999813714 - 05/2021
en-US,US,CA

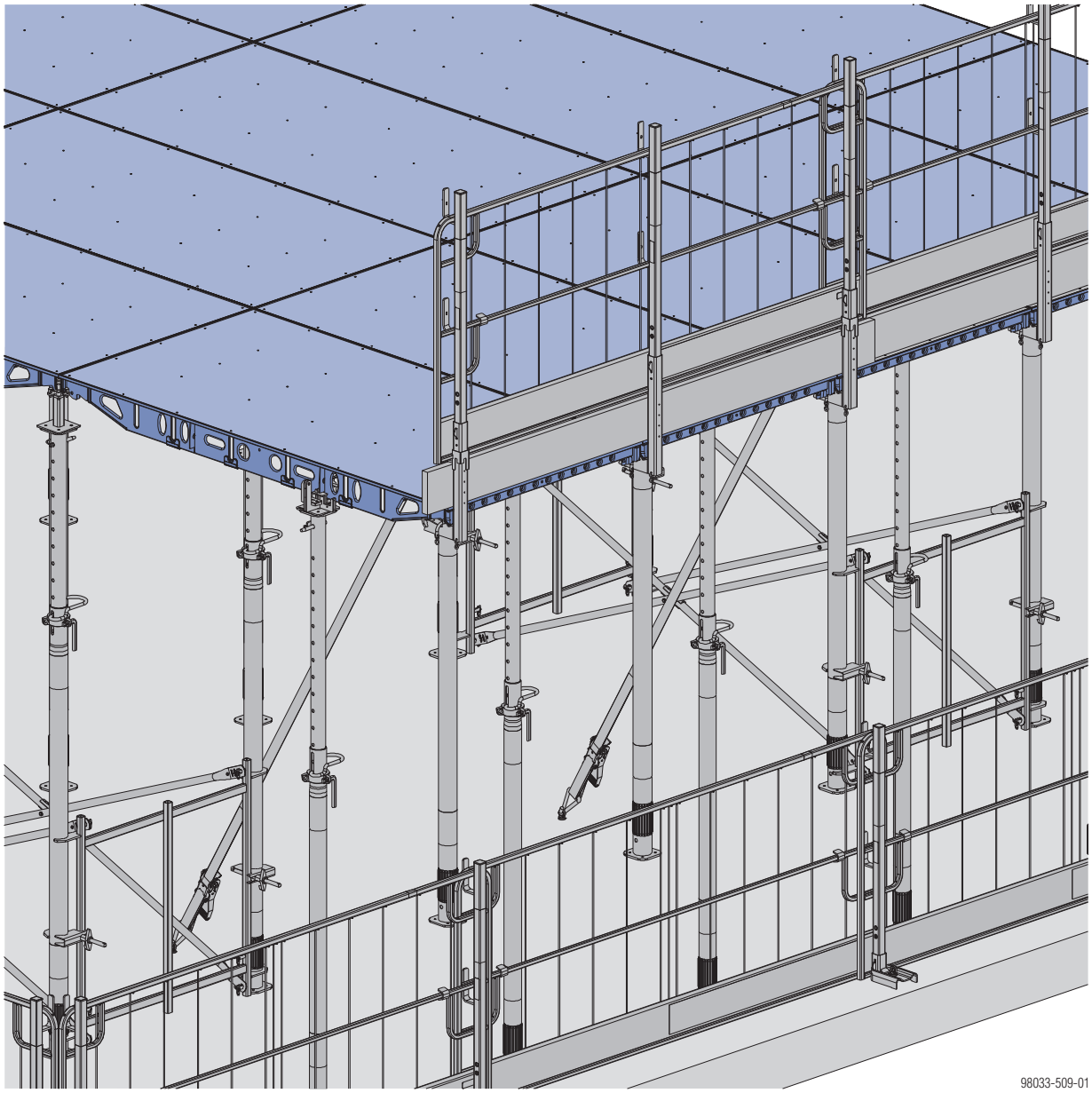
The Formwork Experts.

Structure edge

Panel floor formwork Dokadek 30

User Information

Instructions for assembly and use



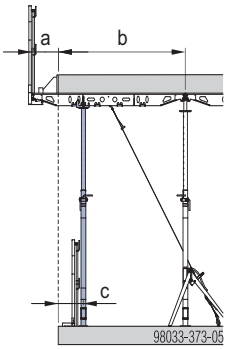
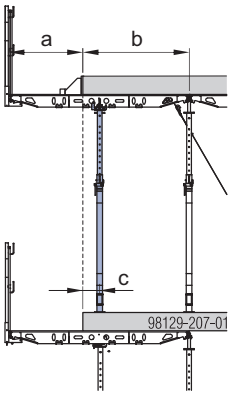
98033-509-01

Contents

Overview

NOTICE

- This document is valid only in combination with the basic document(s): '**Panel floor formwork Dokadek 30**' User Information booklet.
- When using Dokadek 30 for structures with high floor-to-ceiling heights, also follow the directions in the '**Alternative methods of assembly**' User Information booklet.
- Use of Dokadek panels 4’-0"x4’-0" (1.22x1.22m) and 2’-8"x4’-0" (0.81x1.22m) at structure edge not permitted.

	Variant 1 Propping of the cantilevering panels at the one-third point	**Variant 2** Propping of the cantilevering panels at the middle point
		
Permitted cantilever **a** of the Dokadek panel	max. 2’-4" (71 cm)	max. 3’-8" (112 cm)
Permitted concrete load **b**	7’-3" (220 cm)[1)]	4’-8" (140 cm)
Distance **c** (floor prop centerline to slab edge)	min. 4" (10 cm)	min. 4" (10 cm)

[1)] depending on slab stop-ends

Variant 1 - Propping of the cantilevering panels at the one-third point

Basic rules

NOTICE

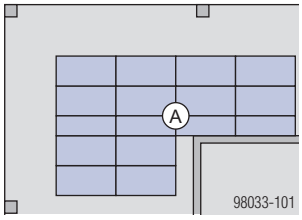
Use of Dokadek panels 4’-0"x4’-0" (1.22x1.22m) and 2’-8"x4’-0" (0.81x1.22m) at structure edge not permitted.

Permitted slab thickness without additional precautions

Panel size	Perm. slab thickness	Deflection as defined by DIN 18202
4’-0"x8’-0" (1.22x2.44m)	1’-0" (30 cm)	Line 6
4’-0"x8’-0" (1.22x2.44m)	> 1’-0" (30 cm) - 1’-1" (32 cm)	Line 5
4’-0"x4’-0" (1.22x2.44m)	1’-1" (32 cm)	Line 5
2’-8"x8’-0" (0.81x2.44m)	1’-6" (45 cm)	Line 6
2’-8"x8’-0" (0.81x2.44m)	> 1’-6" (45 cm) - 1’-8" (50 cm)	Line 5
2’-8"x4’-0" (0.81x1.22m)	1’-8" (50 cm)	Line 6

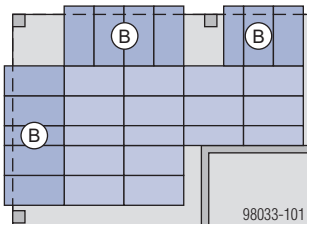
Schematic set-up

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

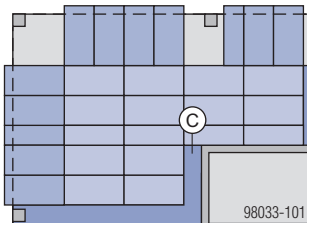
2) Set up the cantilevering panels, level them and tie them back.



B Cantilevering panels

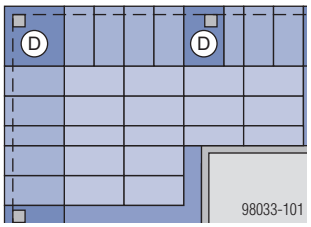
3) Install guardrails.

4) Form the infills in the typical zone.



C Infills in typical zone

5) Form the infills between the cantilevering panels.



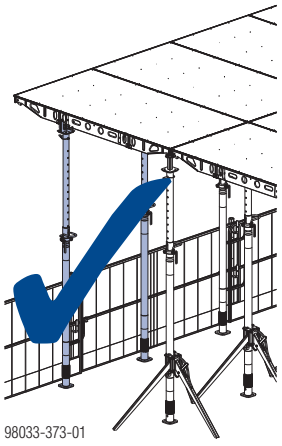
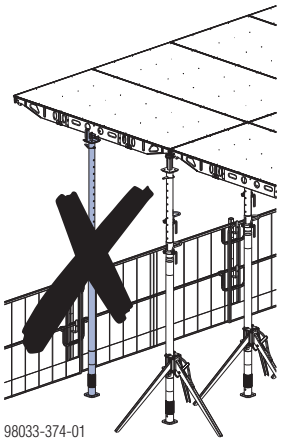
D Infills between cantilevering panels

6) Install the stop-end formwork.

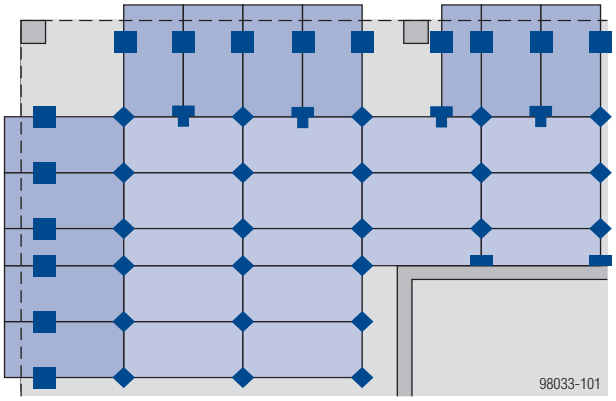
Dokadek heads

WARNING

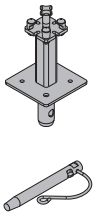
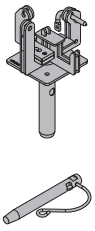
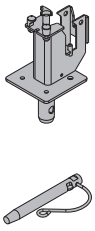
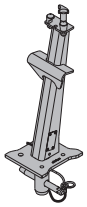
- The Dokadek heads must always be fixed to the floor prop with the correct pin. (Exception: edge heads at inter-panel joints).
- Install the edge head only at the outside one-third point of the panel.

Right! (floor props installed at the outside one-third point)	Wrong! (floor props installed at the inside one-third point or the middle)
	

Position of the Dokadek heads



Legend

Support head	Edge head 18mm / 21mm / 27mm	Cross head	Wall head
 1)	 1) 2)	 1)	

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

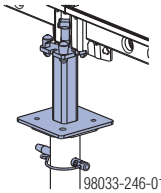
2) Spring locked connecting pin 16mm needed only for the combination of edge head with infill beam.

NOTICE

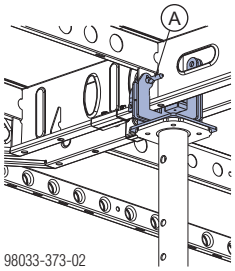
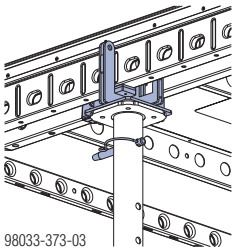
- When placing the panels onto the heads, make sure that the panels are correctly fixed in the heads.
- Edge heads on which infill beams are set (in the infill zone) must be secured with Spring locked connecting pins 16mm.
- If a Dokadek panel 4’-0"x4’-0" (1.22x1.22m) is to be connected, the cross head is installed at the middle point on the broadside of the panel.
- If a Dokadek panel 2’-8"x4’-0" (0.81x1.22m) is to be connected, the cross head is installed at the one-third point on the broadside of the panel.

Installation examples

Support head

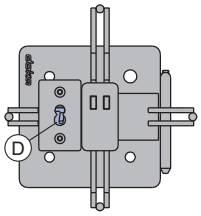
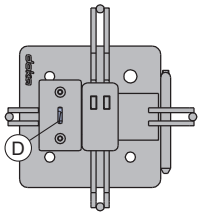
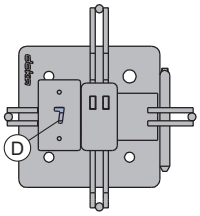


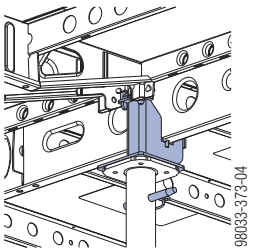
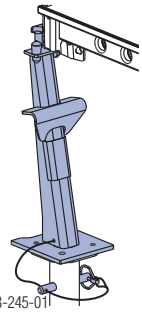
Edge head

Used at inter-panel joint	Used with panel and infill beam
	

A Pin for securing the edge head to the panel (included in scope of supply)

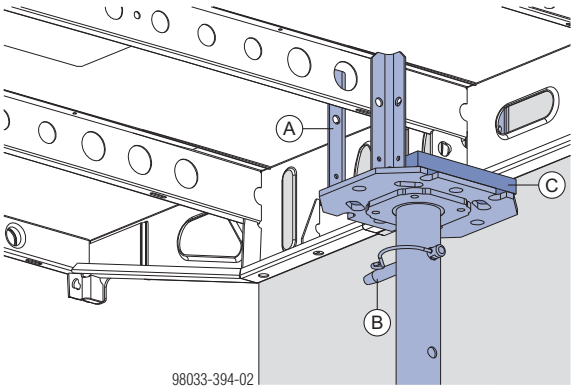
Identification mark (D) on edge head to show matching sheet thickness

Sheet thickness		
18 mm	21 mm	27 mm
		

Cross head Used on the broadside of the panel, at the one-third point or in the middle of the panel	**Wall head**
	

Preparing wall junctions

At wall junctions the 4-way head or lowering head is used instead of the corresponding edge head at the one-third point of the panel.



A 4-way head or Lowering head H20
B Spring locked connecting pin 16mm
C Height compensation min. $^{7}/_{8}$" (21 mm) (secure with nails)

Securing the formwork against tip-over

WARNING

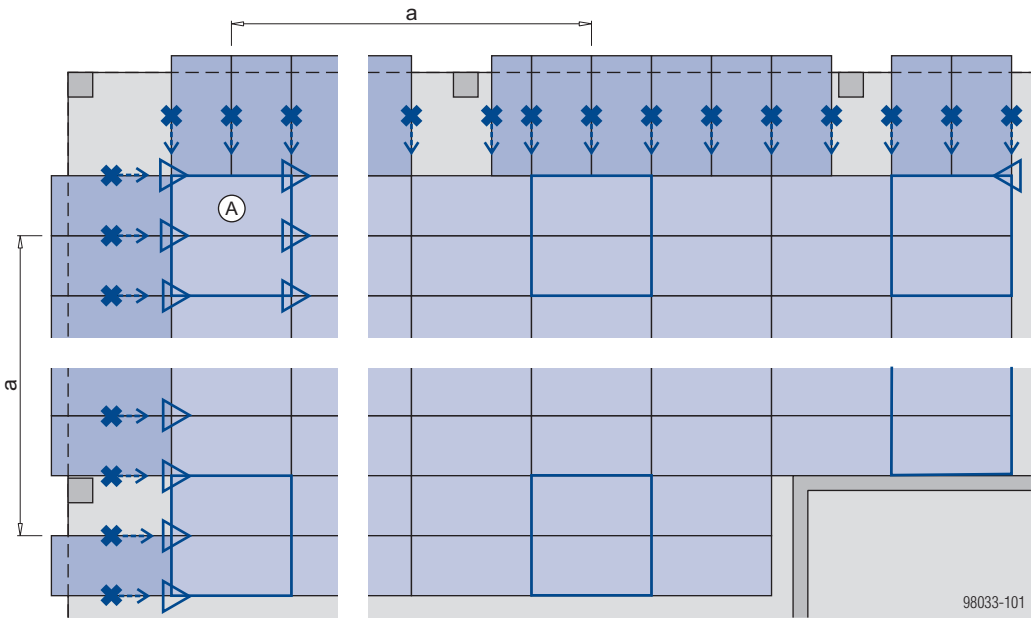
- ➤ Before anyone steps onto the surface of the formwork, its stability must be ensured by e.g. wall clamps or lashing straps.
- ➤ Transfer of loads must be ensured by other measures (e.g. by transferring these loads into the structure or using tie-backs).
- ➤ All cantilevered panels must be secured against tilting.

For more information on tie-backs with lashing straps, see the section headed 'Floor formwork around edges' in the 'Panel floor formwork Dokadek 30' User Information booklet.

NOTICE

- Secure each floor prop in the 1st row of props with a Removable folding tripod.
  - Propping height < 9'-10" (3.00 m): Removable folding tripod
  - Propping height ≥ 9'10" (3.00 m): Removable folding tripod 1.20m
- While the formwork is being set up, make a braced unit at the 1st pair of panels (with removable folding tripods), every max. 24' - 7" (7.50 m) and at the last pair of panels (without removable folding tripods) (see Practical examples 1 & 2).
  - Alternatively, tie-backs can be attached (see Practical example 3).
- Important to remember when installing the floor prop (incl. cross head): in the typical zone, secure – with tripods – the props that have only 1 panel resting on them.
- Tie back the typical zones at the corners.
- Tie back cantilevering panels:
  - by the Scaffold tube 0.50m at every inter-panel joint (see Practical example 5)
  - additionally, at the outside panels, by the middle bulkhead plate (see Practical example 6)

Variant with braced unit



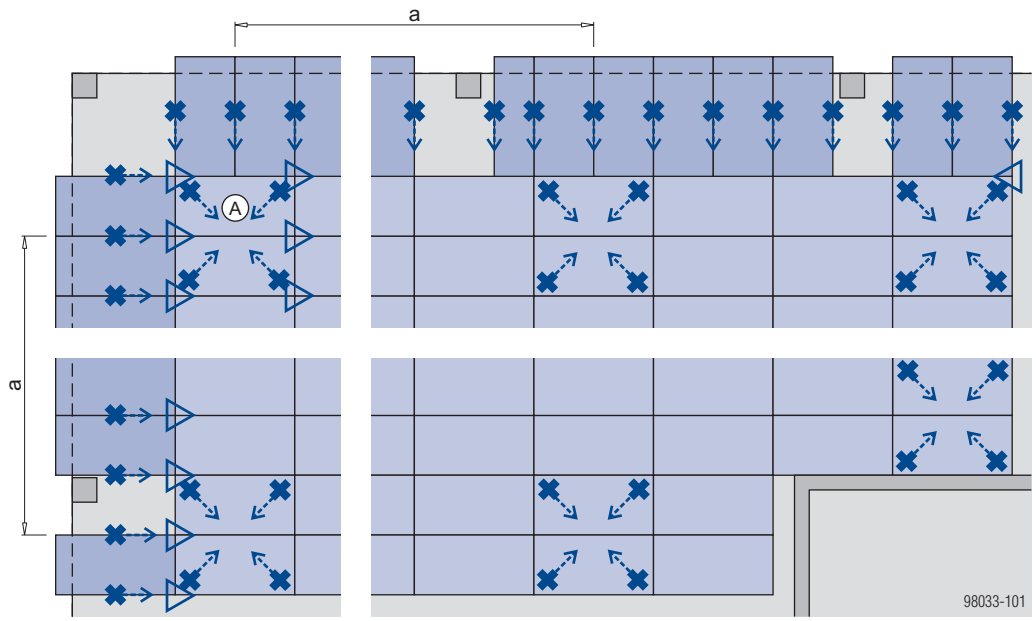
a ... Braced unit at 1st pair of panels, every max. 24'-7" (7.50 m) **and** at last pair of panels

A Starting unit

Legend

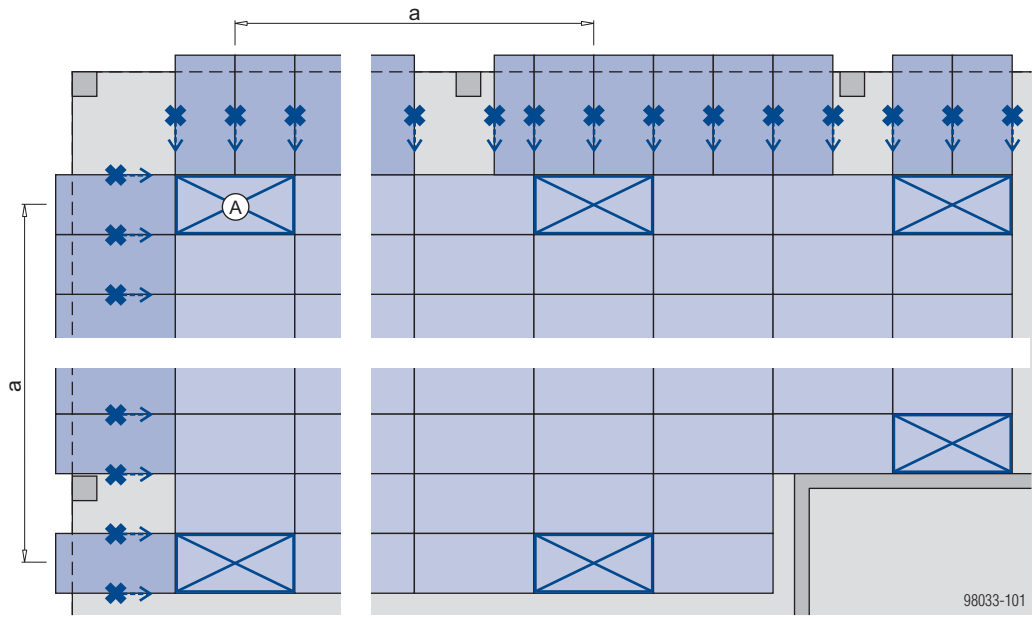
- Removable folding tripod
- Stabilization point (e.g. with tie-back) Arrow = direction of the tie-back
- Braced unit

Variant without braced unit



a ... Braced unit or tie-back at 1st pair of panels, every max. 24’-7" (7.50 m) **and** at last pair of panels

Variant with Bracing frame Eurex



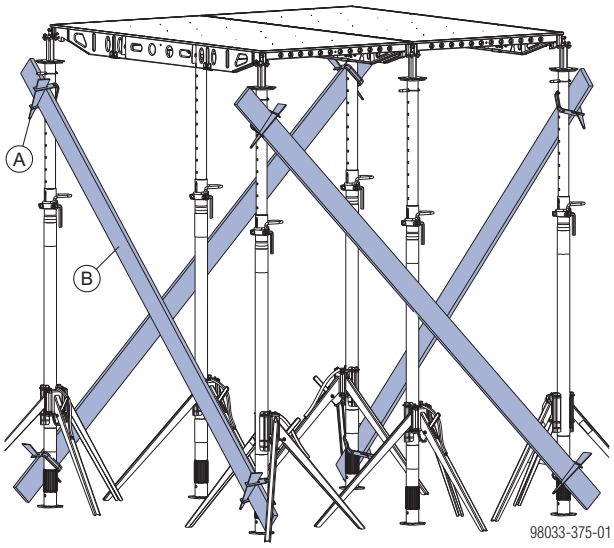
a ... Braced unit with Bracing frame Eurex at 1st pair of panels, every max. 24’-7" (7.50 m) **and** at last pair of panels

A Starting unit

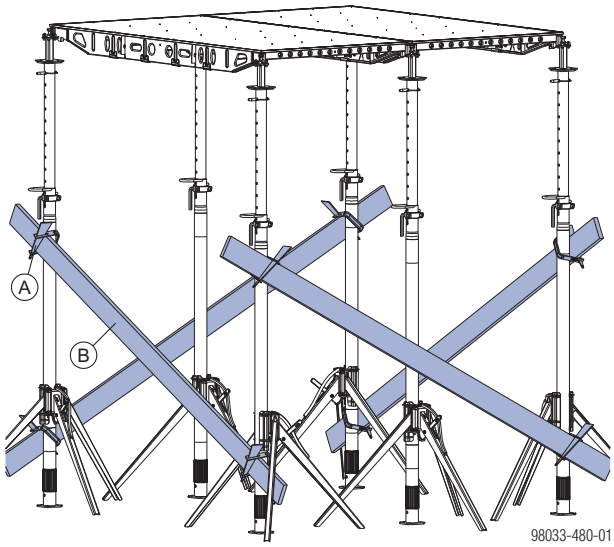
Legend

	Removable folding tripod
	Stabilization point (e.g. with tie-back) Arrow = direction of the tie-back
	Braced unit
	Bracing frames Eurex with diagonal crosses

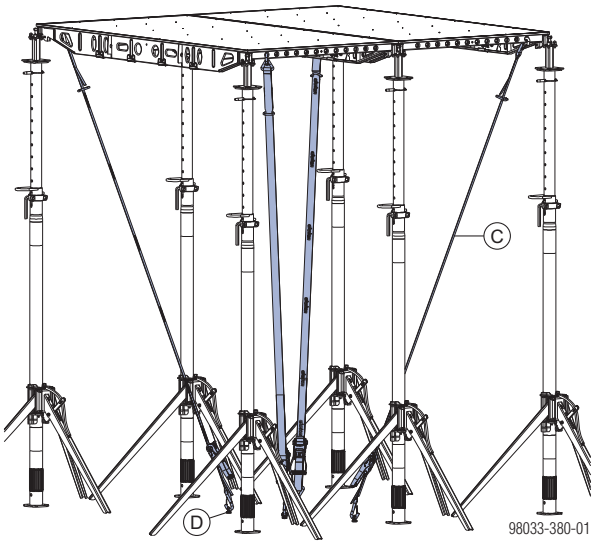
Practical example 1
Braced unit at 1st pair of panels



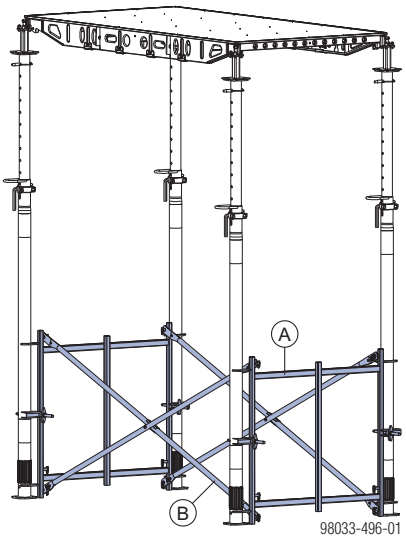
Practical example 2
Alternative, braced unit



Practical example 3
Alternative, tie-back



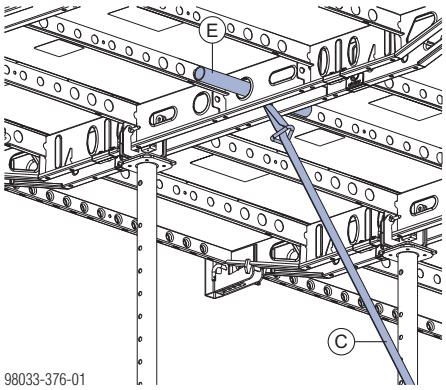
Practical example 4
With Bracing frame Eurex

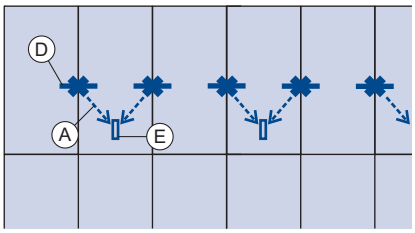


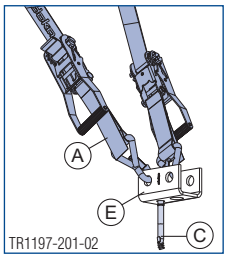
A Bracing frame Eurex

B Diagonal cross

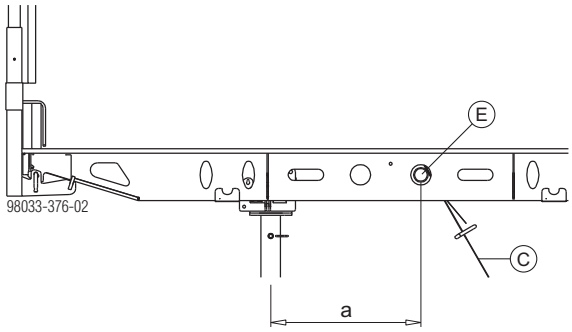
Practical example 5
Tie-back at inter-panel joint







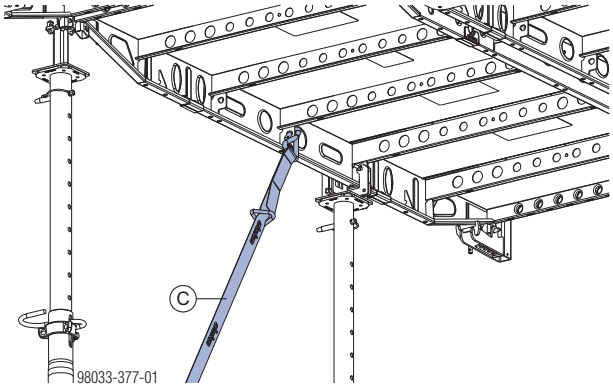
A Lashing strap 5.00m
C Doka express anchor 16x125mm
D Scaffold tube 48.3mm 0.50m
E Bracing shoe



a ... 1'-8" (50 cm)

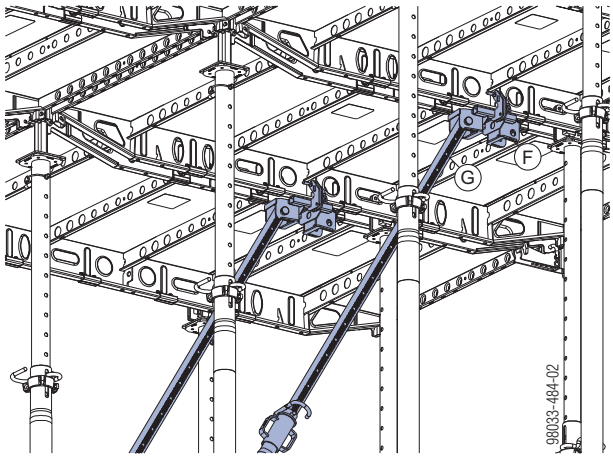
Permitted tie-back force in longitudinal direction at the Scaffold tube 48.3mm 0.50m: 1.1 kip (5 kN)

Practical example 6
Tie-back in middle bulkhead plate



Permitted tie-back force in longitudinal and transverse directions at the middle bulkhead plate: 1.1 kip (5 kN)

Practical example 7
Tie-back at the inter-panel joint at the middle point with Dokadek plumbing strut connector

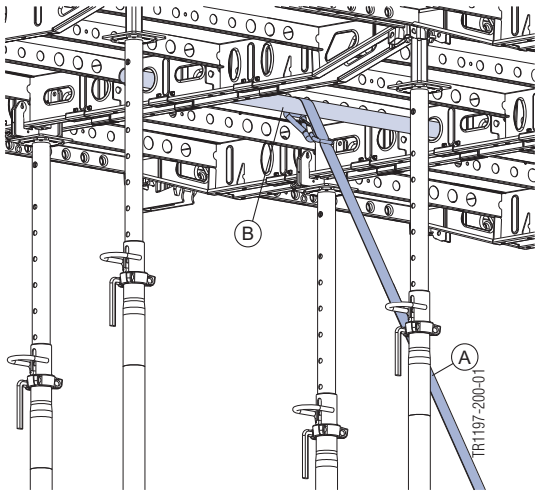


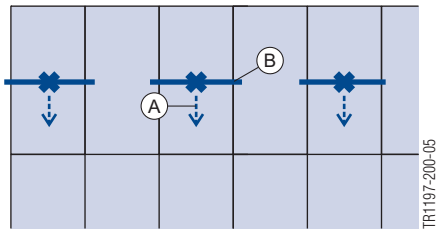
A Bracing clamp B
B Plank
C Lashing strap 5.00m
D Doka express anchor 16x125mm
E Scaffold tube 48.3mm 0.50m
F Dokadek plumbing-strut connector
G Plumbing strut 340 IB or 540 IB

Permitted compressive force: 3.0 kip (13.5 kN)
Permitted tensile force: 1.1 kip (5 kN)

For details on use of the Dokadek plumbing strut connector see the section headed 'Sloping slabs' in the 'Panel floor formwork Dokadek 30' User Information booklet.

Practical example 8
Tie-back in middle of panel





A Lashing strap 5.00m
B Scaffold tube 48.3mm 1.50m

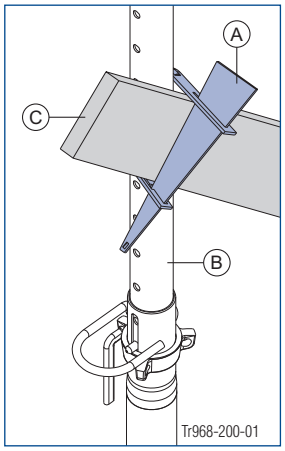
Permitted tie-back force in longitudinal direction at the Scaffold tube 48.3mm 1.50m: 0.6 kip (3 kN)

Bracing clamp B

Lumber 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 30
C Plank

Possible plank/floor-prop combinations with the Bracing clamp B

Eurex 20	Plank											
	1"x6" (2.4x15 cm)		1 1/8"x6" (3x15 cm)		1 5/8"x6" (4x15 cm)		2"x4" (5x10 cm)		2"x4 1/2" (5x12 cm)		2"x6" (5x15 cm)	
	IT	OT	IT	OT	IT	OT	IT	OT	IT	OT	IT	OT
250	—	✓	—	✓	✓	✓	✓	✓	✓	✓	✓	✓
300	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
350	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
400	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
450	✓	✓	✓	✓	✓	✓	✓	—	✓	—	✓	—
550	✓	✓	✓	✓	✓	—	✓	—	✓	—	—	—

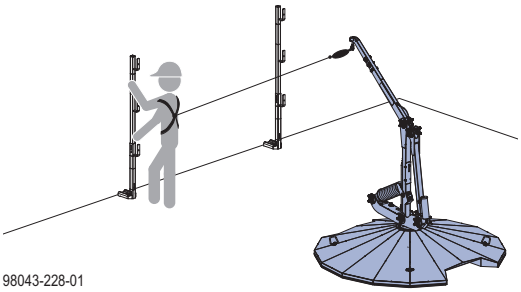
Legend:

IT	Inner tube
OT	Outer tube
✓	Possible to combine
—	Not possible to combine

FreeFalcon

WARNING
Risk of falling at open drop-off edges!
- ➤ Every member of the crew must use a personal fall-arrest system (e.g. personal fall-arrest set) until all fall protection has been installed.
- ➤ Suitable anchorage points must be defined by a skilled person appointed by the contractor.

A fall arrester such as the FreeFalcon provides a mobile anchorage point for the personal fall-arrest set.

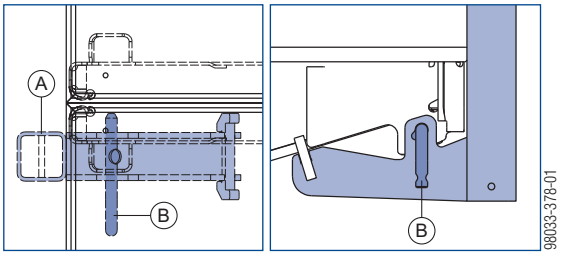


User instruction prior to use of the FreeFalcon is mandatory.
Follow the directions in the 'FreeFalcon' Operating Instructions.

Fall protection on the formwork

For more information on permitted influence width of the railing shoes, see the section headed 'Floor formwork around edges' in the 'Panel floor formwork Dokadek 30' User Information booklet.

Note:
The position of the railing shoe short is different from that in the standard installation configuration as described in the 'Floor formwork around edges' section of the 'Panel floor formwork Dokadek 30' User Information booklet.



A Dokadek railing shoe short
B Pin (vertical!)

Fall protection on the structure

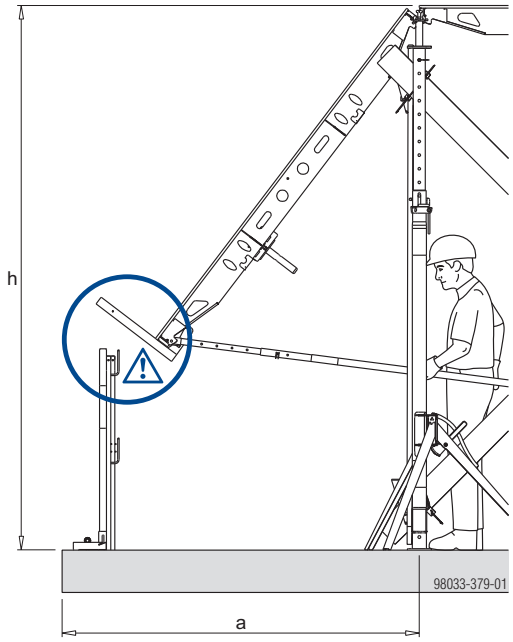
Note:
When tilting up the cantilevering panels, make sure that they do not collide with the guardrail system on the structure. Different minimum room heights are required, depending on the attachment method used.

Possible ranges of use with Edge protection system XP

Attachment method used	Min. room height 'h'
Railing shoe XP	10'-2" (310 cm)
Railing clamp XP 40cm	9'-10" (300 cm)
Screw-on shoe XP	9'-10" (300 cm)

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. personal fall-arrest set).

Practical example

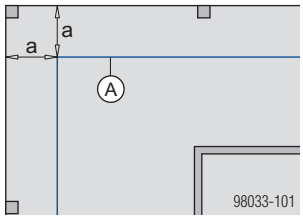


a ... 6'-11" (210 cm) (checking is necessary for any other dimension!)

Operating with assembling tool

Formwork set-up in the typical zone

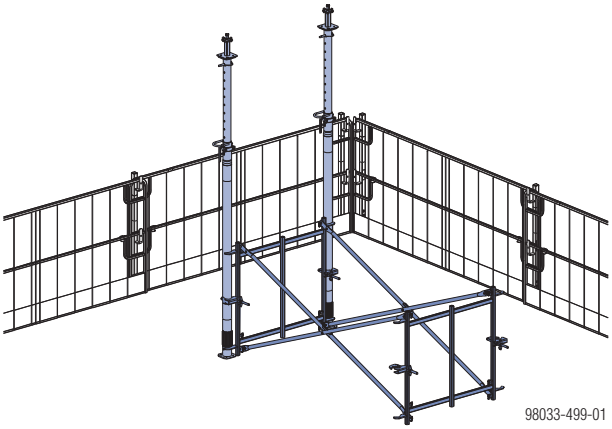
➤ Draw a vertical plan of the typical zone.



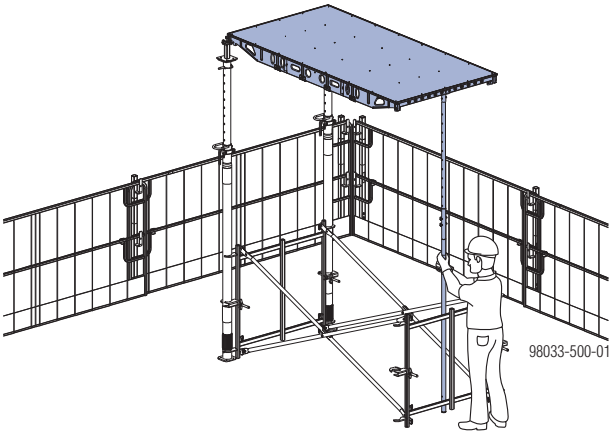
a ... 6'-11" (210 cm) (checking is necessary for any other dimension!)

A Vertical plan

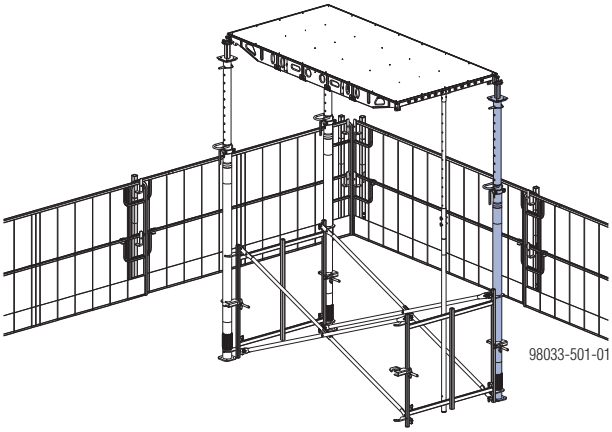
➤ Pre-assemble the unit consisting of bracing frames and diagonal crosses and set up the first two floor props (with support heads) at the appropriate positions.



➤ 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°).

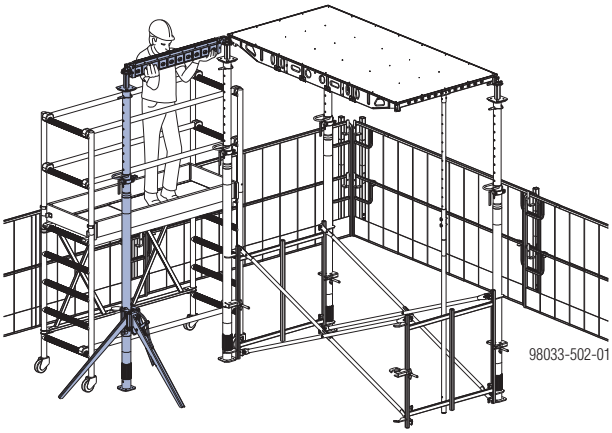


NOTICE

➤ Make sure that the Wheel-around scaffold DF is steady and secure!

➤ When work is being carried out near drop-off edges (i.e. at a distance of < 6'-7" (2 m), the Wheel-around scaffold DF accessory set (consisting of a toeboard and intermediate guard rail) is needed.

➤ Working from a Wheel-around scaffold DF, put up the next floor prop (with a support head), secure it with a removable folding tripod and engage infill beams into the heads to fix the props the correct distance apart.



CAUTION

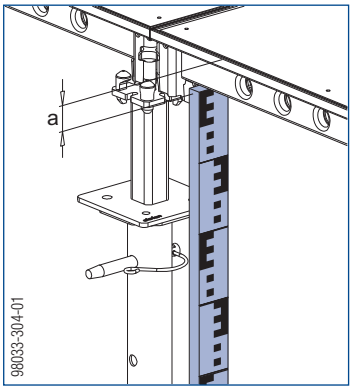
➤ When engaging and tilting up the panel, give the floor props additional stabilization (i.e. as well as with the removable folding tripods) to prevent them tipping over.

➤ 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 (see the section headed 'Securing the formwork against tip-over' in the 'Panel floor formwork Dokadek 30' User Information booklet).

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

Leveling the typical zone

➤ Adjust the panels at the corners to the desired floor-slab height (= room height minus 2 $^1/_2$" (6.5 cm), with reference to the frame cross-profile.



a ... 2 $^1/_2$" (6.5 cm)

Securing the typical zone against tip-over

➤ See the section headed 'Ground rules'.

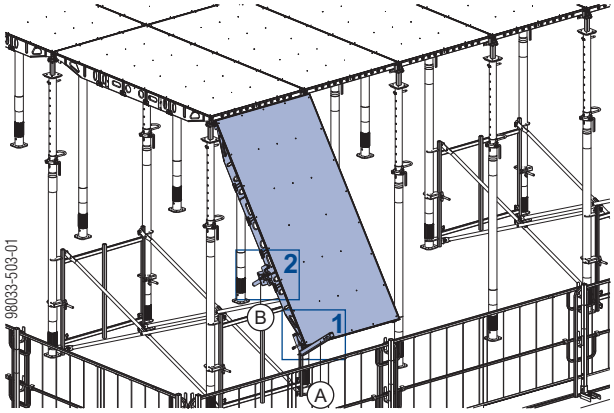
Installing cantilevering panels

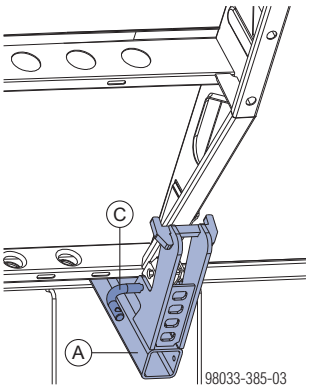
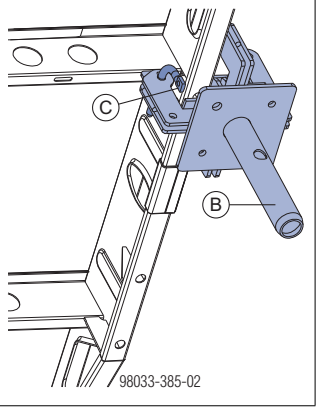
Preparations

- ➤ Set at least **2 assembling tools** to the required length (= approx. room height + 8" (20 cm).
- ➤ Roughly adjust the height of the floor prop, using the fastening clamp (required length = room height minus 10" (25 cm).
- ➤ Seat the cross head on the floor prop and secure it with the pin.

Adding to narrowside of standard panels

- ➤ Engage the cantilevering panel in the support heads.
- ➤ Install a railing shoe short and an edge head.



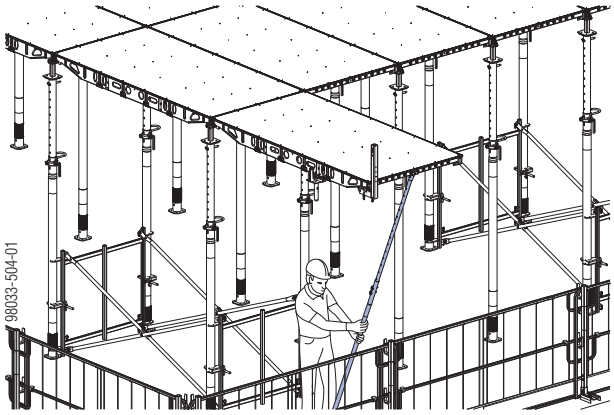
Close-up 1 Railing shoe short	Close-up 2 Edge head
	

A Dokadek railing shoe short
B Dokadek edge head
C Safety pin (vertical!)

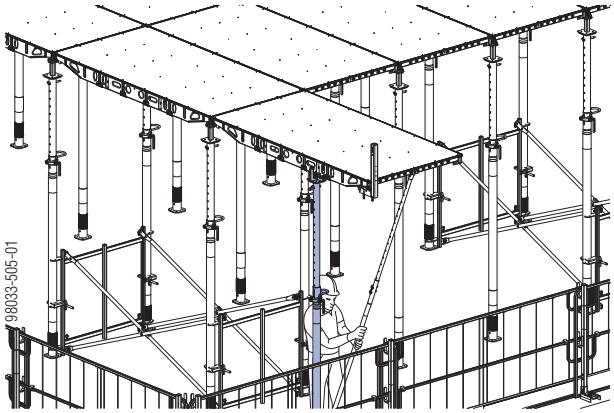
WARNING

➤ When assembling tools are used for propping cantilevering panels, they must always be held by one person to prevent tip-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.

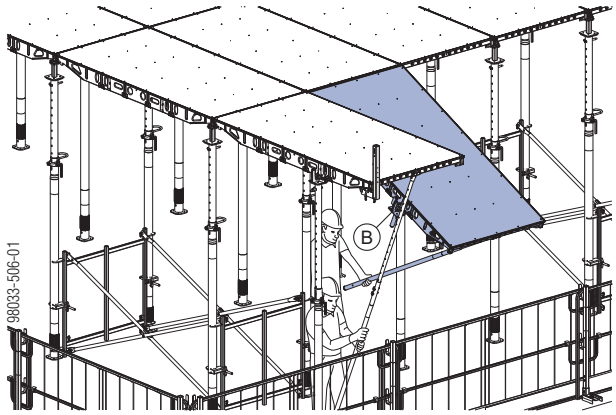


➤ Shore the panel by placing a floor prop under the edge head. Assembling tool remains securely propped in position.

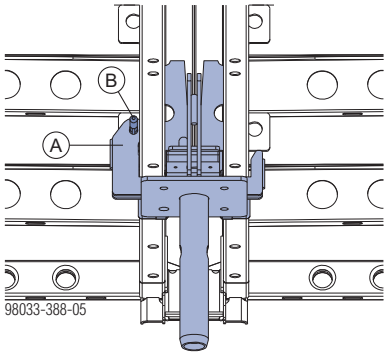


➤ Engage the next panel.

➤ Install the edge head and, if necessary, the railing shoe short (depends on the permitted influence width). Then swing the panel up into position.



Close-up of edge head



A Dokadek edge head
B Safety pin (vertical!)

➤ Set up further panels in the same way, until only the planned infill zone is left unformed. Note, however, that an extra edge head is needed at the final panel.

Dokadek panels 2’-8"x8’-0" (0.81x2.44m) can be used to optimize the infill width around columns.

The Dokadek panels 2'-8"x8'-0" (0.81x2.44m) are installed in the same way as the Dokadek panels 4'-0"x8'-0" (1.22x2.44m).

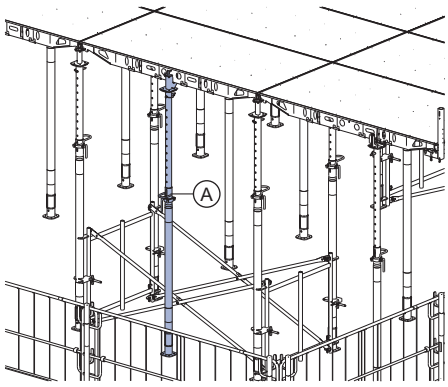
Adding to broadside of standard panels

NOTICE

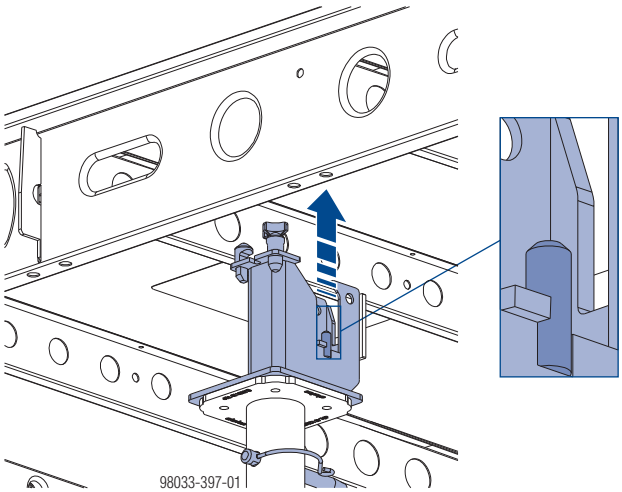
➤ Props with a cross head should only be extended (by turning the adjusting nut) until the prop encounters resistance from above. The panel must not be raised.

➤ At the corners, use tripods to secure every floor prop where only 1 panel is resting on this prop's head.

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



A Doka floor prop with Dokadek cross head

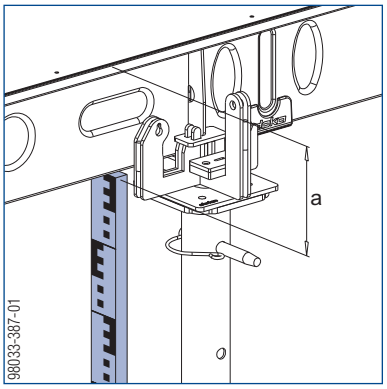


The pins of the cross head must be engaged in the two holes in the panel.

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

Leveling cantilevering panels

➤ Adjust the panels above the floor prop to the desired floor-slab height (= room height minus 7"(17.5 cm)), with reference to the longitudinal profile.



a ... 7" (17.5 cm)

Securing cantilevering panels against tip-over

➤ See the section headed 'Ground rules'.

Installing guardrail systems

For more information, see the 'Panel floor formwork Dokadek30' User Information booklet.

Installing fillers

NOTICE

If fillers have to be installed from above, the crew must use a personal fall-arrest system (e.g. safety harness).

Installing fillers in the typical zone

For more information, see the 'Panel floor formwork Dokadek30' User Information booklet.

Installing fillers between cantilevering panels

- A force-locked superstructure is necessary in order for the horizontal forces to be transferred.
- The back-stay can be fastened to either a joist or a stringer.

WARNING

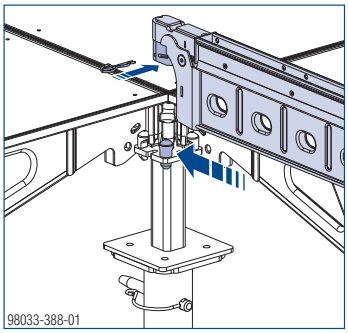
➤ Secure cantilevering slab formwork to prevent lift-out and tipover.

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

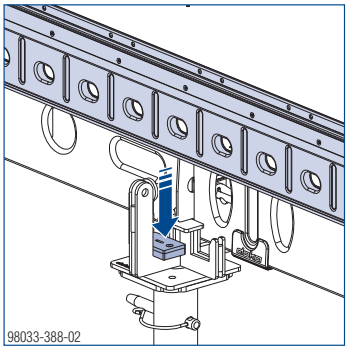
➤ In addition, if necessary, put up a protection platform on the structure (e.g. Folding platform K).

➤ Engage infill beams 8’ -0” (2.44m) in the heads (cheek plate at top), and secure each with spring cotters.

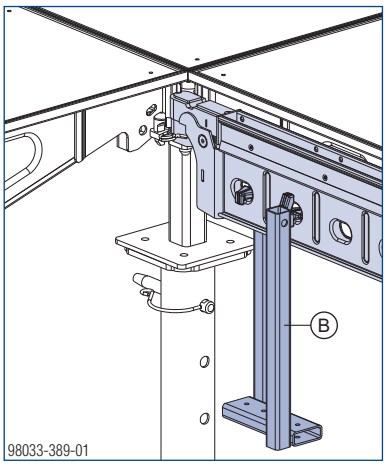
Position on support head



Position on edge head



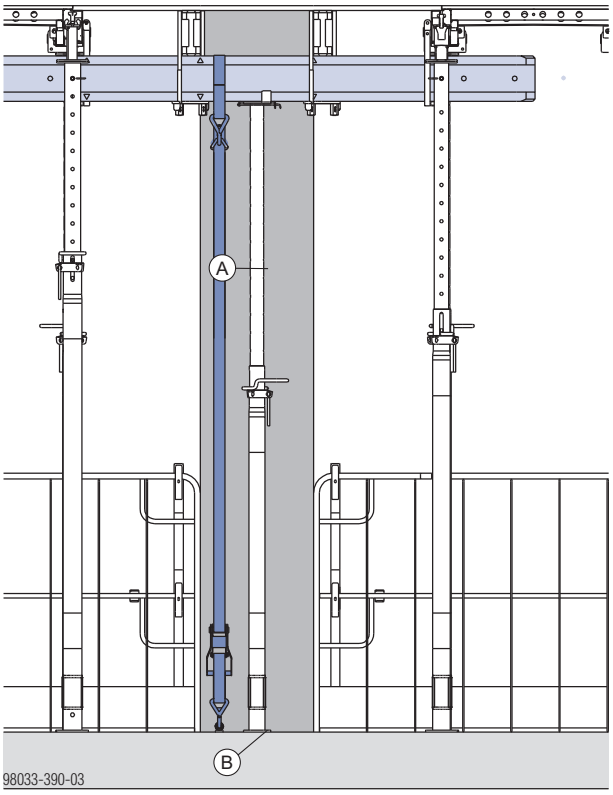
➤ Hook 4 suspension clamps into the infill beams **as close to the floor props as possible**.



B Dokadek suspension clamp H20

➤ Work 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.



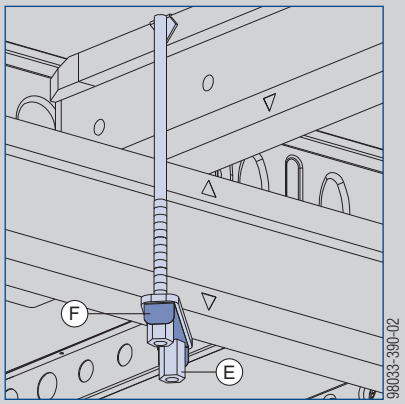
A Lashing strap 5.00m

B Doka express anchor 16x125mm

CAUTION

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

➤ 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.

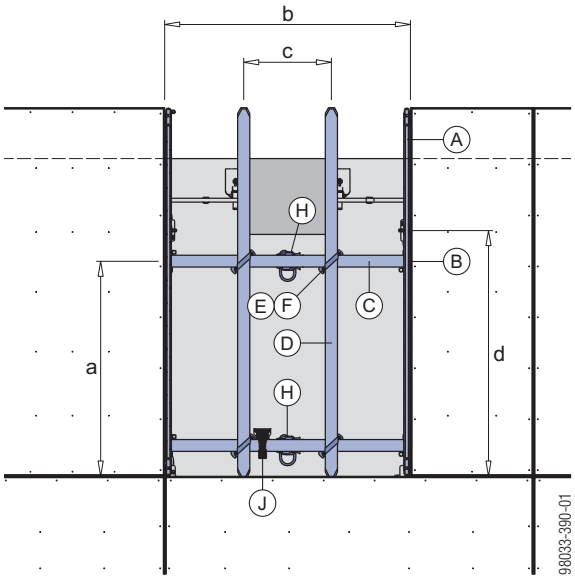
Use each safety plate once only.

➤ Install Doka beams H20 as secondary beams and secure them with Brace stirrups 8.

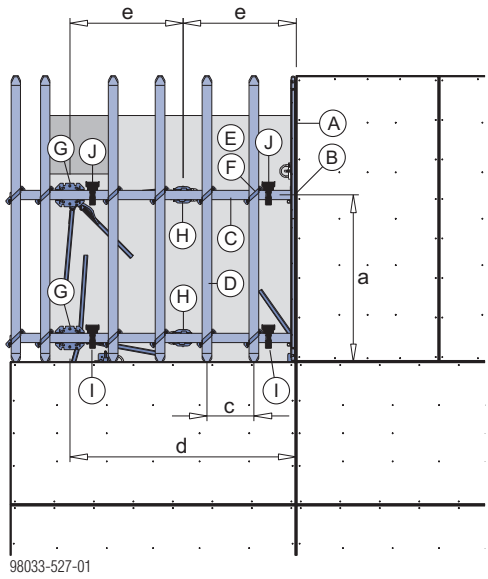
➤ Install the infill.

Practical examples

Infilling between cantilevering panels



Infilling at corner of building



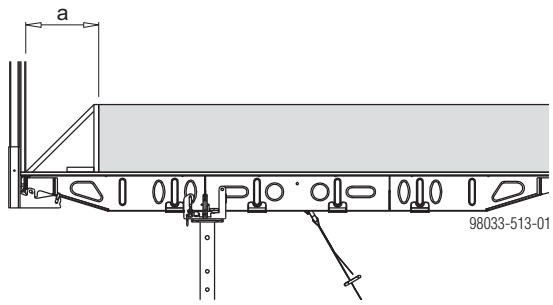
Permissible dimensions

Max. slab thickness	1’1" (32 cm)	1’-6" (45 cm)
Dokadek panel	4’-0"x8’-0"(1.22x2.44m)	2'-8"x8'-0" (0.81x2.44m)
a (position of outside primary beam)	≥ 4’-8" (142 cm)	
b (max. infill width **without** centered additional prop)	≤ 4’ (122 cm)	≤ 2’-8" (81.3 cm)
b (max. infill width **with** 1 centered additional prop)	≤ 6’ (184 cm)	≤ 2’-8" (81.3 cm)
c (max. secondary-beam spacing)	1’-8" (50 cm)	1’-0" (30 cm)
d (position of floor prop with edge head)	5’-4" (163 cm)	
e (max. spacing of props)	3’-2" (96.5 cm) (with 1 additional prop at one-third point)	2’-1 1/4" (64 cm) (with 2 additional props at one-third point)

A Dokadek infill beam 8'-0" (2.44m)
B Dokadek suspension clamp H20
C Doka beam H20 used as primary beam
D Doka beam H20 used as secondary beam (e.g. 2.45m)
E Brace stirrup 8
F Safety catch
G Floor prop Eurex 30 top
Removable folding tripod
Lowering head H20
H Floor prop Eurex 30 top and Supporting head H20 DF
I Lashing strap 5.00m

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 ... 8" (20 cm) up to 1'-0" (30 cm)

NOTICE
Use of Dokadek panels 4'-0"x4'-0" (1.22x1.22m) and 2'-8"x4'-0" (0.81x1.22m) at structure edge not permitted.

Perm. slab thickness[1)]

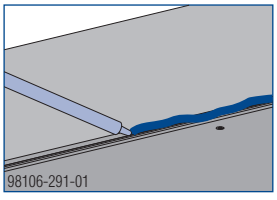
Panel size	**without** additional measures	**with** additional measures[2)]	Flatness deviation as per DIN 18202, Table 3
4'-0"x8'-0" (1.22x2.44m)	1'-0" (30 cm)	—	Line 6
4'-0"x8'-0" (1.22x2.44m)	> 1'-0" (30 cm) - 1'-1" (32 cm)	—	Line 5
4'-0"x8'-0" (1.22x2.44m)	—	> 1'-0" (30 cm) - 1'-8" (50 cm)	Line 6
4'-0"x4'-0" (1.22x2.44m)	1'-1" (32 cm)	> 1'-0" (30 cm) - 1'-8" (50 cm)	Line 5
2'-8"x8'-0" (0.81x2.44m)	1'-6" (45 cm)	—	Line 6
2'-8"x8'-0" (0.81x2.44m)	> 1'-6" (45 cm) - 1'-8" (50 cm)	—	Line 5
2'-8"x8'-0" (0.81x2.44m)	—	> 1'-6" (45 cm) - 1'-8" (50 cm)	Line 6
2'-8"x4'-0" (0.81x1.22m)	1'-8" (50 cm)	—	Line 6

[1)] with use of Doka floor prop Eurex 30 top

[2)] See the section headed 'Additional measures for slab thicknesses up to 1'-8" (50 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

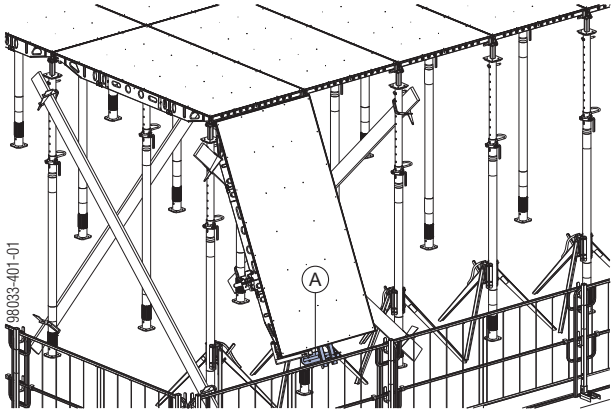
NOTICE
- Comply with the stipulated stripping times.
- Always strip out the formwork in reverse order.
- Observe the following sections in the 'Panel floor formwork Dokadek 30' User Information booklet.
  - 'Reshoring props, concrete technology and stripping'
  - If necessary, 'Additional precautions for slab thicknesses of up to 1' -8" (50 cm)'.

Additional precautions for slab thicknesses of up to 1'-8" (50 cm)

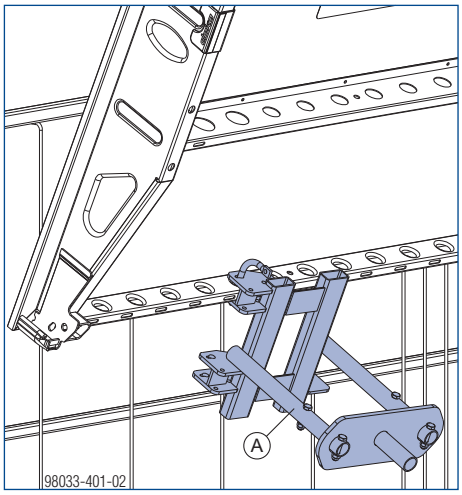
Installing additional propping (at the slab edge)

For more information on installing in the typical zone, see the section headed 'Installing additional propping' in the 'Panel floor formwork Dokadek 30' User Information booklet.

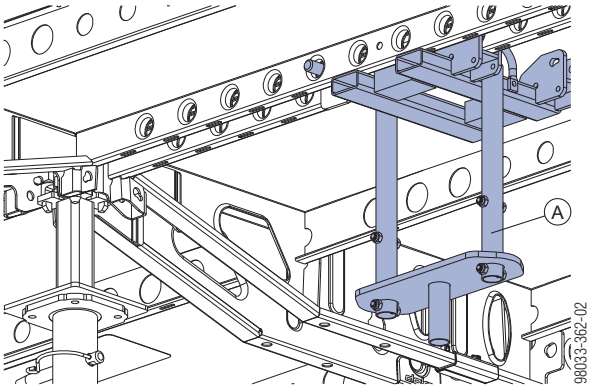
➤ After the panel has been engaged in the Support heads, fit the front Timber beam seat H20 to the middle of its end cross profile.



Close-up of timber beam seat H20



➤ After the panel has been tilted up and shored, fit the rear Timber beam seat H20 to the middle of the other end cross profile, using e.g. a Platform stairway 0.97m.



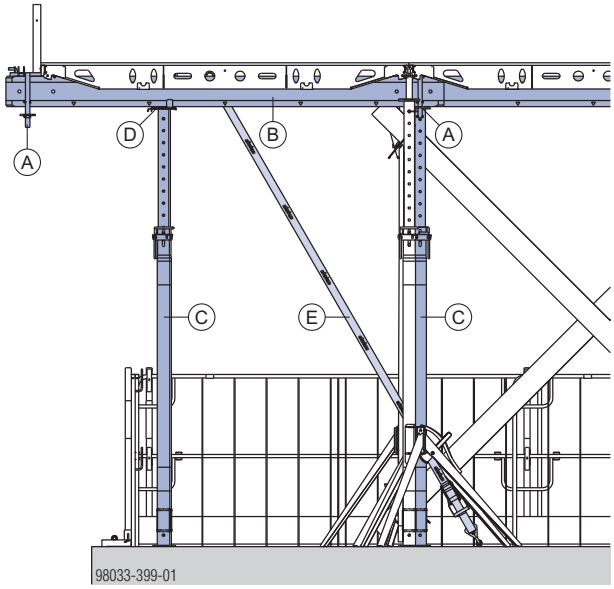
➤ Insert a Doka beam H20 centered in the Timber beam seats H20.

NOTICE

➤ Only extend the floor props until they encounter resistance from above. The panel must not be raised.

➤ Fit the floor prop into the rear timber beam seat H20, and adjust it.

➤ Place a floor prop plus Supporting head H20 under the Doka beam H20 at the outer one-third point of the panel.



A	Timber beam seat H20
B	Doka beam H20
C	Doka floor prop Eurex 30 top
D	Supporting head H20
E	Tie-back

Stripping the formwork

NOTICE

- Observe the stipulated stripping times.
- Always strip out the formwork in reverse order.
- As well as the instructions given here, the section headed 'Reshoring props, concrete technology and stripping' must be followed.

On slabs with thicknesses of between 1'-0" and 1'-8" (30 and 50 cm), early removal of all the extra shores from the typical zone is permitted even in cases where service loads and live loads are present. The resulting prop loads are of max. 9 kip 40 kN per prop, which is permissible for temporary reshores.

Minimum concrete strength required before the extra shores are removed: C8/10

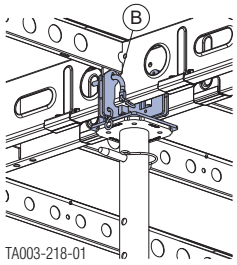
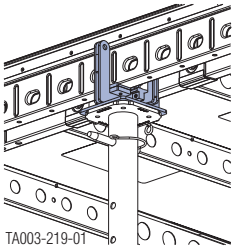
Variant 2 - Propping of the cantilevering panels at the middle point

Operating with assembling tool and personal fall-arrest system

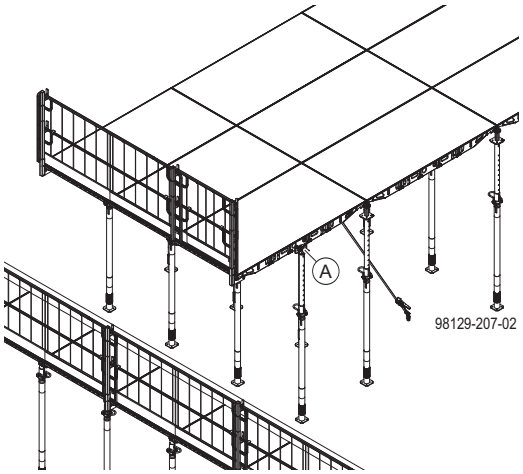
Basic rules

The Dokadek edge head is used for making a platform up to 3'-3 $^1/_2$" (1.0 m) wide at the building edge with cantilevered Dokadek panels. In this configuration the Dokadek edge head supports the Dokadek panel at the middle, not at the one-third point.

Close-up of edge head

Used at inter-panel joint	Used with panel and infill beam
	

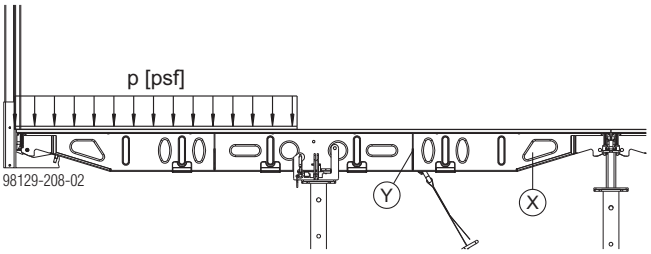
Practical example



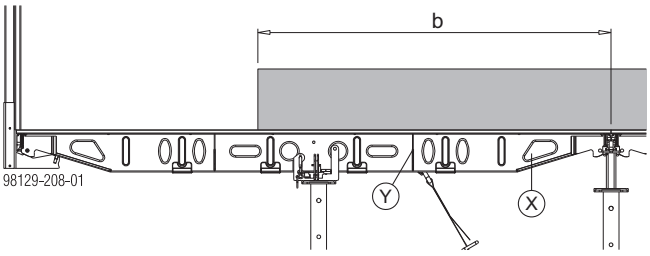
A Dokadek edge head

B Pin for securing the edge head to the panel (included in scope of supply)

Permitted platform load p [kN/m²] on cantilevered panel (see table)



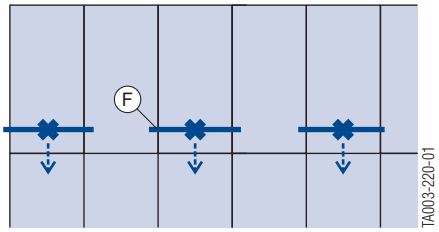
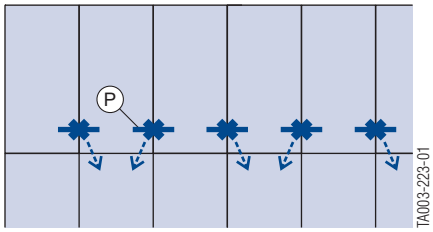
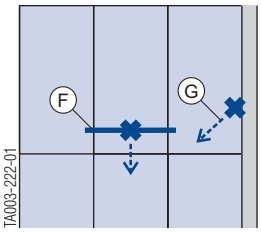
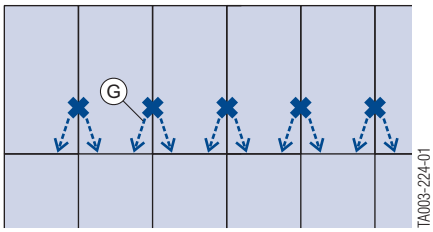
Permitted concrete load on cantilevered panel



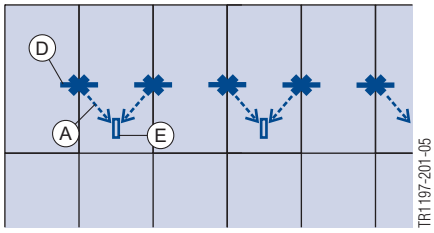
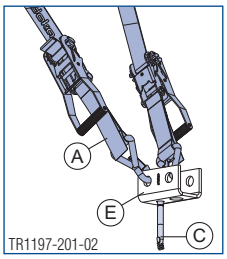
b ... max. 4'-7" (140 cm)

X 1st grip hole

Y Bulkhead plate at one-third point

	Variant 1 Load Class 1 to EN 12811 Permitted platform load p ≤ 15.6 psf (0.75 kN/m²)	Variant 2 Load Class 2 to EN 12811 Permitted platform load p ≤ 31.3 psf (1.50 kN/m²))
Attachment to grip hole	In this configuration, a scaffold tube 1.50m has to be tied back from the 1st grip hole in every second panel. Make sure that each scaffold tube is correctly positioned: The scaffold tube has to tie back the adjacent panel as well.	In this configuration a tie-back is required in the form of a Scaffold tube 0.50m or a short tie rod 20.0 in the 1st grip hole at every inter-panel joint. Make sure that the lashing straps are installed to left and right alternately.
		
	Max. tie-back force: 0,6 kip (3.00 kN)	Max. tie-back force: 1.1 kip (5.00 kN)
Attachment to bulk-head plate	If necessary (for example close to the wall), the panel can also be tied back by means of the bulkhead plate at the one-third point.	Alternatively, each panel can also be tied back twice by means of the bulkhead plate at the one-third point.
		

F Scaffold tube 48.3mm 1.50m
G Lashing strap 5.00m
P Tie rod 20.0 or Scaffold tube 48.3mm 0.50m

	Variant 3 Load Class 2 to EN 12811 Permitted platform load p ≤ 15.6 psf (0.75 kN/m²)
Attachment at the middle point	This variant requires a tie-back at every panel, with the tie-back looped round the Scaffold tube 0.50m at the middle point. The scaffold tubes can be tied back in pairs with lashing straps and anchored in bracing shoes.
	 
	Max. tie-back force: 1.1 kip (5.00 kN)

A Lashing strap 5.00m
C Doka express anchor 16x125mm
D Scaffold tube 48.3mm 0.50m
E Bracing shoe

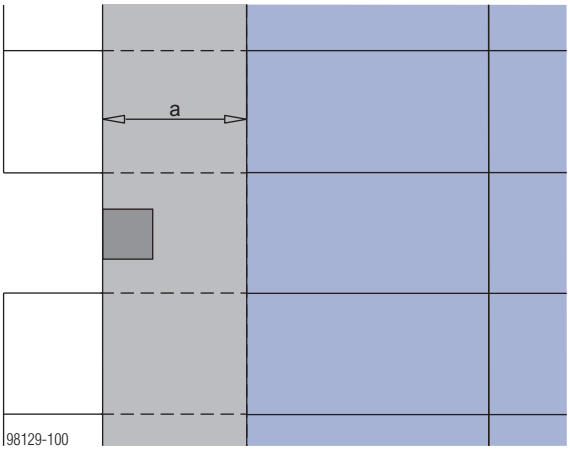
Permitted slab thickness without additional precautions

Panel size	Perm. slab thickness	Deflection to DIN 18202
4’-0"x8’-0" (1.22x2.44m)	1’-0" (30 cm)	Line 6
4’-0"x8’-0" (1.22x2.44m)	> 1’-0" (30 cm) - 1’-1" (32 cm)	Line 5
4’-0"x4’-0" (1.22x2.44m)	1’-1" (32 cm)	Line 5
2'-8"x8'-0" (0.81x2.44m)	1’-6" (45 cm)	Line 6
2'-8"x8'-0" (0.81x2.44m)	> 1’-6" (45 cm) - 1’-8" (50 cm)	Line 5
2’-8"x4’-0" (0.81x1.22m)	1’-8" (50 cm)	Line 6

NOTICE

- This method must not be used for constructing outward-staggered floor-slabs.
- It is not possible to change the direction of the panels at the structure edge.
- The outermost row of floor props must be at a distance of at least 4" (10 cm) from the slab edge.
- The last row of floor props with support heads must be at a distance of 4’ -7” (140 cm) from the structure edge, so that the edge head can be installed centered underneath the cantilevering panel (platform width ≤ 3’-3 $^{1}/_{2}$" (1.0m)).
- Use of Dokadek panels 4’-0"x4’-0" (1.22x1.22m) and 2’-8"x4’-0" (0.81x1.22m) at structure edge not permitted.

Diagrammatic floorplan



a ... 4’-7" (140 cm)

Dokadek panels on lower level
slab between two levels
Dokadek panels on upper level

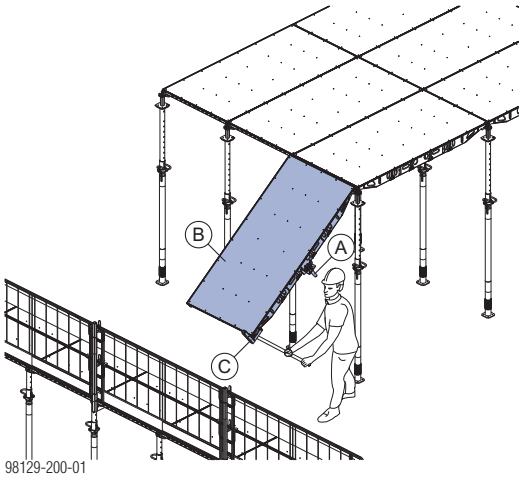
Erecting the formwork

WARNING

➤ Before stepping on to the panels at the slab edge (which will act as the platform), make sure that the floor props with the Dokadek edge heads on the level below are not stress-relieved!

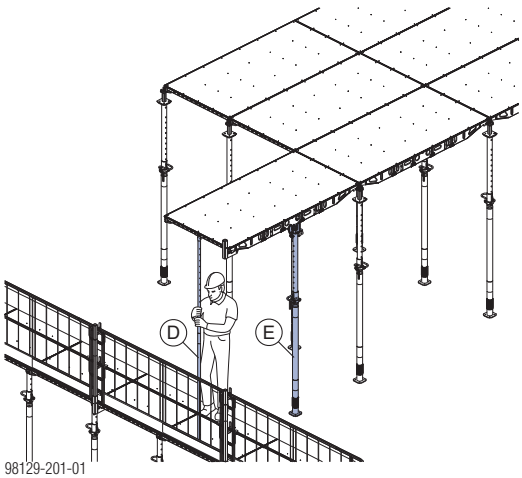
➤ Install the Dokadek edge head and the Dokadek railing shoe short on the Dokadek panel.

➤ Engage the Dokadek panel in the heads and use the assembling tool to lift the free end up to the horizontal.



A Dokadek edge head
B Dokadek panel
C Dokadek railing shoe short

➤ Secure the assembling tool so that it cannot fall and pin the floor prop into the Dokadek edge head 18mm with Spring locked connecting pins 16mm.



D Dokadek assembling tool B
E Doka floor prop Eurex

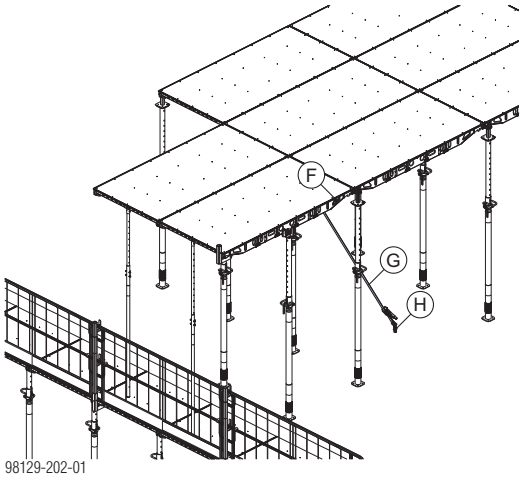
WARNING

Risk of panels tipping over!

➤ Do not remove the assembling tool until after the tie-back has been installed and secured!

➤ Install the next panel in the same way. If necessary, install railing shoes on the Dokadek panel.

➤ Install tie-backs in accordance with the platform load (see the section headed 'Ground rules').



F Scaffold tube 48.3mm 1.50m
G Lashing strap 5.00m
H Doka express anchor 16x125mm

➤ Install further panels in the same way. If necessary, install railing shoes on the Dokadek panel.

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 system equipment when installing the handrail posts and protective gratings!

NOTICE

➤ The lashing straps are allowed to be temporarily loosened while the panels are being leveled.

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

➤ Level the panels.

➤ Install Handrail posts XP and Protective gratings XP on the formwork.

➤ Install infill zones and lay intermediate panels in position.

Installing fillers between cantilevering panels

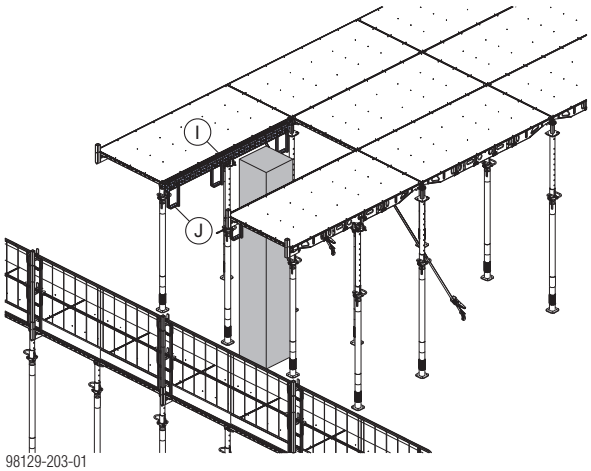
WARNING

- ➤ Secure cantilevering slab formwork to prevent lift-out and tipover.
- ➤ 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).
  Risk of infill beams tipping over!
- ➤ Use spring cotters to secure the infill beams to the heads.

NOTICE

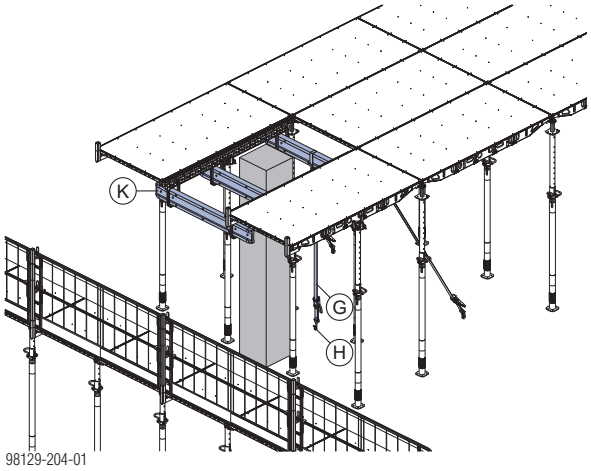
If fillers have to be installed from above, the crew must use a personal fall-arrest system (e.g. safety harness).

- ➤ Engage infill beams 8’ -0” (2.44m) in the heads and secure each infill beam with spring cotters to prevent lift-out.
- ➤ Hook 4 suspension clamps into the infill beams as close to the floor props as possible. Hook 2 suspension clamps into the infill beam, in the outermost position.



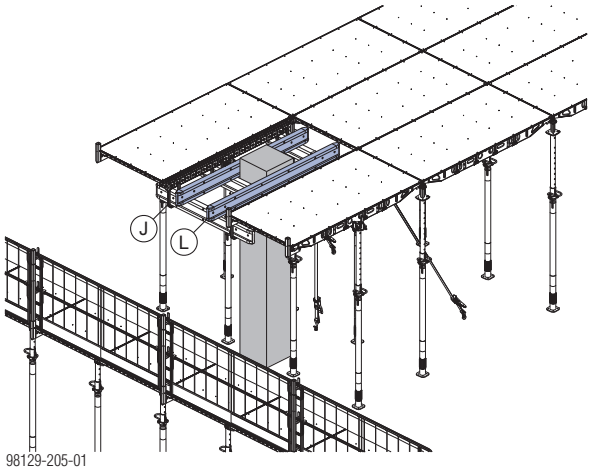
I Dokadek infill beam 8'-0" (2.44m)
J Dokadek suspension clamp H20

- ➤ First engage the inner primary beam in the suspension clamps.
- ➤ Pass the lashing strap round the primary beam and tie it back vertically with an express anchor.
- ➤ Then engage the remaining two primary beams.



G Lashing strap 5.00m
H Doka express anchor 16x125mm
K Doka beam H20 used as primary beam (e.g. 5’-11" (1.80m))

- ➤ Install Doka beams H20 as secondary beams.

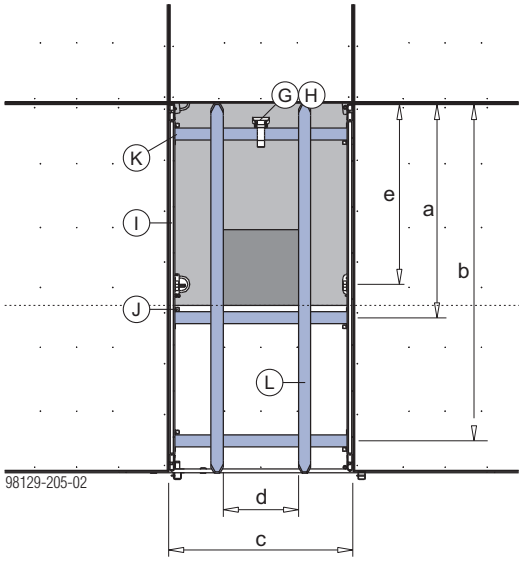


J Dokadek suspension clamp H20
L Doka beam H20 used as secondary beam (e.g. 8’-$^{1}/_{2}$" (2.45m))

To make the sheets easier to strip, it is recommended to nail them to the infill beams only.

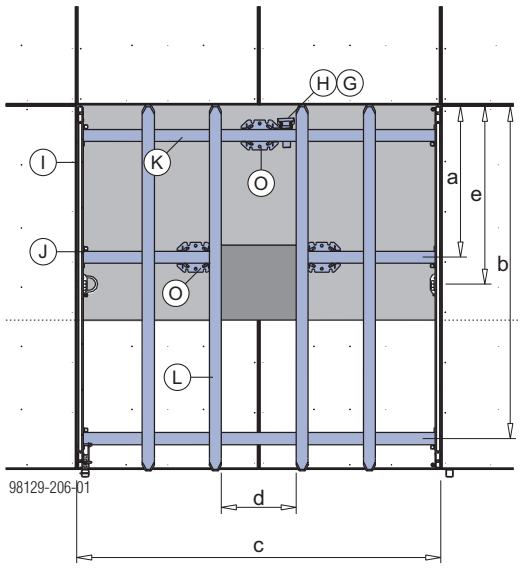
- ➤ Install the infill.

Close-up floorplan



	Designation	Dimensions
a	Position of middle primary beam	5’-0" (153 cm)
b	Position of outer primary beam	7’-4 1/4" (224 cm)
c	max. infill width without centered additional prop	≤ 4’-0" (122 cm)
d	max. secondary-beam spacing	depends on form-ply
e	Position of floor prop with main beam head	4’-0" (122 cm)

Close-up of floorplan, column at joint between two panels



	Designation	Dimensions
a	Position of middle primary beam	as close as possible to the middle of the column
b	Position of outer primary beam	7’-4 1/4" (224 cm)
c	max. infill width (1 centered extra prop at the rear primary beam)	≤ 8’-0" (244 cm)
d	max. secondary-beam spacing	depends on form-ply
e	Position of floor prop with main beam head	4’-0" (122 cm)

G Lashing strap 5.00m
H Doka express anchor 16x125mm
I Dokadek infill beam 8'-0" (2.44m)
J Dokadek suspension clamp H20
K Doka beam H20 used as primary beam (e.g. 5’-11" (1.80m))
L Doka beam H20 used as secondary beam (e.g. 8’-1/2" (2.45m))
O Doka 4-way head

Pouring

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

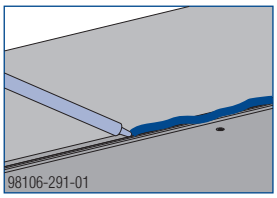
NOTICE
Use of Dokadek panels 4’-0"x4’-0" (1.22x1.22m) and 2’-8"x4’-0" (0.81x1.22m) at structure edge not permitted.

Permitted slab thickness without additional precautions

Panel size	Perm. slab thickness	Deflection to DIN 18202
4’-0"x8’-0" (1.22x2.44m)	1’-0" (30 cm)	Line 6
4’-0"x8’-0" (1.22x2.44m)	> 1’-0" (30 cm) - 1’-1" (32 cm)	Line 5
4’-0"x4’-0" (1.22x2.44m)	1’-1" (32 cm)	Line 5
2’-8"x8’-0" (0.81x2.44m)	1’-6" (45 cm)	Line 6
2’-8"x8’-0" (0.81x2.44m)	> 1’-6" (45 cm) - 1’-8" (50 cm)	Line 5
2’-8"x4’-0" (0.81x1.22m)	1’-8" (50 cm)	Line 6

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.



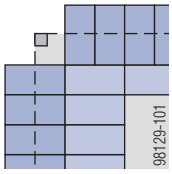
Stripping the formwork

NOTICE

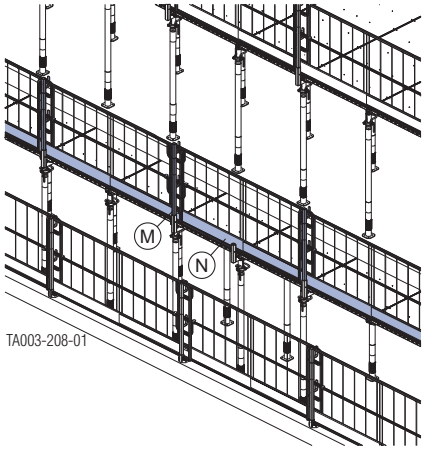
- Comply with the stipulated stripping times.
- Observe the following sections in the 'Panel floor formwork Dokadek 30' User Information booklet.
  - 'Reshoring props, concrete technology and stripping'
  - If necessary, 'Additional precautions for slab thicknesses of up to 1’ -8" (50 cm)'.

WARNING

➤ The panels at the slab edge must remain in place (see illustration).



➤ Move the guardrail system back from the slab formwork to the edge of the structure.



M Handrail post XP

N Protective grating XP

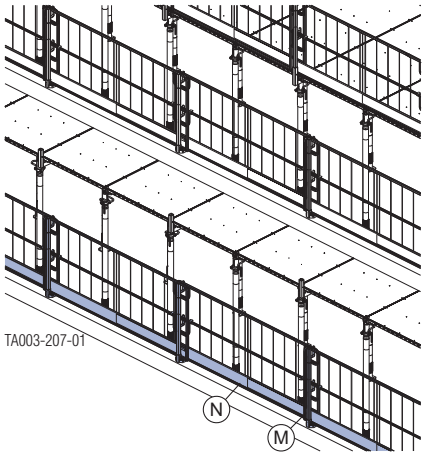
➤ Put up temporary reshoring in the infill zone.

➤ Strip the infill zone.

NOTICE

➤ Use appropriate personal fall-arrest system equipment when removing the guardrail system.

➤ Remove the guardrail system at the edge of the structure in the area of the panel to be stripped out.



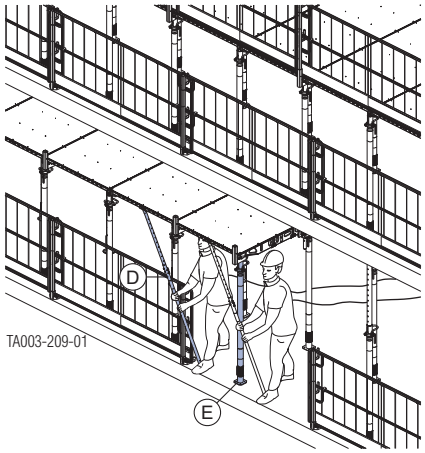
M Handrail post XP

N Protective grating XP

NOTICE

➤ Always comply with the country-specific safety regulations!

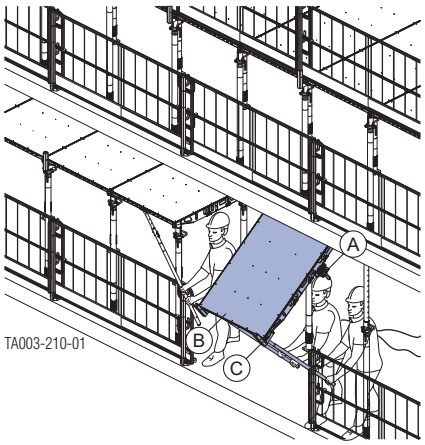
➤ Secure two adjacent panels with assembling tools and remove the corresponding floor props.



D Dokadek assembling tool B

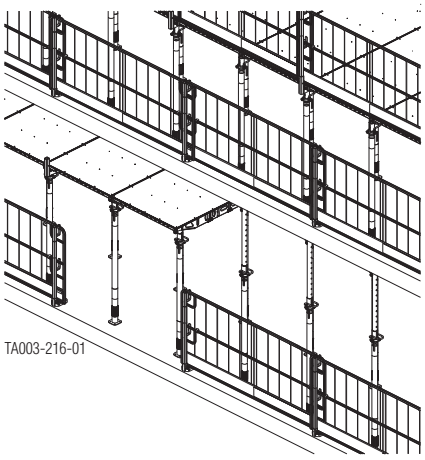
E Doka floor prop Eurex

➤ Position another assembling tool underneath the panel to be stripped out. Swing the panel down and remove the mounted parts

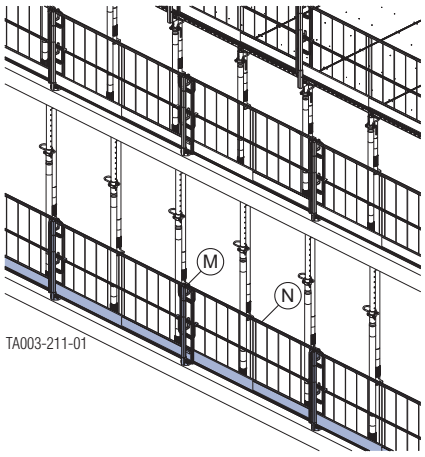


A Dokadek edge head P 18mm
B Dokadek panel
C Dokadek railing shoe short

➤ Put the guardrail system back into position at the edge of the structure and disengage the panel.
➤ Disengage the guardrail system at the next panel for removal.



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



M Handrail post XP
N Protective grating XP

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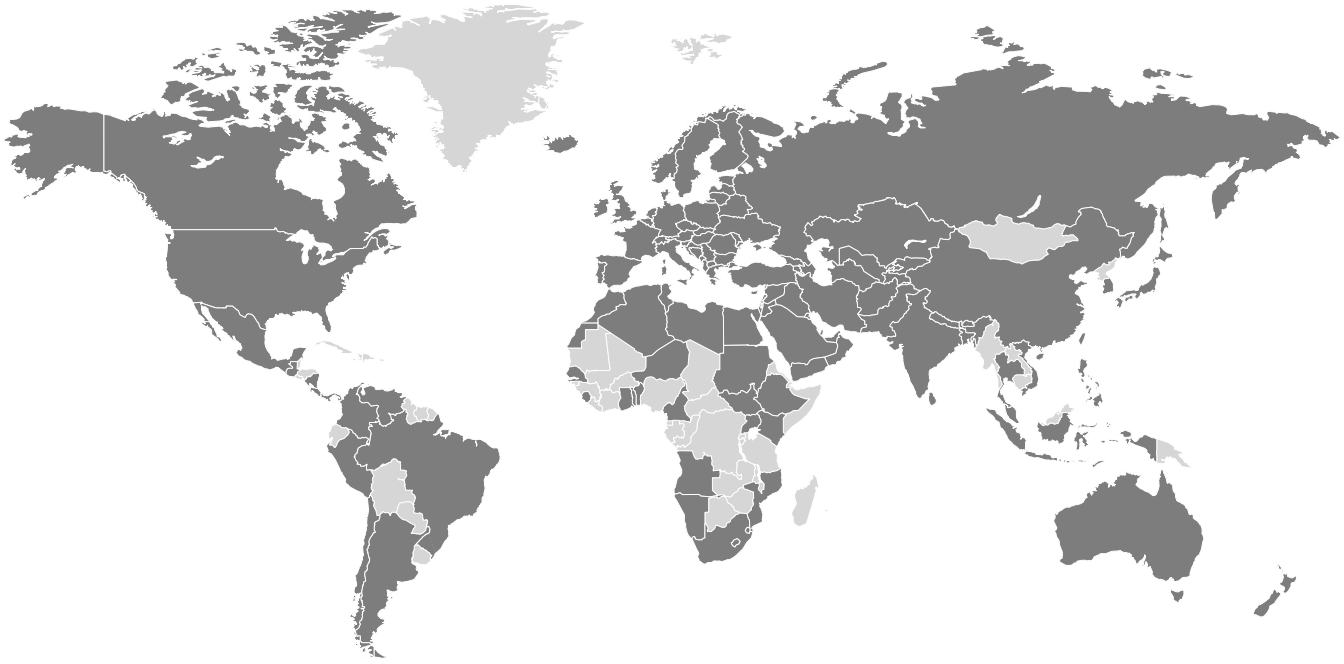

www.doka.com/dokadek-30