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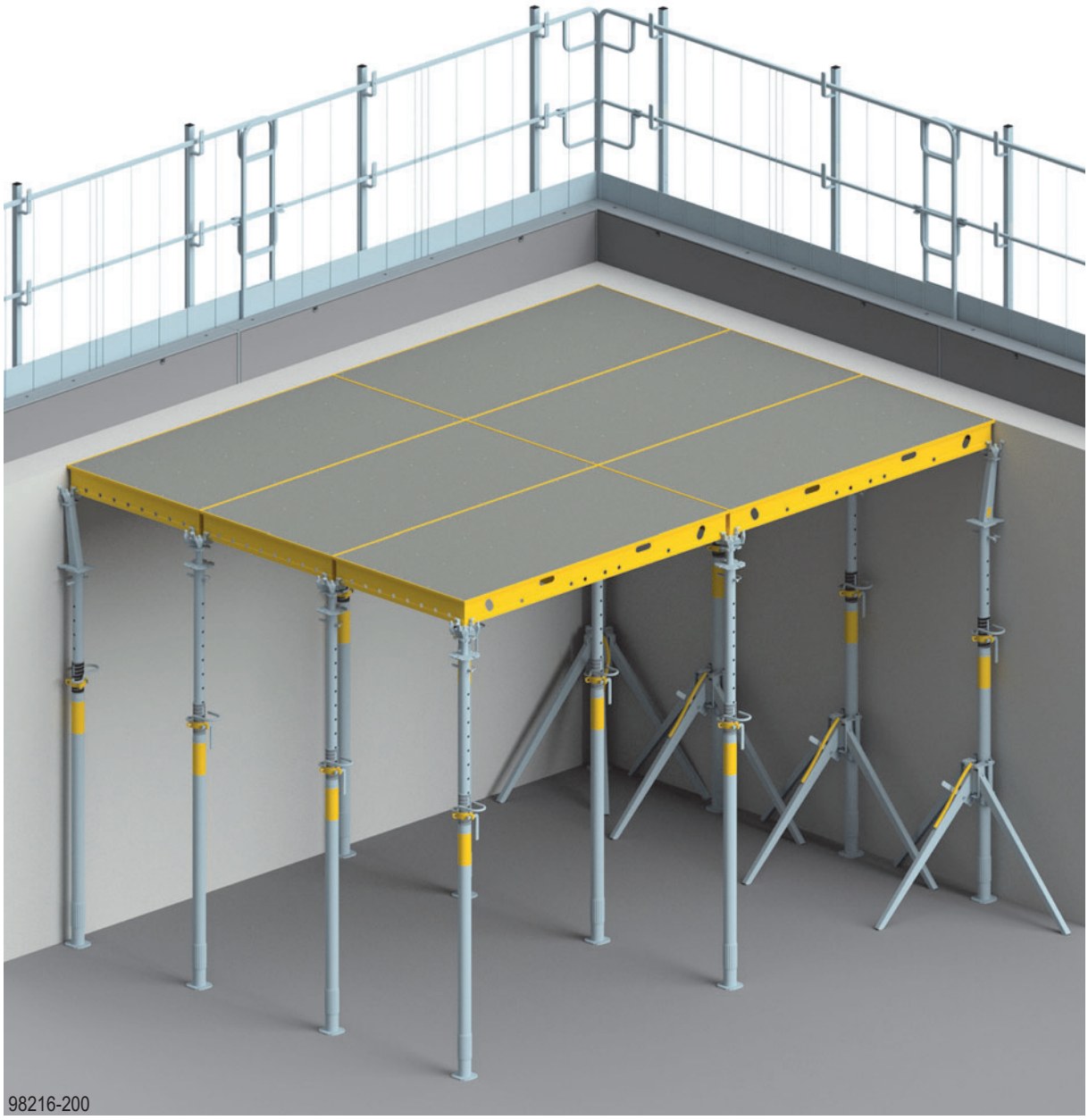
en-GB

Formwork & Scaffolding.
We make it work.

DokaXdek panel floor formwork

User Information

Instructions for assembly and use (Method statement)



Contents

Introduction

Elementary safety warnings

User target groups

- This booklet is aimed at all persons who will be working with the Doka product or system that it describes. It contains information on the standard design for setting up this system, and on correct, compliant utilisation of the system.
- All persons working with the product described herein must be familiar with the contents of this booklet and with all the safety instructions it contains.
- Persons who are incapable of reading and understanding this booklet, or who can do so only with difficulty, must be instructed and trained by the customer.
- The customer is to ensure that the information materials provided by Doka (e.g. User Information booklets, Instructions for Assembly and Use, Operating Instruction manuals, plans etc.) are up to date and available to all users, and that they have been made aware of them and have easy access to them at the usage location.
- In the relevant technical documentation and formwork utilisation plans, Doka shows the workplace safety precautions that are necessary in order to use the Doka products safely in the usage situations shown.
  In all cases, users are obliged to ensure compliance with national laws, standards and regulations throughout the entire project and to take appropriate additional or alternative workplace safety precautions where necessary.

Hazard assessment

- The customer is responsible for drawing up, documenting, implementing and continually updating a hazard assessment at every job-site.
  This booklet serves as the basis for the site-specific hazard assessment, and for the instructions given to users on how to prepare and utilise the system. It does not substitute for these, however.

Remarks on this booklet

- This document can be used as general Instructions for Assembly and Use (Method Statement) or be incorporated into site-specific Instructions for Assembly and Use (Method Statement).
- **The graphics, animations and videos in this document or app sometimes depict partially assembled assemblies and may require additional safety equipment and/or measures to comply with safety regulations.**
  The customer must ensure all applicable regulations are complied with, even if they are not shown or implied in the graphics, animations and videos provided.
- **Individual sections contain further safety instructions and/or special warnings as applicable.**

Planning

- Provide safe workplaces for those using the formwork (e.g. for when it is being erected/dismantled, modified or repositioned etc). It must be possible to get to and from these workplaces via safe access routes!
- **If you are considering any deviation from the details and instructions given in this booklet, or any application which goes beyond those described in the booklet, then revised static calculations must be produced for checking, as well as supplementary assembly instructions.**

Regulations; industrial safety

- All laws, Standards, industrial safety regulations and other safety rules applying to the utilisation of our products in the country and/or region in which you are operating must be observed at all times.
- If a person or object falls against, or into, the sideguard component and/or any of its accessories, the component affected may only continue in use after it has been inspected and passed by an expert.

Rules applying during all phases of the assignment

- The customer must ensure that this product is erected and dismantled, reset and generally used for its intended purpose in accordance with the applicable laws, standards and rules, under the direction and supervision of suitably skilled persons.
  These persons' mental and physical capacity must not in any way be impaired by alcohol, medicines or drugs.
- Doka products are technical working appliances which are intended for industrial / commercial use only, always in accordance with the respective Doka User Information booklets or other technical documentation authored by Doka.
- The stability and load-bearing capacity of all components and units must be ensured during all phases of the construction work!
- Do not step on or apply strain to cantilevers, closures, etc. until suitable measures to ensure their stability have been correctly implemented (e.g. by tie-backs).
- Strict attention to and compliance with the functional instructions, safety instructions and load specifications are required. Non-compliance can cause accidents and severe injury (risk of fatality) and considerable damage to property.
- Sources of fire in the vicinity of the formwork are prohibited. Heaters are permissible only when used correctly and situated a correspondingly safe distance from the formwork.
- Customer must give due consideration to any and all effects of the weather on the equipment and regards both its use and storage (e.g. slippery surfaces, risk of slipping, effects of the wind, etc.) and implement appropriate precautionary measures to secure the equipment and surrounding areas and to protect workers.
- All connections must be checked at regular intervals to ensure that they are secure and in full working order.
  In particular threaded connections and wedged connections have to be checked and retightened as necessary in accordance with activity on the jobsite and especially after out-of-the-ordinary occurrences (e.g. after a storm).
- It is strictly forbidden to weld Doka products – in particular anchoring/tying components, suspension components, connector components and castings etc. – or otherwise subject them to heating.
  Welding causes serious change in the microstructure of the materials from which these components are made. This leads to a dramatic drop in the failure load, representing a very great risk to safety.
  It is permissible to cut individual tie rods to length with metal cutting discs (introduction of heat at the end of the rod only), but it is important to ensure that flying sparks do not heat and thus damage other tie rods.
  The only articles which are allowed to be welded are those for which the Doka literature expressly points out that welding is permitted.

Assembly

- The equipment/system must be inspected by the customer before use, to ensure that it is in an acceptable condition. Steps must be taken to exclude components that are damaged, deformed, or weakened due to wear, corrosion or rot (e.g. fungal decay).
- Using our safety and formwork systems together with those of other manufacturers can create risks that may lead to injury and damage to property. This requires separate verification by the user.
- The equipment/system must be assembled and erected in accordance with the applicable laws, standards and rules by trained customer personnel whilst maintaining any applicable safety inspections that may be required.
- It is not permitted to modify Doka products; such modifications constitute a safety risk.

Closing the formwork

- Doka products and systems must be set up so that all loads acting upon them are safely transferred!

Pouring

- Do not exceed the permitted fresh-concrete pressures. Over-high pouring rates overload the formwork, cause greater deflection and risk breakage.

Stripping the formwork

- Do not strip out the formwork until the concrete has reached sufficient strength and the person in charge has given the order for the formwork to be stripped out!
- When stripping out the formwork, never use the crane to break concrete cohesion. Use suitable tools such as timber wedges, special pry-bars or system features such as Framax stripping corners.
- When stripping out the formwork, do not endanger the stability of any part of the structure, or of any scaffolding, platforms or formwork that is still in place!

Transporting, stacking and storing

- Observe all country-specific regulations applying to the handling of formwork and scaffolding. For system formwork the Doka slinging means stated in this booklet must be used – this is a mandatory requirement.
  If the type of sling is not specified in this document, the customer must use slinging means that are suitable for the application envisaged and that comply with the regulations.
- When lifting, always make sure that the unit to be lifted and its individual parts can absorb the forces that occur.
- Remove loose parts or secure them so that they cannot slip out of position and drop.
- When lifting formwork or formwork accessories with a crane, no persons must be carried along, e.g. on working platforms or in multi-trip packaging.
- All components must be stored safely, following all the special Doka instructions given in the relevant sections of this document!

Maintenance

- Only original Doka components may be used as spare parts. Repairs may only be carried out by the manufacturer or authorised facilities.

Miscellaneous

The weights as stated are averages for new material; actual weights can differ, depending on material tolerances. Dirt accretions, moisture saturation, etc. can also affect weight.
We reserve the right to make alterations in the interests of technical progress.

Eurocodes at Doka

The permissible values stated in Doka documents (e.g. F_{perm} = 70 kN) **are not design values** (e.g. F_{Rd} = 105 kN), unless specified**!**

- It is essential to avoid confusing permissible values with design values!
- Doka documents will continue to state the permissible values.

Allowance has been made for the following partial factors:

- γ_F = 1.5
- $\gamma_{M,\ timber}$ = 1.3
- $\gamma_{M,\ steel}$ = 1.1
- k_{mod} = 0.9

Consequently, all the design values for an EC design calculation can be determined from the permissible values.

Symbols used

The following symbols are used in this document:

DANGER
This is a notifier drawing attention to an extremely dangerous situation in which non-compliance with this notifier will lead to death or severe, irreversible injury.

WARNING
This is a notifier drawing attention to a dangerous situation in which non-compliance with this notifier can lead to death or severe, irreversible injury.

CAUTION
This is a notifier drawing attention to a dangerous situation in which non-compliance with this notifier can lead to slight, reversible injury.

NOTICE
This is a notifier drawing attention to a situation in which non-compliance with this notifier can lead to malfunctions or damage to property.

Instruction
Indicates that actions have to be performed by the user.

Sight-check
Indicates that you need to do a sight-check to make sure that necessary actions have been carried out.

Tip
Points out useful practical tips.

Reference
Cross-references other documents.

Intended use

DokaXdek panel floor formwork is for the production of slabs in cast-in-place concrete construction.

DokaXdek is designed for forming by hand.

Boundary conditions for use:

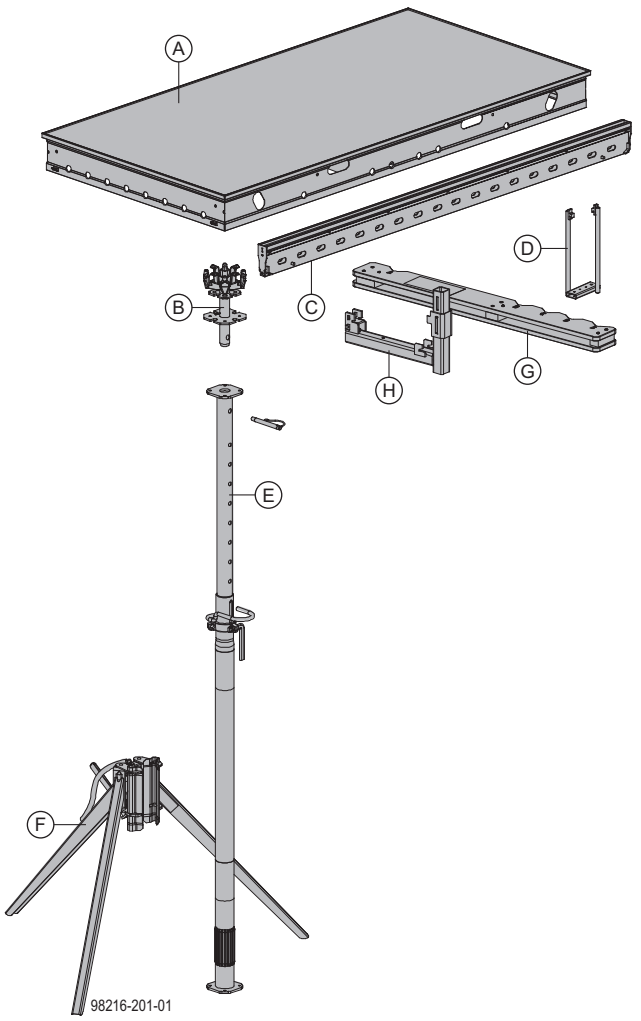
- Max. slab thickness: 75 cm
- Max. room height: 6.00 m

In special cases, boundary conditions can vary. The relevant information in the Doka technical documents must be observed.

Other use or use not in conformity with that stated above is non-intended use and requires the prior written approval of the Doka company!

System overview

Basic design concept

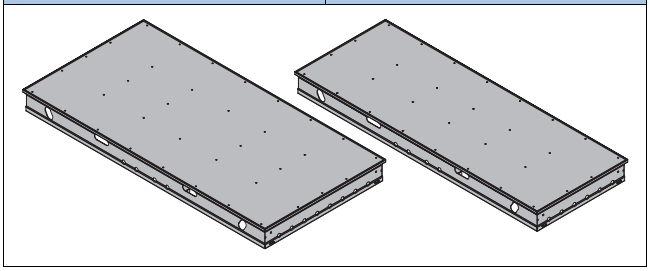


A	DokaXdek panels
B	DokaXdek heads
C	DokaXdek infill beams
D	DokaXdek suspension clamps H
E	Doka floor props Eurex top
F	Removable folding tripod
G	DokaXdek wall clamp
H	DokaXdek handrail-post shoe XP

The DokaXdek system components

DokaXdek panels

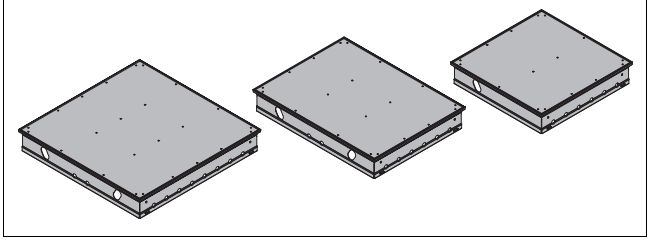
Powder-coated aluminium frames with riveted formwork sheets 9 mm thick; built-in anti-liftout guards at each corner of the panel.

DokaXdek panel 1.00x2.00m	DokaXdek panel 0.75x2.00m
	

NOTICE

Impermissible areas of application for DokaXdek panels 1.00x1.00m, 0.75x1.00m and 0.75x0.75m:

- use at the structure edge

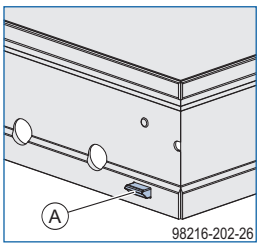
DokaXdek panel		
1.00x1.00m	0.75x1.00m	0.75x0.75m
		

Can be used for purposes that include minimising the closure zone.

Note:

The integrated anti-liftout guard ensures a form-fitting connection of the slab formwork.

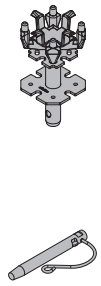
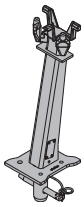
It reduces the need for bracing measures and prevents individual formwork panels from lifting unintentionally in applications without bracing.



A	Anti-liftout guard

DokaXdek heads

- for holding the DokaXdek panels safely
- with built-in anti-liftout guards for the DokaXdek panels

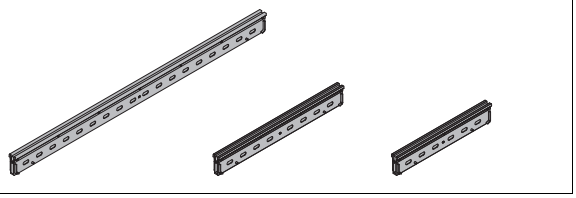
Support head	Wall head
 1) 2)	

1) Spring locked connecting pin 16mm not included with product

2) For floor props with larger tube diameters, we recommend the Spring locked connecting pin D16 with eye

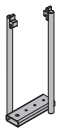
DokaXdek infill beams

- for infilling along edges and around columns
- available for formwork-sheet thicknesses of 18mm, 21mm and 27mm
- delivered on Dokadek infill beam pallets

Infill beam 2.00m	Infill beam 1.00m	Infill beam 0.75m
		

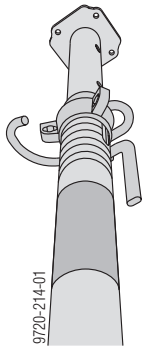
DokaXdek suspension clamp H

These are hooked into the infill beams and make it possible to transition from the DokaXdek system to the Dokaflex system.



Doka floor props Eurex top

- approved in accordance with Z-8.311-905
- EN 1065-compliant floor prop



Their high load-bearing capacity is complemented by many practical details making them very easy to handle:

- numbered pegging holes for height adjustment
- elbowed fastening clamps, reducing the risk of injury and making the props easier to operate
- special geometry of the thread makes the prop easier to release even under high load

Follow the directions in the 'Floor props Eurex top' User Information booklet.

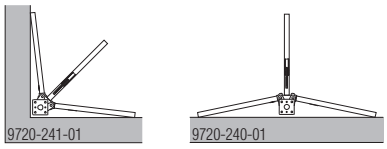
WARNING

➤ It is **not permitted** to use the **Floor prop extension 0.50m**.

Removable folding tripod 'top'

- Set-up aid for floor props
- swing-out legs allow flexible placement in constricted situations such as along edges and in corners

Setting up in corners and against walls



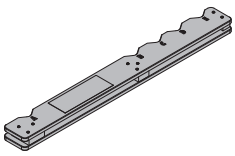
CAUTION

Not a substitute for the bracing necessary for load-bearing towers.

➤ Use as a set-up aid only!

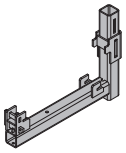
DokaXdek wall clamp

- for holding floor props upright next to walls
- with an integrated template for measuring-up the right spacing of the floor props



DokaXdek handrail-post shoe XP

This is used with Handrail posts XP 1.20m or 1.80m to set up guardrail systems on the narrowside and broadside of the DokaXdek panel.



Structural design

Structural design of panels

Permitted slab thickness [cm] with Floor props Eurex 30[1)]

Panel size	with no additional precautions	with additional precautions[2)]	Flatness deviation as per DIN 18202, Table 3
1.00x2.00m	40	65	Line 6
0.75x2.00m	55	75	Line 6
1.00x1.00m	65		Line 6
0.75x1.00m	75		Line 6
0.75x0.75m	75		Line 6

[1)] For use of the Eurex 20 top or Eurex 20 eco floor props, follow the directions in section 'Structural design of floor props'.

[2)] See section 'Additional precautions for slab thicknesses of up to 75 cm'.

Note:
The values refer to the structural design of the panels. Follow the directions along with those in section 'Structural design of floor props'.

Structural design of floor props

WARNING
- In the typical zone and closure zones, and when DokaXdek and Dokaflex are used in combination, the props used must all be of the same type with the same load-bearing capacity.
- It is forbidden to use the Doka floor prop Eco 20!

Note:
The table takes account of the props' higher load-bearing capacity when their extension-length is reduced; for this reason, it is only valid for the room heights and types of props specified.

Follow the directions in the 'Doka floor prop Eurex top', 'Doka floor prop Eurex eco' and 'Doka floor prop Eurex 20 top 700' User Information booklets.

Permitted slab thicknesses [cm] with 4 floor props per panel

Room height [m]	Eurex 20																	
	250		300		300 LW		350		350 LW		400		eco 450[1]		550		700[2]	
	Panel widths																	
	1.00m	0.75m	1.00m	0.75m	1.00m	0.75m	1.00m	0.75m	1.00m	0.75m	1.00m	0.75m	1.00m	0.75m	1.00m	0.75m	1.00m	0.75m
7.15																	36.1	48.1
7.05																	37.6	50.2
6.95																	39.0	52.0
6.85																		
6.75																		
6.65																		
6.55																		
6.45																		
6.35																		
6.25																		
6.15																		
6.05																		
5.95																		
5.85																		
5.75																		
5.65															32.1	42.8	40.0	53.3
5.55															33.8	45.1		
5.45															35.4	47.2		
5.35															37.3	49.7		
5.25															39.0	52.0		
5.15																		
5.05																		
4.95																		
4.85																		
4.75																		
4.65													39.2	52.2				
4.55																		
4.45															40.0	53.3		
4.35																		
4.25																		
4.15											32.6	43.5						
4.05											35.0	46.7						
3.95											37.4	49.9						
3.85													40.0	53.3				
3.75																		
3.65							31.4	41.9	31.1	41.5								
3.55							34.0	45.4	33.3	44.3								
3.45							36.4	48.6	36.0	47.9								
3.35							39.0	52.0	38.7	51.6	40.0	53.3						
3.25																		
3.15			31.3	41.7	31.1	41.5												
3.05			34.0	45.4	33.0	43.9												
2.95			36.8	49.0	36.0	48.0	40.0	53.3	40.0	53.3								
2.85			39.0	52.0	39.3	52.4												
2.75																		
2.65	34.2	45.6																
2.55	36.6	48.8	40.0	53.3	40.0	53.3												
2.45	38.7	51.5																
2.35																		
2.25	40.0	53.3																
2.15																		

Allow for deflections as per DIN 18218 (see section 'Ground rules').

[1] available only in the Eurex 20 eco version

[2] The erection methods shown apply to room heights up to 6.00 m.

For slab thicknesses up to 75 cm, see the table in section 'Additional precautions for slab thicknesses of up to 75 cm'.

Instructions for assembly and use (Method statement)

Ground rules

DokaXdek panels

Permitted slab thickness [cm] with Floor props Eurex 30[1)]

Panel size	**without** additional precautions	**with** additional precautions[2)]	Flatness deviation as per DIN 18202, Table 3
1.00x2.00m	40	65	Line 6
0.75x2.00m	55	75	Line 6
1.00x1.00m	65		Line 6
0.75x1.00m	75		Line 6
0.75x0.75m	75		Line 6

[1)] For use of the Eurex 20 top or Eurex 20 eco floor props, follow the directions in section 'Structural design of floor props'.

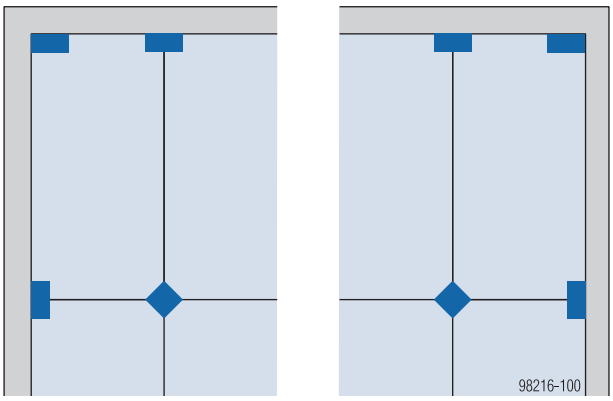
[2)] See section 'Additional precautions for slab thicknesses of up to 75 cm'

DokaXdek heads

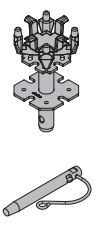
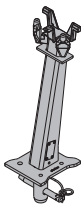
WARNING

➤ The DokaXdek heads must always be fixed to the floor prop with the correct pin.

Position of the DokaXdek heads



Legend

Support head	Wall head
	
 1) 2)	

[1)] Spring locked connecting pin 16mm not included with product

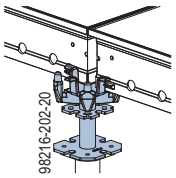
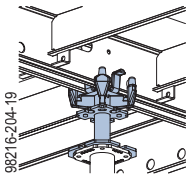
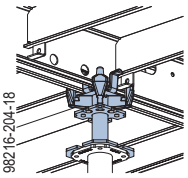
[2)] For floor props with larger tube diameters, we recommend the Spring locked connecting pin D16 with eye

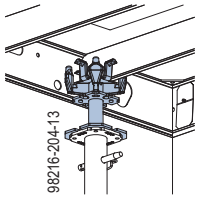
NOTICE

When placing the panels onto the heads, make sure that the panels are correctly fixed in the heads.

The DokaXdek support head can be used instead of the DokaXdek wall head. See section 'Setting up 1st row of panels without use of wall heads'.

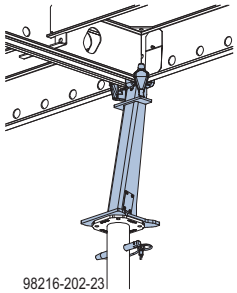
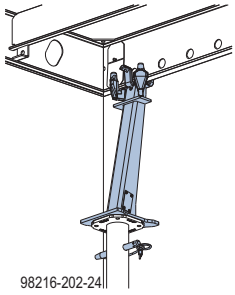
Installation examples

Support head		
Use at panel corner	Use along the frame[1)]	Use along the frame underneath cross-profile stiffening plate
 Spring locked connecting pin 16mm not included with product	 Spring locked connecting pin 16mm not included with product	 Spring locked connecting pin 16mm not included with product

Use underneath cross-profile stiffening plate[2)]
 Spring locked connecting pin 16mm not included with product

[1)] Set up a removable folding tripod to stabilise each prop that is not seated with a head at a panel corner or underneath a cross-profile stiffening plate.

[2)] up to a slab thickness of 40 cm

Wall head	
Use as wall head	Use as corner head
	

WARNING

➤ If used as corner head, stabilise the prop (e.g. with wall clamp or removable folding tripod).

Doka floor props Eurex top

WARNING

- In the typical zone and closure zones, and when DokaXdek and Dokaflex are used in combination, the props used must all be of the same type with the same load-bearing capacity.
- Floor props must not be used extended to their full lengths!

This means that the props must be shortened, as follows, before being used:

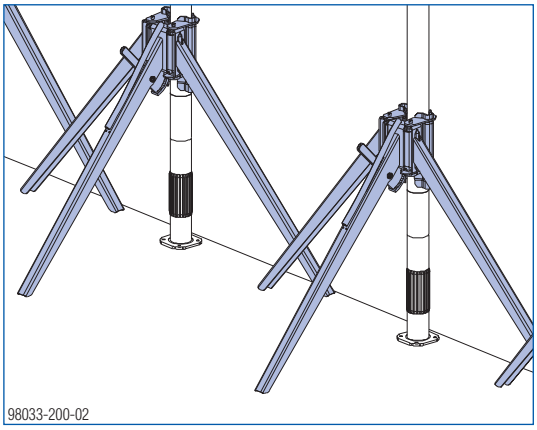
- minus 16 cm when used with support head
- minus 41 cm when used with wall head
- minus 16 cm when used with connecting head

Example: Floor prop Eurex 20 top 300 with support head can be extended to max. 284 cm (for a max. room height of 315 cm).

Removable folding tripod 'top'

NOTICE

- Do not oil or grease the clamping mechanism of the Removable folding tripod.



CAUTION

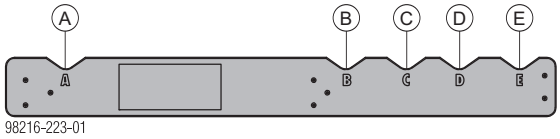
Risk of floor props tipping over when DokaXdek panel is tilted up!

- Make sure that the Removable folding tripod is facing in the right direction.
- The leg with the clamping lever must be pointing in the longitudinal direction of the panels.
- Before anybody steps onto the formwork, check again to make sure that the props have been correctly fixed in the tripods.

- Once the 1st row of panels has been fixed (e.g. with wall clamps) so that it cannot tip over, the Removable folding tripods can be removed.
  However, before the formwork is stripped out, the Removable folding tripods MUST be put up again!

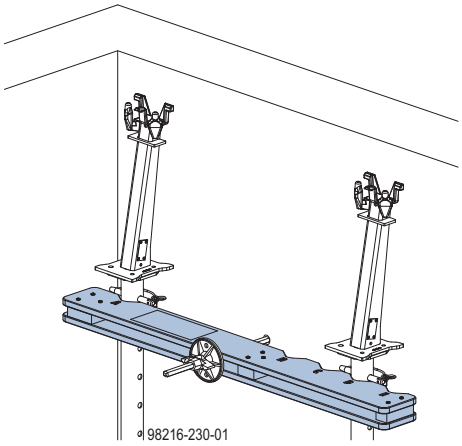
DokaXdek wall clamp

Determining the required spacing of the floor props

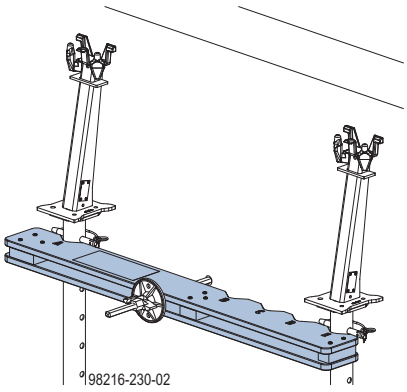


Head on 1st prop is in Position A.	Width of panel to be shored	Position of 2nd prop
Wall head in the corner	0.75 m	B
Wall head	0.75 m	C
Wall head in the corner	1.00 m	D
Wall head	1.00 m	E

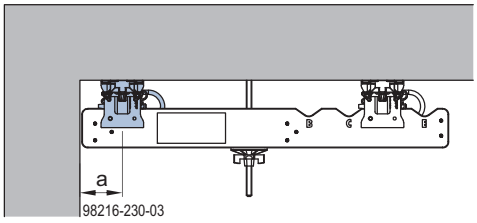
Practical examples



Starting in a corner (with DokaXdek panel 1.00x2.00m)



Starting from a wall (with DokaXdek panel 1.00x2.00m)



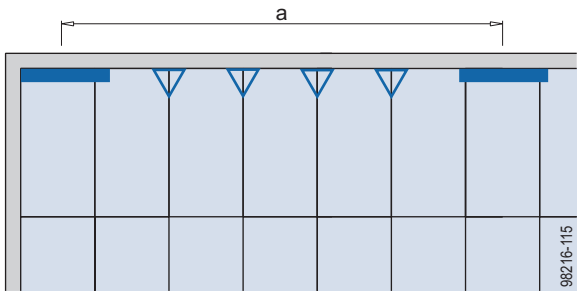
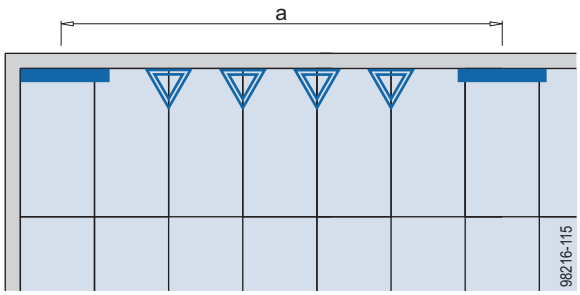
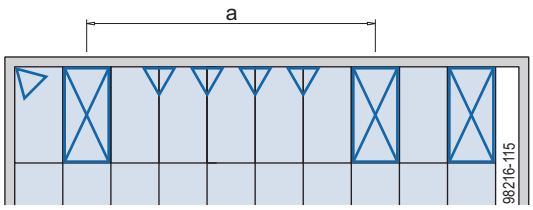
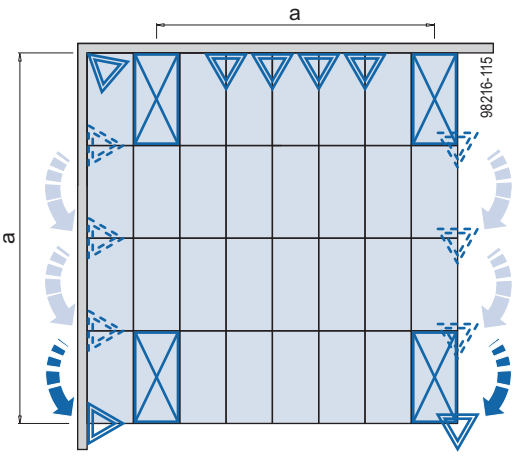
a ... corner distance 13 cm
When starting in the corner, make sure that the corner distance ‘a’ is as specified.

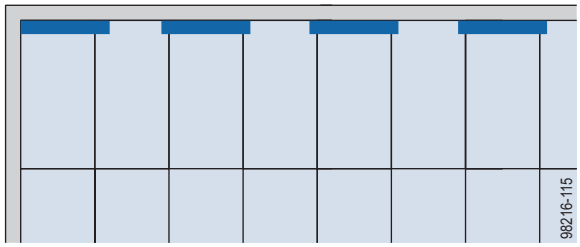
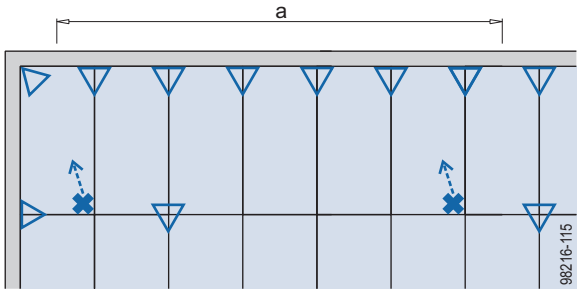
When using the wall clamp in the corner, butt the end of the wall clamp against the wall. This automatically sets the correct corner distance.

Stability of formwork

Stabilising the starting section during assembly

Starting from a wall

Shoring height < 3.50 m	**Shoring height 3.50 - 4.00 m**
with wall clamp	with wall clamp
	
a ... fixing point on 1st panel, every max. 6.00 m **and** on last panel	a ... fixing point on 1st panel, every max. 6.00 m **and** on last panel
with Bracing frame Eurex 1.00m	with Bracing frame Eurex 1.00m
	
a ... braced unit on 2nd panel, every max. 6.00 m and on last panel	a ... braced unit on 2nd panel, every max. 6.00 m and on last panel Until the Bracing frame Eurex 1.00m is installed, in each new row of panels the Removable folding tripods at the first panel and the last panel have to be repositioned.

Shoring height > 4.00 m	**Special precautions** e.g. if it is not possible to use a wall clamp.
	
	Note: When the panels are being tilted up into the horizontal, the floor props must be given additional fixing to prevent them tipping over (i.e. the Removable folding tripods alone are insufficient). a ... fixing point on 1st panel, every max. 6.00 m and on last panel

Legend

- DokaXdek wall clamp
- Removable folding tripod top (shoring height < 3.50 m)
- Removable folding tripod 1.20m (shoring height ≥ 3.50 m)
- Fixing point (e.g. with bracing) Arrow = direction of the bracing
- Bracing frames Eurex with diagonal crosses

CAUTION

➤ When engaging and tilting up the panel, give the floor props additional fixing to prevent them tipping over (i.e. the Removable folding tripods alone are insufficient).

Bracing frame used along a wall

Doka floor prop Eurex 20 top	Inner tube	Outer tube
250	✓	✓
300	✓	✓
350	✓	✓
400	✓	—
450	✓	—
550	—	—

Until the Bracing frame Eurex 1.00m is installed, in each new row of panels the Removable folding tripods at the first panel and the last panel have to be repositioned.

Starting from middle of room

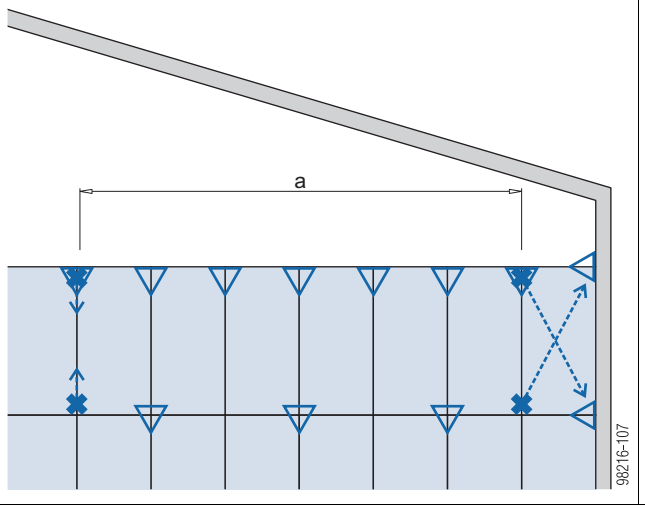
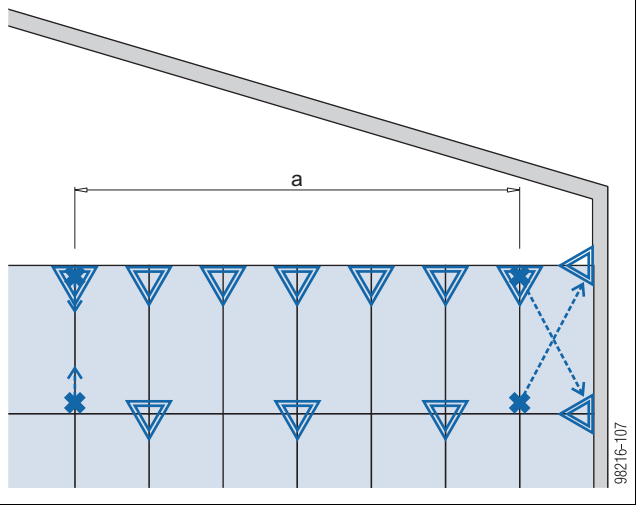
NOTICE

When starting from the middle of a room where it is possible to attach fixing points to the structure, you MUST proceed in the following order:

1. Put up the props and secure them so that they cannot fall over.
2. Engage the first panel into the system heads.
3. Swing panel up.
4. Fix the panel.

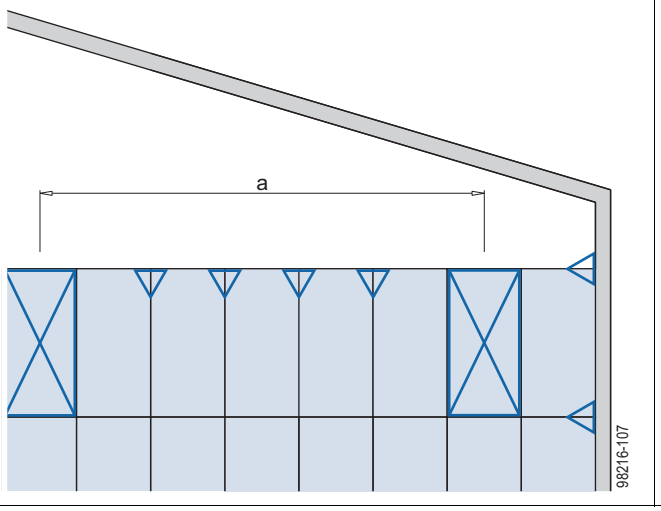
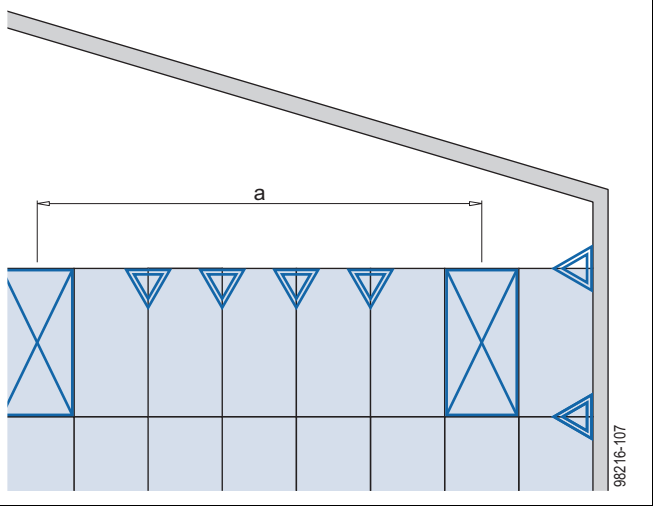
WARNING

➤ When engaging and tilting up the panel, give the floor props additional fixing to prevent them tipping over (i.e. the Removable folding tripods alone are insufficient).

Shoring height < 3.50 m	Shoring height 3.50 - 4.00 m
	

a ... Fixing point on 1st panel, max. every 6.00 m **and** on last panel

With bracing frames Eurex

Shoring height < 3.50 m	Shoring height 3.50 - 4.50 m
	

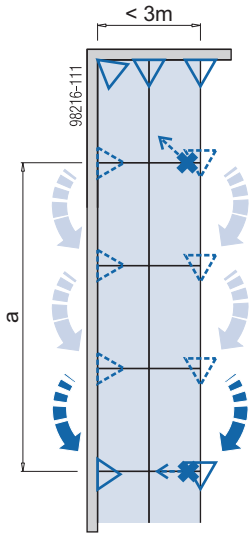
a ... Fixing point on 1st panel, max. every 6.00 m **and** on last panel

Legend

	Removable folding tripod top (shoring height < 3.50 m)
	Removable folding tripod 1.20m (shoring height ≥ 3.50 m)
	Fixing point (e.g. with bracing) Arrow = direction of the bracing
	Eurex bracing frames with diagonal crosses

Rooms < 3 m wide

In rooms < 3 m wide, the removable folding tripods have to be offset in each new row of panels.



a ... fixing point on 1st panel, every max. 6.00 m **and** on last panel

Legend

▽	Removable folding tripod top
⇠✖	Fixing point (e.g. with bracing) Arrow = direction of the bracing

Additional stabilisation during erection work

WARNING

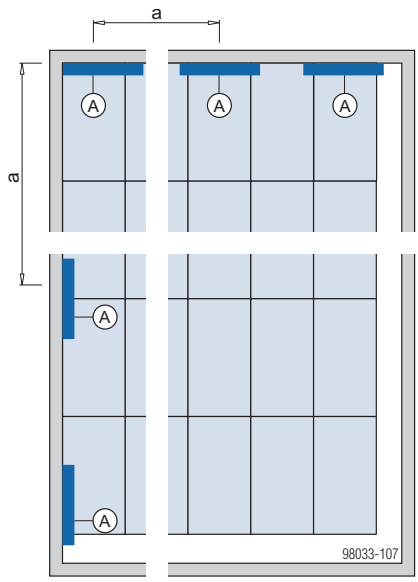
- ➤ Before anybody steps onto the surface of the formwork, its stability must be ensured by e.g. wall clamps or lashing straps.
- ➤ The transfer of concreting loads must be ensured by other measures (e.g. by transferring these loads into the structure or using bracing).

For details on how to make tie-backs with lashing straps, see the section headed Floor formwork around edges and the 'Lashing strap 5.00m' User Information booklet.

➤ Formwork next to walls must be secured against tip-over as shown in the illustrations.

➤ Once the 1st row of panels has been fixed (e.g. with wall clamps) so that it cannot tip over, the Removable folding tripods can be removed.
However, before the formwork is stripped out, the Removable folding tripods MUST be put up again!

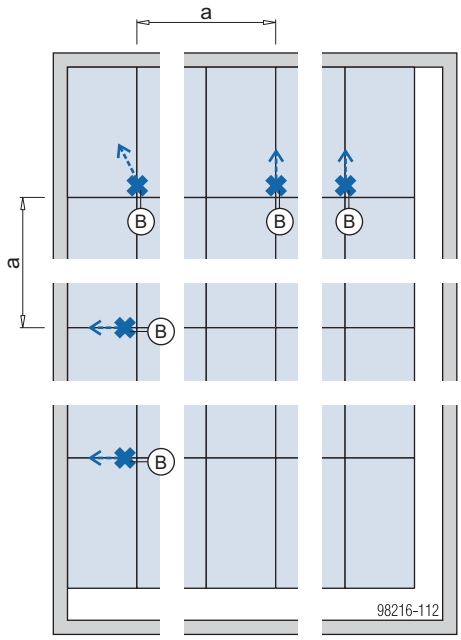
Fixing point with wall clamps



a ... fixing point on 1st panel, every max. 6.00 m **and** on last panel

A Fixing point with wall clamps

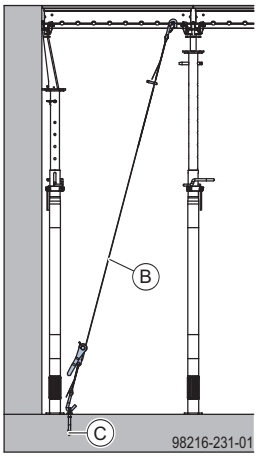
Fixing point with lashing straps



a ... fixing point on 1st panel, every max. 6.00 m **and** on last panel

B Fixing point using lashing straps
Arrow = direction of the bracing

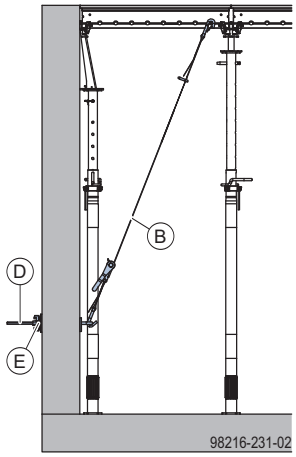
Practical example
Tip-over protection using lashing straps



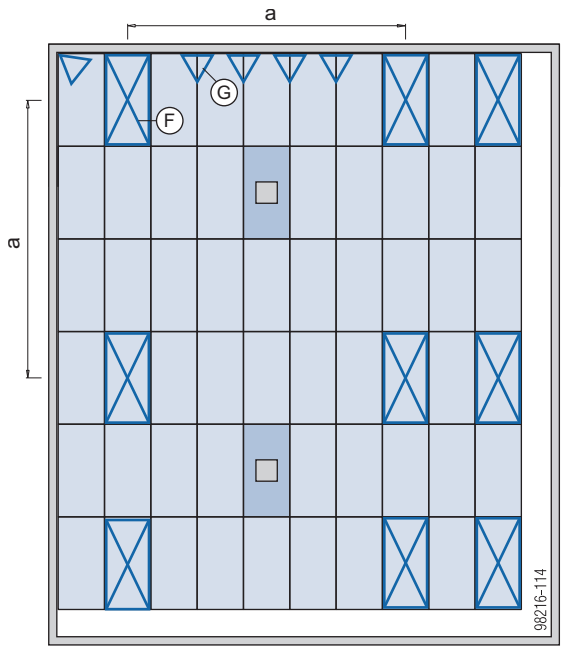
B Lashing strap 5.00m

C Doka express anchor 16x125mm

➤ Up to a wall thickness of 40 cm, the Lashing strap **(B)** can also be fixed to a wall with a Lifting rod 15.0 **(D)** and a Super plate 15.0 **(E)** .



Fixing with Bracing frames Eurex



a ... braced unit on 2nd panel, every max. 6.00 m **and** on last panel

Legend

▽	Removable folding tripod top (shoring height < 3.50 m)
⊠	Bracing frames Eurex with diagonal crosses

F Braced unit with Bracing frames Eurex 1.00m and Diagonal crosses 9.200

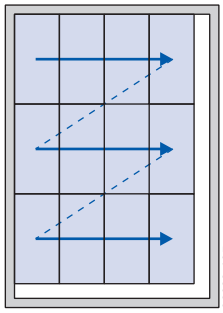
G Removable folding tripod

Note:

It is not possible to start with a bracing frame in the corner.

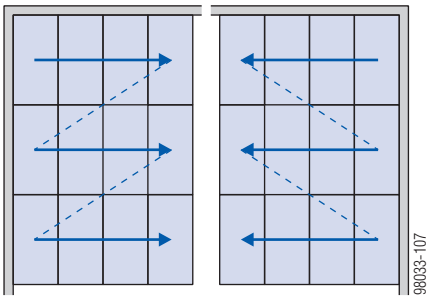
Forming up and stripping out

Preferred laying direction



1) Start by setting up the panels row by row until only the planned infill zone is left unformed.
2) Then install the wall junctions and closures.

If necessary, you can start setting up the panels working from more than one side. The separate DokaXdek forming sections are then joined by fillers (see section 'Forming infill zones').



The formwork is stripped in the same way, but in reverse order.

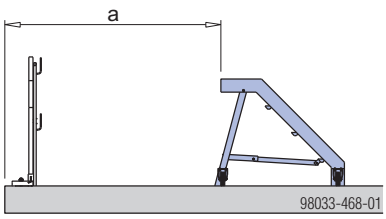
Ladder systems and working scaffolds

Platform stairway 0.97m

- wheel-around, fold-down platform stairway made of light alloy
- working heights of up to 3.00 m (max. standing height 0.97 m)
- Stair width: 1.20 m

NOTICE

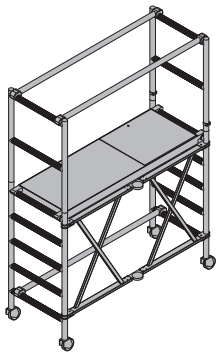
- 2 platform stairways are needed for hanging the panels into place.
- Minimum distance **a** from drop-off edge: 2.00 m



Max. load-bearing capacity: 150 kg

Follow all country-specific regulations!

Wheel-around scaffold DF



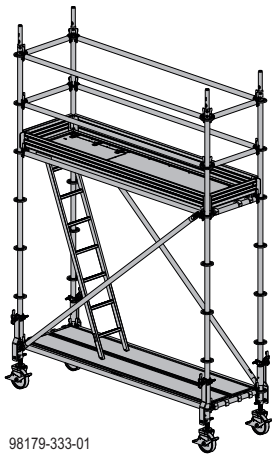
- collapsible wheel-around platform made of light alloy
- variable working heights of up to 3.50 m (max. platform height 1.50 m)
- width of scaffold: 0.75 m

NOTICE

- The Wheel-around scaffold DF is not allowed to be used for mounting and dismounting the panels.
- When work is being carried out near drop-off edges (i.e. at a distance of < 2 m), the 'Wheel-around scaffold DF accessory set' (consisting of a toeboard and intermediate guardrail) is needed.

Follow the directions in the User Information booklet!

Ringlock



Movable working scaffold:

- Variable working heights of up to 12.0 m
- Variable scaffold width and length

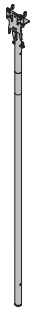
Follow the directions in the User Information booklet!

Method statement overview

Operating with assembling tool[2] or suspension tool

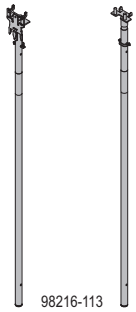
Working from the ground

with assembling tool[2]



Room height:
from 2.10 m to approx. 3.50 m [4]

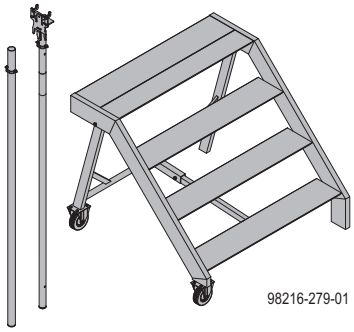
with assembling tool[2] and suspension tool[3]



Room height:
from 2.10 m to approx. 3.80 m

Working from Platform stairway 0.97m[1]

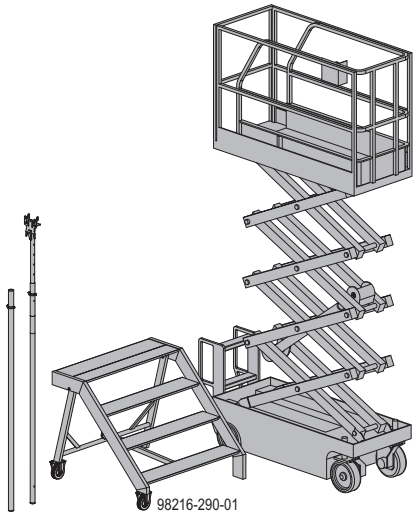
with assembling tool[2]



Room height:
from 2.10 m to approx. 4.50 m

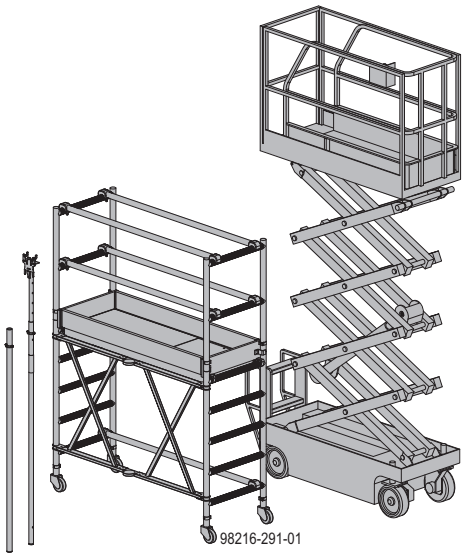
Operating with assembling tool[2], scissor-lift working platform and platform stairway or Wheel-around scaffold DF

with assembling tool[2], platform stairway[1] and scissor-lift working platform



Room height:
up to 5.50 m

with assembling tool[2], Wheel-around scaffold DF and scissor-lift working platform



Room height:
up to 6.00 m[3]

[1] 2 platform stairways are needed for lifting the panels and hooking them into place.

[2] From room heights of 3.80 m upward, the assembling tool extension 2.00m is also needed.

[3] For more information, please contact your Doka technician.

[4] For erection without wall heads, a minimum room height of 1.85 m is required.

Operating with Dokadek assembling tool

NOTICE

As well as the instructions given here, you must follow the instructions in section Reshoring props, concrete technology and stripping out.

NOTICE

For manual transport, hold the floor prop only at the outer and inner tubes.

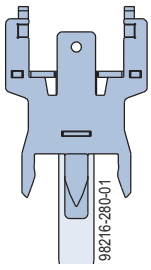
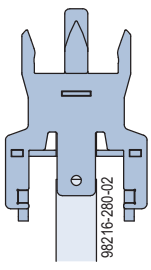
Closing the formwork

Preparations

- The fastening clamp **(A)** has to be pushed all the way into the floor prop.
- The adjusting nut **(B)** has to be tightened into contact with the fastening clamp.

➤ Set the **assembling tools** to the required length (= approx. room height). Min. 3 assembling tools needed per site-erection team.
From room heights of 3.80 m upward, the assembling tool extension 2.00m is also needed.

➤ Set the heads of the assembling tools to the correct position for the use case:

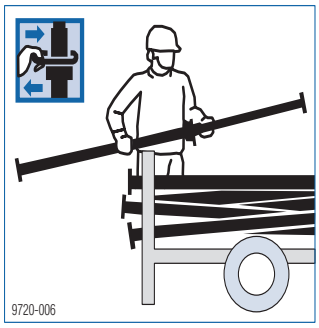
Position of assembling-tool head	
	
For purpose: ▪ Swivelling panels and infill beams up and down ▪ Pull-off function for removing the infill beam	For purpose: ▪ Swivelling infill beams up ▪ Deactivating the panel's anti-liftout guard

WARNING

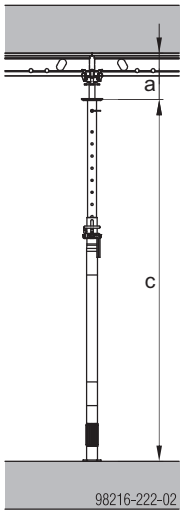
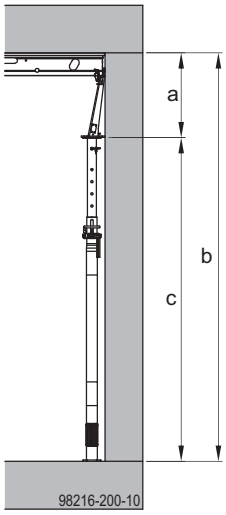
➤ Floor props must not be used extended to their full lengths!

See also section 'Ground rules'.

➤ Roughly adjust the height of the floor props, using the fastening clamps.



Required length = room height minus 'a'

DokaXdek head used	
Support head	Wall head
	
a ... 31 cm	a ... 56 cm
b ... room height (e.g. with Eurex top 300: max. 315 cm) (see section 'Ground rules') c ... extension length of floor prop	

The pegging holes are all numbered, which makes it easier to adjust the props to the same height.

➤ Fit the DokaXdek head onto the floor prop and **secure it with the pin**.

Setting up 1st row of panels with use of wall heads

Putting up the 1st row of floor props

➤ Set up each Removable folding tripod.

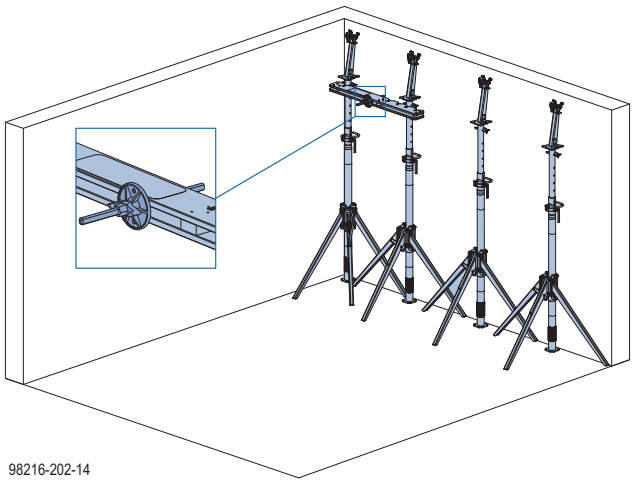
CAUTION
Risk of floor props tipping over when DokaXdek panel is tilted up!
- ➤ Make sure that the Removable folding tripod is facing in the right direction.
- ➤ The leg with the clamping lever must be pointing in the longitudinal direction of the panels.

➤ Put up floor props with wall heads directly against the wall and secure them with Removable folding tripods.

➤ Refer to the wall clamp to find out how far apart the floor props have to be spaced.

CAUTION
Risk of damage to the panel!
- ➤ Make sure that the tie rod does not stick out too far from the wall clamp, as this would get in the way when the panel is lifted onto the heads.

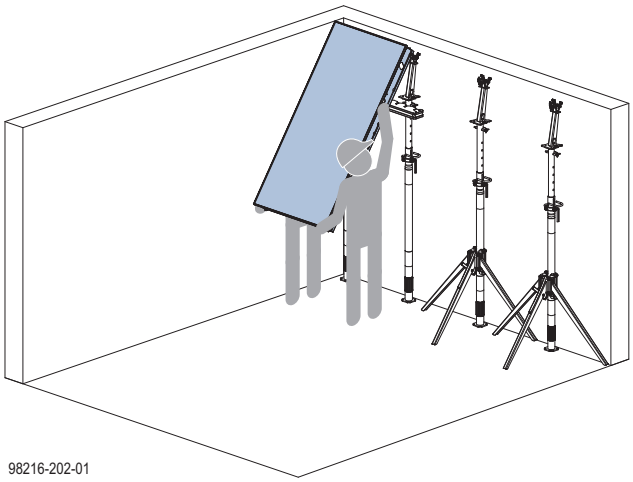
➤ Adjust the 1st and 2nd floor props to the right height and fix them with a wall clamp to prevent them from tipping over. To do this, mount the wall clamp as high up the wall as possible, using a tie rod and super plate. If there are tie-holes near the top of the wall, use these.



98216-202-14

Mount the 1st panel

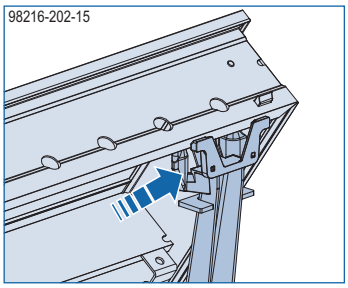
➤ Persons 1 and 2: Engage the panel into the wall heads.



98216-202-01

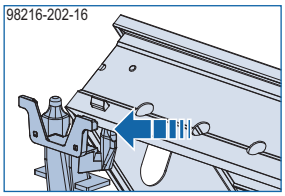
Make sure that the panel is correctly engaged in both heads.

Wall head in the corner



98216-202-15

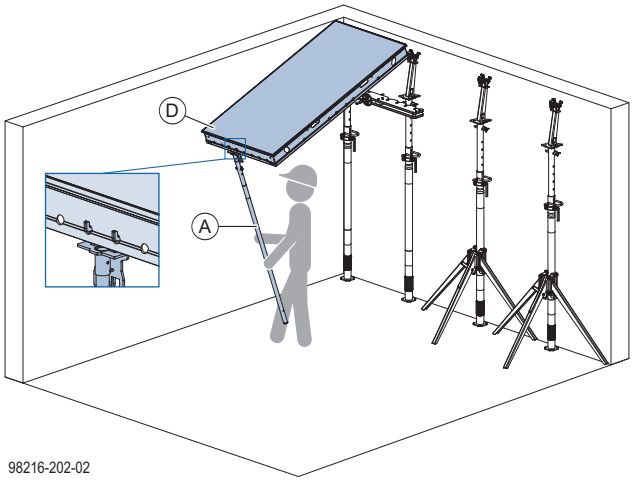
Wall head



98216-202-16

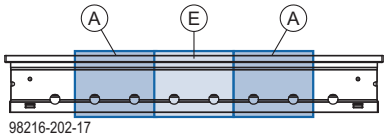
For greater room heights, use an extra assembling tool (set to a shorter length) or a suspension tool for tilting up the panel.

➤ Person 1: Position the assembling tool that is set to a shorter length off-centre in the outside cross profile of the panel and lift up the end for propping.



A DokaXdek assembling tool set to shorter length, or DokaXdek suspension tool

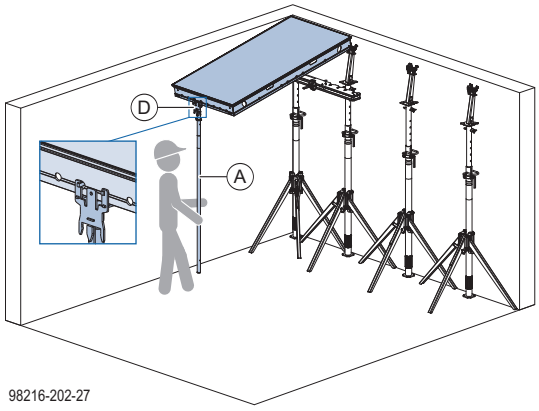
D DokaXdek panel



A Position of DokaXdek assembling tool set to shorter length, or DokaXdek suspension tool

E Position of DokaXdek assembling tool B

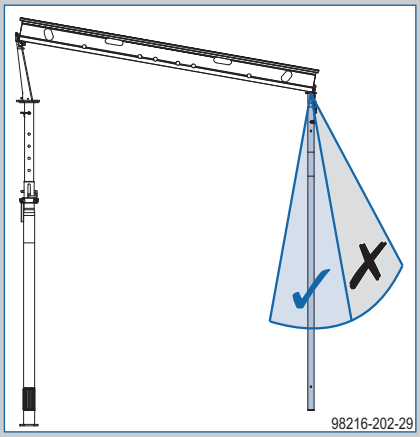
When swivelling along a wall or around obstacles, the formwork panel (D) can be swivelled up using an assembling tool (A) attached from the outside.



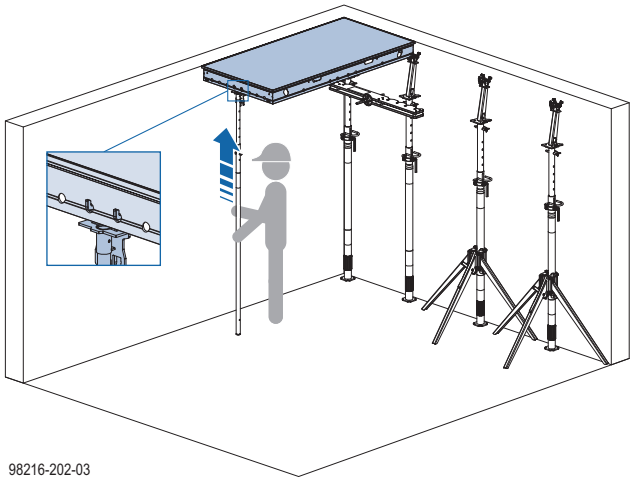
WARNING

Formwork panel can be lifted out of the heads when swivelling upwards from the outside!

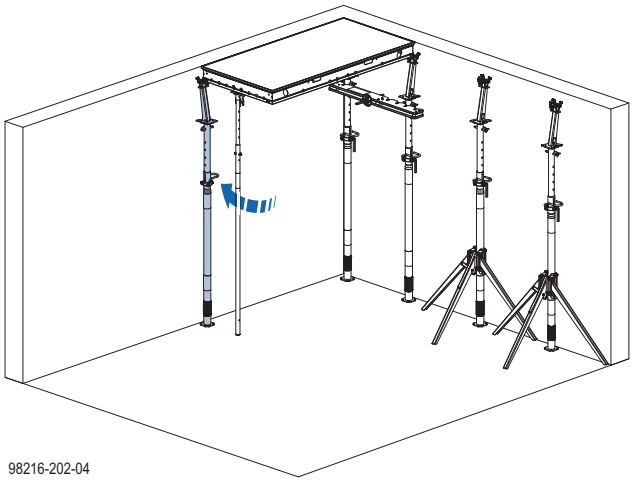
- ➤ Swivelling from the outside may only be carried out using a non-telescoped assembling tool.
- ➤ The assembling tool must not be placed on the ground during swivelling.
- ➤ Shoring the panel is only permitted in a horizontal position with an additional, longer assembling tool.
- ➤ The assembling tool must always be kept as vertical as possible during swivelling.



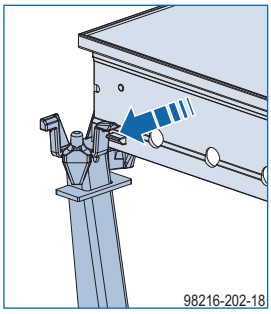
➤ Person 2: Hook the assembling tool into the middle of the outside cross profile of the panel, raise the panel and secure the assembling tool so that it cannot tip over.



➤ Person 1: Place a floor prop (plus wall head) beneath the panel. The panel must still also be supported by the assembling tool. (Max. inclination of the assembling tool with respect to the perpendicular: 5°).



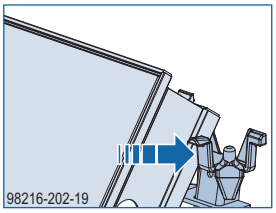
Check that the panel is correctly engaged in the pins of the head and that the anti-liftout guard (latch) is locked.



Mounting the 1st row of panels

➤ Persons 1 and 2: Hook the panel into the heads.

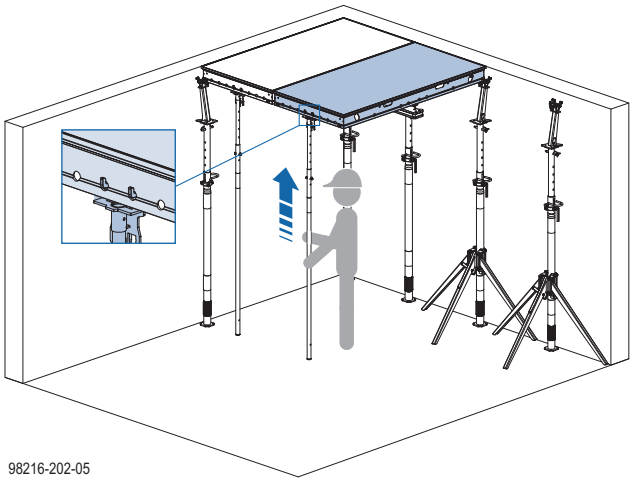
Make sure that the panel is correctly fitted onto the pins of both heads.



➤ Person 1: Tilt the panel part-way up.

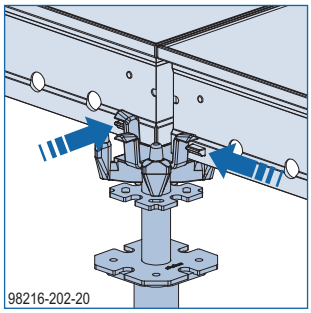
For greater room heights, use an extra assembling tool (set to a shorter length) or a suspension tool for tilting up the panel.

➤ Person 2: Hook the assembling tool into the middle of the outside cross profile of the panel, raise the panel and secure the assembling tool so that it cannot tip over.

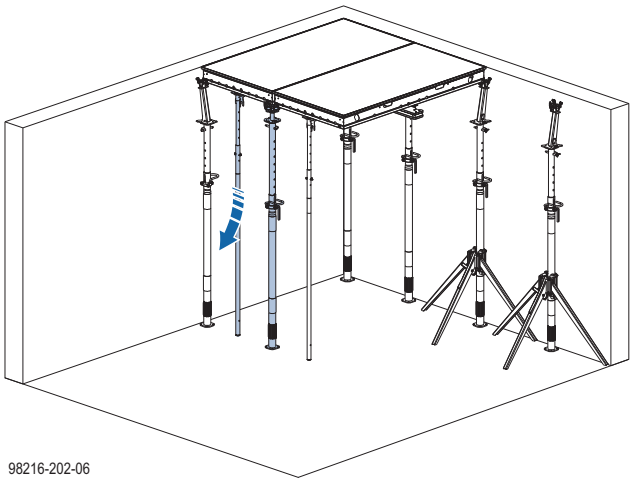


➤ Person 1: Place a floor prop (plus support head) beneath both panels.

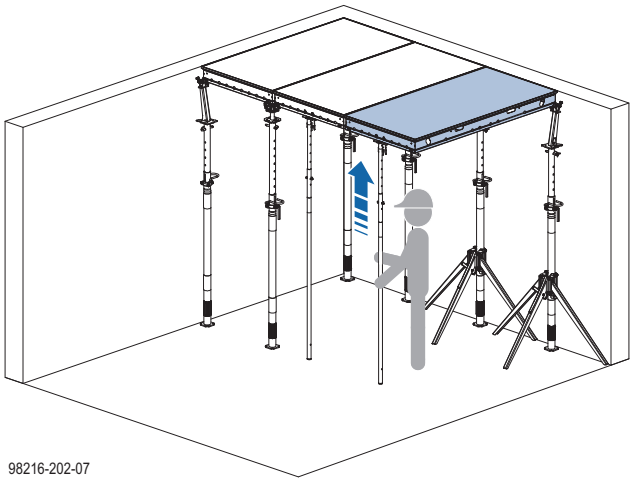
Check that the panels are correctly engaged in the pins of the head and that the anti-liftout guards (latch) are locked.



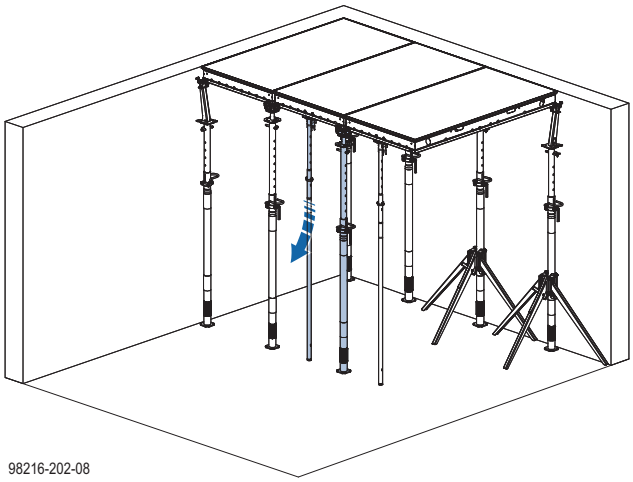
➤ Person 2: Remove the assembling tool from the 1st panel. The 2nd panel must still also be supported by the assembling tool. (Max. inclination of the assembling tool with respect to the perpendicular: 5°)



➤ Set up further panels in the same way, until only the planned infill zone is left unformed. Ensure stability during the set-up operations (see section 'Ground rules')!



98216-202-07



98216-202-08

Setting up 1st row of panels without use of wall heads

NOTICE

In the configuration without use of wall heads, the maximum permitted slab thickness is 40 cm!

Thicker slabs would overload the formwork!

Putting up the 1st row of floor props

Putting up the 1st row of floor props

➤ Set up each removable folding tripod.

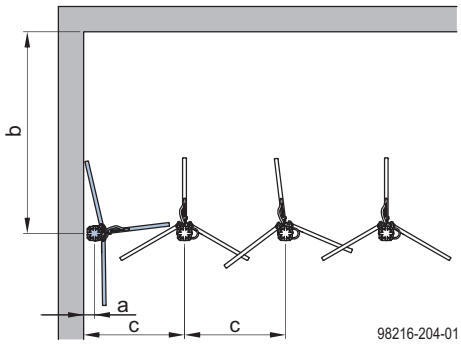
WARNING

Risk of floor props tipping over when DokaXdek panel is tilted up!

➤ Make sure that the Removable folding tripod is facing in the right direction.

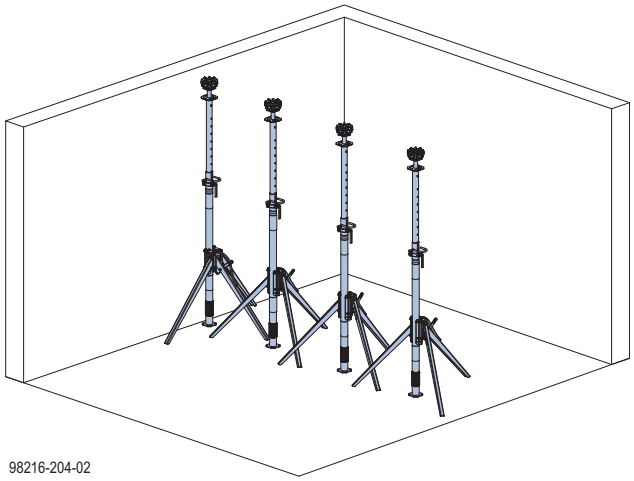
➤ The leg with the clamping lever must be pointing in the longitudinal direction of the panels, which is also the tilt-up direction.

➤ Determine the distance of the 1st floor prop from the wall and also determine the spacing of the remaining floor props.



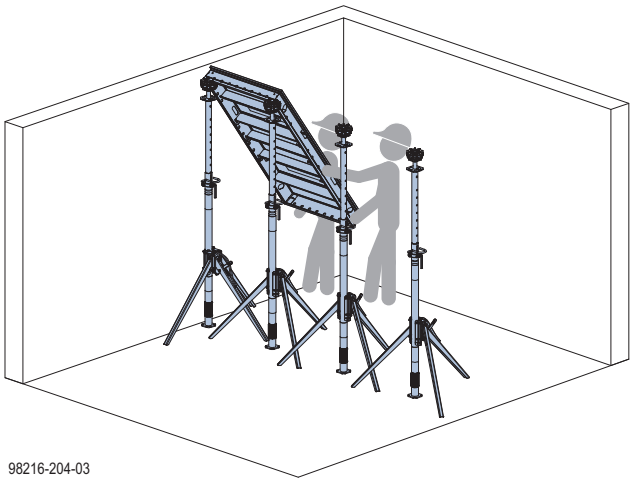
a ... Distance in transverse direction, wall to centreline of floor prop = 13.5 cm
b ... Distance in longitudinal direction, wall to centreline of floor prop = 200 cm
c ... Distance, wall to centreline of 2nd floor prop = 100 cm
and spacing between floor props in transverse direction

➤ Set up floor props with support heads and secure each prop with a Removable folding tripod.



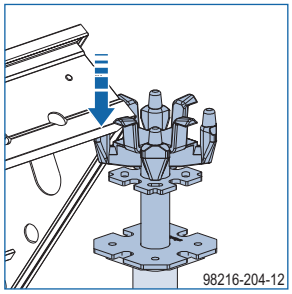
Mount the 1st panel

➤ Persons 1 and 2: Engage the panel into the support heads.



Make sure that the panel is correctly engaged in both heads.

Support head



CAUTION

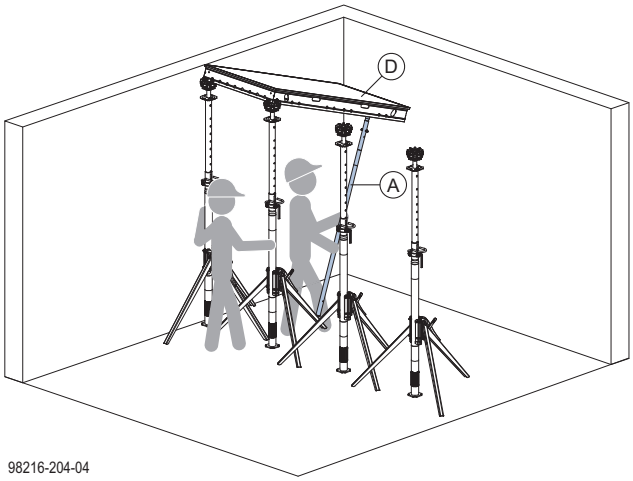
Risk of floor props tipping over when DokaXdek panel is tilted up!

➤ In addition to the support of the Removable folding tripods, when the panels are being tilted up one person must secure the props to prevent them tipping over.

NOTICE

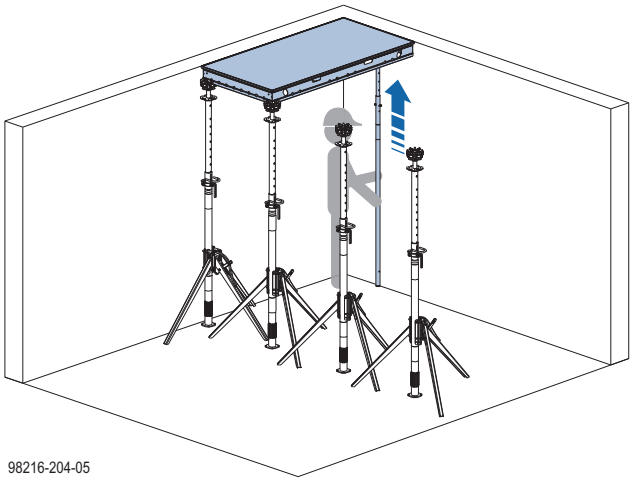
For details on using and positioning the assembling tool on the panel see the preceding section 'Setting up 1st row of panels with use of wall heads'.

➤ Person 1: Position the assembling tool into the middle of the outside cross profile of the panel and lift up the end for propping.

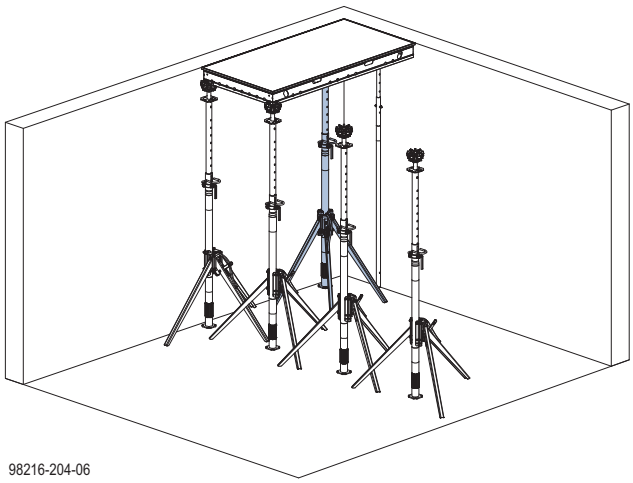


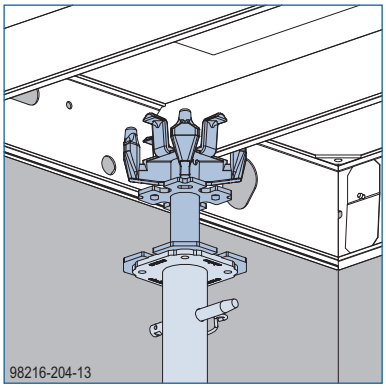
A DokaXdek assembling tool
D DokaXdek panel

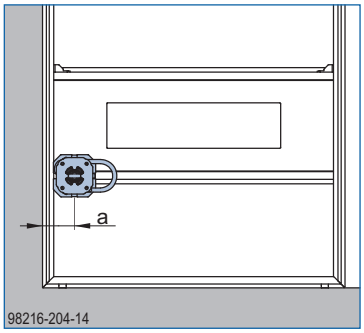
➤ Person 1: Secure the panel with the assembling tool so that it cannot fall over.



➤ Person 2: Support the panel with a floor prop (including support head) at the wall at the 1st inner cross profile of the panel. Position the support head seated tight against the inside of the DokaXdek panel frame. The panel must remain supported by the assembling tool. (max. inclination of the assembling tool relative to the perpendicular: 5°).







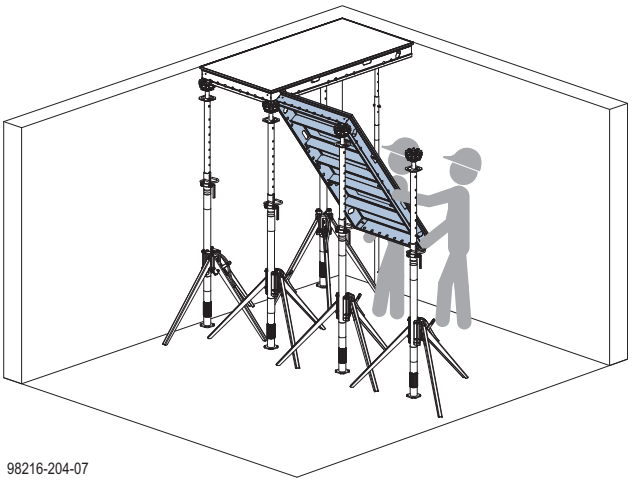
a ... max. 15.0 cm distance in transverse direction, wall to centreline of floor prop

NOTICE

Shoring of the panel at the cross profile is permitted only for applications at the wall corner (up to max. 40 cm slab thickness).

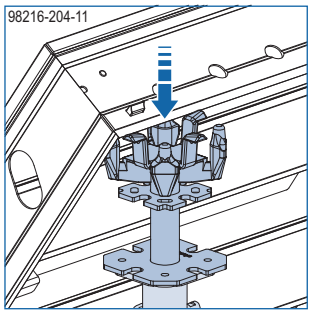
Mounting the 1st row of panels

➤ Persons 1 and 2: Engage the panel into the support heads.

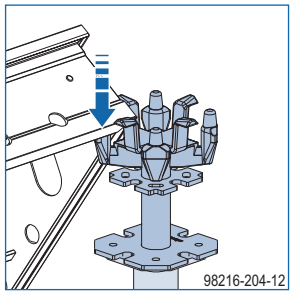


Make sure that the panel is correctly engaged in both heads.

Support head at the wall



Support head



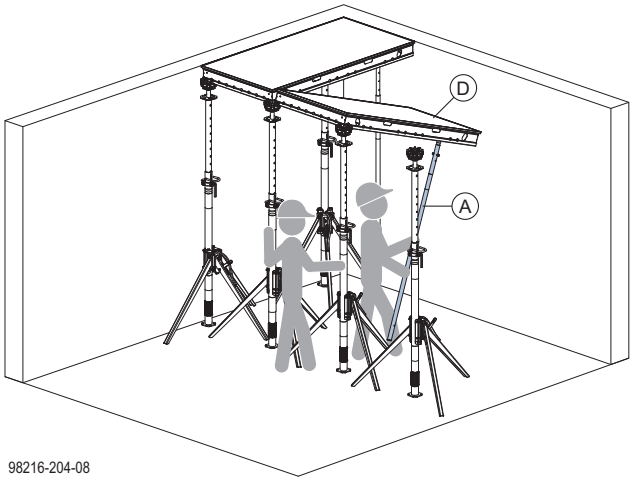
CAUTION

Risk of floor props tipping over when DokaXdek panel is tilted up!

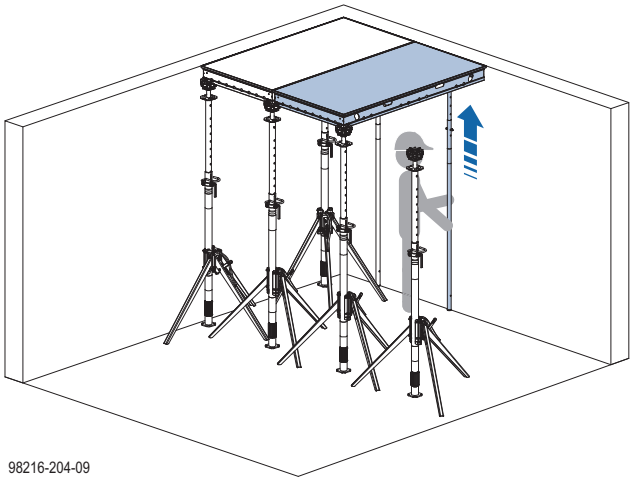
➤ In addition to the support of the Removable folding tripods, when the panels are being tilted up one person must secure the props to prevent them tipping over.

For details on using and positioning the assembling tool on the panel see the preceding section 'Setting up 1st row of panels with use of wall heads'.

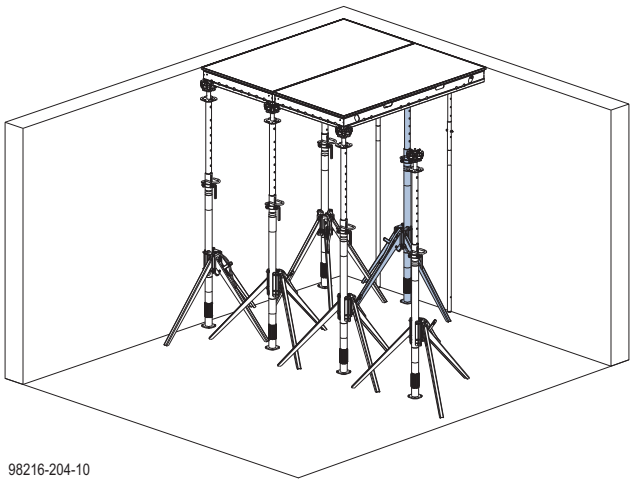
➤ Person 1: Position the assembling tool into the middle of the outside cross profile of the panel and lift up the end for propping.



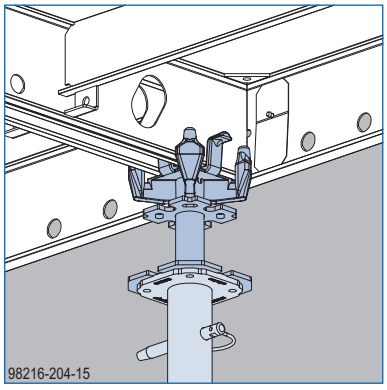
➤ Person 1: Secure the panel with the assembling tool so that it cannot fall over.



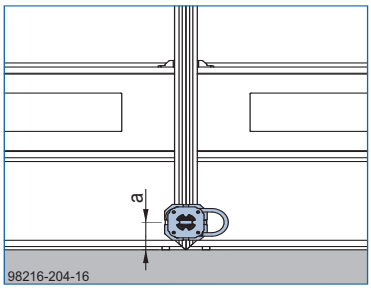
➤ Person 2: Support the panel with a floor prop (including support head) at the wall at the longitudinal profile of the panel. Distance in transverse direction, wall to centreline of floor prop ‘a’ = max. 15.0 cm. The panel must remain supported by the assembling tool. (max. inclination of the assembling tool relative to the perpendicular: 5°).



98216-204-10

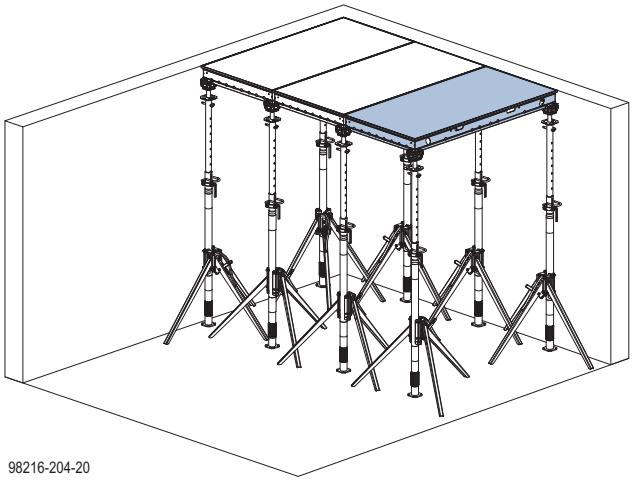


98216-204-15



98216-204-16

a ... max. 15.0 cm

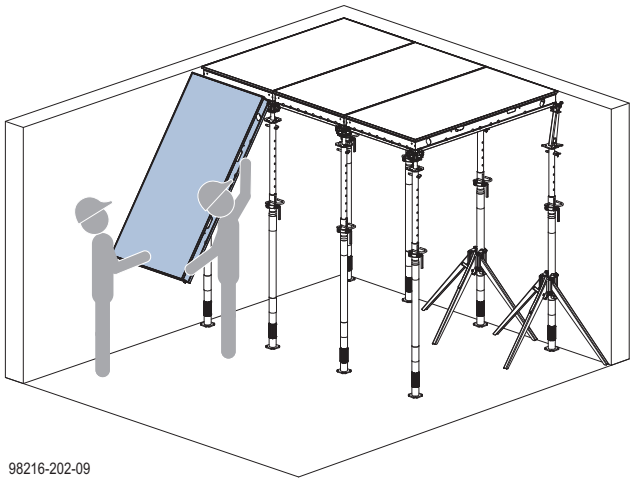


98216-204-20

Putting up further rows of panels

Note:
The procedure for setting up more rows of panels is the same for both applications ('Setting up 1st row of panels with use of wall heads' and 'Setting up 1st row of panels without use of wall heads').

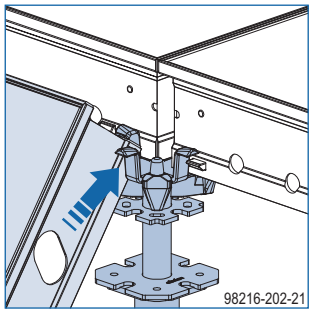
➤ Set up further rows of panels in the same way, until only the planned infill zone is left unformed. Ensure stability during the set-up operations (see section 'Ground rules')!



98216-202-09

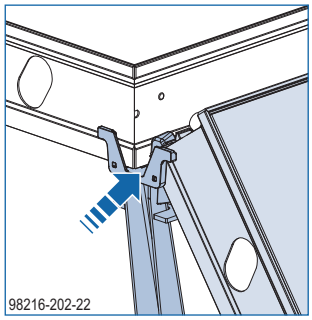
Make sure that the panel is correctly engaged in both heads.

Support head

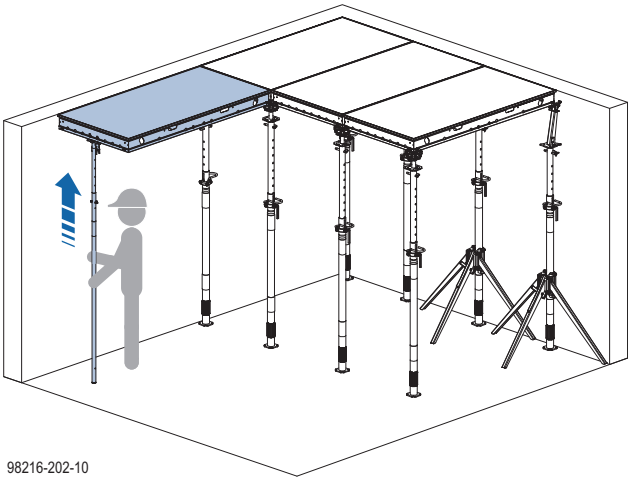


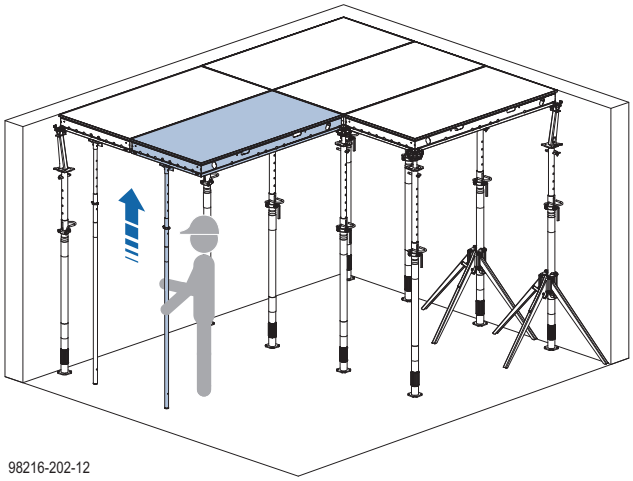
98216-202-21

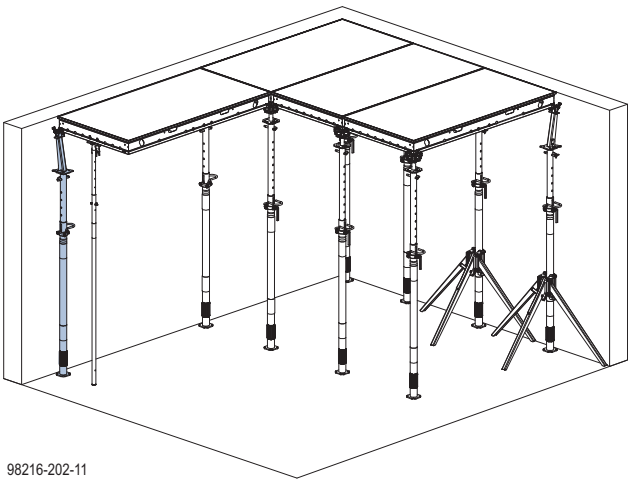
Wall head

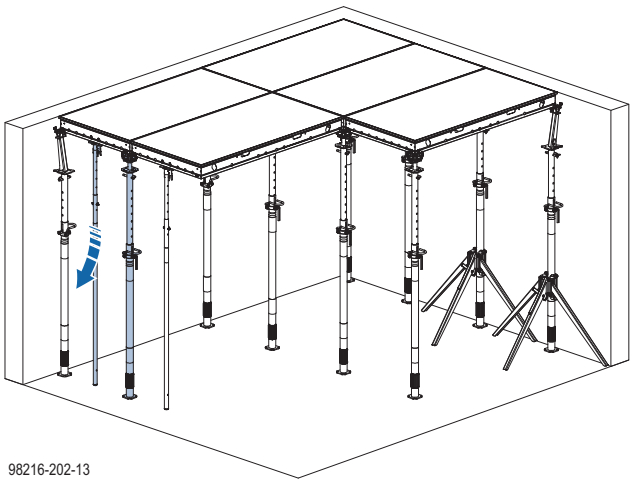


98216-202-22



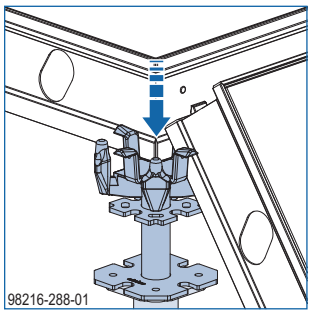




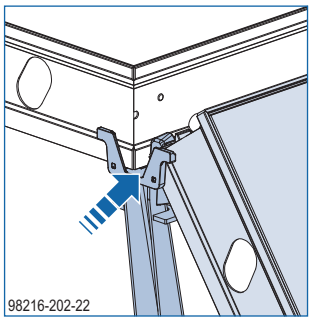


Make sure that the panel is correctly engaged in both heads.

Support head at the wall

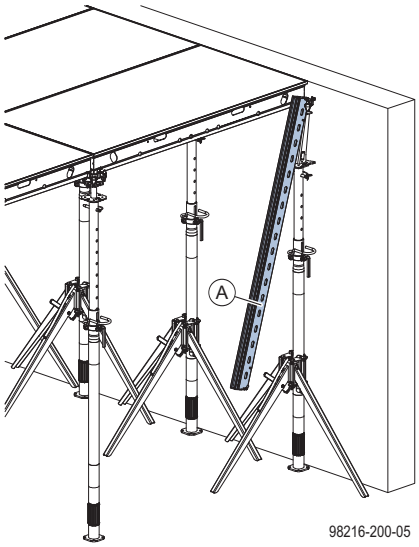


Wall head



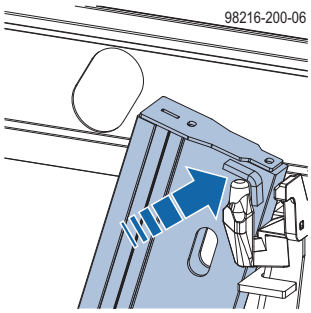
Installing DokaXdek infill beams

➤ Hook the infill beam into the head.

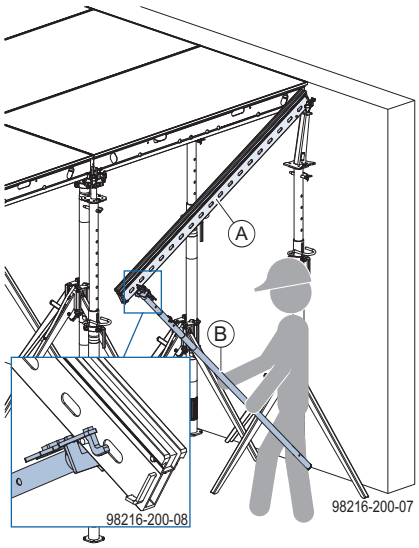


A DokaXdek infill beam

Make sure that the infill beam is correctly engaged in the pins of the head.

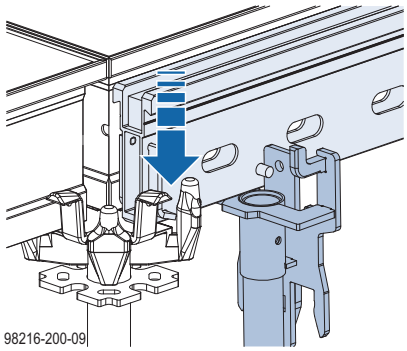


➤ With the side mount in the assembling tool, tilt the infill beam up and place it in the head.
The nub on the infill beam acts as a stop and prevents the assembling tool from slipping outward.



A DokaXdek infill beam
B DokaXdek assembling tool

Check that the infill beam is correctly engaged in the head.



➤ Install further infill beams in the same way.

Mounting the bracing frames

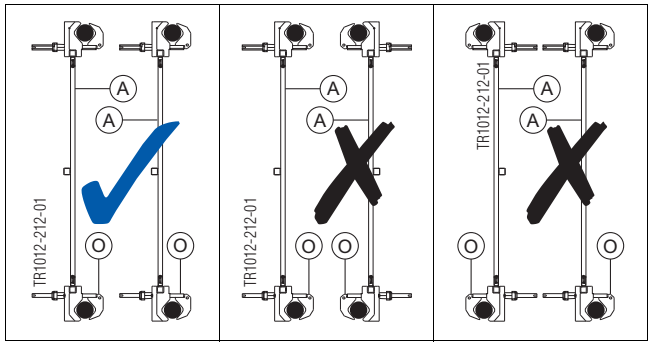
The Bracing frames Eurex 1.00m fix the Doka floor props Eurex 20 and Eurex 30 and are a stable set-up aid - especially close to the edges of floor-slab formwork.

Features:

- Suitable for fixing to both the outer and inner tubes.
- Captively integrated quick-fixing mechanism for the Doka floor props
- Can be used in combination with diagonal crosses.
- On uneven surfaces (e.g. gravel fill of load-bearing capability), higher stability is ensured during assembly.

NOTICE

- Used as a set-up aid and takes horizontal loads during assembly.
- **Not suitable** for sustaining horizontal loads during pouring.
- All the floor props must be plumb.
- The prop holders on the bracing frames must always be pointing in the same direction.



A Bracing frame Eurex
O Prop holder with quick-fixing mechanism

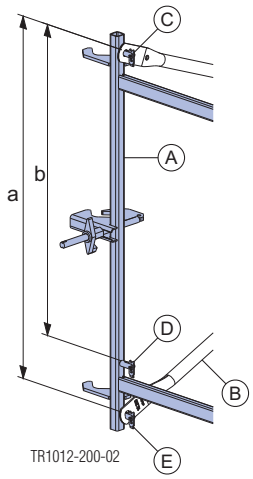
- Always set up the bracing frames such that the end with the two safety catches **(D)** and **(E)** is at the bottom (see Close-up A).
- It is not possible to use bracing frames directly alongside a wall.

Area	Diagonal cross	Safety catch needed
DokaXdek typical zone	9.200	Pos. C+D
DokaXdek with wall head	9.200	Pos. C+E[1)]

[1)] ... Observe the table in section 'Stability of formwork'.

For special uses (e.g. in the infill zone), see the 'Dokaflex' User Information booklet for the necessary spacing of the bracing frames.

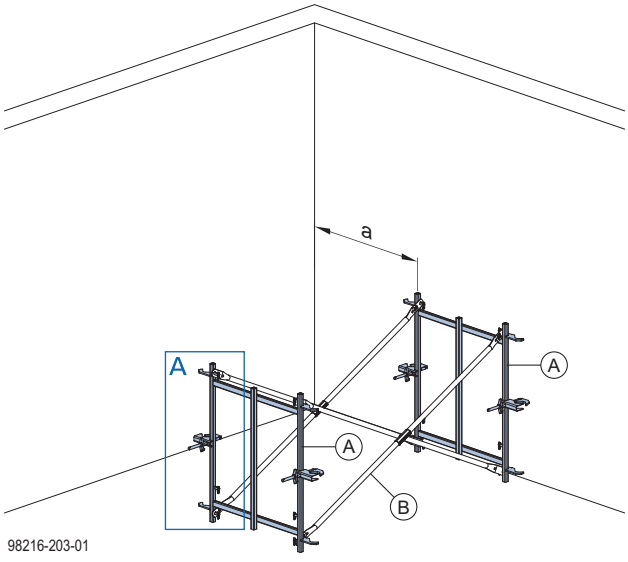
Close-up A



a ... 98.3 cm
b ... 80.3 cm

A	Bracing frame Eurex 1.00m
B	Diagonal cross
C	Safety catch 1
D	Safety catch 2
E	Safety catch 3

➤ Join both Bracing frames Eurex with diagonal crosses at top and bottom, and secure these with safety catches (Close-up A).

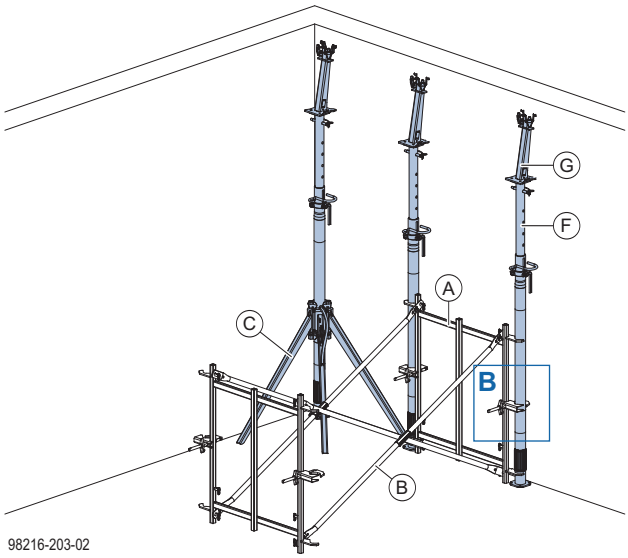


a ... 1.00 m (DokaXdek panel 1.00x2.00m)
or 0.75 m (DokaXdek panel 0.75x2.00m)

A	Bracing frame Eurex
B	Diagonal cross

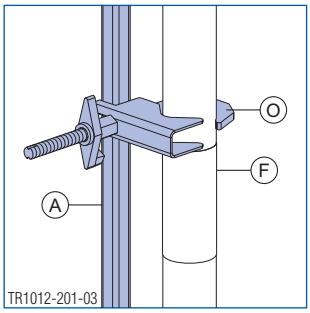
➤ Place the floor prop (plus wall head) in the corner and secure it with a Removable folding tripod.

➤ Insert the floor props (plus wall head) into the prop holder on the bracing frame, and fix it in place (see Close-up B). Position another floor prop (complete with wall head and Removable folding tripod) in the corner.



A	Bracing frame Eurex
B	Diagonal cross
C	Removable folding tripod
F	Doka floor prop Eurex
G	DokaXdek wall head

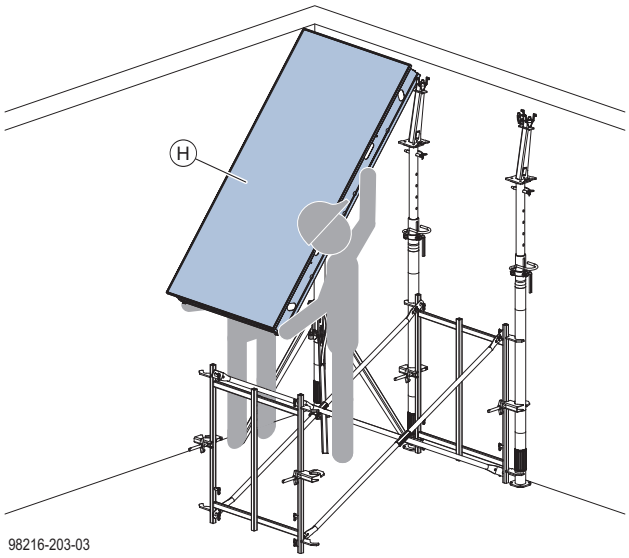
Close-up B – prop holder



Quick-fixing mechanism closed

A	Bracing frame Eurex
F	Doka floor prop Eurex
O	Prop holder with quick-fixing mechanism

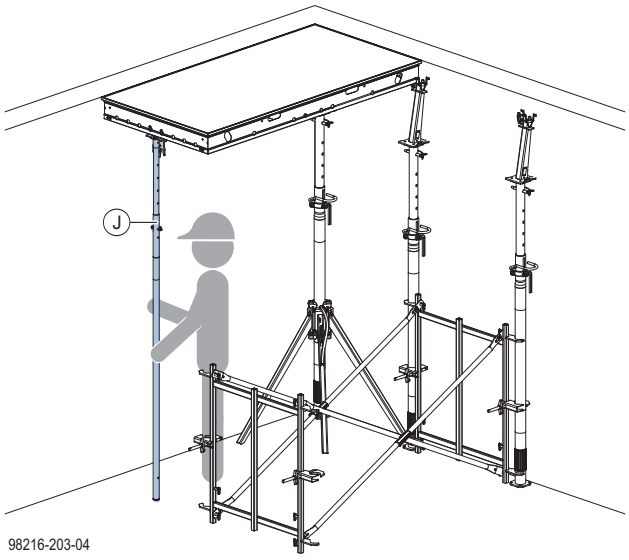
➤ Persons 1 and 2: Engage the DokaXdek panel in the wall heads.



H DokaXdek panel

Check that the DokaXdek panel is hooked into both of the heads.

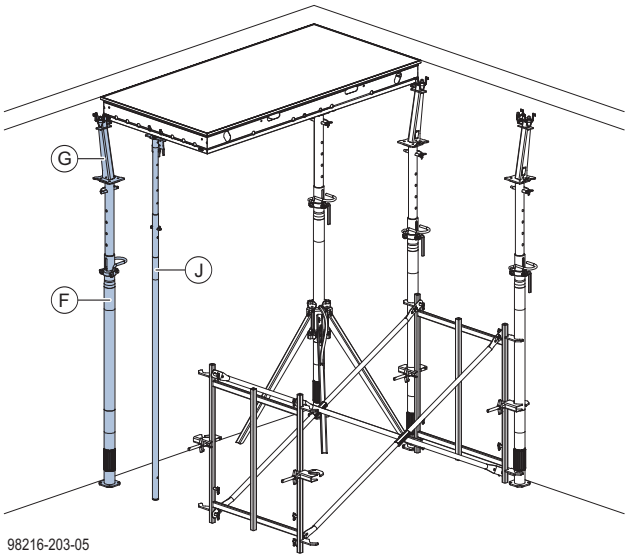
➤ Person 1: Hook the assembling tool into the middle of the outside cross profile of the panel, raise the panel and hold the assembling tool securely in position so that it cannot tip over.



J DokaXdek assembling tool

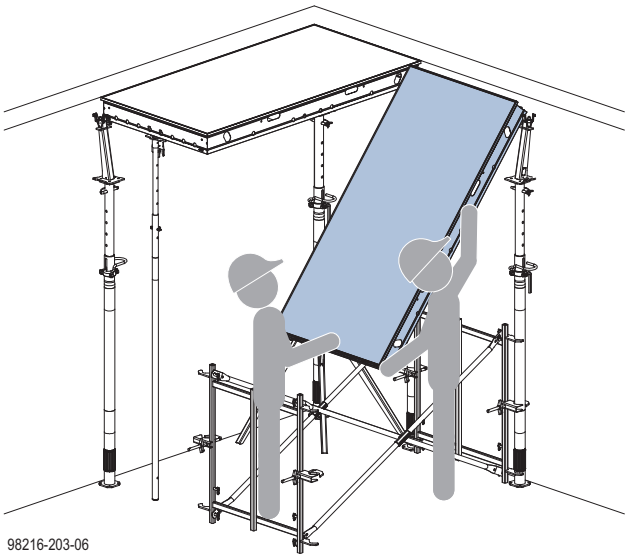
For greater room heights, use an extra assembling tool (set to a shorter length) for tilting up the panel.

➤ Person 2: Place a floor prop (plus wall head) beneath the panel. The panel must still also be supported by the assembling tool. (Max. inclination of the assembling tool with respect to the perpendicular: 5°).



F Doka floor prop Eurex
G DokaXdek wall head
J DokaXdek assembling tool

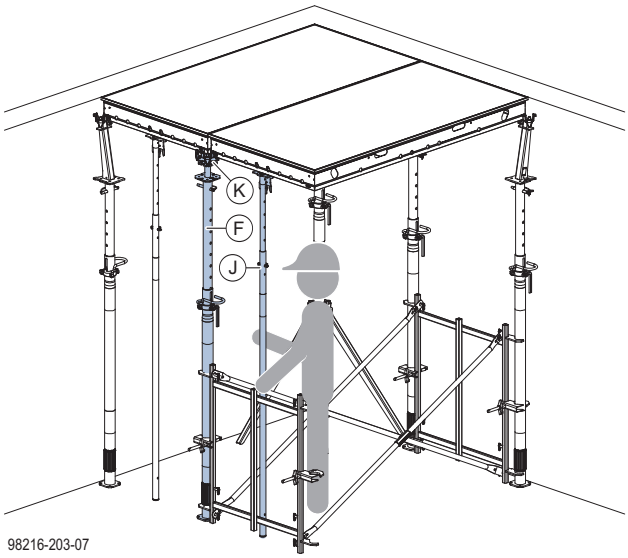
➤ Persons 1 and 2: Hang the panel into place.



Make sure that the panel is correctly fitted onto the pin of the head.

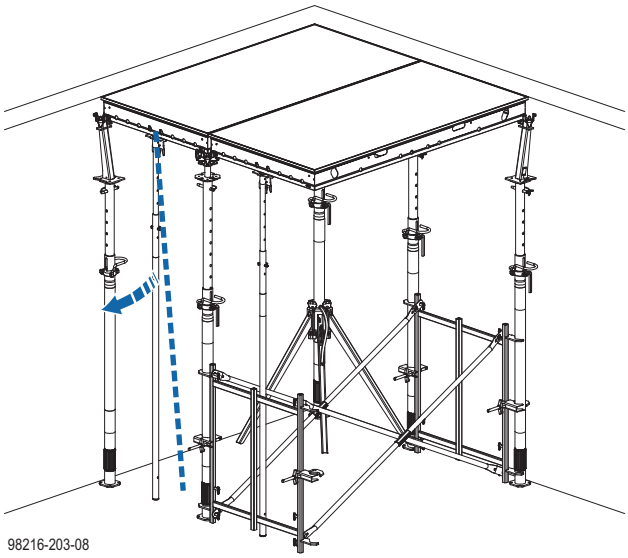
➤ Person 1: Hook the assembling tool into the middle of the outside cross profile of the panel, raise the panel and hold the assembling tool securely in position so that it cannot tip over.

➤ Put up another floor prop (plus support head) under the panel, and secure the prop to the bracing frame.



F Doka floor prop Eurex
J DokaXdek assembling tool
K DokaXdek support head

➤ Remove the assembling tool and install further panels.



➤ For more steps, see section 'Operating with Dokadek assembling tool'.
➤ Position and number of frames, see sections 'Ground rules', 'Additional stabilisation during erection work'.

Dismantling

➤ is carried out in the opposite order from assembly.

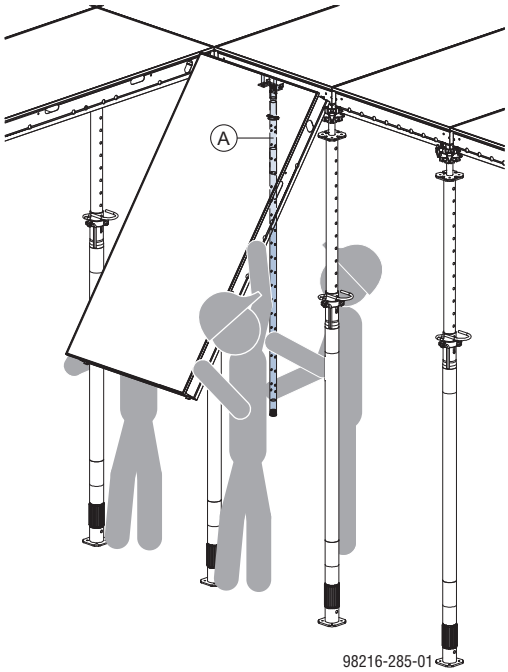
Operating with assembling tool and suspension tool from ground level

The DokaXdek suspension tool is for lifting and engaging DokaXdek panels.

Note:
The DokaXdek suspension tool is not a substitute for the DokaXdek assembling tool.

Features:
- Usable from floor level at floor-to-ceiling heights up to 3.80 m (with platform stairway, up to 4.50 m).
- Panels beside the wall can be pre-lifted in preparation for propping.
  The DokaXdek assembling tool is the only permissible tool for use when propping the panels.

Practical example



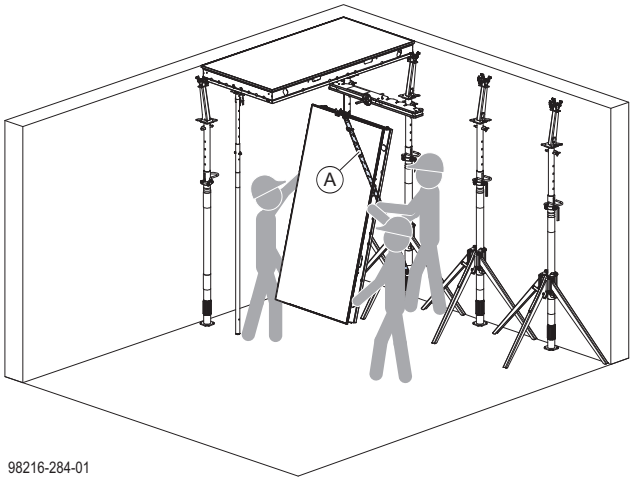
A DokaXdek suspension tool

The person with the suspension tool uses it to guide the panel and to take some of the weight.

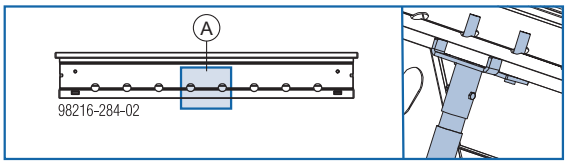
Closing the formwork

➤ Adjust the DokaXdek suspension tool to the required length (= approx. floor-to-ceiling height minus 1.00 m).

➤ Persons 1 and 2: Lift the panel off the floor.

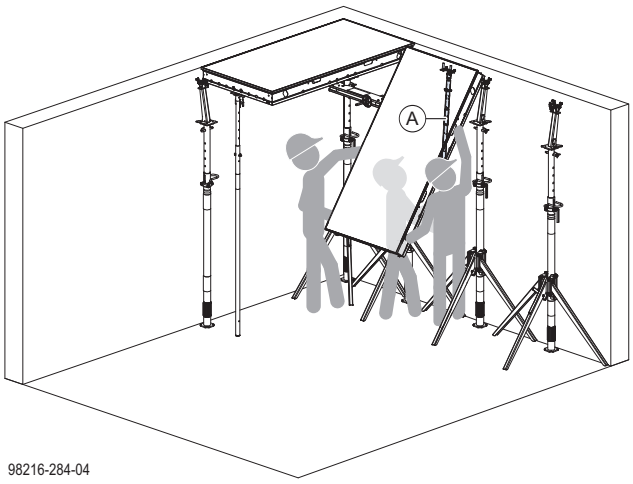


➤ Person 3: Engages the panel at the midway point with the DokaXdek suspension tool.



A Position of DokaXdek suspension tool

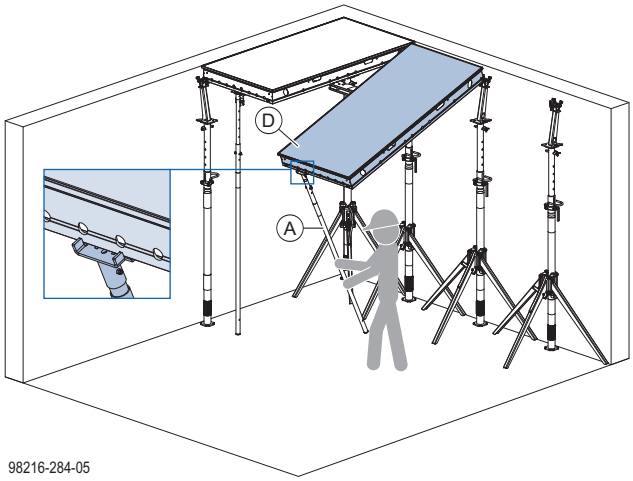
➤ Persons 1, 2 and 3: Hook the panel into the heads.



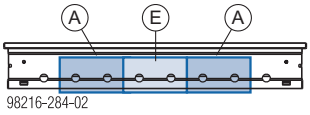
A DokaXdek suspension tool

Make sure that the panel is correctly fitted onto the pin of the head.

➤ Person 1: Position the suspension tool off-centre in the outside cross profile of the panel and lift up the end for propping.



A DokaXdek suspension tool
D DokaXdek panel

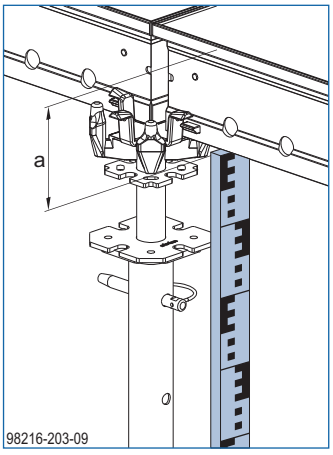


A DokaXdek suspension tool
E DokaXdek assembling tool

➤ Person 2: Hook the assembling tool into the middle of the outside cross profile of the panel, raise the panel and secure the assembling tool so that it cannot tip over.

Levelling the formwork

➤ Adjust the panels at the corners to the desired room height minus 15 cm, with reference to the frame cross-profile.



a ... 15 cm

Additional precautions for slab thicknesses of up to 75 cm

➤ See section 'Additional precautions for slab thicknesses of up to 75 cm'.

Installing fall protection

➤ See the section headed Fall protection on the formwork.

Mounting fillers

➤ See the section headed Forming infill zones.

Pouring

➤ Before pouring, recheck all floor props.

- The fastening clamp **(A)** has to be pushed all the way into the floor prop.
- The adjusting nut **(B)** has to be tightened into contact with the fastening clamp.

98017-202-01

Permitted slab thickness [cm] with Floor props Eurex 30[1)]

Panel size	**without** additional precautions	**with** additional precautions[2)]	Flatness deviation as per DIN 18202, Table 3
1.00x2.00m	40	65	Line 6
0.75x2.00m	55	75	Line 6
1.00x1.00m	65		Line 6
0.75x1.00m	75		Line 6
0.75x0.75m	75		Line 6

[1)] For use of the Eurex 20 top or Eurex 20 eco floor props, follow the directions in section 'Structural design of floor props'.

[2)] See section 'Additional precautions for slab thicknesses of up to 75 cm'.

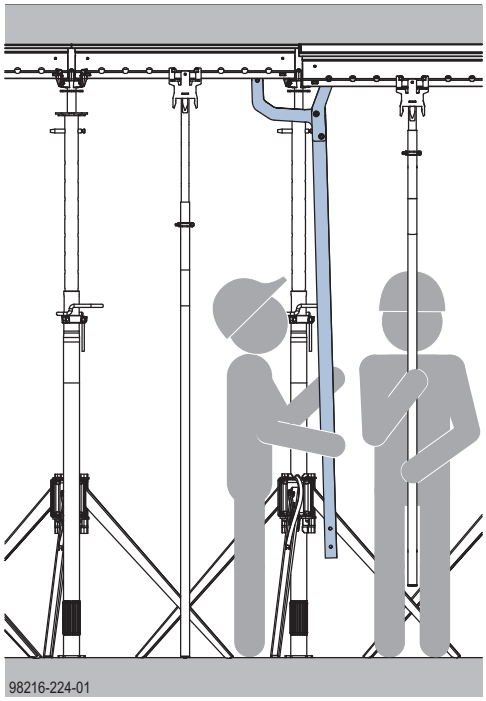
To protect the surface of the form-facing, we recommend using a vibrator with a protective rubber cap.

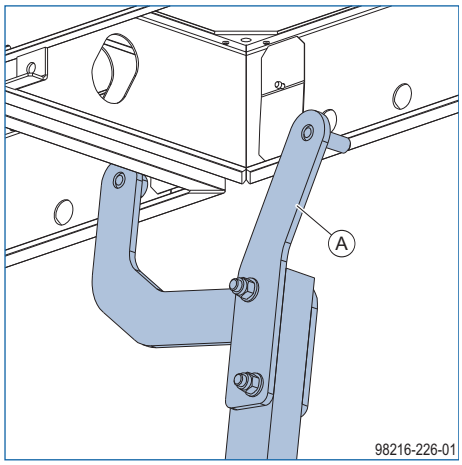
Stripping the formwork

NOTICE

- Comply with the stipulated stripping times.
- Always strip out the formwork in reverse order.
- As well as the instructions given here, you must follow the directions in section 'Reshoring props, concrete technology and stripping out'.

The DokaXdek stripping tool **(A)** provides an easy, safe way of detaching panels from the concrete where necessary.


98216-224-01



98216-226-01

Preparations

NOTICE

- ➤ Before stripping the formwork, make sure that the floor props in the last row of panels to be struck are still fixed with Removable folding tripods or wall clamps.
- ➤ Before stripping the formwork, make sure that a Removable folding tripod is in place to stabilise each prop that is not seated with a head at a panel corner or underneath a cross-profile stiffening plate (see section 'Ground rules').

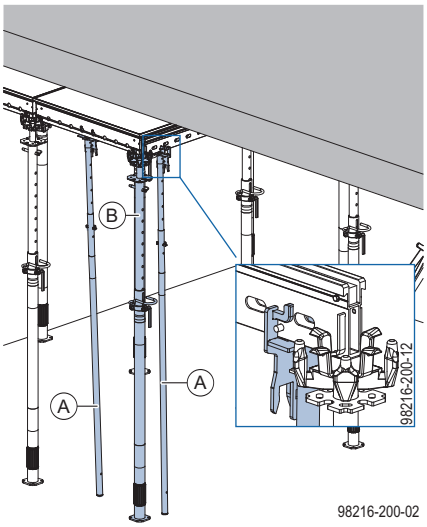
➤ Set the **assembling tools** to the required length (= approx. room height). 3 assembling tools needed for supporting the panels and 2 assembling tools needed for deactivating the anti-liftout guards.
From room heights of 3.80 m upward, the assembling tool extension 2.00m is also needed.

➤ Secure the panels so that they cannot suddenly drop.

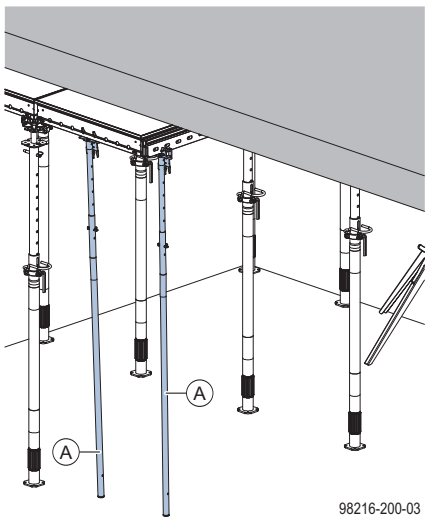
➤ Lower the floor formwork in the infill zone (floor props underneath infill beams approx. 2 cm).

➤ Remove the Doka beams H20, for example using a working scaffold for access.

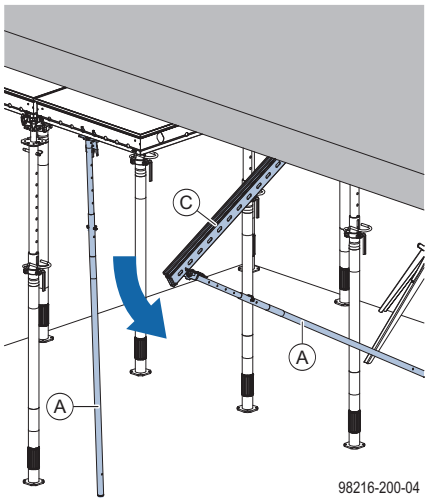
➤ Use one assembling tool to support the infill beam and another assembling tool to support the panel.



➤ Remove the floor prop with head.



➤ Tilt the infill beam down and remove.

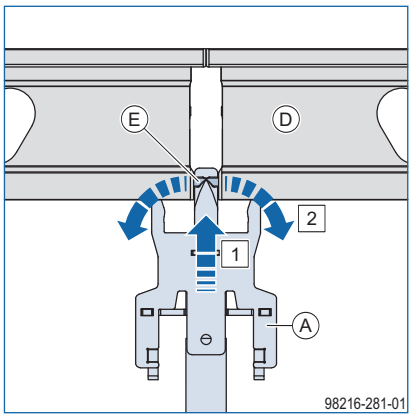


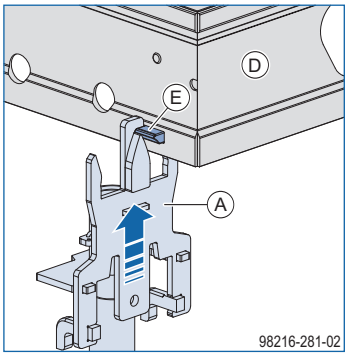
A	DokaXdek assembling tool
B	Doka floor prop Eurex + DokaXdek support head
C	DokaXdek infill beam

➤ Remove the panels.

The anti-liftout guards of the panels can be deactivated with the DokaXdek assembling tool. This is necessary in situations in which stripping out starts in closure zones or in the middle of the room.

Deactivating the anti-liftout guard



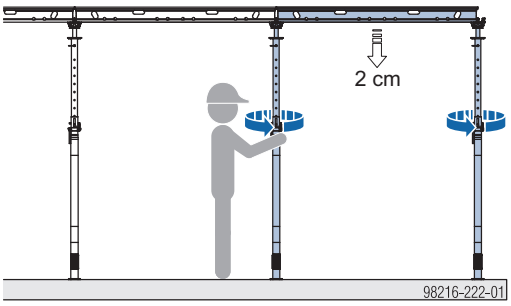


A	DokaXdek assembling tool
D	DokaXdek panels
E	Anti-liftout guard of the DokaXdek panel

Dismantling the floor props and panels

NOTICE

- Loosen the adjusting nut with a blow of the hammer and turn it to lower the floor prop.
- Lower the props in the first row of panels to be stripped out, by approx. 2 cm (= approx. 1 turn of the adjusting nut).



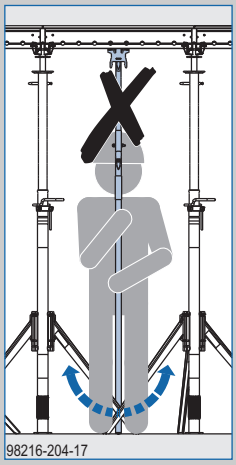
- Prop the 1st and 2nd panels on assembling tools. (Max. inclination of the assembling tool with respect to the perpendicular: 5°).
- Remove the 1st and 2nd floor props and place them in a stacking pallet.

NOTICE

- Bring the floor prop into a horizontal position.
- If necessary, open the fastening clamp and push the inner tube into the outer tube.
- Lay the floor prop on the stacking pallet.

CAUTION

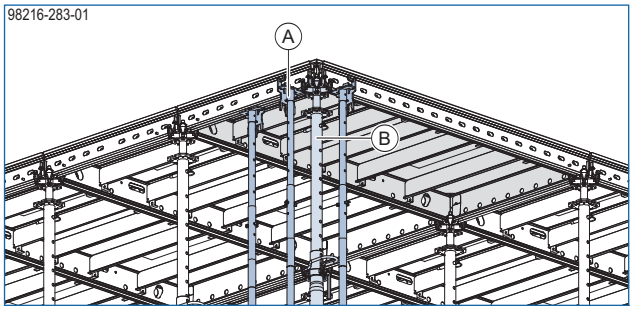
- Use only the DokaXdek stripping tool to release the panels from the concrete.



- Using the assembling tool, lower the panel until the 2nd person can take hold of it and tilt it all the way down.
- Lift the panel off the prop heads and set it down.
- Place the assembling tool beneath the 3rd panel, remove the 3rd floor prop and place it in the stacking pallet. (Max. inclination of the assembling tool with respect to the perpendicular: 5°).
- Unhook the 2nd panel and place it on a panel pallet.
- Take down all the other panels in the same way.

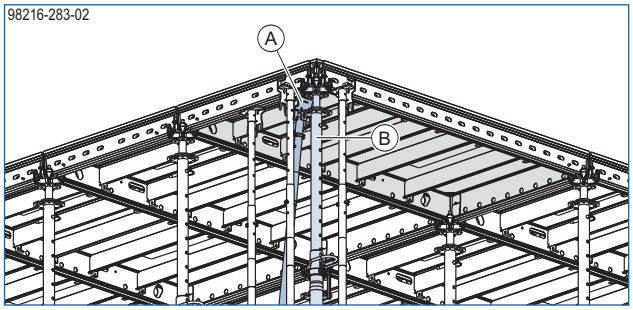
Start in closure zones

- Use 3 assembling tools to support the area of the panel to be stripped out.



A DokaXdek assembling tool
B Doka floor prop Eurex

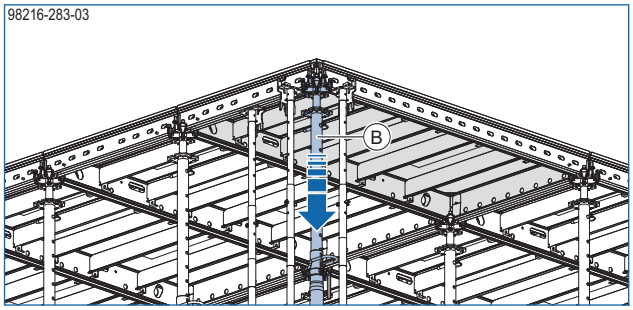
- Deactivate the anti-liftout guards of the panels at the floor prop.



A DokaXdek assembling tool
B Doka floor prop Eurex

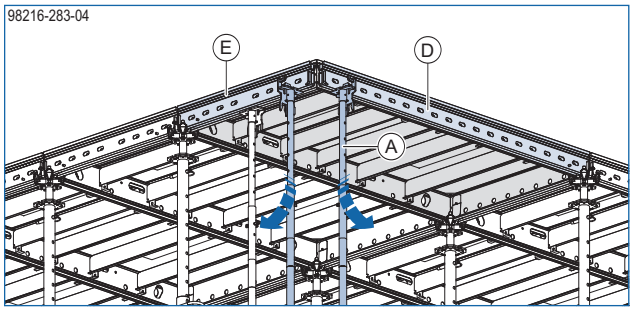
Note:
For information on deactivating the anti-liftout guards of the panels see section 'Preparations'.

- Remove the floor prop.



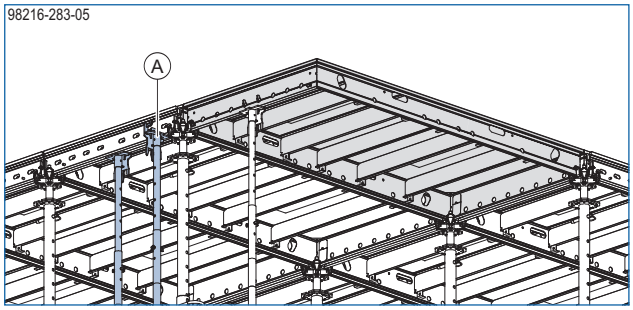
B Doka floor prop Eurex

➤ Remove the infill beam.



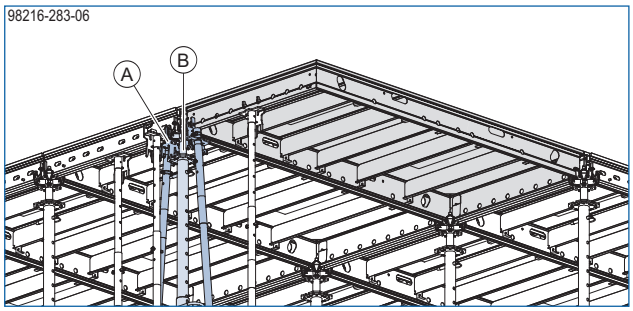
A DokaXdek assembling tool
D DokaXdek infill beam 2.00m
E DokaXdek infill beam 1.00m

➤ Support the neighbouring panel and infill beam.



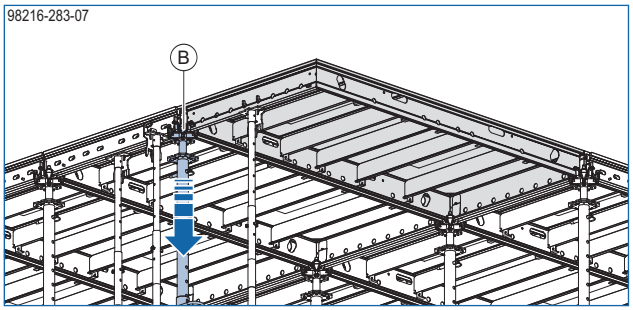
A DokaXdek assembling tool

➤ Deactivate the anti-liftout guards at the floor prop.



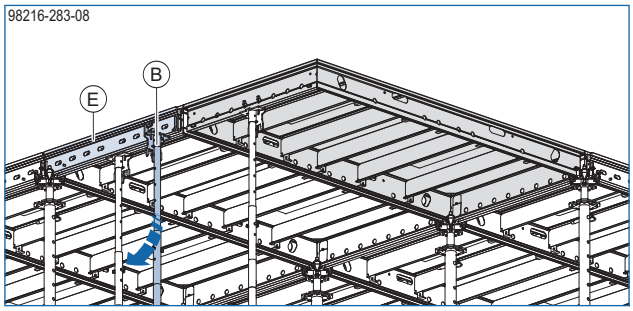
A DokaXdek assembling tool
B Doka floor prop Eurex

➤ Remove the 2nd floor prop.



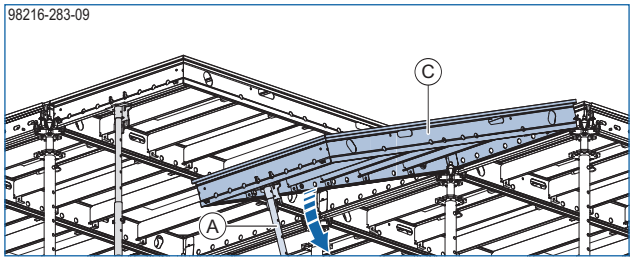
B Doka floor prop Eurex

➤ Remove the next infill beam.



B Doka floor prop Eurex
E DokaXdek infill beam 1.00m

➤ Remove the first panel.



A DokaXdek assembling tool
C DokaXdek panel

Cleaning the formwork

➤ See the section headed Cleaning and care of your equipment.

Reshoring

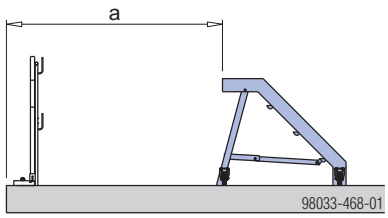
➤ Before pouring the next floor-slab (i.e. above the one that has just been stripped), put up reshoring props.
➤ See the section headed Reshoring props, concrete technology and stripping out.

Operating with assembling tool from Platform stairway 0.97m

- wheel-around, fold-down platform stairway made of light alloy
- working heights of up to 3.00 m (max. standing height 0.97 m)
- Stair width: 1.20 m

NOTICE

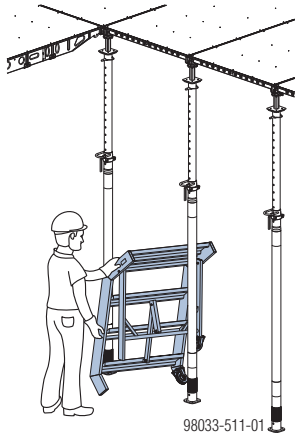
- 2 platform stairways are needed for hanging the panels into place.
- Minimum distance **a** from drop-off edge: 2.00 m



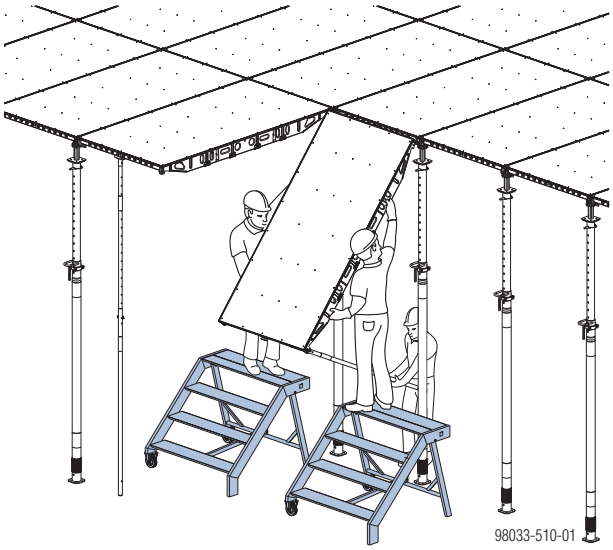
Max. load-bearing capacity: 150 kg

Follow all country-specific regulations!

- Position the platform stairways far enough apart to enable the person with the assembling tool to raise the panel without obstruction.
- The platform stairway can be folded together for wheeling between the floor props.



Practical example



Working from platform stairway and scissor-lift working platform

NOTICE

General information:

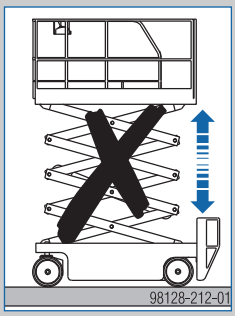
- Operators working off platform stairways and scissor-lift working platform can handle DokaXdek panels up to a room height of 5.50 m.
- At an extension length of 5.50 m, the floor props have to be positioned with the outer tube at the top, as otherwise the folding tripods cannot be installed.
- DokaXdek panels beside the wall can be pre-lifted in preparation for propping. The DokaXdek assembling tool is the only permissible tool for use when propping the DokaXdek panels.
- Installation of the floor props with DokaXdek heads (support head) can be assisted with the suspension tool.

Information relating to scissor-lift working platform:

- 2 scissor-lift working platforms are always required for installation of the DokaXdek panels.
- Always comply with the instructions of the scissor-lift working platform (wind loads, floor gradient, etc.)!
- Lifting force: min. 150 kg
- Length of the workspace: min. 1.20 m; Scissor-lift working platforms with telescoping workspaces are recommended.
- Recommended width of the platform's working surface:
  0.80 - 0.85 m
- Scissor-lift working platform must be suitable for outdoor use (wind loads).

CAUTION

➤ Do not change the height of the scissor-lift working platform while formwork set-up or stripping is in progress!

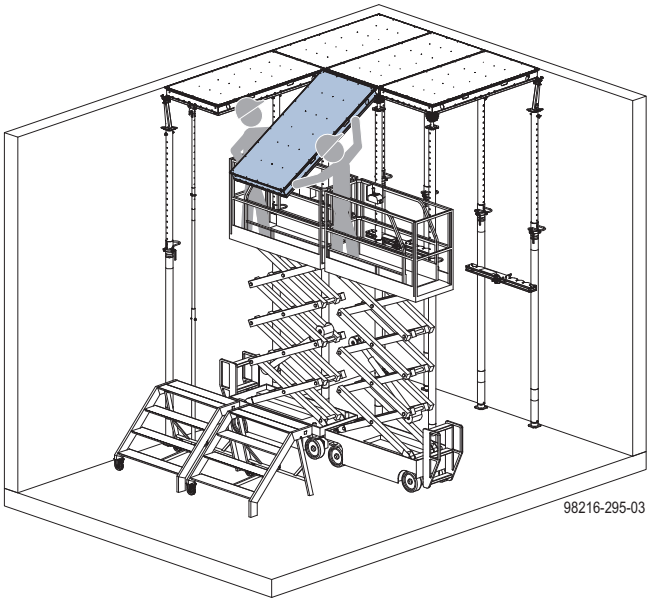


WARNING

Risk of tipping over!

➤ When assembly of the DokaXdek system is in progress with the scissor-lift working platforms, it is not permissible for additional horizontal loads to occur (F_H > 400 N).

Practical example

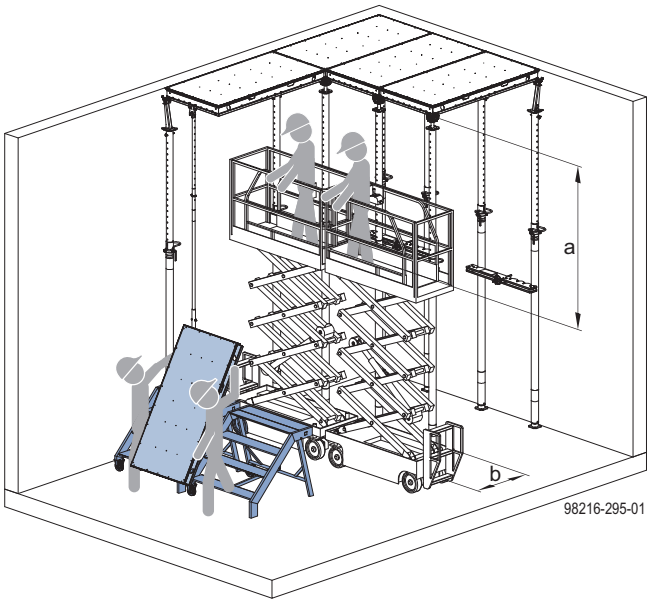


Closing the formwork

➤ Manoeuvre the scissor-lift working platforms into place and position the platform stairways.

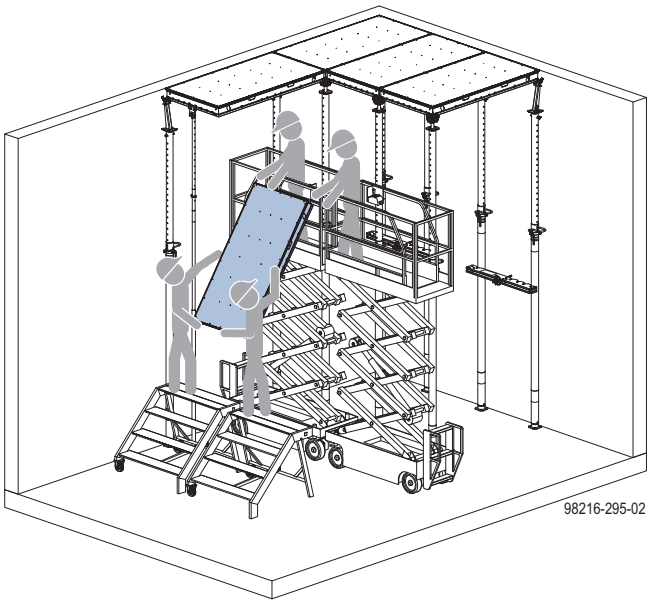
- Height of the platform's working surface: approx. 2 m below the slab.
- Maintain a distance of approx. 50 - 60 cm between upright floor prop and scissor-lift working platforms.
- Position the scissor-lift working platforms with the telescoping end toward where the floor prop to be installed will stand.

➤ Persons 1 and 2: Lift the panel off the ground and step up the platform stairway.



a ... approx. 2.0 m
b ... 50 - 60 cm

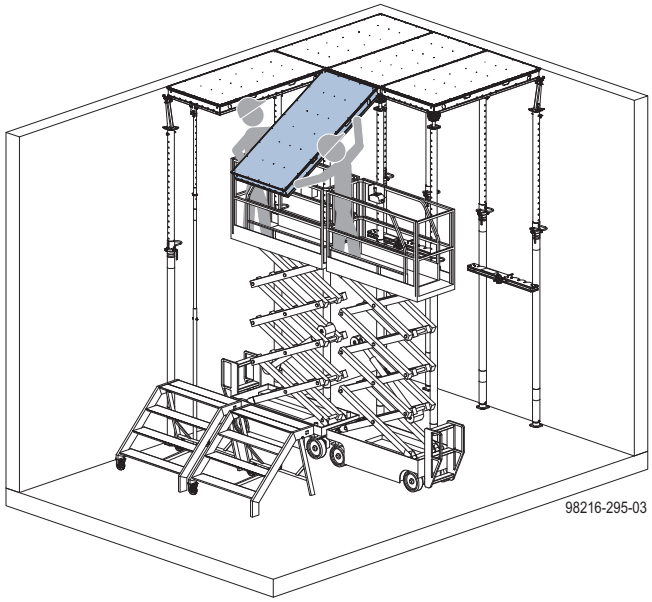
➤ Persons 3 and 4: Take over the panel from persons 1 and 2 and lift it on to the scissor-lift working platforms.



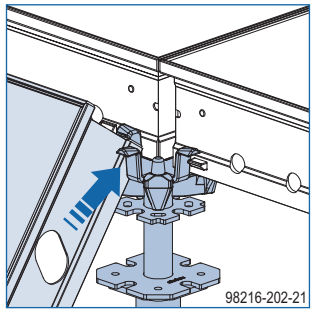
WARNING
DokaXdek panel can fall down!
➤ After handing over the panel, persons 1 and 2 must exit the danger zone.

WARNING
It is not permissible to rest the DokaXdek panel on the handrail post of the scissor-lift working platforms!
➤ Comply with country-specific standards, regulations and laws, and with the manufacturer's operating instructions.

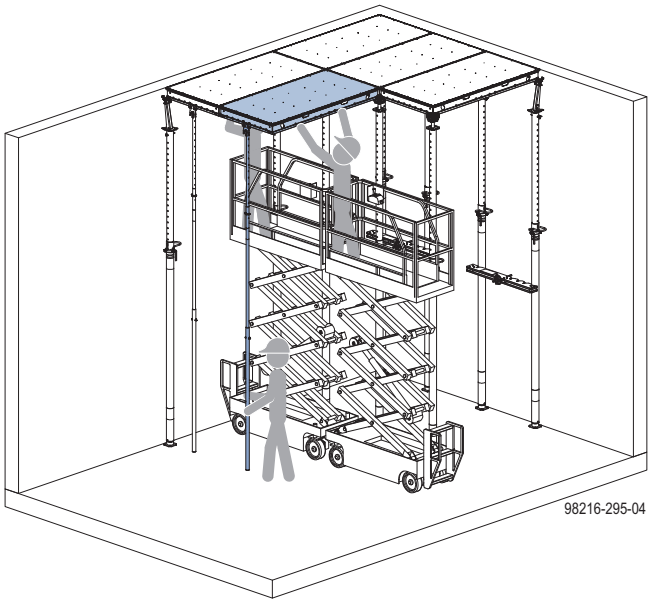
➤ Persons 3 and 4: Hook the panel into the heads.



Make sure that the panel is correctly engaged in both heads.



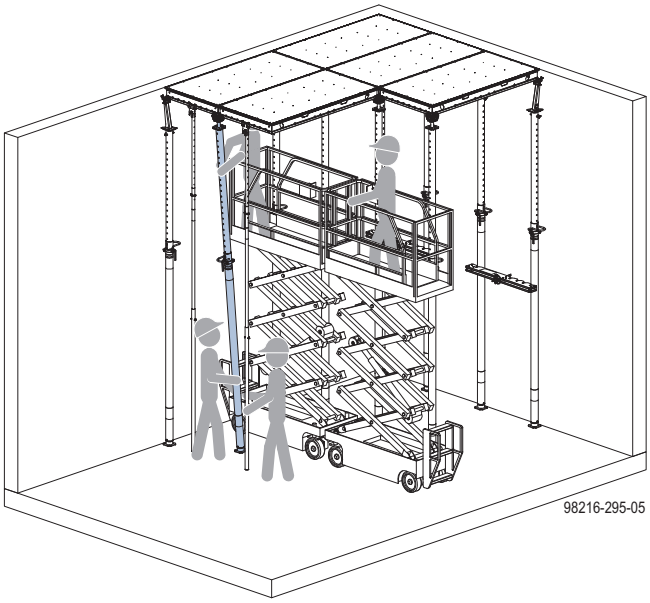
➤ Persons 3 and 4: Swing the free end of the DokaXdek panel up. Person 1: Remove the platform stairways and using the assembling tool, prop the panel off the floor from outside.



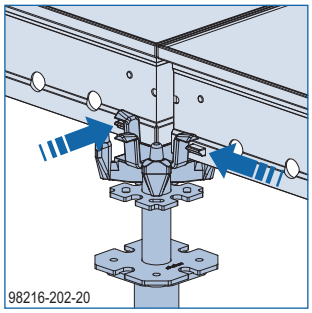
WARNING
It is not permissible to swing the DokaXdek panel up into position either by raising the scissor-lift working platform or by using the assembling tool from outside!

➤ Always swing the DokaXdek panels up into position by hand.

➤ Person 1: Working on floor level, installs the floor prop with the assistance of person 3, working on the platform.



Check that the panels are correctly engaged in the pins of the head.



➤ Re-position the scissor-lift working platforms and set up the platform stairways.

Fully retract the platform before moving the scissor-lift working platform.

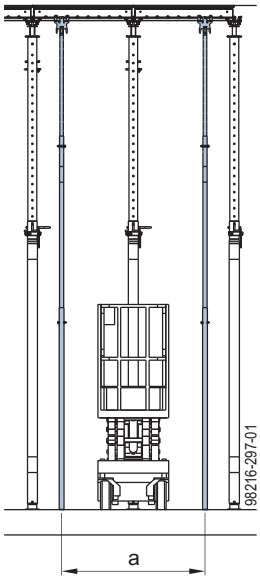
Setting up next row of panels

Re-position the scissor-lift working platforms and the platform stairways for the next row of panels.

Repositioning the scissor-lift working platform when space is restricted

Space is restricted when, for example, there is not enough room between floor prop and wall to manoeuvre the scissor-lift working platform.

➤ Prop the DokaXdek panels with 2 assembling tools in the outermost holes and remove the floor prop between the assembling tools.

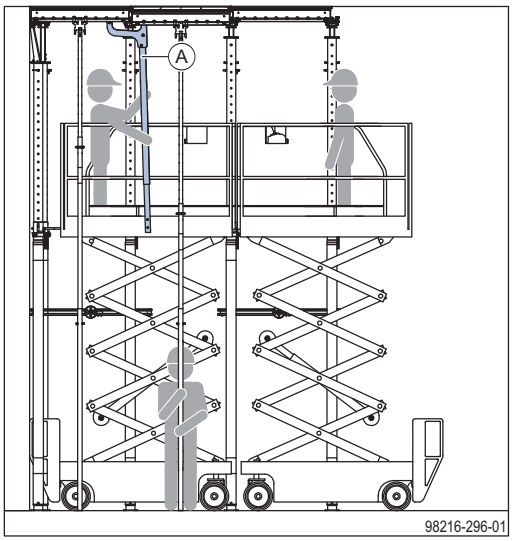


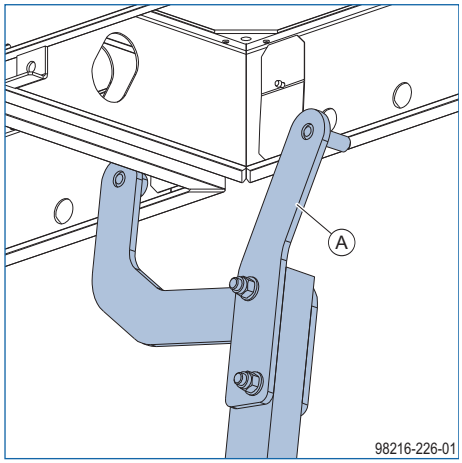
a ... allow space for width of scissor-lift working platform plus clearances for manipulation

Stripping the formwork

➤ In reverse sequence.

The DokaXdek stripping tool (A) can be used by an operator on the scissor-lift working platform as an easy, safe way of detaching panels from the concrete where necessary.





Forming infill zones

NOTICE

- For infilling along edges and around columns.
- Ideally, closures should be mounted from below (e.g. from a Wheel-around scaffold DF).
- If closures have to be mounted from above, the crew must use a personal fall-arrest system (e.g. safety harness).
- Suitable attachment points must be defined by an approved person appointed by the contractor (e.g. FreeFalcon).
- Dimension fillers with a slab thickness > 65 cm separately!

Areas where fillers may be needed:

- at wall junctions
- between 2 DokaXdek forming sections
- around columns

WARNING

Falling hazard! Do not step onto loose sheets and infill beams!

➤ Only step onto these once the entire infill zone has been closed and secured by nailing!

Recommended nail lengths:

- Sheet thickness of 18 mm: approx. 55 mm
- Sheet thickness of 21 mm: approx. 60 mm
- Sheet thickness of 27 mm: approx. 65 mm

DokaXdek system components for infill zones

DokaXdek panel 1.00x2.00m and 0.75x2.00m

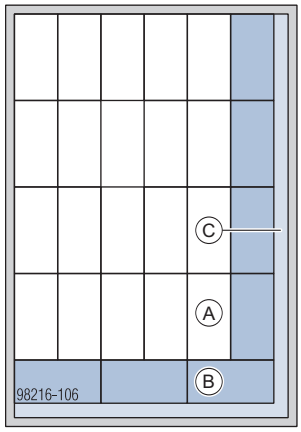
DokaXdek panels of both sizes can be combined in any pattern in both directions and the configuration requires only two types of DokaXdek head (support head and wall head).

If DokaXdek panels 1.00x2.00m are combined with 0.75x2.00m, the max. infill width in one direction can generally be reduced to 25 cm by turning the panels.

NOTICE

The number and arrangement of the DokaXdek heads differs for slab thicknesses from 0 - 40 cm and slab thicknesses from 40 - 65 cm (see section 'Additional precautions for slab thicknesses of up to 75 cm').

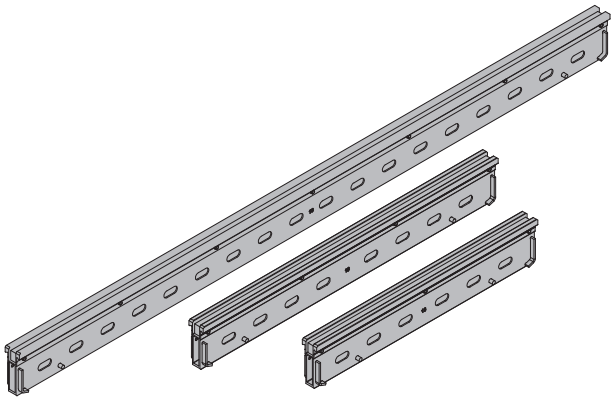
The DokaXdek panels 0.75x2.00m are installed in the same way as the DokaXdek panels 1.00x2.00m.



A	DokaXdek panel 1.00x2.00m
B	DokaXdek panel 1.00x2.00m or 0.75x2.00m
C	Filler

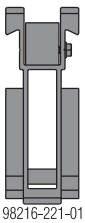
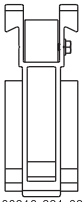
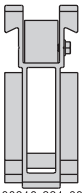
DokaXdek infill beams

- For infilling along edges and around columns, in three different lengths.
- Available for formwork-sheet thicknesses of 18mm, 21mm and 27mm.
- Delivered on Dokadek infill beam pallets.

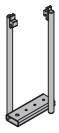


- Permitted moment: 5 kNm
- Permitted shear force: 11 kN
- Flexural rigidity EI: 150 kNm²
- Permissible reaction load where supported by floor prop in mid-span: 22 kN

Colour coding indicating sheet thickness for the infill beams

Sheet thickness		
18 mm	21 mm	27 mm
Colour		
Dark grey RAL-7045	Yellow RAL-1021	Light grey RAL-7035
 98216-221-01	 98216-221-02	 98216-221-03

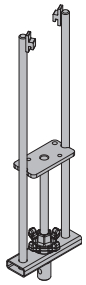
DokaXdek suspension clamp H



Perm. reaction force: 11 kN

Note:
The DokaXdek suspension clamp H does not need to be supported by any extra floor prop.

DokaXdek lowering clamp H



Perm. reaction force: 11 kN

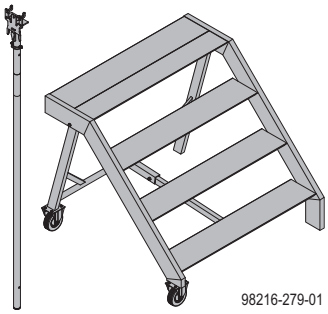
Note:
The DokaXdek lowering clamp H does not need to be supported by any extra floor prop.

For more information, follow the directions in section 'With DokaXdek lowering clamp H'.

Installing panel in transverse direction

If necessary (e.g. adaptation to the geometry of the structure), panels can be installed in the transverse direction.

Follow the directions in section 'Forming infill zones'.

Operating with assembling tool	
Working from the ground with assembling tool	Working from Platform stairway 0.97m[1)] with assembling tool
 Room height: from 2.10 m to approx. 2.50 m	 98216-279-01 Room height: from 2.10 m to approx. 3.50 m

[1)] 2 platform stairways are needed for lifting the panels and hooking them into place.

Note:
Use of the DokaXdek suspension tool for installing DokaXdek panels in the transverse direction is not permitted!

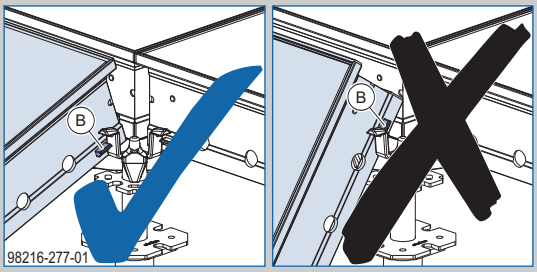
NOTICE
Swivelling a panel turned in the transverse direction up at the building edge is prohibited!

WARNING

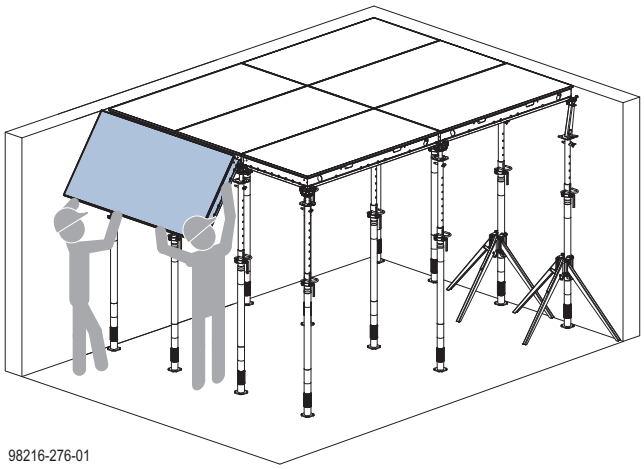
The anti-liftout guards will not engage in the support heads.

Panel can fall down!

➤ Make sure that the panels are correctly engaged, including the anti-liftout guards **(B)** !

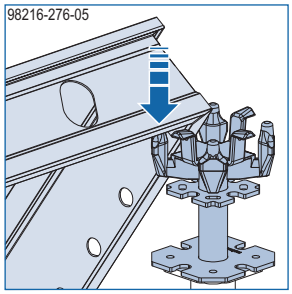


➤ Persons 1 and 2: Engage the panel in the support heads or wall heads, as applicable, in the direction transverse to the other panels.

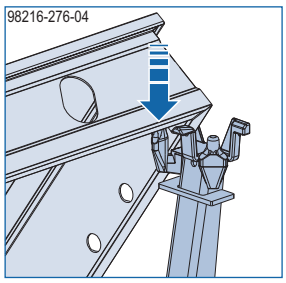


Make sure that the panel is correctly fitted in the heads.

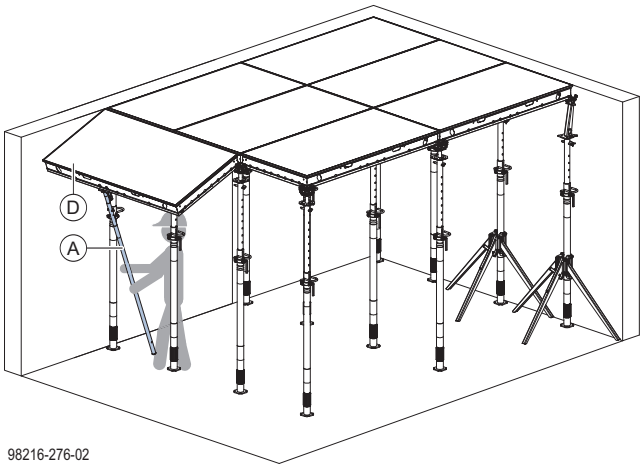
Support head



Wall head



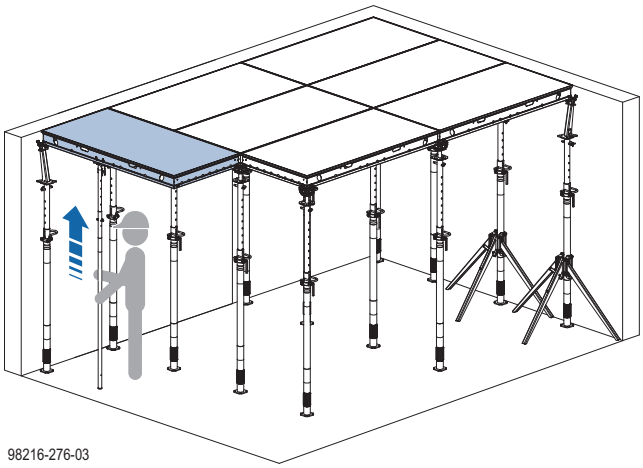
➤ Person 1: Hook the assembling tool into the middle of the longitudinal profile of the panel, raise the panel and secure the assembling tool so that it cannot tip over.



A DokaXdek assembling tool

D DokaXdek panel

➤ Person 2: Place a floor prop (plus support head or wall head) beneath the panel.



Infilling along wall connections

Variant 1: Infill width 'a' = 18 - 36 cm

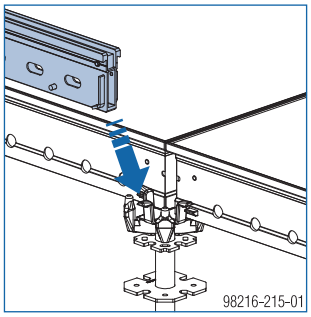
Max. infill widths:

Slab thickness	Infill width 'a'$_{max}$
up to 40 cm	36 cm
up to 65 cm	33 cm

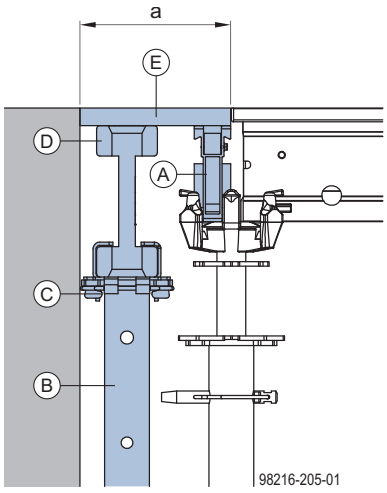
- Max. spacing of infill props (Eurex): 200 cm

Installation:

➤ Hook the infill beams into the support heads (see section 'Installing DokaXdek infill beams').



➤ Install the filler.



A	DokaXdek infill beam
B	Doka floor prop Eurex + Removable folding tripod
C	Supporting head H20 DF
D	Doka beam H20 where infill width 'a' is ≥ 18 cm (infill gaps of less than 18 cm can be filled in-situ with a plank or squared timber).
E	Formwork sheeting

NOTICE

Put up the intermediate props so that they force-fit. It is not allowed to make some props higher than others!

Version 2: Infill width 'a' = 32 - 60 cm

Max. infill width 'a' for slab thicknesses of up to 40 cm

Sheet thickness	Type of sheet	
	Doka formwork sheet 3-SO [1]	Multi-ply formwork sheet [2]
18 mm	—	53 cm
21 mm	36 cm	60 cm
27 mm	51 cm	—
▪ Max. spacing of infill props (Eurex): 200 cm		

Max. infill width 'a' for slab thicknesses of up to 65 cm

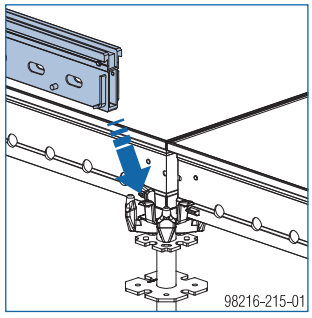
Sheet thickness	Type of sheet	
	Doka formwork sheet 3-SO [1]	Multi-ply formwork sheet [2]
18 mm	—	47 cm
21 mm	33 cm	53 cm
27 mm	45 cm	—
▪ Max. spacing of infill props (Eurex): 200 cm		

[1] The computed values apply to the secondary (i.e. weaker) load-bearing direction, with the longitudinal direction of the sheet parallel to the edge of the floor-slab.

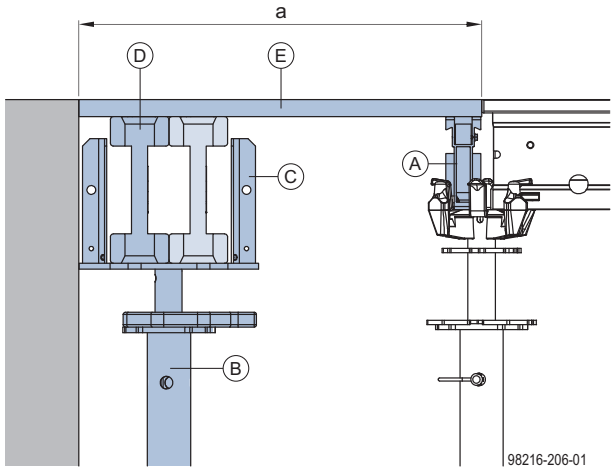
[2] Mean flexural modulus of elasticity where sheet moisture content is 10±2%: ≥ 5600 N/mm²
Characteristic flexural strength where sheet moisture content is 10±2%:
≥ 19 N/mm²

Installation:

➤ Hook the infill beams into the support heads (see section 'Installing DokaXdek infill beams').



➤ Install the filler.



A	DokaXdek infill beam
B	Doka floor prop Eurex + Removable folding tripod
C	Lowering head H20
D	Doka beam H20 (telescoped)
E	Formwork sheeting

Version 3: Infill width 'a' = 55 - 225 cm

Infill width 'a' for slab thicknesses of up to 40 cm

Primary beam	Infill width 'a'	Recommended secondary beam
1.10 m	55 - 100 cm	2.45 m
1.80 m	90 - 170 cm	
2.45 m	145 - 225 cm	

Eurex:
- max. prop spacing 'b': 65 cm
- max. primary-beam spacing: 200 cm
- max. secondary-beam spacing: 80 cm (Do not exceed the max. support centres of the formwork sheets!)
- for infill gaps 'a' ≥ 110 cm: intermediate prop (with Supporting head H20 DF) is required

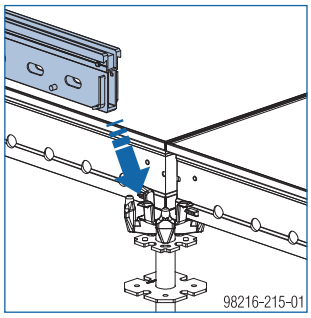
Infill width 'a' for slab thicknesses of up to 65 cm

Primary beam	Infill width 'a'	Recommended secondary beam
1.10 m	55 - 100 cm	2.45 m
1.80 m	90 - 170 cm	
2.45 m	145 - 225 cm	

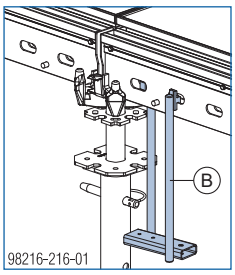
Eurex:
- max. prop spacing 'b': 45 cm
- max. primary-beam spacing: 200 cm
- max. secondary-beam spacing: 50 cm (Do not exceed the max. support centres of the formwork sheets!)
- for infill gaps 'a' ≥ 70 cm: intermediate prop (with Supporting head H20 DF) is required

Installation:

➤ Hook the infill beams into the support heads (see section 'Installing DokaXdek infill beams').

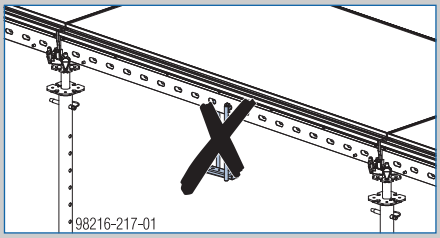


➤ Hook the suspension clamps into the infill beams **as close to the floor props as possible**.



WARNING

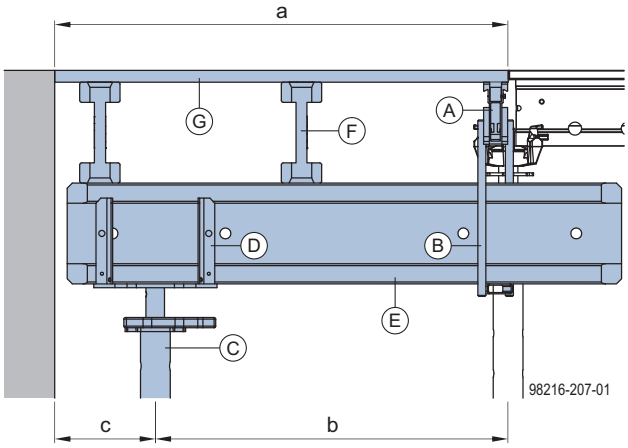
➤ Do not hook the suspension clamp into the mid-section of the infill beam 2.00m.



Number of suspension clamps needed:
- next to every floor prop in the longitudinal direction
- next to every other floor prop in the transverse direction

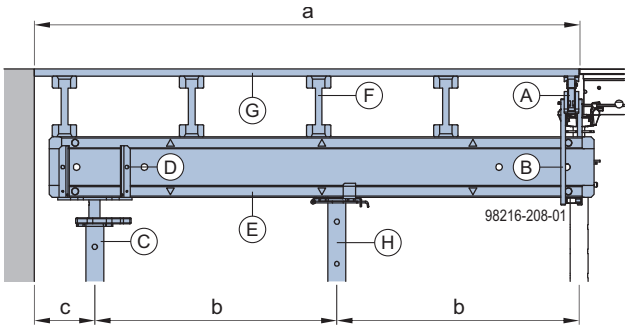
➤ Install the filler.

Practical example: without intermediate prop



c ... 45 cm (up to slab thickness of 40 cm), 25 cm (slab thickness > 40 cm and up to 65 cm)

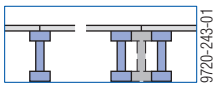
Practical example: with intermediate prop



c ... 45 cm (up to slab thickness of 40 cm), 25 cm (slab thickness > 40 cm and up to 65 cm)

A	DokaXdek infill beam
B	DokaXdek suspension clamp H
C	Doka floor prop Eurex + Removable folding tripod
D	Lowering head H20
E	Doka beam H20 as primary beam
F	Doka beam H20 as secondary beam
G	Formwork sheeting
H	Intermediate prop with Supporting head H20 DF

Place a beam (or double beam) wherever there is to be a joint between the panels.



NOTICE

Put up the intermediate props so that they force-fit. It is not allowed to make some props higher than others!

With DokaXdek infill-beam shoes

2 DokaXdek infill-beam shoes 18mm or 21mm can be used in combination with a squared timber to create economical beams as an alternative to the conventional infill beams.

These beams can be used for closure zones of up to 45 cm at wall junctions in the panel floor formwork system.

Features:

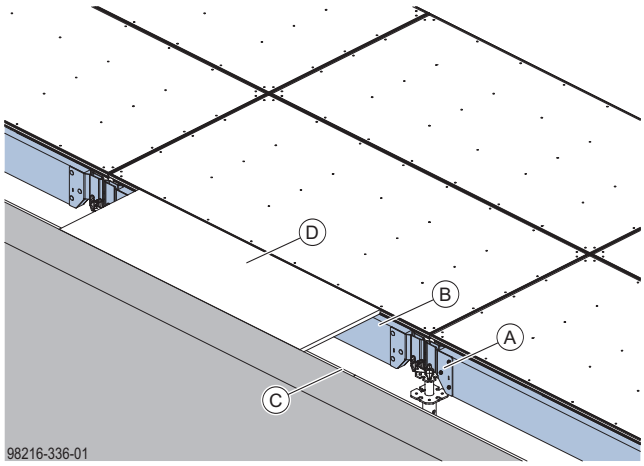
- For form-ply thicknesses of 18 mm to 21 mm
- With support head and wall head
- The squared timber 200x40 mm is not included in the scope of supply!

NOTICE

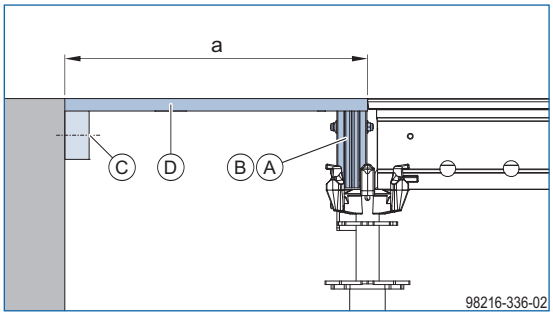
Use at the structure edge is not possible!

Central shoring with support head not possible!

Use with support head



Close-up



A	DokaXdek infill-beam shoe 18mm or 21mm
B	Squared timber 200x40 mm
C	Support timber (site-provided)
D	Form-ply of 18mm or 21mm

Max. infill width 'a' for slab thicknesses of up to 40 cm

Sheet thickness	Type of sheet	
	Doka formwork sheet 3-SO [1]	Multi-ply formwork sheet [2]
18 mm	—	45 cm
21 mm	36 cm	

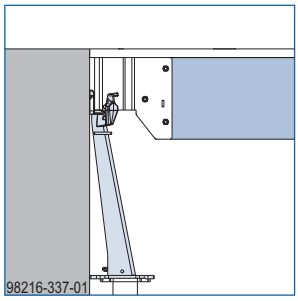
Max. infill width 'a' for slab thicknesses of up to 65 cm

Sheet thickness	Type of sheet	
	Doka formwork sheet 3-SO [1]	Multi-ply formwork sheet [2]
18 mm	—	30 cm
21 mm	30 cm	

[1] The computed values apply to the secondary (i.e. weaker) load-bearing direction, with the longitudinal direction of the sheet parallel to the edge of the floor-slab.

[2] Mean flexural modulus of elasticity where sheet moisture content is 10±2%: ≥ 5600 N/mm²
Characteristic flexural strength where sheet moisture content is 10±2%:
≥ 19 N/mm²

Use with wall head



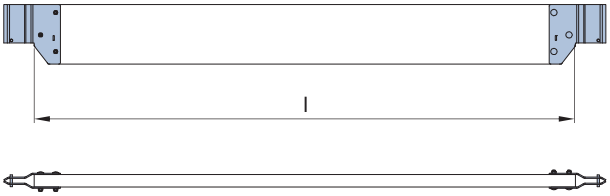
Installation:

➤ Cut the squared timber to length (±2 mm).

NOTICE

Squared timber size 200x40 mm with min. timber quality of C24.

DokaXdek panel length [m]	Squared timber cut l [m]
0.75	0.54
1.00	0.79
2.00	1.79



- ➤ Push the infill-beam shoe all the way onto the squared timber until this rests against the inside of the shoe, and mark the 3 holes to be drilled and the bevel to be cut.
- ➤ Remove the infill-beam shoe, drill holes with a diameter of 9 mm and bevel the ends of the squared timber.
- ➤ Push the infill-beam shoe back on to the squared timber and fix it using the enclosed cup square bolts M8x60mm and hexagon nut M8 (self-locking).

Make sure that the bolts are tight and fitted correctly!

Closures between 2 DokaXdek forming-sections

Version 1: Infill width 'a' = 17 - 60 cm

Max. infill width 'a' for slab thicknesses of up to 40 cm

Sheet thickness	Type of sheet	
	Doka formwork sheet 3-SO [1]	Multi-ply formwork sheet [2]
18 mm	—	53 cm
21 mm	36 cm	60 cm
27 mm	51 cm	—

Max. infill width 'a' for slab thicknesses of up to 65 cm

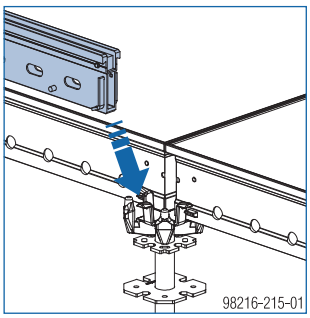
Sheet thickness	Type of sheet	
	Doka formwork sheet 3-SO [1]	Multi-ply formwork sheet [2]
18 mm	—	47 cm
21 mm	33 cm	53 cm
27 mm	45 cm	—

[1] The computed values apply to the secondary (i.e. weaker) load-bearing direction, with the longitudinal direction of the sheet parallel to the edge of the floor-slab.

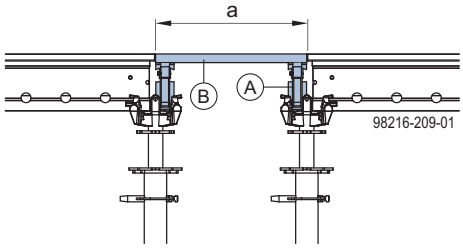
[2] Mean flexural modulus of elasticity where sheet moisture content is 10±2%: ≥ 5600 N/mm²
Characteristic flexural strength where sheet moisture content is 10±2%:
≥ 19 N/mm²

Installation:

- ➤ Hook the infill beams into the support heads (see section 'Installing DokaXdek infill beams').



- ➤ Install the filler.



A DokaXdek infill beam
B Formwork sheeting

Version 2: Infill width 'a' = 55 - 225 cm

Infill width 'a' for slab thicknesses of up to 40 cm

Primary beam	Infill width 'a'	Recommended secondary beam
1.10 m	55 - 100 cm	2.45 m
1.80 m	90 - 170 cm	
2.45 m	145 - 225 cm	

Eurex:
- max. prop spacing 'b': 65 cm
- max. primary-beam spacing: 200 cm
- max. secondary-beam spacing: 80 cm
  (Do not exceed the max. support centres of the formwork sheets!)
- for infill gaps 'a' ≥ 110 cm: intermediate prop (with Supporting head H20 DF) is required

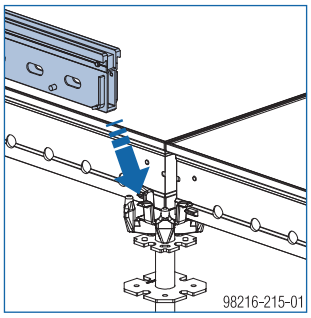
Infill width 'a' for slab thicknesses of up to 65 cm

Primary beam	Infill width 'a'	Recommended secondary beam
1.10 m	55 - 100 cm	2.45 m
1.80 m	90 - 170 cm	
2.45 m	145 - 225 cm	

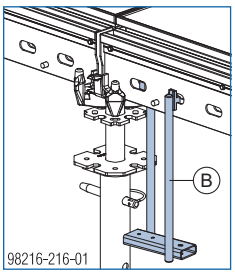
Eurex:
- max. prop spacing 'b': 40 cm
- max. primary-beam spacing: 200 cm
- max. secondary-beam spacing: 50 cm
  (Do not exceed the max. support centres of the formwork sheets!)
- for infill gaps 'a' ≥ 72 cm: intermediate prop (with Supporting head H20 DF) is required

Installation:

➤ Hook the infill beams into the support heads (see section 'Installing DokaXdek infill beams').

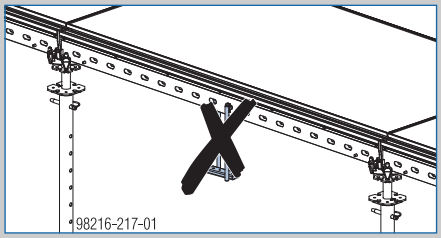


➤ Hook the suspension clamps into the infill beams **as close to the floor props as possible**.



WARNING

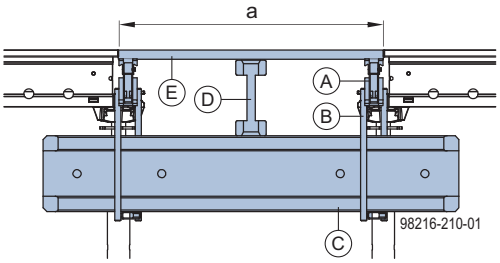
➤ Do not hook the suspension clamp into the mid-section of the infill beam 2.00m.



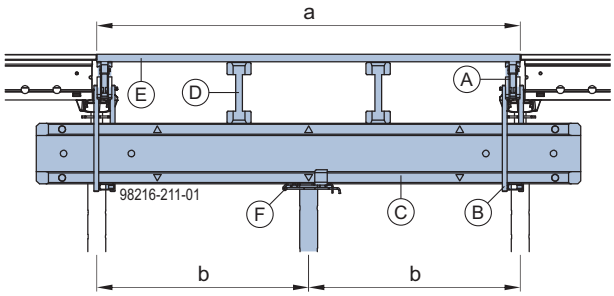
Number of suspension clamps needed:
- next to every floor prop in the longitudinal direction
- next to every other floor prop in the transverse direction

➤ Install the filler.

Practical example: without intermediate prop

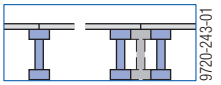


Practical example: with intermediate prop



A	DokaXdek infill beam
B	DokaXdek suspension clamp H
C	Doka beam H20 as primary beam
D	Doka beam H20 as secondary beam
E	Formwork sheeting
F	Intermediate prop with Supporting head H20 DF

Place a beam (or double beam) wherever there is to be a joint between the panels.

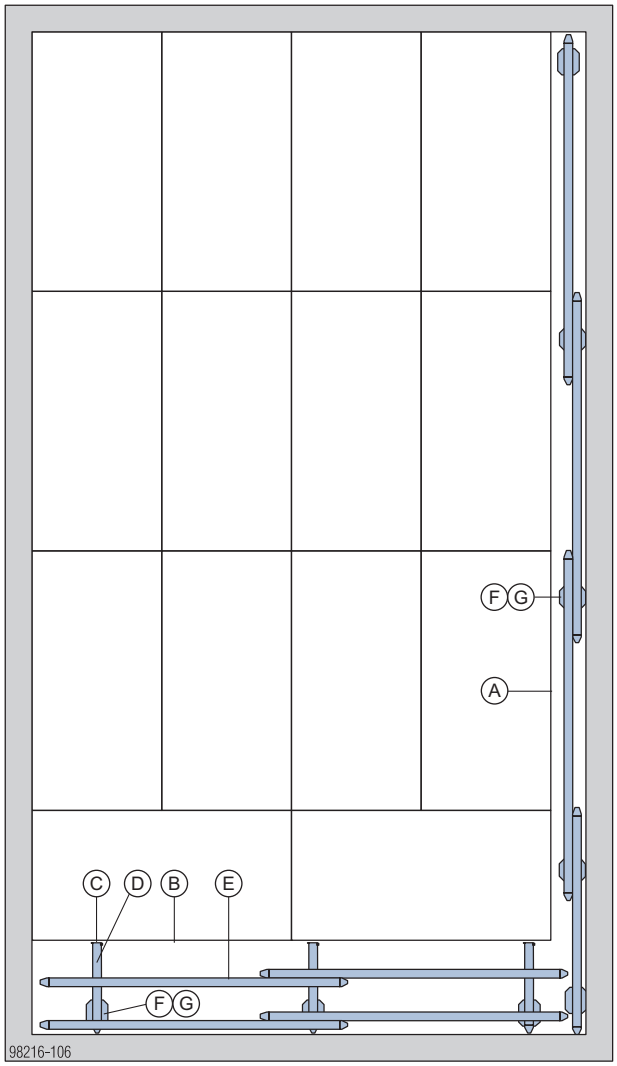


NOTICE

Put up the intermediate props so that they force-fit. It is not allowed to make some props higher than others!

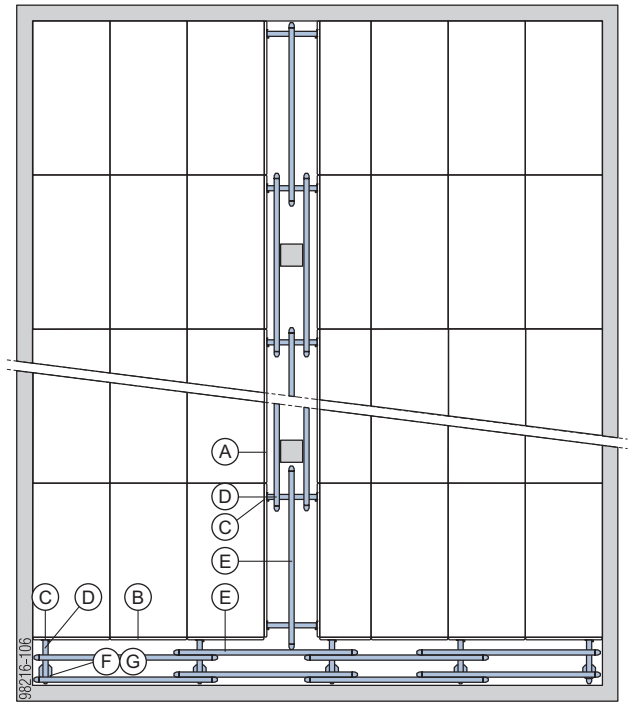
Practical examples

L-shaped infill zone

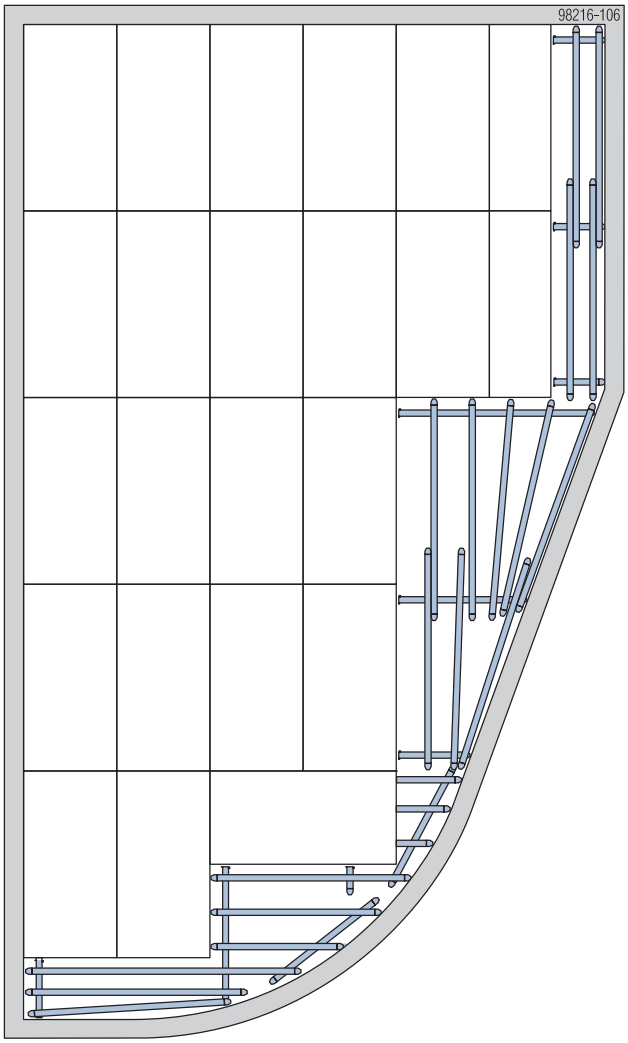


A	DokaXdek infill beam 2.00m
B	DokaXdek infill beam 1.00m or 0.75m
C	DokaXdek suspension clamp H
D	Doka beam H20 as primary beam
E	Doka beam H20 as secondary beam
F	Doka floor prop Eurex + Removable folding tripod
G	Lowering head H20

T-shaped infill zone



Adapting to difficult layout shapes



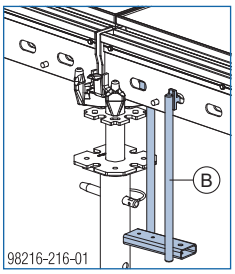
Symbolic representation

Infill zones around columns

using DokaXdek infill beams and Doka beams H20

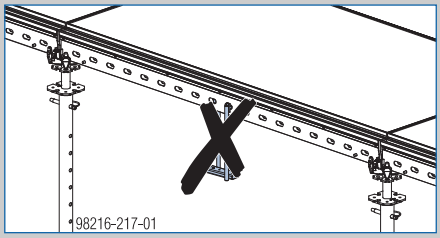
➤ Hook two infill beams 1.00m or 0.75m into the support heads in the transverse direction.

➤ Hook 4 suspension clamps into the infill beams as close to the floor props as possible.



WARNING

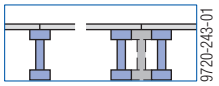
➤ Do not hook the suspension clamp into the mid-section of the infill beam 2.00m.



➤ Fit 2 Doka beams H20 into the suspension clamps, to serve as primary beams.

➤ E.g. with 1.00 m wide panels: place Doka beams H20 (e.g. Doka formwork beam H20 P 0.90m for a panel width of 1.00 m) onto the primary beams, in the transverse direction.

Place a beam (or double beam) wherever there is to be a joint between the panels.



NOTICE

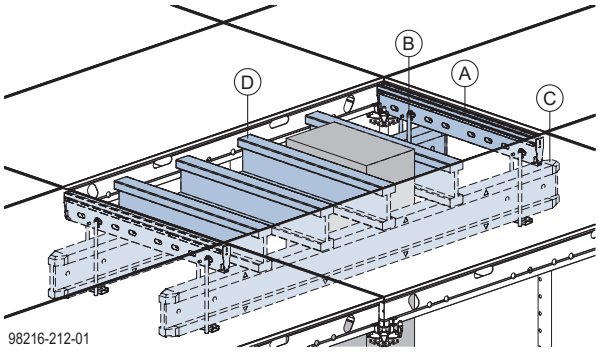
Put up the intermediate props so that they force-fit. It is not allowed to make some props higher than others!

NOTICE

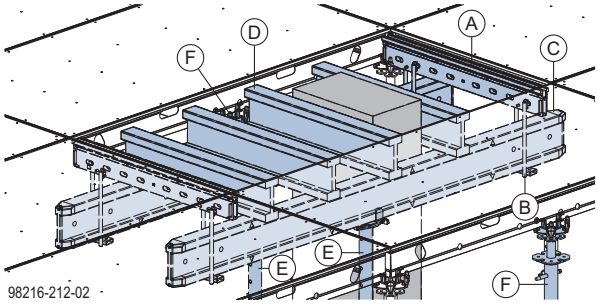
The extra shore is not illustrated completely! With slab thicknesses > 40 cm, the extra shore of the panels must be taken into consideration.

Practical examples - Column located inside panel-field (variant 1)

Slab thickness ≤ 40 cm



Slab thickness > 40 - 65 cm



Slab thickness	Max. secondary-beam spacing	N° of extra shores per primary beam
≤ 40 cm	65 cm [1]	—
> 40 - 65 cm	45 cm [1]	1 (in mid-span)

[1] Do not exceed the max. support centres of the formwork sheets!

A DokaXdek infill beam 1.00m or 0.75m

B DokaXdek suspension clamp H

C Doka beam H20 2.45m as primary beam

D Doka beam H20 as secondary beam (e.g. Formwork beam H20 P 0.90m FF20 for a panel width of 1.00 m)

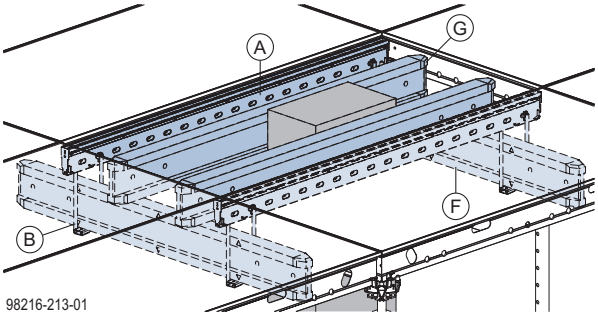
E Extra shore (primary beam):
- Doka floor prop Eurex
- Supporting head H20 DF

F Extra shore (panel):
- Doka floor prop Eurex
- DokaXdek support head
- Spring locked connecting pin 16mm

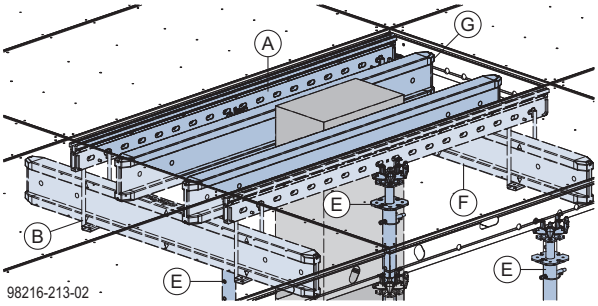
Practical examples - Column located inside panel-field (variant 2)

If necessary, the infill beams and Doka beams H20 can also be arranged the other way round, i.e. the Infill beams 2.00m on which the suspension clamps are mounted are fixed in the longitudinal direction.

Slab thickness ≤ 40 cm



Slab thickness > 40 - 65 cm



Slab thickness	Max. secondary-beam spacing	N° of extra shores per infill beam
≤ 40 cm	65 cm [1]	—
> 40 - 65 cm	45 cm [1]	1 (in mid-span)

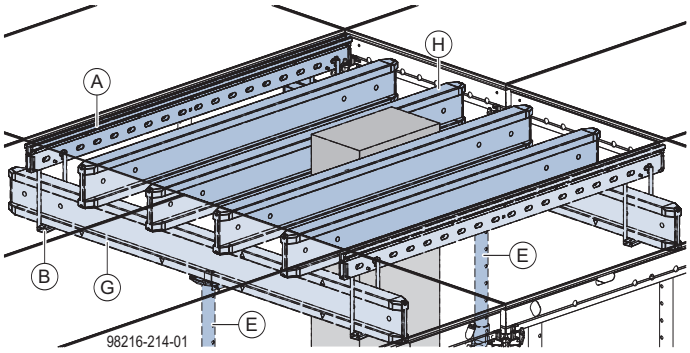
[1] Do not exceed the max. support centres of the formwork sheets!

A DokaXdek infill beam 2.00m
B DokaXdek suspension clamp H
E Extra shore (panel):
- Doka floor prop Eurex
- DokaXdek support head
- Spring locked connecting pin 16mm

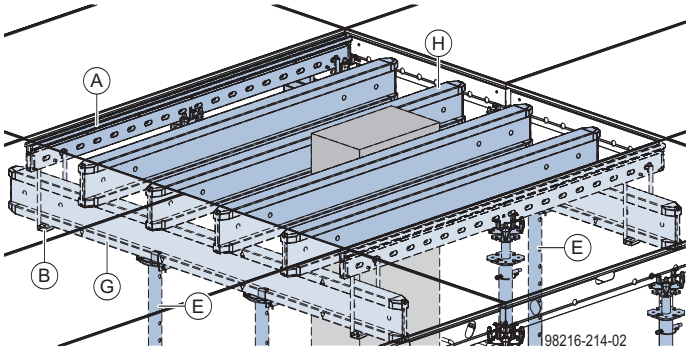
F Doka beam H20 as primary beam (e.g. Dokamatic secondary beam 1.95m for a panel width of 1.00 m)
G Doka beam H20 1.95m as secondary beam

Practical examples - Column is exactly beneath the panel joint

Slab thickness ≤ 40 cm



Slab thickness > 40 - 65 cm



Slab thickness	Max. secondary-beam spacing	N° of extra shores per primary beam
≤ 40 cm	65 cm [1]	1 (in mid-span)
> 40 - 65 cm	45 cm [1]	2 (at the one-third points)

[1] Do not exceed the max. support centres of the formwork sheets!

A DokaXdek infill beam 2.00m
B DokaXdek suspension clamp H
E Extra shore (primary beam):
- Doka floor prop Eurex
- Supporting head H20 DF

F Extra shore (panel):
- Doka floor prop Eurex
- DokaXdek support head
- Spring locked connecting pin 16mm

G Doka beam H20 as primary beam (e.g. Doka beam H20 2.45m for a panel width of 1.00 m)
H Doka beam H20 1.95m as secondary beam

With DokaXdek panel 1.00x1.00m or 0.75x1.00m or 0.75x0.75m, DokaXdek infill beam and Doka beams H20

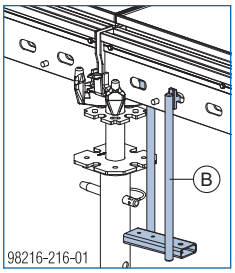
Note:

- The DokaXdek support heads (in the middle of the filler) must be positioned approx. 3 mm lower than the other heads to avoid offsets.
- Set up the surrounding DokaXdek panels 2.00m first, then engage the DokaXdek panels 1.00m or 0.75m and swing them up into position.

➤ Lift in the DokaXdek panel 1.00x1.00m, 0.75x1.00m or 0.75x0.75m and swing it up into position in longitudinal or transverse direction.

➤ Hook 2 infill beams 1.00m into the support heads in longitudinal direction.

➤ Hook 4 suspension clamps **(B)** into the infill beam as close to the floor props as possible.

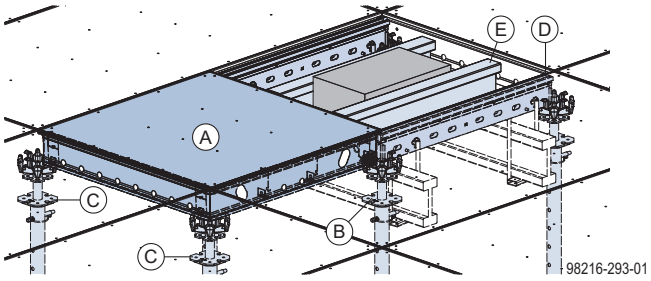


➤ Fit 2 Doka beams H20 into the suspension clamps, to serve as primary beams.

➤ Place Doka beams H20 onto these primary beams, in the transverse direction.

Up to a room height of 3.50 m, the suspension tool can be used for setting up and stripping out the panels from floor level.

Practical example - Column located inside panel-field



DokaXdek panel	Slab thickness	N° of extra shores per primary beam
1.00x1.00m	≤ 65 cm	—
0.75x1.00m	≤ 65 cm	—
0.75x0.75m	≤ 65 cm	—

A DokaXdek panel 1.00x1.00m, 0.75x1.00m or 0.75x0.75m

B DokaXdek support head + Doka floor prop Eurex top (in the middle of the filler)

C DokaXdek support head + Doka floor prop Eurex top (at an inter-panel joint)

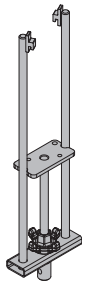
D DokaXdek infill beam 1.00m

E DokaXdek system beam H20 eco P 0.90m used as secondary beam

With DokaXdek lowering clamp H

The DokaXdek lowering clamp H can be used to compensate for swelling and shrinkage of the H20 beams and formwork sheets in the infill-beam area with millimetre precision.

In addition, stripping is possible even before the typical zone.



Perm. reaction force: 11 kN

Note:

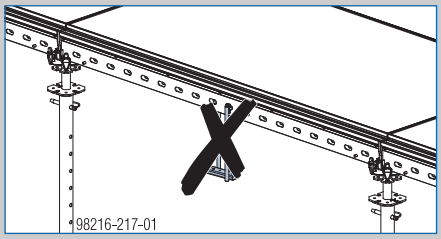
The DokaXdek lowering clamp H does not need to be supported by any extra floor prop.

Extra function:

- Stepped floors up to 15 cm are possible when using Doka beam H20. (Individual planning required. Contact Doka!)

WARNING

➤ Do not hook the lowering clamp into the mid-section of the infill beam 2.00m.

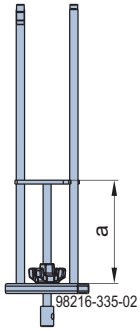


Number of lowering clamps needed

- next to every floor prop in the longitudinal direction
- next to every other floor prop in the transverse direction

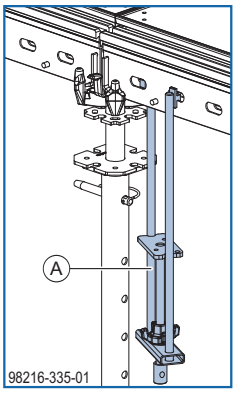
Installation:

➤ Adjust the support plate height using the markings (weld seam point as a rough guide) on the suspension profiles.



Formwork-sheet thickness:	a [mm]
18 mm	223
21mm	220
27mm	214

➤ Hook the lowering clamps into the infill beams **as close to the floor props as possible**.



A DokaXdek lowering clamp H

➤ Fit Doka beams H20 into the lowering clamps.

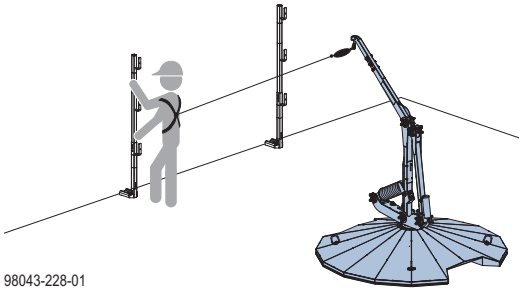
➤ Fine-tune the lowering clamps to the required formwork-ply thickness (this allows for swelling and shrinkage to be compensated for).

Dismantling:

➤ The lowering clamp makes stripping easier. Loosening the nut lowers the closure zone.

FreeFalcon

A fall arrester such as the FreeFalcon provides a mobile anchorage point for the safety harness.



Symbolic representation

WARNING

Risk of falling at open edges!

➤ The crew must use personal fall-arrest systems (e.g. safety harnesses) until all fall protection has been installed.

➤ Suitable anchorage points must be defined by an approved person appointed by the contractor.

User instruction prior to use of the FreeFalcon is mandatory.
Follow the directions in the 'FreeFalcon' Operating Instructions.

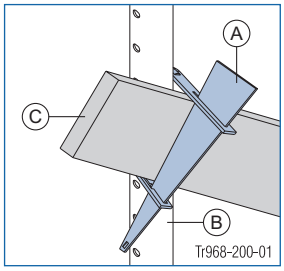
Increasing the stability

Bracing clamp B

Planks can be attached to the floor props as diagonal braces, using the Bracing clamp B.

NOTICE

- Only allowed to be used as a set-up aid.
- Not suitable for sustaining horizontal loads during pouring.
- Always hammer in the wedge from top to bottom!



A	Bracing clamp B
B	Doka floor prop Eurex
C	Plank

Possible clamping ranges for planks and Bracing clamps B

Eurex 20	Plank											
	2.4 x 15		3 x 15		4 x 15		5 x 10		5 x 12		5 x 15	
	IT	OT	IT	OT	IT	OT	IT	OT	IT	OT	IT	OT
250	—	✓	—	✓	✓	✓	✓	✓	✓	✓	✓	✓
300	—	✓	—	✓	✓	✓	✓	✓	✓	✓	✓	✓
350	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
400	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
450 (eco)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
550	✓	✓	✓	✓	✓	✓	✓	—	✓	—	✓	—
700	✓	✓	✓	✓	✓	✓	✓	—	✓	—	✓	—

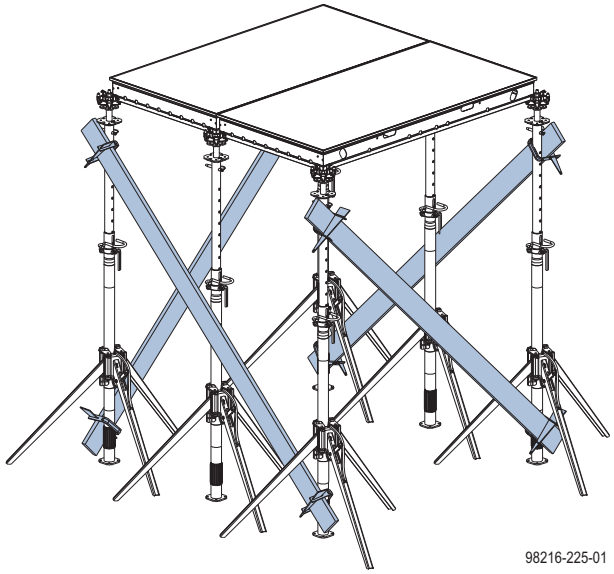
Eurex 30	Plank											
	2.4 x 15		3 x 15		4 x 15		5 x 10		5 x 12		5 x 15	
	IT	OT	IT	OT	IT	OT	IT	OT	IT	OT	IT	OT
250	—	✓	—	✓	✓	✓	✓	✓	✓	✓	✓	✓
300	—	✓	—	✓	✓	✓	✓	✓	✓	✓	✓	✓
350	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
400	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
450	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
550	✓	✓	✓	✓	✓	✓	✓	—	✓	—	✓	—

Legend:

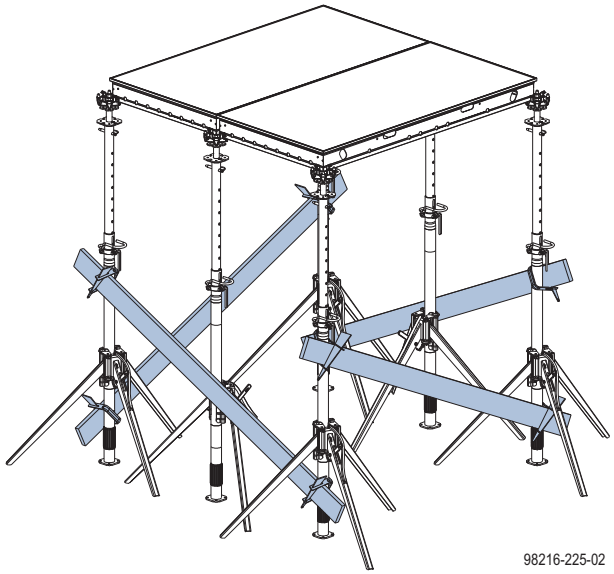
IT	Inner tube
OT	Outer tube

Practical examples

Practical example 1
Braced unit on 1st pair of panels

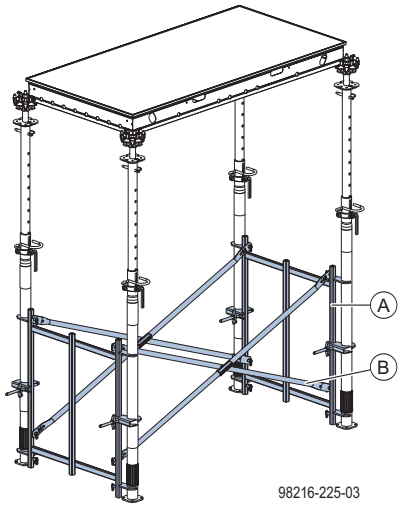


Practical example 2
Alternative braced unit



Propping with Bracing frame Eurex 1.00m

Practical example 3
With bracing frames Eurex



A Bracing frame Eurex
B Diagonal cross

Follow the instructions in section 'Mounting the bracing frames'.

Windproofing

NOTICE

The bracing shown is used exclusively to secure the formwork against being lifted by the wind.

WARNING

- Before anybody steps onto the formwork, its stability must be ensured (by e.g. wall clamps or lashing straps). Follow the instructions in section 'Stability of formwork'.
- Transfer of horizontal loads during pouring must be ensured by other measures (e.g. by transferring these loads into the structure or using additional bracing). Follow the instructions in section 'Horizontal loads of floor formwork'.
- All cantilevered panels must be secured against overturning. Follow the instructions in section 'Floor-slab formwork at the structure edge'.

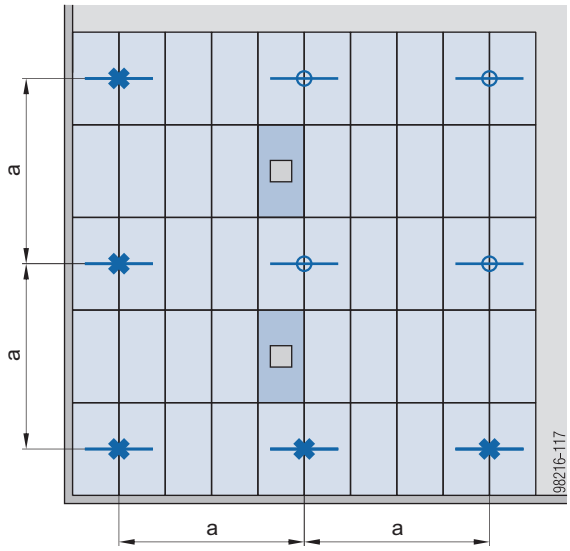
If lashing straps are already in place to transfer horizontal loads, increase stability or secure cantilevered panels, these can be used to secure against wind. In this case, the bracing does not need to be carried out twice.

Depending on the design of the bracing, different wind loads can be absorbed. The following values apply to open and closed structures:

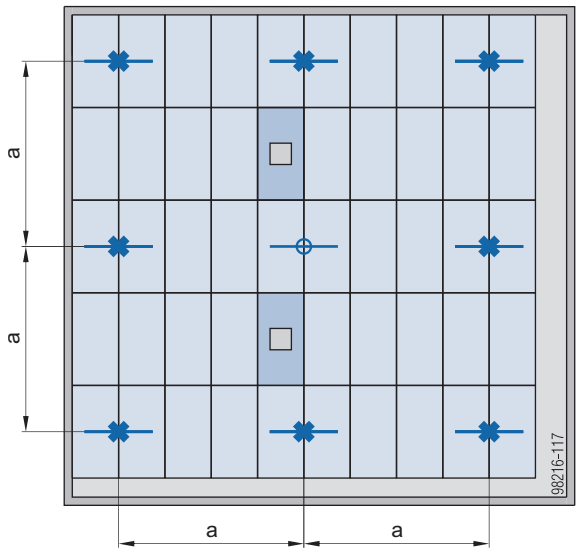
	Bracing design		
	Without bracing	Bracing of edges and corners	Bracing of edges and corners as well as in the field
Permissible peak velocity pressure q [kN/m²]	0.08	0.17	0.48
Permissible wind speed [km/h]	40	60	100

	Bracing of edges and corners (Vertical bracing with tie rod with max. 5 kN)
	Bracing in the field (vertical bracing with tie rod with max. 5 kN)
	Bracing to secure the cantilevered panels (3.5 kN below 60°)

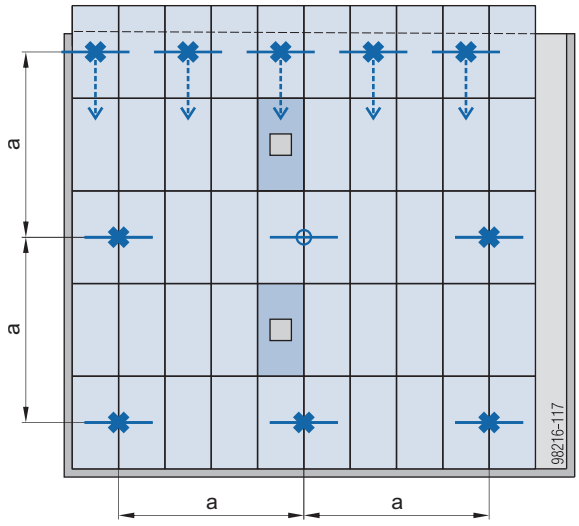
Practical example: Open space



Practical example: Enclosed space



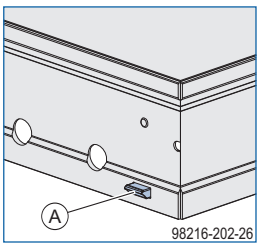
Practical example: Structure edge (cantilevered panels)



a ... bracing in the corners and max. every 4 m
Influence per bracing:
- in the corners and at the edges: max. 8 m²
- in the field: max. 24 m²

NOTICE

- In the event of higher wind loads, the formwork must also be secured against uplift (e.g. by placing reinforcement on top or by additional bracing).
- Closure zones must also be secured against uplift by the wind (e.g. by nailing or bracing).
- The anti-liftout guards (A) at all 4 panel corners must be free to move and must return to their initial positions automatically when operated.
  - Remove foreign matter from anti-liftout guard (A).
  - The use of panels with faulty anti-liftout guards (A) is not permitted!



Forming downstand beams

Creating drop beams with DokaXdek panels

WARNING

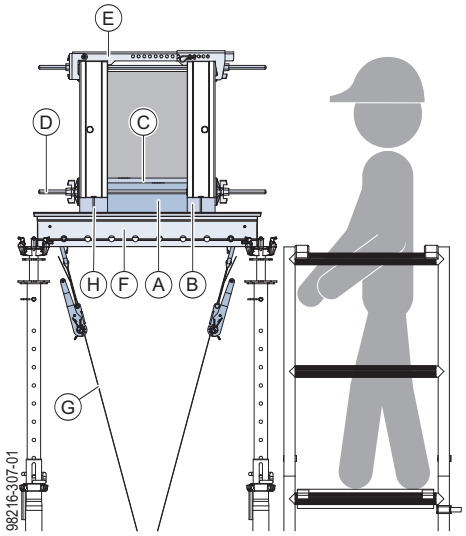
➤ Transfer of horizontal loads as defined by EN 12812 must be catered for by other measures (e.g. by transferring loads into the structure or using tie-backs).

NOTICE

- Throughout assembly and disassembly of the formwork, it is essential that adequate fall protection is in place at all times. For example, a wheel-around working scaffold.
- Follow all country-specific regulations.

NOTICE

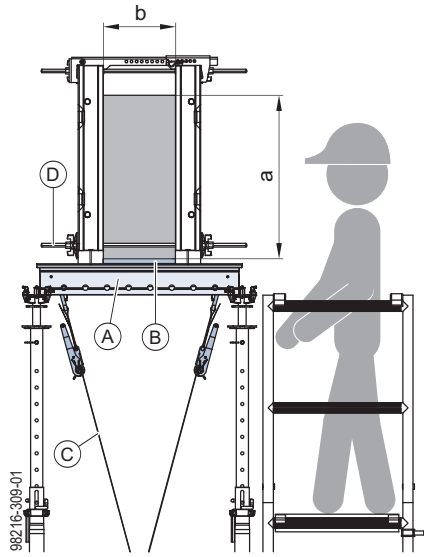
- Centre the drop beam on the panel.
- Allow up to 3 mm extra height for the side formwork.
- Install bracing frames or crossed tie-backs to ensure stability of assembly.
- If form-tie points in the drop beam are not allowed, squared timbers have to be placed alongside each other in virtually full-surface contact (see illustration below).



A	Squared timber (by site)
B	Squared timber min. 10 cm (provided by site)
C	Formwork sheeting
D	Tie rod 15.0 + Super plate 15.0
E	Framax head anchor
F	DokaXdek panel
G	Lashing strap
H	Nail

Drop-beam not integrated into the slab

Panel in longitudinal direction



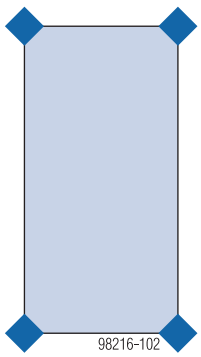
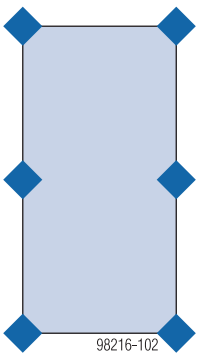
a ... max. drop beam height
b ... max. drop beam width

A	DokaXdek panel
B	Formwork sheeting (must be used)
C	Lashing strap
D	Tie rod 15.0 + Super plate 15.0

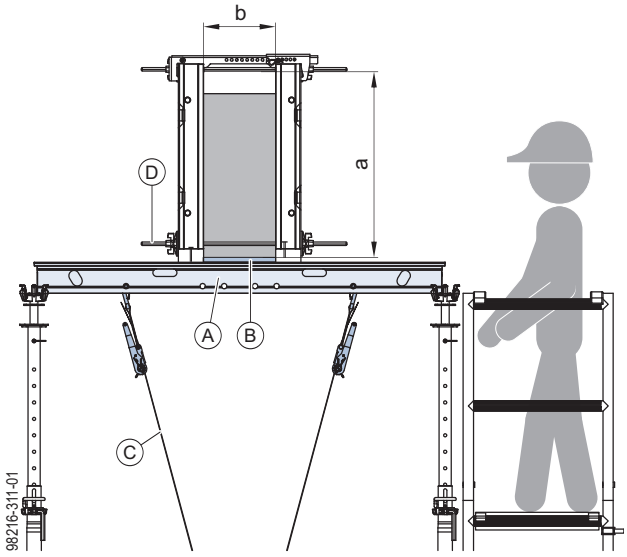
Permissible drop beam dimensions [cm] with Floor props Eurex 30[1)]

Number of floor props[1)]	4 props			6 props	
				Additional formwork sheeting[2)]	
				without	with
max. drop beam height **a** [cm]	40	50	60	65	100
max. drop beam width **b** [cm]	100	80	60	100	100
Deflection as per EN 12812	Line 6			Line 6	Line 5

[1)] For use of the Eurex 20 top or Eurex 20 eco floor props, the floor props must be pushed in accordingly (follow the instructions in section 'Structural design of floor props').
[2)] At least Doka formwork sheet 3-SO 21/27mm or multi-ply formwork sheet 18mm (mean flexural modulus of elasticity where sheet moisture content is 10±2%: > 7452 kN/mm² characteristic flexural strength where sheet moisture content is 10±2%: > 34.1 kN/mm²)

Shoring of the DokaXdek panels	
with 4 floor props	with 6 floor props
	
Shoring with 4 support heads (at the corners)	Shoring with 4 support heads (at the corners) + additional shoring in mid-span

Panel in transverse direction



a ... max. drop beam height
b ... max. drop beam width

A	DokaXdek panel
B	Formwork sheeting (must be used)
C	Lashing strap
D	Tie rod 15.0 + Super plate 15.0

Permissible drop beam dimensions [cm] with Floor props Eurex 30[1)]

Number of floor props[1)]	4 props			6 props	
				Additional formwork sheeting[2)]	
				without	with
max. drop beam height **a** [cm]	40	50	60	65	100
max. drop beam width **b** [cm]	200	100	80	200	200
Deflection as per EN 12812	Line 6			Line 6	Line 5

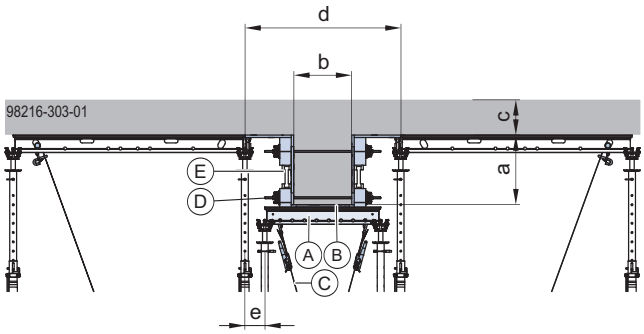
[1)] For use of the Eurex 20 top or Eurex 20 eco floor props, the floor props must be pushed in accordingly (follow the instructions in section 'Structural design of floor props').
[2)] At least Doka formwork sheet 3-SO 21/27mm or multi-ply formwork sheet 18mm (mean flexural modulus of elasticity where sheet moisture content is 10±2%: > 7452 kN/mm² characteristic flexural strength where sheet moisture content is 10±2%: > 34.1 kN/mm²)

Drop-beam integrated into the floor-slab

NOTICE

- Secure the Doka beam H20 in position, for example by nailing.
- Position the structure for creating the drop beam symmetrically on the DokaXdek panel.

Drop beam solution with closure zone



a ... drop beam height
b ... drop beam width
c ... slab thickness

A	DokaXdek panel
B	Formwork sheeting (must be used)
C	Lashing strap
D	Tie rod 15.0 + Super plate 15.0
E	Doka beam H20

Number of floor props[1)]	4 props [cm][2) 3)]	6 props [cm][2) 3)]
max. drop beam height **a**	30	40
max. drop beam width **b**	80	80
max. slab thickness **c**	15	25
d	132	150
e	16	25
According to EN 12812- line 6		

[1)] Dimension with 30kN and if the Eurex 20 is used, the floor props must be pushed in accordingly (see table Dimensioning).

[2)] Use of DokaXdek panel 1.00x2.00m

[3)] Verification of the formwork sheeting in the closure zone necessary

Early stripping without activation of the slab

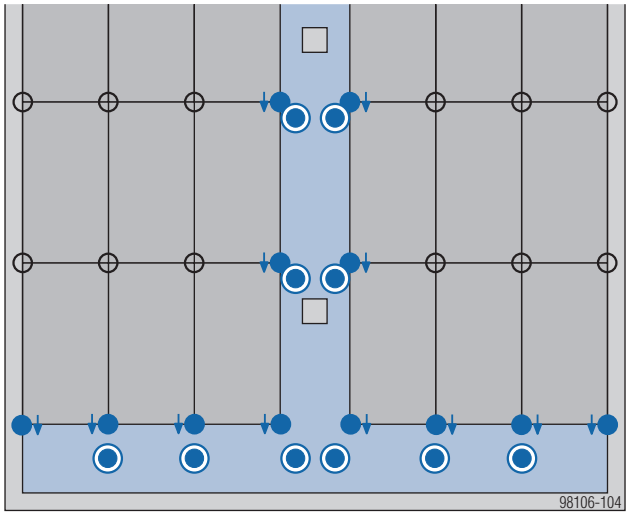
The precondition for this is the presence of an upper reinforcement layer (minimum reinforcement is sufficient) to sustain the stresses occurring above the props.

Key to symbols:

- System prop under load
- Floor prop to be lowered
- Temporary reshore to be installed - same type of floor prop as system prop
- Temporary reshore already under load
- Lowered floor props

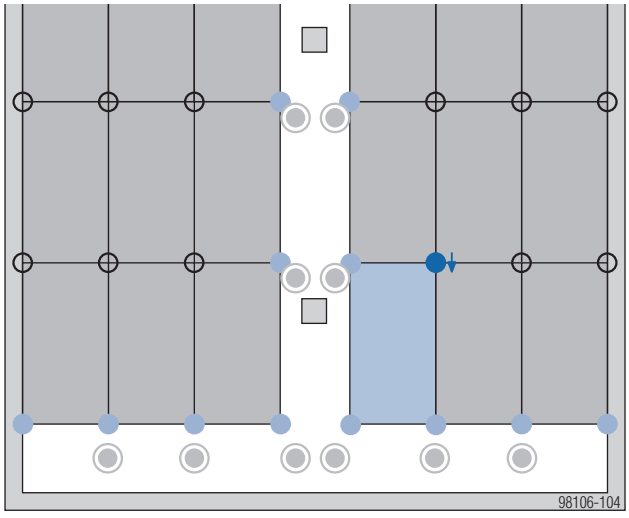
➤ Lower all the floor props of the panels in the edge zone of the closure.

➤ Install floor props to support the formwork sheets of the closure zone.



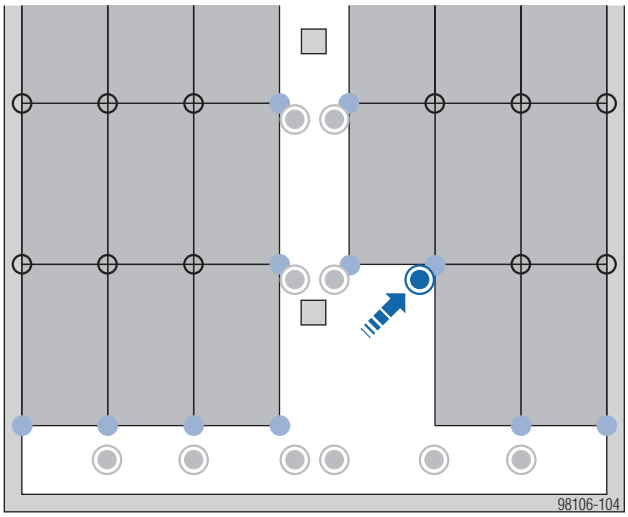
➤ With the exception of the formwork sheeting, remove the substructure in the closure zone.

➤ Lower the floor prop of the first panel.

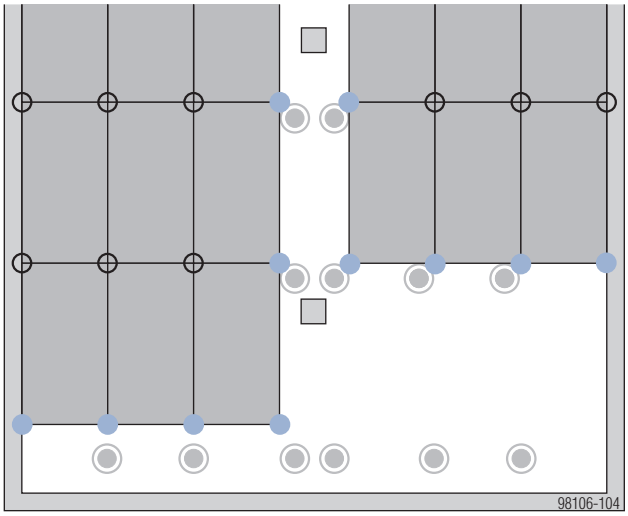


➤ Strip out the panel.

➤ Install the floor prop for the temporary reshore.



➤ Following the same procedure for each panel in turn, lower the floor props of the next panels, strip out the panels and install the floor props for the temporary reshore.

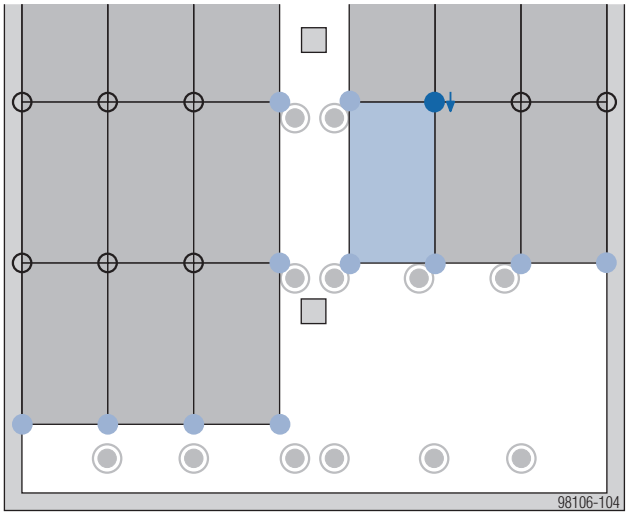


Note:

In the wall zone the extra floor prop for the temporary reshore is not necessary.

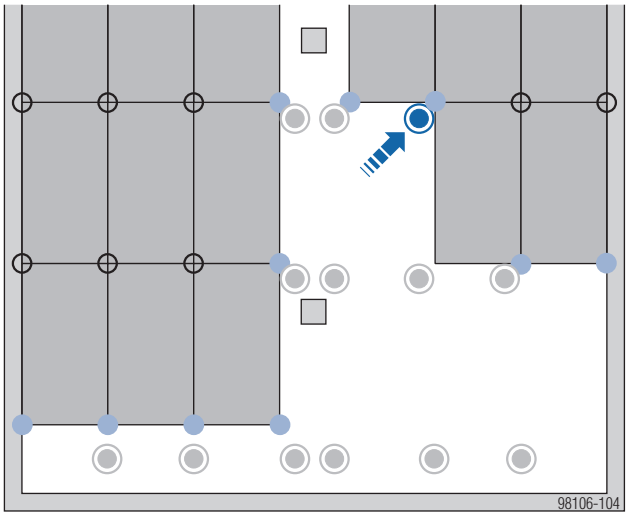
➤ Follow the same procedure for each row of panels in turn.

➤ Lower the floor props.

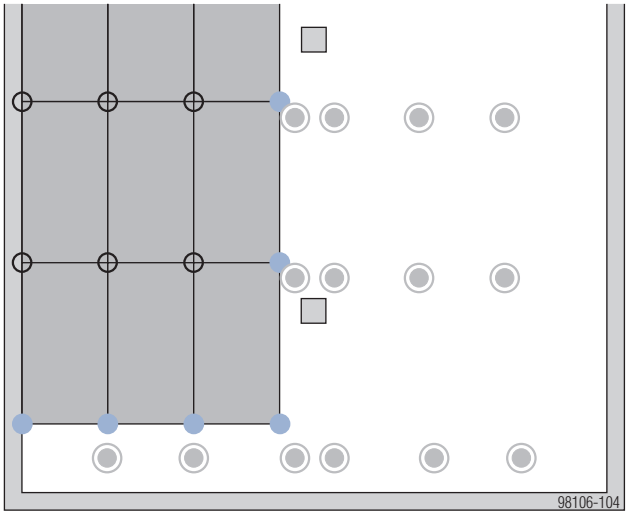


➤ Strip out the panel.

➤ Install the floor prop for the temporary reshore.



➤ Using this principle, strip out the remaining panels and install the floor props for the temporary reshore.



➤ Follow the same procedure to strip out the rest of the room. Now only the temporary reshore remains in place.

NOTICE

All systems in which the floor props are re-installed directly after section-by-section stripping, with the result that the floor slab is not activated.

In early stripping without activation of the slab, the formwork is removed section by section, with the props being reinstalled immediately to reshore each section as it is stripped.

One possibility with Dokaflex 1-2-4 is to insert strips of formwork sheeting that can be propped to carry the slab, permitting the actual formwork to be stripped.

Strips of formwork sheeting can also be positioned between tables, and propped.

Important parts of the procedure:

- As each floor prop is placed it has to be pre-stressed by a blow with a hammer against the adjusting nut.
- The entire slab is not stripped at once, because it does not yet have the strength necessary to support its dead load; instead, stripping proceeds by small degrees, section by section.
- At the time of stripping concrete strength must be adequate and for the slab to support its dead load between the floor props.

  A minimum concrete strength of C8/10 and the presence of top reinforcement suffice for a span of max. 2.6 m between props.

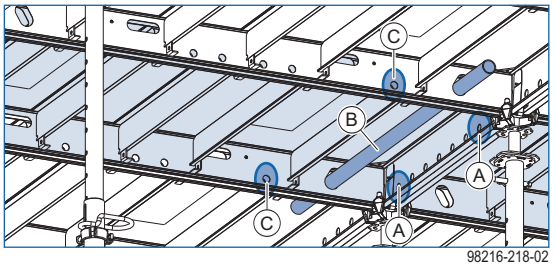
  Top reinforcement of 1.88 cm^2/m is required. If slab thickness is less than 16 cm the top reinforcement has to be at least 2.1 cm^2/m.
- Consequently, the floor slab is not activated.
- Before the next floor-slab is poured, the floor props must be completely stress-relieved, so that they can be subsequently re-used as temporary reshores.
- It is important to allow for adequate curing.

Note:

For more information on correct positioning of the reshoring props, see the section headed ‘Reshoring props, concrete technology and stripping out’.

Floor formwork around edges

Tie-back with Lashing strap 5.00m and Doka express anchor 16x125mm



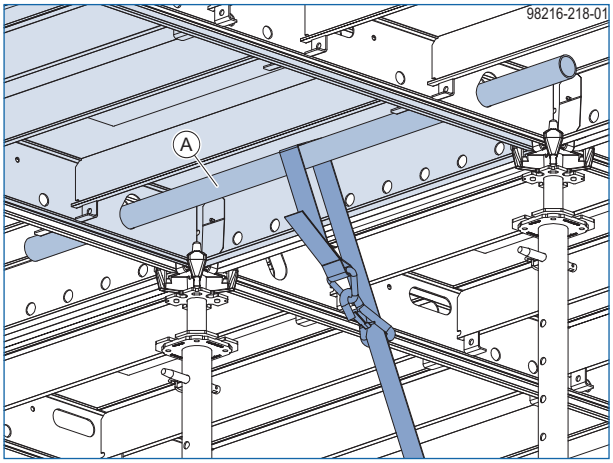
A Anchorage points for Tie rod 15.0 in the inter-panel joint for transverse tie-back

B Scaffold tube 48.3mm in the inter-panel joint for longitudinal tie-back

C Attachment points for Tie rod 15.0 in the inter-panel joint for longitudinal tie-back

Tie-back in longitudinal direction

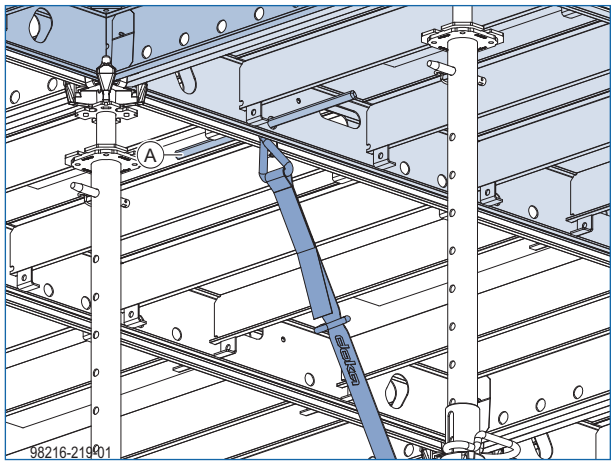
Fastening variant 1



A With panel 1.00x2.00m: Scaffold tube 48.3mm 1.50m
With panel 0.75x2.00m: Scaffold tube 48.3mm 1.00m

Permissible bracing force: 3.5 kN

Fastening variant 2

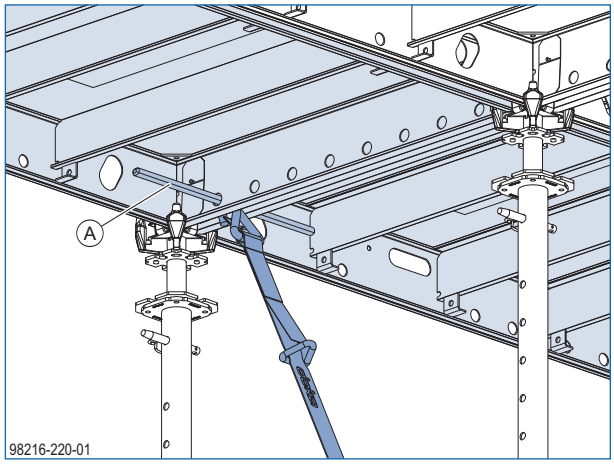


A Tie rod 15.0 inserted into panel for longitudinal tie-back
or Connecting pin 10cm + Spring cotter 5mm

Permissible bracing force: 10.0 kN

Tie-back in transverse direction

Fastening variant 3



A Tie rod 15.0 inserted into panel for transverse tie-back
or Connecting pin 10cm + Spring cotter 5mm

Permissible bracing force: 10.0 kN

Follow the directions in the 'Lashing strap 5.00m' User Information booklet.

Installation of the tie-back

WARNING

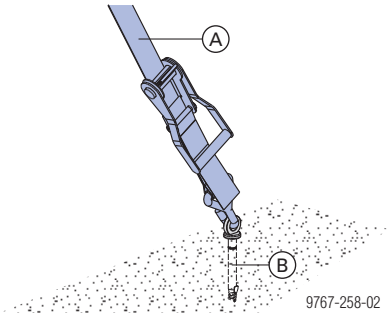
- ➤ Do NOT exceed the permitted bracing angle and bracing force, so as to prevent damage and to ensure that all forces from horizontal loads can be transferred in conformity with EN 12812.
- ➤ Use bracing to transfer horizontal forces. Subject to the consent of the structural engineer, these forces can also be transferred into existing structural members such as concrete columns or walls.

NOTICE

- Attach the Lashing strap 5.00m only to the points shown and tension it in the direction indicated.
- When calculating the leg loads, allow for the additional forces imposed by the bracing!

➤ Prepare an anchorage point in the ground with the Doka express anchor.

➤ Attach the lashing strap and tighten it.



A Lashing strap 5.00m

B Doka express anchor 16x125mm

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

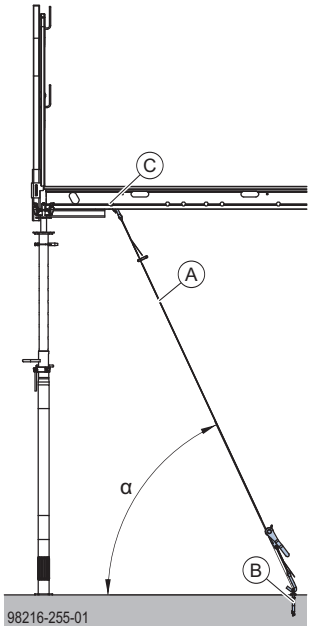
Permitted load where $f_{ck,cube,current} \geq 10$ N/mm²:
$F_{permissible} = 10.0$ kN ($R_d = 15.0$ kN)

Follow the directions in the 'Doka express anchor 16x125mm' and 'Lashing strap 5.00m' User Information booklets.

Always perform a static check if other-make heavy-duty dowels are used to fabricate anchorages in the floor slab.
Follow the manufacturers' applicable fitting instructions.

Practical examples

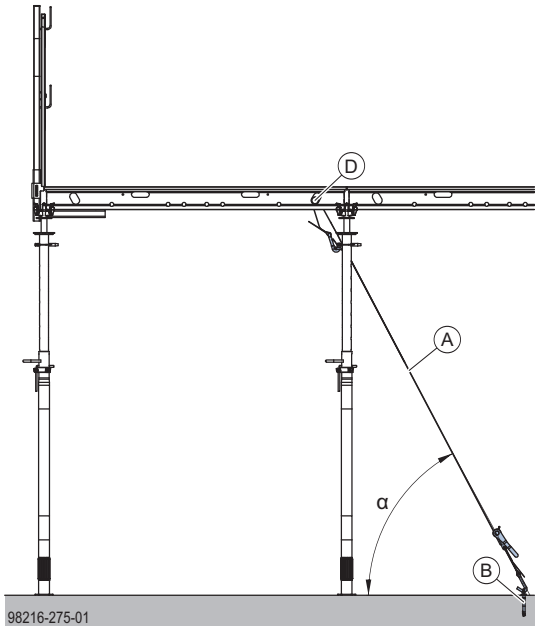
Longitudinal bracing with Tie rod 15.0



α ... Bracing angle approx. 60°

A	Lashing strap 5.00m
B	Doka express anchor 16x125mm
C	Tie rod 15.0

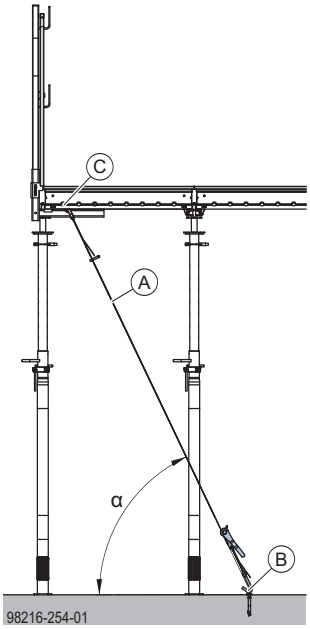
Longitudinal bracing with scaffold tube



α ... Bracing angle approx. 60°

A	Lashing strap 5.00m
B	Doka express anchor 16x125mm
D	Scaffold tube 48.3mm 1.50m

Bracing in transverse direction



α ... Bracing angle approx. 60°

A	Lashing strap 5.00m
B	Doka express anchor 16x125mm
C	Tie rod 15.0

Fall protection on the formwork

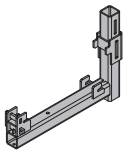
Fall protection on the formwork

NOTICE

- Ideally, fall protection should be mounted from below (e.g. using a Wheel-around scaffold DF).
- When mounting/dismounting edge protection from above, the crew must use a personal fall-arrest system (e.g. safety harness).
- Suitable attachment points must be defined by an approved person appointed by the contractor.

Follow the directions in the 'Edge protection system XP' User Information booklet.

DokaXdek handrail-post shoe XP

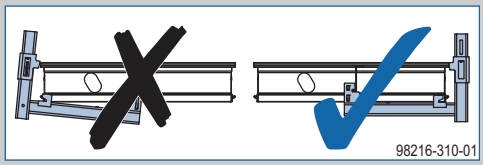


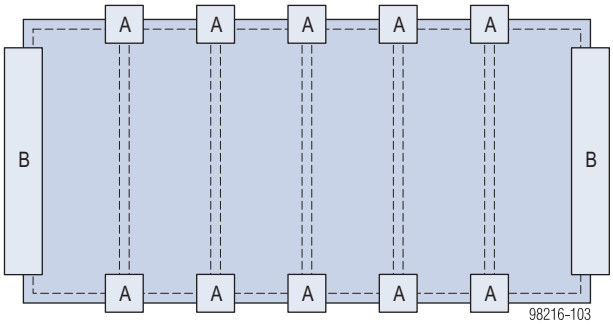
Possible fixing points for the handrail-post shoes

WARNING

➤ On the long side, handrail-post shoes can be installed only over a cross profile.

➤ Pay attention to the correct installation direction when using the handrail-post shoe on the DokaXdek panel 0.75x0.75m.





A Position for handrail-post shoes on the long side

B Position (stepless) for handrail-post shoe on the short side

CAUTION

➤ Allowance for a DIN 4420 walkway of at least 60 cm in width has to be made when using the Handrail post XP 1.20m.

Note:

The information stated here is compliant with the German DIN standards and the rules set out by the German Employers Liability Insurance Association for the Construction Industry and consequently, they are particularly applicable within Germany. However, this ruling can be used as a recommendation in other countries, unless other, stricter national regulations apply.

Permitted influence width [m] of the handrail-post shoes on short side and long side with Handrail posts XP 1.20m

Peak velocity pressure q [kN/m²]	Safety barrier: Protective grating XP 2.70x1.20m	Guardrail boards: 2.5 x 12.5 cm [1]	2.4 x 15 cm	3 x 15 cm	4 x 15 cm	3 x 20 cm	4 x 20 cm	5 x 20 cm	Scaffold tube 48.3mm [2]
0.2	2.5	1.8	1.9	2.7	3.6	2.9	3.7	3.7	5.0
0.6	2.5	1.8	1.9	2.7	3.3	2.4	2.4	2.4	5.0
1.1	2.5	1.8	1.8	1.8	1.8	1.3	1.3	1.3	5.0
1.3	2.5	1.8	1.5	1.5	1.5	1.1	1.1	1.1	4.3

[1] ... with toeboard 3 x 20 cm, 4 x 20 cm or 5 x 20 cm
[2] ... with toeboard 5 x 20 cm

Permitted influence width [m] of the handrail-post shoes on short side and long side with Handrail posts XP 1.20m and 0.60m or Handrail posts XP 1.80m

Peak velocity pressure q [kN/m²]	Safety barrier: Protective grating XP 2.70x1.20m and 2.70x0.60m	Guardrail boards: 2.5 x 12.5 cm [1]	2.4 x 15 cm	3 x 15 cm	4 x 15 cm	3 x 20 cm	4 x 20 cm	5 x 20 cm	Scaffold tube 48.3mm [2]
0.2	2.5	1.8	1.9	2.7	3.6	2.9	3.1	3.1	5.0
0.6	2.5	1.8	1.9	2.6	2.6	1.9	1.9	1.9	5.0
1.1	2.5	1.7	1.4	1.4	1.4	1.0	1.0	1.0	4.4
1.3	2.5	1.4	1.2	1.2	1.2	0.9	0.9	0.9	3.8

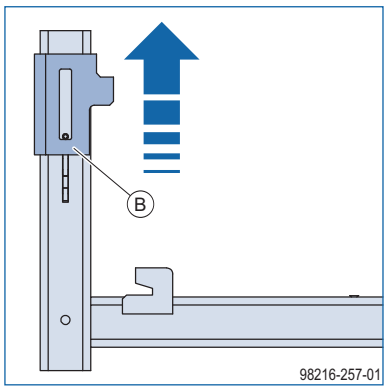
[1] ... with toeboard 3 x 20 cm, 4 x 20 cm or 5 x 20 cm
[2] ... with toeboard 5 x 20 cm

- The span of the handrail posts approximates to influence width, given the following factors:
  - Regular spacing
  - Planks run through or plank butts to plank at the handrail post
  - No cantilevers
- Peak velocity pressure q = 0.6 kN/m² corresponds to the wind conditions in Europe in accordance with EN 13374 (highlighted grey in the tables)

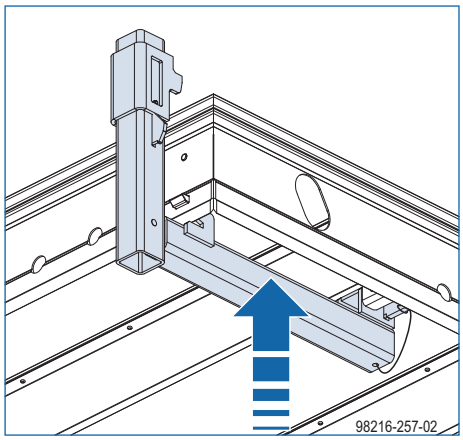
Installing handrail-post shoe on short side

The handrail-post shoe can be installed either before or after the panel is swivelled up into position.

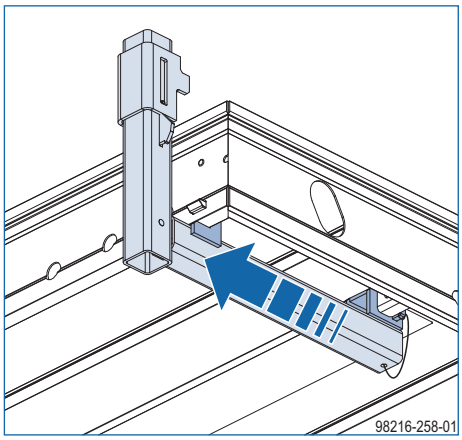
➤ Push the safety sleeve on the adapter all the way up.



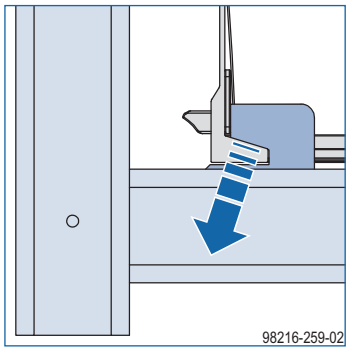
➤ From below, position the handrail-post shoe on the panel.

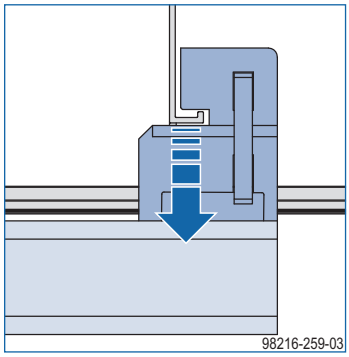


➤ Fully lock the handrail-post shoe to the frame profile and into the cross profile.

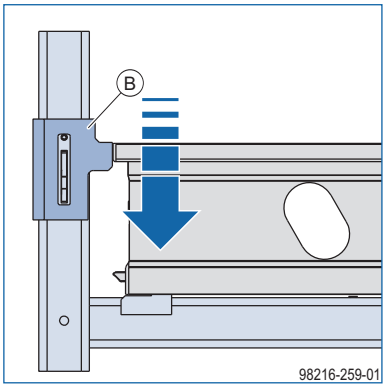


Make sure that the shoe correctly grips round the frame profile and the cross profile!





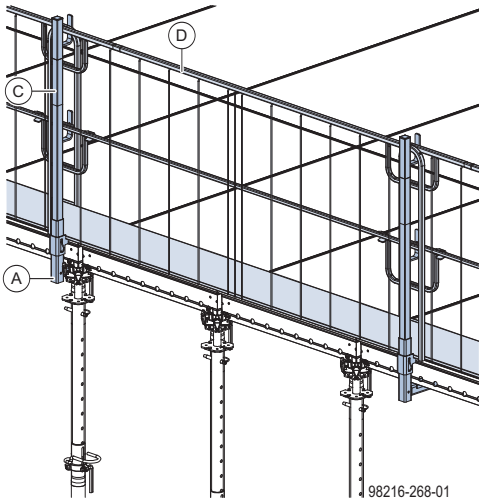
➤ Push the safety sleeve all the way down, until the locking mechanism engages ('Easy-Click' function).



A DokaXdek handrail-post shoe XP
B Safety sleeve

➤ Push the Handrail post XP into the adapter until the locking mechanism engages ('Easy-Click' function).
➤ Mount the sideguards.

Practical example with Protective grating XP



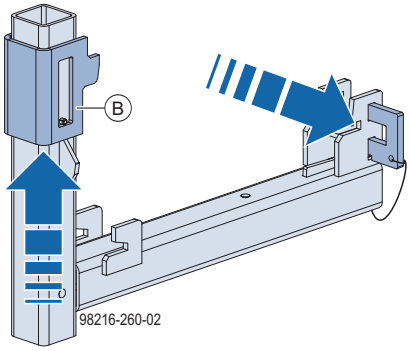
A DokaXdek handrail-post shoe XP
C Handrail post XP 1.20m
D Protective grating XP 2.50x1.20m (incl. toeboard)

Installing handrail-post shoe on long side

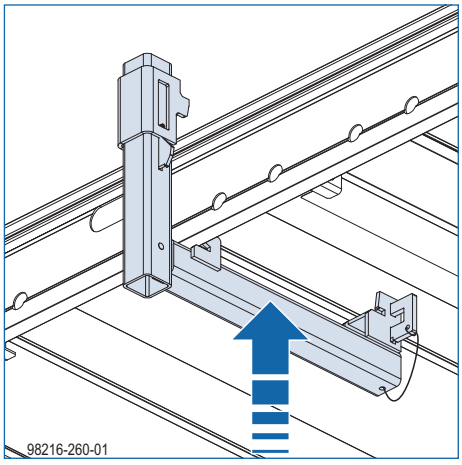
The handrail-post shoe can be installed either before or after the panel is swivelled up into position.

WARNING
➤ On the long side, handrail-post shoes can be installed only over a cross profile.

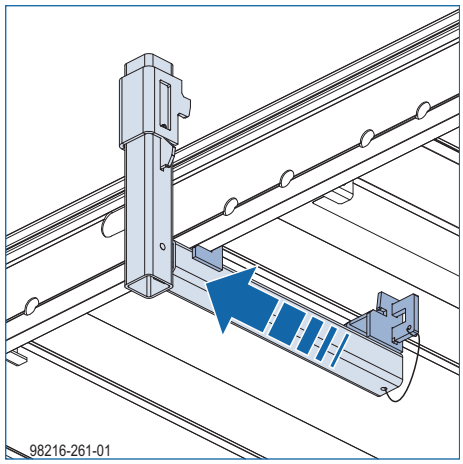
➤ Push the safety sleeve on the adapter all the way up and pull out the safety bow to the side.



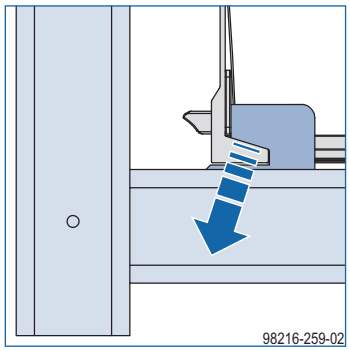
➤ From below, position the handrail-post shoe on the panel in line with a cross profile.



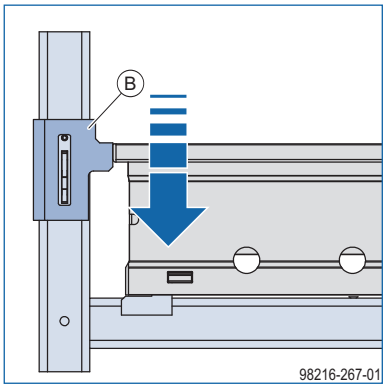
➤ Push the handrail-post shoe fully on to the frame profile.



Make sure that the shoe correctly grips round the frame profile and the cross profile!

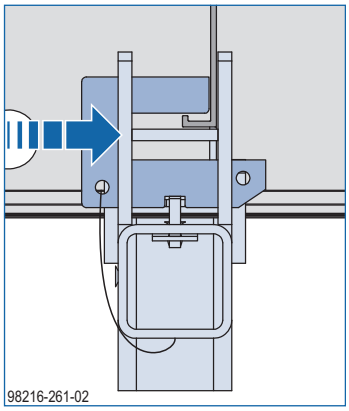


➤ Push the safety sleeve all the way down, until the locking mechanism engages ('Easy-Click' function).



A DokaXdek handrail-post shoe XP
B Safety sleeve

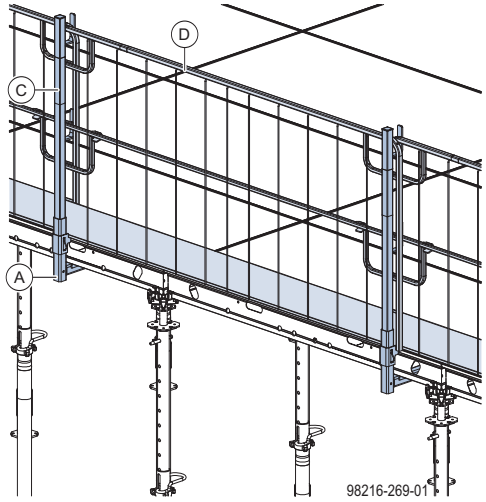
➤ Push the safety bow over the cross profile until the locking mechanism engages ('Easy-Click' function). Depending on the position of the cross profile, the safety bow can be pushed in and locked from both sides.



➤ Push the Handrail post XP into the adapter until the locking mechanism engages ('Easy-Click' function).

➤ Mount the sideguards.

Practical example with Protective grating XP

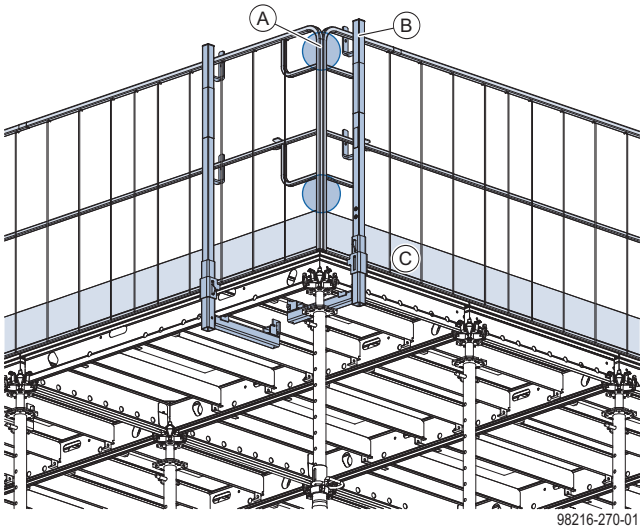


A	DokaXdek handrail-post shoe XP
C	Handrail post XP 1.20m
D	Protective grating XP 2.50x1.20m (incl. toeboard)

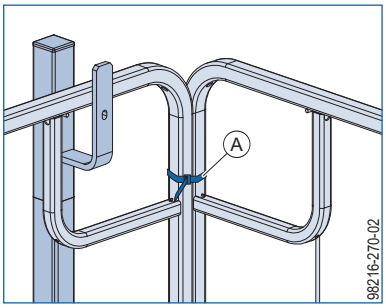
Fall protection at corners

NOTICE

- In corner zones, the Protective gratings XP must be attached to the Handrail posts XP with cable ties or binding wire (see the blue markings in the examples illustrated here). It is not permitted to use the Velcro® fastener 30x380mm.
- On the long side of the panel, working from the corner, start with a Protective grating 2.00m. After this, Protective gratings 2.50m can be used.



Close-up showing how fastened:

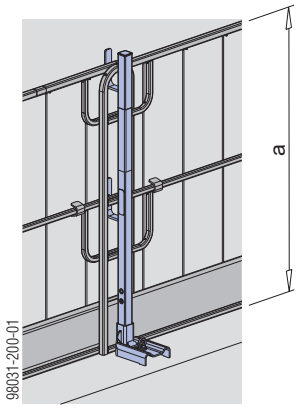


A	Attached with cable tie or binding wire
B	Handrail post XP 1.20m
C	Protective grating XP 2.50x1.20m

Fall protection on the structure

Handrail post XP 1.20m

- Attached with screw-on shoe, railing clamp, hand-rail-post shoe or Step bracket XP
- Protective grating XP, guardrail boards or scaffold tubes can be used as the safety barrier

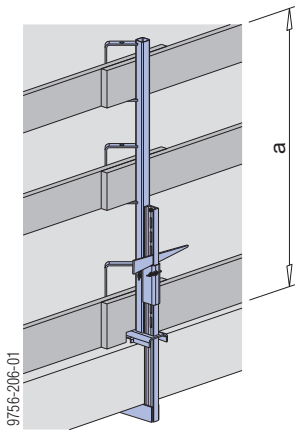


a ... > 1.00 m

Follow the directions in the 'Edge protection system XP' User Information booklet.

Handrail clamp S

- Attached with integral clamp
- Guardrail boards or scaffold tubes can be used as the safety barrier

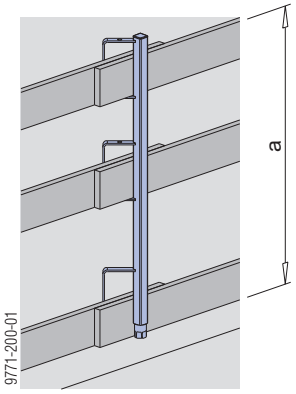


a ... > 1.00 m

Follow the directions in the 'Handrail clamp S' User Information booklet.

Handrail post 1.10m

- Fixed in a Screw sleeve 20.0 or Attachable sleeve 24mm
- Guardrail boards or scaffold tubes can be used as the safety barrier

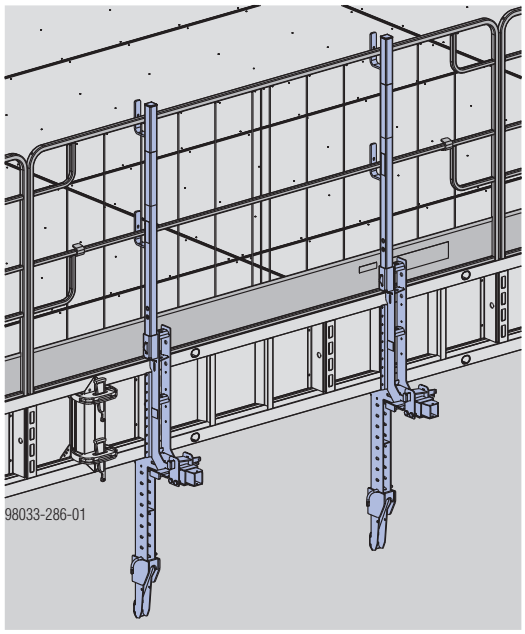


a ... > 1.00 m

Follow the directions in the 'Handrail post 1.10m' User Information booklet.

Doka floor end-shutter clamp

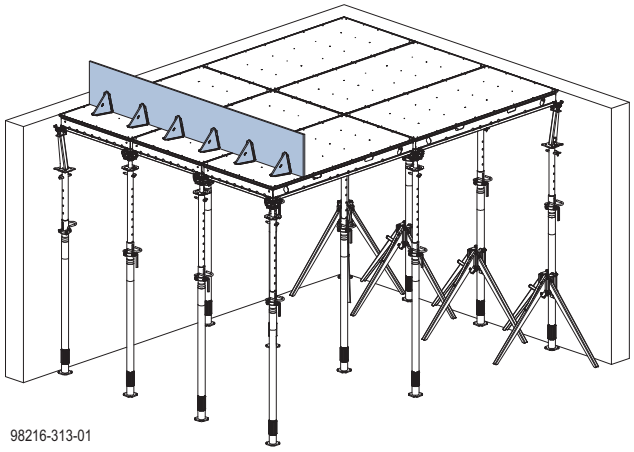
- Slab stop-ends and safety barriers in one system

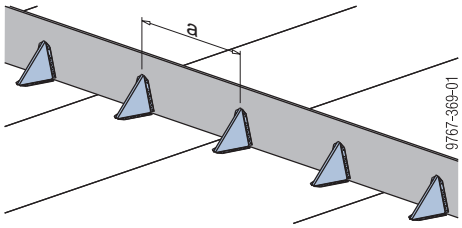


Follow the directions in the 'Doka floor end-shutter clamp' User Information booklet!

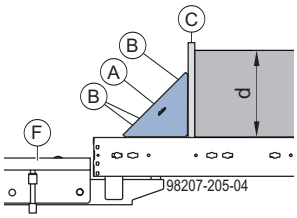
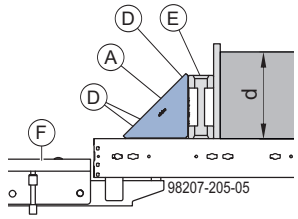
Slab stop-ends

with Universal end-shutter support 30cm





		Max. influence width: a for slab thickness of [cm]		
Means of attachment	Config-uration	20	25	30
4 x nail 3.1x80	A	93	86	68
4 x universal countersunk screw 4x40 (fully threaded)	B	260	224	198

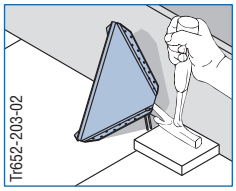
Configuration A (secured with nails)	**Configuration B** (secured with universal countersunk screws)
	

d ... slab thickness max. 30 cm

A Universal end-shutter support 30cm
B Nail 3.1x80
C Doka formwork sheet 3-SO
D Universal countersunk screw 4x40 (fully threaded)
E Doka beam H20
F Dokamatic table platform

Tip for stripping formwork:

- ➤ Take out the nails on the stop-end side.
- ➤ Put the claw of a hammer under the corner (put a piece of wood under it to protect the formwork sheeting)
- ➤ Lever up the end-shutter support.

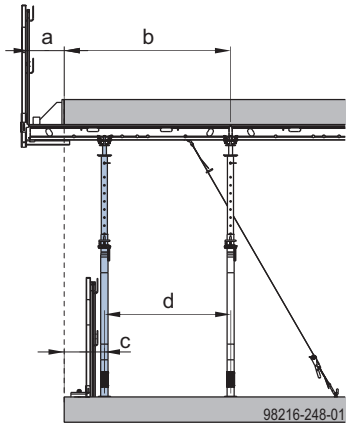
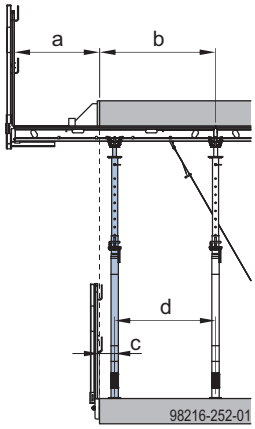
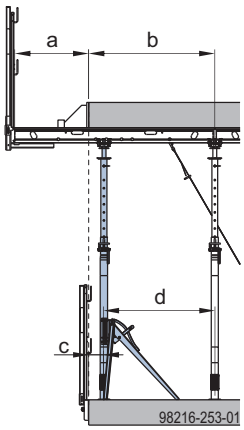
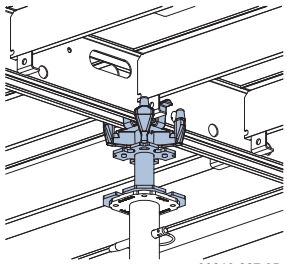
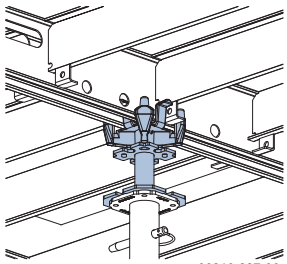
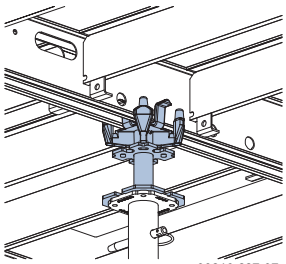


Note:

For slab thicknesses > 30 cm, an on-site solution must be carried out.

Floor-slab formwork at the structure edge

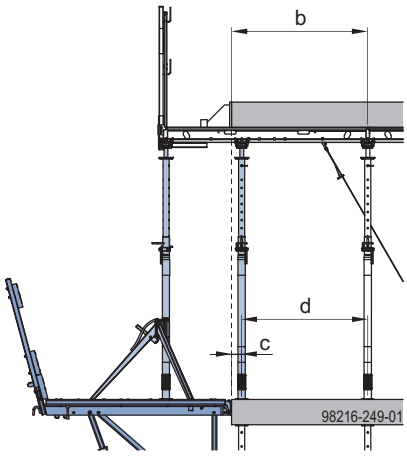
Overview

	Situation 1 Propping when d = 1.25m	Situation 2 Propping when d = 1.00m (middle point) [2]	Situation 3 Propping at any position [1] [2]
Overview			
Propping point			
Permitted cantilever **a** of the DokaXdek panel [3]	max. 65 cm	max. 90 cm	190 cm - d
Permitted cantilever concrete load **b**	180 cm	150 cm	d + 50 cm, max. 180 cm
Distance **c** (floor prop centreline to slab edge)	See table ‘Distance c’		
Distance **d** between floor props	125 cm	100 cm	100 - 165 cm

[1] Prop must be secured against tip-over

[2] Note: Project-specific structural analysis and implementation planning are required for outward-staggered slabs.

[3] Allow min. 20 cm for stop-end

	Situation 4 Propping the cantilevered panels at the middle point or at 1.25m on Folding platform K[4]
Overview	
Permitted cantilever **a** of the DokaXdek panel	---
Permitted cantilever concrete load **b**	180 cm
Distance **c** (floor prop centreline to slab edge)	See table ‘Distance c’
Distance **d** between floor props	100 - 165 cm

[1] Prop must be secured against tip-over

[2] Note: Project-specific structural analysis and implementation planning are required for outward-staggered slabs.

[3] Allow min. 20 cm for stop-end

[4] For more instructions and information, see section 'Variant 4 - Propping the cantilevering panels on Folding platform K'.

Distance c (floor prop centreline to slab edge)

Attachment method used	Dimension ‘c’
Handrail-post shoe XP	min. 40 cm
Railing clamp XP 40cm	min. 30 cm
Screw-on shoe XP	min. 30 cm
Step bracket XP	min. 10 cm

CAUTION

➤ Every prop with support head that is not positioned at a panel corner or a cross-profile stiffening plate must be secured against tip-over with a Removable folding tripod.

WARNING

➤ The DokaXdek heads must always be fixed to the floor prop with the correct pin.

NOTICE

- Impermissible areas of application for DokaXdek panels 1.00x1.00m, 0.75x1.00m and 0.75x0.75m:
  - use at the structure edge

Ground rules for floor-slab formwork at the structure edge

NOTICE

Cantilevering of the panels in transverse direction is not permitted!

Permitted slab thickness [cm] with Floor props Eurex 30[1)]

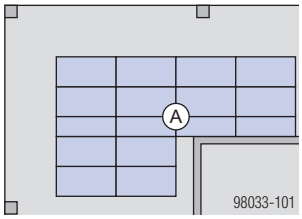
Panel size	with no additional precautions	with additional precautions[2)]	Flatness deviation as per DIN 18202, Table 3
1.00x2.00m	40	65	Line 6
0.75x2.00m	55	75	Line 6
1.00x1.00m	65		Line 6
0.75x1.00m	75		Line 6
0.75x0.75m	75		Line 6

[1)] For use of the Eurex 20 top or Eurex 20 eco floor props, follow the directions in section 'Structural design of floor props'.

[2)] See section 'Additional precautions for slab thicknesses of up to 75 cm'.

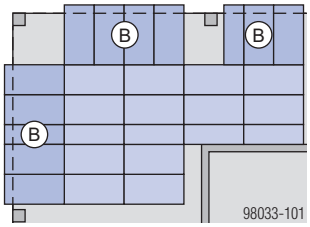
Schematic set-up

1) Erect formwork in the typical zone until only the planned infill zone is left unformed; level and secure it against tip-over.



A Typical zone

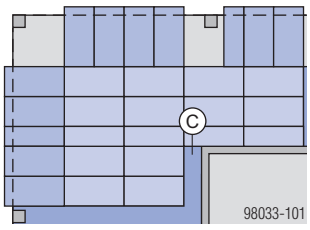
2) Set up the cantilevering panels, level them and tie them back.



B Cantilevering panels

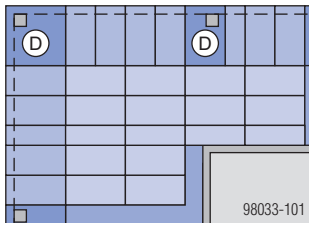
3) Install fall protection.

4) Form the infilling in the typical zone.



C Infilling in typical zone

5) Form the infilling between the cantilevering panels.



D Infilling between cantilevering panels

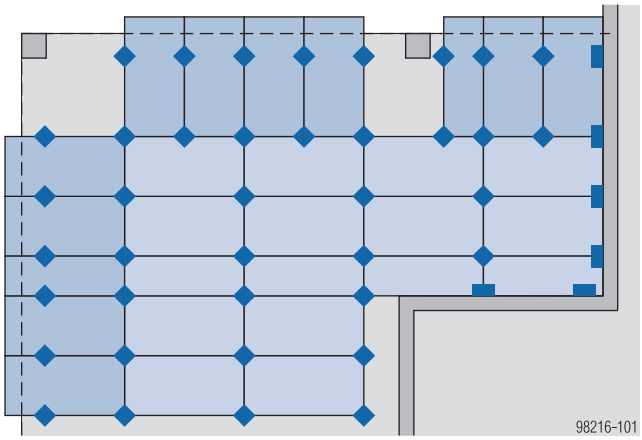
6) Mount the stop-end formwork.

DokaXdek heads

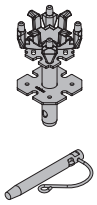
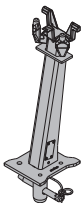
WARNING

➤ The DokaXdek heads must always be fixed to the floor prop with the correct pin.

Position of the DokaXdek heads



Legend

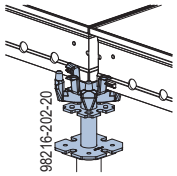
Support head	Wall head
◆	▮
 1) 2)	

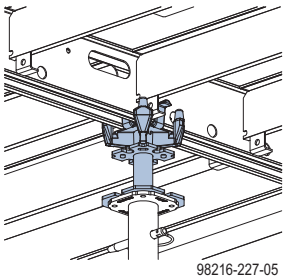
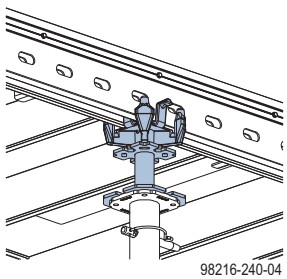
[1] Spring locked connecting pin 16mm and Spring locked connecting pin D16 with eye not included with product
[2] For floor props with larger tube diameters, we recommend the Spring locked connecting pin D16 with eye

NOTICE

- When placing the panels onto the heads, make sure that the panels are correctly fixed in the heads.

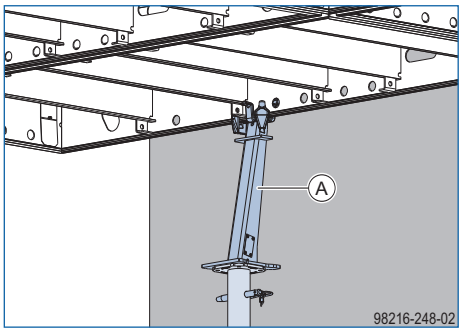
Installation examples

Support head in typical case


Support head with cantilevers	
Used at panel joint	Used with panel and infill beam
	

Forming wall junctions

The wall head is used at wall junctions.



A DokaXdek wall head

Securing the formwork against tip-over

WARNING

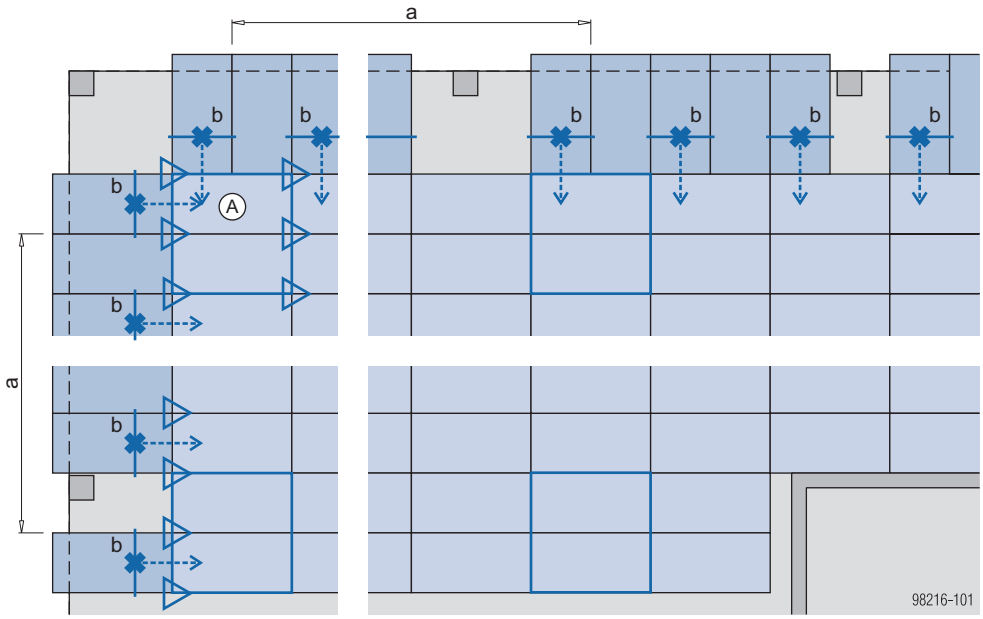
- Before anybody steps onto the surface of the formwork, its stability must be ensured by e.g. wall clamps or lashing straps.
- The transfer of concreting loads must be ensured by other measures (e.g. by transferring these loads into the structure or using bracing).
- All cantilevered panels must be secured against overturning.

For more information on bracings with lashing straps, see section 'Tie-back with Lashing strap 5.00m and Doka express anchor 16x125mm' and the 'Lashing strap 5.00m' User Information booklet.

NOTICE

- Secure every floor prop in the 1st row of props with a Removable folding tripod.
  - Shoring height < 3.00 m: Removable folding tripod
  - Shoring height ≥ 3.00 m: Removable folding tripod 1.20m
- While the formwork is being set up, make a braced unit on the 1st pair of panels (with Removable folding tripods), every max. 6.00 m and on the last pair of panels (without Removable folding tripods) – see 'Practical examples 1 & 2'.
- Tie back the typical zones at the corners.
- Tie back cantilevered panels:
  - See section 'Tie-back with Lashing strap 5.00m and Doka express anchor 16x125mm'.

Variant with braced unit
Bracing with Scaffold tube 48.3mm



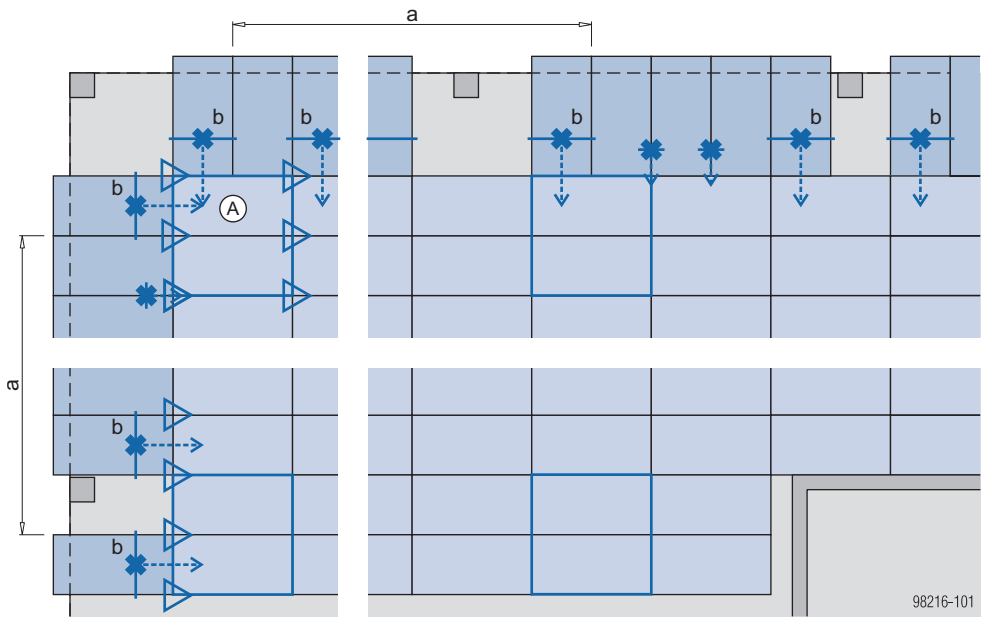
a ... braced unit on 1st pair of panels, every max. 6.00 m **and** on the final pair of panels
b ... scaffold tube at every 2nd panel and at the last panel

A Starting unit

Legend

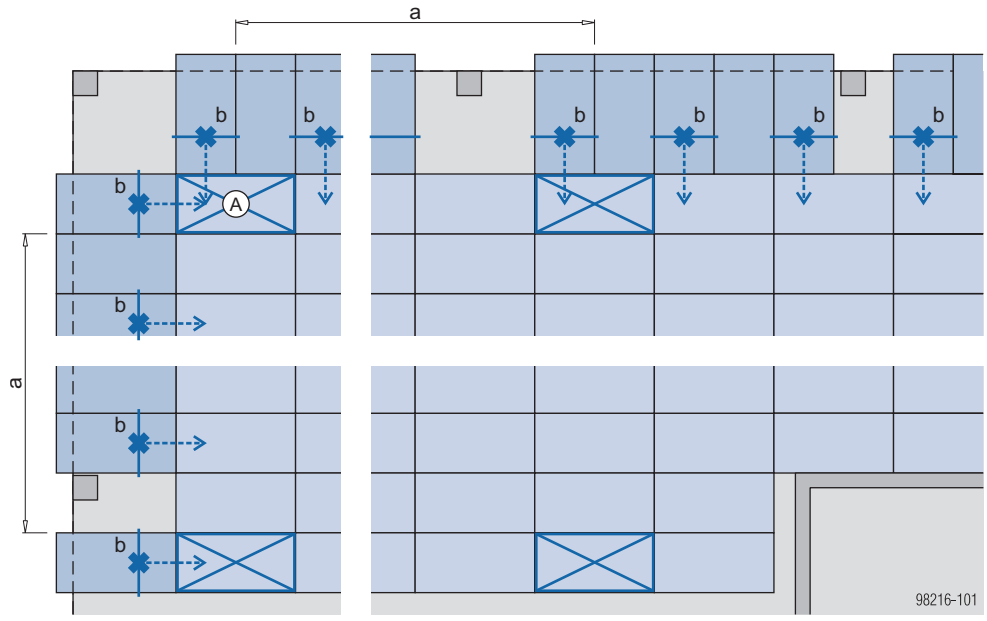
▽	Removable folding tripod
⇠✖	Fixing point (e.g. with bracing) Arrow = direction of the bracing
□	Braced unit

Variant with braced unit
Bracing with Tie rod 15.0 and Scaffold tube 48.3mm



a ... braced unit on 1st pair of panels, every max. 6.00 m **and** on the final pair of panels
b ... scaffold tube at every 2nd panel and at the last panel

Variant with Bracing frame Eurex
Bracing with Scaffold tube 48.3mm



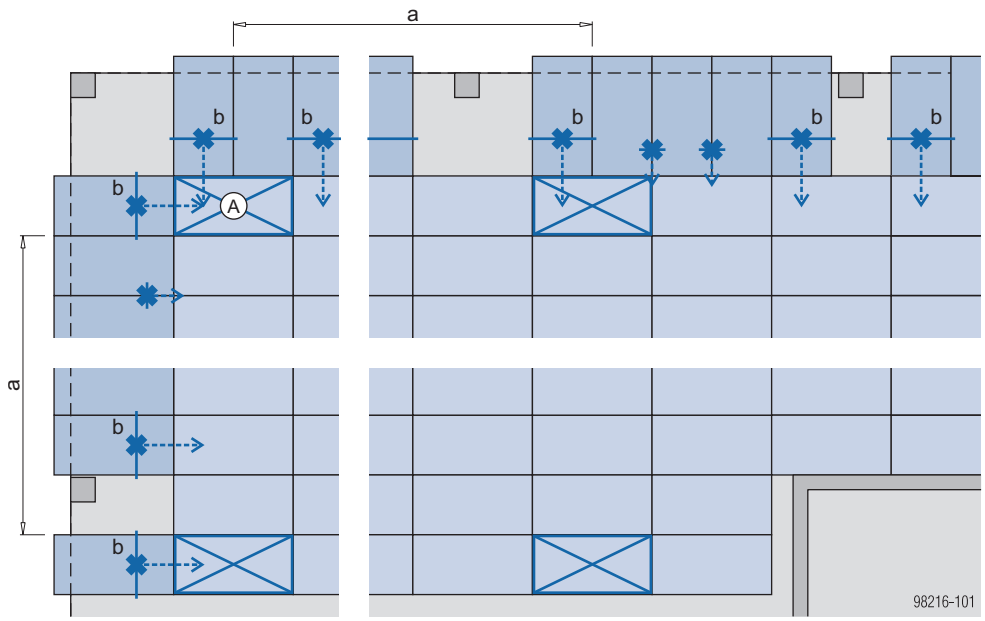
a ... braced unit with bracing frames Eurex on 1st pair of panels, every max. 6.00 m **and** on the final pair of panels
b ... scaffold tube at every 2nd panel and at the last panel

A Starting unit

Legend

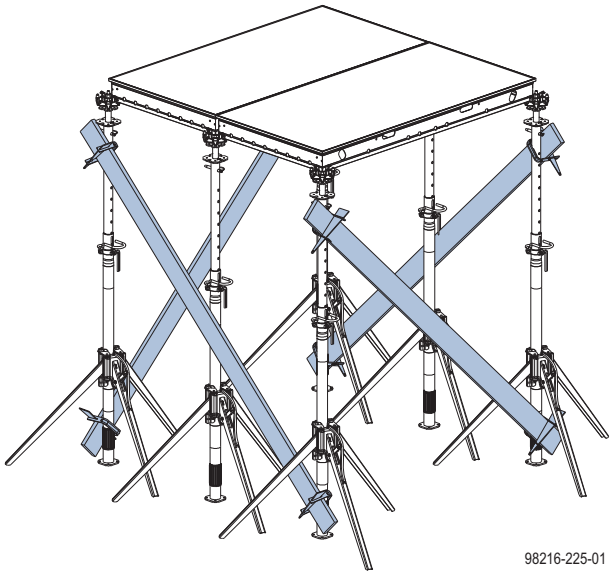
▽	Removable folding tripod
✱	Fixing point (e.g. with bracing) Arrow = direction of the bracing
□	Braced unit
☒	Bracing frame Eurex with diagonal crosses

Variant with Bracing frame Eurex
Bracing with Tie rod 15.0 and Scaffold tube 48.3mm

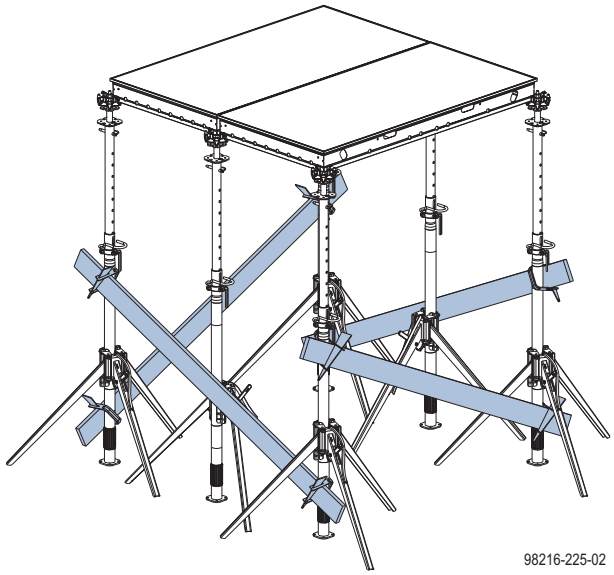


a ... braced unit on 1st pair of panels, every max. 6.00 m **and** on the final pair of panels
b ... scaffold tube at every 2nd panel and at the last panel

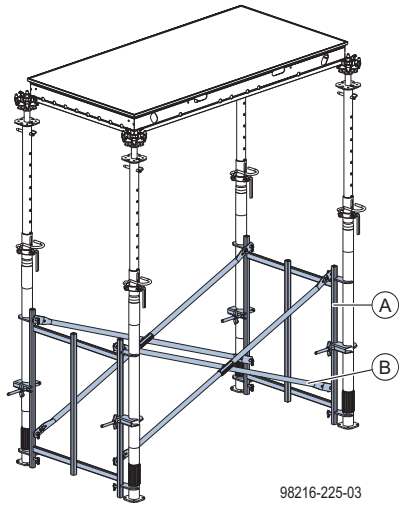
Practical example 1
Braced unit on 1st pair of panels



Practical example 2
Alternative braced unit



Practical example 3
With bracing frames Eurex



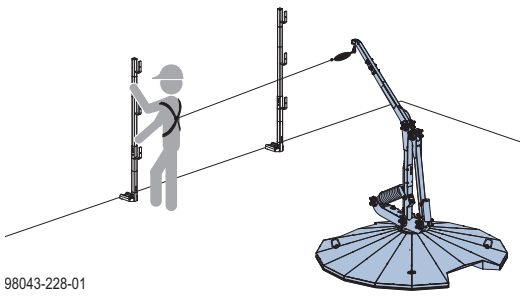
A Bracing frame Eurex
B Diagonal cross

Bracing clamp B

➤ See section 'Increasing the stability'.

FreeFalcon

A fall arrester such as the FreeFalcon provides a mobile anchorage point for the safety harness.



Symbolic representation

WARNING
Risk of falling at open edges!
➤ The crew must use personal fall-arrest systems (e.g. safety harnesses) until all fall protection has been installed.
➤ Suitable anchorage points must be defined by an approved person appointed by the contractor.

User instruction prior to use of the FreeFalcon is mandatory.
Follow the directions in the 'FreeFalcon' Operating Instructions.

Fall protection on the structure

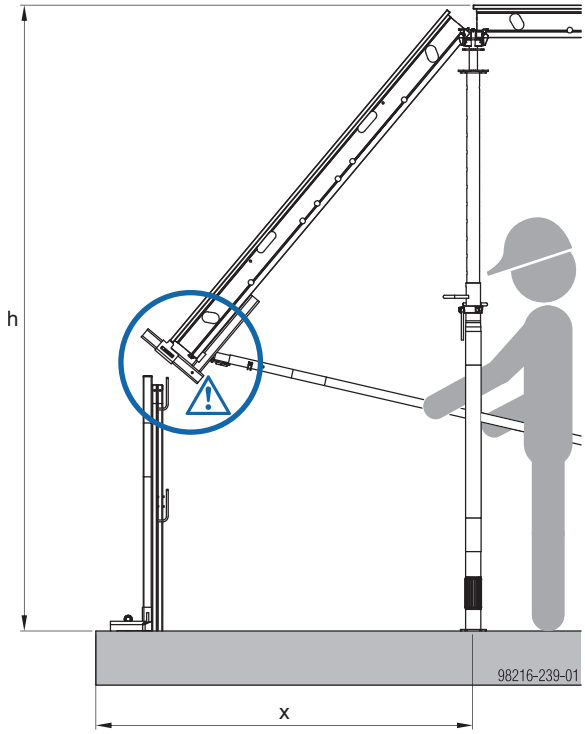
Note:
When tilting up cantilevering panels, make sure that these do not collide with the guardrail system on the structure. Different minimum room heights are required, depending on the attachment method used.

Min. room height 'h' depending on the edge protection used [cm]:

	Edge protection XP on structures			
Dimension 'x' [cm]	Handrail-post shoe XP	Railing clamp XP 4 0cm	Screw-on shoe XP	Stair shoe XP
110	-	-	-	305
120	-	-	-	300
130	-	320	315	290
140	315	310	310	285
150	305	305	300	275
160	300	295	295	265
170	290	290	285	250
180	285	280	275	240

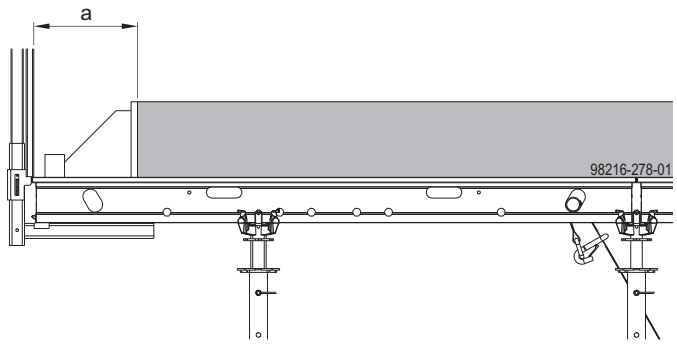
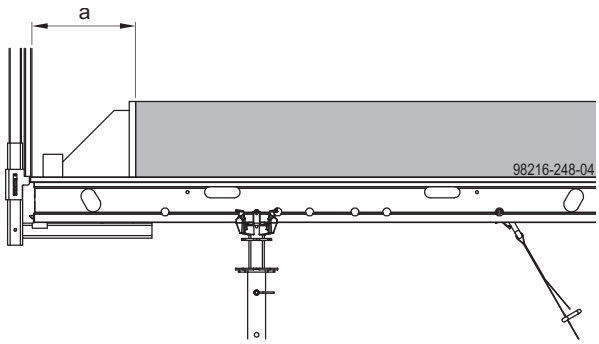
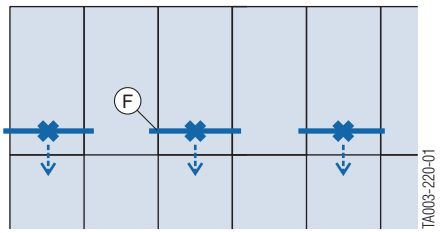
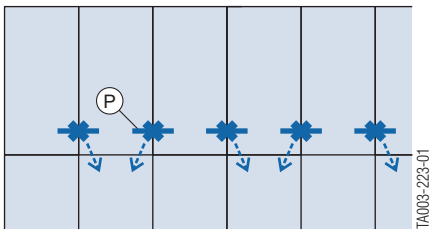
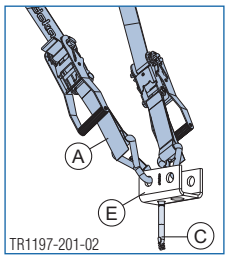
Note:
Always comply with the country-specific safety regulations! For lower room heights, the guardrail system can be temporarily removed and a personal fall-arrest system (PFAS) must be used instead (e.g. safety harness).

Practical example



Bracing at the structure edge

Attachment to grip hole

Situation 1	Situation 2
Load Class 1 as defined in EN 12811	Load Class 2 as defined in EN 12811
Permitted platform load p ≤ 0.75 kN/m²	Permitted platform load p ≤ 1.50 kN/m²
In this variant, bracing with a scaffold tube 1.50m is required at every 2nd panel and the last panel[1]. Make sure that the scaffold tube is correctly positioned: The scaffold tube has to tie back the adjacent panel as well.	In this variant bracing in the form of a short Tie rod 15.0 is required at every inter-panel joint. Make sure that the lashing straps are installed to left and right alternately.
	
	
Max. tie-back force: 3.50 kN	

Cube compressive strength	Max. tie-back force per lashing strap [kN]
C8/10 ($f_{ck,cube,current}$ = 10 N/mm²)	3.5
C12/15 ($f_{ck,cube,current}$ = 15 N/mm²)	4.5
C16/20 ($f_{ck,cube,current}$ = 20 N/mm²)	5.0
C20/25 ($f_{ck,cube,current}$ = 25 N/mm²)	6.0
C25/30 ($f_{ck,cube,current}$ = 30 N/mm²)	6.5

[1] ... Illustration
a ... min. 25 cm

A	Lashing strap 5.00m
C	Doka express anchor 16x125mm
E	Bracing shoe
F	Scaffold tube 48.3mm 1.50m
P	Tie rod 15.0 or Connecting pin 10cm + Spring cotter 5mm

Follow the instructions in section 'Tie-back with Lashing strap 5.00m and Doka express anchor 16x125mm'.

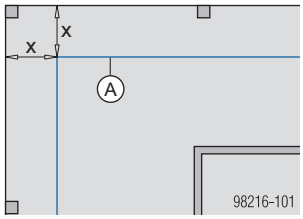
Formwork set-up at structure edge

WARNING

- ➤ No-one is allowed to step on to the formwork area before all safety measures have been complied with and all panels and infill areas securely stayed.
- ➤ Use appropriate personal fall-arrest systems when installing the handrail posts and protective gratings!

Formwork set-up in the typical zone

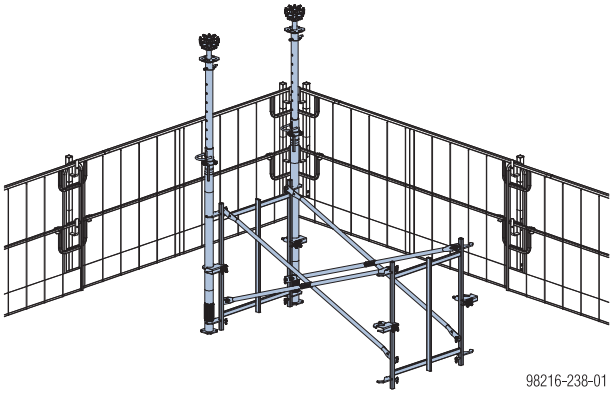
➤ Draw a vertical plan of the typical zone.



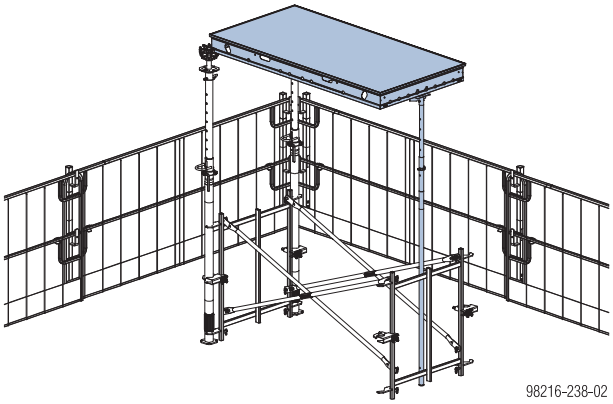
x ... see table in section 'Overview'

A Vertical plan

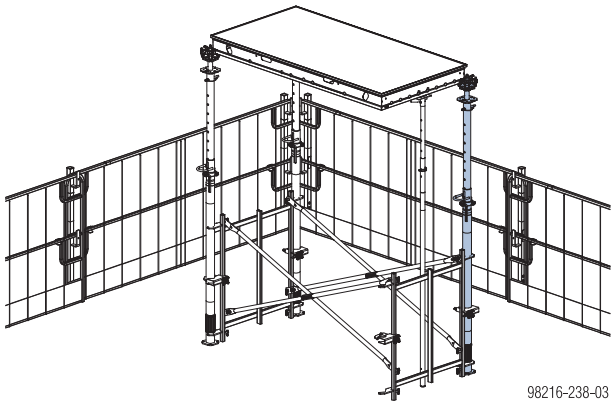
➤ Pre-assemble the unit consisting of bracing frames and diagonal crosses and set up the first two floor props (with support heads) at the appropriate positions.



➤ Engage the panel, raise the free end and support it with the assembling tool. Secure the assembling tool so that it cannot tip over.



➤ Secure another floor prop (with support head) to the bracing frame with the quick-fixing mechanism. Assembling tool remains securely propped in position. Max. inclination of the assembling tool with respect to the perpendicular: 5°).



CAUTION

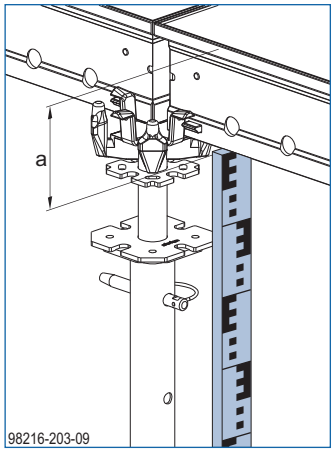
- ➤ When engaging and tilting up the panel, give the floor props additional fixing to prevent them tipping over (i.e. the Removable folding tripods alone are insufficient).

➤ Set up further panels in the same way, until only the planned infill zone is left unformed. Assemble units consisting of bracing frames and diagonal crosses.

➤ From now on, all the other rows of panels follow the standard set-up procedure.

Levelling the typical zone

➤ Adjust the panels at the corners to the desired room height minus 15 cm, with reference to the frame cross-profile.



a ... 15 cm

Securing the typical zone against tip-over

➤ See 'Ground rules for floor-slab formwork at the structure edge'.

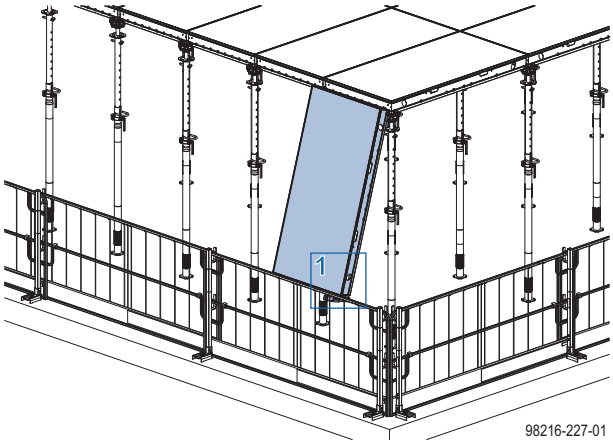
Adding cantilevering panels

Preparations

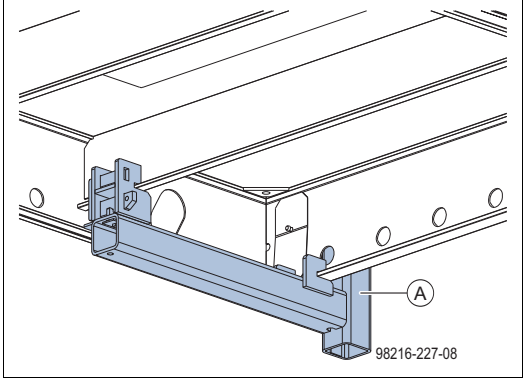
➤ Set at least **2 assembling tools** to the required length (= approx. room height + 15 cm).
➤ Roughly adjust the height of the floor prop, using the fastening clamp (required length = room height minus 31 cm).
➤ Fit the support head onto the floor prop and secure it with the pin.

Adding to narrowside of standard panels

➤ Engage the cantilevered panel in the support heads.
➤ Install Handrail-post shoe XP (see section 'Fall protection on the formwork').



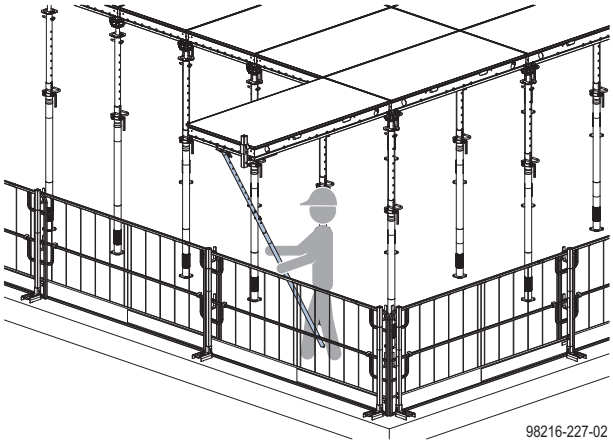
Close-up, Handrail-post shoe XP



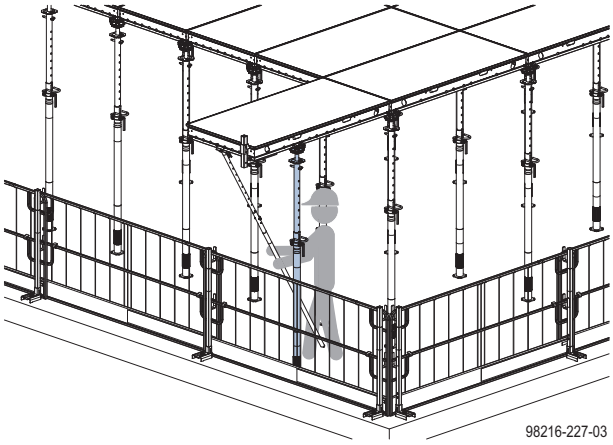
A DokaXdek handrail-post shoe XP

WARNING
➤ When putting up cantilevered panels, the assembling tools must always be held by one person to prevent it tipping over.

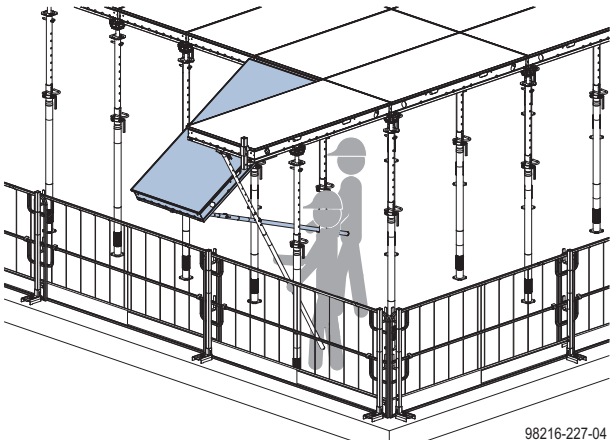
➤ Hook the assembling tool into the middle of the outside cross profile of the panel, raise the panel and secure the assembling tool so that it cannot tip over.



➤ Place a floor prop (plus support head) beneath the panel. Assembling tool remains securely propped in position.

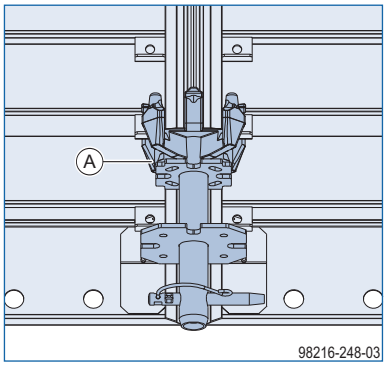


➤ Engage the next panel.
➤ If necessary, install Handrail-post shoe XP (depending on permitted influence width). Then tilt the panel up.



➤ Place a floor prop (plus support head) beneath the panel. Assembling tool remains securely propped in position.

Close-up, support head



A DokaXdek support head

➤ Tie back panels (see section 'Ground rules for floor-slab formwork at the structure edge').

WARNING

Risk of panels tipping over!

➤ Do not remove the assembling tool until after the bracing has been installed and secured!

➤ Set up further panels in the same way, until only the planned infill zone is left unformed. In this case, however, an extra support head is needed on the final panel.

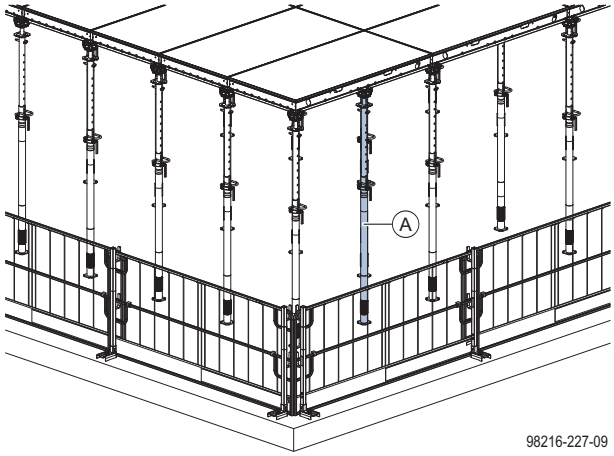
Adding to broadside of standard panels

NOTICE

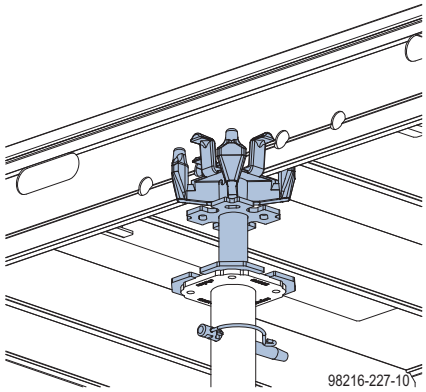
➤ Extend floor props with support heads at the middle point (by turning the adjusting nut) only until the prop encounters resistance from above. The panel must not be raised.

➤ To prevent tip-over, install a removable folding tripod at every floor prop that is not seated against a cross-profile stiffening plate.

➤ Shore the panels with floor props and support heads at the required position.



A Doka floor prop with DokaXdek support head



➤ All the other worksteps are the same as for adding cantilevering panels to the narrowsides of standard panels.

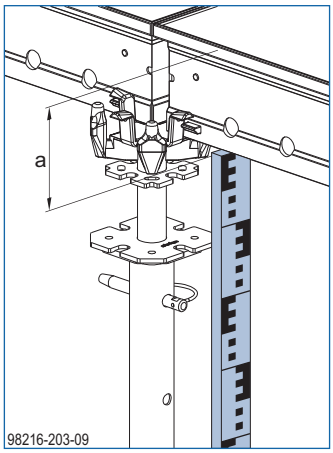
Levelling cantilevering panels

NOTICE

The lashing straps are allowed to be temporarily released while the panels are being levelled.

However, the lashing straps may only be released one at a time.

➤ Adjust the panels above the floor prop to the desired room height minus 15 cm, with reference to the longitudinal profile.



a ... 15 cm

Installing fall protection

For more information see sections 'Floor formwork around edges' and 'Fall protection on the formwork'.

Mounting fillers

Mounting fillers in the typical zone

➤ See section 'Forming infill zones'.

Mounting fillers between the cantilevering panels

- In order to be able to transfer the horizontal forces, the superstructure components must be firmly attached to one another.
- The bracing can be fastened to either the secondary or primary beam.

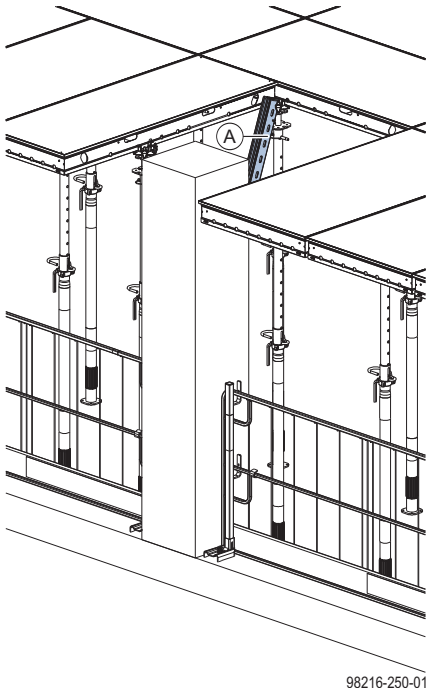
WARNING

➤ Secure cantilevered floor formwork to prevent lift-out and overturning.

➤ Secondary beams with stop-end formwork must be secured against horizontal pull-out.

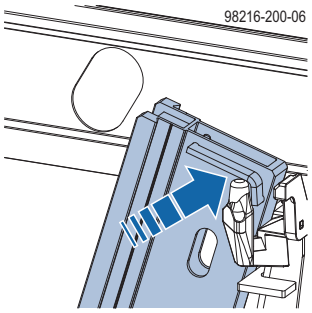
➤ In addition, if necessary, put up a protection platform on the structure (e.g. Folding platform K).

➤ Hook the infill beams into the heads.

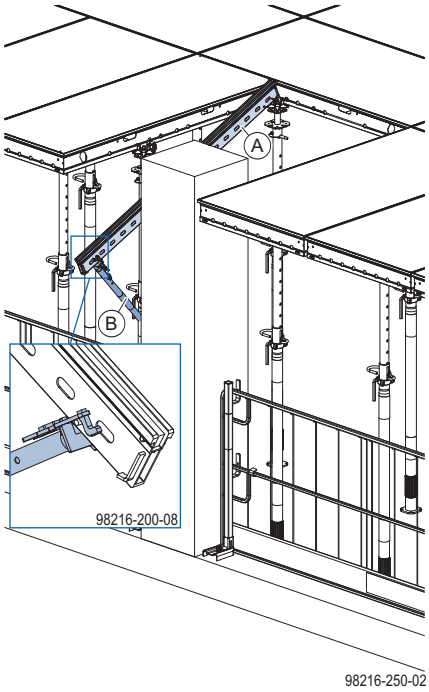


A DokaXdek infill beam

Make sure that the infill beam is correctly engaged in the pins of the head.

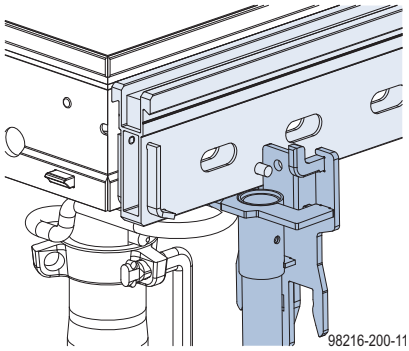


➤ With the side mount in the assembling tool, tilt the infill beam up and place it in the head.
The nub on the infill beam acts as a stop and prevents the assembling tool from slipping outward.

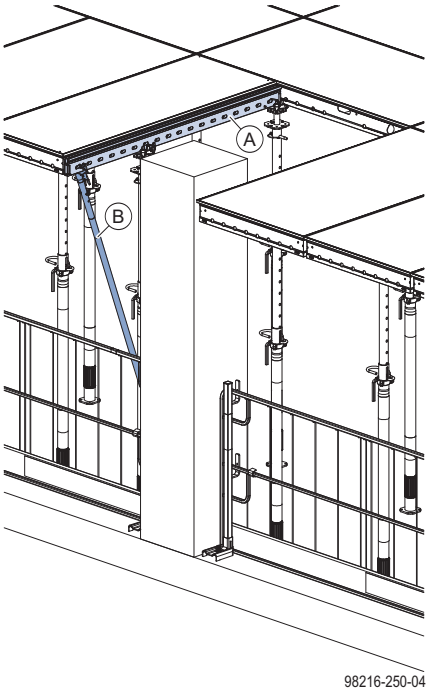


A DokaXdek infill beam
B DokaXdek assembling tool

The assembling tool must be seated against the pin of the infill beam, as illustrated.

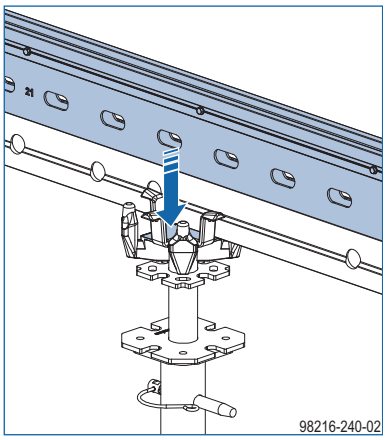


➤ The assembling tool for propping the infill beam remains in place.

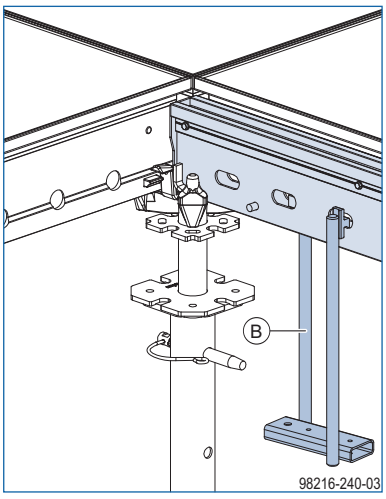


A DokaXdek infill beam
B DokaXdek assembling tool

Position on support head for 1.25 m point



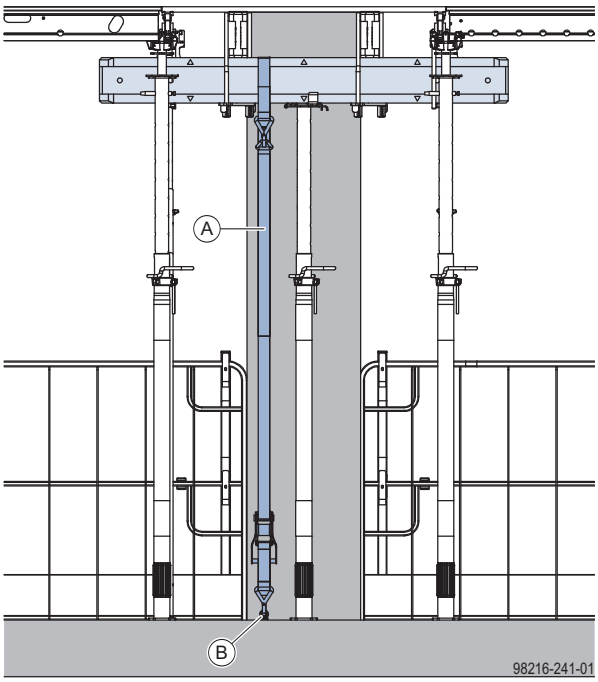
➤ Hook 4 suspension clamps into the infill beam, **as close as possible to each floor prop**.



B DokaXdek suspension clamp H

➤ Fit 2 Doka beams H20 into the suspension clamps, to serve as primary beams.

➤ Tie back each primary beam in the vertical with a lashing strap.



A Lashing strap 5.00m

B Doka express anchor 16x125mm

WARNING

Risk of infill beams toppling!

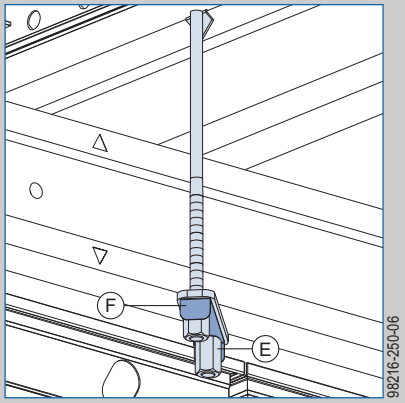
➤ Do not remove the assembling tool until after the bracing has been installed and secured!

➤ Remove the assembling tool underneath the infill beam.

CAUTION

There is a risk of the hexagon nuts working loose on the Brace stirrup 8.

➤ Secure the hexagon nuts on the Brace stirrup 8 with a **Safety plate for brace stirrup 8**.



Always bend the safety plate over the flat side of the hexagon nut.

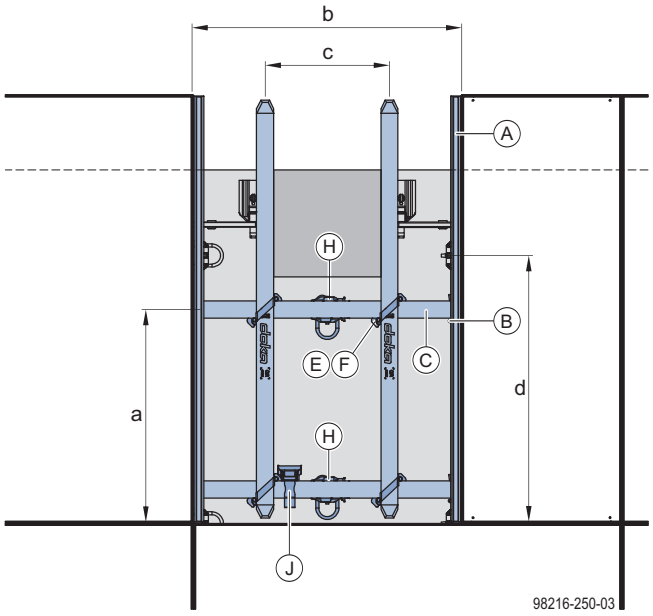
Use each safety plate once only.

➤ Mount Doka beams H20 as secondary beams and fix them with Brace stirrups 8.

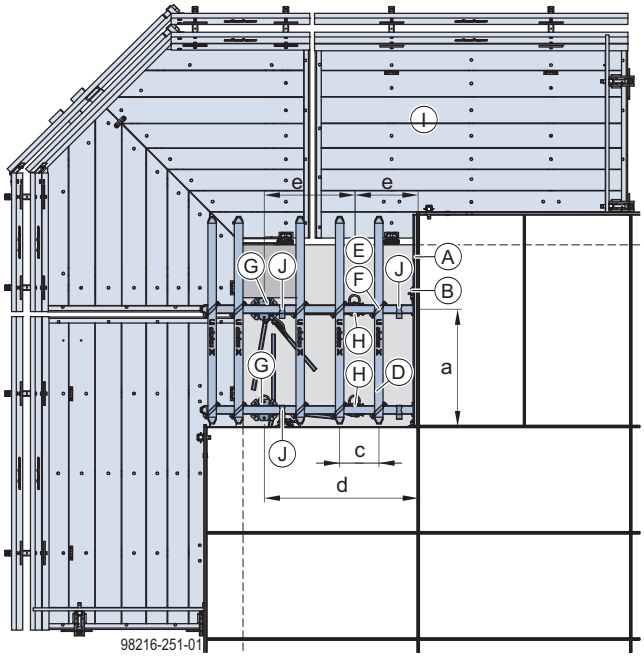
➤ Install the filler.

Practical examples

Infilling between cantilevered panels



Infilling at corner of building



Permissible dimensions [cm]

Permitted slab thickness	40	65
DokaXdek panel	1.00x2.00m	
a (position of outside primary beam)	≥ 100	
b (max. infill width **without** centred additional prop)	≤ 150	≤ 100
b (max. infill width **with** 1 centred additional prop)	≤ 250	≤ 180
c (max. secondary-beam spacing)	50	33
d (position of floor prop)	> 110	
e (max. spacing of props)	125	90

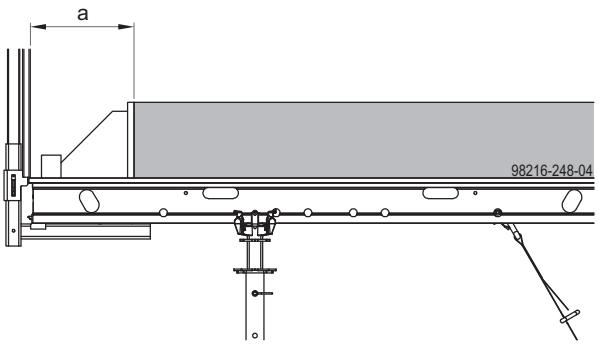
A DokaXdek infill beam 2.00m
B DokaXdek suspension clamp H
C Doka beam H20 as primary beam
D Doka beam H20 as secondary beam (e.g. 2.45m)
E Brace stirrup 8
F Safety plate
G Floor prop Eurex
Removable folding tripod
Lowering head H20
H Floor prop Eurex and Supporting head H20 DF
I Protection platform, e.g. folding platform
J Lashing strap 5.00m

NOTICE

Put up the intermediate props so that they force-fit. It is not allowed to make some props higher than others!

Pouring

WARNING
Ensure correct direction of pouring!
➤ Always work outwards from the middle of the building towards the edge of the slab when pouring.



a ... min. 20 cm

Permitted slab thickness [cm] with Floor props Eurex 30[1)]

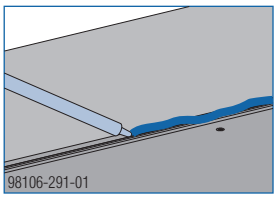
Panel size	**without** additional pre-cautions	**with** additional pre-cautions[2)]	Flatness deviation as per DIN 18202, Table 3
1.00x2.00m	40 cm	65 cm	Line 6
0.75x2.00m	55 cm	75 cm	Line 6

[1)] For use of the Eurex 20 top or Eurex 20 eco floor props, follow the directions in section 'Structural design of floor props'.

[2)] See section 'Additional precautions for slab thicknesses of up to 75 cm'

To protect the surface of the form-facing, we recommend using a vibrator with a protective rubber cap.

PU foam (e.g. Hilti CF-FW 500 or Würth UNI PUR) can be used to seal any gaps between the formwork and the walls.



Stripping the formwork

NOTICE
- Comply with the stipulated stripping times.
- Always strip out the formwork in reverse order.
- Follow the directions in the following sections:
  - 'Reshoring props, concrete technology and stripping out'
  - If required 'Additional precautions for slab thicknesses of up to 75 cm'

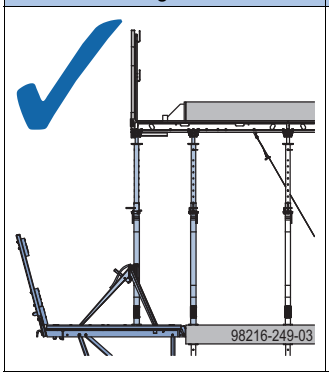
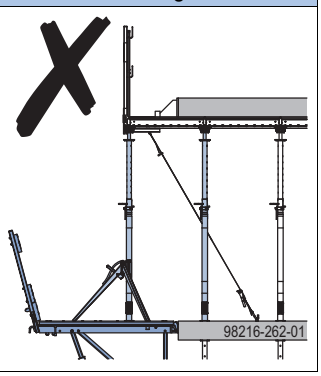
Variant 4 - Propping the cantilevering panels on Folding platform K

Folding platform K

At the structure edge, cantilevered DokaXdek panels with floor props can also be supported on Folding platforms K where needed.

WARNING

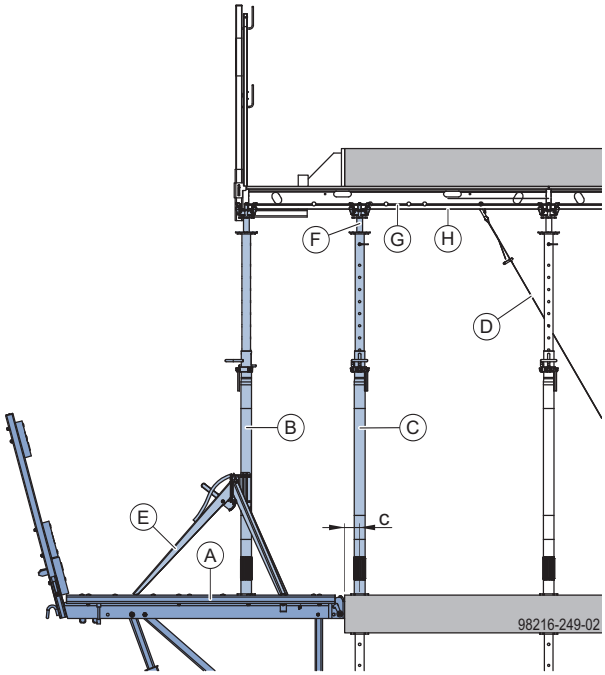
➤ Only lengthways cantilevered panels may be shored on the Folding platforms K.

Right!	Wrong!
	

WARNING

➤ The floor props on the Folding platform K are only for use as a set-up aid, and not for transferring loads.

➤ The loads which occur as a result of concreting must be transferred via the floor props and support heads at one of the propping points (middle point or 1.25m point) of the DokaXdek panel (minimum distance **c** from edge: 10 cm).
Always use only the next propping point toward the inside for this purpose.



c ... min. 10 cm

A	Doka folding platform K
B	Doka floor prop Eurex + DokaXdek support head (as set-up aid only)
C	Doka floor prop Eurex + DokaXdek support head
D	Bracing
E	Removable folding tripod
F	Outer propping point (1.25 m) of the panel
G	Middle point of the panel
H	Inner propping point (1.25 m) of the panel

Closing the formwork

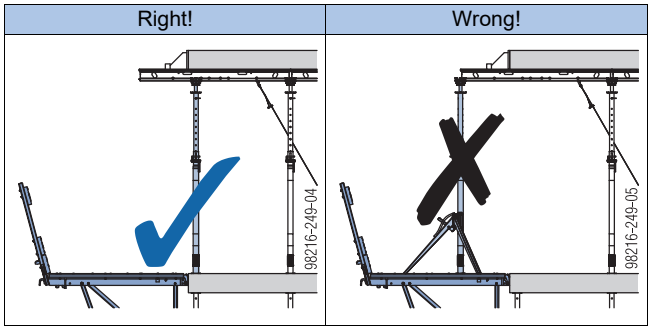
- ➤ Put up the formwork in the typical zone, level it and tie it down.
- ➤ Engage the cantilevered panel in the support heads.
- ➤ Hook the assembling tool into the middle of the outside cross profile of the panel, raise the panel and secure the assembling tool so that it cannot tip over.
- ➤ Support the 1st panel on the Folding platform K with a support head and floor prop, and secure the prop with a Removable folding tripod.
- ➤ Engage the next panel.
- ➤ Swing panel up.
- ➤ Support the panels on the Folding platform K with a support head and floor prop.
- ➤ Level the floor-slab formwork in the edge zone.
  Important: When extending the inner floor props with support head (**c**), turn the adjusting nut until the prop encounters resistance from above!
- ➤ Install bracing and take suitable precautions to prevent lift-out of the formwork by the wind for example (see section 'Floor formwork around edges').
- ➤ Put up the guardrail system; wear a personal fall-arrest system (e.g. safety harness) when doing this.

CAUTION

- ➤ Every prop with support head that is not positioned at a panel corner or a cross-profile stiffening plate must be secured against tip-over with a Removable folding tripod.

Stripping the formwork

- ➤ Take down the guardrail system; wear a personal fall-arrest system (e.g. safety harness) when doing this.
- ➤ Remove the bracing and the formwork lift-out precautions.
- ➤ First remove the outer floor props with support heads on the Folding platform K and only then remove the inner floor props.



- ➤ Tilt down the panels.

Additional areas of use

Inclination adjustment

CAUTION

➤ If the slab has an inclination, a separate structural design appraisal and definition of the necessary additional precautions (e.g. bracing) are necessary.

NOTICE

The transfer of the horizontal loads from the following points via the braces must be ensured:

- imperfection
- inclinations
- work operations
- props not vertical
- concrete pressure
- wind

NOTICE

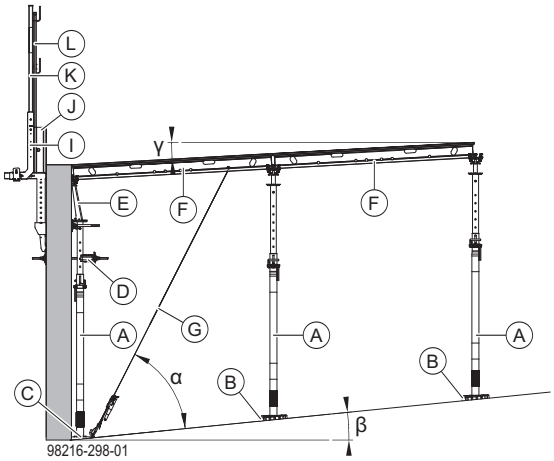
Take the angle of inclination of the working surface into account for the edge protection system! (See EN 13374).

Compensating plates can be used to compensate for floor-slab angles of inclination up to 16 % in all directions.

Follow the directions in the 'Doka express anchor 16x125mm' and 'Lashing strap 5.00m' User Information booklets.

Forming inclined floor-slabs

Doka floor props are in the vertical



α ... approx. 60°
β ... max. 16%
γ... max. 5% (in longitudinal and transverse direction)

NOTICE

Because of the slab inclination, additional horizontal forces occur!

Closing the formwork

NOTICE

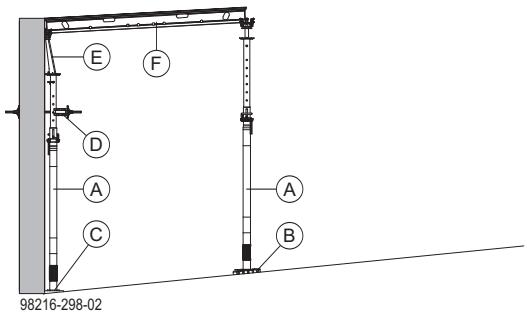
Ensure the stability of all components and units during all phases of the construction work!

➤ Set up the Doka floor props and use compensating plates to plumb the props. Use wooden wedges close to the edge of the slab where space is restricted.

➤ Use DokaXdek wall clamps to secure the floor props to prevent them falling over.

➤ Install a DokaXdek wall head.

➤ Engage the panel, raise the free end and fix it.



A	Doka floor prop Eurex
B	Compensating plate
C	Wooden wedge
D	DokaXdek wall clamp
E	DokaXdek wall head
F	DokaXdek panel

Pouring

➤ Before pouring, recheck all floor props.

- The fastening clamp **(A)** has to be pushed all the way into the floor prop.
- Adjusting nut **(B)** has to be tightened into contact with the fastening clamp.

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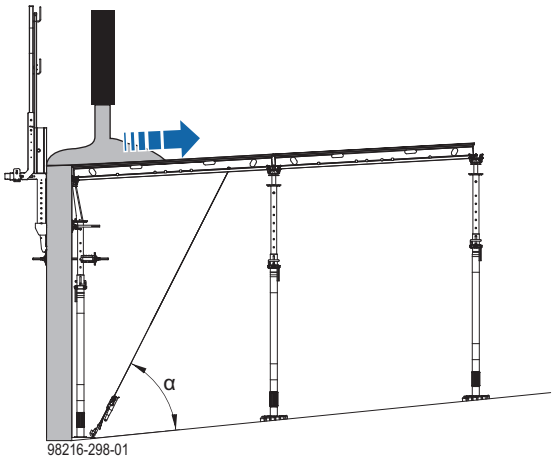
WARNING

➤ Make sure that pouring is carried out in the correct direction (from 'bottom to top')!



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Stripping the formwork

NOTICE

- Comply with the stipulated stripping times.
- Always strip out the formwork in reverse order.
- Also observe section Reshoring props, concrete technology and stripping out.

Additional precautions for slab thicknesses of up to 75 cm

Typical zone

The DokaXdek panels are designed for slab thicknesses up to 75 cm.

No additional precautions are needed for slab thicknesses from 0 to 40 cm.

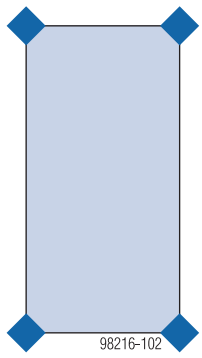
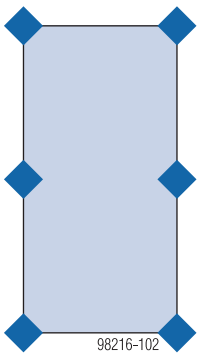
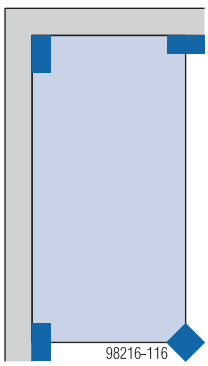
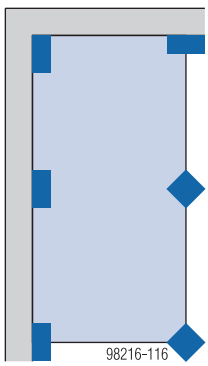
Suitable additional precautions are needed for slab thicknesses from 40 to 75 cm.

Permitted slab thickness [cm] with additional precautions with Floor props Eurex 30[1)]

Panel size	with no additional precautions	with additional precautions	Flatness deviation as per DIN 18202, Table 3
1.00x2.00m	40	65	Line 6
0.75x2.00m	55	75	Line 6
1.00x1.00m	65		Line 6
0.75x1.00m	75		Line 6
0.75x0.75m	75		Line 6

[1)] For use of the Eurex 20 top or Eurex 20 eco floor props, follow the directions in section 'Structural design of floor props'.

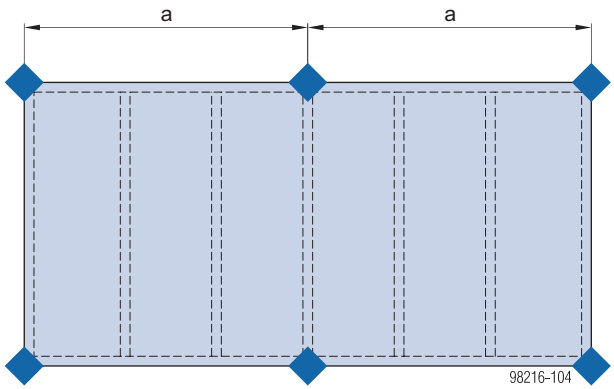
Note:
The values refer to the structural design of the panels. Follow the directions along with those in section 'Structural design of floor props'.

Overview of additional precautions	
with no additional precautions	with additional precautions
	
Shoring with 4 support heads (at the corners)	Shoring with 4 support heads (at the corners) + additional shoring in mid-span
Overview with wall heads	
	

NOTICE
The additional propping is mounted AFTER the formwork has been secured against tip-over.

Mounting additional propping

- Form the typical zone (see section 'Closing the formwork').
- Level the formwork.
- Set up additional propping (floor props with support heads) at the middle point of the panels.



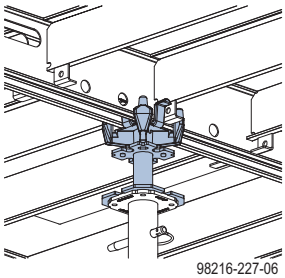
a ... 1.00 m

- Turn the adjusting nut to extend the floor prop with support head until contact is made with the panel frame.

WARNING
- Extend the floor props of the additional propping only far enough to make contact between head and panel frame, as otherwise the floor props might be overloaded.
- The DokaXdek heads must always be fixed to the floor prop with the correct pin.

At the middle point of the panel, floor props with support head are held by a cross-profile stiffening plate and do not need additional stabilisation.

Make sure that the head is correctly held by the cross-profile stiffening plate.



Structural design

Permitted slab thicknesses [cm] with 6 floor props per panel

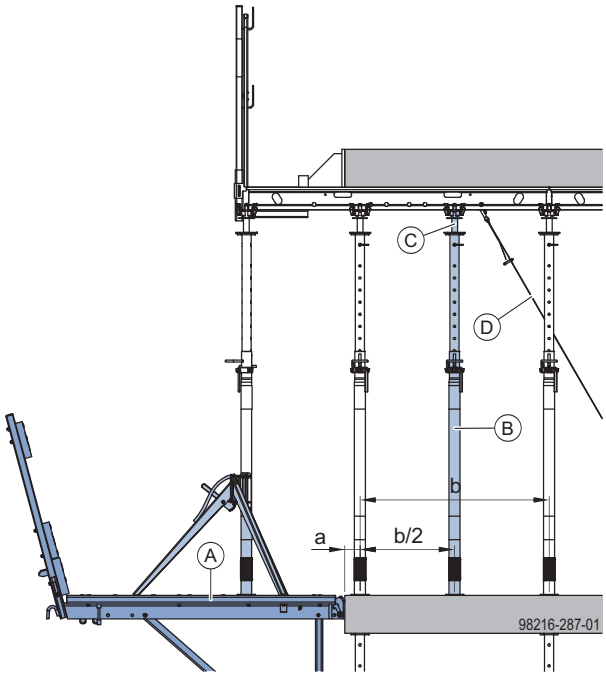
Room height [m]	Eurex 20																	
	250		300		300 LW		350		350 LW		400		eco 450[1]		550		700[2]	
	Panel		Panel		Panel		Panel		Panel		Panel		Panel		Panel		Panel	
	1.00 m	0.75 m	1.00 m	0.75 m	1.00 m	0.75 m	1.00 m	0.75 m	1.00 m	0.75 m	1.00 m	0.75 m	1.00 m	0.75 m	1.00 m	0.75 m	1.00 m	0.75 m
7.15																	57.7	75.0
7.05																	60.2	
6.95																	62.4	
6.85																		
6.75																		
6.65																		
6.55																		
6.45																		
6.35																		
6.25																		
6.15																		
6.05																		
5.95																		
5.85																		
5.75																		
5.65															51.4	68.5	65.0	
5.55															54.1	72.2		
5.45															56.6	75.0		
5.35															59.6			
5.25															62.4			
5.15															65.0			
5.05																		
4.95																		
4.85																		
4.75																		
4.65													62.7	75.0				
4.55													65.0					
4.45																		
4.35																		
4.25																		
4.15											52.2	69.6						
4.05											56.1	74.8						
3.95											59.9	75.0						
3.85											64.0							
3.75											65.0							
3.65							50.3	67.1	49.8	66.4								
3.55							54.4	72.6	53.2	70.9								
3.45							58.3	75.0	57.5	74.1								
3.35							62.4		61.9	74.4								
3.25							65.0		65.0	75.0								
3.15			50.0	66.7	49.8	66.4												
3.05			54.4	72.6	52.7	70.3												
2.95			58.8	75.0	57.6	73.4												
2.85			62.4		62.9	75.0												
2.75			64.6		65.0													
2.65	54.7	72.9	65.0															
2.55	58.5	75.0																
2.45	61.8																	
2.35	64.6																	
2.25	65.0																	
2.15																		

Allow for deflections as per DIN 18218 (see section 'Ground rules').

[1] available only in the Eurex 20 eco version
[2] The erection methods shown apply to room heights up to 6.00 m.

Structure edge

At the structure edge, set up additional propping (floor props with support heads) at the middle point of the floor props.



a ... min. 10 cm
b ... see section 'Overview'

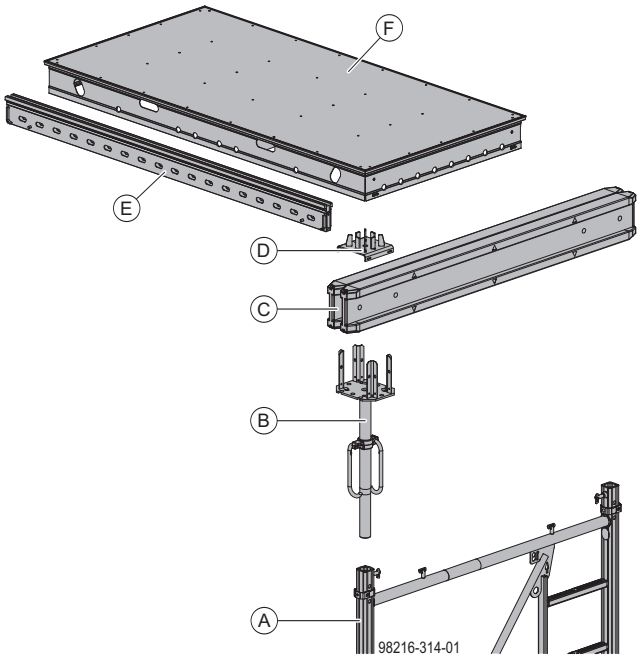
A	Doka folding platform K
B	Doka floor prop Eurex
C	DokaXdek support head
D	Bracing

Use on load-bearing towers

The DokaXdek shoring head H enables the use of DokaXdek panel floor formwork on the Load-bearing tower Staxo 100.

Follow the directions in the 'Load-bearing tower Staxo 100' User Information booklet.

Basic design concept



A	Load-bearing tower Staxo 100
B	4-way screw-jack head
C	Double Doka beam H20 or double Doka beam XT20
D	DokaXdek shoring head H
E	DokaXdek infill beam
F	DokaXdek panel 1.00x2.00m or 0.75x2.00m

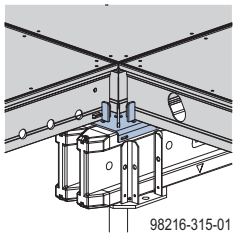
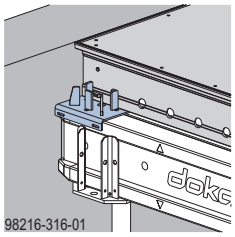
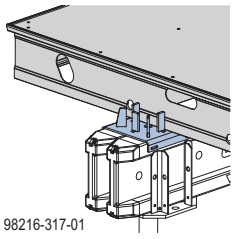
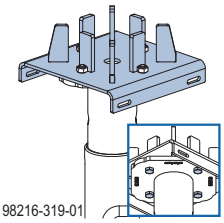
Structural design

Design with double Doka beam H20 or XT20 as primary beams in the superstructure and Load-bearing tower Staxo 100

Permitted slab thickness [cm] for design with double Doka beam XT20

Max. slab thickness	Flatness deviation as per DIN 18202, Table 3
For design with double Doka beam H20	
35	Line 6
For design with double Doka beam XT20	
40	Line 6

Applicational range

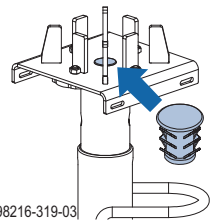
Position in field	Position in wall area
 98216-315-01	 98216-316-01
Position in cantilevered area	**Use in combination with floor prop [1)]**
 98216-317-01	 98216-319-01

[1)] ... The DokaXdek shoring head H is bolted to the head plate of the floor prop using 4 hexagon bolts M8x20 + nuts M8 incl. wedge disc.

Note:
Bolting the shoring heads onto multi-purpose walings is not possible ‘continuously’.

WARNING
➤ Lifting up the panels in the shoring heads (similar to use with DokaXdek support heads) is not permitted!

When used on a floor prop, the Universal plug R20/25 can be used to close the centre hole. This protects the floor prop from concrete spatter.

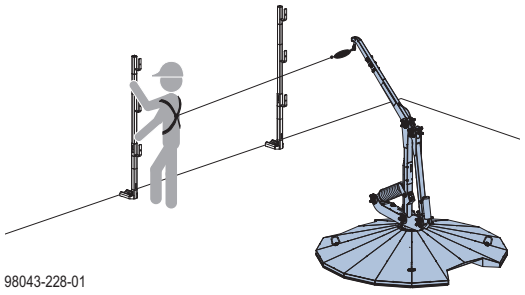


Assembly

WARNING
Risk of tipping over!
If loads (primary beams, formwork panels) are not centred, stability can be impaired!!
- ➤ All loads must be transferred centrally.
- ➤ Make sure that the structure is sufficiently stable.
- ➤ Consider the loads from slab stop-ends.

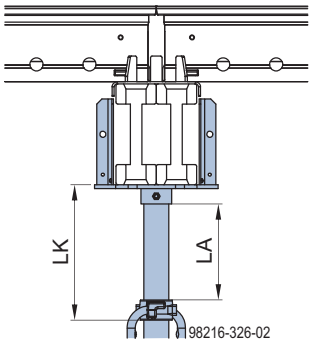
WARNING
Risk of falling at open edges!
- ➤ The crew must use personal fall-arrest systems (e.g. safety harnesses) until all fall protection has been installed.
- ➤ Suitable attachment points must be defined by an approved person appointed by the contractor.
- ➤ As part of a risk assessment, evaluate the use of a personal fall-arrest system. Check the stability of the load-bearing tower.

A fall arrester such as the FreeFalcon provides a mobile anchorage point for the safety harness.



Symbolic representation

NOTICE
Take the following into account in planning:
- The LK value must be at least 28 cm in order to achieve the lowering distance/screw-jack travel LA of 20 cm required for stripping. Take into account the height levelling of the formwork!



- Because of manual handling in stripping out, the maximum weight of the primary beams should be < 50 kg! This is particularly important at closure zones and in towers that cannot be moved out for dismantling.
- Brace cantilevered panels and infill beams!
- Replace the topmost horizontal crosses with assembly planking.
- Underneath the topmost ‘storey’, construct an uninterrupted assembly level extending for the entire area to be formed. Whenever possible, compensate for differences in height due to different frame heights, or install clearly visible steps.

Preparations

Below are some general notes for safe use.

For a detailed assembly sequence, follow the directions in the User Information booklets 'Load-bearing tower Staxo 100' and 'Eurex 60 550'.

- ➤ Interconnect the towers (bracing for 6.00 m + towers).
- ➤ Tie-back towers and anchor them to the structure (bracing for 6.00 m + towers).
- ➤ Install assembly planking on the towers.
- ➤ Install an assembly level between the towers.

Note:
Pay attention to the required lowering distance of the 4-way screw-jack heads for stripping.

Installing the primary beams

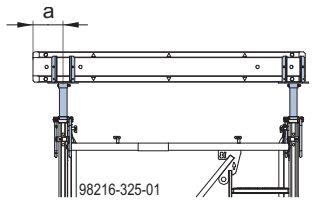
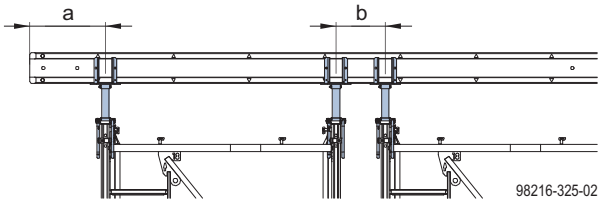
When planning the load-bearing towers and the primary beams of the superstructure, the following must be observed:

WARNING

Formwork tipping due to lack of stability (overturning of the superstructure)!

➤ Please note the following table regarding beam lengths and beam cantilevers.

Permissible beam cantilever

Beam length 1.80m in combination with a tower

Permissible cantilever **a** ≤ 20 cm
Beam length 3.90m / 4.50m / 4.90m in combination with 2 towers

Permissible cantilever **a** ≤ 50 cm

b ... The distance between the Staxo towers must be adjusted accordingly so that the permissible beam cantilever is not exceeded!

NOTICE

- By complying with the permissible cantilever of the respective beam lengths, installing the panels from the assembly decks and attaching edge protection to the structure, stability in accordance with standard EN 12812 is guaranteed at every stage.
- The static load-bearing capacity of the double Doka beam H20 and XT20 is guaranteed when the cantilevers are maintained up to the above-specified permissible slab thickness of 35 cm and 40 cm with double Doka beam XT20.
- If, for example, due to the geometric conditions of the structure, a different beam length (e.g. 2.45m) (beam cantilever > 20 cm) or a different beam cantilever is required, project-specific extra measures and proof of stability are required!

  The load-bearing capacity of the double H20 beams with regard to concrete loads must be verified separately!

Installation of DokaXdek shoring heads and DokaXdek panels

WARNING

➤ Secure cantilevered floor formwork to prevent lift-out and overturning.

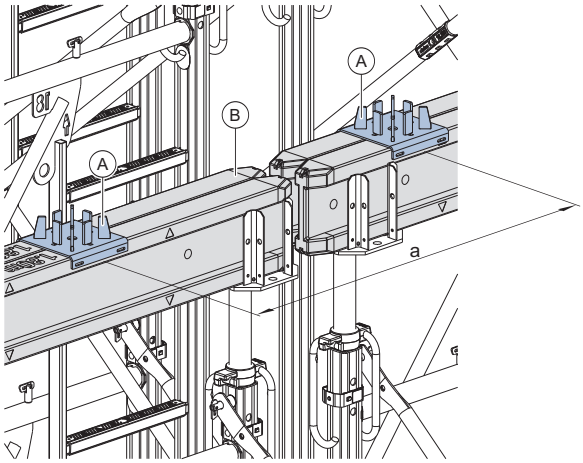
➤ Secure secondary beams with slab stop-ends to prevent horizontal pull-out.

WARNING

➤ The DokaXdek panels may only be inserted into the DokaXdek shoring heads from the assembly level.

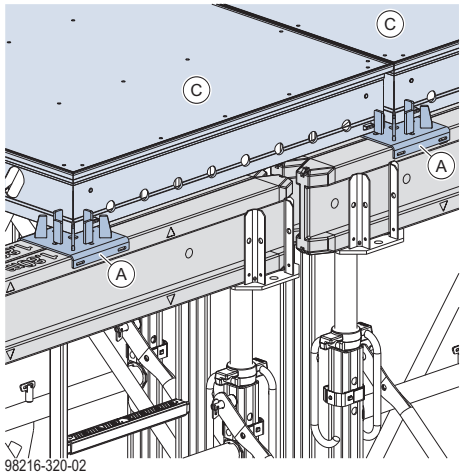
➤ Insertion from the panel level is prohibited (stability not guaranteed at all times)!

➤ Place the DokaXdek shoring heads H on the primary beams at a distance to the panel width of the DokaXdek panels (a = 1.0 m or 0.75 m).



➤ Lift the panels individually into the load-bearing tower and move them to the place of use.

➤ Insert the panels from the assembly level transversely to the primary beams into the DokaXdek shoring heads H.



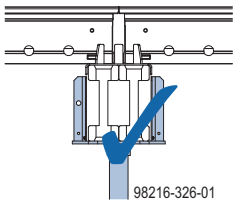
A	DokaXdek shoring head H
B	Double Doka H20 beam as primary beam
C	DokaXdek panel

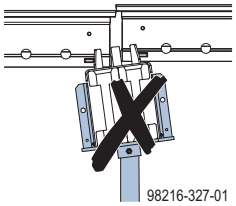
➤ Brace cantilevered areas, especially at the slab edge.

WARNING

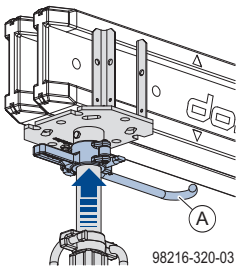
➤ Before entering or concreting, check that the 4-way screw-jack heads are vertical and not tilted.

➤ If necessary, position the formwork straight before installing the fillers.





Use Split nut B (A) for straight positioning.



Installing cantilevered DokaXdek panels at wall junctions

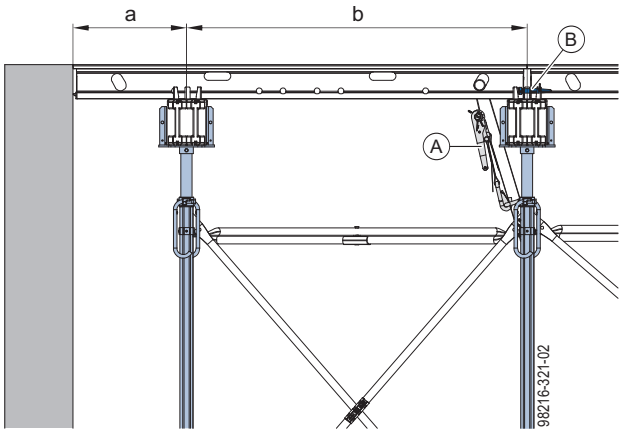
WARNING

Fall hazard due to tilting panels and closure zones at the edge!

➤ Brace cantilevered panels and closure zones before concreting or accessing them.

➤ Do not exceed the maximum permissible cantilever.

➤ Secure cantilevered panels to the typical zone using Connecting pins 10cm and Spring cotters 5mm.



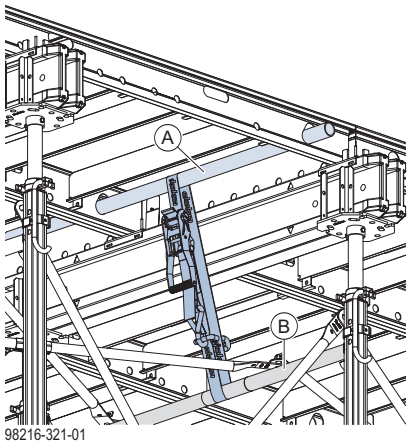
a ... permissible cantilever ≤ 500 mm
b ... 1500 mm

A Bracing on the horizontal profile of a Staxo 100 frame

B Connecting pin 10cm + Spring cotter 5mm

Bracing of the cantilevered panels with scaffold tubes and lashing straps

Means of attachment to Staxo 100 frame



A For panel 2.00x1.00m: Scaffold tube 48.3mm 1.50m
For panel 2.00x0.75m: Scaffold tube 48.3mm 1.00m

B Horizontal tube of the Staxo 100 frame

Permissible tie-back force on the horizontal tube of the Staxo 100 frame: 3.5 kN

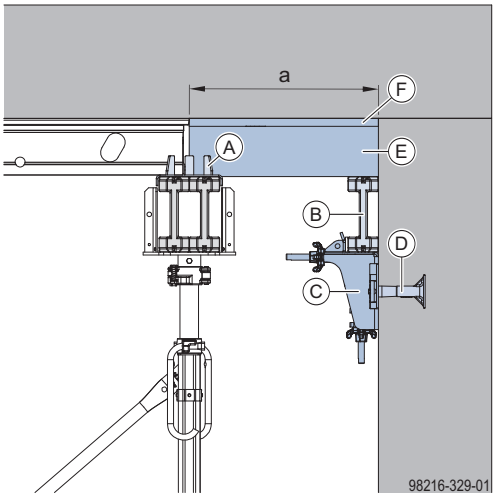
Note:
Also brace cantilevered closure zones on site!

For installing cantilevered panels at the structure edge, follow the directions in section 'Formwork set-up at structure edge'.

Forming infill zones

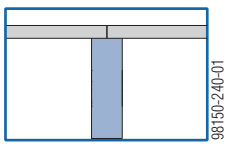
Infilling along wall connections

The permissible closure width **a** must be determined on a project-specific basis!



A	DokaXdek shoring head H
B	Doka beam H20
C	Wall-formwork support angle
D	Bridge edge beam anchor 15.0 + Screw-in cone 15.0
E	Squared timber
F	Formwork sheeting

Place a squared timber wherever there is to be a joint between the panels.



Note:

- When dimensioning the squared timber and formwork sheeting, take into account the overall height of the DokaXdek panel.
- Nail the squared timbers to the Doka H20 beams.

Closures between 2 DokaXdek forming-sections

Max. infill width 'a' for slab thicknesses of up to 40 cm

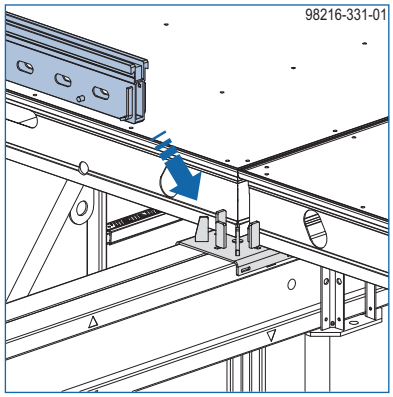
Sheet thickness	Type of sheet	
	Doka formwork sheet 3-SO [1]	Multi-ply formwork sheet [2]
18 mm	—	53 cm
21 mm	36 cm	60 cm
27 mm	51 cm	—

[1] The computed values apply to the secondary (i.e. weaker) load-bearing direction,

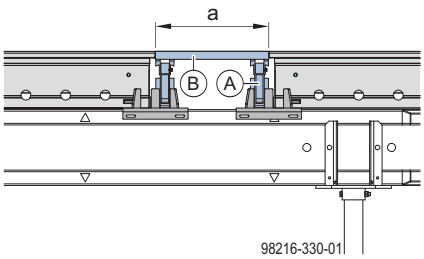
[2] Mean flexural modulus of elasticity where sheet moisture content is 10±2%: ≥ 5600 N/mm²
Characteristic flexural strength where sheet moisture content is 10±2%:
≥ 19 N/mm²

Installation:

➤ Insert infill beams into DokaXdek shoring heads H.



➤ Install the filler.



A	DokaXdek infill beam
B	Formwork sheeting

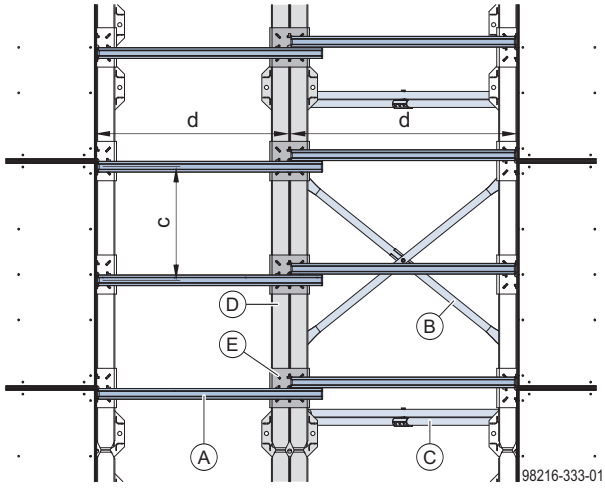
Closure with additional primary-beam unit

The closure zone can also be established flexibly with an additional primary-beam unit (using a multi-plane tower) and by overlapping the infill beams.

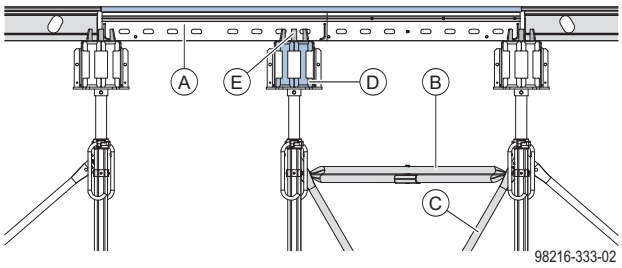
Max. secondary-beam spacing, according to the sheeting used

Slab thickness [cm]	Max. secondary-beam spacing **c** [m] when using the following sheeting					
	3-SO 21 mm	3-SO 27 mm	Dokaplex 18mm	Dokaplex 21mm	DokaPly eco 18mm	DokaPly eco 21mm
Limit of deflection	l/350	l/350	l/350	l/350	l/350	l/350
up to 18	0.75	0.75	0.50	0.75	0.50	0.667
up to 25	0.667	0.75	0.50	0.667	0.50	0.50
up to 30	0.667	0.75	0.50	0.625	0.50	0.50
up to 40	0.625	0.75	0.50	0.50	0.33	0.50

In accordance with EN 12812, this allows for a service load of 0.75 kN/m² and a variable load of 10% of a massive concrete floor-slab, totalling at least 0.75 kN/m², but no more than 1.75 kN/m² (assuming a fresh-concrete density of 2500 kg/m³).
Only the dead weight of the formwork and fresh concrete has been allowed for in calculating deflection.
In the case of cavity flat-slab floors, significantly lower slab loads occur.

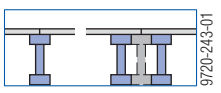


d ... ≤ 1.0 m



A DokaXdek infill beam 1.00m in a telescopic arrangement
B Diagonal cross 9.100 horizontal for multi-plane tower
C Diagonal cross 18.100 vertical for multi-plane tower
D Primary beam
E DokaXdek shoring head H

Place a (double) infill beam wherever there is to be a joint between the panels.



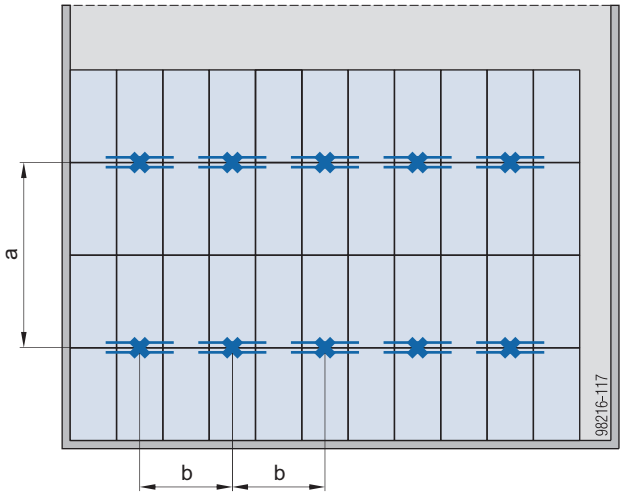
Windproofing

	Bracing design	
	Without bracing	 Bracing of panels with shoring head
Permissible peak velocity pressure q [kN/m²]	-	0.5
Permissible wind speed [km/h]	< 35	102

	Bracing the panels on the shoring heads

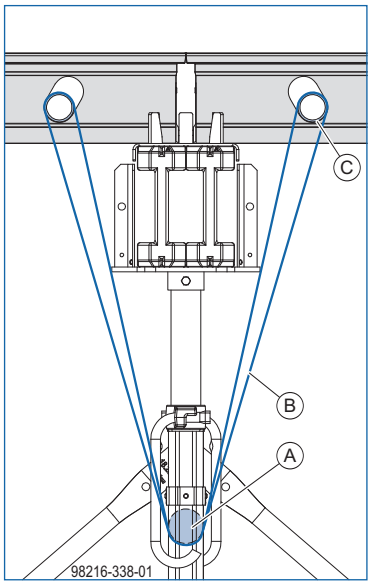
NOTICE

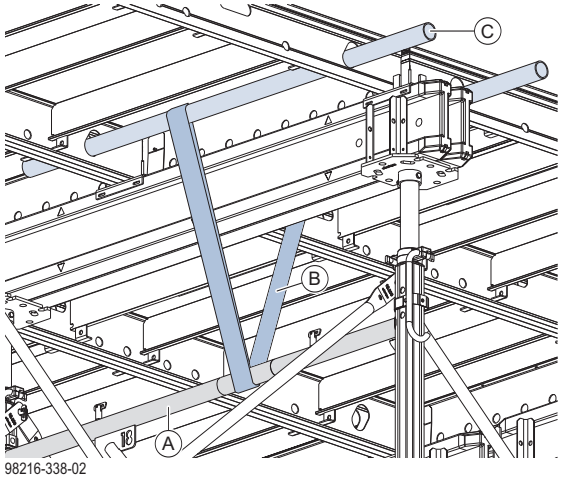
Each panel must be braced at least once! The bracing is carried out using two Scaffold tubes 48.3mm in the panels, which are tensioned around the horizontal tube of the Staxo 100 frame using a lashing strap.



a ... each panel must be braced once: 4 m
b ... every 2nd panel must be braced once: 2 m

Bracing detail





A Horizontal tube of the Staxo 100 frame
B Lashing strap
C Scaffold tube 48.3mm

Dismantling

NOTICE

- As early as in the planning phase, consideration should also be given to the dismantling operations (e.g. travelling/towing the load-bearing tower/unit into the reach of the crane for safe repositioning or for horizontal on-ground dismantling)!
- All steps (assembly and disassembly) must be carried out from the assembly level or a service tower (e.g. a scissor-lift working platform).
- For safe removal of the formwork components, depending on propping height, use appropriate lifting equipment (scissor-lift working platform, forklift, etc.) and appropriate transport frames.

WARNING

Risk of falling at open edges!

- ➤ After removal of the fall protection, a personal fall-arrest system must be used.
- ➤ Suitable attachment points must be defined by an approved person appointed by the contractor.
- ➤ As part of a risk assessment, evaluate the use of a personal fall-arrest system. Check the stability of the load-bearing tower.

For suitable attachment points for the personal fall-arrest system, see the 'Load-bearing tower Staxo 100' User Information booklet!

A fall arrester such as the FreeFalcon provides a mobile attachment point for the PFAS.

WARNING

Danger from falling objects!

- ➤ During all operations, ensure that no other persons are allowed anywhere near the area where assembly is being carried out!
- ➤ Mark or cordon off the area concerned.
- ➤ It is forbidden to enter, pass through or be in the danger zone underneath a suspended load.
- ➤ Secure all parts (e.g. with ropes, etc.) so that they cannot drop.
- ➤ All the work of dismantling the superstructure is carried out from the assembly level.

WARNING

Risk of tipping over!

If loads (e.g. primary beams, secondary beams, formwork sheets) are not centred, stability can be impaired!!

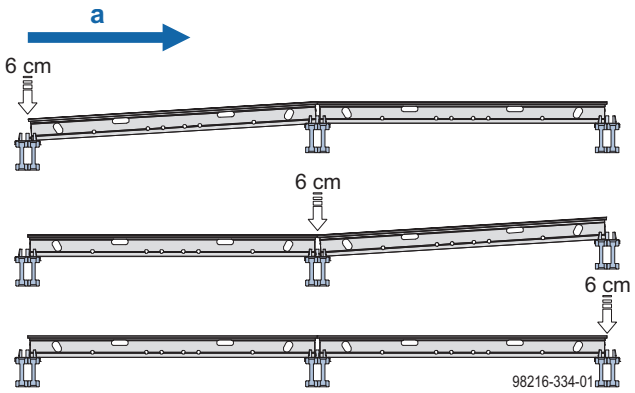
- ➤ Always centre all loads.
- ➤ Make sure that the structure is sufficiently stable.
- ➤ Consider the loads from slab stop-ends.

Dismantling the superstructure

Lowering:

- Safe dismantling of the superstructure is carried out from the assembly level in or between the Staxo towers.
- For safe removal of the formwork components, depending on propping height, also use a scissor-lift working platform and appropriate transport frames.
- Remove longitudinal connectors between the primary beams (e.g. splice plates).
- All loose parts must be removed (e.g. on the assembly level).
- Lower the floor formwork in two stages:
  - **1st stage:**
    Beginning from one side, lower all primary beam rows continuously (see illustration 'Lowering operation') **by 6 cm** until all panels are at the same level.
    Pull down any panels that are stuck to the slab or held in place by nails until the panels are back in the shoring heads.
  - **2nd stage:**
    Beginning from one side, lower all primary beam rows continuously (see illustration 'Lowering operation') **by a further 14 cm** (total lowering distance = 20 cm) until all panels are at the same level.

Lowering operation

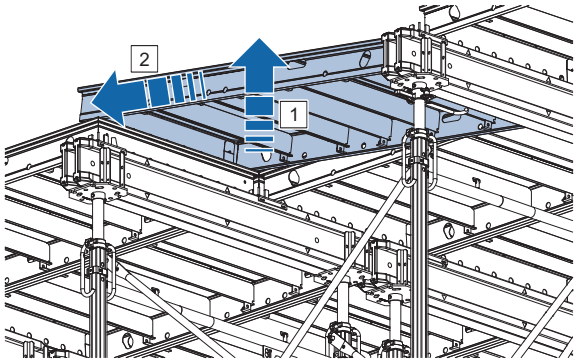


a ... stripping direction

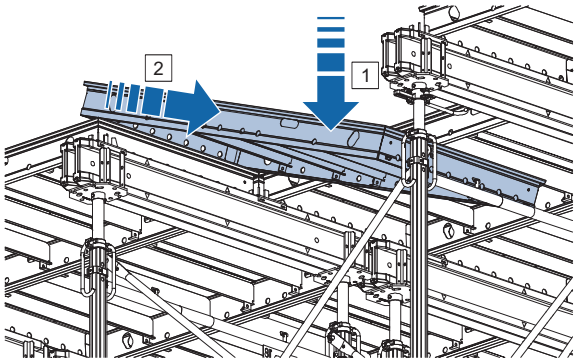
- Remove diagonal braces between the towers on the top level.

➤ Remove the Connecting pin 10cm and Spring cotter 5mm immediately before removing the DokaXdek panel.

➤ Remove the DokaXdek panel and slide it over the panel behind it.

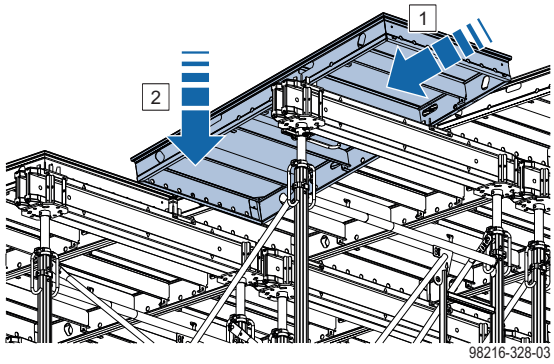


➤ Remove the DokaXdek panel downwards.



➤ Take down all the other panels in the panel row in the same way.

➤ Remove the cantilevered panel inwards.



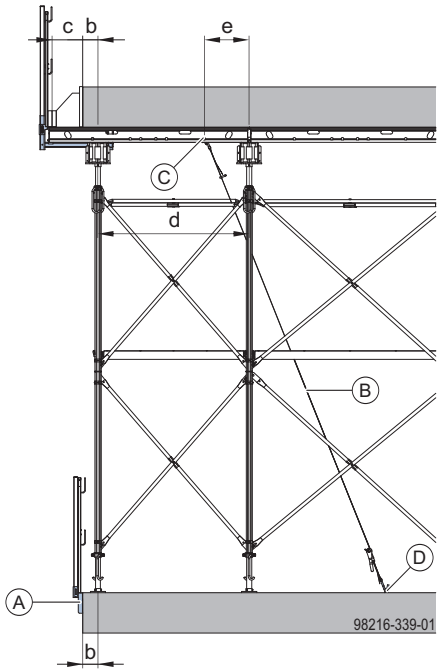
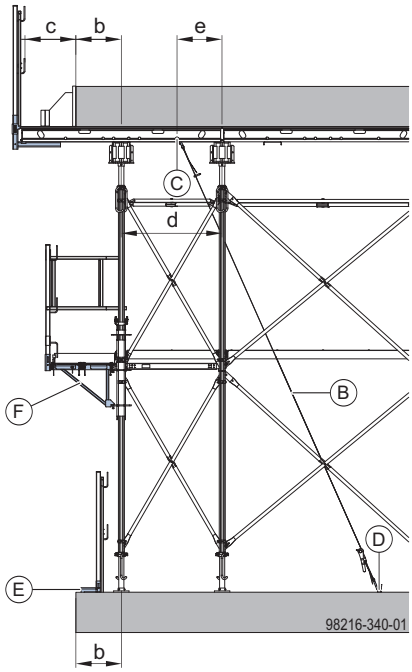
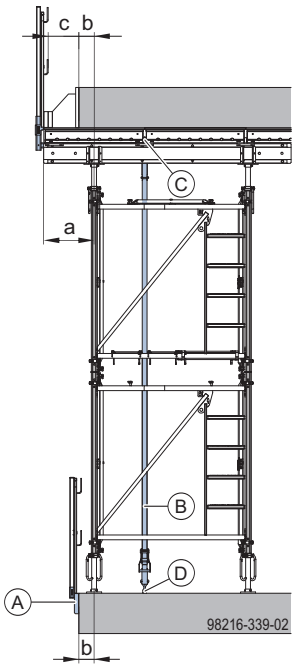
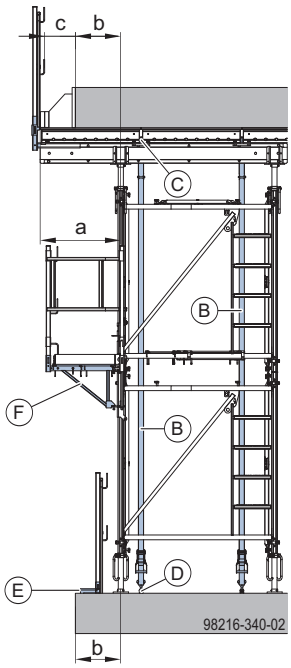
➤ Take down all the other cantilevered panels in the panel row in the same way.

➤ Remove the exposed DokaXdek shoring heads H on the primary beams.

➤ Manually remove each primary beam in turn. Stack the beams and remove them from the work zone.

➤ Remove all the other rows of panels directly downwards.

Floor-slab formwork at the structure edge

	Situation 1 Step bracket XP	**Situation 2** Handrail-post shoe XP
Side view		
Front view		

Permitted cantilever **a** of the primary beams	≤ 50 cm	≤ 80 cm
Permitted cantilever concrete load **b**	15 cm	45 cm
Spacing **c** stop-end	min. 30 cm	
Distance **d** between primary beams	150 cm	100 cm
Distance **e** position of the bracing with tie rod	45 cm	

A Step bracket XP
B Lashing strap 5.00m
C Tie rod 15.0 0.50m
D Doka express anchor 16x125mm
E Handrail-post shoe XP
F Staxo 100 bracket 60cm

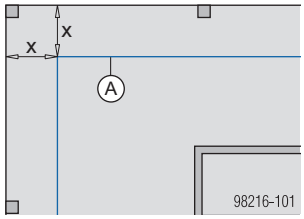
Formwork set-up at structure edge

WARNING

- No-one is allowed to step on to the formwork area before all safety measures have been complied with and all panels and infill areas securely stayed.
- Use appropriate personal fall-arrest systems when installing the handrail posts and protective gratings!
- The cantilevered primary beams at the structure edge must have a minimum length of 4.50 m!

Formwork set-up in the typical zone

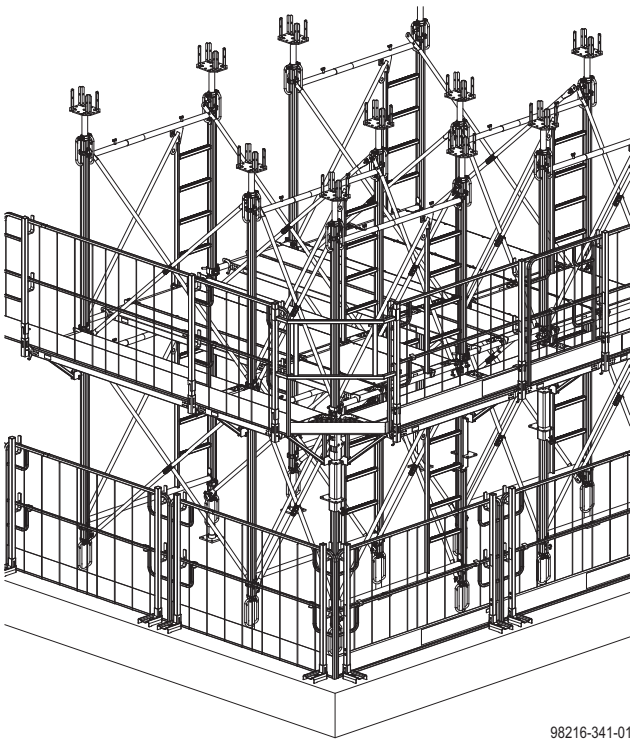
- Draw a vertical plan of the typical zone.



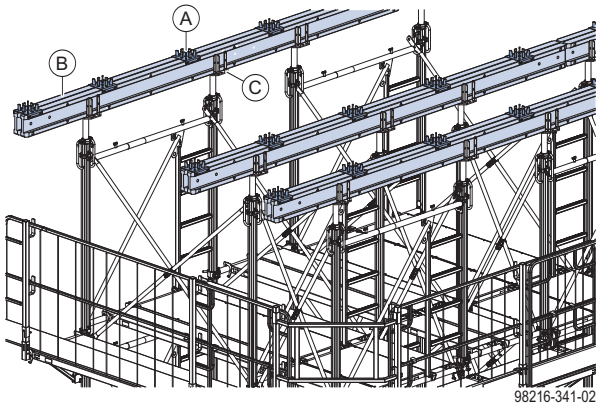
x ... see table in section 'Floor-slab formwork at the structure edge'

A Vertical plan

- Set up the load-bearing tower consisting of frames, diagonal crosses, screw jacks, assembly planking and working platforms in the designated position.



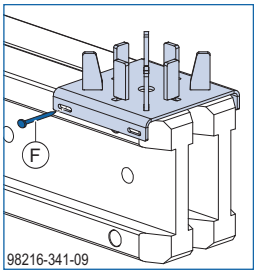
- Insert Doka beams H20 onto 4-way heads and place shoring heads onto Doka beams H20.



A DokaXdek shoring head H
B Double Doka beam H20 4.50m or 4.90m as a primary beam
C 4-way head

- Secure the shoring heads at the end of the Doka beams H20 against falling with at least one nail or screw.

Close-up of DokaXdek shoring head H at the beam end

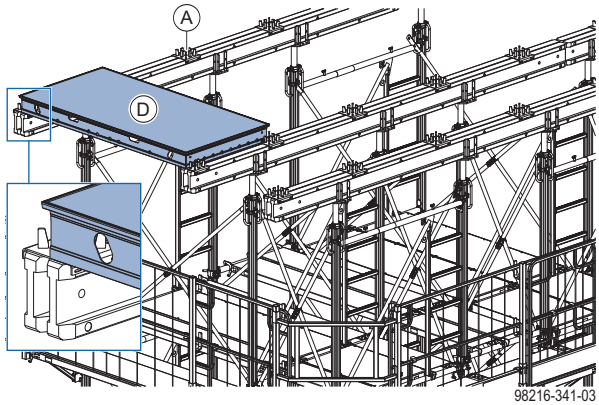


F Nail or screw

WARNING

- At wind speeds > 35 km/h, every panel must be secured!

- Two people need to lift the panel and place it on the shoring heads.

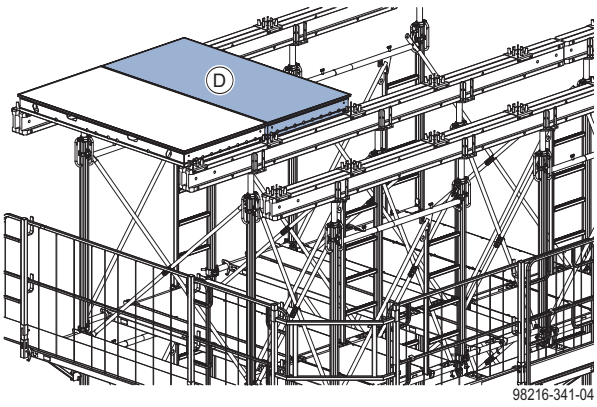


A DokaXdek shoring head H
D DokaXdek panel

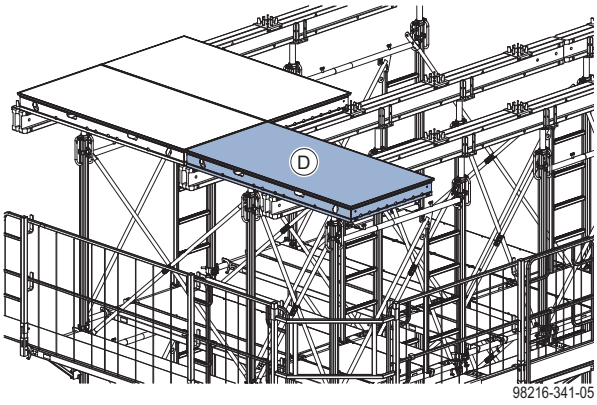
NOTICE

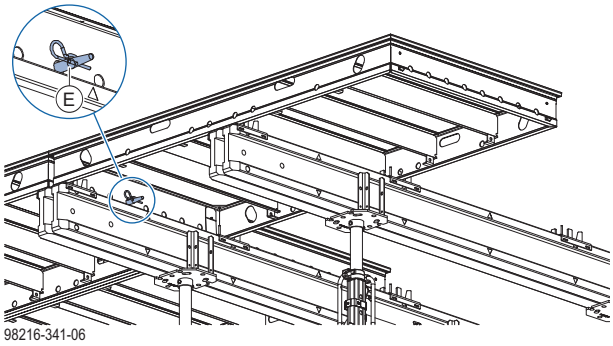
DokaXdek panels 0.75m are not permitted in the edge area!

➤ Lift the second panel and place it on the shoring heads.



➤ Two people need to lift the cantilevered panel and place it on the shoring heads.
A third person secures the panel on the cantilevered side against tipping over until the panel is secured at the short side with a connecting pin and spring cotter.





D DokaXdek panel

E Connecting pin 10cm + Spring cotter 5mm

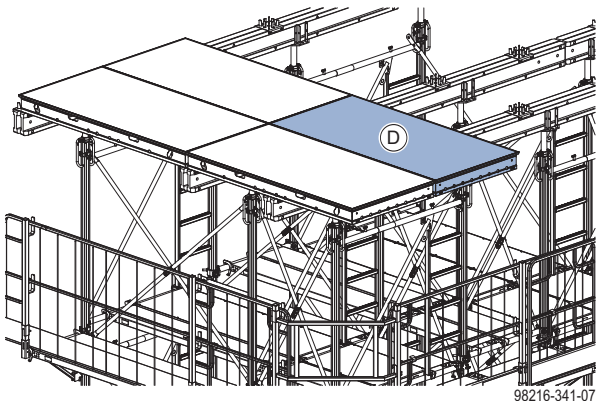
NOTICE

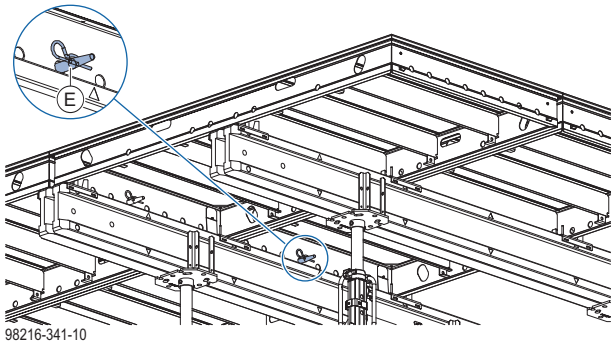
The use of the DokaXdek assembling tool as protection against falling is not permitted in situations at the structure edge!

When lifting the cantilevered panels, they can be placed on the Doka beams H20 and pushed into position.

If necessary, the shoring heads can be positioned under the panels subsequently.

➤ Lift the second cantilevered panel and place it on the shoring heads. Secure the panel at the short side, centrally, with a connecting pin and spring cotter.

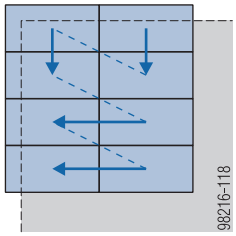




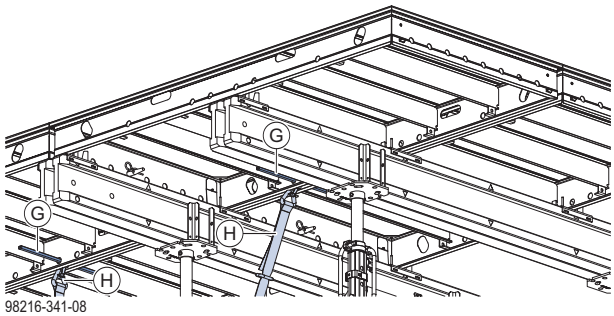
D DokaXdek panel

E Connecting pin 10cm + Spring cotter 5mm (short side, pinned centrally to the panel)

Further laying direction:



➤ Brace cantilevered panels with Tie rod 15.0 and lashing strap down to the ground.



G Tie rod 15.0

H Lashing strap 5.00m

➤ Install Handrail-post shoes XP onto the panels from below.

➤ Install Handrail posts XP on the Handrail-post shoes XP and attach the protective grating.

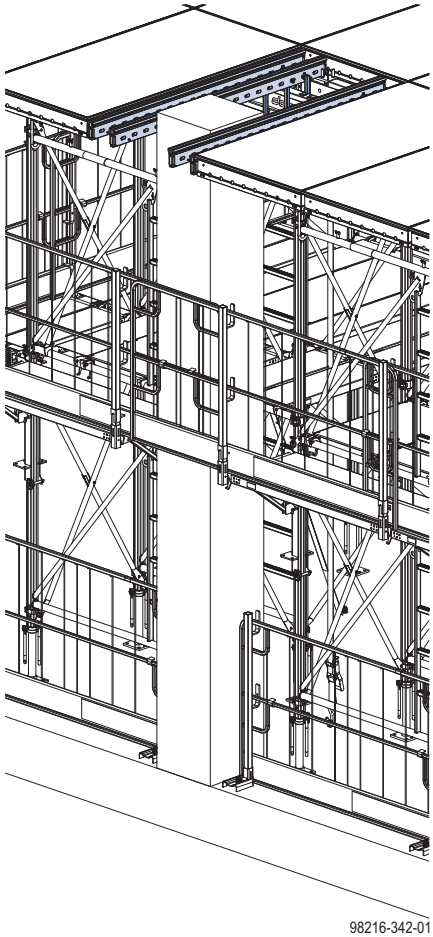
For the installation of the edge protection, follow the directions in section 'Fall protection on the formwork'.

WARNING
Risk of falling at open edges!
- ➤ The crew must use personal fall-arrest systems (e.g. safety harnesses) until all fall protection has been installed.
- ➤ Suitable attachment points must be defined by an approved person appointed by the contractor.

Mounting fillers between the cantilevering panels

WARNING
- ➤ Secure cantilevered floor formwork to prevent lift-out and overturning.
- ➤ Secondary beams with stop-end formwork must be secured against horizontal pull-out.
- ➤ Secure the infill beams by hand until the suspension clamps, including Doka beams H20, are installed.

➤ Hook the infill beams into the shoring heads and hook one suspension clamp into each infill beam. Insert Doka beam H20 to prevent the filler from being lifted out.



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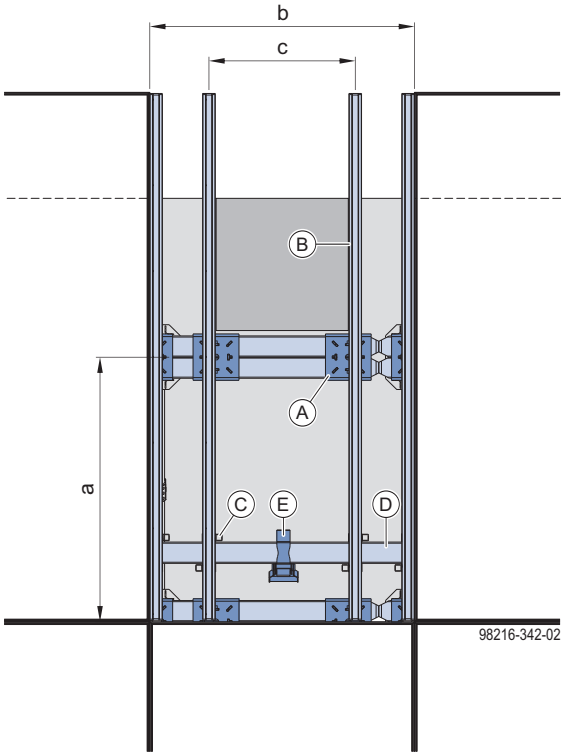
➤ Brace the Doka beam H20 to the ground using a Lashing strap 5.00m.

Close-up of filler at the structure edge



A	DokaXdek shoring head
B	DokaXdek infill beam
C	DokaXdek suspension clamp H
D	Doka beam H20
E	Lashing strap 5.00m

Permissible dimensions [cm]

Permitted slab thickness	35[1] / 40[2]
a (position of outside primary beam)	≥ 100
b (max. infill width without centred additional prop)	≤ 150
c (max. secondary-beam spacing)	50

[1] ... For design with double H20 beam as primary beam
[2] ... For design with double XT20 beam as primary beam

Note:
In order to be able to transfer the horizontal forces, the superstructure components must be firmly attached to one another.

For more information on assembly, see section 'Forming infill zones'.

Inclination adjustment

If the superstructure or the ground are **inclined at an angle of 1% or more**, slope compensation must be provided.

using Wedges for screw-jack ..... %

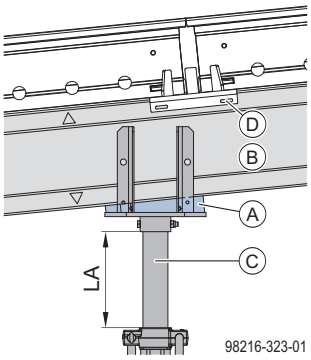
These prefabricated birch plywood wedges make it possible to stand load-bearing towers in the perpendicular on surfaces with various inclinations, even when utilising the full leg load.

CAUTION

Excessively steep wedges may slip away!

➤ Maximum inclination: 12% (6.8°)!

Wedges must therefore not be used on top of each other to achieve gradients of more than 12%.

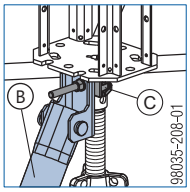


LA ... min. 20 cm

A Wedge for screw-jack ..... %
B H20 beam
C 4-way screw-jack head
D Option to nail down the DokaXdek shoring head

Measures for transferring horizontal loads:

- Pour concrete against an existing structure, a wall, supporting construction frame, in enclosed space or similar.
- Brace screw jack U-heads (provided that the load-bearing tower can transfer the horizontal loads).
- Support with alignment strut on the screw jack U-head



B Plumbing strut 340 IB or 540 IB
C Screw-on coupler 48mm 50 or 95

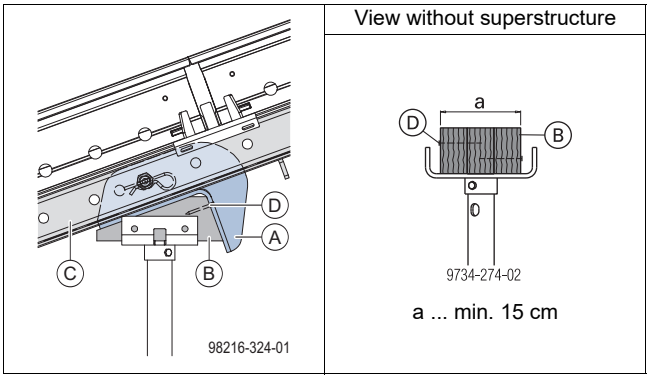
- In the case of a free-standing load-bearing tower, the shoring heads must be screwed or nailed in the slotted holes with the H20 beam.
  It is also possible to screw or nail the 4-way screw-jack heads to the H20 beams.
- The transfer of horizontal loads with lashing straps is not permitted!

using Staxo wedge support WS10

Used with timber wedges, this component provides angle adjustment with a max. inclination of 45°. Bolted into the multi-purpose waling, this wedge support prevents the timber wedges from slipping and ensures that the loads are safely transferred.

NOTICE

This type of connection is no substitute for extra structural design measures such as tie-backs.



A Staxo wedge support WS10
B Timber wedge, project-specific
C Multi-purpose waling WS10 Top50
D Nailed connection

NOTICE

The grain of the timber wedges must always be in the vertical!

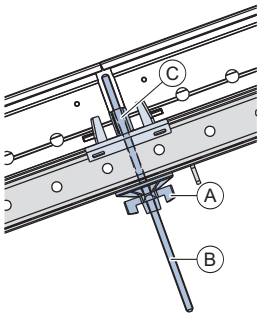
Measures for transferring horizontal loads:

- Pour concrete against an existing structure, a wall, supporting construction frame, in enclosed space or similar
- Brace screw jack U-heads (provided that the load-bearing tower can transfer the horizontal loads)
- Support with alignment strut on the screw jack U-head or with bracing for load-bearing towers
- In the case of a free-standing load-bearing tower, the DokaXdek panels and DokaXdek shoring heads H must be fixed with the waling (there may be places where the fixing cannot be installed if the super plate collides with the position of the fixing plate of the multi-purpose waling).
- The transfer of horizontal loads with lashing straps is not permitted!

Note:

- The multi-purpose waling must be installed so that the fixing plates face downwards.
  A waling length of 2.25 m is recommended, as otherwise the fixing plates may collide with the Staxo wedge support WS10.
- If the legs of the load-bearing tower have to be located outside the pattern of drilled holes in the multi-purpose waling, then a suitable 20 mm diam. hole must be drilled in the web of the waling.

Fixing the panels in place for free-standing formwork



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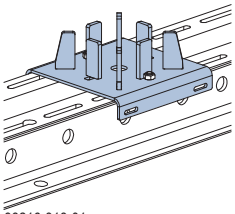
A	Super plate 15.0
B	Tie rod 15.0mm 0.50m
C	Hexagon nut M15

Alternatively, the DokaXdek shoring head H can be bolted to the multi-purpose wailing WS10 in the slotted holes using 2 M8x30 bolts + M8 nuts.



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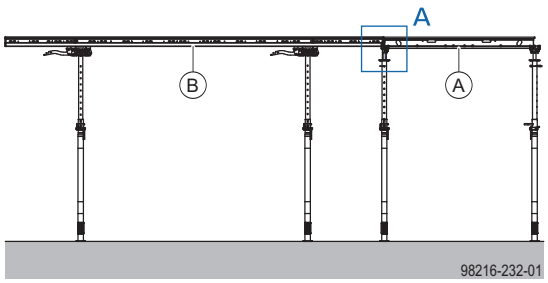
General

Combining with other Doka systems

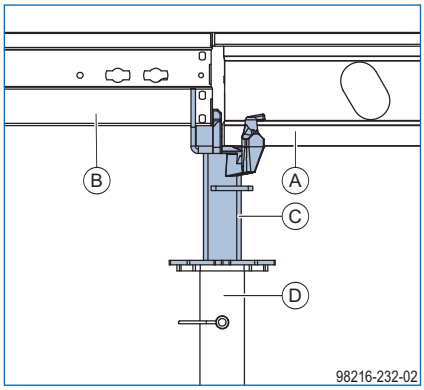
Combination with DokaXdek table

The DokaXdek table saves on human resource, labour and crane time.
With the DoKart plus, the tables can easily be travelled to their next location by just one man working on his own. The system is optimised to give the very shortest forming times, and copes well with varying structural-design and geometrical requirements.
In combination with the DokaXdek panel floor formwork it can adapt easily and flexibly to any and all structure geometries.

The connection between DokaXdek table and the DokaXdek panel floor formwork is made seamlessly with the DokaXdek connecting head.

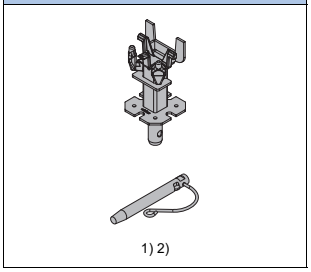


Close-up A



A DokaXdek panel
B DokaXdek table
C DokaXdek connecting head
D Floor prop Eurex top

DokaXdek connecting head

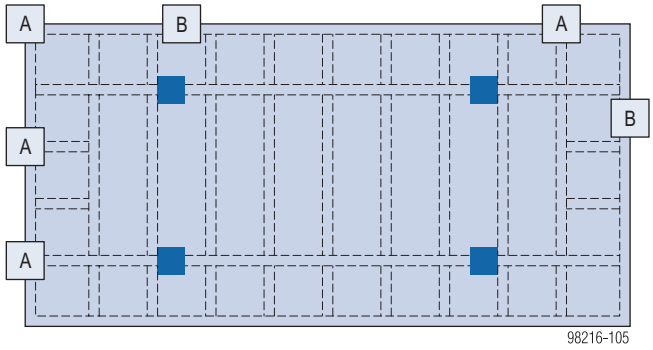


1) Spring locked connecting pin 16mm not included with product

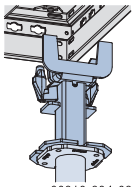
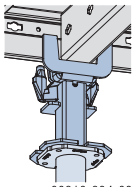
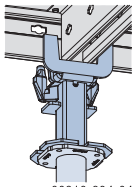
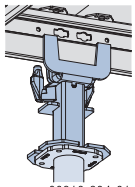
2) For floor props with larger tube diameters, we recommend the Spring locked connecting pin D16 with eye

Note:
The DokaXdek connecting head can be positioned anywhere along the long or short sides of the DokaXdek table.

Possible installation positions:



A Floor props are held by table profiles and cannot tip over
B Floor props must be stabilised by Removable folding tripods so that they cannot tip over

A			B
Prop does not require stabilisation			**Prop requires stabilisation** [1]
 98216-234-02	 98216-234-03	 98216-234-04	 98216-234-01
Prop is held by frame profile	Prop is held by primary profile	Prop is held by anchoring profile	Prop is not held by profile

1) ... Stabilisation of the prop to prevent tip-over (e.g with Removable folding tripod)

Installation

➤ Position DokaXdek tables and adjust to correct height.

Follow the directions in the 'DokaXdek table' User Information booklet!

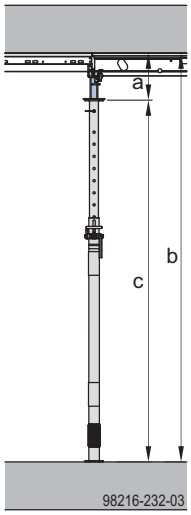
➤ Level the DokaXdek tables.

NOTICE

Level the DokaXdek tables before setting up the DokaXdek panel floor formwork.

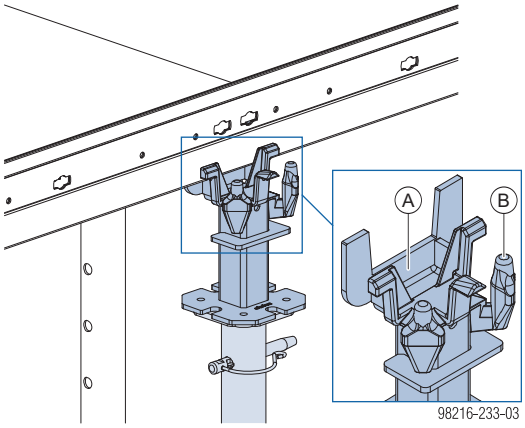
➤ Connect the DokaXdek connecting head to the floor prop and secure it with a Spring locked connecting pin 16mm.

➤ Set the height of the floor prop.



a ... 31 cm
b ... room height
c ... extended length of the floor prop (= room height minus 31 cm)

➤ Set up floor props with connecting heads along the outside profile of the DokaXdek table.



A Mount for DokaXdek table
B Mount for DokaXdek panel floor formwork

Make sure that the head is the right way round.

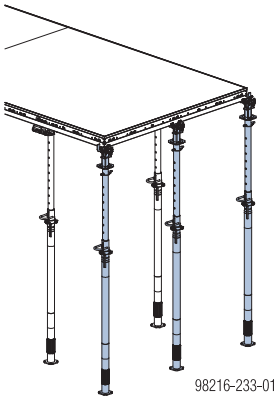
➤ Turn the adjusting nut to extend each floor prop until contact is made.

WARNING

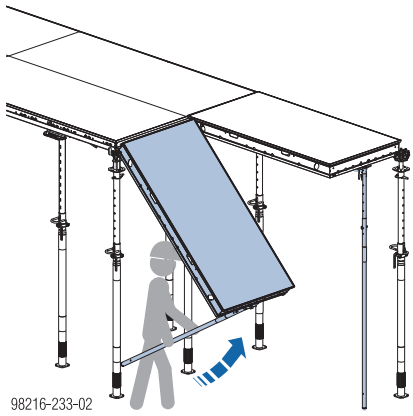
➤ Turn the adjusting nut to extend the floor prop with connecting head only until contact is made with the DokaXdek table.

Make sure that the DokaXdek table is not lifted, because in that case the floor prop would be overloaded.

➤ Set up other floor props complete with connecting heads along the outside profile of the tables and stabilise with Removable folding tripods as necessary.



➤ Hook the DokaXdek panels into the heads and tilt the panels up into position (see section 'Closing the formwork').



Combination with Dokaflex 30 tec and Dokaflex

Dokaflex is the fast and versatile floor-slab formwork for any layout - also for drop beams, stepped floors and filigree slabs. Because the quantities can easily be computed using a slide-rule, no detailed formwork planning work is needed.

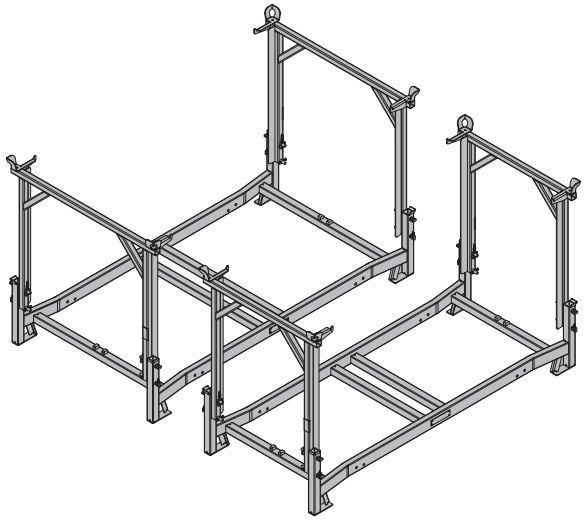
Any type of form-facing can be used, enabling all architectural wishes regarding the concrete surface to be met.

For more information, please refer to the 'Dokaflex 30 tec' and ‘Dokaflex' User Information booklets.

Transporting, stacking and storing

DokaXdek panel pallets

DokaXdek panel pallet 1.00x2.00m and DokaXdek panel pallet 0.75x2.00m

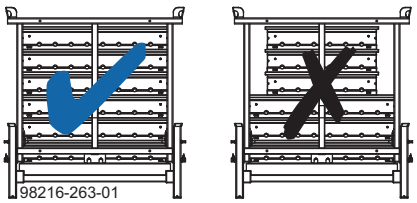


Storage and transport device for DokaXdek panels:

- DokaXdek panel pallet 1.00x2.00m for DokaXdek panels 1.00x2.00m
- DokaXdek panel pallet 0.75x2.00m for DokaXdek panels 0.75x2.00m
- durable
- stackable

CAUTION

- ➤ The DokaXdek panel pallets can transport only DokaXdek panels.
- ➤ Stacking DokaXdek panels with a width of 0.75 m on the DokaXdek panel pallet 1.00x2.00m is prohibited.
- ➤ It is forbidden to stack panels of different widths on the same pallet.
- ➤ The DokaXdek panels 1.00x1.00m and 0.75x1.00m must always be transported in even numbers in the panel pallet!



NOTICE

- The type plate must be in place and clearly legible.

DokaXdek panel pallet 1.00x2.00m

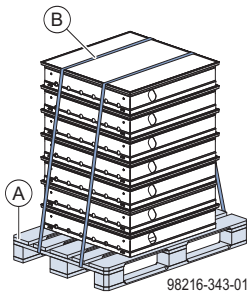
	DokaXdek panel	
	1.00x2.00m	1.00x1.00m
Max. n° of panels	7	14 (2x7)
Permissible load-bearing capacity	300 kg (660 lbs)	
Permitted imposed stacking load	1500 kg (3300 lbs)	

DokaXdek panel pallet 0.75x2.00m

	DokaXdek panel	
	0.75x2.00m	0.75x1.00m
Max. n° of panels	7	14 (2x7)
Permissible load-bearing capacity	200 kg (440 lbs)	
Permitted imposed stacking load	540 kg (1190 lbs)	

Note:

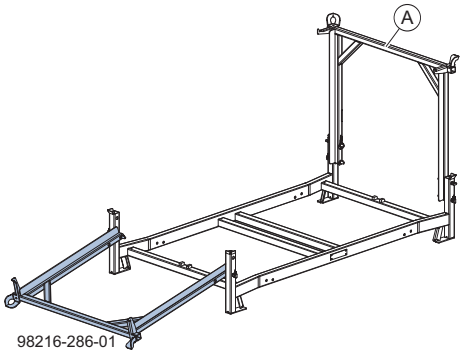
For transporting the DokaXdek panels 0.75x0.75m, the panels must be secured on wooden pallets (Figure; 7 pieces on a Euro pallet and with strapping).

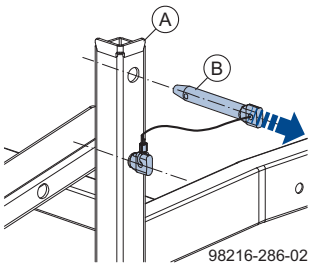


A Wooden pallet
B Strapping band

Stacking the panels

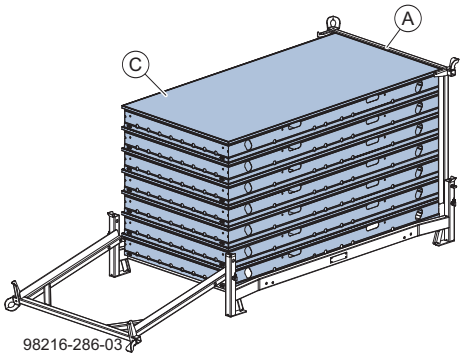
➤ At one end of the pallet, remove the top Fastening pins D22 and swing the frame down.





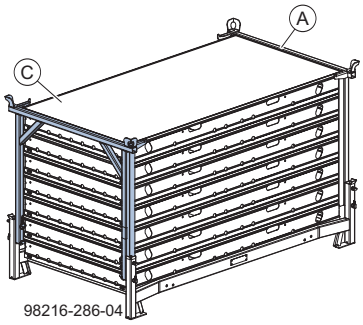
A DokaXdek panel pallet
B Fastening pin D22

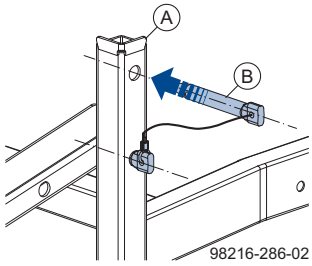
➤ Load the pallet with DokaXdek panels.



A DokaXdek panel pallet
C DokaXdek panel

➤ Swing the frame up and secure it with Pins D22. Secure each Pin D22 with a linch pin.





A DokaXdek panel pallet
B Fastening pin D22
C DokaXdek panel

DokaXdek panel pallet as a storage unit

NOTICE

- When filling panel pallets with panels, make sure that the pallets are standing on firm ground and that the panels are stacked correctly in the pallets.
- Secure the panels on the pallet in inclement weather (wind) to prevent them from lifting off (e.g with lashing straps or strapping band).

Max. number of units on top of one another

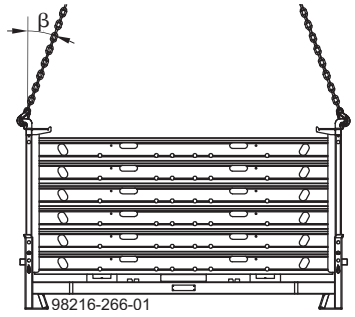
	Outdoors (on the site)	Indoors
DokaXdek panel pallet	Floor gradients up to 3%	Floor gradients up to 1%
1.00x2.00m	1	4
0.75x2.00m	1	2

DokaXdek panel pallet as a transport device

Suitable transport appliances:
- crane
- forklift truck
- pallet truck

Lifting by crane

NOTICE
- Multi-trip packaging items must be lifted individually.
- Use suitable lifting chains (do not exceed the permitted working load limit).
- Sling angle β max. 30°!



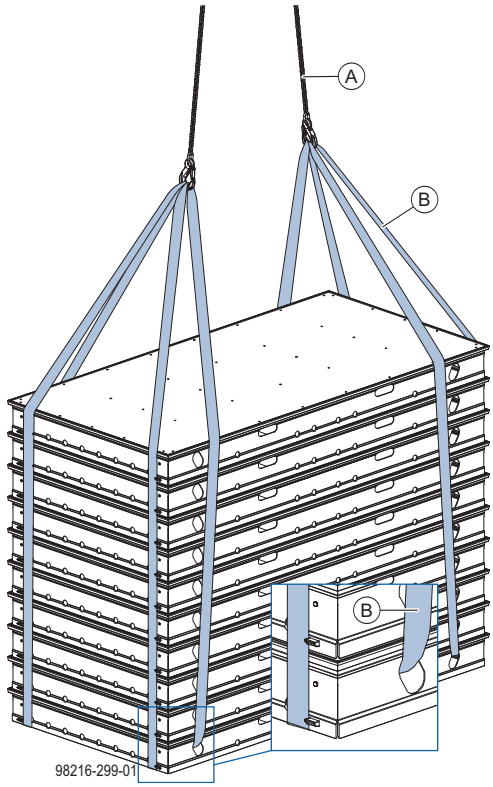
Repositioning panels without panel pallet

It is also possible to reposition DokaXdek panels without DokaXdek panel pallet using 4 lifting slings (recommended lifting string length: 6 m).

	DokaXdek panel 1.00x2.00m or 0.75x2.00m
Max. n° of panels	10

The following points must be observed:
- Only one panel size per stack.
- Stack the panels with the edges flush.
- Reposition with 4 lifting slings of equal length attached to 2 crane lifting tackles.
- A protective sleeve is required for all lifting sling loops.

➤ Thread the lifting sling loops through the hand hole at each corner of the panel and laterally past the latch of the anti-liftout guard.



A Doka 4-part chain 3.20m
B Lifting slings 6.0m

DANGER
- ➤ Lifting slings (with protective sleeves) must be threaded through the hand holes.
- ➤ Moving with only 2 lifting sling loops is not permitted.
- ➤ Mixing of different panel sizes is not permitted.

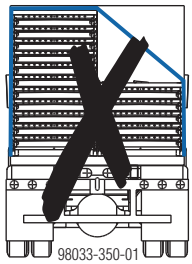
Shifting with forklift or pallet stacking truck

The forks can be inserted under either the sides or the ends of the pallets.

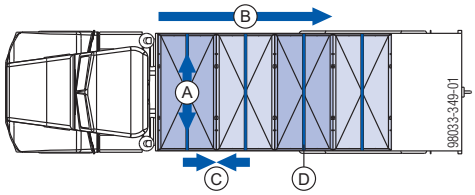
Correct loading of trucks (lorries)

NOTICE

- Ideally, arrange the DokaXdek panel pallets at right-angles **to the cargo floor** (for easier access to the lifting points). **(A)**
  If the stacks are not of the same height, then the panels **must always be arranged at right angles to the cargo floor**.

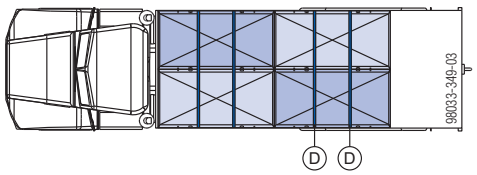


- Load the truck from front to back with DokaXdek panel pallets. **(B)**
- Arrange the DokaXdek panel pallets so that they are positively locked. **(C)**
- Secure every DokaXdek panel pallet with a lashing strap. **(D)**



Animation:
https://player.vimeo.com/video/256036570

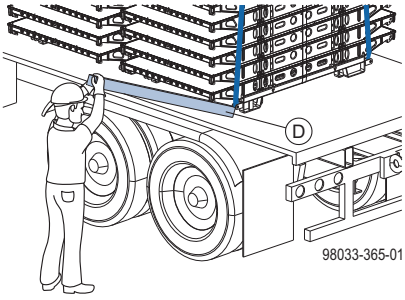
- If the pallets have to be loaded lengthways to the cargo floor, secure each pair of DokaXdek panel pallets with 2 lashing straps. **(D)**



Animation:
https://player.vimeo.com/video/256029891

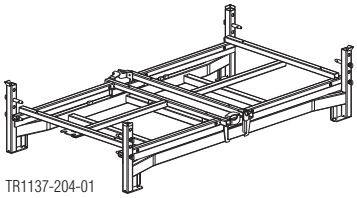
With closely stacked panel bundles:

➤ lever-up a panel bundle (e.g. with a squared timber **(D)**), to make a space for threading in the slings.
Caution!
Always make sure that the panel bundle remains stable!



Transporting and storing empty panel pallets

The frames of the empty pallets have to be folded in and set in the parking position for transport and storage.



Max. number of empty units on top of one another

DokaXdek panel pallet	Outdoors (on the site) Floor gradients up to 3%	Indoors Floor gradients up to 1%
1.00x2.00m	4	10
0.75x2.00m	3	9

Alternative transport options

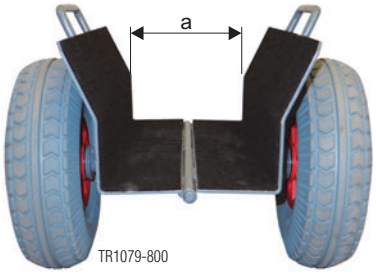
With timber trolley

A standard timber trolley provides a safe and easy way of moving slab panels without any great physical effort.

Features:

- Clamping jaws
- Clamping sides, felt-padded on inside
- The weight of the material being transported securely closes the clamping mechanism

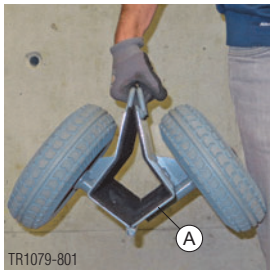
Designation: M-Timber trolley 170mm-CT
Weight: 7.0 kg
Dimensions:
39 x 31 x 35 cm (L x W x H) width including wheels



a ... 170 mm

Max. load-bearing capacity: 300 kg

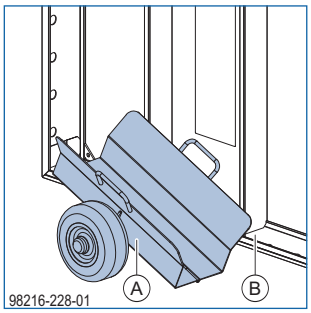
State during transport



A M-Timber trolley 170 mm-CT

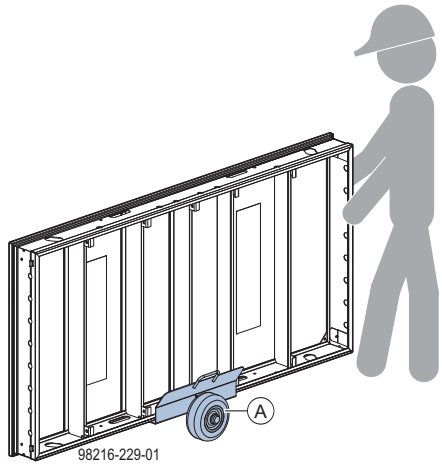
How to load

➤ Position the timber trolley beside the DokaXdek panel, midway along the panel.



A M-Timber trolley 170mm-CT
B DokaXdek panel

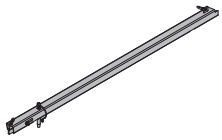
➤ Lift one end of the DokaXdek panel, lower the panel centred on to the timber trolley and wheel it to the desired location.



A M-Timber trolley 170mm-CT

Stacking pallet transport lock 1.55x0.85m

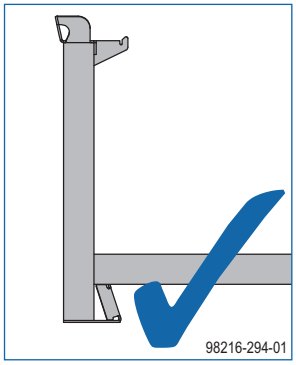
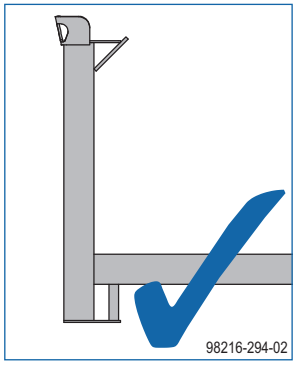
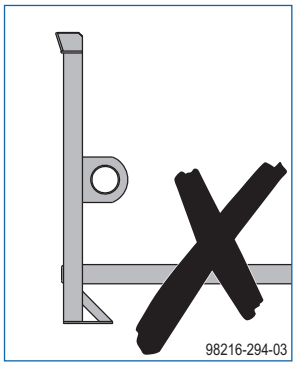
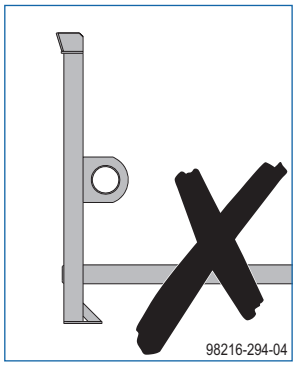
The transport lock allows the stacking pallet to be converted into a transport aid for DokaXdek panels.



Max. number of panels per panel pallet: 4

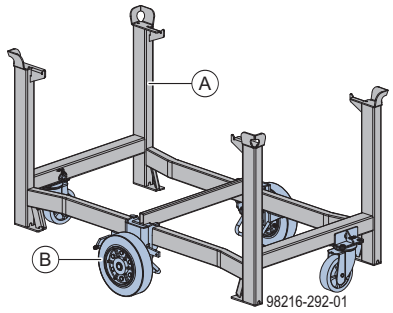
NOTICE

The transport lock is compatible only with stacking pallets from year of manufacture 2008.

Doka stacking pallet 1.55x0.85m	
Manufactured from 2015 onwards	Manufactured between 2008 and 2014
	
Manufactured between 2004 and 2007	Manufactured between 1994 and 2003
	

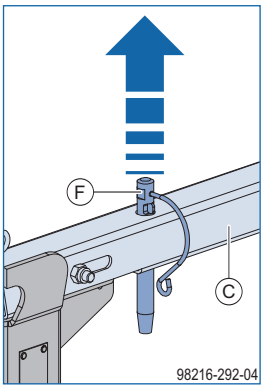
Assembly

➤ Install bolt-on castor set B on the stacking pallet.



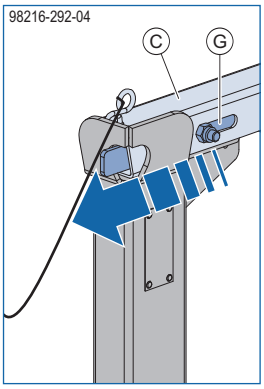
A Doka stacking pallet 1.55x0.85m
B Bolt-on castor set B

➤ Remove spring locked connecting pin 16mm from the transport locks.



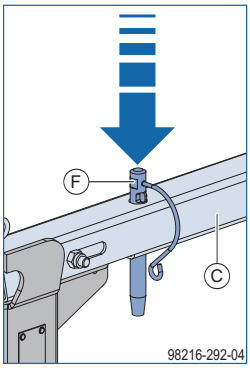
C Stacking pallet transport lock 1.55x0.85m
F Spring locked connecting pin 16mm

➤ Hook one transport lock into each side of the stacking pallet and at the other end of the transport lock push the sliding part out into the opening in the stacking pallet.



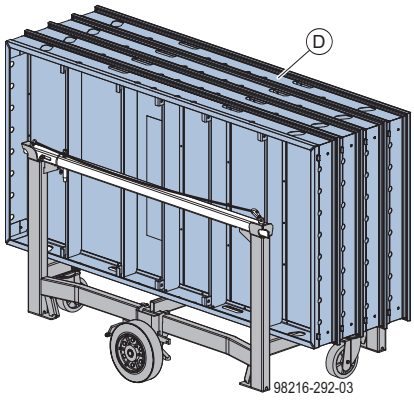
C Stacking pallet transport lock 1.55x0.85m
G Sliding part

➤ Secure the sliding parts again with a spring locked connecting pin 16mm.



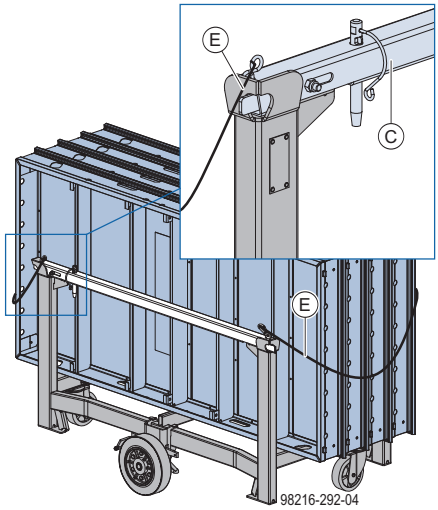
C Stacking pallet transport lock 1.55x0.85m
F Spring locked connecting pin 16mm

➤ Position the DokaXdek panels on the stacking pallet.



D DokaXdek panel

➤ Attach the chain of the respective transport lock to the snap link of the opposite transport lock (adjust the length of the chains according to the number of panels).



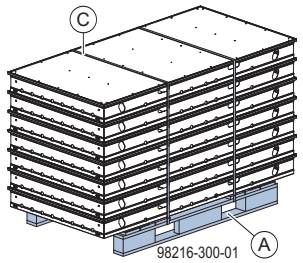
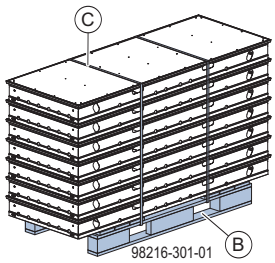
C Stacking pallet transport lock 1.55x0.85m
E Chain of the stacking pallet transport lock 1.55x0.85m

CAUTION

➤ Lift and reposition the Doka stacking pallet only when empty. Always remove the repositioning aid, use only the intended attachment points.

Wooden pallet 1.00x0.60m (HT) and 0.75x1.60m (HT)

Is used as an alternative to the stacking pallet for packaging and storing DokaXdek panels 1.00x2.00m or 0.75x2.00m.

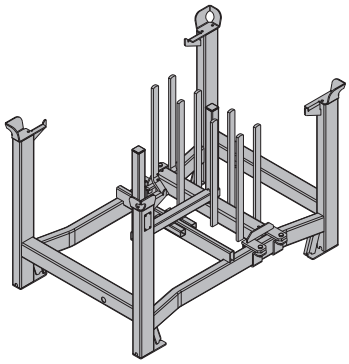
1.00x2.00m	0.75x2.00m
	
Number of panels per unit	
7	
Max. number of units on top of one another	
Outdoors (on the site) Floor gradient max. 3%	
1	
Indoors Floor gradient max. 1%	
3	2

A Wooden pallet 1.00x1.60m

B Wooden pallet 0.75x1.60m

C Strapping tape

Dokadek infill-beam pallet



Storage and transport device for DokaXdek infill beams:

- durable
- stackable
- Infill beams 2.00m are supplied ex-works in the infill beam pallet, while Infill beams 1.00m and 0.75m are supplied in the Doka multi-trip transport box 1.20x0.80m.

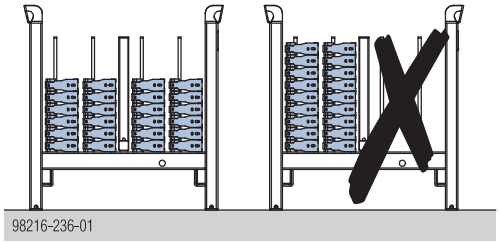
Max. number of DokaXdek infill beams: 36

Max. load-bearing capacity: 800 kg

Permitted imposed stacking load: 5900 kg

NOTICE

- Load Infill beams 2.00m onto the pallet centrically, so that they are braced against the uprights of the pallet.
- Stacked multi-trip boxes or pallets must have the heaviest boxes at the bottom and the lightest at the top!
- Always stack in complete layers.



- Before the infill beams are transported by lorry, they must be firmly connected to the pallet, e.g. by bundling with steel strapping.
- The type plate must be in place and clearly legible.

Using the Dokadek infill-beam pallet as a storage unit

Max. number of units on top of one another

Outdoors (on the site) Floor gradients up to 3%	**Indoors** Floor gradients up to 1%
2	6
It is not allowed to stack empty multi-trip boxes or pallets on top of one another!	

NOTICE

- Stacked multi-trip boxes or pallets must have the heaviest boxes at the bottom and the lightest at the top!
- Castor wheels and Bolt-on castor set B must not be fitted to the bottom multi-trip packaging item in the stack.
- Secure multi-trip packagings with installed castor wheels using the fixing brake when parking.

Using the Dokadek infill-beam pallet as a transport device

Suitable transport appliances:

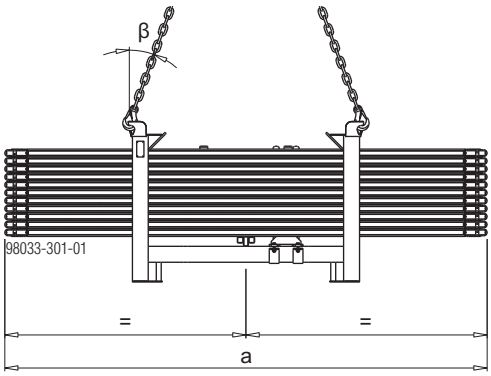
- crane
- forklift truck
- pallet truck
- Bolt-on castor set B

Follow the directions in the 'Bolt-on castor set B' User Information booklet!

Lifting by crane

NOTICE

- Multi-trip packaging items must be lifted individually.
- Use suitable lifting chains (e.g. Doka 4-part chain 3.20m). Do not exceed the permitted working load limit.
- Load the items centrically.
- When lifting units to which Bolt-on castor sets B have been attached, you must also follow the directions in the ‘Bolt-on castor set B’ User information booklet!
- Sling angle β max. 30°!



a ... 200 cm

Repositioning by forklift truck or pallet stacking truck

NOTICE

- Load the items centrically.

Transporting Bracing frames Eurex

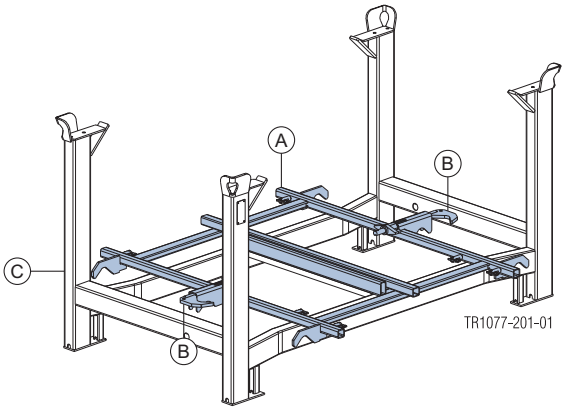
NOTICE

It is not allowed to mix different sizes of bracing frames!

Max. number of Bracing frames Eurex 1.00m per stacking pallet: 10

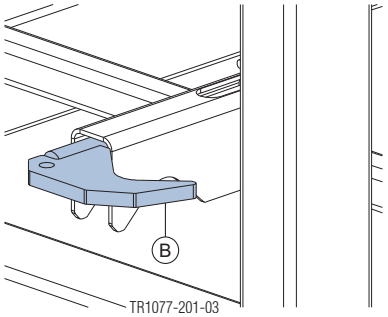
Loading the pallet

➤ Turn the prop-holders (= quick-fixing mechanisms) by 90°, fix them and place the frame into the Doka stacking pallet (see Close-up 1).



A Bracing frame Eurex 1.00m
B Prop-holder (= quick-fixing mechanism)
C Doka stacking pallet 1.55x0.85m

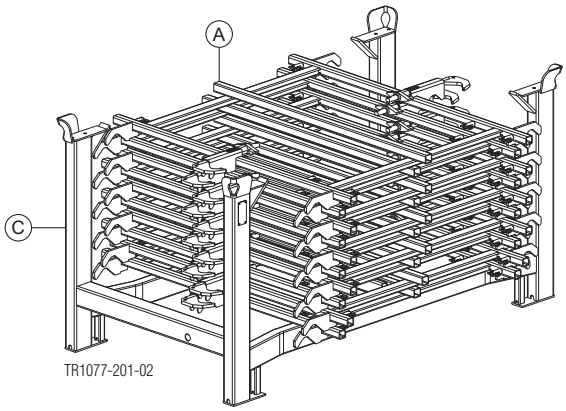
Close-up 1



B Prop-holder (= quick-fixing mechanism)

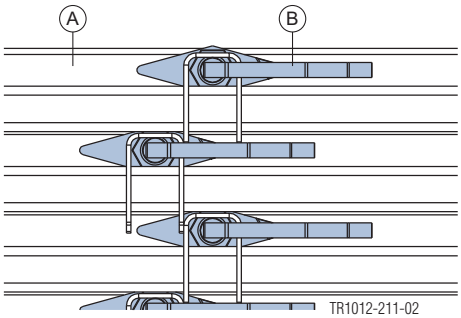
➤ Stack the other bracing frames alternate ways round (as shown in Close-up 2).

➤ Fasten the load to the stacking pallet so that it cannot slide or tip out.



A Bracing frame Eurex 1.00m
C Doka stacking pallet 1.55x0.85m

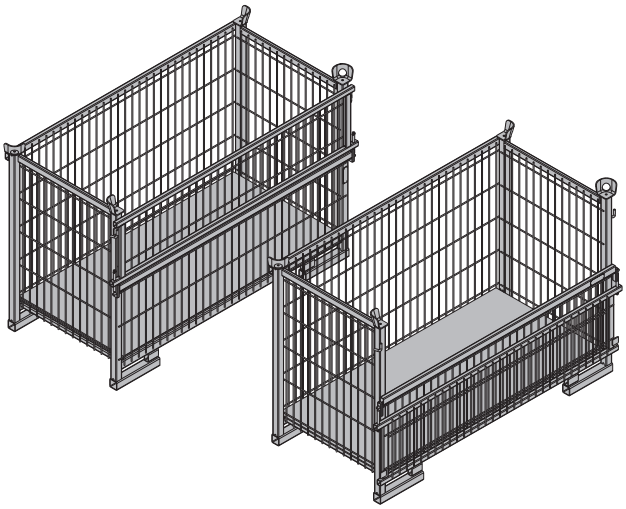
Close-up 2



A Bracing frame Eurex 1.00m
B Prop-holder (= quick-fixing mechanism)

Animation:
https://player.vimeo.com/video/262344460

Doka skeleton transport box 1.70x0.80m



Storage and transport device for small items.
To make the Doka skeleton transport box easier to load and unload, one of its sidewalls can be opened.

Permitted load-bearing capacity: 700 kg (1540 lbs)
Permitted imposed stacking load: 3150 kg (6950 lbs)

Using Doka skeleton transport boxes 1.70x0.80m as storage units

Max. n° of units on top of one another

Outdoors (on the site) Floor gradients up to 3%	Indoors Floor gradients up to 1%
2	5
It is not allowed to stack empty pallets on top of one another!	

NOTICE

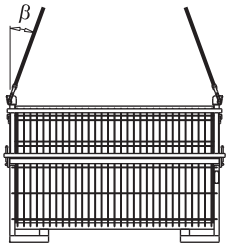
Stacked multi-trip boxes or pallets must have the heaviest boxes at the bottom and the lightest at the top.

Using Doka skeleton transport boxes 1.70x0.80m as transport devices

Lifting by crane

NOTICE

- Multi-trip packaging items must be lifted individually.
- Only lift the boxes when their sidewalls are closed!
- Use suitable lifting chains:
  - e.g. Doka 4-part chain 3.20m
  - Do not exceed the permitted working load limit of the lifting chains.
- Sling angle β max. 30°!



9234-203-01

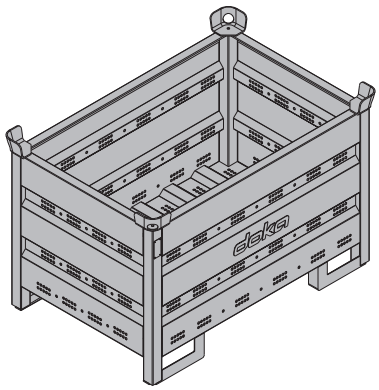
Repositioning by forklift truck or pallet stacking truck

The forks can be inserted under either the broadside or the narrowside of the containers.

Doka multi-trip transport box

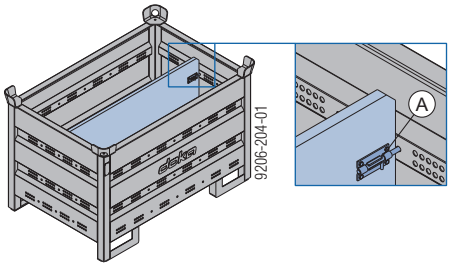
Storage and transport device for small items

Doka multi-trip transport box 1.20x0.80m



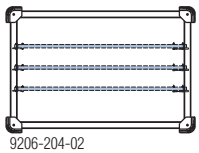
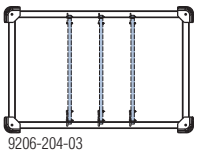
Permitted load-bearing capacity: 1500 kg (3300 lbs)
Permitted imposed stacking load: 7850 kg (17300 lbs)

Different items in the Doka multi-trip transport box can be kept separate with the **Multi-trip transport box partitions 1.20m or 0.80m**.

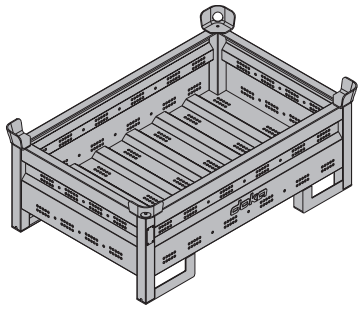


A Slide-bolt for fixing the partition

Possible ways of dividing the box

Multi-trip transport box partition	in the longitudinal direction	in the transverse direction
1.20m	max. 3	-
0.80m	-	max. 3
	 9206-204-02	 9206-204-03

Doka multi-trip transport box 1.20x0.80mx0.41m



Permitted load-bearing capacity: 750 kg (1650 lbs)
Permitted imposed stacking load: 7200 kg (15870 lbs)

Using Doka multi-trip transport boxes as storage units

Max. n° of units on top of one another

Outdoors (on the site) Floor gradients up to 3%		Indoors Floor gradients up to 1%	
Doka multi-trip transport box		Doka multi-trip transport box	
1.20x0.80m	1.20x0.80x0.41m	1.20x0.80m	1.20x0.80x0.41m
3	5	6	10
It is not allowed to stack empty pallets on top of one another!			

NOTICE

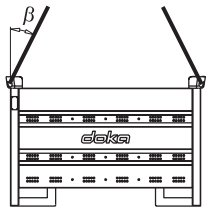
Stacked multi-trip boxes or pallets must have the heaviest boxes at the bottom and the lightest at the top.

Using Doka multi-trip transport boxes as transport devices

Lifting by crane

NOTICE

- Multi-trip packaging items must be lifted individually.
- Use suitable lifting chains:
  - e.g. Doka 4-part chain 3.20m
  - Do not exceed the permitted working load limit of the lifting chains.
- Sling angle β max. 30°!



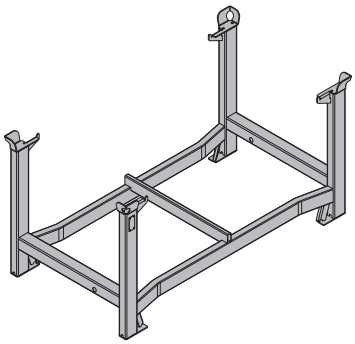
9206-202-01

Repositioning by forklift truck or pallet stacking truck

The forks can be inserted under either the broadside or the narrowside of the containers.

Doka stacking pallet 1.55x0.85m and 1.20x0.80m

Storage and transport device for long items.



Permitted load-bearing capacity: 1100 kg (2420 lbs)
Permitted imposed stacking load: 5900 kg (13000 lbs)

Using Doka stacking pallets as storage units

Max. number of units on top of one another

Outdoors (on the site) Floor gradients up to 3%	Indoors Floor gradients up to 1%
2	6
It is not allowed to stack empty multi-trip boxes or pallets on top of one another!	

NOTICE

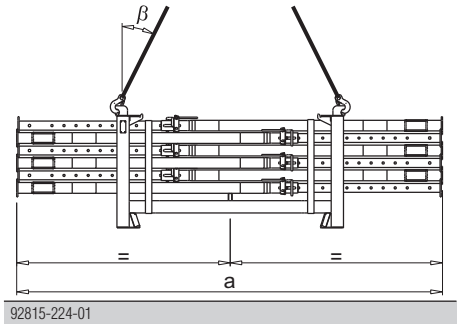
- Stacked multi-trip boxes or pallets must have the heaviest boxes at the bottom and the lightest at the top!
- Castor wheels and Bolt-on castor set B must not be fitted to the bottom multi-trip packaging item in the stack.
- Secure multi-trip packagings with installed castor wheels using the fixing brake when parking.

Using Doka stacking pallets as transport devices

Lifting by crane

NOTICE

- Multi-trip packaging items must be lifted individually.
- Use suitable lifting chains:
  - e.g. Doka 4-part chain 3.20m
  - Do not exceed the permitted working load limit of the lifting chains.
- Load the items centrically.
- Fasten the load to the stacking pallet (e.g. with strapping tape or lashing strap) so that it cannot slide or tip out.
- Sling angle β max. 30°!



	a
Doka stacking pallet 1.55x0.85m	max. 4.5 m
Doka stacking pallet 1.20x0.80m	max. 3.0 m

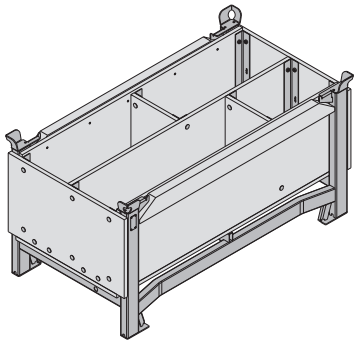
Repositioning by forklift truck or pallet stacking truck

NOTICE

- Load the items centrically.
- Fasten the load to the stacking pallet (e.g. with strapping tape or lashing strap) so that it cannot slide or tip out.

Doka accessory box

Storage and transport device for small items.



Permitted load-bearing capacity: 1000 kg (2200 lbs)
Permitted imposed stacking load: 5530 kg (12190 lbs)

Doka accessory boxes as storage units

Max. number of units on top of one another

Outdoors (on the site) Floor gradients up to 3%	Indoors Floor gradients up to 1%
3	6
It is not allowed to stack empty multi-trip boxes or pallets on top of one another!	

NOTICE

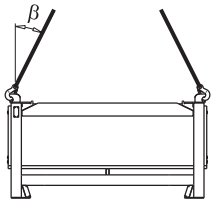
- Stacked multi-trip boxes or pallets must have the heaviest boxes at the bottom and the lightest at the top!
- Castor wheels and Bolt-on castor set B must not be fitted to the bottom multi-trip packaging item in the stack.
- Secure multi-trip packagings with installed castor wheels using the fixing brake when parking.

Doka accessory box as transport devices

Lifting by crane

NOTICE

- Multi-trip packaging items must be lifted individually.
- Use suitable lifting chains:
  - e.g. Doka 4-part chain 3.20m
  - Do not exceed the permitted working load limit of the lifting chains.
- When lifting units to which Bolt-on castor sets B have been attached, you must also follow the directions in the ‘Bolt-on castor set B’ User information booklet!
- Sling angle β max. 30°!



92816-206-01

Repositioning by forklift truck or pallet stacking truck

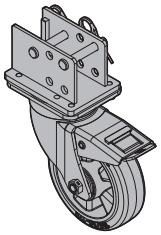
The forks can be inserted under either the broadside or the narrowside of the containers.

Universal castor wheel for transport pallet

The Universal castor wheel for transport pallet turns multi-trip packaging items into fast and manoeuvrable transport devices.

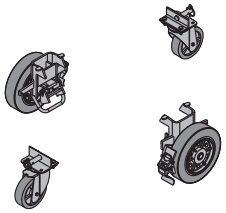
- 4 castor wheels needed per multi-trip packaging item.
- Compatible multi-trip packaging items:
  - Doka stacking pallets (all sizes)
  - Doka multi-trip transport box 1.20x0.80m
  - Doka skeleton transport box 1.70x0.80m
  - DokaXdek panel pallets (all sizes)
  - Superdek beam pallet 1.22x1.10m

Follow the directions in the 'Universal castor wheel for transport pallet' User Information booklet.



Bolt-on castor set B

The Bolt-on castor set B turns multi-trip packaging items into fast and manoeuvrable transport devices.
Suitable for drive-through access openings > 90 cm.



The Bolt-on castor set B can be mounted to the following multi-trip packaging items:

- Dokadek infill beam pallet
- Doka accessory box
- Doka stacking pallets

Follow the directions in the User Information booklet!

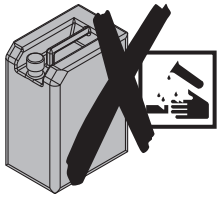
Cleaning and care of your equipment

The **special coating on the Xlife sheet** greatly reduces the amount of cleaning that is needed.

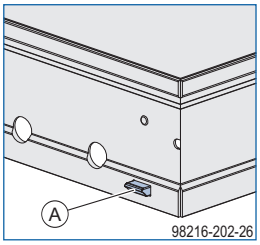
WARNING
➤ Risk of slippage when surface is wet!

Cleaning

NOTICE
- Immediately after pouring:
  - Remove any blobs of concrete from the back-face of the formwork, using water (without any added sand).
- Immediately after stripping the formwork:
  - Clean the formwork with a high-pressure washer and a concrete scraper.
- Do not use any chemical cleaning agents!

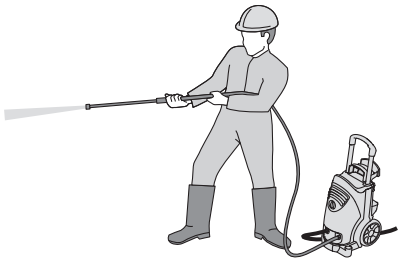


NOTICE
- The anti-liftout guards **(A)** at all 4 panel corners must be free to move and must return to their initial positions automatically when operated.
- Remove foreign matter from anti-liftout guard **(A)**.
- The use of panels with faulty anti-liftout guards **(A)** is not permitted!



Cleaning equipment

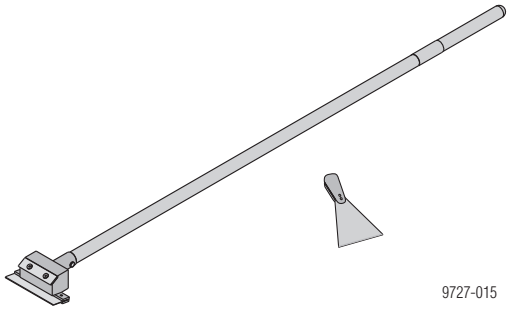
High-pressure spray cleaner



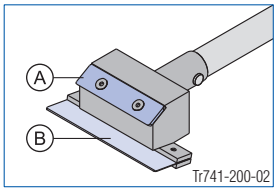
NOTICE
- Appliance pressure rating: 200 to max. 300 bar
- Keep the water-jet the correct distance from the formwork, and move it at the right speed:
  - The higher the pressure, the further away from the formwork you must keep the jet and the faster you must move it across the surface.
- Do not aim the jet at one place for too long.
- Make only moderate use of the jet around the silicone sealing strip:
  - If the pressure is too high, this will damage the silicone sealing strip.
  - Do not aim the jet at one place for too long.

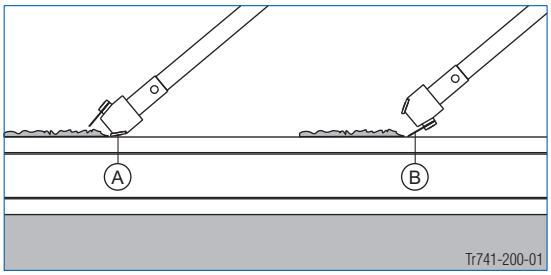
Concrete scraper

For removing any concrete remnants, we recommend using a **Double scraper Xlife** and a spatula.



Functional description:

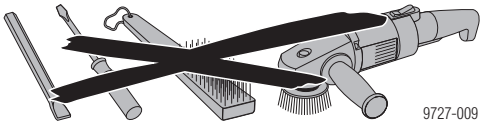




A Blade for dealing with heavy soiling
B Blade for dealing with slight soiling

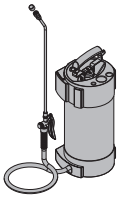
NOTICE

Do not use pointed or sharp objects, wire brushes, abrasive disks or cup brushes.



Release agents

Doka-Trenn and Doka-OptiX are applied using the Doka release-agent sprayer.



Follow the directions in the 'Doka release-agent sprayer' Operating Instructions and on the containers of release agent.

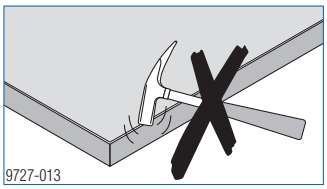
NOTICE

- Before every pour:
  - Apply release agent to the formwork sheet and the end faces **extremely thinly**, **evenly** and **in a continuous layer**.
- Make sure there are no drips of release-agent running down the formwork sheet.
- Applying too much release agent will spoil the concrete finish.

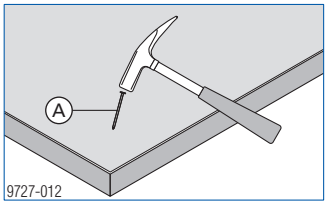
To determine the right dosage and to make sure that you are using the agent correctly, test it on less important parts of the structure first.

Care

- No hammer-blows to the frame profiles



- Do not use nails on the formwork that are longer than 60 mm



A max. l=60 mm

- Never push over panels or allow them to fall
- Do not use the panels as a climbing aid.

Reshoring props, concrete technology and stripping out

Follow the directions in the 'Stripping formwork from slabs in building construction' Calculation Guide or contact Doka!

Concrete monitoring

Concremote provides reliable, standards-compliant information on the strength development of concrete on the site, in real-time.

Follow the directions in the 'Concremote' User Information booklet.

When is the best time to strip out the formwork?

The concrete strength needed before the formwork can be stripped out will depend upon the load factor α. This can be read off from the following table.

Load factor α

This is calculated by:

$$\alpha = \frac{DL_{concrete} + LL_{construction\ state}}{DL_{concrete} + DL_{finishing} + LL_{final\ state}}$$

Slab thickness 'd' [m]	Dead load $DL_{concrete}$ [kN/m²]	Load factor α $LL_{final\ state}$ 2.00 kN/m²	3.00 kN/m²	4.00 kN/m²	5.00 kN/m²
0.14	3.50	0.67	0.59	0.53	0.48
0.16	4.00	0.69	0.61	0.55	0.50
0.18	4.50	0.71	0.63	0.57	0.52
0.20	5.00	0.72	0.65	0.59	0.54
0.22	5.50	0.74	0.67	0.61	0.56
0.25	6.25	0.76	0.69	0.63	0.58
0.30	7.50	0.78	0.72	0.67	0.62
0.35	8.75	0.80	0.75	0.69	0.65

Valid for a finishing-load $DL_{finishing}$ = 2.00 kN/m² and a live load in the early-stripped state of $LL_{construction\ state}$ = 1.50 kN/m²

$DL_{concrete}$: calculated with $\gamma_{concrete}$ = 25 kN/m³
$DL_{finishing}$: load for floor finish, etc.

Example: Slab thickness 0.20 m with a final live load of 5.00 kN/m² results in a load factor α of 0.54.
This means that formwork removal / stress-release can take place once the concrete has reached 54% of its 28-day strength. The load-bearing capacity will then correspond to that of the finished structure.

NOTICE

If the floor props are not stress-relieved, meaning that the floor-slab has not been activated, then the props will remain loaded with the dead weight of the floor-slab.

When the floor above is concreted, this may lead to a doubling of the load that is being applied to the floor props.

The floor props are not designed to cope with such an overload, and the result may be damage to the formwork, the floor props and the structure.

Why put up reshoring props after stripping out the formwork?

After the formwork has been stripped and the floor-slab has been stress-relieved or dismantled, the floor-slab is able to bear its dead load and live loads resulting from the construction state, but not the concreting loads from subsequent floor-slabs.
The temporary reshoring serves to support the floor-slab and distribute the concreting loads across several floors.

Positioning the reshoring props correctly

Reshoring props have the job of spreading loads between the new floor-slab and the floor beneath it. The load distribution will depend on the relationship between these two floor-slabs and their rigidity.

NOTICE

Ask an expert!

As a rule, the question of using reshoring props should be referred to the responsible experts (e.g. structural engineers), regardless of the information given above.

Observe all local standards and regulations!

The **Floor prop spring clamp** provides extra stability of the floor prop.

- This accessory reduces the risk of the floor prop tipping over when the load on it is relieved in the course of construction work.

➤ The spring clamp is designed to be pushed into the top end of the inner tube of the floor prop.

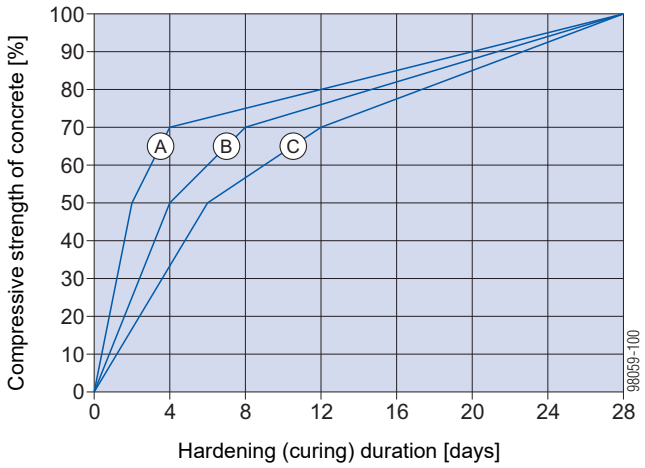
Strength development in the new concrete

Rough reference values can be found in DIN 1045-3:2008, Table 2. The length of time until 50 percent of the final (28-day) strength is reached can be read off from this Table as a function of the temperature and the type of concrete.

The values are only valid if the concrete is given correct, appropriate curing throughout the entire period.

For a concrete with medium strength development, the following inferred graph may thus be used.

Concrete-strength development – medium



A	$\vartheta \geq 15°$
B	$\vartheta \geq 10°$
C	$\vartheta \geq 5°$

Deflection of the new concrete

The concrete's modulus of elasticity develops faster than compressive strength. At 60 % of its compressive strength f_{ck}, the concrete has already reached approximately 90% of its modulus of elasticity $E_{c(28)}$.

The increase in the elastic deformation taking place in the new concrete is thus only negligible.

The creep deformation, which only finally ceases after several years, is several times more than the elastic deformation.

Early striking – e.g. after 3 days instead of 28 – thus only leads to an increase in the total deformation of less than 5%.

The part of this deformation accounted for by creep deformation, however, may be anything between 50% and 100% of the standard value, due to such variable influences as the strength of the aggregates, and the atmospheric humidity. This means that the total deflection of the floor-slab is practically independent of the time at which the formwork was struck.

Cracks in new concrete

The bonding strength between the reinforcement steel and the concrete develops more rapidly in the new concrete than does its compressive strength. This means that early stripping does not have any negative influence upon the size and distribution of cracks on the tension side of reinforced concrete constructions.

Other cracking phenomena can be countered effectively by appropriate curing methods.

Curing of new concrete

New site-placed concrete is exposed to influences which may cause cracking and slow down its strength development:

- premature drying
- over-rapid cooling in the first few days
- excessively low temperatures or frost
- mechanical damage to the surface of the concrete
- hydration heat
- etc.

The simplest precaution is to leave the formwork on the concrete surface for longer. As well as the familiar extra curing measures, this measure should be carried out in any case.

Removing the load from the formwork from wide-spanned floor-slabs with support centres of over 7.5m

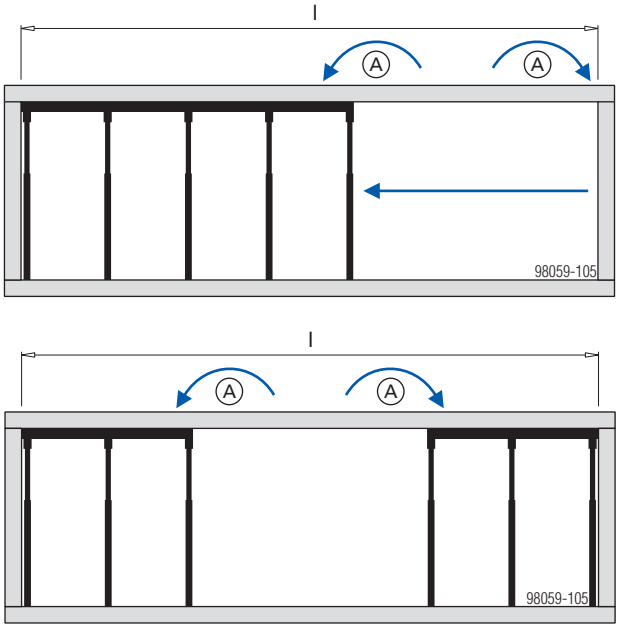
In the case of thin, wide-spanned concrete slabs (e.g. in multistorey car parks), the following points must be remembered:

- When the formwork beneath these slab spans is released (i.e. when the load is taken off the floor props), the floor props that are still in place are briefly subjected to additional loads. This may lead to overloading, and to the floor props being damaged.
- Please consult Doka.

NOTICE

As a general rule:

- Stress-release should always be carried out working **from one side towards the other, or from the middle of the slab (mid-span) towards the slab edges**.
  For wide spans, this procedure MUST be followed!
- Stress-release must **NEVER** be carried out **from both sides towards the middle**!



l ... effective floor-slab spans of 7.50 m and over

A Load redistribution

Horizontal loads of floor formwork

Horizontal loads imposed while the concrete is being poured are considerably higher than the horizontal loads imposed during installation. Consequently appropriate measures are required to transfer them, for example:

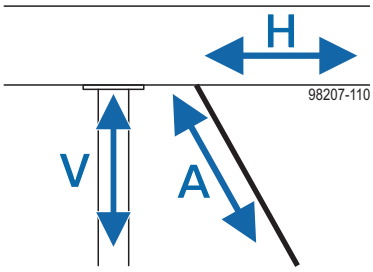
- into the building structure (columns or walls).
- by cables, straps, plumbing struts or bracings.

The load-bearing capacities of these measures may be combined and added.

NOTICE

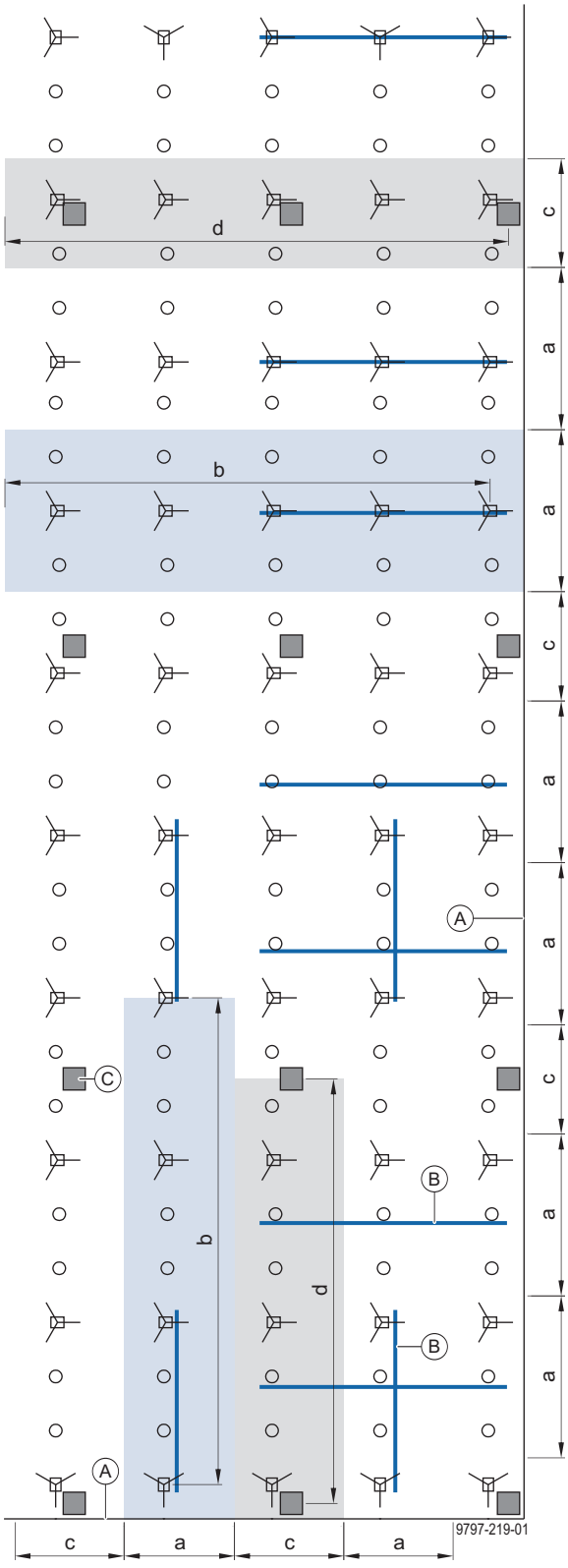
- The forces occur in all directions.
- As regards the transmission of the horizontal loads into an existing structure, it can be assumed that structural components which carry horizontal loads in the final state can do so also during pouring of the concrete floor-slab, for example high-rise building core or solid reinforced-concrete columns. Slender columns hinged at both ends at the edges of structures are not suitable. Contact the structural designer if questions arise!
- The floor-slab loads are a uniformly distributed load, The horizontal loads are exerted over a large area.

  If the horizontal loads are transmitted in concentrated form, it is important to form a non-positive locked formwork plane (friction, pressure contact, form-fit, pull nails, etc.).
- Particularly during assembly, storage areas on the floor formwork have to be considered separately on account of the concentrated higher loads! Additional precautions are needed here!
- When diagonal bracing is used to sustain horizontal loads, the vertical component has to be taken into account as an additional load on the floor props. Pay attention to the lifting forces at the supports.



Note:

This section deals only with the typical zone for horizontal floor formwork. Special areas (edge, drop beams, steps, sloping slabs, etc.) have to be examined and planned separately!



Area of influence of the bracing

a influence width of the bracing

b spacing of the bracing in primary-beam or secondary-beam direction

area of influence of the existing column

c influence width of an existing column

d distance between columns

A Slab edge (open)

B Bracing or tie-back

C Existing column

The following table helps to determine the area of influence of bracing, tie-back or column:

Horizontal loads [kN]

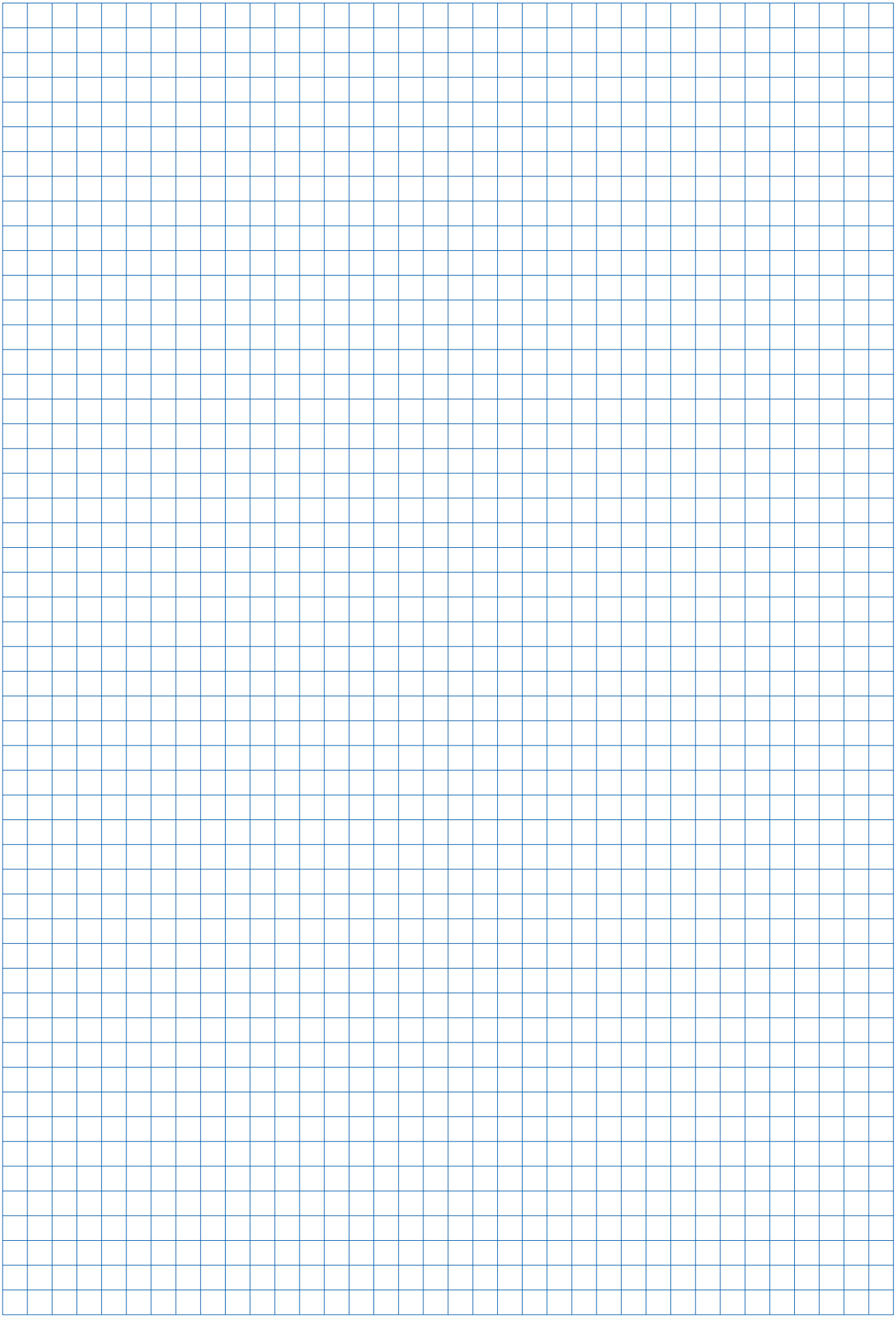
Slab thickness [cm]	Slab surface [m²]									
	5	10	15	20	25	30	35	40	45	50
10	**0.6**	**1.1**	**1.5**	**2.0**	**2.4**	2.8	3.3	3.7	4.2	4.6
12	**0.6**	**1.2**	**1.7**	**2.2**	2.7	3.2	3.7	4.2	4.7	5.2
14	**0.7**	**1.3**	**1.9**	2.5	3.0	3.6	4.1	4.7	5.3	5.8
16	**0.8**	**1.5**	**2.1**	2.7	3.3	3.9	4.6	5.2	5.8	—
18	**0.8**	**1.6**	**2.3**	3.0	3.6	4.3	5.0	5.7	—	—
20	**0.9**	**1.7**	2.5	3.2	3.9	4.7	5.4	—	—	—
22	**0.9**	**1.8**	2.6	3.4	4.2	5.1	5.9	—	—	—
24	**1.0**	**2.0**	2.8	3.7	4.6	5.4	—	—	—	—
26	**1.1**	**2.1**	3.0	3.9	4.9	5.8	—	—	—	—
28	**1.1**	**2.2**	3.2	4.2	5.2	—	—	—	—	—
30	**1.2**	**2.3**	3.4	4.4	5.5	—	—	—	—	—
32	**1.3**	2.5	3.6	4.7	5.8	—	—	—	—	—
34	**1.3**	2.6	3.8	4.9	—	—	—	—	—	—
36	**1.4**	2.7	4.0	5.2	—	—	—	—	—	—
38	**1.5**	2.9	4.1	5.4	—	—	—	—	—	—
40	**1.5**	3.0	4.3	5.7	—	—	—	—	—	—
42	**1.6**	3.1	4.5	—	—	—	—	—	—	—
44	**1.7**	3.3	4.7	—	—	—	—	—	—	—
46	**1.7**	3.4	4.9	—	—	—	—	—	—	—
48	**1.8**	3.5	5.1	—	—	—	—	—	—	—
50	**1.9**	3.7	5.3	—	—	—	—	—	—	—
52	**1.9**	3.8	5.5	—	—	—	—	—	—	—
54	**2.0**	3.9	5.7	—	—	—	—	—	—	—
56	**2.1**	4.1	5.9	—	—	—	—	—	—	—

Notes on utilisation for the table:

- Assumption: Horizontal load of 2.5%, comprising the following:
  - 1 % for imperfections
  - 1% for horizontal equivalent load
  - 0.5% for wind load
- The horizontal loads occur in all directions.
- All horizontal loads are less than 6 kN. It can be assumed that these loads can be absorbed by friction at a load-bearing structural column.
- The horizontal loads with blue background are less than 2.5 kN and can be transferred by Doka tie-back solutions. A permissible tie-back force of max. 5 kN at an angle of 60° is assumed.

Example: Slab thickness 30 cm and bracing with lashing straps

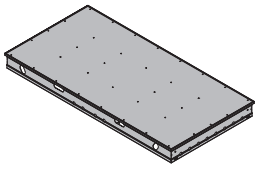
- 1 lashing strap required per 10 m² of slab area.
- If the horizontal load can be absorbed by columns for this slab thickness, each column takes up 25 m².
  This means that, on average, 2.5 times fewer lashing straps are required.



	[kg]	Article N°
DokaXdek panel 1.00x2.00m A	**33.5**	**584000000**
DokaXdek panel 0.75x2.00m A	**27.3**	**584001000**
DokaXdek panel 1.00x1.00m A	**18.5**	**584002000**
DokaXdek panel 0.75x1.00m A	**12.5**	**584003000**
DokaXdek panel 0.75x0.75m A	**12.0**	**584004000**

DokaXdek-Element

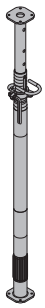
Powder-coated yellow



Doka floor prop Eurex 30 top 250 Length: 148 - 250 cm	**12.8**	**586092400**
Doka floor prop Eurex 30 top 300 Length: 173 - 300 cm	**16.4**	**586093400**
Doka floor prop Eurex 30 top 350 Length: 198 - 350 cm	**20.7**	**586094400**
Doka floor prop Eurex 30 top 400 Length: 223 - 400 cm	**24.6**	**586095400**
Doka floor prop Eurex 30 top 450 Length: 248 - 450 cm	**29.1**	**586119400**
Doka floor prop Eurex 30 top 550 Length: 303 - 550 cm	**38.6**	**586129000**

Doka-Deckenstütze Eurex 30 top

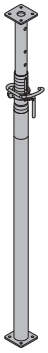
Galvanised



Doka floor prop Eurex 30 eco 250 Length: 148 - 250 cm	**12.8**	**586000000**
Doka floor prop Eurex 30 eco 300 Length: 173 - 300 cm	**16.3**	**586001000**
Doka floor prop Eurex 30 eco 350 Length: 198 - 350 cm	**20.7**	**586002000**
Doka floor prop Eurex 30 eco 400 Length: 223 - 400 cm	**24.2**	**586003000**
Doka floor prop Eurex 30 eco 450 Length: 248 - 450 cm	**28.5**	**586004000**

Doka-Deckenstütze Eurex 30 eco

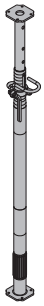
Galvanised



Doka floor prop Eurex 20 top 150 Length: 92 - 150 cm	**8.0**	**586096000**
Doka floor prop Eurex 20 top 250 Length: 148 - 250 cm	**11.8**	**586086400**
Doka floor prop Eurex 20 top 300 Length: 173 - 300 cm	**14.3**	**586087400**
Doka floor prop Eurex 20 top 350 Length: 198 - 350 cm	**17.4**	**586088400**
Doka floor prop Eurex 20 top 400 Length: 223 - 400 cm	**21.6**	**586089400**
Doka floor prop Eurex 20 top 550 Length: 298 - 550 cm	**32.3**	**586090400**
Doka floor prop Eurex 20 top 700 Length: 383 - 700 cm	**48.0**	**586139000**

Doka-Deckenstütze Eurex 20 top

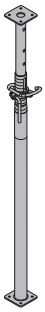
Galvanised



Doka floor prop Eurex 20 eco 250 Length: 148 - 250 cm	**11.5**	**586270000**
Doka floor prop Eurex 20 eco 300 Length: 173 - 300 cm	**14.0**	**586271000**
Doka floor prop Eurex 20 eco 350 Length: 198 - 350 cm	**16.9**	**586272000**
Doka floor prop Eurex 20 eco 400 Length: 223 - 400 cm	**21.8**	**586273000**
Doka floor prop Eurex 20 eco 450 Length: 248 - 450 cm	**24.1**	**586275000**
Doka floor prop Eurex 20 eco 550 Length: 298 - 550 cm	**32.0**	**586276000**

Doka-Deckenstütze Eurex 20 eco

Galvanised

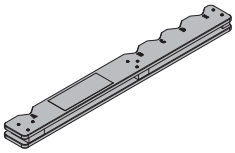
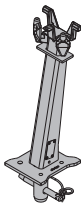
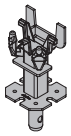


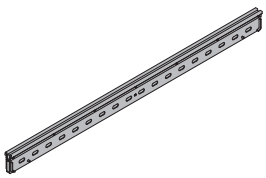
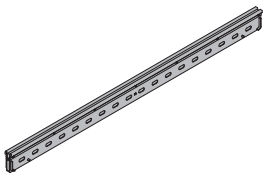
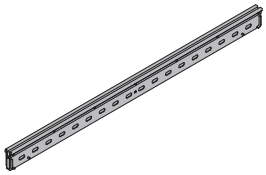
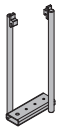
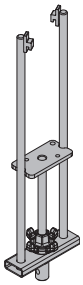
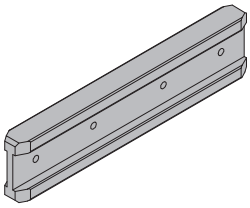
Removable folding tripod top Stützbein top	**12.0**	**586155500**

Galvanised
Height: 80 cm
Delivery condition: folded closed

Removable folding tripod Stützbein	**15.6**	**586155000**

Galvanised
Height: 80 cm
Delivery condition: folded closed

	[kg]	Article N°
Removable folding tripod 1.20m Stützbein 1,20m Galvanised Height: 120 cm Delivery condition: folded closed 	**20.7**	**586145000**
DokaXdek wall clamp DokaXdek-Wandhalter Dark brown 	**4.2**	**183082000**
DokaXdek support head DokaXdek-Auflagerkopf Galvanised 	**3.6**	**584005000**
DokaXdek wall head DokaXdek-Wandkopf Galvanised 	**4.8**	**584006000**
DokaXdek connecting head DokaXdek-Verbindungskopf Galvanised 	**3.3**	**584007000**
Spring locked connecting pin 16mm Federbolzen 16mm Galvanised Length: 15 cm 	**0.25**	**582528000**
Spring locked connecting pin D16 with eye Federbolzen D16 mit Auge Galvanised Length: 16 cm 	**0.27**	**586564000**
Floor prop spring clamp Federklammer Deckenstütze Powder-coated 	**0.08**	**586169000**

	[kg]	Article N°
DokaXdek infill beam 18mm 2.00m **DokaXdek infill beam 18mm 1.00m** **DokaXdek infill beam 18mm 0.75m** DokaXdek-Ausgleichsträger 18mm powder-coated dark grey 	**8.3** **4.1** **3.1**	**584008000** **584011000** **584014000**
DokaXdek infill beam 21mm 2.00m **DokaXdek infill beam 21mm 1.00m** **DokaXdek infill beam 21mm 0.75m** DokaXdek-Ausgleichsträger 21mm Powder-coated yellow 	**8.5** **4.1** **3.1**	**584009000** **584012000** **584015000**
DokaXdek infill beam 27mm 2.00m **DokaXdek infill beam 27mm 1.00m** **DokaXdek infill beam 27mm 0.75m** DokaXdek-Ausgleichsträger 27mm powder-coated light grey 	**8.3** **4.2** **3.2**	**584010000** **584013000** **584016000**
DokaXdek suspension clamp H DokaXdek-Einhängebügel H Galvanised Width: 14.5 cm Height: 35.8 cm 	**1.6**	**584033000**
DokaXdek lowering clamp H DokaXdek-Absenkbügel H 	**3.6**	**584045000**
DokaXdek system beam H20 eco P 0.90m DokaXdek-Systemträger H20 eco P 0,90m Varnished yellow 	**4.0**	**189975000**

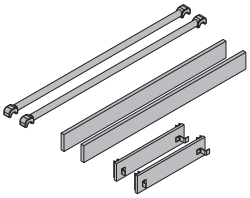
	[kg]	Article N°
Dokamatic cross beam 1.95m Dokamatic-Querträger 1,95m Varnished yellow	10.3	189716000
DokaXdek handrail-post shoe XP DokaXdek-Geländerschuh XP Galvanised	6.0	584034000
Lashing strap 5.00m 2G Zurrgurt 5,00m 2G Yellow	2.9	586018500
Lashing strap 5.00m Zurrgurt 5,00m Yellow	2.8	586018000
Bracing shoe Abspannschuh Painted blue	1.8	584044000
Doka express anchor 16x125mm Doka-Expressanker 16x125mm Galvanised Length: 18 cm	0.31	588631000
Doka coil 16mm Doka-Coil 16mm Galvanised Diameter: 1.6 cm	0.009	588633000
Information plate for express anchor Plakette Expressanker PS Width: 8 cm Height: 7.5 cm	0.1	588630000
Scaffold tube 48.3mm 1.00m Gerüstrohr 48,3mm 1,00m Galvanised	3.6	682014000
Scaffold tube 48.3mm 1.50m Gerüstrohr 48,3mm 1,50m Galvanised	5.4	682015000
Tie rod 15.0mm non-treated 0.50m Ankerstab 15,0mm unbehandelt 0,50m DIN 18216	0.73	581870000
Connecting pin 10cm Verbindungsbolzen 10cm Galvanised Length: 14 cm	0.34	580201000
Spring cotter 5mm Federvorstecker 5mm Galvanised Length: 13 cm	0.03	580204000
Bracing frame Eurex 1.00m Aufstellrahmen Eurex 1,00m Galvanised Height: 111 cm	15.5	586596000
Diagonal cross 9.200 Diagonalkreuz 9.200 Galvanised Delivery condition: folded closed	6.6	582774000
Bracing clamp B Verschwertungsklammer B Painted blue Length: 36 cm	1.4	586195000
Brace stirrup 8 Spannbügel 8 Galvanised Width: 19 cm Height: 46 cm Width-across: 30 mm	2.7	582751000

	[kg]	Article N°
Safety plate for brace stirrup 8 Sicherungsblech für Spannbügel 8 Red Length: 23 cm	**0.05**	**582753000**
DokaXdek infill-beam shoe 21mm DokaXdek-Ausgleichsträgerschuh 21mm	**1.9**	**584046000**
DokaXdek infill-beam shoe 18mm DokaXdek-Ausgleichsträgerschuh 18mm	**2.0**	**584047000**
DokaXdek shoring head H DokaXdek-Traggerüstkopf H Galvanised	**1.5**	**584136000**
DokaXdek assembling tool DokaXdek-Montagestange Aluminium	**3.1**	**584017000**
Dokadek assembling tool extension 2.00m Dokadek-Montagestangenverlängerung 2,00m Aluminium	**1.5**	**586538000**

	[kg]	Article N°
DokaXdek suspension tool DokaXdek-Einhängestange Aluminium Galvanised	**3.3**	**584018000**
DokaXdek stripping tool DokaXdek-Ausschalwerkzeug Powder-coated yellow	**6.7**	**584019000**
Dokadek stripping tool extension 1.50m Dokadek-Ausschalwerkzeugverlängerung 1,50m Powder-coated yellow	**3.1**	**586559000**
Universal end-shutter support 30cm Universal-Abschalwinkel 30cm Galvanised Height: 21 cm	**1.0**	**586232000**
Platform stairway 0.97m Podesttreppe 0,97m Aluminium Width: 121 cm Pay attention to the national, technical safety regulations!	**23.5**	**586555000**
Wheel-around scaffold DF Mobilgerüst DF Aluminium Length: 185 cm Width: 80 cm Height: 255 cm Delivery condition: separate parts	**44.0**	**586157000**

[kg] Article N°

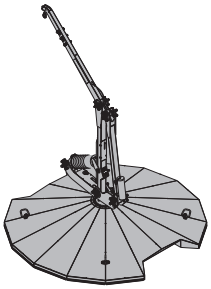
Wheel-around scaffold DF accessory set 13.3 586164000
Zubehörset Mobilgerüst DF



Aluminium
Timber parts varnished yellow
Length: 189 cm

FreeFalcon

FreeFalcon 450.0 583034000
FreeFalcon



Red
Length: 225 cm
Width: 208 cm
Height: 235 cm
Follow the directions in the "Operating Instructions"!

CE

Mast cover FreeFalcon 3.8 583027000
Abdeckung Mast FreeFalcon

Red

Base-plate cover FreeFalcon 3.2 583026000
Abdeckung Sockelplatte FreeFalcon

Red

Safety harness FreeFalcon 1.5 583036000
Auffanggurt FreeFalcon

Follow the directions in the "Operating Instructions"!

CE

Fall arrester FreeFalcon 6.00m 3.3 583039000
Fall arrester FreeFalcon 9.00m 3.8 583035000
Höhensicherungsgerät FreeFalcon

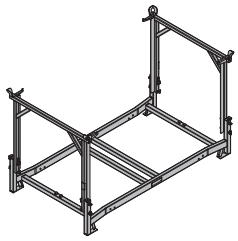
[kg] Article N°

Case for safety accessories FreeFalcon 1.5 583037000
Koffer Sicherheitszubehör FreeFalcon

Multi-trip packaging

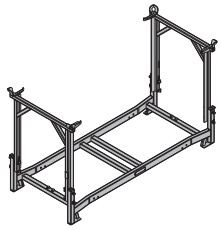
DokaXdek panel pallet 1.00x2.00m 77.0 584041000
DokaXdek-Elementpalette 1,00x2,00m

Galvanised



DokaXdek panel pallet 0.75x2.00m 70.0 584040000
DokaXdek-Elementpalette 0,75x2,00m

Galvanised

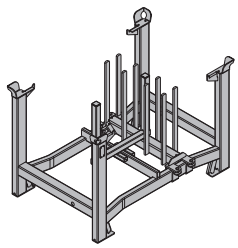


Stacking pallet transport lock 1.55x0.85m 8.5 584042000
Transportsicherung Stapelpalette 1,55x0,85m

Galvanised

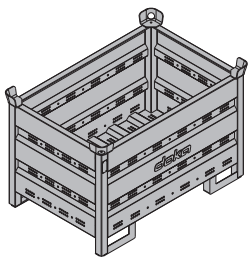
Dokadek infill beam pallet 62.0 586528000
Dokadek-Ausgleichsträgerpalette

Galvanised
Length: 119 cm
Width: 79 cm
Height: 81 cm



Doka multi-trip transport box 1.20x0.80m 70.0 583011000
Doka-Mehrwegcontainer 1,20x0,80m

Galvanised
Height: 78 cm



	[kg]	Article N°
Multi-trip transport box partition 0.80m **Multi-trip transport box partition 1.20m** Mehrwegcontainer Unterteilung Steel parts galvanised Timber parts varnished yellow	**3.7** **5.5**	**583018000** **583017000**
Doka multi-trip transport box 1.20x0.80x0.41m Doka-Mehrwegcontainer 1,20x0,80x0,41m Galvanised	**42.5**	**583009000**
Doka accessory box Doka-Kleinteilebox Timber parts varnished yellow Steel parts galvanised Length: 154 cm Width: 83 cm Height: 77 cm	**106.4**	**583010000**
Doka skeleton transport box 1.70x0.80m Doka-Gitterbox 1,70x0,80m Galvanised Height: 113 cm	**87.0**	**583012000**
Doka stacking pallet 1.55x0.85m Doka-Stapelpalette 1,55x0,85m Galvanised Height: 77 cm	**41.0**	**586151000**
Doka stacking pallet 1.20x0.80m Doka-Stapelpalette 1,20x0,80m Galvanised Height: 77 cm	**38.0**	**583016000**

	[kg]	Article N°
Universal castor wheel for transport pallet Universal-Lenkrolle Transportgebinde Galvanised Height: 28.8 cm	**6.0**	**584043000**
Bolt-on castor set B Anklemm-Radsatz B Painted blue	**33.6**	**586168000**

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