The Formwork Experts.

Dokaflex 15

User Information
Instructions for assembly and use (Method statement)
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**Elementary safety warnings**

**User target groups**

- This manual is aimed at all persons who will be working with the Doka product or system that it describes. It contains information on the standard design for setting up this system, and on correct, compliant utilisation of the system.
- All persons working with the product described herein must be familiar with the contents of this manual and with all the safety instructions it contains.
- Persons who are incapable of reading and understanding this booklet, or who can do so only with difficulty, must be instructed and trained by the customer.
- The customer is to ensure that the information materials provided by Doka (e.g. User Information booklets, Instructions for Assembly and Use, Operating Instruction manuals, plans etc.) are available to all users, and that they have been made aware of them and have easy access to them at the usage location.
- In the relevant technical documentation and formwork utilisation plans, Doka shows the workplace safety precautions that are necessary in order to use the Doka products safely in the usage situations shown. In all cases, users are obliged to ensure compliance with national laws, Standards and 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 document serves as the basis for the site-specific hazard assessment, and for the instructions given to users on how to prepare and utilise the system. It does not substitute for these, however.

**Remarks on this document**

- This manual can also be used as a generic method statement or incorporated with a site-specific method statement.
- Many of the illustrations in this booklet show the situation during formwork assembly and are therefore not always complete from the safety point of view.
  Any safety accessories not shown in these illustrations must still be used by the customer, in accordance with the applicable rules and regulations.
- Further safety instructions, especially warnings, will be found in the individual sections of this document!

**Planning**

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

**Regulations; industrial safety**

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

▪ The customer must ensure that this product is erected and dismantled, reset and generally used for its intended purpose in accordance with the applicable laws, Standards and rules, under the direction and supervision of suitably skilled persons. These persons' mental and physical capacity must not in any way be impaired by alcohol, medicines or drugs.

▪ Doka products are technical working appliances which are intended for industrial/commercial use only, always in accordance with the respective Doka User Information booklets or other technical documentation authored by Doka.

▪ The stability of all components and units must be ensured during all phases of the construction work!

▪ The functional/technical instructions, safety warnings and loading data must all be strictly observed and complied with. Failure to do so can cause accidents and severe (even life-threatening) damage to health, as well as very great material damage.

▪ Fire-sources are not permitted anywhere near the formwork. Heating appliances are only allowed if properly and expertly used, and set up a safe distance away from the formwork.

▪ The work must take account of the weather conditions (e.g. risk of slippage). In extreme weather, steps must be taken in good time to safeguard the equipment, and the immediate vicinity of the equipment, and to protect employees.

▪ All connections must be checked regularly to ensure that they still fit properly and are functioning correctly.

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 any components that are damaged, deformed, or weakened due to wear, corrosion or rot.

▪ Combining our formwork systems with those of other manufacturers could be dangerous, risking damage to both health and property. If you intend to combine different systems, please contact Doka for advice first.

▪ 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 so that all loads acting upon them are safely transferred!

Pouring

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

Striking the formwork

▪ Do not strike the formwork until the concrete has reached sufficient strength and the person in charge has given the order for the formwork to be struck!

▪ When striking the formwork, never use the crane to break concrete cohesion. Use suitable tools such as timber wedges, special pry-bars or system features such as Framax stripping corners.

▪ When striking 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 regulations applying to the handling of formwork and scaffolding. In addition, the Doka slinging means must be used - this is a mandatory requirement.
▪ Remove any loose parts or fix them in place so that they cannot be dislodged or fall free!
▪ All components must be stored safely, following all the special Doka instructions given in the relevant sections of this manual!

Maintenance

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

Miscellaneous

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

Symbols used

The following symbols are used in this booklet:

Important note
Failure to observe this may lead to malfunction or damage.

CAUTION / WARNING / DANGER
Failure to observe this may lead to material damage, and to injury to health which may range up to the severe or even life-threatening.

Instruction
This symbol indicates that actions need to be taken by the user.

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

Tip
Points out useful practical tips.

Reference
Refers to other documents and materials.
Doka services

Support in every stage of the project

Doka offers a broad spectrum of services, all with a single aim: to help you succeed on the site. Every project is unique. Nevertheless, there is one thing that all construction projects have in common – and that is a basic structure with five stages. We at Doka know our clients’ varying requirements. With our consulting, planning and other services, we help you achieve effective implementation of your formwork assignment using our formwork products – in every one of these stages.

1. Project Development Stage
   - Taking well-founded decisions thanks to professional advice and consulting
   - Find precisely the right formwork solutions, with the aid of
     - help with the bid invitation
     - in-depth analysis of the initial situation
     - objective evaluation of the planning, execution, and time-risks

2. Bidding Stage
   - Optimising the preliminary work with Doka as an experienced partner
   - Draw up potentially winning bids, by
     - basing them on realistically calculated guideline prices
     - making the right formwork choices
     - having an optimum time-calculation basis

3. Project Management Planning Stage
   - Controlled, regular forming operations, for greater efficiency resulting from realistically calculated formwork concepts
   - Plan cost-effectively right from the outset, thanks to
     - detailed offers
     - determination of the commissioning quantities
     - co-ordination of lead-times and handover deadlines
The advantages for you thanks to professional advice and consulting

- **Cost savings and time gains**
  When we advise and support you right from the word “go”, we can make sure that the right formwork systems are chosen and then used as planned. This lets you achieve optimum utilisation of the formwork equipment, and effective forming operations because your workflows will be correct.

- **Maximised workplace safety**
  The advice and support we can give you in how to use the equipment correctly, and as planned, leads to greater safety on the job.

- **Transparency**
  Because our services and costs are completely transparent, there is no need for improvisation during the project – and no unpleasant surprises at the end of it.

- **Reduced close-out costs**
  Our professional advice on the selection, quality and correct use of the equipment helps you avoid damage, and minimise wear-and-tear.

**Concrete Construction Stage**

Optimum resource utilisation with assistance from the Doka Formwork Experts

Workflow optimisation, thanks to
- thorough utilisation planning
- internationally experienced project technicians
- appropriate transport logistics
- on-site support

**Project Close-out Stage**

Seeing things through to a positive conclusion with professional support

Doka Services are a byword for transparency and efficiency here, offering
- jointly handled return of rented formwork
- professional dismantling
- efficient cleaning and reconditioning using special equipment
Product description

Dokaflex 15 - the versatile hand-set system for floor-slabs

Dokaflex 15 can easily be adapted to fit any layout, simply by telescoping the Doka H16 beams.

- no structural-design work is needed, as '1-2-5' shows you the maximum spacings for all slabs up to 15 cm thick
- you can tell at a glance whether the formwork has been set up correctly

Further advantages:
- infill zones are managed within the system, making it easy to accommodate walls and columns
- for shoring heights of up to 3.80 m
- any type of form-facing can be used
- no need to measure up
- flexible adaptation possible for larger slab thicknesses

Small number of system components - all perfectly co-ordinated
(A) DokaPly eco
- special surface coating for superb-quality concrete faces
- can be used on both sides
- easy to clean, with high-pressure spray cleaner
- space-saving storage and handling
- alternatively, it is also possible to use Doka formwork sheets 3-SO

(B) Doka beams H16 P
- are used as both primary and secondary beams
- tried-and-tested end-reinforcement with bevelled beam-ends and extra plastic rivet in beam-flange
- pre-defined positioning points as reference marks for setting-up and checking the formwork

(C) 4-way head DF15
- stabilises the primary beams so that these cannot tip over on their sides

(D) Supporting head DF15
- easy to mount to the floor prop
- for fixing intermediate props to the primary beam

(E) Doka floor props Eco 15
Doka floor props Eco are extendable floor props made of steel. They are designed for use as vertical props for temporary structures.

The main features:
- high load-bearing capacity
  - permitted capacity of Eco 15: 15 kN as per trials to US Standards (ANSI)
- Quick connection:
  Head adapters of various types can be attached in a crane-handling-safe manner with the spring-locked connecting pin
- Drop-out latch:
  For safety reasons, Doka props have latches to prevent the inner tube sliding out of the outer tube.
- special thread geometry, which makes the prop easier to release even when it is under high load
- holes in the adjusting nut to make it easier to operate
- When the prop is pushed in all the way, it still leaves a clear 10 cm gap so that the operator’s hands are not trapped.
- Galvanised, long-life constructional design

Permitted values:
- Permitted bending moment: 2.7 kNm
- Permitted shear force: 8.5 kN

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

(F) Removable folding tripod DF15
- for holding Eco 15 floor props upright
- swing-out legs allow flexible placement in constricted situations such as along edges and in corners

Follow the directions in the "Timber formwork beams" User Information booklet!

a ... 16 cm
b ... 6.5 cm
c ... 3.5 cm
System logic for all floor-slabs up to 15 cm thick

The set-up procedure has an easy-to-understand logic which reduces the amount of design and operations-scheduling work that is needed.

Spacing and positions of the component parts

No matter whether the beams are resting on, between or next to the marks, the maximum spacing is always plain to see. You can tell at a glance whether the formwork has been erected correctly, and without having to measure up.

1 mark = 0.5 m
- max. spacing of secondary beams
- max. cantilever of edge-beam
- min. cantilever in primary-beam overlap zone

2 marks = 1.0 m
- max. spacing of props

5 marks = 2.5 m
- max. spacing of primary beams

Primary and secondary beams

The 3.90m long Doka beam H16 P is used as a primary beam, and the 3.30m long H16 P beam as a secondary beam.

The primary beams should be orientated at right angles to the direction of an uneven length/width of room (5 m, 7 m, 9 m, etc.). This makes more efficient use of the potential of the system.

Format of the formwork sheets

The DokaPly eco (18 or 21mm) sheets are sized to fit exactly into the grid of the Dokaflex system.
Instructions for assembly and use

Erecting the formwork

Putting up the floor props

➤ Roughly adjust the height of the floor prop, using the fastening clamp.

➤ Insert the 4-way head DF15 into the prop.

➤ Roughly adjust the height of the floor prop, using the fastening clamp.

➤ Place primary and secondary beams along the edges.
  The marks on the beams show you the maximum spacings:
  - 5 marks for primary beams
  - 6 marks (3 x 2) for props held in a removable folding tripod

➤ Make sure that the nut is in the right position. To back off the prop, it must be possible to lower the nut by at least another 4 cm, by turning it with the fastening clamp.

➤ If you transport floor props with the 4-way heads still attached, you must secure these with a Spring-locked connecting pin 16 mm to prevent them dropping out. This is particularly important when they are transported in the horizontal.

➤ Put up each removable folding tripod.

➤ Put the prop into the tripod and fix it in place with the clamping bracket (tap this with the hammer). Before anybody steps onto the formwork, check again to make sure that the props have been correctly fixed in the tripods.

➤ Do not oil or grease clamping connections.

Setting up tripods in corners or against walls

If it is not possible to completely unfold the legs of the tripod – e.g. at the edges of a structure or at floor break-throughs etc. – we recommend fastening this tripod to an adjacent floor prop instead, where there is room for the legs to be completely unfolded.
Inserting the primary beams
➤ Using beam-forks, place the primary beams into the 4-way heads.

The 4-way heads can hold both single beams (on edge-of-room props) and double beams (at overlaps).
➤ Adjust the primary beams to the correct floor-slab height.

**WARNING**
➤ It is not permitted to set down any loads on the floor-slab formwork (e.g. beams, formwork sheets, reinforcement steel) until after the intermediate props have been set up!

- **Wheel-around scaffold DF:**
  - collapsible wheelaround platform made of light alloy
  - variable working heights of up to 3.50 m (max. platform height 1.50 m)
  - width of scaffold: 0.75 m
  - When work is being carried out near drop-off edges (i.e. at a distance of < 2 m), the ‘Wheel-around scaffold DF accessory set’ (consisting of a toeboard and intermediate guardrail) is needed.
  - Follow the directions in the User Information booklet!

Especially in edge zones, ‘Bracing frames Eco’ can be used as a sturdy alternative to ‘Removable folding tripods’.

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

Placing the secondary beams on the primary beams
➤ Use the beam forks to place the secondary beams on the primary beams, with an overlap. Maximum spacing of secondary beams: 1 mark
➤ If it is planned to lay the panels on the secondary beams working from below, always lay only as many secondary beams in place as are needed for placing the next row of panels.

Be sure to place a beam (or double beam) wherever there is to be a joint between the panels.
Putting up the intermediate props
➤ Place a Supporting head DF15 on the inside tube of the prop and secure it with a Spring-locked connecting pin 16 mm.

![Diagram of Supporting head DF15](image1)

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

![Diagram of intermediate props](image2)

Mounting slab stop-ends and fall-arrest railings
➤ Use personal fall arrest systems to protect against fall hazards when working on unsecured slab-edges (e.g. Doka personal fall-arrest set).
➤ Mount the slab stop-ends
➤ Mount guard rails around all exposed edges.
➤ Lay DokaPly eco sheets at right angles to the secondary beams.

![Diagram of mounting slab stop-ends](image3)

➤ Spray the DokaPly eco sheets with concrete release agent.

Where necessary (e.g. edge zones), secure the form-ply with nails.

- Recommended nail lengths
  - Sheet thickness 18 - 21 mm - approx. 50 mm

Windproofing
- For increased stability, in larger rooms, the full erection sequence of "primary beams + secondary beams + formwork sheets" should be carried out progressively for successive sub-areas of the room. When doing this, provide suitable bracing to walls or columns.
- If there is any risk of the formwork being blown over, all free-standing, non-enclosed areas of slab formwork must be secured during work-breaks and when work finishes for the day.
- Horizontal forces at exposed slab-edges, drop beams or steps in ceiling slabs must be restrained by strutting or back-stays.

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

Comply with the stripping times stipulated by the structural designer.

Removing the intermediate props
➤ Back off and remove the intermediate props.

Lowering the floor-slab formwork
➤ Back off the props and lower the floor-slab formwork approx. 4 cm.

Removing parts that are no longer needed
➤ Turn the secondary beams over onto their sides, pull them out and put them in the stacking pallet. Leave the beams under the panel-joints in place.

➤ Remove the DokaPly eco sheets.

➤ Remove the remaining secondary beams and the primary beams.
Removing the floor props

1) Hold the inner tube with one hand.
2) Open the fastening clamp to unfix the inner tube.
   Guide this by hand while lowering it into the outer tube.

Reshoring

➤ Before pouring the next floor-slab (i.e. above the one that has just been stripped), put up reshoring props as stipulated by the structural designer.
Setting up the system using Bracing frames Eco

Especially in edge zones, 'Bracing frames Eco' can be used as a sturdy alternative to 'Removable folding tripods'.

Features:
- Only suitable for mounting to the outer tube.
- Captively integrated quick-fixing mechanism (clamping bracket with wedge).
- Is used together with Diagonal crosses 9.xxx.

Important note:
- Only allowed to be used as a set-up aid.
- Not suitable for sustaining horizontal loads during pouring.

Assembly

➤ Join together 2 Bracing frames Eco with 2 suitable Diagonal crosses 9.xxx (Close-up 1).
➤ Fix the Floor props Eco onto the Bracing frame Eco with the quick-fixing mechanisms (Close-up 2).
➤ Mount the superstructure.

Close-up 1: Connecting the diagonal cross

Close-up 2: Quick-fixing mechanism open

Quick-fixing mechanism closed

a ... e.g. 150 cm (with Diagonal crosses 9.150)

b ... 125 cm

c ... 88 cm

A Bracing frame Eco
B e.g. Diagonal cross 9.150
C e.g. Doka floor prop Eco 15 300
D Quick-fixing mechanism (clamping bracket with wedge)
Bracing clamp B

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

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

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

<table>
<thead>
<tr>
<th>Eco 15</th>
<th>2.4 x 15 IT</th>
<th>2.4 x 15 OT</th>
<th>3 x 15 IT</th>
<th>3 x 15 OT</th>
<th>4 x 15 IT</th>
<th>4 x 15 OT</th>
<th>5 x 10 IT</th>
<th>5 x 10 OT</th>
<th>5 x 12 IT</th>
<th>5 x 12 OT</th>
<th>5 x 15 IT</th>
<th>5 x 15 OT</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>350</td>
<td>✓</td>
<td></td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Legend:**
- IT Inner tube
- OT Outer tube
- ✓ Possible to combine
- — Not possible to combine
Adaptability

Closures and adjustments

Infill zones are solved within the system - with no special accessories needed. The necessary adaptation is made by overlapping the Doka beams and inserting strips of formwork sheeting.

Grid and flexibility - in one system

Dokaflex also adapts to difficult layouts.

Adaptation along edge

Adaptation around columns

When using formwork sheets whose load capacity is directionally dependent, make sure that these are laid in the right direction.
Dokaflex 15 system components – also for slab thicknesses of over 15 cm

Only one system in use on the site

Up to a slab thickness of 15 cm, no structural design work is needed. However, it is also possible to compute the exact quantities – of the same system components – that will be needed for any given thickness of slab, with reference to the table. In this way, only as much formwork equipment is used as is really needed, as dictated by the slab load.

On the site, the easy-to-use slide-rule is ideal for determining the permissible spacing of primary beams and props.

<table>
<thead>
<tr>
<th>Slab thickness [cm]</th>
<th>Slab load [kN/m²]</th>
<th>Max. permitted spacing of primary beams b [m] for a secondary-beam spacing c [m] of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.33 m</td>
</tr>
<tr>
<td>10</td>
<td>4.30</td>
<td>3.20</td>
</tr>
<tr>
<td>11</td>
<td>4.55</td>
<td>3.20</td>
</tr>
<tr>
<td>12</td>
<td>4.80</td>
<td>3.20</td>
</tr>
<tr>
<td>13</td>
<td>5.05</td>
<td>3.19</td>
</tr>
<tr>
<td>14</td>
<td>5.30</td>
<td>3.12</td>
</tr>
<tr>
<td>15</td>
<td>5.55</td>
<td>3.05</td>
</tr>
<tr>
<td>16</td>
<td>5.80</td>
<td>2.99</td>
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<tr>
<td>17</td>
<td>6.05</td>
<td>2.94</td>
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<td>18</td>
<td>6.30</td>
<td>2.89</td>
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<tr>
<td>19</td>
<td>6.55</td>
<td>2.84</td>
</tr>
<tr>
<td>20</td>
<td>6.80</td>
<td>2.79</td>
</tr>
</tbody>
</table>

The table allows for a live load of 1.5 kN/m². Mid-span deflection has been limited to l/500.

A Floor prop Eco 15 + 4-way head DF15 + Removable folding tripod DF15
B Floor prop Eco 15 + Supporting head DF15
C Doka beam H16 P 3.30m (secondary beam)
D Doka beam H16 P 3.90m (primary beam)
Floor formwork around edges and drop beams

Slab stop-ends

Universal end-shutter support 30cm

Configuration A: Fastened with nails

Configuration B: Fastened with Spax screws

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

<table>
<thead>
<tr>
<th>How fastened:</th>
<th>Configuration</th>
<th>Max. influence width: a for slab thickness of [cm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 nails 3.1x80</td>
<td>A 90 50 30</td>
<td></td>
</tr>
<tr>
<td>4 Spax screws 4x40 (fully threaded)</td>
<td>B 220 190 160</td>
<td></td>
</tr>
</tbody>
</table>
With edge drop-beam

Supported by load-bearing tower

The **Load-bearing tower** **Staxo 40** system can be readily combined with Dokaflex 15 for forming drop beams.

Supported by Dokaflex 15 and Bracing frames **Eco**

Using 'Bracing frames Eco' with 'Diagonal crosses 9.xxx' increases the stability of the floor props. This allows drop-beam constructions to be formed more quickly at slab-edges, and provides greater safety during system set-up.

**WARNING**

➤ Where formwork beams cantilever out a long way, secure them against accidental lift-out.
Supported by Dokaflex 15

Using Dokaflex on edge zones

When using Dokaflex, remember the following points:

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

**WARNING**

- For work at dangerous heights, the secondary-beam elements with the working platforms must be preassembled on the ground.
- Where working platforms are erected on cantilevering floor-slab formwork, the formwork must be secured against accidental lift-out.
- Secondary beams with stop-end formwork must be secured against horizontal pull-out.
- In addition, put up a protection platform on the structure, e.g. Folding platform K

---

A  Dokaflex 15
B  Board with Bracing clamp B
C  Lashing strap 5.00m
D  Doka Express anchor 16x125mm and Doka coil 16mm
E  Handrail post XP 1.20m with Step bracket XP
F  Handrail clamp S
Drop beams in mid-slab

using Beam-forming head D15

Permitted dimensions of the drop-beam when using Beam-forming head DF15 with Floor prop Eco 15

<table>
<thead>
<tr>
<th>Drop-beam height [cm] incl. floor-slab height</th>
<th>Drop-beam width [cm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-40</td>
<td>10-40</td>
</tr>
<tr>
<td>45-55</td>
<td>15-55</td>
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<tr>
<td>60-65</td>
<td>20-65</td>
</tr>
<tr>
<td>65-70</td>
<td>25-70</td>
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<tr>
<td>70-75</td>
<td>30-75</td>
</tr>
<tr>
<td>75-80</td>
<td>35-80</td>
</tr>
<tr>
<td>80-85</td>
<td>40-85</td>
</tr>
</tbody>
</table>

Prop spacing:
- V Prop spacing 2.00 m
- W Prop spacing 1.75 m
- X Prop spacing 1.50 m
- Y Prop spacing 1.25 m
- Z Prop spacing 1.00 m

Permitted load-bearing capacity of Floor prop Eco 15 with Beam-forming head DF15: 6.5 kN
Tie-back solution

e.g. with Lashing strap 5.00m

For transferring low horizontal loads (stabilisation, V/100, windproofing etc.).

H Horizontal load
V Vertical load
A Back-stay force

Max. tie-back load: 5 kN

WARNING
➤ Never attach the tie-back directly to a 4-way head or floor prop
Fall-arrest systems on the structure

**Handrail post XP 1.20m**

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

**Handrail post 1.10m**

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

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

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

**Handrail clamp S**

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

Follow the directions in the "Handrail clamp S" User information!
<table>
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<tr>
<th>Article description</th>
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<th>Article n°</th>
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**Height:**

- 67.5 cm
- 13 cm
- 24 cm
- 14 cm
- 7 cm
- 14 cm
- 15 cm
- 60 cm
- 9 cm
- 28 cm
- 137 cm
- 88 cm

**Width:**

- 20 cm
- 13 cm
- 24 cm
- 14 cm
- 7 cm
- 14 cm
- 15 cm

**Height:**

- 172 - 300 cm
- 197 - 350 cm
- 60 cm
- 9 cm
- 28 cm
- 137 cm
- 88 cm

**Delivery condition:**

- Folded closed
- Painted blue
- Length: 36 cm
- Height: 21 cm
- Height: 123 - 171 cm
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Galvanised

Yellow

Varnished yellow

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| DokaPly eco 21mm 250/125cm | 32.8 | 185058000 |
| DokaPly eco 21mm 250/125cm | 16.4 | 185065000 |
| DokaPly eco 21mm 250/125cm | 10.5 | 186009000 |
| DokaPly eco 21mm 250/125cm | 13.1 | 186011000 |
| DokaPly eco 21mm 244/122cm | 31.2 | 186096000 |
| Doka formwork sheet 3-SO 21mm 200/50cm | 10.5 | 186009000 |
| Doka formwork sheet 3-SO 21mm 250/50cm | 13.1 | 186011000 |
| Doka formwork sheet 3-SO 21mm 250/50cm | 32.8 | 186097000 |
| Doka formwork sheet 3-SO 21mm 244/122cm | 31.2 | 186096000 |

Follow the directions in the "Operating Instructions"!

Varnished yellow

Delivery condition: folded closed

Follow fitting instructions!
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