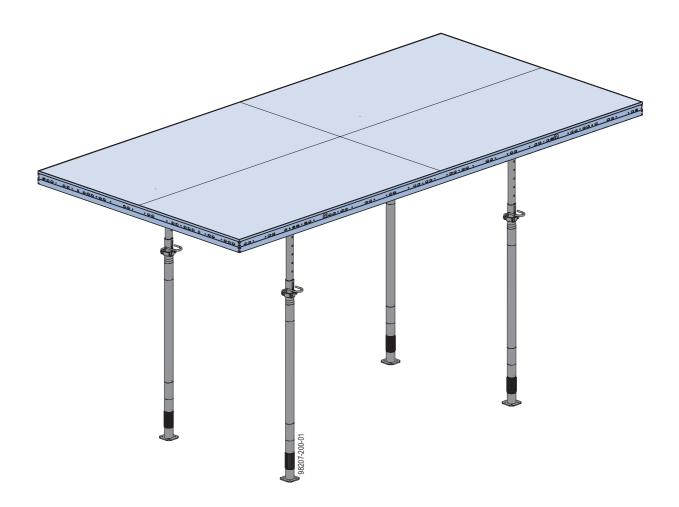


The Formwork Experts.

# **DokaXdek table**

## **User Information**

Instructions for assembly and use (Method statement)



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## 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!

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## 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<sub>perm</sub> = 70 kN) are not design values (e.g. F<sub>Rd</sub> = 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:

- $\gamma_F = 1.5$
- γ<sub>M, timber</sub> = 1.3
- γ<sub>M, steel</sub> = 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.



#### qiT

Points out useful practical tips.



#### Reference

Cross-references other documents.

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### **Services**

## Support in every stage of the project

- Project success assured by products and services from a single source.
- Competent support from planning through to assembly directly on site.

#### Project assistance from start to finish

Every single project is unique and calls for individualised solutions. When it comes to the forming operations, the Doka team can help you with its consulting, planning and ancillary services in the field, enabling you to carry out your project effectively, safely and reliably. Doka assists you with individual consulting services and customised training courses.

#### Efficient planning for a safe project sequence

Efficient formwork solutions can only be developed economically if there is an understanding of project requirements and construction processes. This understanding is the basis of Doka engineering services.

#### Optimise construction workflows with Doka

Doka offers special tools that help you in designing transparent processes. This is the way to speed up pouring processes, optimise inventories and create more efficient formwork planning processes.

#### **Custom formwork and on-site assembly**

To complement its system formwork range, Doka offers customised formwork units. And specially trained personnel assemble load-bearing towers and formwork on site.

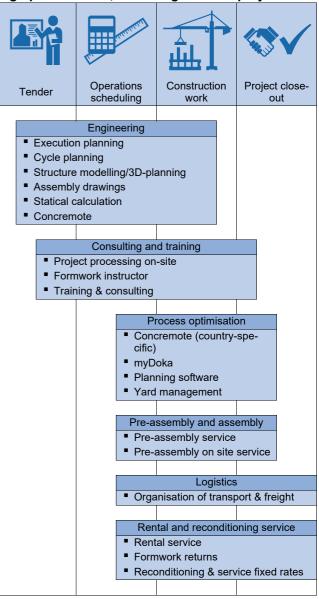
#### Just-in-time availability

Formwork availability is a crucial factor in realising your project on time and on budget. The worldwide logistics network puts the necessary formwork quantities on site at the agreed time.

#### Rental and reconditioning service

The formwork material needed for any particular project can be rented from Doka's high-performing rental park. Doka Reconditioning cleans and overhauls both client-owned equipment and Doka rental equipment.

High performance, in all stages of the project





#### **Digital Services**

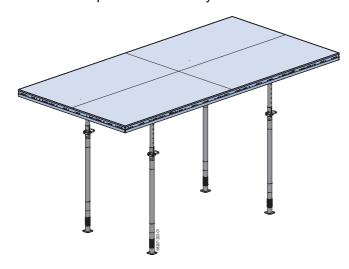
for higher productivity in construction

From planning to completion of construction - with our digital services we want to set the pace for boosting productivity in construction. Our digital portfolio includes solutions for planning, procuring and managing to performing on site. Learn more about our digital offer at doka.com/digital.

## **System description**

### DokaXdek table

The DokaXdek table is the strong member of the DokaXdek family and is suitable for large and medium-sized builds. With table sizes up to 12.5 m², best use can be made of the system's advantages whenever large slabs have to be formed. The galvanised steel frame and the Xlife sheet make the DokaXdek table very durable and also easy to clean. A seamless transition to the DokaXdek panel floor formwork and to Dokaflex is implemented in the system.



## **Ergonomic**

- Easier swivel-head installation by engagement in fastening pin
- Fatigue-free working thanks to the use of jobsitecompatible DoKart plus

#### Safe

- High stability, due to 1.50 m spacing between props in transverse direction
- Flexible positioning of the swivel head on longitudinal profiles and function profiles enables safe use, e.g. for balconies
- Swivel head with locking function for safe projection past parapets or railings
- Combinable with Xsafe edge protection XP and table platforms

#### Versatile

- 4 table sizes:
  - 2.50 x 5.00 m
  - 2.00 x 5.00 m
  - 2.50 x 4.00 m
  - 2.00 x 4.00 m
- For slab thicknesses of up to 108 cm
- Logical system grid for any combination of DokaXdek tables in the longitudinal and transverse directions
- Seamless transition to DokaXdek handset systems and Dokaflex

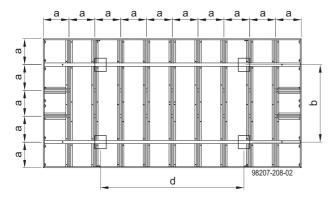
#### Possible room heights

Propping of the tables	Room height
Floor props Eurex 30 top or Eurex 30 eco	up to 5.65 m
Floor props Eurex 30 top or Eurex 30 eco and Table frame 1.50m	up to 7.15 m
Load-bearing tower Staxo 100	more than 7.15 m

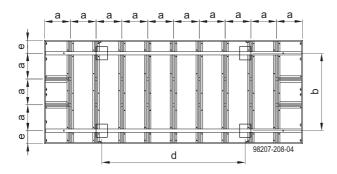
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## **System dimensions**

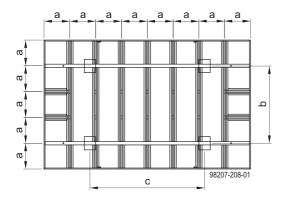
### DokaXdek table 2.50x5.00m



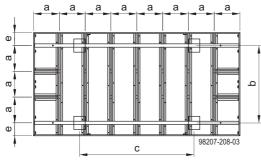
#### DokaXdek table 2.00x5.00m



#### DokaXdek table 2.50x4.00m



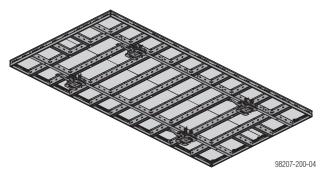
#### DokaXdek table 2.00x4.00m



- a ... 50 cm b ... 150 cm c ... 225 cm
- d ... 275 cm e ... 25 cm

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#### DokaXdek table in detail



#### As-delivered condition variants:

- Including 4 pre-installed DokaXdek swivel heads and 8 Safety pins D20 195 (e.g. DokaXdek table 2.50x5.00m)
- Excluding DokaXdek swivel heads and Safety pins D20 195

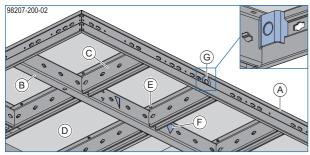
(e.g. DokaXdek table 2.50x5.00m ES)

#### DokaXdek frame

- Sturdy frame, primary and function profiles (overall height: 12.3 cm)
- Easy to clean, thanks to cathodic dip paint finish
- Hot-dip galvanised for long life
- Edge protection for Xlife sheets
- Cross-holes for bolting tables together
- Four integral lifting points (marked red) on the table long sides for repositioning by crane
- Triangular markers as positioning aid for DokaXdek swivel heads
- Universal connectability is ensured by the systemcompatible increment-grid of the drilled holes
- Easy attachment of the accessories in the integrated waling system

#### Note:

The horizontal connection of wall formwork panels to the DokaXdek table is prohibited!



- A Frame profile
- **B** Primary profile
- C Function profile
- D Xlife sheet 18mm
- F Bolt
- F Triangular markings
- **G** Lifting point for transport bolt (close-up view from inside)

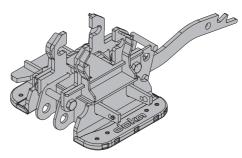
#### Xlife sheets

The Xlife sheet consists of a combination of a traditional plywood core and a novel and innovative plastic coating.

This combination of materials ensures high numbers of repeat use, it is less prone to damage and gives a superb concrete finish every time.

- High quality concrete finish
- Less touching-up needed
- Less cleaning the Xlife sheet can be cleaned using a high-pressure spray cleaner
- The sheeting is screwed on from the back, preventing rivet impressions in the concrete and making cleaning easier

#### DokaXdek swivel head



- Easy installation on the DokaXdek primary profile or function profile with 2 safety pins (not included with product).
- Floor props are quick to connect, with wedgeclamped join (hammer-operated).
- Wedge is fixed in transport position by integrated spring-lock.
- The flexurally rigid connection to the superstructure increases the load-bearing capacity of the floor props.
- Swivel-mounted floor props, lockable at 80° and 90° (lift-out positions).
- Swivel head latch can be operated from ground
- Holes drilled for diagonal tie-backs on edge tables.
- The DokaXdek swivel head can remain on the table when stacking tables for transport by truck (max. 10 tables).
- Plastic cover protects the form-facing on stacked tables.

# Floor props Eurex 30 top and Eurex 30 eco

#### 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 thread geometry makes the floor prop easier to back off even under high load.
- The flexurally rigid connection with the swivel head at the primary profile increases the permitted load-bearing capacity of the floor props Eurex 30 top and Eurex 30 eco to 41.2 kN.
- The connection with the swivel head at the function profile reduces the permitted load-bearing capacity to 22 kN.



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



#### NOTICE

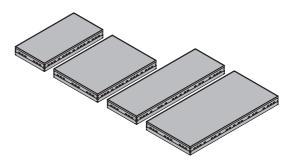
The values stated in the section headed 'Structural design' are based on use with Floor props Eurex 30 top and Eurex 30 eco. Prop types differing from those shown here will require revised static verification.



#### WARNING

- Use with the Floor prop extension 0.50m is prohibited!
- Props of a uniform type must be used in the typical zone and closure zone and when DokaXdek tables are combined with Dokaflex.

## DokaXdek table panels



For construction of closures and edge tables.

- Sturdy frame and function profiles (overall height: 12.3 cm) also serve as edge protection for the Xlife sheet.
- Cross-holes for bolting together tables and table panels with Centring connectors 15.0 and Centring nuts 15.0.
- Universal connectability is ensured by the systemcompatible increment-grid of the drilled holes.
- Easy attachment of the accessories in the integrated waling system.

Available formats:

- 0.50x1.00m
- 0.75x1.00m
- 0.50x1.50m
- 0.75x1.50m

## Instructions for assembly and use (Method statement)

## Schematic sequence of operations

DokaXdek tables can cover a wide area of practical applications.

Their flexible design enables them to be combined in very versatile ways.

This means that in some projects, they will be put together differently and a sequence of operations differing from the schematic sequence shown here might be needed (e.g. sloping slabs).



#### **CAUTION**

- DokaXdek tables with floor props may only be used up to a max. inclination of the slab of 2%.
- ➤ If the slab inclination is >2%, then a separate structural-design appraisal is needed, and the necessary additional precautions (e.g. bracing) must be defined.
- Never place tables with floor props on top of one another.
- Horizontal stability must be ensured (e.g. by bracing the edge tables, by fixing the tables to the structure, by joining them into one continuous forming area).
- Before anybody steps onto the surface of the formwork, its stability must be ensured (e.g. by tie-backs or plumbing struts).
- It is not permitted to set down any loads on the floor-slab formwork (e.g. beams, formwork sheets, reinforcement steel) before adequate stability is ensured.
- ➤ Transfer of horizontal loads during pouring must be ensured by other measures (e.g. by transferring these loads into the structure or by bracing). Follow the directions in the section headed 'Tie-back solutions'.



#### **NOTICE**

All necessary traffic routes must be prepared at the site!



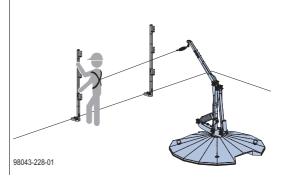
#### **WARNING**

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.



The FreeFalcon mobile fall protection mast permits a secure attachment point to be created for the safety harness.





User instruction prior to use of the FreeFalcon is mandatory.

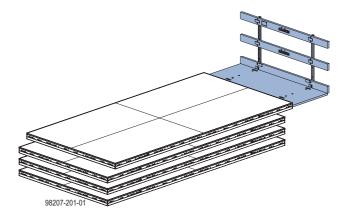
Follow the directions in the 'FreeFalcon' Operating Instructions.

## **Repositioning Doka tableforms**

➤ For offloading tables from a truck, or lifting them onsite a stack at a time, use the Dokamatic lifting strap 13.00m or Framax transport bolt. See the section headed 'Transporting, stacking and storing'.

## **Pre-assembly**

- ➤ Install swivel heads, if they are not already preinstalled on the DokaXdek tables (see the section headed 'Adapting to different slab thicknesses').
- ➤ Also pre-install the table platforms and fall-protection for edge tables while the tables are still on the stack (see the section headed 'Tables around edges of slab').



## Closing the formwork

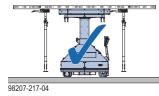
## $\Lambda$

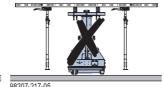
#### **WARNING**

#### Risk of tipping over!

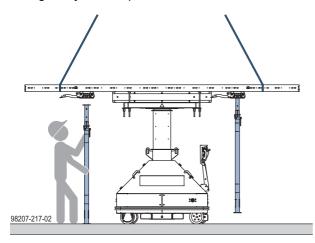
Move tables with DoKart plus in the longitudinal direction only!

The distribution beams on the DoKart run parallel with the long side of the table.





- ➤ Use the Dokamatic lifting strap 13.00m to lift the table superstructure onto the DoKart plus, or onto suitable temporary shoring (see the sections headed 'Transporting, stacking and storing' and 'Repositioning').
- ➤ If necessary, adjust the position and number of swivel heads accordingly (see the section headed 'Adapting to different slab thicknesses').
- ➤ Install the floor props (see the section headed 'Height adjustment').



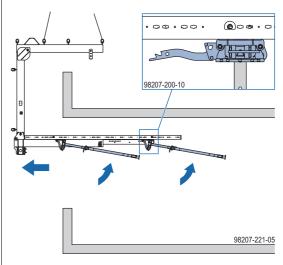


Install very long floor props in the swivelled position of the swivel head.



#### **NOTICE**

➤ Always position the tables so that the swivel head latch points towards the edges of the floor-slabs (in the direction in which the tables will later be removed).



➤ Bring the table to its usage location using the Dokamatic lifting strap 13.00m, the Framax transport bolt or the DoKart plus. Then raise it to its intended operational height, extend the floor props, and adjust the height.

If possible, start by putting up the first table in one corner of the building.

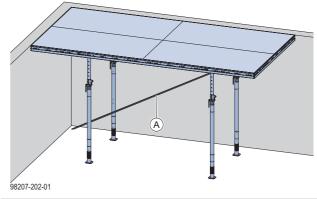
➤ Line and level the DokaXdek tables (see the section headed 'Lining-and-levelling the DokaXdek tables').



#### **CAUTION**

## Risk of tip-over if floor props are extended to different lengths!

- ➤ Before setting down the table, make sure that all the floor props are extended to the same length.
- ➤ Fix the first table to the structure (e.g. with braces, Lashing strap 5.00m or in-place solutions using e.g. the tie-holes in the wall).



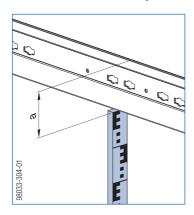
A Lashing strap 5.00m

Bring further tables to the usage location in the same way and connect the tables to each other (see the section headed 'Adaptation to building layout').



### Levelling the formwork

Level the tableforms at room height minus 12.3 cm.



a ... 12.3 cm (frame profile height of the DokaXdek tables)

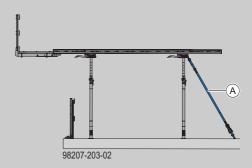
### Installing fall protection

## $\Lambda$

#### **CAUTION**

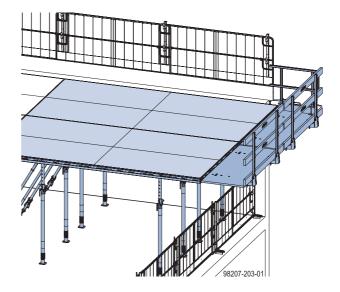
Risk of tip-over with edge tables or tables with accessories installed! (e.g. due to cantilevering platforms, edge props that have been relocated towards the inside, stop-end formwork, table panels, drop beams)

- ➤ Secure all edge tables by tying back (A) every primary beam in the inner cantilever zone of the table.
- ➤ Do not release tables from the shifting device until tip-up protection has been installed, e.g. attachment to the structure with bracings or supports.
- ➤ Also applies when tables are set down or put into temporary storage.



For details of the tie-back, see the section headed 'Tie-back solutions'.

- ➤ Set up the slab edge tables (see the section headed 'Tables around edges of slab').
- ➤ Install fall protection (see the section headed 'Fall protection on the structure').



#### Before pouring

- ➤ Form the closure zones (see the section headed 'Adaptation to building layout').
- ➤ Form the slab stop-ends (see the section headed 'Slab stop-ends').
- Spray the formwork sheeting with release agent (see the section headed 'Release agents').
- ➤ Place the reinforcement.

## **Pouring**

Before the concrete is poured, recheck all the floor props and swivel heads.



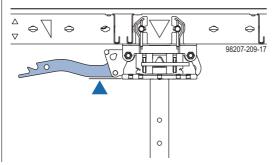
- The fastening clamp (A) has to be pushed all the way into the floor prop.
- Adjusting nut (B) has to be tightened into contact with the fastening clamp.



 All floor props must be in contact with the floor.



- Make sure that the wedges in the swivel heads are secure.
- Check that the swivel head is properly engaged - the swivel head latch must be pointing parallel to the swivel head!



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

# Stripping and repositioning the formwork



#### NOTICE

- Comply with the stipulated stripping times.
- As well as the instructions given here, you must follow the instructions in the section headed 'Reshoring props, concrete technology and stripping out'.



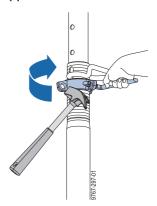
Concremote provides reliable, standards-compliant information on the strength development of concrete on the site, in real-time.



Follow the directions in the 'Concremote' User Information booklet.

- > Check the concrete strength.
- ➤ Undo the connectors to the adjacent tables.

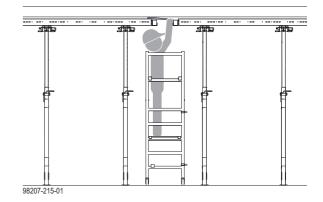
➤ Take the load off the floor props of the tables, and lower them approx. 5 cm.



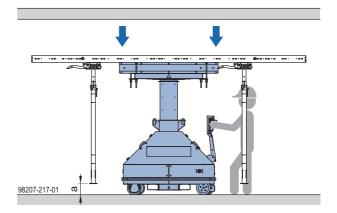


For tools facilitating detachment of the tables from hardened concrete, see the section headed 'Tools for stripping the formwork'.

➤ Remove the closures (see the section headed 'Adaptation to building layout').



- Position the DoKart plus beneath the middle of the table.
- ➤ Extend the lifting tower until the table is supported on the distribution beams of the DoKart plus.
- ➤ Push the floor props all the way in and lower the table with the DoKart plus (floor props max. 10 cm clear of the floor).



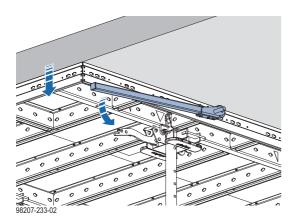
- a ... max. 10 cm
- Reposition the table (see the section headed 'Repositioning').

### Tools for stripping the formwork

#### Framax stripping tool

The **Framax stripping tool** is for detaching a table from the hardened concrete.

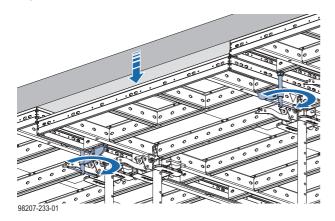
➤ Position the Framax stripping tool in the lifting point of the table and lever the table away from the concrete.



#### Framax stripping aid

The **Framax stripping aid** is for detaching a table from the hardened concrete by pressing against the neighbouring table.

- ➤ Engage and position two Framax stripping aids in the same function profile.
  - The spindles of the Framax stripping aids act against the frame profile of the neighbouring panel on each side.
- ➤ Detach the table from the concrete by tightening both spindles at the same time.



## Reshoring



#### **NOTICE**

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

➤ Before pouring the next floor-slab (i.e. above the one that has just been stripped), put up reshoring props.

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## Adaptation to structure geometry

## Adaptation to building layout

The formwork system can be adapted to the building layout in the following ways:

#### Typical zone:

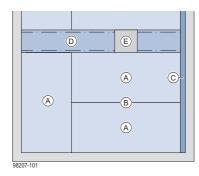
- Combining different sizes of table
- Grid logic (arranging the tables lengthways and crossways)

#### Closure zone:

- DokaXdek or Dokaflex system components to support fitting boards
- Screw squared timbers directly to the table frame
- Tables offset to allow for closure zone
- DokaXdek table panels

#### Note:

The horizontal connection of wall formwork panels to the DokaXdek table is prohibited!



- A DokaXdek table
- **B** Typical zone (2 tables positioned directly beside each other)
- C Closure zone at wall
- D Closure zone between the tables
- E Column

## Safe working

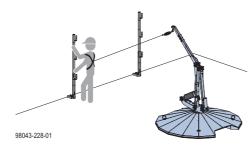
#### FreeFalcon

The FreeFalcon mobile fall protection mast permits a secure attachment point to be created for the safety harness.



User instruction prior to use of the FreeFalcon is mandatory.

Follow the directions in the 'FreeFalcon' Operating Instructions.



Practical example

### Platform stairway 0.97m

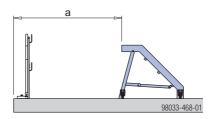


- Wheel-around, fold-down platform stairway made of light alloy
- Working heights of up to 3.00 m (max. standing height 0.97 m)
- Stair width: 1.20 m



#### **NOTICE**

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



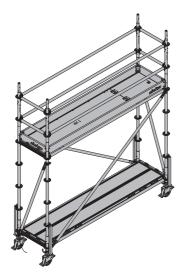
#### **NOTICE**

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!

#### Working scaffold Modul



- Movable working scaffold
- Variable working heights of up to 3.50 m
- Width of scaffold: 0.73 mLength of scaffold: 2.07 m



Follow the directions in the User Information booklet!

## **Typical zone**

#### Centring connector and centring nut

Permitted tensile force and shear force: 10 kN (max. 1 connector per field)

Permitted moment: 0.33 kNm

#### Max. 1 connector per field





### Interconnecting tables:

➤ Align the tables with each other before connecting them.



The Angular arbor SL-1 makes it easier to align the cross holes during assembly.

## $\triangle$

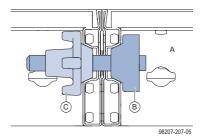
#### **WARNING**

Malfunction, culminating in falling parts when the concrete is being compacted!

Always tighten the centring nut with a blow of a hammer or by using some other suitable tool.

Tightening torque: 80 Nm (16 kg with lever length 50 cm)

➤ Connect adjacent tables on each side with 2 centring connectors and 2 centring nuts at the edge zone of the frame joints. This automatically brings the tables into vertical alignment.



- A DokaXdek table
- B Centring connector 15.0
- C Centring nut 15.0



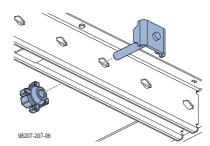
Centring connector must engage in the frame profile.



The Friction type ratchet SW27 or Box spanner 27 0.65m can be used for low-noise releasing and tightening of the Centring nut 15.0.

#### Parked position for repositioning:

➤ Connect centring connector and centring nut at the primary profile or function profile and tighten the nut with a blow of a hammer or by using some other suitable tool.



#### Closure zone

### Forming and stripping closures

Possible areas of application:

- between DokaXdek tables
- at wall connections
- at columns



#### **NOTICE**

- ➤ If fillers have to be mounted from above, the crew must use a personal fall-arrest system (e.g. safety harness).
- ➤ By preference, work from below to install fillers for setting up and stripping out the formwork (see the sections headed 'Design variants' and 'Structural design').



#### CAUTION

Ensure horizontal stability, e.g. by tying back the edge tables, by fixing the tables to the structure, or by joining them into one continuous forming area!



#### 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



#### 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.

## **Design variants**

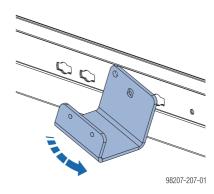
#### DokaXdek squared timber support 8x10cm



Accommodates a length of squared timber to carry a fitting-board for formwork sheeting 18, 21 or 27 mm thick.

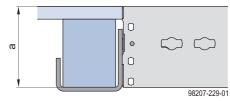
#### Installation:

➤ Engage the squared timber support in a cross hole in the frame profile and turn it to the vertical position.



➤ Adapt the squared timber to the thickness of the formwork sheeting and insert it into the squared timber support.

In wet conditions, allow for swelling of the squared timber!



- a ... 12.3 cm
- Place fitting-boards of variable width between adjacent tables.

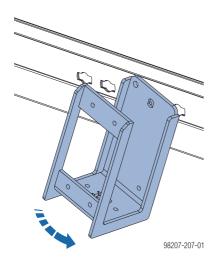
## DokaXdek beam support H20 18mm, 21mm and 27mm



Accommodates a Doka beam to carry a fitting-board for formwork sheeting 18, 21 or 27 mm thick.

#### Installation:

➤ Engage the beam support in a cross hole in the frame profile and turn it to the vertical position.



- Lay a Doka beam H20 in the beam support.
- Place fitting-boards of variable width between adjacent tables.

## DokaXdek suspension clamp T 18mm, 21mm and 27mm

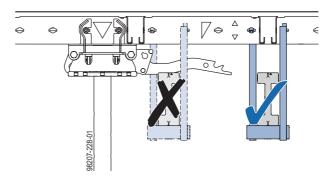


Accommodates a Doka beam H20 to carry a fitting-board for formwork sheeting 18, 21 or 27 mm thick.



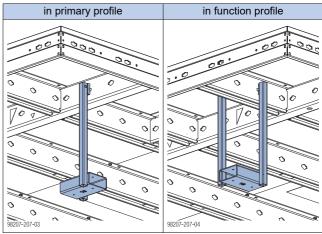
#### WARNING

Do not install suspension clamps in the area of the swivel lever.



#### Installation:

➤ Engage the suspension clamps in the holes in the primary profile or function profile, as applicable.



> Fit Doka beams H20 into the suspension clamps.

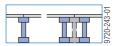


After positioning the beams, check that the suspension clamps are still correctly engaged.

Insert further Doka beams H20 to support the fittingboards.



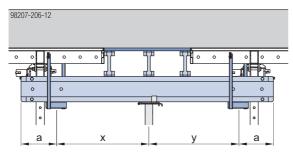
Place a beam or double beam wherever there is to be a joint between the panels.



Place fitting-boards of variable width between adjacent tables.



- Make sure that the suspension clamps are uniformly spaced (x = y).
- Centre the prop underneath the filler.



a ... min. 15 cm protruding length of the Doka beam H20



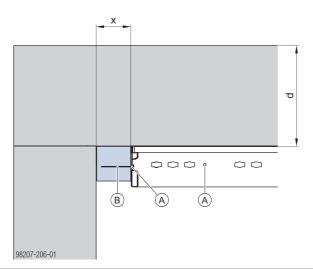
#### **NOTICE**

- Put up the intermediate props so that they force-fit. When the installation sequence as stated here is adhered to, it is enough to hand-tighten the props against the bottom flange.
- Make sure that the Supporting head H20 DF is correctly screwed up against the bottom flange.
- Setting individual intermediate props higher than others is not permitted!
- Additional securing of the intermediate prop with chipboard screw 4x35 or nail through the hole in the supporting head is optional.

#### Squared timber

#### Installation:

- Secure the squared timber (C24 grade) with a d5 mm screw in every hole provided for the purpose in the frame profile.
- Max. closure width 'x': 10 cm
- Max. slab thickness 'd': 40 cm



- A Hole for securing squared timber
- B Screw d5 mm

#### DokaXdek adjustable clamp T



Is used to pull the joints tight and make the joints resistant to tensile forces when tables are offset relative to each other.

Permitted tensile force: 6.2 kN

#### Interconnecting tables:



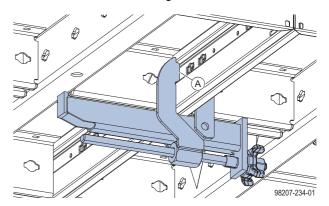
#### **WARNING**

Malfunction, culminating in falling parts when the concrete is being compacted!

Always tighten the star grip nut with a blow of a hammer or by using some other suitable tool.

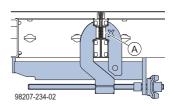
Tightening torque: 80 Nm (16 kg with lever length 50 cm)

➤ Seat 2 Adjustable clamps T on the frame profiles at the edge areas of the neighbouring tables and secure with star grip nuts. This automatically brings the tables into vertical alignment.





The Adjustable clamps T must engage in the hardware slots of the frame profiles (A).





The Friction type ratchet SW27 or Box spanner 27 0.65m can be used for low-noise releasing and tightening of the Centring nut 15.0.

#### DokaXdek table panels



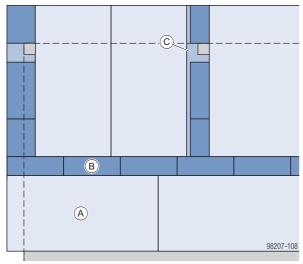
#### WARNING

➤ Install table panels (B) only with the long side on the table (A).



- ➤ Do not step on to cantilevering table panels at slab edge tables unless the table panels are supported on platform adapters or universal walings.
- Additional propping is required for cantilevering table panels at slab edge tables if concreting loads are to be transferred to them.

#### **Practical example**



#### Schematic

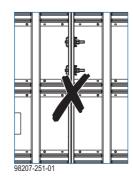
- A DokaXdek table
- B DokaXdek table panel
- C Closure zone, e.g. with squared timber supports

Permitted tensile force and shear force: 10 kN (max. 1 connector per field)

Permitted moment: 0.33 kNm

#### Max. 1 connector per field



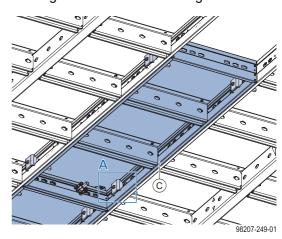


#### Note:

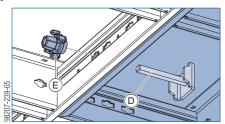
Follow the directions in the section headed 'Repositioning tables with table panels installed'!

#### Installation between 2 tables:

➤ On each side, secure the table panel to the table with 2 centring connectors and centring nuts.



#### Close-up A



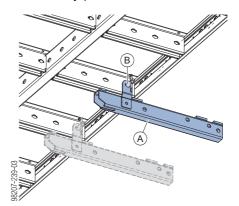
- C DokaXdek table panel
- D Centring connector 15.0
- E Centring nut 15.0



Also connect table panels to each other with centring connectors and centring nuts for a smoother transition and increased rigidity.

#### Installation with Platform adapter T:

➤ Secure Platform adapter T to the primary profile or, as applicable, the function profile of the DokaXdek table with a safety pin.



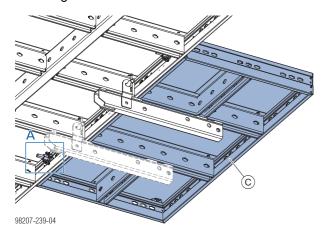


A 2nd platform adapter per table panel makes installation easier.

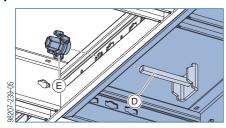
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➤ Lay the table panel on the Platform adapter T and secure to the table with 2 centring connectors and centring nuts.



#### Close-up A



- A DokaXdek platform adapter T
- B Safety pin D20 195
- C DokaXdek table panel
- D Centring connector 15.0
- E Centring nut 15.0

#### Correct position of the Platform adapter T

For table panel width 0.50m	For table panel width 0.75m					
98207-239-01	98207-239-02					

#### Installation with Universal waling T:

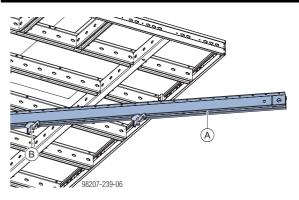


#### **NOTICE**

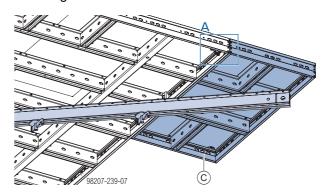
- ➤ Do not oil or grease wedged connections.
- ➤ Secure Universal waling T to the primary profile or, as applicable, the function profile of the DokaXdek table with 2 wedge clamps.

#### DokaXdek universal waling T 2.30m:

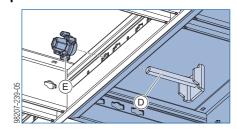
- Permitted tensile force (in function profile): 14 kN
- Permitted moment: 6 kNm (on account of the permitted tensile force in the function profile, also applies to stiffer parts such as the Multi-purpose waling WS10 Top50)



➤ Lay the table panel on the universal waling and secure to the table with 2 centring connectors and centring nuts.



### Close-up A

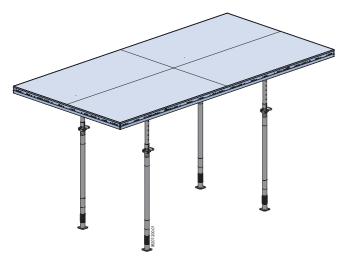


- A DokaXdek universal waling T 2.30m
- B Framax wedge clamp
- C DokaXdek table panel
- D Centring connector 15.0
- E Centring nut 15.0

## **Height adjustment**

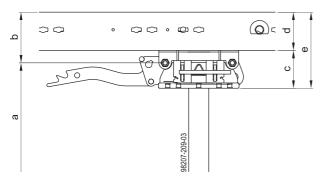
# Room heights up to 5.65 m (standard tables)

For these room heights, the DokaXdek table is fitted with Doka floor props Eurex 30 top or Eurex 30 eco and DokaXdek swivel heads.



Clamping area in the DokaXdek swivel head for floor-prop plate of the Eurex 30 top or Eurex 30 eco:

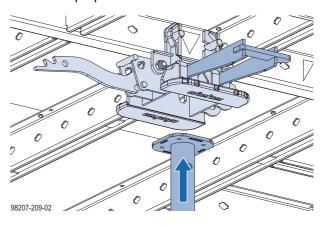
- Length x width: 12 x 12 cm up to 14 x 14 cm
- Thickness: 6 to 8 mm



- a ... floor-prop extension length
- b ... 16.1 cm
- c ... 12.2 cm
- d ... 12.3 cm
- e ... 24.5 cm (height of the table construction with swivel head)

#### Mounting the floor props

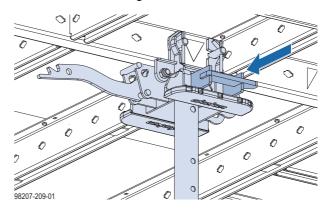
- ➤ Use the Dokamatic lifting strap 13.00m to lift the table superstructure onto the DoKart plus, or onto suitable temporary shoring (see the section headed 'Transporting, stacking and storing').
- ➤ Open the wedge of the DokaXdek swivel head and insert the prop.





#### **NOTICE**

- > Do not oil or grease wedged connections.
- Hammer in the wedge until the hammer rebounds.





#### **NOTICE**

- Having the outer tube at the top increases stability.
- Where the room height is 3.50 m and upward, secure the wedge with a Spring cotter 5mm, as at this height and above it is difficult to do a sight-check.
- Set up the floor props with the holes at right angles to the swivel direction.



- To make it easier to get at the adjusting nut, it is also possible to have the outer tube at the bottom.
- Long floor props can also be fitted with the swivel head tilted back.

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#### **CAUTION**

## Risk of tip-over if floor props are extended to different lengths!

➤ Before setting down the table, make sure that all the floor props are extended to the same length.



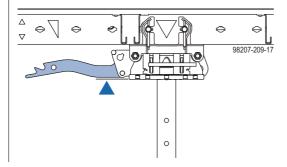
- The fastening clamp (A) has to be pushed all the way into the floor prop.
- Adjusting nut (B) has to be tightened into contact with the fastening clamp.



 All floor props must be in contact with the floor.



- Make sure that the wedges in the swivel heads are secure.
- Check that the swivel head is properly engaged - the swivel head latch must be pointing parallel to the table waling!





#### WARNING

## Risk of tableform tipping over when floor props are being aligned!

Striking the floor props too hard with the plastic mallet causes accidental loosening of the fastening clamp of the floor prop or of the swivel latch of the swivel head.

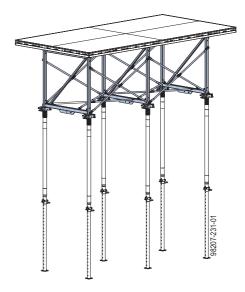
- ➤ Use only moderate force when striking with the Plastic mallet 4kg. Max. mallet backswing distance 50 cm!
- ➤ Give just one knock to each floor prop at a time, then move on to the next prop!
- ➤ Strike only the bottom part of the floor prop.

## Room heights up to 7.15 m

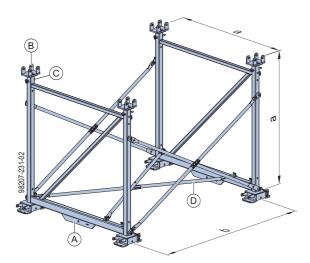
The **Table frame 1.50m** extends the DokaXdek tables' range to include room heights of up to 7.15 m.

- Quickly adds 1.50 m to the height.
- Table frame can be installed on the DokaXdek table with DokaXdek scaffold connector T.
- Props connected in same way as with DokaXdek swivel head.
- Integral latch-type pegs for connecting diagonal crosses from the Doka load-bearing tower system Staxo.
- Centring plates for the Transport fork DM 1.5t.

The flexurally rigid connection to the superstructure increases the load-bearing capacity of the Floor props Eurex 30 top and Eurex eco to 41.2 kN.



#### Assembly



- a ... 1.50 m
- b ... variable (as statically required)
- A Table frame 1.50m
- B DokaXdek scaffold connector T
- C Spring locked connecting pin 16mm
- D Diagonal cross as per table

## Items needed and permitted slab thicknesses<sup>1)</sup> [cm]

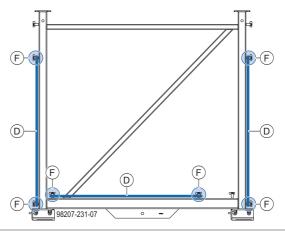
	Length of table (m)					
	4 5					
	Number of table frames					s
	2	3	4	2	3	4
Diagonal cross 12.100 <sup>2)</sup>	_	6 <b>47</b>	9 <b>108</b>	_		9 <b>52</b>
Diagonal cross 12.150 <sup>2)</sup>	_	6 <b>70</b>	1	_	6 <b>54</b>	၁ <b>69</b>
Diagonal cross 12.200 <sup>2)</sup>	3 <b>41</b>	_	1	_	6 <b>48</b>	
Diagonal cross 12.250 <sup>2)</sup>	3 <b>30</b>	_	_	3 <b>19</b>	_	_
Diagonal cross 12.300 <sup>2)</sup>	_	_	l	3 <b>21</b>		
Table frame 1.50m	2	3	4	2	3	4
DokaXdek scaffold connector T	4	6	8	4	6	8
Spring locked connecting pin 16mm	4	6	8	4	6	8
Floor prop Eurex 30 top or Eurex 30 eco	4	6	8	4	6	8
Safety pin D20 195	8	12	16	8	12	16

<sup>1)</sup> in accordance with line 6, DIN 18202; values are bolded in table

> Set up the table frames.

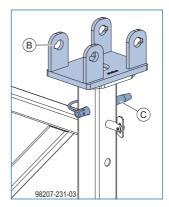


- Prop connector must be positioned at the bottom.
- Latch-type pegs for connection of the horizontal diagonal cross must be opposite each other.
- ➤ Install diagonal crosses in both the vertical and the horizontal, and secure each diagonal cross with the safety catch as soon as it has been slotted on to the latch-type peg marked in the illustration.



- D Diagonal cross as per table
- F Latch-type peg
- Push DokaXdek scaffold connectors T into the Table frame 1.50m and secure them with Spring locked connecting pins 16mm.

#### Close-up, DokaXdek scaffold connector T



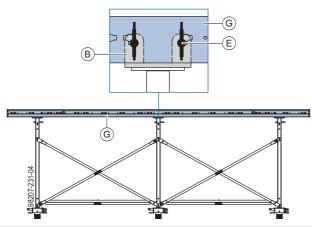
- B DokaXdek scaffold connector T
- C Spring locked connecting pin 16mm

#### Attaching the superstructure:

➤ Using two Dokamatic lifting straps 13.00m and the crane, lift the superstructure on to the pre-assembled load-bearing tower.

<sup>2)</sup> The number suffix of the article designation corresponds to the spacing of the table frames. e. g. Diagonal cross 12.100: spacing of table frames = 100 cm

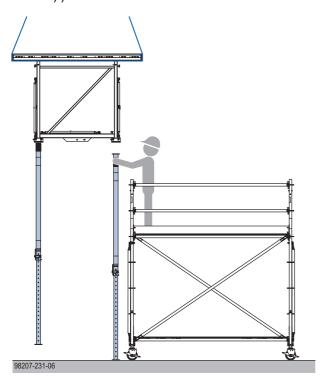
Connect each DokaXdek scaffold connector T to the table superstructure with 2 safety pins and turn each safety pin through 90°.



- **B** DokaXdek scaffold connector T
- E Safety pin D20 195
- **G** Table superstructure

#### Installing the floor props:

➤ Raise the entire unit by crane and, working from a mobile scaffold tower (e.g. Working scaffold Modul), install the floor props (for installation see the section headed 'Room heights up to 5.65 m (standard tables)').





- 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.





#### **WARNING**

## Risk of tableform tipping over when floor props are being aligned!

Striking the floor props too hard with the plastic mallet causes accidental loosening of the fastening clamp of the floor prop or of the swivel latch of the swivel head.

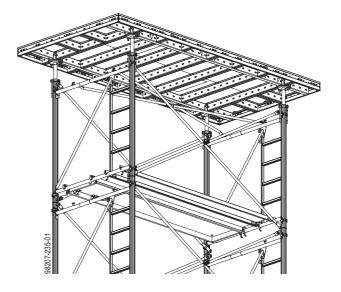
- ➤ Use only moderate force when striking with the Plastic mallet 4kg. Max. mallet backswing distance 50 cm!
- ➤ Give just one knock to each floor prop at a time, then move on to the next prop!
- Strike only the bottom part of the floor prop.

## Room heights greater than 7.15 m

The DokaXdek table can be installed on the Load-bearing tower Staxo 100 with the **DokaXdek spindle connector T**.



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



## Adapting to different slab thicknesses

- ➤ Use the Dokamatic lifting strap 13.00m to lift the table onto the DoKart plus, or onto suitable temporary shoring (see the section headed 'Transporting, stacking and storing').
- ➤ Reposition edge props and DokaXdek swivel heads.
- Install additional intermediate props and DokaXdek swivel heads.

For installation of the floor props, see the section headed 'Height adjustment'.

## Positioning the floor props

Marks on the DokaXdek table facilitate the correct positioning of 2, 3 or 4 floor props per primary profile.

#### Note:

- Only tables 5.00 metre long have the marks for 4 floor props per primary profile.
- Consult your Doka technician if floor props have to be positioned at other positions.

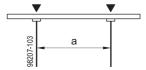
#### DokaXdek table (length 5.00 m)



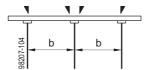
#### DokaXdek table (length 4.00 m)



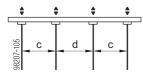
#### 2 floor props per primary profile



#### 3 floor props per primary profile



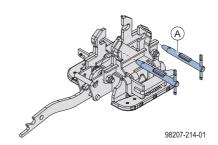
### 4 floor props per primary profile



Length, DokaXdek table	а	b	С	d
5.00 m	275	175	112.5	150
4.00 m	225	137.5	100	100

Dimensions in cm

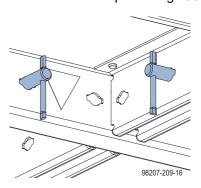
## Installing the DokaXdek swivel head



A Safety pin D20 195 (not included with product)

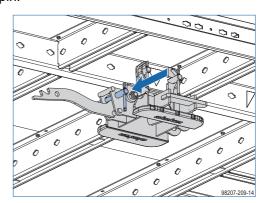
#### Note:

Pin unneeded safety pins into the primary profile or function profile and turn each pin through 90°.





If the swivel function is not needed, the swivel head can be locked by fitting an extra safety pin.



### Installing on primary profile

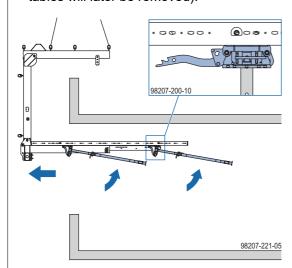
#### Perm. reaction load:

Swivel head on the primary profile: 41.2 kN

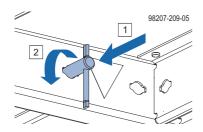


#### **NOTICE**

- Mount all the swivel heads on each table so that they point in the same direction.
- ➤ Always set up the tables so that the swivel head latch points towards the edges of the floor-slabs (in the direction in which the tables will later be removed).

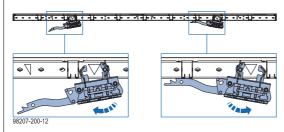


➤ Insert a safety pin into the primary profile and turn the pin 90°. This activates the anti-dropout lock between the cross holes.

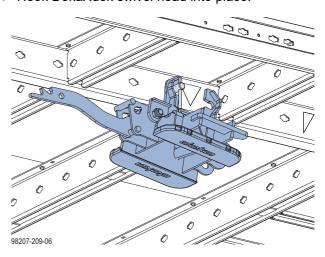




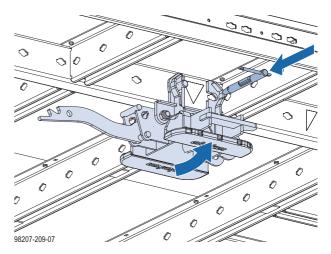
Position of the swivel head close to the function profile: To facilitate installation, first insert the safety pin that is farther from the function profile.



➤ Hook DokaXdek swivel head into place.

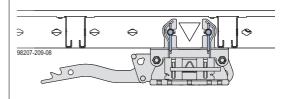


➤ Swing the DokaXdek swivel head up, install the safety pin in the primary profile and turn the pin by 90°.





Check that the toggle bar on the safety pin is hanging down in the vertical position.



## Installing on function profile

#### Perm. reaction load:

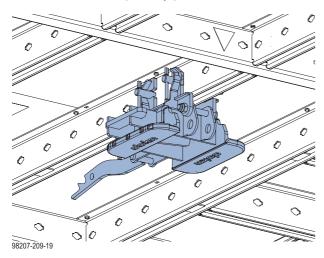
Swivel head on the function profile: 22 kN



#### **WARNING**

Reduced load-bearing capacity when swivel head is installed on the function profile!

- ➤ The values shown in the section headed 'Structural design' are not valid for installation on the function profile. Revised static verification is required.
- ➤ The procedure for installation is analogous to that for installation on the primary profile.

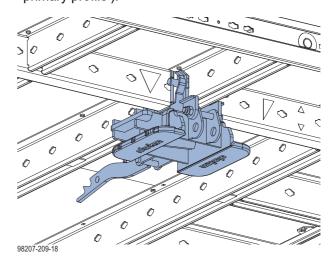


# Installing at node point of primary profile and function profile

#### Perm. reaction load:

Swivel head at node point of primary profile and function profile: 41.2 kN

➤ Engage the swivel head on the primary profile or function profile (see the section headed 'Installing on primary profile').



## Structural design

## $\Lambda$

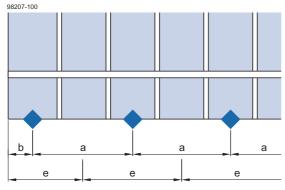
#### WARNING

- ➤ This structural design applies only in the case of general use of Floor props Eurex 30 top or Eurex 30 eco and installation of the swivel heads on the primary profile (see the section headed 'Positioning the floor props').
- In accordance with EN 12812, 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, are allowed for (assuming a fresh-concrete density of 2500 kg/m³).
- Total deflection was limited for full-surface loading according to line 6 in accordance with DIN 18202.
- For circumstances other than full-surface loading, perform statical calculation.

For installation of the formwork sheets and closures see the section headed 'Adaptation to building layout'.

#### Difference between span and influence width:

- The span (a) is the distance between the filler supports.
- The permitted influence width (e) of a filler support is stated in the respective tables.
- The actual influence width can only be determined by calculation, and corresponds to roughly the spacing (a) between the filler supports, and in the cantilever-arm zone to around b + a/2.
- The span (a) of the filler supports is roughly equal to the influence width (e) if
  - they are evenly spaced and
  - there are no cantilevering projections.



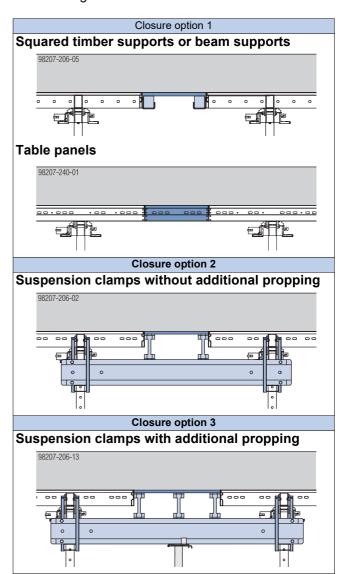
- a ... span
- b ... max. 12.5 cm
- e ... influence width

## Table type and closure options

On the basis of the specified slab thickness, determine the table format and the number of floor props per primary profile.

Factors influencing permitted slab thickness:

- Required closure width
- Closure option
- Installation of the closure on long side or short side or on long and short sides of the table.



Closure on long side of the tables [cm]

		er of floor orimary p		Closure option				
	2	3	4	1	2	3		
Table format	Max. s	lab thickr	ness 'd'	Max. o	closure w	idth 'x'		
	44	66	92	wit	hout clos	ure		
2.50x5.00m	38	58	80	25	25	75		
2.30%3.00111	32	51	61	50	50	150		
	26	42	49	75	75	150		
	55	85	108	without closure				
2.00x5.00m	47	73	94	25	25	75		
2.0000.00111	41	63	85	50	50	150		
	37	56	78	75	75	150		
	55	85	108	without closure				
2.50x4.00m	48	73	89	25	25	75		
2.50%4.00111	42	59	66	50	50	150		
	34	47	52	75	75	150		
	70	108	108	wit	hout clos	ure		
2.00x4.00m	60	93	108	25	25	75		
2.0004.00111	53	81	108	50	50	150		
	47	72	96	75	75	150		

#### Closure on short side of the tables [cm]

ended and the state of the stat										
	Number of floor props per primary profile			Clo	sure opt	ion				
	2 3 4			1	2	3				
Table format	Max. s	lab thickr	ness 'd'	Max. o	closure w	idth 'x'				
	44	66	92	wit	hout clos	ure				
2.50x5.00m	29	60	79	25	25	75				
	16	41	44	50	50	150				
	10	44	59	75	75	150				
2.00x5.00m	55	85	108	without closure						
	38	76	85	25	25	75				
2.0000.00111	21	54	58	50	50	150				
	13	54	56	75	75	150				
	55	85	108	without closure						
2.50x4.00m	50	72	81	25	25	75				
2.50%4.00111	36	46	51	50	50	150				
	22	56	67	75	75	150				
2.00x4.00m	70	108	108	wit	hout clos	ure				
	64	86	90	25	25	75				
2.0004.00111	46	59	66	50	50	150				
	28	57	59	75	75	150				

#### Closure on long and short sides of the tables [cm]

Number of floor props

	per primary profile			
	2	3	4	
Table format	Max. slab thickness 'd'			Max. closure width 'x'
	30	56	73	20
	19	47	58	40
2.50x5.00m	16	43	52	50
2.0000.00111	13	40	46	60
		35	38	80
	1	29	32	100
	42	71	95	20
2.00x5.00m	25	60	78	40
	21	55	71	50
	17	52	66	60
		45	57	80
		40	51	100
	48	68	88	20
	42	58	64	40
2.50x4.00m	34	51	57	50
2.5074.00111	29	46	51	60
	21	38	42	80
	15	32	35	100
	60	86	108	20
2.00x4.00m	53	71	91	40
	47	66	83	50
2.0004.00111	38	61	76	60
	27	53	66	80
	21	47	58	100

## Structural design example for 'Closure on long and short sides of the tables':

- Basic data:
  - Slab thickness 30 cm
  - Table format 2.50x5.00m
  - 2 floor props per primary profile
- Result: Max. 10 cm closure in both directions at same time possible

# Permitted influence width e of the filler supports

➤ On the basis of the specified slab thickness, determine the permitted influence width of the filler supports.

Factors influencing permitted influence width:

- Required closure width
- Closure option

Max. closure width 'x'		25 5		0 75			100	125	150		
Closure option		1	2	1	2	1	2	3	3	3	3
	20	177	250	146	250	130	250	250	250	197	137
	30	162	250	133	250	119	215	250	196	142	99
(0	40	150	250	124	250	109	165	200	150	109	76
thickness	50	141	250	117	221	88	134	162	121	88	61
용	60	135	250	111	186	74	112	136	102	74	52
Ē	70	129	250	96	160	64	97	117	88	64	44
Slab	80	125	250	85	142	57	86	104	78	57	40
0)	90	122	250	77	128	51	78	94	70	51	36
	100	118	250	70	116	47	71	85	64	47	32
	108	116	241	65	108	43	66	80	60	43	30

Dimensions in cm

## Sheet type of the closure

➤ Check that the selected sheet type for the closure is suitable for the specified slab thickness.

Factors influencing permitted slab thickness:

- Type of sheet
- Span

	3-SO 21mm	3-SO 27mm	Dokaplex 18mm	Dokaplex 21mm	DokaPly eco 18mm	DokaPly eco 21mm
Span 's'		Ма	x. slab t	hickness	'd'	
20	108*	108*	108*	108*	108*	108*
25	108*	108*	108*	108*	108*	108*
30	90	108*	108*	108*	108*	108*
35	55	108*	108*	108*	108*	108*
40	37	108	108	108*	98	108*
45	25	78	108	108	70	100
50	_	58	99	108	53	75
55	_	46	61	103	41	58
60	_	32	41	67	33	47
65	_	21	28	47	26	38
70	_	_	19	33	17	32
75	_	_	_	24	_	23

<sup>\*)</sup> also complies with L/300

Dimensions in cm

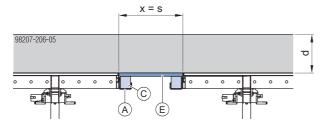
33

## **Closure options**

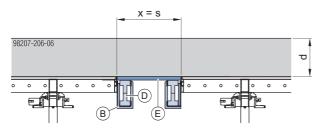
#### Closure option 1

Configuration with DokaXdek squared timber supports 8x10cm, DokaXdek beam supports H20 or DokaXdek table panels.

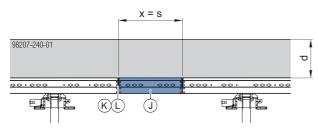
#### Closures between DokaXdek tables



with squared timber supports

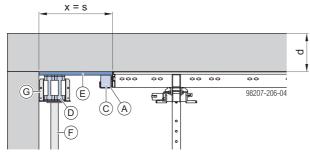


with beam supports

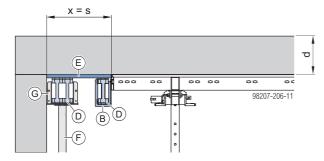


with table panels

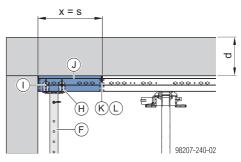
### Closures along wall connections



with squared timber supports



with beam supports



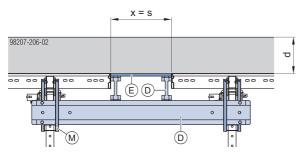
with table panels

- c ... max. 25 cm
- d ... slab thickness
- s ... span
- x ... closure width
- A DokaXdek squared timber support 8x10cm
- B DokaXdek beam support H20 18mm, 21mm or 27mm
- C Squared timber (C24 grade)
- D Doka beam H20
- **E** Formwork sheet
- F Floor prop Eurex 30 top or Eurex 30 eco
- G 4-way head H20
- H DokaXdek prop connection T
- I Safety pin D20/195
- J DokaXdek table panel
- K Centring connector 15.0
- L Centring nut 15.0

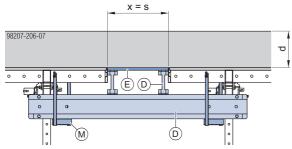
### Closure option 2

Configuration with suspension clamps without additional propping.

#### Closures between DokaXdek tables

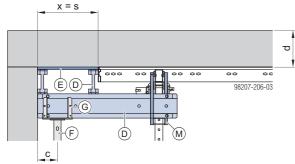


Suspension clamps in the primary profile

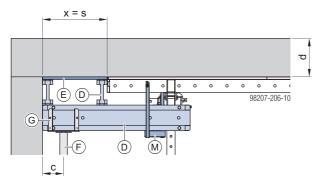


Suspension clamps in the function profile (between primary profile and frame profile)

#### Closures along wall connections



Suspension clamps in the primary profile



Suspension clamps in the function profile (between primary profile and frame profile)

- c ... max. 25 cm
- d ... slab thickness
- s ... span
- x ... closure width
- D Doka beam H20 (2 as secondary beams)
- E Formwork sheet 18mm, 21mm or 27mm
- F Floor prop Eurex 30 top or Eurex 30 eco
- G 4-way head H20
- M DokaXdek suspension clamp T 18mm, 21mm or 27mm

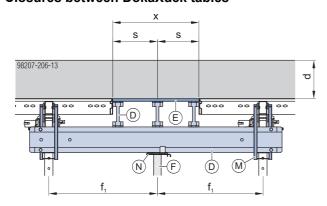
**34** 999820702 - 12/2023

User Information DokaXdek table Structural design

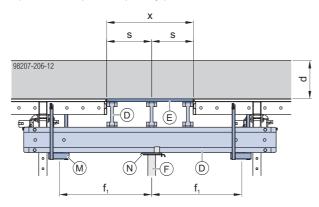
### Closure option 3

Configuration with suspension clamps and additional propping.

#### Closures between DokaXdek tables

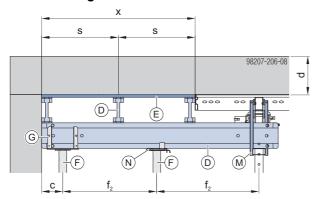


Suspension clamps in the primary profile

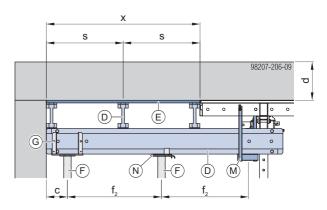


Suspension clamps in the function profile

#### Closures along wall connections



Suspension clamps in the primary profile



Suspension clamps in the function profile

- c ... max. 25 cm d ... slab thickness
- $\begin{array}{l} f_1 \; ... \; max. \; 125 \; cm \\ f_2 \; ... \; max. \; 90 \; cm \end{array}$
- s ... span
- x ... closure width
- **D** Doka beam H20 (at least 3 as secondary beams)
- E Formwork sheet
- F Floor prop Eurex 30 top or Eurex 30 eco
- G 4-way head H20
- M DokaXdek suspension clamp T 18mm, 21mm or 27mm
- N Supporting head H20 DF

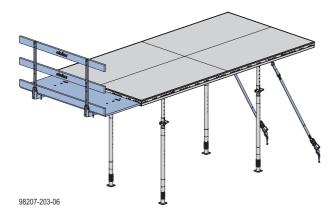
## Tables around edges of slab

Different mounted parts can be integrated on the short and long sides of tableforms in the edge zone:

- DokaXdek table panels
- Table platforms
- Sideguard
- Slab stop-ends
- Drop beams



If possible, pre-mount the attachments to the tableforms on the floor, while these are still on the stack.

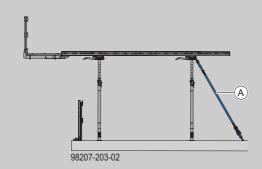




#### **CAUTION**

Risk of tip-over with edge tables or tables with accessories installed! (e.g. due to cantilevering platforms, edge props that have been relocated towards the inside, stop-end formwork, table panels, drop beams)

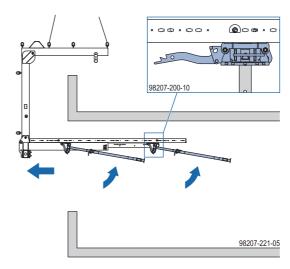
- Secure all edge tables by tying back (A) every primary beam in the inner cantilever zone of the table.
- ➤ Do not release tables from the shifting device until tip-up protection has been installed, e.g. attachment to the structure with bracings or supports.
- ➤ Also applies when tables are set down or put into temporary storage.



For details of the tie-back, see the section headed 'Tie-back solutions'.

#### Note:

Always position the tables so that the swivel head latch points towards the edges of the floor-slabs (in the direction in which the tables will later be removed).

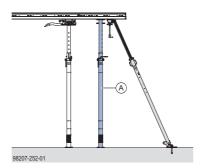


## **Tie-back solutions**

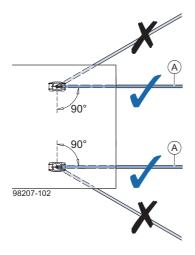


### NOTICE

- When calculating the leg loads, allow for the additional forces imposed by the bracing!
  - If tensile force exceeds 10 kN, prop the table with an additional floor prop (A) in the area of the bracing.



- Attach the bracing in such a way that the tableform is held in both directions and secured against twisting.
- Direction of pull of the bracing (A) always 90° to the tableform. Oblique pull is not permitted!



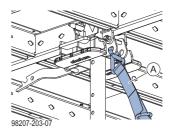
## Lashing strap 5.00m



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

## Tie-back attached to the DokaXdek swivel head

➤ Hook the Lashing strap 5.00m directly into the DokaXdek swivel head and secure it to the floor.



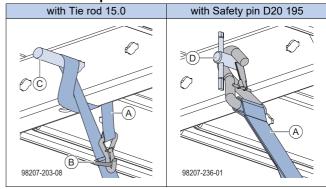
A Lashing strap 5.00m

Permitted tensile force per lashing strap: 10 kN

## Tie-back in primary profile or function profile

- ➤ Insert Tie rod 15.0 or safety pin into primary profile or function profile, as applicable.
- ➤ Loop a Lashing strap 5.00m round the Tie rod 15.0 or hook it to the safety pin and secure it to the floor.

## **Practical examples**

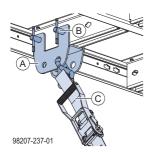


- A Lashing strap 5.00m
- **B** Triangle
- **C** Tie rod 15.0
- D Safety pin D20 195

Permitted tensile force per lashing strap: 9.5 kN

## Tie-back attached to DokaXdek plumbing strut adapter T

- Secure the plumbing strut adapter to the function profile or the primary profile with 2 safety pins.
- ➤ Hook the lashing strap into the plumbing strut adapter and secure it to the floor.

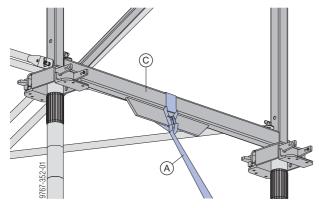


- A DokaXdek plumbing strut adapter T
- B Safety pin D20 195
- C Lashing strap 5.00m

Permitted tensile force per lashing strap: 10 kN

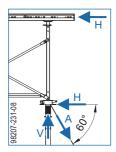
## Tie-back attached to Table frame 1.50m

➤ Pass the Lashing strap 5.00m around the bottom profile of the table frame.



- A Lashing strap 5.00m
- C Table frame 1.50m

Permitted tensile force for tie-back at the Table frame 1.50m: 5 kN



- H ... Horizontal force
- V ... Resulting vertical force from H
- A ... Tie-back force

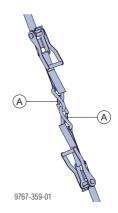
## Tie-backs for high tableforms

If necessary, two Lashing straps 5.00m can be joined together to form a longer back-stay.



#### **NOTICE**

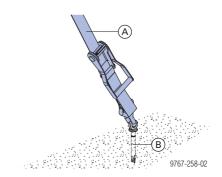
Only Lashing straps 5.00m with springloaded locking flap may be used!



A Lashing strap 5.00m (with spring-loaded locking flap)

## Anchoring in the ground

- ➤ 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

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

Permitted load where  $f_{ck,cube,current} \ge 10 \text{ N/mm}^2$ :  $\mathbf{F}_{perm.} = 10.0 \text{ kN } (R_d = 15.0 \text{ kN})$ 



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 heavyduty dowels are used to fabricate anchorages in the floor slab.

Follow the manufacturers' applicable fitting instructions

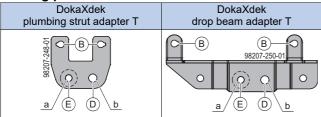
## **Plumbing struts**

## Bracing attached to Plumbing strut adapter T



Drop beam adapter T can be used as an alternative to Plumbing strut adapter T.

**Pinning positions** 

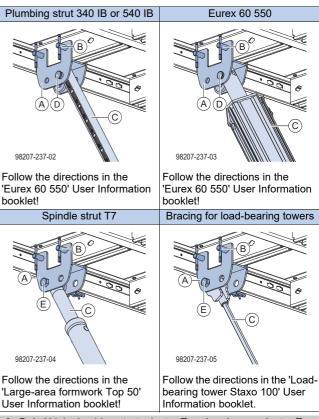


Support or purpose	Pin	Pos.
Plumbing strut 340 IB or 540 IB	Pin D20 160	D
Eurex 60 550	Pin D20 160	D
Spindle strut T7	Connecting pin 10cm	Е
Bracing for load-bearing towers	Connecting pin 10cm	Е
Fixing to the table	Safety pin D20 195	В

- a ... diam. 21.5 mm (welded on spacer)
- b ... diam. 26 mm

#### Installation:

- ➤ Secure the adapter to the function profile or the primary profile with 2 safety pins.
- ➤ Attach the support by inserting the corresponding pin into the hole provided for the purpose in the adapter and secure the pin.
- Secure the support to the floor with Doka express anchor or anchors.
  - Support secured to the floor with 1 express anchor:
    - Permitted tensile and compressive forces: 13.5 kN
      - (60° propping angle; applies for both adapters)
  - Support secured to the floor with 2 express anchors:
    - DokaXdek plumbing strut adapter T:
       Permitted tensile and compressive forces:
       27 kN
       (60° propping angle)
    - DokaXdek drop beam adapter T:
       Permitted tensile and compressive forces:
       20 kN
       (60° propping angle)
    - 13.5 kN or more (applies for both adapters):
       Comply with the information on permissible slab thickness and floor prop loads and load-bearing capacities in the applicable User Information booklets. Structural design of the tables is project-specific.



- A DokaXdek plumbing strut adapter T or drop beam adapter T
- B Safety pin D20 195
- C Support
- **D** Pin D20 160
- E Connecting pin 10cm + Spring cotter 5mm

## Anchoring in the ground

➤ Prepare an anchorage point in the ground with the Doka express anchor (see the sections headed 'with Lashing strap 5.00m and Doka express anchor 16x125mm' - 'Anchoring in the ground').



### **NOTICE**

If tensile or compressive force is 13.5 kN or higher, secure each support to the floor with 2 Doka express anchors.

## Bracing at prop head

Using plumbing struts, DokaXdek tables can be fixed at right angles to or in line with the function profile.



#### WARNING

Malfunction, culminating in falling parts when the concrete is being compacted!

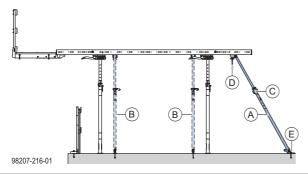
Always tighten the star grip nut on the prop head with blows of a hammer or with a suitable tool.

Tightening torque: 80 Nm (16 kg with lever length 50 cm)



#### **WARNING**

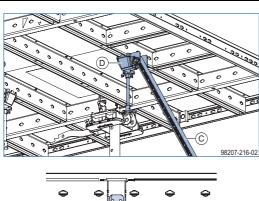
Check the connections between the plumbing struts and the tableform before repositioning the table.

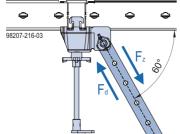


- A Fixed at right angles to the function profile
- B Fixed in line with the function profile
- C Plumbing strut 340 IB or 540 IB
- **D** Prop head EB
- E Doka express anchor 16x125mm

## Fixed at right angles to the function profile

Permitted tensile force  $F_z$  per plumbing strut: 13.5 kN Permitted compressive force  $F_d$  per plumbing strut: 7.5 kN





- C Plumbing strut 340 IB or 540 IB
- **D** Prop head EB

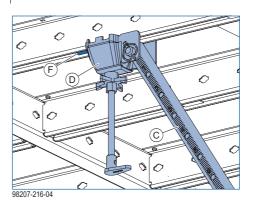
## Fixed in line with the function profile

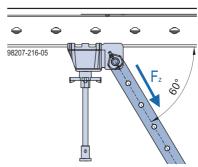
Permitted tensile force  $F_z$  per plumbing strut: 5 kN Compressive loading of the plumbing strut is prohibited!



### **NOTICE**

Always install the prop head securely form-fitted to the primary profile or drawn metal sheet.



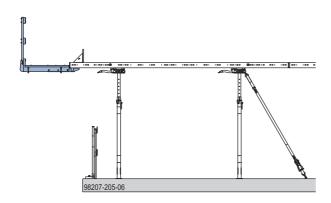


- C Plumbing strut 340 IB or 540 IB
- D Prop head EB
- F Drawn metal sheet

## Anchoring in the ground

➤ Prepare an anchorage point in the ground with the Doka express anchor (see the sections headed 'with Lashing strap 5.00m and Doka express anchor 16x125mm' - 'Anchoring in the ground').

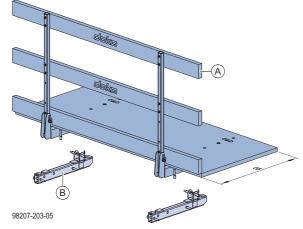
## **Edge table with platform**



## **Dokamatic table platform**

A pre-assembled, foldable, ready-to-use platform, 1.00 m wide, for convenient and safe working.

- 2 lengths of platform are available:
  - 2.45m for 2.50m wide DokaXdek tables
  - 1.95m for 2.00m wide DokaXdek tables
- High safety for edge tables
- Installable on short side (primary profile) and long side (function profile) of the table
- Easy to mount a hammer is the only tool needed
- Integral connectors for system stop-end formwork
- Fold-down railing to facilitate moving edge tables into the inside of the building



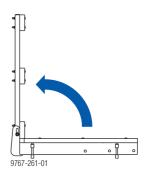
- a ... 1.00m
- A Dokamatic table platform
- B DokaXdek platform adapter T

Permitted service load: 200 kg/m<sup>2</sup> Load Class 3 to EN 12811-1:2003

## Assembly

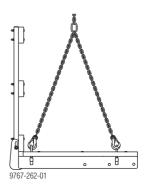
## Preparation:

➤ Tilt up the guard rails and lock them in position.



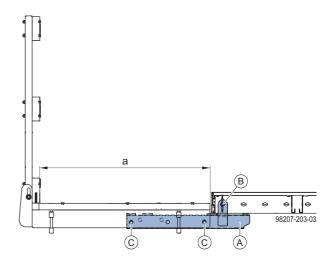
## Repositioning:

➤ Attach a 4-part lifting chain (e.g. Doka 4-part chain 3.20m) to the Dokamatic table platform.



## Means of attachment:

- ➤ On the short side or long side, as applicable, of each platform, install 2 Platform adapters T spaced at 150 cm and secure each adapter with one safety pin.
- ➤ Place the Dokamatic table platform onto the Platform adapter T, and secure it with Connecting pins 10cm and spring cotters.



Example: Installation on short side (primary profile)

- a ... 1.00m
- A DokaXdek platform adapter T
- B Safety pin D20 195
- C Connecting pin 10cm + Spring cotter 5mm

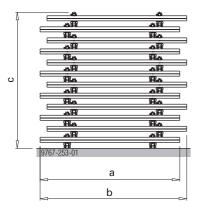
doka

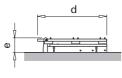
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## Transporting, stacking and storing

## Stack of 12 Dokamatic table platforms

Single folded-down platform





### **Dimensions** [cm]

	-	-					
	Dokamatic table platform						
	1.00/2.50m	1.00/2.00m					
а	245.0	195.0					
b	253.0	203.0					
С	239	9.0					
d	12:	2.0					
е	25	5.5					

## Sideguards on exposed platform-ends

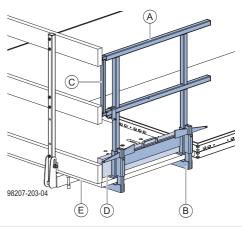
On platforms that do not completely encircle the structure, suitable sideguards must be placed across exposed end-of-platform zones.

#### Nota

The plank and board thicknesses given here comply with the C24 category of EN 338.

Observe all national regulations applying to deckboards and guard-rail boards.

## Side handrail clamping unit T



- A Side handrail clamping unit T
- **B** Clamping part
- C Integrated telescopic railing
- **D** Guardrail board min. 15/3 cm (site-provided)
- E Dokamatic table platform

### Installation:

- Use the wedge (clamping range 4 to 6 cm) to fasten the clamping part to the decking of the pouring platform.
- ➤ Slot in the railing.
- ➤ Extend the telescopic railing to the desired length and secure it.
- ➤ Insert toeboard (guardrail board).

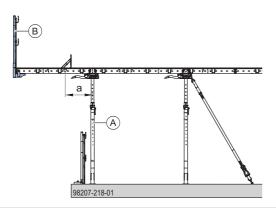
## **Edge table without platform**

## **Moving floor props**



## **NOTICE**

- ➤ The unloaded cantilever (working area) influences deflection. Check the positioning of the floor props separately for each project and, if necessary, move them farther inward.
- ➤ Move the outer floor props (A) 37.5 cm farther in (a) than for the standard table. This leaves a sufficiently large area of table free to work on beyond the stopend.



- A Doka floor prop Eurex 30 top or Eurex 30 eco
- **B** Xsafe edge protection XP

## Installing table panels

## $\triangle$

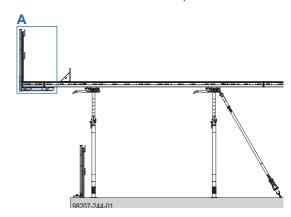
## **WARNING**

➤ Install table panels (B) only with the long side on the table (A).

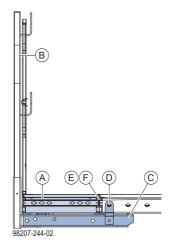


- Do not step on to cantilevering table panels at slab edge tables unless the table panels are supported on platform adapters or universal walings.
- ➤ Additional propping is required for cantilevering table panels at slab edge tables if concreting loads are to be transferred to them.

For instructions on installing the table panels see the section headed 'DokaXdek table panels'.



## Close-up A



- A DokaXdek table panel
- **B** Xsafe edge protection XP
- C DokaXdek platform adapter T
- D Safety pin D20 195
- E Centring connector 15.0
- F Centring nut 15.0

## Xsafe edge protection XP



Follow the directions in the 'Xsafe edge protection XP' User Information booklet.

## DokaXdek table adapter XP

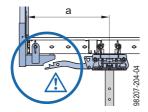


Used together with the Handrail post XP to construct all-round safety barriers on the DokaXdek table.

- Suitable for all sizes of table.
- Suitable for railing heights of 1.20 m and 1.80 m.
- Can be installed on the primary profile or the function profile.

#### Note:

Distance **a** between floor props and table edge ≤ 62.5 cm: Collision of the Table adapter XP with the swivel head during installation and when the swivel function is used.

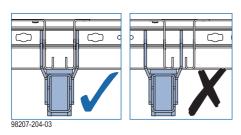


#### Installation:

Secure the DokaXdek table adapter XP to the primary profile or function profile of the DokaXdek table with safety pins.



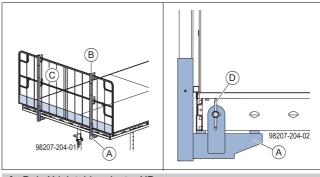
Position the table adapter centred along the function profile.



- Working from below, push the Toeboard holder XP onto the Handrail post XP (not needed when using the Protective grating XP).
- ➤ Push the Handrail post XP into the post holder of the DokaXdek table adapter XP until the locking mechanism engages (= 'Easy-Click' function).



- The locking mechanism must engage.
- The railing shackles must be facing towards the inside of the railing.
- ➤ Fit on a Protective grating XP or guardrail boards, and fix them in place.



- A DokaXdek table adapter XP
- **B** Handrail post XP
- C Protective grating XP or guardrail boards (site-provided)
- D Safety pin D20 195

### Structural design

## used in combination with Handrail post XP 1.20m

		Permissible influence width 'e' [m							າ]	
	Ε		(	Guard	drail b	oards	3			
Peak velocity pressure q [kN/m²]	Protective gratings XP 2.70x1.20m	2.5 x 12.5 cm <sup>1)</sup>	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 tubes 48.3mm 2)	Gap-free boarding
0.2		1.8	1.9	2.7	3.6	2.9	3.4	3.4	5.0	1.9
0.6	2.5	1.8	1.9	2.7	3.4	2.4	2.4	2.4	5.0	1.3
1.1	2.5	1.8	1.8	1.8	1.8	1.3	1.3	1.3	5.0	0.7
1.3		1.8	1.6	1.6	1.6	1.1	1.1	1.1	4.4	0.6

<sup>1)</sup> with toeboard 3 x 20 cm, 4 x 20 cm or 5 x 20 cm

## used in combination with Handrail post XP 1.20m and 0.60m or Handrail post XP 1.80m

		Permissible influence width 'e' [m]							]	
	E		(	Guard	Irail b	oard	s			
Peak velocity pressure q [kN/m²]	Protective gratings XP 2.70x1.20m and 2.70x0.60m	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 tubes 48.3mm <sup>2)</sup>	Gap-free boarding
0.2	2.5	1.8	1.9	2.7	3.6	2.9	3.3	3.3	5.0	1.6
0.6	2.5	1.8	1.9	2.6	2.6	1.9	1.9	1.9	5.0	0.9
1.1	2.4	1.7	1.4	1.4	1.4	1.1	1.1	1.1	4.6	0.5
1.3	2.1	1.5	1.2	1.2	1.2	0.9	0.9	0.9	3.9	0.4

<sup>1)</sup> with toeboard 3 x 20 cm, 4 x 20 cm or 5 x 20 cm

<sup>2)</sup> with toeboard 5 x 20 cm

<sup>2)</sup> with toeboard 5 x 20 cm

## DokaXdek screw-on adapter XP T



Used together with the Handrail post XP to construct all-round safety barriers on the DokaXdek table and DokaXdek table panels.

- Suitable for all sizes of table.
- Suitable for railing heights of 1.20 m and 1.80 m.
- Installable in each cross hole in the frame profile.

### Installation:



### **WARNING**

Malfunction, culminating in falling parts when the concrete is being compacted!

Always tighten the centring nut with a blow of a hammer or by using some other suitable tool.

Tightening torque: 80 Nm (16 kg with lever length 50 cm)

➤ Secure DokaXdek screw-on adapter XP T to the frame profile with Centring nut 15.0.



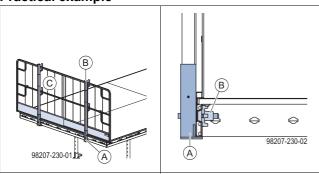
The Friction type ratchet SW27 or Box spanner 27 0.65m can be used for low-noise releasing and tightening of the Centring nut 15.0.

- ➤ Working from below, push the Toeboard holder XP onto the Handrail post XP (not needed when using the Protective grating XP).
- ➤ Push the Handrail post XP into the post holder of the DokaXdek screw-on adapter XP T until the locking mechanism engages (= 'Easy-Click' function).



- The locking mechanism must engage.
- The railing shackles must be facing towards the inside of the railing.
- ➤ Fit on a Protective grating XP or guardrail boards, and fix them in place.

## **Practical example**



- A DokaXdek screw-on adapter XP T
- **B** Handrail post XP
- **C** Protective grating XP or guardrail boards (site-provided)
- D Centring nut 15.0

### Structural design

### Use in combination with Handrail post XP 1.20m

		Permissible influence width 'e' [m							1]	
Peak velocity pressure q [kN/m²]	Protective grating XP 2.70x1.20m	2.5 x 12.5 cm <sup>1)</sup>	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 tubes 48.3mm <sup>2)</sup>	Gap-free boarding
0.2		1.8	1.9	2.7	3.6	2.9	3.4	3.4	5.0	1.9
0.6	2.5	1.8	1.9	2.7	3.4	2.4	2.4	2.4	5.0	1.3
1.1	2.5	1.8	1.8	1.8	1.8	1.3	1.3	1.3	5.0	0.7
1.3		1.8	1.6	1.6	1.6	1.1	1.1	1.1	4.4	0.6

<sup>1)</sup> with toeboard 3 x 20 cm, 4 x 20 cm or 5 x 20 cm

## Use in combination with Handrail post XP 1.20m and 0.60m or Handrail post XP 1.80m

	Permissible influence width 'e' [m]									
		Permissible influence width 'e' [m						ij		
	Ε	E Guardrail boards								
Peak velocity pressure q [kN/m²]	Protective gratings XP 2.70x1.20m and 2.70x0.60m	2.5 x 12.5 cm <sup>1)</sup>	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 tubes 48.3mm <sup>2)</sup>	Gap-free boarding
0.2	2.5	1.8	1.7	1.7	1.7	1.2	1.2	1.2	5.0	0.6
0.6	2.5	1.8	1.8	1.8	1.8	1.2	1.2	1.2	5.0	0.6
1.1	1.6	1.1	1.0	1.0	1.0	0.7	0.7	0.7	4.6	0.3
1.3	1.4	1.0	8.0	8.0	8.0	0.6	0.6	0.6	3.9	0.3

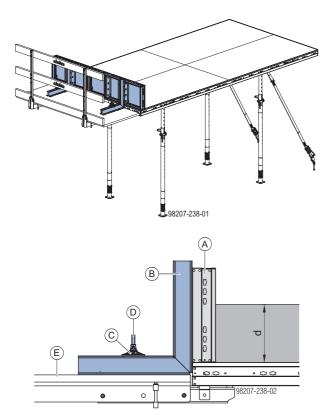
<sup>1)</sup> with toeboard 3 x 20 cm, 4 x 20 cm or 5 x 20 cm

<sup>2)</sup> with toeboard 5 x 20 cm

<sup>2)</sup> with toeboard 5 x 20 cm

## Slab stop-ends

## with Framax universal corner waling



- d ... Slab thickness max. 44 cm (with table panel) or 50 cm (with framed formwork panel)  $\,$
- A DokaXdek table panel (or framed formwork panel)
- **B** Framax universal corner waling
- C Super plate 15.0
- D Tie rod 15.0 (length approx. 25 cm)
- E Dokamatic table platform

Connect table panels to each other with 2 Centring connectors 15.0 and Centring nuts 15.0.

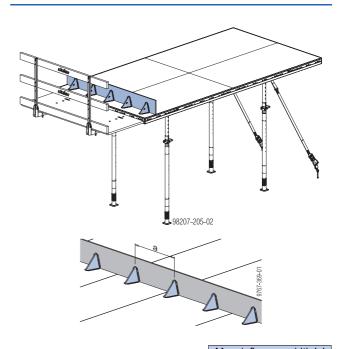
### Note:

After erecting the formwork and final adjustments have been made, firmly tighten the Super plate 15.0 once again (to pre-tension it).

Max. loading of the Dokamatic table platform during pouring: 150 kg/m<sup>2</sup>

Load Class 2 to EN 12811-1:2003

# with Universal end-shutter support 30cm



			thicknes	
Means of attachment	Config- uration	20	25	30
4 nails 3.1x80	Α	90	50	30
4 universal countersunk screws 4x40 (fully threaded)	В	220	190	160

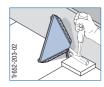
Configuration A (secured with nails)	Configuration B (secured with universal countersunk screws)
B 98207-205-04	D E 98207-205-05

- 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.



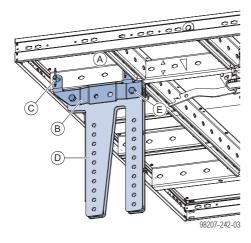
doka

## Edge table with drop-beam formwork

Drop-beam formwork assemblies are installed on the short side or the long side of the DokaXdek table with the DokaXdek drop beam adapter T and the Dokamatic drop beam plate 60cm.

- For drop-beam heights from 10 to 50 cm (without slab thickness) in the 5-cm grid (adapt intermediate sizes on project-specific basis)
- Support for side Doka beams H20
- Extra anchoring possibilities for custom constructions
- Max. stop-end height: 75 cm

### Installation

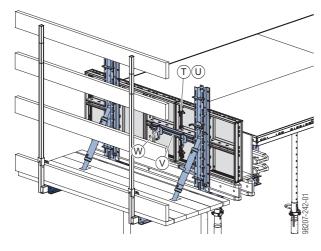


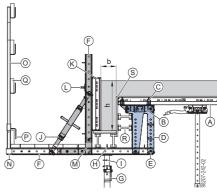
- **B** DokaXdek drop beam adapter T
- C Safety pin D20 195
- **D** Dokamatic drop beam plate 60cm
- E Connecting pin 10cm + Spring cotter 5mm

#### Note

Be aware of possible collision between drop beam plate and swivel head.

## Practical example with spindle strut





- b ... drop-beam width (dependent on the length of the multi-purpose waling and on the load-bearing capacity of the floor prop) h ... drop-beam height (incl. slab thickness)
- A DokaXdek table (standard version)
- **B** DokaXdek drop beam adapter T
- C Safety pin D20 195
- D Dokamatic drop beam plate 60cm
- E Connecting pin 10cm + Spring cotter 5mm
- F Multi-purpose waling WS10 Top50
- G Doka floor prop Eurex 30 top or Eurex 30 eco
- H Dokamatic prop connection
- I Spring locked connecting pin 16mm
- J Spindle strut T7 75/110cm
- K DokaXdek table panel (size as needed)
- L Framax wedge clamp
- M Corner plate FF20 G
- N Insertion adapter XP
- O Handrail post XP
- P Toeboard holder XP
- **Q** Safety barrier e.g. guardrail boards
- R Doka beam H20 top
- S Formwork sheet
- T Centring connector 15.0
- U Centring nut 15.0
- V Frami universal waling 0.70m
- ${\bf W}\,$  Frami wedge clamp

### Perm. influence width of the support for stop-end

	Drop-beam width 'b'						
Drop-beam height 'h'	25	30	40	50	60	70	75
50	175	172	166	160	152	145	142
55	164	160	155	148	142	135	132
60	152	150	145	138	132	125	122
65	141	140	135	130	124	118	114
70	130	130	125	120	115	110	106
75	122	120	117	112	108	102	100

Dimensions in cm



## NOTICE

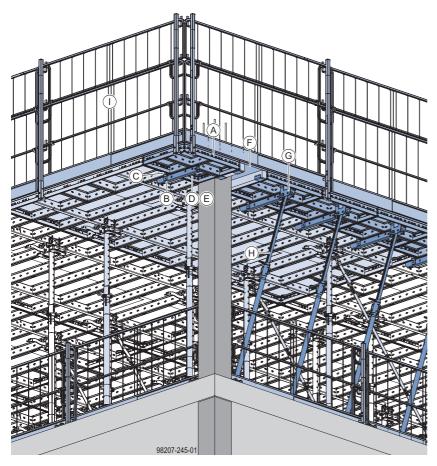
- Values apply only for propping of the drop beam formwork with Floor props Eurex 30 top or Eurex 30 eco (position always centred below drop beam).
- Secure the deck-boards with strips of formwork sheeting so that they cannot tip over (screw down e.g. with Torx 6x60).
- Cut-outs in the platform decking around the spindle struts can be covered with nailed-on strips of formwork sheeting where necessary.

## Edge table in the corner zone

Safe corner solutions with integrated columns are possible at the slab-edge, using the DokaXdek table and a few standard components.

## Note:

Consult your Doka technician!



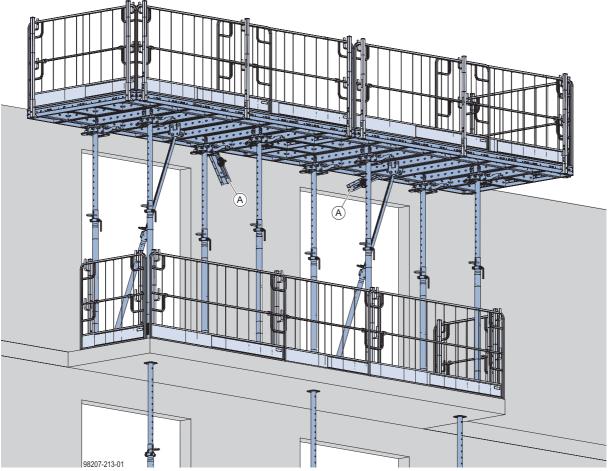
- A DokaXdek table frame
- **B** DokaXdek platform adapter T
- C Safety pin D20 195
- **D** Centring connector 15.0
- E Centring nut 15.0
- F Closure
- **G** DokaXdek plumbing strut adapter T
- H Plumbing strut 340 IB or 540 IB
- I Xsafe edge protection XP

## **Balcony tables**

With the DokaXdek table, balcony tables can be constructed without additional measures (such as additional waling planes) by reversing the installation direction of the DokaXdek swivel head.

Note:

Consult your Doka technician!



Schematic

**A** Fixed to the wall with universal waling, Tie rod 15.0 and Super plate 15.0

## Repositioning

## **General instructions on repositioning**



### WARNING

- > 'Passenger transportation' is forbidden!
- ➤ Before repositioning the tableform, remove all loose items (e.g. fitting boards) from it.
- Check the connections between the floor props, plumbing struts and the tableform before repositioning the table.



#### **NOTICE**

## Repositioning tables with plumbing struts installed:

 Make sure that the floor props are the first to contact the floor. Consequently, make the plumbing struts correspondingly shorter or fix the plumbing struts at an appropriate angle.



#### **NOTICE**

When tableforms are left free-standing (short-term intermediate storage), the following conditions must be met:

- There must be a firm horizontal surface.
- No attachments such as table platforms, table panels, safety barriers, drop beams, etc.
- Max. height of tables 4.0 m.
- Max. wind speed: 72 km/h.

If these conditions are not met, the tables must be secured with a suitable **tie-back** (see the section headed 'Tie-back solutions')!



## **NOTICE**

- The table must not be loaded not even temporarily with e.g. a stack of panels until it has been completely erected according to plan (i.e. with all intermediate props).
- Follow the directions in the section headed 'Repositioning tables with table panels installed'!

## Horizontal repositioning / travelling



#### NOTICE

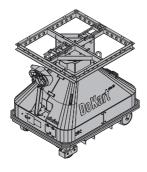
Observe the following points when repositioning / travelling tableforms horizontally:

- There must be a flat, firm (e.g. concrete), adequately dimensioned floor that is capable of supporting the load.
- Max. permitted inclination of trackway: 3%
- Min. height of tables: 2.00 m.
- Take particular care with:
  - height offsets
  - steps
  - floor holes and wall openings
  - tight spaces
  - strong winds
- The use of movers not described in this document is prohibited!
- For longer breaks between operations, or when the shifting device is permanently parked, it must not be carrying any formwork.

## **DoKart plus**

The DoKart plus is a battery-powered lifting appliance that allows Doka tableforms to be travelled by just one person.

- The battery is designed to allow 1 whole day's operation before being recharged on mains electricity overnight.
- The tableforms are lifted and lowered hydraulically.
- Max. travel speed: 5 km/h (walking pace)



Max. load, where load is applied centrally:

- without Stacking frame DF: 1950 kg
- with one Stacking frame DF: 1868 kg
- with two Stacking frames DF: 1786 kg
- with three Stacking frames DF: 1704 kg



Follow the Operating Instructions!

## Intended use

The DoKart plus and the stacking frames may only be used for repositioning Dokaflex, Dokamatic and DokaXdek tables.

## Distribution beams



#### **NOTICE**

Before tableforms can be repositioned, 2 extra distribution beams (Doka beams H20) must be installed.



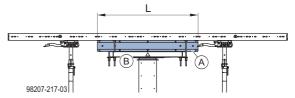
### WARNING

Risk of injury when the DoKart plus with projecting distribution beams is moved!

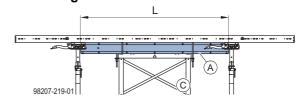
- ➤ DoKart plus without stacking frame: Length (L) of distribution beams: 1.80 m
- ➤ DoKart plus with stacking frame: Length (L<sub>min</sub>) of distribution beams: 2.65 m
- DoKart plus with stacking frame and table frame:

Length (L<sub>min</sub>) of distribution beams: a +

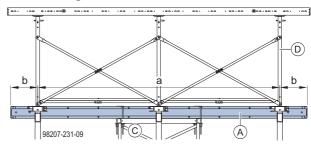
### without stacking frames



## with stacking frames



## with stacking frames and table frames



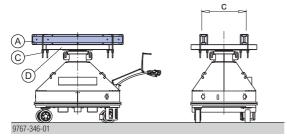
b ... min. 0.5 m

- A Distribution beam (Doka beam H20)
- **B** DoKart plus carrying frame
- C Stacking frame DF
- D Table frame 1.50m

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## **Assembly**

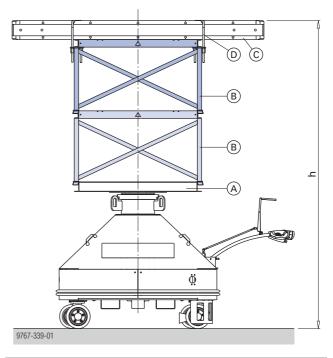
- ➤ Arrange the distribution beams symmetrically, spaced max. 90 cm (c) apart.
- ➤ Secure each distribution beam to the carrying frame of the DoKart plus, or to the Stacking frame DF, with two Brace stirrups 8.



- c ... max. 90 cm
- A Distribution beam (Doka beam H20)
- **C** Brace stirrup 8 (4 are supplied with the DoKart plus)
- **D** Carrying frame of DoKart plus or Stacking frame DF

## Height adjustment

The height range can be extended with **Stacking frames DF**.



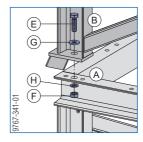
- A DoKart plus carrying frame
- **B** Stacking frame DF
- C Distribution beam (Doka beam H20)
- D Brace stirrup 8

Number of Stacking frames DF	h min. [cm]	h max. [cm]
0	174	344
1	249	419
2	324	494
3	399	569

Height ranges incl. distribution beams

## Installation:

➤ Secure the stacking frame to the carrying frame of the DoKart plus or to another stacking frame at four points with the bolting items supplied with the frame.



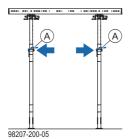
- A Carrying frame of DoKart plus, or another Stacking frame DF
- **B** Stacking frame DF
- E Hexagon bolt M12x40
- F Hexagon nut M12
- **G** Washer A13
- H Spring washer A12

## Positioning under the tableform



### **NOTICE**

Bolt on the fastening clamps (A) of the floor props from the inside to the outside, so that they are facing outward and do not obstruct the DoKart plus when it moves in under the table.



- The outriggers of the DoKart plus extension set (if fitted) must also be completely pushed in.
- ➤ Depending on the size of the table and the situation on the site, travel the DoKart plus under the table either from one end or one side of the table.



The carrying frame of the DoKart plus and the Stacking frame DF come with centre markings (red arrows).

These make it easier for them to be positioned centrally beneath the tables.

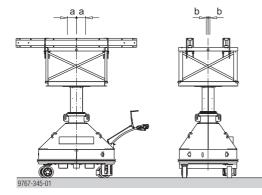


### **NOTICE**

If the tables are asymmetric (edge tables, tables with stop-end formwork, tables with table panels), 'central positioning' means 'central' in terms of the load centre.

Max. permitted eccentric position for the load centre:

- a<sub>max</sub> = 20 cm
- b<sub>max</sub> = 10 cm



## Travelling the tableform



## WARNING

Risk of injury when the DoKart plus with projecting distribution beams is moved!

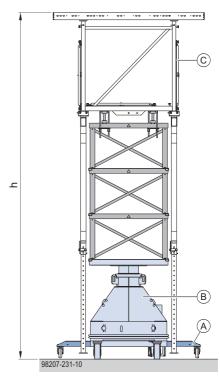
➤ Make sure that the distribution beams are the correct length (see the section headed 'Distribution beams')!



### **NOTICE**

Before it can be used for **5.65 m to 7.15 m** high tableforms with table frames, the DoKart plus must first be fitted with an **Extension set for DoKart plus**.





- h ... 5.65 m to max. 7.15 m
- A Extension set for DoKart plus
- B DoKart plus
- C DokaXdek table with Table frame 1.50m

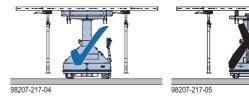


## **WARNING**

## Risk of tipping over!

Move tables in the longitudinal direction only!

The distribution beams on the DoKart run parallel with the long side of the table.



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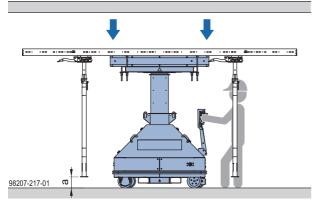
53



### **WARNING**

## Risk of tipping over!

- ➤ Do not extend the lifting tower of the DoKart plus farther than necessary.
- > Push the floor props all the way in.
- ➤ Lower the tableform (until floor props are max. 10 cm clear of the floor).
- ➤ If necessary, extend the outriggers of the DoKart plus extension set.



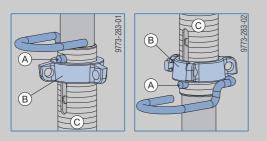
a ... max. 10 cm



### **CAUTION**

The fastening clamp of the floor prop can work loose during transport and possibly drop out.

➤ Use the adjusting nut (B) to hold the fastening clamp (A) in place at the top or bottom end of the slot (depending on whether the outer tube (C) is at the bottom or the top).





## **WARNING**

## Danger of crushing!

➤ When steering the DoKart plus, be extracareful about obstacles in the occupation zones marked in the illustration!



## Setting down and positioning the tableform



### **CAUTION**

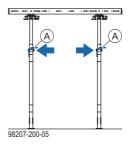
## Risk of tip-over if floor props are extended to different lengths!

➤ Before setting down the table, make sure that all the floor props are extended to the same length.



### **NOTICE**

Before setting down the table, push the fastening clamps (A) of the floor props through from the inside to the outside so that they are not an obstruction when the DoKart plus is moved out from under the table.





- 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.





### **NOTICE**

- The outriggers of the DoKart plus extension set (if fitted) must be completely pushed in.
- Check the wedge-clamped joins between the floor props and the tableform.



## WARNING

## Risk of tableform tipping over when floor props are being aligned!

Striking the floor props too hard with the plastic mallet causes accidental loosening of the fastening clamp of the floor prop or of the swivel latch of the swivel head.

- ➤ Use only moderate force when striking with the Plastic mallet 4kg. Max. mallet backswing distance 50 cm!
- ➤ Give just one knock to each floor prop at a time, then move on to the next prop!
- > Strike only the bottom part of the floor prop.

## **Vertical repositioning**

## **Transport forks**

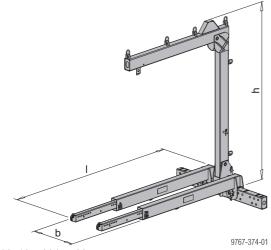
The transport fork can be used to move tableforms out from under the cast floor-slab and to reposition them.

#### Note:

- Ensure correct centre-of-gravity position!
  - Required minimum width of the forks:  $\frac{1}{3}$  of the width of the table
  - Required minimum length of the forks: <sup>2</sup>/<sub>3</sub> of the length of the table
- For additional measures for repositioning tables carried at right angles to the forks or repositioning custom tables (drop beams, 2 connected tables, tables carrying attachments, etc.) consult your Doka technician!
  - See also the section headed 'Repositioning tables with table panels installed'!

## Transport fork 1.3t adjustable

- Adjustable fork width and fork length
- Integrated tag-lines
- Three attachment possibilities for 2-part lifting chains for optimum (horizontal) transport of the table
- Attaching/detaching the 2-part lifting chain is easy in the parking position (bracket tilts down when lowered to the ground



b ... 90, 137, 204 or 227 cm l ... 275, 324, 373 or 422 cm

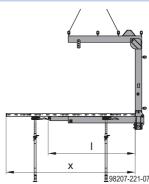
h ... 384.6 cm

Max. working load limit: 1300 kg (2870 lbs)



Follow the Operating Instructions!

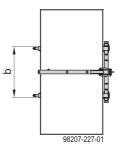
## Table along the direction of the fork



- I ... Fork length (min. 2/3 table length)
- x ... Length of table

## Table at right angles to the direction of the fork (e.g. balcony table)





- b ... Fork width 1.37 m for table length 4.00m
- b ... Fork width 2.04 m for table length 5.00m

#### Note

For use with table across the forks, pin the forks at their shortest length.

## Transport fork DM 1.5t adjustable / Transport fork DM 2.5t adjustable

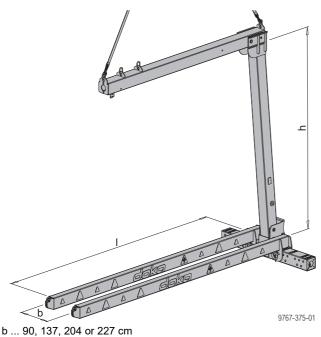
- Adjustable fork width
- Integrated tag-lines
- Fork marks for optimum (horizontal) transport of the table
- Attaching/detaching the 2-part lifting chain is easy in the parking position (bracket tilts down when lowered to the ground)
- Additional vertical extension (art. n° 586235000) for repositioning tableforms over two storeys available
- 2 additional lifting slings are needed for repositioning with Transport fork DM 2.5t adjustable.



Follow the directions in the 'Transport fork DM 1.5t adjustable and Transport fork DM 2.5t adjustable' Operating Instructions.



Follow the directions in the 'Lifting sling for transport fork DM 2.5t' Operating Instructions.

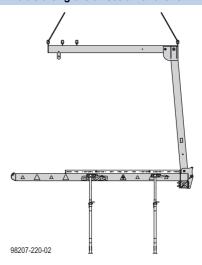


1... 580 cm

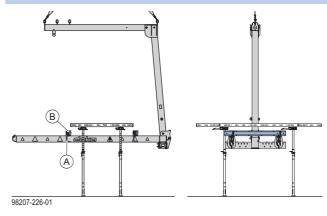
h ... 421 cm

Max. working load limit: 1500 kg (3300 lbs)

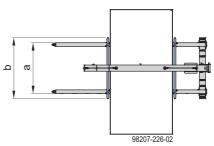
### Table along the direction of the fork



#### Table across the direction of the fork



- A Extension clamp H20 for fork
- B Doka beam H20



- a ... Fork width 1.37 m for table width 4.00m
- a ... Fork width 2.04 m for table width 5.00m
- b ... Beam length of extension 1.80 m for table width 4.00m
- b ... Beam length of extension 2.45 m for table width 5.00m

When lifting a table at right angles to the forks, secure Doka beams H20 to the fork profiles at right angles to the fork axis.



## WARNING

## Tableform falling-hazard!

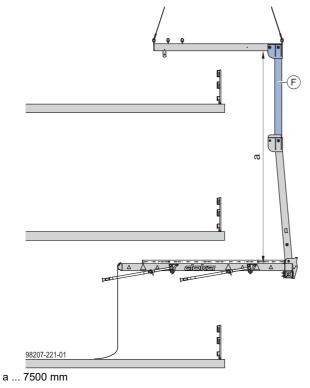
Using the Doka beams H20 in this way deactivates the lever-latch so that it no longer acts as an anti-slide-off guard.

Do not use the transport fork for regular lifting operations if Doka beams H20 are mounted to it!

User Information DokaXdek table Repositioning

## Lifting tables over two storeys

The lifting extension bracket of the transport fork is lengthened with the Vertical extension DM 3.30m.



F Vertical extension DM 3.30m

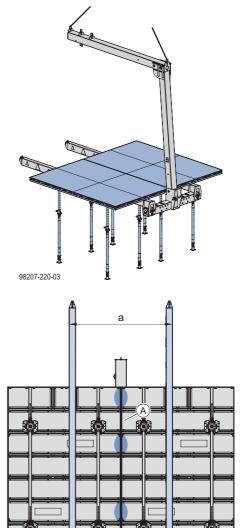
## Repositioning 2 tables jointly

If required, the **Transport fork DM 2.5t adjustable** can be used to reposition 2 DokaXdek tables jointly.



Follow the Operating Instructions!

## 2 tables side by side:



- a ... 2.04 m (table width 2.00m), 2.27 m (table width 2.50m)
- A Centring connector 15.0 and Centring nut 15.0



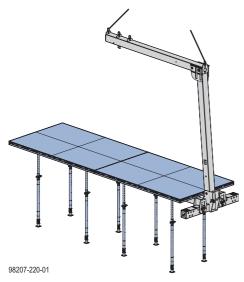
## **NOTICE**

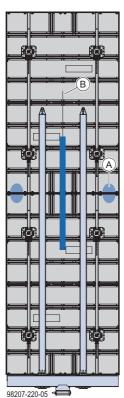
## 2 tables side by side:

- Interconnect DokaXdek tables with 4 centring connectors and 4 centring nuts along the table long side (blue marks).
- Position fork profiles in the area of the table middle.

Repositioning User Information DokaXdek table

#### 2 tables one behind the other:





- A Centring connector 15.0 and Centring nut 15.0
- B DokaXdek universal waling T 2.30m



### **NOTICE**

## 2 tables one behind the other:

- Only 4-metre tables permitted.
- Interconnect DokaXdek tables with 2 centring connectors and 2 centring nuts along the table short side (blue marks).
- Additional, middle stiffening with DokaXdek universal waling T 2.30m (secured with 2 Framax wedge clamps).
- Position fork profiles in the area of the table middle.

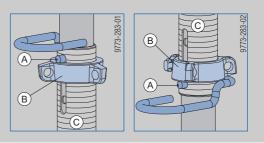
## Repositioning operation



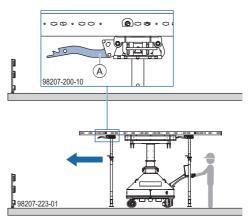
### **CAUTION**

The fastening clamp of the floor prop can work loose during transport and possibly drop out.

➤ Use the adjusting nut (B) to hold the fastening clamp (A) in place at the top or bottom end of the slot (depending on whether the outer tube (C) is at the bottom or the top).



➤ Wheel the table to the pick-up point with the DoKart plus, making sure that the swivel head latch always points in the direction in which the table is to be removed.



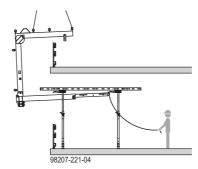
A Swivel head latch



## **CAUTION**

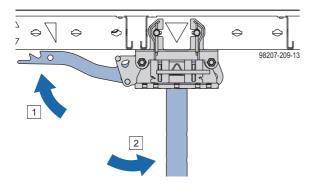
## Risk of tip-over if floor props are extended to different lengths!

- ➤ Before setting down the table, make sure that all the floor props are extended to the same length.
- > Set the table down.
- ➤ Wheel out the DoKart plus from under the table (the next table can now be prepared for repositioning).
- Manoeuvre the transport fork under the table.

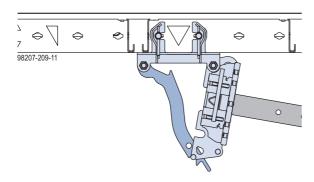


Pick up the table with the transport fork.

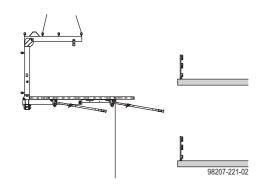
- ➤ Push up the swivel head latch (this can be done with a plank of wood if the latch is too high to reach by hand).
- Tilt up the prop.



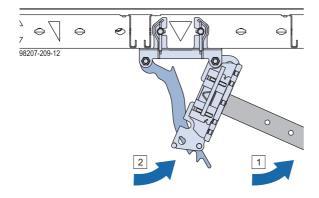
➤ Snap the swivel head into the 80° or 90° position.



➤ Move the table out and lift it to its new location.



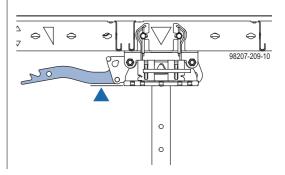
- > Slightly raise the floor prop.
- ➤ Lift the swivel head latch.



> Swing the floor prop down into its operational position and latch it in place.



Check that the swivel head is properly engaged - the swivel head latch must be pointing parallel to the swivel head!

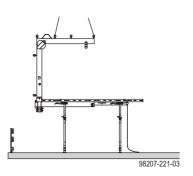




## **CAUTION**

## Risk of tip-over if floor props are extended to different lengths!

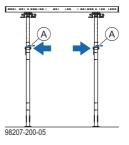
- ➤ Before setting down the table, make sure that all the floor props are extended to the same length.
- > Set the table down at its new location.





## **NOTICE**

Before setting down the table, push the fastening clamps (A) of the floor props through from the inside to the outside so that they are not an obstruction when the DoKart plus is moved out from under the table.





- 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.



- All floor props must be in contact with the floor.
- Make sure that the wedges in the swivel heads are secure.



#### NOTICE

- The outriggers of the DoKart plus extension set (if fitted) must be completely pushed in.
- Check the wedge-clamped joins between the floor props and the tableform.



### **WARNING**

## Risk of tableform tipping over when floor props are being aligned!

Striking the floor props too hard with the plastic mallet causes accidental loosening of the fastening clamp of the floor prop or of the swivel latch of the swivel head.

- ➤ Use only moderate force when striking with the Plastic mallet 4kg. Max. mallet backswing distance 50 cm!
- ➤ Give just one knock to each floor prop at a time, then move on to the next prop!
- Strike only the bottom part of the floor prop.

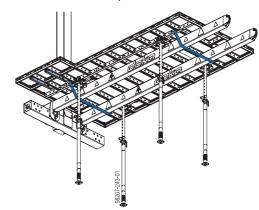
# Repositioning tables with table panels installed:



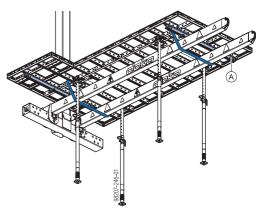
### **NOTICE**

### Repositioning with transport fork:

- Be aware of the load centre!
- Secure the table with 2 lashing straps attached to the fork profiles.



- When repositioning tables with table panels and universal walings installed, note the following:
  - The table must be seated flat on the transport fork. If necessary, install a 2nd universal waling (A).





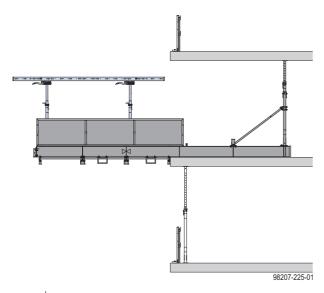
### **WARNING**

## Framax transport bolt:

➤ The transport of connected tables and tables with table panels is prohibited!

## **Loading platform**

The Doka loading platform 2.95x4.50m 5.0t serves as a temporary, safe setdown flat outside the structure. Using the Dokamatic lifting straps 13.00m, the tableforms are lifted off the loading platform and up to the next level.





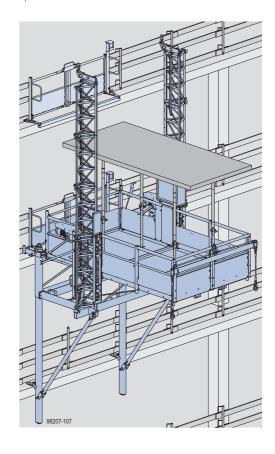
Follow the directions in the 'Doka loading platform 2.95x4.50m 5.0t' User Information booklet.

## **Doka Table Lifting System TLS**

The Doka Table Lifting System TLS is used for moving Doka tableforms up from storey to storey without crane lifts.



Follow the directions in the 'Doka Table Lifting System TLS' User Information booklet and 'Doka Table Lifting System TLS' Operating Instructions.



## Lining-and-levelling the DokaXdek tables



#### NOTICE

- Before lining-and-levelling, check whether all the floor props are under load. Only props that are actually standing on the ground can be lined-and-levelled.
- Check the wedge-clamped joins on the swivel heads.
- Follow the directions in the section headed 'Setting down and positioning the tableform'!



- 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.





## Plastic mallet 4kg:

- For fine-positioning a tableform quickly without using any shifting devices.
- Integrated base makes it easy to put the mallet on 'stand-by'.
- The mallet has been designed with just the right weight and with plastic of the right hardness to prevent damage.





### **WARNING**

## Risk of tableform tipping over when floor props are being aligned!

Striking the floor props too hard with the plastic mallet causes accidental loosening of the fastening clamp of the floor prop or of the swivel latch of the swivel head.

- Use only moderate force when striking with the Plastic mallet 4kg. Max. mallet backswing distance 50 cm!
- ➤ Give just one knock to each floor prop at a time, then move on to the next prop!
- Strike only the bottom part of the floor prop.

## **General**

## Additional areas of use

## **Sloping slabs**

Consult your Doka technician!

## **Combining with other Doka systems**

Combination with DokaXdek panel floor formwork



Follow the directions in the 'DokaXdek panel floor formwork' User Information booklet.

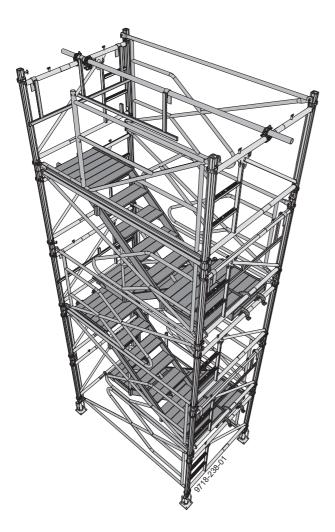
## Combined with Dokaflex

The system transition to Dokaflex can be effected with the existing infill components, for example with the DokaXdek suspension clamp (see the section headed 'Adaptation to building layout').



Follow the directions in the 'Dokaflex' User Information booklet!

## **Access systems**



## Note:

The ladder system must be implemented in such a way that all national regulations are complied with.

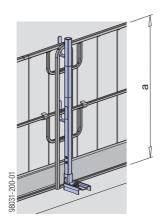


Follow the directions in the 'Stair tower 250' User Information booklet!

## Fall protection on the structure

## **Xsafe edge protection XP**

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



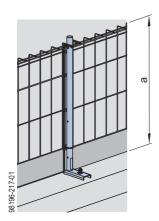
a ... > 1.00 m



Follow the directions in the 'Xsafe edge protection XP' User Information booklet.

## **Xsafe edge protection Z**

- Attachment by integral screw-on shoe
- Protective barrier Z can be used as the safety barrier



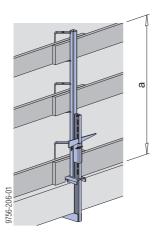
a ... > 1.17 m



Follow the directions in the 'Xsafe edge protection Z' User Information booklet.

## **Handrail clamp S**

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



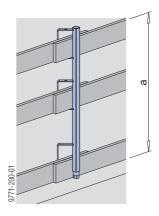
a ... > 1.00 m



Follow the directions in the "Handrail clamp S" User information!

## Handrail post 1.10m

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



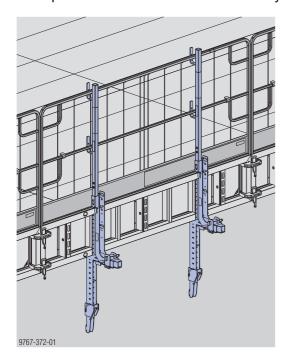
a ... > 1.00 m



Follow the directions in the 'Handrail post 1.10m' User Information!

## Doka floor end-shutter clamp

Slab stop-ends and fall-arrest barriers in one system

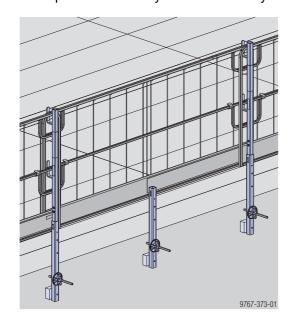




Follow the directions in the 'Doka floor endshutter clamp' User Information booklet!

## Floor end-shutter profile XP

Slab stop-ends and safety barriers in one system





Follow the directions in the 'Xsafe edge protection XP' User Information booklet.

999820702 - 12/2023 **doka** 

## Transporting, stacking and storing

## DokaXdek tables





#### NOTICE

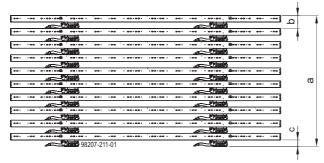
## **Transport:**

- Load the DokaXdek tables positively locked or directly lashed down.
- Never climb on to the stack of tables.
- For transport by truck, lash the DokaXdek tables with surface cleaned.
  - Number of lashing straps: min. 4 for DokaXdek tables of length 5.00 m min. 3 for DokaXdek tables of length 4.00 m
  - Required tensile force per lashing strap: min. 5.0 kN
- When tables without DokaXdek swivel heads are to be transported it is essential to lay anti-slip mats between all the DokaXdek tables.

## Interim storage of fully assembled tables:

- Only set down tables on level, firm surfaces.
- Never place finished tables on top of one another - not even with their floor props tilted back at 90°.
- In exposed locations, secure against wind pressure.

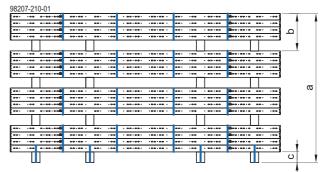
## Stack of tables with swivel heads



a ... 245 cm b ... 24.5 cm c ... 12 cm

Max. 10 DokaXdek tables with swivel heads per stack.

## Stack of tables without swivel heads



a ... 236 cm

b ... 59 cm

c ... 10 cm

Max. 16 DokaXdek tables without swivel heads per stack (4 per package).

## Lifting by crane

## Dokamatic lifting strap 13.00m



The Dokamatic lifting strap 13.00m is a lifting accessory that is only suitable for lifting Doka tableforms and stacked Doka panels.

The moveable, 8 m long protective sleeve makes it possible to lift in a horizontal position, and protects the strap fabric.

2 Dokamatic lifting straps are needed for each unit to be lifted.

- Max. working load limit:
  - 2000 kg / Dokamatic lifting strap 13.00m
- Max. number of tables with swivel heads: 6
- Max. number of tables bundled in a stack: 4

## $\Lambda$

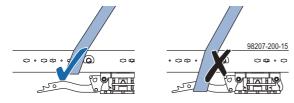
## WARNING

- The Lifting straps 13.00m may only be used as shown if there is no risk of the straps sliding towards one another, or of the load being displaced.
- The transport of connected tables is prohibited!

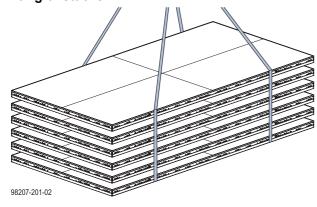


Follow the Operating Instructions!

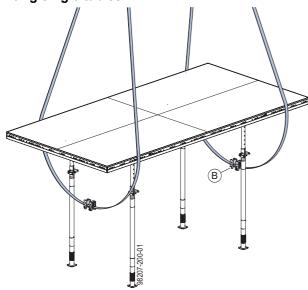
## Correct position of the lifting strap at the table underside



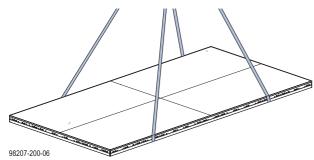
## Lifting of stacks



## Lifting single tables



### **B** Strap shoes



The strap shoes can either remain on the strap, or be detached from it as needed.

## Framax transport bolts with Doka 4-part chain 3.20m

The Framax transport bolt is a lifting accessory and is used in combination with the Doka 4-part chain 3.20m for transporting a single DokaXdek table or stacked DokaXdek tables.



## **NOTICE**

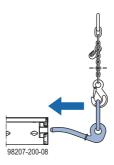
- 4 Framax transport bolts are always needed per repositioning unit!
- Max. working load limit: 800 kg / Framax transport bolt
- Max. number of tables bundled in a stack: 4
- Max. number of tables with swivel heads: 3



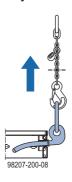
### **WARNING**

## Framax transport bolt:

- ➤ The transport of connected tables and tables with table panels is prohibited!
- ➤ Push all 4 Framax transport bolts fully into the crane lifting points of the DokaXdek table.



➤ Raise the Doka 4-part chain by crane. The transport bolt locks automatically under load.

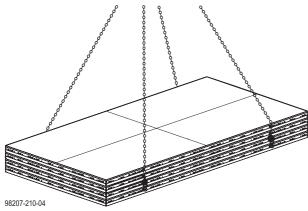




Follow the 'Framax transport bolt' and 'Doka 4-part chain 3.20m' Operating Instructions!

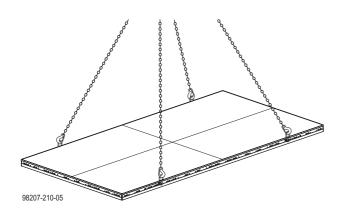
User Information DokaXdek table General

## Lifting of stacks



The Framax transport bolts are pushed into the crane lifting points of the bottom DokaXdek table in the stack to be lifted.

## Lifting single tables



## Frami transport hook with Doka 4-part chain 3.20m

The Frami transport hook is a lifting accessory and is used in combination with the Doka 4-part chain 3.20m for transporting a single DokaXdek table (including swivel heads).

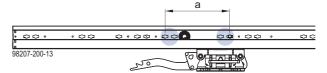


### **NOTICE**

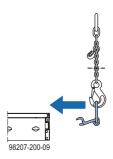
- 4 Frami transport hooks are always needed per repositioning unit!
- Max. working load limit: 450 kg / Frami transport hook
- Reposition only one table at a time.

➤ Push all 4 Frami transport hooks, as far as they will go, into the outside cross boreholes in the DokaXdek table

## Permissible positions of the transport hooks:



a ... Hook-fixing zone: 2 cross holes to left and right of the lifting point for transport bolt

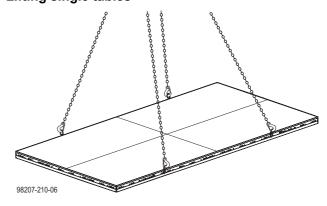


Raise the Doka 4-part chain by crane. The transport hook locks automatically under load.



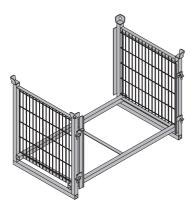
Follow the 'Frami transport hook' and 'Doka 4-part chain 3.20m' Operating Instructions!

## Lifting single tables



# Frami pallet 1.50m and DokaXlight pallet 1.00m

To accommodate the DokaXdek table panels.



## Frami pallet 1.50m:

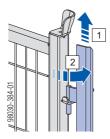
- Max. load-bearing capacity: 800 kg (1760 lbs)
- Permitted imposed load: 3500 kg (7700 lbs)

## DokaXlight pallet 1.00m:

- Max. load-bearing capacity: 800 kg (1760 lbs)
- Permitted imposed load: 3450 kg (7600 lbs)

## Loading the pallets (from the side)

- 1) Lift the left and right side hinges.
- 2) Turn the side hinges to one side.



- 3) Load the pallets.
- 4) Lift the left and right side hinges and close them.



Both side hinges must be locked in place.

## Using pallets as storage units

## Max. number of units on top of one another

Outdoors (on the site)	Indoors
Floor gradients up to 3%	Floor gradients up to 1%
Do not stack Frami pallets on top of each other outdoors!	6



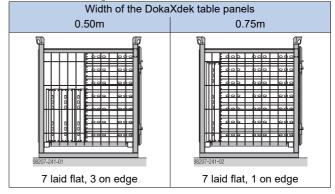
## **NOTICE**

Stacked multi-trip boxes or pallets must have the heaviest boxes at the bottom and the lightest at the top.

## Max. n° of panels that can be loaded

DokaXdek table panel	Frami pallet 1.50m	DokaXlight pallet 1.00m
0.50x1.50m	10	_
0.75x1.50m	8	_
0.50x1.00m	_	10
0.75x1.00m	_	8

## **Correct loading**



## Using pallets as transport devices

### Lifting by crane



Both side hinges must be locked before the crane slings are attached.



## **NOTICE**

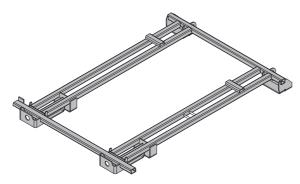
- Multi-trip packaging items must be lifted individually.
- Use suitable lifting chains (e.g. Doka 4-part chain 3.20m).
   Do not exceed the permitted working load limit
- Sling angle β max. 30°!



## Repositioning by forklift truck or pallet stacking truck

The forks can be inserted under the broadside of the containers.

# Dokamatic table-frame pallet 2.15x1.60m



Storage unit and transport device for Table frames 1.50m or Dokamatic table frames 1.50m

- Durable and stackable.
- Optimised for container and truck-based shipments.
- Entry direction for transport appliances: possible from all sides.

Suitable transport appliances:

- crane
- pallet truck
- forklift truck

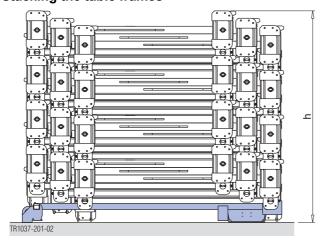
Max. load-bearing capacity: 1450 kg Permitted imposed load: 4600 kg



## **NOTICE**

- The type plate must be in place and clearly legible.
- Ensure that the table frames are centrally placed!

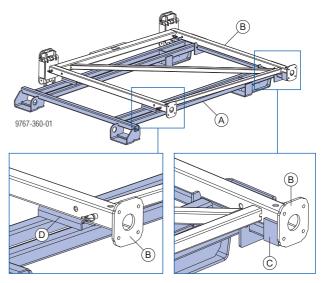
## Stacking the table frames



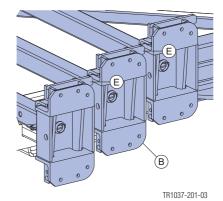
h ... 172 cm (max. 24 frames)

## Loading the transport device

Lay the first table frame onto the defined points of the Dokamatic table-frame pallet (see close-ups).



- A Dokamatic table-frame pallet 2.15x1.60m
- B Table frame 1.50m or Dokamatic table frame 1.50m
- C Distance piece
- **D** Support profile
- ➤ Stack all the other table frames, with an alternating axis offset (always 3 frames side-by-side).



- **B** Table frame 1.50m or Dokamatic table frame 1.50m
- E Spacer wedge

This way the table frames are secured against slippage.

## Dokamatic table-frame pallet 2.15x1.60m as a storage unit

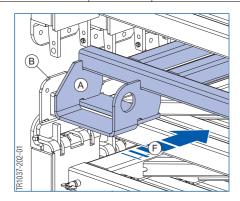
## Stacking and storing filled Dokamatic table-frame pallets 2.15x1.60m



### **NOTICE**

- The Dokamatic table-frame pallets 2.15x1.60m at the bottom of the stack must be completely and uniformly filled.
- There must be a flat, firm base capable of supporting the load (e.g. concrete).

	Max. q'ty	Max. inclination of floor
Stacked on site	2	3%
Stacked in warehouse	3	1 %



- A Dokamatic table-frame pallet 2.15x1.60m
- B Table frame 1.50m or Dokamatic table frame 1.50m
- **F** Entry direction

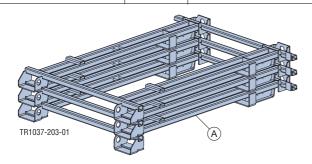


## **NOTICE**

When filled Dokamatic table-frame pallets 2.15x1.60m are being stacked, there is only one possible entry direction **(F)** for transport appliances.

## Stacking and storing empty Dokamatic table-frame pallets 2.15x1.60m

	Max. q'ty	Max. inclination of floor
Stacked on site	20	3%
Stacked in warehouse	25	1%



A Dokamatic table-frame pallet 2.15x1.60m

# Dokamatic table-frame pallet 2.15x1.60m as a transport device

### Lifting by crane

## $\triangle$

### **WARNING**

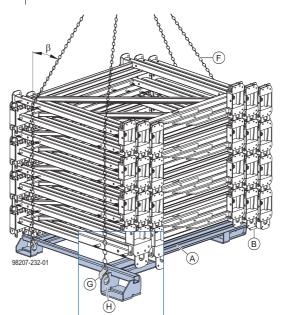
Do not attach the lifting chains to the table frames!

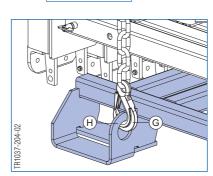
➤ Attach the lifting chains to the 4 crane lifting points on the Dokamatic table-frame pallet 2.15x1.60m only.



## **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.
- Sling angle β max. 30°!





- A Dokamatic table-frame pallet 2.15x1.60m
- B Table frame 1.50m or Dokamatic table frame 1.50m
- G Doka 4-part chain 3.20m
- H Crane lifting point

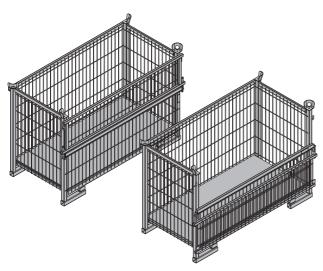
## Repositioning by forklift truck or pallet stacking truck



## NOTICE

 Push the forks of the forklift truck as far apart as possible.

## Doka skeleton transport box 1.70x0.80m



Lager- und Transportmittel für Kleinteile. Zum leichten Be- und Entladen kann auf einer Seite der Doka-Gitterbox die Seitenwand geöffnet werden.

Zul. Tragfähigkeit: 700 kg (1540 lbs) Zul. Auflast: 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)	Indoors
Floor gradients up to 3%	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.

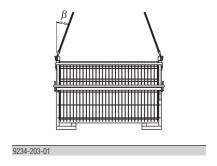
## Using Doka skeleton transport boxes 1.70x0.80m as transport devices

## Lifting by crane



## **NOTICE**

- Mehrweggebinde nur einzeln umsetzen.
- Nur mit geschlossener Seitenwand umsetzen!
- Geeignetes Gehänge verwenden:
  - z.B. Doka-Vierstrangkette 3,20m
  - Zul. Tragfähigkeit des Gehänges beachten.
- Neigungswinkel β max. 30°!



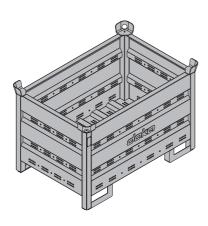
## Repositioning by forklift truck or pallet stacking truck

The forks can be inserted under either the broadside or the narrowside of the containers.

## Doka multi-trip transport box

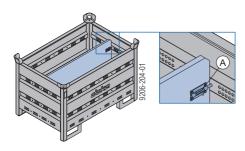
Storage and transport device for small items

## Doka multi-trip transport box 1.20x0.80m



Zul. Tragfähigkeit: 1500 kg (3300 lbs) Zul. Auflast: 7850 kg (17300 lbs)

Der Inhalt des Doka-Mehrwegcontainers 1,20x0,80m kann mit den **Mehrwegcontainer Unterteilungen 1,20m oder 0,80m** getrennt werden.

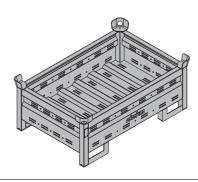


A Riegel zum Fixieren der Unterteilung

Mögliche Unterteilungen

Mehrwegcontainer Unterteilung	in Längsrichtung	in Querrichtung
1,20m	max. 3 Stk.	-
0,80m	-	max. 3 Stk.
	9206-204-02	9206-204-03

## Doka multi-trip transport box 1.20x0.80mx0.41m



Zul. Tragfähigkeit: 750 kg (1650 lbs) Zul. Auflast: 7200 kg (15870 lbs)

## Using Doka multi-trip transport boxes as storage units

## Max. n° of units on top of one another

Outdoors	s (on the site)	In	idoors	
Floor grad	lients up to 3%	Floor grad	dients 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	
	red to stack empty p of one another!			



### **NOTICE**

Stacked multi-trip boxes or pallets must have the heaviest boxes at the bottom and the lightest at the top.

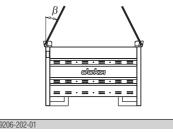
## Using Doka multi-trip transport boxes as transport devices

## Lifting by crane



#### **NOTICE**

- Mehrweggebinde nur einzeln umsetzen.
- Geeignetes Gehänge verwenden:
  - z.B. Doka-Vierstrangkette 3,20m
  - Zul. Tragfähigkeit des Gehänges beachten.
- Neigungswinkel β max. 30°!

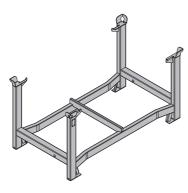


## Repositioning by forklift truck or pallet stacking truck

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

Lager- und Transportmittel für Langgüter.



Zul. Tragfähigkeit: 1100 kg (2420 lbs) Zul. Auflast: 5900 kg (13000 lbs)

## Using Doka stacking pallets as storage units

#### Max. n° of units on top of one another

•	
Outdoors (on the site)	Indoors
Floor gradients up to 3%	Floor gradients up to 1%
2	6
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.
- How to use with Bolt-on castor set B:
  - Always apply the fixing brake when the container is 'parked'.
  - When Doka stacking pallets are stacked, the bottom pallet must NOT be one with a bolt-on castor set mounted to it.

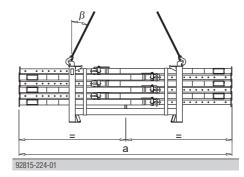
## Using Doka stacking pallets as transport devices

### Lifting by crane



#### **NOTICE**

- Mehrweggebinde nur einzeln umsetzen.
- Geeignetes Gehänge verwenden:
  - z.B. Doka-Vierstrangkette 3,20m
  - Zul. Tragfähigkeit des Gehänges beachten.
- Zentrisch beladen.
- Ladung rutsch- und kippsicher mit der Stapelpalette verbinden (z.B. mit Umreifungsband oder Zurrgurt).
- Neigungswinkel β max. 30°!



	а
Doka-Stapelpalette 1,55x0,85m	max. 4,5 m
Doka-Stapelpalette 1,20x0,80m	max. 3,0 m

## Repositioning by forklift truck or pallet stacking truck

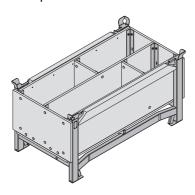


#### **NOTICE**

- 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

Lager- und Transportmittel für Kleinteile.



Zul. Tragfähigkeit: 1000 kg (2200 lbs) Zul. Auflast: 5530 kg (12190 lbs)

## Doka accessory boxes as storage units

#### Max. n° of units on top of one another

Outdoors (on the site)	Indoors						
Floor gradients up to 3%	Floor gradients up to 1%						
3	6						
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.
- How to use with Bolt-on castor set B:
  - Always apply the fixing brake when the container is 'parked'.
  - When Doka stacking pallets are stacked, the bottom pallet must NOT be one with a bolt-on caster set mounted to it.

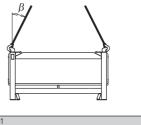
## Doka accessory box as transport devices

## Lifting by crane



#### NOTICE

- Mehrweggebinde nur einzeln umsetzen.
- Geeignetes Gehänge verwenden:
  - z.B. Doka-Vierstrangkette 3,20m
  - Zul. Tragfähigkeit des Gehänges beachten.
- Beim Umsetzen mit angebautem Anklemm-Radsatz B zusätzlich die Anweisungen in der Anwenderinformation "Anklemm-Radsatz B" beachten!
- Neigungswinkel β max. 30°!



### Repositioning by forklift truck or pallet stacking truck

The forks can be inserted under either the broadside or the narrowside of the containers.

### **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:

- Doka accessory box
- Doka stacking pallets
- Protective barrier Z pallets



Follow the directions in the 'Bolt-on castor set B' User Information booklet!

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## 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!



## **Cleaning equipment**

## High-pressure spray cleaner



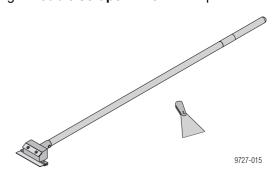


#### **NOTICE**

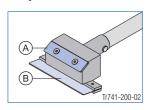
- Appliance pressure rating: 200 to max. 300 bar
- Keep the water-jet the correct distance from the formwork, and move it at the right speed:
  - The higher the pressure, the further away from the formwork you must keep the jet and the faster you must move it across the surface.
- Do not aim the jet 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.

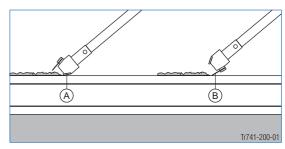
## Concrete scraper

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 or Doka-OptiX is applied using the Doka release-agent sprayer.





Follow the directions in the 'Doka releaseagent sprayer' Operating Instructions and on the containers of release agent.



## **NOTICE**

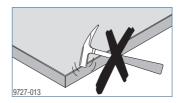
- Before every pour:
  - Apply release agent to the formwork sheet and the end faces extremely thinly, evenly and in a continuous layer.
- Make sure there are no drips of releaseagent running down the formwork sheet.
- Applying too much release agent will spoil the concrete finish.



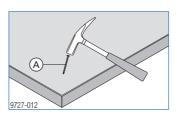
To determine the right dosage and to make sure that you are using the agent correctly, test it on less important parts of the structure first.

## Care

No hammer-blows to the frame profiles



 Do not use nails on the formwork that are longer than 60 mm



**A** max. I = 60 mm

## Reshoring props, concrete technology and stripping out



Follow the directions in the Calculation Guide entitled 'Stripping out formwork from floors in building construction', and/or ask your Doka technician.

## **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  $\alpha$ . This can be read off from the following table.

### Load factor a

This is calculated by:

$$\alpha = \frac{DL_{concrete} + LL_{construction \ state}}{DL_{concrete} + DL_{finishing} + LL_{final}}$$

Slab	Dead load	Load factor α LL <sub>final state</sub>							
d [m]	DL <sub>concrete</sub> [kN/m <sup>2</sup> ]	2.00 kN/m²	3.00 kN/m <sup>2</sup>	4.00 kN/m <sup>2</sup>	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/m $^2$  and a live load in the early-stripped state of LL $_{construction\ state}$  = 1.50 kN/m $^2$ 

DL<sub>concrete</sub>: calculated with  $\gamma_{concrete} = 25 \text{ kN/m}^3$ 

DL<sub>finishing</sub>: load for floor finish, etc.

Example: Slab thickness 0.20 m with a final live load of  $5.00 \text{ kN/m}^2$  results in a load factor  $\alpha$  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 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 slab has been stress-relieved or dismantled, the 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 floorslab 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.



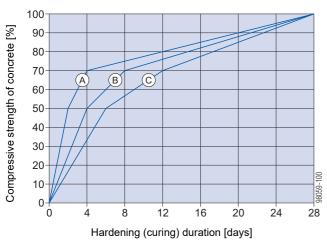
➤ The spring clamp is designed to be pushed into the top end of the inner tube of the floor prop.

## 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 diagram may thus be used.

## Concrete-strength development - medium



**A** ϑ ≥ 15°

**B** ϑ ≥ 10°

**C** ϑ≥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 floor-slabs (e.g. in multistorey car parks), the following points must be remembered:

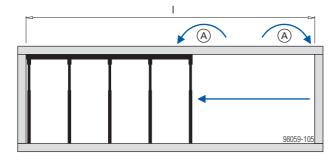
- When the formwork beneath these floor-slab spans is released (i.e. when the load is taken off the floor props), the floor props that are still in place are briefly subjected to additional loads. This may lead to overloading, and to the floor props being damaged.
- Please consult your Doka technician.

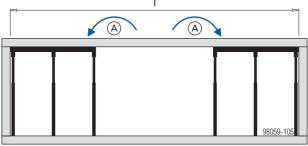


#### NOTICE

#### As a basic rule:

- Stress-release should always be carried out working from one side towards the other, or from the middle of the floor slab (midspan) 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!





I ... Effective floor-slab spans of 7.50 m and over

A Load redistribution

## Horizontal loads of slab formwork

#### Note:

This section deals only with the typical zone for horizontal floor-slab formwork. Special areas (edge, drop beams, steps, sloping slabs, etc.) have to be examined and planned separately!

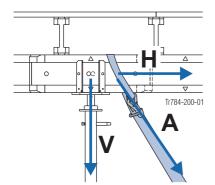
Horizontal loads imposed while the concrete is being poured are considerably higher than the horizontal loads imposed during installation. Consequently appropriate measures are required to transfer them, for example:

- into the building structure (concrete columns or walls).
- by cables, straps, plumbing struts or bracings.

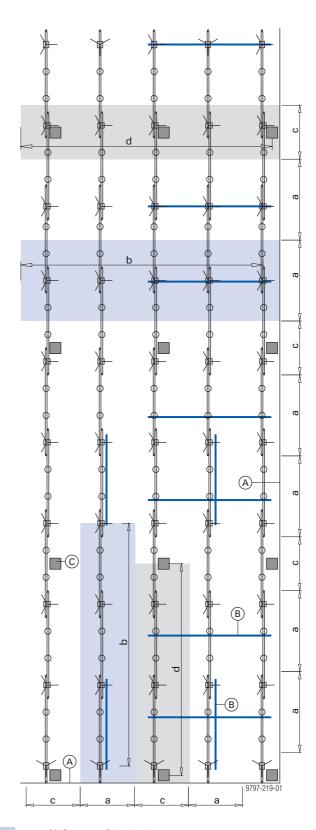
The load-bearing capacities of these measures can be combined and added, but uniformity of distribution and design is important.

In this context, the area to be supported (influence width) of each measure has to be calculated.

- 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 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 slab loads are a uniformly distributed load, so the horizontal loads also occur distributed over a large area.
- If the horizontal loads are transmitted in concentrated form by tie-backs, 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 slab 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.



- H Horizontal load
- V Vertical load
- A Tie-back force



- area of influence of the bracing
- a influence width of the bracing
- b spacing of the bracing in primary-beam and secondary-beam directions
- area of influence of the existing concrete column
- c influence width of an existing concrete column
- d distance between concrete columns
- A Slab edge (open)
- **B** Bracing or tie-back
- C Existing concrete column

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The table below can be used as a rough guide to sizing for calculating the area of influence:

## Horizontal loads [kN]

	HOLIZOIILAI IOAUS [KN]										
[cm]				SI	ab surl	face [n	า <sup>2</sup> ]				
Slab thickness [ci	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		1		
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	1		1		
28	1.1	2.2	3.2	4.2	5.2	1	l	1	l	1	
30	1.2	2.3	3.4	4.4	5.5		1		1		
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:

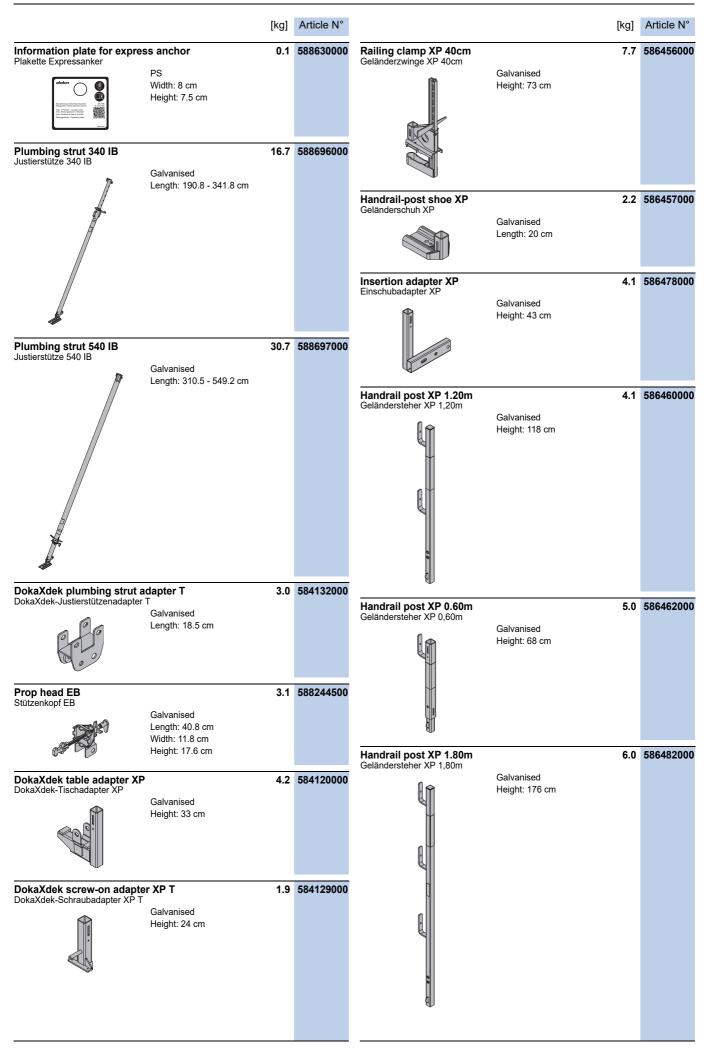
- Assumption: Horizontal load of 2.5%, comprising the following:
  - 1% for imperfections
  - 1% for horizontal equivalent load
  - 0.5% for wind load
- The horizontal loads occur in all directions.
- All values are lower than 6 kN. It can be assumed that these forces are sustained by a load-bearing structural column and are transmitted by friction.
- The values appearing here with a colour background are less than 2.5 kN. These forces can be sustained by Doka tie-back solutions. A permissible tie-back force of max. 5 kN at an angle of 60° is assumed.

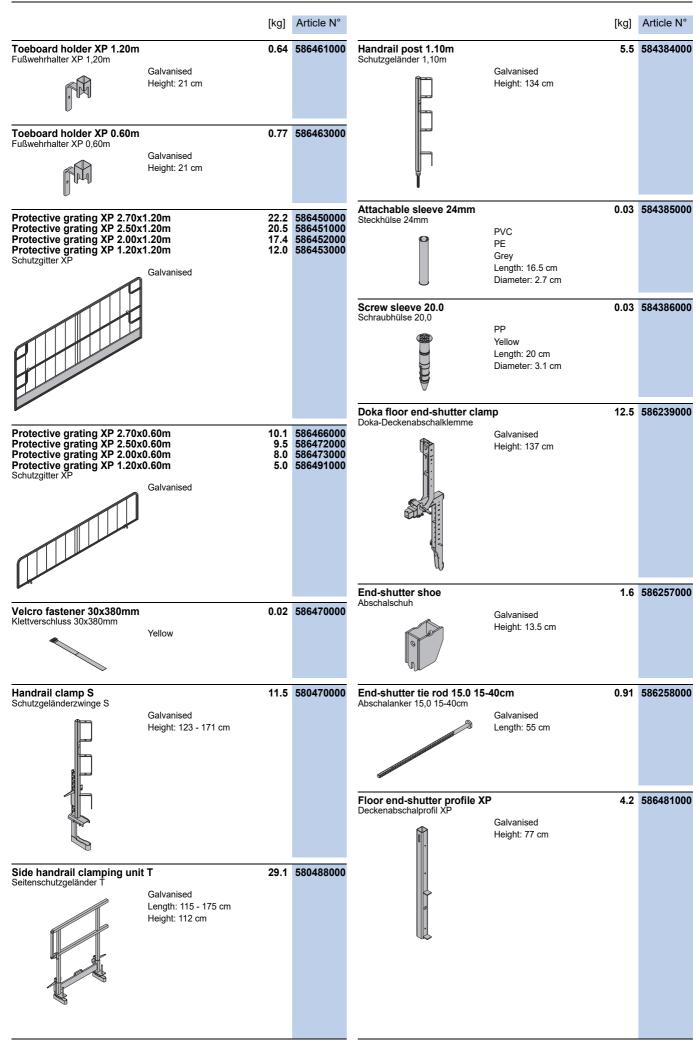
Article list			User Information D	ока	Xdek table
	[kg]	Article N°	[I	g]	Article N°
DokaXdek table 2.50x5.00m		584100000		2.8	586000000
DokaXdek table 2.00x5.00m DokaXdek table 2.50x4.00m	510.0	584101000 584102000		6.3	586001000
DokaXdek table 2.00x4.00m DokaXdek-Tisch	450.0	584103000	Length: 173 - 300 cm  Doka floor prop Eurex 30 eco 350  2	0.7	586002000
Galvanised Painted yellow			Length: 198 - 350 cm		586003000
Grey			Length: 223 - 400 cm		586004000
			Length: 248 - 450 cm Doka-Deckenstütze Eurex 30 eco	0.0	00000
DokaXdek table 2.50x5.00m ES DokaXdek table 2.00x5.00m ES		584104000 584105000	Galvanised		
DokaXdek table 2.50x4.00m ES DokaXdek table 2.00x4.00m ES		584106000 584107000	Ĭ		
DokaXdek-Tisch ES Galvanised					
Painted yellow Grey					
Cley					
DokaXdek swivel head	17.0	584108000			
DokaXdek-Schwenkkopf Galvanised	17.0	004100000			
Galvanised					
			Doka floor prop Eurex 30 250	4.8	586092000
Safety pin D20 195	0.47	584110000		6.7	586093000
Sicherungsbolzen D20 195  Galvanised				0.5	586094000
				4.9	586095000
			Length: 227 - 400 cm	9.2	586119000
Doka floor prop Eurex 30 top 250 Length: 148 - 250 cm	12.8	586092400	Length: 248 - 450 cm Doka-Deckenstütze Eurex 30		
Doka floor prop Eurex 30 top 300	16.4	586093400	Galvanised		
Length: 173 - 300 cm  Doka floor prop Eurex 30 top 350	20.7	586094400			
Length: 198 - 350 cm  Doka floor prop Eurex 30 top 400	24.6	586095400			
Length: 223 - 400 cm  Doka floor prop Eurex 30 top 450	29.1	586119400			
Length: 248 - 450 cm  Doka floor prop Eurex 30 top 550	38.6	586129000			
Length: 303 - 550 cm Doka-Deckenstütze Eurex 30 top					
Galvanised					
			Centring connector 15.0 0 Zentrierverbinder 15.0	45	584111000
U			Galvanised		
			Length: 12.6 cm		
			Centring nut 15.0 0	.36	584112000
			Zentriermutter 15,0 Galvanised		
			Height: 5 cm Diameter: 6.6 cm		
			Width-across: 27 mm		
			DokaXdek adjustable clamp T DokaXdek-Ausgleichsspanner T	3.7	584130000
			Galvanised		
			Length: 40 cm		

	[kg]	Article N°	[kg]	Article N°
	0m 40.0 0m 36.5 0m 51.7 Ivanised	584128000 584127000 584126000 584125000	DokaXdek beam support H20 21mm DokaXdek-Trägerauflager H20 21mm Galvanised Powder-coated yellow Width: 12.5 cm Height: 21.5 cm	584117000
DokaXdek universal waling T 2.3 DokaXdek-Klemmschiene T 2,30m	.30m 25.5 nted blue	584131000	DokaXdek beam support H20 27mm DokaXdek-Trägerauflager H20 27mm  Galvanised Powder-coated grey Width: 12.5 cm Height: 21.5 cm	584118000
	1.5 Ivanised ngth: 21 cm	588152000	Supporting head H20 DF Haltekopf H20 DF  Galvanised Length: 19 cm Width: 11 cm Height: 8 cm	586179000
DokaXdek suspension clamp T		584113000	Spring locked connecting pin 16mm Federbolzen 16mm  Galvanised Length: 15 cm	5 582528000
DokaXdek-Einhängebügel T 18mm Galv Pow	lvanised wder-coated grey ight: 43 cm		DokaXdek prop connection T DokaXdek-Stützenanschluss T  Galvanised Height: 23 cm	584134000
Pow	21mm 2.3 Ivanised wder-coated yellow ght: 43 cm	584114000	DokaXdek-Stützenanschlussplatte T Galvanised Length: 18 cm Width: 15 cm Height: 1 cm	584135000
Pow	27mm 2.5 Ivanised wder-coated grey ight: 43 cm	584115000		586217000
Widt	oort 8x10cm 1.1 Ivanised dth: 10 cm ight: 9.4 cm	584119000	Dokamatic platform bracket 1.00m Dokamatic-Bühnenkonsole 1,00m  Galvanised Length: 112 cm Height: 124 cm	586227000
Pow Widt	8mm 2.5 Ivanised wder-coated grey tth: 12.5 cm ght: 21.5 cm	584116000		

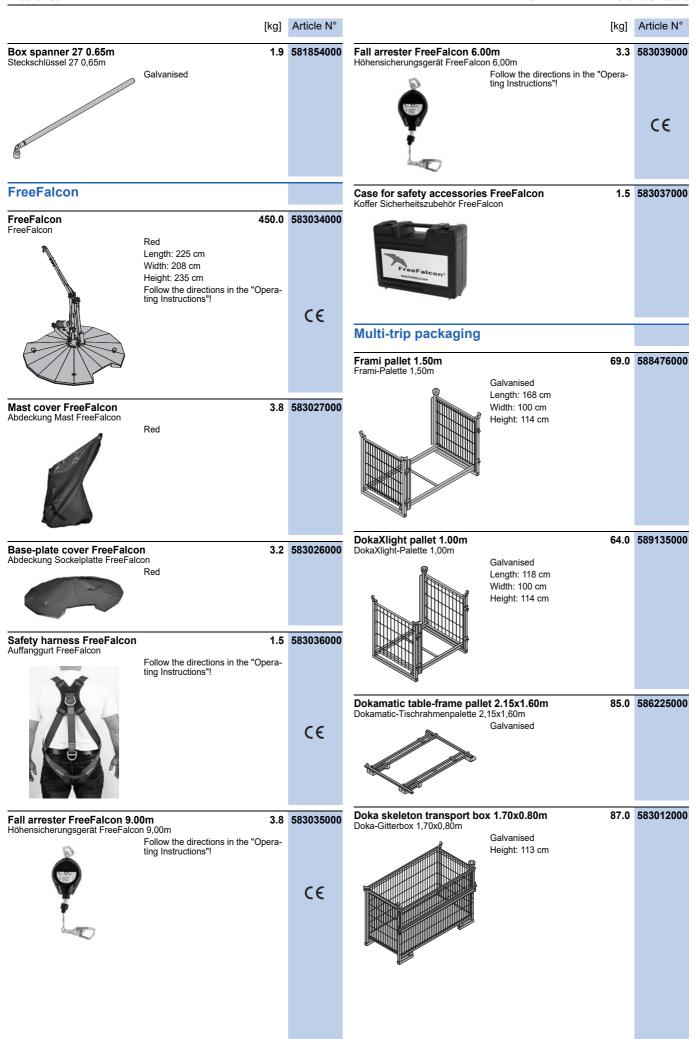
		[kg]	Article N°			[kg]	Article N°
DokaXdek platform adapter DokaXdek-Bühnenadapter T	T Galvanised Length: 72.4 cm	5.7	584121000	Tie rod 15.0mm galvanised Tie rod 15.0mm galvanised	0.75m 1.00m 1.25m 1.50m 1.75m 2.00m	1.1 1.4 1.8 2.2 2.5 2.9	581821000 581822000 581823000 581826000 581827000 581828000 581829000 581852000
Connecting pin 10cm Verbindungsbolzen 10cm	Galvanised Length: 14 cm	0.34	580201000	Tie rod 15.0mm galvanised Tie rod 15.0mm non-treated Tie rod 15.0mm non-treated	m 0.50m 0.75m 1.00m 1.25m 1.50m 1.75m 2.00m	1.4 0.73 1.1 1.4 1.8 2.1 2.5 2.9	581824000 581870000 581871000 581874000 581886000 581876000 581887000 581875000
Spring cotter 5mm Federvorstecker 5mm	Galvanised Length: 13 cm	0.03	580204000	Tie rod 15.0mm non-treated Tie rod 15.0mm non-treated Ankerstab 15,0mm	3.00m 3.50m 4.00m 5.00m 6.00m	4.3 5.0 5.7 7.2 8.6	581877000 581878000 581888000 581879000 581880000 581881000 581873000
DokaXdek scaffold connect DokaXdek-Gerüstanschluss T	<b>or T</b> Galvanised Height: 22.8 cm	3.2	584123000	ON THE PROPERTY OF THE PARTY OF			DIN 18216
DokaXdek spindle connector DokaXdek-Spindelanschluss T	or T	4.8	584124000	Super plate 15.0 Superplatte 15,0	0.1	1.1	581966000
	Galvanised Height: 10.2 cm				Galvanised Height: 6 cm Diameter: 12 cm Width-across: 27 mm		DIN 18216
				Universal end-shutter supp Universal-Abschalwinkel 30cm	ort 30cm Galvanised	1.0	586232000
DokaXdek wedge for screw DokaXdek-Spindelkeil T %	Jack T %  Length: 19.5 cm  Width: 21 cm	0.35	176002000		Height: 21 cm		
Table frame 1.50m Tischrahmen 1,50m		60.0	586224500	Lashing strap 5.00m 2G Zurrgurt 5,00m 2G		2.9	586018500
TISCHI AITHER 1,50H	Galvanised				Yellow		
				Lashing strap 5.00m Zurrgurt 5,00m	Yellow	2.8	586018000
Framax universal corner wa	aling	12.8	588151000	Doka express anchor 16x12	25mm	0.31	588631000
	Painted blue Leg length: 60 cm			Doka-Expressanker 16x125mm	Galvanised Length: 18 cm		
				Doka coil 16mm Doka-Coil 16mm	Galvanised Diameter: 1.6 cm	0.009	588633000

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	586226000	Wheel-around scaffold DF a Zubehörset Mobilgerüst DF	Accessory set Aluminium Timber parts varnished yellow Length: 189 cm		586164000
Galvanised Length: 47 cm Width: 10 cm Height: 17 cm		Platform stairway 0.97m Podesttreppe 0,97m	Aluminium Width: 121 cm		586555000
Galvanised Height: 26 cm		Plastic mallet 4kg Kunststoffhammer 4kg	Blue Length: 110 cm	4.5	586097000
Galvanised		Universal dismantling tool Universal-Lösewerkzeug	Galvanised	3.7	582768000
7.2 Painted blue Length: 49 cm Width: 24 cm	587571000	Framax stripping tool Framax-Ausschalwerkzeug	Galvanised	5.5	58923500
Painted blue	588439000	Framax stripping aid Framax-Ausschalhilfe	Length: 110 cm	3.2	589246000
Galvanised Length: 16 cm	588441000	Angular arbor SL-1 Winkeldorn SL-1		1.4	582867000
Aluminium Length: 185 cm Width: 80 cm Height: 255 cm Delivery condition: separate parts	586157000	Friction type ratchet SW27 Freilaufknarre SW27	Manganese-phosphated Length: 30 cm	0.49	581855000
	The Painted blue Height: 68 cm  The Fainted blue Height: 68 cm  Galvanised Length: 47 cm Width: 10 cm Height: 17 cm  Market Selection Height: 26 cm  The Fainted blue Length: 49 cm Width: 24 cm  Market Selection Height: 185 cm Width: 16 cm  Aluminium Length: 185 cm Width: 80 cm Height: 255 cm  Height: 255 cm	Ter T 7.2 584133000  Galvanised Length: 47 cm Width: 10 cm Height: 26 cm  1.3 586215000  Galvanised Height: 26 cm  7.2 587571000  Painted blue Length: 49 cm Width: 24 cm  1.1 588439000  Galvanised Length: 46 cm  44.0 586157000  Aluminium Length: 185 cm Width: 255 cm Height: 255 cm	Painted blue Height: 68 cm  To all the properties of the propertie	Painted blue Height: 68 cm  Tor T 7.2 584133000 Platform stairway 0.97m Fodestreppe 0.97m Aluminium Width: 121 cm Podestreppe 0.97m Aluminium Width: 121 cm Podestreppe 0.97m Podestreppe 0.97m Aluminium Width: 121 cm Podestreppe 0.97m Podestreppe 0.97m Podestreppe 0.97m Aluminium Width: 121 cm Podestreppe 0.97m Podest	Ter T 7.2 584133000 Galvanised Length: 47 cm Width: 10 cm Height: 28 cm  Tail 3 586215000 Galvanised Height: 28 cm  Tail 3 586215000 Galvanised Height: 28 cm  Tail 3 586215000  Framax Stripping tool Framax Ausschalwerkzeug Framax Ausschalwerkzeug Galvanised Length: 110 cm  Tail 3 586439000  Painted blue Length: 18 cm  Tail 44.0 586157000  Aluminium Length: 18 cm  Manganese-phosphated  Friction type ratchet SW27 Friellaufknare SW27 Friellaufknare SW27 Friellaufknare SW27 Friellaufknare SW27 Friellaufknare SW27 Manganese-phosphated  Aluminium Length: 18 cm  Manganese-phosphated



Article N° Article N° [kg] Doka multi-trip transport box 1.20x0.80m 70.0 583011000 33.6 586168000 Bolt-on castor set B Doka-Mehrwegcontainer 1,20x0,80m Anklemm-Radsatz B Galvanised Painted blue Height: 78 cm Shifting appliances for tables **DoKart plus** DoKart plus 1448.0 586265500 3.7 583018000 5.5 583017000 Multi-trip transport box partition 0.80m Multi-trip transport box partition 1.20m Mehrwegcontainer Unterteilung included in scope of supply: (A) Brace stirrup 8 2.7 582751000 Steel parts galvanised 4 pcs. Timber parts varnished yellow . Galvanised Width: 19 cm Height: 46 cm Width-across: 30 mm Yellow Length: 172 cm Width: 132 cm Height: 154 - 327 cm 42.5 583009000 Doka multi-trip transport box 1.20x0.80x0.41m Follow the directions in the "Opera-Doka-Mehrwegcontainer 1,20x0,80x0,41m ting Instructions"! Galvanised CE Extension set for DoKart plus 50.0 586266500 Auslegersatz DoKart plus Doka stacking pallet 1.55x0.85m Doka-Stapelpalette 1,55x0,85m 41.0 586151000 Galvanised Length: 120 cm Galvanised Follow the directions in the "Opera-Height: 77 cm ting Instructions"! Shifting trolley DF 566.0 586080000 Umsetzwagen Di included in scope of supply: (A) Positioning lever for shifting trolley DF 586063000 6.0 (B) Brace stirrup 8 582751000 4 pcs. Galvanised Width: 19 cm 38.0 583016000 Doka stacking pallet 1.20x0.80m Height: 46 cm Doka-Stapelpalette 1,20x0,80m Width-across: 30 mm Galvanised Galvanised Height: 77 cm Length: 181 cm Width: 130 cm Height: 154 - 303 cm Follow the directions in the "Operating Instructions"! CE 106.4 583010000 Doka accessory box Doka-Kleinteilebox Timber parts varnished yellow Steel parts galvanised Length: 154 cm Width: 83 cm **Extension for shifting trolley DF** 40.0 586015000 Height: 77 cm Ausleger für Umsetzwagen DF Galvanised Length: 128.4 cm Follow the directions in the "Operating Instructions"!

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[kg]	Article N°	[kg]	Article N°
Stacking frame DF Aufsatzrahmen DF  Galvanised Length: 134 cm Width: 130 cm Height: 75 cm	586079000	Vertical extension DM 3.30m Vertikalverlängerung DM 3,30m  Galvanised Height: 352 cm	586235000
Transport fork 1.3t adjustable Umsetzgabel 1,3t verstellbar  Galvanised Delivery condition: folded closed Follow the directions in the "Operating Instructions"!	586234000	Extension clamp H20 for fork  Aufsatzklemme H20 für Gabel  Galvanised  Height: 45 cm	586236000
ung instructions :	C€	Dokamatic lifting strap 13.00m Dokamatic-Umsetzgurt 13,00m  Green Follow the directions in the "Operating Instructions"!	586231000 C €
Transport fork DM 1.5t adjustable Umsetzgabel DM 1,5t verstellbar  Galvanised Delivery condition: folded closed Follow the directions in the "Operating Instructions"!	586233000	Follow the directions in the "Operating Instructions"!	588621000 C €
	C€	Frami transport hook Frami-Transporthaken  Galvanised Length: 17.5 cm Follow the directions in the "Operating Instructions"!	588494000 C €
Transport fork DM 2.5t adjustable Umsetzgabel DM 2,5t verstellbar  Galvanised Delivery condition: folded closed Follow the directions in the "Operating Instructions"!	586259000		
	C€		
Lifting sling for transport fork DM 2.5t Hebeband Umsetzgabel DM 2,5t  Grey Length: 220 cm Width: 12 cm Follow the directions in the "Operating Instructions"!	586261000		
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