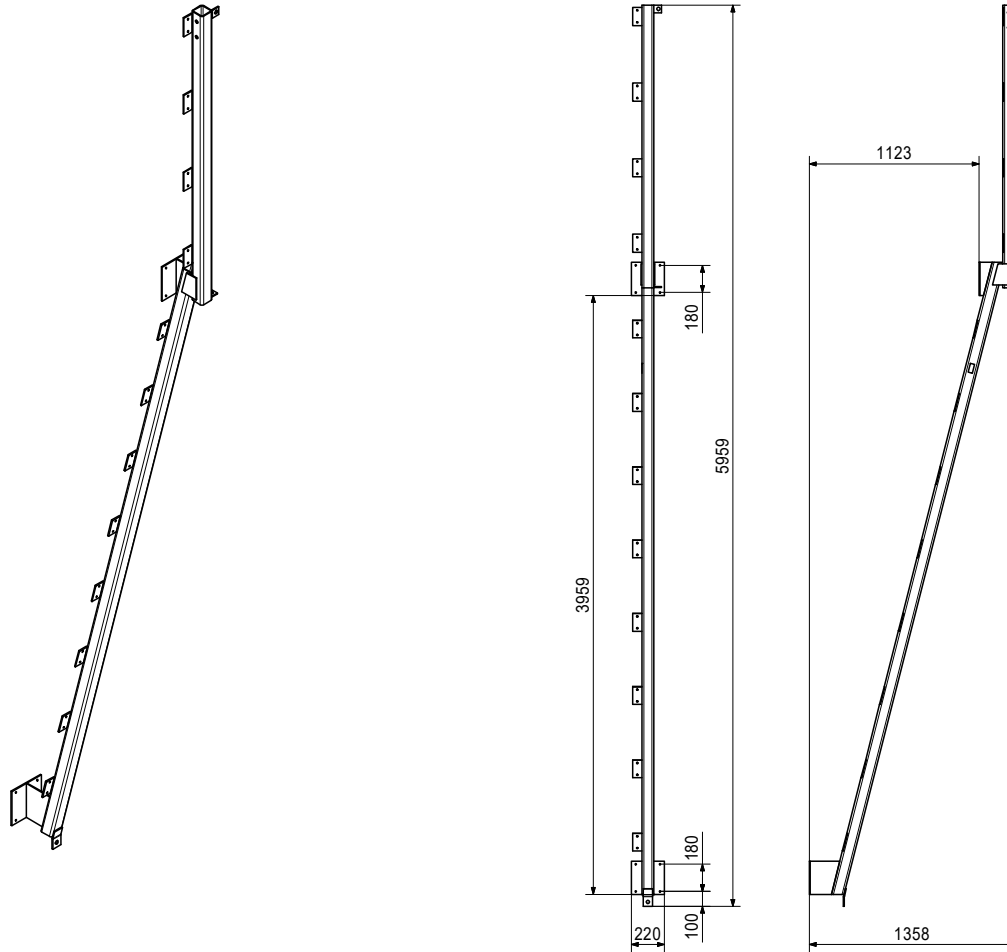
- 1 pc 710232 Screw ISO4014-M16x130-8.8-ga
- 1 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 1 pc 711074 Washer ISO7089-16-200HV-ga

Self-climbing System ACS-R



Art no.	Weight [kg]	
051724	80.800	Cantilever Post NB ACS long

Additional guardrail post for fixing to the Decking Supports of the Main and Trailing Platform at Lower Cantilever Beam 360.

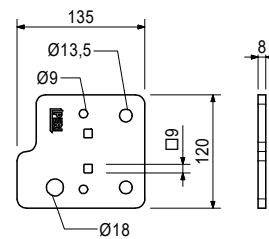
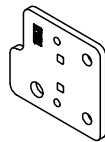


Accessory (not included)

113762	0.884	Guardrail Conn. Plate ACS/SCS
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Art no.	Weight [kg]	
113762	0.884	Guardrail Conn. Plate ACS/SCS

For assembling Scaffold Tubes $\varnothing 48$ or $\varnothing 60$ as Guardrail by means of Bail Pin A64 on Guardrail Posts ACS, SCS and GT 24. Fixation by Hex. Bolt M8, M12, M16 or Wood Screw $\varnothing 8$.



Accessory (not included)

110296	0.220	Clamp A64 DIN3570-M12-ga
710330	0.017	Hex-Nut ISO4032-M12-8-ga

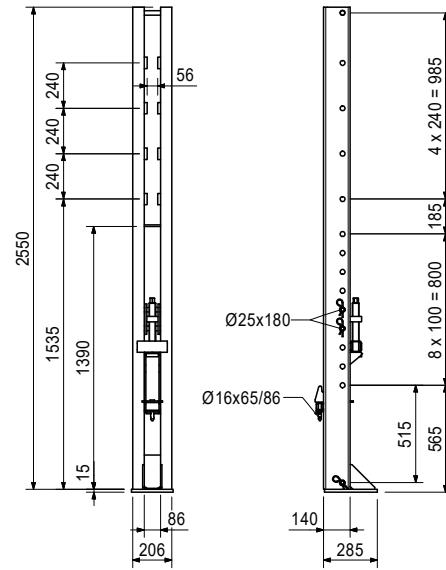
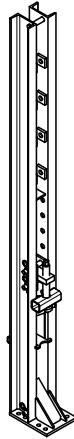
Self-climbing System ACS-R



Art no. Weight [kg]

057097 107.000 **Strongback ACS 255**

For connecting the formwork to the Carriage ACS. Standard formwork height up to 3.3m.



Accessory (not included)

057327	11.000	Strongback Adaptor 50 cpl
057332	15.700	Strongback Adaptor 200 cpl
057099	17.300	Adjust. Spindle Connect. ACS-P
037150	0.641	Tie Yoke DW15
722137	0.849	Cross Strap 2 coat
110055	0.861	Cross Strap coat
030100	0.439	Wingnut DW15 ga
030440	0.686	Sperical Nut DW15 ga

Consists of

- 1 pc 057081 Adjustable Spindle ACS cpl
- 1 pc 057307 Adjust. Nut ACR TR36x6mm coat
- 1 pc 057313 Ledger Bracket ACS coat
- 1 pc 057315 Counterholder ACS coat
- 3 pc 715936 Pin with Clamping Sleeve
- 1 pc 018050 Pin Ø16x65/86mm ga
- 3 pc 022230 Cotter Pin 5/1 ga
- 1 pc 018060 Cotter Pin 4/1 ga

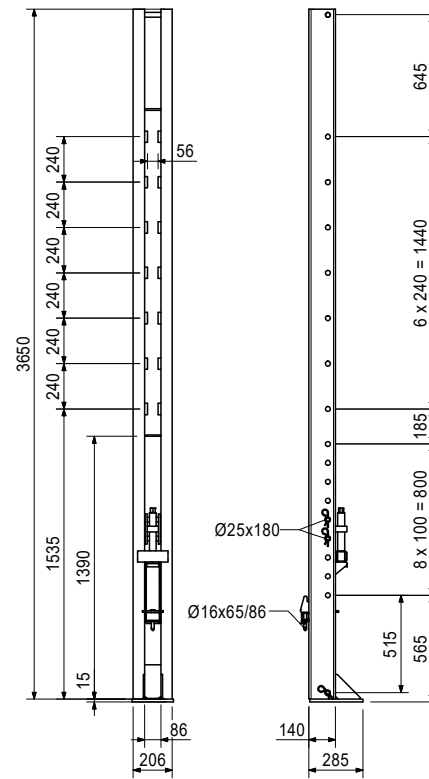
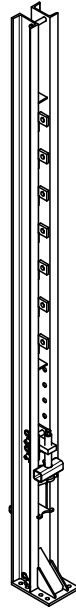
Self-climbing System ACS-R



Art no. Weight [kg]

057098 145.000 **Strongback ACS 365**

For connecting the formwork to the Carriage ACS. Standard formwork height up to 5.1m.



Accessory (not included)

057327	11.000	Strongback Adaptor 50 cpl
057332	15.700	Strongback Adaptor 200 cpl
057099	17.300	Adjust. Spindle Connect. ACS-P
037150	0.641	Tie Yoke DW15
722137	0.849	Cross Strap 2 coat
110055	0.861	Cross Strap coat
030100	0.439	Wingnut DW15 ga
030440	0.686	Spherical Nut DW15 ga

Consists of

- 1 pc 057081 Adjustable Spindle ACS cpl
- 1 pc 057307 Adjust. Nut ACR TR36x6mm coat
- 1 pc 057313 Ledger Bracket ACS coat
- 1 pc 057315 Counterholder ACS coat
- 3 pc 715936 Pin with Clamping Sleeve
- 1 pc 018050 Pin Ø16x65/86mm ga
- 3 pc 022230 Cotter Pin 5/1 ga
- 1 pc 018060 Cotter Pin 4/1 ga

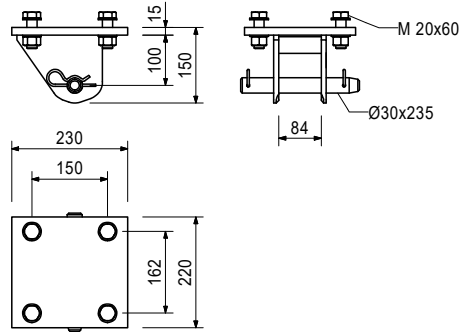
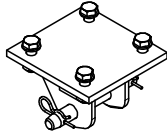
Self-climbing System ACS-R



Art no. Weight [kg]

057327 11.000 **Strongback Adaptor 50 cpl**

For connecting Strongback ACS to the Carriage ACS with wall offsets 0-50mm.



Accessory (not included)

057336 1.270 **Tie Yoke ACS 465**

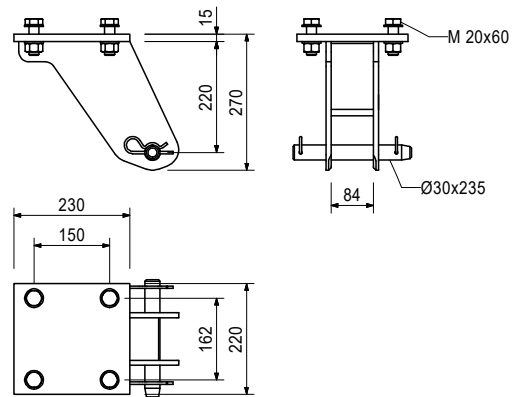
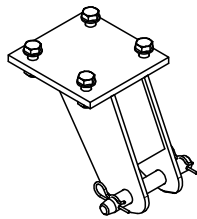
Consists of

- 1 pc 706372 Pin ACS Ø30x235mm coat
- 2 pc 022230 Cotter Pin 5/1 ga
- 4 pc 057139 Screw ISO4017-M20x060-8.8-ga
- 4 pc 710334 Hex-Nut ISO4032-M20-8-ga-left
- 8 pc 706454 Washer ISO7089-20-200HV-ga

Art no. Weight [kg]

057332 15.700 **Strongback Adaptor 200 cpl**

For connecting Strongback ACS to the Carriage ACS with wall offsets up to 200mm.



Accessory (not included)

057336 1.270 **Tie Yoke ACS 465**

Consists of

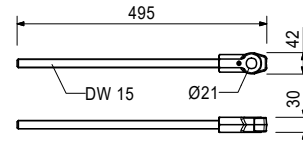
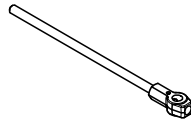
- 1 pc 706372 Pin ACS Ø30x235mm coat
- 2 pc 022230 Cotter Pin 5/1 ga
- 4 pc 057139 Screw ISO4017-M20x060-8.8-ga
- 4 pc 710334 Hex-Nut ISO4032-M20-8-ga
- 8 pc 706454 Washer ISO7089-20-200HV-ga

Self-climbing System ACS-R



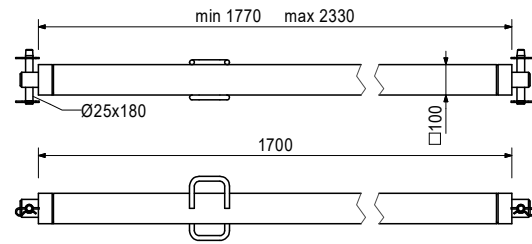
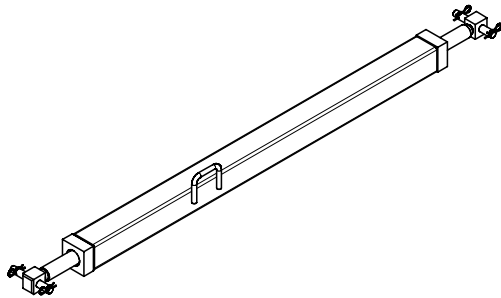
Art no.	Weight [kg]	
057336	1.270	Tie Yoke ACS 465

For securing the ACS Carriage with wall offsets.



Art no.	Weight [kg]	
057427	40.100	Compress. Spindle ACS 177-233

For supporting Strongback ACS 255.

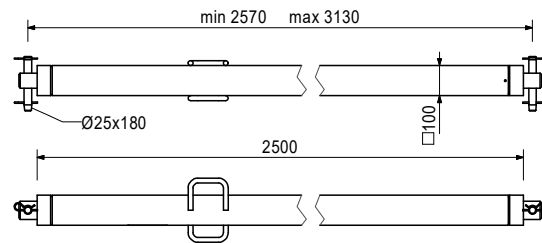
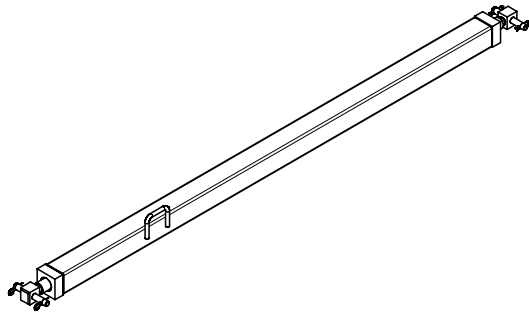


Consists of

- 2 pc 710894 Pin Ø25x180mm coat
- 4 pc 018060 Cotter Pin 4/1 ga

Art no.	Weight [kg]	
057430	49.500	Compress. Spindle ACS 257-313

For supporting Strongback ACS 365.



Consists of

- 2 pc 710894 Pin Ø25x180mm coat
- 4 pc 018060 Cotter Pin 4/1 ga

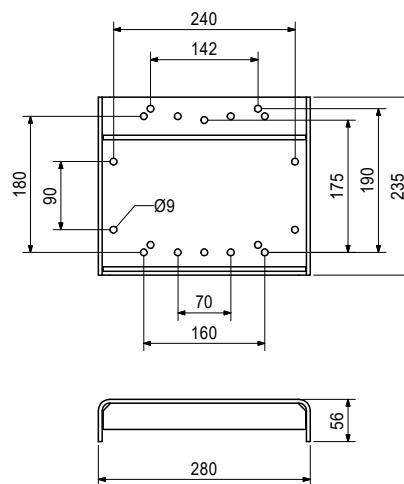
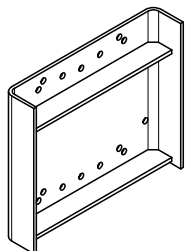
Self-climbing System ACS-R



Art no.	Weight [kg]	
057096	4.260	Connector IPE ACS

For fixing Platform Supports IPE 180 to IPE 240 at
- Main Platform Beam ACS
- Main Cantilever Beams ACS
- Lower Cantilever Beams ACS
- Lower Cantilever Beam ACS 360

for fixation of
- Cantilever Supports CP ACS
- Cantilever Props FB ACS, long
- Cantilever Props FP ACS, 2.61m
to Platform Girders IPE 180 to IPE 240.

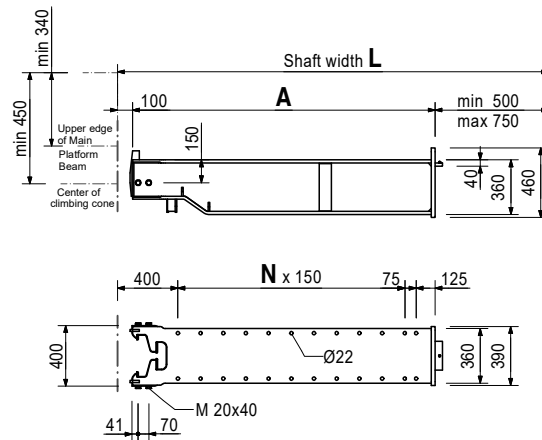
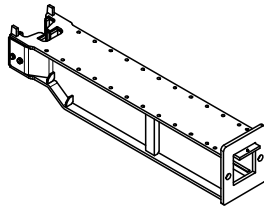


Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]		A [mm]	min. L [mm]	max. L [mm]	X [mm]	Y [mm]
		Main Platf. Beams ACS-P s.					
057000	263.000	Main Platf. Beam ACS-P 140 s.	1400	2000	2250	2000	2250
057001	286.000	Main Platf. Beam ACS-P 155 s.	1550	2150	2400	2150	2400
057002	308.000	Main Platf. Beam ACS-P 170 s.	1700	2300	2550	2300	2550
057003	331.000	Main Platf. Beam ACS-P 185 s.	1850	2450	2700	2450	2700
057004	354.000	Main Platf. Beam ACS-P 200 s.	2000	2600	2850	2600	2850
057005	376.000	Main Platf. Beam ACS-P 215 s.	2150	2750	3000	2750	3000
057006	400.000	Main Platf. Beam ACS-P 230 s.	2300	2900	3150	2900	3150

For supporting Self-Climbing Platforms ACS-P in building cores with single, telescopic Main Platform Beam Head Piece ACS-P. For shaft widths of 2-3.15m.



Accessory (not included)

057013	147.000	Main Platf. Beam Head ACS-P
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Consists of

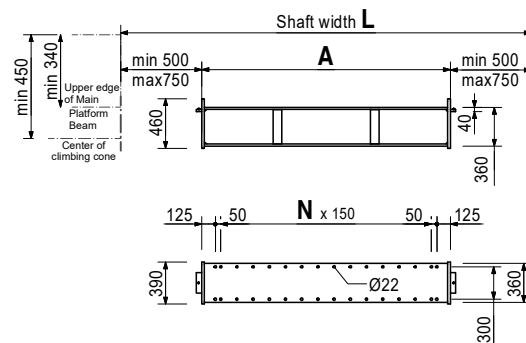
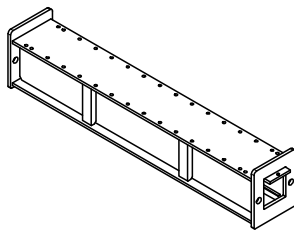
- 4 pc 706454 Washer ISO7089-20-200HV-ga
- 4 pc 706458 Screw ISO4017-M20x040-8.8-ga

Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]		A [mm]	min. L [mm]	max. L [mm]	X [mm]	Y [mm]
		Main Platf. Beams ACS-P do.					
057007	384.000	Main Platf. Beam ACS-P 200 do.	2000	3000	3500	3000	3500
057008	430.000	Main Platf. Beam ACS-P 230 do.	2300	3300	3800	3300	3800
057009	476.000	Main Platf. Beam ACS-P 260 do.	2600	3600	4100	3600	4100
057010	522.000	Main Platf. Beam ACS-P 290 do.	2900	3900	4400	3900	4400
057011	567.000	Main Platf. Beam ACS-P 320 do.	3200	4200	4700	4200	4700
057012	613.000	Main Platf. Beam ACS-P 350 do.	3500	4500	5000	4500	5000

For supporting Self-Climbing Platforms ACS-P in building cores with double, telescopic Main Platform Beam Head Piece ACS-P. For shaft widths 3-5m.



Accessory (not included)

057013	147.000	Main Platf. Beam Head ACS-P
057014	4.160	Beam Head Fixing ACS-P

Self-climbing System ACS-P / ACS-G

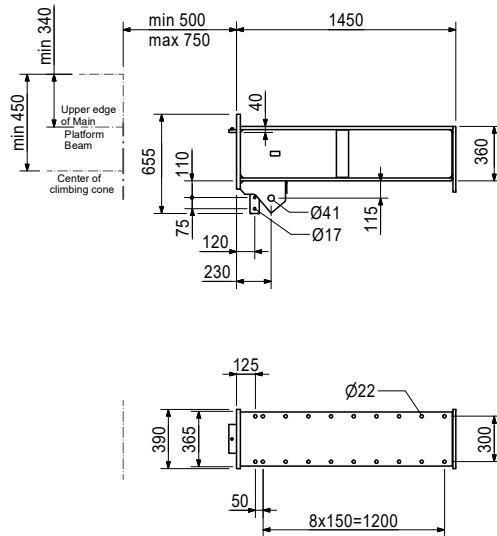
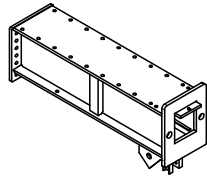


Art no.	Weight [kg]	
057060	298.000	Main Platf.Beam End Pie. ACS-P

For supporting Self-Climbing Platforms ACS-P in building cores with intermediate piece (special).
 For shaft widths over 5m.
 2 per Main Platform Beam.

Notes

In conjunction with Main Platform Support Central ACS-P (special component).
 Diagonal- and Vertical Braces are optional.

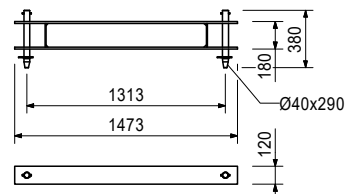
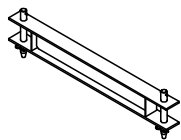


Accessory (not included)

057021	0.370	HV-Set M20x75-10.9
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Art no.	Weight [kg]	
057061	49.200	Diagonal Strut ACS-P 1473

For use in connection with the Main Platform End Piece ACS-P and Vertical Strut ACS-P 121 when Main Beam is tensioned.



Consists of

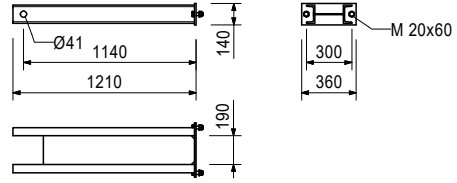
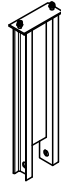
- 2 pc 057135 Pin $\varnothing 40 \times 290$ mm coat
- 2 pc 770012 Sleeve ISO8752-08.0x060-coat
- 2 pc 022230 Cotter Pin 5/1 ga

Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]	
057062	45.600	Vertical Strut ACS-P 121

For use in connection with the Main Platform End Piece ACS-P and Diagonal Strut 147.3 ACS-P.

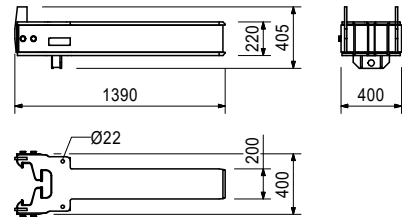
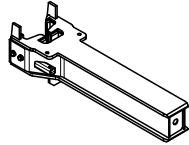


Consists of

- 2 pc 057139 Screw ISO4017-M20x060-8.8-ga
- 2 pc 781053 Hex-Nut ISO7040-M20-8-ga
- 4 pc 706454 Washer ISO7089-20-200HV-ga

Art no.	Weight [kg]	
057013	147.000	Main Platf. Beam Head ACS-P

As telescopable component in Main Platform Beam ACS-P.



Accessory (not included)

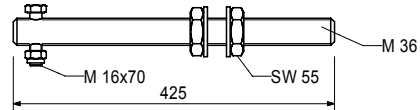
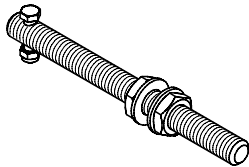
057014	4.160	Beam Head Fixing ACS-P
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Consists of

- 4 pc 706458 Screw ISO4017-M20x040-8.8-ga
- 4 pc 706454 Washer ISO7089-20-200HV-ga

Art no.	Weight [kg]	
057014	4.160	Beam Head Fixing ACS-P

For fixing Main Platform Beam Head Piece ACS-P in Main Platform Beam ACS-P.



Consists of

- 2 pc 114792 Hex-Nut ISO4035-M36-5-ga
- 2 pc 114784 Washer ISO7089-36-200HV-ga
- 1 pc 714093 Screw ISO4014-M16x070-8.8-ga
- 1 pc 070890 Hex-Nut ISO7040-M16-8-ga

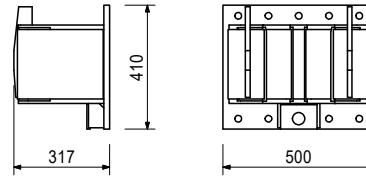
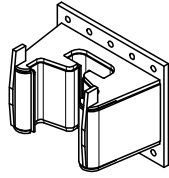
Self-climbing System ACS-P / ACS-G



Art no. Weight [kg]

057391	73.600	Head Adaptor ACS-P screwable
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Fixation to Connection Beam ACS-P 215 or ACS-P 235.



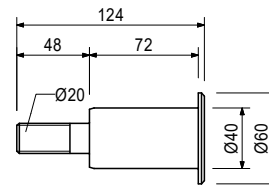
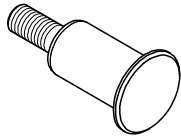
Accessory (not included)

057021	0.370	HV-Set M20x75-10.9
706454	0.017	Washer ISO7089-20-200HV-ga
123803	0.913	Head Bolt Ø40x124mm

Art no. Weight [kg]

123803	0.913	Head Bolt Ø40x124mm
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For the fixation of Climbing Unit ACS 100 to the Head Adapter.



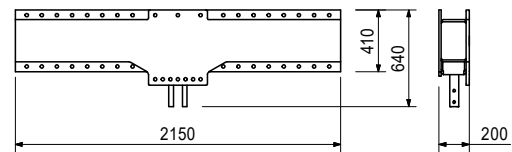
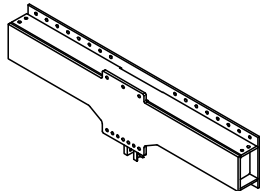
Accessory (not included)

781053	0.065	Hex-Nut ISO7040-M20-8-ga
706454	0.017	Washer ISO7089-20-200HV-ga

Art no. Weight [kg]

057393	319.000	Connection Beam ACS-P 215
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For supporting Main Platform Beam ACS-P with 2 climbing units.



Accessory (not included)

057391	73.600	Head Adaptor ACS-P screwable
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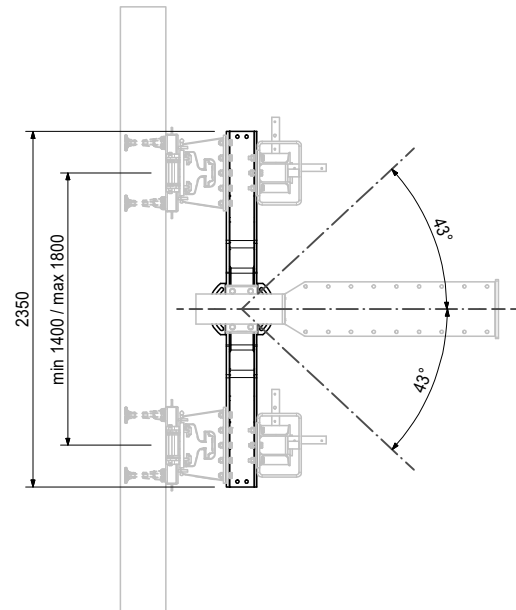
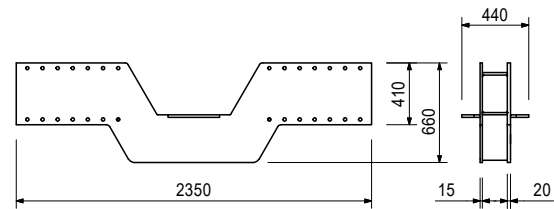
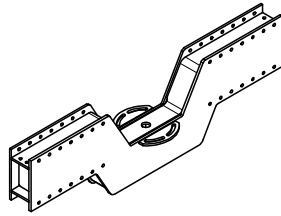
Self-climbing System ACS-P / ACS-G



Art no. Weight [kg]

057395 403.000 **Connection Beam ACS-P 235**

For articulated support of the End Pieces ACS-P 200 with 2 climbing units on straight and sloping walls. Angle range max. $\pm 43^\circ$.



Accessory (not included)

057391	73.600	Head Adaptor ACS-P screwable
057400	207.000	Vertical Strut ACS-P 307.5
057409	23.800	Slide Bearing Plate ACS-P
057413	14.800	Fixed Bearing Plate ACS-P

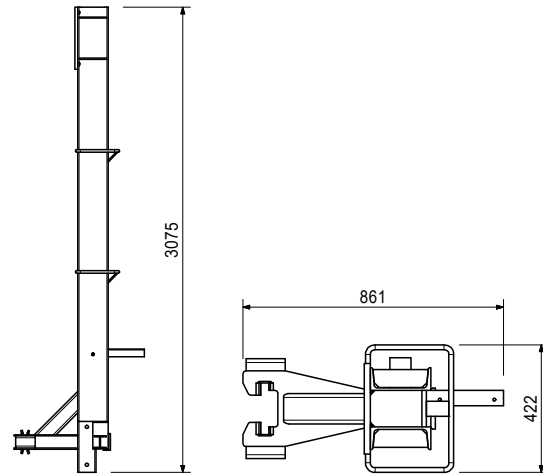
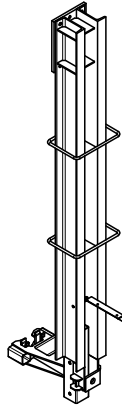
Self-climbing System ACS-P / ACS-G



Art no. Weight [kg]

057400	207.000	Vertical Strut ACS-P 3075
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For the fixation to Connection Beam ACS-P 215 or 235.



Accessory (not included)

051711	20.800	Sliding Unit ACS
051712	4.540	Compression Spindle ACS cpl
051713	2.360	Plywood Platform ACS-R
057021	0.370	HV-Set M20x75-10.9
123839	0.440	HV-Set M20x90-10.9
123845	0.057	U-Washer DIN6918-21-ga
710295	0.028	Screw DIN603-M08x045-4.8-ga

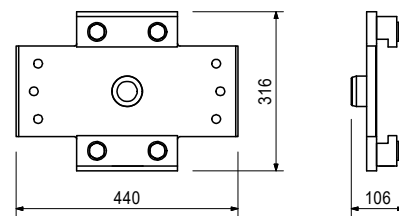
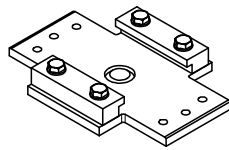
Consists of

- 1 pc 057397 Lan. Plat. Supp. coat
- 1 pc 710225 Screw ISO4017-M16x045-8.8-ga
- 1 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 2 pc 711074 Washer ISO7089-16-200HV-ga

Art no. Weight [kg]

057409	23.800	Slide Bearing Plate ACS-P
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Sliding connection of End Piece ACS-P 200 to the Connection Beam ACS-P 235.



Accessory (not included)

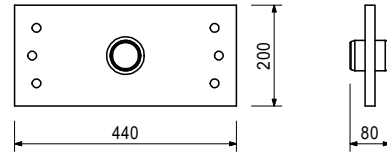
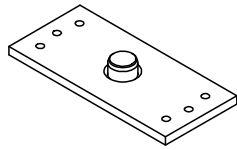
123844	0.130	Screw ISO4017-M20x035-8.8-ga
706454	0.017	Washer ISO7089-20-200HV-ga

Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]	
057413	14.800	Fixed Bearing Plate ACS-P

For the connection of End Piece ACS-P 200 to the Connection Beam ACS-P 235.

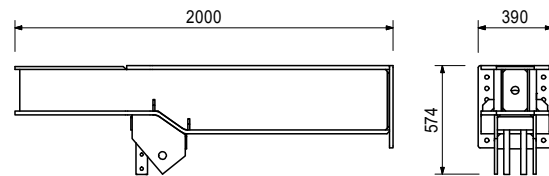
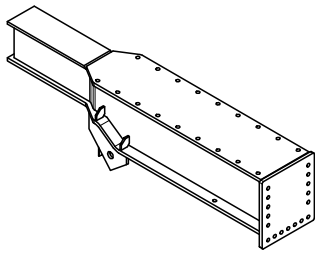


Accessory (not included)

123844	0.130	Screw ISO4017-M20x035-8.8-ga
706454	0.017	Washer ISO7089-20-200HV-ga

Art no.	Weight [kg]	
057402	330.000	End Piece ACS-P 200

For the support of Self-climbing Platforms ACS-P in diagonal building cores with intermediate piece (special).



Accessory (not included)

057021	0.370	HV-Set M20x75-10.9
057061	49.200	Diagonal Strut ACS-P 147.3
057062	45.600	Vertical Strut ACS-P 121
057409	23.800	Slide Bearing Plate ACS-P
057413	14.800	Fixed Bearing Plate ACS-P

Self-climbing System ACS-P / ACS-G



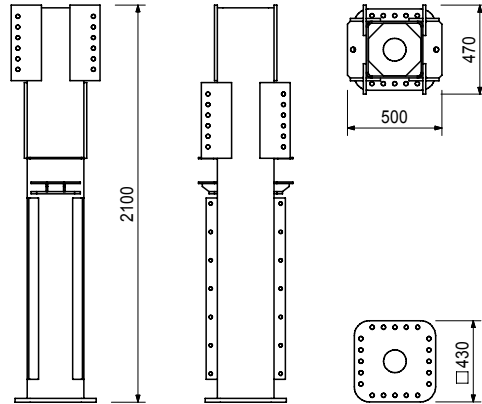
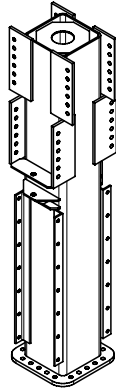
Art no. Weight [kg]

057016	305.000	Vertical Post Top ACS 210
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For the fixation on Vertical Post Base ACS 207.5 or Vertical Post Intermediate to support girder grid level +1.

Notes

Creation of the production drawing - compression strut ACS Cross Bracing - is made on a project-specific basis.



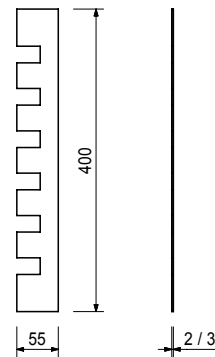
Accessory (not included)

057085	0.281	Distance Plate ACS 55x400x2mm
057086	0.422	Distance Plate ACS 55x400x3mm
024900	0.255	Screw ISO4014-M20x080-8.8-ga
781053	0.065	Hex-Nut ISO7040-M20-8-ga
706454	0.017	Washer ISO7089-20-200HV-ga

Art no. Weight [kg]

Distance Plates ACS		
057085	0.281	Distance Plate ACS 55x400x2mm
057086	0.422	Distance Plate ACS 55x400x3mm

For compensating the tolerance between Vertical Post Top ACS 210 and Main Beam ACS-P or Gallow ACS-G 143 and Gallow ACS-G 332.5.

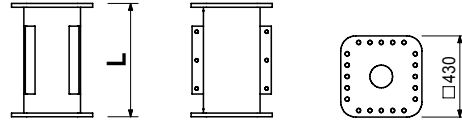
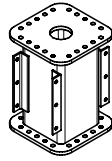


Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]		L [mm]
Vertical Posts Intermed ACS			
057067	179.000	Vertic. Post Intermed ACS 120	1200
057019	74.800	Vertical Post Intermed ACS 30	300
057018	110.000	Vertical Post Intermed ACS 60	600
057017	144.000	Vertical Post Intermed ACS 90	900

Assembly between Vertical Post Top ACS 210 and Vertical Post Base ACS 2075 as height adjustment.



Accessory (not included)

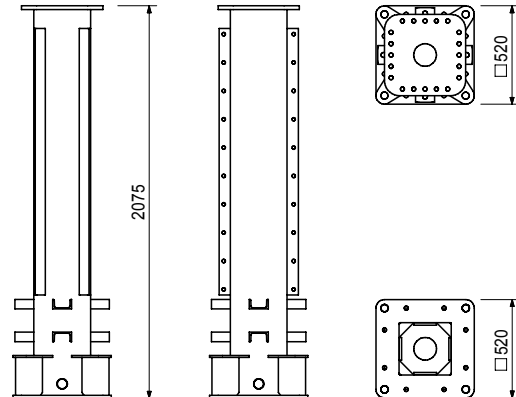
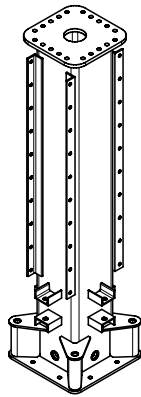
057021	0.370	HV-Set M20x75-10.9
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Art no.	Weight [kg]	
057020	309.000	Vertical Post Base ACS 2075

For the fixation on Main Platform Beam ACS to support girder grid level +1.

Notes

Creation of the production drawing - compression strut ACS Cross Bracing - is made on a project-specific basis.



Accessory (not included)

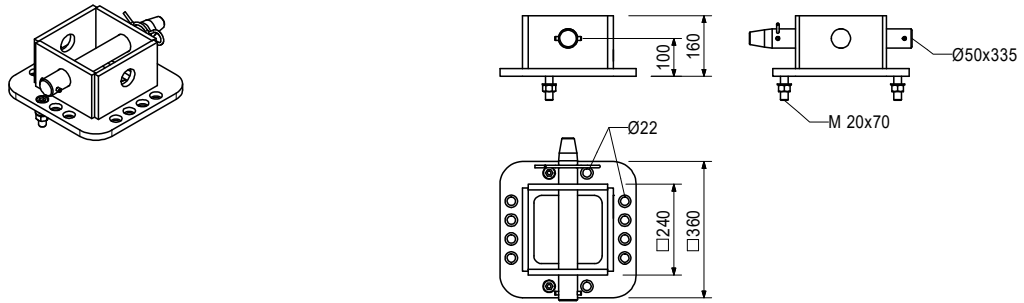
057021	0.370	HV-Set M20x75-10.9
057022	33.500	Vertic.Post Conn. ACS-P artic.
057023	22.800	Distance Plate ACS-P 36x52
057025	19.300	Yoke ACS-P 43
057026	9.410	Clamping Bolt ACS-P M36x1000mm

Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]	
057022	33.500	Vertic.Post Conn. ACS-P artic.

For articulated connection of Vertical Post Base ACS 207.5 to Main Platform Beam ACS-P.

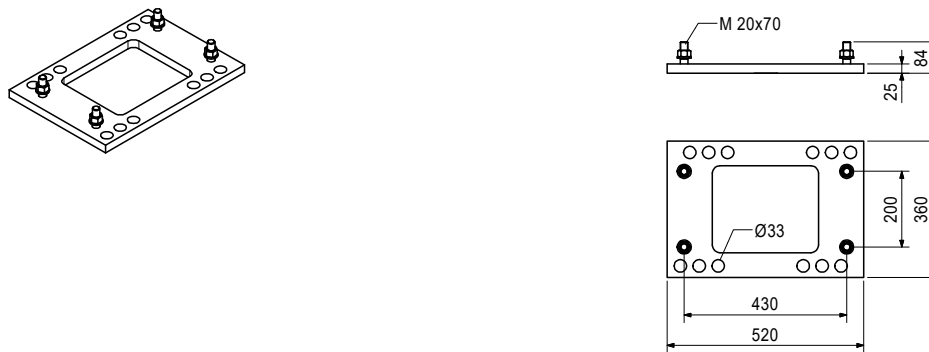


Consists of

- 1 pc 057120 Pin $\varnothing 50 \times 335$ mm coat
- 1 pc 722457 Sleeve ISO8752-10.0 x 070-coat
- 1 pc 710618 Cotter Pin 8/1 coat
- 2 pc 057121 Screw DIN6912-M20 x 70-8.8-ga
- 2 pc 710334 Hex-Nut ISO4032-M20-8-ga
- 2 pc 706454 Washer ISO7089-20-200HV-ga

Art no.	Weight [kg]	
057023	22.800	Distance Plate ACS-P 36x52

Is fixed below on the Vertical Post Base ACS 207.5 for a stiff connection.



Accessory (not included)

057024	0.308	Centering Pin ACS-P 30
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Consists of

- 4 pc 057121 Screw DIN6912-M20 x 70-8.8-ga
- 4 pc 710334 Hex-Nut ISO4032-M20-8-ga
- 4 pc 706454 Washer ISO7089-20-200HV-ga

Art no.	Weight [kg]	
057024	0.308	Centering Pin ACS-P 30

For positioning the Vertical Post Base ACS-P 36x52 on the Main Platform Beam ACS-P for a stiff connection.
2 for each connection.



Consists of

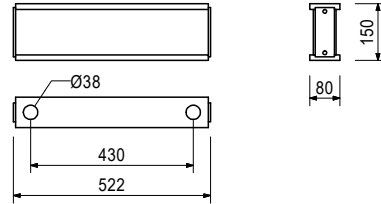
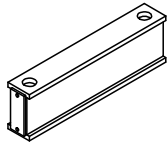
- 1 pc 710334 Hex-Nut ISO4032-M20-8-ga-left
- 1 pc 706454 Washer ISO7089-20-200HV-ga

Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]	
057025	19.300	Yoke ACS-P 43

For a stiff connection of the Vertical Post Base ACS 207.5 to the Main Platform Beam ACS-P.
2 for each connection.

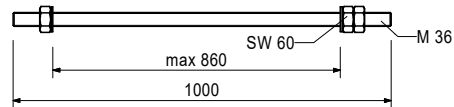
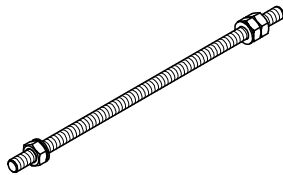


Accessory (not included)

057026	9.410	Clamping Bolt ACS-P M36x1000mm
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Art no.	Weight [kg]	
057026	9.410	Clamping Bolt ACS-P M36x1000mm

For a stiff connection of Vertical Post Base ACS 207.5 to the Main Platform Beam ACS-P.
4 for each connection.

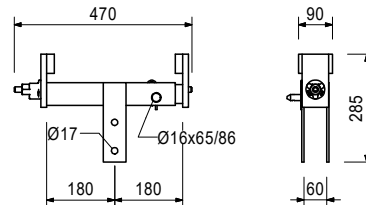
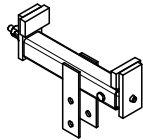


Consists of

- 3 pc 057126 Nut EN14399-4-M36-10-HV-geo
- 2 pc 057127 Washer EN14399-6-36-coat

Art no.	Weight [kg]	
057027	9.190	FP Post Conn. ACS-P Main-Plat.

For fixing the Platform Post ACS 299.5 to the Main Platform Beam ACS-P.



Accessory (not included)

057029	17.900	FP Post ACS 299.5
057030	14.900	Post Extension ACS 295.5
057031	8.090	Girder Support ACS

Consists of

- 1 pc 030130 Cam Nut DW15 coat
- 1 pc 018050 Pin Ø16x65/86mm ga
- 1 pc 018060 Cotter Pin 4/1 ga

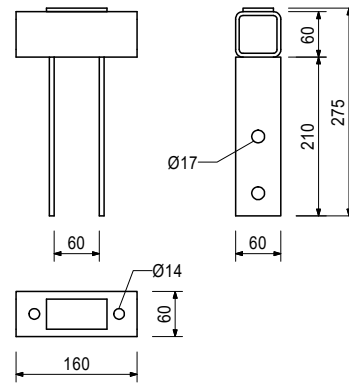
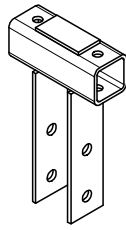
Self-climbing System ACS-P / ACS-G



Art no. Weight [kg]

057065	2.550	FP Post Conn. ACS VT 20-GT 24
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For fixing the Platform Post ACS 299.5 to the VT 20K or GT 24 Girders



Accessory (not included)

057794	0.912	Tension Strap cpl
057029	17.900	FP Post ACS 299.5
057030	14.900	Post Extension ACS 295.5
057031	8.090	Girder Support ACS

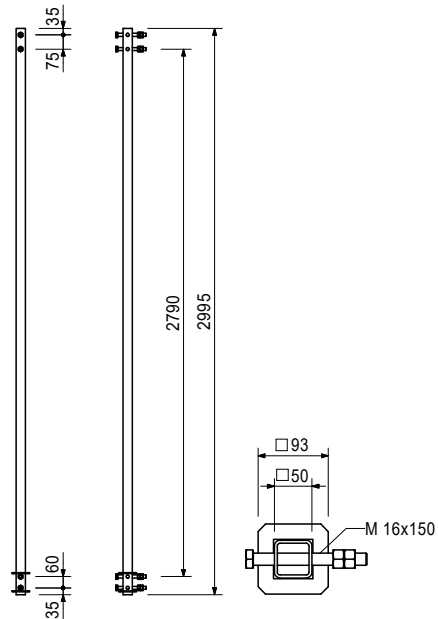
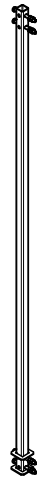
Art no. Weight [kg]

057029	17.900	FP Post ACS 299.5
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For suspending finishing platforms.

Notes

Extension of FP Post with Post Extension ACS 295,5.



Accessory (not included)

057030	14.900	Post Extension ACS 295.5
057031	8.090	Girder Support ACS

Consists of

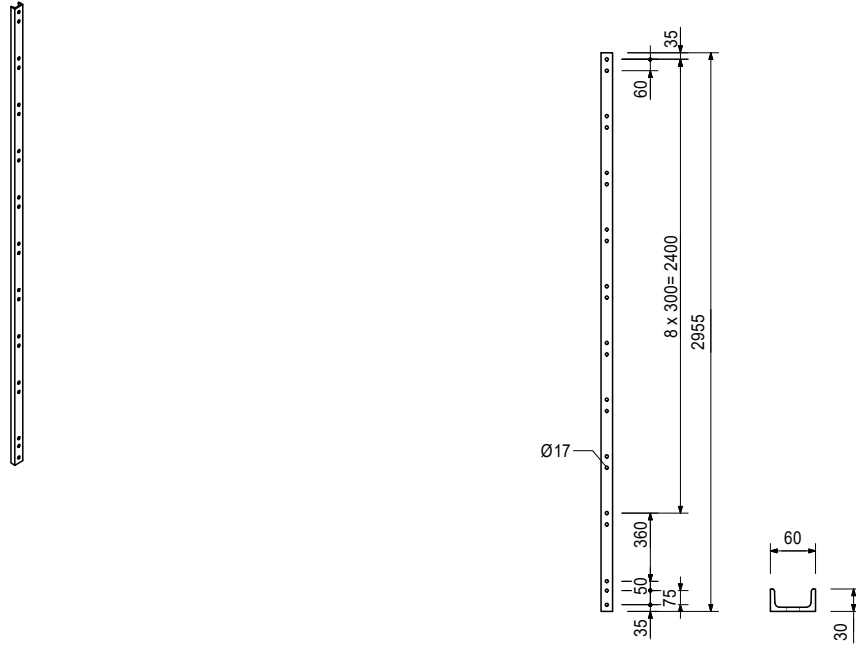
- 4 pc 710049 Screw ISO4014-M16x150-8.8-ga
- 8 pc 710229 Hex-Nut ISO4032-M16-8-ga

Self-climbing System ACS-P / ACS-G



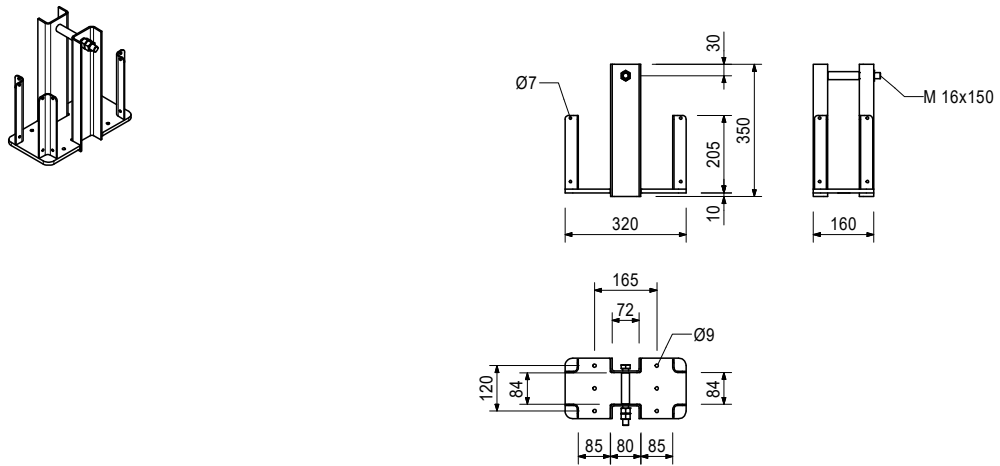
Art no.	Weight [kg]	
057030	14.900	Post Extension ACS 295.5

For suspending finishing platforms.



Art no.	Weight [kg]	
057031	8.090	Girder Support ACS

For fixing one or two GT 24 or VT 20K Girders, without tipping, on the finishing platform.



Consists of

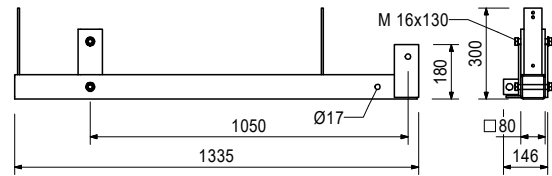
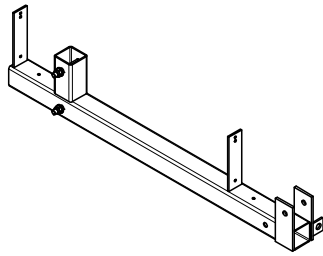
- 1 pc 710049 Screw ISO4014-M16x150-8.8-ga
- 2 pc 710229 Hex-Nut ISO4032-M16-8-ga

Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]	
051720	17.200	Lower Cantilever Beam ACS

For fixing Decking Supports GT 24 and Beams IPE.

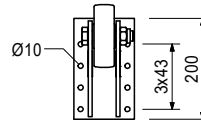
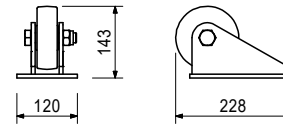
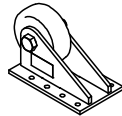


Consists of

- 2 pc 710232 Screw ISO4014-M16x130-8.8-ga
- 2 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 2 pc 711074 Washer ISO7089-16-200HV-ga

Art no.	Weight [kg]	
126208	3.800	Platform Guiding Roller ACS-C

As guiding for working platforms at the building wall. Fixation with screws 8x65 for planking 40mm.



Accessory (not included)

724553	0.034	Screw ISO4014-M08x065-8.8-ga
780354	0.002	Washer ISO7089-08-200HV-ga
710342	0.007	Washer ISO7093-1-08-200HV-ga
711071	0.004	Hex-Nut ISO7040-M08-8-ga
710709	0.036	Screw DIN603-M08-065-4.8-ga

Consists of

- 1 pc 710226 Screw ISO4014-M20x090-8.8-ga
- 1 pc 781053 Hex-Nut ISO7040-M20-8-ga
- 1 pc 057414 Polyamide Wheel SPO 125/20G

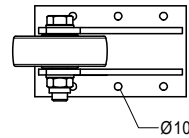
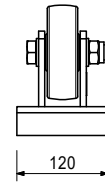
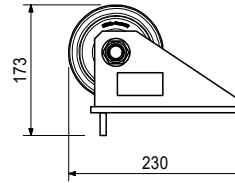
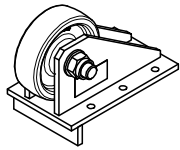
Self-climbing System ACS-P / ACS-G



Art no. Weight [kg]

057417 4.080 **Supporting Roller ACS**

As guiding for working platforms at the building wall. Fixation with screws 8x65 for planking 40mm.



Accessory (not included)

724553	0.034	Screw ISO4014-M08x065-8.8-ga
780354	0.002	Washer ISO7089-08-200HV-ga
710342	0.007	Washer ISO7093-1-08-200HV-ga
711071	0.004	Hex-Nut ISO7040-M08-8-ga
710709	0.036	Screw DIN603-M08-065-4.8-ga

Self-climbing System ACS-P / ACS-G

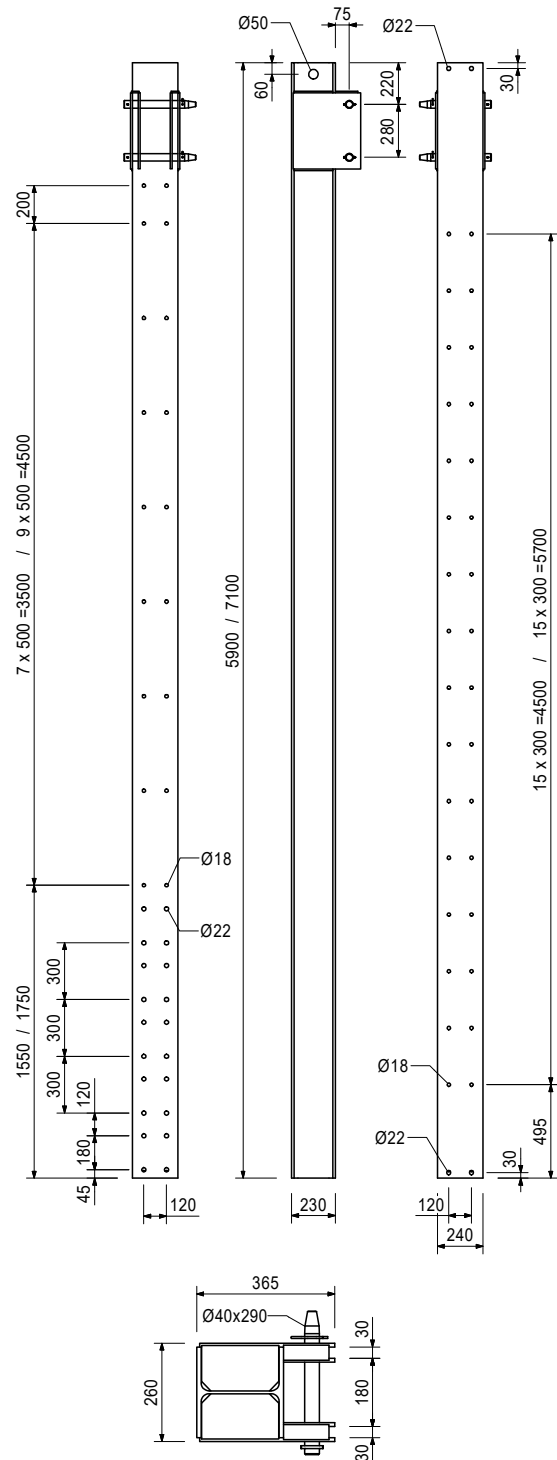
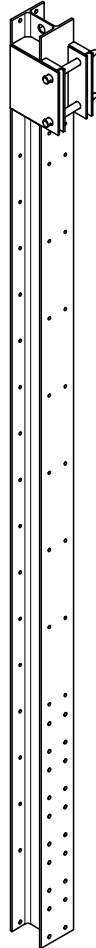


Art no. Weight [kg]

Platform Posts ACS IPBL

057032	398.000	Platform Post ACS IPBL 24x590
057070	470.000	Platform Post ACS IPBL 24x710

For fixing to girder grid level +1 as suspension of the external platform.
 Platform Post ACS IPBL 24x590 for concreting heights up to approx. 4.2m.
 Platform Post ACS IPBL 24x710 for concreting heights up to approx. 5.4m.



Accessory (not included)

057039	2.390	Railing Adaptor ACS VT 20
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Consists of

- 2 pc 057135 Pin Ø40x290mm coat
- 2 pc 770012 Sleeve ISO8752-08.0x060-coat
- 2 pc 022230 Cotter Pin 5/1 ga

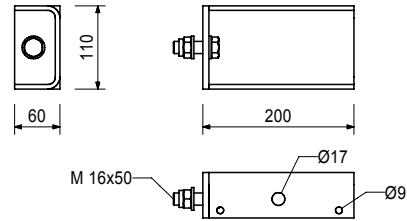
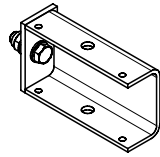
Self-climbing System ACS-P / ACS-G



Art no. Weight [kg]

057039 2.390 **Railing Aaptor ACS VT 20**

For fixing horizontal VT 20K Girders as railing to: Bracket ACS-G, Finishing Platform Post ACS-G 330, Vertical Post ACS, Platform Posts ACS IPBL 24.



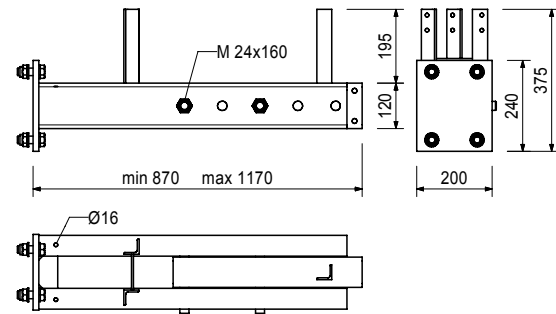
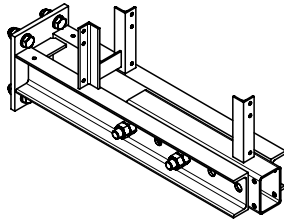
Consists of

- 1 pc 710252 Screw ISO4017-M16x050-8.8-ga
- 1 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 1 pc 711074 Washer ISO7089-16-200HV-ga

Art no. Weight [kg]

057072 39.700 **Platform Beam ACS 87-117**

For supporting the external platform. Telescopic 300mm.



Accessory (not included)

057034 7.120 **Supporting Spindle ACS**

Consists of

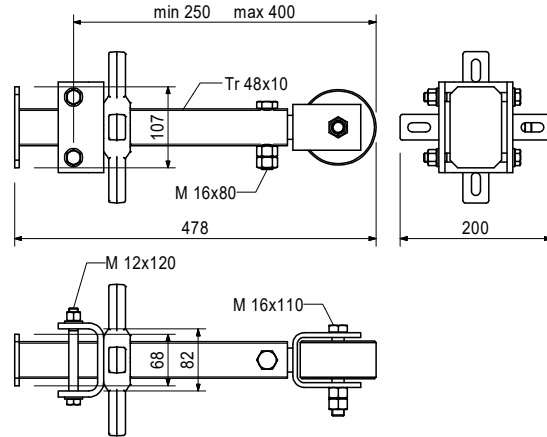
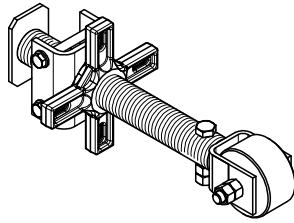
- 1 pc 057196 Sliding Beam 50 coat
- 2 pc 057138 Screw ISO4014-M24x160-8.8-ga
- 4 pc 022250 Hex-Nut ISO4032-M24-8-ga
- 4 pc 057139 Screw ISO4017-M20x060-8.8-ga
- 4 pc 781053 Hex-Nut ISO7040-M20-8-ga
- 8 pc 706454 Washer ISO7089-20-200HV-ga

Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]	
057034	7.120	Supporting Spindle ACS

For fixing to Cantilever Platform Beam ACS 57-87 and Cantilever Platform Beam ACS 87-117 if support from the structure is necessary.

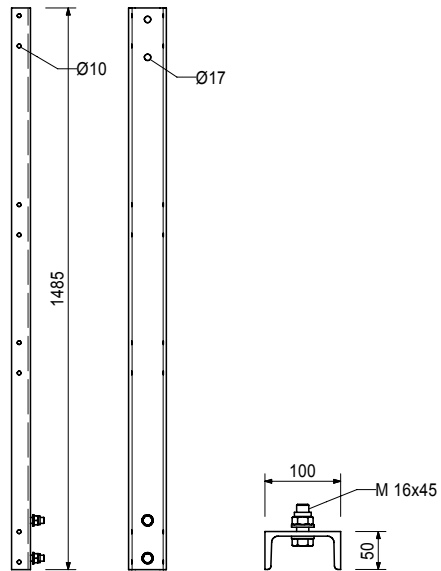
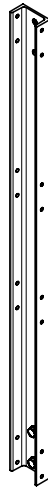


Consists of

- 1 pc 070100 Screw ISO4016-M12x120-4.6-ga-N
- 1 pc 780702 Washer ISO7089-12-200HV-ga
- 1 pc 057177 Roller Ø100mm 50mm
- 1 pc 710233 Screw ISO4014-M16x110-8.8-ga
- 1 pc 710222 Screw ISO4014-m16x080-8.8-ga

Art no.	Weight [kg]	
057036	16.000	Guardrail Post ACS 148.5

For the fixation to girder grid level +1.



Consists of

- 2 pc 710225 Screw ISO4017-M16x045-8.8-ga
- 2 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 2 pc 711074 Washer ISO7089-16-200HV-ga

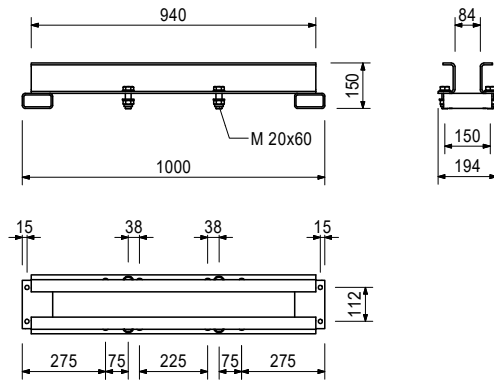
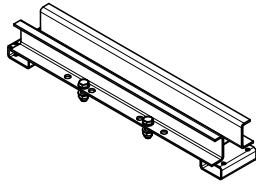
Self-climbing System ACS-P / ACS-G



Art no. Weight [kg]

057063 19.800 **Beam Adaptor Type 1 ACS**

For a stiff connection of Platform Girders VT 20K and GT 24 to Main Platform Beams ACS-P, Brackets ACS-G, Gallow ACS-G 332.5 or Gallow ACS-G 143, Finishing Platform Beam ACS-G 136.5.



Accessory (not included)

057794 0.912 **Tension Strap cpl**

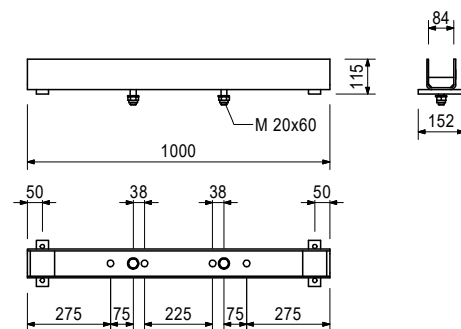
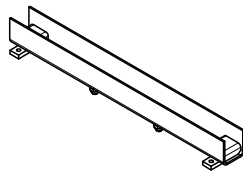
Consists of

- 4 pc 057139 Screw ISO4017-M20x060-8.8-ga
- 4 pc 781053 Hex-Nut ISO7040-M20-8-ga
- 8 pc 706454 Washer ISO7089-20-200HV-ga

Art no. Weight [kg]

057064 15.600 **Beam Adaptor Type 2 ACS**

For a stiff connection of Platform Girders VT 20 and GT 24 to the Main Platform Beam Head ACS-P.



Accessory (not included)

057794 0.912 **Tension Strap cpl**

Consists of

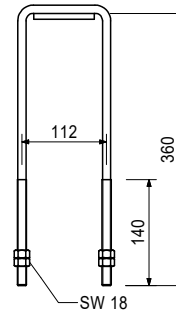
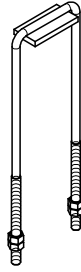
- 2 pc 057139 Screw ISO4017-M20x060-8.8-ga
- 2 pc 781053 Hex-Nut ISO7040-M20-8-ga
- 4 pc 706454 Washer ISO7089-20-200HV-ga

Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]	
057794	0.912	Tension Strap cpl

For clamping Girders GT 24.



Consists of

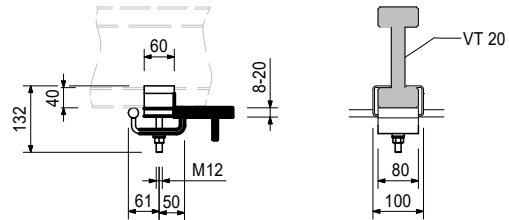
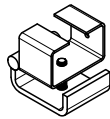
4 pc 710330 Hex-Nut ISO4032-M12-8-ga

Art no.	Weight [kg]	
057037	1.800	Clamp ACS VT 20

Connection of VT 20K Formwork Girder with the steel profile.

Notes

Flange thickness $t = 8-20$

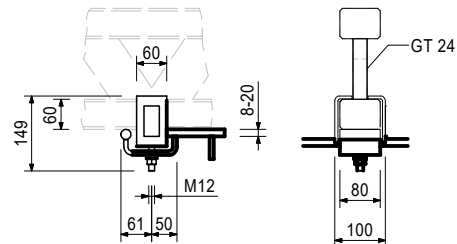
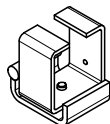


Art no.	Weight [kg]	
057038	1.950	Clamp ACS GT 24

Connection of GT 24 Formwork Girder with the steel profile.

Notes

Flange thickness $t = 8-20$



Consists of

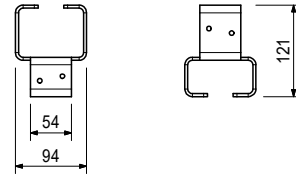
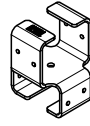
- 1 pc 710330 Hex-Nut ISO4032-M12-8-ga
- 1 pc 109112 Spherical Washer 13 DIN6319-C
- 1 pc 109113 Ball Cup 14.2 DIN6319-D

Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]	
129722	0.746	Cross Connector GT 24/VT 20

For connecting a Girder GT 24 to a crossing Girder VT 20.

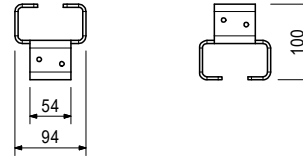
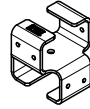


Accessory (not included)

024540	0.005	Wood-Screw 6x40 SK-TX30 HPI
024470	0.008	Wood-Screw 6x60 SK-TX30 HPI

Art no.	Weight [kg]	
129817	0.675	Cross Connector VT 20/VT 20

For the connection of crossing Girders VT 20.

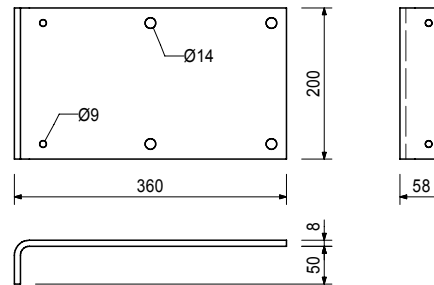
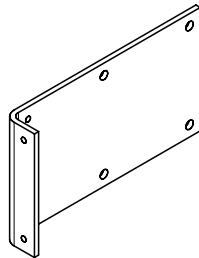


Accessory (not included)

024540	0.005	Wood-Screw 6x40 SK-TX30 HPI
024470	0.008	Wood-Screw 6x60 SK-TX30 HPI

Art no.	Weight [kg]	
057075	5.010	Adaptor ACS VT 20 Bottom

For fixing vertical Girders VT 20K as railing on Platform Beams at Levels 0/-1/-2 of ACS-P and ACS-G.
One per Girder VT 20K.



Accessory (not included)

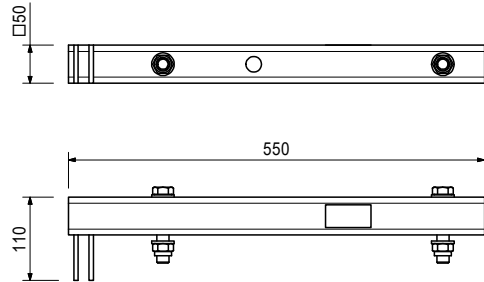
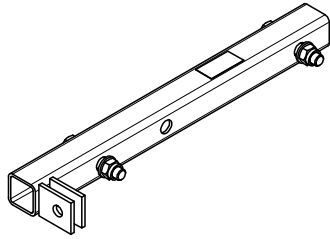
070030	0.015	Plate Conn. Ø50/12mm single
070100	0.132	Screw ISO4016-M12x120-4.6-ga-N
750350	0.027	Washer ISO7093-1-12-200HV-ga

Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]	
057051	3.640	Connector ACS AV

For connecting the Kicker for panel suspension to:
Bracket ACS-G, Vertical Posts ACS, Platform Post ACS IPBL 24x590 and Platform Beam ACS IPBL 24x7100.

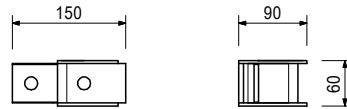
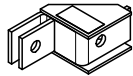


Consists of

- 2 pc 721729 Screw ISO4014-M16x090-8.8-ga
- 2 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 4 pc 706454 Washer ISO7089-20-200HV-ga

Art no.	Weight [kg]	
057052	0.955	Offset Connector ACS AV

For connecting the second Kicker to the Connector ACS AV.

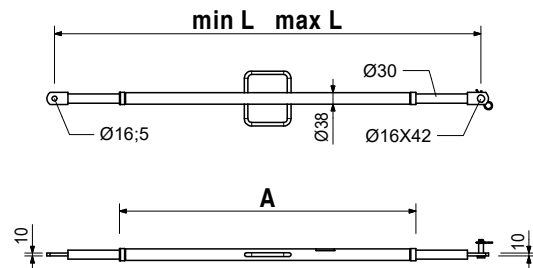
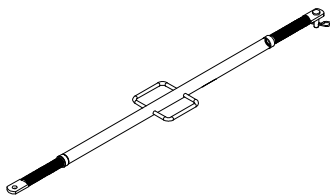


Art no.	Weight [kg]		min. L [mm]	max. L [mm]
Kickers AV				
057087	3.510	Kicker AV 82	500	820
057088	4.200	Kicker AV 111	790	1110
028110	4.850	Kicker AV 140	1080	1400

For aligning PERI Formwork Systems.

Notes

Permissible load see PERI Design Tables.



Consists of

- 1 pc 027170 Pin Ø16x42mm ga
- 1 pc 018060 Cotter Pin 4/1 ga

Self-climbing System ACS-P / ACS-G



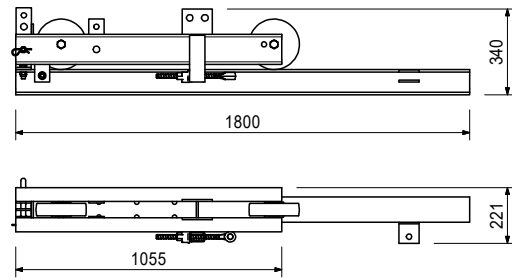
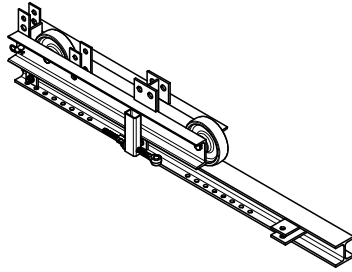
Art no. Weight [kg]

057015 77.200 **Carriage ACS-P**

Clampable carriage on platforms to retract the formwork.

Notes

For use with Tilt Carrier ACS 255, Tilt Carrier ACS 365, Tilt Carrier CB 270 and Tilt Carrier CB 380.



Consists of

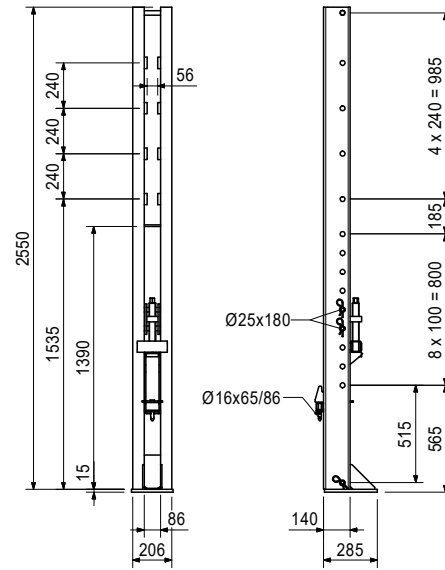
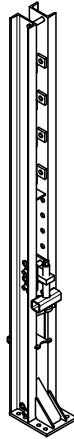
- 1 pc 037150 Tie Yoke DW15
- 1 pc 030130 Cam Nut DW15 coat
- 1 pc 037160 Pin Ø20x205mm ga
- 2 pc 710225 Screw ISO4017-M16x045-8.8-ga
- 2 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 2 pc 057164 Heavy-duty Wheel SPO 201/20K

Self-climbing System ACS-P / ACS-G

Art no. Weight [kg]

057097 107.000 **Strongback ACS 255**

For connecting the formwork to the Carriage ACS. Standard formwork height up to 3.3m.



Accessory (not included)

057327	11.000	Strongback Adaptor 50 cpl
057332	15.700	Strongback Adaptor 200 cpl
057099	17.300	Adjust. Spindle Connect. ACS-P
037150	0.641	Tie Yoke DW15
722137	0.849	Cross Strap 2 coat
110055	0.861	Cross Strap coat
030100	0.439	Wingnut DW15 ga
030440	0.686	Sperical Nut DW15 ga

Consists of

- 1 pc 057081 Adjustable Spindle ACS cpl
- 1 pc 057307 Adjust. Nut ACR TR36x6mm coat
- 1 pc 057313 Ledger Bracket ACS coat
- 1 pc 057315 Counterholder ACS coat
- 3 pc 715936 Pin with Clamping Sleeve
- 1 pc 018050 Pin $\text{Ø}16 \times 65/86$ mm ga
- 3 pc 022230 Cotter Pin 5/1 ga
- 1 pc 018060 Cotter Pin 4/1 ga

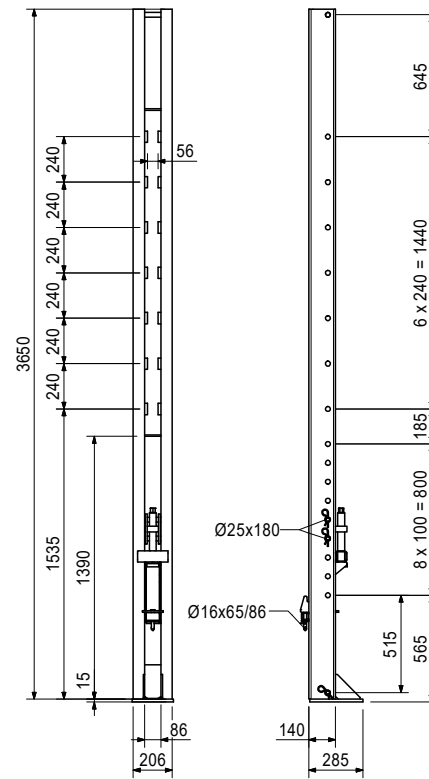
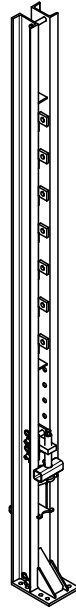
Self-climbing System ACS-P / ACS-G



Art no. Weight [kg]

057098 145.000 **Strongback ACS 365**

For connecting the formwork to the Carriage ACS. Standard formwork height up to 5.1m.



Accessory (not included)

057327	11.000	Strongback Adaptor 50 cpl
057332	15.700	Strongback Adaptor 200 cpl
057099	17.300	Adjust. Spindle Connect. ACS-P
037150	0.641	Tie Yoke DW15
722137	0.849	Cross Strap 2 coat
110055	0.861	Cross Strap coat
030100	0.439	Wingnut DW15 ga
030440	0.686	Spherical Nut DW15 ga

Consists of

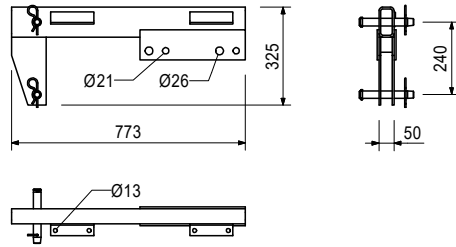
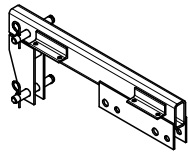
- 1 pc 057081 Adjustable Spindle ACS cpl
- 1 pc 057307 Adjust. Nut ACR TR36x6mm coat
- 1 pc 057313 Ledger Bracket ACS coat
- 1 pc 057315 Counterholder ACS coat
- 3 pc 715936 Pin with Clamping Sleeve
- 1 pc 018050 Pin Ø16x65/86mm ga
- 3 pc 022230 Cotter Pin 5/1 ga
- 1 pc 018060 Cotter Pin 4/1 ga

Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]	
057099	17.300	Adjust. Spindle Connect. ACS-P

For the connection of Adjustable Brace CB 164-224 or Heavy-Duty Spindle SLS 140/240 to the Strongback.



Accessory (not included)

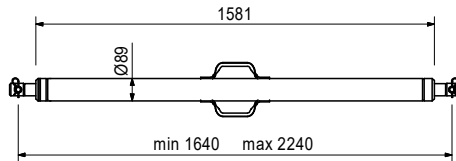
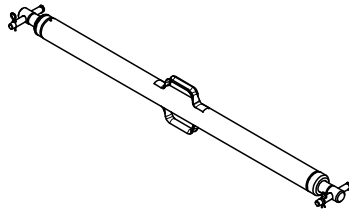
101776	24.900	Heavy Duty Spindle SLS 140/240
051110	25.300	Adjustable Brace CB 164-224

Consists of

- 2 pc 715936 Pin with Clamping Sleeve
- 2 pc 022230 Cotter Pin 5/1 ga

Art no.	Weight [kg]	
051110	25.300	Adjustable Brace CB 164-224

For aligning the Strongback CB.



Consists of

- 2 pc 715936 Pin with Clamping Sleeve
- 2 pc 018060 Cotter Pin 4/1 ga

Self-climbing System ACS-P / ACS-G



Art no. Weight [kg]

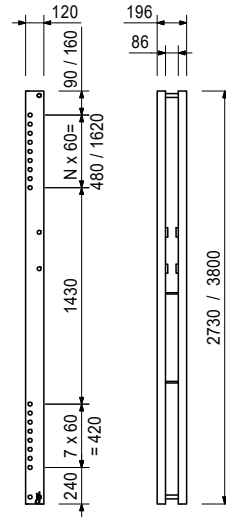
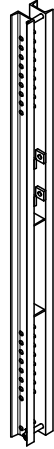
Strongbacks CB

051060	73.400	Strongback CB 270
051150	103.000	Strongback CB 380

For assembling system formwork on Climbing Brackets CB 240 and 160. For formwork heights up to 5.4m.

Notes

Permissible load-bearing point capacity 1.9t.



Accessory (not included)

051030	5.530	Height Adjusting Unit CB, SCS
--------	-------	--------------------------------------

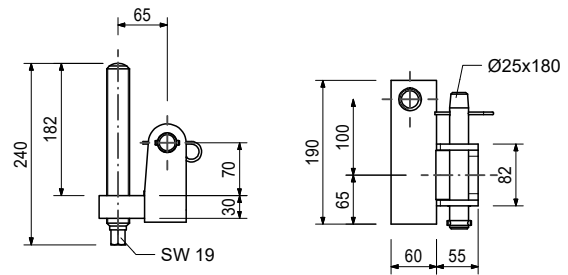
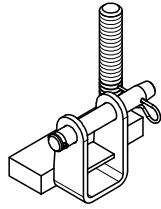
Consists of

- 1 pc 715936 Pin with Clamping Sleeve
- 1 pc 018060 Cotter Pin 4/1 ga

Art no. Weight [kg]

051030	5.530	Height Adjusting Unit CB, SCS
--------	-------	--------------------------------------

For height adjustment of VARIO GT 24 Panels on the Strongbacks CB and SCS.



Consists of

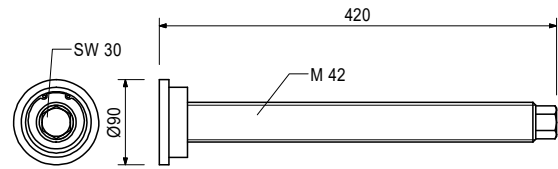
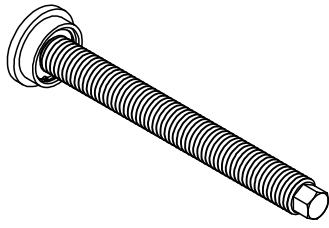
- 1 pc 715936 Pin with Clamping Sleeve
- 1 pc 018060 Cotter Pin 4/1 ga

Self-climbing System ACS-P / ACS-G



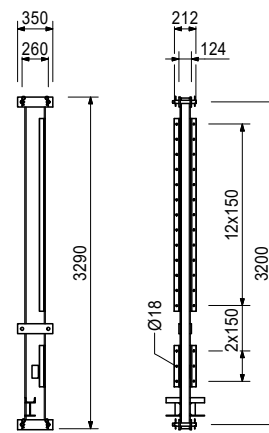
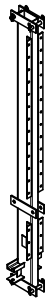
Art no.	Weight [kg]	
057054	5.110	Compression Spindle ACS M42

2 for each Brackets ACS-G



Art no.	Weight [kg]	
057056	148.000	FP Post ACS-G 330

For the fixation to Bracket ACS-G.
For concreting heights up to 5.1m.



Accessory (not included)

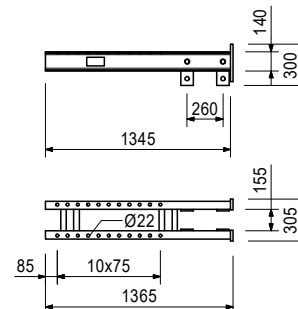
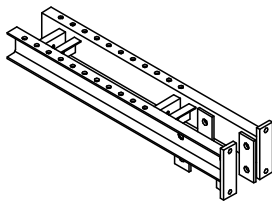
057039	2.390	Railing Adaptor ACS VT 20
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Consists of

- 4 pc 706372 Pin ACS Ø30x235mm coat
- 8 pc 022230 Cotter Pin 5/1 ga

Art no.	Weight [kg]	
057057	59.500	FP Post ACS-G 136.5

For the fixation to Finishing Platform Post ACS-G 330.



Self-climbing System ACS-P / ACS-G

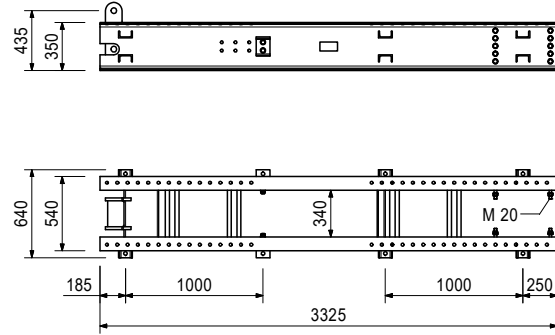
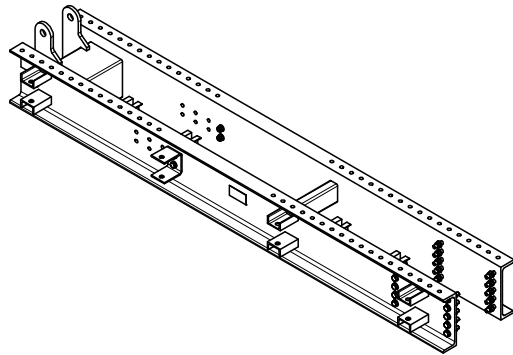


Art no.	Weight [kg]	
057058	481.000	Gallow ACS-G 332.5

For the suspension of the retracted formwork on both sides. Fixation of the Vertical Post Top ACS 210.

Notes

Creation of the production drawing - compression strut ACS cross bracing - is made on a project-specific basis.



Consists of

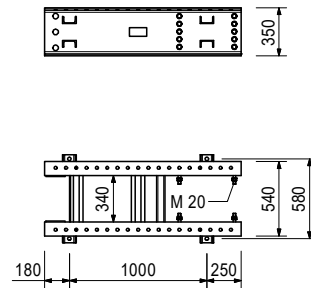
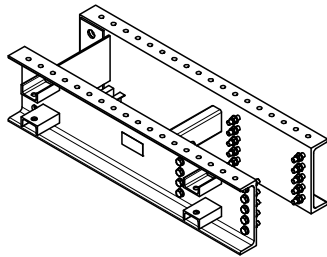
- 20 pc 024900 Screw ISO4014-M20x080-8.8-ga
- 4 pc 780357 Screw ISO4017-M20x050-8.8-ga
- 24 pc 781053 Hex-Nut ISO7040-M20-8-ga
- 48 pc 706454 Washer ISO7089-20-200HV-ga

Art no.	Weight [kg]	
057059	214.000	Gallow ACS-G 143

For the suspension of the one-sided retracted formwork. Fixation of the Vertical Post Top ACS 210.

Notes

Creation of the production drawing - compression strut ACS cross bracing - is made on a project-specific basis.



Consists of

- 20 pc 024900 Screw ISO4014-M20x080-8.8-ga
- 20 pc 781053 Hex-Nut ISO7040-M20-8-ga
- 40 pc 706454 Washer ISO7089-20-200HV-ga

Self-climbing System ACS-P / ACS-G

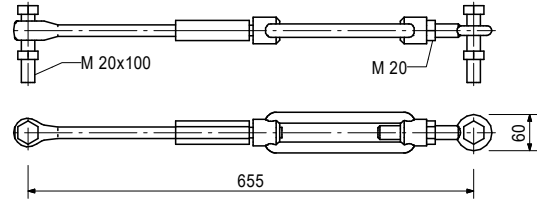
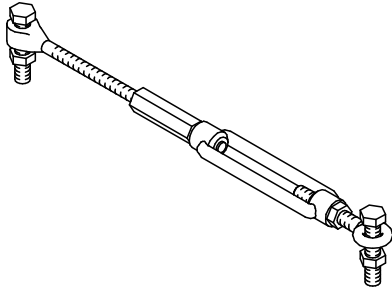


Art no.	Weight [kg]	
057083	3.820	Bracing ACS DW15

For bracing scaffolds. For bracing large VARIO GT 24 Elements.

Notes

Tie Rod DW15 must be ordered separately. Transport dimension 655.



Accessory (not included)

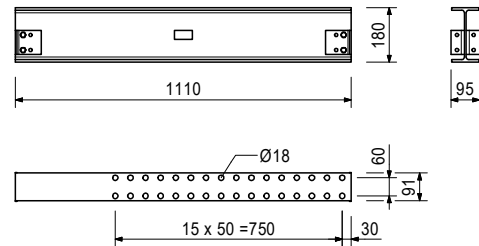
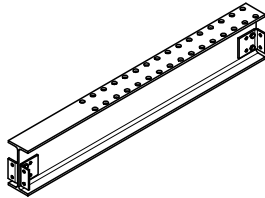
030030	1.440	Tie Rod DW15 spec. Length
030050	0.000	Cutting Cost DW15/B15

Consists of

- 1 pc 037150 Tie Yoke DW15
- 1 pc 030090 Hex Nut DW15 SW30/108 ga
- 1 pc 701335 Tie Rod DW15 0.1m
- 1 pc 711059 Turnbuckle CB coat
- 1 pc 711060 Eyebolt M20 left coat
- 1 pc 057263 Hex-Nut ISO4032-M20-8-left-ga
- 2 pc 024910 Screw ISO4014-M20x080-8.8-ga
- 2 pc 710334 Hex-Nut ISO4032-M20-8-ga-left

Art no.	Weight [kg]	
057040	21.900	Panel Carrier Beam ACS 111

Traveling rail for Trolley HTP Type A.



Accessory (not included)

057073	0.745	Counterplate ACS 100x100x10mm
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Consists of

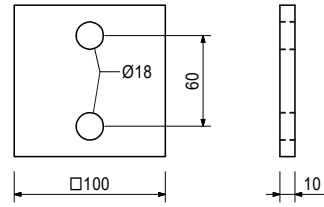
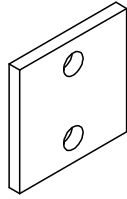
- 4 pc 057082 Trolley Stopper
- 4 pc 057264 Screw ISO4017-M10x025-8.8-ga
- 4 pc 710234 Hex-Nut ISO4032-M10-8-ga

Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]	
057073	0.745	Counterplate ACS 100x100x10mm

For fixing Panel Carrier Beam ACS 111 to Yoke Beams ACS-P and Gallow ACS-G. 2 for each panel carrier beam.

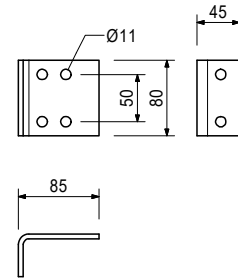


Accessory (not included)

710233	0.200	Screw ISO4014-M16x110-8.8-ga
070890	0.030	Hex-Nut ISO7040-M16-8-ga
711074	0.011	Washer ISO7089-16-200HV-ga

Art no.	Weight [kg]	
057082	0.359	Trolley Stopper

End stop for Trolley HTP.
Used for beam flange width of 90mm to 200mm. Used in pairs.

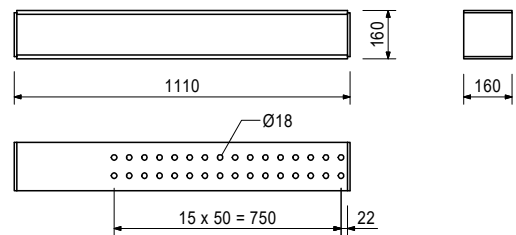
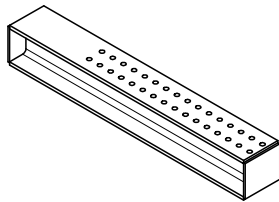


Accessory (not included)

057264	0.026	Screw ISO4017-M10x025-8.8-ga
710234	0.010	Hex-Nut ISO4032-M10-8-ga

Art no.	Weight [kg]	
057389	48.700	Panel Car. Beam ACS IPB 16x111

Travelling rail for Trolley HTP Type A and Type B.



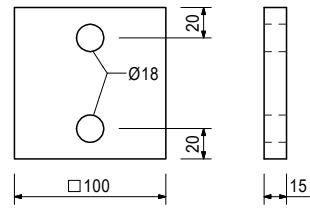
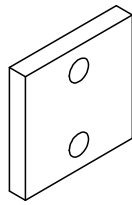
Accessory (not included)

057387	1.120	Counter Plate ACS 100x100x15mm
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Self-climbing System ACS-P / ACS-G



Art no.	Weight [kg]	
057387	1.120	Counter Plate ACS 100x100x15mm



Accessory (not included)

105402	0.200	Screw ISO4014-M16x120-8.8-ga
070890	0.030	Hex-Nut ISO7040-M16-8-ga
711074	0.011	Washer ISO7089-16-200HV-ga

Accessories ACS

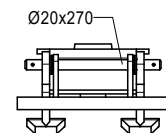
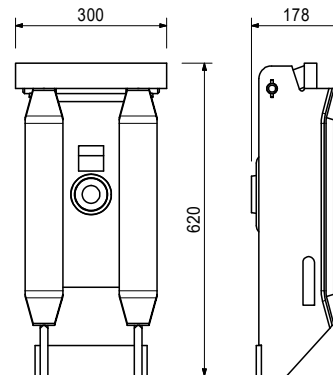
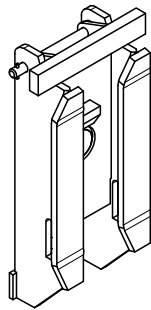
Art no. Weight [kg]

051725 38.600 **Climbing Shoe I ACS**

For use on Climbing Cone-2 M30/DW20.

Notes

Permissible load-bearing capacity see PERI Design Information (on request).



Accessory (not included)

051728 0.800 **Screw ISO4762-M30x110-10.9**

Consists of

- 4 pc 706454 Washer ISO7089-20-200HV-ga
- 1 pc 706455 Pin ACS Ø20x270mm coat
- 2 pc 711063 Sleeve ISO8752-05.0x035-coat

Art no. Weight [kg]

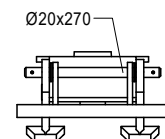
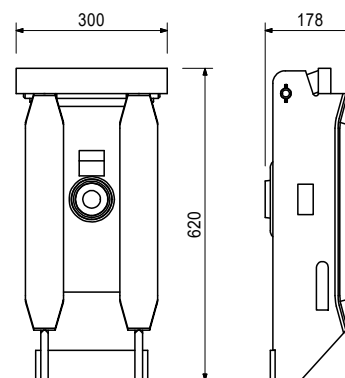
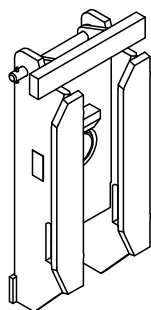
057875 39.300 **Climbing Shoe-2 I ACS single**

For anchoring the ACS Self-Climbing System to the structure and as a replacement for the Climbing Shoe I ACS (yellow).

Notes

Red color version.

Permissible load capacity see Design Information (on request).



Accessory (not included)

051728 0.800 **Screw ISO4762-M30x110-10.9**

Consists of

- 1 pc 706455 Pin ACS Ø20x270mm coat
- 4 pc 706454 Washer ISO7089-20-200HV-ga
- 2 pc 711063 Sleeve ISO8752-05.0x035-coat

Accessories ACS

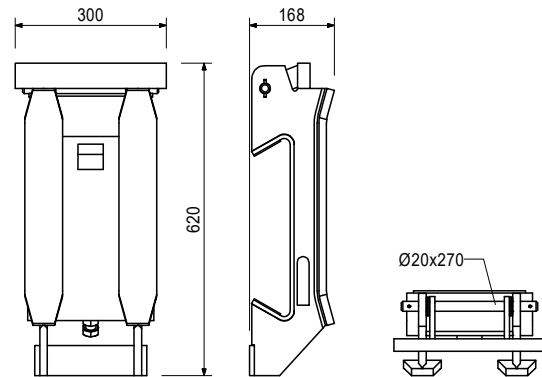
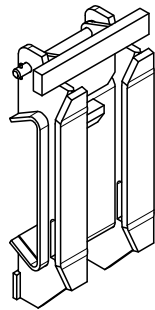


Art no.	Weight [kg]	
051726	33.300	Climbing Shoe II ACS

For anchoring on Double Anchor Support right or left.

Notes

Permissible load-bearing capacity see PERI Design Information (on request).



Accessory (not included)

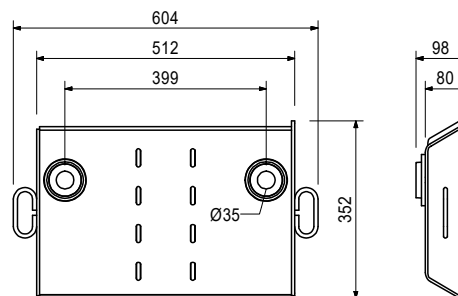
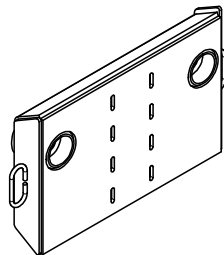
051727	30.200	Double Anchor Support ACS right
051774	30.100	Double Anchor Support ACS left

Consists of

- 4 pc 706454 Washer ISO7089-20-200HV-ga
- 1 pc 706455 Pin ACS Ø20x270mm coat
- 2 pc 711063 Sleeve ISO8752-05.0x035-coat

Art no.	Weight [kg]	
051727	30.200	Double Anchor Support ACS right

For anchoring on two Climbing-Cones-2 M30/DW20.
Double Anchor Supports right and left must always be used in pairs.



Accessory (not included)

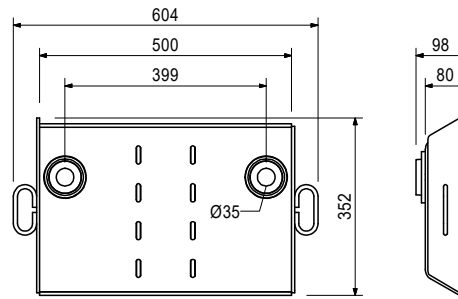
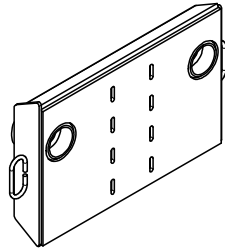
051728	0.800	Screw ISO4762-M30x110-10.9
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Accessories ACS

Art no. Weight [kg]

051774 30.100 **Double Anchor Support ACS left**

For anchoring on two Climbing-Cones-2 M30/DW20.
Double Anchor Supports right and left must always be used in pairs.



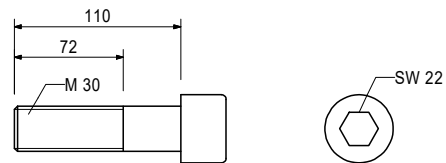
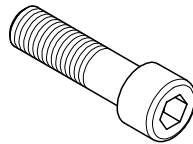
Accessory (not included)

051728 0.800 **Screw ISO4762-M30x110-10.9**

Art no. Weight [kg]

051728 0.800 **Screw ISO4762-M30x110-10.9**

For attaching Climbing Shoe ACS, Climbing Shoe-2 ACS and Anchor Tube ACS right or left to Climbing Cone-2 M30/DW20 or Screw-On Cone M30/DW26



Accessories ACS

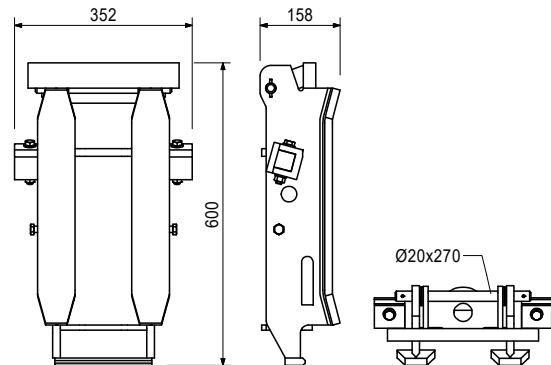
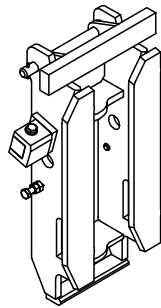
Art no. Weight [kg]

057568 33.600 **Climbing Shoe IV ACS**

Pivotable anchoring in horizontal and vertical axis.

Notes

Permissible load-bearing capacity see PERI Design Information (on request).



Accessory (not included)

057566	13.200	Anchor Shoe H ACS
057567	17.200	Anchor Shoe V ACS

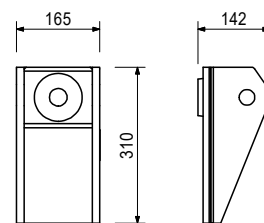
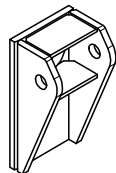
Consists of

- 1 pc 706455 Pin ACS Ø20x270mm coat
- 4 pc 706454 Washer ISO7089-20-200HV-ga
- 2 pc 711063 Sleeve ISO8752-05.0x035-coat
- 2 pc 057594 Spacer 60x60x50mm coat
- 2 pc 710220 Screw ISO4014-M12x080-8.8-ga
- 2 pc 710710 Screw ISO4017-M12x055-8.8-ga
- 4 pc 710330 Hex-Nut ISO4032-M12-8-ga
- 4 pc 780702 Washer ISO7089-12-200HV-ga

Art no. Weight [kg]

057566 13.200 **Anchor Shoe H ACS**

Pivotable anchoring in vertical axis with Climbing Shoe IV ACS.



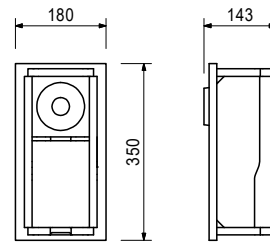
Accessory (not included)

123843	0.623	Screw ISO4017 M30x80-10.9
057569	1.510	Pin ACS Ø30x280mm

Accessories ACS

Art no.	Weight [kg]	
057567	17.200	Anchor Shoe V ACS

Pivotable anchoring in horizontal axis with Climbing Shoe IV ACS.

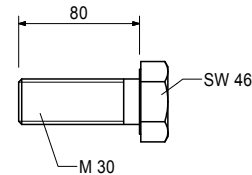
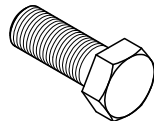


Accessory (not included)

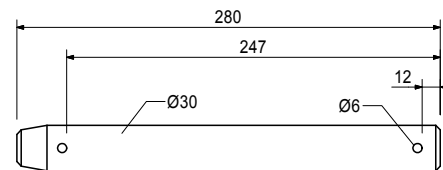
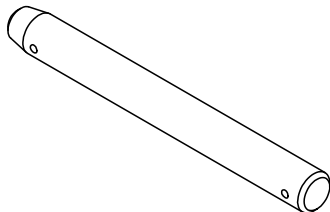
123843	0.623	Screw ISO4017-M30x80-10.9
057570	4.080	Pin ACS Ø35x525mm

Art no.	Weight [kg]	
123843	0.623	Screw ISO4017-M30x80-10.9

For attaching Anchor Shoe H ACS and Anchor Shoe V ACS to Climbing Cone-2 M30/DW20 or Screw-On Cone M30/DW26.



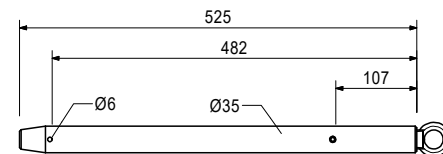
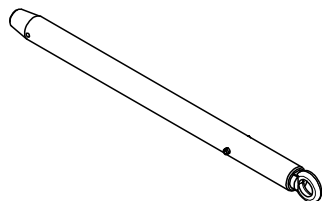
Art no.	Weight [kg]	
057569	1.510	Pin ACS Ø30x280mm



Accessory (not included)

022230	0.033	Cotter Pin 5/1 ga
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Art no.	Weight [kg]	
057570	4.080	Pin ACS Ø35x525mm



Accessory (not included)

022230	0.033	Cotter Pin 5/1 ga
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Consists of

- 1 pc 710914 Sleeve ISO8752-08.0x045-coat
- 1 pc 722802 Eye Bolt DIN580-M10-ga

Accessories ACS



Art no.	Weight [kg]	
051729	5.160	Locking Bar ACS

For supporting the Climbing Bracket ACS in the Climbing Shoe ACS.



Consists of

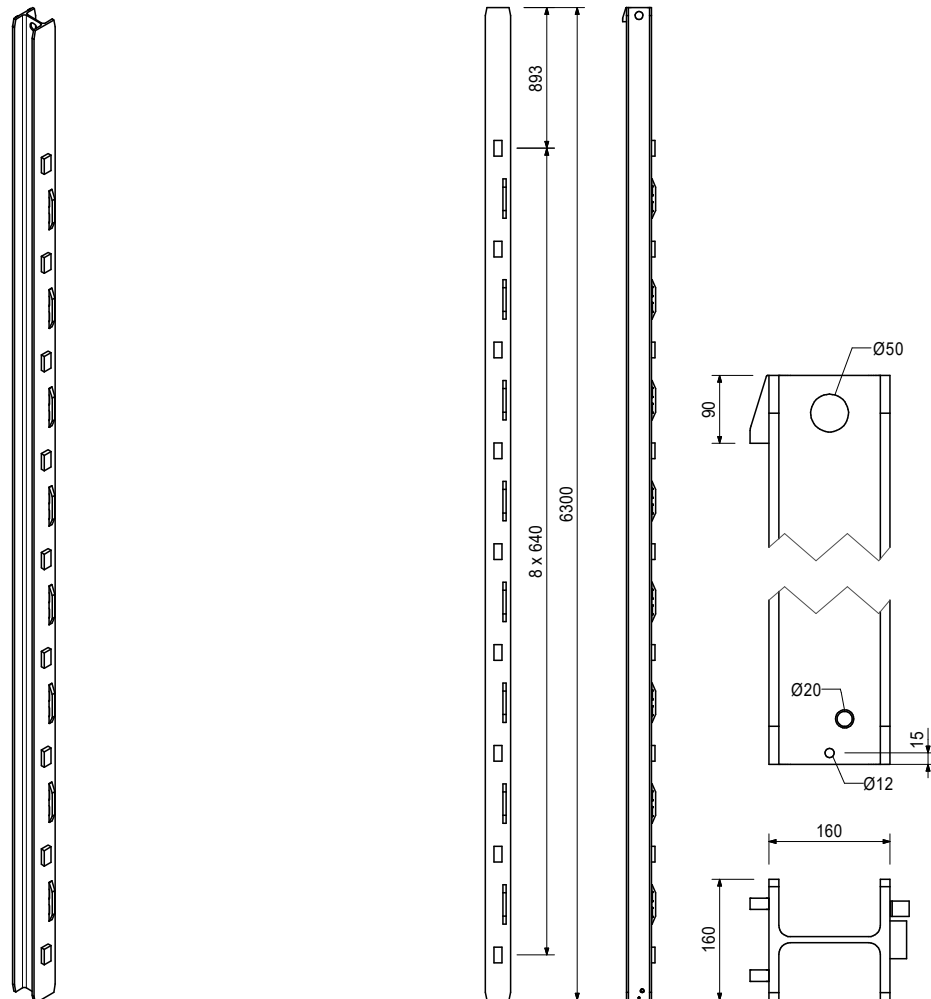
- 1 pc 706452 Chain DIN5685-G-05x35-lfm-ga
- 1 pc 706451 Curved Shackle 1/4 coat

Art no.	Weight [kg]		L [mm]
051731	282.000	Climbing Rail ACS 630	6300

Guiding rail for Self-Climbing System ACS with Hydraulic Climbing Mechanism ACS 100.

Notes

Corresponding concrete heights see Product Information (on request).



Accessory (not included)

051736	3.910	Distance Piece cpl
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Art no. Weight [kg]

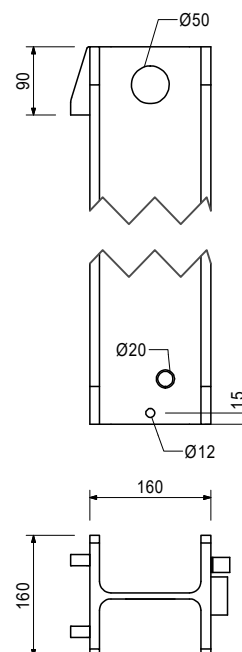
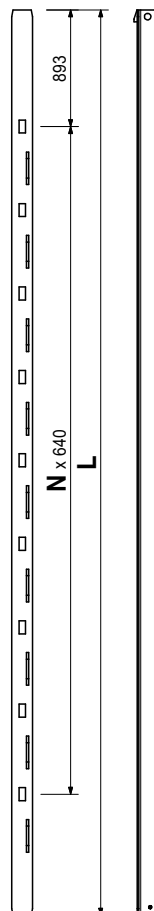
Climbing Rails ACS

057213	311.000	Climbing Rail ACS 694
051732	340.000	Climbing Rail ACS 758
057215	368.000	Climbing Rail ACS 822
051733	45.100	Climbing Rail sp. Length / m

Guiding rail for Self-Climbing System ACS with Climbing Mechanism ACS 100 cpl.
Climbing Rail ACS special length on request.

Notes

Corresponding concrete heights see Product Information (on request).



Accessory (not included)

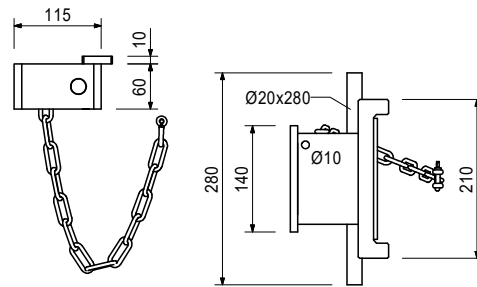
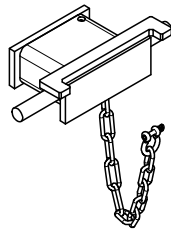
051736	3.910	Distance Piece cpl
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Accessories ACS



Art no.	Weight [kg]	
051736	3.910	Distance Piece cpl

Two Distance Pieces are necessary for each ACS-R/G rail from a climbing rail length of 8220mm.



Accessory (not included)

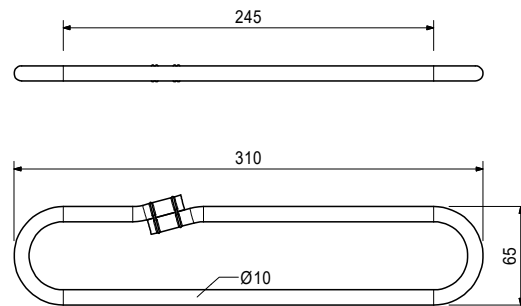
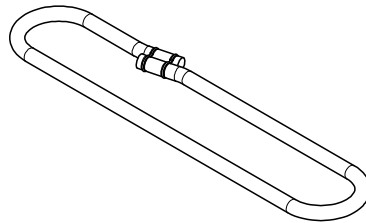
051737	0.050	Expander ACS
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Consists of

- 1 pc 706452 Chain DIN5685-G-05x35-lfm-ga
- 1 pc 706451 Curved Shackle 1/4 coat

Art no.	Weight [kg]	
051737	0.050	Expander ACS

For Distance Piece ACS.

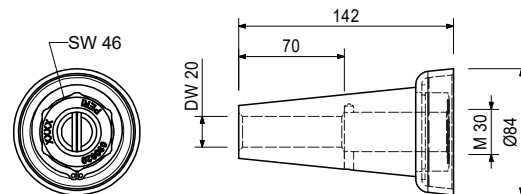
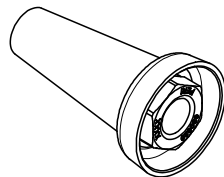


Art no.	Weight [kg]	
030920	1.650	Climbing Cone-2 M30/DW20 ga

Anchor System M30. For anchoring climbing systems.

Notes

Separate Design Information on request.



Accessory (not included)

030860	0.792	Threaded Anchor Plate DW20
030700	2.560	Tie Rod DW20 spec. Length
030745	2.600	Tie Rod B20 spec. Length

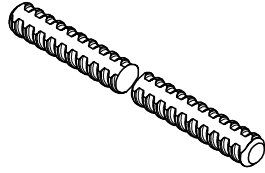
Accessories ACS



Art no.	Weight [kg]	
		Tie Rod DW20
030800	0.000	Cutting Costs DW20/B20
030700	2.560	Tie Rod DW20 spec. Length

Notes

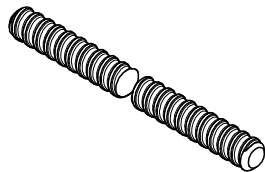
Non-weldable! Observe the permissions! Permissible tension force 150 kN.



Art no.	Weight [kg]	
		Tie Rod B20
030800	0.000	Cutting Costs DW20/B20
030745	2.600	Tie Rod B20 spec. Length

Notes

Weldable! Take official Approval into consideration! Permissible tension force 150 kN.

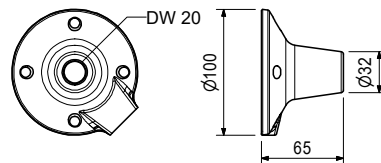
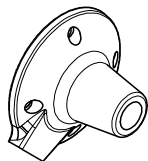


Art no.	Weight [kg]	
030860	0.792	Threaded Anchor Plate DW20

For use with Tie Rod DW20, B20 or Screw-On Cone-2 M24/DW20. For anchoring in concrete.

Notes

Lost anchor part.

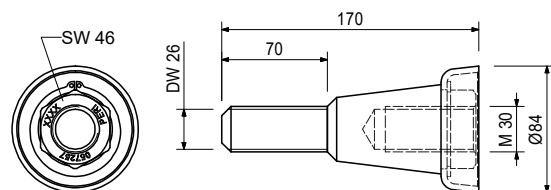
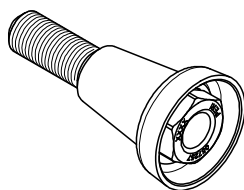


Art no.	Weight [kg]	
057257	1.810	Screw-On Cone M30/DW26

Anchor System M30. For anchoring climbing systems.

Notes

Separate dimensioning information on request.



Accessory (not included)

030870	1.260	Threaded Anchor Plate DW26
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Accessories ACS

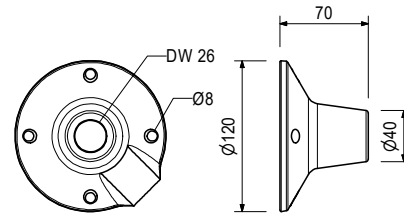
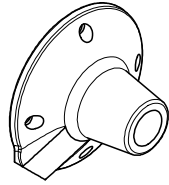
Art no. Weight [kg]

030870 1.260 **Threaded Anchor Plate DW26**

For use with Tie Rod DW26 or Screw-On Cone M36/DW26. For anchoring in concrete.

Notes

Lost anchor part.



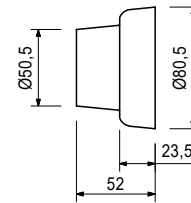
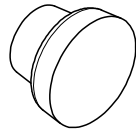
Art no. Weight [kg]

031653 0.364 **Concr. Cone KK M30 Ø80x52mm**

For closing anchor points with Climbing Cone-2 M30/DW20 or Screw Cone M30/DW26.

Notes

Delivery Unit 50 pieces.



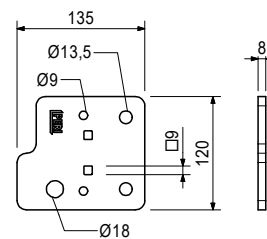
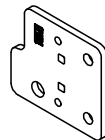
Accessory (not included)

131709 9.980 **Sealing Adhesive-3 6 Cans-Set**

Art no. Weight [kg]

113762 0.884 **Guardrail Conn. Plate ACS/SCS**

For assembling Scaffold Tubes Ø48 or Ø60 as Guardrail by means of Bail Pin A64 on Guardrail Posts ACS, SCS and GT 24. Fixation by Hex. Bolt M8, M12, M16 or Wood Screw Ø8.



Accessory (not included)

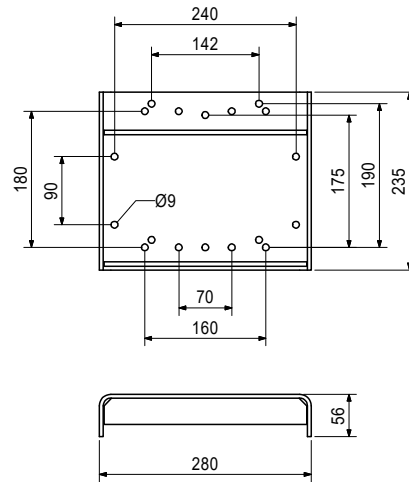
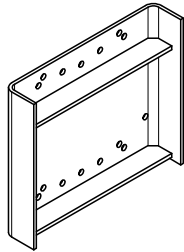
110296 0.220 **Clamp A64 DIN3570-M12-ga**

710330 0.017 **Hex-Nut ISO4032-M12-8-ga**

Art no.	Weight [kg]	
057096	4.260	Connector IPE ACS

For fixing Platform Supports IPE 180 to IPE 240 at
 - Main Platform Beam ACS
 - Main Cantilever Beams ACS
 - Lower Cantilever Beams ACS
 - Lower Cantilever Beam ACS 360

for fixation of
 - Cantilever Supports CP ACS
 - Cantilever Props FB ACS, long
 - Cantilever Props FP ACS, 2.61m
 to Platform Girders IPE 180 to IPE 240.



Hydraulics ACS



Art no. Weight [kg]

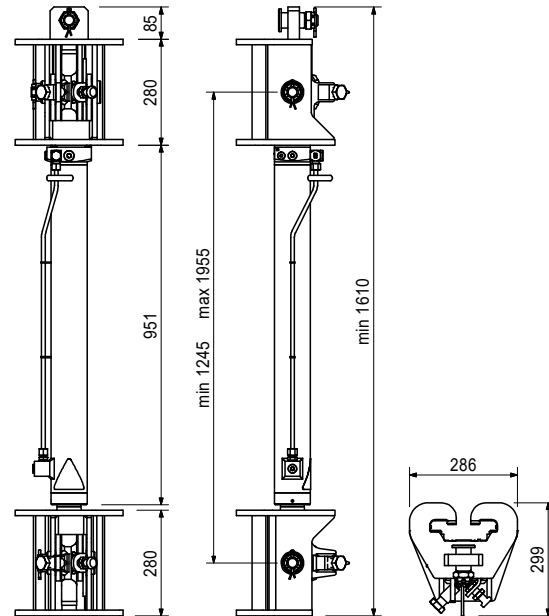
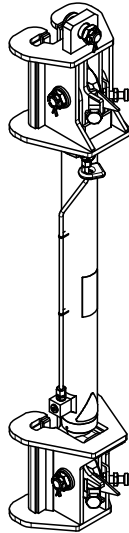
051738 111.000 **Hydr.Climb. Mech. ACS 100 cpl**

For hydraulic climbing of Self-Climbing Systems ACS.

Notes

Manuf. item-no. 109.080C-710

Follow Instructions for Use!



Consists of

- 1 pc 706475 Cotter Pin ISO1234-06.3x060-ST
- 1 pc 706468 Head Bolt ACS Ø40x75mm
- 1 pc 706476 Castle-Nut DIN979-M30-05-ga

Art no. Weight [kg]

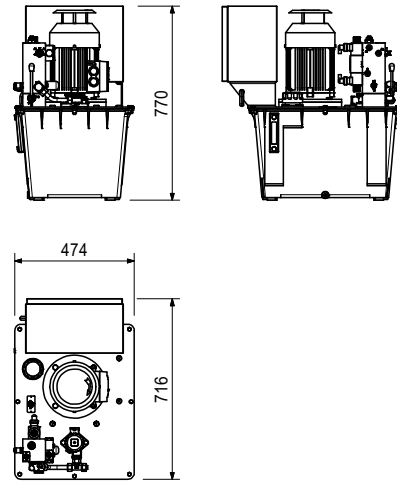
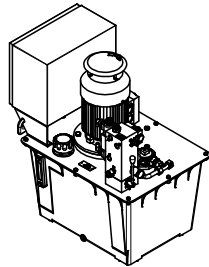
Hydr.Pumps ACS 2-fold

051739	93.000	Hydr.Pump ACS 2x210/400V
051762	93.000	Hydr.Pump ACS 2x210/460V
057637	93.000	Hydr.Pump ACS 2x240/400V
057638	93.000	Hydr.Pump ACS 2x240/460V
057766	93.000	Hydr.Pump ACS 2x240/460V CSA

Hydraulic Pumps for the connection of two Hydraulic Climbing Mechanisms ACS 100 cpl. Different versions concerning power supply, operating pressure, delivery rate and certification.

Notes

- Manuf. item-no. 964.007C-050
- Manuf. item-no. 964.007C-060
- Manuf. item-no. 964-007C-4,0-050
- Manuf. item-no. 964-007C-4,0-060
- Manuf. item-no. 964-007C-4,0-060-CSA
- Follow Assembly Instruction!
- Remote Controller with 12m cable included!
- Delivered without oil!



Art no. Weight [kg]

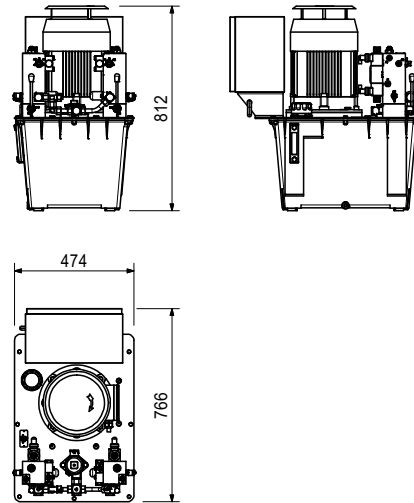
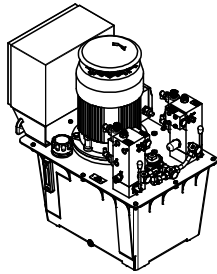
Hydr.Pumps ACS 4-fold

051740	135.000	Hydr.Pump ACS 4x210/400V
051741	135.000	Hydr.Pump ACS 4x210/460V
057639	135.000	Hydr.Pump ACS 4x240/400V
057640	135.000	Hydr.Pump ACS 4x240/460V
057767	135.000	Hydr.Pump ACS 4x240/460V CSA

Hydraulic Pumps for the connection of four Hydraulic Climbing Mechanisms ACS 100 cpl. Different versions concerning power supply, operating pressure, delivery rate and certification.

Notes

- Manuf. item-no. 964.003C-050
- Manuf. item-no. 964.003C-060
- Manuf. item-no. 964-003C-4,0-050
- Manuf. item-no. 964-003C-4,0-060
- Manuf. item-no. 964-003C-4,0-060-CSA
- Follow Assembly Instruction!
- Remote Controller with 12m cable included!
- Delivered without oil!



Art no. Weight [kg]

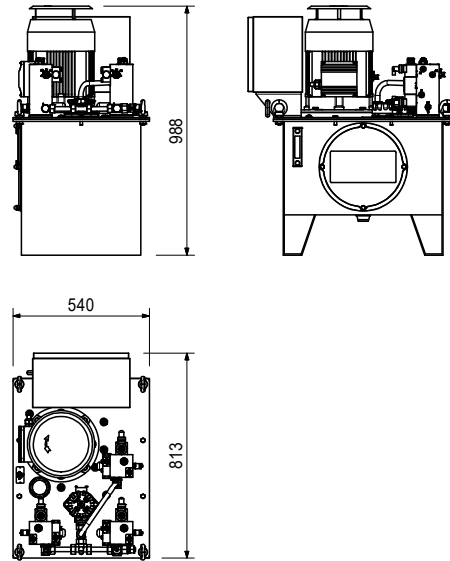
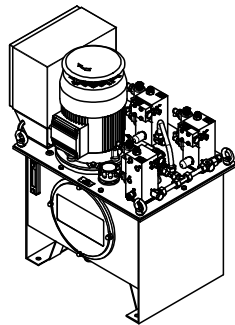
Hydr.Pumps ACS 6-fold

051742	204.000	Hydr.Pump ACS 6x210/400V
051743	204.000	Hydr.Pump ACS 6x210/460V
057641	204.000	Hydr.Pump ACS 6x240/400V
057642	204.000	Hydr.Pump ACS 6x240/460V
057768	204.000	Hydr.Pump ACS 6x240/460V CSA

Hydraulic Pumps for the connection of six Hydraulic Climbing Mechanisms ACS 100 cpl. Different versions concerning power supply, operating pressure, delivery rate and certification.

Notes

- Manuf. item-no. 964.009C-050
- Manuf. item-no. 964.009C-060
- Manuf. item-no. 964-009C-4,0-050
- Manuf. item-no. 964-009C-4,0-060
- Manuf. item-no. 964-009C-4,0-060-CSA
- Follow Assembly Instruction!
- Remote Controller with 12m cable included!
- Delivered without oil!

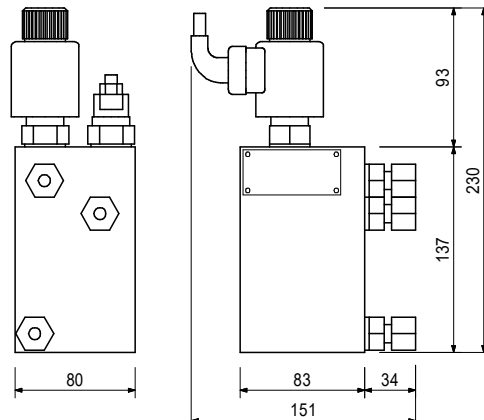
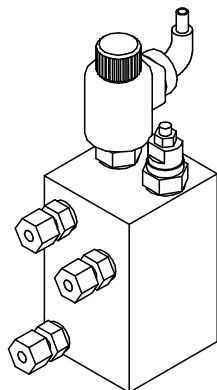


Art no. Weight [kg]

Control Blocks 3

057358	10.000	Control Block 3. 50HZ
057359	10.000	Control Block 3. 60HZ

Complete with hose, cable and connections.
For installing on 4-fold, 6-fold and 8-fold Hydraulic Pumps, when only 3, 5 or 7 climbing mechanisms are connected to these.



Art no. Weight [kg]

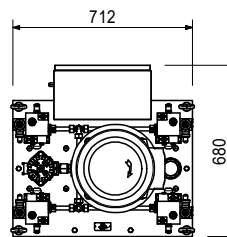
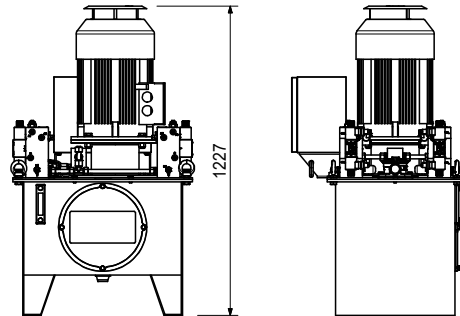
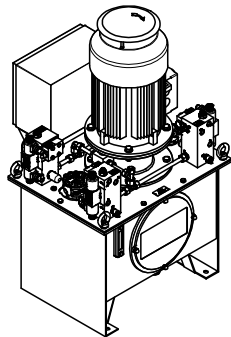
Hydr.Pumps ACS 8-fold

051746	267.000	Hydr.Pump ACS 8x210/400V
051747	267.000	Hydr.Pump ACS 8x210/460V
057518	267.000	Hydr.Pump ACS 8x240/400V
057643	267.000	Hydr.Pump ACS 8x240/460V
057769	267.000	Hydr.Pump ACS 8x240/460V CSA

Hydraulic Pumps for the connection of eight Hydraulic Climbing Mechanisms ACS 100 cpl. Different versions concerning power supply, operating pressure, delivery rate and certification.

Notes

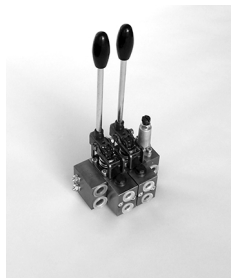
- Manuf. item-no. 964.010C-050
- Manuf. item-no. 964.010C-060
- Manuf. item-no. 964-010C-4,0-050
- Manuf. item-no. 964-010C-4,0-060
- Manuf. item-no. 964-010C-4,0-060-CSA
- Follow Assembly Instruction!
- Remote Controller with 12m cable included!
- Delivered without oil!



Art no. Weight [kg]

057375	5.000	Hydr.Contr.Unit with Endpl.-3
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When using Mechanical Drive ACS for the operation of the carriage. Fixation at the guardrail post of platform level 0.



Hydraulics ACS

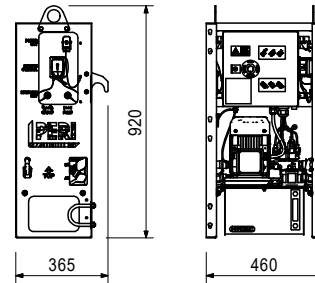
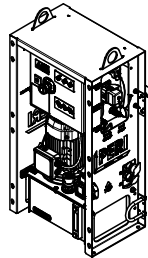


Art no.	Weight [kg]	
135500	47.000	Hydr.P. RCS MAX 2x210/380-460V

Hydraulic Pump for driving two Climbing Devices, RCS MAX 75 and Climbing Device-2 RCS 50.
Connecting several units enables synchronous climbing of all climbing units.

Notes

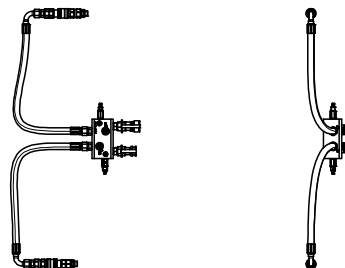
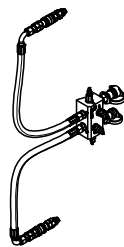
Follow Assembly Instructions of the manufacturer!
See PERI Product Information.
Only use original PERI Hydraulic Oil.



Accessory (not included)

135606	0.100	Return Filter RCS MAX
135607	0.100	Tank Breather Filter RCS MAX
137281	14.000	Hydr.Oil Filter Pump CE
137282	1.000	Hydr.Oil Filterelement 500
137283	1.000	Suction-/Pressure Hose 250

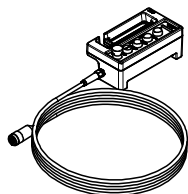
Art no.	Weight [kg]	
136533	3.400	Conv. Set Climbing Device ACS



Art no.	Weight [kg]	
057362	5.000	Rem.Contr. 2-fold Hydr.Pump

Notes

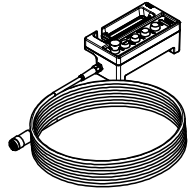
Manuf. item-no. K039.049
Cable length = 12m



Art no.	Weight [kg]	
057363	5.000	Rem.Contr. 4-fold Hydr.Pump

Notes

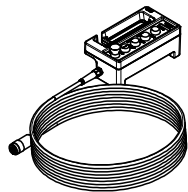
Manuf. item-no. K039.027
Cable length = 12m.



Art no.	Weight [kg]	
057364	5.000	Rem.Contr. 6-fold Hydr.Pump

Notes

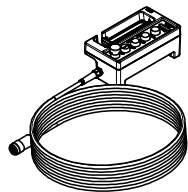
Manuf. item-no. K039.037
Cable length = 12m.



Art no.	Weight [kg]	
057366	5.000	Rem.Contr. 8-fold Hydr.Pump

Notes

Manuf. item-no. K039.076
Cable length = 12m.



Art no. Weight [kg]

Remote Control ACS 2 Pumps

123833	8.000	Remote Control ACS 2 Pumps
128303	8.000	Remote Control ACS CSA 2 Pumps

Remote control for the simultaneous operation of 2 Hydraulic Pumps ACS.

Notes

Manuf. item-no. K039.103

Manuf. item-no. K039.321

Follow Instructions for Use!

Incl. two connecting cables, each 12m length.



Accessory (not included)

123834	4.000	Extension Cable 18m ACS
123836	0.300	Adapter Cable 2-fold 3/07C ACS
123835	0.300	Adapter Cable 4-fold 2/03C ACS
123837	0.300	Adapter Cable 6-fold 1/09C ACS
123838	0.300	Adapter Cable 8-fold 5/10C ACS

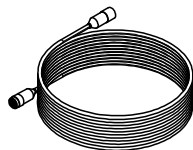
Art no. Weight [kg]

123834	4.000	Extension Cable ACS 18m
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Notes

Manuf. item-no. K039.104

Only for Remote Controllers for 2 Pumps item-no 123833 and 128303.



Hydraulics ACS



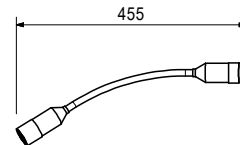
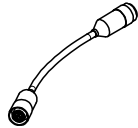
Art no. Weight [kg]

Adapter Cables ACS

123836	0.300	Adapter Cable ACS 2-fold 3/07C
123835	0.300	Adapter Cable ACS 4-fold 2/03C
123837	0.300	Adapter Cable ACS 6-fold 1/09C
123838	0.300	Adapter Cable ACS 8-fold 5/10C

Notes

Manuf. item-no. K039.106
 Manuf. item-no. K039.105
 Manuf. item-no. K039.107
 Manuf. item-no. K039.108



Art no. Weight [kg]

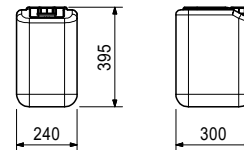
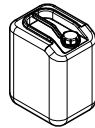
Hydr.Oils ISO11158 in canister

131270	17.900	Hydr.Oil ISO11158 HM10 20I
131274	18.300	Hydr.Oil ISO11158 HVI22 20I
137373	18.300	Hydr.Oil ISO11158 HVI32 20I
057376	18.300	Hydr.Oil ISO11158 HVI46 20I

High-quality synthetic hydraulic oils for PERI Hydraulic Power Units with different viscosity suitable for certain temperature ranges.

Notes

Filter with filter pump before filling the aggregates.
 Observe Safety Data Sheet and applicable National Safety Regulations regarding hydraulic oil, in particular for transport, storage and disposal! Observe the technical documentation for the hydraulic power unit! Product Data Sheet on request.



Art no. Weight [kg]

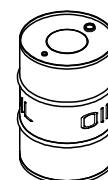
Hydr.Oils ISO11158 in drum

131273	200.000	Hydr.Oil ISO11158 HM10 210I
131275	200.000	Hydr.Oil ISO11158 HVI22 210I
137374	201.000	Hydr.Oil ISO11158 HVI32 210I
131277	201.000	Hydr.Oil ISO11158 HVI46 210I

High-quality synthetic hydraulic oils for PERI Hydraulic Power Units with different viscosity suitable for certain temperature ranges.

Notes

Filter with filter pump before filling the aggregates.
 Observe Safety Data Sheet and applicable National Safety Regulations regarding hydraulic oil, in particular for transport, storage and disposal! Observe the technical documentation for the hydraulic power unit! Product Data Sheet on request.



Hydraulics ACS

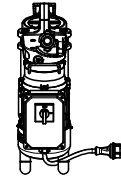
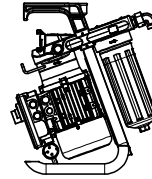
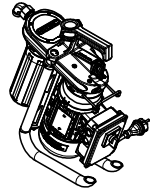


Art no.	Weight [kg]	
137281	14.000	Hydr.Oil Filter Pump CE

Filter pump for quick and clean transfer of hydraulic oil with simultaneous filtration.

Notes

Follow Instructions for Use!
Power connection 220V/50Hz, plug CEE 7/7



Accessory (not included)

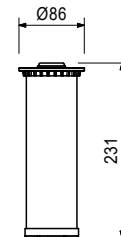
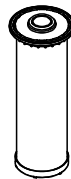
137282	1.000	Hydr.Oil Filterelement 500
137283	1.000	Suction-/Pressure Hose 250

Art no.	Weight [kg]	
137282	1.000	Hydr.Oil Filterelement 500

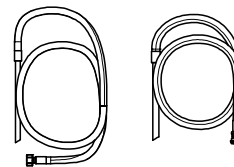
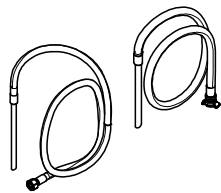
Wear part of the hydr.Oil Filter Pump CE.

Notes

Follow Instruction for use!
Observe the maintenance instructions in the technical documentation for the oil filter pump!
Observe disposal instructions!

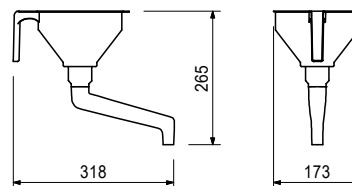


Art no.	Weight [kg]	
137283	1.000	Suction-/Pressure Hose 250



Art no.	Weight [kg]	
130685	0.225	Universal Funnel

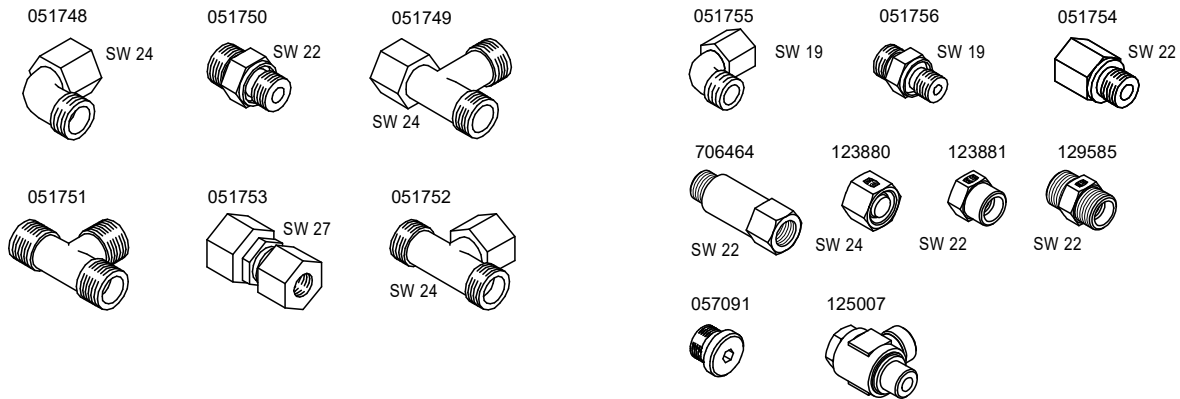
For easy filling of hydraulic pumps with oil.



Art no. Weight [kg]

Connections

706464	0.144	Drive Connector ACS
051755	0.080	Elbow Stud X-EVW 8PS
051748	0.140	Elbow Stud X-EVW 12PS
129585	0.060	Hydr.Hose Coupling G12S
051749	0.200	L-Stud X-EVL 12PS
051756	0.080	Male Stud Coupl. X-GE8-PSR-ED
051750	0.060	Male Stud Coupl. X-GE12PSR-ED
051753	0.150	Reducing Coupler KOR15PL/12PS
051754	0.070	Reducing Stud RI 3/8x1/4
125007	0.190	Swivel Fitting WH12SRKDSOMD
051751	0.280	T-Connector X-T 12PS
051752	0.140	T-Stud X-EVT 12PS
123880	0.055	Threaded Plug VKAM 12S VIT
057091	0.027	Threaded Plug VSTI R 3/8-ED
123881	0.050	Tube Screw Plug ROV12SX

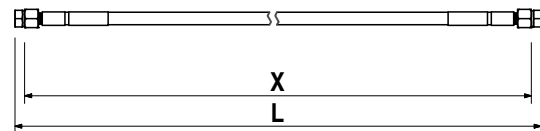
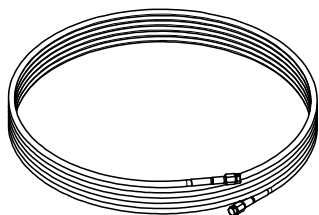


Art no. Weight [kg]

L [mm] X [mm]

Hydr.Hoses EN853-2SN-DN08

129587	0.260	Hydr.Hose EN853-2SN-DN08 0.3m	326	300
129592	0.349	Hydr.Hose EN853-2SN-DN08 0.5m	526	500
129593	0.656	Hydr.Hose EN853-2SN-DN08 1m	1026	1000
129594	1.090	Hydr.Hose EN853-2SN-DN08 2m	2026	2000
129595	2.350	Hydr.Hose EN853-2SN-DN08 5m	5026	5000
129596	4.560	Hydr.Hose EN853-2SN-DN08 10m	10026	10000
129597	6.780	Hydr.Hose EN853-2SN-DN08 15m	15026	15000
129598	8.990	Hydr.Hose EN853-2SN-DN08 20m	20026	20000



Consists of

2 pc 123881 Tube Screw Plug ROV12SX

Hydraulics ACS

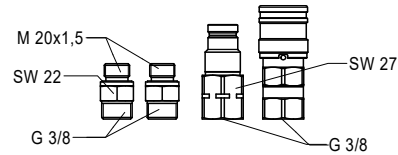
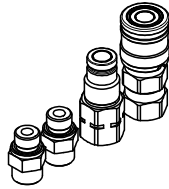


Art no.	Weight [kg]	
129424	0.440	FF-Coupling Pair X-GE12PSR-ED+

Spare parts set for PERI Hydraulic Components with quick couplings X-GE 12PSR-ED+.

Notes

For assembling on hydraulic hoses EN853-2SN-DN08.



Consists of

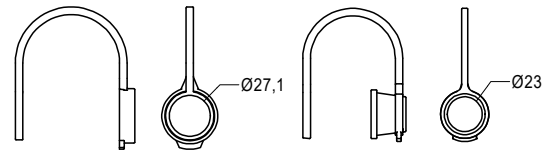
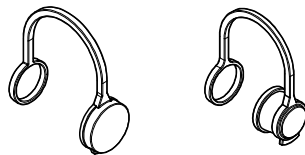
- 1 pc 128992 Pin ISO16028 DN10 R3/8IG
- 1 pc 128993 Sleeve ISO16028 DN10 R3/8IG
- 2 pc 051750 Male Stud Coupl. X-GE12PSR-ED

Art no.	Weight [kg]	
125632	0.050	Prot. Covers Climb. Device RCS

Spare part.
To protect unplugged quick couplings against dirt and damage.

Notes

Use with hydraulic hoses with FF couplings possible.
1 set for 1 Climbing Device RCS 50 (2x bushing and 2x nipple each).

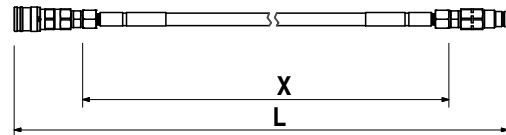
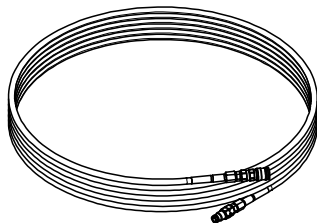


Art no.	Weight [kg]		L [mm]	X [mm]
Hydr.Hoses 853-2SN-DN08-FF				
129035	0.996	Hydr.Hose 853-2SN-DN08-FF 1m	1169	1000
129036	1.430	Hydr.Hose 853-2SN-DN08-FF 2m	2169	2000
129419	2.690	Hydr.Hose 853-2SN-DN08-FF 5m	5170	5000
129420	4.900	Hydr.Hose 853-2SN-DN08-FF 10m	10170	10000
129421	7.120	Hydr.Hose 853-2SN-DN08-FF 15m	15170	15000
129422	9.330	Hydr.Hose 853-2SN-DN08-FF 20m	20170	20000

Hydraulic hoses with quick couplings and nominal diameter 8mm.

Notes

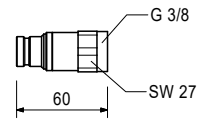
Follow applicable Safety Regulations for the installation and maintenance of hydraulic lines!



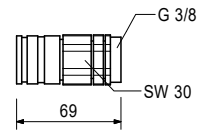
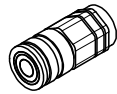
Consists of

- 1 pc 128992 Pin ISO16028 DN10 R3/8IG
- 1 pc 128993 Sleeve ISO16028 DN10 R3/8IG
- 2 pc 051750 Male Stud Coupl. X-GE12PSR-ED

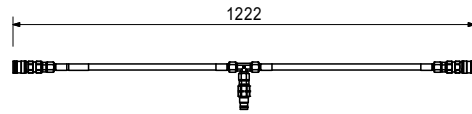
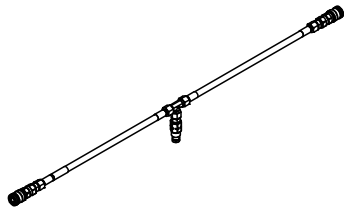
Art no.	Weight [kg]	
Quick Coupler Connectors		
128992	0.140	Pin ISO16028 DN10 R3/8IG
110823	0.171	Quick Coupler Nipple RCS



Art no.	Weight [kg]	
Quick Coupler Bushings		
110822	0.297	Quick Coupler Bushing RCS
128993	0.280	Sleeve ISO16028 DN10 R3/8IG



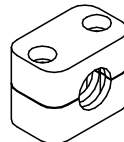
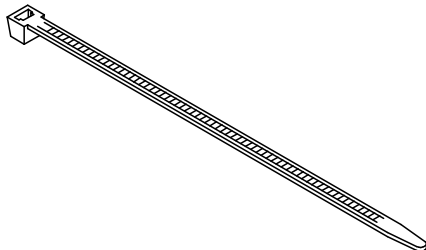
Art no.	Weight [kg]	
129423	1.370	Hydr.T-Piece 2SN-DN08-FF



Consists of

- 1 pc 128992 Pin ISO16028 DN10 R3/8IG
- 2 pc 128993 Sleeve ISO16028 DN10 R3/8IG
- 3 pc 051750 Male Stud Coupl. X-GE12PSR-ED

Art no.	Weight [kg]	
Connectors		
051760	0.004	Cable Binder NT-240H
051758	0.100	Clip Unit 319 PA
051759	0.050	Screw ISO1207-M06x030-4.8-ga
051775	0.010	Washer US



051758



051759



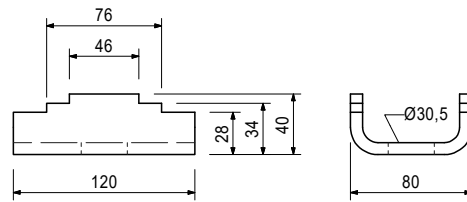
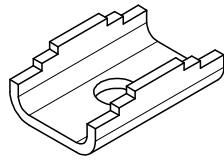
051775

Accessories Formwork ACS



Art no.	Weight [kg]	
110055	0.861	Cross Strap coat

For fixing formwork at the Strongbacks by means of Tie Yokes DW15.

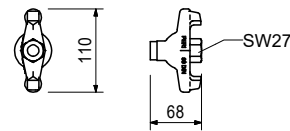


Accessory (not included)

030440	0.686	Sperical Nut DW15 ga
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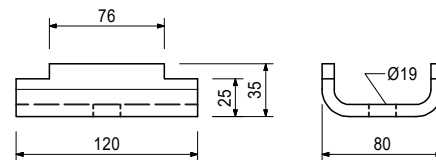
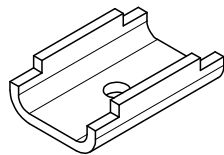
Art no.	Weight [kg]	
030440	0.686	Sperical Nut DW15 ga

For pivotable anchoring with Tie Rod DW15 and B15.



Art no.	Weight [kg]	
722137	0.849	Cross Strap 2 coat

For fixing formwork at the Strongbacks by means of Tie Yokes DW15.



Accessory (not included)

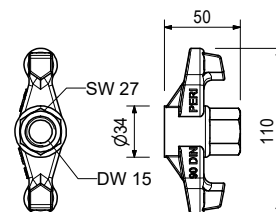
030100	0.439	Wingnut DW15 ga
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Art no.	Weight [kg]	
030100	0.439	Wingnut DW15 ga

For anchoring with Tie Rod DW15 and B15.

Notes

Permissible load 90 kN.

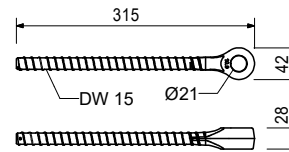


Accessories Formwork ACS



Art no.	Weight [kg]	
037150	0.641	Tie Yoke DW15

For fixing SRZ Steel Walers to the strongback.

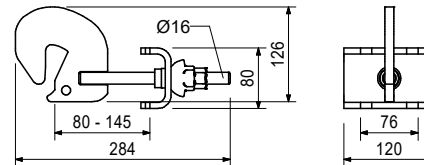
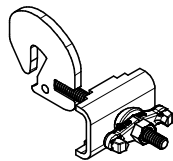


Accessory (not included)

037160	0.736	Pin Ø20x205mm ga
781053	0.065	Hex-Nut ISO7040-M20-8-ga
710226	0.340	Screw ISO4014-M20x090-8.8-ga

Art no.	Weight [kg]	
110059	2.840	Waler Fixation U100/U120

For fixing VARIO GT 24 Panels to Strongbacks CB, SCS and Steel Waler SRU.

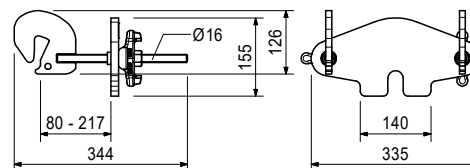
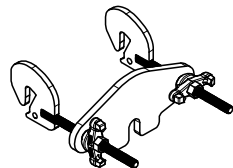


Consists of

- 1 pc 110055 Cross Strap coat
- 1 pc 118260 Spherical Nut RD16 coat

Art no.	Weight [kg]	
129720	8.040	Waler Fixation U100/U120 doub.

For fixing VARIO GT 24 Panels to Strongbacks CB, SCS, Steel Waler SRU if anchoring is done through the strongback.



Consists of

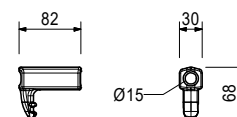
- 2 pc 118260 Spherical Nut RD16 coat

Art no.	Weight [kg]	
023820	0.375	Hook Tie Head DW15 ga

For connecting accessories to MAXIMO and TRIO Panels. DW15 thread.

Notes

Permissible tension force 20.0 kN.



Accessories Formwork ACS

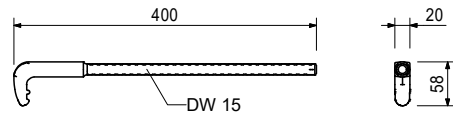
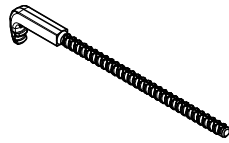


Art no.	Weight [kg]	
023650	0.769	Hook Tie DW15x400mm ga

For connecting accessories to MAXIMO and TRIO Panels. DW15 thread.

Notes

Permissible tension force 20.0 kN.

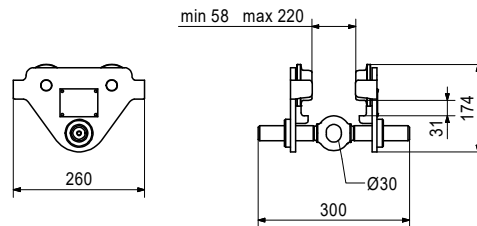
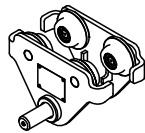


Art no.	Weight [kg]	
057043	9.000	Trolley HTP 1000kg Type A

For the movable suspension of the formwork on Steel Profiles HEB, IPE or similar. Width = 58-220mm.

Notes

Follow Instructions for Use!

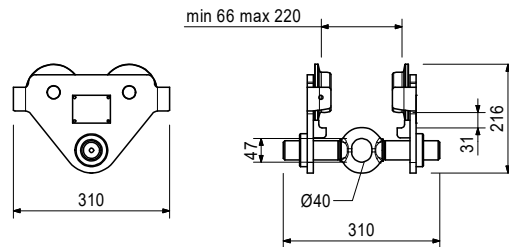
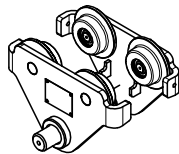


Art no.	Weight [kg]	
057045	16.000	Trolley HTP 2000kg Type A

For the movable suspension of the formwork on Steel Profiles HEB, IPE or similar. Width = 66-220mm.

Notes

Follow Instructions for Use!



Accessories Formwork ACS

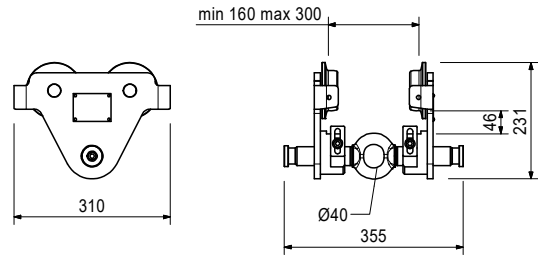
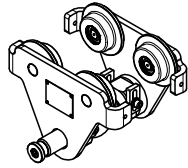


Art no.	Weight [kg]	
057046	19.300	Trolley HTP 2000kg Type B

For the movable suspension of the formwork on Steel Profiles HEB, IPE or similar.
Width = 160-300mm.

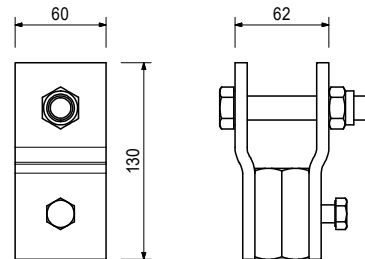
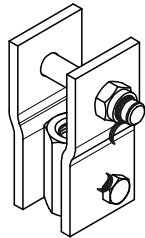
Notes

Follow Instructions for Use.



Art no.	Weight [kg]	
057049	2.570	Panel Suspens.Adaptor ACS DW20

Connecting Betomax 20 with Trolley HTP.



Consists of

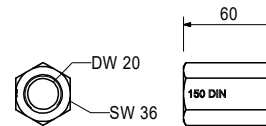
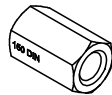
- 1 pc 721729 Screw ISO4014-M16x090-8.8-ga
- 1 pc 070890 Hex-Nut ISO7040-M16-8-ga
- 1 pc 710266 Screw ISO4017-M12x025-8.8-ga

Art no.	Weight [kg]	
030580	0.371	Hex-Nut DW20 SW36 60mm weldab.

For anchoring with Tie Rod DW20 and B20.

Notes

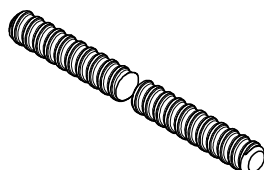
Weldable! Permissible load 150 kN.



Art no.	Weight [kg]	
030745	2.600	Tie Rod B20 spec. Length

Notes

Weldable! Take official Approval into consideration! Permissible tension force 150 kN.

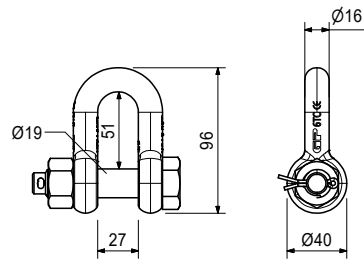
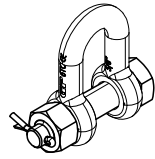


Accessories Formwork ACS



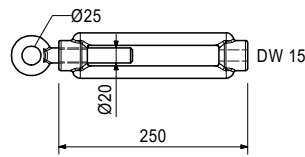
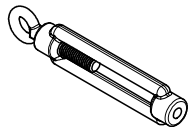
Art no.	Weight [kg]	
130616	0.670	Shackle Ø16/Ø19mm 3.25t Hex-N.

For attaching loads or mounting formwork elements, Trolleys HTP 2000kg by means of Turnbuckle CB M20/DW15.



Art no.	Weight [kg]	
116807	1.850	Turnbuckle CB Ø25-M20/DW15

For tensioning of Tie Rod DW15.



Consists of

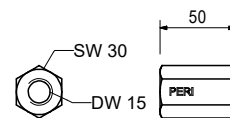
- 1 pc 711059 Turnbuckle CB coat
- 1 pc 711060 Eyebolt M20 left coat

Art no.	Weight [kg]	
030070	0.222	Hex-Nut DW15 SW30 50mm ga

For anchoring with Tie Rod DW15 and B15.

Notes

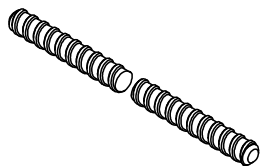
Weldable!



Art no.	Weight [kg]	
030740	1.550	Tie Rod B15 spec. Length

Notes

Weldable! Observe the permissions! Permissible tension force 85 kN.



Accessories Formwork ACS

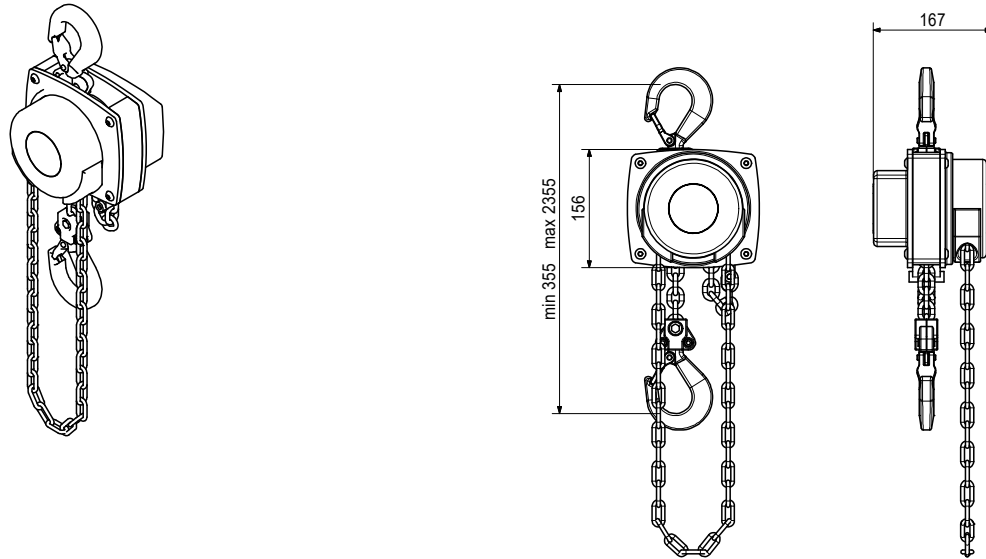


Art no.	Weight [kg]
057517	13.000 Winch 1.0t

For the height-adjustable suspension of the formwork or for lifting and lowering loads.

Notes

Follow Instructions for Use!
Lifting height 2m.
Hand chain 3m.

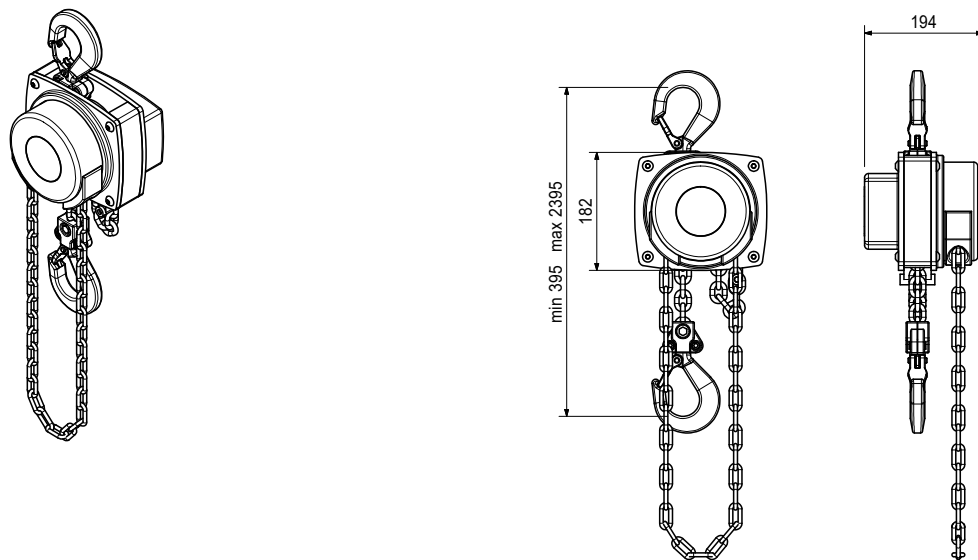


Art no.	Weight [kg]
129981	20.000 Winch 2.0t

For the height-adjustable suspension of the formwork or for lifting and lowering loads.

Notes

Follow Instructions for Use!
Lifting height 2m.
Hand chain 3m.



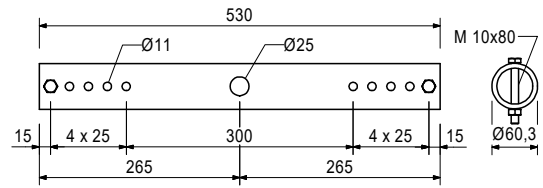
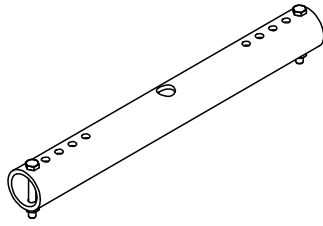
Accessories Formwork ACS



Art no. Weight [kg]

057050	4.450	Panel Suspens. Tube VARIO 53
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For attaching VARIO GT 24 Elements.



Accessory (not included)

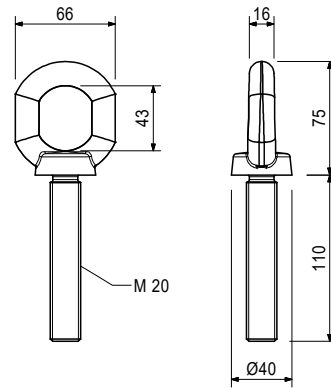
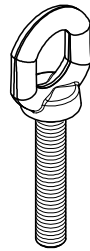
057095	0.902	Pywood Insert GT 24 ACS
125823	2.170	Formwork Suspension VARIO Ø60
724812	0.656	Eyebolt M20/110 coat

Consists of

- 2 pc 710593 Screw ISO4014-M10x080-8.8-ga
- 2 pc 710234 Hex-Nut ISO4032-M10-8-ga

Art no. Weight [kg]

724812	0.656	Eyebolt M20x110mm coat
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Accessory (not included)

781053	0.065	Hex-Nut ISO7040-M20-8-ga
113350	0.174	Washer ISO7094-20 100HV-ga.

Accessories Formwork ACS

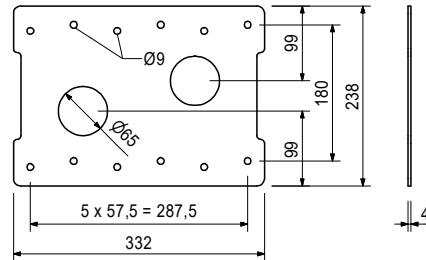
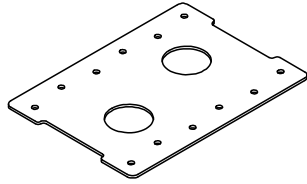


Art no.	Weight [kg]	
125823	2.170	Formwork Suspension VARIO Ø60

For connecting the Suspension Tube VARIO 53 to Formwork Girders GT 24.

Notes

Permissible load-bearing capacity see PERI Design Information (on request).
At least 2 pieces per fixing point.



Accessory (not included)

024540	0.005	Wood-Screw 6x40 SK-TX30 HPI
024470	0.008	Wood-Screw 6x60 SK-TX30 HPI

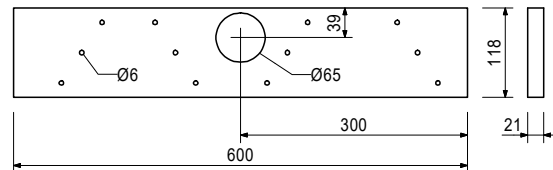
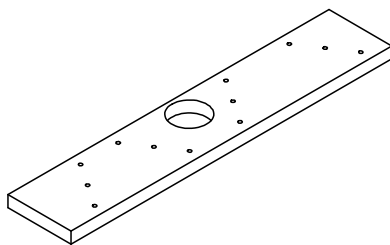
Art no.	Weight [kg]	
057095	0.902	Pywood Insert GT 24 ACS

Of 21mm Finply.

For panel suspension. Fixed with Wood-Screw 6x60 SK-TX30 HPI both sides on the struts of the GT 24.

Notes

Permissible load-bearing capacity see PERI Design Information (on request).
At least 4 pieces per fixing point.



Accessory (not included)

024470	0.008	Wood-Screw 6x60 SK-TX30 HPI
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Accessories Formwork ACS

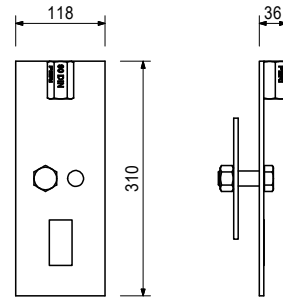
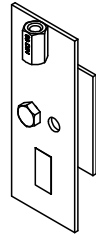


Art no.	Weight [kg]	
057076	3.060	Suspens. f. Corner Element ACS

For the suspension of VARIO GT 24 Corner Elements.

Notes

Permissible load-bearing capacity see PERI Design Information (on request).

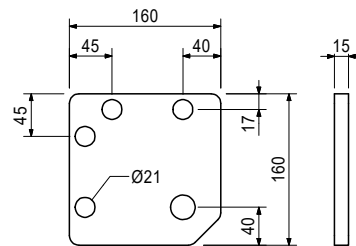
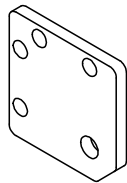


Consists of

- 1 pc 057139 Screw ISO4017-M20x060-8.8-ga
- 1 pc 710334 Hex-Nut ISO4032-M20-8-ga

Art no.	Weight [kg]	
125475	2.730	Suspens. Plate ACS/TRIO 16x16

For the suspension of TRIO Formwork Elements

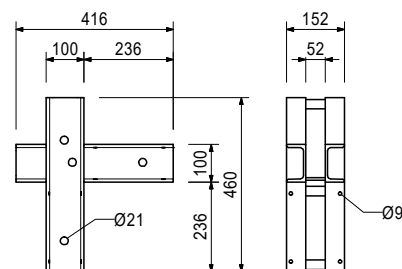
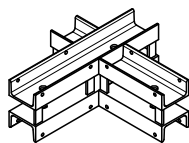


Accessory (not included)

024910	0.303	Screw ISO4014-M20x100-8.8-ga
781053	0.065	Hex-Nut ISO7040-M20-8-ga
706454	0.017	Washer ISO7089-20-200HV-ga

Art no.	Weight [kg]	
057077	16.800	Steel Corn. Waler ESRZ 46/41.6

For VARIO GT 24 Corner Elements.



Accessory (not included)

057078	18.300	T-Shaped Artic. Coupl. 115-76
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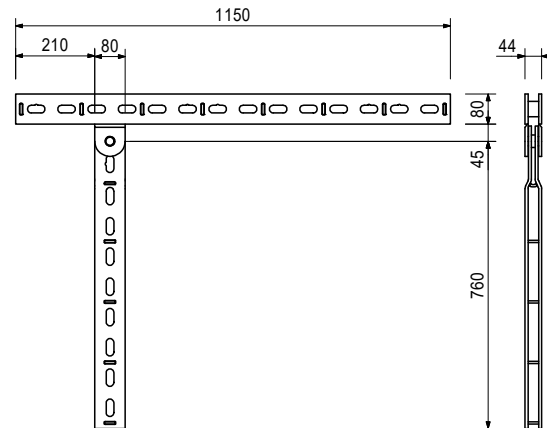
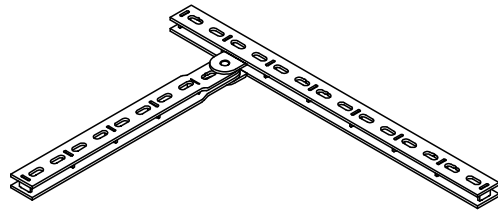
Accessories Formwork ACS



Art no. Weight [kg]

057078 18.300 **T-Shaped Artic. Coupl. 115-76**

For connecting VARIO GT 24 Corner Elements.



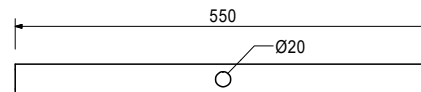
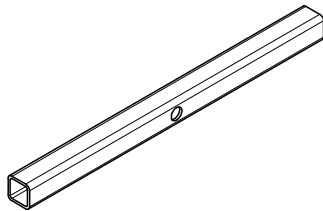
Accessory (not included)

037160	0.736	Pin Ø20x205mm ga
024240	0.805	Wedge KZ tensionproof

Art no. Weight [kg]

123806 2.320 **Tube 40x40x4mm 55**

For clamping compensation plates.

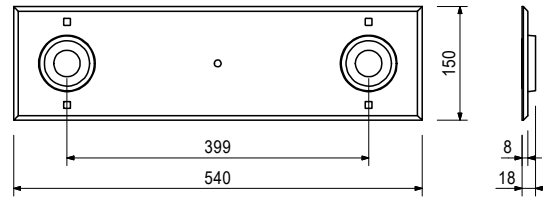
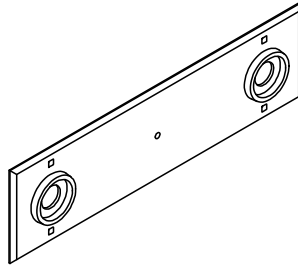


Accessories Formwork ACS



Art no.	Weight [kg]	
057869	4.740	Leading Anchor Plate ACS 399mm

For the exact installation of the climbing cones for Double Anchor Support left, right. Mounted to the formwork facing the concrete structure.

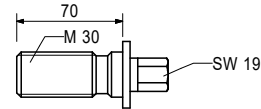
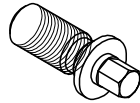


Accessory (not included)

710295	0.028	Screw DIN603-M08x045-4.8-ga-Nu
024470	0.008	Wood-Screw 6x60 SK-TX30 HPI

Art no.	Weight [kg]	
029450	0.339	Advancing Screw M30 ga

For fixing the M30 Anchor System if the plywood formlining is drilled through.

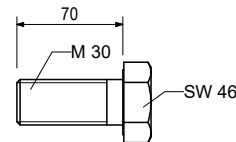
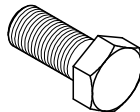


Accessory (not included)

029380	0.184	Anchor Posit. Plate M30 ga
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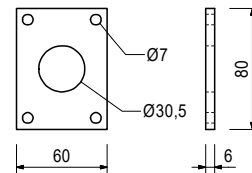
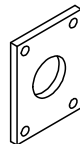
Art no.	Weight [kg]		L [mm]
029420	0.590	Screw ISO4017-M30x070-8.8-ga	70

Alternative to Leading Screw M30 galvanized. Item number: 029450



Art no.	Weight [kg]	
029380	0.184	Anchor Posit. Plate M30 ga

For fixing the M30 Anchor System if the plywood formlining is drilled through.



Accessory (not included)

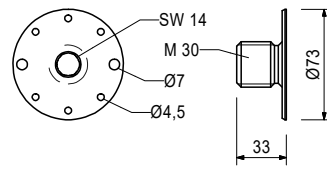
029440	0.005	Hex-Wood-Screw 6x20 DIN571-ga
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Accessories Formwork ACS



Art no.	Weight [kg]	
026450	0.214	Anchor Posit. Stud M30 ga

For fixing the M30 Anchor System if the plywood formlining is not drilled through.



Accessory (not included)

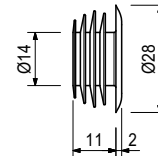
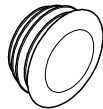
027212	0.445	Hexag. Recess Wrench SW14 long
710312	0.005	Wire Nail 3.0x80mm

Art no.	Weight [kg]	
030300	0.002	Plug Ø20/24mm

For sealing unused tie holes Ø20 to Ø24mm.

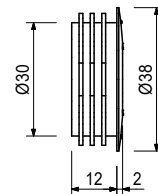
Notes

Delivery unit 250 pieces.



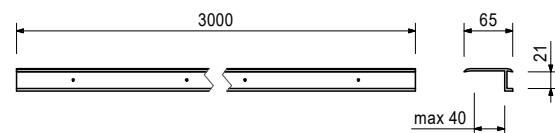
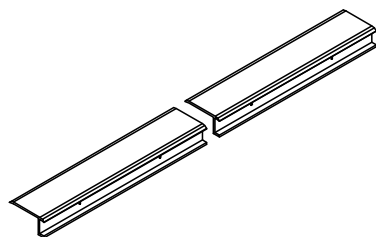
Art no.	Weight [kg]	
057094	0.004	Plug SFL 38x1-3

For closing advancing Anchor Holes Ø32 to Ø36mm.



Art no.	Weight [kg]	
101706	1.230	Formwork Joint 21/40mm 300

Plastic profile strip for easier striking of shafts.



Accessories general ACS

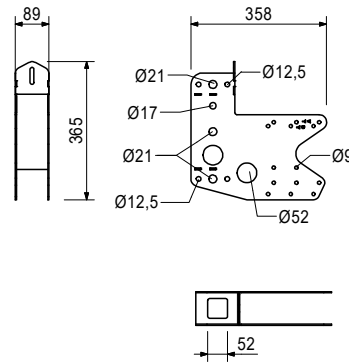
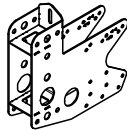


Art no.	Weight [kg]	
126088	4.390	Guardrail Post Holder Multi

For fixing of an end guardrail post on Girders GT 24, VT 20 or KH 80/160. Fixing of the guardrail posts by means of Hex. Bolts M20.

Notes

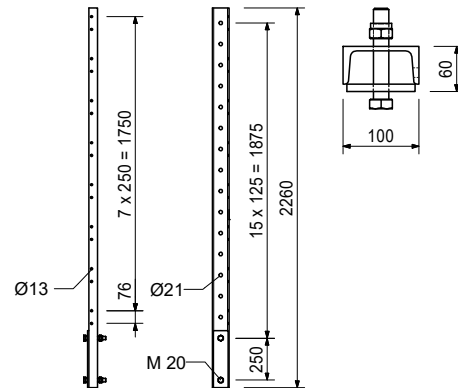
Suitable for
 Guardrail Post RCS 226 item no.: 109720
 Guardrail Post RCS/SRU 184 item no.: 114328
 Vertical scaffold tubes
 Special post QR 50x50



Accessory (not included)		
710285	0.050	Screw ISO4014-M08-100-8.8-ga
024090	0.005	Self-cleaning Nut M8 coat
024470	0.008	Wood-Screw 6x60 SK-TX30 HPI

Art no.	Weight [kg]	
109720	26.600	Guardrail Post RCS 226

For assembly of the guardrail on the main platform with RCS Formwork Scaffolding or on Guardrail Post Holder Multi .



Accessory (not included)		
110296	0.220	Clamp A64 DIN3570-M12-ga
710330	0.017	Hex-Nut ISO4032-M12-8-ga
710709	0.036	Screw DIN603-M08-065-4.8-ga
780354	0.002	Washer ISO7089-08-200HV-ga
057345	0.010	Washer 9mm DIN 434 ga.

Consists of

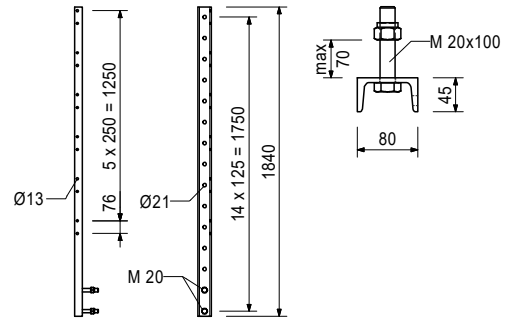
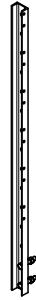
2 pc 104477 Screw ISO4014-M20x120-8.8-ga
 2 pc 781053 Hex-Nut ISO7040-M20-8-ga

Accessories general ACS



Art no.	Weight [kg]	
114328	16.600	Guardrail Post RCS/SRU 184

For assembly of the guardrail on the Platform Beam RCS/SRU or Guardrail Post Holder Multi.



Accessory (not included)

110296	0.220	Clamp A64 DIN3570-M12-ga
710330	0.017	Hex-Nut ISO4032-M12-8-ga
710709	0.036	Screw DIN603-M08-065-4.8-ga
780354	0.002	Washer ISO7089-08-200HV-ga
057345	0.010	Washer 9mm DIN 434 ga.

Consists of

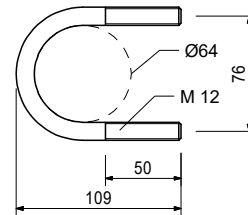
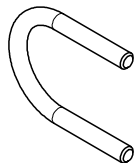
2 pc 114727 Screw ISO4017-M20x100-8-8-ga
2 pc 781053 Hex-Nut ISO7040-M20-8-ga

Art no.	Weight [kg]	
110296	0.220	Clamp A64 DIN3570-M12-ga

For assembling Scaffold Tubes on Railing Posts RCS.

Notes

Wrench size SW19.



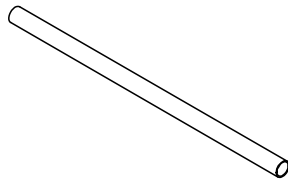
Accessory (not included)

710330	0.017	Hex-Nut ISO4032-M12-8-ga
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Accessories general ACS

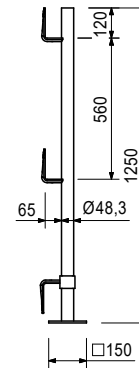


Art no.	Weight [kg]		L [mm]
Scaff. Tubes 48.3x3.2mm ga			
026417	0.000	Cutting Costs Scaffold Tube	1
026411	3.550	Scaff. Tube 48.3x3.2mm 1m ga	1000
026412	7.100	Scaff. Tube 48.3x3.2mm 2m ga	2000
026413	10.650	Scaff. Tube 48.3x3.2mm 3m ga	3000
026414	14.200	Scaff. Tube 48.3x3.2mm 4m ga	4000
026419	17.750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



Art no.	Weight [kg]	
019040	6.480	Guardrail Post PD8

As guardrail for different systems. Screwed onto sub-structure.

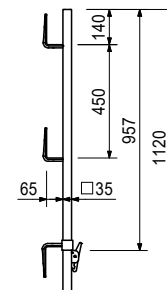


Art no.	Weight [kg]	
117325	4.270	Post PP

For the fixation of the Side-Mesh-Barriers.

Notes

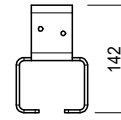
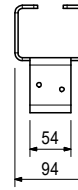
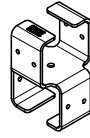
Maximum distance of posts with Side-Mesh-Barrier: PMB 260 max. 2.4m.



Accessories general ACS

Art no.	Weight [kg]	
129724	0.817	Cross Connector GT 24/GT 24

For the connection of crossing GT 24 Formwork Girders.

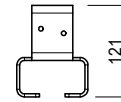
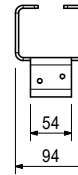
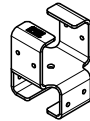


Accessory (not included)

024540	0.005	Wood-Screw 6x40 SK-TX30 HPI
024470	0.008	Wood-Screw 6x60 SK-TX30 HPI

Art no.	Weight [kg]	
129722	0.746	Cross Connector GT 24/VT 20

For connecting a Girder GT 24 to a crossing Girder VT 20.

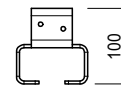
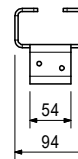
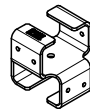


Accessory (not included)

024540	0.005	Wood-Screw 6x40 SK-TX30 HPI
024470	0.008	Wood-Screw 6x60 SK-TX30 HPI

Art no.	Weight [kg]	
129817	0.675	Cross Connector VT 20/VT 20

For the connection of crossing Girders VT 20.



Accessory (not included)

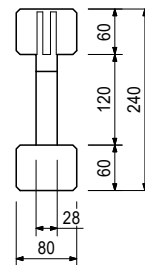
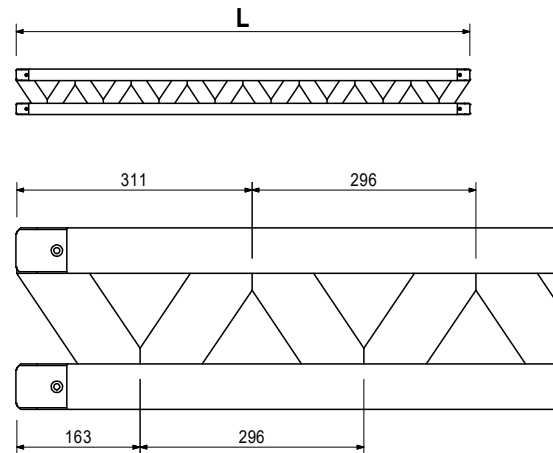
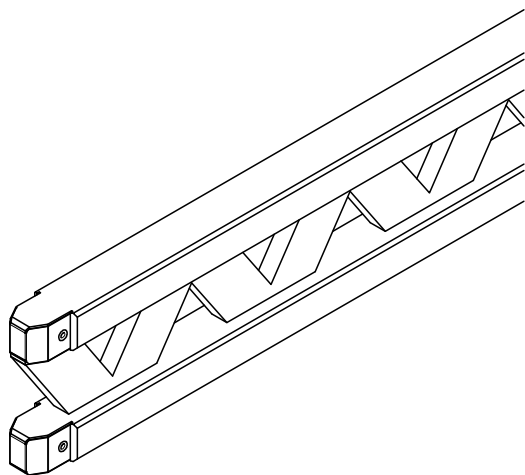
024540	0.005	Wood-Screw 6x40 SK-TX30 HPI
024470	0.008	Wood-Screw 6x60 SK-TX30 HPI

Art no.	Weight [kg]		L [mm]
Girders GT 24			
075100	5.300	Girder GT 24 90	918
075120	7.100	Girder GT 24 120	1214
075150	8.900	Girder GT 24 150	1510
075180	10.600	Girder GT 24 180	1806
075210	12.400	Girder GT 24 210	2102
075240	14.200	Girder GT 24 240	2398
075270	15.900	Girder GT 24 270	2694
075300	17.700	Girder GT 24 300	2990
075330	19.500	Girder GT 24 330	3286
075360	21.200	Girder GT 24 360	3582
075390	23.000	Girder GT 24 390	3878
075420	24.800	Girder GT 24 420	4174
075450	26.600	Girder GT 24 450	4470
075480	28.300	Girder GT 24 480	4766
075510	30.100	Girder GT 24 510	5062
075540	31.900	Girder GT 24 540	5358
075570	33.600	Girder GT 24 570	5654
075600	35.400	Girder GT 24 600	5950

Universal formwork girder made of wood.

Notes

Special lengths over 6m are possible and can be provided on request.

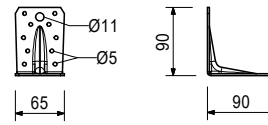


Accessories general ACS



Art no.	Weight [kg]	
123478	0.255	Angle Connector 90x90x65mm

For diverse timber connections.

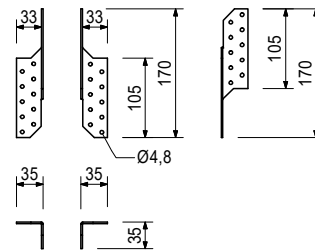
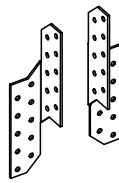


Accessory (not included)

129711	0.010	Wood Screw 6x20 HRK-TX30 HSX
024550	0.005	Wood Screw 8x20 SK-TX30 HSX

Art no.	Weight [kg]	
018290	0.098	Framing Clip ga

For various wood connections.

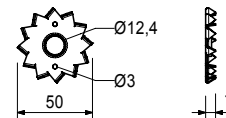
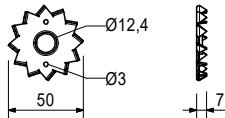


Accessory (not included)

018280	1.000	Double Head Nail
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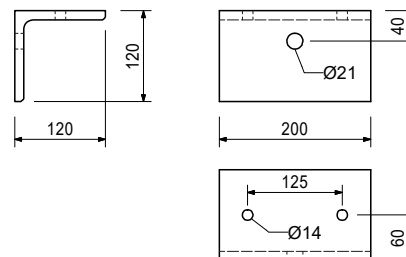
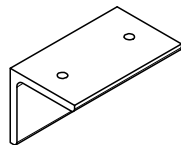
Art no.	Weight [kg]	
070030	0.015	Plate Conn. Ø50/12mm single

To strengthen the timber fixation and for other connections of timber with steel.



Art no.	Weight [kg]	
110289	4.260	L-Angle RCS 120x120x200mm

For fixing end handrail posts on the decking.



Accessory (not included)

131404	1.080	Screw-On Cou.-2 HT B Ø48mm M20
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Accessories general ACS

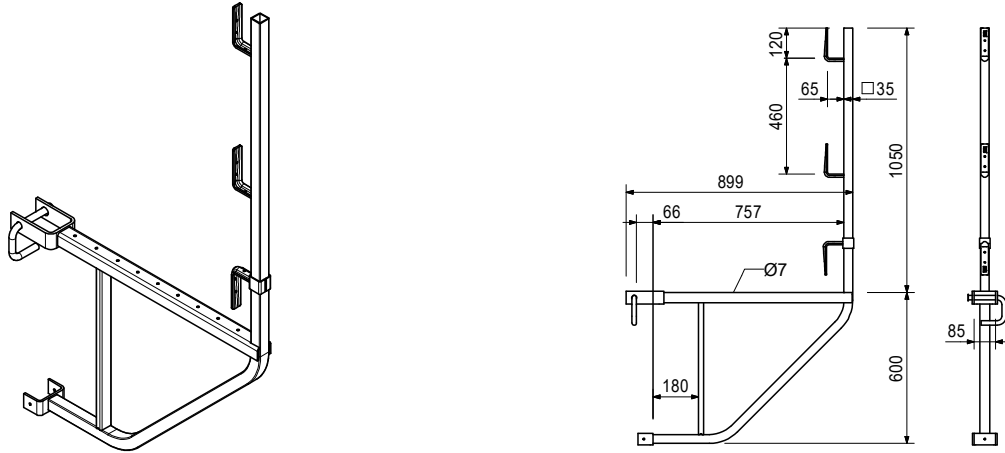


Art no.	Weight [kg]	
027110	11.000	Scaffold Bracket GB80

For assembly of a working and concreting scaffold with GT 24 girder.

Notes

Permissible load 150kg/m².
Maximum width of influence 1.25m.

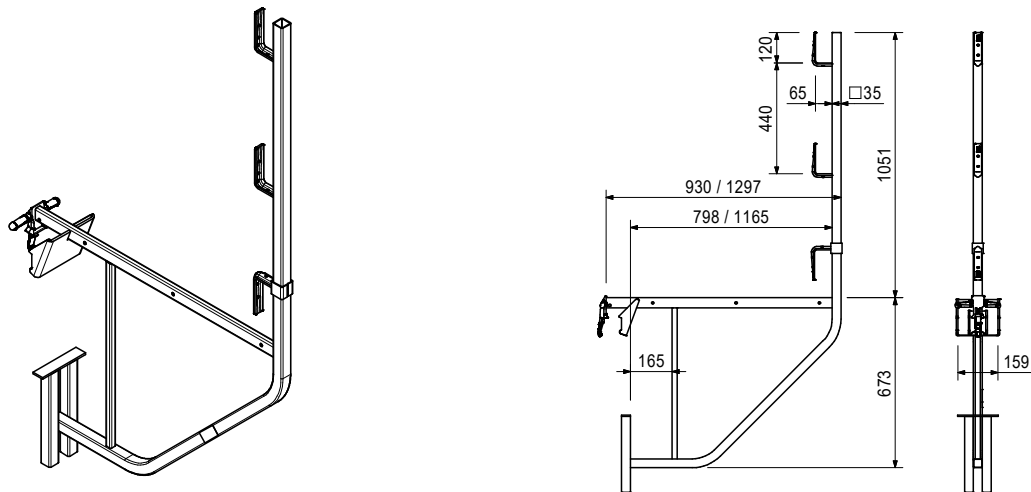


Art no.	Weight [kg]	
Scaffold Brackets TRG		
023670	12.500	Scaffold Bracket TRG 80
023680	16.600	Scaffold Bracket TRG 120

For assembly of a working and concreting scaffold with MAXIMO and TRIO. Mounted on horizontal and vertical struts.

Notes

Permissible load 150kg/m² with maximum width of influence 1.35m.

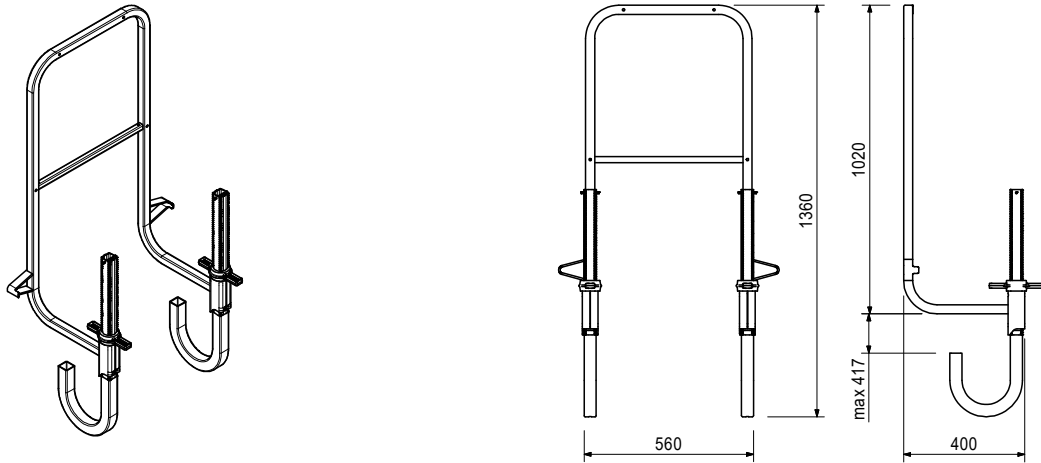


Accessories general ACS



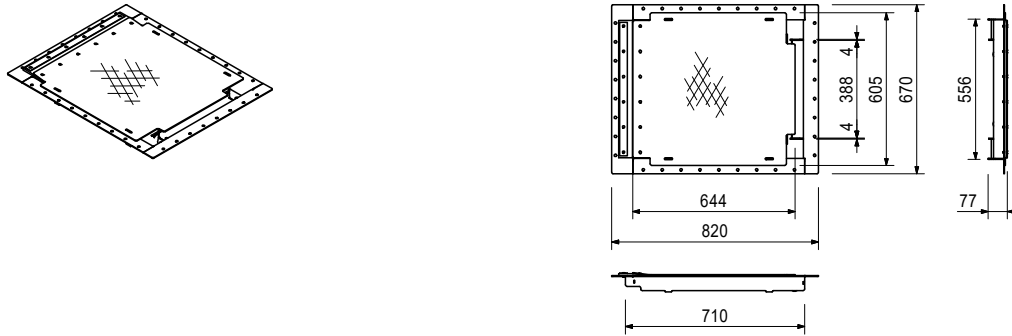
Art no.	Weight [kg]	
065066	14.800	End Guardrail Frame 55

End guardrail for clamping to all PERI scaffold platforms and climbing systems.



Art no.	Weight [kg]	
126431	12.300	Hatch-2 RCS 55x60 foldable

Self-closing hatch for ladder access. Clear opening approx. 55x60cm. Ladder fixation with bolts or by hanging up.



Accessory (not included)

710224	0.047	Screw ISO4017-M12x040-8.8-ga
710381	0.017	Hex-Nut ISO7040-M12-8-ga

Consists of

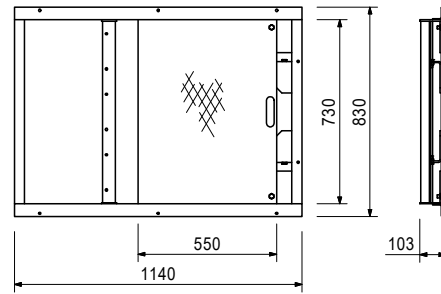
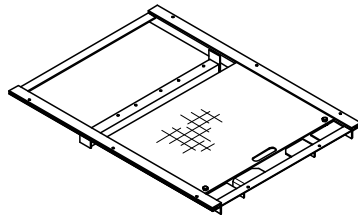
- 1 pc 126785 Hatch Hinge RCS
- 12 pc 108647 Rivet ISO15979-5.0x20-ST/ST
- 2 pc 022230 Cotter Pin 5/1 ga

Accessories general ACS



Art no.	Weight [kg]	
051430	37.900	Sliding Hatch

Non self-closing hatch for ladder access. Clear opening approx. 73x55cm. Ladder fixation with bolts.

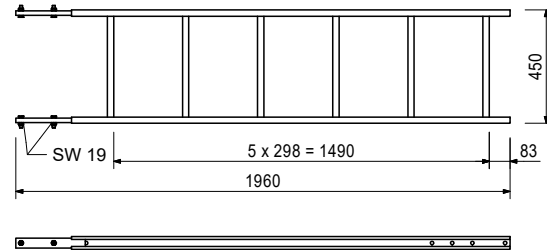
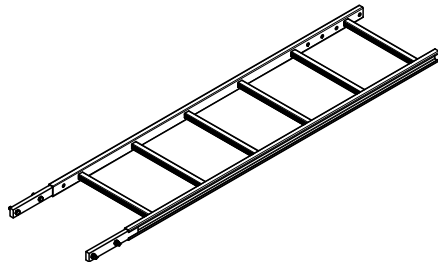


Consists of

- 4 pc 710266 Screw ISO4017-M12x025-8.8-ga
- 4 pc 710381 Hex-Nut ISO7040-M12-8-ga

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

For accessing PERI Formwork Systems.

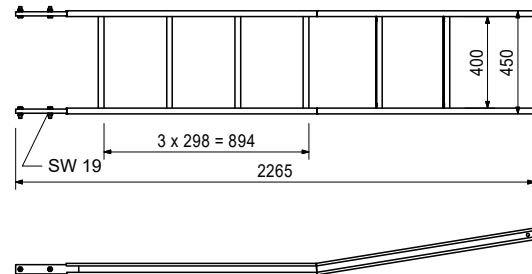
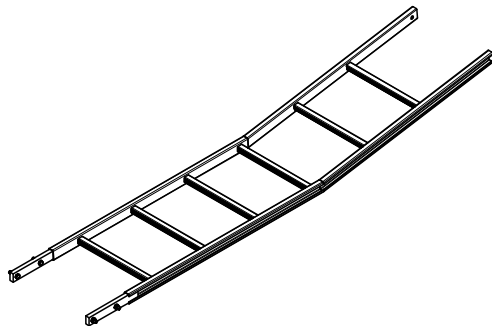


Consists of

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

Art no.	Weight [kg]	
051420	12.800	Ladder 220/6

As access for PERI Formwork Systems.



Consists of

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

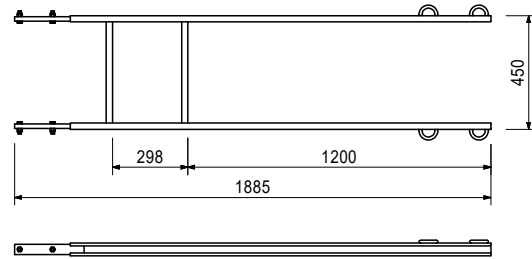
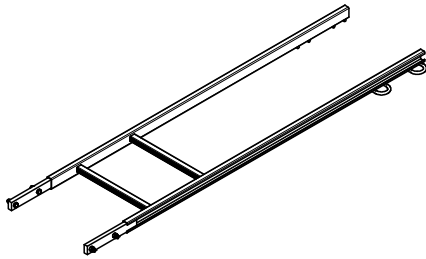
Accessories general ACS



Art no. Weight [kg]

103724 10.400 **End Ladder 180/2 cpl**

As access for PERI Formwork Systems.



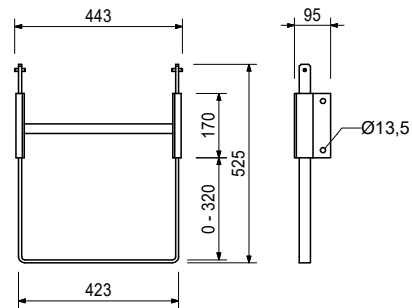
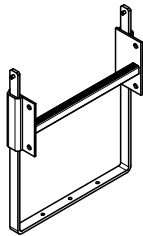
Consists of

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

Art no. Weight [kg]

109105 5.070 **Ladder Base 30 ga**

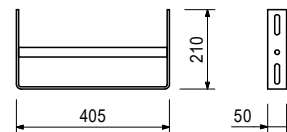
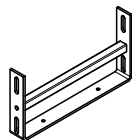
For horizontal fixing of ladders on the platform decking.



Art no. Weight [kg]

051460 2.180 **Ladder Base ga**

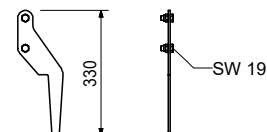
As bottom ladder connection and for securing ladders against sliding on the scaffold decks.



Art no. Weight [kg]

103718 0.684 **Ladder Hook**

For adjusting the bottom ladder. Always use in pairs.



Consists of

- 2 pc 710266 Screw ISO4017-M12x025-8.8-ga
- 2 pc 710381 Hex-Nut ISO7040-M12-8-ga

Accessories general ACS

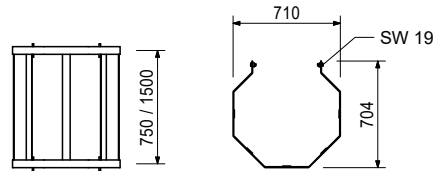
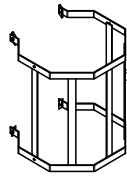


Art no. Weight [kg]

Ladder Safety Cages

104132	15.600	Ladder Safety Cage 75
051450	25.200	Ladder Safety Cage 150

Ladder cage for PERI ladder access.



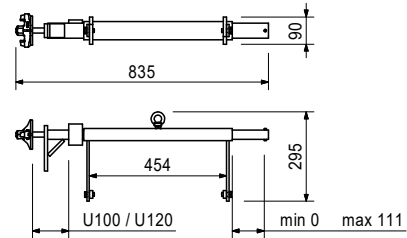
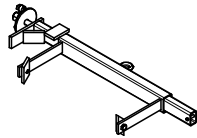
Consists of

- 4 pc 710266 Screw ISO4017-M12x025-8.8-ga
- 4 pc 701763 Clamping Plate FL 25x10x90mm

Art no. Weight [kg]

111165	6.260	Ladder Connector VARIO adj.
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For connecting ladders to Steel Walers SRZ and SRU, Profile U100-U120.

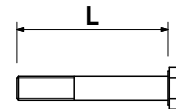
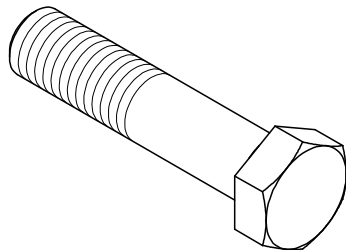


Consists of

- 2 pc 710266 Screw ISO4017-M12x025-8.8-ga
- 2 pc 701763 Clamping Plate FL 25x10x90mm

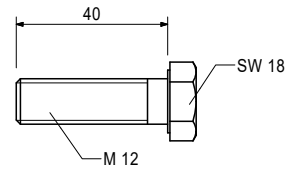
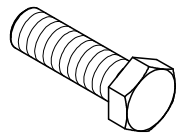
Art no. Weight [kg]

Art no.	Weight [kg]	Schrews ISO4014-8.8-ga	L [mm]
710285	0.050	Screw ISO4014-M08-100-8.8-ga	100
101949	0.015	Screw ISO4014-M08x030-8.8-ga	30
710220	0.087	Screw ISO4014-M12x080-8.8-ga	80
711078	0.360	Screw ISO4014-M20x130-8.8-ga	130
113766	0.518	Screw ISO4014-M20x180-8.8-ga	180



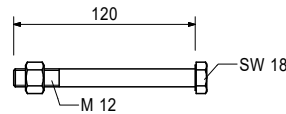
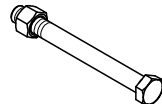
Accessories general ACS

Art no.	Weight [kg]		L [mm]
710224	0.047	Screw ISO4017-M12x040-8.8-ga	40

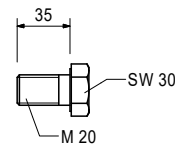


Art no.	Weight [kg]		L [mm]
070100	0.132	Screw ISO4016-M12x120-4.6-ga-N	120

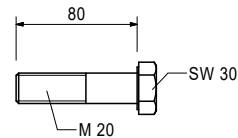
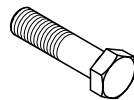
For uses with small loads, including nut.



Art no.	Weight [kg]		L [mm]
123844	0.130	Screw ISO4017-M20x035-8.8-ga	35

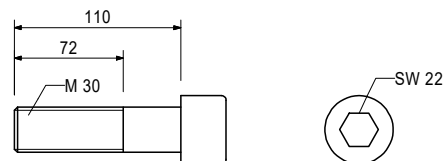
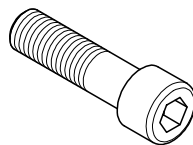


Art no.	Weight [kg]		L [mm]
024900	0.255	Screw ISO4014-M20x080-8.8-ga	80



Art no.	Weight [kg]		
051728	0.800	Screw ISO4762-M30x110-10.9	

For attaching Climbing Shoe ACS, Climbing Shoe-2 ACS and Anchor Tube ACS right or left to Climbing Cone-2 M30/DW20 or Screw-On Cone M30/DW26



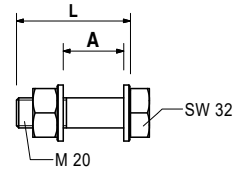
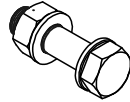
Accessories general ACS

Art no.	Weight [kg]		L [mm]
HV-Sets M20-10.9			
057021	0.370	HV-Set M20x75-10.9	75
123839	0.440	HV-Set M20x90-10.9	90

For high-tension bolt connections.

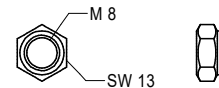
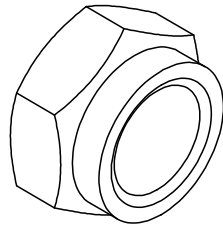
Notes

DIN EN 14 399-4.
 l = 75: A = 40-45mm
 l = 90: A = 55-60mm

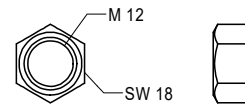


Art no.	Weight [kg]	
711071	0.004	Hex-Nut ISO7040-M08-8-ga

Self-locking.

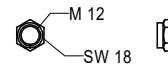


Art no.	Weight [kg]	
104526	0.017	Hex-Nut ISO4032-M12-8



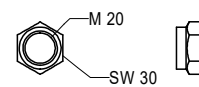
Art no.	Weight [kg]	
710381	0.017	Hex-Nut ISO7040-M12-8-ga

Self-locking.



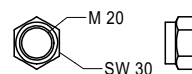
Art no.	Weight [kg]	
781053	0.065	Hex-Nut ISO7040-M20-8-ga

Self-locking.

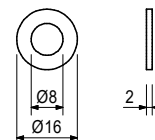
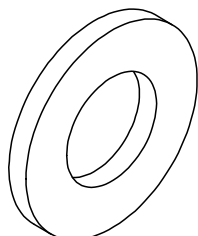


Accessories general ACS

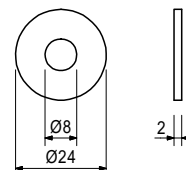
Art no.	Weight [kg]	
130341	0.063	Hex-Nut ISO7042-M20-8-ga



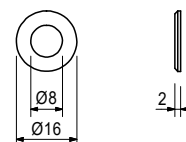
Art no.	Weight [kg]	
780354	0.002	Washer ISO7089-08-200HV-ga



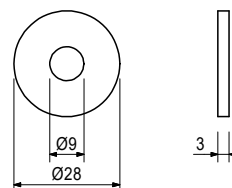
Art no.	Weight [kg]	
710342	0.007	Washer ISO7093-1-08-200HV-ga



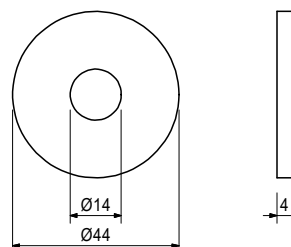
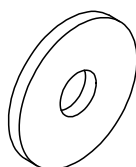
Art no.	Weight [kg]	
722356	0.002	Washer ISO7090-08-200HV



Art no.	Weight [kg]	
113347	0.013	Washer ISO7094-08-100HV-ga



Art no.	Weight [kg]	
113348	0.043	Washer ISO7094-12-100HV-ga

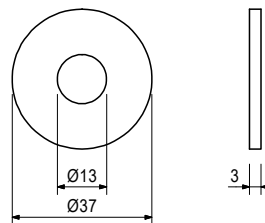
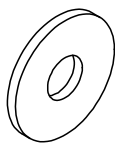


Accessories general ACS

Art no. Weight [kg]

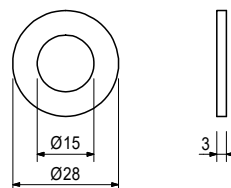
750350 0.027 **Washer ISO7093-1-12-200HV-ga**

Corresponds to old standard DIN 9021. With large supporting area.



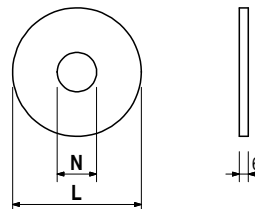
Art no. Weight [kg]

725574 0.009 **Washer ISO7089-14-200HV-ga**



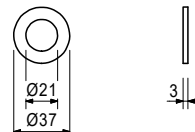
Art no. Weight [kg]

129975 0.210 **Washer ISO7094-24-100HV-ga**



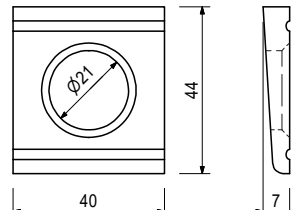
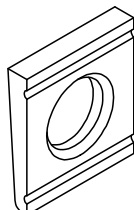
Art no. Weight [kg]

706454 0.017 **Washer ISO7089-20-200HV-ga**



Art no. Weight [kg]

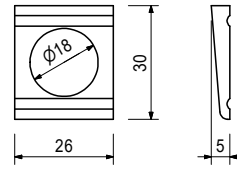
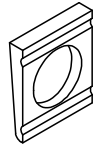
123845 0.057 **U-Washer DIN6918-21-ga**



Accessories general ACS



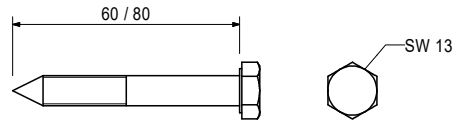
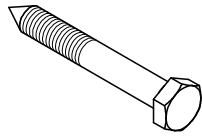
Art no.	Weight [kg]	
710880	0.032	Washer DIN434-18-ga



Art no.	Weight [kg]		L [mm]
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Hex-Wood-Screws DIN 571 ga

029440	0.005	Hex-Wood-Screw 6x20 DIN571-ga	20
024270	0.023	Hex-Wood-Screw 8x60 DIN571 ga	60

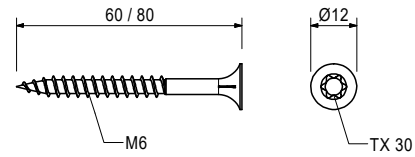
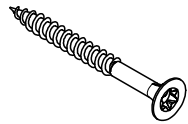


Art no.	Weight [kg]		L [mm]
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Wood-Screws SK-TX30 HPI

024540	0.005	Wood-Screw 6x40 SK-TX30 HPI	40
024470	0.008	Wood-Screw 6x60 SK-TX30 HPI	60
024690	0.008	Wood-Screw 6x80 SK-TX30 HPI	80

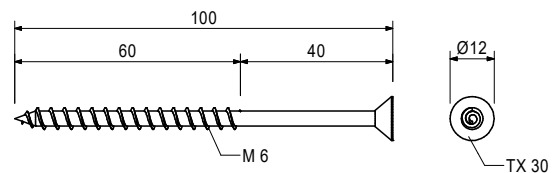
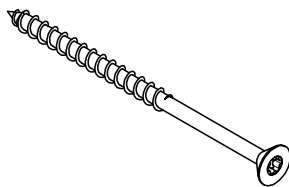
For Torx Bit Points TX30. Self-drilling.



Art no.	Weight [kg]		L [mm]
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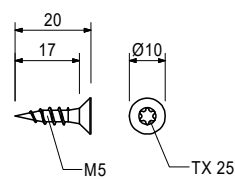
024950	0.012	Wood-Screw 6x100 SK-TX30 HSX	100
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For Torx Blade TX30. Self-drilling.



Art no.	Weight [kg]		L [mm]
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111437	0.004	Wood-Screw 5x20 SK-TX25 HSX	20
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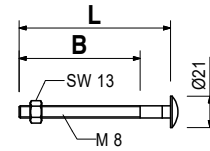
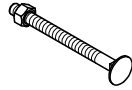


Accessories general ACS

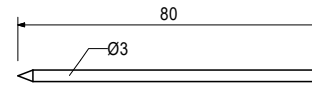
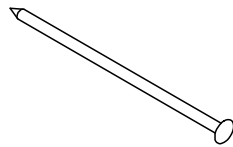


Art no.	Weight [kg]		B [mm]	L [mm]
Screws DIN603-M08-4.8-ga-Nu				
710709	0.036	Screw DIN603-M08-065-4.8-ga-Nu	22	65
710295	0.028	Screw DIN603-M08x045-4.8-ga-Nu	22	45
710326	0.030	Screw DIN603-M08x060-4.8-ga-Nu	22	60
024140	0.033	Screw DIN603-M08x070-4.8-ga-Nu	58	70
710240	0.050	Screw DIN603-M08x100-4.8-ga-Nu	80	100
024390	0.090	Screw DIN603-M08x200-4.8-ga-Nu	150	200

With nut.



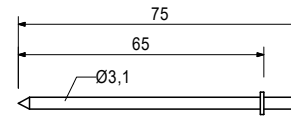
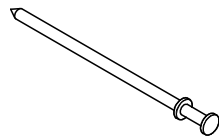
Art no.	Weight [kg]	
710312	0.005	Wire Nail 3.0x80mm



Art no.	Weight [kg]	
018280	1.000	Double Head Nail

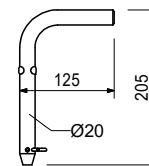
Notes

Delivery unit: carton with 1000 pieces.



Art no.	Weight [kg]	
037160	0.736	Pin Ø20x205mm ga

For various and other connections.



Consists of

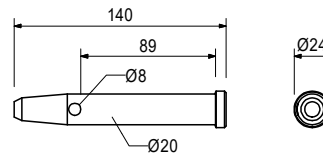
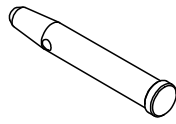
1 pc 018060 Cotter Pin 4/1 ga

Accessories general ACS



Art no.	Weight [kg]	
105400	0.330	Pin Ø20x140mm ga

For different connections.



Accessory (not included)

018060	0.014	Cotter Pin 4/1 ga
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Art no.	Weight [kg]	
018060	0.014	Cotter Pin 4/1 ga



Art no.	Weight [kg]	
022230	0.033	Cotter Pin 5/1 ga

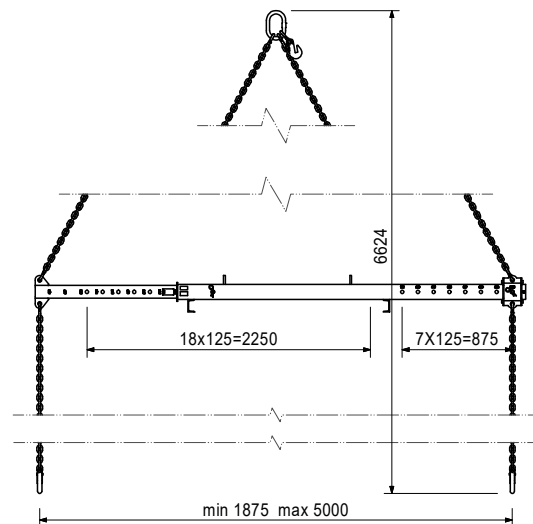
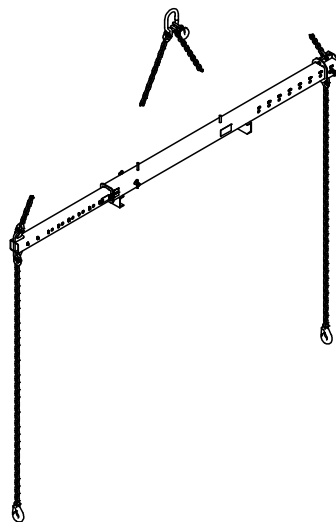


Art no.	Weight [kg]	
127320	158.000	Lifting Beam 9t

For moving climbing units.

Notes

Follow Instructions for Use.
Permissible load-bearing capacity 9t.



Consists of

- 1 pc 112865 Locking Pin Ø25x180mm coat
- 1 pc 022230 Cotter Pin 5/1 ga
- 1 pc 107297 Screw ISO4014-M12x140-8.8-ga
- 1 pc 710330 Hex-Nut ISO4032-M12-8-ga

Accessories general ACS



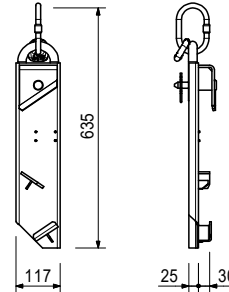
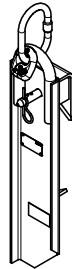
Art no.	Weight [kg]	
070760	4.680	Crane Splice GT 24

For transporting elements by crane with the GT 24 Girder.

Notes

Follow Instructions for Use!

Permissible load-bearing capacity 700kg with crane sling angle $\leq 15^\circ$.



Consists of

- 1 pc 018050 Pin $\varnothing 16 \times 65/86$ mm ga
- 1 pc 018060 Cotter Pin 4/1 ga

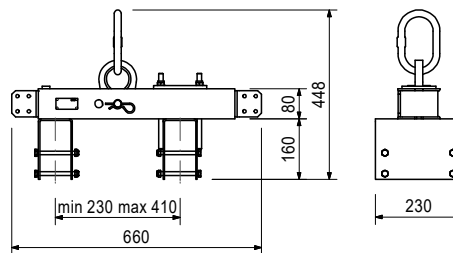
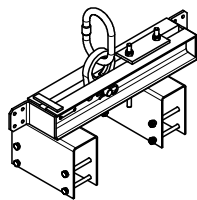
Art no.	Weight [kg]	
111238	19.800	Crane Splice GT 24 2t

For transporting elements by crane with the GT 24 Girder. Adjustable from 230 to 410mm.

Notes

Follow Instructions for Use!

Permissible load-bearing capacity 2t with crane sling angle $\leq 30^\circ$.



Consists of

- 1 pc 018060 Cotter Pin 4/1 ga
- 8 pc 710138 Screw ISO4014-M10x110-8.8-ga
- 8 pc 780356 Hex-Nut ISO7040-M10-8-ga

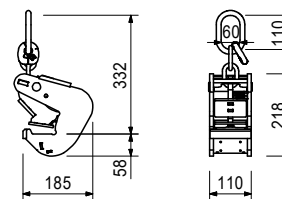
Art no.	Weight [kg]	
115168	6.950	Lifting Hook MX 1.5t

For transporting MAXIMO and TRIO Panels.

Notes

Follow Instructions for Use!

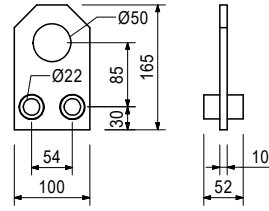
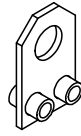
Permissible load-bearing capacity: Steel elements 1.5t. Alu elements 750kg.



Accessories general ACS



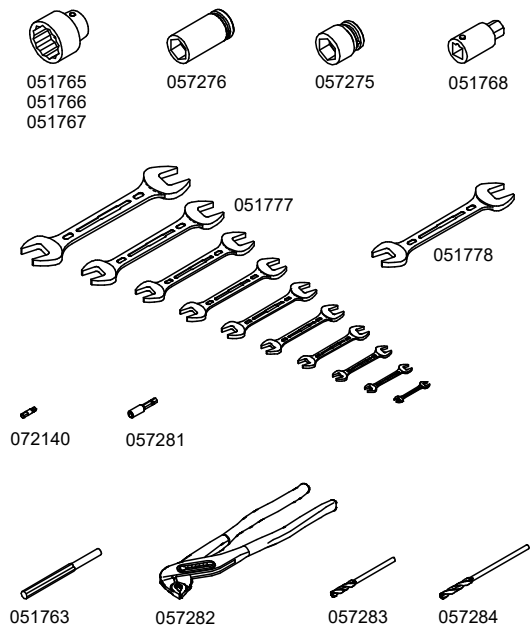
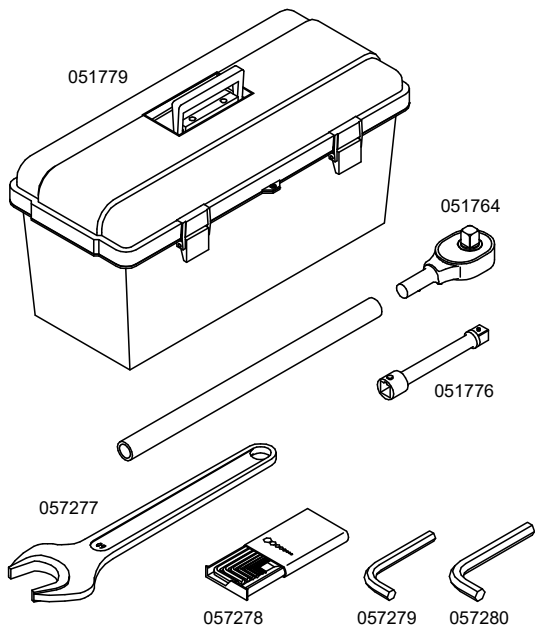
Art no.	Weight [kg]	
715631	1.280	Lifting Eye BR



Art no.	Weight [kg]	
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Tools ACS

057281	0.042	Bit Clip for TX30
051777	1.650	Double Spanner Set 10-pcs.
051778	0.350	Double Spanner SW24/SW27
051763	0.125	Driftpin 10mm
057284	0.065	Drill Bit HSS 9mm long
057283	0.042	Drill Bit HSS 9mm short
051776	0.520	Extension 3/4" 200mm
057277	1.510	Open-End Wrench SW60
057282	0.500	Pipe Wrench
051764	2.650	Ratchet Wrench 3/4"
057278	0.405	Socket Set 8 Pieces
057279	0.260	Socket SW14
057280	0.430	Socket SW17
051765	0.235	Socket SW19 3/4"
051768	0.500	Socket SW22 3/4"
051766	0.215	Socket SW24 3/4"
057276	0.625	Socket SW30 3/4"
051767	0.660	Socket SW46 3/4"
051779	3.500	Tool Box 457x257x255mm
051761	13.700	Tool Set ACS
072140	0.005	Torx Bit TX30



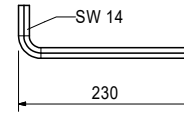
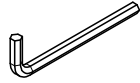
Accessories general ACS

PERI

Art no. Weight [kg]

027212 0.445 **Hexag. Recess Wrench SW14 long**

Fits PERI Positioning Discs and Allen Key Bolts M16.

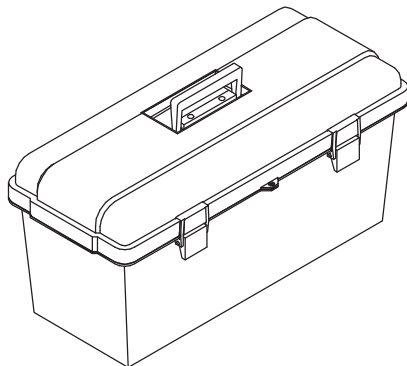


Art no. Weight [kg]

115581 10.280 **Service Box Hydraulics**

Consisting of:

- 1 pc. 115590 Tool Box 580x260x285mm
- 6 pc. 115583 Pressure Gauge Typ 570 VA-Geh.
- 6 pc. 115584 Hose MKT 6-02 DN 02
- 12 pc. 115582 Measuring Coupl. SMK 20-G 1/4-PC
- 2 pc. 115591 Double Spanner SW10x13
- 1 pc. 115592 Double Spanner SW13x17
- 1 pc. 135172 Double Spanner SW19x22
- 1 pc. 115588 Double Spanner SW19x24
- 1 pc. 051778 Double Spanner SW24x27
- 1 pc. 115589 Double Spanner SW27x32
- 1 pc. 057278 Allen Key Set 8 pcs.
- 1 pc. 115585 Allen Key SW12
- 1 pc. 057279 Allen Key SW14
- 1 pc. 057282 Pipe Wrench
- 1 pc. 115147 Angle Fitting Set PS
- 2 pc. 115396 Fitting Set PS RCS short
- 1 pc. 072180 Ratchet Wrench 1/2"
- 20 pc. 123881 Tube Screw Plug ROV12SX
- 20 pc. 123880 Threaded Plug VKAN 12S VIT
- 100 pc. 051760 Cable Binder NT-240H
- 2 pc. 126425 Distance Piece Ø120mm coat
- 1 pc. 126440 Socket SW17 1/2"
- 1 pc. 135173 Allen Key SHR-Bit SW05
- 1 pc. 135174 Allen Key SHR-Bit SW06
- 1 pc. 135175 Allen Key SHR-Bit SW08
- 1 pc. 135176 Allen Key SHR-Bit SW10
- 1 pc. 135177 SHR Screwdriver Bit 6 parts Slot/PH
- 2 pc. 711035 PERI Label 128x65mm
- 1 pc. 126434 List of contents Hydraulic Service Case



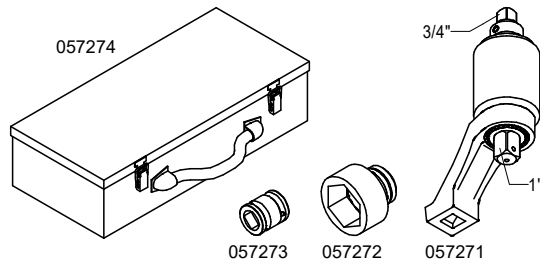
Accessories general ACS

Art no.	Weight [kg]	
133372	6.800	Cordless Screwdriver-Set ACS

Consists of

- 1 pc 133356 Screwdriver ACS 18V
- 1 pc 111435 Socket SW17 1/2"
- 1 pc 133369 Extension 125mm 1/2"
- 1 pc 133370 Adaptor 1/4" to C6.3 hex.
- 1 pc 133371 Adapter 1/4" on 1/2"

Art no.	Weight [kg]	
057089	11.050	Power Wrench Set 4000Nm



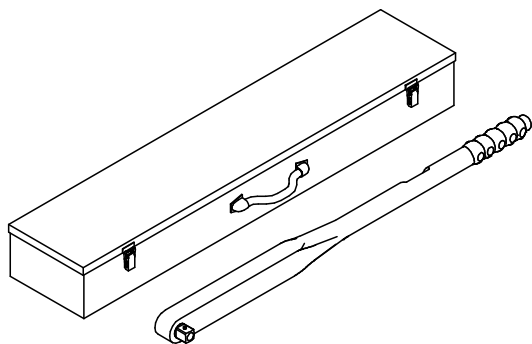
Consists of

- 1 pc 057274 Tool Box LKV-40RS
- 1 pc 057271 Power Wrench LKV-40RS 4000 Nm
- 1 pc 057272 Socket SW60-1"
- 1 pc 057273 Adaptor AVK 1/2" to IVK 3/4"

Art no.	Weight [kg]	
057090	6.700	Torque Wrench 140-760Nm

Notes

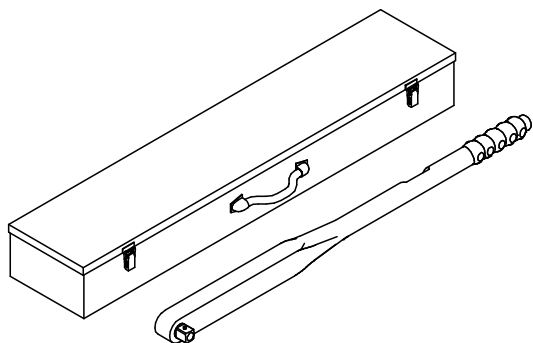
- Outer square 3/4"
- length: 812mm
- incl. sheet metal case



Accessories general ACS



Art no.	Weight [kg]	
138813	1.000	Torque Wrench 40-200Nm

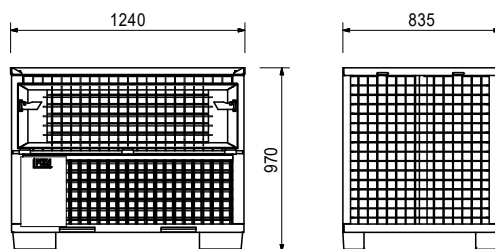
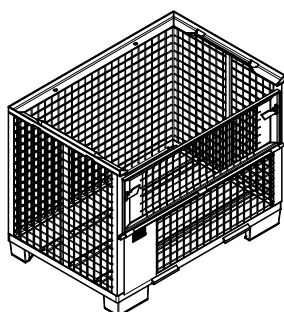


Art no.	Weight [kg]	
065068	88.200	Grate Pallet 80x120 ga

For stacking and transportation of formwork and scaffold components.

Notes

Follow Instructions for Use!
 Capacity approx. 0.75m³.
 Load-carrying capacity 1.5t.

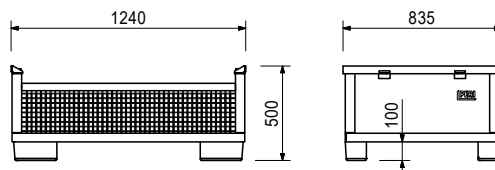
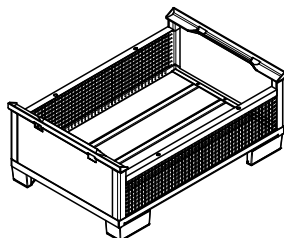


Art no.	Weight [kg]	
025660	66.500	Hardware Box 80x120 ga

For stacking and transportation of formwork and scaffold components.

Notes

Follow Instructions for Use!
 Capacity approx. 0.28m³.
 Permissible load-bearing capacity 1.5t.



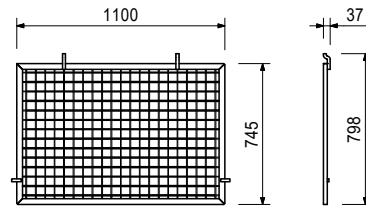
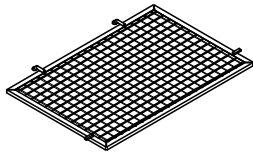
Accessories general ACS



Art no. Weight [kg]

065067 9.410 **Lid for Grate Pallet 80x120**

For closing Crate Pallets 80x120 or Hardware Boxes 80x120.



Art no. Weight [kg]

L [mm]

Pallets RP ga

103434 38.500 **Pallet RP 80x120/2 ga**

1200

103429 45.300 **Pallet RP 80x150/2 ga**

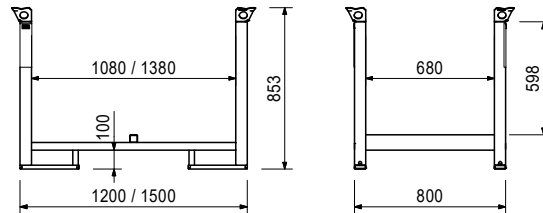
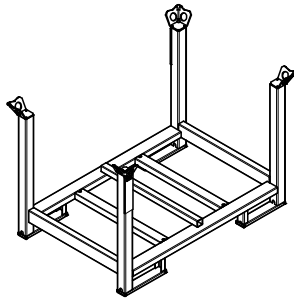
1500

For stacking and transportation of formwork and scaffolding components.

Notes

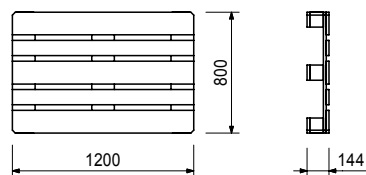
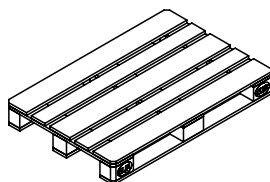
Follow Instructions for Use!

Permissible load-bearing capacity 1.5t.



Art no. Weight [kg]

065015 28.000 **Euro Flat Pallet 80x120**



Art no. Weight [kg]

061510 105.000 **Pallet Lifting Trolley 1800mm**

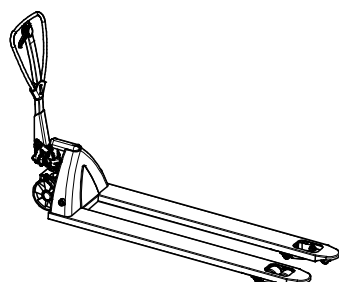
For moving pallets and crate pallets.

Notes

Follow Instructions for Use!

Forklift arm length 1800mm, forklift arm width 550mm, stroke range 115mm.

Permissible load-bearing capacity 2t.



**The optimal System
for every Project and
every Requirement**



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Column Formwork



Slab Formwork



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