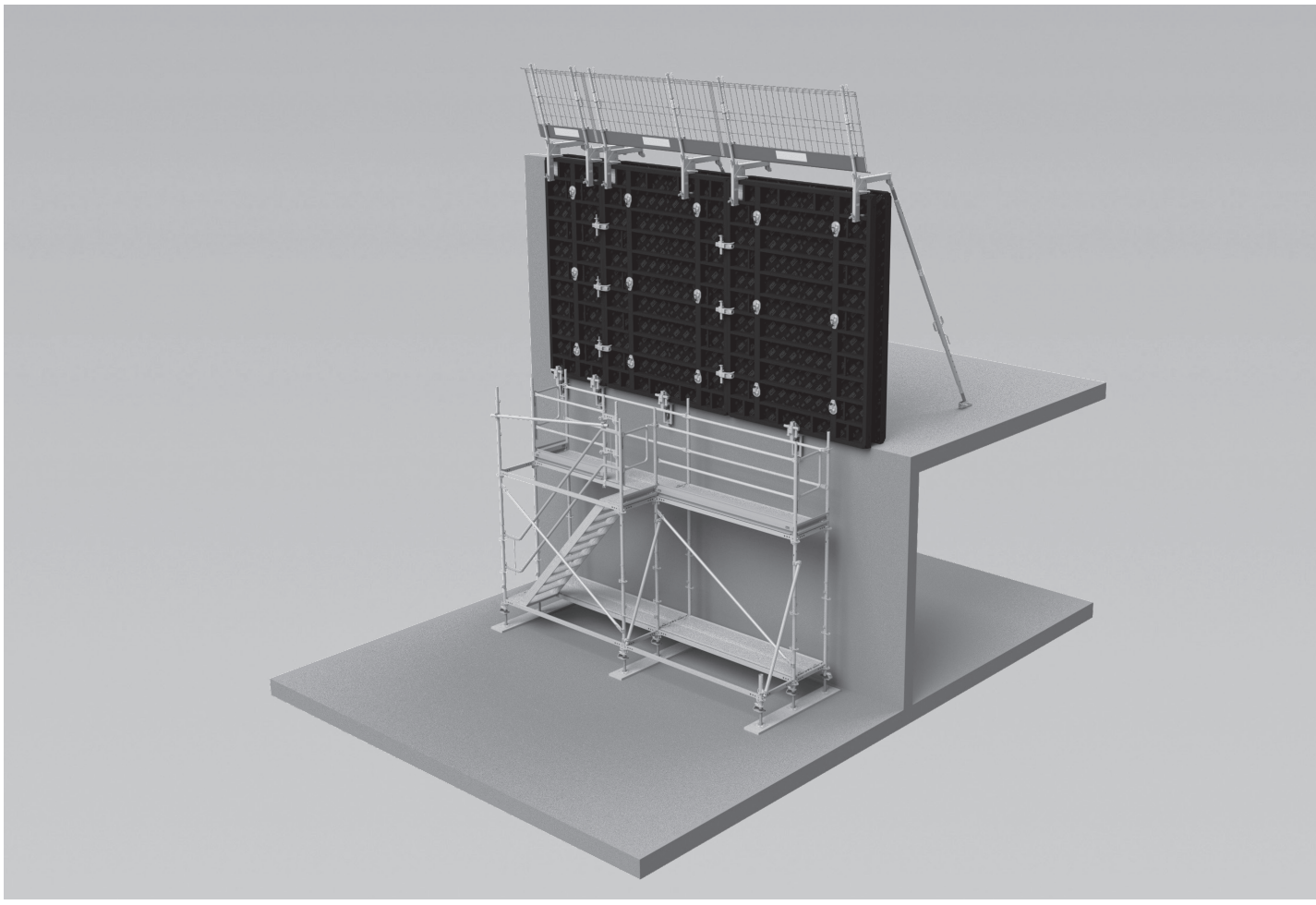
MAXIMO System Supplement

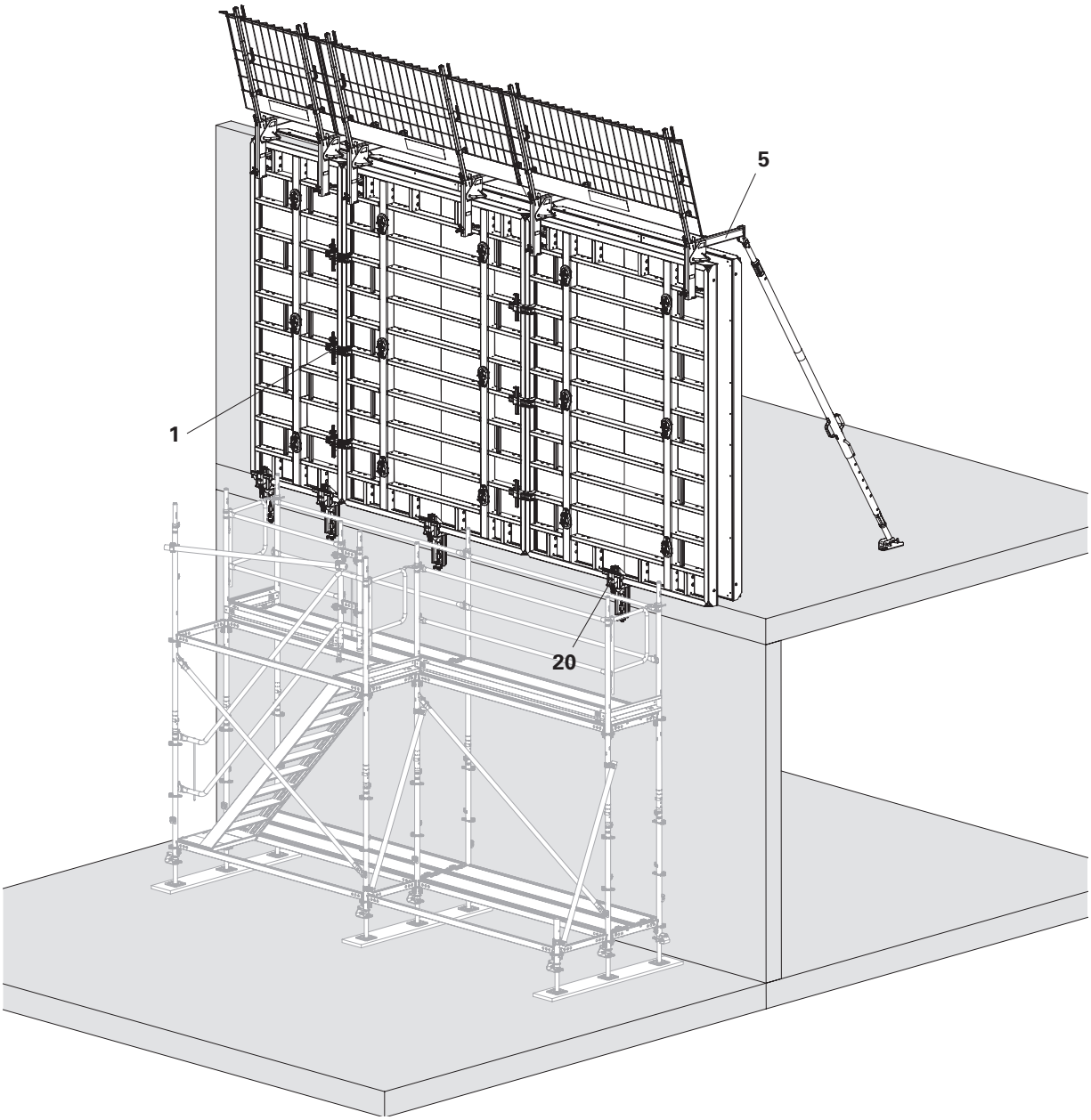
134321 Panel Connection Clamp MX VS
134623 Brace Connector Forml Side
135327 Wall Formwork Bracket MX WK

Supplement to the Instructions for Assembly and Use – Standard configuration – Version 2.0



Contents

Main components



1 Panel Connection Clamp MX VS
5 Brace Connector Forml Side
20 Wall Formwork Bracket MX WK

Overview

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 that could result in death or serious, irreversible injury if the safety instructions are not followed.

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

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

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

Structure of the safety instructions

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

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

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

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

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

Target groups

Contractors
These Instructions for Assembly and Use are designed for contractors who either
- assemble, modify and dismantle PERI systems, or
- use them, e.g. for concreting, or
- allow them to be used for other operations, e.g. carpentry or electrical work.

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

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

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

Qualified personnel
PERI systems may only be assembled, modified or dismantled by personnel who are suitably qualified to do so. Qualified personnel must have completed a course of training** in the work to be performed, covering the following points at least:
- Explanation of the plan for the assembly, modification or dismantling of the system in an understandable form and language.
- Description of the measures for safely assembling, modifying or dismantling the system.
- Naming of the preventive measures to be taken to avoid the risk of persons and objects falling.
- Designation of the safety precautions in the event of changing weather conditions that could adversely affect the safety of the system, as well as the personnel concerned.
- Details regarding permissible loads.
- Description of all other risks and dangers associated with assembly, modification or dismantling operations.

- **Ensure that the respective current version of relevant national guidelines and regulations are complied with!**
- **If no country-specific regulations are available, PERI recommends that you proceed according to German guidelines and regulations.**

* Valid in Germany e.g.: 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.

Introduction

Document instructions

This “Supplement to the Instructions for Assembly and Use of MAXIMO System Supplement” must only be used in combination with the assembly and usage instructions for the MAXIMO system used.

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.

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

Cleaning and maintenance instructions

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

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

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

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

is available and used as intended.

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

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

Spray the formwork on both sides with concrete release agent before each use; this makes the formwork easier and faster to clean. Spray the concrete release agent very thinly and evenly!

Do not spray Working Platforms and access routes with concrete release agent. Slip hazard.

Spray the rear side of the formwork 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 deshuttering; 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-head 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 supported 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.

Never clean powder-coated components, e.g. elements and accessories, with steel brushes or hard metal scrapers; this preserves the powder coating. Use spacers for reinforcements with large or flat supports; this largely avoids indentations in the formlining under load.

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

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.

Additional technical documentation

- Approval:
  - Z-21.6-1768 Peri Anchor Sleeve M24 and PERI Anchor Sleeve DW 15
- Instructions for Assembly and Use:
  - MAXIMO MX-2 15 and MX15 Panel Formwork
  - MAXIMO MX 18 Panel Formwork 270 / 330
  - MAXIMO MX 18 Panel Formwork 300 | 360
  - PROKIT EP 110 Safety System
- Instructions for Use:
  - Lifting Hook MAXIMO 1.5 t
  - Lifting Gear Combi MX
  - Lifting Gear MX
- Data sheet:
  - Anchor Bolt SW 21 Ø14 x 150 TG
  - Anchor Bolt SW 24 Ø14/20 x 130 TG
  - Anchor Bolt SW 24 Ø14/20 x 130 HC

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 in question, this makes it possible to:

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

For more information, see "RFID LA-TAG Assembly Set User Information".

Disposal

Carry out disposal in accordance with the relevant national regulations.

Observe the safety data sheets of the auxiliary and operating materials.

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, the current safety regulations and guidelines valid in the respective countries must be observed.

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

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

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

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

Components provided by the contractor must comply with the characteristics stipulated in these Instructions for Assembly and Use and all applicable laws and standards. Unless otherwise indicated, the following applies in particular:
- Timber components:
  Strength class C24 for solid wood according to DIN EN 338:2016-07.
- Scaffolding tubes:
  Galvanized steel tubes with minimum dimension Ø 48.3 x 3.2 mm according to DIN EN 12811-1:2004-03 4.2.1.2.
- Scaffolding tube couplings:
  according to DIN EN 74-1:2022-09 and DIN EN 74-2:2022-09.

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

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

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

Nails and wood screws must not protrude. Only allow other connecting components to protrude to the extent that is necessary.
If necessary, mark protruding components or fit them with protective material.
Secure all bolts with cotter pins and all screws with nuts

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

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

Suitable measures could be:
- removing nets/tarpaulin,
- clearing snow and ice,
- reducing live loads,
- securing loose materials.

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

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

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

Before use, establish rescue procedures for the event of a fall, taking into account all the emergencies that may occur during work.
Rescue must take place within 20 minutes to prevent suspension trauma.
Ensure that first aid is provided!
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 via safe access routes.

The contractor must ensure that the following points are observed:
- If necessary, secure individual parts and assemblies to prevent them from falling, e.g. using ropes.
- Cordon off and signpost danger zones.
- Ensure stability during all construction stages.
- Ensure and demonstrate that all loads that occur are safely transferred.

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

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

When systems are used in publicly accessible areas,
- measures to prevent unauthorised use, e.g. enclosure of access areas, must be taken.
- measures are taken against injuries caused by bumping against protruding components, e.g. assembly of protective components.

Always keep the contact surfaces of the system free of dirt, objects, snow and ice.
Close off the system in extreme weather conditions.

System-specific

Strike components only when the concrete has sufficiently hardened and the person in charge has given the go-ahead for deshuttering 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 contractor (user).

Enclosure of the platforms or mounting of additional surface areas is not permissible because wind load calculations will be affected.

The platforms are to be inspected for damage at regular intervals by authorised and competent personnel.

Dirt that affects functionality is to be removed immediately.

When stepping onto platforms, watch out for hazards and use PPE if necessary.

When working at open edges of the building, such as when moving the platforms, site personnel must always be secured against falling, e.g. with PPE. Cordon off danger zones.

Site personnel, construction materials or tools must not be transported with the crane during moving operations. Exceptions to this can be determined through the operational working and assembly instructions on the basis of a corresponding risk assessment carried out by the contractor.

When operating lifting equipment near the platforms there is the risk of accidental detachment of the load.
This risk is to be taken into consideration when creating the site-specific work and assembly instructions.

BGI 663
"Handling instructions for the use of work and safety scaffolding".
Extract taken from Section 7:

- For their own safety, it is important that site personnel use the designated access means for ascents and descents, and do not climb or jump off the scaffold.
- Do not jump on the scaffold decks or throw any objects off the side.

Storage and transportation

General information

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

During the relocation procedure

- Ensure that components are picked up and set down in such a way that unintentional falling over, falling apart, sliding, falling down or rolling is avoided.
- Always use ropes to guide components or assemblies that are susceptible to wind when moving them with a crane.
- No one is allowed to remain under the suspended load.
- The access areas on the construction site must be free of obstacles and tripping hazards, and must also be slip-resistant.
- The substrate must have sufficient load-bearing capacity for transport.
- Use original PERI storage and transport systems, e.g. crate pallets, pallets or stacking devices.

Component overview

Pos. no.	Component name	Art. no.
1	Panel Connection Clamp MX VS	134321
2	Operate Bar MX VS	134337
3	Operate Bar MX VS Extension	134339
4	Squared timber 20/16 cm	–
5	Brace Connector Forml Side	134623
6	Lifting Hook MX 1.5 t	115168
7	Push-Pull Prop RS	–
8	Base Plate-3 f. RS 210-1400	126666
9	Anchor Bolt SW24 Ø14/20x130 TG	124777
10	Guardrail Post MXK	126360
11	Side Mesh Barrier PMB S 260	117326
12	Primary formwork	–
13	Closing formwork	–
14	Formwork unit	–
15	Swivel Nut MX 15	112386
16	Alignment Coupler BFD	023500
17	Brace Connector-2 MX/TR	023660
18	Formwork Girder GT 24	–
19	Tie MX15	–
20	Wall Formwork Bracket MX WK	135327
21	Slip on Unit Slab MX WK	135282
22	Anchor Bolt SW21 Ø14x150 TG	132889
23	Anchor Sleeve M24	026230
24	Screw ISO4014-M24x100-10.9	135465
25	Timber Plank 15/3 cm	–
26	Formwork panel	–
27	Cone PP Ø31/26 mm C=25 mm	–
28	Anchor Posit. Stud M24 ga	–

Tool list

Tool name	Article no.
Ratchet Wrench 1/2"	072180
Socket SW 27-1/2"	029650
Socket SW 22-1/2"	–
Socket SW 36-1/2"	–
Socket SW14 long	027212
Hammer 500 g	–

Tightening torques

Unless otherwise indicated, PERI recommends the following guide values for screw connections as "hand-tightened" tightening torques $M_{A,hand\text{-}tightened}$.
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
Lubrication	**Lightly oiled**	**MoS2**	**Undefined**
M8 screw	8 Nm	6.6 Nm	8 Nm
M10 screw	16 Nm	13.0 Nm	16 Nm
M12 screw	30 Nm	23.0 Nm	30 Nm
M16 screw	65 Nm	54.0 Nm	65 Nm
M20 screw	100 Nm		100 Nm
M24 screw	150 Nm		150 Nm
M30 screw	260 Nm		260 Nm
M36 screw	350 Nm		350 Nm

Tightening torques have been determined for the following components:

Scaffolding tube coupling	50 Nm

A1 Brace Connector Forml Side

Intended use

The Brace Connector Forml Side may only be attached to MAXIMO Panel Formwork.

The Brace Connector Forml Side is mounted on the back of the formwork. A push-pull prop is attached on the formlining side and this secures the formwork element against tipping over. The Brace Connector Forml Side can be attached to both horizontal and vertical panel struts.
An opposing guardrail can be mounted on the Brace Connector Forml Side.

Components

5 Brace Connector Forml Side
5.1 Base part
5.2 Mounting part
5.3 Pin Ø16x42 mm ga
5.4 Cotter Pin 4/1 ga
5.5 Three-wing Nut DW15
5.6 Double hook
5.7 Linch pin
5.8 Bolt Ø18 mm
5.9 Support for guardrail post
5.10 Vertical lift lock

Fig. A1.02 shows the Brace Connector Forml Side in its assembled state.

Application limits
- Maximum extension height 5.4 m
- Maximum working wind 0.2 kN/m²

Removing the mounting part
1. Remove the linch pin (**5.7**) and bolt Ø18 mm (**5.8**).
2. Separate mounting part (**5.2**) from base part (**5.1**).

(Fig. A1.03)

Connect mounting part and base part
1. Attach mounting part (**5.2**) to base part (**5.1**).
2. Connect mounting part with bolt Ø18 mm (**5.8**) and secure with linch pin (**5.7**).

(Fig. A1.03)

Fitting the Brace Connector Forml Side
1. Remove mounting part.
2. Position base part (**5.1**) along the top edge of the formwork element (**14**) and engage.
   → The double hook (**5.6**) fixes into the holes of the cross strut of the formwork element.
3. Fit and tighten the Three-wing Nut DW15 (**5.5**).
   – The base part (**5.1**) must lie firmly on the cross strut of the formwork element (**14**).
   – The vertical lift lock (**5.10**) hooks below the cross strut.

(Fig. A1.0a + Fig. A1.0b)

Safety instructions

- Permissible wind load: 0.2 kN/m²
- If storms or other weather events are predicted, which will definitely exceed this wind load, one of the following measures must be taken:
  – Position the closing formwork and support it with Push-Pull Props RS in accordance with the Instructions for Assembly and Use of the MAXIMO system used.
  – Dismantle the formwork.
- For building heights exceeding this wind load, use the Brace Connector Forml Side only if additional measures have been taken to prevent the wind load from acting on the formwork

The assembly and permissible loads can be found in the Instructions for Assembly and Use for the MAXIMO system used.

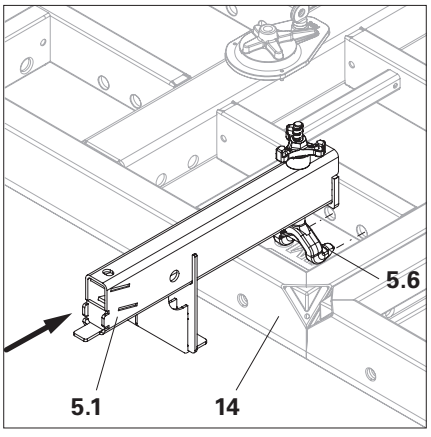


Fig. A1.0a

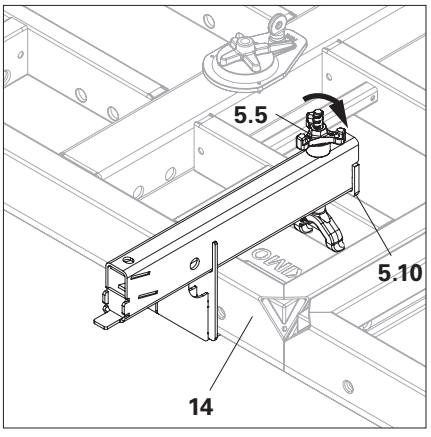


Fig. A1.0b

A1 Brace Connector Forml Side

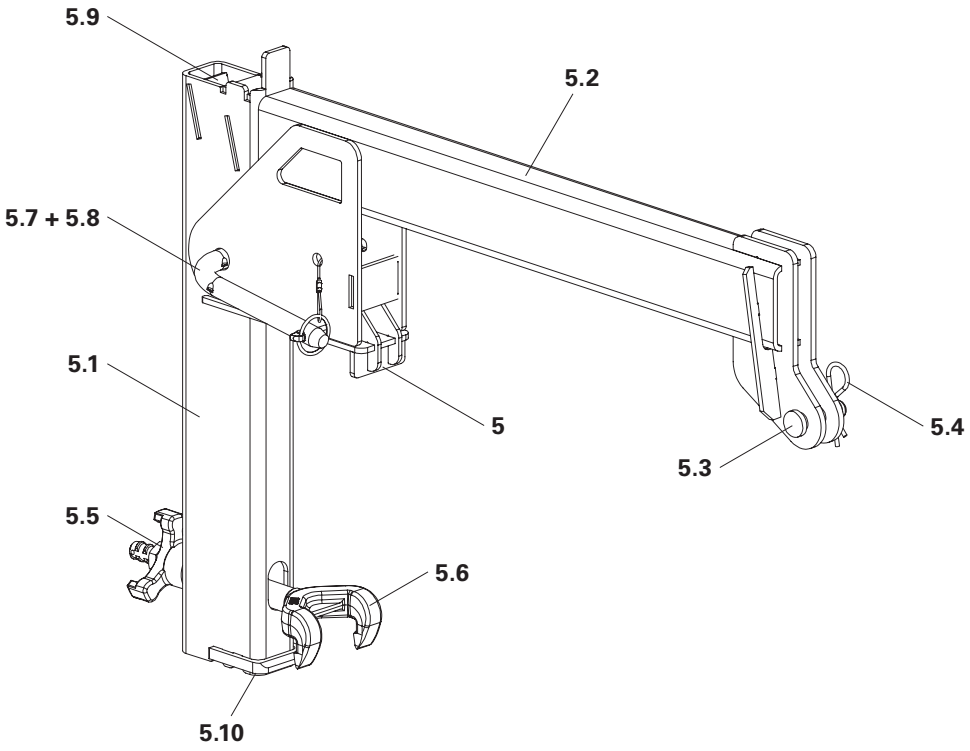


Fig. A1.02

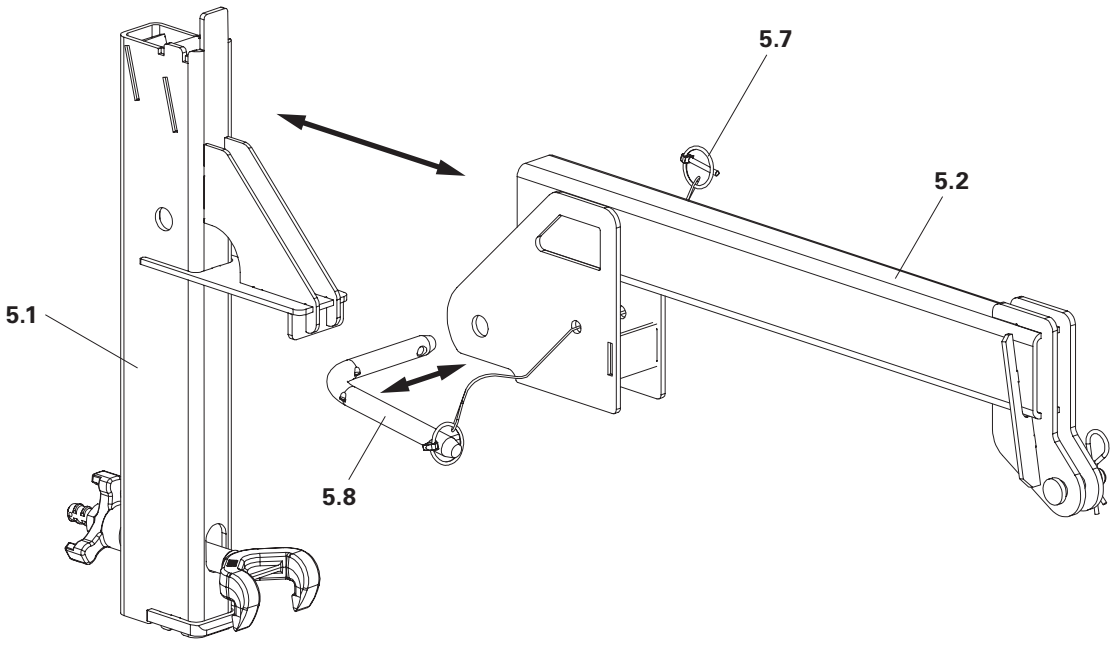


Fig. A1.03

Operating states and loads

Safety instructions

- Permissible wind load: 0.2 kN/m².
- If storms or other weather events are predicted, which will definitely exceed this wind load, one of the following measures must be taken:
  – Position the closing formwork and support it with Push-Pull Props RS in accordance with the Instructions for Assembly and Use of the MAXIMO system used.
  – Dismantle the formwork.

The assembly and permissible loads can be found in the Instructions for Assembly and Use for the MAXIMO system used.

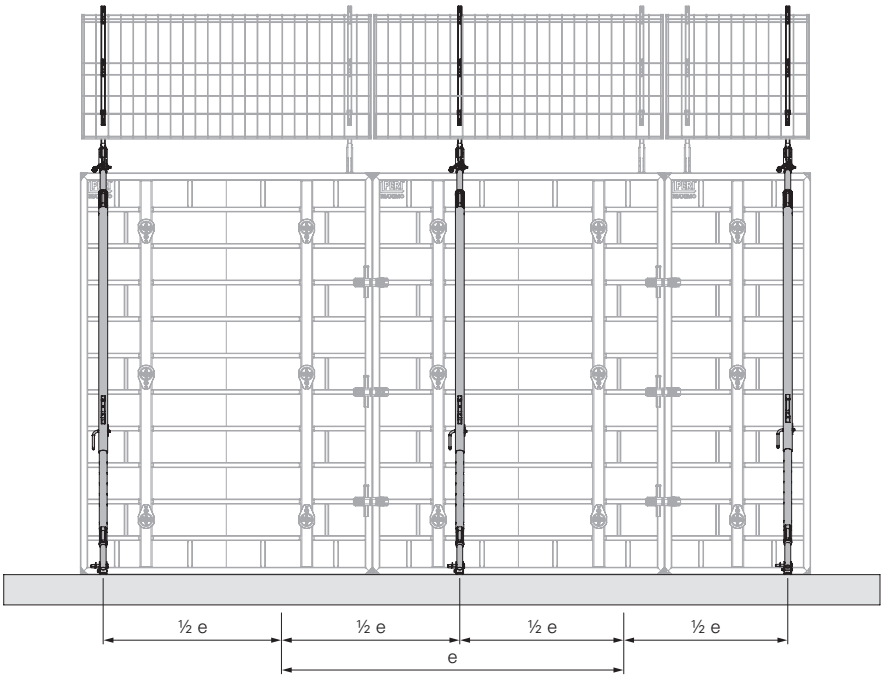


Fig. A1.04

Width of influence e											
Formwork height [m]	2.70	3.00	3.30	3.60	3.60	3.90	4.20	4.50	4.80	5.10	5.40
Push-pull prop new	RS 450				RS 650						
Width of influence e [m]	6.30	6.30	6.30	6.30	6.30	6.30	5.33	5.33	5.33	2.93	2.93
Push-pull prop force F_Q [kN]	4.77	5.13	5.50	5.87	5.87	6.24	5.59	5.91	6.22	3.60	3.77

Tab. A1.01

A2 Wall Formwork Bracket MX WK

Intended use

The Wall Formwork Bracket MX WK provides the bearing for forming elements in the MAXIMO system formwork when forming walls at the slab edge.
The forming elements are secured using an alignment coupler BFD so they cannot be lifted out and are pressed against the existing slab.

The wall formwork bracket is secured on the building by means of
- Anchor Bolt SW21 Ø14x150 TG.

or
- Anchor Sleeve M24 in conjunction with Screw ISO4014-M24x100-10.9.

Observe the information on the fixing materials in the data sheets and approvals.

The position of the formwork elements can be corrected by fine adjustment using the adjusting screw by up to ±30 mm.

The wall formwork bracket can be used as support for the slab edge formwork by engaging the Slip on Unit Slab MX WK.

A guardrail post MXK is mounted on the slip-on unit to provide anti-fall protection.

The resulting changes to the influence width and anchor forces must be taken into account. See Section "Wall formwork bracket as slab edge formwork" on page 26.

Application limits
- Maximum extension height 5.4 m.
- Maximum working wind 0.2 kN/m², corresponds to approx. 60 km/h.
- Maximum influence width 2.4 m as wall formwork.
- Maximum influence width 2.4 m as slab edge formwork without guardrail post.
- Maximum influence width 1.5 m as slab formwork with guardrail post.

Safety instructions

Danger

Risk of formwork elements falling if the permissible bearing strengths are exceeded!

⇒ Do not attach any concreting platforms or other attachment to the formwork elements on the Wall Formwork Bracket MX WK.

Always use the Wall Formwork Bracket MX WK in combination with the Brace Connector formlining side MX RS.

A2 Wall Formwork Bracket MX WK

Main components

Wall Formwork Bracket MX WK
Supporting the formwork elements.

Components

20 Wall Formwork Bracket MX WK
20.1 Wall mounting
20.2 Formwork girder
20.3 Adjusting screw
20.4 Mounting hole 18 mm
20.5 Mounting hole 25 mm
20.6 Insertion aid

(Fig. A2.01)

- Fixing hole 18 mm (**20.4**) is used for the Anchor Bolt SW21 Ø14x150 mm TG (**22**).
- Fixing hole 25 mm (**20.5**) is used for the Anchor Sleeve M24 (**23**) in conjunction with Screw ISO4014-M24x100-10.9-ga (**24**).

(Fig. A2.01)

Slip on Unit Slab MX WK
Using as slab edge formwork

Components

21 Slip on Unit Slab MX WK
21.1 Post support
21.2 Linch pin
21.3 Hole

(Fig. A2.02)

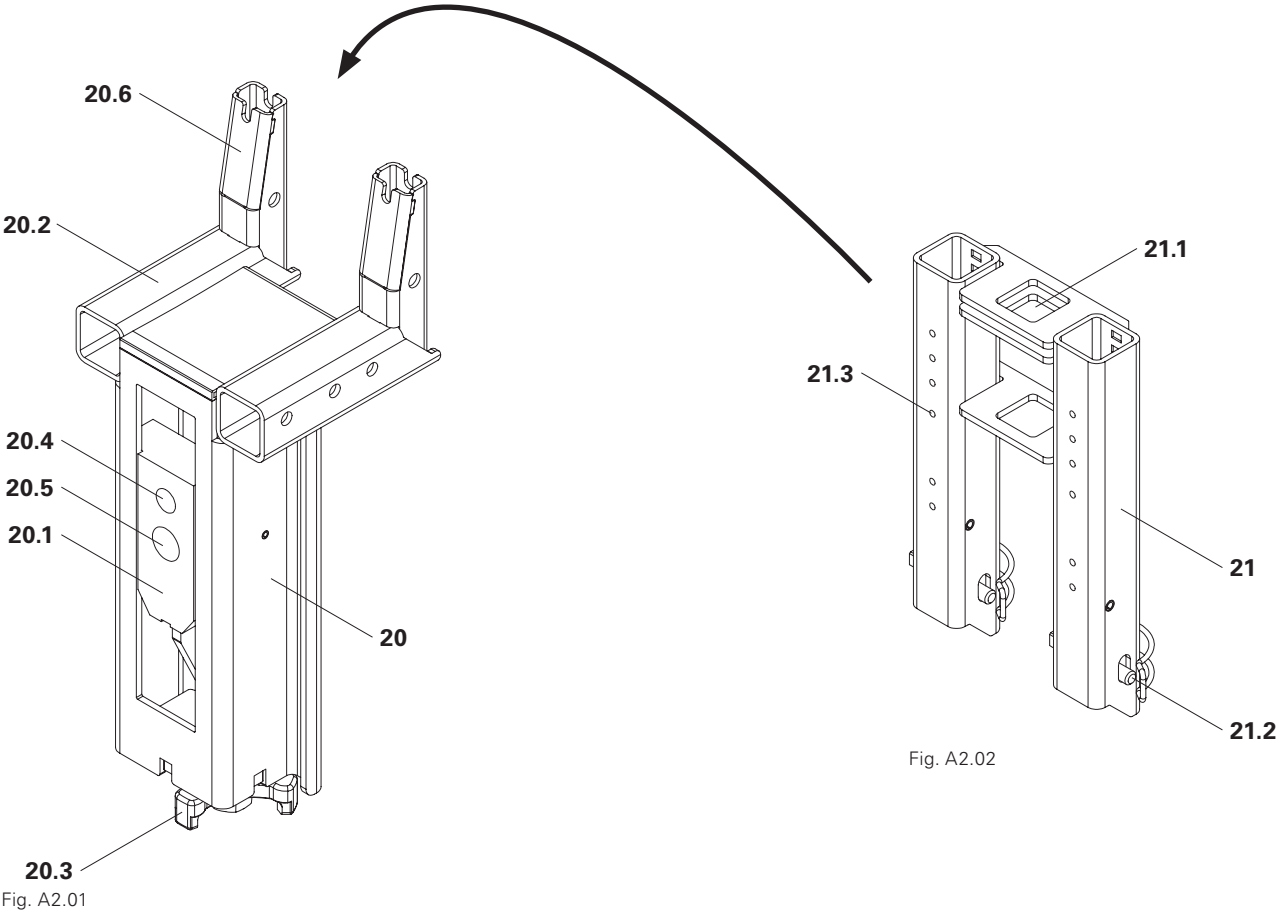


Fig. A2.01

Fig. A2.02

Connection dimensions and contact surfaces

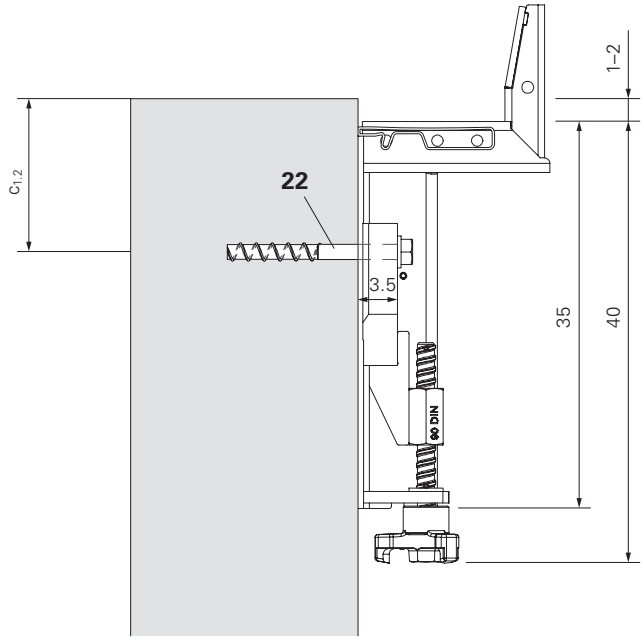


Fig. A2.03

Target values for the assembly	
Anchor dimension $c_{1.2}$ Ø 18 mm (Fig. A2.03)	13.5 cm
Anchor dimension $c_{1.2}$ Ø 25 mm (Fig. A2.04)	17.0 cm
Stop for formwork element	1 – 2 cm
Clamping length	3.5 cm
Bearing dimension	35 cm
Operating height	40 cm

Tab. A2.01

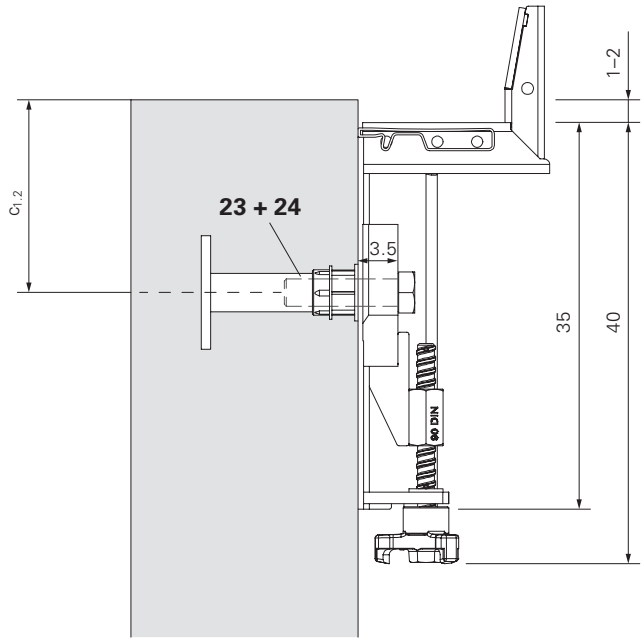


Fig. A2.04

Live loads and operating states

Wind loads
The use of components is restricted to wind loads of 0.2 kN/m². This corresponds to a wind speed of approx. 60 km/h.

Wall formwork bracket
A lifting unit may consist of one or more formwork elements.

The following relationships apply:		
Influence width	e	$e = ½\ e_1 + ½\ e_2$
Projection	e_1	$e_1 = 2e - e_2$
Wall formwork bracket spacing	e_2	
The following applies:	$e_1 < e_2$	

Tab. A2.02

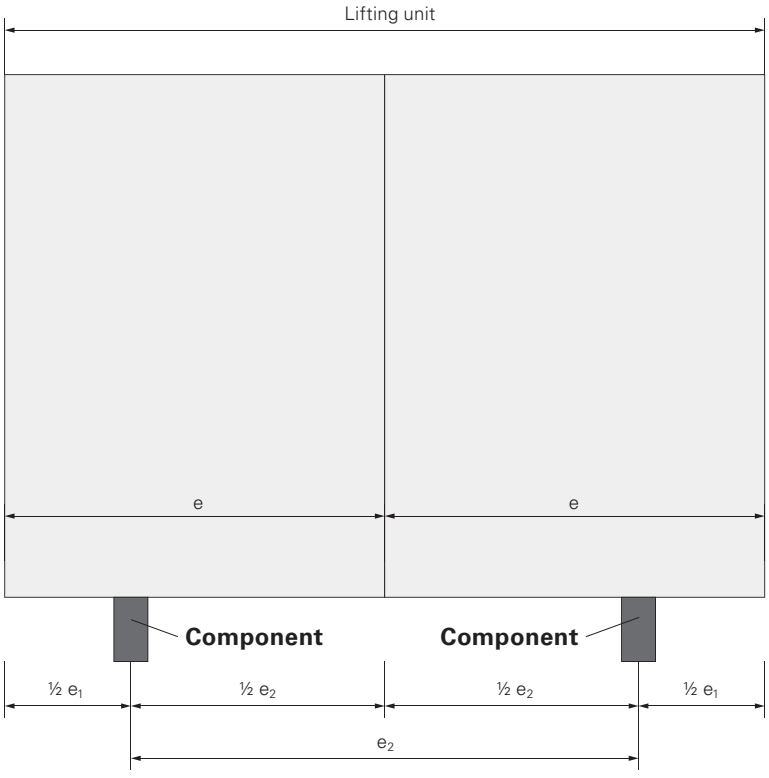


Fig. A2.05

Technical data

- The forces detailed in the tables are values for a wind load of 0.2 kN/m².
- Determine higher wind loads at the edge of the formwork using the assumptions from the Instructions for Assembly and Use of the MAXIMO system used.
- The vertical force is the weight of the formwork elements and mounting parts (see the Instructions for Assembly and Use of the MAXIMO system used). In the case of deviations to the standard configuration, calculate the weight of the elements and increase the number of wall formwork brackets if necessary.
- The forces to be anchored are characteristic values.

Safety instructions

- Do not attach any concreting platforms or other attachment to the formwork elements on the Wall Formwork Bracket MX WK.
- Always use the Wall Formwork Bracket MX WK in conjunction with the Brace Connector Forml Side, except for slab edge formwork.
- Please observe permissible anchor forces when selecting the fixing materials. (Tab. A2.03 + Fig. A2.06)
- Do not attach any girders or boards to the slab and secure the closing formwork on the inside against slipping. The filling pressure of the concrete could tear the brackets from the anchoring.
- The wall formwork bracket must cover the entire surface. The stability of the wall formwork bracket should be supported if necessary. (Fig. A2.07)

Forces to be anchored										
High formwork [m]	2.70	3.00	3.30	3.60	3.90	4.20	4.50	4.80	5.10	5.40
Width of influence [m]	2.40									
Force horiz. F_H [kN] Ø 18 mm	4.04	4.33	4.51	4.79	5.02	5.30	5.52	5.78	6.04	6.18
Force horiz. F_H [kN] Ø 25 mm	4.87	5.21	5.44	5.78	6.05	6.38	6.65	6.96	7.27	7.44
Force vert. F_V [kN]	4.20	4.72	4.90	5.42	5.77	6.25	6.57	7.01	7.45	7.49
Force F_R [kN] Ø 18 mm	5.83	6.40	6.66	7.24	7.65	8.19	8.58	9.09	9.59	9.71
Force F_R [kN] Ø 25 mm	6.43	7.03	7.32	7.92	8.36	8.93	9.35	9.88	10.41	10.56

Tab. A2.03

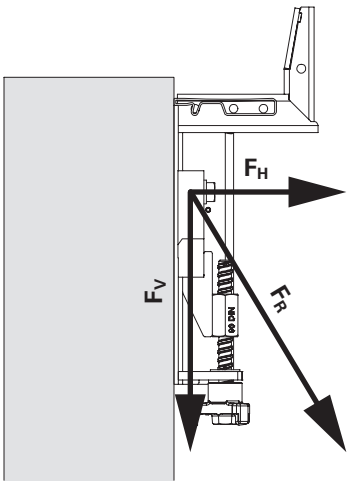


Fig. A2.06

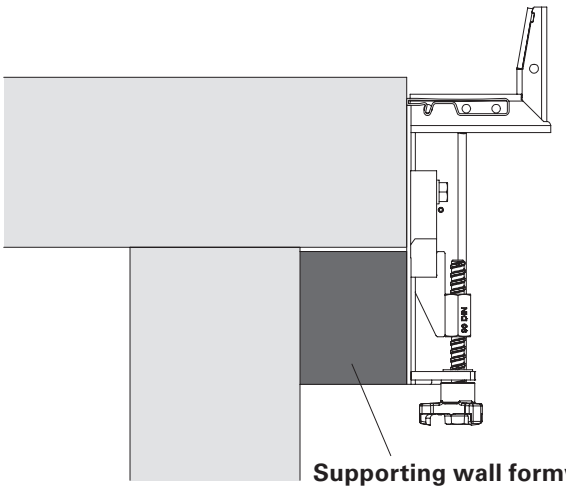


Fig. A2.07

Supporting the formwork element or lifting unit

- An individual formwork unit must always cover two wall formwork brackets. (Fig. A2.08)
- A lifting unit must always cover two wall formwork brackets. (Fig. A2.09)
- A formwork element must not cover an individual wall formwork bracket. (Fig. A2.10)
- The joint of two formwork elements must not cover one wall formwork bracket. (Fig. A2.11)
- The centre of gravity must always be between two wall formwork brackets. (Fig. A2.08 + Fig. A2.09)

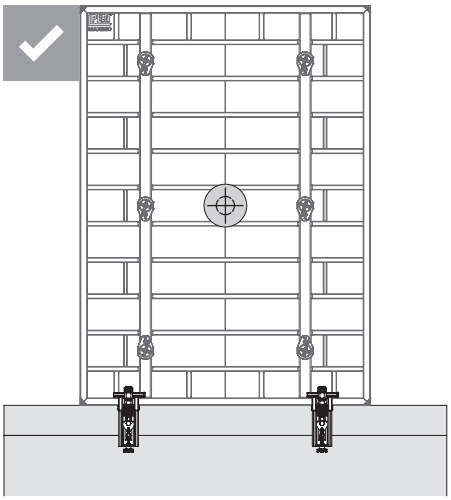


Fig. A2.08

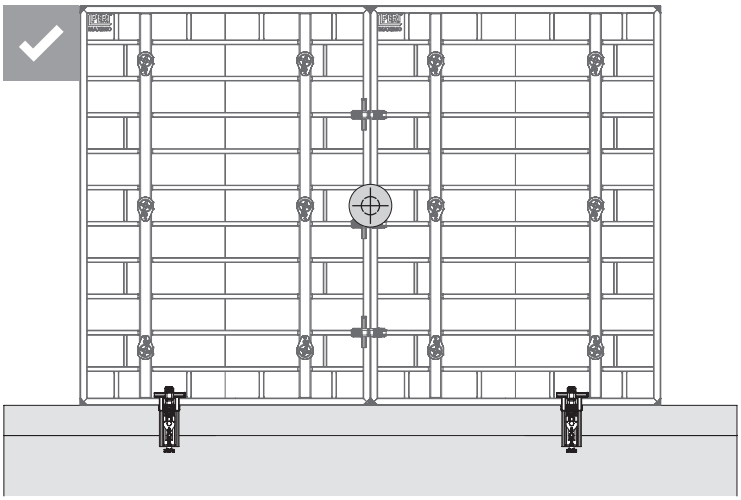


Fig. A2.09

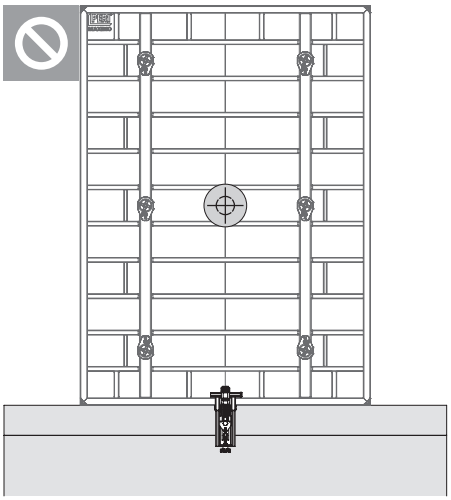


Fig. A2.10

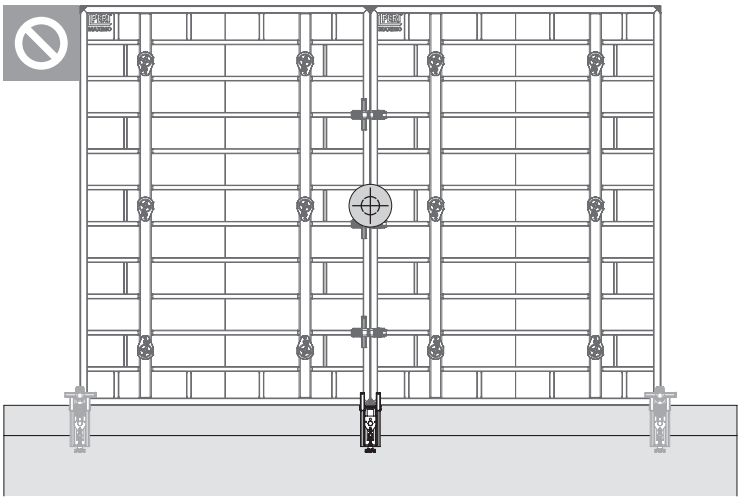


Fig. A2.11

Plug-in unit and guardrail posts

The wall formwork bracket can be used as slab edge formwork by using the Plug-in Unit Slab MX WK.

Components

10 Guardrail Post MXK
20 Wall Formwork Bracket MX WK
21 Slip on Unit Slab MX WK

Mounting the plug-in unit

1. Pull out linch pin (**21.2**).
2. Insert the plug-in unit (**21**) into the wall formwork bracket (**20**), with the post supports pointing upwards.
3. Secure plug-in unit (**21**) with linch pins (**21.2**).

(Fig. A2.12)

Is the plug-in unit secured by the linch pins?

Mounting Guardrail Post MXK

1. Insert the Guardrail Post MXK (**10**) into the support (**21.1**) until the securing hook (**10.1**) is engaged.

Is the safety hook engaged in the plug-in unit?

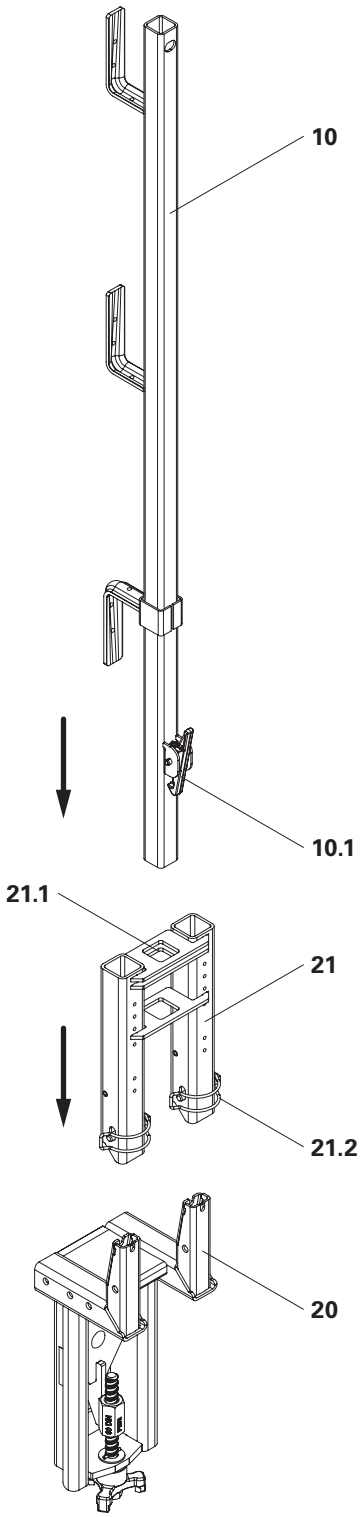


Fig. A2.12

Wall formwork bracket as slab edge formwork

Variants
When a wall formwork bracket is used as slab edge formwork, the following variants are possible:
– Without anti-fall protection. (Fig. A2.13 + Fig. A2.14)
– Anti-fall protection with boards. (Fig. A2.15)
– Anti-fall protection with PROKIT EP 110. (Fig. A2.16)

Forces to be anchored [1) 2)]				
Structure	Force F_A [kN]		Width of influence e [m]	Figure
	Ø 18 mm	Ø 25 mm		
Without posts	–	8.5	2.4	Fig. A2.13 / Fig. A2.14
	7.0	–	2.4	
Posts + boards	8.7	10.6	1.5	Fig. A2.15
Posts + PMB S	8.7	10.6	1.5	Fig. A2.16

1) The forces to be anchored are characteristic values.
2) Maximum slab thickness 30 cm.

Tab. A2.04

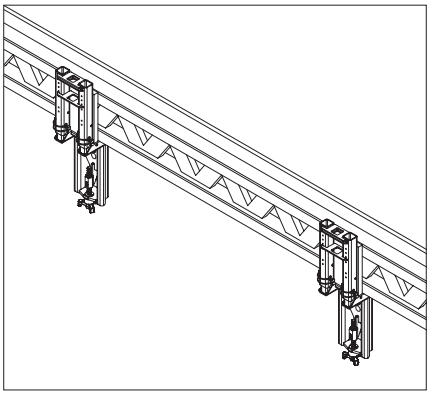


Fig. A2.13

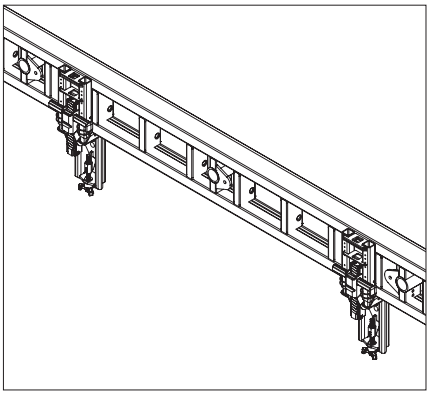


Fig. A2.14

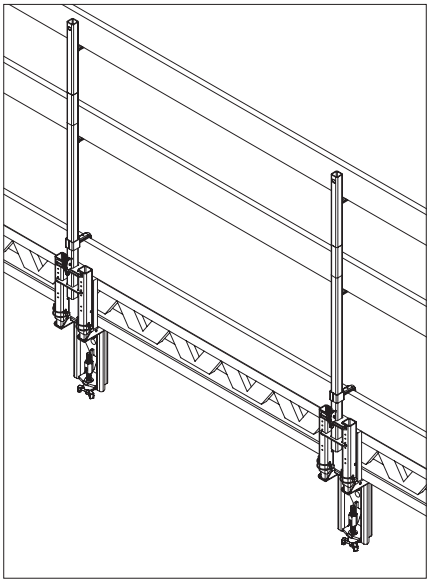


Fig. A2.15

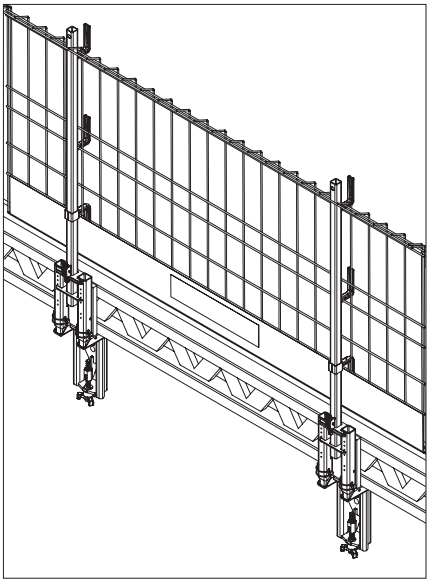


Fig. A2.16

Determination of width of influence

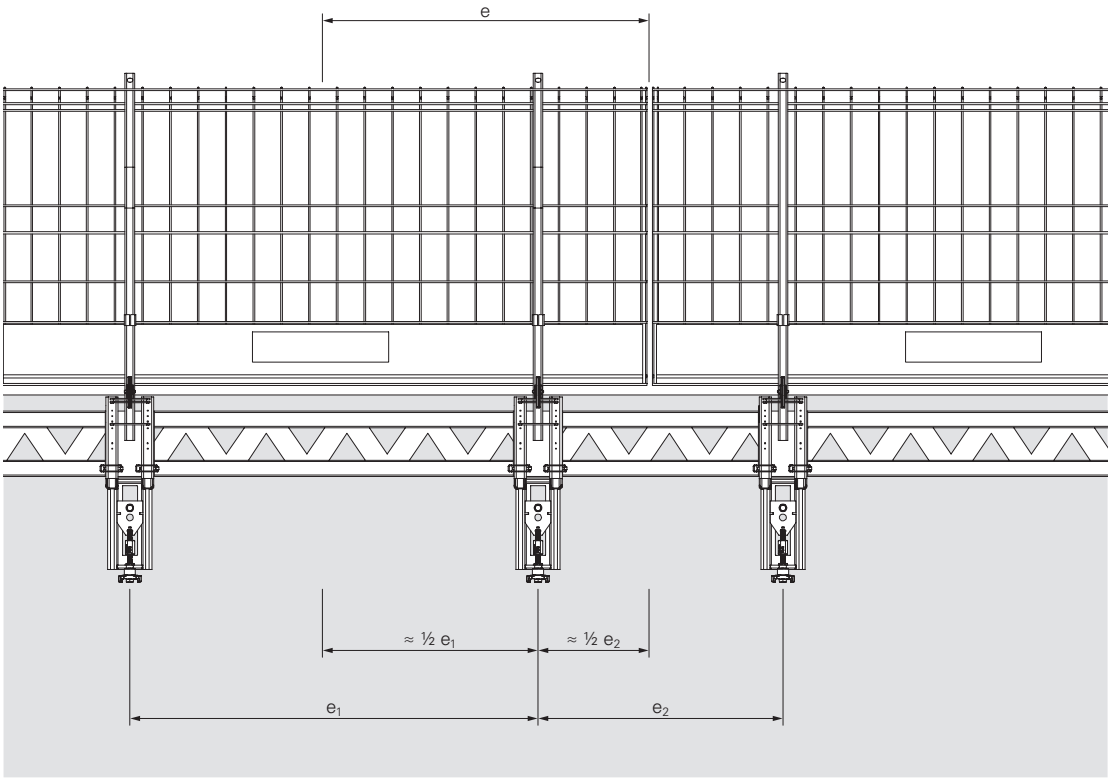


Fig. A2.17

- Observe the Instructions for Assembly and Use for the PROKIT EP 110, particularly the values for the spacing of the post connections L_A (corresponds to e_1) and the maximum projection of the Side Mesh Barrier PMB S.
- The influence width e must not be exceeded, see Tab. A2.04.

A3 Panel Connection Clamp MX VS

Intended use

The Panel Connection Clamp MX VS may only be mounted on the PERI MAXIMO formwork.

Formwork units are connected using the Panel Connection Clamp MX VS; assembly and operation takes place from a working scaffold on the formlining side.

The Panel Connection Clamp MX VS enables assembly when there are restricted space conditions behind the formwork, or if access to the rear of the formwork is only possible using a working scaffold.
The Panel Connection Clamp MX VS corresponds to the Alignment Coupler BFD and has the same function. It only differs in terms of its operation.

Main components

Panel Connection Clamp MX VS
For connection of the MAXIMO formwork elements.

Components

1	Panel Connection Clamp MX VS
1.1	Thread DW15
1.2	Mounting bracket
1.3	Hook

(Fig. A3.01)

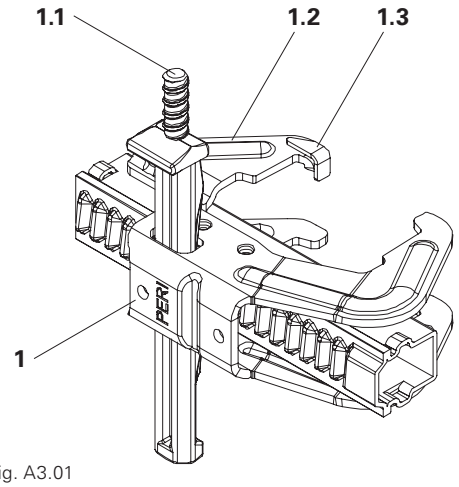


Fig. A3.01

A3 Panel Connection Clamp MX VS

Operate Bar MX VS
For connection and operation of the Panel Connection Clamp MX VS for formwork heights up to 3.3 m.

Components

2 Operate Bar MX VS
2.1 Bracket
2.2 Screw ISO4014-M8x45-8.8
2.3 Nuts ISO7040-8-ga
2.4 Stop MX VS

(Fig. A3.02)

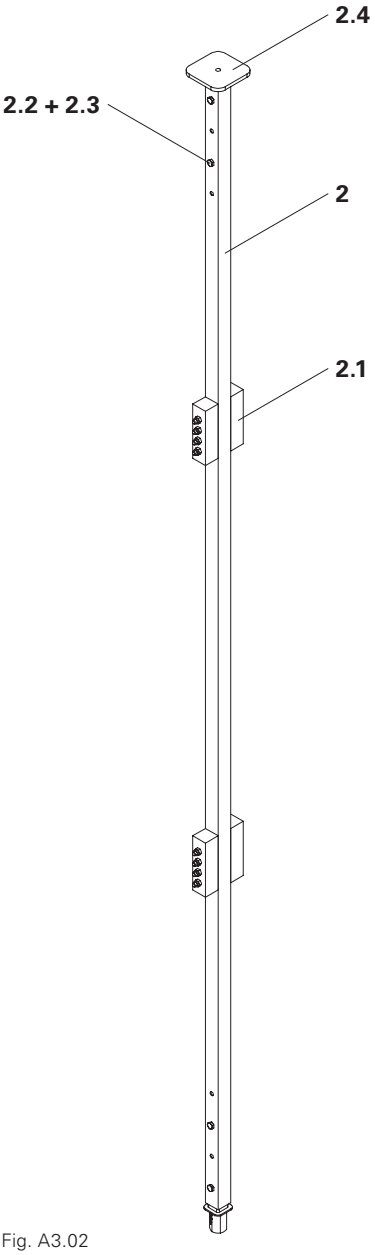


Fig. A3.02

Operate Bar MX VS Extension
To extend the Operate Bar MX VS for formwork heights up to 5.4 m.

Components

3 Operate Bar MX VS Extension
3.1 Bracket
3.2 Screw ISO4014-M8x45-8.8
3.3 Nuts ISO7040-8-ga

(Fig. A3.03)

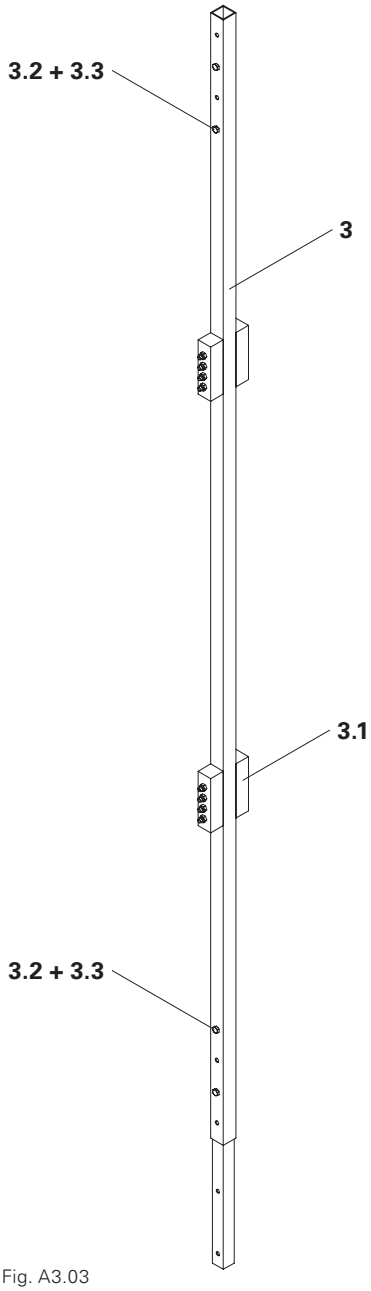


Fig. A3.03

Formwork height up to 330 cm

- The arrangement and number of required Panel Connection Clamps MX VS can be found in the Instructions for Assembly and Use for the MAXIMO system used.
- Installation sequence of the Panel Connection Clamp MX VS from bottom to top. (Fig. A3.06)

Components

1 Panel Connection Clamp MX VS
2 Operate Bar MX VS

Assembly

1. Screw Operate Bar MX VS (**2**) onto Panel Connection Clamp MX VS (**1**). (Fig. A3.04)
2. Position the Panel Connection Clamp MX VS (**1**) on the cross strut of the formwork joint.
3. Engage Panel Connection Clamp MX VS (**1**) until the hook (**1.3**) of the mounting bracket (**1.2**) hooks into the side profile.
4. Swing the Panel Connection Clamp MX VS (**1**) closed.
5. Secure the Panel Connection Clamp MX VS (**1**) with three hammer strikes on the Stop MX VS (**2.4**) and bracket (**2.1**).
6. Unscrew Operate Bar MX VS (**2**) from the Panel Connection Clamp MX VS (**1**).

(Fig. A3.05 + Fig. A3.06)

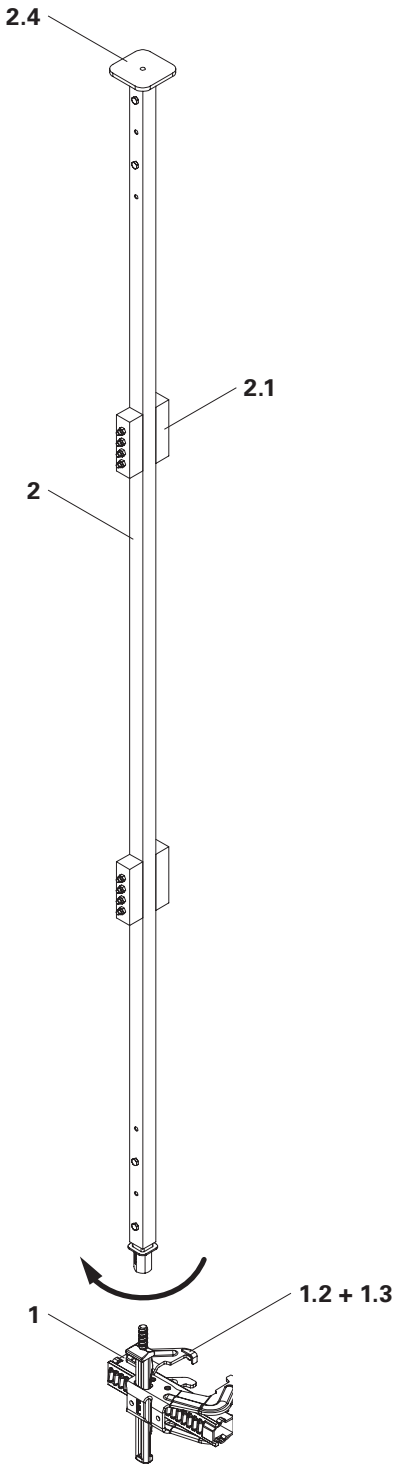


Fig. A3.04

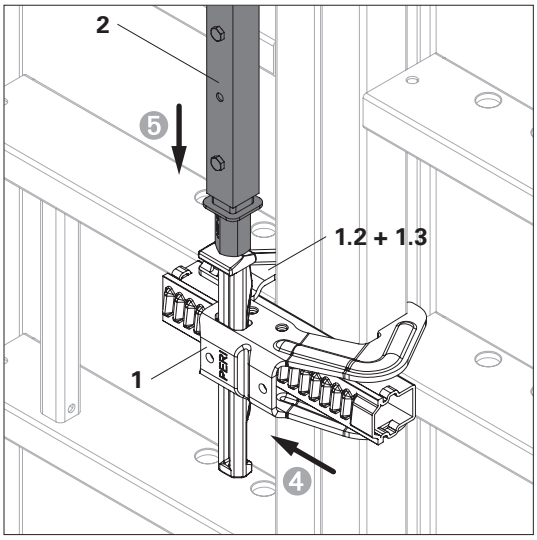


Fig. A3.05

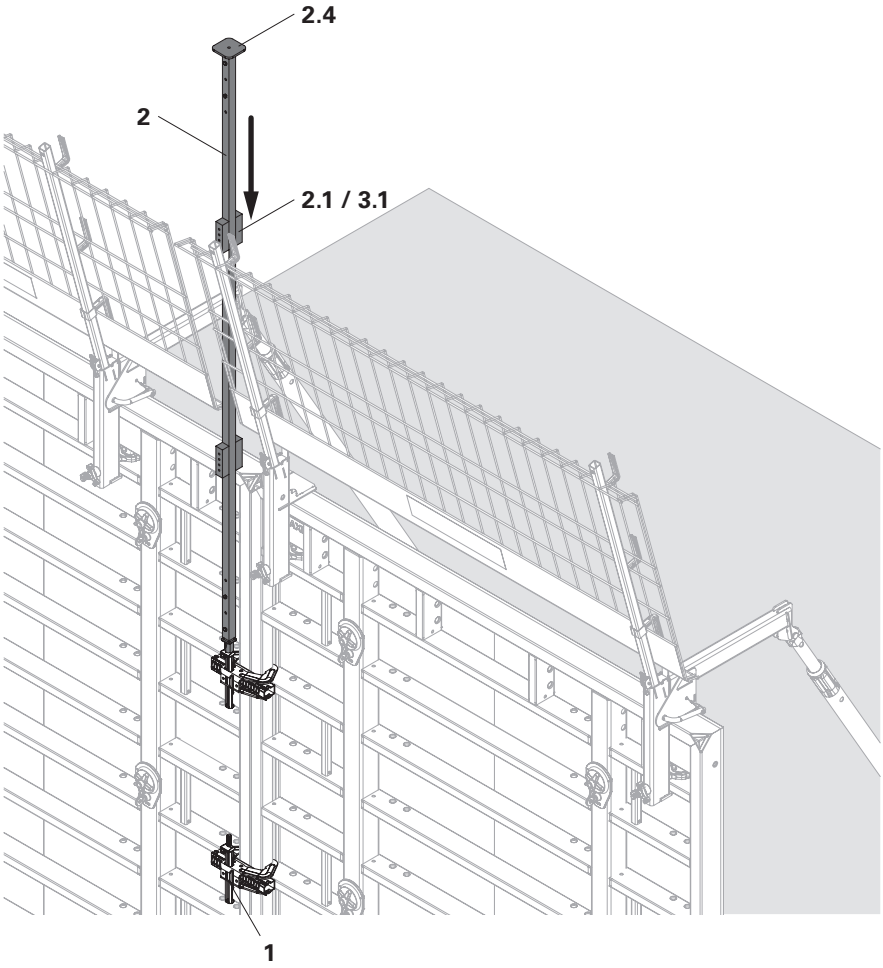


Fig. A3.06

Formwork height up to 540 cm

- The arrangement and number of required Panel Connection Clamps MX VS can be found in the Instructions for Assembly and Use for the MAXIMO system used.
- Installation sequence of the Panel Connection Clamp MX VS from bottom to top.

Components

1 Panel Connection Clamp MX VS
2 Operate Bar MX VS
3 Operate Bar MX VS Extension

Assembly

1. Remove Screw ISO4014-M8x45-8.8 (**2.2**) and pull out Stop MX VS (**2.4**) from Operate Bar MX VS (**2**).
2. Fit Stop MX VS (**2.4**) on Operate Bar MX VS Extension (**3**). Fasten with Screws ISO4014-M8x45-8.8 (**2.2**) and Nuts ISO7040-M8-8 (**2.3**).
3. Fit Operate Bar MX VS Extension (**3**) on Operate Bar MX VS (**2**). Fasten with Screws ISO4014-M8x45-8.8 (**3.2**) and Nuts ISO7040-M8-8 (**3.3**).
4. For the remainder of the installation process, see Section "Formwork height up to 330 cm" on page 30.

(Fig. A3.07)

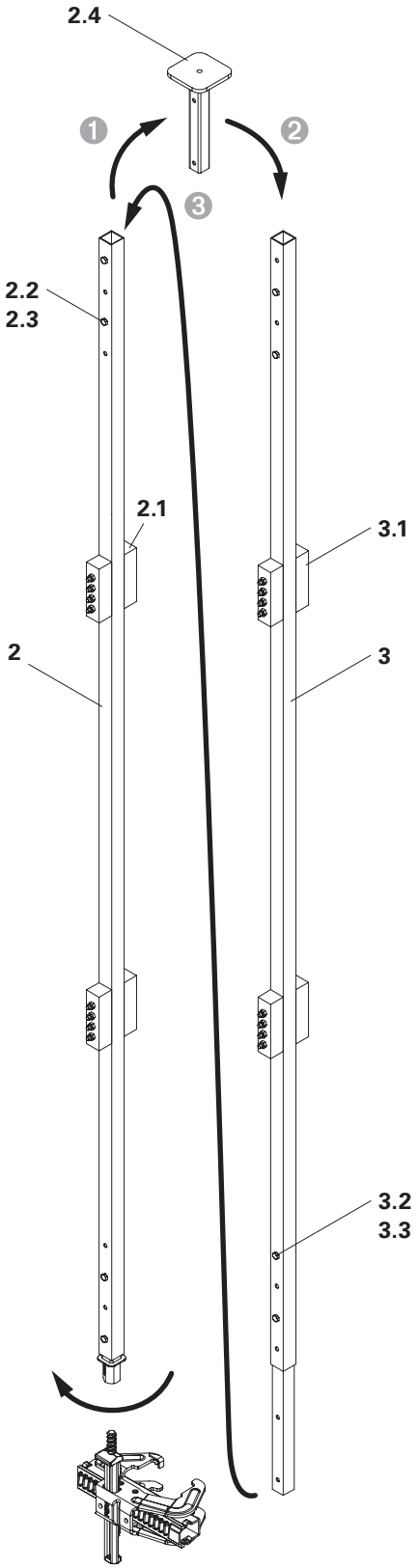


Fig. A3.07

Removing the Panel Connection Clamp MX VS

The working area between the formwork and an obstacle must be at least 33 cm.
(Fig. A3.09)

Components

1 Panel Connection Clamp MX VS
2 Operate Bar MX VS

Dismantling

1. Screw Operate Bar MX VS (**2**) onto Panel Connection Clamp MX VS (**1**).
2. Unlock the Panel Connection Clamp MX VS (**1**) with hammer blows on bracket (**2.1 / 3.1**).
3. Open and remove the Panel Connection Clamp MX VS (**1**).
4. Unscrew Panel Connection Clamp MX VS (**1**) from Operate Bar MX VS (**2**).

(Fig. A3.08)

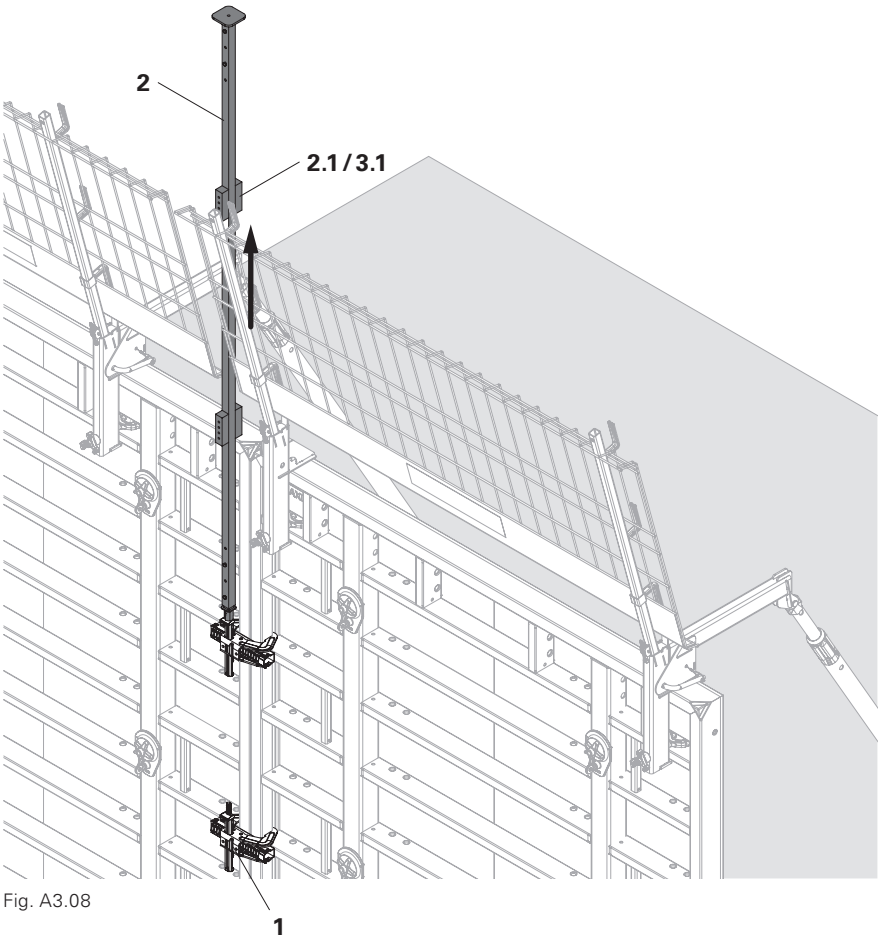


Fig. A3.08

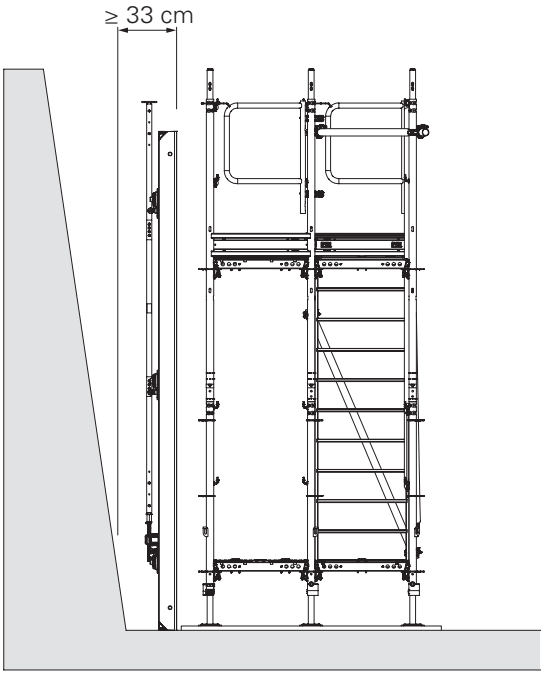


Fig. A3.09

B1 Mounting the wall formwork bracket

- This regular assembly describes the assembly of the wall formwork for another storey.
- These instructions describe the assembly for the MAXIMO MX 15 system and apply accordingly to the MAXIMO MX 18 system.

Requirements
The execution of the regular assembly is subject to the following requirements:
- Anchor sleeves M24 are set in concrete in the existing slab.
- A working scaffold is erected for mounting the Wall Formwork Brackets MX WK.
- The slab thickness is 30 cm.

(Fig. B1.01)

Before assembling the Wall Formwork Bracket MX WK, move the wall mounting to centre position using the adjusting screw.

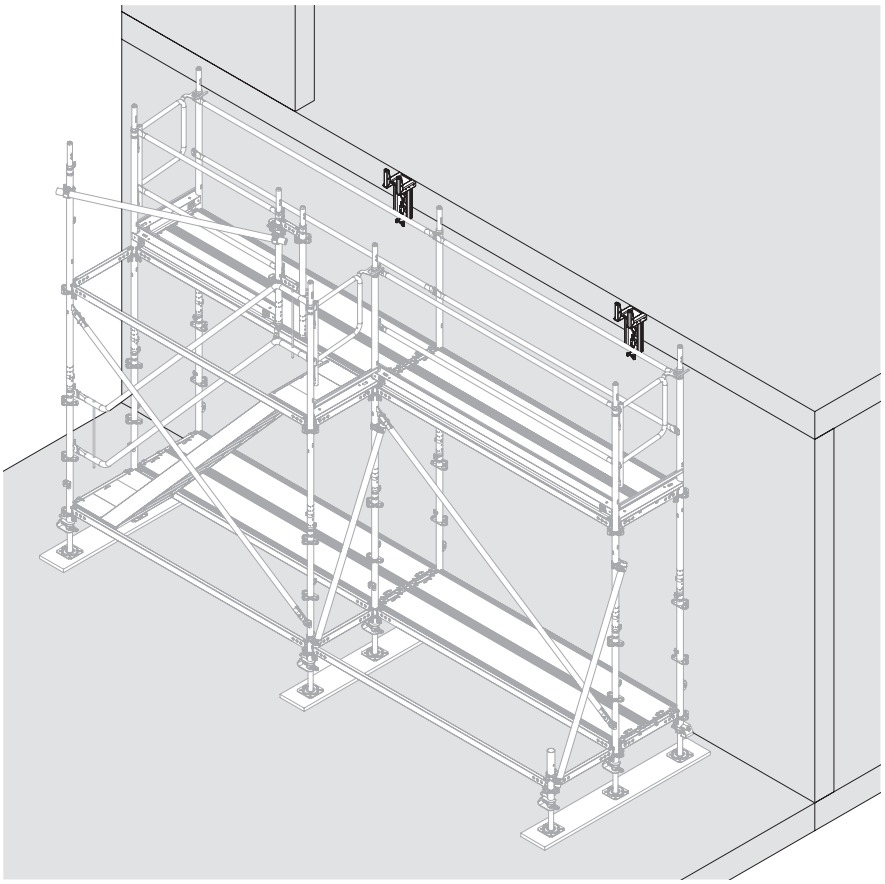


Fig. B1.01

Anchor Sleeve M24

Required components:

23 Anchor Sleeve M24
27 Cone PP Ø31/26 mm C=25 mm
28 Anchor Posit. Stud M24 ga

Before concreting

Installing the Anchor Sleeve M24
1. Nail the Anchor Posit. Stud M24 ga (**28**) to the formwork.
2. Screw the Anchor Sleeve M24 (**23**) to the Anchor Posit. Stud M24 ga (**23**) with Cone PP Ø31/26 mm C=25 mm (**27**).
(Fig. B1.02)
3. Secure the Anchor Sleeve M24 (**23**) with Cone PP Ø31/26 mm C=25 mm (**27**) through the drilled holes in the reinforcement using tie wire.

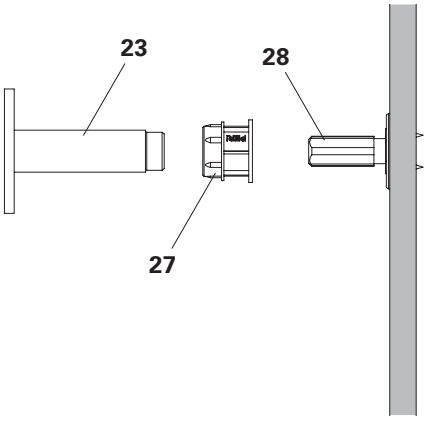


Fig. B1.02

B1 Mounting the wall formwork bracket

Warning

Anchoring can become detached!
A fall can result in serious injuries or even death.

⇒ Only those components specified by PERI are to be used for the anchoring.

⇒ Do not load the anchoring system until the concrete has reached a strength of 10 N/mm².

⇒ Concrete quality: C20/C25 or higher.

Anchoring to the slab

- Minimum concrete strength: 10 N/mm²
- Slab thickness: ≥ 300 mm
- Secure each tie point with an Anchor Sleeve M24 with 2x bracket Ø 8 BSt 500S, unless appropriate edge reinforcement is already in place.

If the concrete slab is not supported by a wall, it must be supported with sufficiently load-bearing slab props, e.g. PERI MULTIPROP. If necessary, a support extension is to be used. (Fig. B1.05)

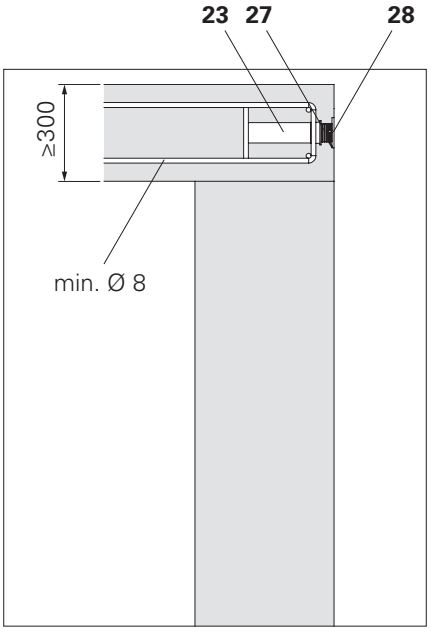


Fig. B1.04

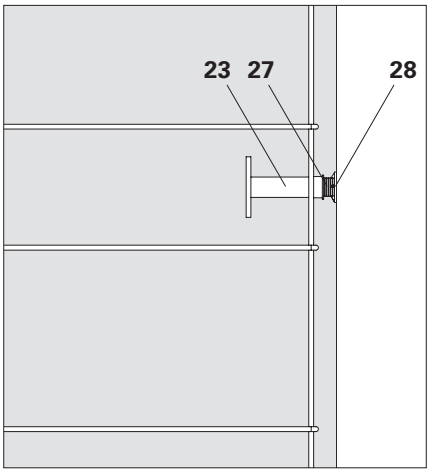


Fig. B1.03

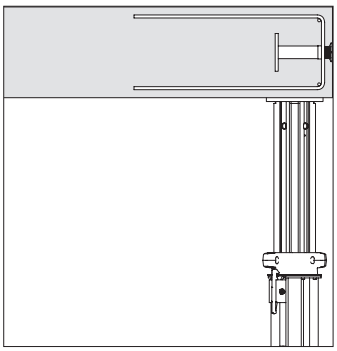


Fig. B1.05

Wall formwork bracket

Parts list per wall formwork bracket

20 Wall Formwork Bracket MX WK
24 Screw ISO4014-M24x100-10.9

Removing Anchor Posit. Stud M24 ga

1. Straighten wire nails.
2. Retract the formwork. Pull the wire nails through the formwork panel.
3. Unscrew the Anchor Posit. Stud M24 ga (**28**) from the Anchor Sleeve M24 (**23**) using Socket SW14.

Assembly

1. Screw down the Wall Formwork Bracket MX WK (**20**) with Screw ISO4014-M24x100-10.9 (**24**), but do not tighten it.
2. Adjust to the required level using adjusting screw (**20.3**). Observe a formwork overhang of 1 – 2 cm.
3. Tighten Screw ISO4014-M24x100-10.9 (**24**) with 150 Nm.

(Fig. B1.06)

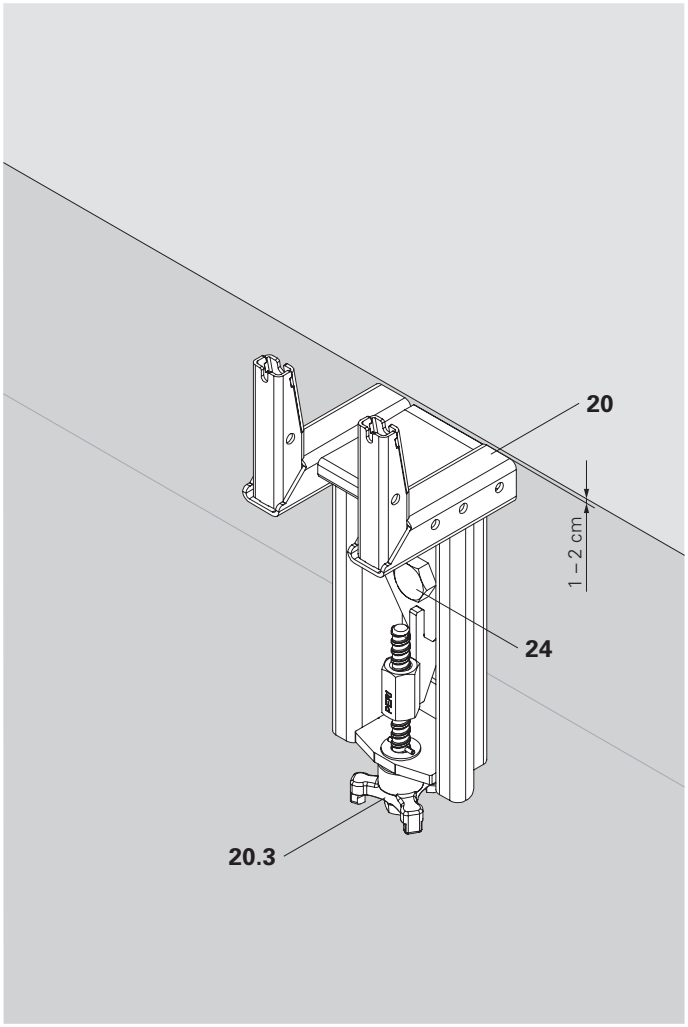


Fig. B1.06

Fitting the Brace Connector Forml Side

Components

4 Squared timber 20/16 cm
5 Brace Connector Forml Side
6 Lifting Hook MAXIMO 1.5 t
14 Formwork unit
16 Alignment Coupler BFD

Assembly on formwork

1. Rest two formwork elements (**14**) formlining side on square timbers 20/16 cm (**4**).
2. Connect the two formwork units with Alignment Coupler BFD (**16**). For the number, see the Instructions for Assembly and Use for the MAXIMO system used.

(Fig. B2.01)

3. Separate base part (**5.1**) and mounting part (**5.2**).
4. Fix base part (**5.1**) in assembly position.

(Fig. B2.02)

Is the base part (**5.1**) lying firmly on the cross strut of the formwork element (**14**)?

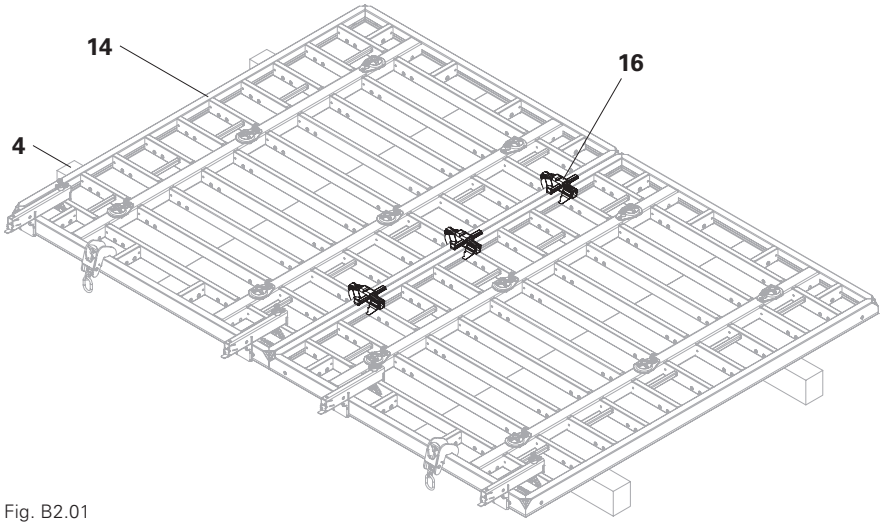


Fig. B2.01

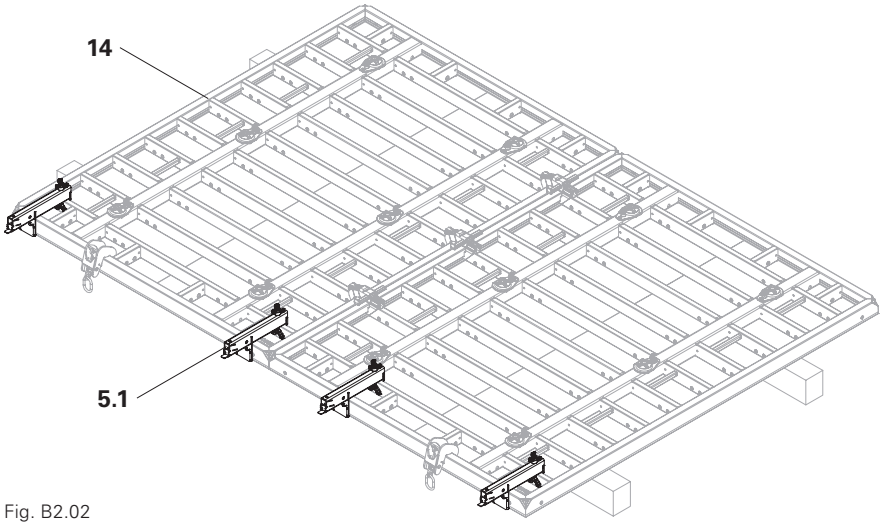


Fig. B2.02

Mount other base parts for later assembly of the side mesh barrier according to specifications.

5. Fit the Lifting Hook MX 1.5t (**6**) to the formwork units (**14**).
6. Fit the Swivel Nuts MX15 (**15**).

(Fig. B2.03)

7. Turn the formwork unit (**14**) with the formlining side facing upwards and place it on squared timbers 20/16 cm (**4**).
8. Spray formlining with formwork oil.
9. Connect mounting part (**5.2**) with base part (**5.1**).

(Fig. B2.04)

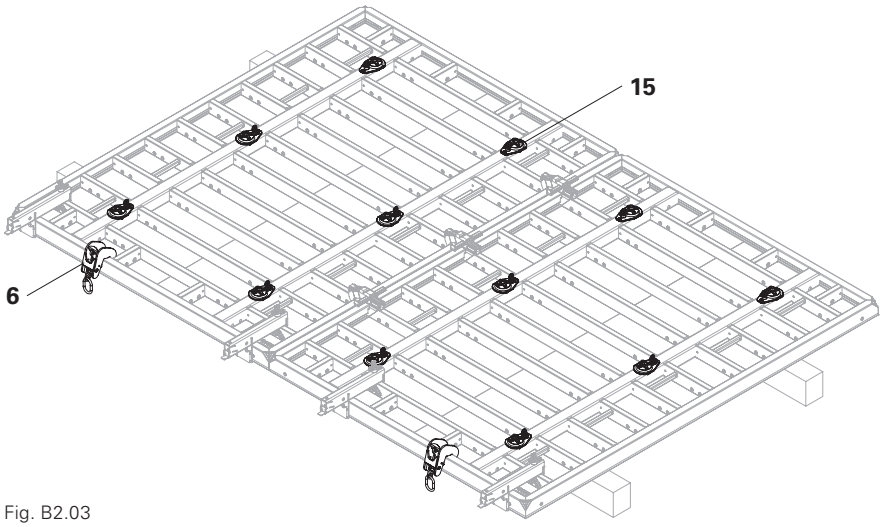


Fig. B2.03

- For secure assembly lay construction boards over the back of the formwork elements.
- Do not walk on the formlining.

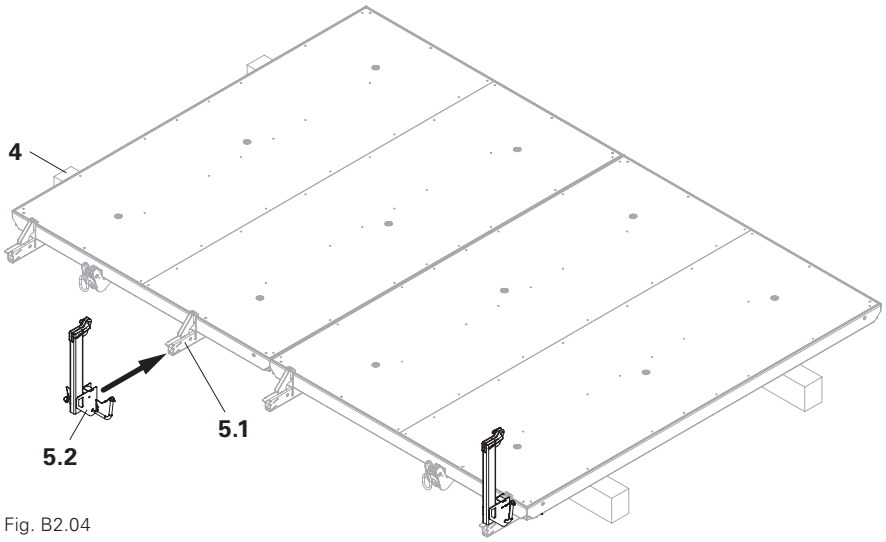


Fig. B2.04

Installing the mounting parts

Components

7 Push-Pull Prop RS
8 Base Plate-3 f. RS 210-1400

Care must be taken to ensure that the formwork is not damaged during assembly.

Installing the push-pull props
1. Remove Pin Ø16x42 mm ga (**5.3**).
2. Fix Push-Pull Prop RS (**7**) on the mounting part (**5.2**) with bolts Ø16x42 mm (**5.3**) and secure with cotter pins 4/1 (**5.4**).
3. Pull out Push-Pull Prop RS (**7**) to the required length.

(Fig. B2.05)

Mounting the base plate
1. Remove Pin Ø16x42 mm ga (**8.1**).
2. Fix Base Plate-3 f. RS 210-1400 (**8**) at the other end of the Push-Pull Prop RS (**7**) with bolts Ø16x42 mm (**8.1**) and secure with cotter pins 4/1 (**8.2**).

(Fig. B2.05)

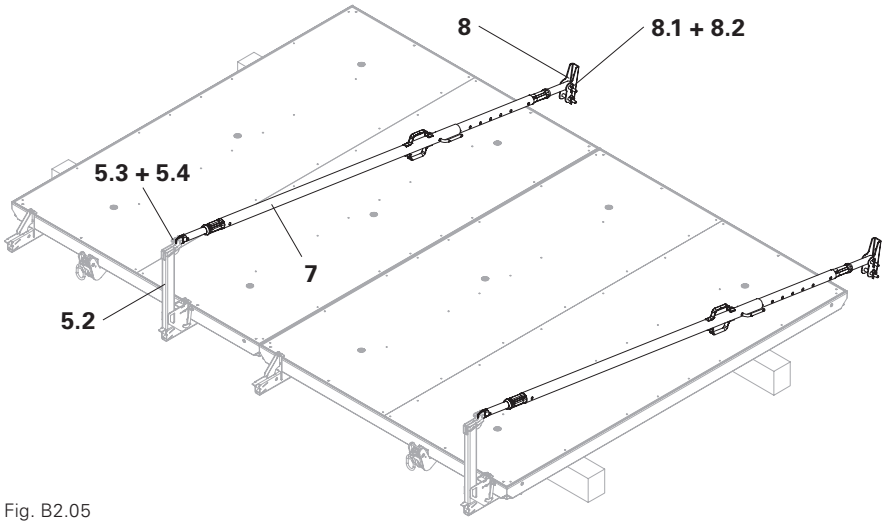


Fig. B2.05

Assembling the side mesh barrier

Components

10 Guardrail Post MXK
11 Side Mesh Barrier PMB S 260

Mounting the guardrail post

1. Fasten formwork unit (**14**) onto the crane using Lifting Hook MX 1.5 t (**6**) and lift approx. 90 cm.
2. Push the Guardrail Post MXK (**10**) into the base part (**5.1**) until the securing hook is engaged.

(Fig. B3.01)

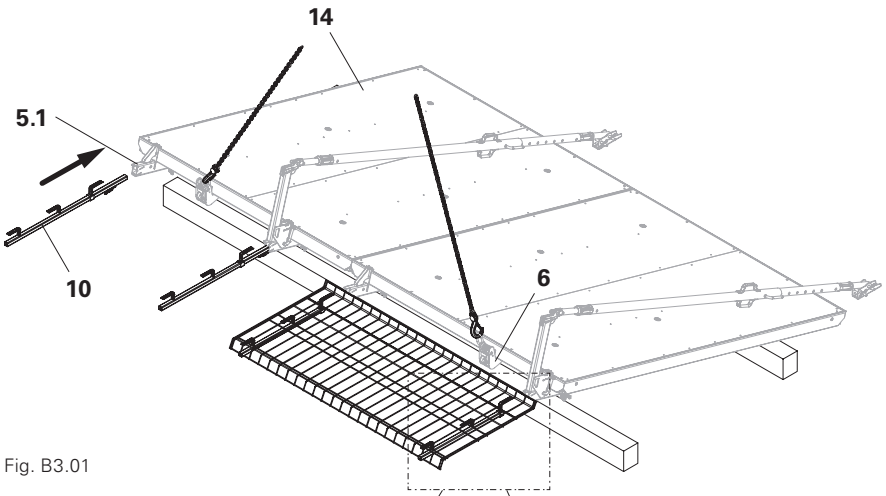


Fig. B3.01

Is the securing hook (**10.1**) of Guardrail Post MXK (**10**) engaged correctly? (Fig. B3.01a)

Assembly

1. Hook the Side Mesh Barrier PMB S 260 (**11**) into the two upper L-holders (**10.2**). (Fig. B3.01)
2. Push the lower L-hook (**10.3**) upwards and push the Side Mesh Barrier PMB S 260 (**11**) backwards.
3. Push the lower L-hook (**10.3**) downwards and secure the Side Mesh Barrier PMB S 260 (**11**).

(Fig. B3.01b)

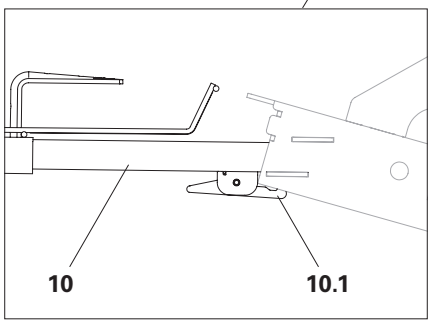


Fig. B3.01a

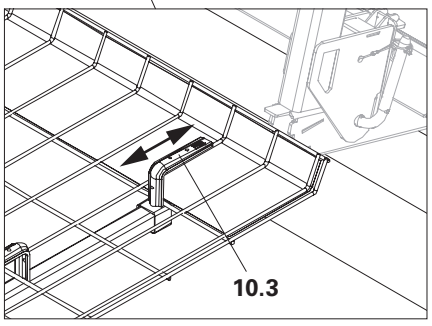


Fig. B3.01b

On the formwork element joints, mount the side mesh barrier offset by one mesh hole to the left or right. This allows for subsequent assembly of the Panel Connection Clamp MX VS.

Erecting the formwork

Caution

- Push-Pull Props RS may swing during erection!
- Uncontrolled movement of the formwork when the push-pull prop hooks on the ground!
  Falling or injuries to the whole body are possible.
  ⇒ Hold the push-pull props when erecting the formwork until the formwork is freely suspended.

Erection

1. Erect formwork element (**14**) with crane.

Positioning the formwork

Danger

- There is a risk of the formwork element tipping until it is completely anchored!
- Tipping risk due to wind forces!
  Serious or even fatal injuries due to components tipping over.

⇒ Fix formwork element with alignment coupler BFD.
⇒ Fix Push-Pull Props MXP to the ground.
⇒ Remove crane lifting gear only when the Push-Pull Props RS have been fixed to the ground.

Warning

Heavy moving components!
During assembly, there is a risk of hands being trapped.
⇒ Do not move formwork element in the area of the supports.

Always begin with the outer bay when positioning the formwork.

Increased risk of high winds occurring

Secure the formwork with additional push-pull props and wall formwork brackets for wind speeds over 60 km/h (corresponds to maximum working wind of 0.2 kN/m²).

In the event of storm warning take additional measures:

- Anchor the formwork.
- Install the closing formwork and secure.
- Dismantle the formwork.

Components

9 Anchor Bolt SW24 Ø14/20x130 TG
16 Alignment Coupler BFD

Positioning the formwork element

1. Move the formwork unit (**14**) to the assembly position with a crane and position it on the Wall Formwork Brackets MX WK (**20**).
2. Align the formwork unit (**14**) and clamp it to the Wall Formwork Bracket MX WK (**20**) from a safe working position using Alignment Coupler BFD (**16**).
   ⇒ The formwork unit (**14**) is pushed onto the concrete slab and via the Alignment Coupler BFD (**16**) and simultaneously fixed to the Wall Formwork Bracket MX WK (**20**). (Fig. B3.03)
3. Set the inclination of the Push-Pull Props (**7**) to 60° from the horizontal.
4. Fasten Base Plate-3 f. RS 210-1400 (**8**) with Anchor Bolt SW24 Ø14/20x130 TG (**9**).
5. Erect a secure working area between the push-pull props.
6. Remove crane lifting gear.
7. Remove the Lifting Hook MAXIMO 1.5t (**6**).
8. Set up formwork unit (**14**) with Push-Pull Props RS (**7**).

(Fig. B3.02)

Set up additional formwork elements in the same way. Connect the formwork elements with the element connection lock MX VS. The number of required connection locks can be found in the MAXIMO Instructions for Assembly and Use.

As an alternative to the Anchor Bolt SW24 Ø14/20x130 TG (**9**), Anchor Bolt SW24 Ø14/20x130 HC (article no.: 141466) can be used.

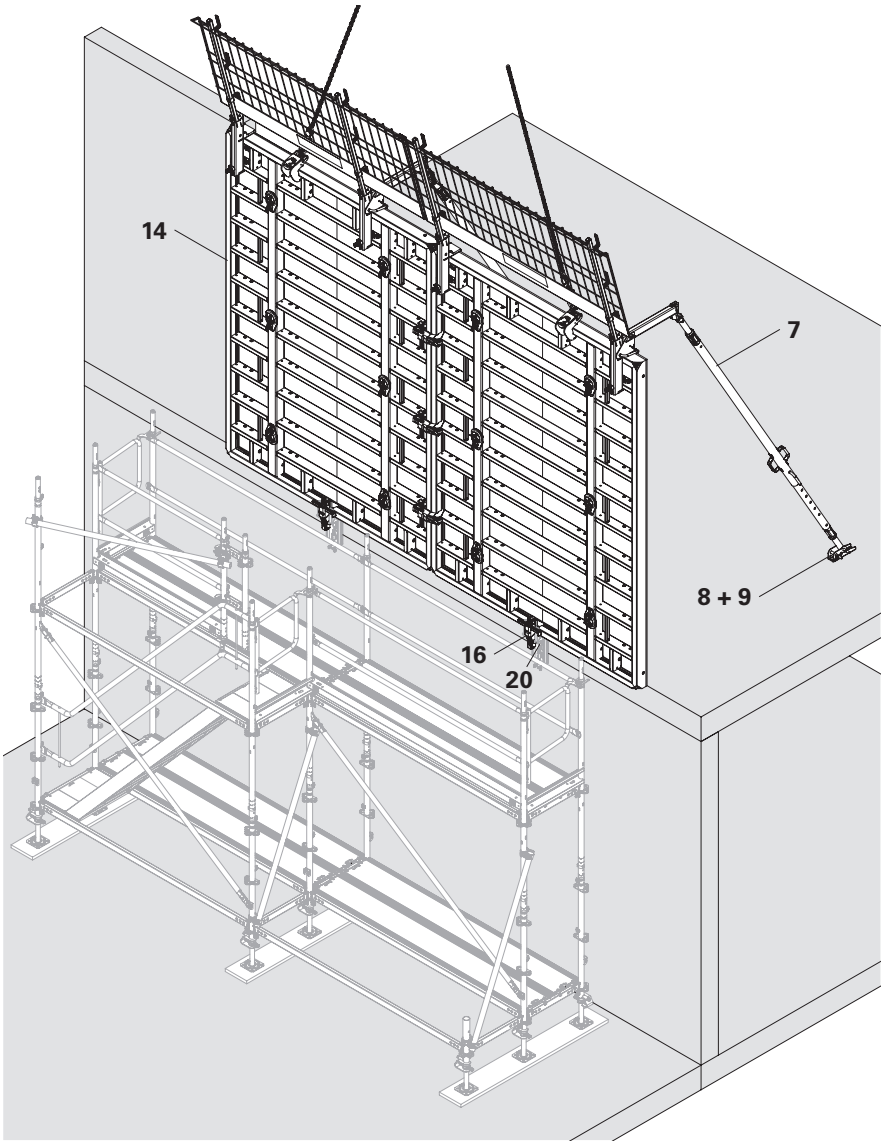


Fig. B3.02

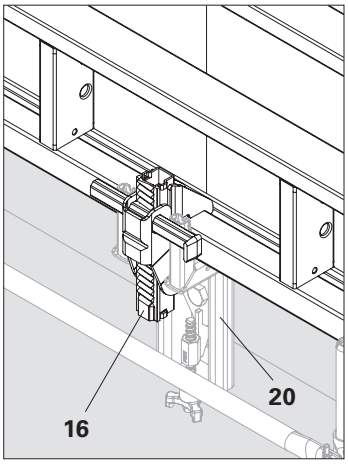


Fig. B3.03

Concluding work

1. If necessary, close the gaps between the Side Mesh Barriers PMB S.
2. Carry out reinforcement work.

(Fig. B3.04)

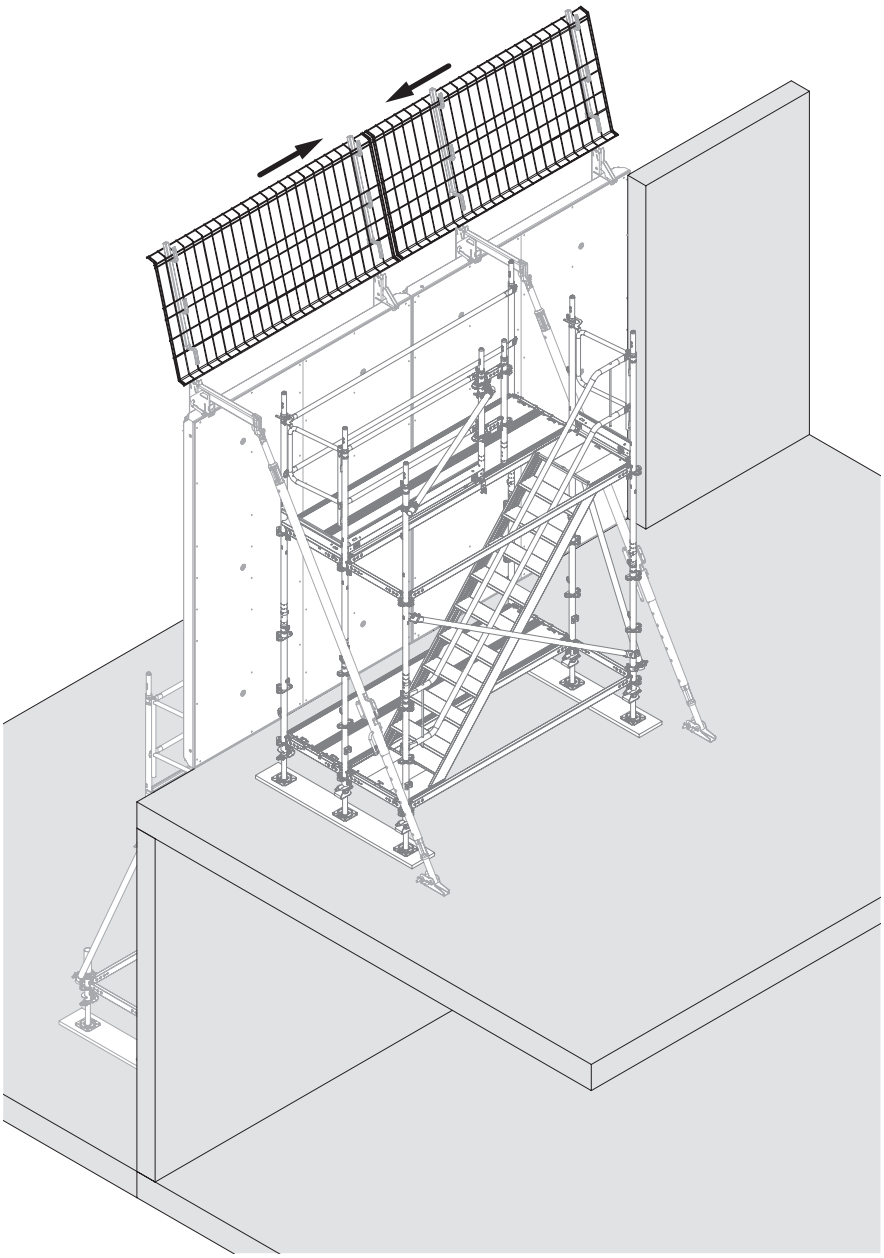


Fig. B3.04

Mounting the closing formwork

Danger

- Crushing risk due to heavy moving parts!
  ⇒ Leave the danger zone.
  ⇒ Move formwork unit with ropes.
- There is a risk of the formwork element tipping until it is completely anchored!
  Serious or even fatal injuries due to components tipping over.
  ⇒ Remove crane lifting gear only when the Push-Pull Props RS have been fixed to the ground.
  ⇒ Anchor closing formwork with the primary formwork.

Components

6 Lifting Hook MAXIMO 1.5 t
7 Push-Pull Prop RS
8 Base Plate-3 f. RS 210-1400
9 Anchor Bolt SW24 Ø14/20x130 TG
16 Alignment Coupler BFD
19 Tie MX15
17 Brace Connector-2 MX/TR

Assembly

1. Fit the MAXIMO 1.5 t lifting hook (**6**) to the closing formwork (**13**) and attach the crane lifting gear.
2. Position closing formwork (**13**) in assembly position. To do this, swing the formwork unit diagonally into position between the Push-Pull Props RS and align it.
3. Fit Push-Pull Props RS (**7**) to the formwork unit with Brace Connector-2 MX/TR (**17**) and temporarily support the formwork unit.

(Fig. B3.05)

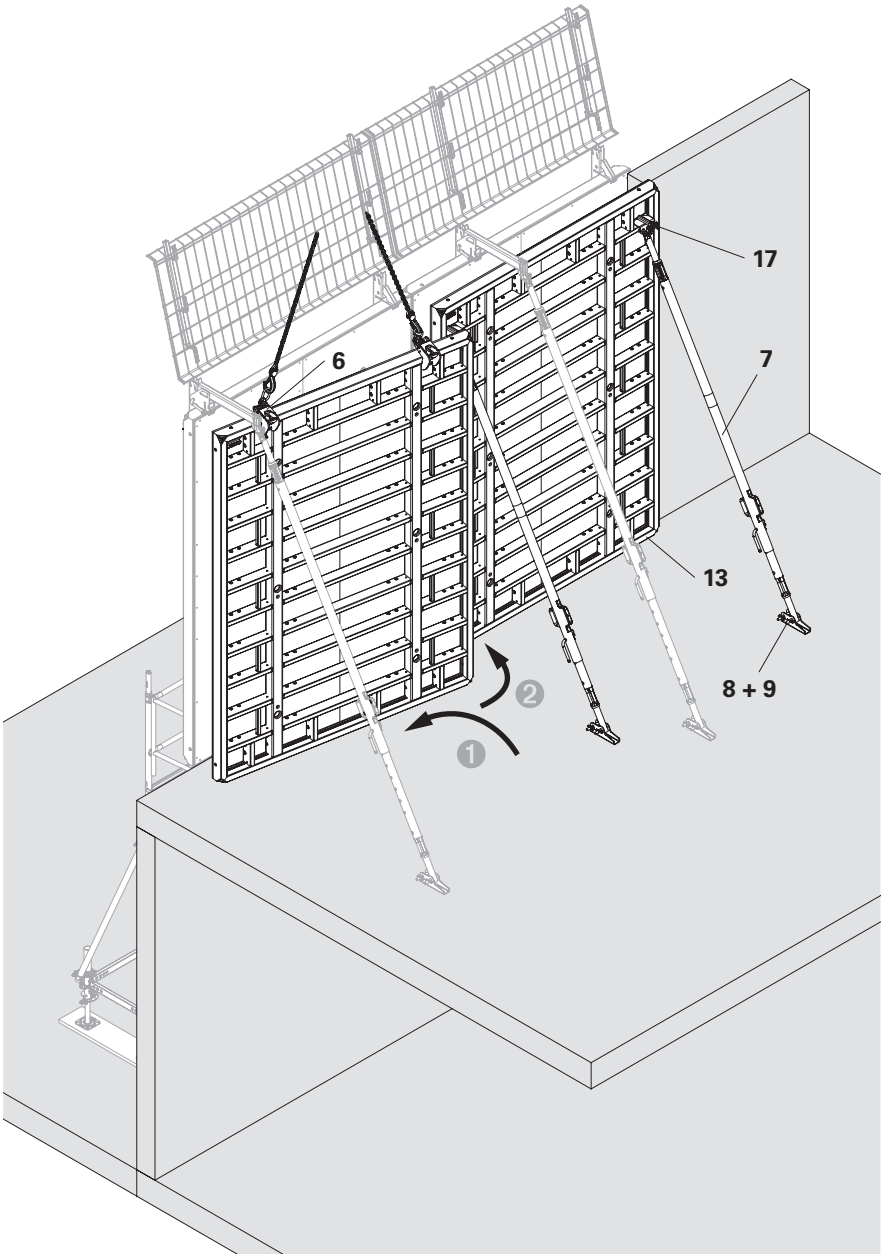


Fig. B3.05

4. Fix Base Plate-3 f. RS 210-1400 (**8**) to the Push-Pull Prop RS (**7**) with bolts and secure to the ground with Anchor Bolt SW24 Ø14/20x130 TG (**9**).
5. Position next formwork element in assembly position.

(Fig. B3.05)

6. Connect the formwork elements with alignment coupler BFD (**16**).
7. Fit all Anchors MX15 (**19**).
8. Loosen the crane lifting gear and remove the Lifting Hook MAXIMO 1.5t (**6**).
9. Remove the temporary Push-Pull Props RS (**7**) again.

(Fig. A3.06)

Concreting

1. Position working scaffold between the brace connectors.
2. Carry out concreting work.

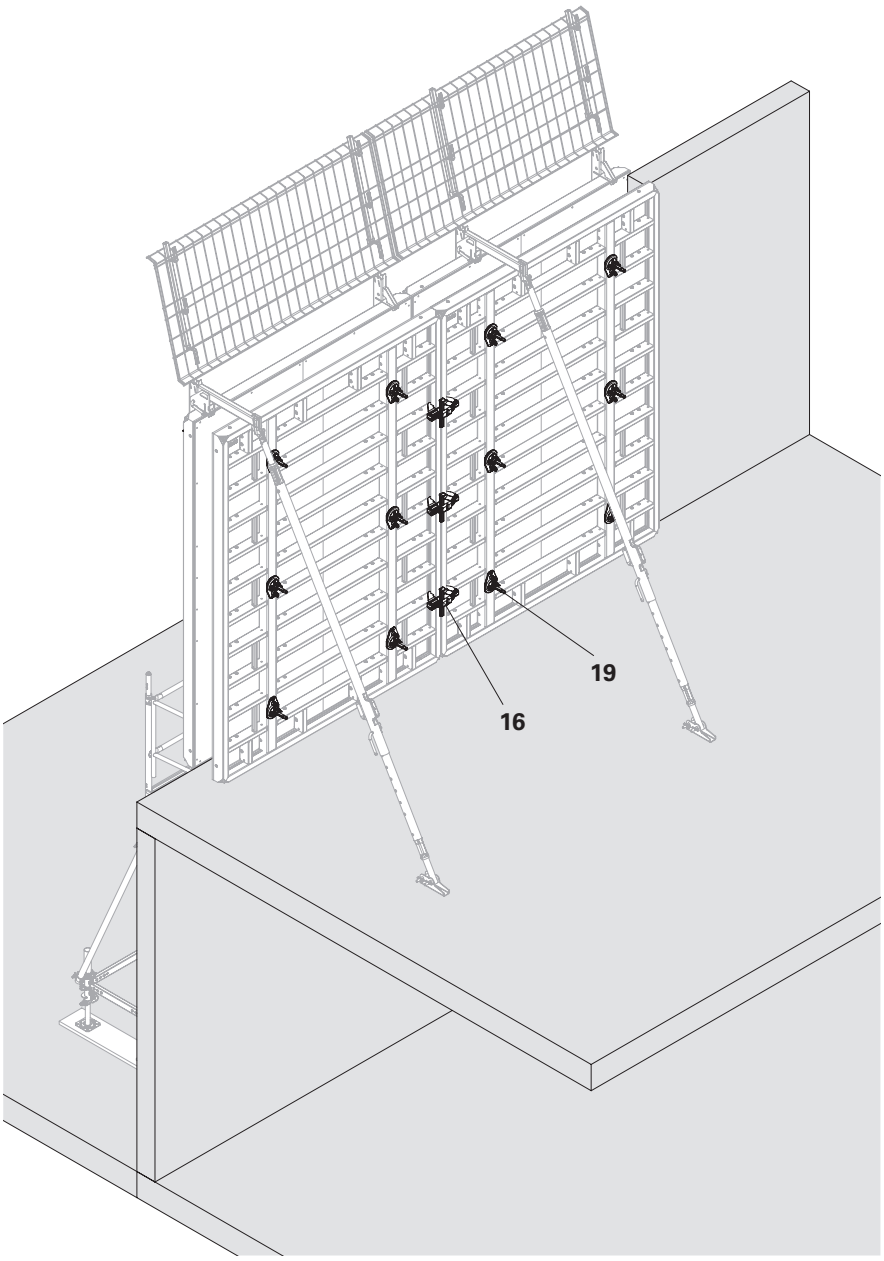


Fig. B3.06

Deshuttering

Danger

- Crushing risk due to heavy moving parts!
  ⇒ Leave the danger zone.
  ⇒ Move formwork unit with ropes.
- Formwork elements that remain on the building can fall if supported incorrectly!
  A fall can result in serious injuries or even death.
  ⇒ A formwork element or connected element must always cover at least two wall formwork brackets.
- Crushing risk due to overturned components!
  ⇒ Secure intermediate posts with temporary supports to prevent tipping over.

Removing the closing formwork

1. Fit the Lifting Hook MX 1.5t (**6**) to the formwork unit (**14**) and attach it to the crane.
2. Remove Anchor MX15 (**19**) and Alignment Coupler BFD (**16**).
3. Swivel out the formwork unit (**14**) diagonally between the Push-Pull Props RS (**7**).
4. Move formwork element (**14**) to the next place of use or store for dismantling.

(Fig. C1.01)

Removing the formwork

1. Position working scaffold between the brace connectors.
2. Fit the Lifting Hook MX 1.5t (**6**) to the formwork unit (**14**) and attach it to the crane.
3. Remove Anchor Bolt SW24 Ø14/20x130 TG (**9**) from Base Plate-3 f. RS 210-1400 (**8**).
4. Remove formwork element (**14**).

(Fig. C1.01)

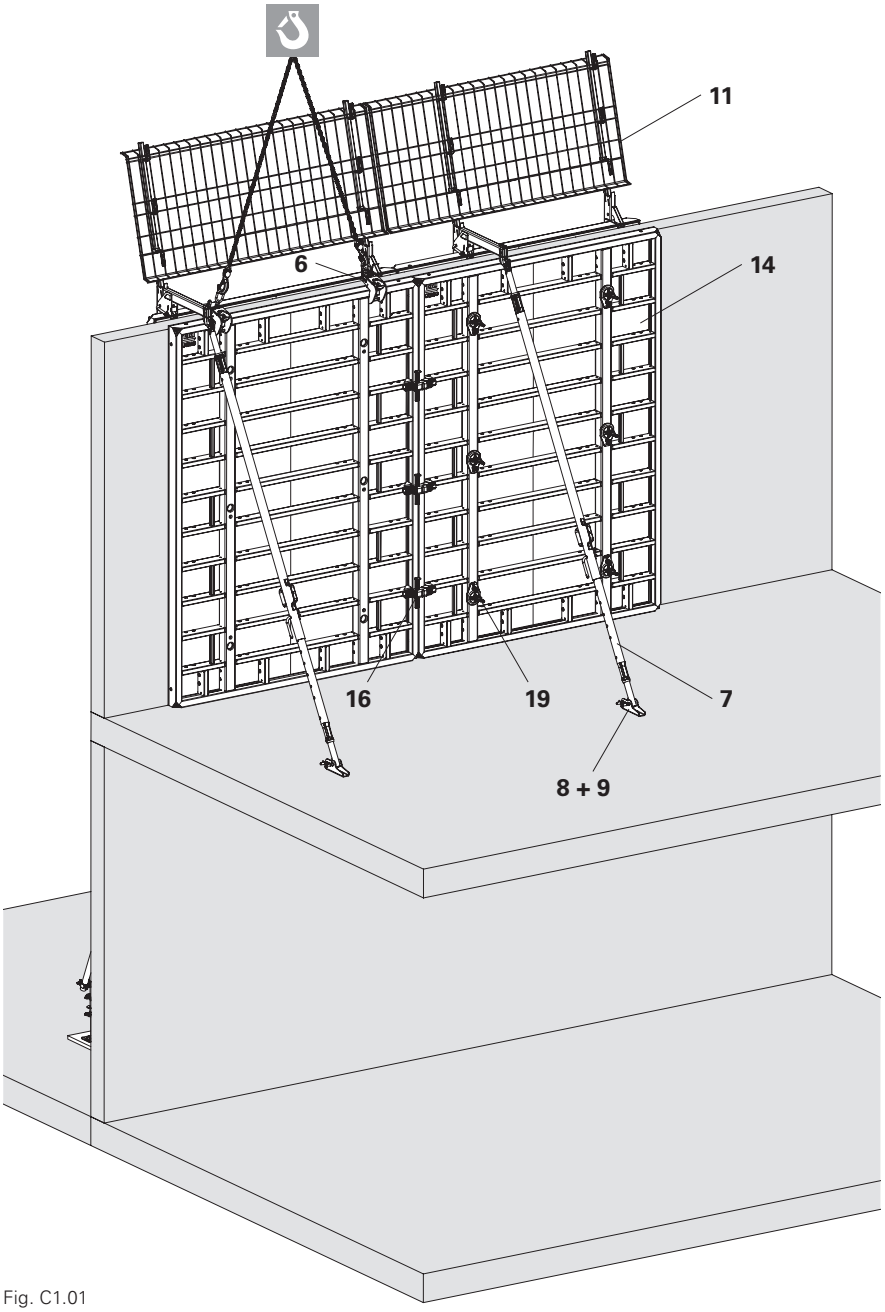


Fig. C1.01

Dismantling

Caution

Crushing risk when dismantling due to folding-back push-pull props!
⇒ Leave the danger zone.
⇒ Move formwork unit with ropes.

Dismantling the primary formwork

1. Set aside the formwork element (**14**) and carefully tip back.
2. Lower formwork element (**14**) to approx. 90 cm. Unhook the Side Mesh Barrier PMB S 260 (**11**) and remove the Guardrail Posts MXK (**10**).
3. Rest formwork element (**14**) on square timbers 20/16 cm (**4**).

(Fig. C1.02)

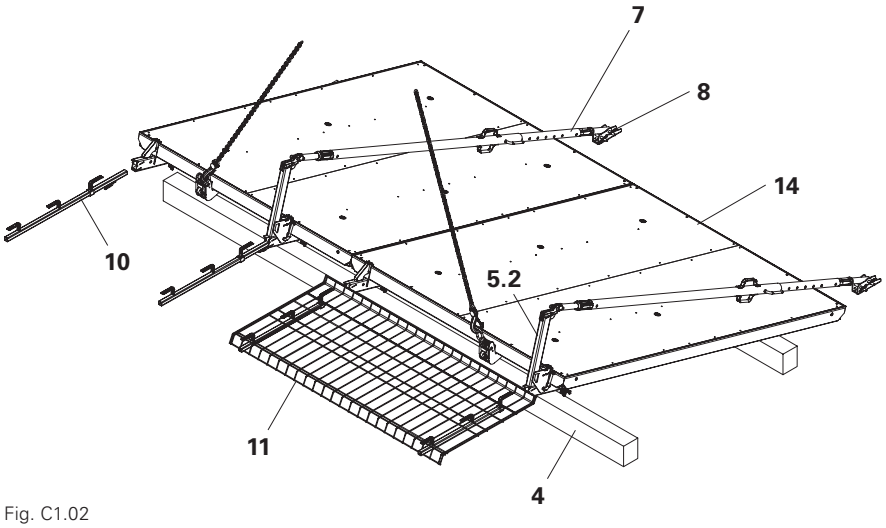


Fig. C1.02

Removing the components

1. Remove the Push-Pull Prop RS (**7**).
2. Remove Base Plate-3 f. RS 210-1400 (**8**) from the Push-Pull Prop RS (**7**).
3. Pull out Pin Ø16x42mm ga and remove the mounting part (**5.2**).

(Fig. C1.02)

4. Turn the formwork unit (**14**) onto the formlining side and support with square timbers 20/16 (**4**).
5. Remove Lifting Hook MX 1.5t (**6**), Wingnut MX15 (**15**) and, if necessary, the Alignment Coupler BFD (**16**).
6. Loosen the wing nut and remove the base part (**5.1**).
7. Reassemble mounting part (**5.2**) and base part (**5.1**).
8. Unscrew Wall Formwork Bracket MX WK and close Anchor Sleeve M24 with a plug.

(Fig. C1.03)

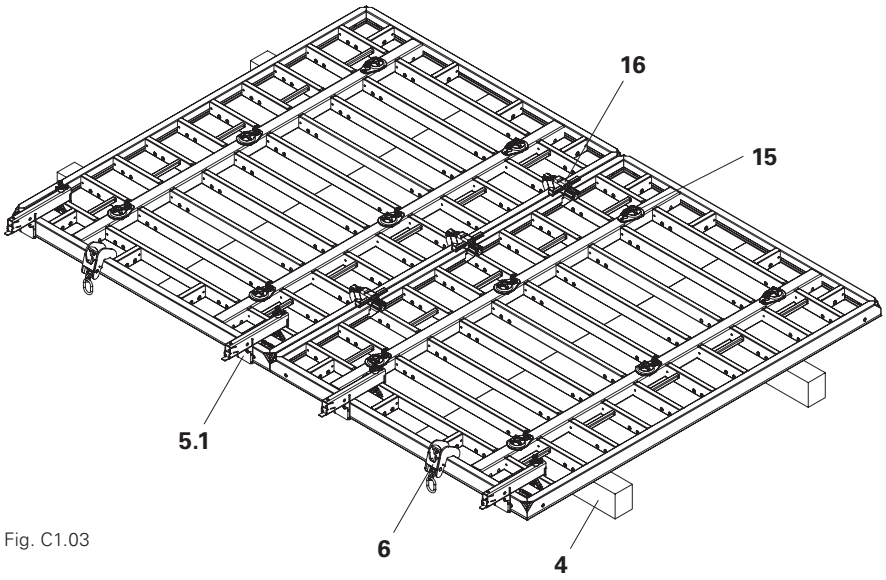


Fig. C1.03

Slab edge stop end

The Wall Formwork Bracket MX WK combined with the Slip on Unit Slab MX WK together form the support construction for slab edge formwork. This allows slab thicknesses of up to 30 cm to be shuttered and concreted.
If anti-fall protection is required, this is possible using Guardrail Posts MXK and Side Mesh Barrier PMB S 260 or timber planks. The width of influence is limited in this case to a maximum of 1.5 m.

Components

10 Guardrail Post MXK
18 Formwork Girder GT 24
20 Wall Formwork Bracket MX WK
21 Slip on Unit Slab MX WK
22 Anchor Bolt SW21 Ø14x150 TG
25 Timber plank 15/3 cm
26 Formwork panel

Assembly

1. Drill a Ø 14 mm hole at the installation position. Distance to upper slab edge 13.5 cm.
2. Screw down the Wall Formwork Bracket MX WK (**20**) with Anchor Bolt SW21 Ø14x150 TG (**22**), but do not tighten it.
3. Adjust to the required level using adjusting screw (**20.3**).
   Observe a formwork overhang of 1 – 2 cm.
4. Tighten Anchor Bolt SW21 Ø14x150 TG (**22**) with 50 Nm.
5. Fit the Slip on Unit Slab MX WK (**21**) to the Wall Formwork Bracket MX WK (**20**).
6. Insert the Guardrail Post MXK (**10**) into the support until the securing hook (**10.1**) is engaged.
7. Attach timber planks 15/3 (**25**) as anti-fall protection with wood screws or nails to Guardrail Post MXK (**10**).
8. Fit the slab edge stop end with Formwork Girders GT 24 (**18**) and formwork panels (**26**), and fix to the Plug-in Unit MX WK (**21**) with wood screws or nails.

(Fig. D1.01 + Fig. D1.02)

Before assembling the Wall Formwork Bracket MX WK, move the wall mounting to centre position using the adjusting screw.

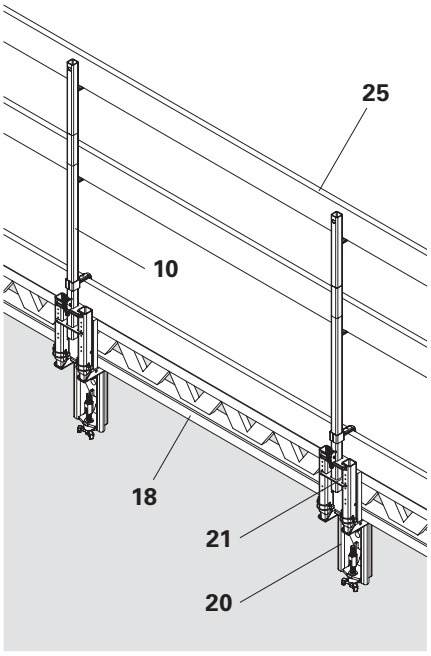


Fig. D1.01

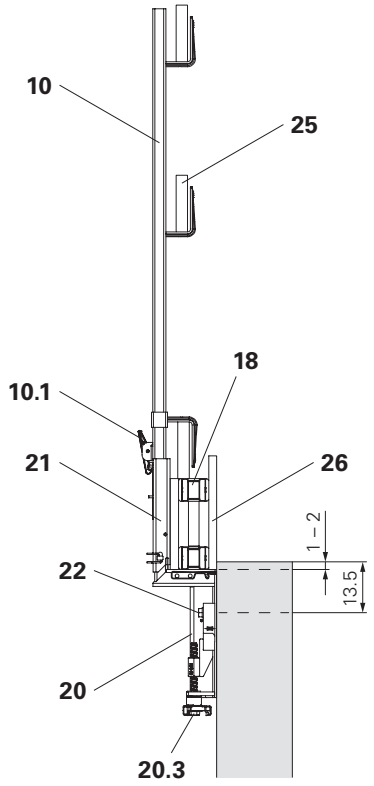


Fig. D1.02

Tight space restrictions

The Brace Connector Forml Side enables the construction of wall formwork where there are tight space restrictions behind the formwork. The support and structure are carried out from the formlining side.

Danger

- There is a risk of the formwork element tipping until it is completely anchored!
- Tipping risk due to wind forces!

Serious or even fatal injuries due to components tipping over.

⇒ Secure formwork element to prevent slipping.

⇒ Fix Push-Pull Props MXP to the ground.

⇒ Remove crane lifting gear only when the Push-Pull Props RS have been fixed to the ground.

Always begin with the outer bay when positioning the formwork.

Components

4 Squared timber 20/16 cm
7 Push-Pull Prop RS
8 Base Plate-3 f. RS 210-1400
9 Anchor Bolt SW24 Ø14/20x130 TG
12 Primary formwork
13 Closing formwork

Pre-assembly is carried out in the same way as for assembly with the wall formwork bracket.

Assembly

1. Fasten the 20/16 cm squared timber (**4**) to the floor as a stop for the primary formwork (**12**).
2. Move primary formwork (**12**) with crane into the assembly position and push it to the stop.
2. Set the inclination of the Push-Pull Props (**7**) to 60° from the horizontal.
3. Fasten Base Plate-3 f. RS 210-1400 (**8**) with Anchor Bolt SW24 Ø14/20x130 TG (**9**).
4. Set up the primary formwork (**12**) with Push-Pull Props RS (**7**).
5. Position closing formwork (**13**).
6. Position working scaffold.
7. Anchor the closing formwork.

(Fig. D1.03)

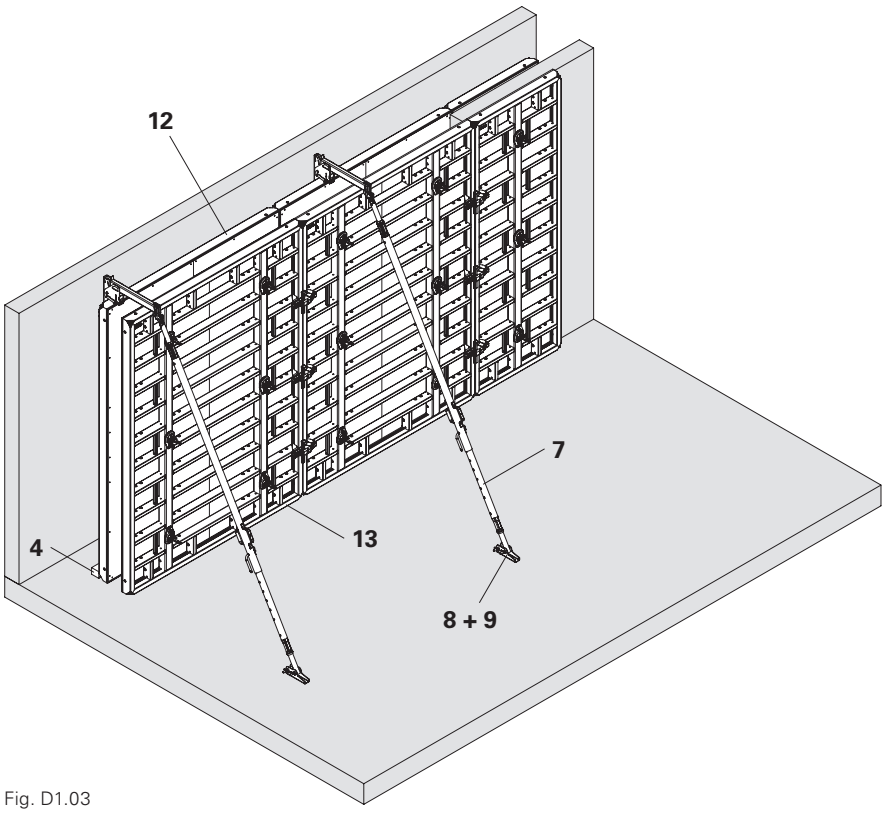
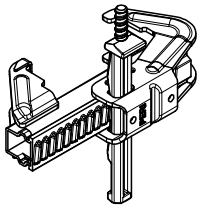
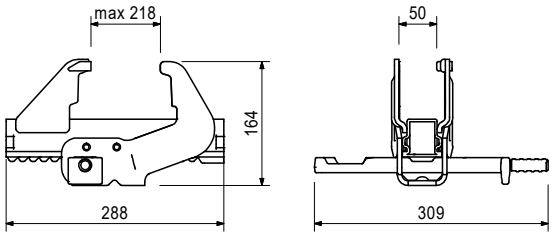


Fig. D1.03

Art-Nr.	Weight [kg]	
134321	4.660	**Panel Connection Clamp MX VS**

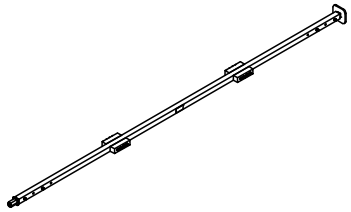
For connecting Panels MAXIMO from above, in places where access to the panel is not possible.

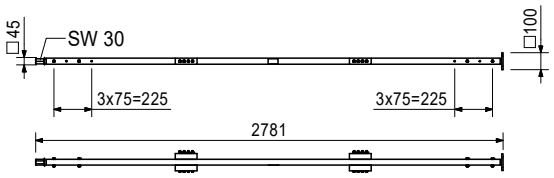




Art-Nr.	Weight [kg]	
134337	5.770	**Operate Bar MX VS**

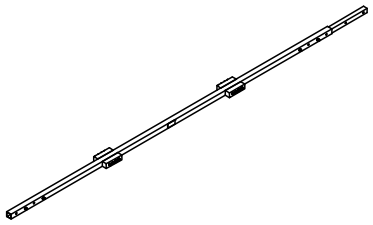
For operation of the Panel Connection Clamp MX VS.

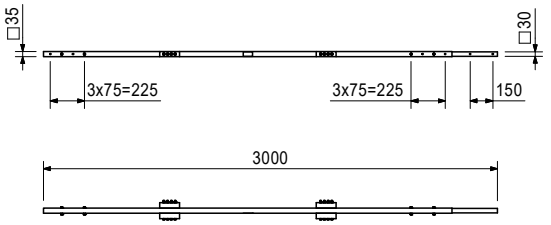




Art-Nr.	Weight [kg]	
134339	4.510	**Operate Bar MX VS Extension**

Extension of the Operate Bar MX VS.

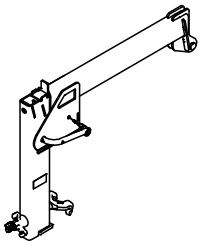


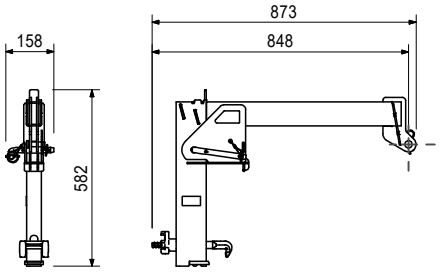


Art-Nr.	Weight [kg]	
134623	18.400	**Brace Connector Forml Side**

The formwork side Brace Connector Forml Side allows the adjustable formwork to be mounted at the edge of the ceiling in conjunction with the Wall Formwark Bracket MX WK and secured against tipping over with a Push-Pull Prop.

In connection with the Post MXK and the Side Mesh Barrier-2 PMB, a counter railing can be mounted on the Brace Connector Forml Side.





Accessory (not included)

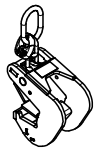
126360	Guardrail Post MXK
033839	Side Mesh Barrier-2 PMB S 90
033840	Side Mesh Barrier-2 PMB S 120
033841	Side Mesh Barrier-2 PMB S 240
138084	Side Mesh Barrier PMB S 260

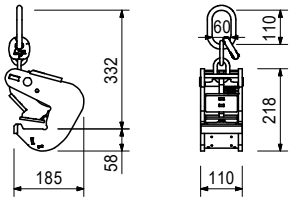
Art-Nr.	Weight [kg]	
115168	6.950	**Lifting Hook MX 1.5t**

For transporting Panels MAXIMO and TRIO.

Notes

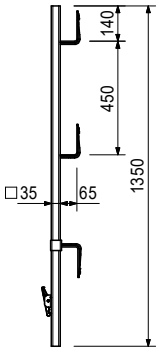
Follow Instructions for Use!
Permissible load-bearing capacity: Steel Panels 1.5 t. Alu Panels 750.0 kg.





Art-Nr.	Weight [kg]	
126360	4.920	**Guardrail Post MXK**

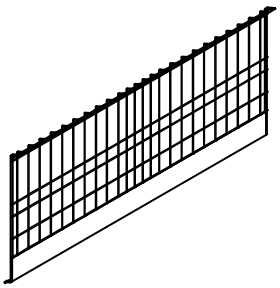
As guardrail for MAXIMO and TRIO.

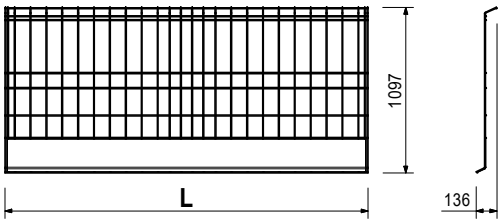


Art-Nr.	Weight [kg]		L [mm]
		Side Mesh Barriers PMB S	
138087	5.940	**Side Mesh Barrier PMB S 90**	900
138086	7.920	**Side Mesh Barrier PMB S 120**	1200
138085	14.560	**Side Mesh Barrier PMB S 240**	2400
138084	16.060	**Side Mesh Barrier PMB S 260**	2600

Notes

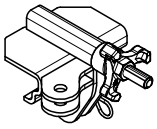
Maximum distance of posts with Side Mesh Barrier: PMB S 260 max. 2.40 m.

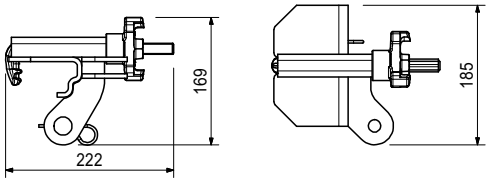




Art-Nr.	Weight [kg]	
023660	3.290	**Brace Connector-2 MX/TR**

For connecting push-pull props and kicker braces to MAXIMO and TRIO Panels. Mounted on vertical and horizontal struts.





Included in delivery

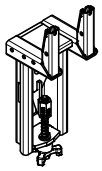
027170 Pin Ø16x42mm ga 1 pc
018060 Cotter Pin 4/1 ga 1 pc

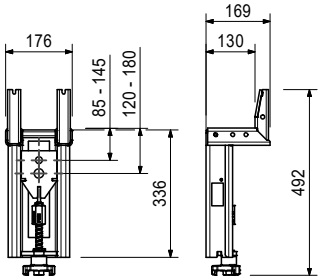
Art-Nr.	Weight [kg]	
135327	9.570	**Wall Formwork Bracket MX WK**

Used to support formwork panels.
Maximum stacking height 5.40 m.

Notes

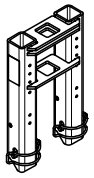
Observe the forces to be anchored in the Instructions for Assembly and Use.

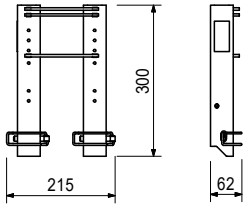




Art-Nr.	Weight [kg]	
135282	3.410	**Slip on Unit Slab MX WK**

Extension for Wall Formwork Bracket MX WK for ceiling edge formwork.



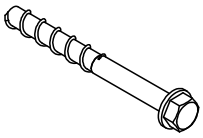


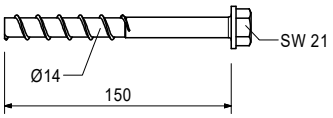
Art-Nr.	Weight [kg]	
132889	0.213	**Anchor Bolt AF21 Ø14x150 TG**

For temporary attachment to reinforced concrete components.

Notes

Take the PERI Data Sheet into consideration!
Drill hole Ø 14 mm.



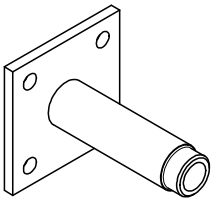


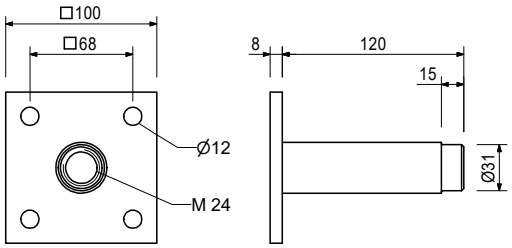
Art-Nr.	Weight [kg]	
026230	1.010	**Anchor Sleeve M24**

For anchoring of platform systems.

Notes

Separate design information on request.

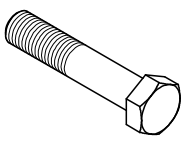


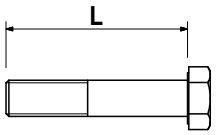


Accessory (not included)

026240	Cone PP Ø31/26mm C=25mm
026250	Plug PP Ø26mm
116233	Cone FRC Ø32/52mm C=40
026420	Anchor Posit. Stud M24 ga
116234	Concrete Plug Ø32mm
115150	Anchor Position. M24x65mm ga
123800	Threaded Cone M24/40mm

Art-Nr.	Weight [kg]		L [mm]
135465	0.452	**Screw ISO4014-M24x100-10.9**	100



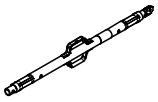


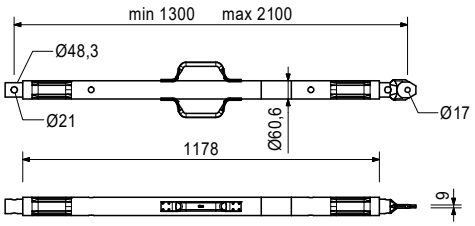
Art-Nr.	Weight [kg]	
117466	10.600	**Push-Pull Prop RS 210 ga**

Extension length L = 1.30 – 2.10 m.
For aligning PERI Formwork Systems and precast concrete elements.

Notes

Permissible load see Instructions for Assembly and Use.



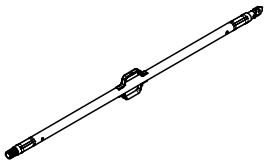


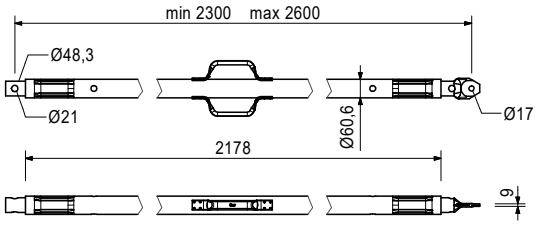
Art-Nr.	Weight [kg]	
118238	12.100	**Push-Pull Prop RS 260 ga**

Extension length L = 2.30 – 2.60 m.
For aligning PERI Formwork Systems and precast concrete elements.

Notes

Permissible load see Instructions for Assembly and Use.



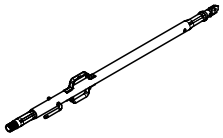


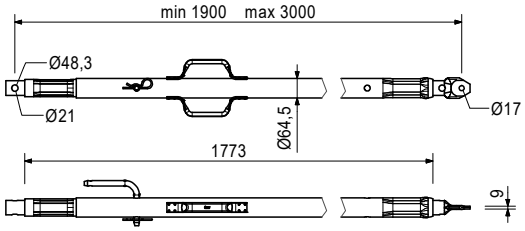
Art-Nr.	Weight [kg]	
117467	15.500	**Push-Pull Prop RS 300 ga**

Extension length L = 1.90 – 3.00 m.
For aligning PERI Formwork Systems and precast concrete elements.

Notes

Permissible load see Instructions for Assembly and Use.



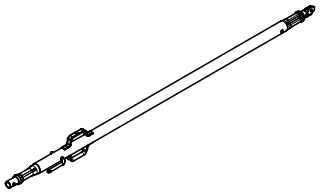


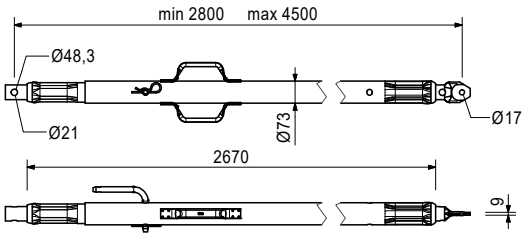
Art-Nr.	Weight [kg]	
117468	23.000	**Push-Pull Prop RS 450 ga**

Extension length L = 2.80 – 4.50 m.
For aligning PERI Formwork Systems and precast concrete elements.

Notes

Permissible load see Instructions for Assembly and Use.



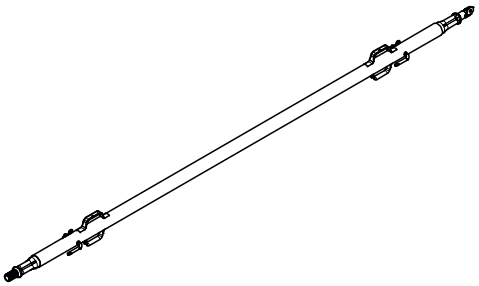


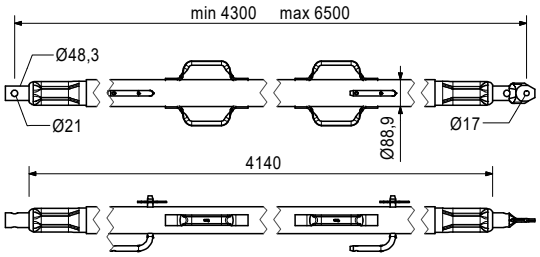
Art-Nr.	Weight [kg]	
117469	39.900	**Push-Pull Prop RS 650 ga**

Extension length L = 4.30 – 6.50 m.
For aligning PERI Formwork Systems.

Notes

Permissible load see Instructions for Assembly and Use.



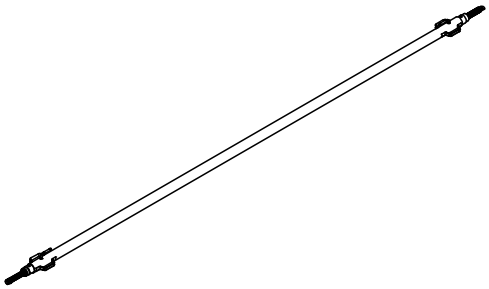


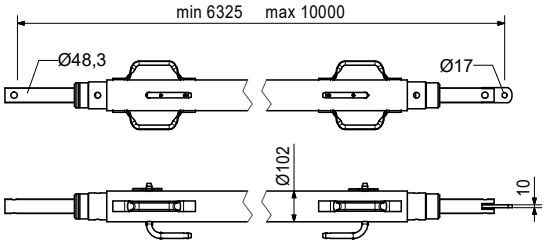
Art-Nr.	Weight [kg]	
028990	115.000	**Push-Pull Prop RS 1000 ga**

Extension length L = 6.40 – 10.00 m.
For aligning PERI Formwork Systems.

Notes

Permissible load see Instructions for Assembly and Use.



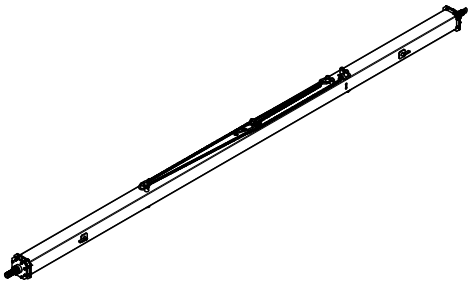


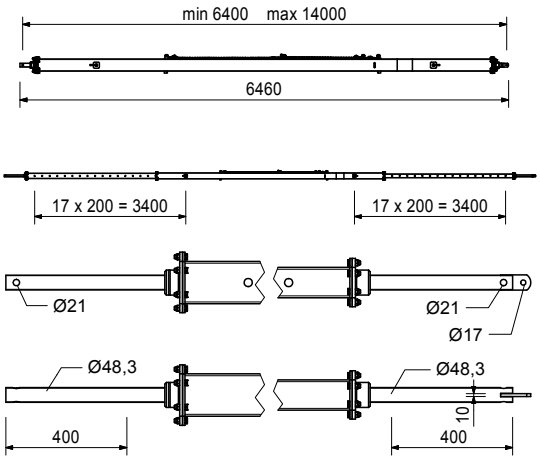
Art-Nr.	Weight [kg]	
103800	271.000	**Push-Pull Prop RS 1400 ga**

Extension length L = 6.40 – 14.00 m.
For aligning PERI Formwork Systems.

Notes

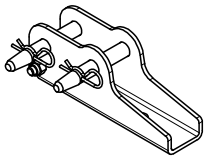
Permissible load see Instructions for Assembly and Use.
Chain can be operated from bottom.

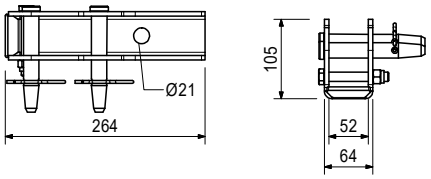




Art-Nr.	Weight [kg]	
126666	3.040	**Base Plate-3 f. RS 210-1400**

For assembly of Push-Pull Props RS 210, 260, 300, 450, 650, 1000 and 1400.





Accessory (not included)

124777	Anchor Bolt AF24 Ø14/20x130 TG
141466	Anchor Bolt AF24 Ø14/20x130 HC

Included in delivery

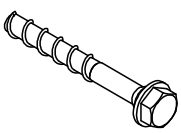
113063 Screw ISO4014-M12x80-8.8-ga 1 pc
113064 Hex-Nut ISO7040-M12-8-ga 1 pc
105400 Pin Ø20x140mm ga 2 pc
018060 Cotter Pin 4/1 ga 2 pc

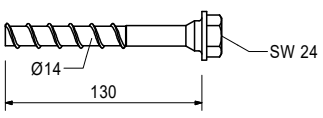
Art-Nr.	Weight [kg]	
124777	0.210	**Anchor Bolt AF24 Ø14/20x130 TG**

For temporary attachment of construction site facilities in concrete.

Notes

Take the PERI Data Sheet into consideration!
Hole Ø 14 mm.



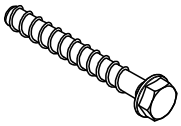


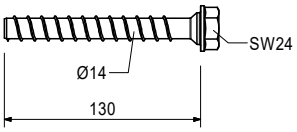
Art-Nr.	Weight [kg]		B [mm]	L [mm]
141466	0.210	**Anchor Bolt AF24 Ø14/20x130 HC**	24	142

For temporary fixation to reinforced concrete structures.

Notes

See PERI Data Sheet!





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