

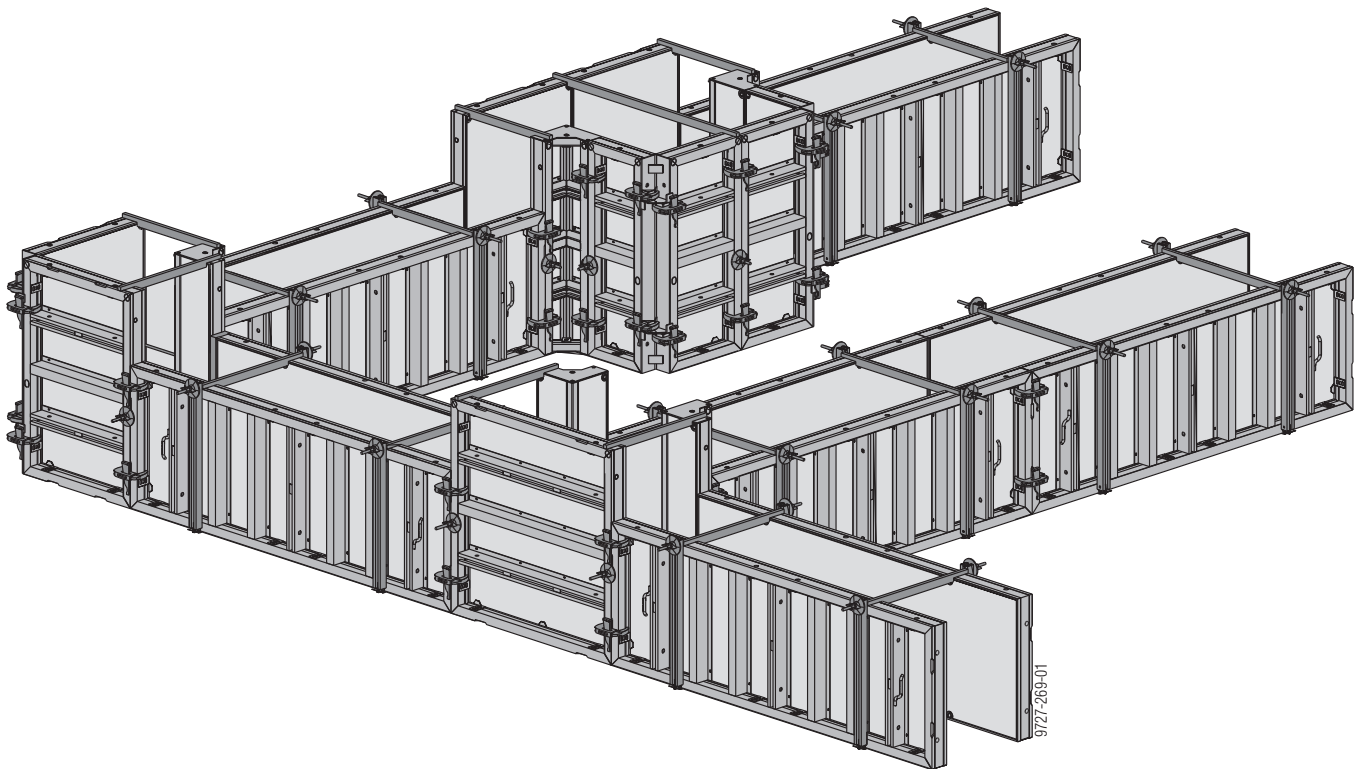
The Formwork Experts.

# Foundation formwork Framax Xlife

Framed formwork Framax Xlife

## User Information

Instructions for assembly and use (Method statement)



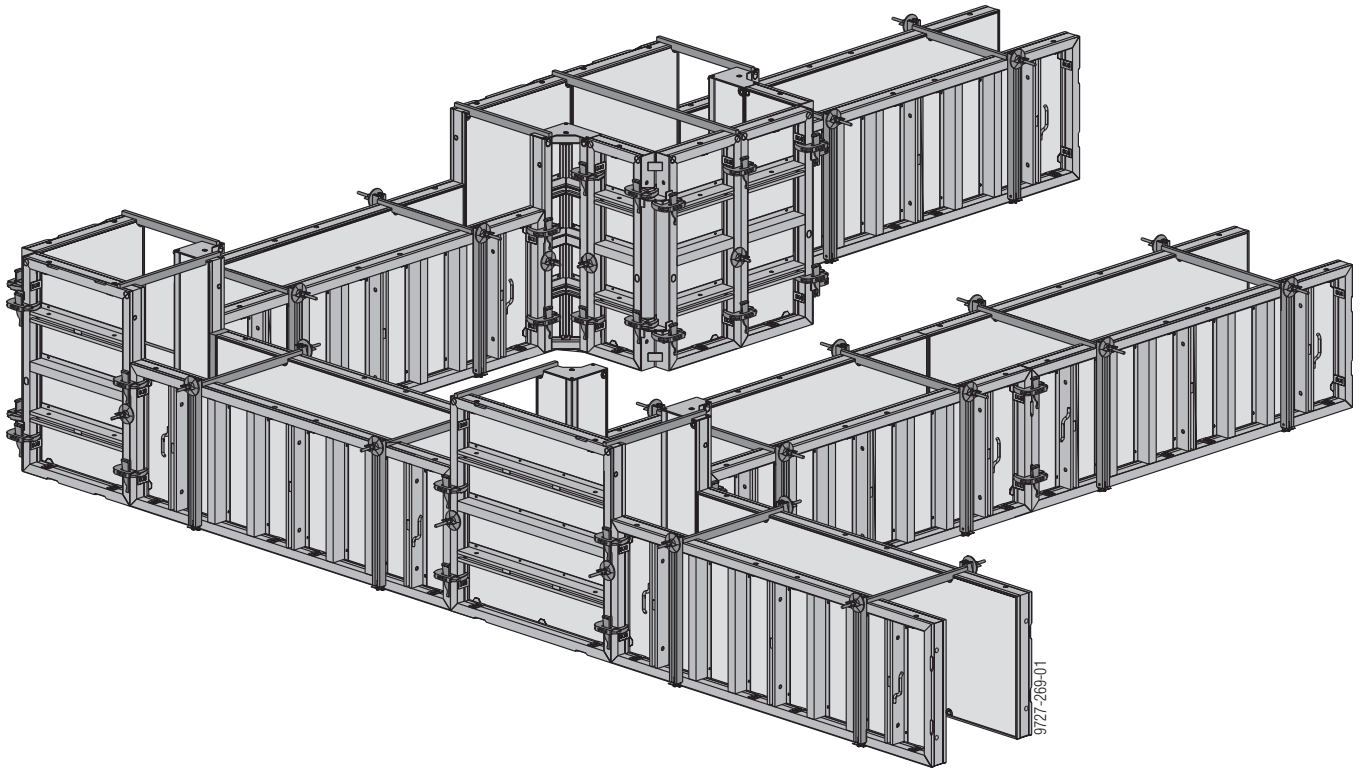


## System description

### Framax Xlife panels can also be used for foundations.

This is particularly advantageous where it is intended to continue using the same panels for the walls. Foundations can quickly be formed with any of the panels, with

the panels either upright or horizontal. Quick acting clamps and a blow with the hammer are all it takes to join the panels. Length closures and corners are just as easy to solve here as they are on "normal" walls. A range of practical accessories makes this work easier.



#### NOTICE

This document is only valid in combination with the following underlying document:  
'Framed formwork Framax Xlife' User Information booklet.

## Tying the panels

### Note:

Seal off unneeded form-tie sleeves with **Universal plugs R20/25**.

## Tying at top

### Number of ties, Framax Xlife panel longside horizontal:

Panel length	Pour height	Head anchors or tie-holder brackets
2.70m	up to 1.35m	2
	up to 0.90m	2
3.30m	up to 1.35m	3 (2*)
	up to 0.90m	2

\* ... valid for tie-holder bracket

### Number of ties, Framax Xlife panel longside vertical:

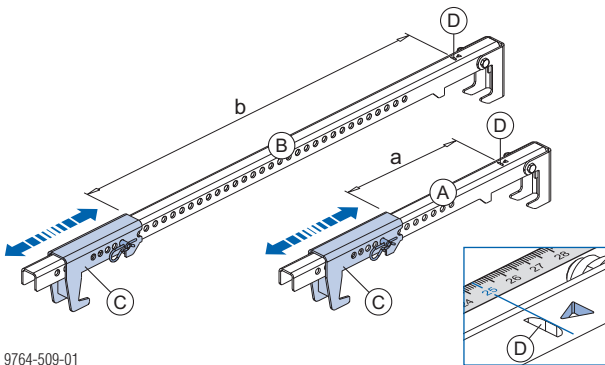
Panel width	Head anchors or tie-holder brackets
1.35m	1
0.30 to 0.90m	1**

\*\* ... only at every second panel

## Framax head anchor

- Tie rod is held above panel (not in the concrete)
- Tension bracing and compression bracing using just one tool.
- Wall thickness adjustable in 5-mm grid
- For foundation formwork of up to 1.35 m in height.

### Adjusting wall thickness at the head anchor:



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a ... 15 - 40 cm  
b ... 15 - 100 cm

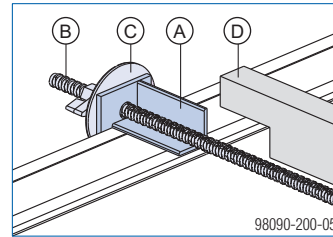
- A Framax head anchor 15-40cm
- B Framax head anchor 15-100cm
- C Adjusting unit
- D Notch = measuring point

### Framax head anchor:

Permitted tensile force: 10 kN  
Permitted compressive force: 10 kN

## Tie-holder bracket

- Tie rod is held above panel (not in the concrete)
- Form-tie spacing freely selectable



- A Framax tie-holder bracket
- B Tie rod 15.0mm
- C Super plate 15.0
- D Wooden spacer

### Framax tie-holder bracket:

Permitted capacity: 15 kN

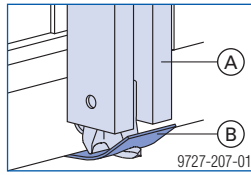


To prevent soiling of the tie rods placed across the top of the concrete, we recommend using Plastic tubes 22mm.

## Tying at bottom

### Foundation clamp and perforated tape

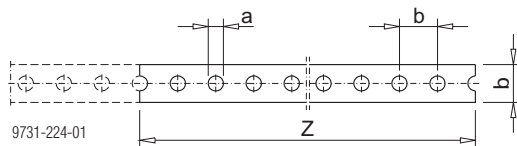
- Wall thicknesses can be formed in 5 cm grid



- A** Framax foundation clamp
- B** Doka perforated tape 50x2.0mm 25m (extendable)

**Permissible load** for a form-tie point with the Framax foundation clamp and Doka perforated tape is **12 kN**.

### Doka perforated tape 50x2.0mm 25m



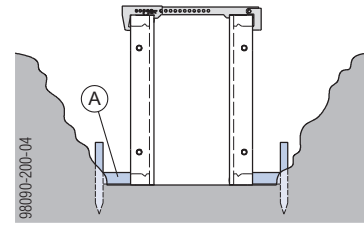
- a ... 18 mm
- b ... 50 mm
- Z ... Length of tape cut: wall thickness + 40 cm

### Number of foundation clamps and perforated tapes:

Panel length	Pour height	Foundation clamp and perforated tape
2.70m	up to 1.20m	3
	up to 0.90m	2
3.30m	up to 1.20m	4
	up to 0.90m	2

## Horizontal bracing (site-provided)

In very narrow trenches, the bottom tie can be replaced by a horizontal bracing.



- A** Horizontal bracing

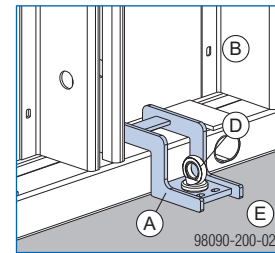
## Floor fixing plate and express anchor

- No site-provided distance protector
- No form ties in the concrete
- No form ties in the area of the joint-sealing tape
- Block foundations possible



### NOTICE

Use Framax floor fixing plates only on foundation slabs and concrete floor-slabs.



- A** Framax floor fixing plate
- B** Framax Xlife panel
- D** Doka express anchor 16x125mm
- E** Foundation slab / concrete floor-slab

- ▶ Engage the Framax floor fixing plate in the frame profile and fix with Doka express anchor 16x125mm.

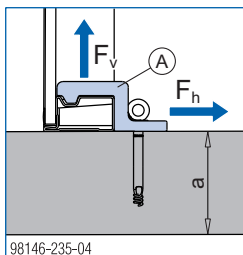


Follow the directions in the 'Doka express anchor 16x125mm' Fitting Instructions!



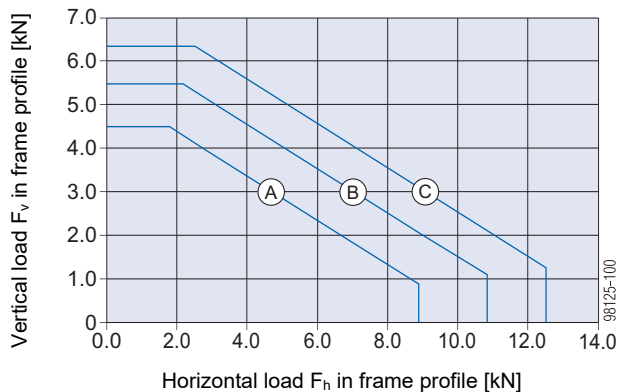
Before drilling the holes for the express anchors, temporarily secure the Framax floor fixing plates (8x12 mm slots integrated), for example with steel nails or bolts set with a compressed-air nailing gun or a bolt-setting tool.

Structural design



a ... min. 20 cm  
 Distance from outside edge of panel: min. 15 cm

**A Framax floor fixing plate**



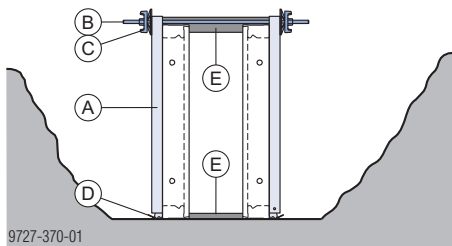
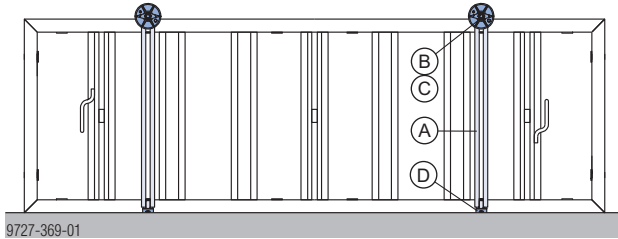
	Characteristic cube compressive strength of the concrete $f_{ck,cube}$	Max. anchoring load	
		$F_{exist}$	$F_d$
<b>(A)</b>	10 N/mm <sup>2</sup> (C8/10 grade concrete)	9.2 kN	13.8 kN
<b>(B)</b>	15 N/mm <sup>2</sup> (C12/15 grade concrete)	11.2 kN	16.8 kN
<b>(C)</b>	20 N/mm <sup>2</sup> (C16/20 grade concrete)	12.9 kN	19.4 kN

## Design of the foundation formwork

### Pour heights of up to 0.90 m

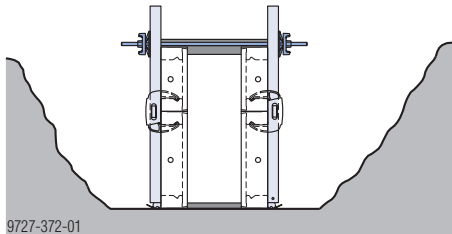
With panels of up to 0.90 m in width, the foundation clamp allows you to tie the panels above the concrete.

**Panel, width 0.90 m, longside horizontal:**



- A Framax foundation clamp
- B Tie rod 15.0mm
- C Super plate 15.0
- D Doka perforated tape
- E Wooden spacer

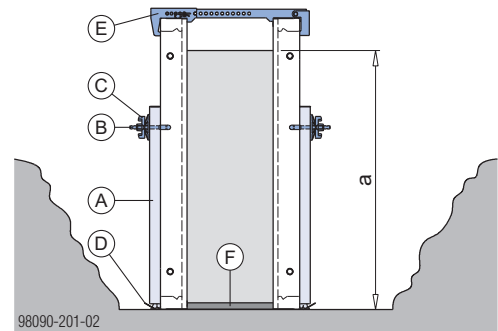
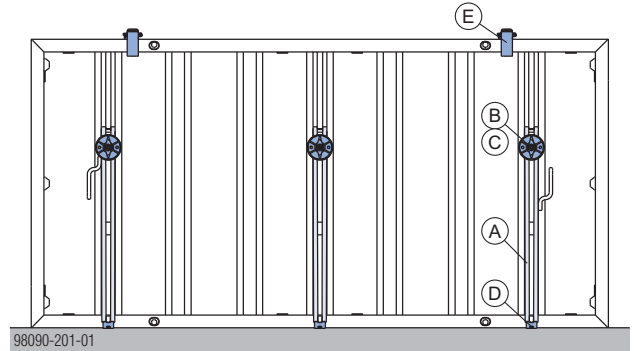
**Example: Panel width 0.45 + 0.30m**



### Pour heights of up to 1.20 m

The foundation clamps are fixed in the continuous hardware slot integrated in the waling profiles of the panels 1.35x2.70 m, using the **Framax clamping bolt 4-8cm**.

**Panel, width 1.35m, longside horizontal:**



a ... max. 120 cm

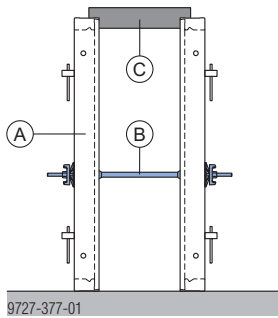
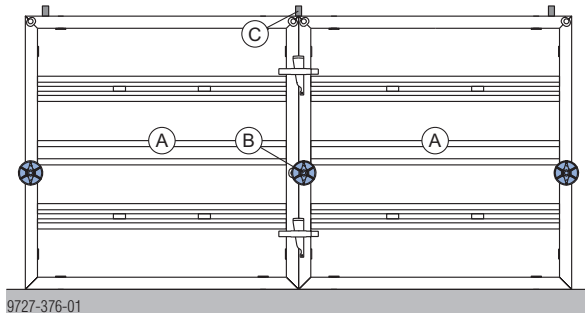
- A Framax foundation clamp
- B Framax clamping bolt 4-8cm
- C Super plate 15.0
- D Doka perforated tape
- E Framax head anchor or Framax tie-holder bracket \*)

\*) + Tie rod 15,0mm + Super plate 15.0 + Wooden spacer

## Pour heights of up to 1.35 m

In the example below, one form-tie is sufficient for the height shown.

Panel, height 1.35 m, longside vertical:



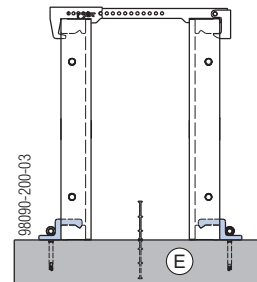
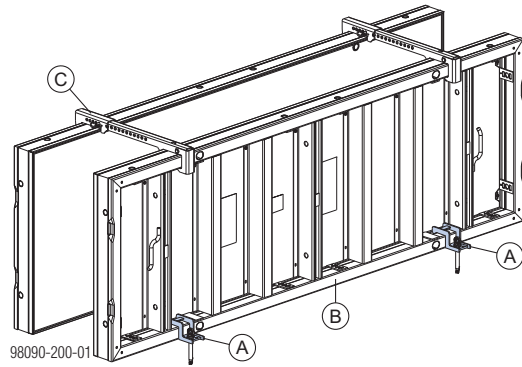
- A Framax Xlife panel 1.35x1.35m
- B Anchor system 15.0:
- C Wooden spacer or Framax head anchor



### NOTICE

Be sure to fit the wooden spacers exactly as shown!

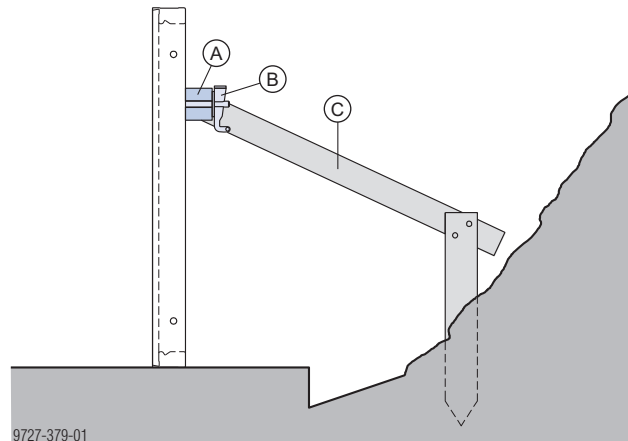
## Variant with floor fixing plates and express anchors



- A Framax floor fixing plate + Doka express anchor 16x125mm
- B Framax Xlife panel
- C Framax head anchor
- E Foundation slab / concrete floor-slab

## Shoring the panel

With the aid of a connecting timber and an in-place timber brace, you can brace the panels so that they stand firmly.

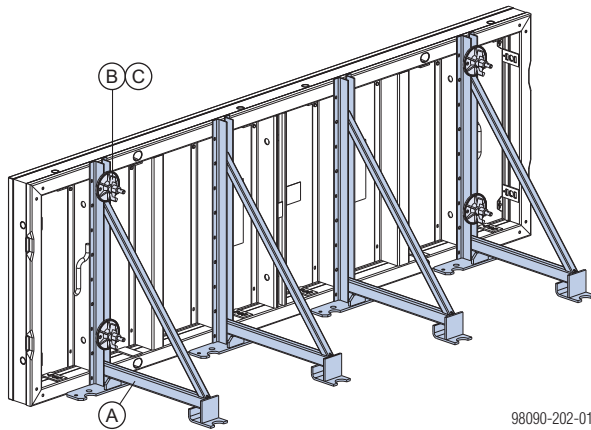


- A Connecting timber
- B Framax wedge clamp
- C Timber brace



## Slab stop-end with Supporting construction

The Supporting construction is used for erecting non-tied, single-sided formwork up to 1.20 m high (e.g. stop ends of floor slabs).



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**A** Supporting construction

**B** Framax clamping bolt 4-8cm

**C** Super plate 15.0

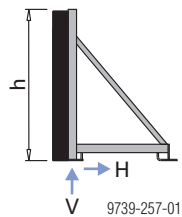


### NOTICE

Transfer the vertical and horizontal forces by suitable means!

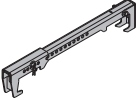

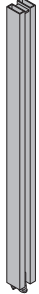


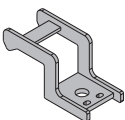



e.g.:

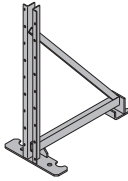
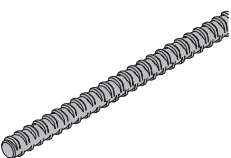
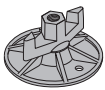




- 2 ground nails per Supporting construction.
- Anchoring with dowel in the blinding layer.

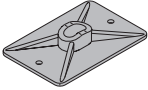

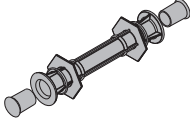
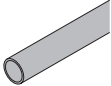



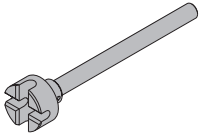
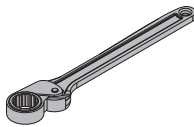
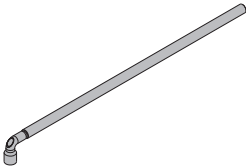


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Pour height <b>h</b> [m]	Influence width [m]	Vertical force <b>V</b> [kN]	Horizontal force <b>H</b> [kN]
0.30	3.00	0.00	3.40
0.45	3.00	0.20	7.60
0.60	1.80	1.00	8.10
0.75	1.15	1.80	8.10
0.90	0.80	2.60	8.10
1.05	0.60	3.40	8.10
1.20	0.45	4.10	8.10

	[kg]	Article N°
<b>Framax head anchor 15-40cm</b> Length: 72 - 81 cm	4.2	588969000
<b>Framax head anchor 15-100cm</b> Length: 131 - 141 cm Framax-Kopfanker	6.1	588970000
 Galvanised, powder-coated		
<b>Framax tie-holder bracket</b> Framax-Ankerhaltewinkel	1.4	588188000
 Painted blue Width: 9 cm Height: 13 cm		
<b>Framax foundation clamp 0.90m</b> Framax-Fundamentspanner 0,90m	4.9	588141000
 Galvanised		
<b>Framax clamping bolt 4-8cm</b> Framax-Klemmschraube 4-8cm	0.39	588107000
 Galvanised Length: 19 cm		
<b>Doka perforated tape 50x2.0mm 25m</b> Doka-Lochband 50x2,0mm 25m	17.0	588206000
		
<b>Framax floor fixing plate</b> Framax-Bodenhalter	0.87	588628000
 Galvanised Length: 17.6 cm Width: 7.7 cm		
<b>Doka express anchor 16x125mm</b> Doka-Expressanker 16x125mm	0.31	588631000
 Galvanised Length: 18 cm Follow the directions in the "Fitting instructions"!		
<b>Doka coil 16mm</b> Doka-Coil 16mm	0.009	588633000
 Galvanised Diameter: 1.6 cm		
<b>Connecting timber</b> Anklemmholz	0.70	176030000
 Varnished yellow Width: 10 cm		

	[kg]	Article N°
<b>Supporting construction</b> Abstützwinkel	10.7	588477000
 Galvanised Length: 66 cm Width: 37 cm Height: 91 cm		
<b>Tie rod system 15.0</b>		
<b>Tie rod 15.0mm galvanised 0.50m</b>	0.72	581821000
<b>Tie rod 15.0mm galvanised 0.75m</b>	1.1	581822000
<b>Tie rod 15.0mm galvanised 1.00m</b>	1.4	581823000
<b>Tie rod 15.0mm galvanised 1.25m</b>	1.8	581826000
<b>Tie rod 15.0mm galvanised 1.50m</b>	2.2	581827000
<b>Tie rod 15.0mm galvanised 1.75m</b>	2.5	581828000
<b>Tie rod 15.0mm galvanised 2.00m</b>	2.9	581829000
<b>Tie rod 15.0mm galvanised 2.50m</b>	3.6	581852000
<b>Tie rod 15.0mm galvanised .....m</b>	1.4	581824000
<b>Tie rod 15.0mm non-treated 0.50m</b>	0.73	581870000
<b>Tie rod 15.0mm non-treated 0.75m</b>	1.1	581871000
<b>Tie rod 15.0mm non-treated 1.00m</b>	1.4	581874000
<b>Tie rod 15.0mm non-treated 1.25m</b>	1.8	581886000
<b>Tie rod 15.0mm non-treated 1.50m</b>	2.1	581876000
<b>Tie rod 15.0mm non-treated 1.75m</b>	2.5	581887000
<b>Tie rod 15.0mm non-treated 2.00m</b>	2.9	581875000
<b>Tie rod 15.0mm non-treated 2.50m</b>	3.6	581877000
<b>Tie rod 15.0mm non-treated 3.00m</b>	4.3	581878000
<b>Tie rod 15.0mm non-treated 3.50m</b>	5.0	581888000
<b>Tie rod 15.0mm non-treated 4.00m</b>	5.7	581879000
<b>Tie rod 15.0mm non-treated 5.00m</b>	7.2	581880000
<b>Tie rod 15.0mm non-treated 6.00m</b>	8.6	581881000
<b>Tie rod 15.0mm non-treated 7.50m</b>	10.7	581882000
<b>Tie rod 15.0mm non-treated .....m</b>	1.4	581873000
Ankerstab 15,0mm		
		
		<b>DIN 18216</b>
<b>Super plate 15.0</b> Superplatte 15,0	1.1	581966000
 Galvanised Height: 6 cm Diameter: 12 cm Width-across: 27 mm		
		<b>DIN 18216</b>
<b>Wing nut 15.0</b> Flügelmutter 15,0	0.31	581961000
 Galvanised Length: 10 cm Height: 5 cm Width-across: 27 mm		
		<b>DIN 18216</b>
<b>Hexagon nut 15.0</b> Sechskantmutter 15,0	0.23	581964000
 Galvanised Length: 5 cm Width-across: 30 mm		
		<b>DIN 18216</b>
<b>Framax pressure plate 6/15</b> Framax-Druckplatte 6/15	0.80	588183000
 Galvanised		
<b>Star grip nut 15.0 G</b> Sternmutter 15,0 G	0.43	587544000
 Galvanised Width: 10 cm Height: 5 cm Width-across: 26 mm		

	[kg]	Article N°	[kg]	Article N°
<b>Angle anchor plate 12/18</b> Winkelplatte 12/18  Galvanised 	1.5	581934000		
<b>Distance piece 20cm</b> <b>Distance piece 25cm</b> <b>Distance piece 30cm</b> Distanzhalter  PE Grey Blue	0.04 0.05 0.06	581907000 581908000 581909000		
<b>Plastic tube 22mm 2.50m</b> Kunststoffrohr 22mm 2,50m  PVC Grey Diameter: 2.6 cm	0.45	581951000		
<b>Universal cone 22mm</b> Universal-Konus 22mm  Grey Diameter: 4 cm	0.005	581995000		
<b>Plug 22mm</b> Verschlussstopfen 22mm  PE Grey	0.003	581953000		
<b>Protective cap 15.0/20.0</b> Schutzkappe 15,0/20,0  Yellow Length: 6 cm Diameter: 6.7 cm	0.03	581858000		
<b>Tie-rod wrench 15.0/20.0</b> Ankerstabschlüssel 15,0/20,0  Galvanised	1.8	580594000		
<b>Friction type ratchet SW27</b> Freilaufnarre SW27  Manganese-phosphated Length: 30 cm	0.49	581855000		
<b>Box spanner 27 0.65m</b> Steckschlüssel 27 0,65m  Galvanised	1.9	581854000		

## Near to you, worldwide

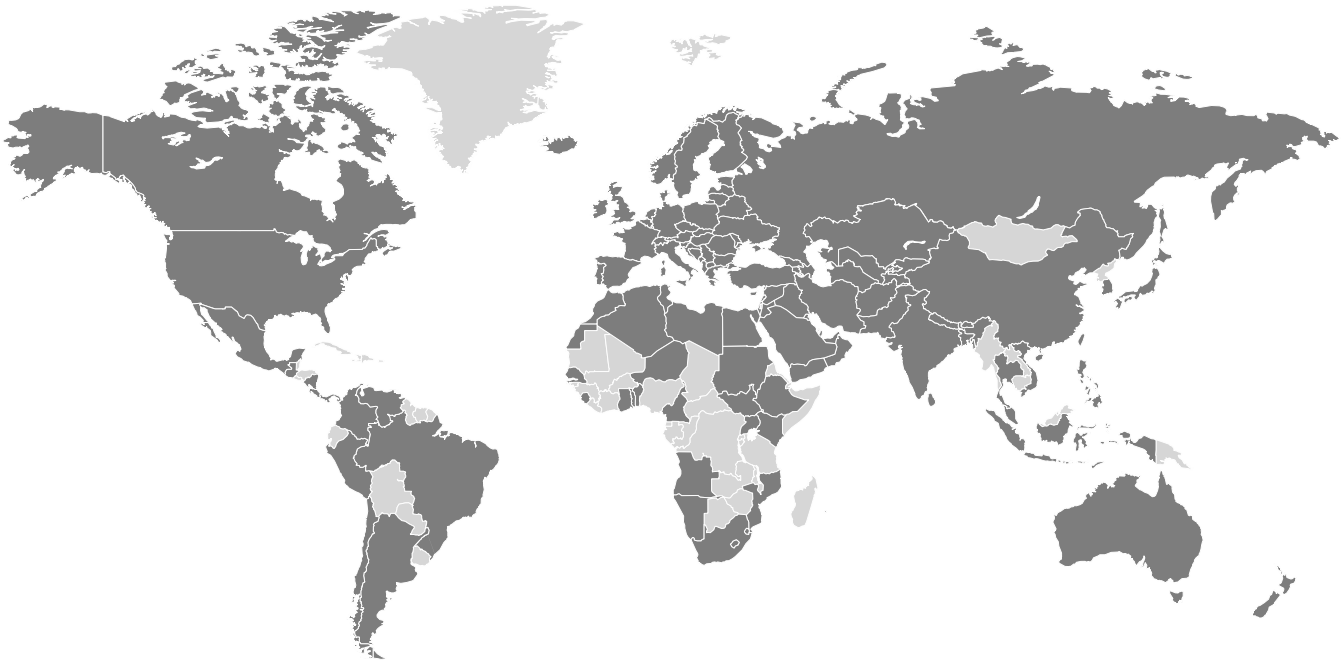
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With more than 160 sales and logistics facilities in over 70 countries, the Doka Group has a highly efficient distribution network which ensures that equipment and

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.



[www.doka.com/framax-xlife](http://www.doka.com/framax-xlife)