



**SecuritBasic**

Technical Instruction Manual



## Product Features

SecuritBasic is a safety system equipped with platforms, ladders and access hatches. SecuritBasic allows for safe and economic work in all heights and is designed to prevent workers from falling down.

SecuritBasic can be used for 250 cm and 125 cm wide panels of the Mammut 350 and Mammut wall formwork systems as well as for 240 cm and 135 cm wide panels of the StarTec wall formwork system.

SecuritBasic is assembled to the wall formwork panels safely on the ground with the panels lying flat on the ground.

SecuritBasic offers users the following additional benefits:

- The safety equipment and panels are lifted and moved together as complete units, i.e. panel with platform, ladder and railings.
- Ties and accessories can be handled and operated safely at all heights.
- The SecuritBasic system can be added to existing Mammut 350, Mammut and StarTec wall formwork at any time.

### Important safety advise

Safety regulations vary in all countries in which MEVA wall formwork systems are used. As there are no harmonized safety standards inside and outside Europe, we bring it to your attention that the company that uses MEVA equipment on the construction site is obliged to take care of all necessary safety precautions and minimise any safety risks.

When assembling and using SecuritBasic, make sure to also observe the Technical Instruction Manual of the wall formwork system that is used with SecuritBasic. You can download the Technical Instruction Manuals from the MEVA website [www.meva-international.com](http://www.meva-international.com)

### Abbreviations, measurements, decimal numbers, figures and tables

The abbreviation SB is used for the SecuritBasic system. Any further abbreviations are explained where they are used the first time.

**Measurements:** This manual uses the metric system and thus m (for metre), cm (for centimetre) and mm (for millimetre). Dimensions without a measure are in cm.

**Decimal numbers:** Note that the comma is used in decimal numbers, e.g. 1,5 means 1 and a half.

The page numbers in this manual start with SB. The figures and tables are numbered per page. Depending on its product abbreviation, a cross reference in the text refers to a page, table or figure in this or in another manual.



## Please observe

This Technical Instruction Manual contains information, instructions and hints describing how to use the MEVA equipment on the construction site in a proper, quick and economic way. Most examples shown are standard applications that will occur in practice most often. For more complicated or special applications not covered in this manual, please contact the MEVA experts for advice. When using our products the federal, state and local codes and regulations must be observed. Many of the details shown do not illustrate the wall formwork system in the ready-to-pour condition as to the aforementioned safety regulations. Please adhere to this manual when applying the equipment described here. Deviations require engineering calculations and analysis to guarantee safety.

Please observe the assembly instructions that your local contractor or employer has created for the site on which the MEVA equipment is used. Such instructions are intended to minimise site-specific risks and must contain the following details:

- The order in which all working steps including assembly and disassembly must be carried out
- The weight of the panels and other system parts
- The type and number of ties and braces as well as the distance between them
- The location, number and dimensions of working scaffolds including working area and protection against falling down
- Pick points for panel transport by crane. With regard to panel transport, please observe this manual. Any deviation will require a static proof.

Important: Generally, only well maintained material may be used. Damaged parts must be replaced. Apply only original MEVA spare parts for replacement.

Attention: Never wax or oil assembly locks.

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**Product overview – SecuritBasic for Mammut / Mammut 350**

SecuritBasic is equipped with general parts that can be used with any of the aforementioned wall formwork systems and with specific parts usable for Mammut and Mammut 350 only.

**General parts:**

- ① Scaffolding bracket SB
- ② Flange screw 28
- ③ Flange screw 18
- ④ Telescopic ladder SB
- ⑤ Side railing SB
- ⑥ Rear railing post SB
- ⑦ Ladder fixture panel SB
- ⑧ Brace frame 250
- ⑨ Front railing post SB

**Specific parts for Mammut and Mammut 350:**

- ⑩ Scaffold tube 2470 SB
- ⑪ Rear railing frame
- M 2470 SB
- ⑫ Alu(minium) platform
- M 2470 SB with hatch

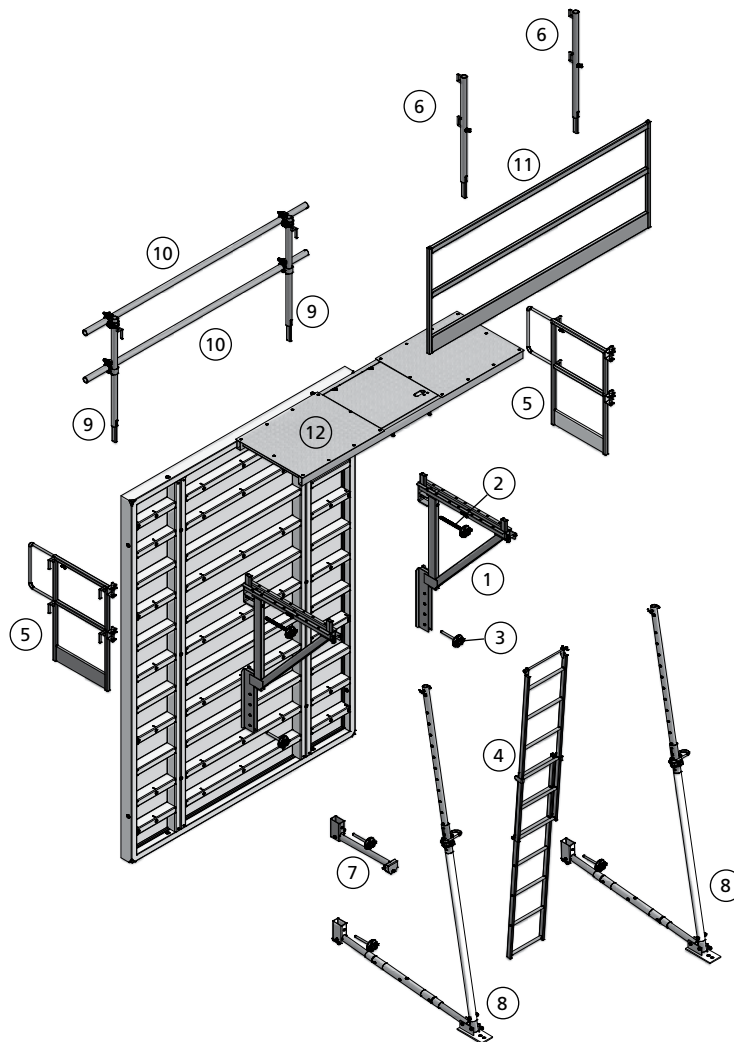


Fig. 4.1

SecuritBasic parts for Mammut / Mammut 350		
Panel width 250	29-600-10	Alu(minium) platform M 2470 SB
	29-600-15	Alu(minium) platform M 2470 SB with hatch
	29-601-85	Front railing post SB
	29-603-55	Scaffold tube 2470 SB
	29-602-10	Rear railing frame M 2470 SB
Panel width 125	29-600-25	Alu(minium) platform M 1220 SB
	29-601-85	Front railing post SB
	29-603-70	Scaffold tube 1220 SB
	29-602-25	Rear railing frame M 1220 SB
Inside corner	29-600-20	Alu(minium) platform M 1690 SB

Table 4.2

Description	Ref. No.
Scaffolding bracket SB	29-603-10
Alu(minium) platform	
M 2470 SB with hatch	29-600-15
Front railing post SB	29-601-85
Scaffold tube 2470 SB	29-603-55
Scaffold tube 1220 SB	29-603-70
Rear railing post SB	29-601-90
Rear railing frame	
M 2470 SB	29-602-10
Side railing SB	29-601-75
Telescopic ladder	
1700-3180 SB	29-603-45
Ladder fixture	
panel SB	29-603-80

**Product overview – SecuritBasic for StarTec**

SecuritBasic is equipped with general parts that can be used with any of the aforementioned wall formwork systems and with specific parts usable for StarTec only.

**General parts:**

- ① Scaffolding bracket SB
- ② Flange screw 28
- ③ Flange screw 18
- ④ Telescopic ladder SB
- ⑤ Side railing SB
- ⑥ Rear railing post SB
- ⑦ Ladder fixture panel SB
- ⑧ Brace frame 250
- ⑨ Front railing post SB

**Specific parts for StarTec:**

- ⑩ Scaffold tube 2370 SB
- ⑪ Rear railing frame ST 2370 SB
- ⑫ Alu(minium) platform ST 2370 SB with hatch

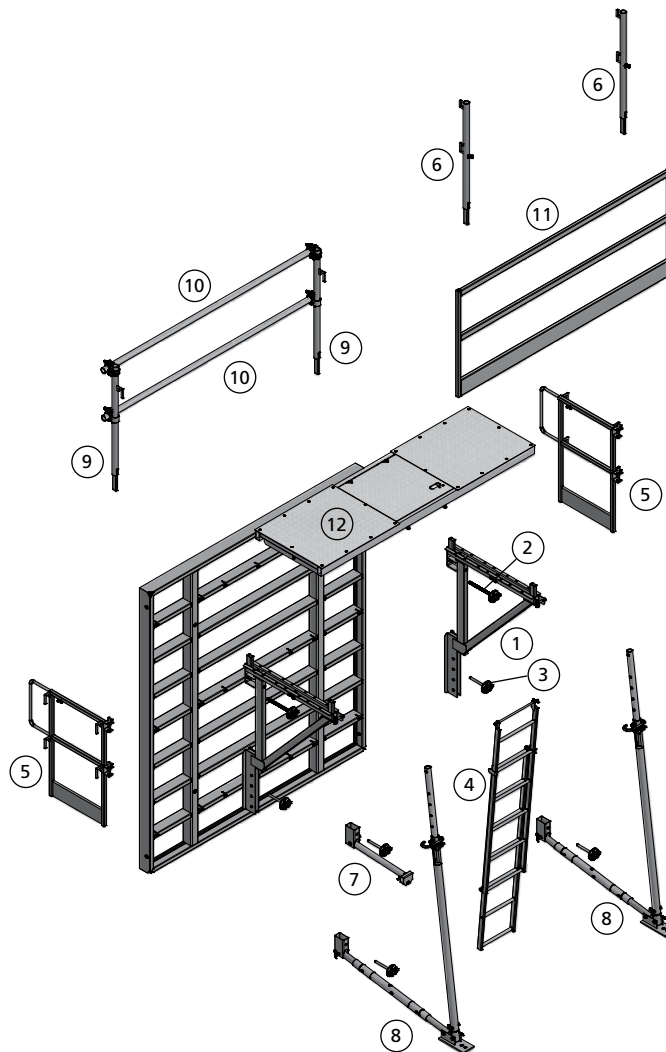


Fig. 5.1

SecuritBasic parts for StarTec		
Panel width 240	29-600-40	Alu(minium) platform ST 2370 SB
	29-600-45	Alu(minium) platform ST 2370 SB with hatch
	29-601-85	Front railing post SB
	29-603-60	Scaffold tube 2370 SB
	29-602-40	Rear railing frame ST 2370 SB
Panel width 135	29-600-55	Alu(minium) platform ST 1320 SB
	29-601-85	Front railing post SB
	29-603-65	Scaffold tube 1320 SB
	29-602-55	Rear railing frame ST 1320 SB
Inside corner	29-600-50	Alu(minium) platform ST 1590 SB

Table 5.2

Description	Ref. No.
Scaffolding bracket SB	29-603-10
Alu(minium) platform ST 2370 SB with hatch	29-600-45
Front railing post SB	29-601-85
Scaffold tube 2370 SB	29-603-60
Scaffold tube 1320 SB	29-603-65
Rear railing post SB	29-601-90
Rear railing frame ST 2370 SB	29-602-40
Side railing SB	29-601-75
Telescopic ladder 1700-3180 SB	29-603-45
Ladder fixture panel SB	29-603-80

## Basic assembly

1. Attach the scaffolding brackets SB to the panel's multi-function profile with a flange screw 28 and a flange screw 18 (Fig. 6.1). The flange screws must be ordered separately.
2. Attach the front railing posts SB to the scaffolding brackets SB and assemble the front railing with the scaffold tubes (Fig. 6.2). See p. SB-4 and SB-5 for the scaffold tubes usable for the various formwork widths.
3. Place the aluminium platform – with or without hatch – onto the scaffolding brackets SB (Fig. 6.3). Make sure that the profiles on the underside of the platform rest between the L profiles of the scaffolding brackets. The platform is attached with the bolts integrated in the scaffolding brackets and secured with cotter pins.
4. Attach the rear railing posts to the scaffolding brackets SB (Fig. 6.3).

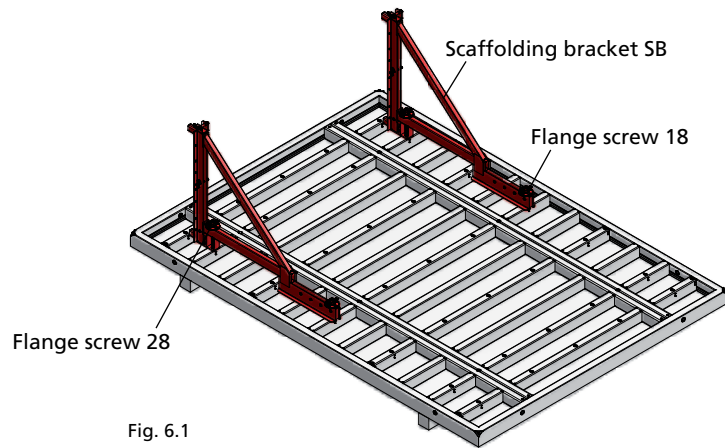


Fig. 6.1

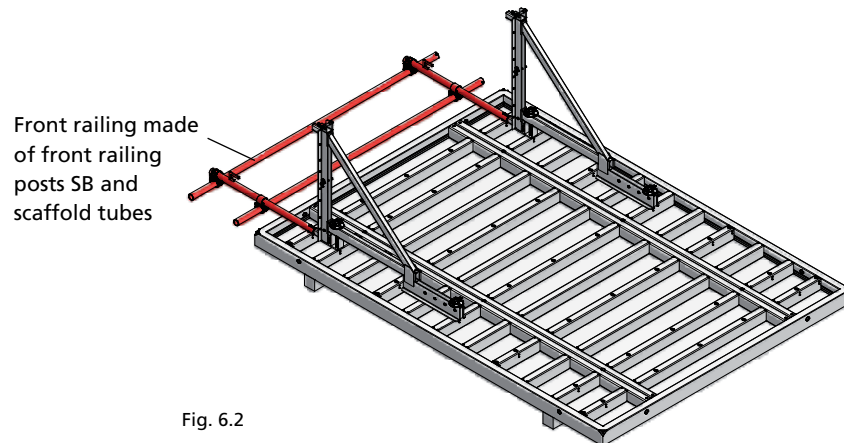


Fig. 6.2

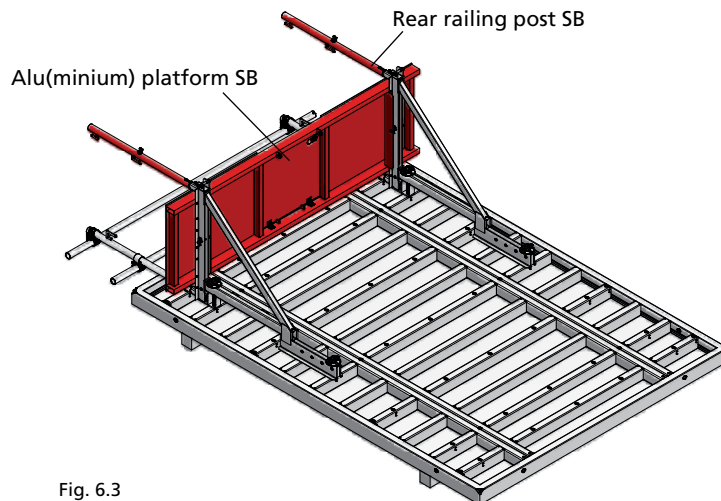


Fig. 6.3

Description	Ref. No.
Scaffolding bracket SB	29-603-10
Flange screw 28.....	29-401-12
Flange screw 18.....	29-401-10
Front railing post SB.....	29-601-85
Scaffold tube	
2470 SB.....	29-603-55
1220 SB.....	29-603-70
2370 SB.....	29-603-60
1320 SB.....	29-603-65
Alu(minium) platform	
M 2470 SB.....	29-600-10
M 2470 SB with hatch	29-600-15
M 1220 SB.....	29-600-25
ST 2370 SB.....	29-600-40
ST 2370 SB with hatch	29-600-45
ST 1320 SB.....	29-600-55
Rear railing post SB.....	29-601-90

## Basic assembly

5. Attach the rear railing frame to the rear railing posts SB (Fig. 7.1). See p. SB-4 and SB-5 for the rear railing frames usable for the various formwork panels.

6. Attach the side railings SB with the integrated wedges to the rear railing frame (Fig. 7.2).

7. Attach the ladder fixture panel SB at the panel's bottom with a flange screw 18. The flange screw must be ordered separately. (Fig. 7.3).

8. Attach the telescopic ladder with its integrated bolt to the access hatch of the aluminium platform and secure it with a cotter pin (Fig. 7.3). Then secure the low end of the telescopic ladder to the ladder fixture panel SB at the bottom of the panel.

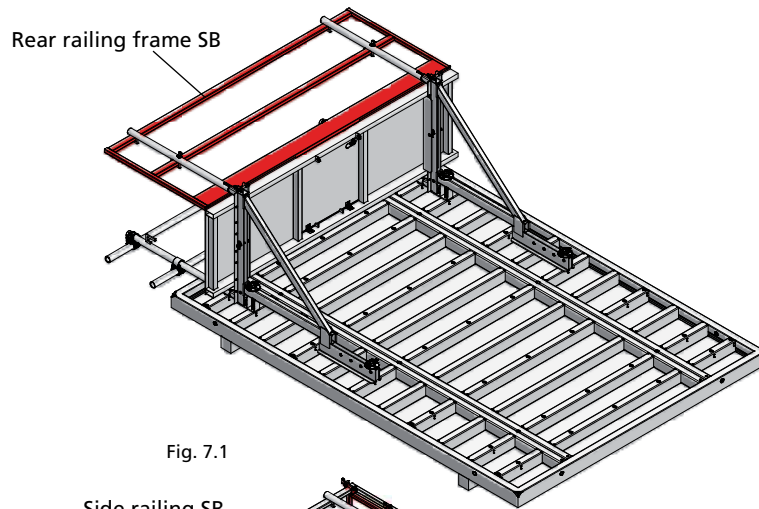


Fig. 7.1

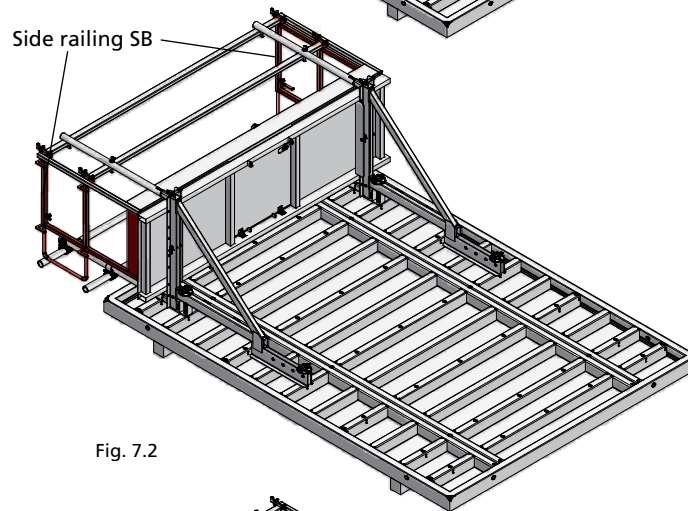


Fig. 7.2

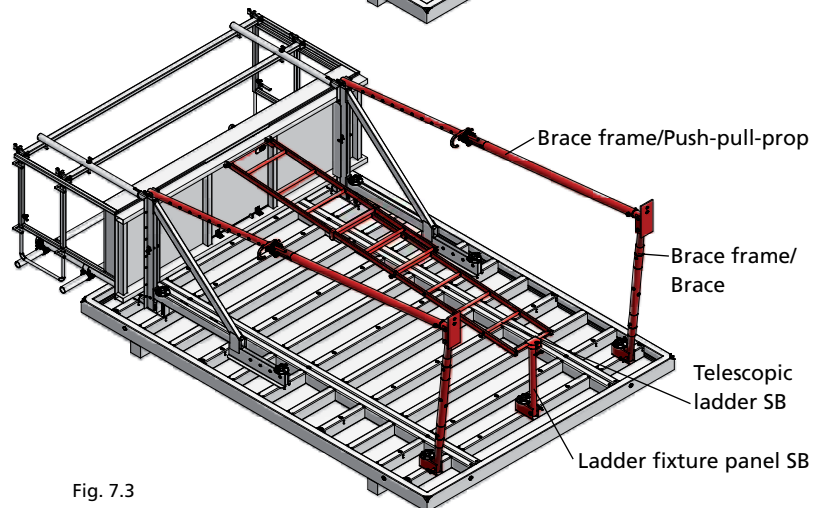


Fig. 7.3

Description	Ref. No.
Rear railing frame	
M 2470 SB.....	29-602-10
M 1220 SB.....	29-602-25
ST 2370 SB.....	29-602-40
ST 1320 SB.....	29-602-55
Side railing SB.....	29-601-75
Ladder fixture panel SB.....	29-603-80
Flange screw 18.....	29-401-10
Telescopic ladder	
1700-3180 SB.....	29-603-45
2600-4100 SB.....	29-603-40

## Basic assembly

9. Attach the push-pull props (of the brace frame) to the scaffolding brackets SB and the formwork prop connectors with flange screws 18 to the multi-function profile at the bottom of the formwork panel (Fig. 8.1).

### Please note

- The formwork height should be identical with the length of the push-pull props (Table 8.2).
- Use foot plates and dowels to firmly attach the brace frames or push-pull props with the ground, e.g. with a prefab base plate.
- Once the formwork unit has been erected and is in vertical position – see p. SB-11 – and before anchoring the formwork to the ground, the properties and the rating of the dowels must be verified according to the federal, state and local codes and regulations.

### Brace frame 250

It consists of a push-pull prop R 250, a brace SRL 120 and a double-jointed foot plate.

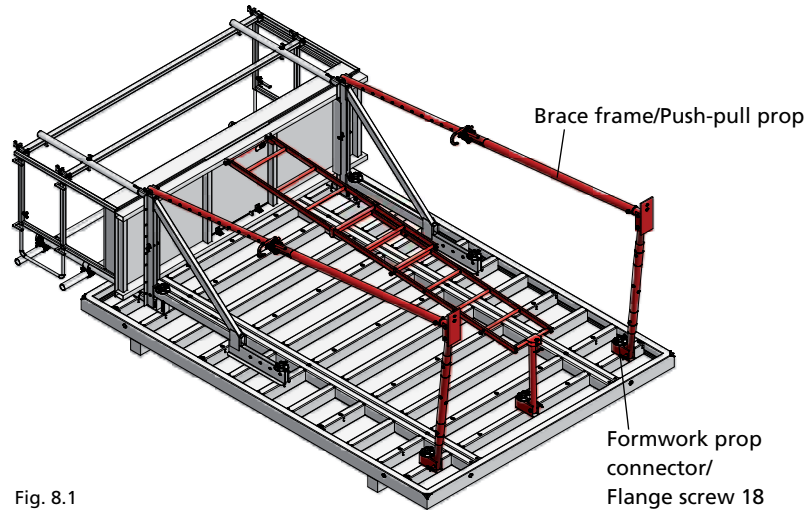


Fig. 8.1

Description	Ref. No.	Adjustment range [m]	Adm. pressure [kN]	Adm. tensile force [kN]	Weight [kg]	Recommended area of application
<b>Braces SRL</b>						
SRL 120	29-108-80	0,90–1,50	20,0	30,0	8,3	Horizontal alignment of bottom of wall formwork, brace frame 250, climbing formwork
SRL 170	29-108-90	1,20–2,20	25,0	40,0	10,5	Folding shaft formwork
<b>Push-pull props R</b>						
R 160	29-109-40	1,35–2,00	25,0	25,0	11,0	Horizontal and vertical alignment
R 250	29-109-60	1,90–3,20	25,0	30,0	18,5	Top brace of brace frame 250 for formw. heights up to 4,05 m
R 460	29-109-80	3,40–5,20	20,0	30,0	35,8	Wall formwork up to 6,00 m high
R 630	29-109-85	5,10–7,60	9,5	25,0	68,0	Wall formwork up to 9,00 m high
<b>Formwork heights exceeding 6,00 m</b>						
Triplex R 680	—	6,40–7,20	45,0	45,0	123,0	Wall formwork, props
Triplex R 780	—	7,40–8,20	45,0	45,0	139,0	Wall formwork, props
Triplex R 880	—	8,40–9,20	45,0	45,0	149,0	Wall formwork, props
Triplex R 980	—	9,40–10,20	35,0	45,0	160,0	Wall formwork, props

Table 8.2

Description	Ref. No.
Double-jointed foot plate.....	29-402-32
Formwork prop connector.....	29-804-85
Flange screw 18.....	29-401-10



## Basic assembly - Height-extended units

Like the basic units, height-extended units are also assembled flat on the ground with all required SecuritBasic parts. This page shows an example with hatches and telescopic ladders.

1. Assemble bottom and height extension panels.
2. Start adding the SecuritBasic equipment from bottom to top by performing steps 1 through 9 (for a unit with hatch) or steps 1 through 6 and step 9 (for a unit without hatch). See p. SB-6 through SB-8.
3. Add the SecuritBasic equipment for the 2nd level. The steps are the same as before except for the attachment of the telescopic ladder if one is mounted. Its low end at the 1st and other platforms is attached to the rear railing frame – not to the panel. Add the ladder fixture railing SB with its integrated bolt to the rear railing frame and attach the ladder to the fixture (Fig. 9.1 and 9.2 Detail).

### Scaffolding brackets and safety nets

The vertical distance between two scaffolding brackets should be from 2,00 m to 3,00 m. If it exceeds 3,00 m, a safety net must be installed around the access area. We generally recommend installing safety nets.

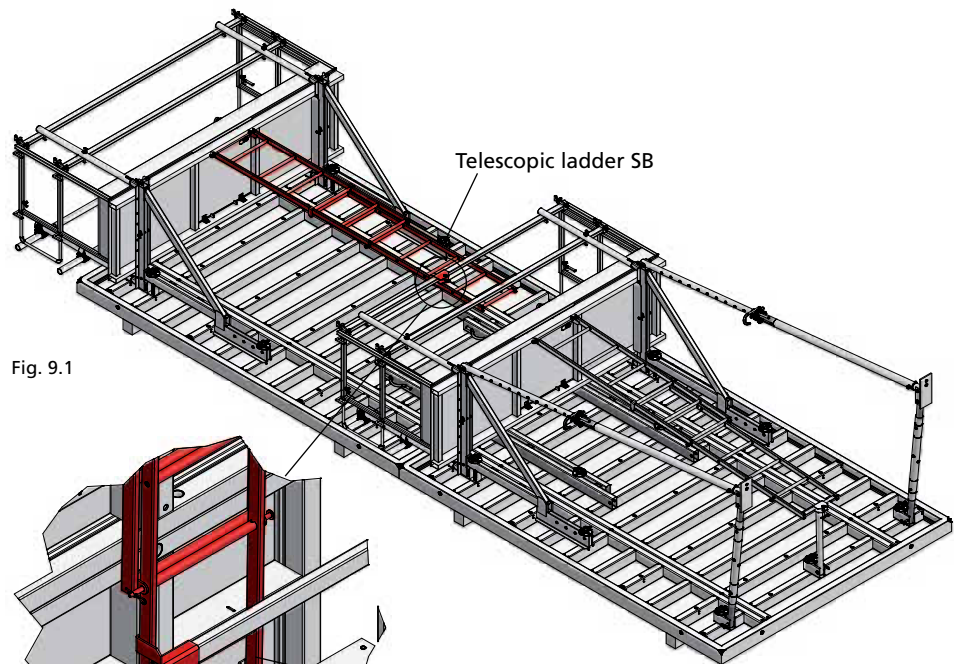


Fig. 9.1

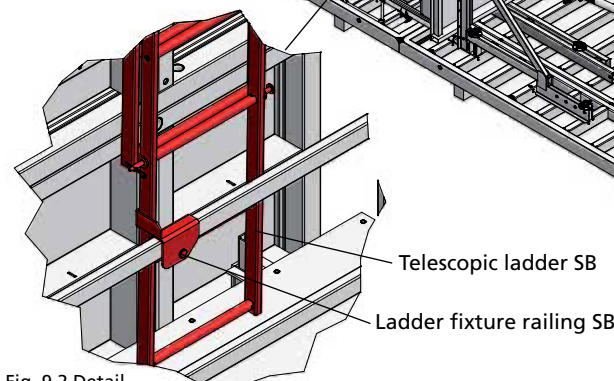


Fig. 9.2 Detail

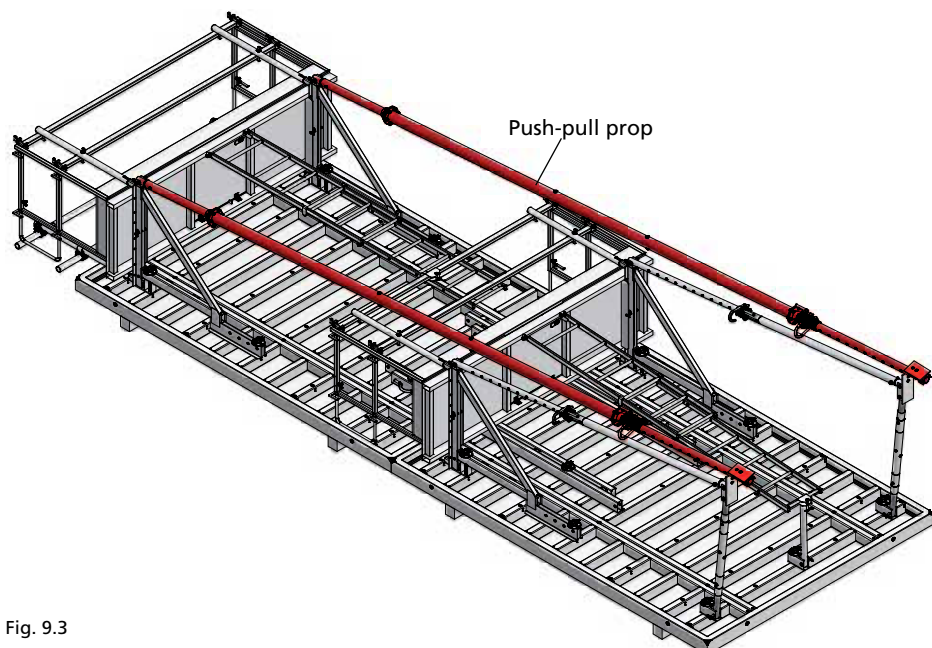


Fig. 9.3

Description	Ref. No.
Telescopic ladder	
1700-3180 SB.....	29-603-45
2600-4100 SB.....	29-603-40
Ladder fixture railing SB	
.....	29-603-75

## Basic assembly – Height-extended units

The number of required and feasible platforms depends on the adjustment range of the telescopic ladders and the vertical distance between the scaffolding brackets that is necessary to walk and work on the platforms without any problems.

Note that in the height configuration shown on this page the scaffolding brackets are attached to both the bottom and the top panel.

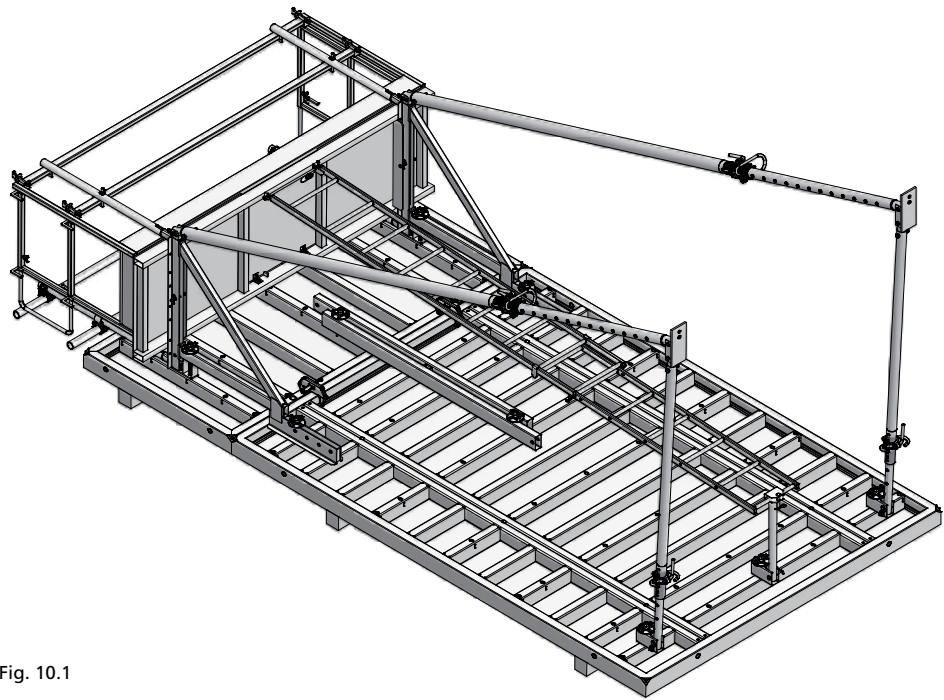


Fig. 10.1

## Formwork assembly – Erecting a formwork unit

### Important notes for lifting units

When erecting, crane-ganging and laying down formwork units make sure to observe the following rules. They are valid for basic formwork units, height-extended units and panel gangs.

■ Lifting arms 1000/1750 SB must be used when erecting formwork (that lies on the ground) from its horizontal to a vertical position. The lifting arms make sure the platform railings are not damaged when erecting the formwork.

■ Lifting arms must also be used when laying down vertical formwork into a horizontal position on the ground.

■ Erecting and laying down formwork is also referred to as horizontal lifting in this manual.

■ When moving erected formwork from one place to another and the formwork remains in vertical position throughout the lifting process, e.g. from one cycle to the next, lifting arms or crane hooks can be used – but not a combination of both. This method of transport is also referred to as vertical lifting in this manual.

■ Always two lifting arms or crane hooks are required per transport unit.

### Erecting a base unit with lifting arms

Two lifting arms 1000/1750 SB are required to erect a unit (Fig. 11.1).

The maximum load capacity of a lifting arm is 1000 kg for horizontal lifting and 1750 kg for vertical lifting (see p. SB-19).

The lifting arm is suspended over the panel's frame and attached with a flange screw 18 to a Dywidag-threaded nut of the panel's multi-function profile. The integrated safety mechanism prevents the lifting arm from disengaging.

Once the unit is erected and in vertical position (Fig. 11.2), its push-pull props are attached to the ground or base slab.

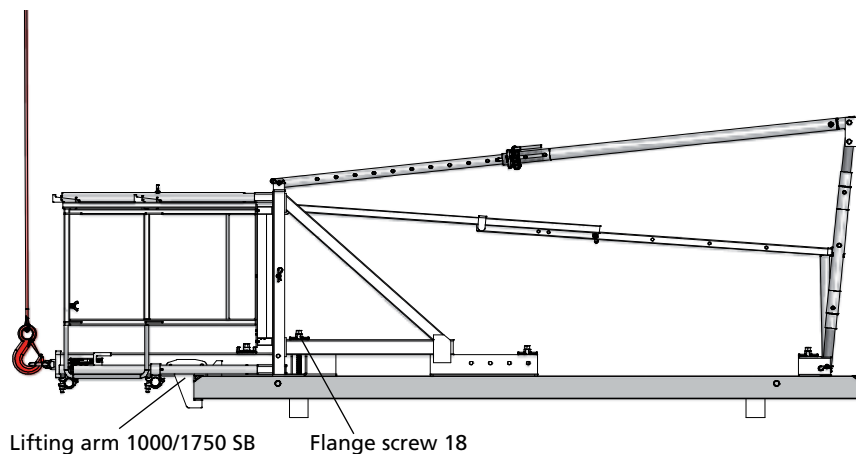


Fig. 11.1

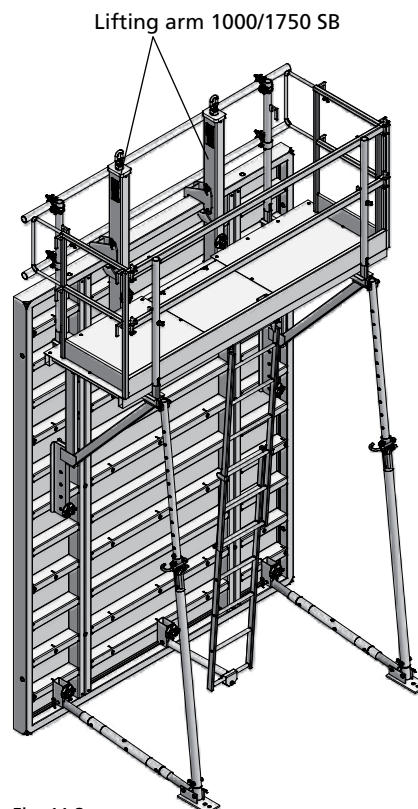


Fig. 11.2

Description	Ref. No.
Lifting arm 1000/1750 SB.....	29-603-30

## Formwork assembly – Erecting height-extended units

Erecting a height-extended unit requires the same steps and equipment as erecting a basic unit (see p. SB-11).

Two lifting arms 1000/1750 SB are required to erect a unit (Fig. 12.1).

The maximum load capacity of a lifting arm is 1000 kg for horizontal lifting and 1750 kg for vertical lifting (see p. SB-19).

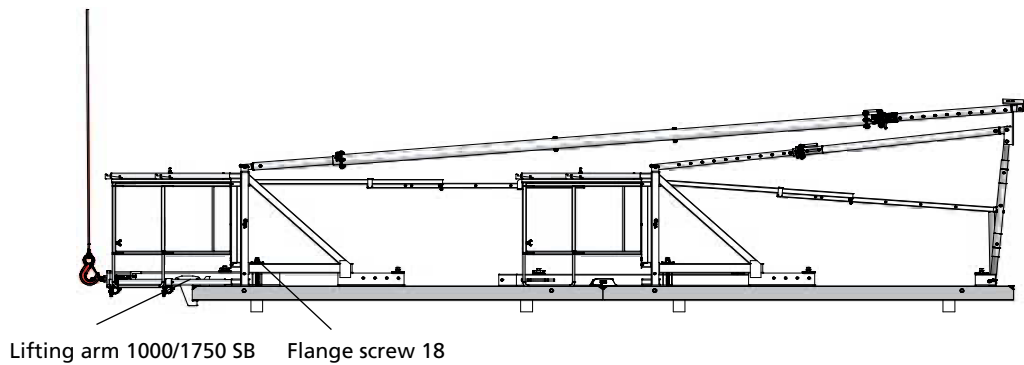


Fig. 12.1

The lifting arm is suspended over the panel's frame and attached with a flange screw 18 to a Dywidag-threaded nut of the panel's multi-function profile. The integrated safety mechanism prevents the lifting arm from disengaging.

Once the unit is erected and in vertical position (Fig. 12.2), its push-pull props are attached to the ground or base slab.

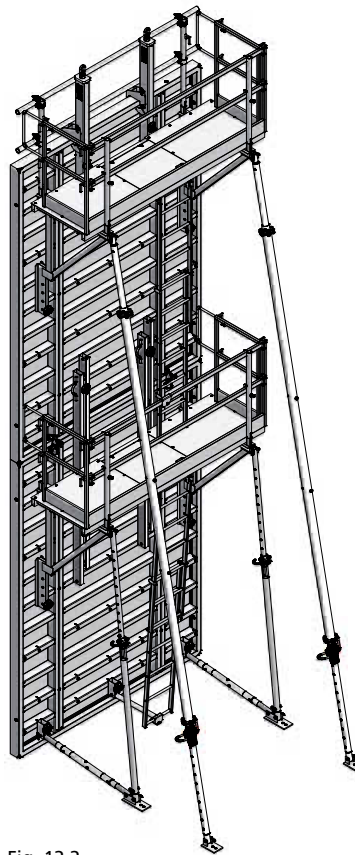


Fig. 12.2

Description	Ref. No.
Lifting arm 1000/1750 SB.....	29-603-30

## Formwork assembly – Positioning vertical formwork units

This page describes how to add formwork units to an existing one that has been erected and is in vertical position. Note that this unit must be equipped with a hatch, a ladder and front railings on both ends (Fig. 13.1).

1. Person A ascends to the platform of the erected unit and removes the crane slings.
2. A second formwork unit – with or without hatch and ladder – is assembled on the ground as described on p. SB-6 through SB-8 and equipped with lifting arms. No front railing is required on the platform end that is going to adjoin to the platform of the unit already in vertical position (Fig. 13.2).

3. Person B (on the ground) attaches the crane slings to the lifting arms of the second unit. The unit is erected and placed directly next to the first unit. The crane slings must not be detached from the lifting arms at this time. Person B now connects the adjoining panels with assembly locks and firmly attaches the push-pull props to the ground or base slab.

4. On the platform of the first unit, person A removes the side railing on the end adjoining the second platform, walks to that platform and detaches the crane slings from the lifting arms.

Steps 2 through 4 are repeated until all units are in place (Fig. 13.3).

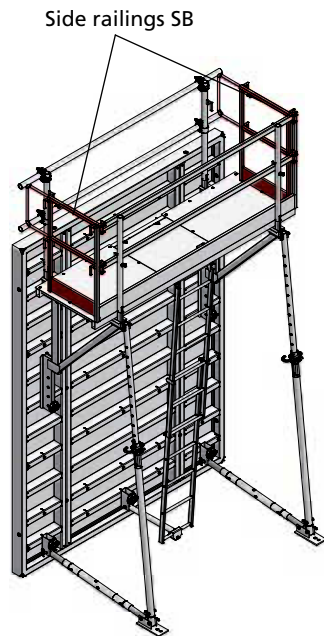


Fig. 13.1

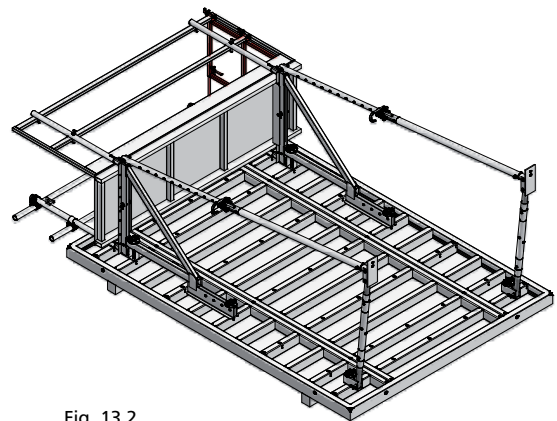


Fig. 13.2

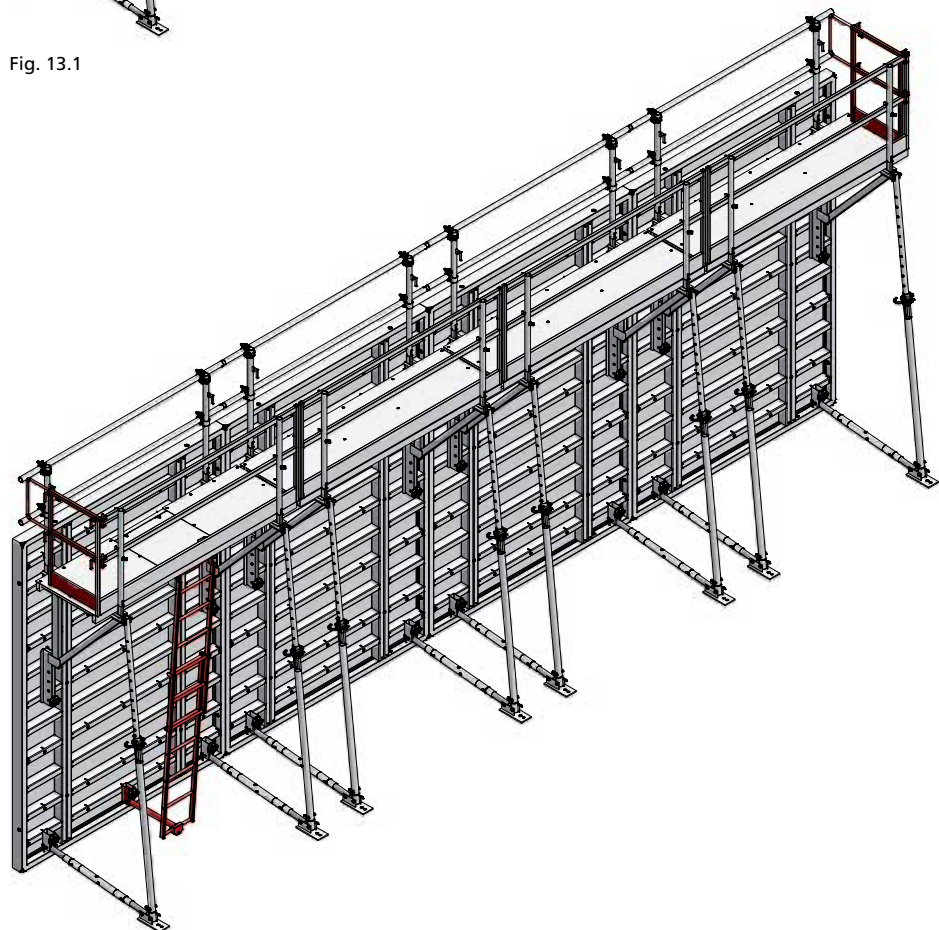


Fig. 13.3

## Formwork assembly – Corners (Mammut / Mammut 350)

The M 2470 SB aluminium platform is used for panels 250 cm wide and the M 1220 SB aluminium platform for panels 125 cm wide.

Inside corner areas are configured using the above panel widths plus an additional M 1690 SB aluminium platform and an 880 SB scaffolding bracket (Fig. 14.1). The 880 SB scaffolding bracket is used instead of the regular SB scaffolding bracket directly at the inside corner where a rear railing post is not required and not possible (Fig. 14.1).

A rear railing frame 1650 SB must be installed at the M 2470 SB aluminium platform placed directly at the inside corner and at the M 1690 SB aluminium platform (Fig. 14.1).

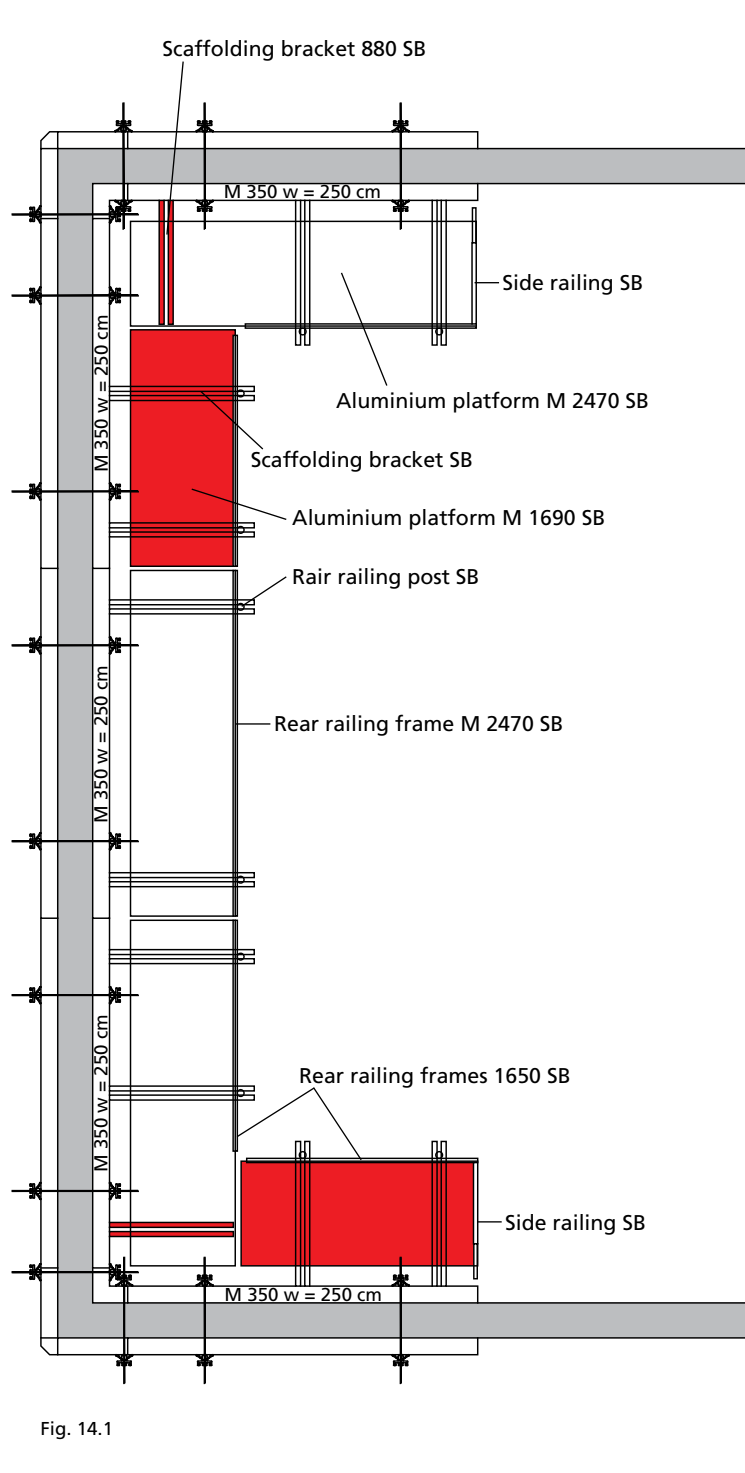


Fig. 14.1

Description	Ref. No.
Scaffolding bracket 880 SB.....	29-603-20
Alu(minium) platform M 2470 SB.....	29-600-10
M 2470 SB with hatch	29-600-15
M 1690 SB.....	29-600-20
M 1220 SB.....	29-600-25
Rear railing post SB.....	29-601-90
Rear railing frames M 2470 SB .....	29-602-10
M 1220 SB .....	29-602-25
1650 SB .....	29-602-60

## Formwork assembly – Corners (StarTec)

The ST 2370 SB aluminium platform is used for panels 240 cm wide and the ST 1320 SB aluminium platform for panels 135 cm wide.

Inside corner areas are configured using the above panel widths plus an additional ST 1590 SB aluminium platform and an 880 SB scaffolding bracket (Fig. 15.1). The 880 SB scaffolding bracket is used instead of the regular SB scaffolding bracket directly at the inside corner where a rear railing post is not required and not possible (Fig. 15.1).

A rear railing frame 1550 SB must be installed at the ST 2370 SB aluminium platform placed directly at the inside corner and at the M 1690 SB aluminium platform (Fig. 15.1).

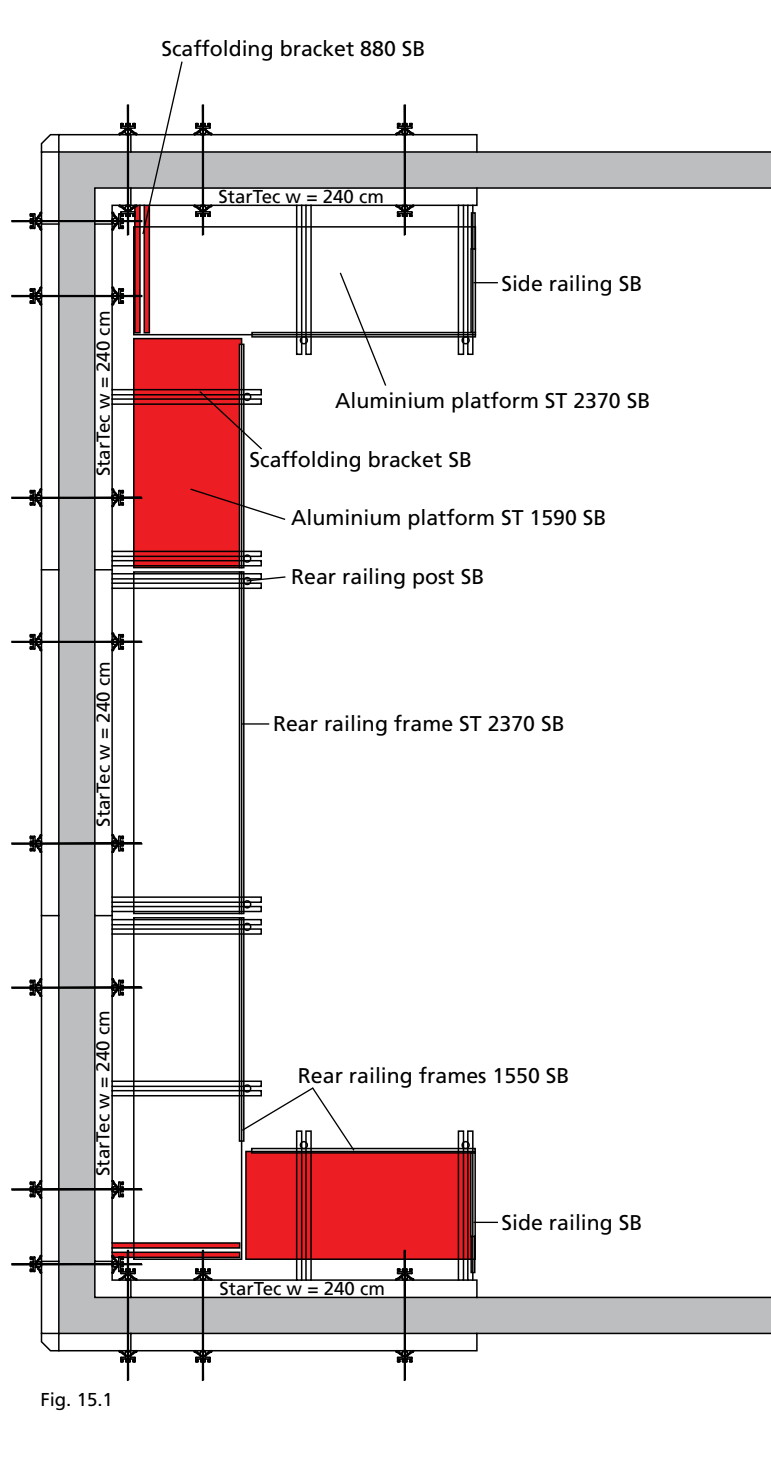


Fig. 15.1

Description	Ref. No.
Scaffolding bracket 880 SB .....	29-603-20
Alu(minium) platform	
ST 2370 SB .....	29-600-40
ST 2370 SB with hatch .....	29-600-45
ST 1590 SB .....	29-600-50
ST 1320 SB .....	29-600-55
Rear railing post SB .....	29-601-90
Rear railing frames	
ST 2370 SB .....	29-602-40
ST 1550 SB .....	29-602-50
ST 1320 SB .....	29-602-55
1650 SB .....	29-602-60

## Formwork assembly – Length compensation

A gap between two platforms can be bridged with wooden planks.

After positioning the units (see p. SB-13) and prior to bridging the gap, the platforms ends at the gap must be secured with side railings SB against falling down (Fig. 16.1).

The wooden planks (single planks or complete planking) are placed over the gap by a person standing on a secured platform (Fig. 16.1 und 16.2).

The bridged gap requires a rear railing frame 1650 SB to be mounted. Thanks to its integrated wedges, it can be mounted without the need for rear railing posts and is attached with its wedges to the adjoining rear railing frames (Fig. 16.2).

The front railing is made with swivel-joint couplers 48/48 and scaffold tubes 48,3 that are as long as the gap is wide.

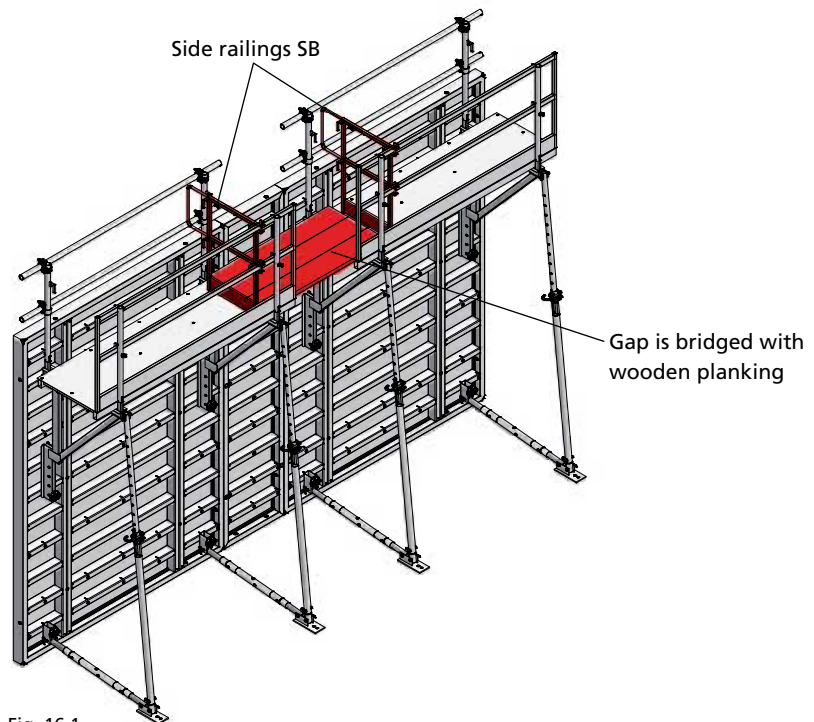


Fig. 16.1

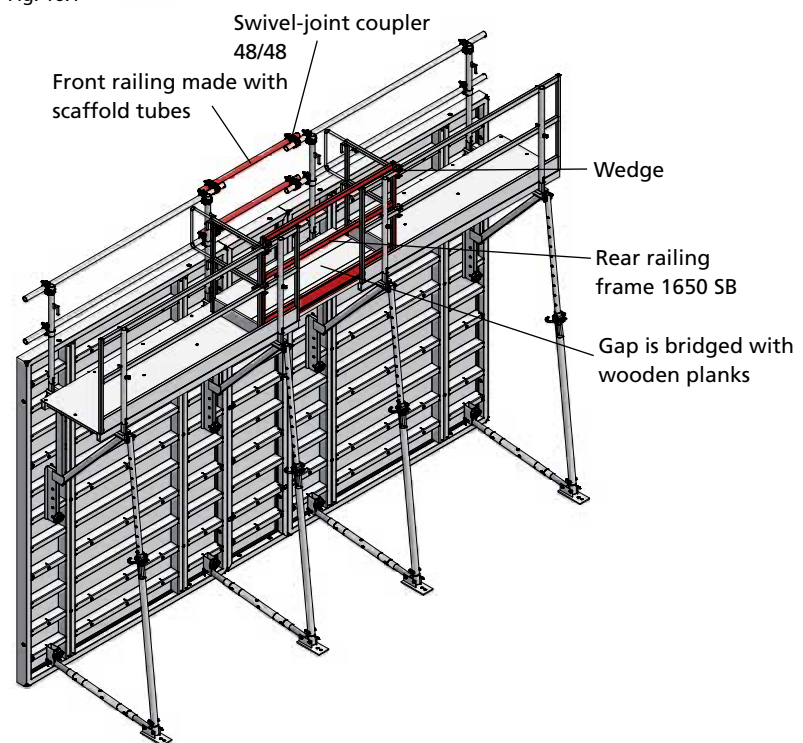


Fig. 16.2

Description	Ref. No.
Rear railing frame 1650 SB.....	29-602-60
Scaffold tube 48.3/2470 SB.....	29-603-55
48.3/2370 SB.....	29-603-60
48.3/1320 SB.....	29-603-65
48.3/1220 SB.....	29-603-70
Swivel-joint coupler 48/48 .....	29-412-52



## Formwork assembly – Closing formwork

When the SecuritBasic units are erected and in position, the opposite closing formwork can be put in place and firmly be tied with the SecuritBasic units using DW tie rods, articulated flange nuts and assembly locks.

If the closing formwork is not equipped with scaffolds (Fig. 17.1), the DW tie rods, articulated flange nuts and assembly locks are installed from a mobile platform.

If the closing formwork is equipped with SecuritBasic platforms (Fig. 17.2), the DW tie rods, articulated flange nuts and assembly locks are easily installed from the SecuritBasic platform.

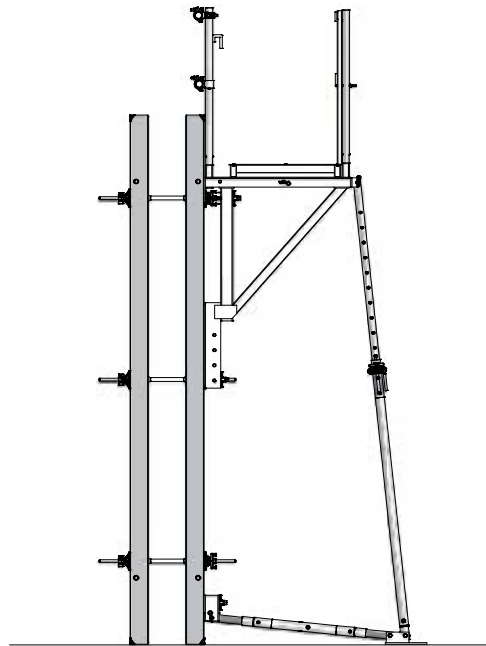


Fig. 17.1

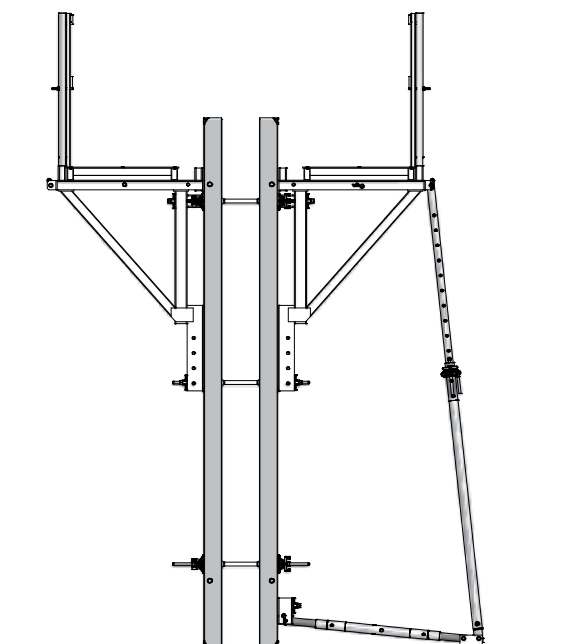


Fig. 17.2

Description	Ref. No.
Tie rod DW 15/90 .....	29-900-76
Articulated flange nut 15/120.....	29-900-10
Flange nut 100 .....	29-900-20

## Crane-ganging – With crane hooks

Erected formwork units can be crane-ganged in a vertical position (vertical lifting) using crane hooks or lifting arms 1000/1750 SB. The M crane hook is used for SecuritBasic units with Mammut or Mammut 350 panels while the AS crane hook is used for SecuritBasic units with StarTec panels.

Both the M crane hook and the AS crane hook (Fig. 18.1) have a load capacity of 15 kN (1,5 t).

### Handling

1. Open the safety lever as far as possible (Fig. 18.2).
2. Push the crane hook over the panel profile until the claw engages completely in the groove.
3. Let go of the safety lever and it will go back to its start position and lock the crane hook. Check that the crane hook is locked before using the crane hook (Fig. 18.3).

### Important handling notes

- When moving panels, make sure to always use 2 crane hooks, also when moving single panels.
- When moving horizontal panels, the crane hooks must always be attached at the cross stiffeners (Fig. 18.4).

### When to replace the crane hook

If the reference dimension exceeds

- 61 mm (M crane hook)
  - 41 mm (AS crane hook)
- the crane hook must be replaced immediately. The crane hook must also be replaced if only one side of the hook exceeds the reference dimension (Fig. 18.5 and 18.6).

### Safety check

Always check the crane hook before using it. Do not overload the crane hook. Overloading causes damage. A damaged crane hook is not capable of full load and its safe use can no longer be guaranteed.

### Safety regulations

When using our products, the federal, state and local codes and regulations must be observed. Also observe the operating instructions delivered with the crane hook.

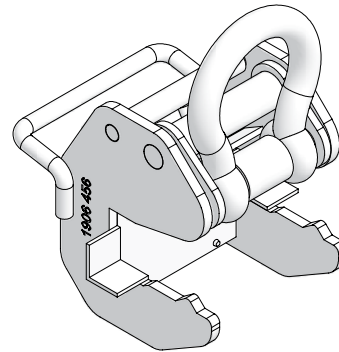


Fig. 18.1

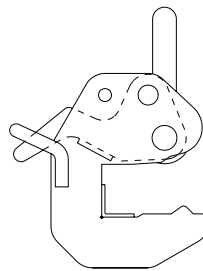


Fig. 18.2

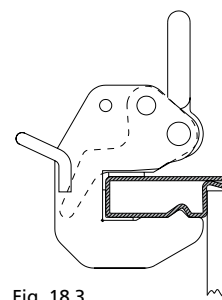


Fig. 18.3

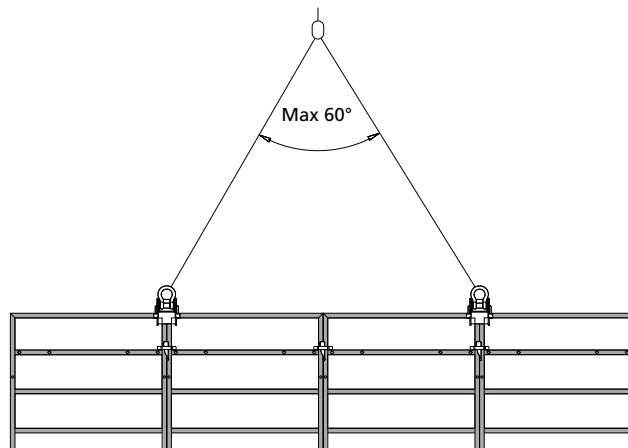


Fig. 18.4

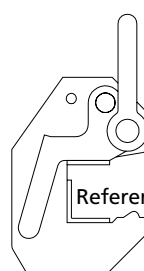


Fig. 18.5 – M crane hook

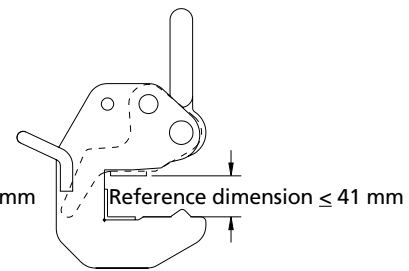


Fig. 18.6 – AS crane hook

Description	Ref. No.
M crane hook .....	29-401-21
AS crane hook .....	29-203-89

**Crane-ganging – With lifting arms 1000/1750 SB**

The lifting arms 1000/1750 SB can be used for all kinds of lifting and transport: erecting units from the ground into a vertical position (see p. SB-11), laying down units on the ground and for crane-ganging erected units in a vertical position.

Two lifting arms 1000/1750 SB are required to erect, lay down or crane-gang a unit (Fig. 19.4).

The maximum load capacity of a lifting arm is 1000 kg for horizontal lifting (Fig. 19.2) and 1750 kg for vertical lifting (Fig. 19.3).

The lifting arm is suspended over the panel's frame and attached with a flange screw 18 to a Dywidag-threaded nut of the panel's multi-function profile. The integrated safety mechanism prevents the lifting arm from disengaging.

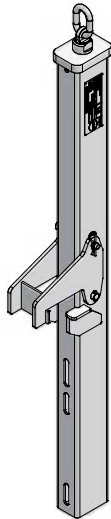


Fig. 19.1

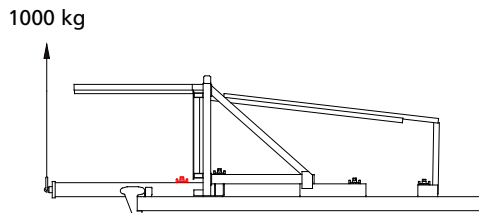


Fig. 19.2 Horizontal

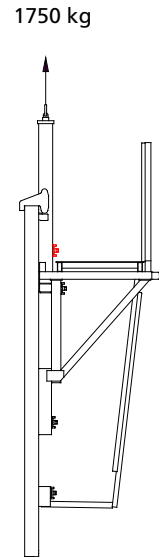


Fig. 19.3 Vertical

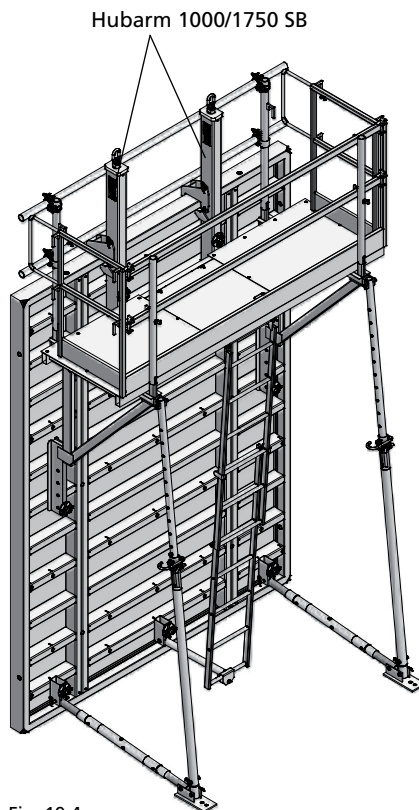


Fig. 19.4

Bezeichnung	Artikel-Nr.
Hubarm 1000/1750 SB	29-603-30

## Crane-gangging – Large-size panel units

Like basic units, complete panel gangs and height-extended units – hereafter also called transport unit – can be erected, laid down or crane-gangged using lifting arms or crane hooks (crane hooks for vertical lifting only).

When moving gangs or height-extended units make sure to observe this:

- The entire transport unit must not exceed the load capacity of the crane hooks or lifting arms.
- Two M or AS crane hooks, each with a load capacity of 15 kN (1,5 tons) are required per transport unit. Make sure to attach the crane hooks symmetrically to the centre of gravity.
- Two lifting arms 1000/1750 are required per transport unit.
- Height-extended units: In order to provide the necessary flexural rigidity, alignment rails must be mounted to the panels with flange screws (Fig. 20.2).
- Height extension with horizontal panels (Fig. 20.2): When using crane hooks, they must be attached over the panel's cross stiffeners to prevent them from sliding.

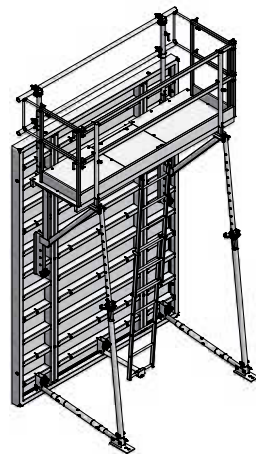


Fig. 20.1

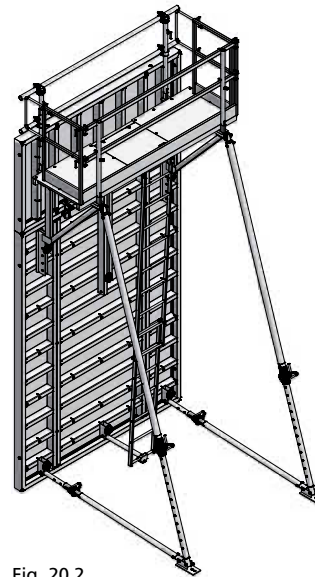


Fig. 20.2

### Examples of transport units

**Fig. 20.1**  
Basic unit  
3,50 x 2,50 m = 8,75 m<sup>2</sup>  
Weight 843 kg

**Fig. 20.2**  
Height-extended unit  
4,75 m x 2,50 m =  
11,88 m<sup>2</sup>, with an  
M alignment rail 180  
Weight 1121 kg

**Fig. 20.3**  
Panel gang  
5,00 m x 3,50 m =  
17,50 m<sup>2</sup>  
Weight 1652 kg

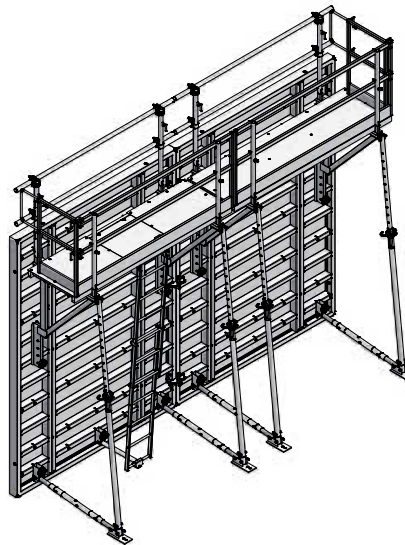


Fig. 20.3

## Formwork stripping

Do not start stripping before the concrete has set to the point where it cannot deform anymore. It is best to start stripping with the closing formwork. Stripping of both the closing formwork and the formwork with the SecuritBasic platforms is done as follows:

1. Remove the articulated flange nuts and tie rods section by section. Make sure the unbraced formwork is immediately secured against falling over or strip it immediately.
2. Loosen the formwork panels or large panel units by removing the assembly locks at the panel joints and then remove the panels with a crane. Before removing them with a crane, make sure the formwork is detached from the concrete.

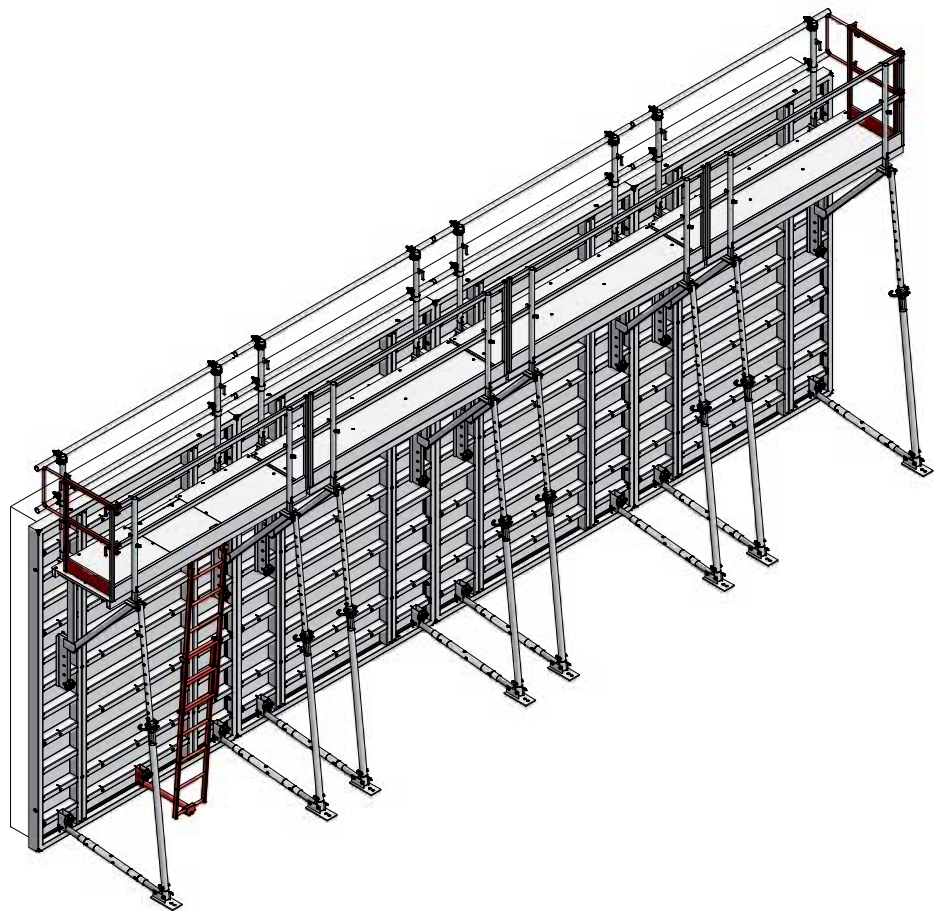


Fig. 21.1

## Formwork stripping

3. Clean the facing and remove any concrete. Before the next use, spray the facing with the release agent MevaTrenn FT8 (for the alkus facing). Observe the operating instructions for the alkus facing. Note that the release agent must not be stored in galvanized containers.

### Please note

When transporting large panel gangs with a crane, the working scaffold and wall braces are not detached from the panel units. While in vertical position, all components are cleaned and sprayed before being transported together to the next place of use.

If there is no further use for the panel units, the working scaffold and wall braces are detached and disassembled in horizontal position, cleaned and stacked for transport.

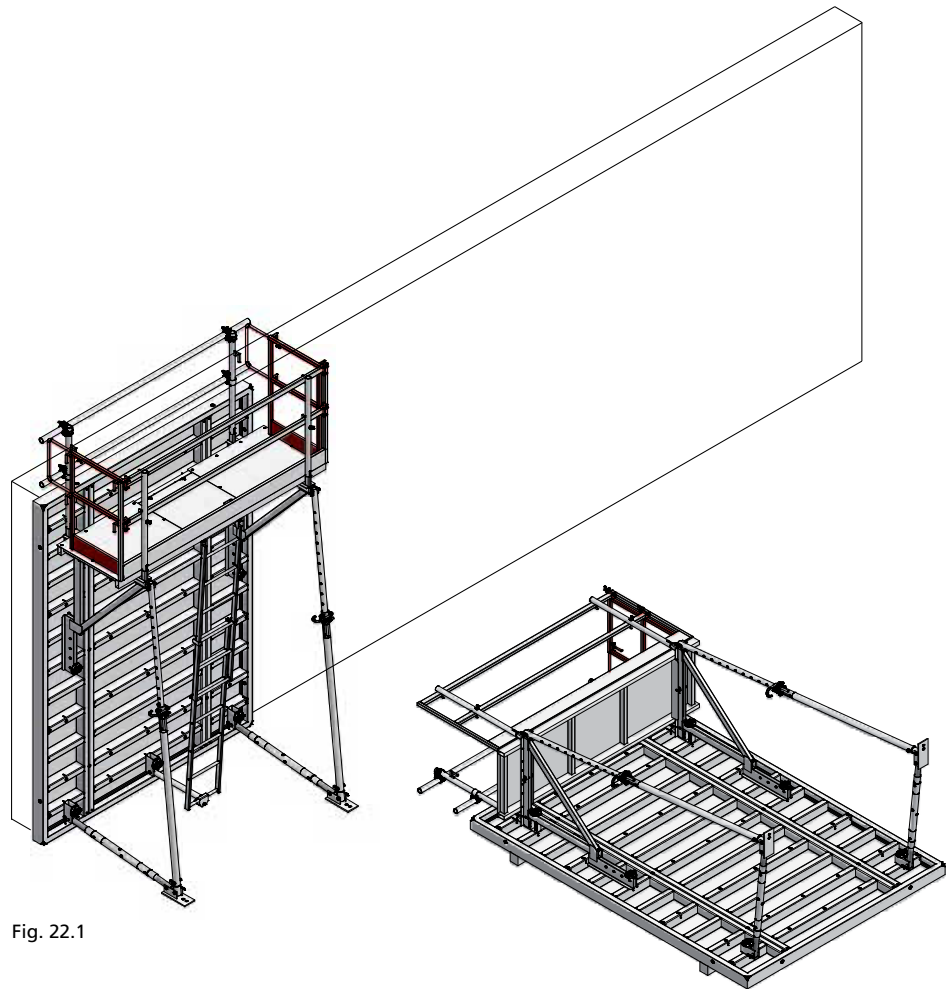


Fig. 22.1

## Material list – Mammut / Mammut 350

The table on this page shows all SecuritBasic items that are required for straight walls without corners when using Mammut and Mammut 350 panels that are 250 cm or 125 cm wide and used for formwork heights from 2,50 m to 9,50 m.

For the items required for corner configurations refer to p. SB-14.

The table does not list  
■ Formwork panels  
■ Anchoring material  
■ Formwork accessories such as assembly locks  
■ Safety equipment such as safety nets

### Scaffolding brackets and safety nets

The vertical distance between two scaffolding brackets should be from 2,00 m to 3,00 m. If it exceeds 3,00 m, a safety net must be installed around the access area. We generally recommend installing safety nets. They must be ordered separately.

- Platform with hatch
- Platform without hatch

Ref. No.	Description	Formwork height (cm)															
		250	300	350	375	425	475	500	550	600	650	700	750	800	850	900	950
29-603-10	Scaffolding bracket SB	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
29-600-25	Alu(minium) platform M 1220 SB	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
29-600-15	Alu(minium) platform M 2470 SB with hatch	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
29-603-40	Telescopic ladder 2600-4100 SB					1	1	1					1	1			
29-603-45	Telescopic ladder 1700-3180 SB	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
29-603-75	Ladder fixture railing SB							1	1	1	1	1	1	1	1	1	1
29-603-80	Ladder fixture panel SB	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
or																	
29-600-10	Alu(minium) platform M 2470 SB (out hatch)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
29-603-55	Scaffold tube 2470 SB	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
29-603-55	Scaffold tube 1220 SB	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
29-601-85	Front railing post SB	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
29-601-90	Rear railing post SB	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
29-602-10	Rear railing frame M 2470 SB	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
29-602-25	Rear railing frame M 1220 SB	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
29-601-75	Side railing SB	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
29-401-10	Flange screw 18	4	5	4	5	4	5	4	5	6	7	6	7	6	7	8	9
29-401-12	Flange screw 28	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
29-109-25	Braces without formwork prop connector	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
29-804-85	Formwork prop connector	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
29-109-60	Push-pull prop R 250					2	2	2	2	2	2	2	2	2	2	2	2
29-109-80	Push-pull prop R 460					2	2	2	2	2	2	2	2	2	2	2	2
29-109-85	Push-pull prop R 630								2	2	2	2	2	2	2	2	2
29-802-48	Double-jointed foot plate					2	2	2	2	2	2	2	2	2	2	2	2
29-407-90	Triplex R 300 RH thread with foot plate													2	2	2	2
29-407-55	Triplex Intermediate piece R 100												2	2	2	2	2
29-407-60	Triplex Intermediate piece R 200																
29-407-65	Triplex Intermediate piece R 300																
29-407-93	Triplex R 300 LH																
42-413-50	Head bolt 16/90 galv.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
62-010-04	Cotter pin 4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
29-603-30	Lifting arm SB	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Table 23.2 Mammut 350 / Mammut





## Transport

Make sure that all material is secured properly.

### Recommendation

Use one load/cargo strap per 1 metre of cargo. That means for a fully loaded truck with a trailer length of 13,60 m, 14 load or cargo straps would be required.

Depending on their size, Mammut, Mammut 350 and StarTec panels require 2 or 3 straps.

When moving panel stacks make sure that panels are secured against shifting.

MEVA secures panels with the following safety bolts:

### Mammut 350:

- 250 cm wide panels with the safety bolt M 350/250 grey
- All other panels with the safety bolt M black

### StarTec:

- 240 cm wide panels with safety bolt ST 270/240 grey
- All other StarTec panels with the safety bolt AS/ST black (Fig. 25.2).

These plugs should also be used by the job-site when returning material.

### Safety regulations

When using or transporting our products, the federal, state, and local codes and regulations must be observed.

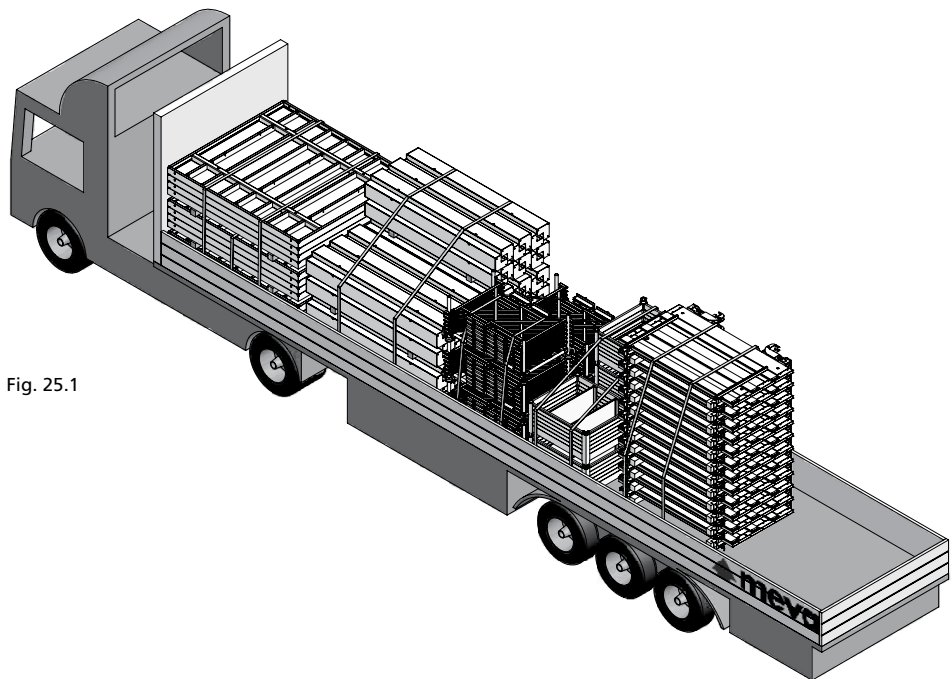


Fig. 25.1

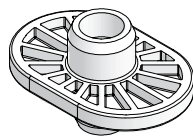


Fig. 25.2

Description	Ref. No.
Safety bolt	
AS/ST black.....	40-131-10
ST 270/240 grey.....	40-131-15
M black.....	40-131-20
M 350/250 grey.....	40-131-25

## Service

### Cleaning

The formwork is cleaned professionally upon return. Cleaning is done using industrial equipment with assembly lines.

### Regeneration

The regeneration is carried out as follows: The frames are checked and, if necessary, repaired, painted and provided with a new facing.

As long as the formwork equipment is up-to-date, a regeneration will always be a more economical solution than purchasing new formwork.

Please note that the cleaning and regeneration service is not available in all countries in which MEVA does business.

### Rentals

With much equipment on stock, we offer our customers the option of renting supplementary material during peak times. We also give prospective customers the chance to test MEVA formwork so they can see its benefits for themselves in actual use.

### RentalPlus

Since MEVA started the flat rate for cleaning and repair of rented formwork systems, more and more contractors experience the outstanding advantages. Ask our representatives about the details!

### Formwork drawings

Of course, all offices in our technical department have CAD facilities. You get expert, clearly represented plans and work cycle drawings.

### Special solutions

We can help with special parts, custom-designed for your project, as a supplement to our formwork systems.

### Static calculations

Generally, this is only necessary for applications like single-sided formwork where the anchor parts are embedded in the foundation or the base slab. If requested, we can perform static calculations for such applications at an additional charge.

### Formwork seminars

To make sure that all our products are used properly and efficiently, we offer formwork seminars. They provide our customers a good opportunity to keep themselves up-to-date and to benefit from the know-how of our engineers.

