

Xsafe platform system plus

Framed formwork Framax Xlife | Framax Xlife plus

User Information

Instructions for assembly and use (Method statement)



9764-301-01

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Introduction

System description

Xsafe platform system plus

These pre-assembled, fold-out working platforms with their integral side railings, self-closing man-hole lids and integrable ladders are ready for immediate use and greatly improve workplace safety.

Easy to use

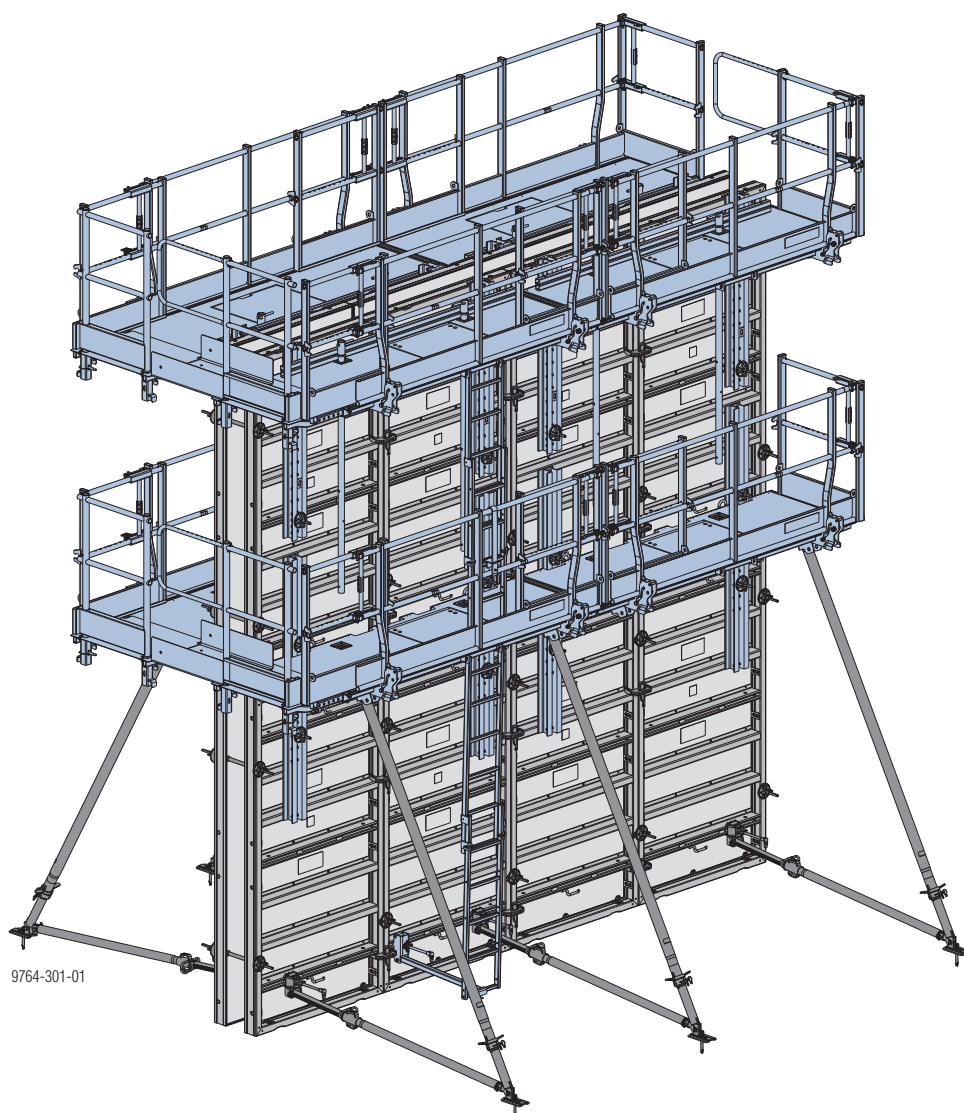
- pre-assembled, fold-out working platforms
- time and cost-savings as so little assembly work is needed
- system accessories for closure gaps and corner transitions

Safe working

- high safety, as side and end guards are integrated in the platform
- integrable ladder system

An economical solution

- its perfect stackability cuts storage and freight costs
- no universal walings needed for bracing the panels in vertically stacked configurations
- simplified planning, from using a single platform concept for all Doka wall systems
- much quicker and more efficient than single brackets



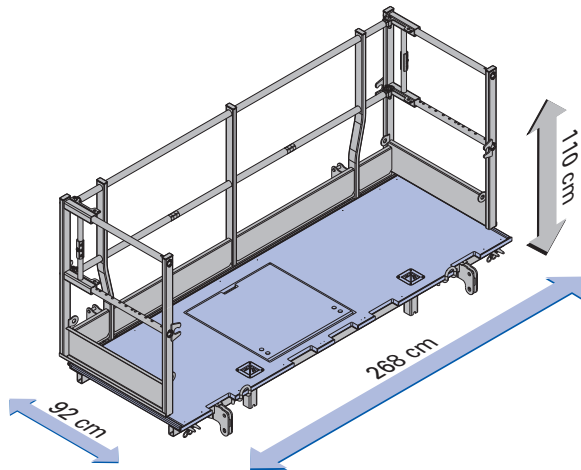
NOTICE

This document is valid only in combination with the basic document(s):
'Framed formwork Framax Xlife' or 'Framed formwork Framax Xlife plus' User Information booklet.

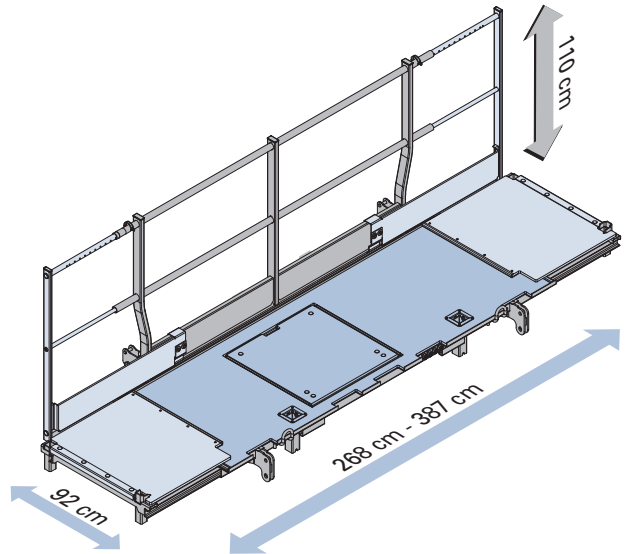
System dimensions

Permitted service load: 1.5 kN/m² (150 kg/m²)
Load Class 2 to EN 12811-1:2003

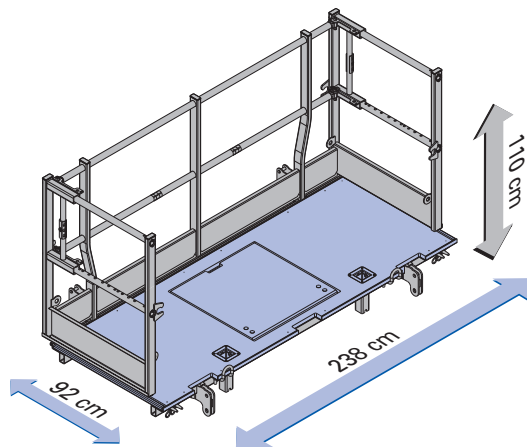
Xsafe plus platform 2.70m with side railing
(with or without side railings)



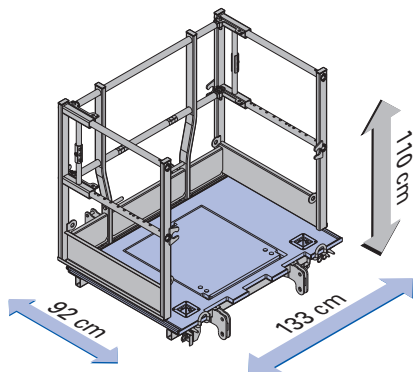
Xsafe plus platform XL 3.90m



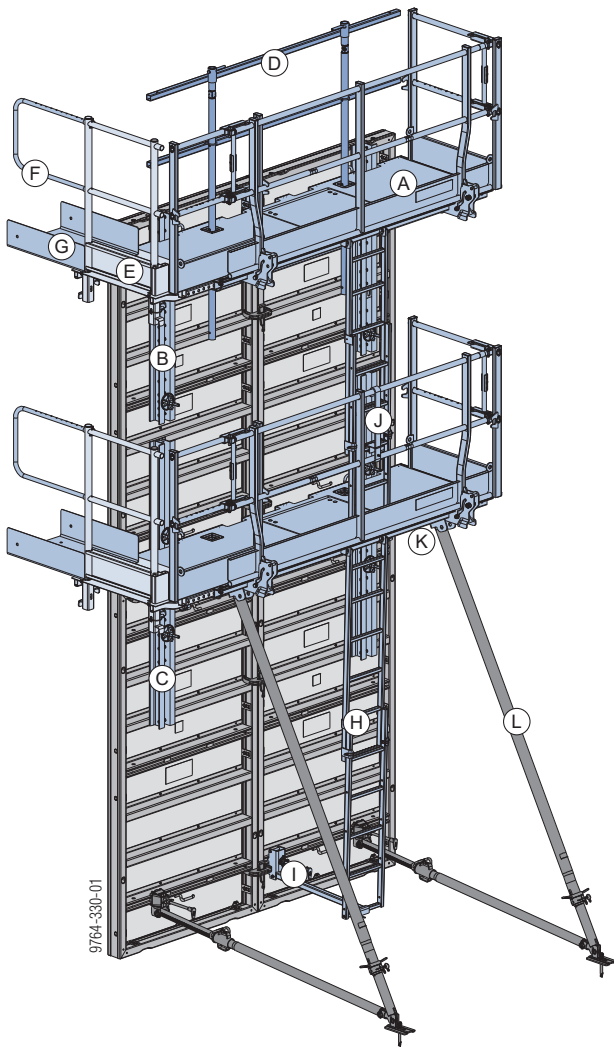
Xsafe plus platform 2.40m with side railing
(with or without side railings)



Xsafe plus platform 1.35m with side railing
(with or without side railings)



Platform system in detail

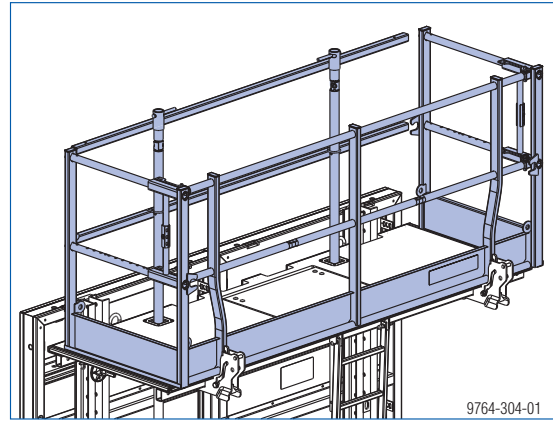


- A Xsafe plus platform
- B Xsafe plus platform waling 1.50m
- C Xsafe plus stacking waler 2.10m
- D Xsafe plus counter railing
- E Xsafe plus platform extension 0.60m
- F Xsafe plus handrail extension
- G Xsafe plus platform transition
- H Xsafe plus telescopic ladder
- I Xsafe plus ladder starter piece
- J Xsafe plus ladder support
- K Xsafe plus supporting strut
- L Panel strut

Immediately work-ready platform

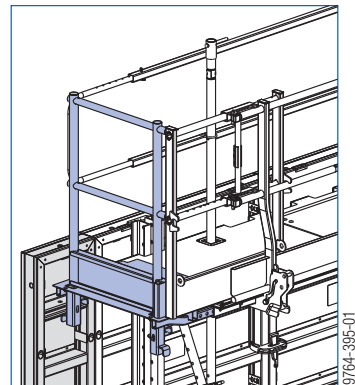
- quick and easy to assemble

Integral guard rails on all four sides



- enables work to take place in complete safety

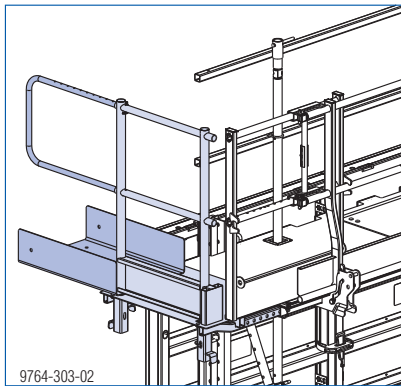
Platform extension



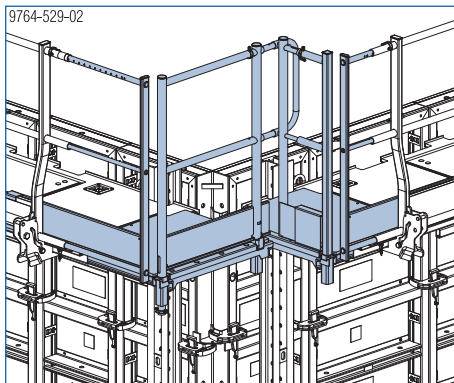
- permits flexible adaptation to formwork, with no need for improvisations

Safe solutions for corner transitions as well

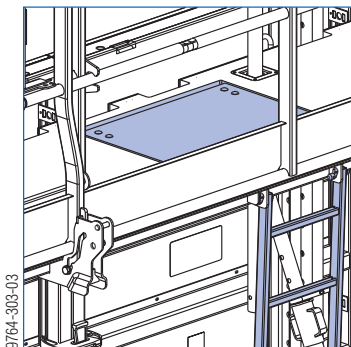
Configuration with the Xsafe plus platform:



Configuration with the Xsafe plus platform XL:



Integral ladder and manhole



- for safe vertical access up to the platform
- self-closing manhole lid (self-closing function can be deactivated)
- spring-assisted opening of manhole lid

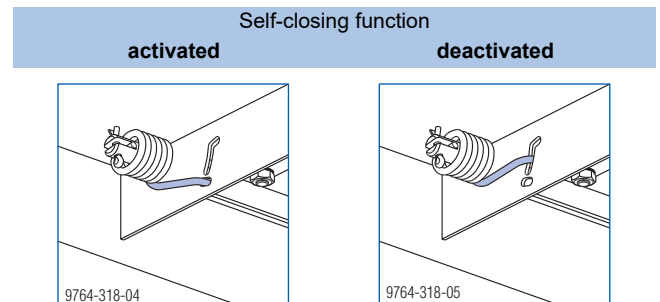
Manhole lid

The spring integrated in the manhole has 2 functions:

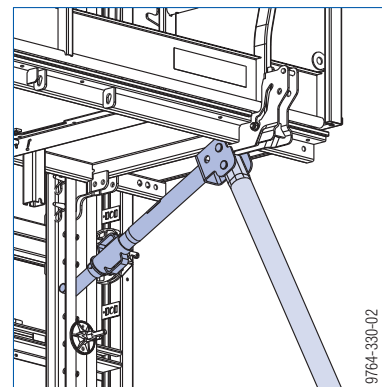
- to make the lid easier to open
- to make the lid close automatically

Where local regulations permit, the self-closing function of the manhole lid can be deactivated.

- Use a flat-bladed screwdriver to change the position of the spring.



Panel struts connected to rear of platform



- leaves unobstructed workplace access routes and simplifies the planning
- the Xsafe plus supporting strut makes it possible to adjust the inclination of the platform

Instructions for assembly and use (Method statement)

Planning guidelines

Co-ordinate the widths of the gang-forms with the lengths of the Xsafe plus platforms.

We recommend forming corners and similar snags in the following way:

▪ Variant 1

Divide up the work into separate pouring sections (i.e. separated by a construction joint):

- Set up formwork and pour first straight wall.
- Set up formwork and pour second straight wall, with corner connection.

▪ Variant 2

Cast in a single pour (no construction joint):

- First set up the formwork for the corners.
- Then set up the formwork for the straight wall between the corners.
- Cast in one single pour.

The sequence outlined below is based on a straight wall.

Ladders must be located so as to create viable 'traffic routes' in the horizontal. (On a straight wall, for example, one ladder on the first panel and another on the last).

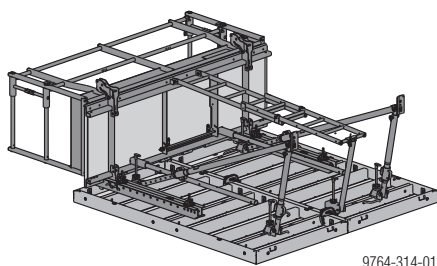
Note:

The sequence outlined below shows the Framed formwork Framax Xlife and applies analogously to the Framed formwork Framax Xlife plus.

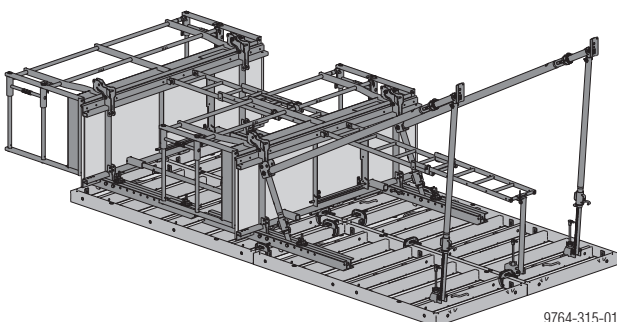
Pre-assembly

- Pre-assemble gang-forms face-down on an assembly bench.
- Mount the platforms, walings, ladder system and panel struts on the face-down gang-form (see the relevant section of this booklet).

Example of room-high formwork:



Example of high formwork:



Closing the formwork

- Attach the crane lifting tackle to the gang-form with the Xsafe plus lifting walers (see the section headed [Lifting by crane](#) and the 'Xsafe plus lifting waler' Operating Instructions).

Max. working load limit:

Sling angle β up to 15°: 1750 kg per lifting waler

Sling angle β up to 30°: 800 kg per lifting waler

- Raise the gang-form by crane.
- Spray the formwork sheet with release agent.
- Lift the gang-form to its new location.



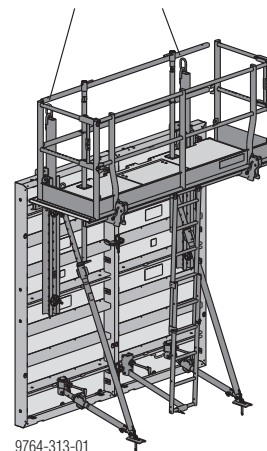
CAUTION

Never use a sledge hammer to plumb and align the panels!

This would damage the profiles of the gangs.

- Use only proper plumbing tools (e.g. a special pry-bar) that cannot cause any damage.

- Fix the panel struts firmly to the ground (see the section headed [Plumbing accessories](#)).
The gang-form is now stable and can be plumbed and aligned exactly, with no need for the crane.
- Extend the Xsafe plus counter railing (see the section headed [Railings facing formwork](#)).



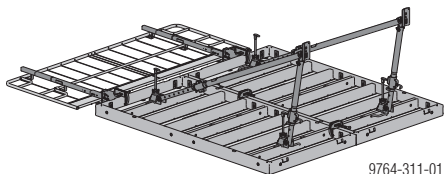
The platform railings are now **in place on all sides**, making it safe to get up onto the platform.

- Detach the gang-form from the crane.
- Continue lining up further gang-forms in this way, and link them together.

Erecting the opposing formwork:

Once the reinforcement has been placed, the formwork can be closed.

- ▶ Mount panel struts and opposing guard-rails to the (laid-flat) gang-form of the opposing formwork.

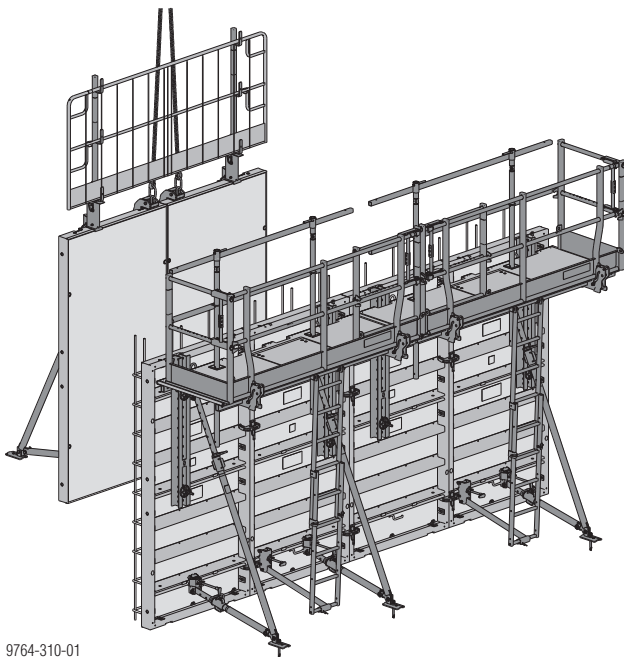


- ▶ Attach the gang-form to the crane with Framax lifting hooks (see the section headed [Lifting by crane](#) and the 'Framax lifting hook' Operating Instructions).

Max. working load limit:

1000 kg / Framax lifting hook

- ▶ Raise the gang-form by crane.
- ▶ Spray the formwork sheet with release agent.
- ▶ Lift the opposing formwork by crane to its next location.



Before disconnecting from the crane:

- ▶ If there are no panel struts on the opposing formwork, do not disconnect the panel from the crane until a large enough number of form ties have been installed to keep it safely in the upright.
- ▶ Detach the gang-form from the crane (wherever possible, operate the lifting hook from the opposite pouring platform).
- ▶ Lower the Xsafe plus counter railing.
- ▶ Fit the anchors.
- ▶ Continue lining up further gang-forms in this way, and link them together.

Pouring

Permitted fresh-concrete pressure:

Follow the directions in the 'Framed formwork Framax Xlife' or 'Framed formwork Framax Xlife plus' User Information booklets.

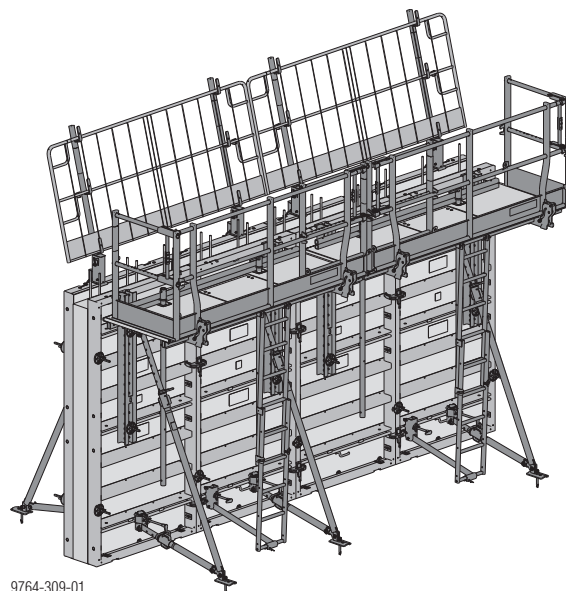
Observe the following **guidelines**:

- The section headed 'Pressure of fresh concrete on vertical formwork, DIN 18218' in the Calculation Guide 'Doka formwork engineering'
- DIN 4235 Part 2 - 'Compacting of concrete by vibrating'



NOTICE

- ▶ Do not exceed the maximum permissible rate of placing.
- ▶ Pour the concrete.
- ▶ Make only moderate use of vibrators, carefully coordinating the times and locations of vibrator use.



Stripping the formwork



NOTICE

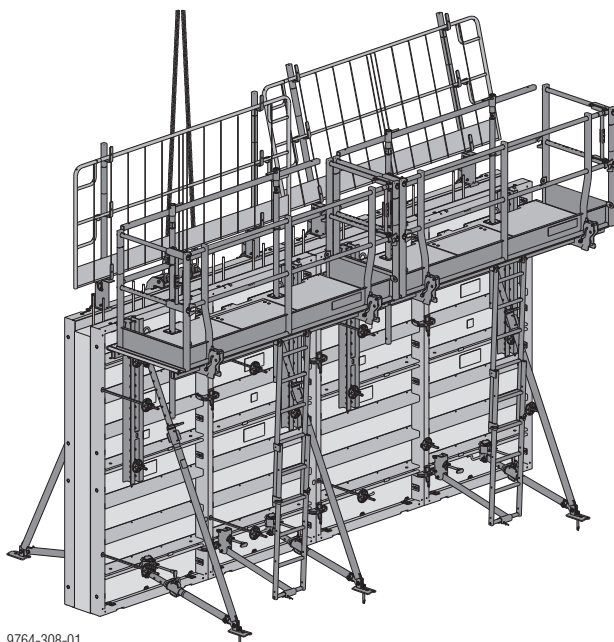
- ▶ Comply with the stipulated stripping times.
- ▶ Remove any loose items from the formwork and platforms, or secure them firmly.

Begin work on stripping the formwork on the opposing formwork:



Where the opposing formwork has no panel struts:

- ▶ When removing form ties, leave enough form-ties in place to safely keep the panel in the upright.
- ▶ Attach the gang-form of the opposing formwork to the crane.
- ▶ Remove the remaining form ties.
- ▶ Take out the form ties and undo the connectors to the adjacent panels.
- ▶ Attach the gang-form of the opposing formwork to the crane (wherever possible, operate the lifting hook from the opposite pouring platform).
- ▶ Undo the ground anchors of the panel struts.



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WARNING

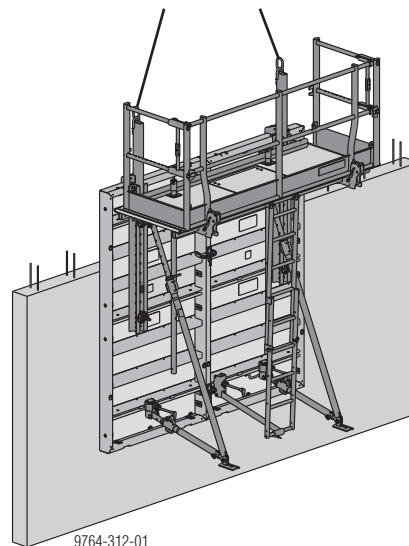
The formwork tends to adhere to the concrete. When stripping the formwork, do not try to break concrete cohesion using the crane!

Risk of crane overload.

- ▶ Use suitable tools such as timber wedges or a special pry-bar to detach the formwork from the concrete.
- ▶ Lift the gang-form away and to its next location.
If the gang-form is 'parked' prior to its next use, it must have sufficient stability (see the section headed [Plumbing accessories](#)).
Gang-forms with only one panel strut must not be 'parked' upright, but placed face-down.
- ▶ Clean residual concrete from the formwork sheet.

Stripping the holding formwork:

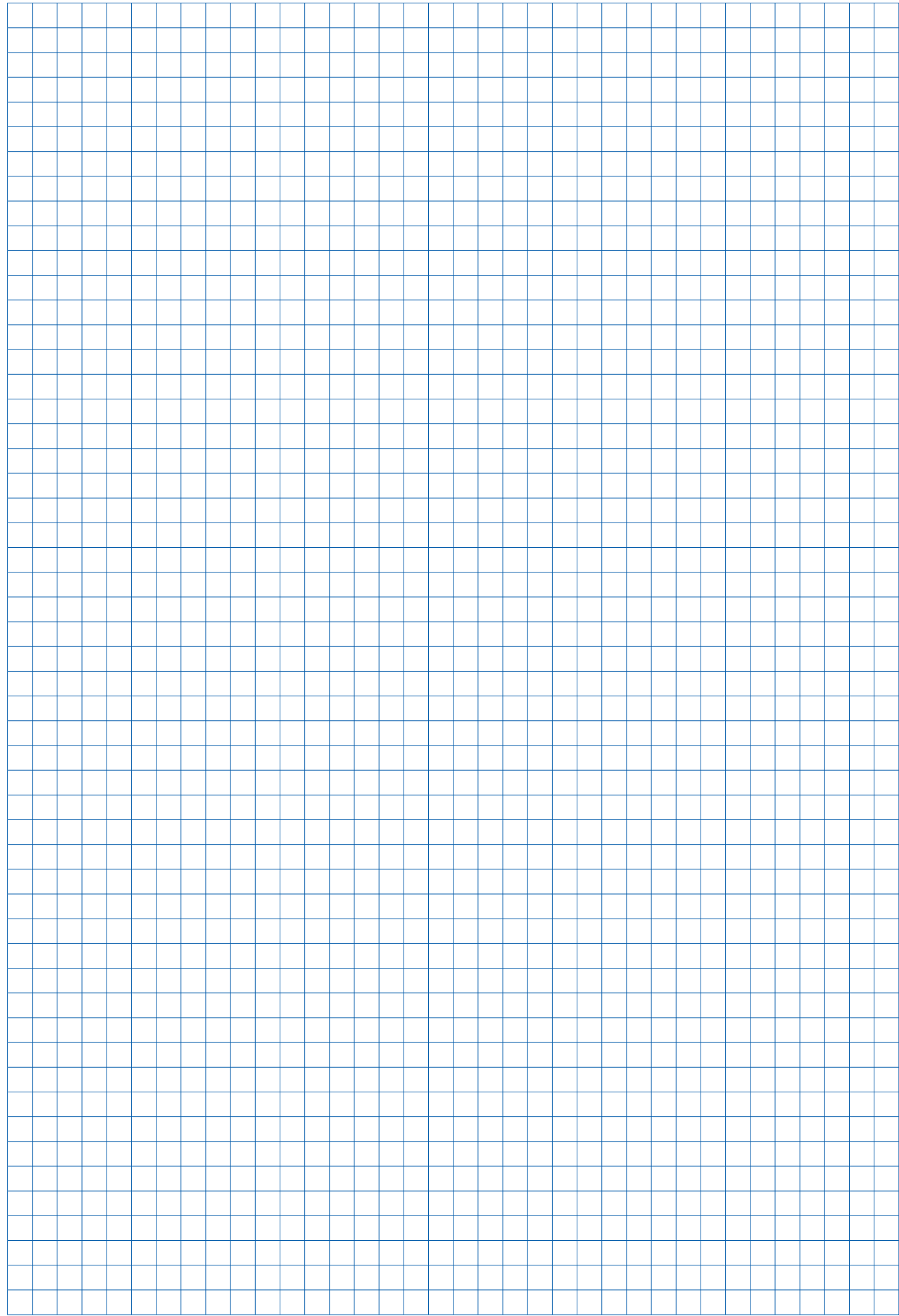
- ▶ Extend the Xsafe plus counter railing (see the section headed [Railings facing formwork](#)).
- ▶ Attach the crane lifting tackle to the gang-form with the Xsafe plus lifting walers (see the section headed [Lifting by crane](#) and the 'Xsafe plus lifting waler' Operating Instructions).
- ▶ Lower the Xsafe plus counter railing.
- ▶ Undo the ground anchors of the panel struts.
- ▶ Lift the gang-form away and to its next location.



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If the gang-form is 'parked' prior to its next use, it must have sufficient stability (see the section headed [Plumbing accessories](#)).

Gang-forms with only one panel strut must not be 'parked' upright, but placed face-down.

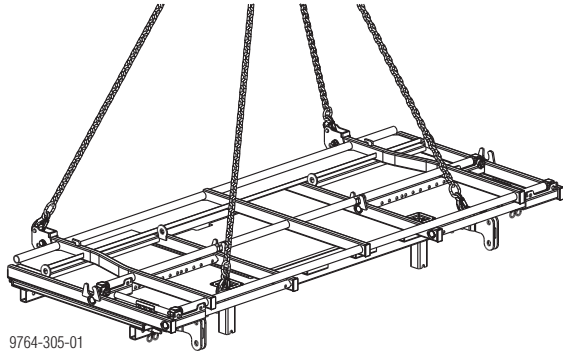


Xsafe plus platform

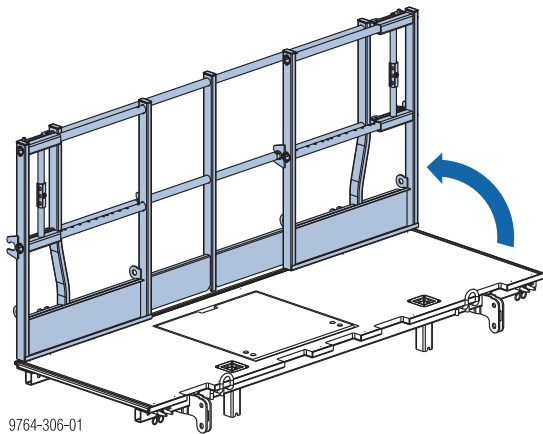
Preparing the platform

Tilting up rear railing

- Lift the Xsafe plus platform off the stack by crane, using a four-part lifting chain (e.g. Doka 4-part chain 3.20m), and set it down on the ground.



- Tilt up the rear railings.



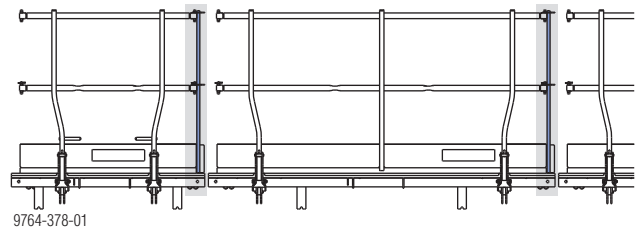
They lock into place automatically.

Railing-closure post on platforms without side railings

Xsafe plus platforms without side railings are equipped with an **Xsafe plus railing-closure post** at one end.



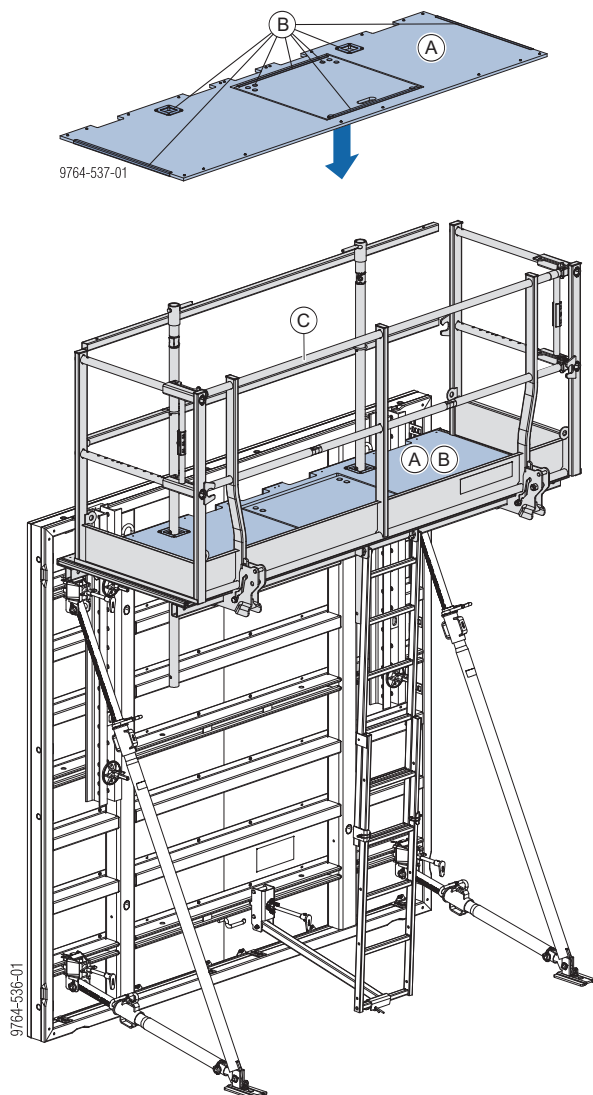
The railing-closure post **reduces the gap between two rear railings**.



Where necessary, the railing-closure post can also be mounted to the other end of the rear railings.

Conversion to Xsafe plus plastic decking 2.70m

The Xsafe plus plastic decking 2.70m can be used as a replacement for the conventional wooden decking of the Xsafe plus platform 2.70m.



- A** Xsafe plus plastic decking 2.70m
- B** Installation kit Xsafe plus plastic decking
- C** Xsafe plus platform 2.70m

Note:

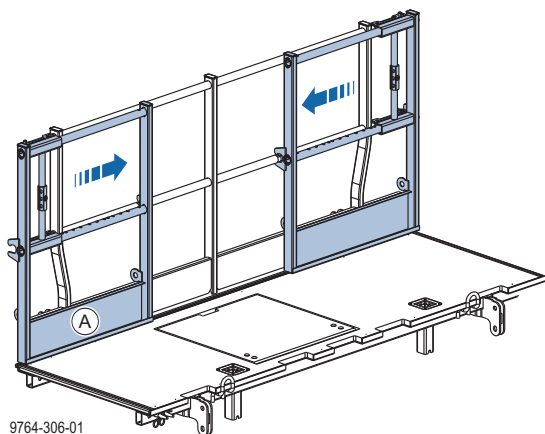
For more information, please contact your Doka technician.

Sideguards on exposed platform-ends

Activating end-of-platform sideguards

The Xsafe plus platform comes with captively **integrated** end-of-platform sideguards.

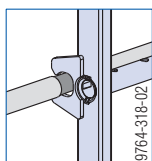
- Push the side railings all the way onto the back railing (starting position).



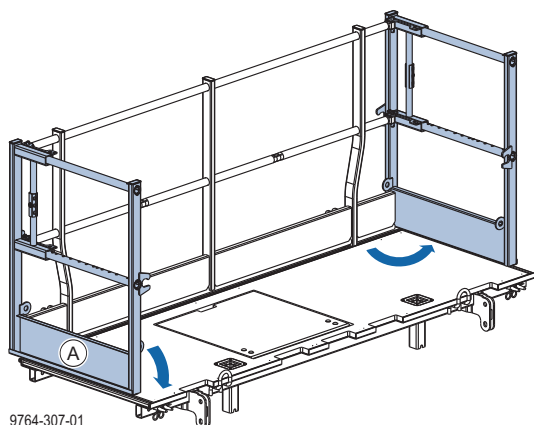
A Xsafe plus side railing



The railing tube must be firmly enclosed by the tube-guide in the crushing zone.



- Swivel the side railings 90° outwards.

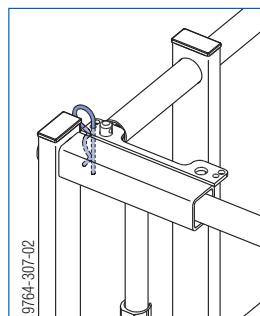


A Xsafe plus side railing

The side railings lock into place automatically.



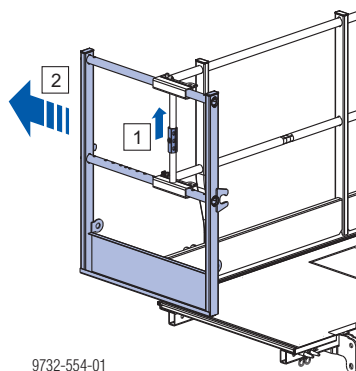
- The side railings are secured so that they cannot open outwards (i.e. by more than 90°).
- The side railing can be fixed in this position with a Spring cotter 5mm.



Moving the end-of-platform sideguards backwards

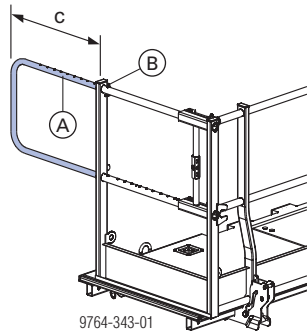
The sideguards can be moved backwards if needed (e.g. at corner transitions or to create an access opening).

- 1) Slide the telescope-lock upwards.
- 2) Push the side railings backwards.



Extending the end-of-platform sideguards

The end-of-platform sideguards on the platform can be lengthened using the **Xsafe plus handrail extension**.



c ... can be telescoped between 15 cm and 70 cm, in a 5 cm grid

A Xsafe plus handrail extension

B Linch pin of Xsafe plus handrail extension

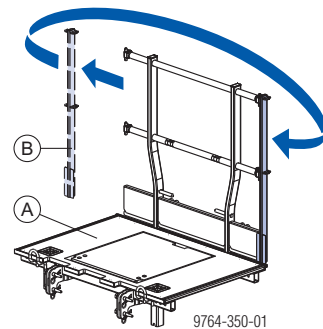
Mounting end-of-platform sideguards

Xsafe plus platforms without integral side railings can be retrofitted with a side railing (e.g. for fall-arrest barriers at the end of a wall).

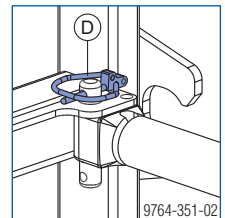
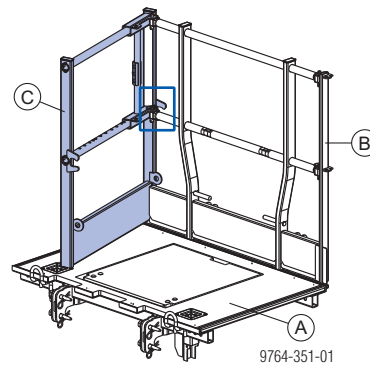
Note:

The symmetrical design of the Xsafe plus side railing means that it can be mounted to either side of the platform.

- 1) If necessary, dismount the Xsafe plus railing-closure post from the Xsafe plus platform and re-mount it at the other end of the rear railings (stand-by position).



- 2) Hook the Xsafe plus side railing into the rear railing and secure it with a linch pin. When doing this, swivel the side railing inwards slightly (by approx. 5°). This makes it easier to hook the side railing into the rear railing.



A Xsafe plus platform

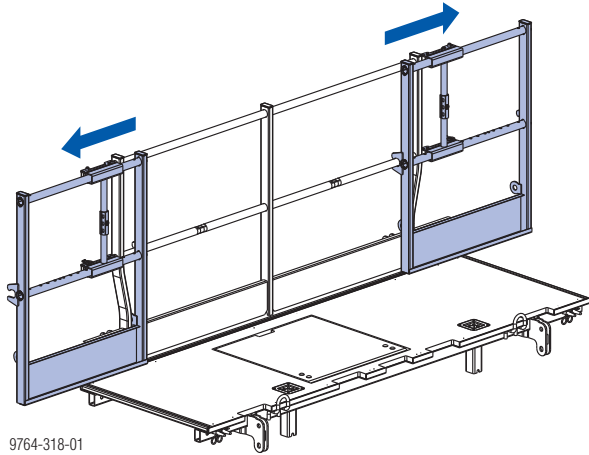
B Xsafe plus railing-closure post

C Xsafe plus side railing

D Linch pin of Xsafe plus platform

Extending the rear railings

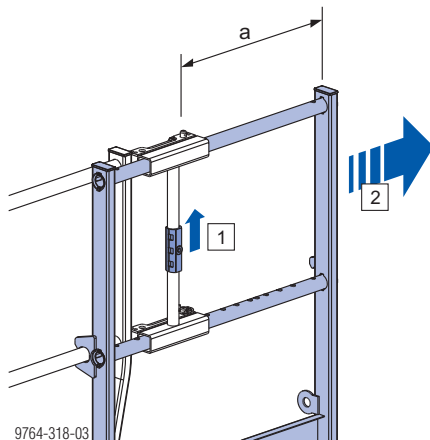
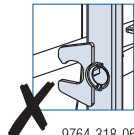
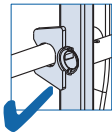
The integrated end-of-platform sideguards can also be used to extend the rear railings (e.g. if the platform has been lengthened to either side).



- 1) Slide the telescope-lock upwards.
- 2) Extend the side railings to the desired length.



The railing tube must be firmly enclosed by the tube-guide.

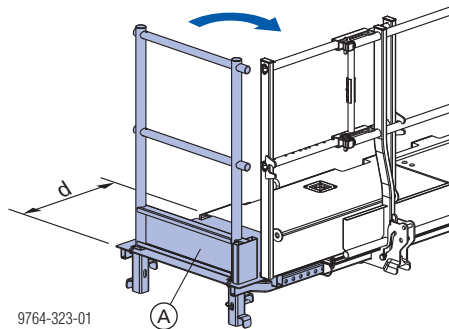


a ... can be telescoped by up to 50 cm, in a 5 cm grid

Extending the platform to either side

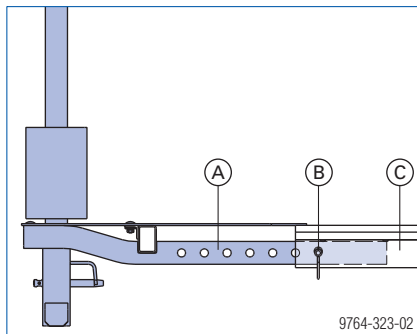
The platform can be lengthened at either end by using the **Xsafe plus platform extension 0.60m**.

The railings of the platform extension can be turned inwards by 90°.



d ... can be telescoped between 30 cm and 60 cm, in a 5 cm grid

How to attach the platform extension:



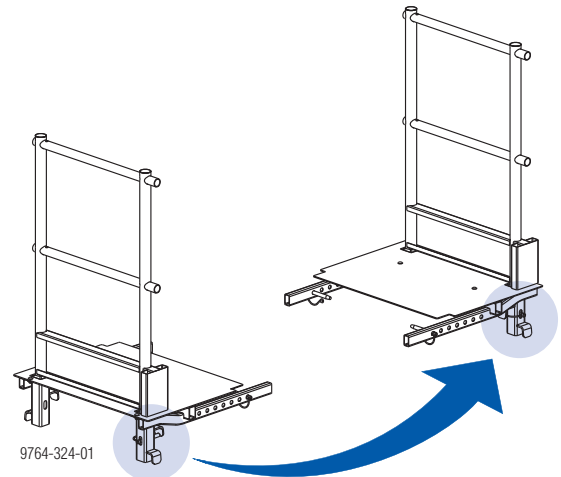
A Xsafe plus platform extension 0.60m

B Spring-locked connecting pin of Xsafe plus platform extension 0.60m

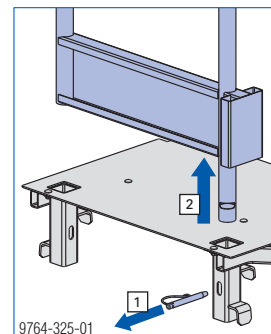
C Xsafe plus platform

Adapting the platform extension for use on left or right

The railings of the platform extension will need to be modified, depending on whether the platform extension is to be mounted to the right-hand or left-hand side of the platform.



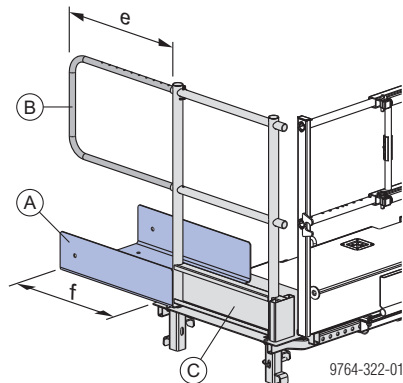
- 1) Take out the spring-locked connecting pin.
- 2) Pull out the railing.



The railing can now be mounted on the other side, in reverse order.

Platform transition

Together with an **Xsafe plus handrail extension**, the **Xsafe plus platform transition** provides a safe crossing point to the opposite platform.

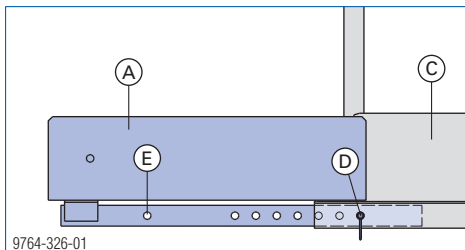


e ... can be telescoped between 15 cm and 70 cm, in a 5 cm grid
f ... can be telescoped between 33.5 cm and 63.5 cm, in a 5 cm grid

Wall thickness	Xsafe plus platform transition	Xsafe plus handrail extension
up to 20 cm	1	1
more than 20 cm	2 *)	2 *)

*) Mount one platform transition on the holding formwork, and one on the opposing formwork (see also the section headed [Stop-end formwork](#)).

Attaching the platform transition:

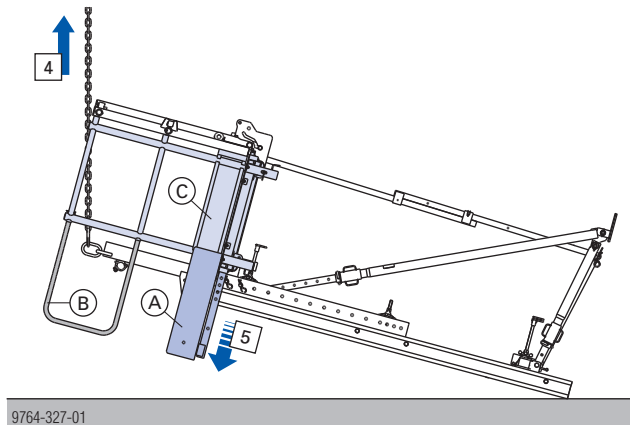


- A Xsafe plus platform transition
- B Xsafe plus handrail extension
- C Xsafe plus platform extension 0.60m
- D Spring locked connecting pin of the Xsafe plus platform transition
- E Fixing position for mounting to a panel placed on its side

Installation:

- 1) Slightly raise the railing of the Xsafe plus platform extension (C) .
- 2) Slide the Xsafe plus platform transition (A) all the way into the Xsafe plus platform extension (C) and fix it in the fixing position (E) with the spring locked connecting pin.
- 3) Slide the Xsafe plus platform extension (C) into the Xsafe plus platform and fix it with a spring locked connecting pin.
- 4) Raise the gang-form by crane.
- 5) Extend the Xsafe plus platform transition (A) to the desired length and fix it with a spring locked connecting pin.

- 6) Install the Xsafe plus handrail extension (B) .



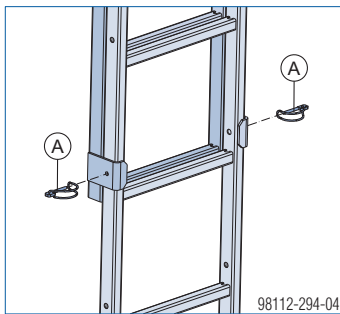
Ladder system

Preparing the formwork

- ▶ Pre-assemble gang-forms face-down on an assembly area.
- ▶ Install platforms and panel struts on the laid-flat panel.

Telescoping the ladder

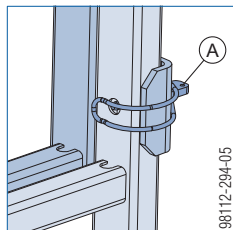
- ▶ Extend the Xsafe plus telescopic ladder to the required length and secure it with hinged pins (push the pins through from the outside to the inside).



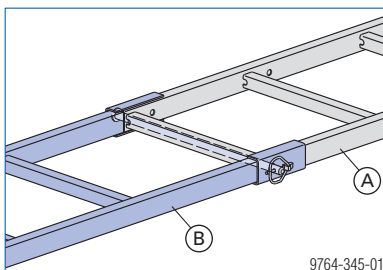
A Hinged pins of the Xsafe plus telescopic ladder



- Check that both hinged pins are inserted right way round!
- The clip of each hinged pin must be closed!



Permanently fixed ladder extension



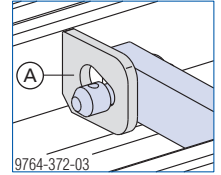
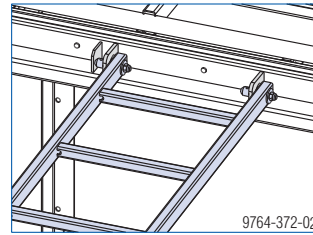
A Xsafe plus telescopic ladder

B Xsafe plus ladder extension 1.15m

Note:

The Xsafe plus telescopic ladder can be extended with **a maximum of two** Xsafe plus ladder extensions.

Connecting the ladder to the Xsafe plus platform



A Integrated ladder connection on the Xsafe plus platform

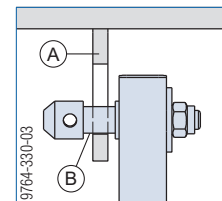
The integrated ladder connection secures the ladder against accidental lift-out.

Note:

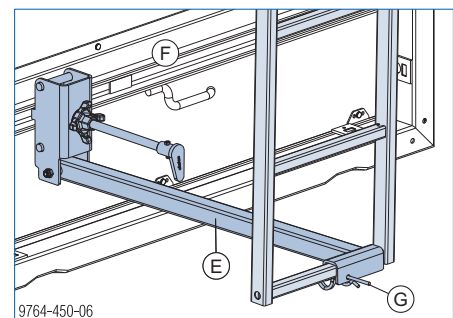
If desired, the ladder can also be secured with a linch pin as well.



The groove in the ladder pin (**B**) must be engaged in the hole of the ladder connection (**A**) !



Connecting the ladder to the formwork



E Xsafe plus ladder starter piece

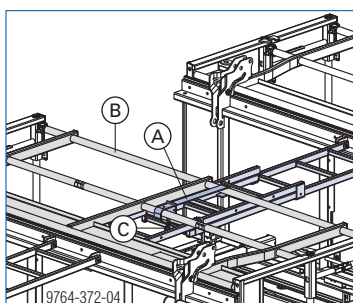
F Function profile of the Framax Xlife panel or Framax Xlife plus panel

G Spring cotter of the Xsafe plus ladder starter piece

Animation:

<https://player.vimeo.com/video/256374934>

Connecting the ladder to the rear railings



- A Xsafe plus ladder support
- B Back railing of the Xsafe plus platform
- C Spring cotter of the Xsafe plus ladder support

Installing the ladder cage on the ladder



Always observe all relevant safety regulations applying to the correct positioning of the ladder cage in the country in which you are operating (e.g. in Germany: DGVU 208-016 and 101-014).

Note:

Follow the instructions in the section headed [Rules for gang-forms](#).



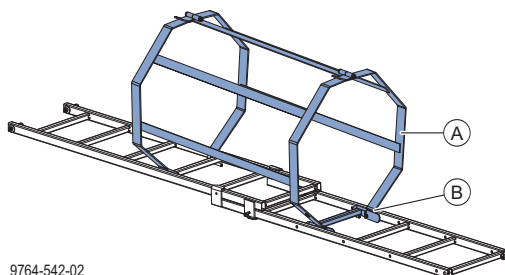
For installation on the Xsafe plus telescopic ladder, slightly squeeze the sides of the ladder cage together so that it sits against the inside of the ladder rails.

Installing Ladder cage XS 1.00m:



NOTICE

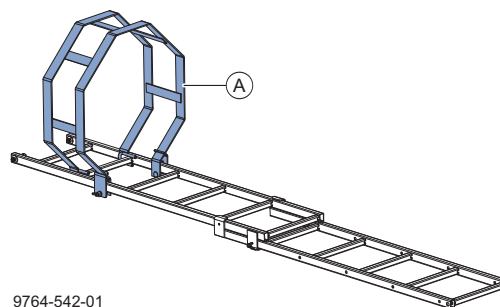
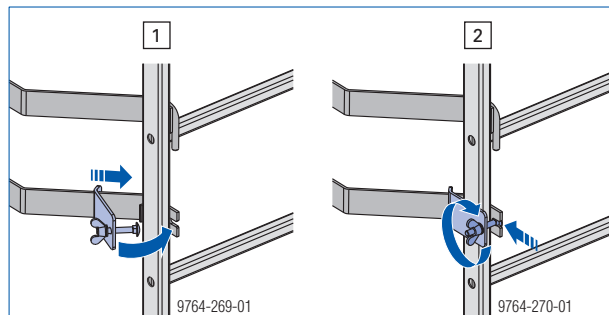
- Where a permanently fixed ladder extension is installed, do not install the Ladder cage XS 1.00m over the ladder-to-extension joint!
- Engage the ladder cage. The safety latches prevent the cage from being accidentally lifted out.
- Additionally secure the safety latches against accidental opening (e.g. with cable ties)



- A Ladder cage XS 1.00m
- B Safety latches (anti-liftout guard)

Installing Ladder cage XS 0.25m:

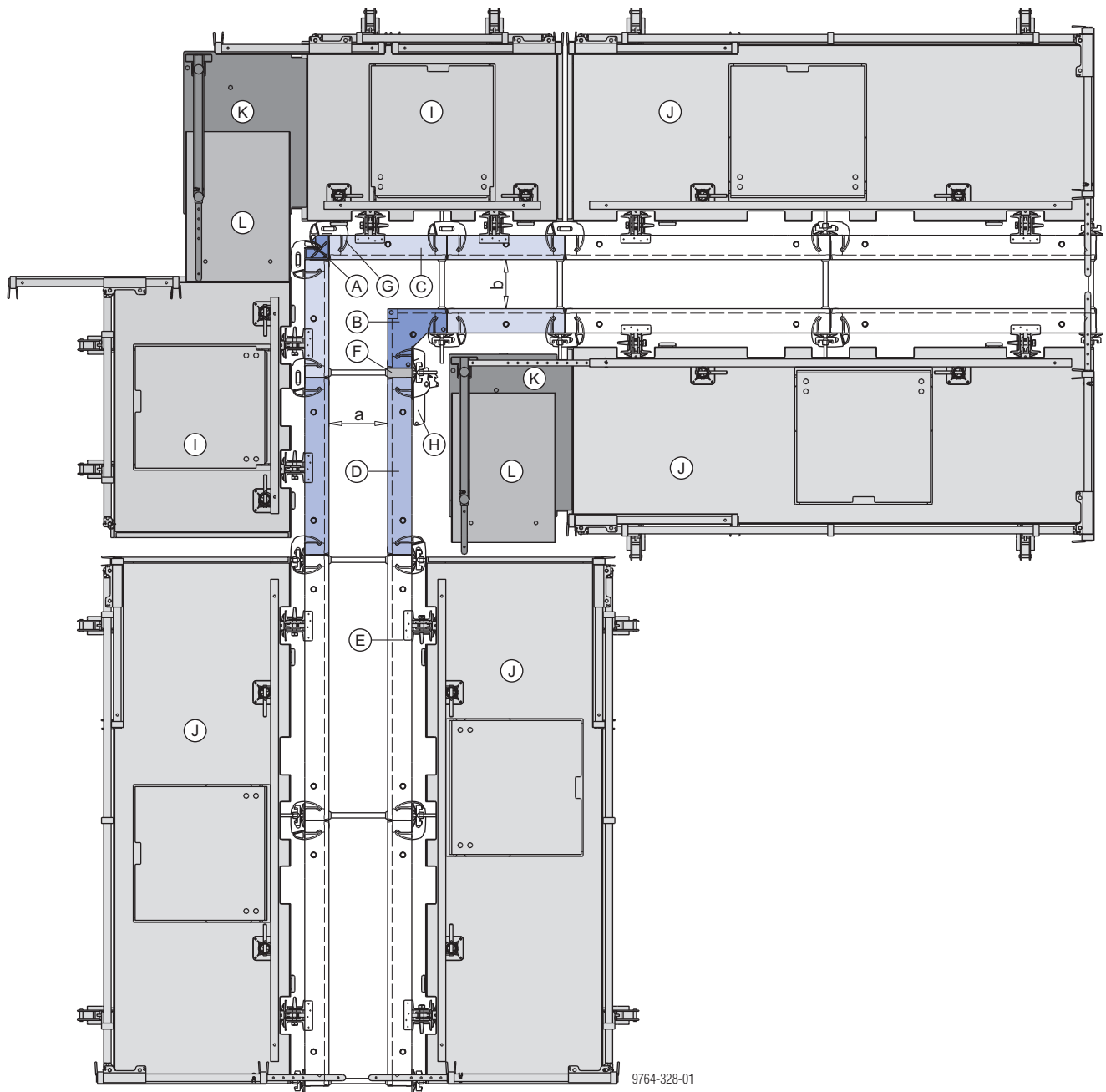
- Hook the ladder cage into position and secure it against accidental lift-out.



- A Ladder cage XS 0.25m

Corner configuration

Practical example with Framed formwork Framax Xlife

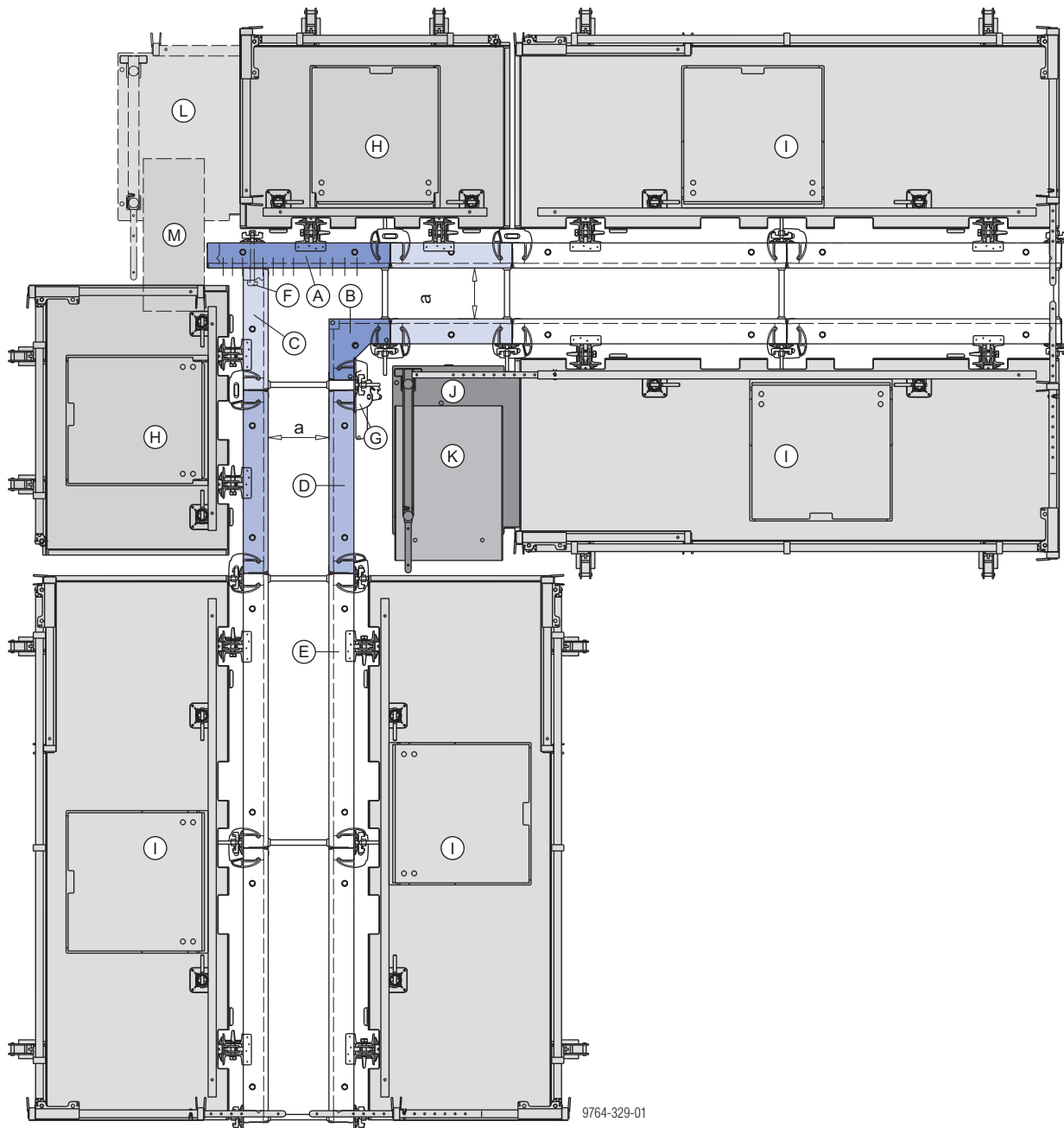


a ... 30 cm

b ... 25 cm

- A Framax outside corner
- B Framax Xlife inside corner
- C Framax Xlife panel 0.60m
- D Framax Xlife panel 0.90m
- E Framax Xlife panel 1.35m
- F Fitting timber
- G Framax quick acting clamp RU
- H Framax multi function clamp
- I Xsafe plus platform 1.35m
- J Xsafe plus platform 2.70m
- K Xsafe plus platform extension 0.60m
- L Xsafe plus platform transition

Practical example with Framed formwork Framax Xlife

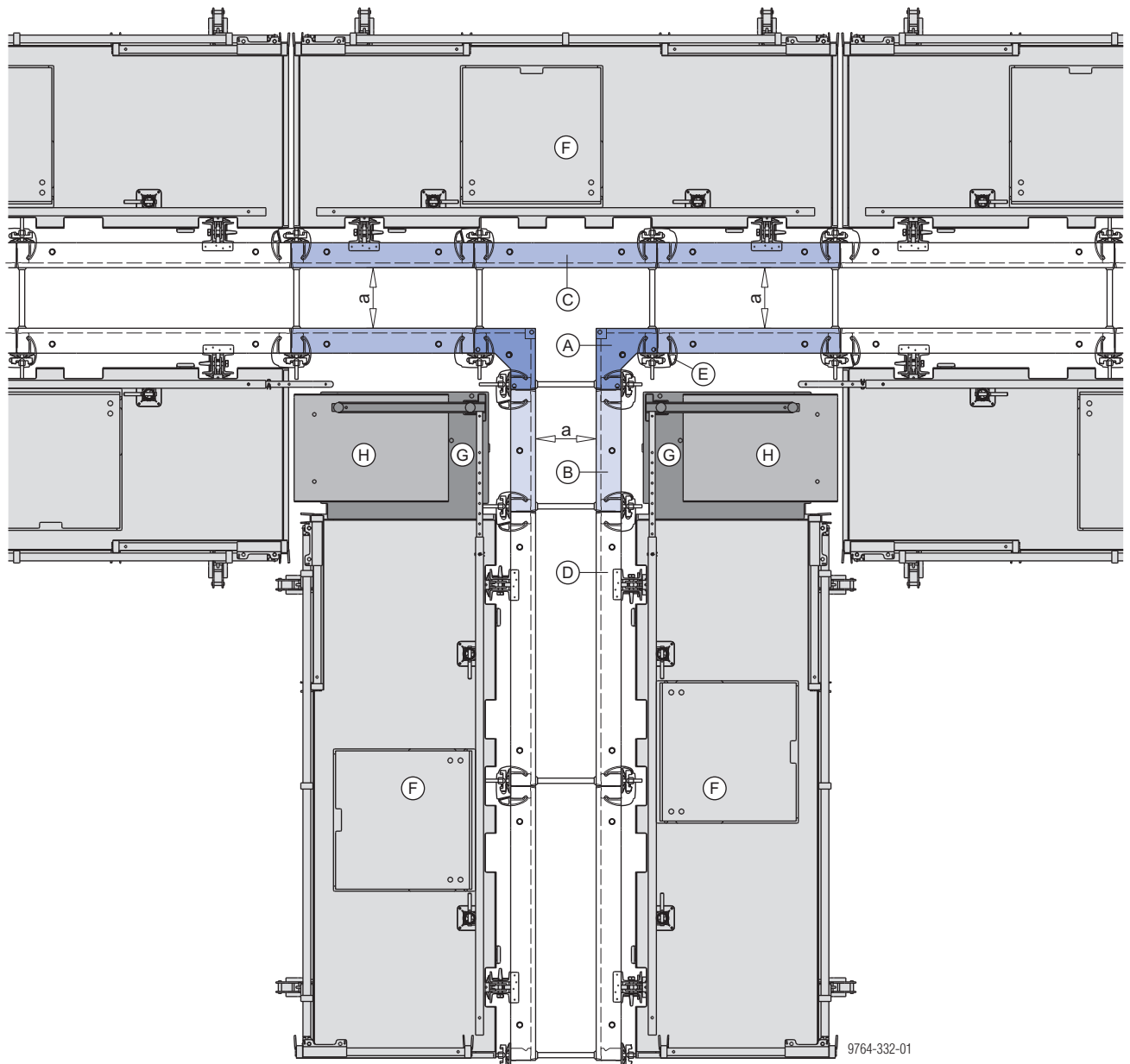


a ... 30 cm

- A** Framax Xlife universal panel
- B** Framax Xlife inside corner
- C** Framax Xlife panel 0.60m
- D** Framax Xlife panel 0.90m
- E** Framax Xlife panel 1.35m
- F** Framax universal fixing bolt + Super plate 15.0
- G** Framax quick acting clamp RU
- H** Xsafe plus platform 1.35m
- I** Xsafe plus platform 2.70m
- J** Xsafe plus platform extension 0.60m
- K** Xsafe plus platform transition
- L** Xsafe plus platform extension 0.60m (optional)
- M** Platform transition, site-provided (optional)

Example: T-junction

Practical example with Framed formwork Framax Xlife

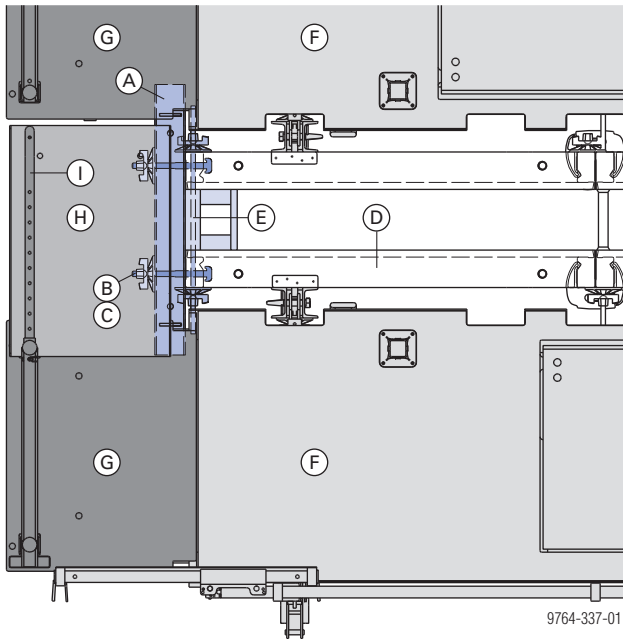


a ... 30 cm

- A** Framax Xlife inside corner
- B** Framax Xlife panel 0.60m
- C** Framax Xlife panel 0.90m
- D** Framax Xlife panel 1.35m
- E** Framax quick acting clamp RU
- F** Xsafe plus platform 2.70m
- G** Xsafe plus platform extension 0.60m
- H** Xsafe plus platform transition

Stop-end formwork

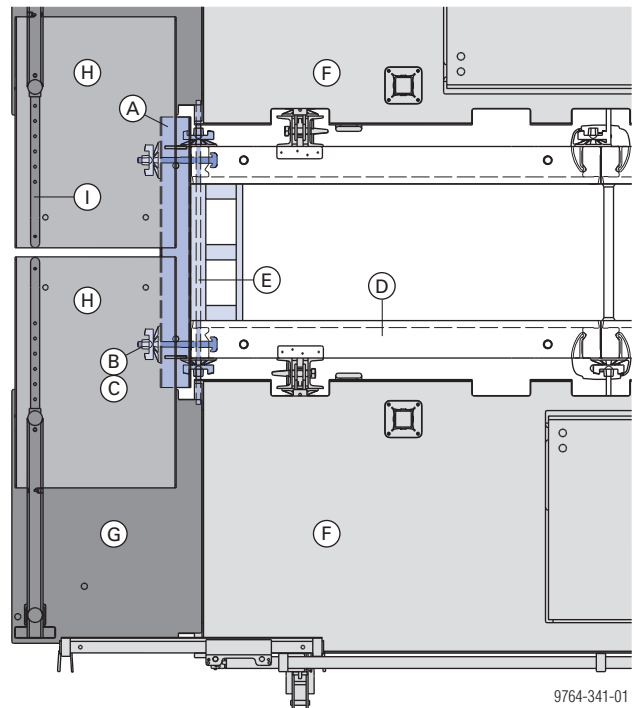
Wall thicknesses up to 20 cm



9764-337-01

- A Framax universal waling
- B Framax universal fixing bolt
- C Super plate 15.0
- D Framax Xlife panel or Framax Xlife plus panel
- E Doka tie rod system
- F Xsafe plus platform
- G Xsafe plus platform extension 0.60m
- H Xsafe platform transition
- I Xsafe plus handrail extension

Wall thicknesses above 20 cm



9764-341-01

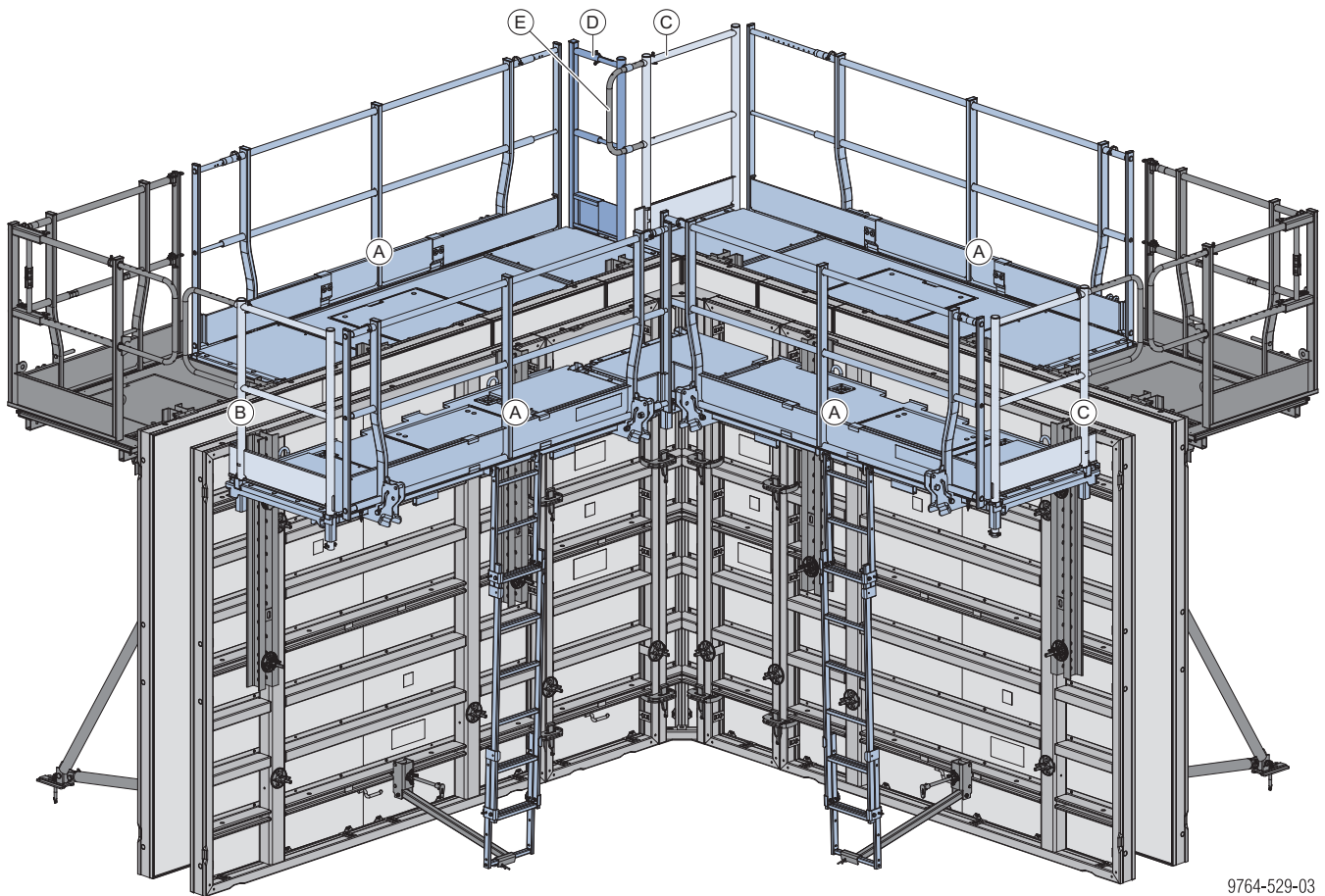
- A Framax universal waling
- B Framax universal fixing bolt
- C Super plate 15.0
- D Framax Xlife panel or Framax Xlife plus panel
- E Doka tie rod system
- F Xsafe plus platform
- G Xsafe plus platform extension 0.60m
- H Xsafe platform transition
- I Xsafe plus handrail extension



If it is not possible to use a Framax universal fixing bolt (this will depend on the level of the platform and the platform transition), use a **Framax stop-end tie** instead.

Xsafe plus platform XL

Component overview

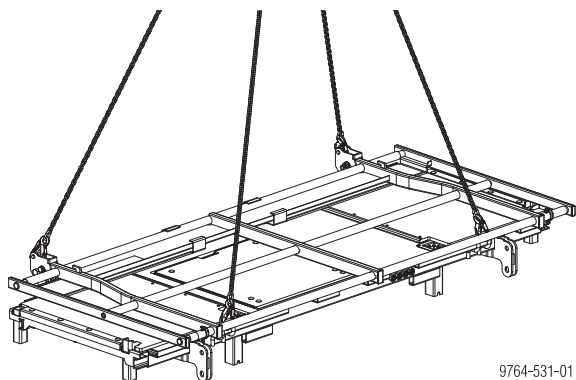


9764-529-03

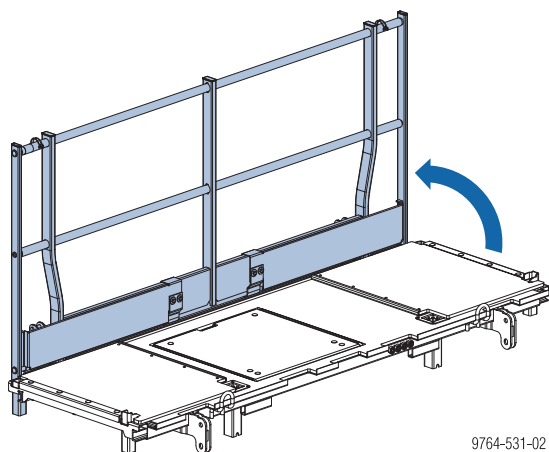
- A** Xsafe plus platform XL 3.90m
(with integral telescopic ladder, and with platform and rear-railing extensions)
- B** Xsafe plus side railing XL left
- C** Xsafe plus side railing XL right
- D** Xsafe plus corner railing XL
- E** Xsafe plus handrail extension

Tilting up rear railing

- Lift the Xsafe plus platform XL off the stack by crane, using a four-part lifting chain (e.g. Doka 4-part chain 3.20m), and set it down on the ground.



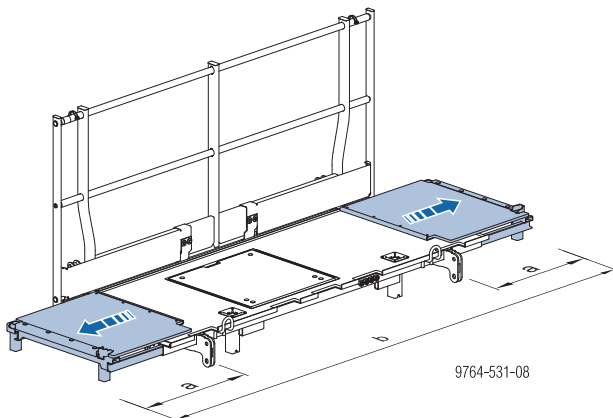
- Tilt up the rear railings.



They lock into place automatically.

Extending the platform to either side

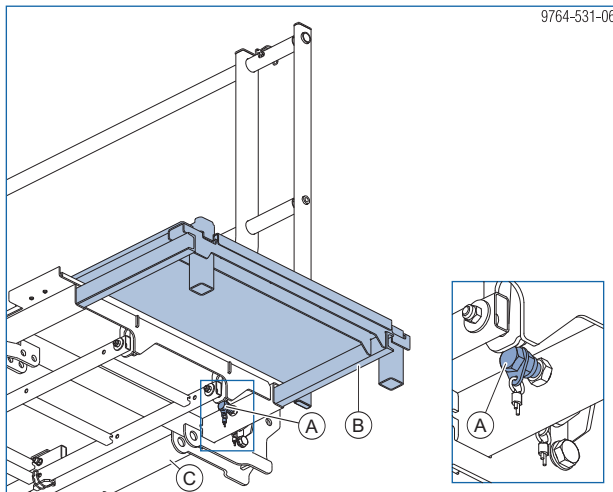
The Xsafe plus platform XL has an integrated extension of the platform decking at each end.



a ... steplessly telescoping to 60 cm

b ... min. 268 up to max. 387 cm

- 1) Loosen the hexagon bolt.
- 2) Extend the platform decking to the desired length.
- 3) Retighten the hexagon bolt.



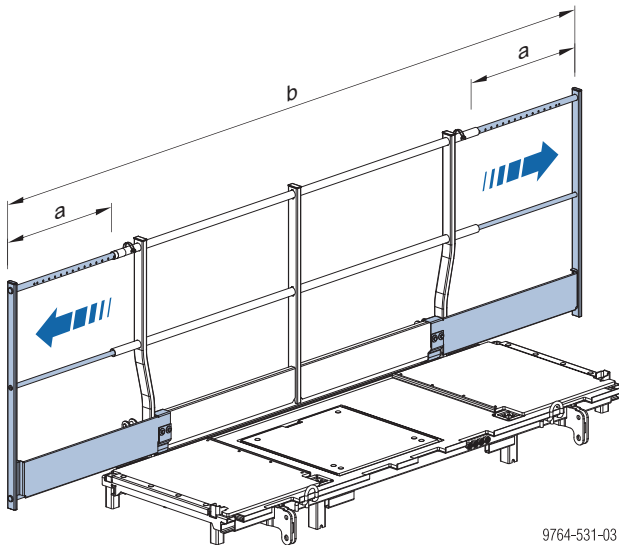
A Hexagon bolt M16

B Integral extension of the platform decking

C Xsafe plus platform XL

Extending the rear railings

The Xsafe plus platform XL has an integrated extension of the rear railing at each end.

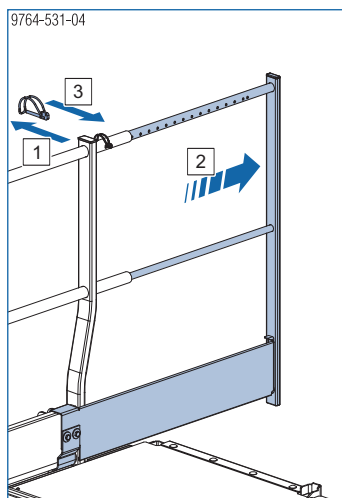


9764-531-03

a ... can be telescoped by up to 60 cm, in a 4 cm grid

b ... min. 253 up to max. 385 cm

- 1) Remove the linch pin.
- 2) Extend the rear railing to the desired length.
- 3) Re-secure the extension of the rear railing by re-inserting the linch pin.

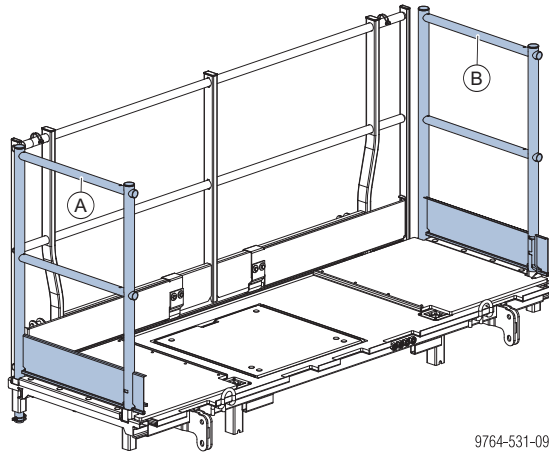


9764-531-04

Sideguards on exposed platform-ends

Mounting end-of-platform sideguards

The Xsafe plus platform XL can be fitted with side railings (for example as a safety barrier at the end of the wall).



9764-531-09

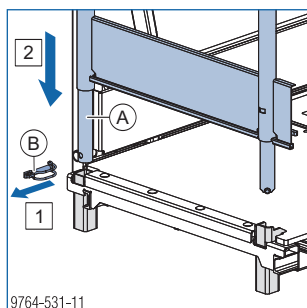
A Xsafe plus side railing XL right

B Xsafe plus side railing XL left

To install side railings:

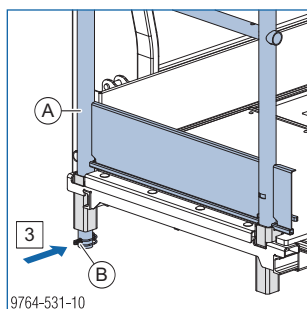
The procedure for installing both side railings XL, right and left, is identical. All the illustrations below show the 'side railing right'.

- 1) Remove the linch pin from the side railing.
- 2) Insert the side railing into the sockets on the platform.



9764-531-11

- 3) Secure the side railing by re-inserting the linch pin.



9764-531-10

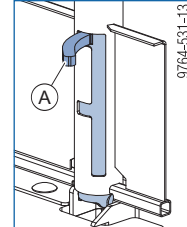
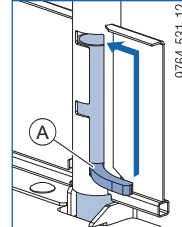
A Xsafe plus side railing XL

B Linch pin of the side railing

Opening end-of-platform sideguard

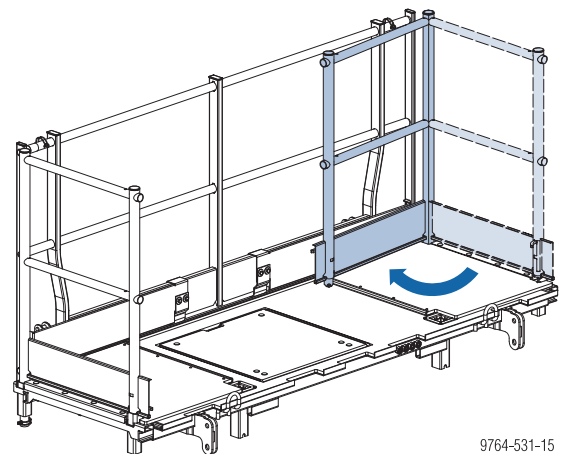
To open the side railing:

- 1) On the side railing, pull the locking lever up and engage it in the topmost position.



A Locking lever on side railing

- 2) Swing the side railing inward until it contacts the rear railing.



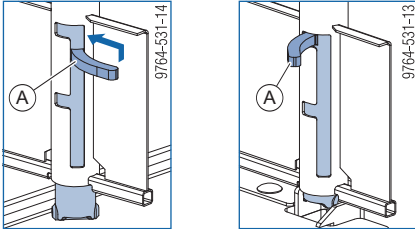
9764-531-15

It locks into place automatically:
Contact with the rear railing activates the locking lever, securing the side railing in this position.

Activating end-of-platform sideguards

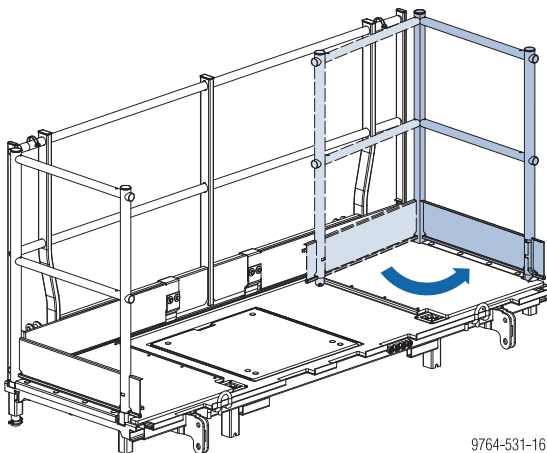
To close the side railing:

- 1) On the side railing, pull the locking lever up and engage it in the topmost position.



A Locking lever on side railing

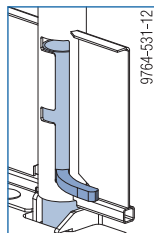
- 2) Swivel the side railings 90° outwards.



It locks into place automatically:
A stop on the platform decking activates the locking lever, securing the side railing in this position.

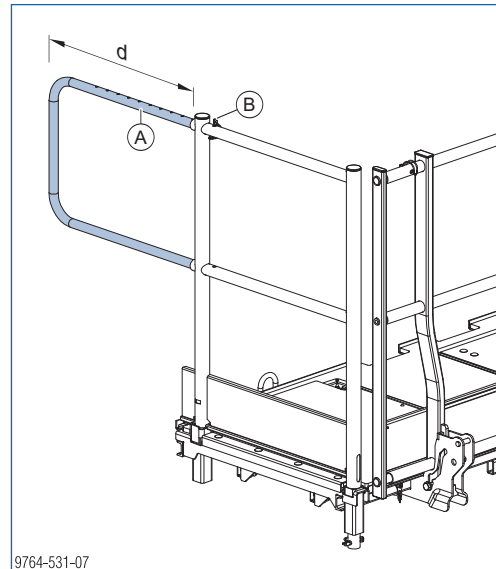


The locking lever must be in the bottommost position.



Extending the end-of-platform sideguards

The **Xsafe plus side railing XL** can be extended with the Xsafe plus handrail extension.



d... telescoping from 15 cm to 70 cm, in a 5 cm grid

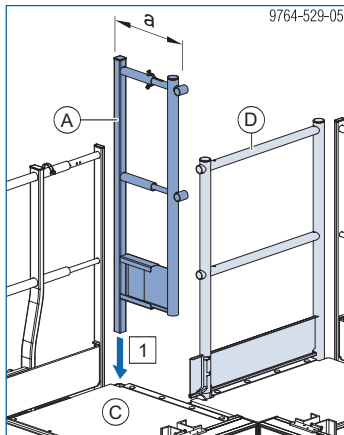
A Xsafe plus handrail extension

B Linch pin of Xsafe plus handrail extension

Sideguard at outside corner

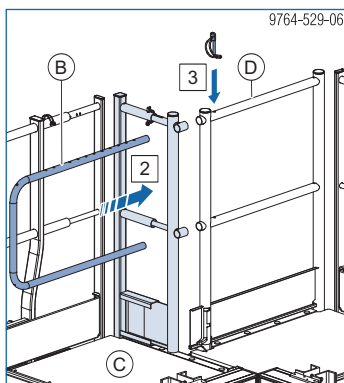
Complete sideguard protection can be constructed at outside corners as well, by using the **Xsafe plus corner railing XL**.

- 1) Insert the corner railing into the sockets on the platform and extend it to the required length.

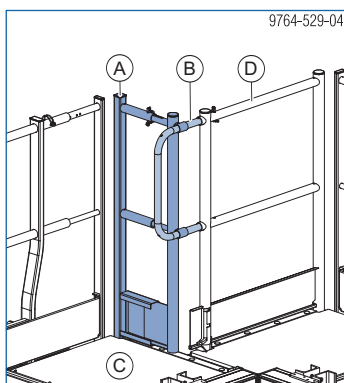


a ... steplessly telescoping between 34 and 44 cm

- 2) Pass the handrail extension through the corner railing and into the side railing.
- 3) Secure the handrail extension to the side railing by inserting the linch pin.



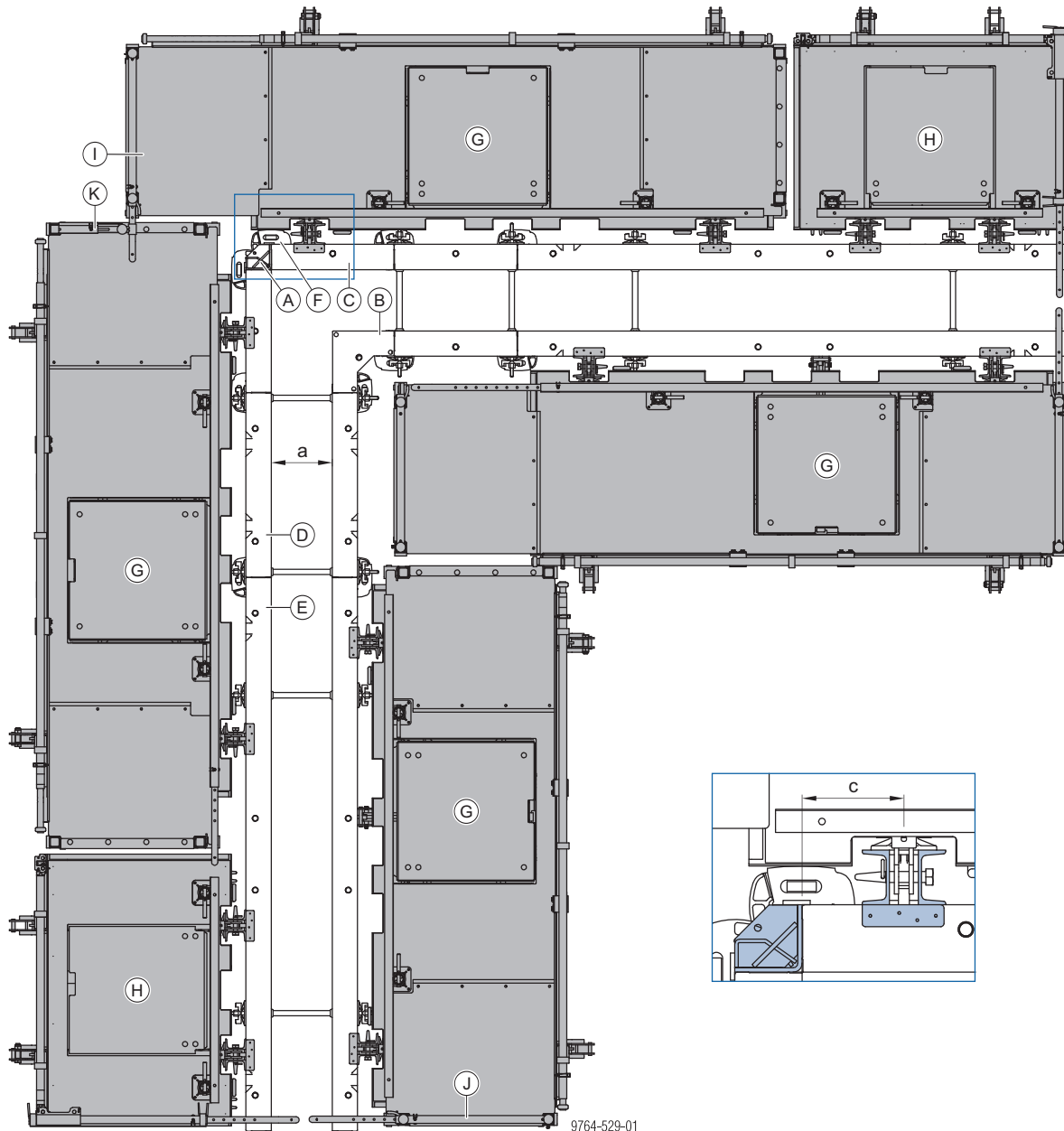
Fully assembled sideguard at outside corner:



- A Xsafe plus corner railing XL
- B Xsafe plus handrail extension
- C Xsafe plus platform XL
- D Xsafe plus side railing XL

Corner configuration

Practical example with Framed formwork Framax Xlife



9764-529-01

a ... 30 cm

c ... 18.5 to 26.5 cm

- A** Framax outside corner
- B** Framax Xlife inside corner
- C** Framax Xlife panel 0.60m
- D** Framax Xlife panel 0.90m
- E** Framax Xlife panel 2.70m
- F** Framax quick acting clamp RU
- G** Xsafe plus platform XL 3.90m
- H** Xsafe plus platform 1.35m
- I** Xsafe plus side railing XL right
- J** Xsafe plus side railing XL left
- K** Xsafe plus corner railing XL

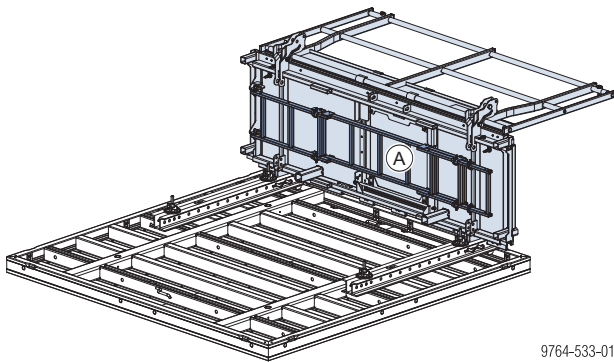
Note:

In planning and assembly, it is important to comply with the specification for dimension 'c' for the following reasons:

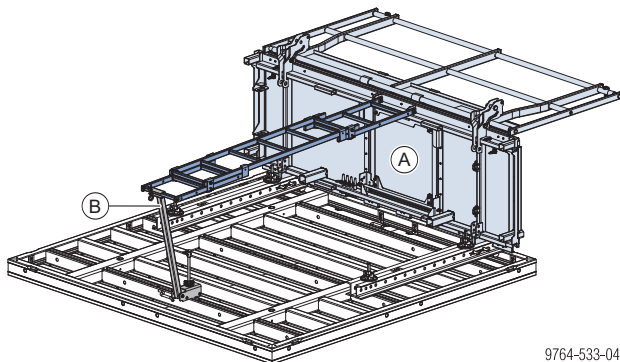
- Ensures sufficient platform passageway width at the outside corner.
- Permits installation of the corner railing XL.
- Ensures sufficient space for installation of the Framax quick acting clamp RU in the outside corner.

Ladder system

Telescopic ladder integrated into the platform.



9764-533-01



9764-533-04

A Xsafe plus platform XL 3.90m (with integrated telescopic ladder)

B Ladder holder (not integrated into the platform)

There is a **telescopic ladder integrated** into the Xsafe plus platform XL 3.90m. The parked position of the ladder is on the underside of the platform decking. The ladder is suitable for **formwork heights from 1.80 to 3.30 m**.

Note:

In the following applications, comply with the notes and instructions in the section headed 'Xsafe plus platform'

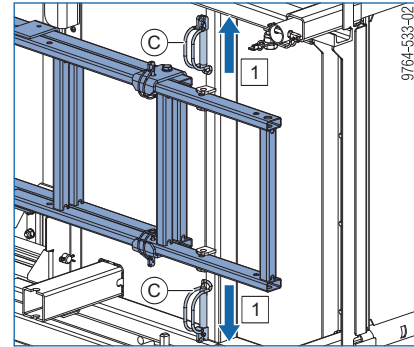
-> [Ladder system](#):

- [Telescoping the ladder](#)
- [Connecting the ladder to the formwork](#)
- [Connecting the ladder to the rear railings](#)
- [Connecting the ladder to the formwork](#)

Releasing the ladder from the parked position

The telescopic ladder is hooked into the underside of the platform and secured in this position by two linch pins.

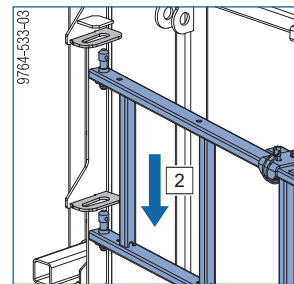
- 1) Remove both linch pins.



9764-533-02

C Linch pin

- 2) Disengage the ladder from the parked position.



9764-533-03



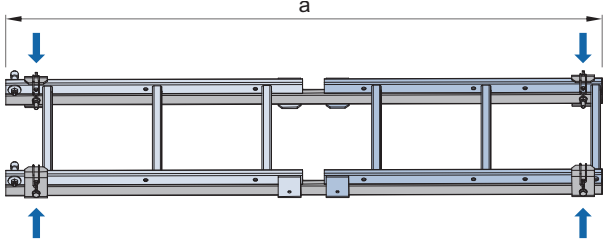
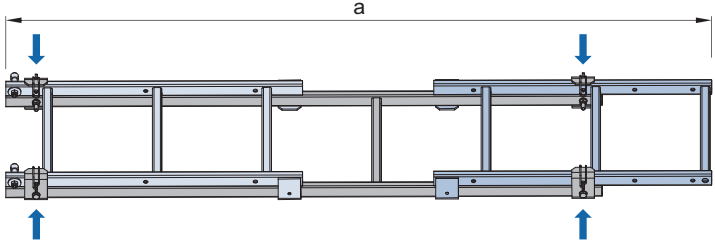
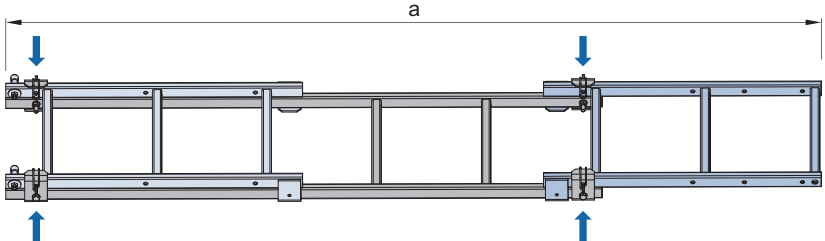
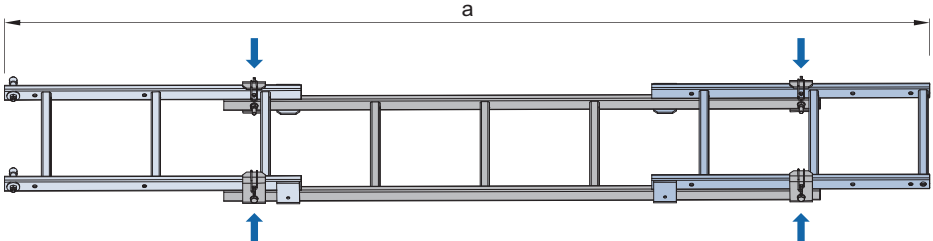
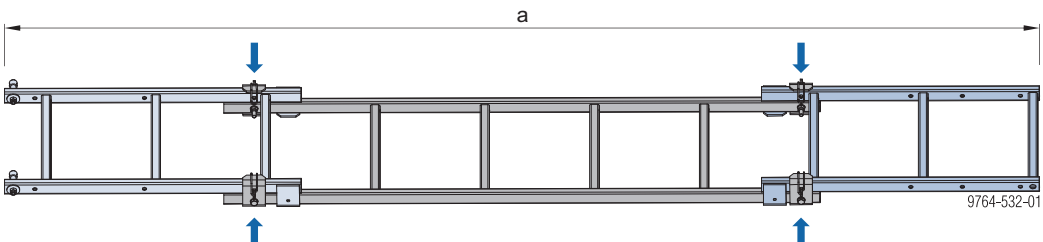
The extended length of the parked ladder corresponds to the working length for a formwork height of 2.70 m.

Consequently, the ladder is ready for use for this height with no change in length needed.

Securing the ladder in the parked position

- Telescope the ladder to the 245 cm extended length. For the positions of the linch pins see the section headed [Extended lengths of the telescopic ladder](#).
- Hook the ladder into the underside of the platform.
- Secure the ladder in the parked position with 2 linch pins.

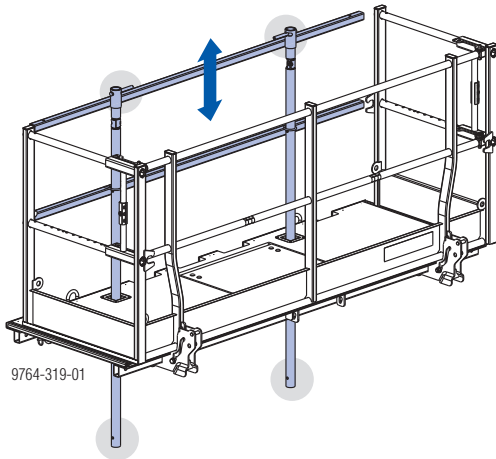
Extended lengths of the telescopic ladder

Extended length 'a'	For formwork heights	Positions of the linch pins
158 cm	1.80 m	
187 cm	2.10 m	
216 cm	2.40 m	
245 cm	2.70 m (extended length and positions of linch pins for the ladder's parked position)	
274 cm	3.00 / 3.30 m	 9764-532-01

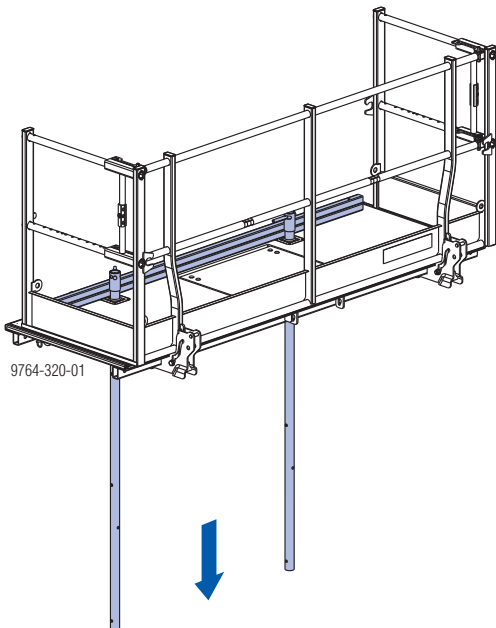
General

Railings facing formwork

The **Xsafe plus counter railing** is used to set up a front (formwork-side) railing. It can be operated (lowered / raised) both from below and from on the platform itself.



If the counter railing is not needed, it can simply be lowered into the platform.



Lowering / raising the counter railing:

The counter railing is operated either by the lever (top) or the handrail-post upright (bottom).

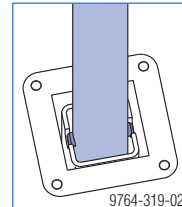
- Slightly raise the counter railing.
- Twist the lever / handrail-post upright 45°
This unlocks the counter railing.
- Lower the counter railing or raise it to the same level as the platform railings.

- Twist the lever / handrail-post upright back 45°
This locks the counter railing again.

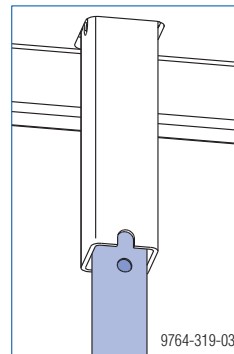


Check whether properly locked:

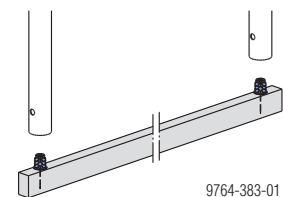
- When operating the lever (top):
The railing bolt must engage in the notch of the guide tube.



- When operating the handrail-post upright (bottom):
The hole must align with the notch of the guide tube.



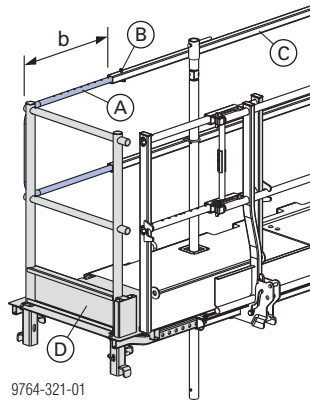
Implement for raising the Xsafe plus counter railing 2.70m from below:



Squared timber (e.g. 3x5x140 cm) with e.g. nailed-on "Universal plugs".

Lengthening the counter railing to either side

The **Xsafe plus handrail lengthening piece** makes it possible to lengthen the counter railing to either side (e.g. if the platform has also been lengthened).



b ... can be telescoped between 13 cm and 68 cm, in a 5 cm grid

- A** Xsafe plus handrail lengthening piece
- B** Linch pin of Xsafe plus handrail lengthening piece
- C** Xsafe plus counter railing
- D** Xsafe plus platform extension 0.60m

Note:

Counter railings with a handrail lengthening piece cannot be completely lowered.

Mounting the Xsafe plus platform onto the formwork

Preparing the formwork

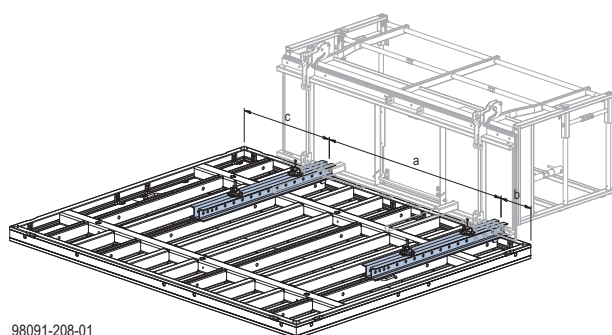
- Pre-assemble the gang-form face-down on a prepared flat area.

Note:

For details of the numbers and positions of Quick acting clamps RU, see the section headed [Rules for gang-forms](#).

Note:

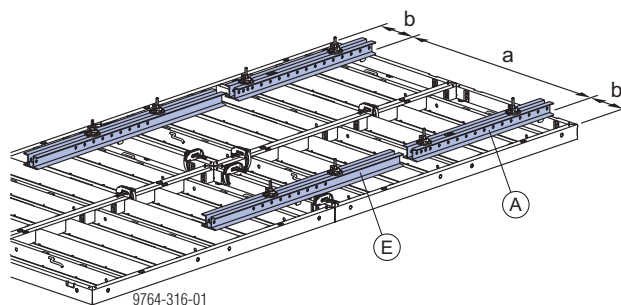
Take care where a panel of height 3.30m is installed turned on its side! Make sure positioning is correct - panel is not symmetrical!



98091-208-01

a ... 198 cm
b ... 36 cm
c ... 96 cm

Mounting the Xsafe plus walings



9764-316-01

A Xsafe plus platform waling 1.50m

E Xsafe plus stacking waler 2.10m

Xsafe plus platform	Centre-to-centre distance 'a'	Distance 'b' from edge
XL 3.90m	1980 mm	360 mm
2.70m	1980 mm	
2.40m	1680 mm	
1.35m	630 mm	

Positions of the Xsafe plus walings:

- Xsafe plus platform walings 1.50m:
 - always at the top of the formwork
- Xsafe plus platform waling extensions:
 - for panels that are vertically stacked placed on their sides, as an extension of the platform waling
- Xsafe plus stacking walers 2.10m:
 - on the inter-panel joints between 2.70m or 3.30m high panels that are vertically stacked in the upright

Note:

For details of the numbers and positions of walings and universal fixing bolts, see also the section headed [Rules for gang-forms](#).

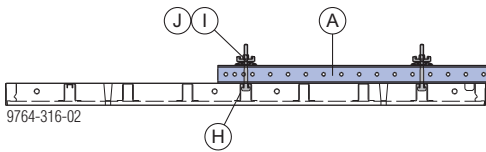


Move the Xsafe plus walings into their approximate position and only slightly fasten them with universal fixing bolts and super plates.

When the platforms are mounted (but not before this), align the Xsafe plus walings to the platform and tighten the super plates.

Mounting the Xsafe plus platform walings 1.50m

- Use Framax universal fixing bolts 10-16cm and Super plates 15.0 to fasten the Xsafe plus platform walings 1.50m in the function profile.



A Xsafe plus platform waling 1.50m

H Function profile in the Framax Xlife panel or Framax Xlife plus panel

I Framax universal fixing bolt 10-16cm

J Super plate 15.0

As a rule:

Always fasten with two universal fixing bolts.

Position of **top universal fixing bolt**:

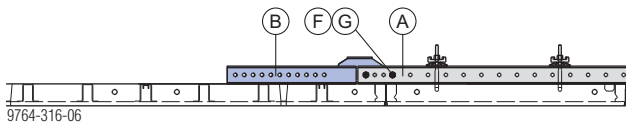
- in the slotted hole of the platform waling
- exception for horizontal 0.30m panels which are vertically stacked onto upright panels:
in the function profile of the 0.30m panel, directly above the panel joint

Position of **bottom universal fixing bolt**:

- on horizontally placed panels:
in the slotted hole of the platform waling
- on upright panels:
in the lowest possible function profile of the panel

Mounting the Xsafe plus platform waling extension 0.70m

- Fasten the platform waling extension to the Xsafe plus platform waling 1.50m with the 2 Connecting pins 10cm and Spring cotters 5mm.



A Xsafe plus platform waling 1.50m

B Xsafe plus platform waling extension 0.70m

F Connecting pin 10cm of the platform waling extension

G Spring cotter 5mm of the platform waling extension

As a rule:

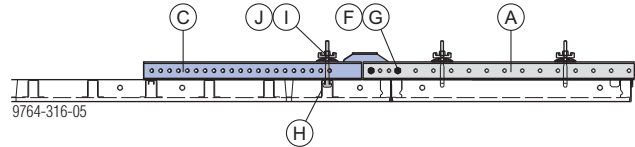
Does not need to be fastened with Universal fixing bolts.

Exception:

When stacking 2.40+2.40+1.35m, fasten with one Universal fixing bolt (directly below the panel joint).

Mounting the Xsafe plus platform waling extension 1.20m

- Fasten the platform waling extension to the Xsafe plus platform waling 1.50m with the 2 Connecting pins 10cm and Spring cotters 5mm.
- Use a Framax universal fixing bolt 10-16cm and a Super plate 15.0 to fasten the platform waling extension in the function profile.



A Xsafe plus platform waling 1.50m

C Xsafe plus platform waling extension 1.20m

F Connecting pin 10cm of the platform waling extension

G Spring cotter 5mm of the platform waling extension

H Function profile in the Framax Xlife panel or Framax Xlife plus panel

I Framax universal fixing bolt 10-16cm

J Super plate 15.0

As a rule:

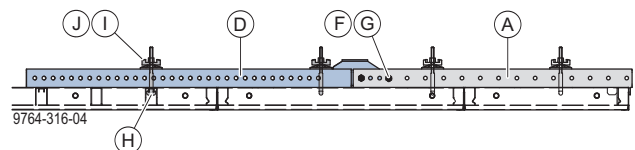
Always fasten with one universal fixing bolt.

Position of **universal fixing bolt**:

- in the function profile of the bottom panel (directly below the panel joint)

Mounting the Xsafe plus platform waling extension 1.80m

- Fasten the platform waling extension to the Xsafe plus platform waling 1.50m with the 2 Connecting pins 10cm and Spring cotters 5mm.
- Use a Framax universal fixing bolt 10-16cm and a Super plate 15.0 to fasten the platform waling extension in the function profile.



A Xsafe plus platform waling 1.50m

D Xsafe plus platform waling extension 1.80m

F Connecting pin 10cm of the platform waling extension

G Spring cotter 5mm of the platform waling extension

H Function profile in the Framax Xlife panel or Framax Xlife plus panel

I Framax universal fixing bolt 10-16cm

J Super plate 15.0

As a rule:

Always fasten with two universal fixing bolts.

Position of **top universal fixing bolt**:

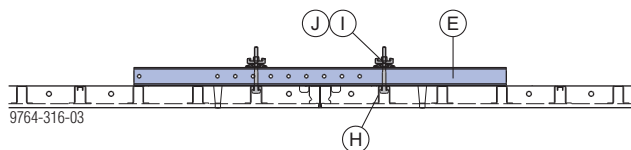
- Directly below the butt joint of the walings

Position of **bottom universal fixing bolt**:

- in the function profile of the bottom panel (directly below the panel joint)

Mounting the Xsafe plus stacking waler 2.10m

- Use Framax universal fixing bolts 10-16cm and Super plates 15.0 to fasten the Xsafe plus stacking waler 2.10m in the function profile.



E Xsafe plus stacking waler 2.10m

H Function profile in the Framax Xlife panel or Framax Xlife plus panel

I Framax universal fixing bolt 10-16cm

J Super plate 15.0

As a rule:

Always fasten with two universal fixing bolts.

Position of **top** and **bottom** universal fixing bolt:

- in the slotted hole of the stacking waler, in each case

Multi-purpose walings instead of Xsafe plus walings

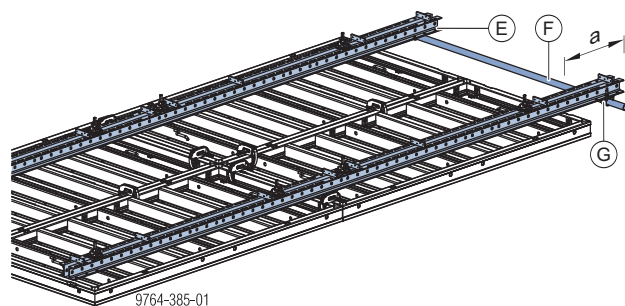
It is also possible to use **continuous multi-purpose walings** instead of the Xsafe plus walings. The platform and lifting loads are transferred into the framed formwork panels by the **Xsafe plus fixing plate**.

Note:

Where Multi-purpose walings WS10 3.50m and 6.00m are used, take the large number of fixing plates into account in planning!

Example:

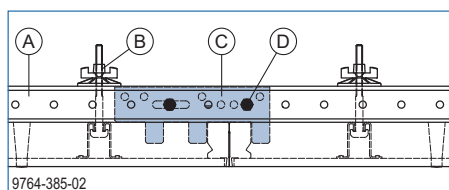
Gang-form measuring 2.70x5.40m



a ... approx. 70 cm

Max. load-bearing capacity at the inter-panel joint:
2500 kg per Xsafe plus fixing plate

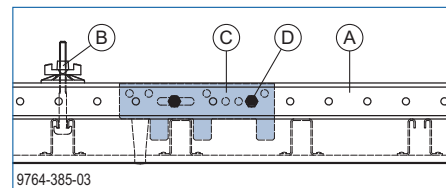
Xsafe plus fixing plate above the inter-panel joint:



Max. load-bearing capacity at the function profile or cross profile:

660 kg per Xsafe plus fixing plate

Xsafe plus fixing plate above the function profile or cross profile:



A Multi-purpose waling WS10 ...m

B Framax universal fixing bolt + Super plate 15.0

C Xsafe plus fixing plate

D Connecting pin 10cm + Spring cotter 5mm

E Crane lifting point (Connecting pin 10cm + Spring cotter 5mm)

F Scaffold tube 48.3mm

G Screw-on coupler 48mm 50

Number of connectors:

▪ As a rule:

Fasten every panel to the multi-purpose waling with two universal fixing bolts and super plates.

- Exception:

Fasten every horizontally placed panel (up to 1.35m wide) onto the multi-purpose waling with 1 universal fixing bolt and 1 super plate.

Note:

Position of **top** universal fixing bolt:

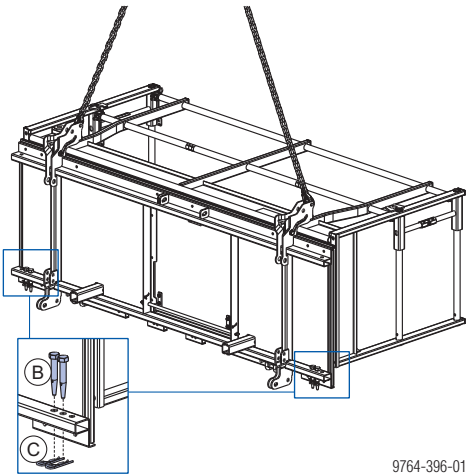
- directly below the top of the formwork

Note:

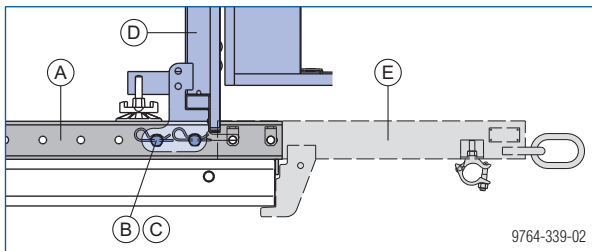
For more information, please contact your Doka technician.

Mounting the Xsafe plus platform

- Raise the Xsafe plus platform by crane and lift it to the formwork.
- Remove the Connecting pins 10cm and Spring cotter 5mm of the Xsafe plus platform from their stand-by positions.

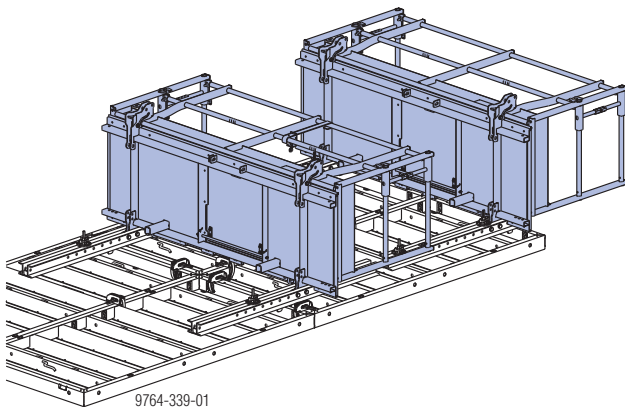


- Bolt the Xsafe plus platform into the Xsafe plus walings with the Connecting pins 10cm and Spring cotter 5mm.



Keep the first two holes in the Xsafe plus platform waling 1.50m free for the Xsafe plus lifting waler.

- Check that the Xsafe plus walings are attached correctly (Universal fixing bolt + Super-plate), and tighten these if necessary.



- A Xsafe plus waling
- B Connecting pin 10cm of the Xsafe plus platform
- C Spring cotter 5mm of the Xsafe plus platform
- D Xsafe plus platform
- E Xsafe plus lifting waler

Bolting-hole position for the platforms on the Xsafe plus walings

The hole-grid in the Xsafe plus walings makes it possible to adjust the platform level very flexibly.

However, when positioning the platforms on the Xsafe plus walings, **observe** the **following** points:

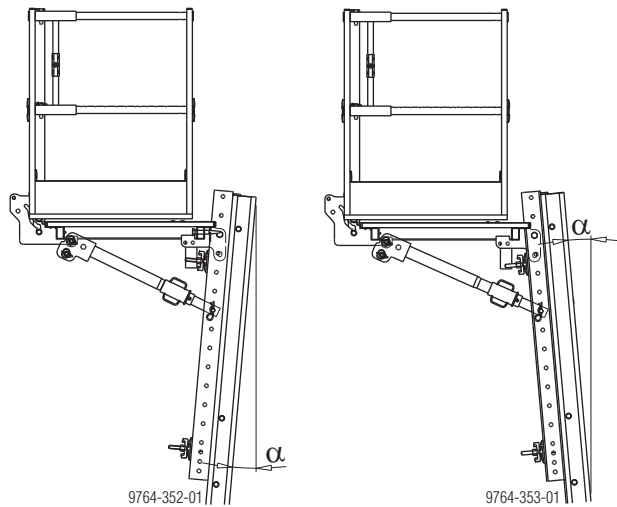
- Fixing position **on the Xsafe plus platform waling 1.50m**:
 - As a rule:
 - on the 3rd and 4th holes (from the top)
 - exception for horizontal 0.30m panels which are vertically stacked onto upright panels:
 - on the 6th and 7th holes (from the top)
- Fixing position **on the Xsafe plus stacking waler 2.10m**:
 - Inter-panel joint between upright panels 2.70m + 2.70m:
 - on the 1st and 2nd holes (from the top)
 - Inter-panel joint between upright panels 3.30m (bottom) + 2.70m (top):
 - on the 5th and 6th holes (from the top)

Note:

For details of the recommended fixing positions of the platforms (platform levels), see also the section headed [Rules for gang-forms](#).

Adjusting the platform inclination

The Xsafe plus supporting strut makes it possible to adjust the inclination of the platform.



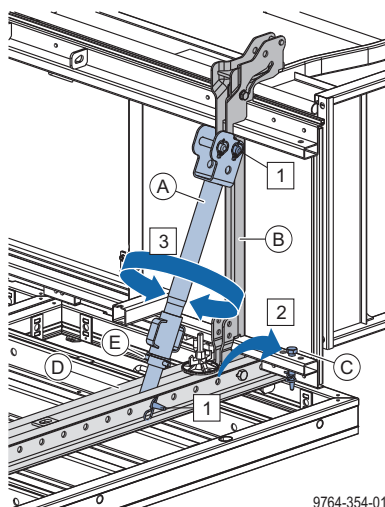
α ... up to approx. 5°

Note:

The version of the Xsafe plus supporting strut manufactured from 2024 onward offers four positions that can be pinned with the Bolt D14/102.

Note:

- For inclination adjustment, **two Xsafe plus supporting struts** are required on **each platform**.
 - Turn the spindles of the Xsafe plus supporting strut at both ends for compression or tension, as applicable.
 - Turn the spindles of both Xsafe plus supporting struts in the same direction to prevent deformation of the decking.
- 1) Mount the Xsafe plus supporting strut between the platform and the Xsafe plus waling.
 - 2) Remove a Connecting pin 10cm (between the platform and the waling).
 - 3) Set the desired platform inclination by turning the screwjack mechanism on the Xsafe plus supporting strut.



- A Xsafe plus supporting strut
- B Xsafe plus platform
- C Connecting pin 10cm
- D Xsafe plus waling
- E Bolt D14/102

Pre-assembly of collapsible, stackable gang-forms

The **Xsafe plus swivel plate** makes it possible to completely pre-assemble the gang-forms, complete with platform.

When the gang-forms are **stacked or transported by truck**, the platform on each gang-form is folded closed.

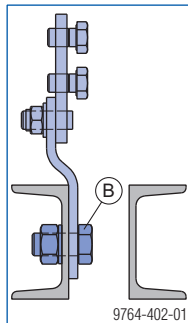
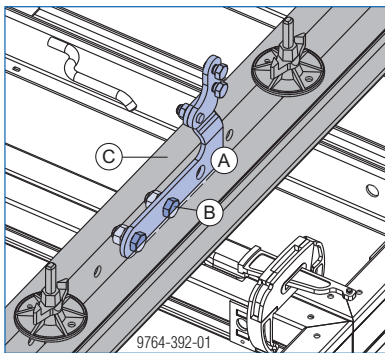
Note:

Required hole-grid on waling: 10 cm (e.g. Xsafe plus waling)

When the swivel plate is used, it is no longer possible to adjust the inclination of the platform.

Mounting the Xsafe plus swivel plate

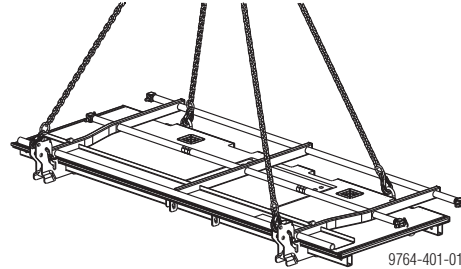
- ▶ Bolt the swivel plates to the left-hand inside face of the Xsafe plus walings.



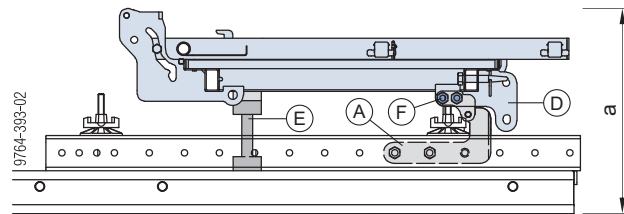
- A Xsafe plus swivel plate
- B M20 bolts of the Xsafe plus swivel plate
- C Xsafe plus waling

Mounting the Xsafe plus platform

- ▶ Position the intermediate distancer on the gang-form.
- ▶ Raise the Xsafe plus platform by crane and lift it to the formwork.

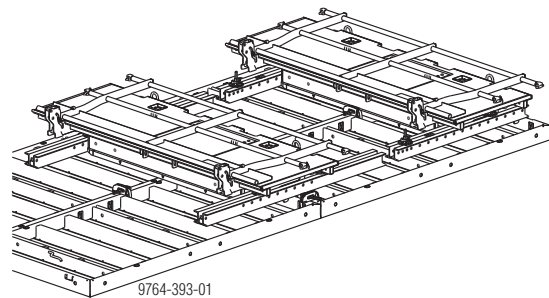


- ▶ Attach the Xsafe plus platform to the swivel plate with the M16 hexagon bolts.



a ... 59 cm

- A Xsafe plus swivel plate
- D Xsafe plus platform
- E Intermediate distancer with a height of approx. 22.5 cm (e.g. Doka beam H20 + formwork-sheet strip)
- F M16 hexagon bolts of the Xsafe plus swivel plate



Stacking the gang-forms



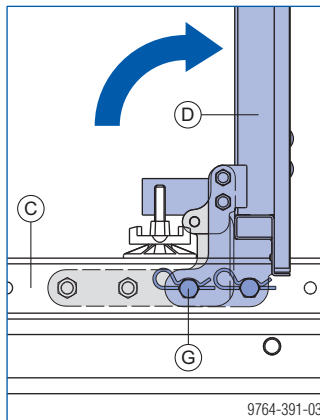
NOTICE

If the pre-assembled gang-forms are stacked on top of one another, observe the following points:

- Do not place any loads upon the platforms when stacking the gang-forms (use 48 cm high intermediate distancers).
- Protect the formwork sheets from damage (place intermediate distancers on the cross profiles or frame profiles only).

Tilting up the Xsafe plus platform

- Remove the connecting pins and spring cotters from the 'parked' positions.
- Tilt up the platform by 90°.
- Insert them into holes in the function profile and secure them.



C Xsafe plus waling

D Xsafe plus platform

G Connecting pin 10cm + Spring cotter 5mm of the Xsafe plus platform

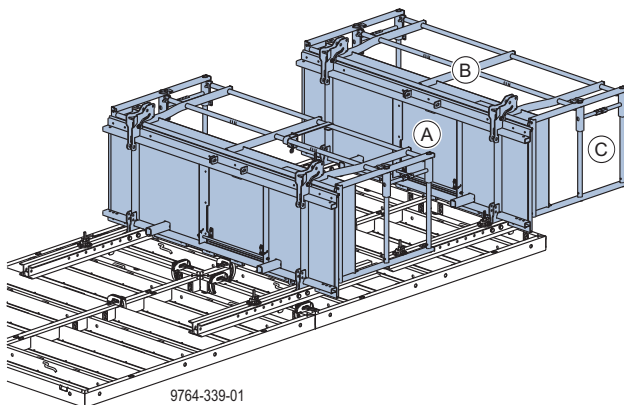


NOTICE

Back railing drops down into folded-in position!

- Activate end-of-platform sideguard to prevent the railing from dropping down to folded-in position (see the section headed [Activating end-of-platform sideguards](#)).

- Tilt up the back railings.



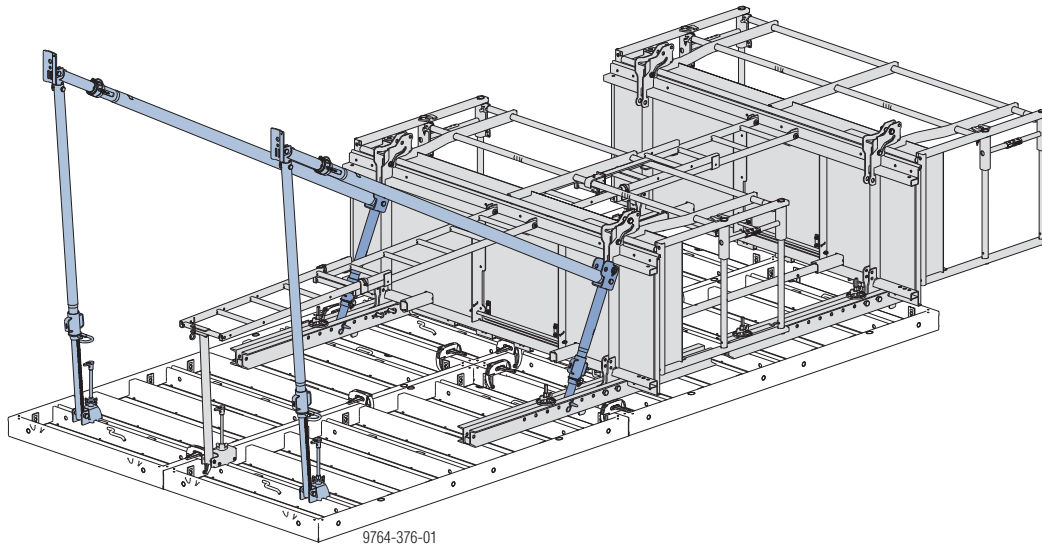
A Xsafe plus platform 2.70m

B Back railing

C Side railing

- Mount the ladder system and panel struts on the face-down gang-form (see the relevant section of this booklet).

Plumbing accessories



Plumbing accessories brace the formwork against wind loads and make it easier to plumb and align the formwork.



WARNING

Risk of the formwork tipping over!

- ▶ Formwork panels must be held stable in **every phase** of construction work!
- ▶ Observe all applicable safety regulations!
- ▶ If **high wind speeds** are likely, and when work finishes for the day or before prolonged work-breaks, always take extra precautions to fix the formwork in place.

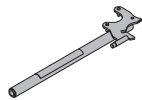
Suitable precautions:

- set up the opposing formwork
- place the formwork against a wall
- anchor the formwork to the ground (e.g. with Framax floor fixing plates)
- ▶ The safety pin is only for rough adjustment of the plumbing accessory. Do not attempt to remove or release the safety pin under load.



Universal dismantling tool

For easy operation of the spindle nuts.



Determining the number of struts

Note:

- The tables are based on the **structural-design** requirements.
- The **geometrical** arrangement of platforms and plumbing accessories must be planned separately for each project.
- The values apply where the wind pressure $w_e = 0.65 \text{ kN/m}^2$. This results in a peak velocity pressure $q_p = 0.5 \text{ kN/m}^2$ (102 km/h) where $c_{p, \text{net}} = 1.3$. The greater wind loads encountered at exposed formwork-ends must be restrained by additional plumbing accessories (e.g. struts or pipe-braces). In cases where higher wind pressure is encountered, the number of struts must be determined by statical calculation!
- Values apply for an angle α of the plumbing strut of 60° .
- Values do not apply for gang-forms in the edge zone or for free-standing gang-forms.
 - Gang-forms in the edge zone must be supported by at least 2 plumbing accessories.
 - Free-standing gang-forms must be supported by at least 2 plumbing accessories.



For more information, see the Calculation Guide 'Wind loads to the Eurocodes', or consult your Doka technician!

Height of basic panel: 2.70 m

up to a formwork height of [m]	Width of gang-form																																	
	2.40 m					2.70 m					3.00 m					3.15 m					3.30 m					3.60 m					3.90 m			
	340	540	Eurex60	Rex750	Rex1020	Supporting strut	340	540	Eurex60	Rex750	Rex1020	Supporting strut	340	540	Eurex60	Rex750	Rex1020	Supporting strut	340	540	Eurex60	Rex750	Rex1020	Supporting strut	340	540	Eurex60	Rex750	Rex1020	Supporting strut				
3.60	1						1						1							1					1									
4.05		1						1						1							1					1								
4.65		1				2		1				2		1				2		1				2		1				2				
4.95								1				2		1				2		2				2		2				2				
5.40		1				2		1				2		2				2		2				2		2				2				
6.75			1			2				2		2		2		2		2		2		2		2		2		2		2				
7.05				1					1*		2		2		2	2*		2		2		2	2*		2		2	2*		2				
7.35								2		2*	2		2*	2		2		2*	2		2		2		2		2*	2		2				
8.10			2		2*	2		2		2*	2		2*	2		2		2*	2		2		2		2		2*	2		2				

*strut(s) usable as alternatives

Height of basic panel: 3.00 m

up to a formwork height of [m]	Width of gang-form																											
	2.40 m				2.70 m				3.00 m				3.15 m				3.30 m				3.60 m				3.90 m			
	340	540	Rex750	Supporting strut	340	540	Rex750	Supporting strut	340	540	Rex750	Supporting strut	340	540	Rex750	Supporting strut	340	540	Rex750	Supporting strut	340	540	Rex750	Supporting strut	340	540	Rex750	Supporting strut
3.90	1				1				2				2				2				2				2			
4.35						1		2		1		2		1		2		1		2		1		2		1		2
4.65		1		2		1		2		1		2		1		2		1		2		1		2		1		2
4.80						1		2		1		2		1		2		1		2		2		2		2		2
4.95						1		2		1		2		1		2		2		2		2		2		2		2
5.25						1		2		2		2		2		2		2		2		2		2		2		2
5.70			1	2			1	2			1	2			1	2			1	2			1	2			2	2
6.00			1	2			1	2			1	2			1	2			1	2			2	2			2	2
6.30						1	2			1	2			2	2			2	2			2	2			2	2	

Height of basic panel: 3.30 m

up to a formwork height of [m]	Width of gang-form																											
	2.40 m				2.70 m				3.00 m				3.15 m				3.30 m				3.60 m				3.90 m			
	340	540	Rex750	Supporting strut	340	540	Rex750	Supporting strut	340	540	Rex750	Supporting strut	340	540	Rex750	Supporting strut	340	540	Rex750	Supporting strut	340	540	Rex750	Supporting strut	340	540	Rex750	Supporting strut
3.30	1				1				1				1				1				1				2			
3.75					1				1				1				2				2	1			2			
3.90						1		2		1		2		1		2		1		2		1				1		2
4.65		1		2		1		2		1		2		1		2		1		2		2		2		2		2
4.95						1		2		1		2		1		2		2		2		2		2		2		2
5.25						1		2		2		2		2		2		2		2		2		2		2		2
5.55						2		2		2		2		2		2		2		2				2		2		2
6.60			1	2			1	2			1	2			2	2			2	2			2	2			2	2

340 Panel strut 340
 540 Panel strut 540
 Eurex60 Eurex 60 550
 Rex750 DokaRex alignment strut 750 IB
 Rex1020 DokaRex alignment strut 1020 IB
 Supporting strut Xsafe plus supporting strut

▪ Width of gang-form: 3.15 m
 Required panel struts:
 2 x Panel strut 540
 2 x Xsafe plus supporting strut

Example:

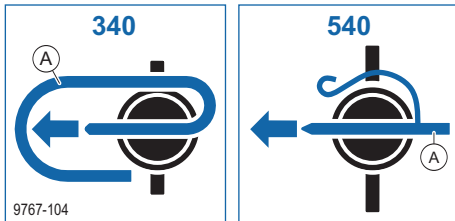
- Height of basic panel: 2.70 m
- Formwork height: 6.00 m

Pre-assembly

- Install heads on the plumbing accessory.
- Fix the plumbing accessory to the formwork and to the ground (see connection possibilities below for details).
- Precision adjustment of the plumbing strut with adjusting nut.

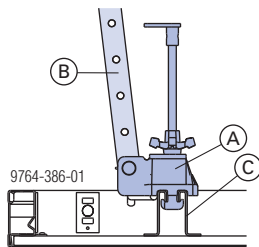


Safety pin (A) must be pushed all the way into the plumbing accessory.



Fixing the struts to the formwork

- Fit the the prop head to the panel strut.
- Fasten the panel strut to the formwork.



- A Prop head EB
- B Panel strut 340 IB or 540 IB or Eurex 60 550
- C Function profile

Note:

If the function profile is blocked by the Xsafe plus waling, the panel strut can be attached to the Xsafe plus waling with a Connecting pin 10cm and Spring cotter 5mm.

Fixing to the platform

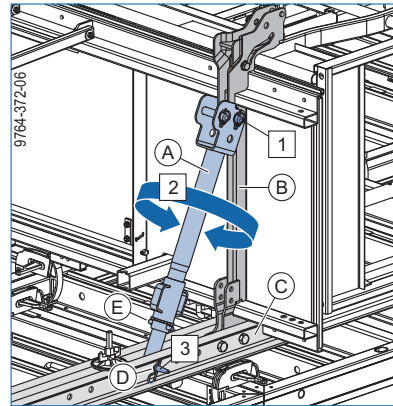
Note:

- Always use supporting struts in pairs (one strut at each end of the platform).
- Turn the spindles of the Xsafe plus supporting strut at both ends for compression or tension, as applicable.
- Turn the spindles of both Xsafe plus supporting struts in the same direction to prevent deformation of the decking.

Install the Xsafe plus supporting struts between the platform and the Xsafe plus waling:

- 1) Pin the supporting strut to the platform and secure it with a linch pin.
- 2) Turn the screwjack mechanism on the supporting strut to adjust it to the required length.

- 3) Pin the supporting strut into the waling with a Connecting pin 10cm and secure this with a spring cotter.



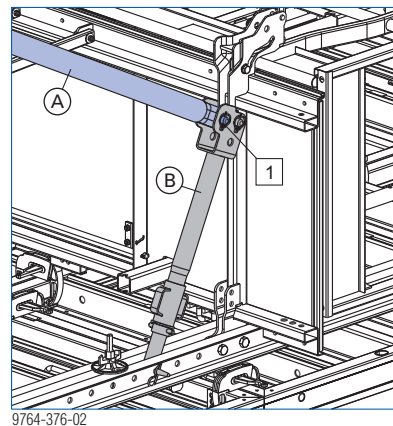
- A Xsafe plus supporting strut
- B Xsafe plus platform
- C Xsafe plus waling
- D Connecting pin 10cm of the Xsafe plus supporting strut
- E Bolt D14/102

Note:

The version of the Xsafe plus supporting strut manufactured from 2024 onward offers four positions that can be pinned with the Bolt D14/102.

Mount the panel strut to the Xsafe plus supporting strut:

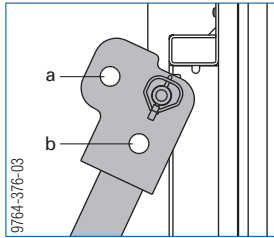
- 1) Bolt the panel strut to the Xsafe plus supporting strut and secure it with a linch pin.



- A Panel strut 340 IB or 540 IB or Eurex 60 550
- B Xsafe plus supporting strut EB

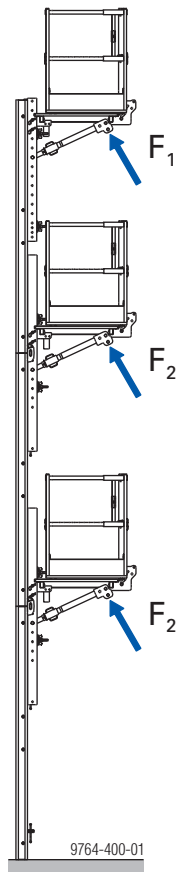
The panel strut can be bolted to the supporting strut in **2 positions**:

- **As a basic rule**, use Position (a).
- For gang-forms with **basic panel height 2.70m** and **Panel strut 540 connected to the lowest platform**: use Position (b).
 - Advantage: larger adjusting range of the Panel strut 540.

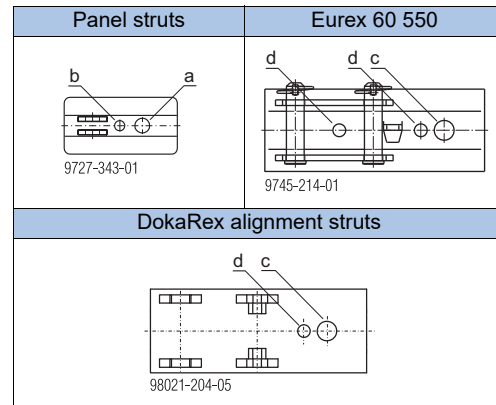
**Xsafe plus supporting strut EB:**

Permitted connection forces (plumbing accessory -> supporting strut):

- Top platform (pouring platform): $F_{1, \text{perm.}} = 10.0 \text{ kN}$
- Intermediate platform / bottom platform:
 $F_{2, \text{perm.}} = 13.5 \text{ kN}$

**Fixing to the ground**

- Anchor the plumbing accessories in such a way as to resist tensile and compressive forces!



a ... diam. 26 mm

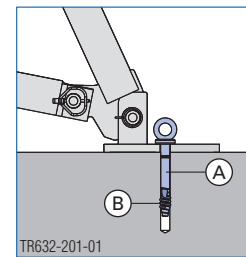
b ... diam. 18 mm (suitable for Doka express anchors)

c ... diam. 28 mm

d ... diam. 18 mm (suitable for Doka express anchors)

Anchoring the footplate

The **Doka express anchor** can be re-used many times over.



A Doka express anchor 16x125mm

B Doka coil 16mm

Characteristic cube compressive strength of the concrete ($f_{ck, \text{cube}}$): min. 15 N/mm² (C12/15 grade concrete)



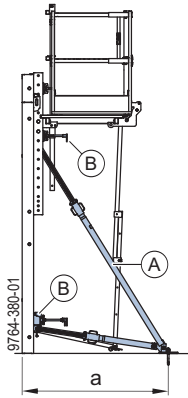
Follow the directions in the 'Doka express anchor 16x125mm' User information booklet!

Required safe working load of alternative anchors:

$F_d \geq 20.3 \text{ kN}$ ($F_{\text{exist}} \geq 13.5 \text{ kN}$)

Follow the manufacturers' applicable fitting instructions.

Panel strut 340

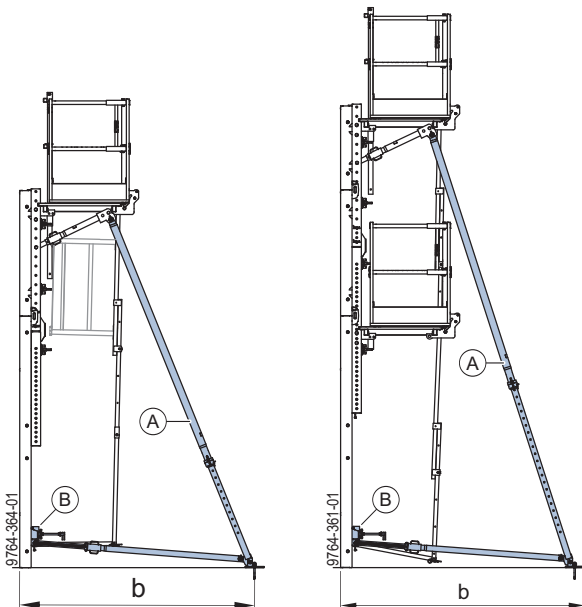


a ... 163.0 cm

A Panel strut 340 IB

B Prop head EB

Panel strut 540



b ... 255.0 cm

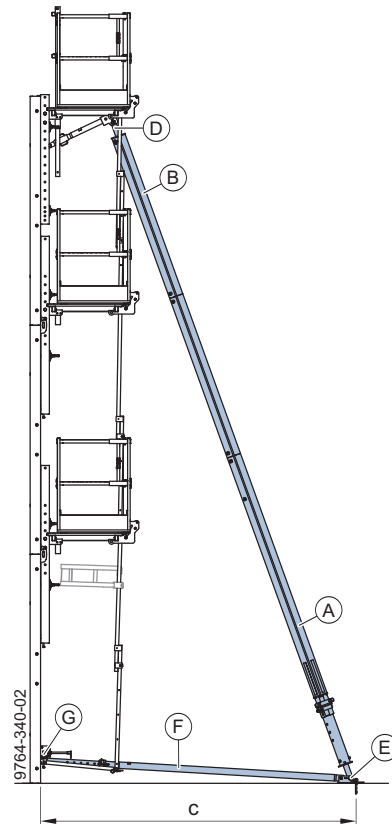
A Panel strut 540 IB

B Prop head EB

Eurex 60 550 used as a shoring & plumbing accessory



Follow the directions in the 'Eurex 60 550' User Information booklet!



b ... 255.0 cm

c ... 360.0 cm

A Plumbing strut Eurex 60 550

B Extension Eurex 60 2.00m

D Connector Eurex 60 IB

E Plumbing strut shoe Eurex 60 EB

F Adjusting strut 540 Eurex 60 IB

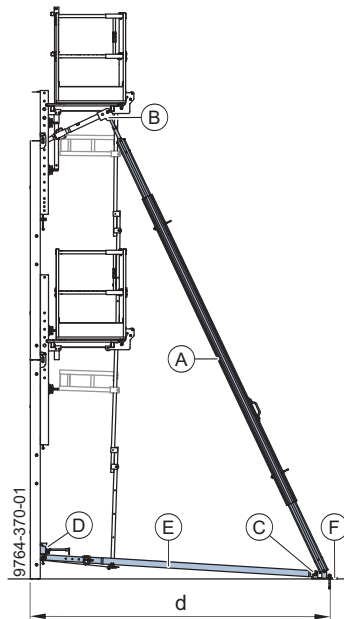
G Prop head EB

DokaRex alignment struts



Follow the directions in the 'Alignment struts DokaRex' User Information booklet!

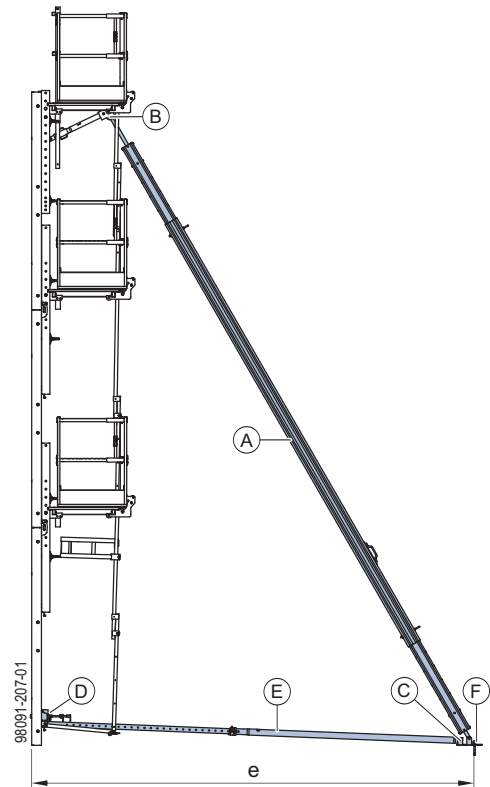
DokaRex alignment strut 750 IB



d ... 4760.0 cm

- A** DokaRex alignment strut 750 IB
(without pin set top/bottom, DokaRex strut shoe EB M16)
- B** DokaRex formwork-adapter pin set
- C** Head bolt D25/151 + Linch pin 6x42
- D** Prop head EB
- E** Adjusting strut 540 Eurex 60 IB
- F** DokaRex panel-strut shoe M16/M20

DokaRex alignment strut 1020 IB



e ... 5540.0 cm

- A** DokaRex alignment strut 1020 IB
(without pin set top/bottom, DokaRex strut shoe EB M16)
- B** DokaRex formwork-adapter pin set
- C** Head bolt D25/151 + Linch pin 6x42
- D** Prop head EB
- E** Adjusting strut 540 Eurex 60 IB
- F** DokaRex panel-strut shoe M16/M20

Rules for gang-forms

Positions of the connectors and accessories needed for:

- Lifting and setting down
- Crane-handling
- Platform loads
- Pouring

The following information is given for each of the gang-forms mentioned below:

- position of the panel connectors
- position and fixing method of the platform walings and stacking walers
- position of the platforms



For details regarding the position of the form ties, follow the directions in the 'Framed formwork Framax Xlife' or 'Framed formwork Framax Xlife plus' User Information booklets.

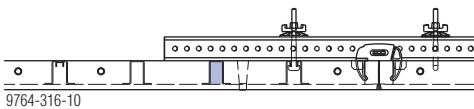
Vertical stacking [m]	Xsafe plus platform waling 1.50m
up to 0.45	
0.45 - 0.75	Xsafe plus platform waling extension 0.70m
0.90 - 1.50	Xsafe plus platform waling extension 1.20m
1.35 - 1.80	Xsafe plus platform waling extension 1.80m

Xsafe plus platform waling 1.50m:

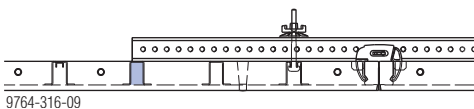
Because of the permitted tensile load of 14 kN in the function profile, the stated permissible moments also apply for more rigid components such as the Multi-purpose waling WU12 Top50.

Permitted moment:

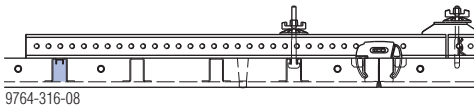
- Resting on 1st cross profile: 5.0 kNm



- Resting on 2nd cross profile: 9.5 kNm



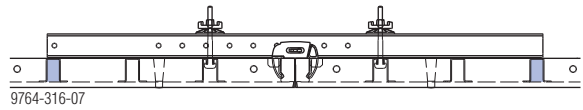
- Resting on 3rd cross profile: 11.0 kNm



(Values also apply where the Xsafe plus platform waling 1.50m is combined with Xsafe plus platform waling extensions)

Xsafe plus stacking waler 2.10m:

- Permitted moment: 9.5 kNm



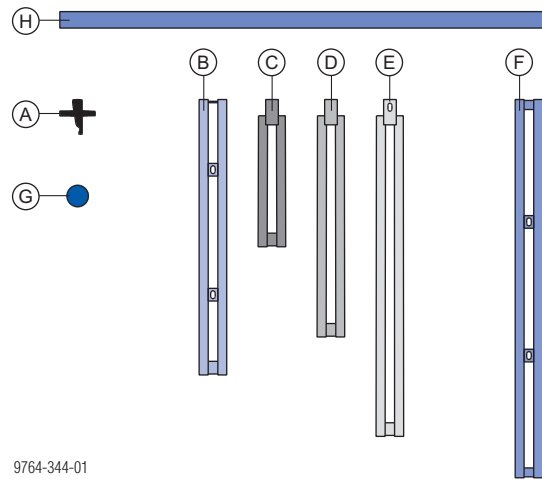
Because of the permitted tensile load of 14 kN in the function profile, the stated permissible moment also applies for more rigid components such as the Multi-purpose waling WU12 Top50.

Framax quick acting clamp RU:

Permitted tensile force: 15.0 kN

Permitted shear force: 6.0 kN

Permitted moment: 0.5 kNm



- A Framax quick acting clamp RU
- B Xsafe plus platform waling 1.50m
- C Xsafe plus platform waling extension 0.70m
- D Xsafe plus platform waling extension 1.20m
- E Xsafe plus platform waling extension 1.80m
- F Xsafe plus stacking waler 2.10m
- G Framax universal fixing bolt 10-16cm + Super plate 15.0
- H Xsafe plus platform

Material list for gang-forms with widths of 2.70 m / 2.40 m / 1.35 m

Height of basic panel	Combination n°	Formwork height [m]	Panel heights [m]				Extension length [cm]			Number of connectors										Platform levels [cm]	
			Panel 1	Panel 2	Panel 3	Panel 4	Adjusting strut 120	Adjusting strut 220	Adjusting strut 540 Eux 60 IB	Framax quick acting clamp RU 1)	Platform waling 1.50m	Platform waling extension 0.70m	Platform waling extension 1.20m	Platform waling extension 1.80m	Stacking waler 2.10m	Framax universal fixing bolt 10-16cm + Super plate 15.0	Xsafe plus telescopic ladder 3)	Xsafe plus ladder starter piece	Xsafe plus ladder support		Xsafe plus ladder extension 1.15m
2.70m	101	2.70	2.70				163.0				2					4	1	1			255
	102	3.00	2.70	0.30			163.0			4	2					4	1	1			255
	103	3.15	2.70	0.45			163.5			4	2					4	1	1			300
	104	3.30	2.70	0.60			163.5			4	2					4	1	1			315
	105	3.60	2.70	0.90			163.5			4	2	2				4	1	1		1	345
	106	4.05	2.70	1.35				255.0		4	2		2			6	1	1		1	390
	107	4.35	2.70	1.35	0.30			255.0		8	2		2			6	2	1	1		257 / 420
	108	4.50	2.70	1.35	0.45			255.0		8	2		2			6	2	1	1		257 / 435
	109	4.65	2.70	1.35	0.60			255.0		8	2		2			6	2	1	1		257 / 450
	110	4.95	2.70	1.35	0.90			255.0		8	2			2		8	2	1	1		257 / 480
	111	5.40	2.70	2.70				255.0		4	2				2	8	2	1	1		299 / 525
	112	5.70	2.70	2.70	0.30			255.0		8	2				2	8	2	1	1		299 / 525
	113	5.85	2.70	2.70	0.45			255.0		8	2				2	8	2	1	1		299 / 570
	114	6.00	2.70	2.70	0.60			255.0		8	2				2	8	2	1	1		299 / 585
	115	6.00	2.70	3.30				255.0		4	2				2	8	2	1	1		299 / 585
	116	6.30	2.70	2.70	0.90			255.0		8	2	2			2	8	2	1	1		299 / 615
	117	6.75	2.70	2.70	1.35				476.0	8	2		2		2	10	3	1	2		259 / 462 / 660
	118	7.05	2.70	2.70	1.35	0.30			493.0	12	2		2		2	10	3	1	2		259 / 472 / 690
	119	7.20	2.70	2.70	1.35	0.45			502.0	12	2			2	2	12	3	1	2		299 / 527 / 705
	120	7.35	2.70	2.70	1.35	0.60			510.0	12	2			2	2	12	3	1	2		259 / 472 / 705
	121	7.65	2.70	2.70	1.35	0.90			528.0	12	2			2	2 + 2 2)	12 + 4 2)	3	1	2		299 / 527 / 750
	122	8.10	2.70	2.70	2.70				554.0	8	2				4 + 2 2)	12 + 4 2)	3	1	2		299 / 569 / 795
3.00m	201	3.00	3.00				163.0				2					4	1	1			285
	202	3.30	3.00	0.30			163.0			4	2					4	1	1			285
	203	3.45	3.00	0.45			163.0			4	2					4	1	1		1	330
	204	3.60	3.00	0.60			163.0			4	2					4	1	1		1	345
	205	3.90	3.00	0.90			163.0			4	2	2				4	1	1		1	375
	206	4.35	3.00	1.35				255.0		4	2	2				4	2	1	1		202 / 420
	207	4.65	3.00	1.35	0.30			255.0		8	2		2			6	2	1	1		257 / 450
	208	4.80	3.00	1.35	0.45			255.0		8	2			2		8	2	1	1		257 / 465
	209	4.95	3.00	1.35	0.60			255.0		8	2			2		8	2	1	1		287 / 480
	210	5.25	3.00	1.35	0.90			255.0		8	2			2		8	2	1	1		287 / 510
	211	5.70	3.00	2.70					415.0	4	2				2	8	2	1	1	1	329 / 555
	212	6.00	3.00	3.00					433.0	4	2				2	8	2	1	1	1	329 / 585
	213	6.30	3.00	3.00	0.30				433.0	8	2				2	8	2	1	1	1	329 / 585
3.30m	301	3.30	3.30				163.0				2					4	1	1			315
	302	3.60	3.30	0.30			163.0			4	2					4	1	1			315
	303	3.75	3.30	0.45			163.0			4	2					4	1	1		1	360
	304	3.90	3.30	0.60				255.0		4	2					4	1	1		1	375
	305	4.20	3.30	0.90				255.0		4	2	2				4	1	1		1	405
	306	4.65	3.30	1.35				255.0		4	2		2			6	2	1	1	2	257 / 450
	307	4.95	3.30	1.35	0.30			255.0		8	2		2			6	2	1	1		287 / 480
	308	5.10	3.30	1.35	0.45			255.0		8	2		2			6	2	1	1		317 / 495
	309	5.25	3.30	1.35	0.60			255.0		8	2			2		8	2	1	1		317 / 510
	310	5.55	3.30	1.35	0.90			255.0		8	2			2		8	2	1	1		317 / 540
	311	6.60	3.30	3.30					467.0	4	2				2	8	2	1	1		319 / 645

¹⁾ N° of quick acting clamps RU for 2.70 m and 2.40 m wide gang-forms.

For 1.35 m wide gang-forms, only half the number of quick acting clamps RU is needed (e.g. 2 instead of 4).

²⁾ Extra stacking waler needed on the 1st and 2nd panel joints on 2.70 m wide gang-forms.

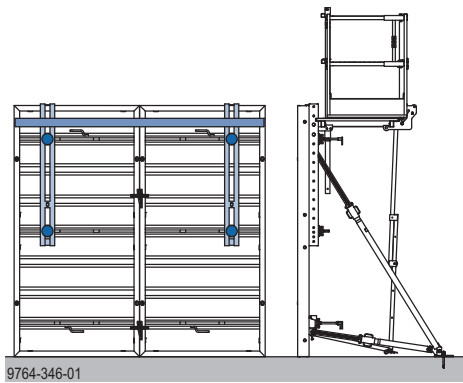
Not needed on 1.35 m wide gang-forms.

³⁾ There is a telescopic ladder integrated into the Xsafe plus platform XL.

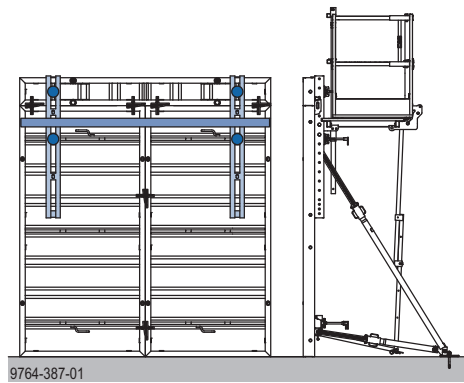
⁴⁾ Xsafe plus ladder starter pieces always required

Examples for a basic panel height of 2.70m

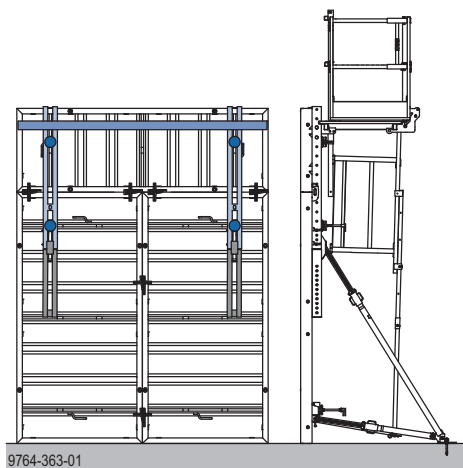
Combination n° 101
Formwork height: 2.70 m
Formwork width: 2.70 m



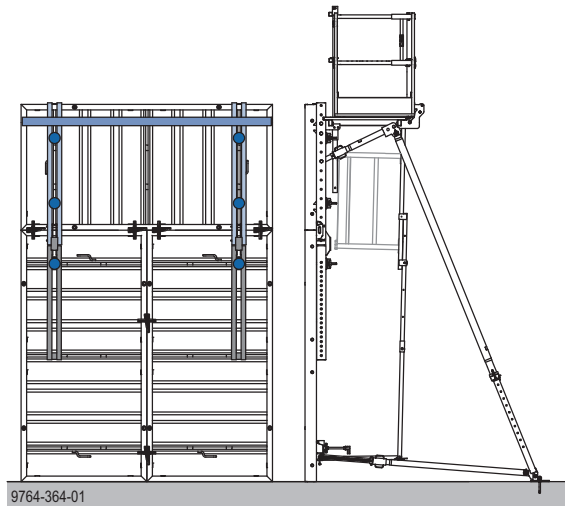
Combination n° 102
Formwork height: 3.00 m
Formwork width: 2.70 m



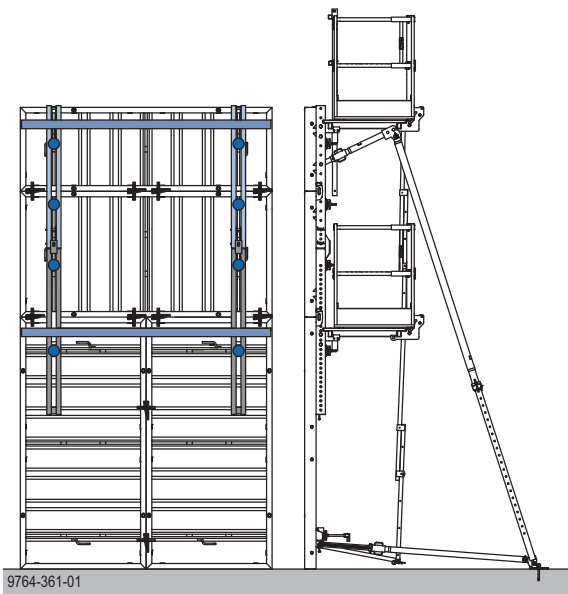
Combination n° 105
Formwork height: 3.60 m
Formwork width: 2.70 m



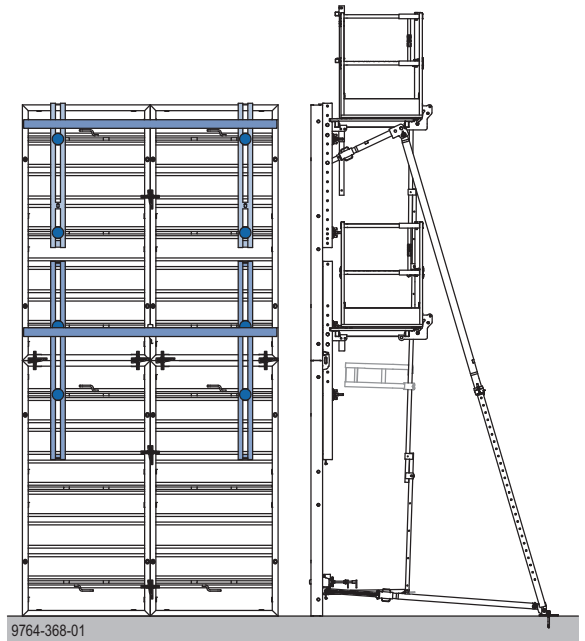
Combination n° 106
Formwork height: 4.05 m
Formwork width: 2.70 m



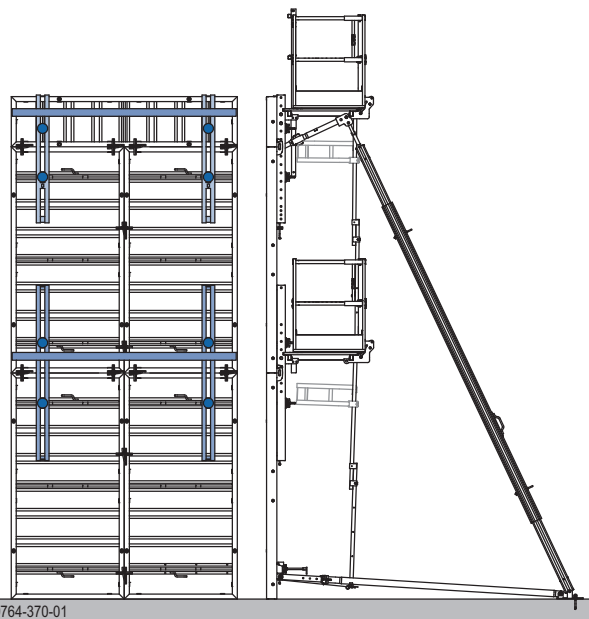
Combination n° 110
Formwork height: **4.95 m**
Formwork width: **2.70 m**



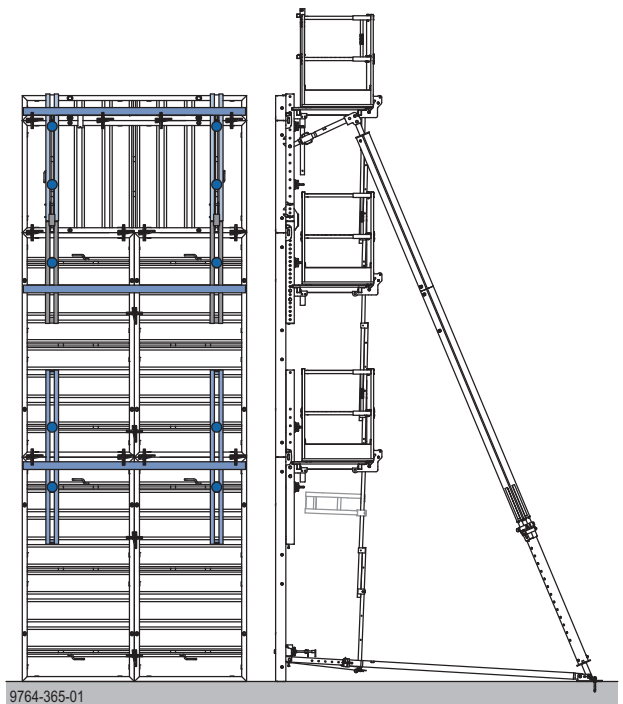
Combination n° 111
Formwork height: **5.40 m**
Formwork width: **2.70 m**



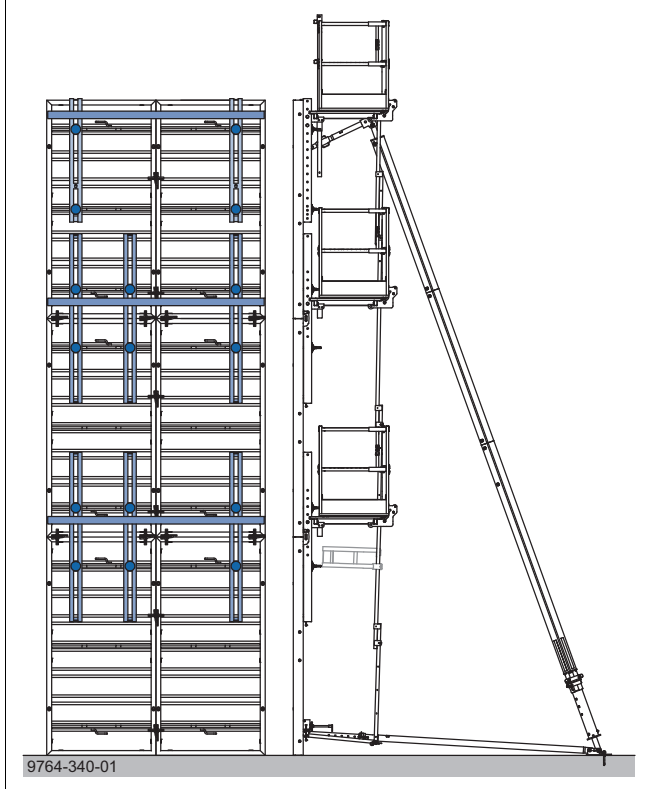
Combination n° 114
Formwork height: **6.00 m**
Formwork width: **2.70 m**



Combination n° 118
Formwork height: **7.05 m**
Formwork width: **2.70 m**

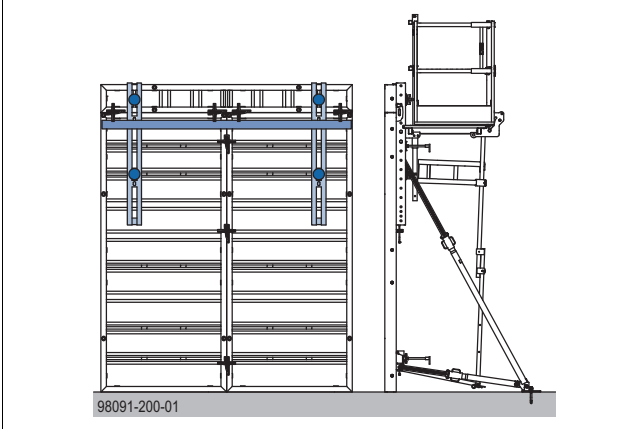


Combination n° 122
Formwork height: 8.10 m
Formwork width: 2.70 m

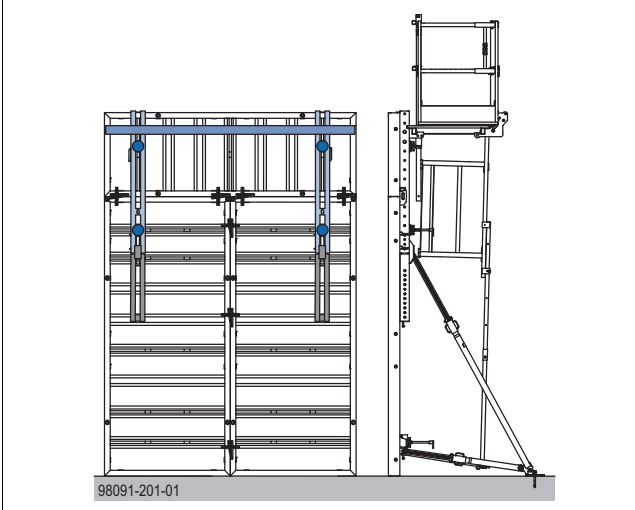


Examples for a basic panel height of 3.00m

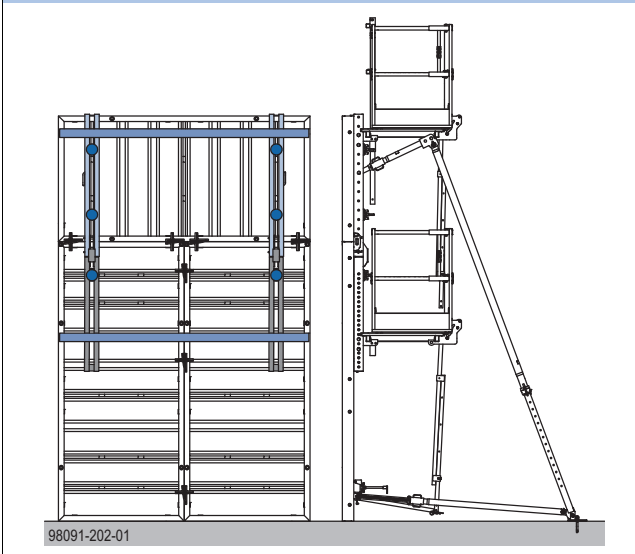
Combination n° 202
Formwork height: 3.30 m
Formwork width: 2.70 m



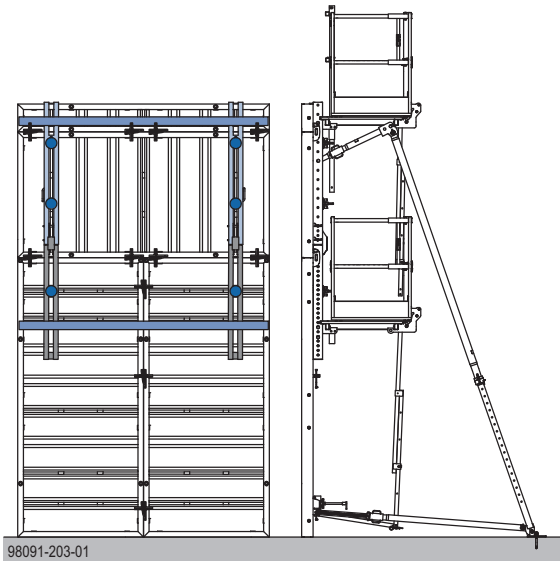
Combination n° 205
Formwork height: 3.90 m
Formwork width: 2.70 m



Combination n° 206
Formwork height: 4.35 m
Formwork width: 2.70 m

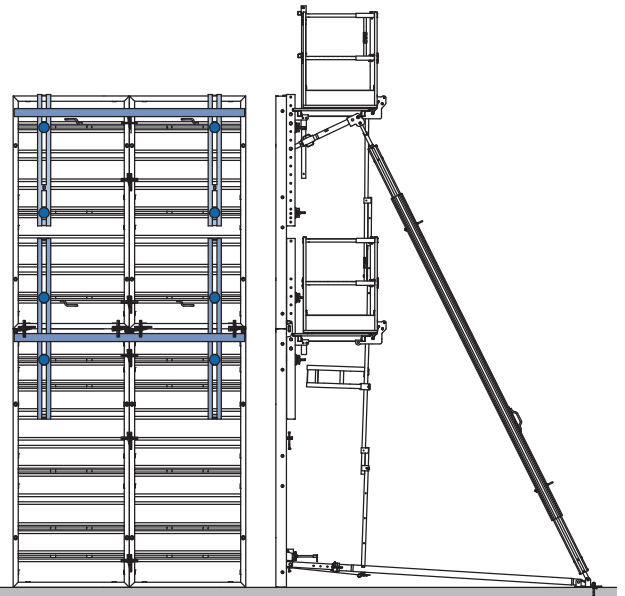


Combination n° 207
Formwork height: **4.65 m**
Formwork width: **2.70 m**



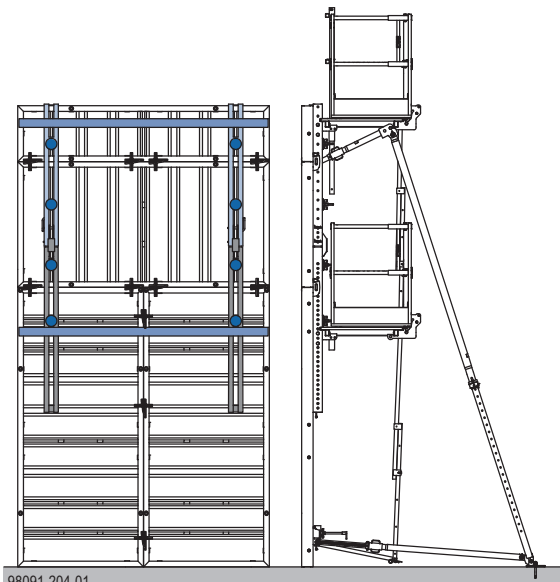
98091-203-01

Combination n° 211
Formwork height: **5.70 m**
Formwork width: **2.70 m**



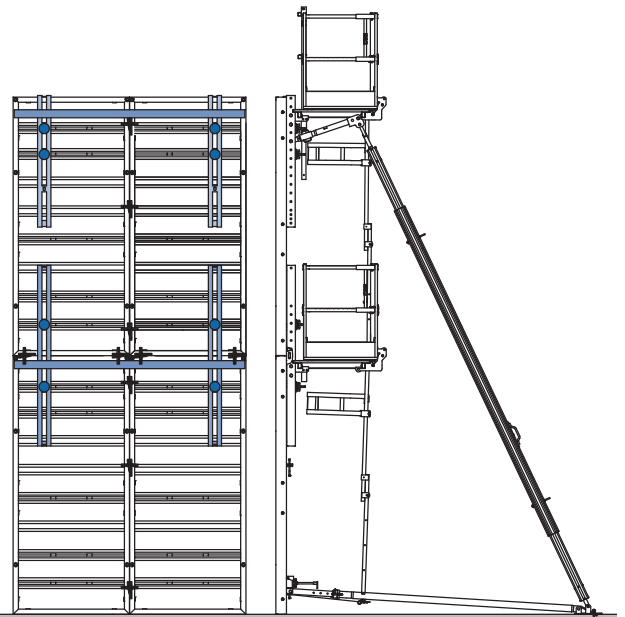
98091-205-02

Combination n° 209
Formwork height: **4.95 m**
Formwork width: **2.70 m**



98091-204-01

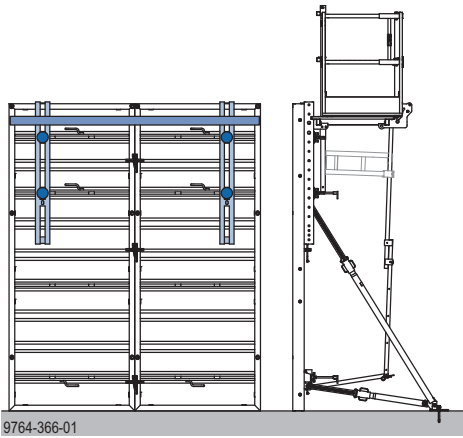
Combination n° 212
Formwork height: **6.00 m**
Formwork width: **2.70 m**



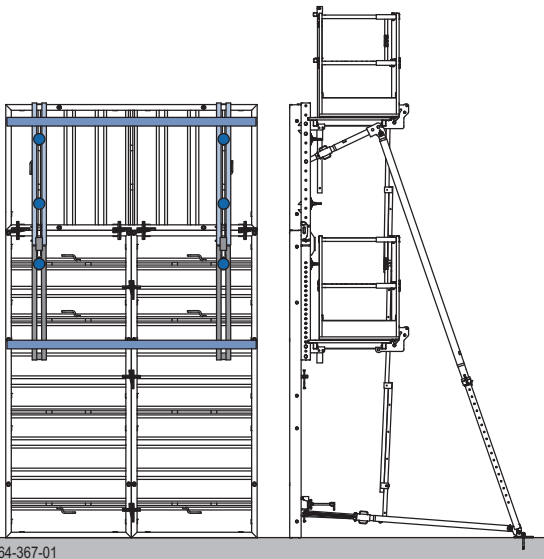
98091-205-01

Examples for a basic panel height of 3.30m

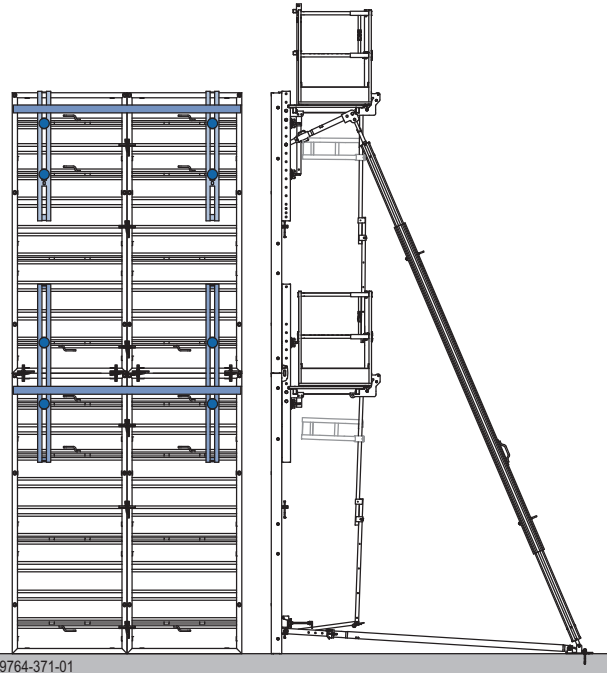
Combination n° 301
Formwork height: 3.30 m
Formwork width: 2.70 m



Combination n° 306
Formwork height: 4.65 m
Formwork width: 2.70 m



Combination n° 311
Formwork height: 6.60 m
Formwork width: 2.70 m



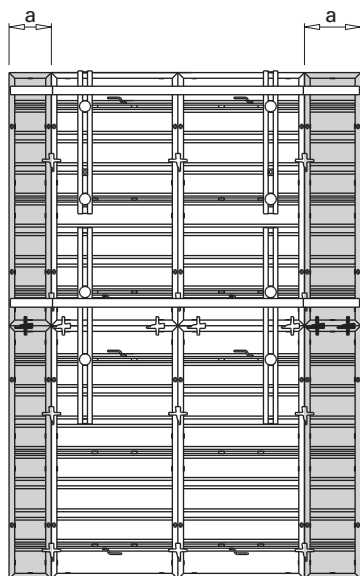
Extra connectors for gang-form width additions

Framax quick-acting clamp RU

Panel width of width-addition (a)	Extra Quick-acting clamps RU for each panel joint of the width-addition
0.30m	1
0.45m	1
0.60m	2

Example:

- Panel width: 0.45m and 0.60m
- Formwork height: 5.40 m

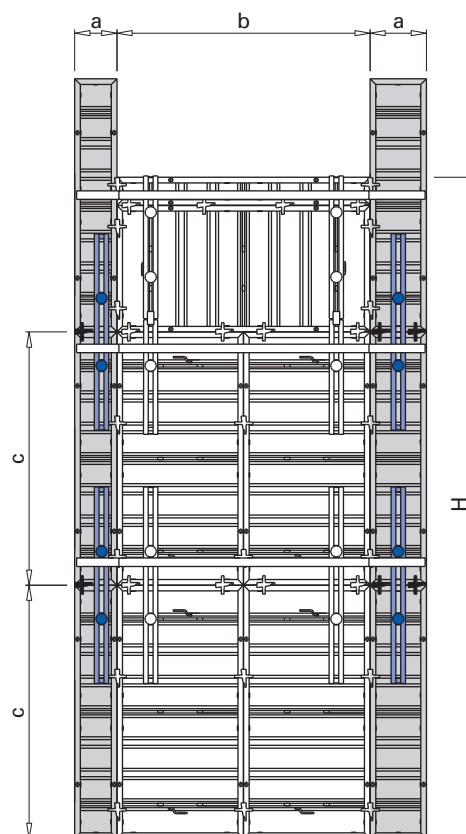


9764-389-01

Framax universal waling 1.50m or Xsafe plus stacking waler 2.10m

Panel width of width-addition (a)	Width of the gang-form to be widened (b)	Panel heights used (c)	Formwork height (H)	Extra Universal waling 1.50m or Stacking waler 2.10m
0.45m or 0.60m	1.35 m	2.70m	7.65m - 8.10m	1 on the first panel joint and 1 on the second panel joint
	2.40 m or 2.70 m	2.40m or 2.70m	7.05m - 8.10m	
		3.30m		No universal waling or stacking waler

Example:



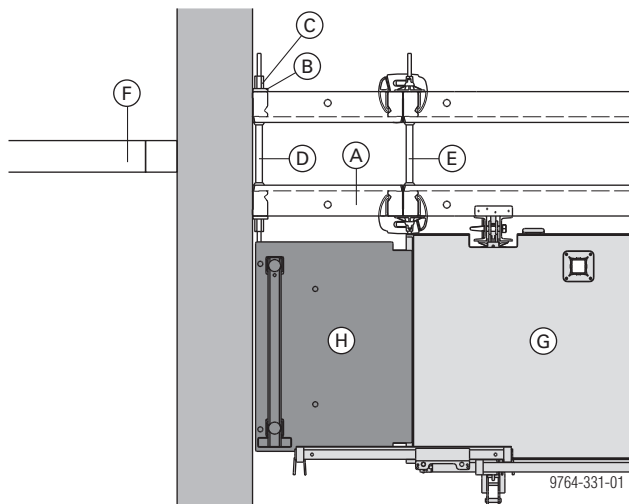
9764-390-01

Wall junctions

Note:

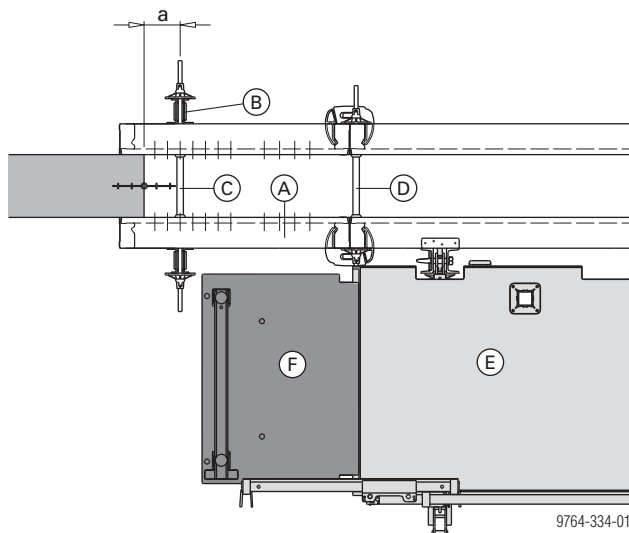
The illustrations below show the Framed formwork Framax Xlife and apply analogously to the Framed formwork Framax Xlife plus.

Right-angled connections



- A** Framax Xlife panel 0.60m
- B** Framax pressure plate 6/15
- C** Hexagon nut 15.0
- D** Doka tie rod system 15.0
- E** Doka tie rod system
- F** Timber brace
- G** Xsafe plus platform
- H** Xsafe plus platform extension 0.60m
or
integral platform extension of the Xsafe plus platform XL

In-line connections

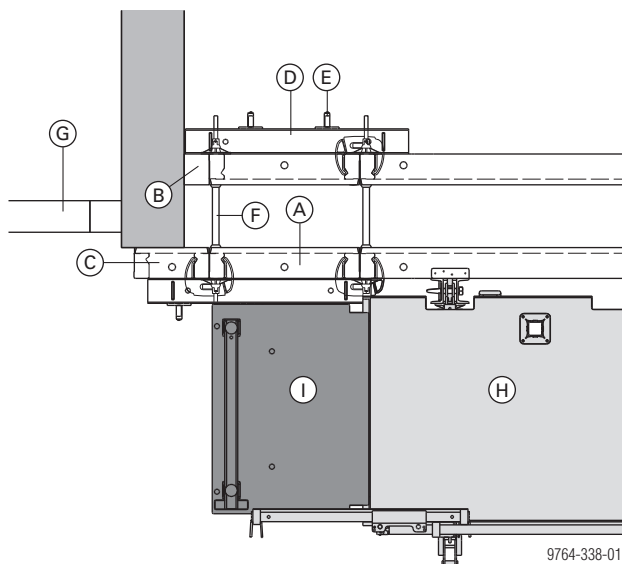


a ... max. 20.0 cm

- A** Framax Xlife universal panel
- B** Framax universal waling 1.50m

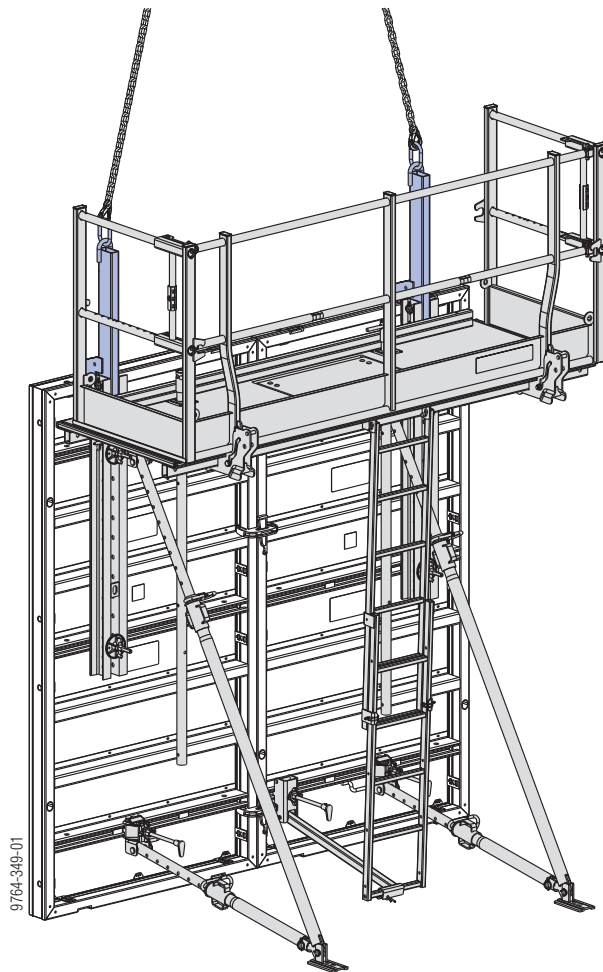
- C** Doka tie rod system 15.0 (in the Universal panel 2.70m, 3 form ties are needed)
- D** Doka tie rod system
- E** Xsafe plus platform
- F** Xsafe plus platform extension 0.60m
or
integral platform extension of the Xsafe plus platform XL

Corner connections



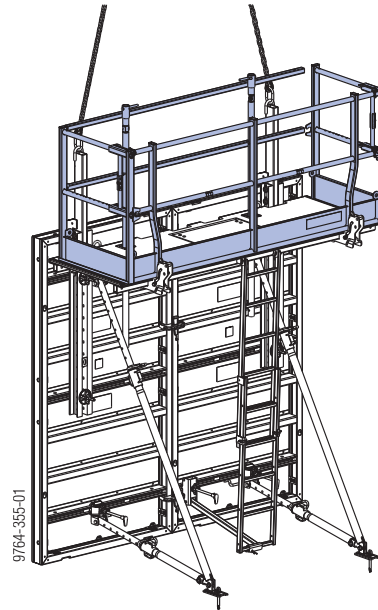
- A** Framax Xlife panel 0.45m
- B** Squared timber (min. 3.5 cm up to max. 20 cm)
- C** Framax Xlife panel 0.30m
- D** Framax universal waling (not necessary with squared timbers up to 5 cm wide)
- E** Framax wedge clamp
- F** Doka tie rod system
- G** Timber brace
- H** Xsafe plus platform
- I** Xsafe plus platform extension 0.60m
or
integral platform extension of the Xsafe plus platform XL

Lifting by crane

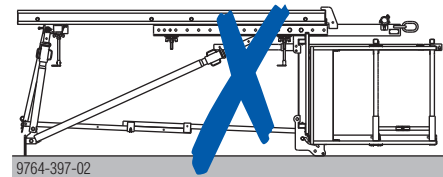


For gang-forms with Xsafe plus platforms, observe the following points:

- It is **only allowed** to operate the lifting waler and lifting hook when the platform railings are in place on all sides.

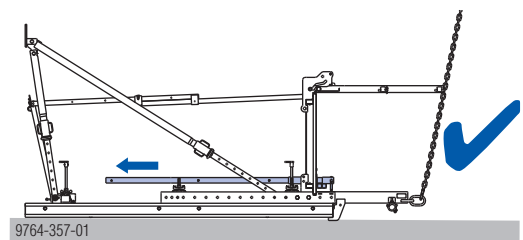


- Do not set down the gang-form on the platform.

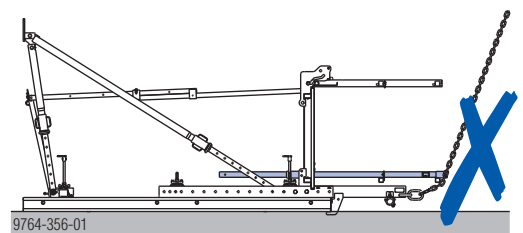


- It is only allowed to raise or set down the gang-form **after the Xsafe plus counter-railing has been pushed in (lowered)**.

Right:

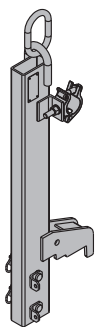


Wrong:



Xsafe plus lifting waler

The **Xsafe plus lifting waler** is used for safe lifting and resetting of the pre-assembled gang-forms by crane.



CE

Max. working load limit:

Sling angle β up to 15°: 1750 kg per lifting waler

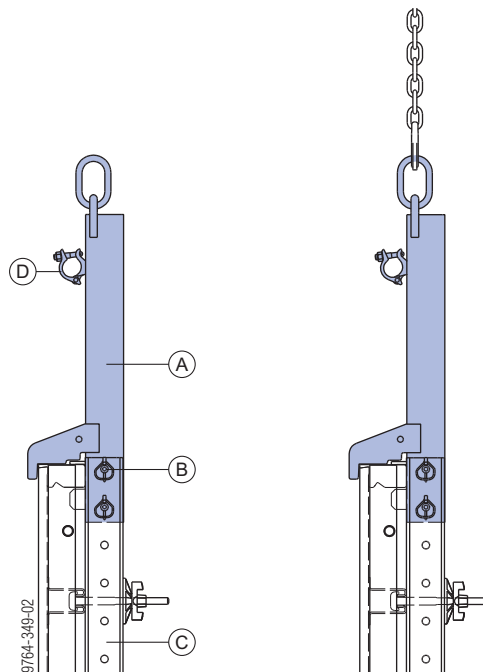
Sling angle β up to 30°: 800 kg per lifting waler



Follow the directions in the Operating Instructions!

Operating the lifting waler

- 1) Pin the Xsafe plus lifting waler to the Xsafe plus platform waling with **both pins**, and secure these with linch pins.
The connection plate must reach down over the Xlife sheet.
- 2) Attach the crane lifting tackle to the Xsafe plus lifting walers.



A Xsafe plus lifting waler

B Pin + linch pin

C Xsafe plus platform waling 1.50m

D Coupler for pressure bracing



Before crane-lifting the gang-form, check that the lifting waler is correctly secured to the platform waling (**2 pins**, each secured by a **linch pin**)



NOTICE

Gang-forms **larger than 15 m²** (approx. 1600 kg) require a **pressure bracing** (Scaffold tube 48.3mm) to be fitted between the lifting walers.

The couplers needed for this are integrated onto the lifting waler.

Stripping and repositioning the panels

Before repositioning: Remove any loose items from the formwork and platforms, or secure them firmly.



NOTICE

- Make sure the tag-lines are long enough to enable the holders to stay outside the danger zone at all times.



WARNING

The formwork tends to adhere to the concrete. When stripping the formwork, do not try to break concrete cohesion using the crane!

Risk of injury and damage to property due to crane overload.

- Use suitable tools such as timber wedges or a special pry-bar to detach the formwork from the concrete.

- Crane-lift the gang-form to its next location (guide with tag-lines if necessary).

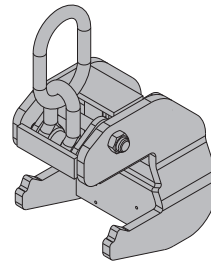
Framax lifting hook

Smaller gang-forms can also be repositioned using the Framax lifting hook.



NOTICE

- Gang-forms with only one Xsafe plus platform (no intermediate platform).
- Gang-forms weighing max. 1250 kg (max. area approx. 12.5 m²)- e. g.: 2.70x4.65m or 3.00x4.05m
- Always use 2 Framax lifting hooks



Max. working load limit:

- Sling angle β up to 30°:
1000 kg (2200 lbs) / Framax lifting hook
- Sling angle β up to 7.5°:
1500 kg (3300 lbs) / Framax lifting hook

Framax lifting hooks with the rated working load limit of max. 1000 kg (2200 lbs) also comply with the requirements for a working load limit of 1500 kg (3300 lbs) at a sling angle $\beta \leq 7.5^\circ$.



Follow the directions in the 'Framax lifting hook' Operating Instructions and the 'Framed formwork Framax Xlife' or 'Framed formwork Framax Xlife plus' Instructions for Assembly and Use.



NOTICE

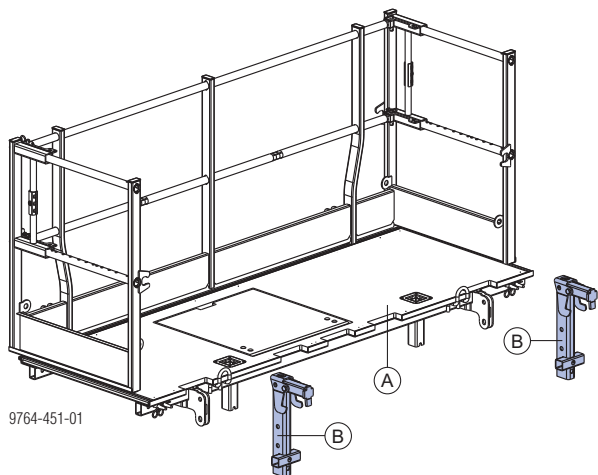
On larger gangs, the **Framax lifting hook 20kN** must be used together with a **two-part lifting chain with sufficient working load limit**.

Follow the directions in the 'Framax lifting hook 20kN' Operating Instructions!

Xsafe plus lifting adapter Framax

Preconditions for using the Xsafe plus platform with the Xsafe plus lifting adapter Framax:

- max. one platform level
- max. vertical stacking configuration where the gang-form is assembled face-down on the ground and has a width of 2.70 m:
2.70m + 1.35m or
3.30m + 1.35m



A Xsafe plus platform

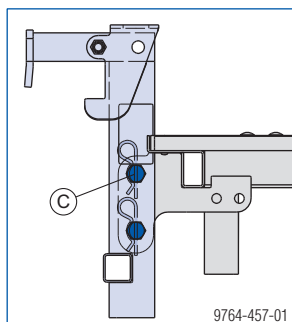
B Xsafe plus lifting adapter Framax (2 per platform)

Permitted service load: 1.5 kN/m² (150 kg/m²)

Load Class 2 to EN 12811-1:2003

Installing the lifting adapter onto the platform:

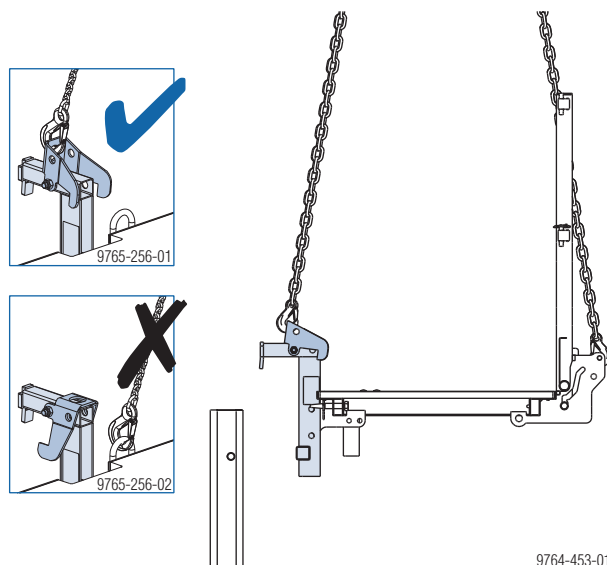
- Use Connecting pins 10cm and Spring cotters 5mm to install the lifting adapters to the platform.



C Connecting pin 10cm and Spring cotter 5mm of the Xsafe plus platform

Lifting the platform onto the formwork:

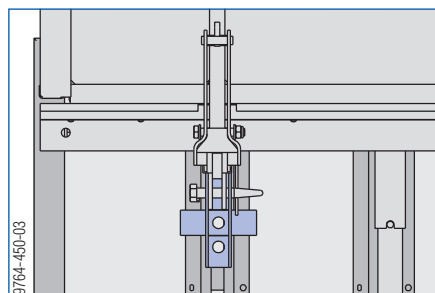
- Attach a 4-part lifting chain (e.g. Doka 4-part chain 3.20m) to the platform and hoist it towards the formwork.



- Fix the platform to the top of the formwork.

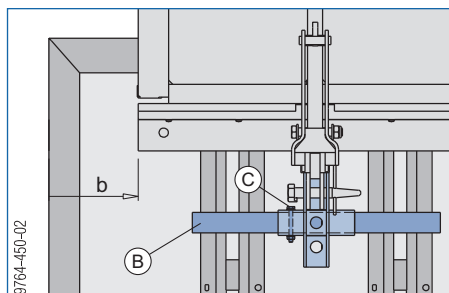
Note:

On **horizontal panels**, install the platform so that it is perfectly aligned with the panel (bearing profile of the lifting adapter is resting on the cross profile of the panel).



If under exceptional circumstances the platform is mounted at an offset to the outer edge of the panel, the bearing profile of the lifting adapter has to be widened.

- Push a hollow section into the bearing profile and secure it with a screw to prevent it dropping out.



b ... offset

B Hollow section 40x40x2, L=550 mm, with diam. 10 mm borehole (site-provided)

C Hexagon bolt M8x65 + hexagon nut M8

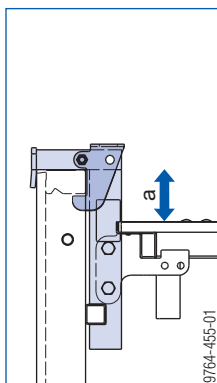
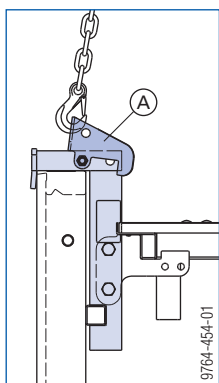
Consequently, the bearing profile of the lifting adapter is resting on two cross profiles of the panel.

- Detach the 4-part lifting chain.
- The securing hooks latch into place automatically.



Do a sight-check to make sure that the securing hooks have latched into place!

The platform is now secured against accidental lift-out.



a ... 13 cm

A Securing hook

The level of the floor planking is 13 cm below the top edge of the formwork. This means that there is a 'boundary' on the side facing the formwork.

Lifting the platform off the formwork:

- Attach a 4-part lifting chain to the platform and raise it.

When the platform is raised by the 4-part lifting chain on the securing hook, the platform is automatically unlocked.

Extending the platform to either side

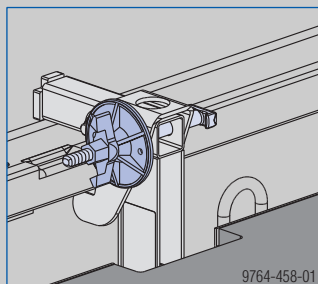
The platform can be lengthened at either end by using the **Xsafe plus platform extension 0.60m**.



CAUTION

Platforms with platform extensions can tip up. Falling hazard!

- Do not step onto the **platform extension** until the safety hooks have been fixed in place.
- **Fix the safety hooks** of both lifting adapters with Framax universal fixing bolts and Super plates 15.0.



Moving the formwork and the platform in one piece

The **Framax lifting hook** makes it possible to reposition or raise the formwork and Xsafe plus platform upright in one piece.

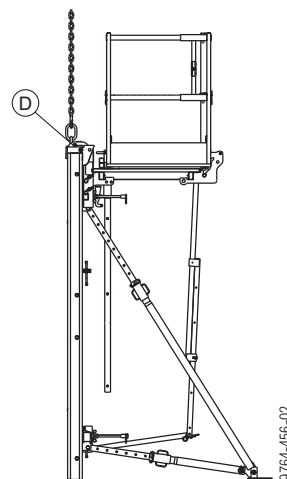


CAUTION

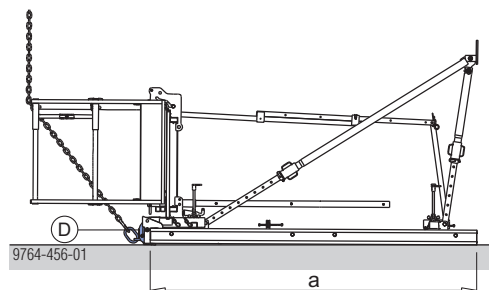
Use for raising upright or laying down formwork with basic panel height 2.70m or 3.30m with a vertical stacking > 1.35m is not permitted!

- In these cases, remove the platform before raising upright / laying down the formwork.

Repositioning:



Raising upright / laying down:

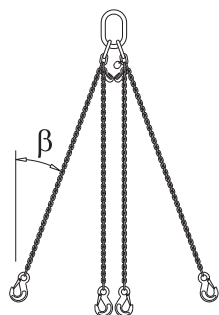


a ... Basic panel (2.70m / 3.30m) + 1.35m max.

D Framax lifting hook

Lifting chain

Doka 4-part chain 3.20m for gang-forms up to max. 1600 kg (approx. 15 m²)



CE

- Attach the Doka 4-part chain 3.20m to the Xsafe plus lifting waler.
- Hang the remaining chain-lengths back in place.



Follow the directions in the Operating Instructions!

Lifting chain for gang-forms over 1600 kg (over 15 m²)

For large gang-forms, a suitably long and strongly-rated lifting chain must be used.

Required working load limit (2-part chain): 3500 kg

Required length of chain: 3.80 m
(sling angle β max. 15°)



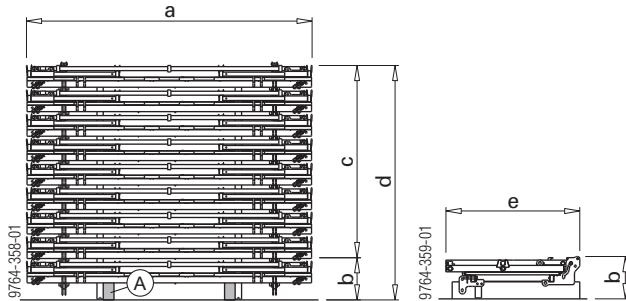
Follow the manufacturer's Operating Instructions!

Transporting, stacking and storing

Stacking the Xsafe plus platforms

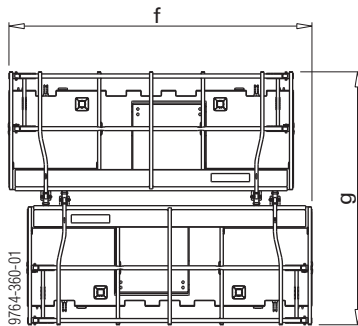
Stack of
9 Xsafe plus platforms

Single folded-
down platform



A Hardwood blocking 16cm

Arrangement of stacks for truck shipments (plan view):



	Xsafe plus platform			
	XL 3.90m	2.70m	2.40m	1.35m
a	276 cm	269 cm	239 cm	134 cm / 188 cm ¹⁾
b	45 cm	36.5 cm	36.5 cm	36.5 cm
c	8 x 22 cm	8 x 23 cm	8 x 23 cm	8 x 23 cm
d	220 cm	224 cm	224 cm	224 cm
e	128 cm	128 cm	128 cm	128 cm
f	297 cm	290 cm	260 cm	155 cm / 209 cm ¹⁾
g	242 cm / 238 cm ¹⁾			

¹⁾ ... platform with side railing.

Transporting the stacked platforms

Crane handling

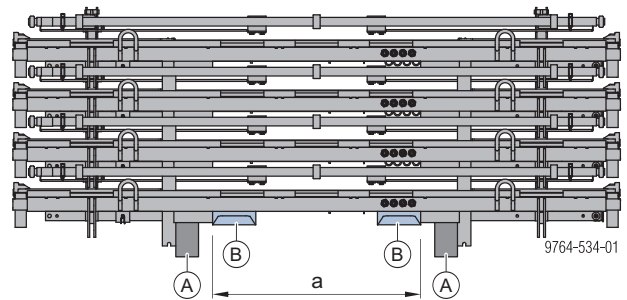
The entire stack of platforms can be transported by crane with a four-part lifting chain.

- Guide the four-part lifting chain through the platform-stack from above.
- Attach the four-part lifting chain to the crane hoisting lugs of the bottom platform.
- Raise the platform-stack by crane.

Transport and handling with fork-lift truck

The entire stack of platforms can be transported by forklift truck.

- To lift a stack of **Xsafe plus platforms XL 3.90m**, the forks of the forklift truck must be inserted **between the two sleepers**.

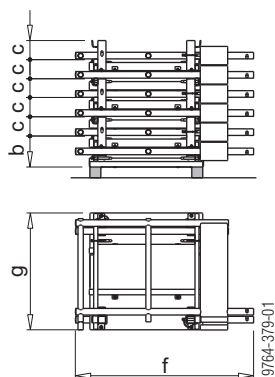


a ... Area for positioning the forks of the forklift truck

A Sleeper

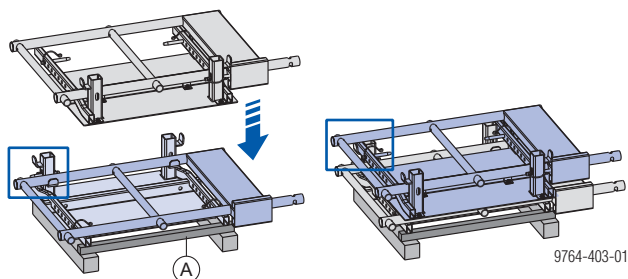
B Forks of forklift truck

Stacking the Xsafe plus platform extensions 0.60m

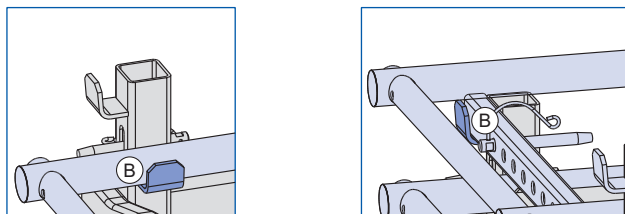


b ... 22.5 cm
c ... 14.0 cm
f ... 131.0 cm
g ... 85.5 cm

How to arrange them in the stack:



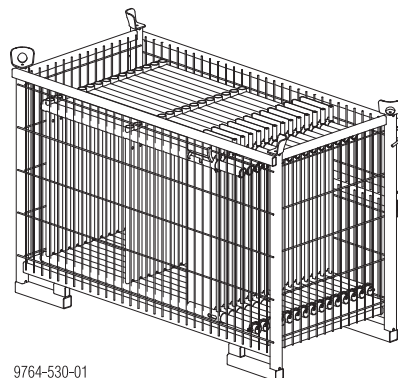
Close-ups showing the stacking stirrup:



A Squared timber 4x4 cm
B Stacking stirrup

Storing Xsafe plus side railings XL

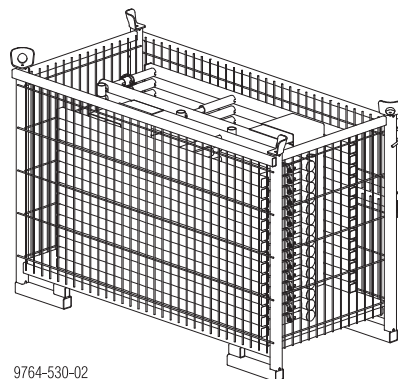
► Store Xsafe plus side railings XL in the Doka skeleton transport box 1.70x0.80m.



Maximum number of side railings XL in the Skeleton transport box:
15

Storing Xsafe plus corner railings XL

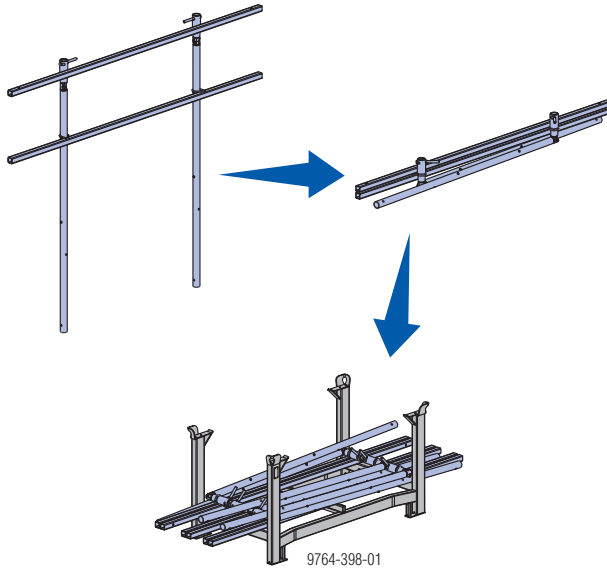
► Store Xsafe plus corner railings XL in the Doka skeleton transport box 1.70x0.80m.

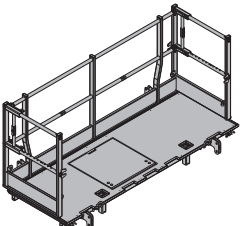
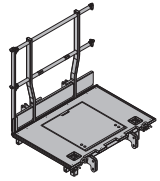
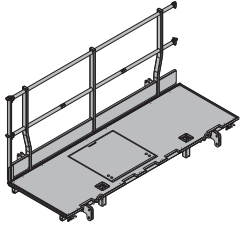
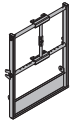
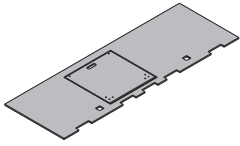



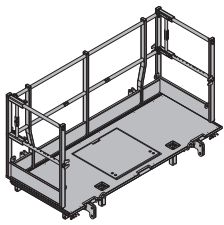
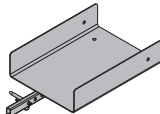
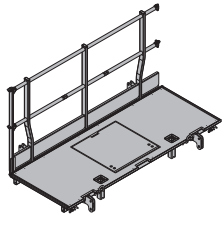
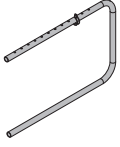
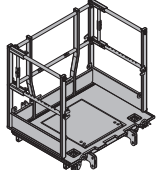




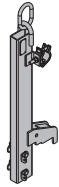
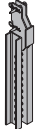
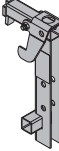


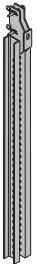


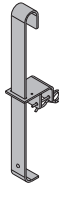
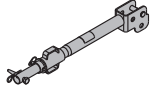
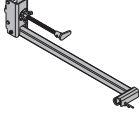

Maximum number of corner railings XL in the Skeleton transport box:
30

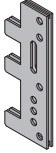
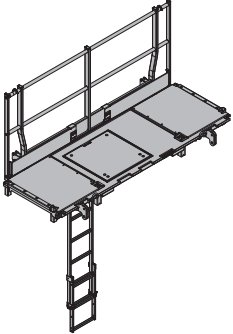
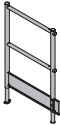
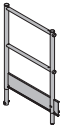

Storing the Xsafe plus counter railings

- Fold each Xsafe plus counter railing together and store it in a stacking pallet.



	[kg]	Article N°		[kg]	Article N°
Xsafe plus platform 2.70m with side railing Xsafe plus-Bühne 2,70m mit Seitengeländer  Steel parts galvanised Timber parts varnished yellow Height: 136 cm Delivery condition: folded closed	189.0	586401000	Xsafe plus platform 1.35m Xsafe plus-Bühne 1,35m  Steel parts galvanised Timber parts varnished yellow Height: 136 cm Delivery condition: folded closed	95.3	586408000
Xsafe plus platform 2.70m Xsafe plus-Bühne 2,70m  Steel parts galvanised Timber parts varnished yellow Height: 136 cm Delivery condition: folded closed	151.7	586404000	Xsafe plus side railing Xsafe plus-Seitengeländer  Galvanised Width: 88 cm Height: 110 cm	20.5	586410000
Xsafe plus plastic decking 2.70m Xsafe plus-Kunststoffbelag 2,70m 	23.0	586445000	Xsafe plus railing-closure post Xsafe plus-Geländerausgleich  Galvanised Height: 111 cm	3.4	586411000
Installation kit Xsafe plus plastic decking Montageset Xsafe plus-Kunststoffbelag 	3.2	586446000	Xsafe plus platform extension 0.60m Xsafe plus-Bühnenverlängerung 0,60m  Galvanised Height: 120 cm Delivery condition: railing included	43.4	586418000
Xsafe plus platform 2.40m with side railing Xsafe plus-Bühne 2,40m mit Seitengeländer  Steel parts galvanised Timber parts varnished yellow Height: 136 cm Delivery condition: folded closed	178.3	586403000	Xsafe plus platform transition Xsafe plus-Bühnenübergang  Galvanised Length: 85 cm Width: 48 cm	26.5	586419000
Xsafe plus platform 2.40m Xsafe plus-Bühne 2,40m  Steel parts galvanised Timber parts varnished yellow Height: 136 cm Delivery condition: folded closed	142.7	586406000	Xsafe plus handrail extension Xsafe plus-Geländerverlängerung  Galvanised Length: 81 cm Width: 53 cm	4.3	586420000
Xsafe plus platform 1.35m with side railing Xsafe plus-Bühne 1,35m mit Seitengeländer  Steel parts galvanised Timber parts varnished yellow Height: 136 cm Delivery condition: folded closed	131.5	586438000	Xsafe plus counter railing 1.35m Xsafe plus counter railing 2.40m Xsafe plus counter railing 2.70m Xsafe plus-Gegengeländer  Galvanised Height: 200 cm Delivery condition: folded closed	17.0 22.0 23.5	586429000 586427000 586425000

	[kg]	Article N°		[kg]	Article N°
Xsafe plus platform waling 1.50m Xsafe plus-Bühnenriegel 1,50m  Painted blue Length: 153 cm	32.5	586416000	Xsafe plus lifting waler Xsafe plus-Umsetzriegel  Galvanised Height: 87 cm	14.0	586417000
Xsafe plus platform waling extension 0.70m Xsafe plus-Bühnenriegelverlängerung 0,70m  Painted blue Length: 96 cm	21.3	586435000	Xsafe plus lifting adapter Framax Xsafe plus-Umsetzadapter Framax  Galvanised Height: 51.4 cm	6.6	586436000
Xsafe plus platform waling extension 1.20m Xsafe plus-Bühnenriegelverlängerung 1,20m  Painted blue Length: 146 cm	31.5	586413000	Xsafe plus telescopic ladder Xsafe plus-Teleskopleiter  Galvanised Height: 158 - 274 cm	15.0	586421000
Xsafe plus platform waling extension 1.80m Xsafe plus-Bühnenriegelverlängerung 1,80m  Painted blue Length: 201 cm	42.4	586414000	Xsafe plus ladder extension 1.15m Xsafe plus-Leiternverlängerung 1,15m  Galvanised Height: 126 cm	7.0	586422000
Xsafe plus stacking waler 2.10m Xsafe plus-Aufstockriegel 2,10m  Painted blue Length: 210 cm	44.3	586415000	Xsafe plus ladder support Xsafe plus-Leiternstütze  Galvanised Height: 55 cm	2.1	586423000
Xsafe plus supporting strut EB Xsafe plus-Stützenstrebe EB  Galvanised Length: 91 - 99 cm	8.0	586412500	Xsafe plus ladder starter piece Xsafe plus-Leiternhalter  Galvanised Length: 95 cm	6.8	586424000
			Xsafe plus swivel plate Xsafe plus-Schwenklasche  Galvanised Height: 33 cm	2.3	586431000

	[kg]	Article N°		[kg]	Article N°
Xsafe plus fixing plate Xsafe plus-Fixierlasche <div>  <div> Galvanised Width: 16 cm Height: 43 cm </div> </div>	4.7	586432000			
Xsafe plus platform XL 3.90m Xsafe plus-Bühne XL 3,90m <div>  <div> Steel parts galvanised Height: 136 cm Delivery condition: folded closed </div> </div>	238.0	586440000			
Xsafe plus side railing XL left Xsafe plus-Seitengeländer XL links <div>  <div> Galvanised Width: 83 cm Height: 134 cm </div> </div>	13.7	586441000			
Xsafe plus side railing XL right Xsafe plus-Seitengeländer XL rechts <div>  <div> Galvanised Width: 83 cm Height: 134 cm </div> </div>	13.7	586442000			
Xsafe plus corner railing XL Xsafe plus-Eckgeländer XL <div>  <div> Galvanised Height: 128 cm </div> </div>	10.7	586443000			



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