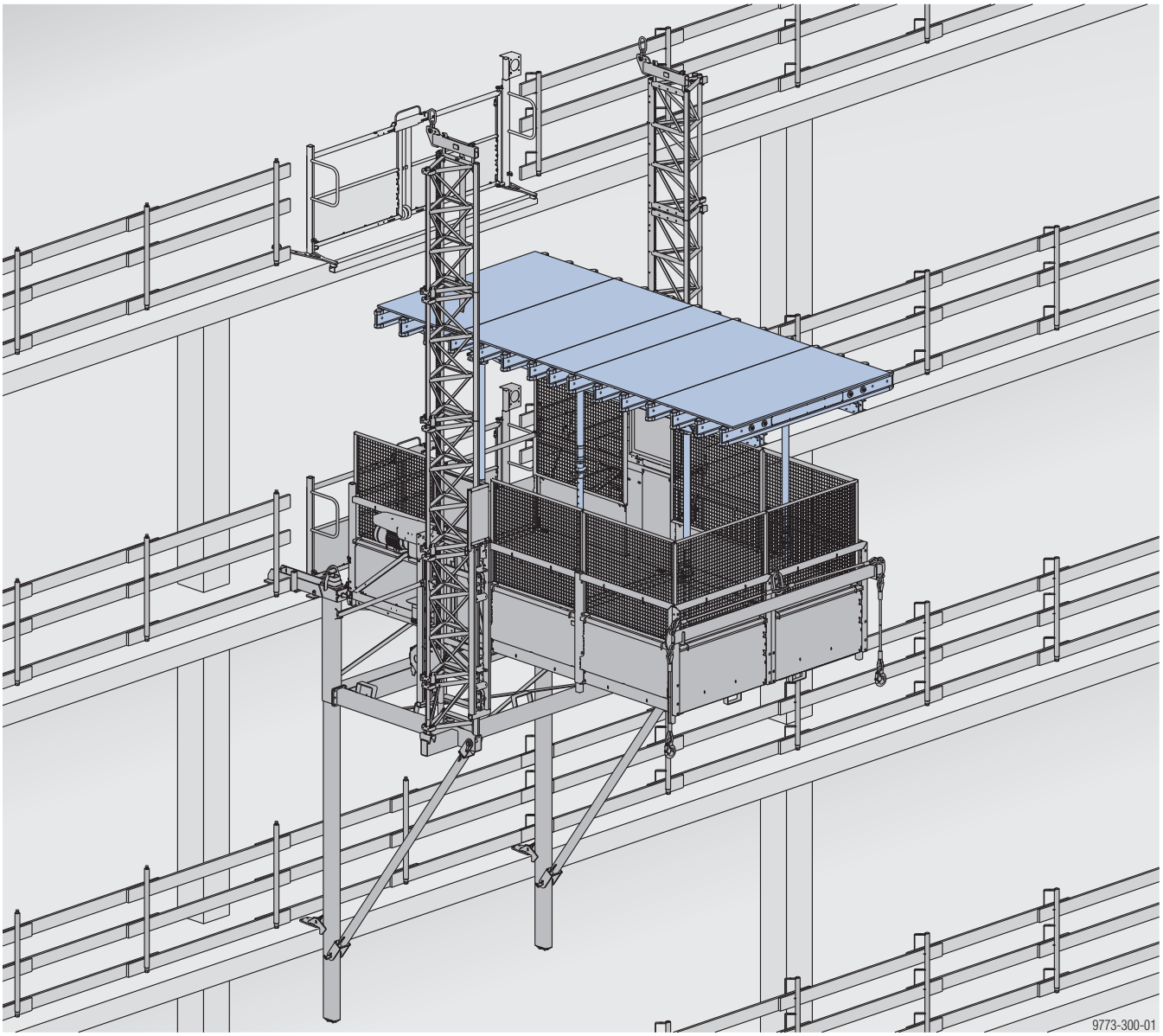
999773014 - 07/2021
en-US

The Formwork Experts.

Dokamatic S table

User Information

Instructions for assembly and use



Contents

Introduction

Basic 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 utilization 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 insure that the information materials provided by Doka (e.g. User Information booklets, Method Statements, Operating Instruction manuals, plans etc.) are up to date and available to all users, and that users have been made aware of them and have easy access to them at the usage location.
- In the relevant technical documentation and formwork utilization 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 must ensure compliance with the national applicable laws, standards and rules 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 utilize 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; occupational health & safety

- All laws, Standards, industrial safety regulations and other safety rules applying to the application and utilization 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 shall ensure that this product is erected and dismantled, repositioned 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 shall 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).
- The functional / technical instructions, safety warnings and loading data shall all be strictly observed and complied with. Non-compliance can cause accidents and severe injury (risk of fatality) and serious 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 prohibited to weld or heat Doka products, particularly parts for anchoring, suspension or connecting, and also cast parts, etc.
  Welding radically changes the micro-structure of the materials of which these components are made. This leads to a drastic reduction in failure load, constituting a serious safety risk.
  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.
  Welding work can be done only on the articles expressly mentioned in the Doka documents as being suitable for work of this nature.

Assembly

- The equipment/system must be inspected by the customer before use, to ensure that it is in suitable condition. Steps must be taken to rule out the use of components that are damaged, deformed, or weakened due to wear, corrosion or rot (e.g. fungal decay).
- The use of our safety systems and formwork systems in combination with those of other manufacturers could be dangerous, risking injury to health and damage to property, and therefore requires separate verification by the user.
- The equipment/system must be assembled and erected in accordance with the applicable laws, standards and rules by suitably skilled personnel of the customer's, having regard to any and all required safety inspections.
- It is not permitted to modify Doka products; any such modifications constitute a safety risk.

Erecting the formwork

- Doka products and systems must be set up in such a way that all loads acting upon them are safely transferred!

Pouring

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

Stripping the formwork

- Do not strip the formwork until the concrete has reached sufficient strength and the person in charge has given the order for the formwork to be stripped!
- When stripping 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 S bias-cut corners.
- When stripping the formwork, do not endanger the stability of any part of the structure, or of any scaffolding, platforms or formwork that is still in place!

Transporting, stacking and storing

- Observe all country-specific regulations applying to the handling of formwork and scaffolding. For system formwork the Doka slinging means stated in this booklet must be used – this is a mandatory requirement.
  If the type of sling is not specified in this booklet, 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 authorized facilities.

Miscellaneous

The weights are averages on the basis of new material. Actual weights can vary due to material tolerances. Weights can also differ on account of dirtying, moisture absorption, etc.

We reserve the right to make alterations in the interests of technical progress.

Symbols

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.

NOTE
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.

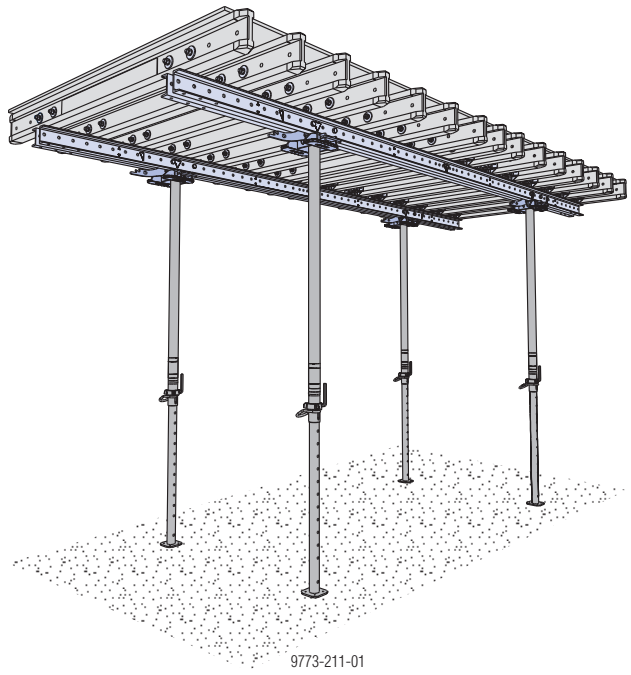
Visual inspection
Indicates that actions performed must be checked by means of a visual inspection.

Tip
Draws attention to a useful tip for best-practice usage.

Reference
Cross-references other documents.

System description

Dokamatic table - the fast tableform that adapts perfectly to any slab



The Dokamatic table saves on both manpower and crane time: With the DoKart plus, the tables can easily be traveled to their next location by just one man working on his own.

The system is optimized to give the very shortest forming times, and copes well with varying structural-design and geometrical requirements.

- 4 standard formats with an underlying 'grid' logic:
  - 9’-0" x 18’-0"
  - 9’-0" x 12’-0"
  - 7’-0" x 18’-0"
  - 7’-0" x 12’-0"
- Faced with 3/4" or 18mm birch plywood. Where flexibility in the choice of form-facing is required, the Dokamatic table grille is available.
- Slab heights:
  - Up to approx. 19' with Doka floor props Eurex
  - Up to approx. 24' with the Dokamatic table frame
  - For heights greater than this, the tableforms can be borne on a shoring tower
- High capacity (slab thicknesses of up to 40") despite the low dead weight of approx. 11.4 lbs/ft²
- Made up of high-grade system components such as the sturdy Dokamatic table waling 12 and Doka beams H20 top, for extremely long service life and minimal follow-up costs
- Just-in-time delivery of the ready-assembled Dokamatic tables to the site

Quick repositioning times

- Ready-assembled units can be traveled
- Handy, practical shifting devices.
- Higher speed and safety than with hand-set formwork – the more so the higher the room height.

Safe and versatile along the edges of the slab

- Integrable table platforms make it unnecessary to mount work and protection platforms.
- Easy lateral adjustment of the props, to allow for table projections of up to 5'.
- System solutions for downturned beams and bulkheads
- Swivel-mounted, lockable props, enabling the tables to be lifted out over parapets with plenty of clearance

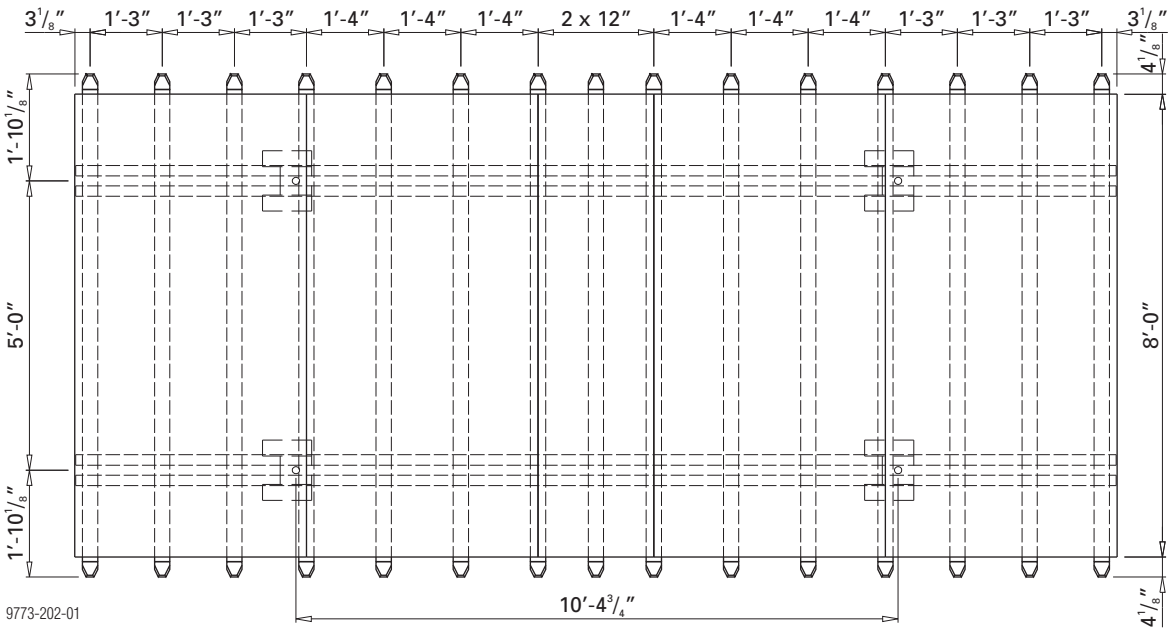
Adaptability in all 3 dimensions

- Rapid accommodation to all layouts is made possible by insertion beams, and by the system-compatible grid of connector holes on the table waling
- Direct connectability to the table frame or to shoring towers, for greater slab heights
- Easy-to-reposition swivel head, for rapid adaptation to changing geometrical and structural-design requirements
- Faced as standard with 3/4" or 18mm birch plywood. Any type of form-facing possible, for all architectural specifications.

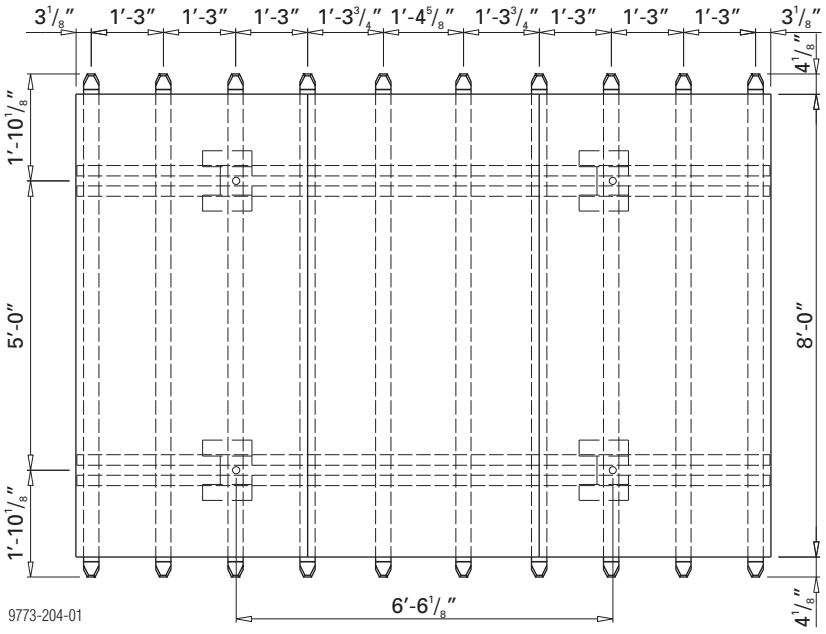
System overview

System dimensions

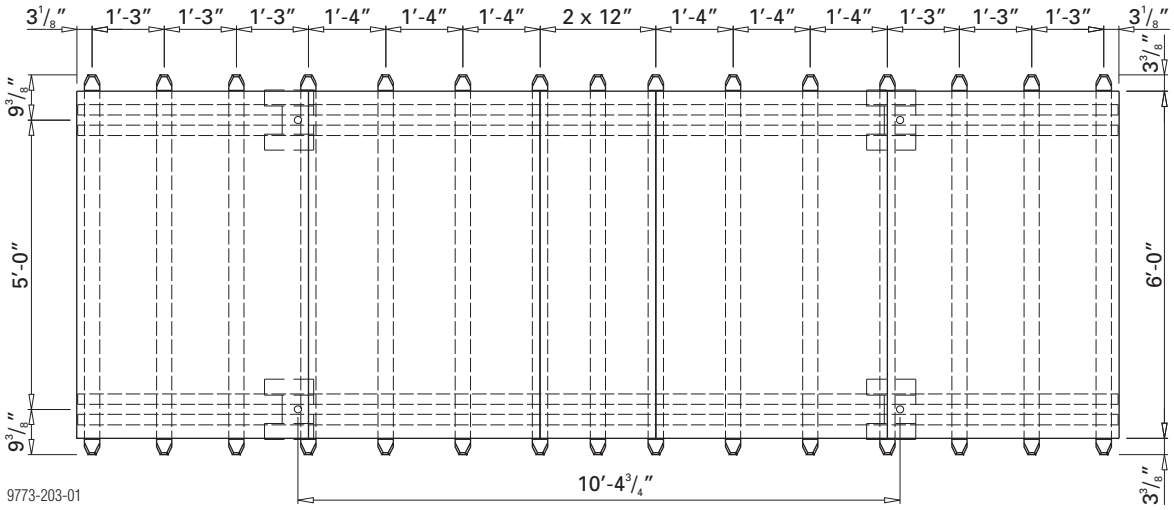
Dokamatic S table 9’-0"x18’-0"



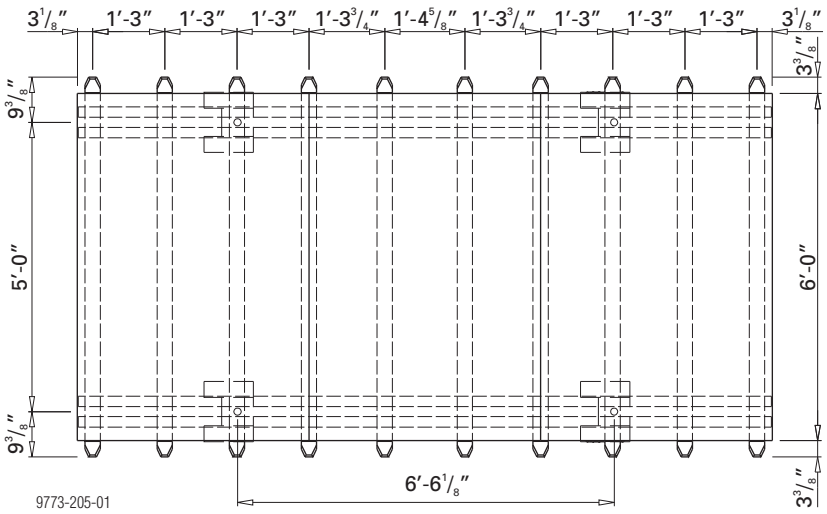
Dokamatic S table 9’-0"x12’-0"



Dokamatic S table 7’-0"x18’-0"

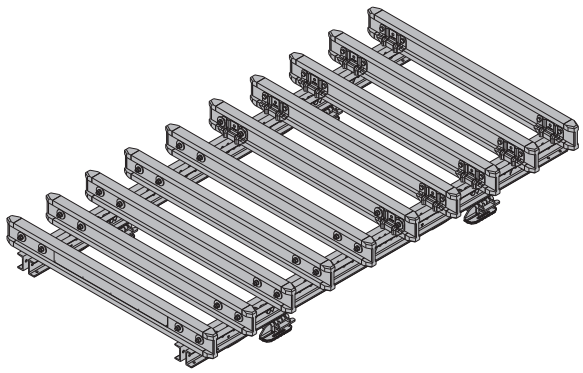


Dokamatic S table 7’-0"x12’-0"



Dokamatic table grille

Pre-assembled table grille in the 4 standard formats, for facing with any desired form-ply.



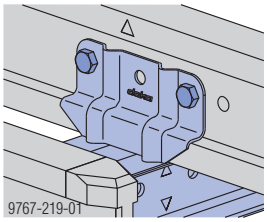
The Dokamatic table in detail

Dokamatic swivel-head 40

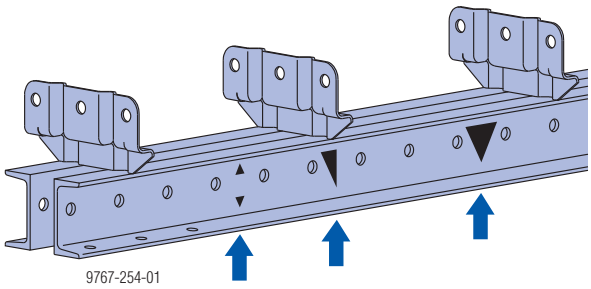
- Easy, bolt-on mounting to the Dokamatic table waling
- Floor props are quick to connect, with wedge-clamped join (hammer-operated)
- Wedge is fixed in transport position by integrated spring-lock
- Rigid clamping of the floor props, and optimum stiffening reinforcement between the head and the secondary beam, for enhanced floor-prop load-bearing capacity
- Swivel-mounted floor props, lockable at 75° and 90° (lift-out positions)
- Swivel lever can be operated from ground level
- Holes drilled for diagonal back-stays on edge tables
- Can be fitted to Multi-purpose waling WS10 (on custom tables)
- Plastic cover protects the form-facing on stacked tables

Dokamatic table waling 12

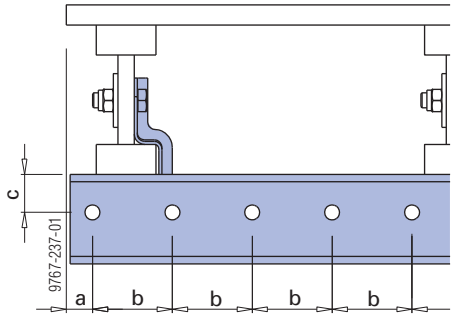
- Dokamatic table waling and secondary beam are rigidly linked



- Triangular markings to ensure optimum positioning of the swivel-heads and intermediate props



- Universal connectability is ensured by the system-compatible increment-grid of the drilled holes

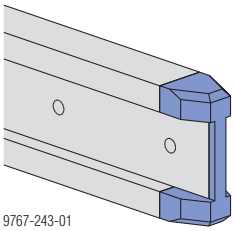


a ... 1 3/8"
b ... 4 3/16" (system increment-grid)
c ... 2"

Doka beam H20 top

Innovative end-reinforcement:

- reduces damage to the ends of the beams
- greatly lengthens the service life



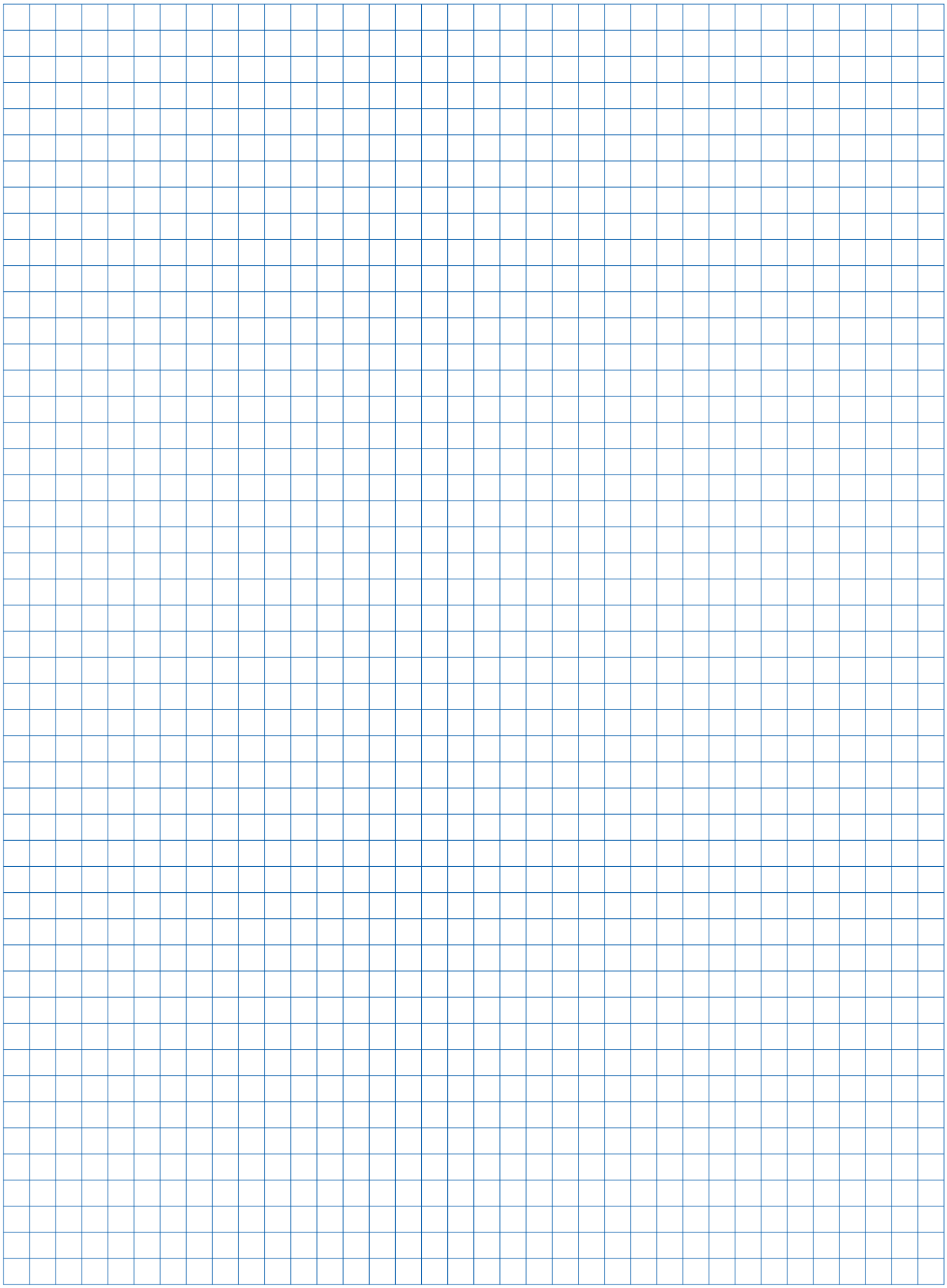
Doka floor props Eurex

EN 1065-compliant floor prop

Type of Doka floor prop	Permitted capacity to US standard
Eurex 20	6.0 kip (6000 lbs)
Eurex 30	8.5 kip (8500 lbs)

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

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



Instructions for assembly and use

Dokamatic 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 different sequence of operations will be needed, from the scheme shown here (e.g. for sloping walls).

CAUTION

- ➤ Dokamatic 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. back-stays) must be defined.
- ➤ Never place tables with floor props on top of one another.

CAUTION

Before stepping onto the tables, observe the following points:

- ➤ Horizontal stability must be ensured (e.g. by back-tying the edge tables, by fixing the tables to the structure, by joining them into one continuous forming area).
- ➤ If no fall protection is in place (e.g. during formwork set-up or stripping), a **personal fall-arrest system (PFAS)** must be used to protect against falls (e.g. safety harness).

NOTICE

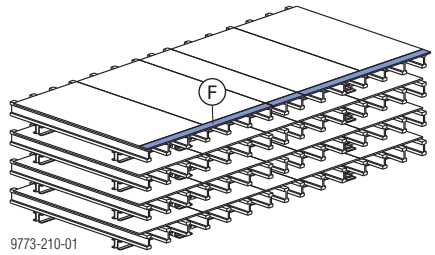
All necessary traffic routes must be prepared at the site!

Transporting / handling the panels

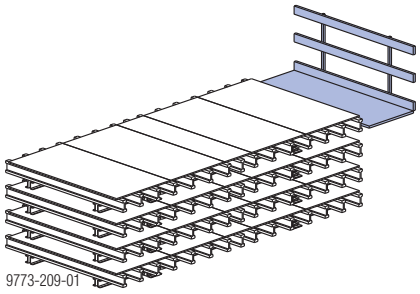
- ➤ For offloading Dokamatic elements from a truck, or lifting them on-site a stack at a time, use the Dokamatic lifting strap 13.00m (see the section headed 'Transporting, stacking and storing').

Pre-assembly

- ➤ While the tables are still on the stack, attach an edge strip **(F)** to each table that is going to be placed directly against a wall of the building.



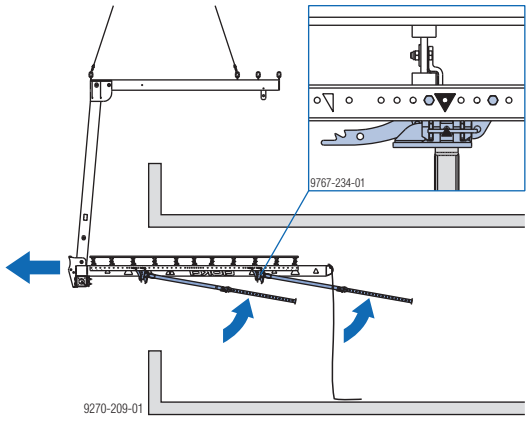
- ➤ The table platforms and fall-protection for edge tables should also be pre-mounted while the tables are still on the stack (see the section headed 'Tables around edges of slab').



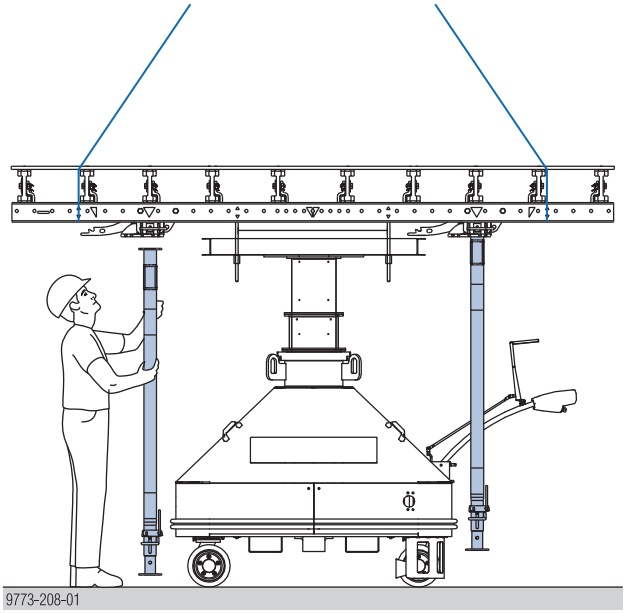
Erecting the formwork

NOTICE

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

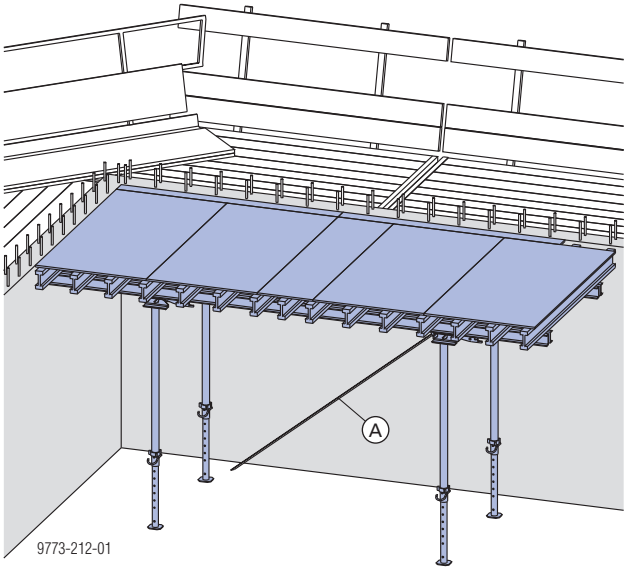


- Use the Dokamatic lifting strap 13.00m to lift the table superstructure onto the DoKart plus, or onto suitable temporary shoring (see the section headed 'Transporting, stacking and storing').
- If necessary, adjust the position and number of swivel heads accordingly (see the section headed 'Adapting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

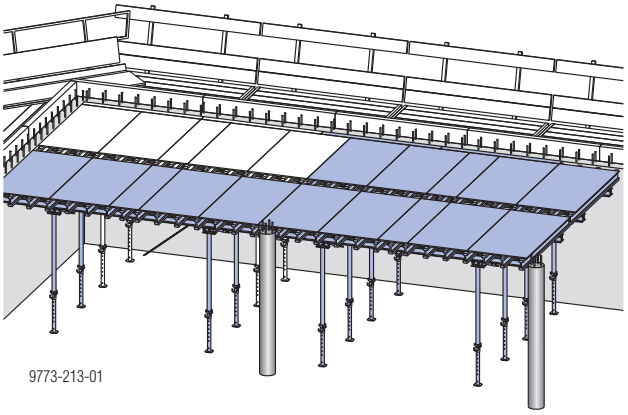


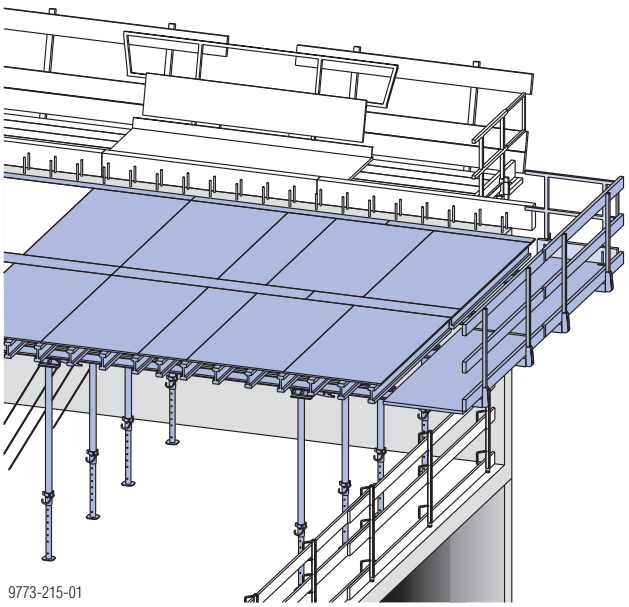
With very long floor props, it may be necessary to mount these in a tilted position.

- Bring the table to its usage location using the Dokamatic lifting strap 13.00m or the DoKart plus, 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 - with the pre-mounted edge strip facing the wall.
- Fix the first table to the structure (e.g. with braces, Lashing strap 5.00m **(A)** or in-place solutions using e.g. the tie-holes in the wall).



- Bring further tables to the usage location in the same way.

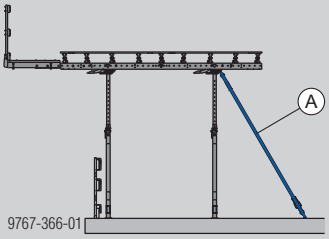




CAUTION

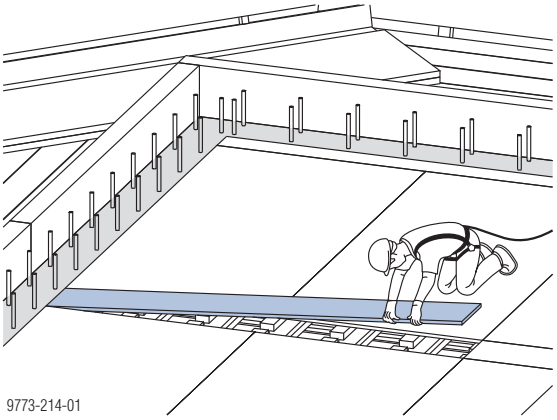
Risk of edge tables toppling over!
(due to cantilevering platforms, edge props that have been relocated towards the inside, slab bulkheads, downturned beams)

- ➤ Secure all edge tables by **tying back (A)** every primary beam in the inner cantilever zone of the table.
- ➤ Do not release the table from the shifting device until tie-backs are fixed to prevent tip-over.
- ➤ Also applies when setting down tables or putting them into temporary storage.



For details on how to make tie-backs, see the section headed 'Tie-back solutions'.

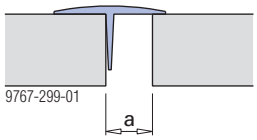
➤ Insert plywood strips between the tables, and nail where needed (see the section headed 'Adaptation to building layout').



➤ Join the tables together with stacking boards placed across the top.
This stabilizes the tables and makes it easier to line up additional tables.

The T ledge makes it easier to strip the formwork.

It is only needed in the area where stripping begins.



a ..max. 1/2"

- ➤ Form the slab bulkheads (see the section headed 'Slab bulkheads').
- ➤ Spray the form-facing with release-agent.
- ➤ Place the reinforcement.

Pouring

➤ Before pouring, check the floor props once again.

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

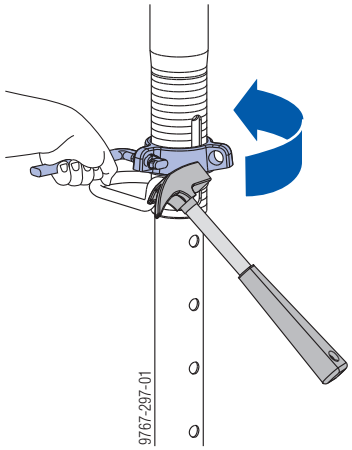
To protect the surface of the plywood-facing, we recommend using a vibrator with a protective rubber cap.

Stripping and repositioning the formwork

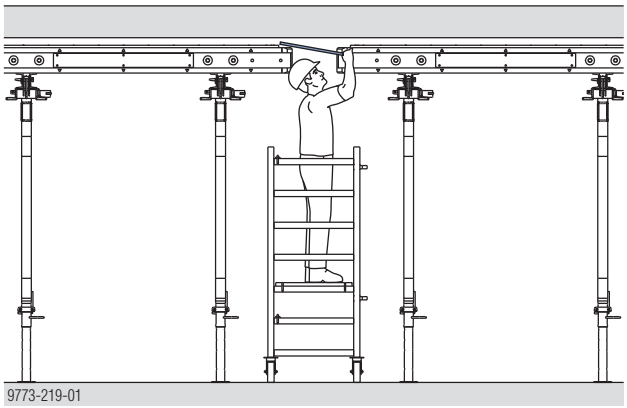
NOTICE

As well as the instructions given here, the section headed 'Shoring system, reshoring, concrete technology and stripping' MUST be followed.

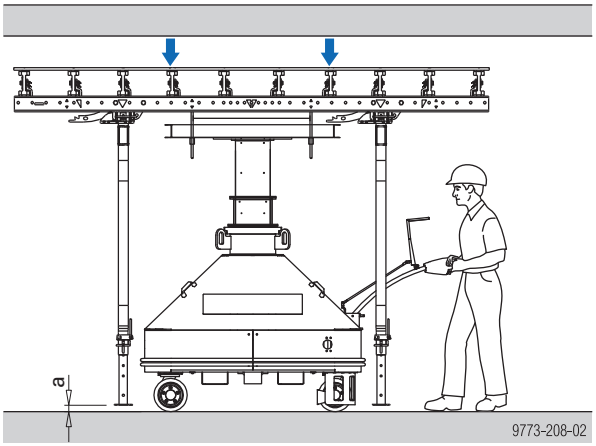
- Check the concrete strength.
- Take the load off the floor props of the tables, and lower them approx. 2".



- Remove the standard strips and 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, with the DoKart plus, lower the table until it is 4" clear of the ground.



a ... approx. 4" ground clearance

- Reposition the table (see the sections headed 'Horizontal repositioning / traveling', 'Vertical repositioning with transport forks' and 'Table Lifting System TLS').

Reshoring

NOTICE

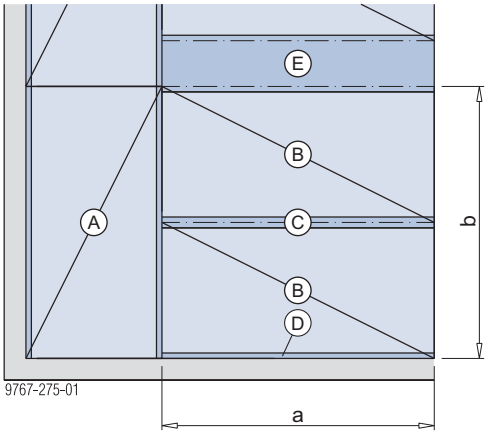
It is essential to follow the instructions given here and the instructions in the section headed 'Reshoring props, concrete technology and stripping'.

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

Adaptation to building layout

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

- combining different sizes of table
- grid logic (arranging the tables lengthways and crossways)
- closure zones with fitting boards/infill strips

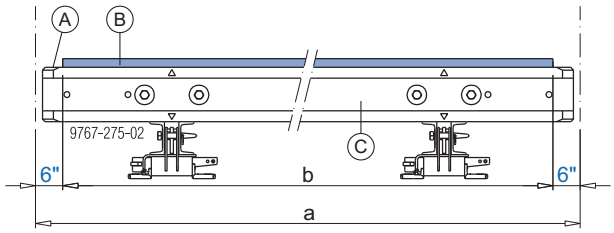


a ... 18'-0" or 12'-0"
b ... 18'-0"

A	e.g. Dokamatic S table 9'-0"x18'-0" or 7'-0"x18'-0"
B	e.g. Dokamatic S table 9'-0"x18'-0" or 9'-0"x12'-0"
C	Typical zone (standard strip)
D	Wall junction (standard strip)
E	Closure zone (fitting-board)

in the direction of the secondary beams

The sheet-covered area is 1’ less than the system dimension on both long sides of the table. The projecting secondary beam acts as a support for the strips of formwork sheeting.



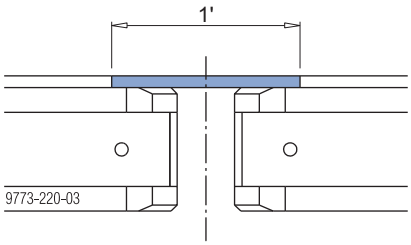
a ... System width of the table (7'-0" or 9'-0")
b ... a - 1’ (6'-0" or 8'-0")

A	Support for strip of formwork sheeting
B	Sheet-covered area
C	Dokamatic secondary beam 1.95m or 2.45m

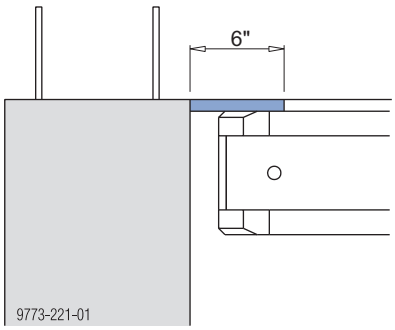
Typical zone

Between the tables and at wall junctions, it is always standard strips that are inserted.

Standard strips (1’) between the tables



Standard strips (6") at wall junctions

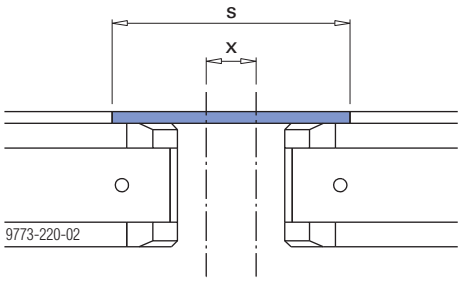


Closure zone

Instead of the standard strips, a fitting-board of variable width is inserted between the tables

Note:
The width of the fitting-board needed is always 1’ wider than the actual closure dimension 'x'.

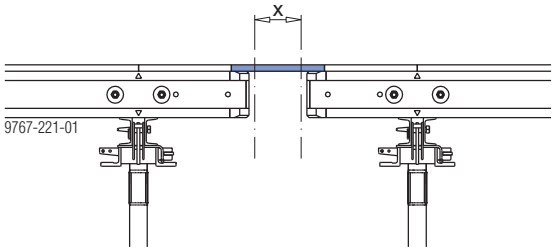
Fitting-board (x + 1’) between the tables



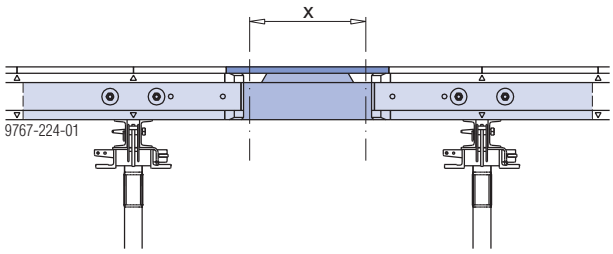
s ... Width of filler (x + 1')
x ... Actual filler dimension

The closure option is selected depending on the slab thickness and on the necessary closure width 'x' (see the section headed 'Structural design').

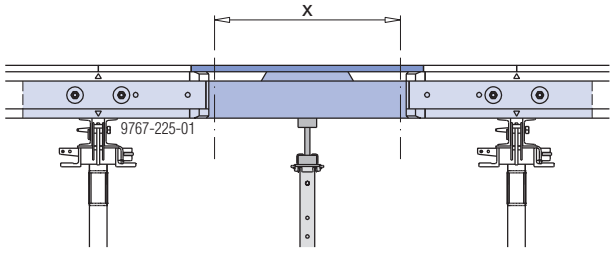
Option 1: fitting-board only



Option 2: fitting-board with insertion beam, with no additional propping

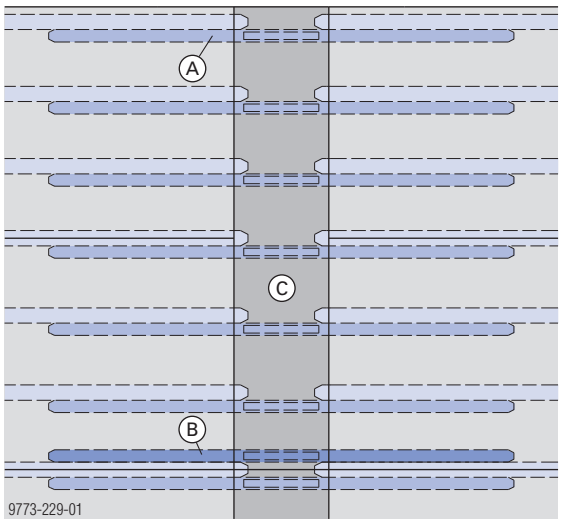


Option 3: fitting-board with insertion beam and additional propping



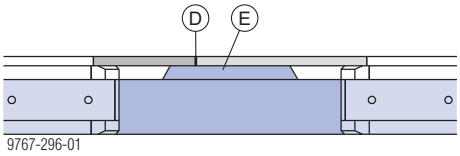
Forming and stripping closures with insertion beams

- ➤ Place the insertion beams **(A)** at the ends of the tables, as close as possible to the edge.
- ➤ Do not space the insertion beams any further apart than the beams of the table.
- ➤ Insert an extra insertion beam **(B)** under the joint between the formwork sheets **(C)** .



NOTICE

The joint where the sheets abut **(D)** must always be positioned over the raised support surface **(E)** of the insertion beam.



If this is not possible, the insertion beam can be fitted with its raised support surface facing downwards, and wedged up to the right height on the table waling.

To facilitate repositioning, the insertion beams 2.45m on 9’-0" wide tables can be pushed in – simply turn them on their sides and push them in.

In this way, they are available for use again straight away at the new location.

For very thick slabs, the insertion beam can be fitted with its raised support surface facing downwards, and wedged up to the right height on the table waling. This permits **bigger filler widths**.

Please consult your Doka technician.

CAUTION

Before stepping onto the tables, observe the following points:

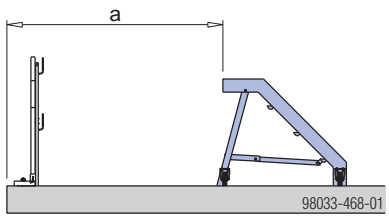
- ➤ Horizontal stability must be ensured (e.g. by back-tying the edge tables, by fixing the tables to the structure, by joining them into one continuous forming area).
- ➤ If no fall protection is in place (e.g. during formwork set-up or stripping), a **personal fall-arrest system (PFAS)** must be used to protect against falls (e.g. safety harness).

Use a mobile scaffold tower (e.g. Working scaffold Modul) or a platform stairway for erecting and stripping the formwork.

NOTICE

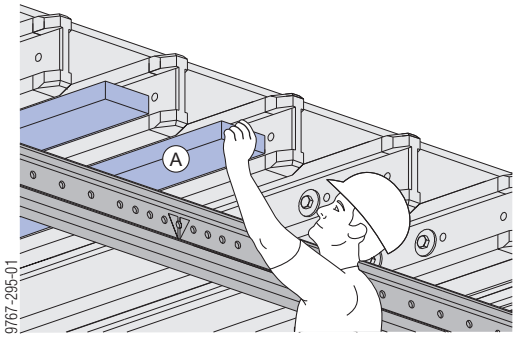
When using the **Platform stairway 0.97m** for vertical access, note the following:

- Minimum distance **a** from drop-off edge: 6'-7"



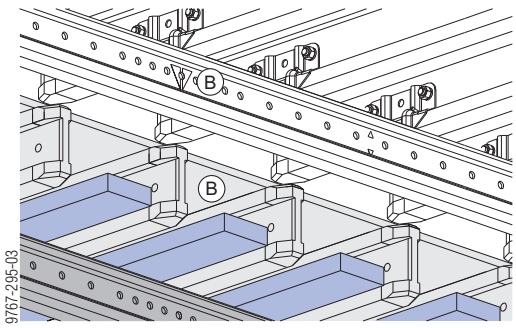
Closing the formwork:

➤ Push insertion beams into the tableforms alongside the filler zone, flush with the secondary beams.



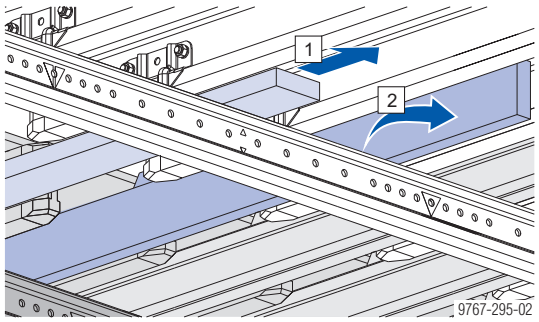
A Insertion beam

➤ Put up tables opposite the filler zone.

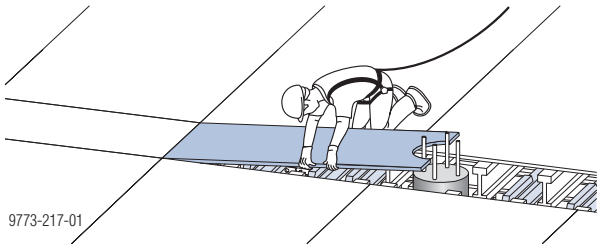


B Dokamatic table

➤ Pull each insertion beam across the filler zone (1) and turn it into the upright (2).



➤ Place fitting boards over the filler zone, and nail where needed.



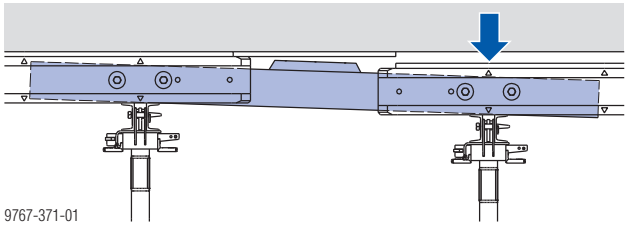
Stripping and resetting the formwork:

CAUTION

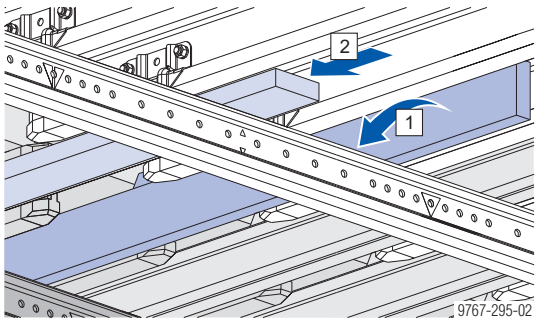
Risk of insertion beams falling out

- ➤ Do **not** leave insertion beams with a **length of 1.95m** inside tables when these are repositioned!

➤ Take the load off the floor props of the tables, and lower the tables approx. 2" on one side of the closure zone.



➤ Turn the insertion beams on their sides (1) and push them into the tableform (2).

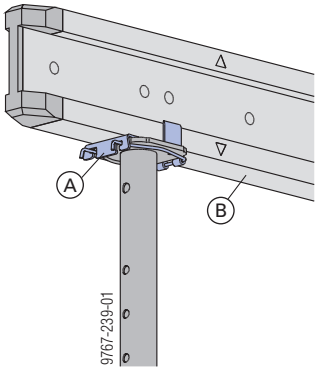


➤ Remove the fitting-boards.

➤ Lower the remaining tables.

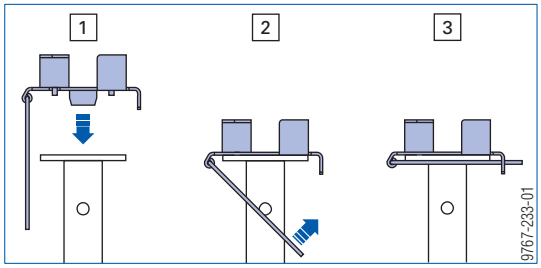
➤ Reposition the tables together with the insertion beams.
The insertion beams are available for use again straight away at the new location.

Propping the filler zones



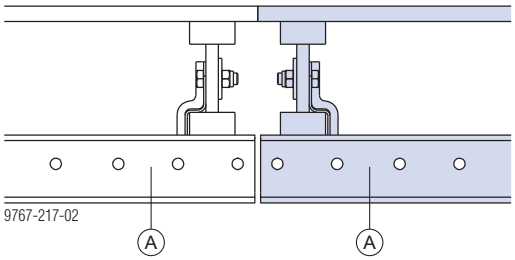
A Supporting head H20 DF
B Doka beam H20 top

➤ Place the Supporting head H20 DF on the inside tube of the floor prop and secure it with the integral spring-steel stirrup.



in the direction of the primary beams

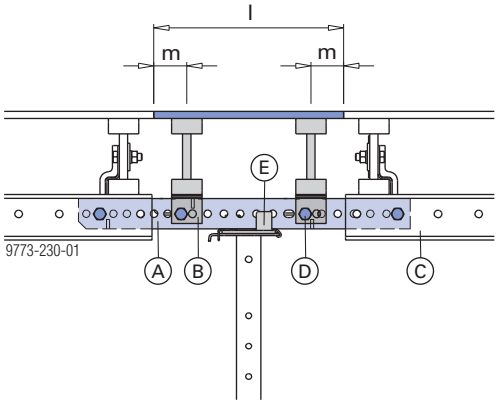
Typical zone



A Dokamatic S table

Closure zone

Note:
The filler zone should be supported by a centrally placed floor prop – this has no implications regarding the dimensioning of the table. Otherwise, statical verification is required.



l ... Dimension of sheet for filler
m ... max. 3 $^{7}/_{8}$"

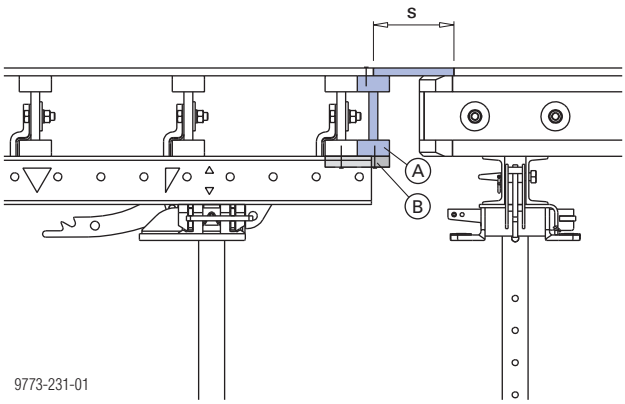
A Adjustable waling extension S FF20 Top50
B Beam clamp Top50
C Dokamatic table waling
D Connecting pin 10cm + Spring cotter 5mm
E Supporting head H20 DF

NOTICE

Fix the waling extension in the table waling with **one connecting pin only**. (This is a tension link only). Otherwise there is a risk of overload.

Secure connecting pins with **Spring cotters 5mm**.

Combining tables in the direction of the secondary beams and of the primary beams



s ... Dimension of sheet

A Doka beam H20

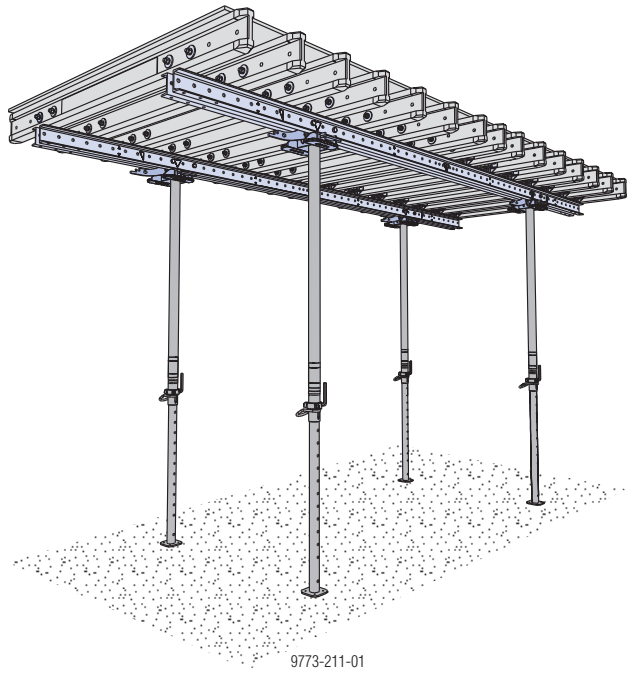
B Nailing board (min. 3/4" thick), provided at site

Note:
The beam **(A)** must be pre-installed!

Height adjustment

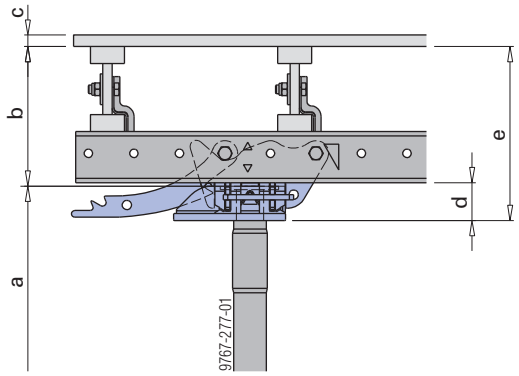
Slab heights up to 19’ (standard tables)

For these heights, the Dokamatic table is fitted with Doka floor props Eurex 20 top or Eurex 30 top.



Floor props Eurex 20 top and 30 top are clamped in the Dokamatic swivel head!

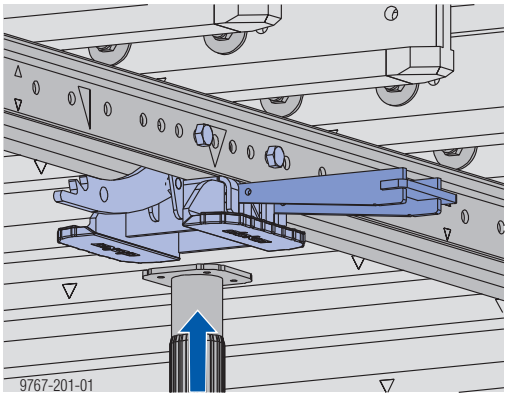
- Strut-plate dimensions from 4 $^{3}/_{4}$" x 4 $^{3}/_{4}$" to 5 $^{1}/_{2}$" x 5 $^{1}/_{2}$".
- Strut-plate thicknesses from $^{4}/_{16}$" to $^{5}/_{16}$".



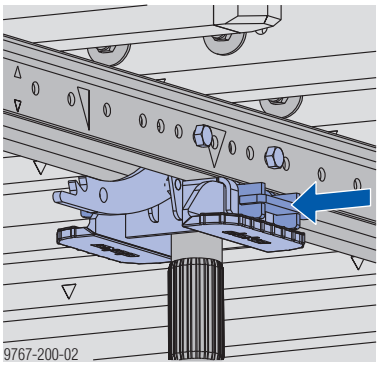
a ... Extension length of the Doka floor prop Eurex top
b ... 1’-$^{11}/_{12}$"
c ... Plywood 3/4" or 18mm
d ... 3 $^{1}/_{2}$"
e ... 1’-4" (height of the table construction without any form-facing)

Mounting the floor props

➤ Open the wedge of the Dokamatic swivel head and insert the prop.



➤ Tighten the wedge with the hammer.



NOTICE

- Having the outer tube at the top increases stability.
- 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 attached with the Dokamatic swivel head tilted back.
- Where the floor-slab height is 12’ and upward, secure the wedge with a spring cotter 5mm, as at this height and above it is difficult to do a sight-check.

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

Slab heights up to approx. 24’

The **Dokamatic table frame** extends the Dokamatic tables' range to include slab heights of up to approx. 24'.

- Quickly adds 4’-11" to the height
- Can be mounted to the Dokamatic table with the Dokamatic scaffold connection.
- Props connected in same way as with Dokamatic swivel head 40
- Integral latch-type peg for connecting diagonal crosses from the Doka shoring tower system Staxo
- Centering plates for the Transport fork DM 1.5t.

9773-242-01

NOTICE

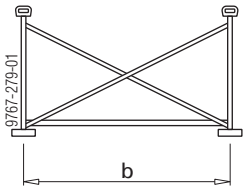
When using the DoKart plus to move these tables, observe the following:

- Length of the distribution beams (Doka beams H20): 3.90 m instead of the standard length of 2.65 m.
- Use an Extension set for DoKart plus

Items needed

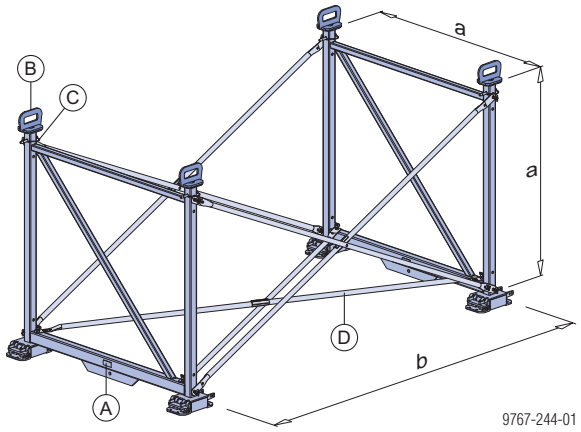
	Number of table frames					
	2		3		4	
	Length of table					
	12'	18'	12'	18'	12'	18'
Diagonal cross 9.150	-	-	-	-	9	-
Diagonal cross 12.150	-	-	6	-	-	-
Diagonal cross 18.100	-	-	-	-	-	9
Diagonal cross 18.150	3	-	-	6	-	-
Dokamatic table frame 1.50m	2	2	3	3	4	4
Dokamatic scaffold connection	4	4	6	6	8	8
Spring locked connecting pin 16mm	4	4	6	6	8	8
Floor prop Eurex	4	4	6	6	8	8
Connecting pin 10cm	6	6	8	8	10	10
Spring cotter 5mm	6	6	8	8	10	10

Inter-frame spacing



Diagonal cross	b [inch]
9.150	3’-4 1/2"
12.150	4’-2 1/4"
18.100	4’-9 1/2"
18.150	6’-0 1/2"

Assembly



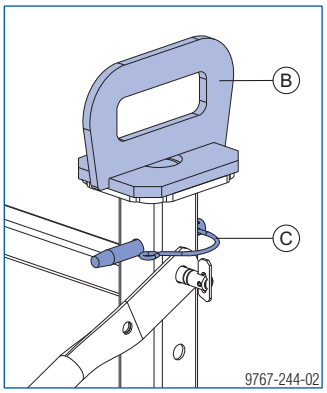
a ... 4'-11"
b ... Variable (as statically required)

A Dokamatic table frame 1.50m
B Dokamatic scaffold connection
C Spring locked connecting pin 16mm (not included in scope of supply)
D Diagonal cross as per table

➤ Mount diagonal crosses in both the vertical and the horizontal, and secure them with the safety catch as soon as you have slid them onto the latch-type peg.

➤ Push Dokamatic scaffold connections into the Dokamatic table frame and secure them with Spring locked connecting pins 16mm.

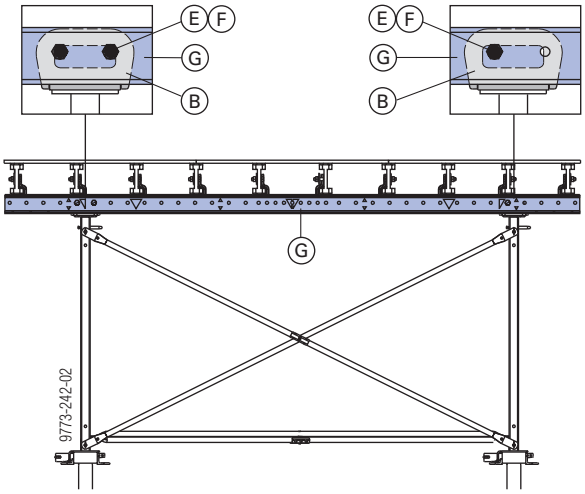
Close-up of scaffold connection:



Attaching the tableform superstructure:

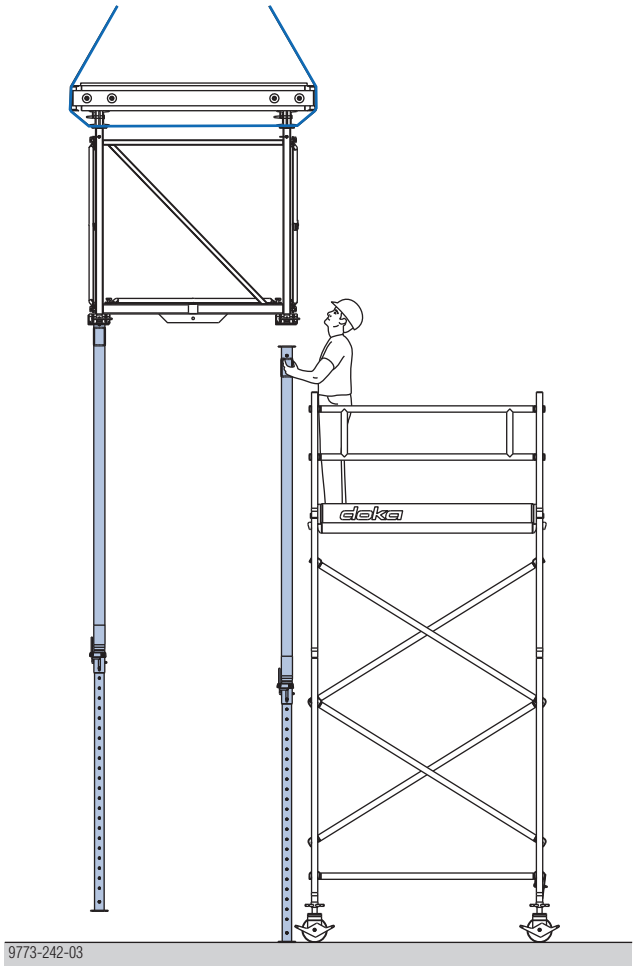
➤ Using two Dokamatic lifting straps 13.00m and the crane, lift the superstructure onto the pre-assembled shoring tower.

➤ Mount Connecting pins 10cm to join the table-superstructure to the tower, and secure them with Spring cotters 5mm. (The second connecting pin on each longitudinal connection prevents any displacement of the superstructure.)



Mounting the floor props

➤ Raise the entire unit by crane and – working from the mobile scaffold tower (e.g. Working scaffold Modul) – mount the floor props (these are attached in the same way as on standard tables).



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

Slab heights over 24’

For slab heights of over 24', the Dokamatic table can be combined with shoring towers.

For more information, please contact your Doka technician.

Adapting to different slab thicknesses

The Dokamatic tables can be adapted to take account of the required slab thickness by:

- relocating the edge props (Dokamatic swivel heads 40)
- installing extra intermediate props
  - with the **Dokamatic swivel head 40**
  - with the **Dokamatic strut connection**

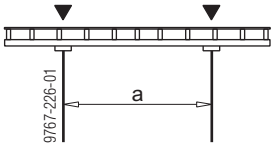
Note:
If the slab thicknesses vary, intermediate props can also be installed temporarily.

Positioning the floor props

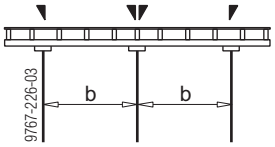
The markings on the Dokamatic table waling 12 make it easy to ensure correct positioning.

Markings on the Dokamatic table waling 12

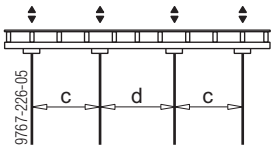
2 floor props per table waling
(standard table)



3 floor props per table waling
(1 intermediate prop with swivel head, edge prop relocated



4 floor props per table waling
(2 intermediate props with swivel head, edge prop relocated)

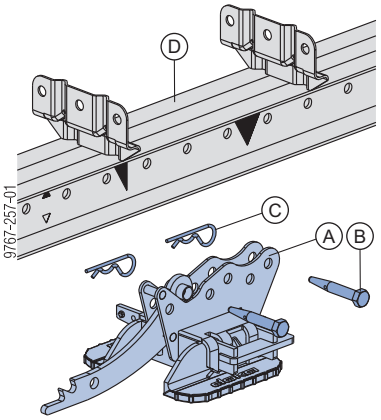


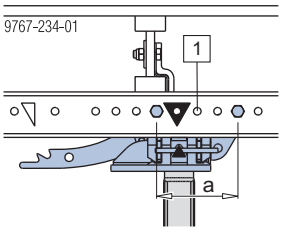
	a	b	c	d
Dokamatic table waling 12 12'-0"	6'-6 1/8"	4'-3 5/8"	3'-2"	3'-0"
Dokamatic table waling 12 18'-0"	10'-4 3/4"	6'-3"	4'-6 3/4"	4'-9 3/8"

Dokamatic swivel-head 40

Assembly

➤ Bolt the Dokamatic swivel head into the Dokamatic table waling using the connecting pins provided, and secure with a Spring cotter 5mm.





a ... 8 1/2"

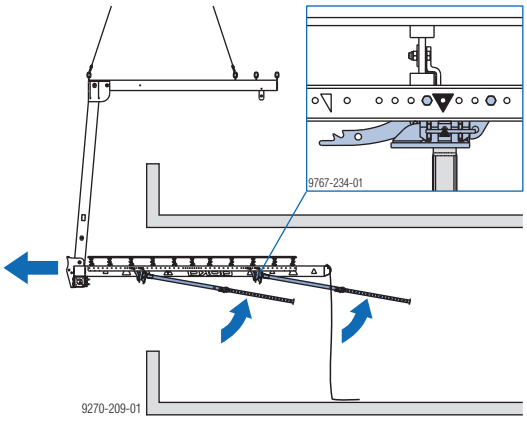
A	Dokamatic swivel head 40
B	Connecting pin
C	Spring cotter 5mm
D	Dokamatic table waling 12

If the swivel function is not needed, the swivel head can be locked by fitting an extra connecting pin in Position 1.

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

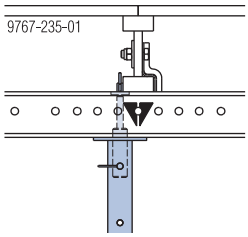
NOTICE

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



Dokamatic strut connection

The Dokamatic strut connection makes it very easy to attach intermediate props to the table waling.
Another application is for shoring edge-beams, i.e. for connecting props to multi-purpose walings WS10 or WU12.



Note:
Position intermediate props as near as possible to the respective markings.

NOTICE

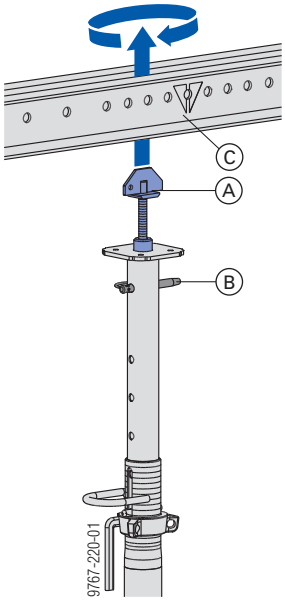
- An increase in the load-bearing capacity of the floor prop, and moment transfer such as with the Dokamatic swivel head 40, are not possible here!
- The main props of the table (at least 4 of them) must always be attached with the Dokamatic swivel head 40!

Assembly

➤ Push the Dokamatic strut connection onto the floor prop and secure it with a Spring locked connecting pin 16mm.

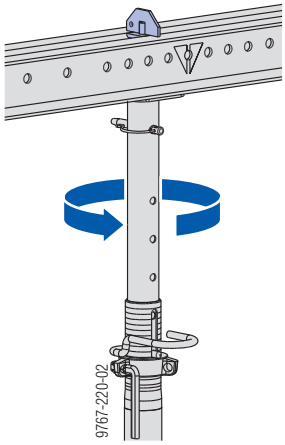
➤ Unscrew the spindle of the strut connection as far as it will go.

➤ With the aid of the floor prop, introduce the strut connection into the table waling, then turn it 90° and pull it downward.



A	Dokamatic strut connection
B	Spring locked connecting pin 16mm
C	Dokamatic table waling 12

➤ Turn the floor prop to fasten it to the table waling.



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

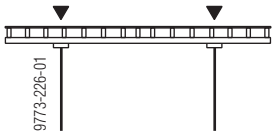
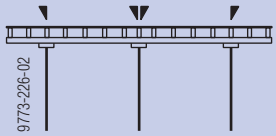
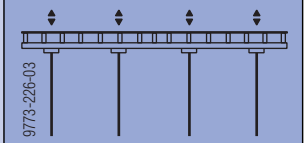
Structural design

Structural design – Dokamatic table without formwork sheeting

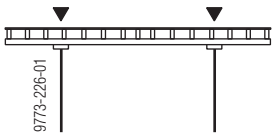
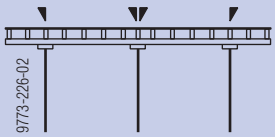
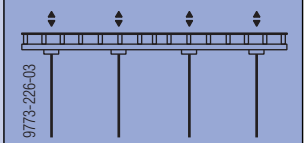
Allowance has been made for the following loads:
- Concrete weight: 150 lb/ft³ (23.56 kN/m³)
- Dead weight: 11 lb/ft² (0.53 kN/m²)
- Live load:
  - Table with Eurex 20: 35 lb/ft² (1.68 kN/m²)
  - Table with Eurex 30: 50 lb/ft² (2.39 kN/m²)

Max. slab thickness / permitted fillers

The formwork sheet and the type of filler must be chosen with reference to the slab thickness (see 'Structural design – formwork sheet and filler options').

Table format	Type of prop	Permitted fillers x [inch] Options 1 and 2	Permitted fillers x [inch] Option 3	Standard table  Max. slab thickness [inch]	1 intermediate prop with swivel head, edge prop relocated  Max. slab thickness [inch]	2 intermediate props with swivel head, edge prop relocated  Max. slab thickness [inch]
9'-0"x18'-0"	Eurex 20	0	0	**8.0**	**14.0**	**19.5**
		4.0	8.0	8.0	13.5	18.5
		8.0	16.0	7.5	13.0	18.0
		12.0	24.0	7.0	12.5	17.0
		16.0	32.0	6.5	12.0	16.5
		20.0	40.0	6.5	11.5	16.0
		24.0	48.0	6.0	11.0	15.5
	Eurex 30	0	0	**12.0**	**20.5**	**28.0**
		4.0	8.0	11.5	19.5	27.0
		8.0	16.0	10.5	18.5	25.5
		12.0	24.0	10.0	18.0	24.5
		16.0	32.0	9.5	17.0	23.5
		20.0	40.0	9.5	16.5	23.0
		24.0	48.0	9.0	15.5	22.0
9'-0"x12'-0"	Eurex 20	0	0	**14.0**	**20.5**	**31.5**
		4.0	8.0	13.5	20.0	30.0
		8.0	16.0	13.0	19.0	29.0
		12.0	24.0	12.5	18.0	28.0
		16.0	32.0	12.0	17.5	27.0
		20.0	40.0	11.5	17.0	26.0
		24.0	48.0	11.0	16.0	25.0
	Eurex 30	0	0	**20.5**	**29.5**	**40.0**
		4.0	8.0	19.5	28.5	40.0
		8.0	16.0	18.5	27.0	40.0
		12.0	24.0	18.0	26.0	40.0
		16.0	32.0	17.0	25.0	37.5
		20.0	40.0	16.5	24.0	35.0
		24.0	48.0	15.5	23.5	33.0

The formwork sheet and the type of filler must be chosen with reference to the slab thickness (see 'Structural design – formwork sheet and filler options').

Table format	Type of prop	Permitted fillers x [inch] Options 1 and 2	Permitted fillers x [inch] Option 3	Standard table  Max. slab thickness [inch]	1 intermediate prop with swivel head, edge prop relocated  Max. slab thickness [inch]	2 intermediate props with swivel head, edge prop relocated  Max. slab thickness [inch]
7'-0"x18'-0"	Eurex 20	0	0	**11.5**	**19.0**	**26.0**
		4.0	8.0	11.0	18.0	25.0
		8.0	16.0	10.0	17.0	23.5
		12.0	24.0	9.5	16.5	22.5
		16.0	32.0	9.0	15.5	21.5
		20.0	40.0	8.5	15.0	20.5
		24.0	48.0	8.0	14.0	19.5
	Eurex 30	0	0	**16.5**	**27.5**	**37.5**
		4.0	8.0	15.5	26.0	35.5
		8.0	16.0	15.0	24.5	33.5
		12.0	24.0	14.0	23.5	32.0
		16.0	32.0	13.0	22.5	30.5
		20.0	40.0	12.5	21.0	29.0
		24.0	48.0	12.0	20.5	28.0
7'-0"x12'-0"	Eurex 20	0	0	**19.0**	**27.5**	**40.0**
		4.0	8.0	18.0	26.0	39.5
		8.0	16.0	17.0	25.0	37.5
		12.0	24.0	16.5	23.5	36.0
		16.0	32.0	15.5	22.5	34.0
		20.0	40.0	15.0	21.5	33.0
		24.0	48.0	14.0	20.5	31.5
	Eurex 30	0	0	**27.5**	**39.5**	**40.0**
		4.0	8.0	26.0	37.5	40.0
		8.0	16.0	24.5	35.5	40.0
		12.0	24.0	23.5	34.0	40.0
		16.0	32.0	22.5	32.5	40.0
		20.0	40.0	21.5	31.0	40.0
		24.0	48.0	20.5	29.5	40.0

Structural design – formwork sheet and filler options

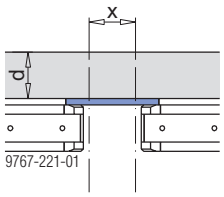
Note:

For detailed information on the formwork sheet and closure options, see the section headed 'Adaptation to building layout'.

Note on dimension (x):

- The influence of the filler on the table will be different, depending on which filler option (1 to 3) has been selected.
- The appropriate table and the number of floor props needed are selected with reference to the values '**x**' and the slab thickness '**d**'.
- The width of the fitting-board needed is always 1’ larger than the actual closure dimension 'x'.

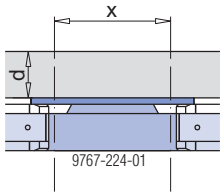
Bridged with formwork sheeting only (option 1)



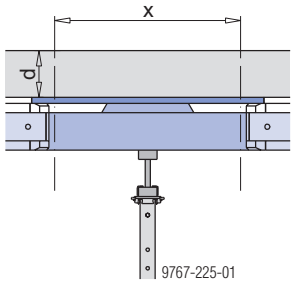
Permitted slab thicknesses d [in inches]

x	0	2"	4"	6"	8"	10"	12"
Structural I Plyform 3/4"	17.5	14.0	11.0	9.0	--	--	--
Plyform Class I 3/4"	19.5	15.5	12.0	9.0	--	--	--
Birch plywood 3/4" or 18mm	39.5	38.5	32.5	27.5	23.5	20.0	17.0

Dokamatic insertion beam with no additional propping (Option 2)



Dokamatic insertion beam and center-propped (Option 3)



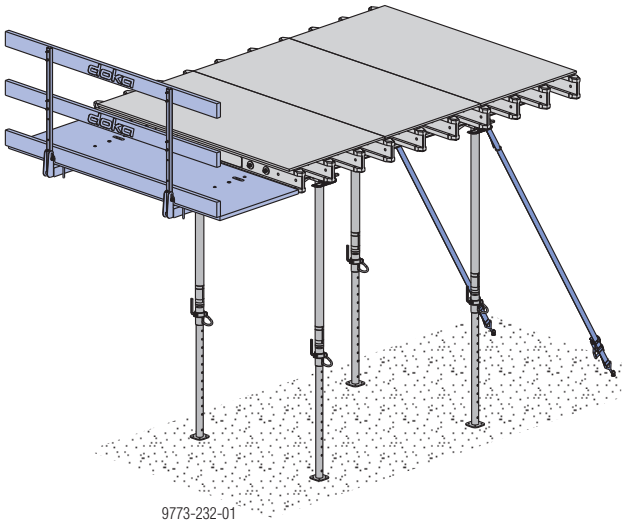
Permitted slab thicknesses d [in inches]

x	8"	12"	16"	20"	24"	28"	32"	36"
Structural I Plyform 3/4"	26	26	26	14/26*	9/17.5*	14	11	9
Plyform Class I 3/4"	33	33	33	15.5/33*	9/19.5*	15.5	12	9
3/4" birch plywood or 18mm	32	32	32	38.5/32*	27.5/32*	32	28	23.5

* only applies where the tables are covered in "wall-to-wall" plywood sheeting (e.g. width 28") or where the sheets are arranged symmetrically (e.g. 14"+14" - not 24"+4")

Tables around edges of slab

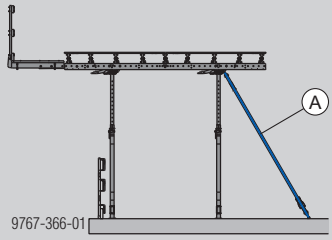
Dokamatic tables for the edge zones can have attachments such as table platforms, sideguards, slab bulkheads, and downturned beams already integrated into the tables.



CAUTION

Risk of edge tables toppling over!
(due to cantilevering platforms, edge props that have been relocated towards the inside, slab bulkheads, downturned beams)

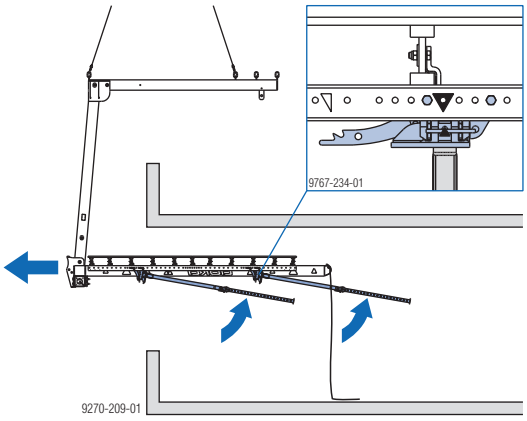
- ➤ Secure all edge tables by **tying back (A)** every primary beam in the inner cantilever zone of the table.
- ➤ Do not release the table from the shifting device until tie-backs are fixed to prevent tip-over.
- ➤ Also applies when setting down tables or putting them into temporary storage.



For details on how to make tie-backs, see the section headed 'Tie-back solutions'.

NOTICE

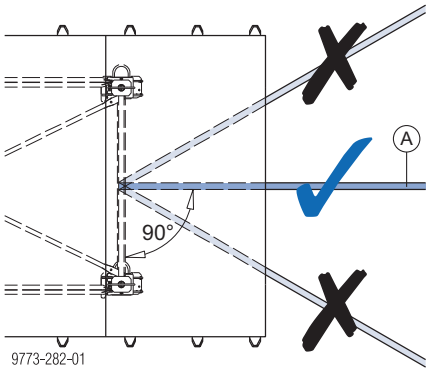
- Always set up the edge tables so that the lever-latch of the swivel head points towards the edges of the floor-slabs (in the direction in which the tables will later be removed).



Tie-back solutions

NOTICE

- When calculating the leg loads, allow for the additional forces imposed by the back-stay!
- Attach the back-stay in such a way that the tableform is held in both directions and secured against twisting.
- Direction of pull of the back-stay **(A)** always 90° to the tableform. Oblique pull is not permitted!

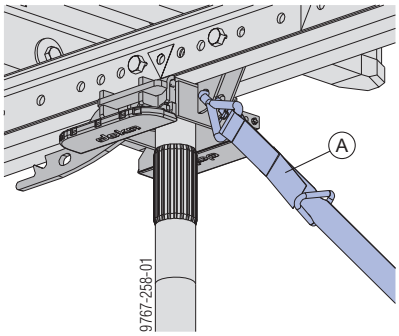


with Lashing strap 5.00m and Doka express anchor 16x125mm

Permitted tensile force per Lashing strap: 2.1 kip

Tie-back attached to the Dokamatic swivel head

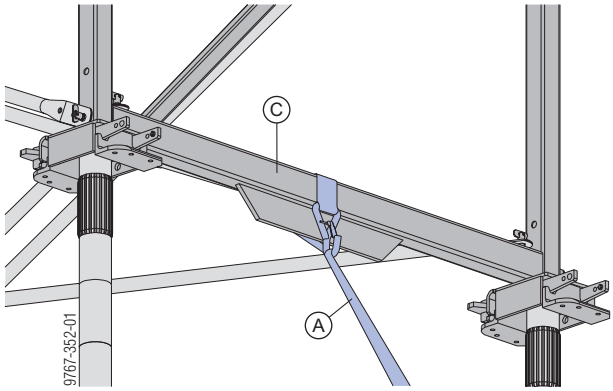
➤ Hook in the Lashing strap 5.00m directly to the Dokamatic swivel head.



A Lashing strap 5.00m

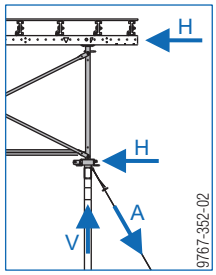
Tie-back attached to the Dokamatic table frame

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



A Lashing strap 5.00m
C Dokamatic table frame

Permitted tensile force for tie-back at the Dokamatic table frame: 1.13 kip



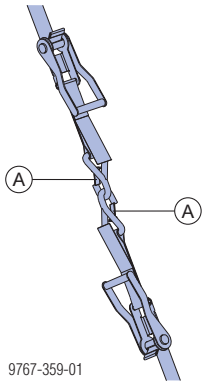
H ... Horizontal force
V ... Resulting vertical force from H
A ... Back-stay force

Tie-backs for high tableforms

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

NOTICE

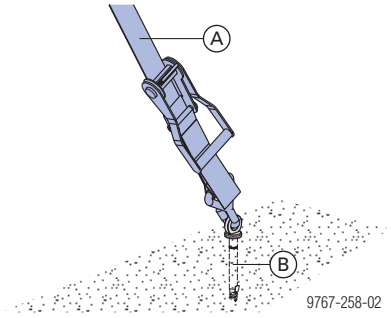
Use only Lashing straps 5.00m **with spring-loaded locking flap**!



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 - hook in the lashing strap and tension it.



A Lashing strap 5.00m

B Doka express anchor

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

Permitted load for $f_{ck,cube,current} \geq 1500$ psi:
F_{perm} = 2.1 kip
(valid for uncracked concrete)

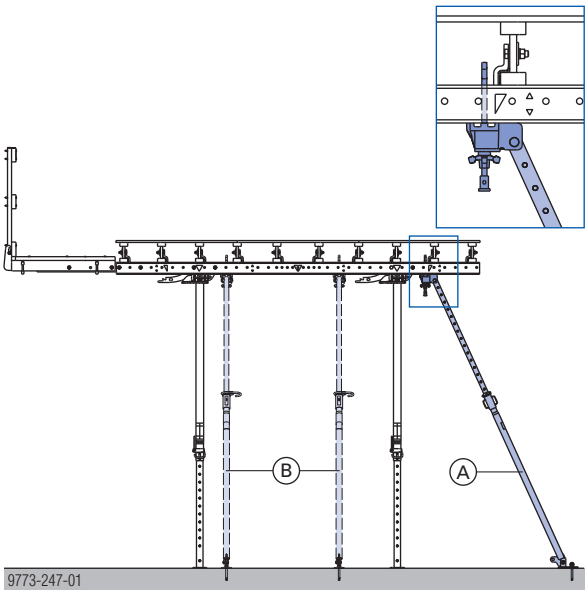
Follow the Fitting Instructions!

Always perform a static check if other-make heavy-duty dowels are used to fabricate anchorages in the floor slab.

Follow the manufacturers' applicable fitting instructions.

with plumbing struts

Using plumbing struts, Dokamatic tables can be fixed so that they are resistant to either tensile or compressive forces.

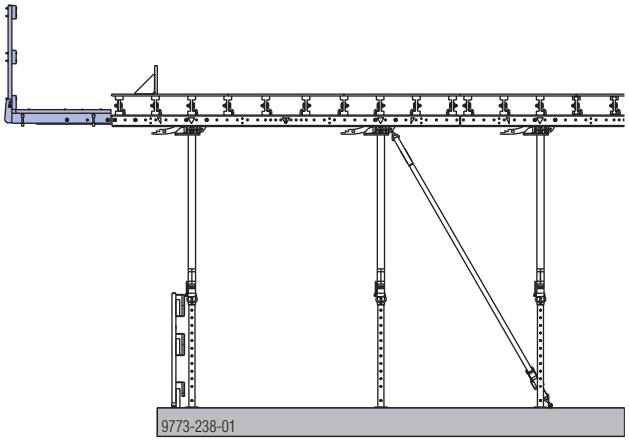


A Fixing in the direction of the primary beams

B Fixing in the direction of the secondary beams

by means of:
- Plumbing strut 340 IB or 540 IB
- Prop head EB
- Doka express anchor

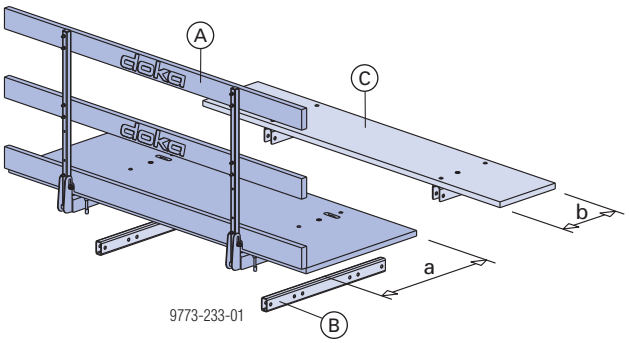
Edge table with platform



Dokamatic table platform

A pre-assembled, foldable, ready-to-use platform, 3'-3" wide, for convenient and safe working.

- 2 lengths of platform are available:
  - 8'-10" - for 9'-0" wide Dokamatic tables
  - 6'-10" - for 7'-0" wide Dokamatic tables
- High safety for edge tables
- Easy to mount - a hammer is the only tool needed
- Integral connectors for system bulkheads
- 1'-8" wide platform extension (system component)
- Fold-down railing to facilitate moving edge tables into the inside of the building



a ... 3'-3"
b ... 1'-8"

A	Dokamatic S table platform
B	Dokamatic platform profile 1.00m
C	Dokamatic S platform extension

Permitted service load without Dokamatic platform extension: 40 lbs/ft²

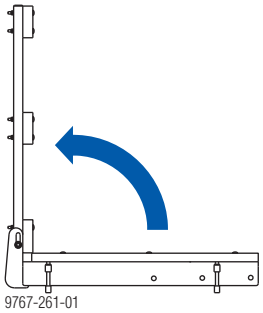
Permitted service load with Dokamatic platform extension: 30 lbs/ft²

Assembly

Note:
If possible, mount the table platforms at ground level.

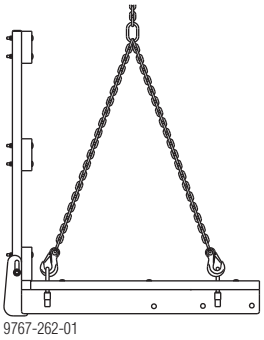
Preparing the Dokamatic table platform:

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



Lifting the Dokamatic table platform:

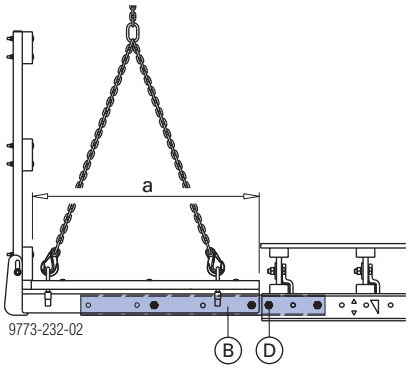
➤ Attach a four-part lifting tackle (e.g. Doka combi lifting chain 3.20m) to the Dokamatic table platform.



Fastening the platform to the Dokamatic table

➤ Mount Dokamatic platform profiles to the table with 2 Connecting pins 10cm for each platform profile, and secure them with spring cotters.

➤ Place the Dokamatic table platform onto the platform profiles, and secure it with Connecting pins 10cm and spring cotters.

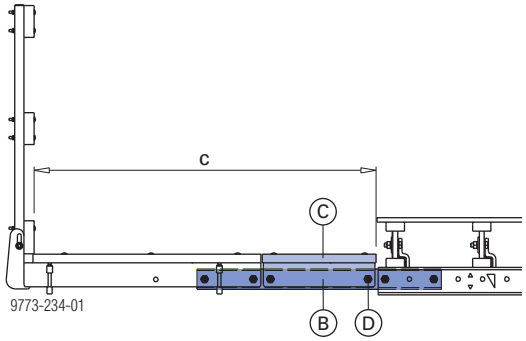


a ... 3'-3"

B Dokamatic platform profile 1.00m
D Connecting pin 10cm + Spring cotter 5mm

Example with Dokamatic platform extension

➤ Mount the Dokamatic platform profiles as described above.
➤ Place the Dokamatic table platform on the platform profiles - on the outermost holes - and secure with Connecting pins 10cm and spring cotters.
➤ Place the platform extension onto the platform profiles and secure it with Connecting pins 10cm and spring cotters.

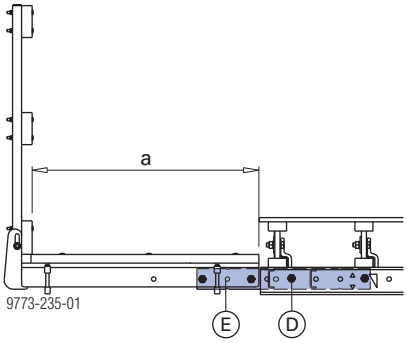


c ... Overall width 4'-11"

B Dokamatic platform profile 1.00m
C Dokamatic platform extension
D Connecting pin 10cm + Spring cotter 5mm

Alternative fixing method with Splice plate S Top50

If no platform extension is needed, **Splice plates S Top50** can be used instead of the Dokamatic platform profiles.



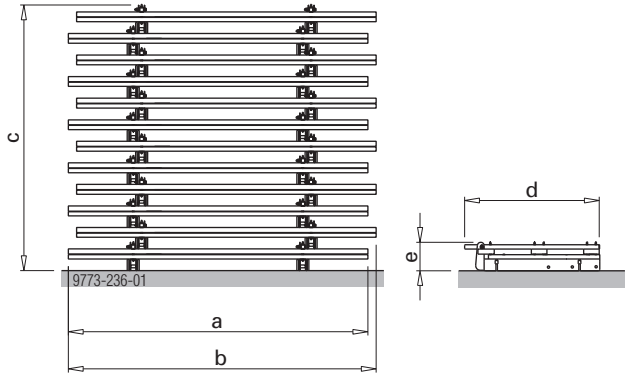
a ... 3'-3"

D Connecting pin 10cm + Spring cotter 6mm
E Double splice plate S Top50

Transporting, stacking and storing

Stack of 12 Dokamatic table platforms

Single folded-down platform



	Dokamatic table platform 3'-3"/9'-0"	Dokamatic table platform 3'-3"/7'-0"
a	8'-10"	6'-10"
b	9'-1 1/8"	7'-1 1/8"
c	7'-10 1/8"	
d	4'-0"	
e	10"	

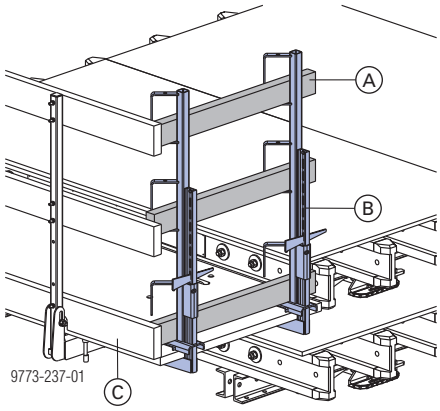
Sideguards on exposed platform-ends

Suitable sideguards must be provided on exposed ends of platforms.

NOTICE

Mount the sideguards while the table elements (to which the Dokamatic table platforms have previously been mounted) are still on the stack.

Handrail clamp S



A	Guardrail plank min. 2"x4" (field)
B	Handrail clamp S
C	Dokamatic table platform

The sideguard consists of:

- Two Handrail clamps S
- 3 guardrail planks min. 2"x4" (field)

How to mount:

➤ Fasten handrail clamps onto the planking of the Dokamatic table platform using the wedges (clamping range 1" - 1’-5").

➤ Secure the guardrail planks to the loops on the handrail clamps with one d10 (28x65) nail per loop.

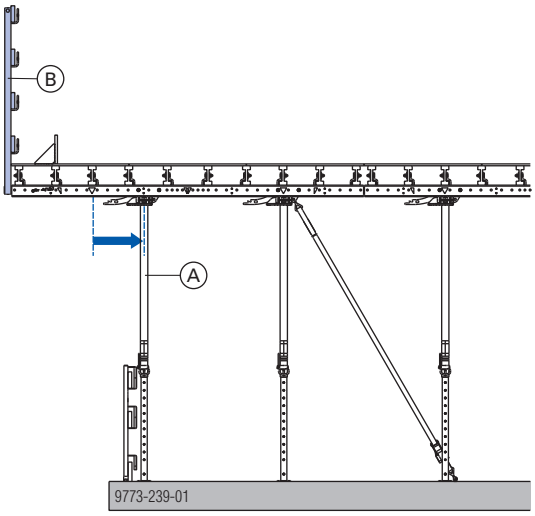
Follow the directions in the User Information booklet "Handrail clamp S"!

Edge table without platform

The floor prop **(A)** is located further towards the inside than on the standard table.

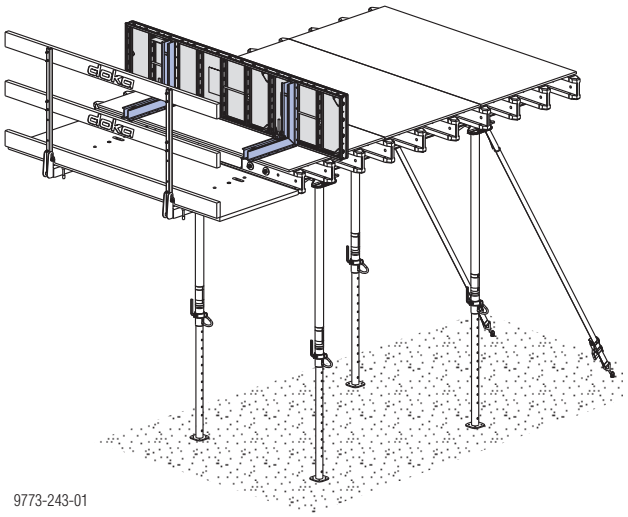
This leaves a sufficiently large area of table free to work on beyond the bulkhead.This leaves a sufficiently large area of table free to work on beyond the bulkhead.

Safety railings can be erected using e.g. the Handrail post T 1.80m **(B)** .

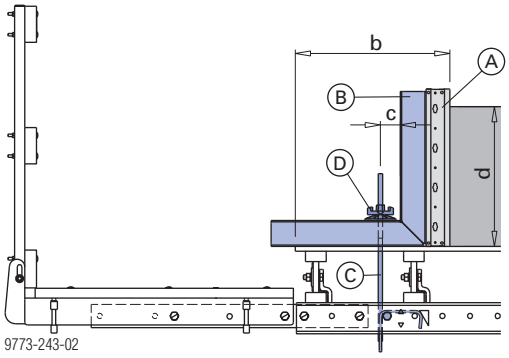


Slab bulkheads

with Framax universal corner waling



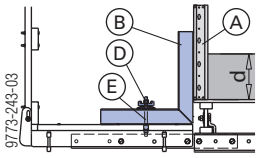
9773-243-01



9773-243-02

b ... Adjusting range from 1'-9 1/4"
c ... 2 1/4" to 6 1/4"
d ... Slab thickness max.1'-4"

Option: Universal corner waling mounted on table platform



9773-243-03

A	Frami panel
B	Framax universal corner waling
C	Dokamatic edge clamp incl. Connecting pin 10cm and Spring cotter 5mm
D	Super plate 15.0
E	Tie rod 15.0, approx. 10" long

Note:

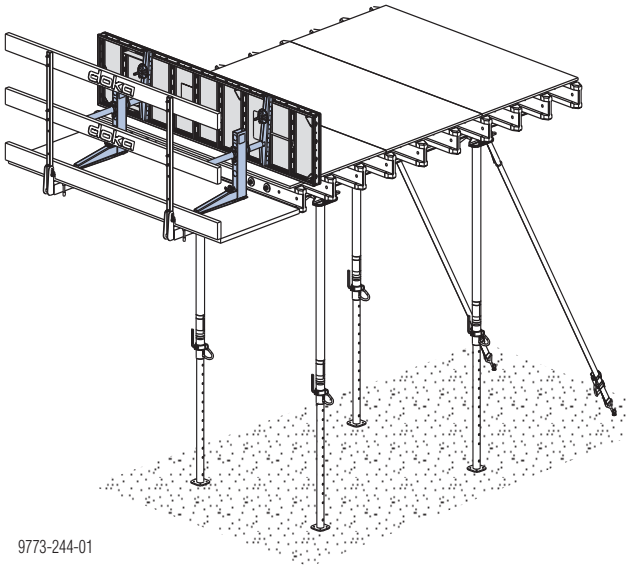
After having erected the formwork and made the last fine adjustments, firmly tighten the Super plate 15.0 once again (to pre-tension it).

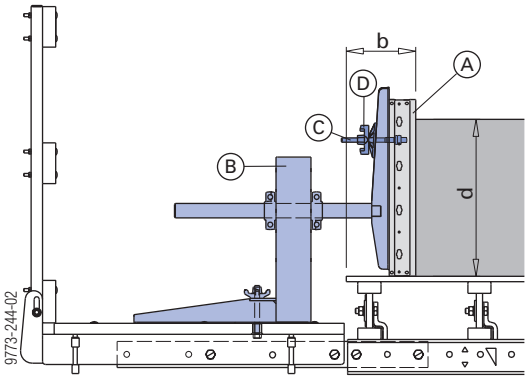
Use a 7/8" diameter bit to drill the hole through the form-ply.

Unneeded clamping holes should be closed off on the site with Universal plugs R20/25.

Wherever possible, use tables in the same way every time, e.g. always as edge tables - this prevents holes being drilled in the tables unnecessarily.

with Dokamatic end-shutter unit





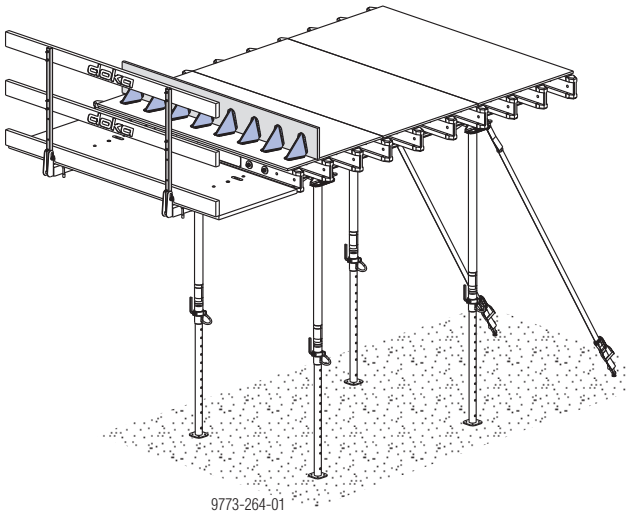
b ... Adjusting range of 2 3/4" to 1'-9 3/4"
d ... Slab thickness: See data-table

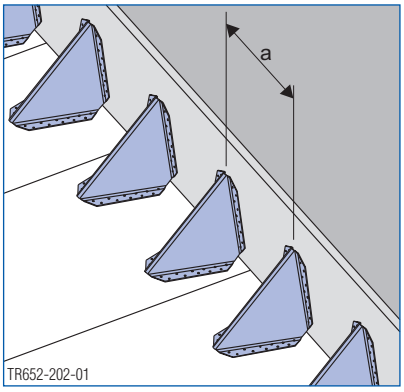
A	Frami panel
B	Dokamatic end-shutter unit 50cm
C	Frami universal fixing bolt 5-12cm
D	Super plate 15.0

Connecting devices between Dokamatic table platform and table	Platform width	Max. slab thickness d
Dokamatic platform profile 1.00m	3'-3"	1'-8"
Splice plate S Top50	3'-3"	1'-4"

Permitted loading of the Dokamatic table platform during pouring: 30 lbs/ft² (applies to all options where the bulkhead formwork is supported on the platform)

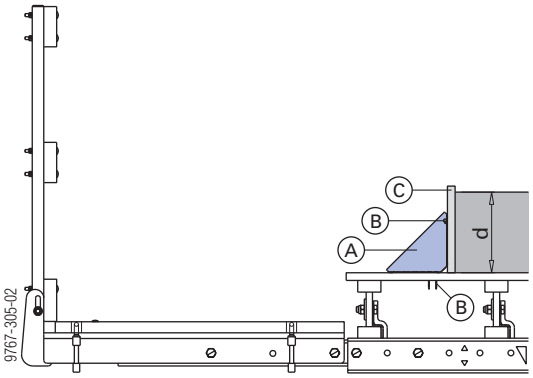
with Universal end-shutter support 30cm





		Max. influence width a for slabs of thickness		
Fastened with:	Configuration	8"	10"	12"
4 nails d16	A	19"	15"	7"
4 Spax screws 4x40 (fully threaded)	B	78"	70"	59"

Fastened with nails (configuration A)

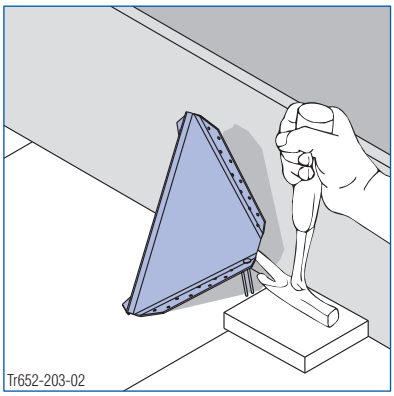


d ... Slab thickness max. 12"

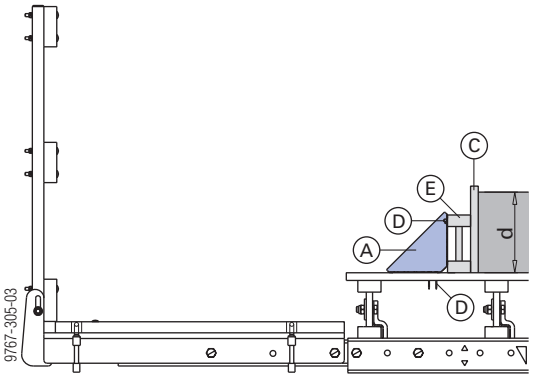
A	Universal end-shutter support 30cm
B	Nail d16
C	Birch plywood 3/4" or 18mm

Stripping tip:

- ➤ Take out the nails on the bulkhead 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



Fastened with Spax screws (configuration B)

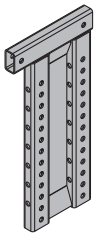


d ... Slab thickness max. 12"

A	Universal end-shutter support 30cm
C	Doka formwork sheet 3-SO
D	Spax screws 4x40 (fully threaded)
E	Doka beam H20

Edge table with downturned beam

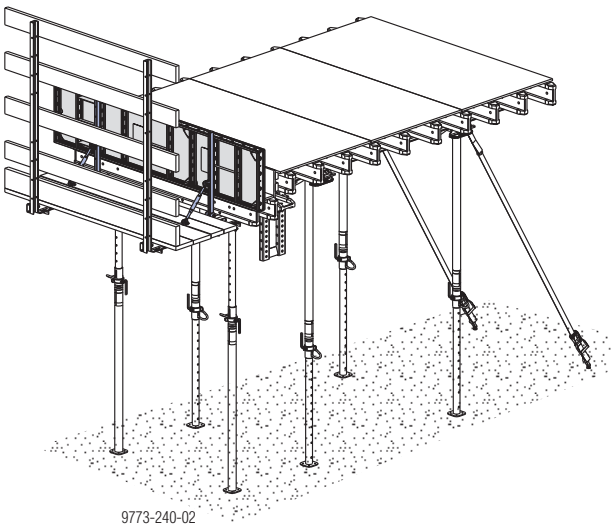
with Dokamatic S floor beam plate 30"

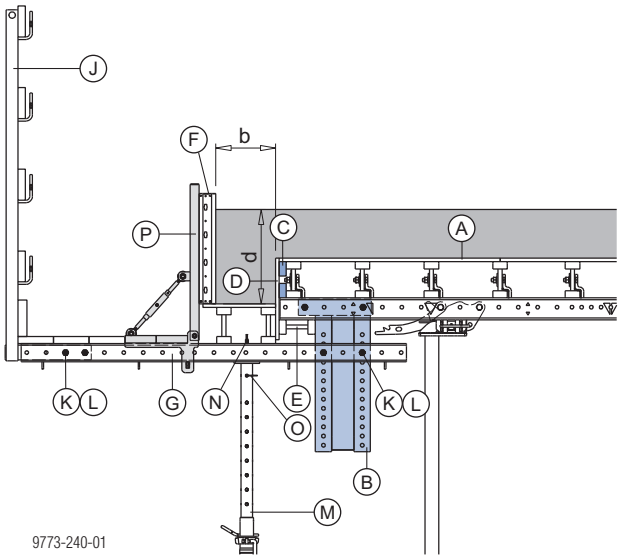


- For downturned beams of between 6" and 30", in 2" increments (intermediate dimensions possible by means of project-specific adaptation)
- Quick and easy to mount (Connecting pin 10cm)
- Support for side Doka beams H20
- Minimal planning costs/times
- Extra anchoring for custom constructions

with Bridge edge beam clamp T 0.40m

Suitable for bulkhead heights of up to 2'-1 1/2"





b ... depending on the length of the multi-purpose waling and on the load-bearing capacity of the floor props placed beneath it

A	Dokamatic table (standard version)
B	Dokamatic S floor beam plate 30"
C	Dokamatic front wood strip 4x8cm 2.60m
D	Plywood
E	Doka beam H20 top
F	Frami panel (size as needed)
G	Multi-purpose waling WS10 Top50
J	Handrail post T 1.80m
K	Connecting pin 10cm
L	Spring cotter 5mm
M	Floor prop Eurex
N	Dokamatic strut connection
O	Spring locked connecting pin 16mm
P	Bridge edge beam clamp T 0.40m

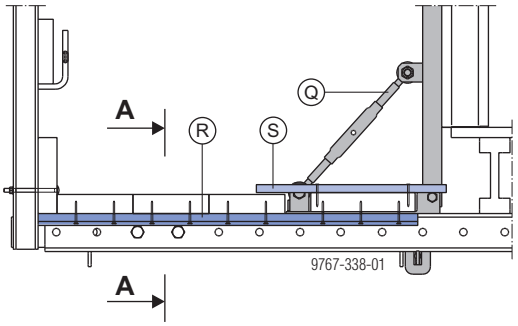
Note:

After having erected the formwork and made the last fine adjustments, tighten the clamping wedge of the Bridge edge beam clamp T until the hammer rebounds from the wedge.

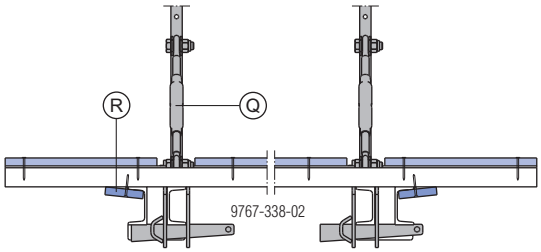
Influence width	Bulkhead height d
4'-6"	24"
5'-6"	22"

NOTICE

Secure deck boards with strips of formwork sheeting to prevent tipping.
Any cut-outs in the platform decking around the Bridge edge beam clamps can be covered with nailed-on strips of formwork sheeting where necessary.



Section A-A

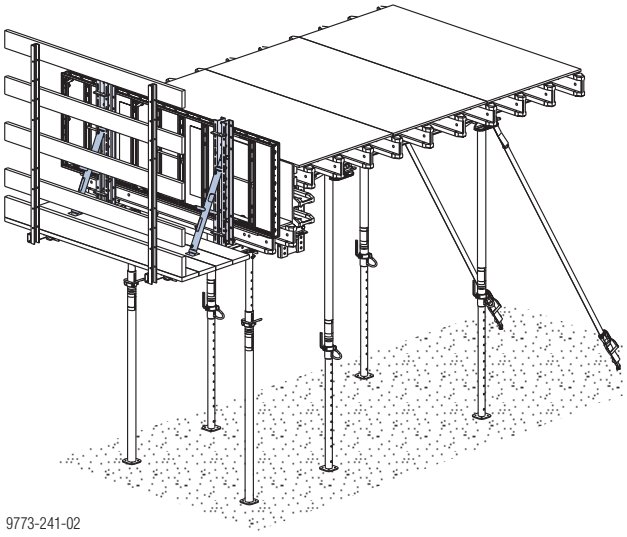


Q	Bridge edge beam clamp T 0.40m
R	Strip of formwork sheeting (to prevent deck-boards tipping)
S	Strip of formwork sheeting (to cover cut-outs)

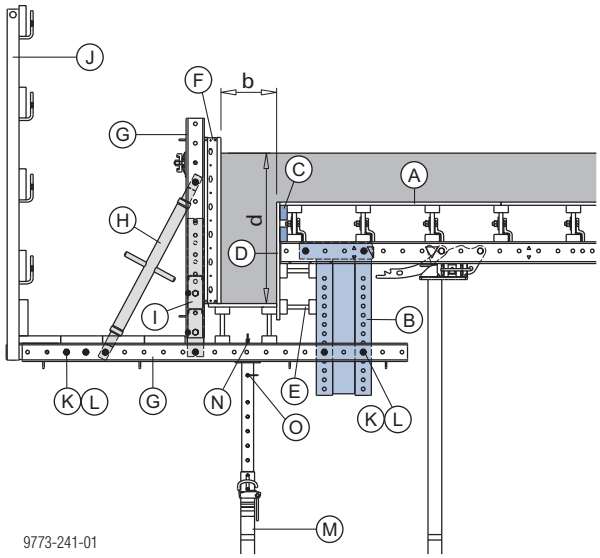
Note:
Always locate the formwork-sheet strips **(R)** on the outside U-section of the multi-purpose waling. Always locate the Bridge edge beam clamp T 0.40m on the inside U-section of the multi-purpose waling.

with spindle strut

Suitable for bulkhead heights of up to 3'-2"



On larger downturned beams, this option makes it necessary to use multi-purpose walings WU12.
A separate statical proof is required.



b ... dependent on the length of the multi-purpose waling and the load-bearing capacity of the floor prop
d ... 3'-2"

A	Dokamatic table (standard version)
B	Dokamatic S floor beam plate 30"
C	Dokamatic front wood strip 4x8cm 2.60m
D	Plywood
E	Doka beam H20 top
F	Frami panel (size as needed)
G	Multi-purpose waling WS10 Top50
H	Spindle strut T6 73/110cm
I	Splice plate S Top50
J	Handrail post T 1.80m
K	Connecting pin 10cm
L	Spring cotter 5mm
M	Floor prop Eurex
N	Dokamatic strut connection
O	Spring locked connecting pin 16mm

Repositioning

General instructions on repositioning

WARNING

- ➤ The transportation of persons is forbidden!
- ➤ Before repositioning the tableform, remove any loose items (e.g. fitting planks) from it.
- ➤ Check the connections between the floor props and the tableform before repositioning it.

NOTICE

Observe the following points when repositioning / traveling 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%
- Height of the tables min. 6’-7".
- Take particular care with:
  - height offsets
  - steps
  - floor holes and wall openings
  - tight or confined spaces
  - strong winds
- It is forbidden to use any other mechanical assistance for the traveling operation!
- For longer breaks between operations, or when the shifting device is permanently parked, it must not be carrying any formwork.

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, safety barriers, downturned beams, etc.
- Max. height of tables 13'-1" (with Dokamatic table frames max. 16'-4").
- Max. wind speed 45 mph.

If these conditions are not met, the tables must be secured with suitable **tie-backs** (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).

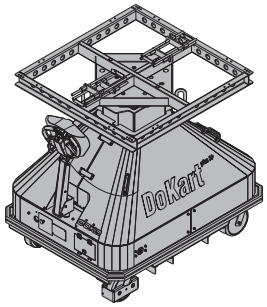
Horizontal repositioning / traveling

DoKart plus

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

The battery is designed to allow 1 whole day's operation before being recharged overnight.

The tableforms are lifted and lowered hydraulically.



Max. travel speed: 3 mph (walking pace)

Max. load, where load is applied centrally:

- without Stacking frame DF: 4300 lbs
- with one Stacking frame DF: 4118 lbs
- with two Stacking frames DF: 3937 lbs
- with three Stacking frames DF: 3757 lbs

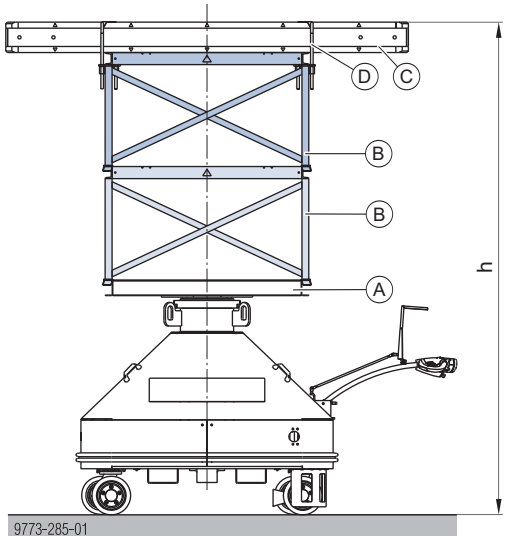
Follow the directions in the Operating Instructions!

Intended use

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

Height adjustment

The **Stacking frame DF** is used for increasing the height range.



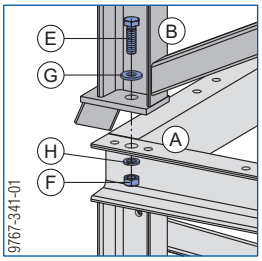
A	Supporting frame DoKart plus
B	Stacking frame DF
C	Distribution beam (Doka beam H20 2.65m)
D	Brace stirrup 8

Height ranges incl. distribution beams

Number of Stacking frames DF	h min.	h max.
0	5'-8 1/2"	11'-3 1/2"
1	8'-2"	13'-9"
2	10'-7 1/2"	16'-2 1/2"
3	13'-1"	18'-8"

Assembly instructions for Stacking frame DF:

➤ Fix the stacking frame to the carrying frame of the DoKart plus with M12 nuts & bolts etc. (in all 4 corners), or to another stacking frame that has already been so fixed.



Threaded-fastener material included in the scope of supply of the Stacking frame DF.

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

Spreader beam

NOTICE

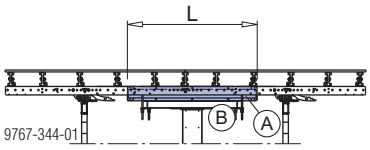
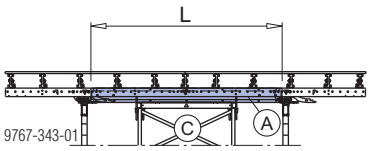
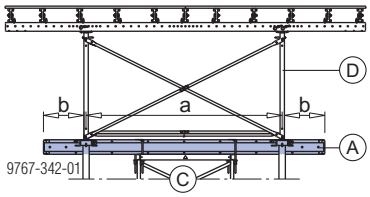
Before tableforms can be repositioned, 2 extra distribution beams must be installed.

WARNING

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

➤ For use of the DoKart plus without stacking frame, use a distribution beam with a length of **6' (1.80m)**!

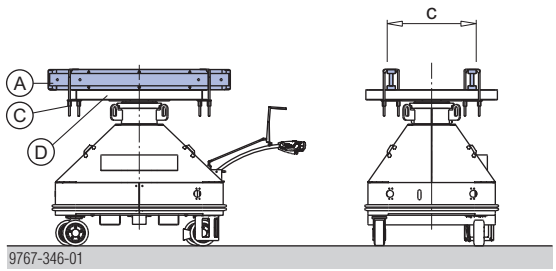
Selecting the right distribution beams:

	Length of distribution beams (Doka beams H20)
without stacking frame	**L = 1.80m** 
with stacking frame	**L_{min} = 2.65m** 
with Dokamatic table frame	**L_{min} = a + 3'-3 1/3"**  b ... min. 1'-7 2/3"

A Distribution beam (Doka beam H20)
B Supporting frame DoKart plus
C Stacking frame DF
D Dokamatic table frame 1.50m

Installing the distribution beams:

➤ Secure each distribution beam (Doka beams H20) to the carrying frame of the DoKart plus, or to the Stacking frame DF, with two Brace stirrups 8. Arrange the distribution beams symmetrically, spaced max. 2'-11 1/3" apart, measured across the outside edges.



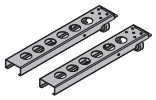
c ... max. 2'-11 1/3"

A Distribution beam (Doka beam H20)
C Brace stirrup 8 (four of these are supplied with the DoKart plus)
D Carrying frame of DoKart plus or Stacking frame DF

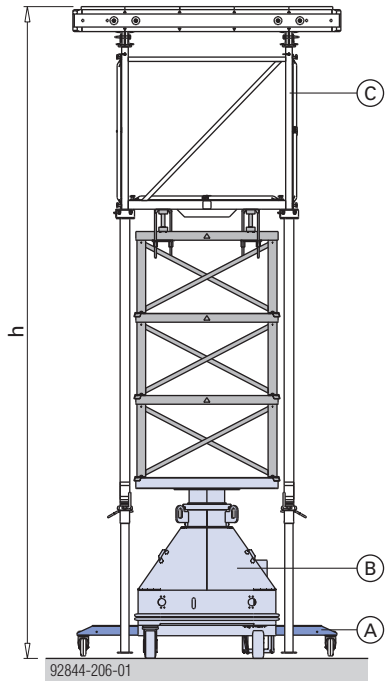
Extra precaution for tableforms with Dokamatic table frames

NOTICE

Before it can be used for **19' to 24' tableforms with Dokamatic table frames**, the DoKart plus must first be fitted with the **Extension set for DoKart plus**.



Follow the directions in the Operating Instructions!



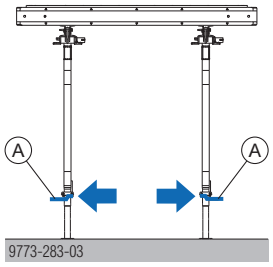
h ... 19' up to max. 24'

A	Extension set for DoKart plus
B	DoKart plus
C	Dokamatic table with Dokamatic table frame 1.50m

Positioning under the tableform

NOTICE

- 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 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, the DoKart plus is pushed under the table either from one end or one side of the table.

The supporting frames of the DoKart plus and the Stacking frame DF come with center markings (red arrows).
These markings make it easier to center the trolley and frame below the table.

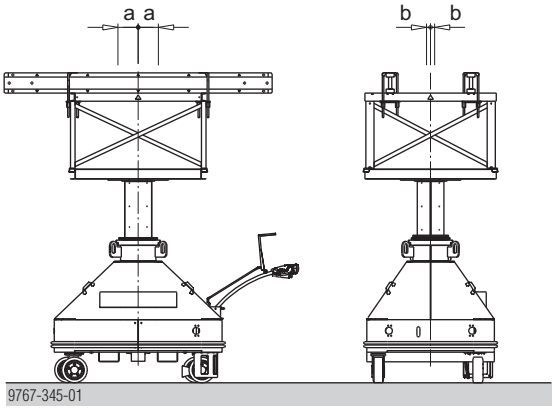
NOTICE

N.B. when working with unsymmetrical tables:

'Central positioning' means central in terms of the center of gravity

Take particular care with unsymmetrical tables (edge tables, tables with bulkheads).

Max. permitted offset from the load's center of gravity:
a = max. 8"
b = max. 4"



Travelling with the tableform

WARNING

Risk of tipping over!

- ➤ Do not extend the lifting tower of the DoKart plus farther than necessary.
- ➤ Retract the floor props all the way.
- ➤ Lower the tableform to max. 4" above the ground.
- ➤ Pull out the extensions on the DoKart plus, if applicable.

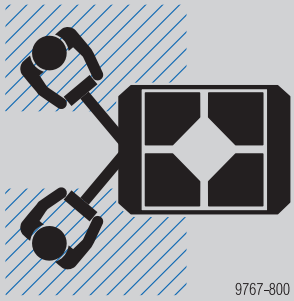
WARNING

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

- ➤ For use of the DoKart plus without stacking frame, use a distribution beam with a length of **6' (1.80m)**!

WARNING

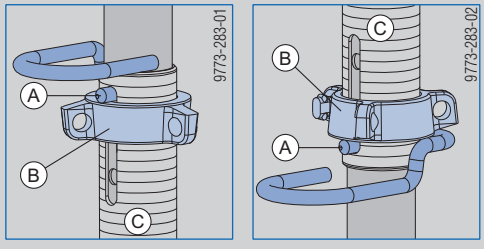
- ➤ Special care is necessary in the shown areas when turning the draw-bar of the DoKart plus!

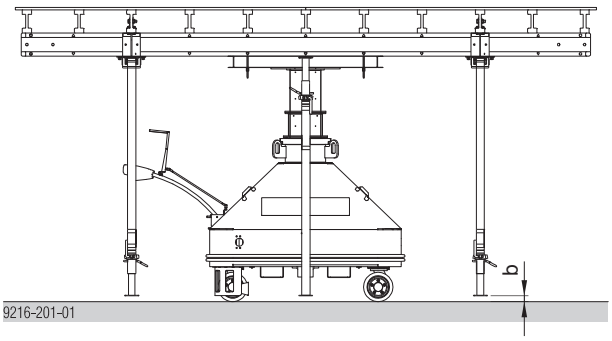


CAUTION

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

- ➤ Use the adjusting nut **(B)** to hold the fastening clamp **(A)** by tightening 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).



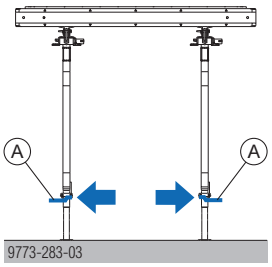


b ... max. 4"

Setting down and positioning the tableform

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.
- Turn the adjusting nut **(B)** until it is in contact with the fastening clamp.

NOTICE

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

Vertical repositioning with transport forks

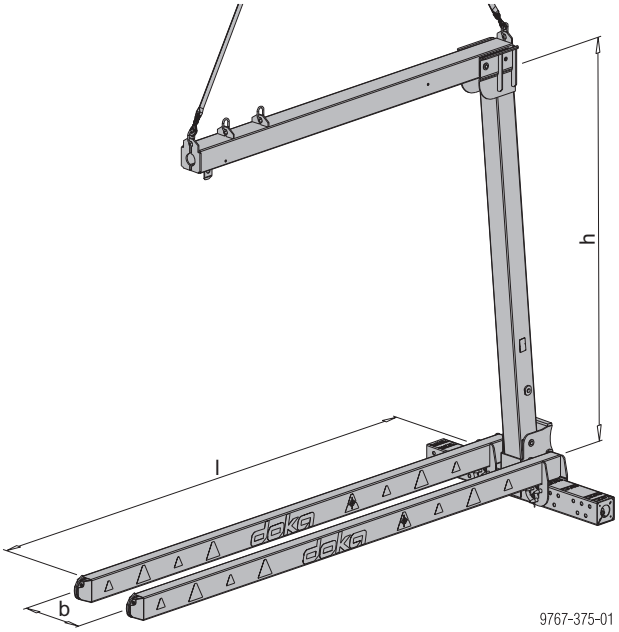
The transport fork can be used to move tableforms out from under the cast floor-slab and to reposition them.

Note:

- Ensure correct center-of-gravity position!
  - Required minimum width of the forks: $^1/_3$ of the width of the table
  - Required minimum length of the forks: $^2/_3$ of the length of the table
- For additional measures for repositioning tables carried at right angles to the forks or repositioning custom tables (downturned beams, 2 connected tables, ...), consult your Doka technician!

Transport fork DM 1.5t (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 stories



b ... 2'-11 $^1/_2$", 4'-6", 6'-8 $^1/_4$" or 7'-5 $^1/_2$"
l ... 19'-$^1/_4$"
h ... 13'-9 $^3/_4$"

Max. load-bearing capacity: 3300 lbs

Follow the directions in the Operating Instructions!

Table along the forks

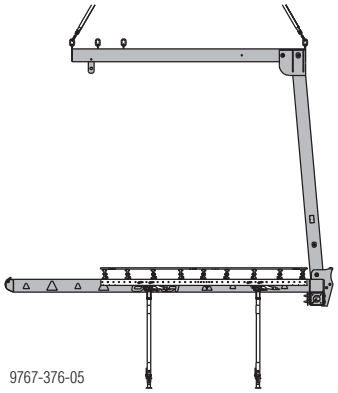
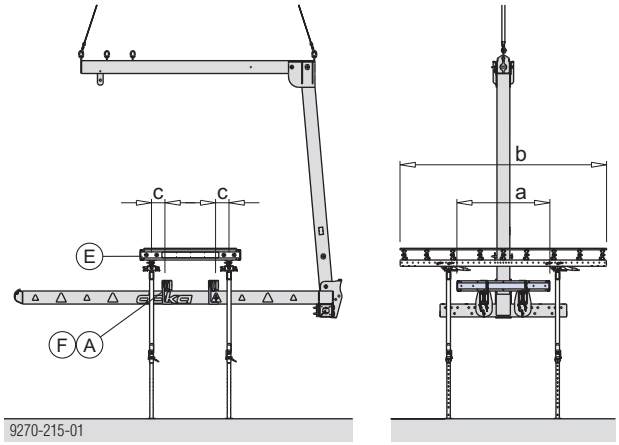


Table at right angles to the forks



a ... Beam length of extension (max. 5'-11")
b ... max. 3 x beam length of extension (otherwise table has to be secured)
c ... max. 12"

A	Extension clamp H20 for fork 1.5t
E	Dokamatic table
F	Doka beam H20

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.

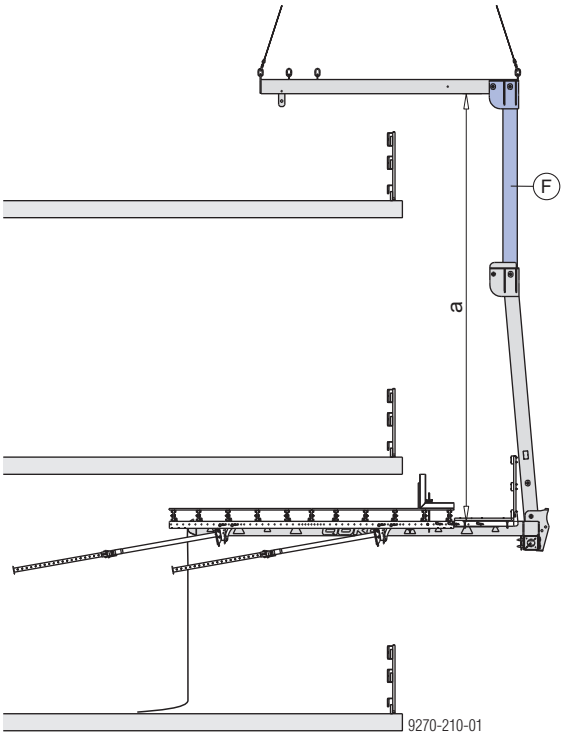
WARNING
Risk of tableform falling!

The Doka beams H20 deactivate the lever-latch so that it no longer acts as an anti-slide-off guard.

➤ With the Doka beams H20 installed, do not use the transport fork for regular lifting operations!

Repositioning tables over two stories

The Lifting extension bracket of the transport fork is lengthened with the Vertical extension DM 1.5t 3.30m.

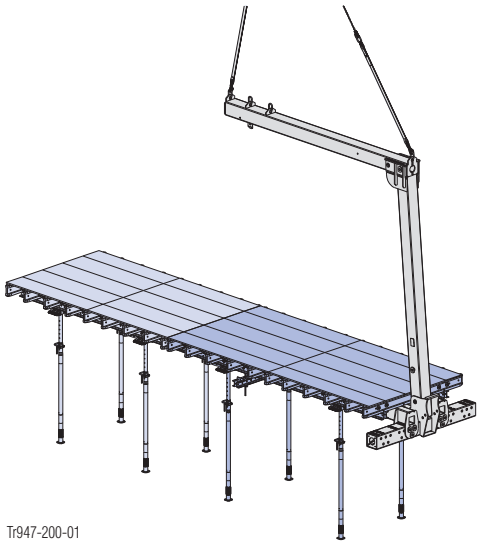


a ... 24'-7 $^1/_2$"

F Vertical extension DM 1.5t 3.30m

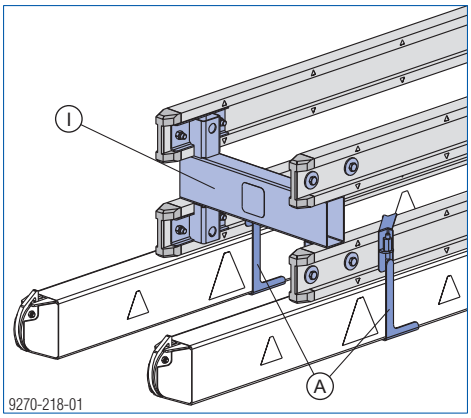
Repositioning 2 tables in a single lift

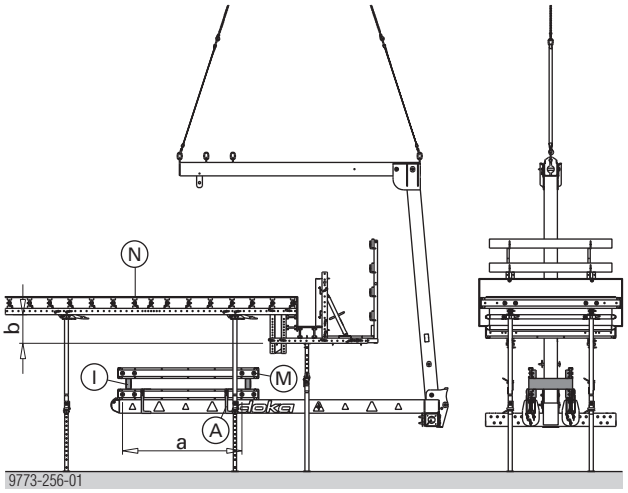
If necessary, the Transport fork DM 1.5t adjustable can be used to reposition 2 Dokamatic tables in a single lift.



Repositioning edge tables with downturned beams

On tableforms with downturned beams, the space left empty between the transport fork and the table can be bridged with e.g. a timber construction consisting of an Extension profile H20, Extension clamp H20 and Doka beams H20.





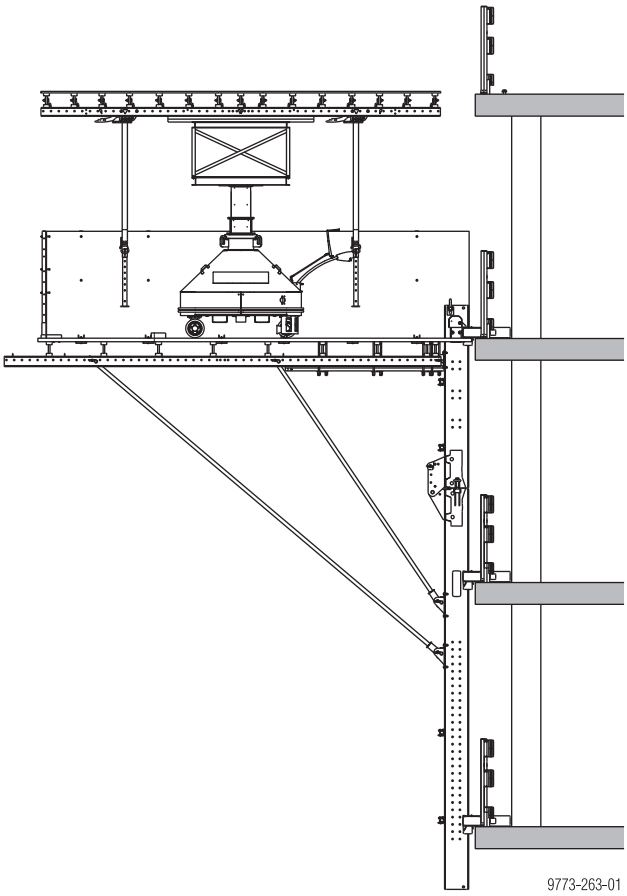
a ... 7'-4 $^1/_2$"
b ... max. 1'-11 $^1/_2$"

A Extension clamp H20 for fork 1.5t
I Extension profile H20 for fork 1.5t
M Doka H20 beam, 2.65m (4 beams)
N Edge table with downturned beam

Loading platform

An easy-to-reposition working platform, for moving materials and equipment in and out.

Using the Dokamatic lifting straps 13.00m, the Dokamatic tables are lifted off the loading platform and up to the next level.



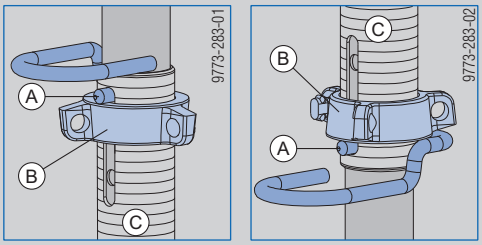
For more information, please contact your Doka technician.

Repositioning operation

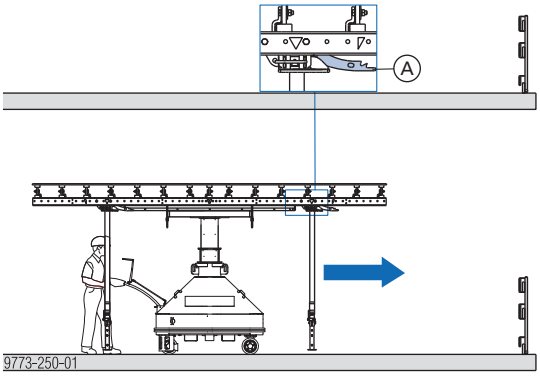
CAUTION

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)** by tightening 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).



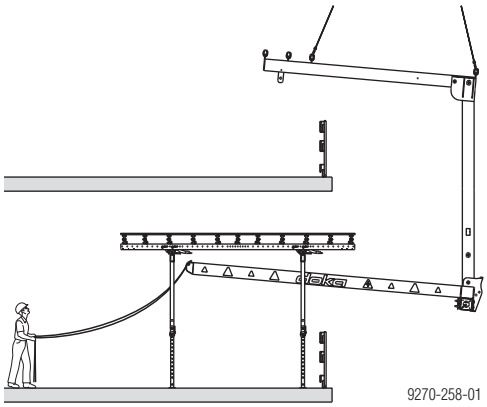
➤ Wheel the table to the pick-up point with the Dokart plus, making sure that the lever-latch of the swivel head always points in the direction in which the table is to be removed.



➤ Set the table down.

➤ Wheel out the DoKart plus from under the table (the next table can now be prepared for repositioning).

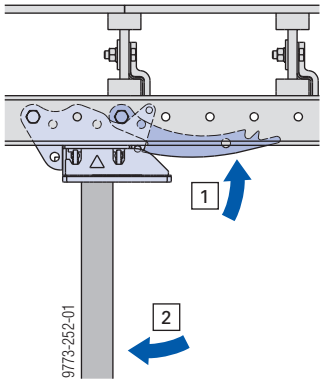
➤ Maneuver the transport fork under the table.



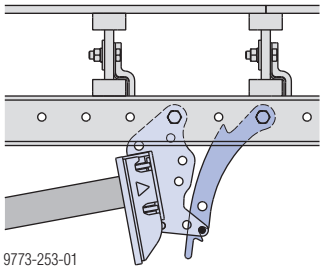
➤ Pick up the table with the transport fork.

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

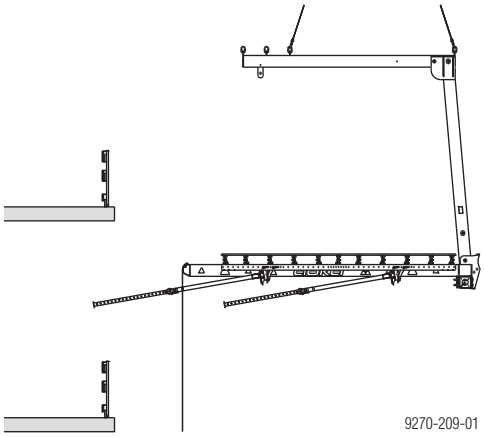
➤ Tilt up the prop.



➤ Snap the swivel head into the 75° or 90° position.

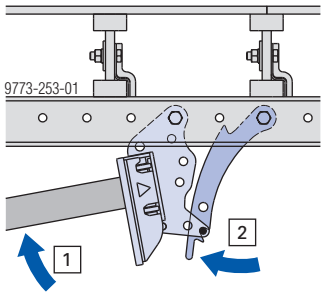


➤ Lift the table out, and up to the next story.



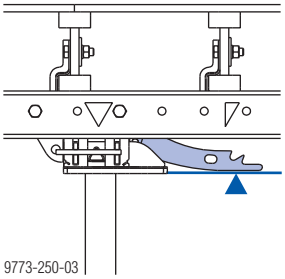
➤ Slightly raise the floor prop.

➤ Lift the lever-latch on the swivel head.

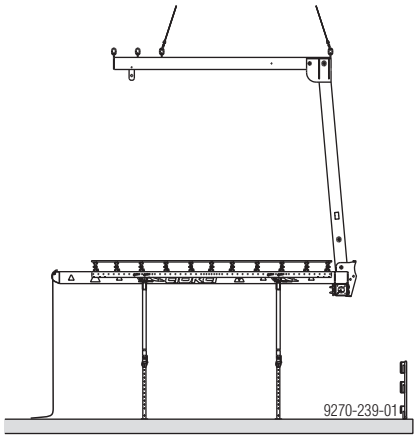


➤ Swing the floor prop down into its operational position and latch it in place.

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

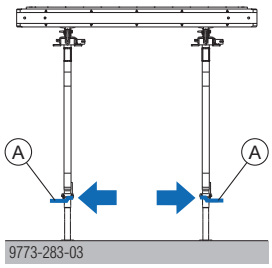


➤ Set the table down at its new location.



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.
- Turn the adjusting nut **(B)** until it is in contact with the fastening clamp.

NOTICE

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

Lining-and-leveling the Dokamatic tables

NOTICE

- Before lining and leveling, check whether all the props are under load. Only props that are actually standing on the ground can be lined-and-leveled.
- Check the wedge-clamped joins on the Dokamatic swivel head.

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

98017-202-01

NOTICE

Follow the directions in the section headed 'Setting down and positioning the tableform'!

The **Plastic mallet 4kg** is a handy tool for fine-positioning a tableform quickly without using any shifting devices. The mallet has been designed with just the right weight for this job, and with plastic of the right hardness.

Use correctly to avoid damage:

- ➤ Use in moderation, and only at the bottom of the floor props
- ➤ Use evenly on all floor props
- ➤ Give just one knock to each foot at a time, then move on to the next foot (max. swing distance 1'-7 $^{1}/_{2}$")

Integrated base makes it easy to put the mallet on "stand-by":

Table Lifting System TLS

Doka Table Lifting System TLS - for vertical lifting of Doka tableforms with no need for a crane

The Doka Table Lifting System TLS is used for moving Doka tableforms up to the next floor.

It is also suitable for transporting Doka equipment between floors, in suitable multi-trip packaging containers (always comply with the loading data and loading rules for the Table Lifting System).

NOTICE

'Passenger transportation' with the Table Lifting System TLS is forbidden. (Exception: for carrying out site-assembly and maintenance work)

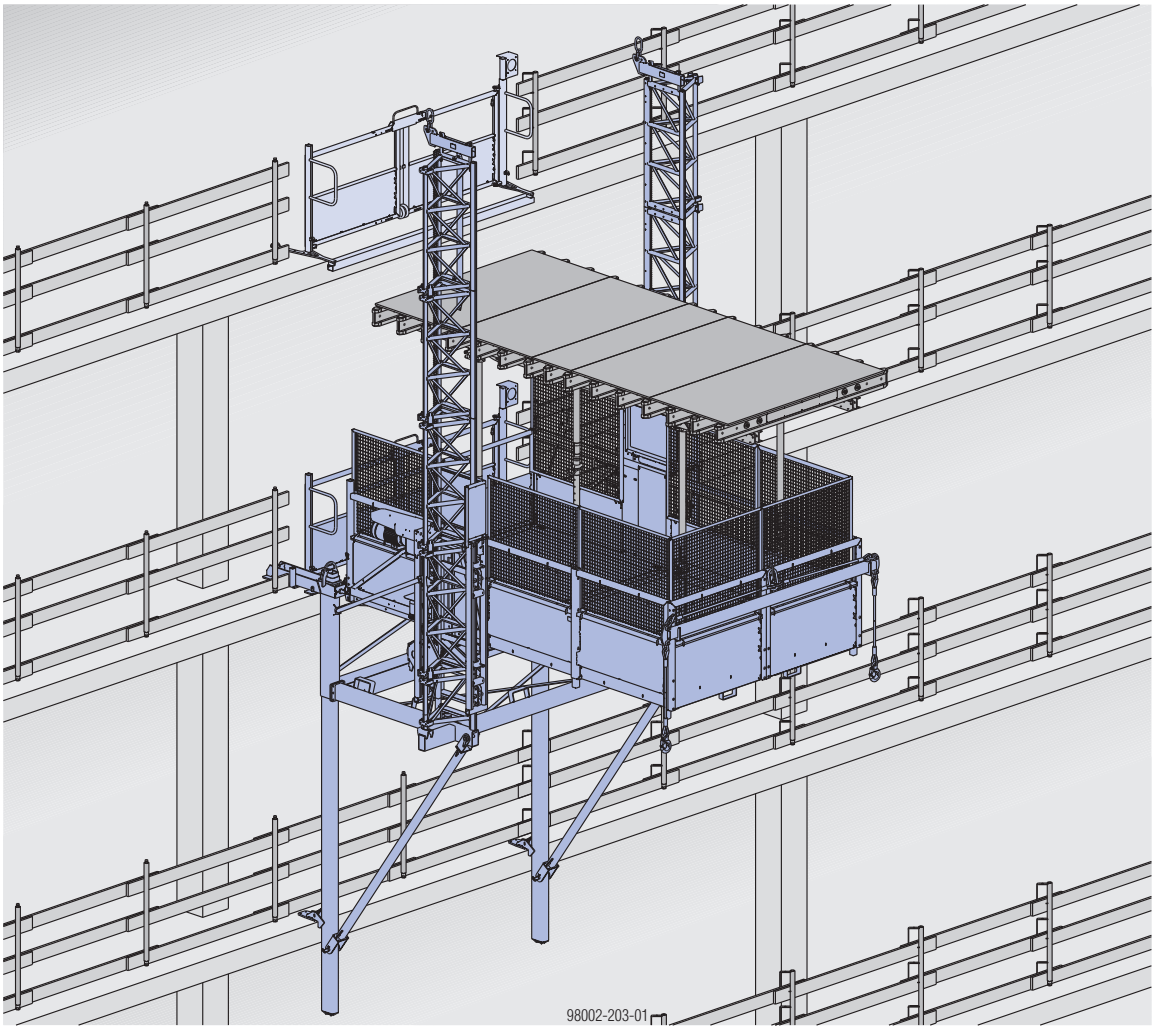
A comprehensive system of safety features makes for fast, safe working, both when operating the Table Lifting System itself and when cycling the tables.

With the Doka Table Lifting System TLS you can even carry on cycling tables safely during strong winds (of max. 45 mph).

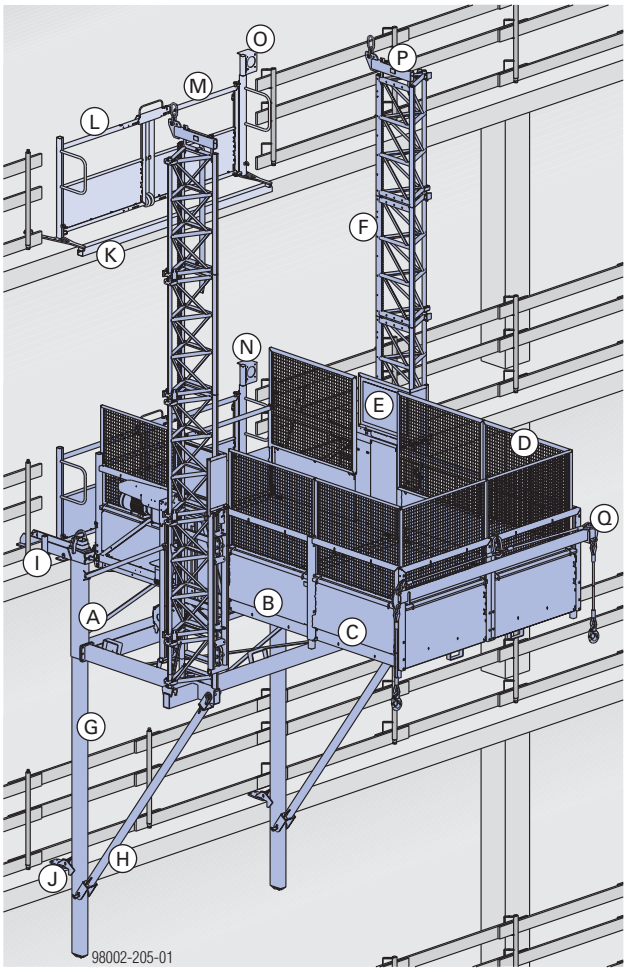
NOTICE

All work in connection with assembly & erection, dismantling, and the first time of putting into service, must be supervised by certified Doka specialists.

- The crew who are going to operate the Doka Table Lifting System TLS need **special skills and knowledge** which can only be passed on by certified Doka specialists.
- As proof that they have received such special instruction, a certificate is issued to persons who have undergone this training.
- Persons who do not have this certificate are not allowed to start up or use the Doka Table Lifting System TLS.



Product description



A	Basic unit S B TLS
B	Lifting platform TLS center 3.00x1.60m
C	Lifting platform TLS back 3.00x1.60m
D	Protective grating TLS 1.80m
E	Protecting metal sheet TLS
F	Lifting mast TLS 1.50m
G	Supporting profile TLS 5.15m
H	Pressure strut TLS 3.70m
I	Floor support TLS 2'-5"
J	Adjusting device TLS
K	Beam for Landing level safety gate TLS 2'-5"
L	Landing-level safety gate TLS with handle
M	Landing-level safety gate S B TLS with limit switch
N	Switchbox S B TLS ground control
O	Switchbox S B TLS landing-level safety gate
P	Lifting cross-bar TLS
Q	Lifting spreader beam TLS

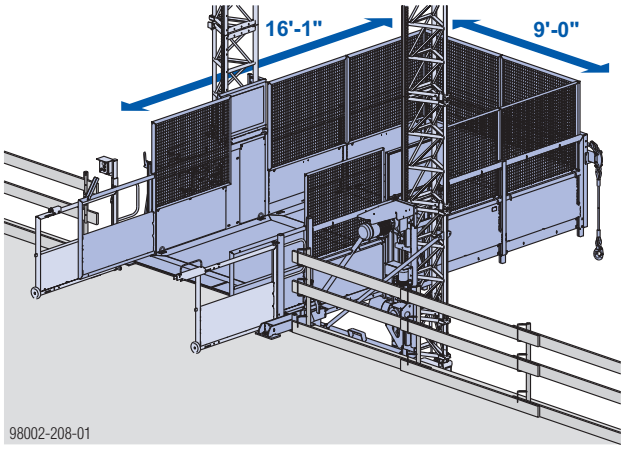
Bottom to top-floor height

- Standing on ground and working from ground level: max. 37'-9"
- when suspended from floor-slab: max. 49'-2"

Lifting platform TLS

Max. load:
when lifting: 3600 lbs
during loading: 5800 lbs

- Loading area:
  - Width: 9'-0" (10'-6" between lifting masts)
  - Length: 16'-1"



- Integral railings
- Integral loading gates
- Integral loading ramp

Landing-level safety gates

- For safeguarding the loading and offloading points
- Landing-level safety gates for every floor
- Integral control for every floor

Drive mechanism

The Table Lifting System is driven electromechanically.

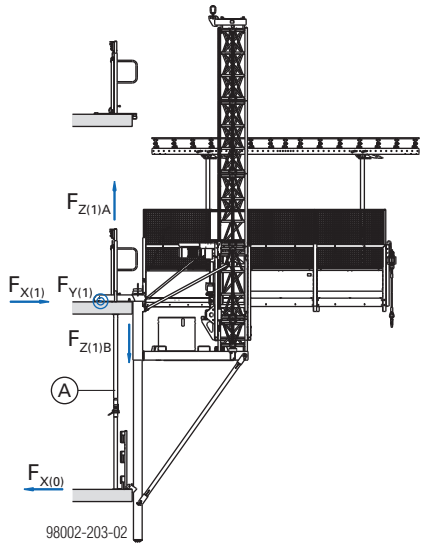
- Required supply voltage: 480V/60Hz (fuse protection min. 3 x 32A, slow-blow)

Lifting speed

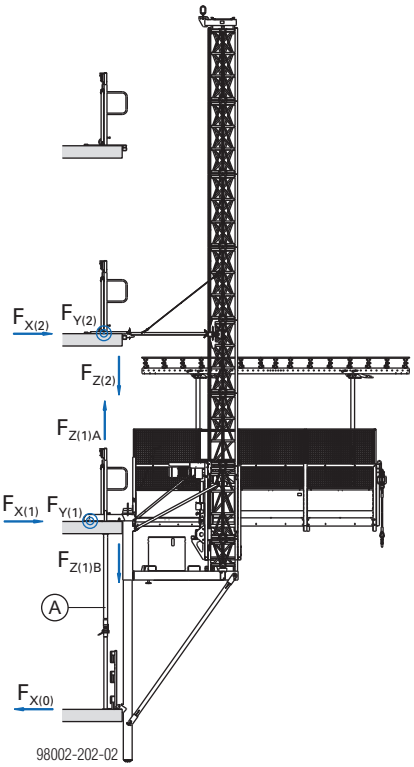
- Starting speed: 19'-8" / min.
- Lifting speed: 39'-4" / min.

Loading data

Anchoring forces per suspension point



A Temporary reshore (locate as statically required)



A Temporary reshore (locate as statically required)

Floor support TLS 2'-5" for max. 7 lifting mast sections (max. bottom to top-floor height 34'-5")

Inter-floor distance	Reaction force (vertical) $F_{Z(1)B,k}$	Forces on dowel			Shoring force (horizontal) $F_{X(0),k}$
		Tension $F_{Z(1)A,k}$	Shear $F_{Y(1),k}$ (90° to Fx)	Shear $F_{X(1),k}$	
8.7 ft	13.50 kip	2.90 kip	0.89 kip	7.19 kip	8.32 kip
9.8 ft	13.50 kip	2.90 kip	0.89 kip	6.29 kip	7.42 kip
14.8 ft	13.50 kip	2.90 kip	0.89 kip	4.05 kip	4.95 kip

Floor support TLS 2'-5" for max. 10 lifting mast sections (max. bottom to top-floor height 49'-2")

Inter-floor distance	Reaction force (vertical) $F_{Z(1)B,k}$	Forces on dowel			Shoring force (horizontal) $F_{X(0),k}$
		Tension $F_{Z(1)A,k}$	Shear $F_{Y(1),k}$ (90° to Fx)	Shear $F_{X(1),k}$	
8.7 ft	14.50 kip	3.70 kip	1.12 kip	7.60 kip	8.80 kip
9.8 ft	14.50 kip	3.70 kip	1.12 kip	6.70 kip	7.90 kip
14.8 ft	14.50 kip	3.70 kip	1.12 kip	4.50 kip	5.60 kip

Lifting mast anchoring TLS cross-bar 2'-5"

Inter-floor distance	Reaction force (vertical) $F_{Z(2),k}$	Forces on dowel Shear	
		$F_{Y(2),k}$ (90° to Fx)	$F_{X(2),k}$
8.7 ft	0.45 kip	2.25 kip	3.60 kip
9.8 ft	0.45 kip	2.25 kip	3.15 kip
14.8 ft	0.45 kip	2.25 kip	2.47 kip
23.0 ft	0.45 kip	1.12 kip	2.25 kip

Lifting mast anchoring TLS wall

Inter-floor distance	Reaction force (vertical) $F_{Z(2),k}$	Forces on dowel Shear	
		$F_{Y(2),k}$ (90° to Fx)	$F_{X(2),k}$
8.7 ft	0.45 kip	0.90 kip	4.50 kip
9.8 ft	0.45 kip	0.90 kip	4.50 kip
14.8 ft	0.45 kip	0.90 kip	4.50 kip
23.0 ft	0.45 kip	0.67 kip	3.82 kip

Subgrade reaction when stood on ground

Bottom to top-floor height	32'-9"
Total weight per mast-side	7800 lbs
Subgrade reaction	2980 psf

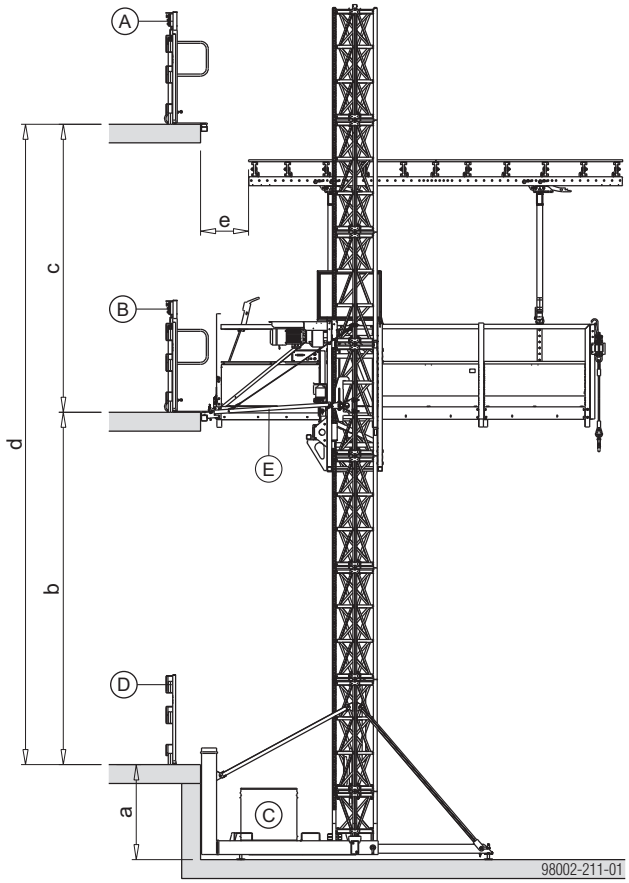
Areas of use, design variants

Follow the directions in the 'Doka Table Lifting System S B TLS' Operating Instructions!

Note:
Check the Doka Table Lifting System TLS after assembly and every time before start-up, as described in the Operating Instructions.

Standing on ground and working from ground level

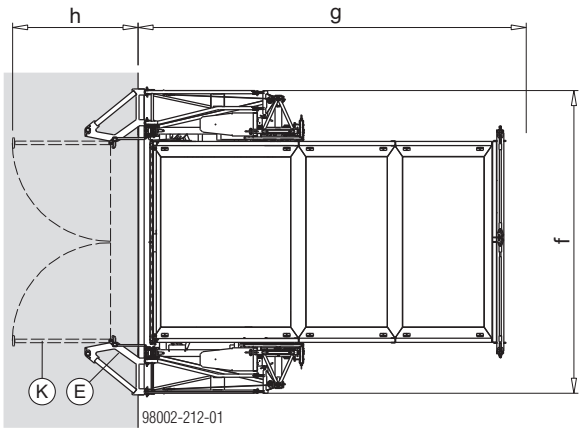
System dimensions:



a ... 4’-5" (landing level safety gates mounted on the floor supports)
a ... 5’-3" (landing level safety gates mounted on the beam for landing level safety gates)
b ... max. 23’-0" (center-to-center spacing of anchors)
c ... max. 14’-9"
(lifting height above the top lifting mast anchoring)
d ... max. 37’-9"
e ... min. 1’-0"

A	Switchbox TLS landing-level safety gate
B	Switchbox TLS ground control
C	Cable reel
D	Safety barrier at edge of slab
E	Lifting mast anchoring TLS

Space required:



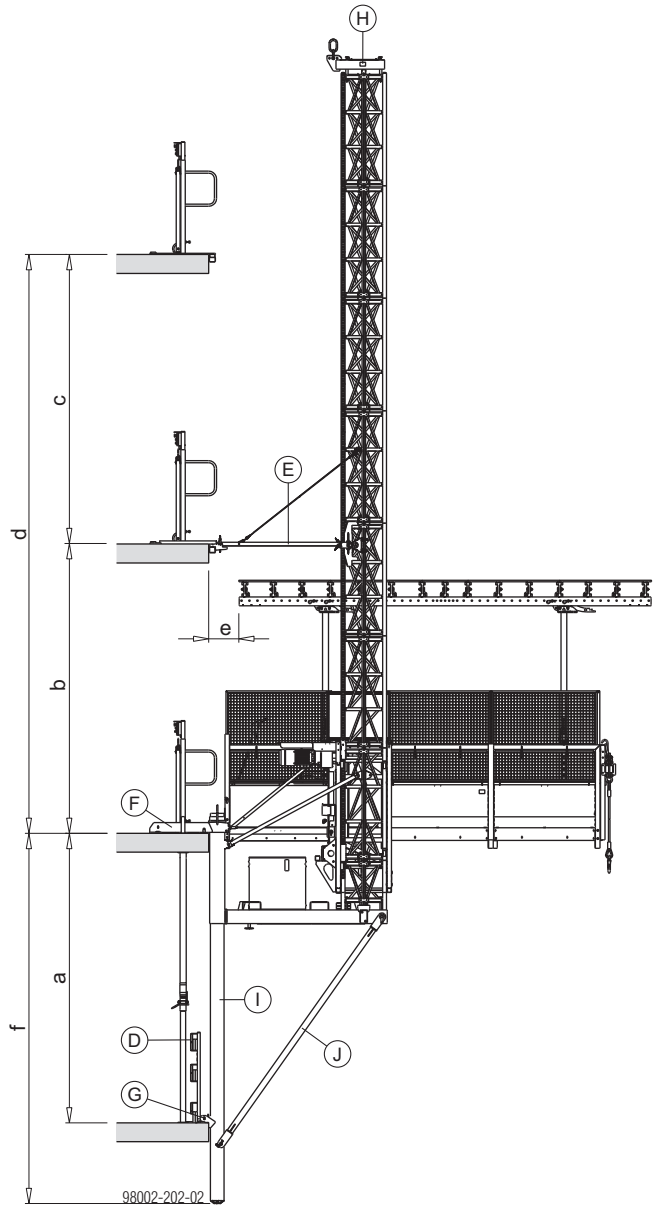
f ... 15’-0"
g ... 19’-0"
h ... 6’-0"

E	Lifting mast anchoring TLS
K	Landing level safety gate TLS

Note:
The Switch box TLS ground control and the Switch box TLS landing level safety gate each come with a 33’-0" control cable permanently attached.
If these switchboxes are too far (> 33’-0") away from the Switchbox for cable-reel, then Control cables TLS 20.0m will be needed as extension cables.

Suspended from the floor-slab

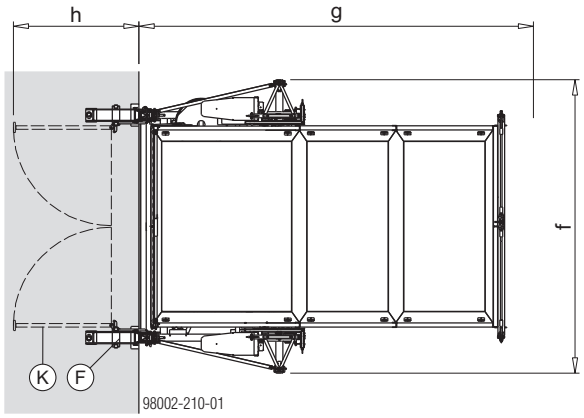
System dimensions:



a ... min. 8’-8" - max. 14’-9"
b ... max. 23’-0" (center-to-center spacing of anchors)
c ... max. 14’-9"
(lifting height above the top lifting mast anchoring)
d ... max. 48’-6"
e ... min. 1’-0"
f ... 16’-3"

D	Safety barrier at edge of slab
E	Lifting mast anchoring TLS
F	Floor support TLS 2’-5"
G	Adjusting device TLS
H	Lifting cross-bar TLS
I	Supporting profile TLS 5.15m
J	Pressure strut TLS 3.70m

Space required:



f ... 15’-0"
g ... 19’-0"
h ... 6’-0"

F	Floor support TLS 2’-5"
K	Landing level safety gate TLS

Note:

If the total lifting height does not exceed 14’-9" (1 story), then no lifting mast anchoring is needed.

Loading platform

The Doka Table Lifting System TLS can also be used as a loading platform.

Usage situation:

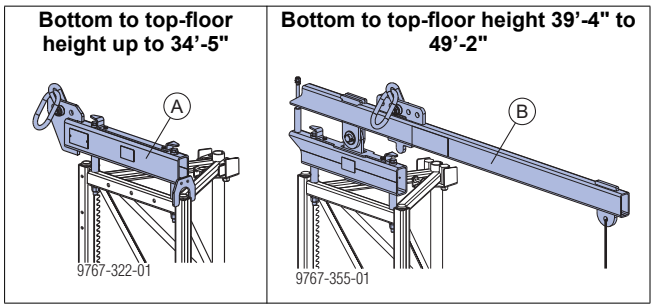
- After the top floor has been completed, the Doka tableforms are craned off the building using Dokamatic lifting straps 13.00m or Transport forks.

Repositioning and aligning the Table Lifting System

Follow the directions in the 'Doka Table Lifting System S B TLS' Operating Instructions!

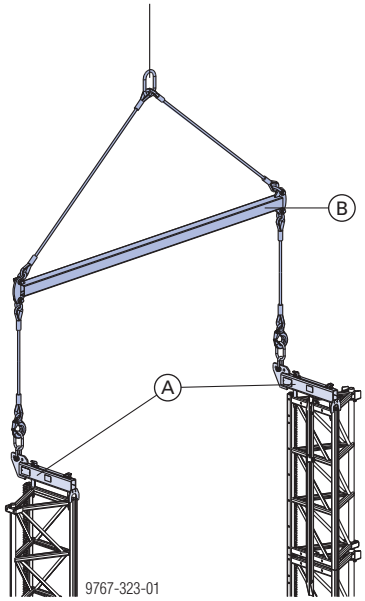
Note:
Only position the Table Lifting System in slab-edge zones that have no projecting parts.

A Lifting cross-bar TLS must be mounted to each of the Lifting masts TLS (with the lugs on the side nearest the motor) before the Table Lifting System can itself be lifted and repositioned.



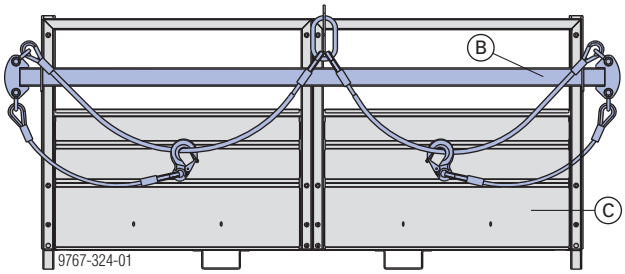
A Lifting cross-bar TLS 10.50m
B Lifting cross-bar TLS 15.00m

Later, the Lifting spreader beam TLS 67kN (which is guided by the crane hook) will be attached to these Lifting cross-bars TLS.



A Lifting cross-bar TLS
B Lifting spreader beam TLS 67kN

After the crane-lifting operation, the Lifting spreader beam TLS 67kN is replaced in the holding fixture on the Lifting platform TLS.



B Lifting spreader beam TLS 67kN
C Lifting platform TLS back 3.00x1.60m

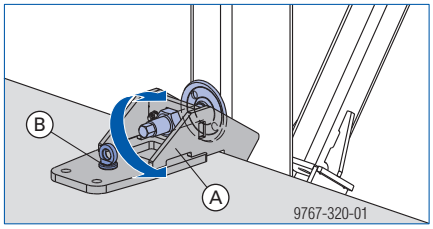
In order to shorten the distances traveled when setting up and stripping the formwork, it may be helpful to reposition the Table Lifting System several times on one floor.

Follow the directions in the 'Lifting spreader beam TLS 67kN' Operating Instructions!

Aligning the Table Lifting System

Depending on how far the slab-edges are out of true in the vertical, there are two possible alignment methods:

- Spindles in the Floor supports TLS
- Fitting wedges between the Supporting profiles and the floor-slab, or setting the distance with the Adjusting device TLS



A Adjusting device TLS
B Doka Express anchor 16x125mm

Lifting Doka tableforms

With the DoKart plus, only one person is needed on each story to maneuver the Doka tableforms. During the automatic lifting operation, the next Doka tableform is readied for lifting, while on the floor above, the previous tableform is moved to its proper location.

General instructions on repositioning

NOTICE

- Tables must stand stably, and be able to withstand wind loads, in every phase of the construction work.
- Max. wind speed during repositioning: 45 mph.
- No persons or unsecured objects are allowed to be on the table or the Table Lifting System TLS during lifting and traveling.

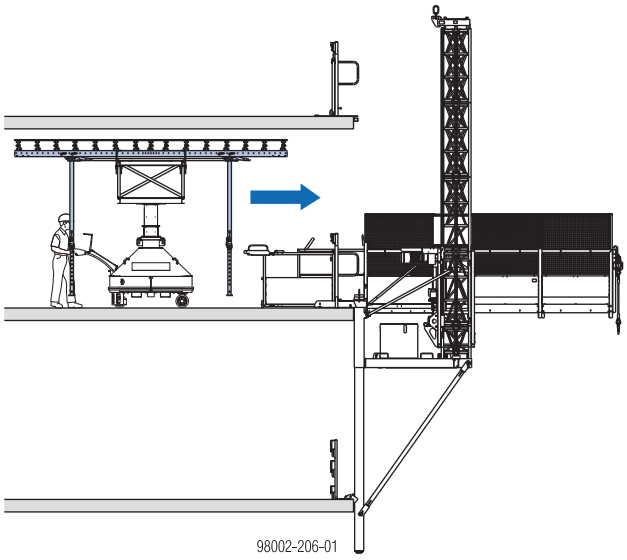
Repositioning operation

Floor below

➤ Send the Lifting platform TLS to the floor in question.

➤ Open the landing-level safety gates.

➤ Lower the loading ramp and open the gates of the lifting platform.



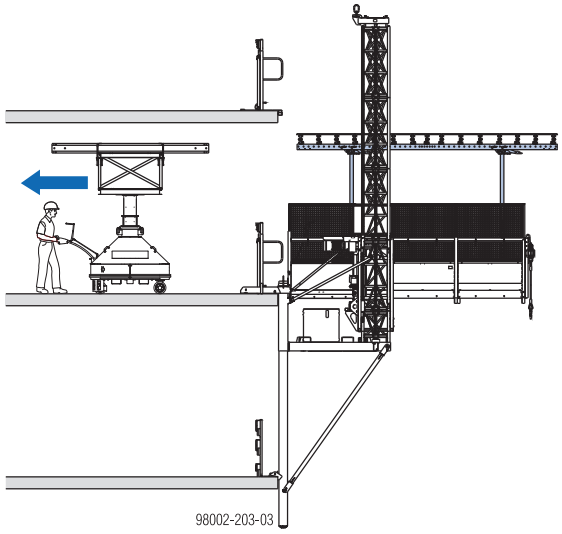
➤ Set down the table on the lifting platform.
The operator of the DoKart plus must always be on the building side.

➤ Wheel out the DoKart plus from under the table.

➤ Secure and tie down the table if necessary (required for edge tables with an integral downturned beam, platforms, ...).
There are crane eyes on the lifting platform for backstaying the Doka tables if necessary.

➤ Close the gates of the lifting platform and tilt up the loading ramp.

➤ Close the landing-level safety gates.



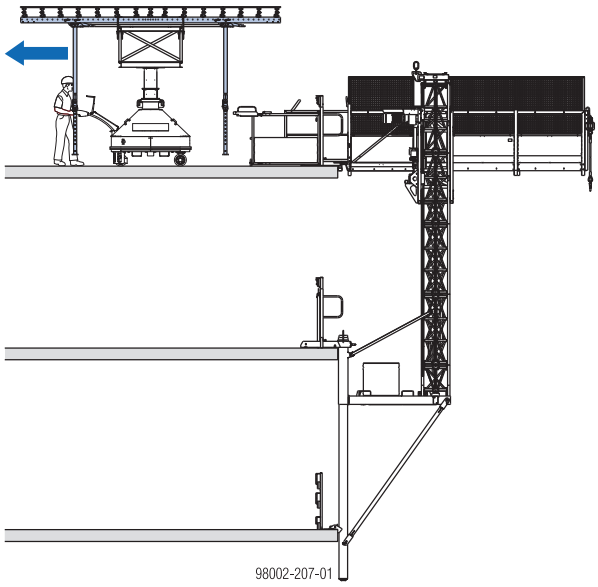
➤ Raise the table to the next floor on the lifting platform.

Floor above:

➤ Open the landing-level safety gates.

➤ Lower the loading ramp and open the gates of the lifting platform.

➤ Wheel the table off the platform.



➤ Close the gates of the lifting platform and tilt up the loading ramp.

➤ Close the landing-level safety gates.

➤ Send the Lifting platform TLS back down to the floor below.

Once the last table has been repositioned, the DoKart plus can also be raised to the next floor by the Table Lifting System.

Anchoring on the structure

NOTICE

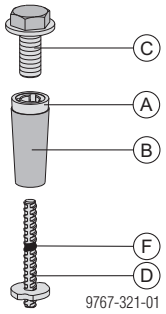
The system is usually anchored to the structure by the **Tie rod system 15.0**.

Risk of confusion!

➤ When the system is combined with Doka automatic climbing systems, the **Tie rod system 20.0** must be used throughout the entire project.

This also applies to combinations with guided climbing systems (e.g. Guided climbing formwork Xclimb 60).

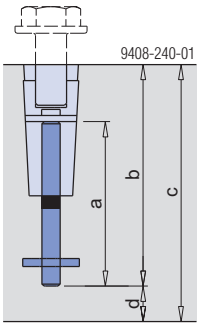
Positioning point and suspension point



A	Universal climbing cone 15.0
B	Sealing sleeve K 15.0 (expendable anchoring component)
C	Cone screw B 7cm
D	Stop-anchor 15.0 (expendable anchoring component)
F	Depth mark

- **Universal climbing cone 15.0**
  - The positioning point and the suspension point are both prepared using this one single type of cone.
- **Stop-anchor 15.0**
  - Expendable anchoring component for anchoring the universal climbing cone (and thus the climbing unit) in the concrete from one side.
- **Cone screw B 7cm**
  - On the positioning point – for fastening the universal climbing cone.
  - On the suspension point - for safe fastening of the floor support, of the beam for landing level safety gate, and of the lifting mast anchoring.

Stop-anchor



	Stop-anchor 15.0		
	11.5cm	**16cm**	**40cm**
a	4 1/2"	6 1/4"	1'-3 3/4"
b	6 2/3"	8 2/3"	1'-6 1/8"
c	**Where the concrete cover 'd' = 3/4"**		
	7 1/2"	9 1/2"	1'-7 3/4"
	Where the concrete cover 'd' = 1 1/6"		
	8"	9 7/8"	1'-7 1/3"

a ... tie-rod length
b ... installation depth
c ... minimum slab thickness
d ... concrete cover

Note:

Stop anchors of different lengths should not be mixed in the same project.

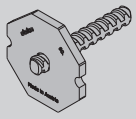
WARNING

The short **Stop anchor 15.0 11.5cm 90** has a much lower load-bearing capacity than the Stop anchor 15.0 16cm 55.

➤ For this reason, the short stop anchor is only allowed to be used on systems with low tensile loads at the anchoring location, such as on climbing systems inside shafts.

➤ If the geometry means that it is only possible to install the short stop anchor, then revised static calculation, with extra reinforcement steel, is required in cases where larger tensile loads may occur.

➤ The Stop anchor 15.0 11.5cm is only permitted for slab thicknesses < 9 1/2". For slab thicknesses ≥ 9 1/2", the Stop anchor 15.0 16cm (or larger) must be used.



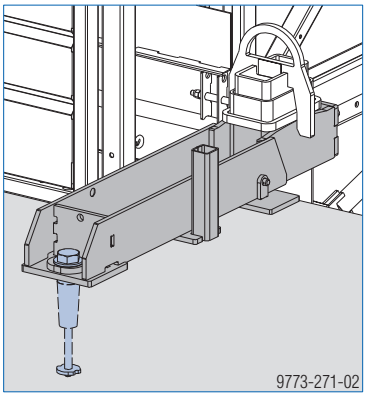
WARNING

The **Stop anchor 15.0 11.5cm 90** may accidentally come unscrewed from the universal climbing cone while low-viscosity concrete is being poured.

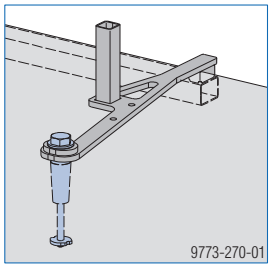
➤ Take additional precautions to prevent the Stop anchor 15.0 11.5cm 90 from being turned.

The following components are fastened to the Universal climbing cone by means of the Cone screw B 7cm.

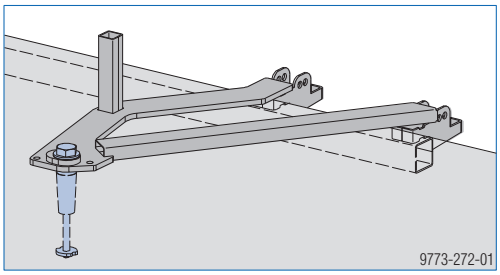
- **Floor support TLS 2’-5"**
  - For safe suspension of the Table Lifting System in all phases of the work.



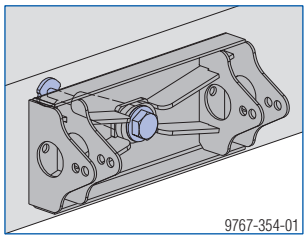
- **Beam for landing level safety gate 2'-5"**
  - For fixing the Landing-level safety gates.



- **Lifting mast anchoring TLS cross-bar 2’-5"**
  - For back-staying the Lifting masts TLS to the structure.



- **Lifting mast anchoring TLS wall**
  - As an alternative to the Lifting mast anchoring TLS cross bar 0.40m, for back-staying the Lifting masts TLS to the structure.



Dimensioning the suspension point

The required **cylinder compressive strength** of the concrete at the time of loading must be specified separately for each project **by the structural designer**. It will depend on the following factors:

- load actually occurring
- length of the stop anchor
- reinforcement / extra reinforcement steel
- distance from edge

The introduction of the forces, the transfer of these forces into the structure, and the stability of the overall construction, must all be verified by the structural designer.

The required cylinder compressive strength must be at least 1100 psi.

Preparing the positioning point

The instructions given below for preparing the positioning point apply, analogously, to all components that are fastened to the Universal climbing cone using the Cone screw B 7cm.

WARNING

- ➤ Always screw the Stop-anchor into the Universal climbing cone until it fully engages (use the depth-mark as your guide). Not screwing the anchor sufficiently far into the cone may subsequently lead to reduced load-bearing capacity and to the failure of the suspension point – resulting in injury and damage.
- ➤ Use only the Cone screw B 7cm for the positioning point and suspension point (head of screw is **red**)!

WARNING

Sensitive anchoring, suspension and connector components!

- ➤ Never weld or heat these components.
- ➤ Any components that are damaged or have been weakened by corrosion or wear must be withdrawn from use.

NOTICE

- The axis of the universal climbing cone must be at right angles to the surface of the concrete – maximum angle of deviation: 2°.
- The universal climbing cone must be embedded so that it is flush with the concrete surface.
- Do not exceed the tolerances for the locations of the positioning point and suspension point.
- Protect the thread from soiling.
- Universal climbing cones are supplied with Sealing sleeves K. **Every time** the cones are **reused**, fit them with **new sealing sleeves** first.

Tools needed:

- Reversible ratchet 3/4"
- Universal cone spanner 15.0/20.0 (for universal climbing cone)
- Extension 20cm 3/4"
- Box nut 50 3/4" (for Cone screw B 7cm)

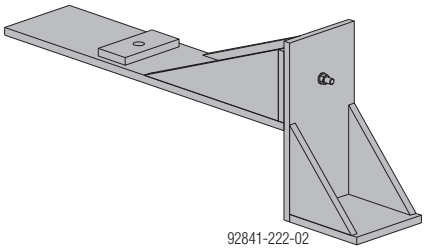
These tools are all included in the Tool box TLS.

➤ Push the sealing sleeve all the way onto the universal climbing cone.

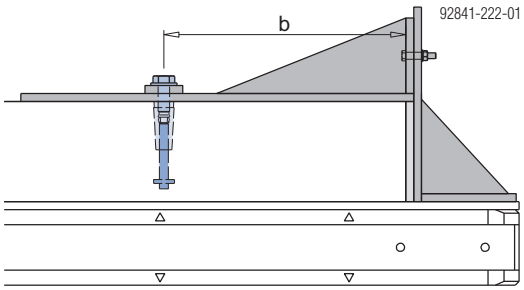
➤ Screw the stop anchor into the universal climbing cone, until it engages (up to the depth mark).

➤ Fasten the universal climbing cone to the installation template with a Cone screw B 7cm.

The installation template ensures that the positioning point is correctly located.



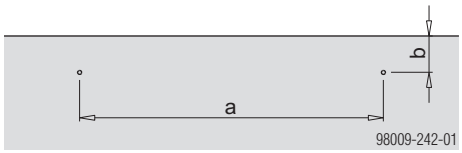
➤ Fix the installation template to the stop-end formwork.



NOTICE

➤ The positioning-point must align with the suspension point beneath it (± 3/8" horizontally).

➤ Tie the stop anchor tightly to the reinforcements with binding wire.



a ... 10'-8 3/4" (± 3/4")
b ... 2'-5" (± 3/8")

Pouring

➤ Before pouring, check all positioning points and suspension points once again.

- The axis of the universal climbing cone must be at right angles to the surface of the concrete – maximum angle of deviation: 2°.
- The universal climbing cone must be embedded so that it is flush with the concrete surface.
- Do not exceed the tolerances for the locations of the positioning point and suspension point.
- The sealing sleeve must be completely pushed onto the Universal climbing cone.
- The depth mark on the stop anchor must be right up against the universal climbing cone = must be screwed in to the full depth.
- Protect the thread from soiling.

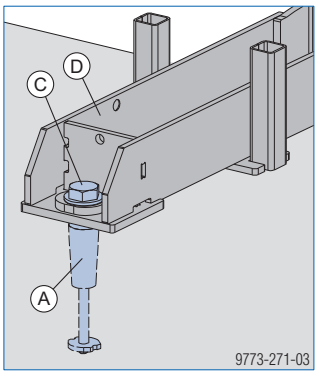
➤ Do not touch positioning-points with the vibrator.

➤ Do not place concrete directly above the positioning-point.

Preparing the suspension point

The instructions given below for preparing the suspension point apply, analogously, to all components that are fastened to the Universal climbing cone using the Cone screw B 7cm.

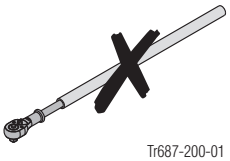
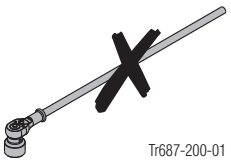
➤ Fix the Floor support TLS in the Universal climbing cone 15.0 with a Cone screw B 7cm. A tightening torque of 75 lbsft is sufficient.



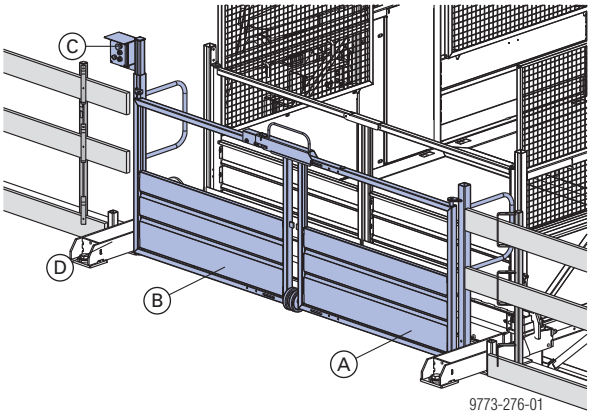
A	Universal climbing cone
C	Cone screw B 7cm
D	Floor support TLS

Forcibly tightening the Cone screw B 7cm any more than this may cause damage and even cause the form tie to break!

The only tool allowed to be used for screwing in and fixing the Cone screw B 7cm in the universal climbing cone is the Reversible ratchet 3/4".

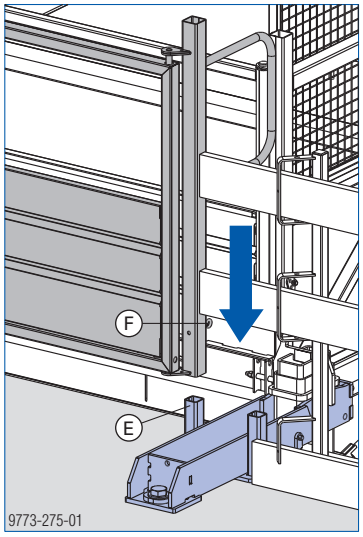
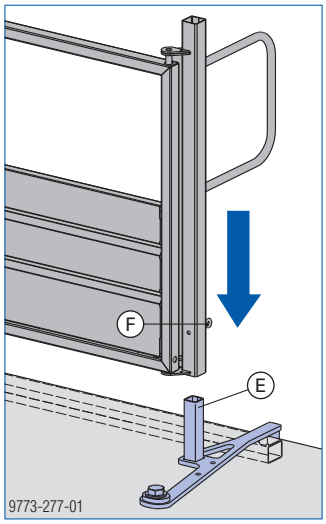
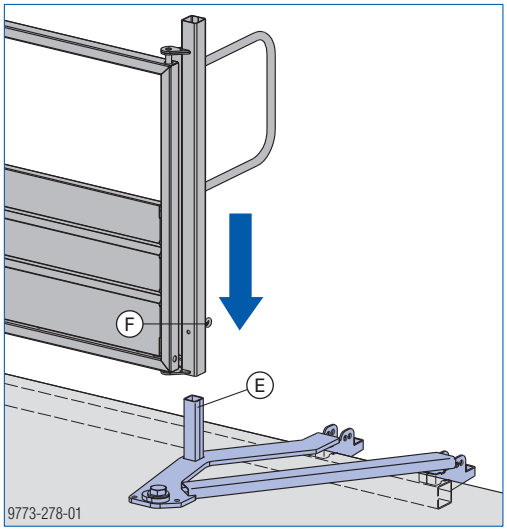
Reversible ratchet 3/4"	Reversible ratchet 3/4" with extension	Ratchet MF 3/4" SW50
 Tr687-200-01	 Tr687-200-01	 Tr687-200-01

Possible ways of connecting the landing-level safety gates



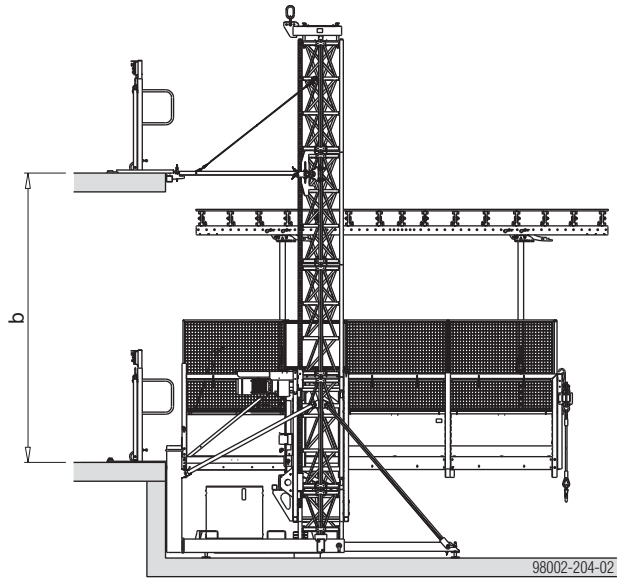
A Landing-level safety gate TLS with handle
B Landing-level safety gate S B TLS with limit switch
C Switchbox TLS
D Floor support TLS 2’-5"

Push the corner post of the landing-level safety gate down onto the mounting fixture **(E)** and secure with the eyebolt **(F)** .

Floor support TLS 2’-5"	Beam for Landing level safety gate TLS 2’-5"	Lifting mast anchoring TLS cross-bar 2’-5"
		

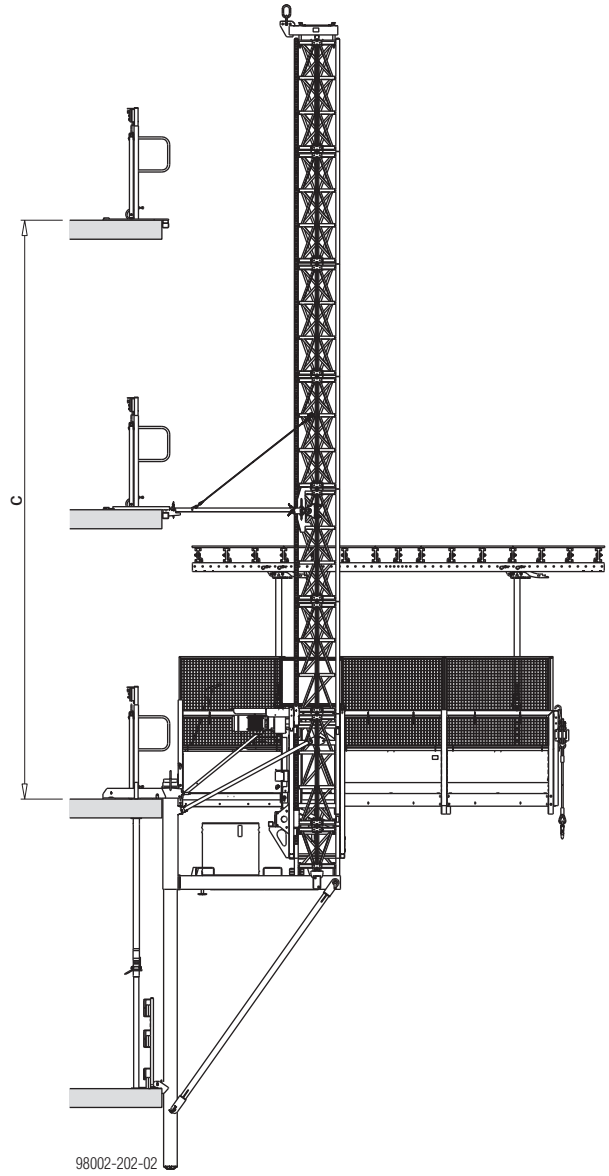
Computation of quantities for Lifting masts TLS 1.50m

Standing on ground and working from ground level



b ... Lifting height	Total number of Lifting masts TLS 1.50m
up to 9’-0"	4
up to 14’-0"	6
up to 19’-0"	8
up to 23’-0"	10
up to 28’-0"	12
up to 33’-0"	14
up to 37’-9"	16

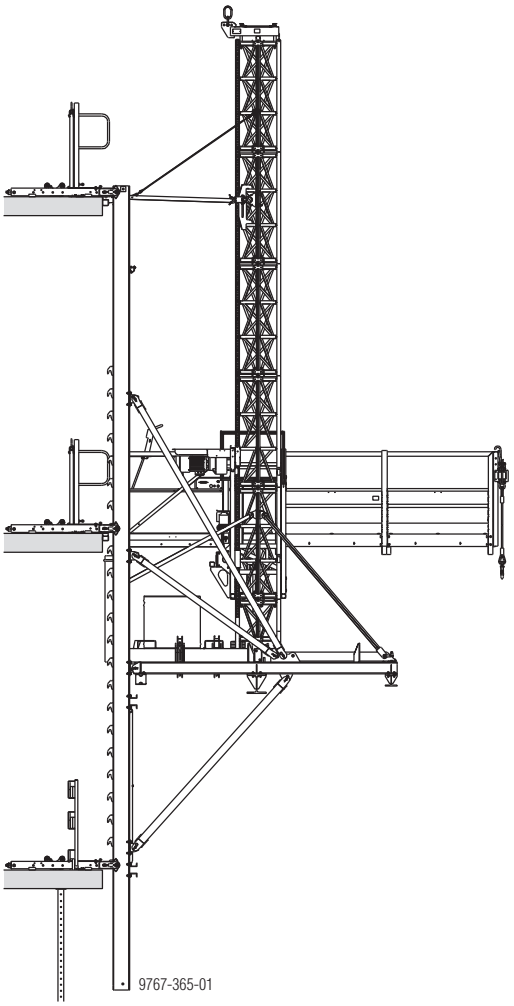
Suspended from the floor-slab



c ... Lifting height	Total number of Lifting masts TLS 1.50m
up to 9’-0"	4
up to 14’-0"	6
up to 19’-0"	8
up to 24’-0"	10
up to 29’-0"	12
up to 32’-9"	14
up to 38’-8"	16
up to 43’-8"	18
up to 48’-6"	20

Automatic climbing unit TLS

The Automatic climbing unit TLS is a lifting appliance that is used for automatic, fast and safe raising of the Table Lifting System TLS in construction operations, without crane assistance.



Follow the directions in the 'Automatic climbing unit TLS' Operating Instructions!

General remarks

Combining with other Doka systems

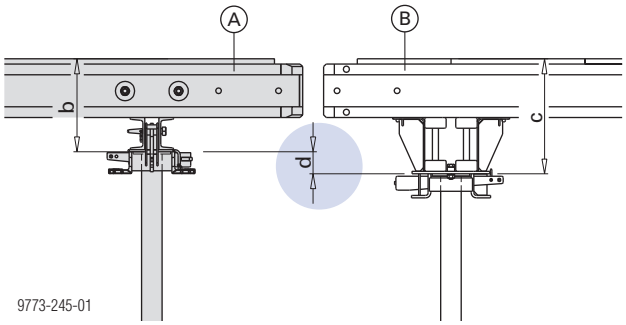
Combining with Dokaflex tables

NOTICE

The Dokamatic table **(A)** and the Dokaflex table **(B)** have different overall heights.

When selecting the props, allow for the difference d of 3 1/4"!

Combining with Dokaflex tables

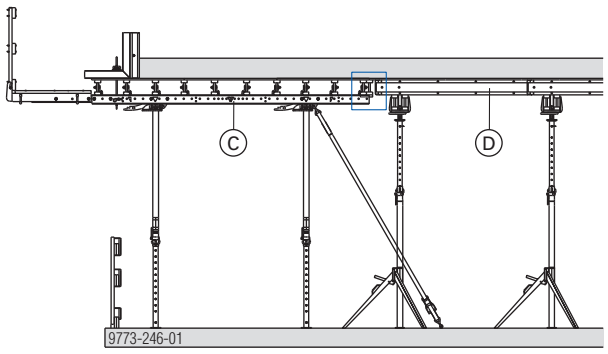


b ... 1'-1 5/8"
c ... 1'-4 7/8"
d ... Differece 3 1/4"

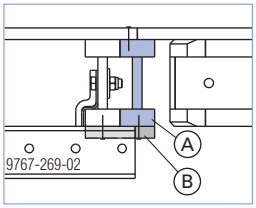
A	Dokamatic table
B	Dokaflex table

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

Combining with Dokaflex or Doka Xtra



Close-up of extra beam:



A	Doka beam H20
B	Nailing plank (site-provided)
C	Dokamatic table
D	Dokaflex or Doka-Xtra

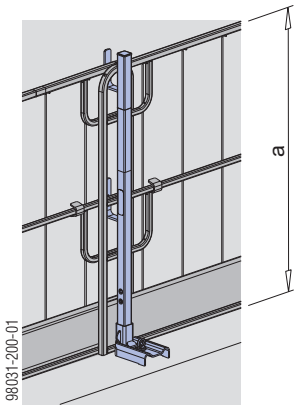
Note:
The beam **(A)** must be pre-installed!

Follow the directions in the 'Dokaflex' and 'Doka Xtra' User Information booklets!

Fall protection on the structure

Handrail post XP 1.20m

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



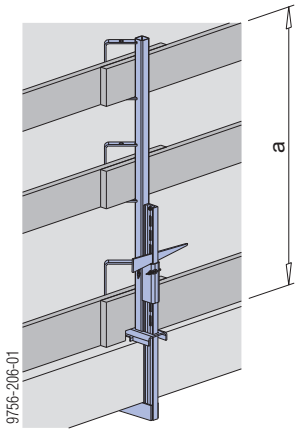
a ... > 3'-3" (1.00 m)

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

Note:
The Dokadek handrail post (US art. n° 741001314) can be used instead of the Handrail post XP. For more information, please contact your Doka technician.

Handrail clamp S

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

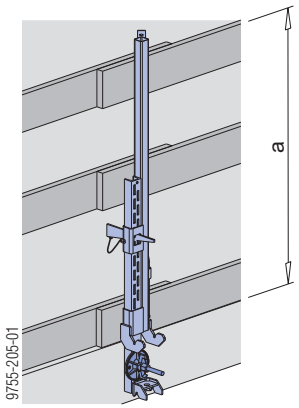


a ... > 3'-3" (1.00 m)

Follow the directions in the User Information booklet "Handrail clamp S"!

Handrail clamp T

- Fixed to embedded anchoring components or reinforcement hoops
- Guardrail planks or scaffold tubes can be used as safety barrier

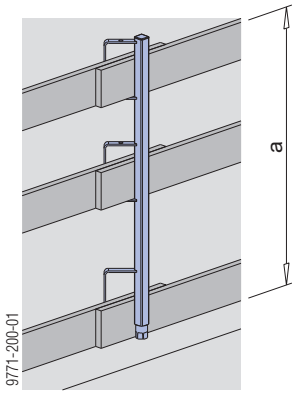


a ... > 3'-3" (1.00 m)

Follow the directions in the User Information booklet "Handrail clamp T"!

Handrail post 1.10m

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

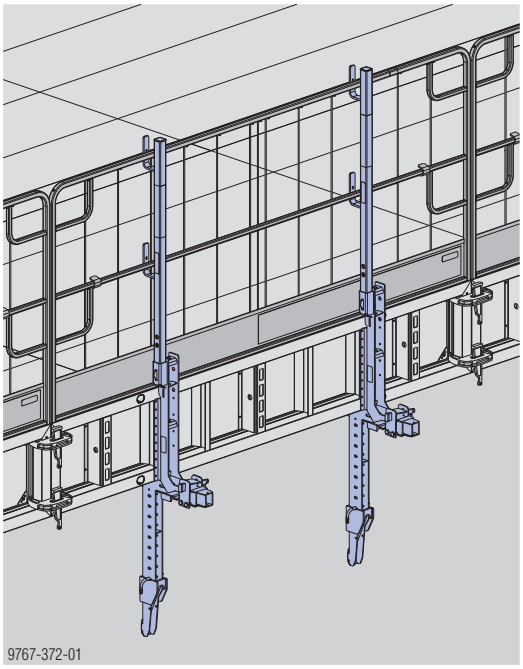


a ... > 3'-3" (1.00 m)

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

Doka slab edge clamp

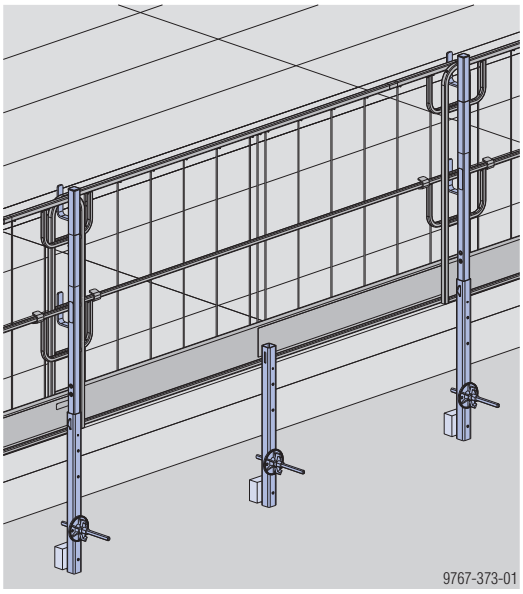
- Slab bulkheads and safety barriers in one system



Follow the directions in the User Information booklet "Doka floor end-shutter clamp".

Floor end-shutter profile XP

- Slab bulkheads and safety barriers in one system



Follow the directions in the User Information booklet "Edge protection system XP"!

Transporting, stacking and storing

Thanks to their compact design, up to 7 Dokamatic tables can be loaded onto a truck on top of one another - making for improved logistics and reduced shipping costs.

NOTICE

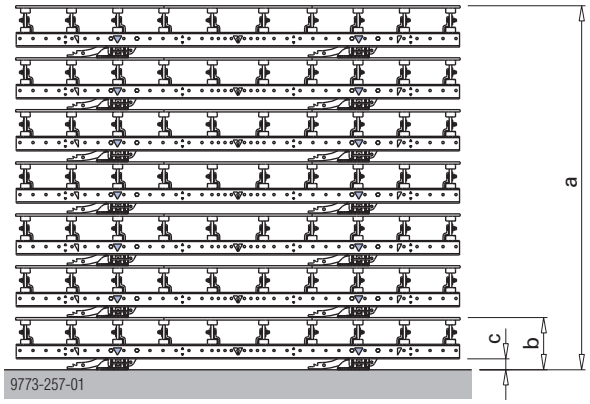
Observe the following safety instructions when transporting and storing pre-assembled table constructions:

- The table elements must be onloaded and off-loaded, transported and stacked in such a way that it is not possible for them to fall off, slip, tip over or slide apart.
- Table elements may only be set down and stacked on flat, firm surfaces.
- Spread-angle β of the slinging chains max. 30°.
- Do not detach a gang from the lifting straps until it has been safely set down.
- Never climb onto the stack of gangs.
- Before being transported by truck, the table elements must be strapped down securely.

Stacking, and delivery condition

NOTICE

Stack max. 7 elements on top of one another!



a ... 9'-10"
b ... 1'-4 7/8"
c ... 3 1/2"

Intermediate storage of tables

NOTICE

Observe the following regarding intermediate storage of 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.

Lifting by crane

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

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

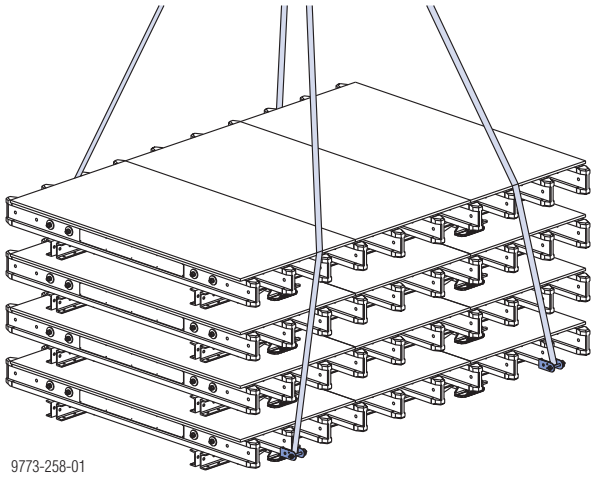
Max. load-bearing capacity:
4400 lbs / Dokamatic lifting strap 13.00m

- Strap shoes for safe lifting of stacked tableform superstructures.
- Anti-dropout safeguard for strap shoes
- A movable, 26'-3" long protective hose enables the table to stay in the horizontal when being lifted, and protects the strap fabric.

Follow the directions in the Operating Instructions!

Lifting of stacks

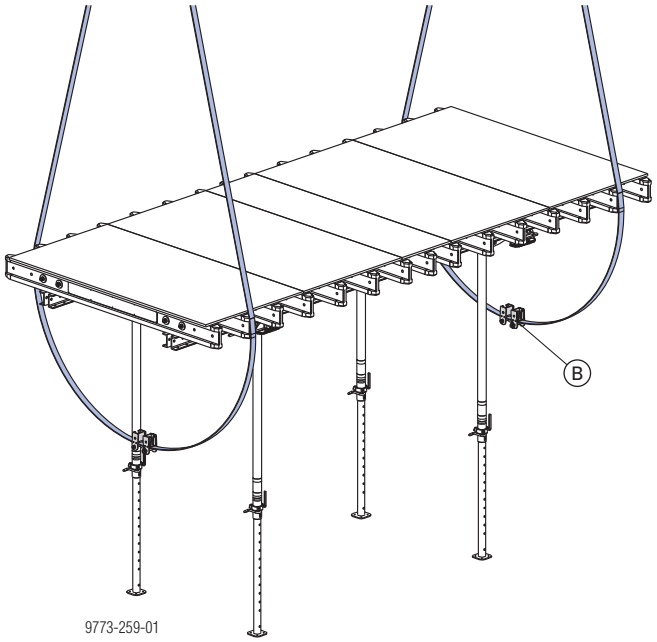
To lift **stacked tableform superstructures**, the Dokamatic lifting strap 13.00m is used **with integrated strap shoes**.



9773-258-01

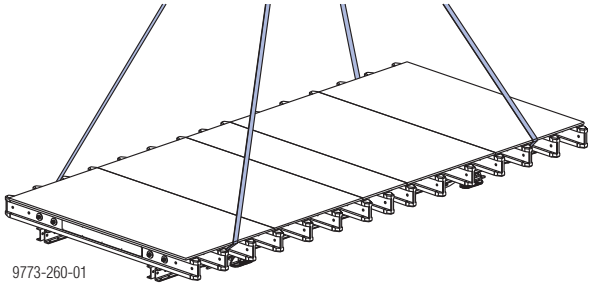
Lifting single tables

The integrated **strap shoes** are **not** pushed onto the secondary beams. This makes it possible to operate the Lifting strap 13.00m when working from ground level.
The strap shoes can either remain on the strap, or be detached from it as needed.



9773-259-01

B Strap shoes



9773-260-01

Shoring system, reshoring, concrete technology and stripping

What is a shoring system?

In multilevel cast-in-place building construction, freshly cast floors are supported by a system of formwork, shoring and reshores that distribute the weight of the concrete floor, reinforcement, formwork, shoring, reshores and construction live loads into the previously cast floors.

Once the newly cast floor has attained sufficient strength to support itself, the forming system, shores and reshores are cycled in such a manner as to avoid overstressing of the previously cast slabs.

The method of shoring and reshoring of slabs is critical to prevent the possibility of partial or total failure of the structure due to construction overloads. Improper reshoring or premature removal of the supports and inadequate lateral bracing causes most horizontal formwork systems failures.

It is imperative that a proper engineering analysis that considers both the construction load distribution and early age load carrying capacity of the floor-slab is performed before the shoring and reshoring operation begins.

Why put up reshoring props after stripping the formwork?

Depending on the construction sequence, reshoring props may be needed to carry **live loads** on the new floor-slab, and/or **concreting-loads** from the next floor to be poured.

Reshoring props have the job of spreading loads between the freshly cast slab and the floor beneath it. This load distribution will depend on the stiffness of the shoring/reshoring system, flexural stiffness of the slab and the rate of construction.

A compressible shore/reshoring system tends to shift more slab loads to the uppermost floors as compared to more rigid shore/reshores. An example is a comparison between wood and steel shoring and reshoring props with the wood being more compressible than steel.

The increase in slab stiffness, as a result of concrete strength gain during construction does not significantly affect the load distribution between slabs. An increase in the slab stiffness due to beams, drop panels and changes in slab thickness in a slab will result in a higher resistance to construction loads because of stiffer members within the slab.

Early age concrete strength gain does have a significant effect on the slab's resistance to cracking and deflection.

What guidelines can be used for shoring and reshoring?

The American Concrete Institute, Committee 347 has issued two references that provide basic guidelines for general formwork operations.

The first is ACI 347R-14 'Guide to Formwork for Concrete' and the second is ACI 347.2R-17 'Guide for Shoring/Reshoring of Concrete Multistory Buildings'.

Both of these guides describe methods to evaluate the effects of the shoring and reshoring operation that can be used by the engineer/architect to determine the structural behavior of the building during construction.

The contractor, formwork designer and engineer/architect should collaborate to develop a rational shoring/reshoring design that is economical, functional and safe.

Positioning the reshoring props correctly

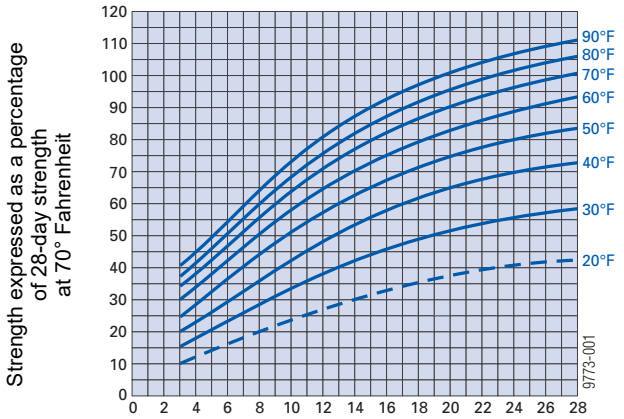
Reshoring props have the job of spreading loads between the new floor-slab and the floor beneath it. This load distribution will depend on the relationship between the rigidity of these two floor-slabs.

NOTICE

Ask the expert

As a rule, the question of using reshoring props should be referred to the responsible experts, regardless of the information given above.

Strength development in the new concrete



Effect of temperature of curing upon compressive strength of Type I, II and IV concrete. (The temperatures given are the mean temperatures encountered during the period of curing).

Deflection of the new concrete

The modulus of elasticity of the concrete develops more quickly than its compressive strength. At a compressive strength f_{ck} of about 60 %, the concrete's modulus of elasticity $E_{c(28)}$ has reached approximately 90 %.

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 stripping – 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
- 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.

Stripping the formwork from wide-spanned floor-slabs with support centers over 24'- 6" (7.5 m)

In the case of thin, wide-spanned concrete floor-slabs (e.g. in multistory car parks), the following points must be taken into consideration:

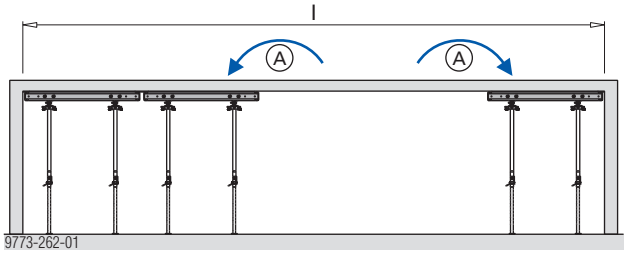
- When the formwork is removed from beneath these floor-slab spans (i.e. when the load is taken off the floor props), the floor props that are still in place are briefly subjected to additional loads. This can lead to overloading, and to the floor props being damaged.
- When planning and designing floor formworks for very thin concrete floor slabs, it is essential to allow for the **loads occurring during formwork removal**, as well as for the usual design loads.

Consult your Doka technician.

NOTICE

The basic rule is:

- Generally, when stripping out, **start at the middle of the floor slab (mid-span) and work toward the slab-edges**.
- It is imperative to adopt this procedure for wide spans!

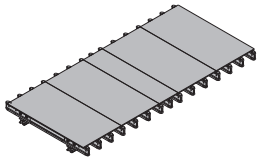


l ... Effective floor-slab spans of 24'-6" (7.5 m) and over

A Load redistribution

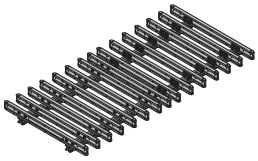
	[lbs]	Article #
Dokamatic S table 9'-0"x18'-0"	**1,720.0**	**581626000**
Dokamatic S table 9'-0"x12'-0"	**1,200.0**	**581627000**
Dokamatic S table 7'-0"x18'-0"	**1,530.0**	**581628000**
Dokamatic S table 7'-0"x12'-0"	**1,070.0**	**581629000**

Dokamatic S-Tisch



Dokamatic S table grille 9'-0"x18'-0"	**1,330.0**	**581635000**
Dokamatic S table grille 9'-0"x12'-0"	**935.0**	**581636000**
Dokamatic S table grille 7'-0"x18'-0"	**1,230.0**	**581637000**
Dokamatic S table grille 7'-0"x12'-0"	**871.0**	**581638000**

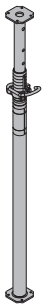
Dokamatic S-Tischrost



Doka floor prop Eurex 20 250	**28.4**	**586086000**
Length: 5' - 8'-2" (152 - 250 cm)		
Doka floor prop Eurex 20 300	**33.7**	**586087000**
Length: 5'-8" - 9'-10" (172 - 300 cm)		
Doka floor prop Eurex 20 350	**39.2**	**586088000**
Length: 6'-6" - 11'-6" (197 - 350 cm)		
Doka floor prop Eurex 20 400	**48.9**	**586089000**
Length: 7'-5" - 13'-1" (227 - 400 cm)		
Doka floor prop Eurex 20 550	**76.3**	**586090000**
Length: 9'-9" - 18'-1" (297 - 550 cm)		

Doka-Deckenstütze Eurex 20

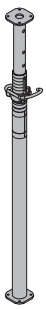
Galvanized



Doka floor prop Eurex 30 250	**32.6**	**586092000**
Length: 5' - 8'-2" (152 - 250 cm)		
Doka floor prop Eurex 30 300	**36.8**	**586093000**
Length: 5'-8" - 9'-10" (172 - 300 cm)		
Doka floor prop Eurex 30 350	**45.2**	**586094000**
Length: 6'-6" - 11'-6" (197 - 350 cm)		
Doka floor prop Eurex 30 400	**54.9**	**586095000**
Length: 7'-5" - 13'-1" (227 - 400 cm)		
Doka floor prop Eurex 30 450	**64.4**	**586119000**
Length: 8'-2" - 14'-9" (248 - 450 cm)		

Doka-Deckenstütze Eurex 30

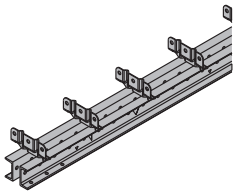
Galvanized



	[lbs]	Article #
Dokamatic S table waling 12 12'-0"	**238.0**	**581624000**
Dokamatic S table waling 12 18'-0"	**358.0**	**581625000**

Dokamatic S-Tischriegel

Painted blue

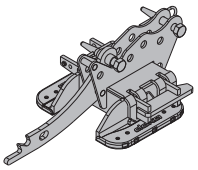


Dokamatic swivel head 40	**37.7**	**586214000**

Dokamatic-Schwenkkopf 40

Galvanized

Length: 2' (60 cm)



Supporting head H20 DF	**1.7**	**586179000**

Haltekopf H20 DF

Galvanized

Length: 7 1/2" (19 cm)

Width: 4 1/2" (11 cm)

Height: 3 1/4" (8 cm)

Spring locked connecting pin 16mm	**0.55**	**582528000**

Federbolzen 16mm

Galvanized

Length: 6" (15 cm)

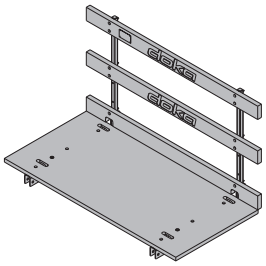
Dokamatic S table platform 3'-3"/9'-0"	**238.0**	**581631000**
Dokamatic S table platform 3'-3"/7'-0"	**216.0**	**581632000**

Dokamatic S-Tischbühne

Steel parts galvanized

Timber parts varnished yellow

Delivery condition: folded closed

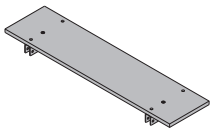


Dokamatic S platform extension 1'-8"/9'-0"	**82.7**	**581633000**
Dokamatic S platform extension 1'-8"/7'-0"	**70.5**	**581634000**

Dokamatic S Bühnenverbreiterung

Steel parts galvanized

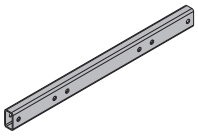
Timber parts varnished yellow

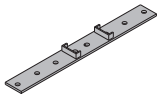
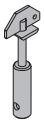
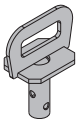
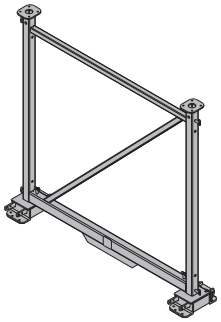
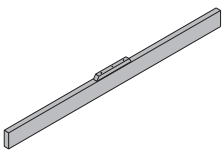


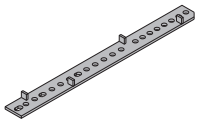
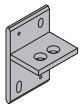
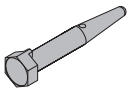
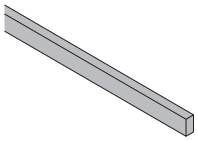
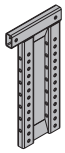
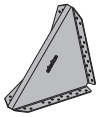
Dokamatic platform profile 1.00m	**24.3**	**586221000**

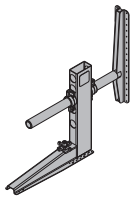
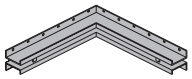
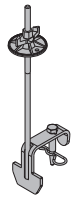
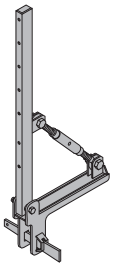
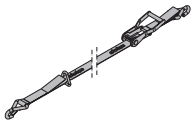
Dokamatic-Bühnenprofil 1,00m

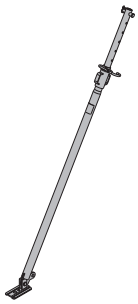
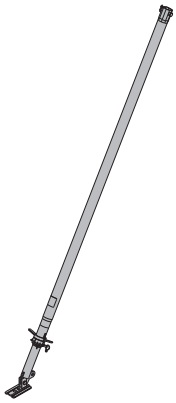
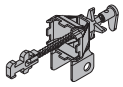
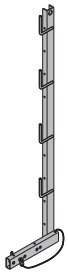
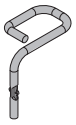
Galvanized

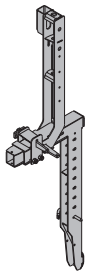


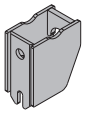
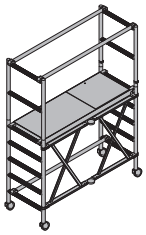
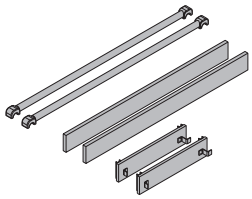
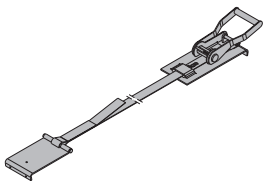
	[lbs]	Article #
Splice plate S Top50 Verbindungslasche S Top50 Painted blue Length: 2'-6" (76 cm) 	**11.9**	**581614000**
Dokamatic strut connection Dokamatic-Stützenanschluss Galvanized Height: 10" (26 cm) 	**2.9**	**586215000**
Dokamatic scaffold connection Dokamatic-Gerüstanschluss Galvanized Height: 11" (27 cm) 	**7.5**	**586216000**
Dokamatic table frame 1.50m Dokamatic-Tischrahmen 1,50m Galvanized 	**132.0**	**586224000**
Diagonal cross 9.150 **Diagonal cross 12.150** **Diagonal cross 18.100** **Diagonal cross 18.150** Diagonalkreuz Galvanized Delivery condition: folded closed 	**11.5** **12.6** **13.4** **15.2**	**582773000** **582612000** **582620000** **582622000**
Insertion beam 1.95m **Insertion beam 2.45m** Einschubträger Varnished yellow 	**15.7** **19.6**	**183074000** **183075000**

	[lbs]	Article #
T ledge 21/42 2.00m T-Leiste 21/42 2,00m Gray Special order only! 	**0.75**	**580196000**
Adjustable waling extension S FF20 Top50 Ausgleichslasche S FF20 Top50 Painted blue Length: 2'-10" (87 cm) 	**11.5**	**581615000**
Beam clamp Top50 Trägerklammer Top50 Painted blue Height: 6" (15 cm) 	**2.6**	**580081000**
Connecting pin 10cm Verbindungsbolzen 10cm Galvanized Length: 5 1/2" (14 cm) 	**0.75**	**580201000**
Spring cotter 5mm Federvorstecker 5mm Galvanized Length: 5" (13 cm) 	**0.066**	**580204000**
Dokamatic front wood strip 4x8cm 2.60m Dokamatic-Stirnholz 4x8cm 2,60m Varnished yellow 	**9.3**	**183046000**
Dokamatic S drop beam plate 30" Dokamatic S-Unterzugslasche 30" Painted blue Height: 2'-9" (84 cm) 	**44.1**	**581630000**
Universal end-shutter support 30cm Universal-Abschalwinkel 30cm Galvanized Height: 8" (21 cm) 	**2.2**	**586232000**

	[lbs]	Article #
Dokamatic end-shutter unit 50cm Dokamatic-Abschaleinheit 50cm  Galvanized Length: 2'-4" (71 cm) Height: 1'-10" (57 cm)	**37.0**	**586223000**
Framax universal corner waling Framax-Eckklemmschiene  Painted blue Leg length: 2' (60 cm)	**28.2**	**588151000**
Dokamatic edge clamp 0.70m Dokamatic-Randklemme 0,70m  Galvanized	**8.6**	**586222000**
Bridge edge beam clamp T 0.40m Gesimszwinge T 0,40m  Galvanized Height: 3'-5" (104 cm)	**22.3**	**584332000**
Lashing strap 5.00m Zurrgurt 5,00m  Yellow	**6.2**	**586018000**
Doka express anchor 16x125mm Doka-Expressanker 16x125mm  Galvanized Length: 7" (18 cm) Follow fitting instructions!	**0.68**	**588631000**
Doka coil 16mm Doka-Coil 16mm  Galvanized Diameter: 5/8" (1,6 cm)	**0.02**	**588633000**

	[lbs]	Article #
Dokamatic lifting strap 13.00m Dokamatic-Umsetzgurt 13,00m  Green Follow the directions in the "Operating Instructions"! CE	**23.1**	**586231000**
Plumbing strut 340 IB Justierstütze 340 IB  Galvanized Length: 6'-3" - 11'-3" (190,8 - 341,8 cm)	**36.8**	**588696000**
Plumbing strut 540 IB Justierstütze 540 IB  Galvanized Length: 10'-2" - 18' (310,5 - 549,2 cm)	**67.7**	**588697000**
Prop head EB Stützenkopf EB  Galvanized Length: 1'-4" (40,8 cm) Width: 4 1/2" (11,8 cm) Height: 7" (17,6 cm)	**6.8**	**588244500**
Handrail post T 1.80m Einschubgeländer T 1,80m  Galvanized	**39.0**	**584373000**
Toeboard holder T 1.80m Fußwehrhalter T 1,80m  Galvanized Height: 5 1/2" (13,5 cm)	**1.2**	**584392000**

	[lbs]	Article #
Handrail clamp S Schutzgeländerzwinge S  Galvanized Height: 4' - 5'-7" (123 - 171 cm)	**25.4**	**580470000**
Handrail clamp T Schutzgeländerzwinge T  Galvanized Height: 4' - 5'-1" (122 - 155 cm)	**27.1**	**584381000**
Handrail post 1.10m Schutzgeländer 1,10m  Galvanized Height: 4'-5" (134 cm)	**12.1**	**584384000**
Attachable sleeve 24mm Steckhülse 24mm  PVC PE Gray Length: 6 1/2" (16,5 cm) Diameter: 1 1/8" (2,7 cm)	**0.066**	**584385000**
Screw sleeve 20.0 Schraubhülse 20,0  PP Yellow Length: 8" (20 cm) Diameter: 1 1/4" (3,1 cm)	**0.066**	**584386000**
Doka slab edge clamp Doka-Deckenabschalklemme  Galvanized Height: 4'-6" (137 cm)	**27.6**	**586239000**

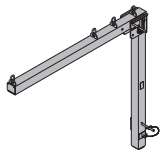
	[lbs]	Article #
End-shutter shoe Abschalschuh  Galvanized Height: 5 1/2" (13,5 cm)	**3.5**	**586257000**
End-shutter tie rod 15.0 15-40cm Abschalanker 15,0 15-40cm  Galvanized Length: 1'-10" (55 cm)	**2.0**	**586258000**
Floor end-shutter profile XP Deckenabschalprofil XP  Galvanized Height: 2'-6" (77 cm)	**9.3**	**586481000**
Wheel-around scaffold DF Mobilgerüst DF  Aluminum Length: 6'-1" (185 cm) Width: 2'-7" (80 cm) Height: 8'-4" (255 cm) Delivery condition: separate parts	**97.0**	**586157000**
Wheel-around scaffold DF accessory set Zubehörset Mobilgerüst DF  Aluminum Timber parts varnished yellow Length: 6'-2" (189 cm)	**29.3**	**586164000**
Platform stairway 0.97m Podesttreppe 0,97m  Aluminum Width: 4' (121 cm) Pay attention to the national, technical safety regulations!	**51.8**	**586555000**
Strip tensioner B 6.00m Bandzwinge B 6,00m  Galvanized Special order only!	**7.3**	**580394500**

	[lbs]	Article #
Plastic mallet 4kg Kunststoffhammer 4kg Blue Length: 3'-7" (110 cm)	9.9	586097000
Universal dismantling tool Universal-Lösewerkzeug Galvanized Length: 2'-6" (75,5 cm)	8.2	582768000
Reversible ratchet 1/2" Umschaltknarre 1/2" Galvanized	1.6	580580000
Box nut 30 1/2" Stecknuss 30 1/2"	0.44	580575000
DoKart plus DoKart plus included in scope of supply:	3,190.0	586265500
(A) **Brace stirrup 8** 4 pcs. Galvanized Width: 7 1/2" (19 cm) Height: 1'-6" (46 cm) Width-across: 30 mm	6.0	582751000
Yellow Length: 5'-8" (172 cm) Width: 4'-4" (132 cm) Height: 5'-1" - 10'-9" (154 - 327 cm) Follow the directions in the "Operating Instructions"!		CE
Extension set for DoKart plus Auslegersatz DoKart plus Galvanized Length: 3'-11" (120 cm) Follow the directions in the "Operating Instructions"!	110.0	586266500

	[lbs]	Article #
Stacking frame DF Aufsatzrahmen DF Galvanized Length: 4'-5" (134 cm) Width: 4'-3" (130 cm) Height: 2'-6" (75 cm)	181.0	586079000
Alu stacking frame DM 2.25m Alu-Aufsatzrahmen DM 2,25m Aluminum Length: 6'-2" (187 cm) Width: 4'-2" (128 cm) Height: 7'-5" (225 cm)	131.0	586238000
Transport fork DM 1.5t adjustable Umsetzgabel DM 1,5t verstellbar Galvanized Length: 20'-10" (635 cm) Delivery condition: folded closed Follow the directions in the "Operating Instructions"!	2,500.0	586233000 CE
Vertical extension DM 3.30m Vertikalverlängerung DM 3,30m Galvanized Height: 11'-7" (352 cm)	529.0	586235000
Extension clamp H20 for fork Aufsatzklemme H20 für Gabel Galvanized Height: 1'-6" (45 cm)	9.9	586236000
Extension profile H20 for fork Aufsatzprofil H20 für Gabel Galvanized Length: 2'-9" (83 cm) Height: 1'-8" (52 cm)	75.2	586237000

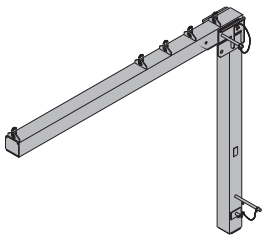
	[lbs]	Article #

Lifting extension bracket DF 1t 580.0 586068000
Ausleger DF 1t



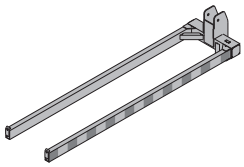
Galvanized
Delivery condition: folded closed
Follow the directions in the "Operating Instructions"!

Lifting extension bracket DF 1.5t 1,050.0 586064000
Ausleger DF 1,5t



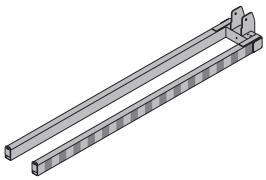
Galvanized
Length: 15' (456 cm)
Width: 2'-8" (82 cm)
Height: 12'-8" (386 cm)
Delivery condition: folded closed
Follow the directions in the "Operating Instructions"!

Transport fork DF 1t 0.90m 485.0 586069000
Transport fork DF 1t 1.30m 540.0 586070000
Transport fork DF 1t 2.00m 604.0 586071000
Gabel DF 1t



Galvanized
Length: 13'-6" (411 cm)
Height: 1'-11" (58 cm)
Follow the directions in the "Operating Instructions"!

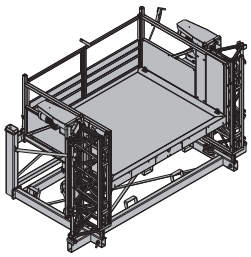
Transport fork DF 1.5t 0.90m 1,060.0 586065000
Transport fork DF 1.5t 1.30m 1,150.0 586066000
Transport fork DF 1.5t 2.00m 1,190.0 586067000
Gabel DF 1,5t



Galvanized
Length: 20'-11" (638 cm)
Height: 2'-4" (71 cm)
Follow the directions in the "Operating Instructions"!

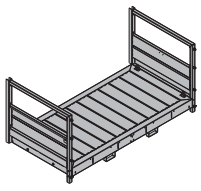
Table Lifting System TLS

Basic unit S B TLS 4,880.0 586354000
Basiseinheit S B TLS



Length: 14'-2" (431 cm)
Width: 7'-11" (242 cm)
Height: 9' (274 cm)
Follow the directions in the "Operating Instructions"!

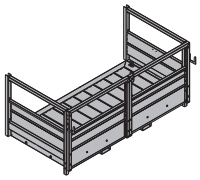
Lifting platform TLS center 3.00x1.60m 683.0 586307000
Hubbühne TLS mitte 3,00x1,60m



Height: 4'-7" (139 cm)

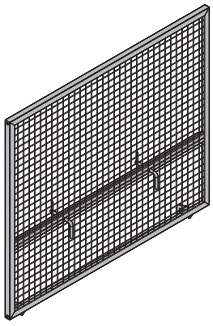
	[lbs]	Article #

Lifting platform TLS back 3.00x1.60m 829.0 586308000
Hubbühne TLS hinten 3,00x1,60m



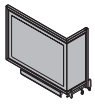
Height: 4'-7" (139 cm)

Protective grating TLS 1.80m 48.5 586334000
Schutzgitter TLS 1,80m



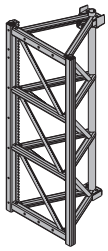
Galvanized
Length: 4'-8" (141 cm)
Height: 4' (121 cm)

Protecting metal sheet TLS right 26.5 586309000
Protecting metal sheet TLS left 26.5 586310000
Schutzblech TLS



Painted yellow
Length: 2'-9" (85 cm)
Width: 1'-1" (32 cm)
Height: 2'-5" (73 cm)

Lifting mast TLS 1.50m 181.0 586328000
Hubmast TLS 1,50m



Galvanized

Supporting profile TLS 5.15m 463.0 586317000
Abstützprofil TLS 5,15m

Galvanized

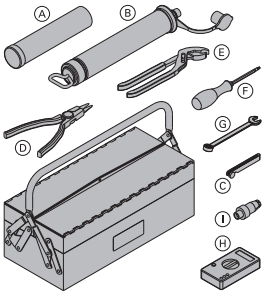
	[lbs]	Article #
Pressure strut TLS 3.70m Druckstrebe TLS 3,70m Galvanized	**154.0**	**586318000**
Floor support TLS 2'-5" Deckenauflager TLS 2'-5"	**110.0**	**586316000**
Adjusting device TLS Justiereinheit TLS Galvanized Length: 1'-5" (42 cm) Width: 6 1/2" (16 cm) Height: 6 1/2" (16 cm)	**22.0**	**586336000**
Cable routing TLS Kabelführung TLS Galvanized Length: 1'-2" (35 cm)	**4.4**	**586333000**
Lifting mast anchoring TLS cross bar 2'-5" Hubmastverankerung TLS Traverse 2'-5"	**209.0**	**586330000**
Lifting mast anchoring TLS strut Hubmastverankerung TLS Strebe Galvanized Length: 5' (153,5 cm) Width: 1'-8" (50 cm)	**48.5**	**586331000**
Lifting mast anchoring TLS wall Hubmastverankerung TLS Wand Galvanized Length: 1'-8" (52 cm)	**34.2**	**586372000**
Lifting mast anchoring TLS mast connection Hubmastverankerung TLS Mastanschluss Galvanized Length: 2'-5" (72,6 cm) Width: 2'-2" (66 cm)	**33.1**	**586332000**

	[lbs]	Article #
Base profile TLS 2.14m Bodenprofil TLS 2,14m Galvanized	**61.7**	**586312000**
Strut for base profile TLS Strebe für Bodenprofil TLS Galvanized Length: 8'-5" (257,3 cm)	**26.0**	**586313000**
Beam for landing level safety gate TLS 2'-5" Träger für Etagentüre TLS 2'-5"	**81.6**	**586320000**
Landing level safety gate TLS with handle Etagentüre TLS mit Griff Length: 5' (153 cm) Height: 4'-2" (126 cm)	**72.8**	**586321000**
Landing level safety gate TLS w. limit switch Etagentüre S B TLS mit Endschalter Length: 5' (153 cm) Height: 4'-2" (126 cm)	**69.7**	**586355000**
Control cable TLS 20.0m blue **Control cable TLS 20.0m red** Steuerkabel TLS	**8.8** **8.8**	**586303000** **586304000**

	[lbs]	Article #
Bar for limit switch TLS Endschalterschiene TLS Galvanized Length: 6'-1" (186 cm)	**11.0**	**586325000**
Lifting cross-bar TLS 10.50m Hebetraverse TLS 10,50m Galvanized Length: 2'-6" (76,5 cm)	**40.8**	**586327000**
Lifting cross-bar TLS 15.00m Hebetraverse TLS 15,00m Galvanized Length: 6'-2" (189 cm)	**141.0**	**586373000**
Lifting spreader beam TLS 67kN Hebeträger TLS 67kN Galvanized Length: 11'-1" (338 cm) Follow the directions in the "Operating Instructions"!	**150.0**	**586326500**

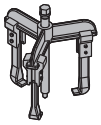
	[lbs]	Article #
Tool box TLS Werkzeugbox TLS consisting of:	**43.2**	**586337000**
(A) **Combination wrench 8**	**0.066**	**586343000**
(B) **Combination wrench 10**	**0.088**	**586342000**
(C) **Combination wrench 13**	**0.13**	**586341000**
(D) **Combination wrench 16**	**0.4**	**580645000**
(E) **Combination wrench 17**	**0.35**	**586340000**
(F) **Combination wrench 18**	**0.37**	**580646000**
(G) **Combination wrench 19**	**0.31**	**582837000**
(H) **Combination wrench 22**	**0.44**	**582838000**
(I) **Combination wrench 24**	**0.55**	**582839000**
(J) **Combination wrench 30**	**0.95**	**582840000**
(K) **Reversible ratchet 3/4"** Galvanized	**3.3**	**580894000**
(L) **Universal cone spanner 15.0/20.0** Galvanized Width-across: 50 mm	**2.0**	**581448000**
(M) **Safety Ruler SK** Length: 7" (18 cm)	**0.044**	**581439000**
(N) **Extension 20cm 3/4"**	**1.5**	**580683000**
(O) **Slot-screw screwdriver 0.6x3.5**	**0.44**	**586344000**
(P) **Slot-screw screwdriver 1x5.5**	**0.44**	**586366000**
(Q) **Set of ball-head hexagon-socket screw keys**	**1.3**	**586346000**
(R) **Box wrench 1/2" set of 29**	**12.3**	**586345000**
(S) **Box nut 18 3/4"**	**0.49**	**580643000**
(T) **Box nut 19 3/4"**	**0.44**	**586375000**
(U) **Box nut 24 3/4"**	**0.46**	**500679030**
(V) **Box nut 24 1/2" L**	**0.66**	**586364000**
(W) **Box nut 27 3/4"**	**0.6**	**586376000**
(X) **Box nut 30 3/4"**	**0.73**	**586377000**
(Y) **Box nut 50 3/4"**	**1.8**	**581449000**
Torque wrench 3/4" 75-400Nm Drehmomentschlüssel 3/4" 75-400Nm Galvanized Length: 2'-3" (69 cm)	**5.1**	**586374000**

	[lbs]	Article #
Maintenance toolbox TLS Wartungs-Werkzeugbox TLS consisting of:	**13.4**	**586369000**
(A) **Grease cartridge TLS**	**1.0**	**586368000**
(B) **Filling press TLS**	**2.1**	**586367000**
(C) **Thickness gauge set 0.05-1.00mm**	**0.2**	**586350000**
(D) **Pliers for external circlips 40-100mm**	**0.71**	**586348000**
(E) **Water pump nut pliers 250mm**	**0.71**	**586347000**
(F) **Screw dr. f. recessed-head scr. PZ 2**	**0.33**	**586351000**
(G) **Combination wrench 14**	**0.2**	**586349000**
(H) **Digital multimeter TLS**	**0.49**	**586353000**
(I) **Dummy plug TLS 4 poles**	**0.088**	**586352000**



Brake-disk pull-off tool TLS D200 **9.5** **586370000**
Scheibenabzieher TLS D200

Height: 11" (27 cm)
Width-across: 22 mm



Doka 4-part chain 3.20m **33.1** **588620000**
Doka-Vierstrangkette 3,20m

Follow the directions in the "Operating Instructions"!

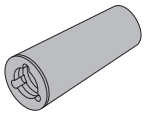
CE

Cone screw B 7cm **1.9** **581444000**
Konusschraube B 7cm

red
Length: 4" (10 cm)
Diameter: 2 3/4" (7 cm)
Width-across: 50 mm

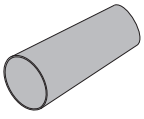
Universal climbing cone 15.0 **2.9** **581977000**
Universal-Kletterkonus 15,0

Galvanized
Orange
Length: 5" (12,8 cm)
Diameter: 2" (5,3 cm)



Sealing sleeve K 15.0 **0.066** **581976000**
Dichtungshülse K 15,0

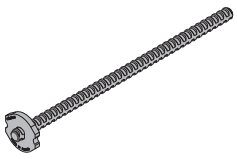
Orange
Length: 4 1/2" (12 cm)
Diameter: 2 1/4" (6 cm)



	[lbs]	Article #
Stop anchor 15.0 B11	**1.2**	**581868000**
Stop anchor 15.0 A16	**0.84**	**581997000**
Stop anchor 15.0 A40	**1.6**	**581999000**

Sperranker 15,0

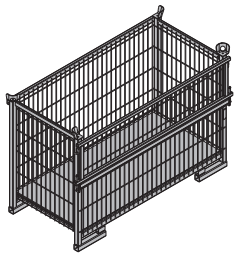
Non-treated



Multi-trip packaging

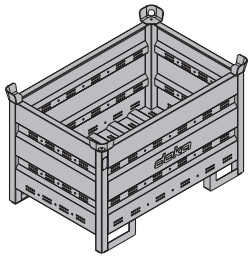
Doka skeleton transport box 1.70x0.80m **192.0** **583012000**
Doka-Gitterbox 1,70x0,80m

Galvanized
Height: 3'-8" (113 cm)



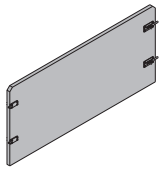
Doka multi-trip transport box 1.20x0.80m **154.0** **583011000**
Doka-Mehrwegcontainer 1,20x0,80m

Galvanized
Height: 2'-7" (78 cm)



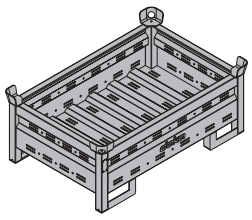
Multi-trip transport box partition 0.80m **8.2** **583018000**
Multi-trip transport box partition 1.20m **12.1** **583017000**
Mehrwegcontainer Unterteilung

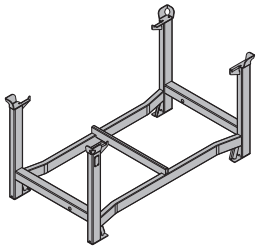
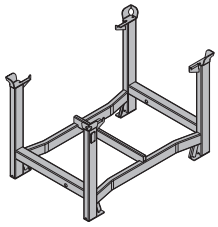
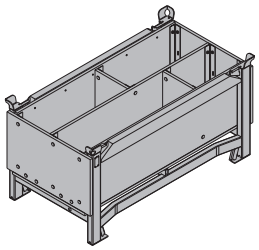
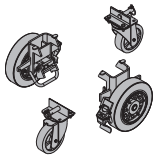
Steel parts galvanized
Timber parts varnished yellow



Doka multi-trip transport box 1.20x0.80x0.41m **93.7** **583009000**
Doka-Mehrwegcontainer 1,20x0,80x0,41m

Galvanized



	[lbs]	Article #
Doka stacking pallet 1.55x0.85m Doka-Stapelpalette 1,55x0,85m Galvanized Height: 2'-6" (77 cm) 	**90.4**	**586151000**
Doka stacking pallet 1.20x0.80m Doka-Stapelpalette 1,20x0,80m Galvanized Height: 2'-6" (77 cm) 	**83.8**	**583016000**
Doka accessory box Doka-Kleinteilebox Timber parts varnished yellow Steel parts galvanized Length: 5'-1" (154 cm) Width: 2'-9" (83 cm) Height: 2'-6" (77 cm) Special order only! 	**235.0**	**583010000**
Bolt-on castor set B Anklemm-Radsatz B Painted blue 	**74.1**	**586168000**

Near to you, worldwide

Doka is one of the world leaders in developing, manufacturing and distributing formwork technology for use in all fields of the construction sector.

With more than 160 sales and logistics facilities in over 70 countries, the Doka Group has a highly efficient distribution network which ensures that equipment and technical support are provided swiftly and professionally.

An enterprise forming part of the Umdasch Group, the Doka Group employs a worldwide workforce of more than 6000.