

# NeoR

## PRODUCT INFORMATION



# NeoR Lightweight formwork

Less weight, more performance

## OBLONG HOLES AND KEYBOLT HOLES

Height offset of the panels on uneven installation surfaces can be performed up to 2cm in a 15cm grid via oblong holes in the panel frame.

## INTEGRATED HANDLE

Thanks to the integrated handle and the light weight this formwork can be assembled and moved easily by hand.

## INTERNAL TIE-POINTS

The formwork can be used both vertically and horizontally. Therefore the panels 90 x 150cm and the large -size panel have additional internal tie-points.

## EXTERNAL TIE-POINTS

The external tie-points guarantee the lowest number of tie-points and thereby an optimal concrete appearance.

## KEYBOLTS

The keybolt serves as lightweight, friction-locked and above all cost-effective connecting pieces.

## PASCHAL-PLYWOOD

The particularly resilient and already proven plywood consists of 9-layer, 12 mm thick finnish birch plywood.

## FUNCTIONAL BARS

Accessories such as suspending pieces for props or platform brackets can be attached at the functional bars.

## FLAT STEEL FRAME

The frame consists of flat steel with a thickness of 6 mm and is light, impact resistant, repairable and has a high durability.

## LARGE-SIZE PANEL

With the large-size panel 180 x 300 cm even large areas can be implemented quickly and economically.

## CROSS PROFILES

The cross profiles provide additional stability and provide more robustness and reduced deformability.





# The advantages

## Less weight

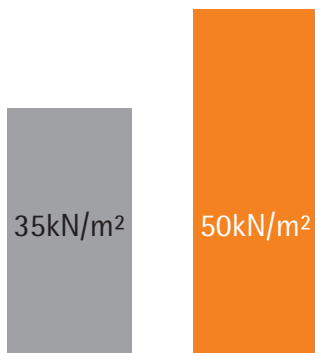


**-25%**

less weight\*  
 \*compared to Modular/GE universal formwork  
 + can be moved easily by hand  
 + low maximum weight of 40kg  
 + universal fields of application  
 + ideal for construction sites without a crane



## Higher maximum concrete pressure

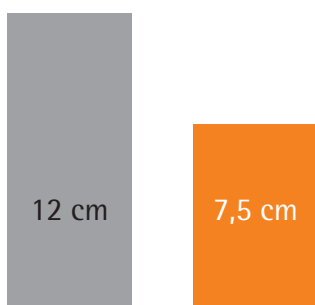


**+40%**

more concrete pressure\*  
 \*compared to Modular/GE universal formwork  
 + 50kN/m<sup>2</sup>  
 + fast concreting  
 + high stability



## Low frame depth



**-35%**

lower frame depth\*  
 \*compared to a conventional formwork  
 + only 7,5 cm frame depth  
 + low storage volume  
 + low transport volume  
 + less transport costs



## Low-cost formwork



...because of low operating costs

+ low-cost connecting pieces  
 + extreme longevity  
 + few different panel widths  
 + small number of tie points  
 + fast way of working  
 = quick return of investment

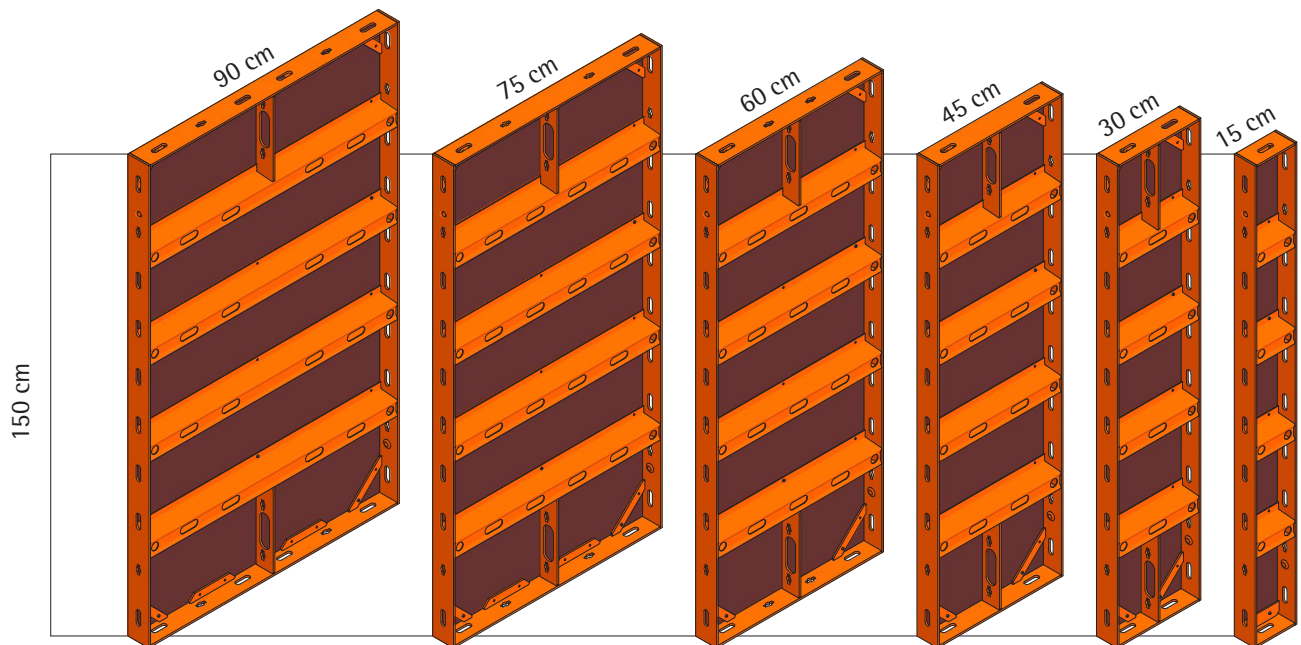


# Well-balanced range of panels & accessories

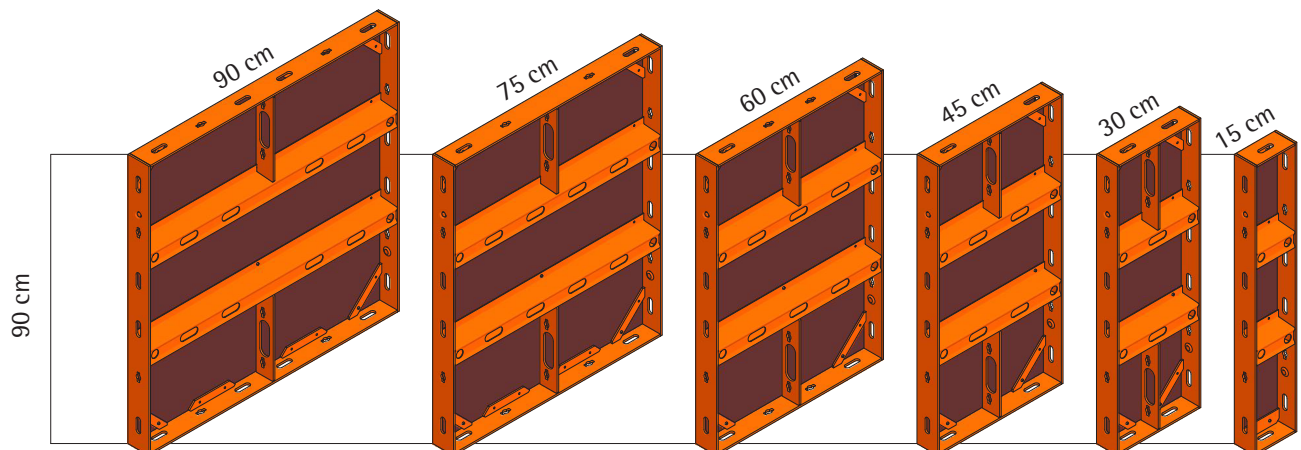
## Perfectly coordinated element sizes

- ideal utilisation of the formwork storage by a well-balanced range of panels
- universal fields of application: foundations, columns, beams, walls
- a floor height of up to 3 m can be formed with just one extension using the panel height 150 cm
- formwork widths of 15 cm up to 90 cm in a 15 cm grid
- all panels can be combined both vertically and horizontally with each other in the same construction project
- with 5, 6 and 10 filler posts for residual compensations and matching plastic filler pieces, everything can be formed down to the centimetre

## Height 150 cm



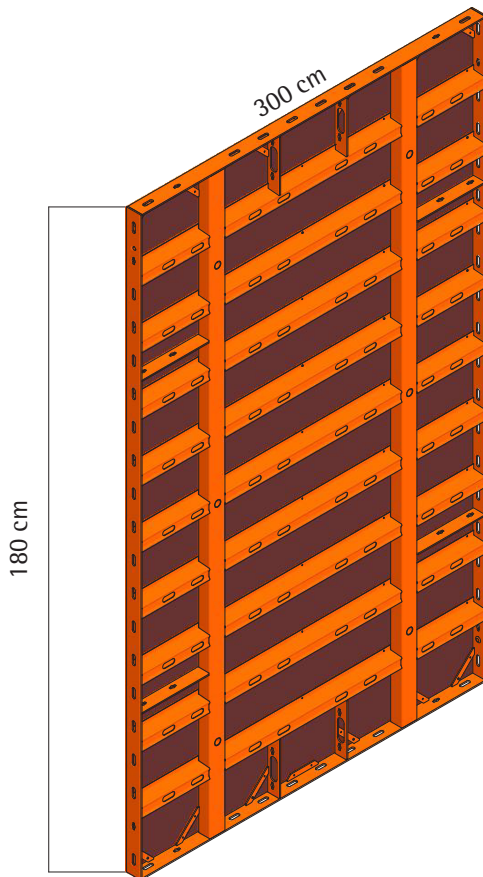
## Height 90 cm





## Large-size panel

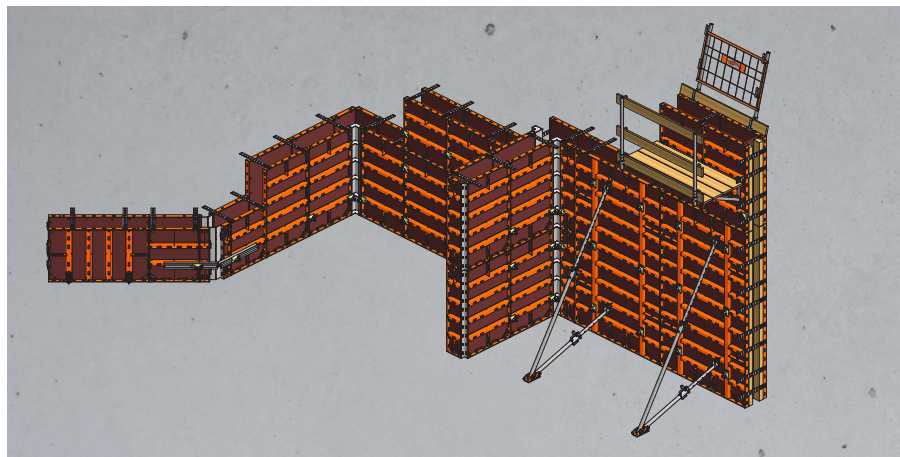
180 x 300 cm



- a floor height of up to 3 m can be formed without extension with the large-size panel or with just one extension with the 150 cm panel range
- large areas can be formed economically with the large-size panel 180 x 300 cm i.e. 5,4m<sup>2</sup>
- can be used both vertically and horizontally
- only 2 tie points on a height of 3m if it is tensioned on top

## Configuration example

Universally and flexibly applicable



## Exposed concrete

The lightweight formwork ensures a perfect concrete appearance

- less joints with the large size panel
- fewer tie points ensure an optimal concrete appearance, therefore ideal for exposed concrete
- maximum concrete pressure of 50 kN/m<sup>2</sup> according to DIN 18218
- the tolerances of deflection according to DIN 18202, table 3, line 6 are fulfilled



## Compatibility

Compatible with all PASCHAL systems

### Modular/GE universal formwork



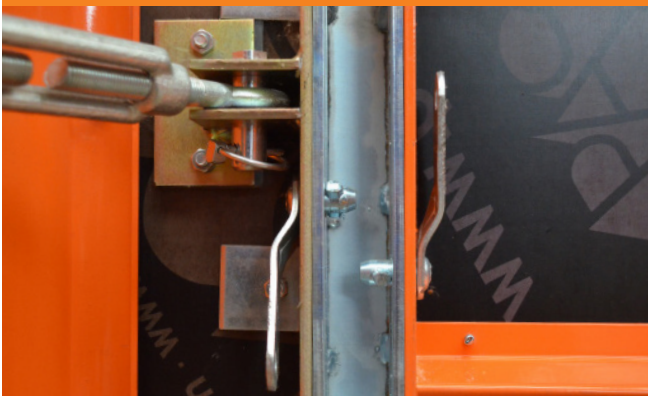
- the same frame depth as the Modular/GE universal formwork
- panels are connected via a filler post with the keybolt
- common accessories can be reused

### LOGO Wall formwork



- easy to combine with the combi clamp
- cross profiles for fixing of same accessories
- common accessories are compatible
- Height offset can be performed easily

### TTR formwork



- the same oblong holes as the Circular Trapezoidal girder formwork
- panels are connected via a filler post with the keybolt
- Seamless connection straight / round

## System properties

### Technical Data

Technical Data	NeoR
Panel widths	90 / 75 / 60 / 45 / 30 / 15 cm
Panel heights	150/90 cm
Large-size panel	180x300 cm
Frame depth	7,5 cm
Plywood	12 mm finnish birch plywood (9-ply)
Max. concrete pressure	50 kN/m <sup>2</sup> according DIN 18218
Tolerances of deflection	According DIN 18202, table 3, line 6
Formwork anchor	Tie rods DW15
Frame	flat steel with a thickness of 6 mm



## Miracle of space

Low volume enables cheap transport

- The lightweight formwork NeoR has a very low volume per panel thanks to its small frame depth of only 7,5 cm
- This results in a low storage and transportation volume
- Accessories (such as the keybolt) also take up little space

Example calculations:

### Example NeoR:

100 m<sup>2</sup> formwork area = 7,5 m<sup>3</sup> storage/transportation volume

### Comparison to a conventional formwork:

100 m<sup>2</sup> formwork area = 12 m<sup>3</sup> storage/transportation volume

## Miracle of transport

The only large-size formwork that fits on a flatbed truck



*Due to the low weight and the ideal product dimensions, up to 6 large-size panels (1.116 kg) can be transported with a flatbed truck.*

# Secuset

## A post for all cases

Opposite lateral protection must be provided at the upper workplaces of the formwork from a fall height of 2.00 m. Secuset is the perfect choice for this:

- Versatile use (for wall formwork, slab formwork, at windows and doorways, on concrete slabs, at free slab edges and on wall tops)
- Easy and fast assembly
- Corresponds to the current security standard (DIN EN 13374)
- Can be used both with fence or boards



Easy assembly of the lateral protection in 4 steps:

1. Attach support NeoR lateral protection on top part of panel.
2. Insert railing post with toe board support.
3. Clip fences or 3 x 15 cm boards to railings.
4. Secure the toe board and fence.



PASCHAL Secuset is easily assembled with the matching support when used with the lightweight formwork NeoR. Therefore the keybolt again serves as a light and friction-locked connection piece.

## The advantages at a glance



**Universal application**  
The lateral protection system can be used for a number of applications with various connection pieces.



**Certified safety**  
Secuset corresponds to the current security standard DIN EN 13374 and convinces with a particularly long durability.



**Fast assembly**  
Thanks to the solid click method, the lateral protection posts can be attached particularly easily and safely.



# Crane lifting clamp

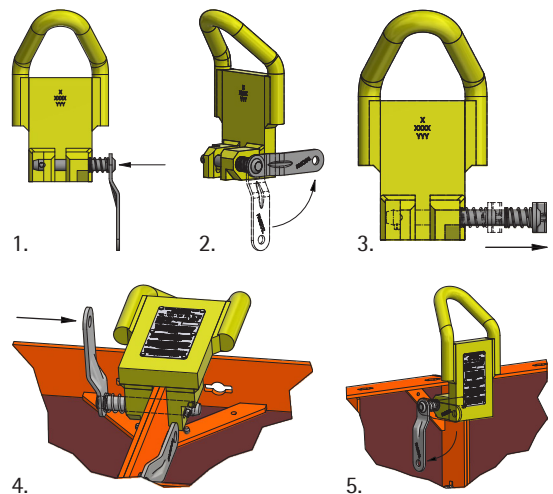
Easy to assemble and extremely load-bearing



The crane lifting clamp KA is used as a lifting device to move individual panels or pre-mounted panel units of the lightweight formwork NeoR. Thanks to its light weight large panel units of up to approximately 25 m<sup>2</sup> can be transported, which saves a lot of time.

Easy assembly of the crane lifting clamp KA in 5 steps:

1. Press safety bolt with handle in the direction of the pin to release this from the lock.
2. Turn safety bolt with handle 90° upwards.
3. Pull out safety bolt until it stops.
4. Position crane lifting clamp KA over the bolt hole or oblong hole of the attachment points. Push the safety bolt through the bolt hole and the locking block.
5. Push safety bolt until the pin comes out of the locking block. Turn the handle 90° downwards until the pin snaps into the lock.



## The advantages at a glance



### Load capacity

The load capacity of the crane lifting clamp KA is 600 kg. The hanging spread angle must not exceed 60°.



### Certified safety

The crane lifting clamp KA corresponds to the current security standards and convinces with a particularly long durability.



### Fast assembly

The crane lifting clamp KA can be easily assembled in only 5 steps.

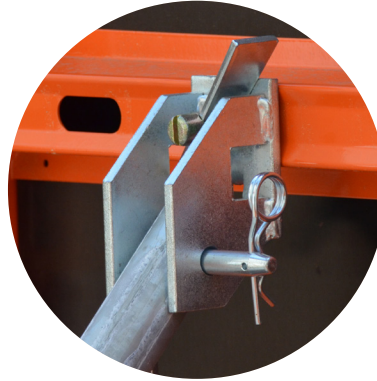
## Other accessories

Existing accessory parts are compatible



### Platform bracket

In order to set up workplaces at the formwork, the bracket is attached to the panels where the railing posts lateral protection and a support for toe board are mounted. The planks and the lateral boards are to be provided by site.



### Suspending piece for props

The connection of suspending pieces for props to the formwork is done using suspending pieces for props via an integrated hook head connection in the oblong holes of the cross profiles.



### Foundation tie clamp

The perforated tie is installed as a lost tie anchor under the formwork panels to a maximum concreting height of 90 cm. The connection to the formwork panels is via the foundation tie clamps in the oblong holes of the functional cross profile.



### Multi water

The multi water as a double U channel water with holes is a lightweight with only 17 kilograms. It can be fixed to the formwork vertically for height extensions or horizontally as a water for hinged corners.



### Tie rod guide

The tie rod guide enables a tie rod to be attached over the top edge of the formwork. It can be placed at any position. Thereby it is not bound to opposite keybolt holes or tie rod openings.



### Fixing bracket

An on-site plywood can be connected to the formwork panels with the fixing bracket. Examples of use are formwork on inclined surfaces, the forming of pipes in underground shafts and the connection to inclined surfaces.



# Application examples



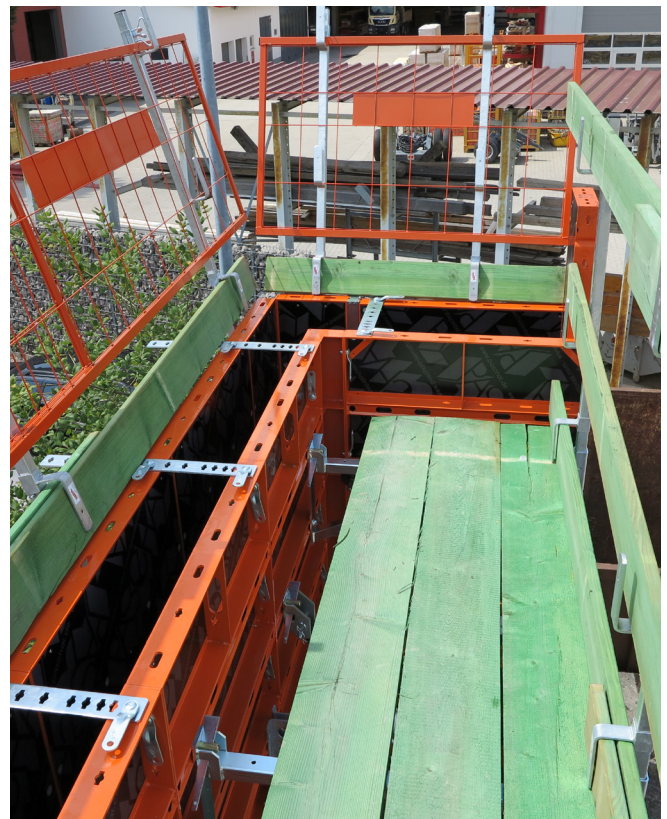
The NeoR is the perfect formwork for every construction project because of its high flexibility and the balanced sorting of panels.



The lightweight formwork NeoR has been extensively tested and is ready for use in a wide variety of fields.



The integrated oblong holes in the element frame allow a height offset of up to 2 cm for uneven installation surfaces.



Accessories and connecting pieces of the Modular/GE universal formwork and the wall formwork LOGO.3 can also be used for the lightweight formwork NeoR.

# Starter kit 1

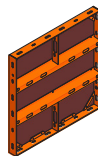
Recommended combination for 50m<sup>2</sup>



Description:	NeoR panel 90x150 cm	NeoR panel 75x150 cm	NeoR panel 60x150 cm	NeoR panel 45x150 cm	NeoR panel 30x150 cm
Quantity:	<b>20 pieces</b>	<b>2 pieces</b>	<b>2 pieces</b>	<b>6 pieces</b>	<b>4 pieces</b>
Size:	27,00 m <sup>2</sup>	2,25 m <sup>2</sup>	1,80 m <sup>2</sup>	4,05 m <sup>2</sup>	1,80 m <sup>2</sup>
Art.-No.	N164.001.0900	N164.001.0750	N164.001.0600	N164.001.0450	N164.001.0300



Description:	NeoR panel 15x150 cm	Filler post 5x150 cm	Inside corner 15x15x150 cm	Outside corner 150 cm
Quantity:	<b>2 pieces</b>	<b>4 pieces</b>	<b>4 pieces</b>	<b>8 pieces</b>
Size:	0,45 m <sup>2</sup>	0,30 m <sup>2</sup>	1,80 m <sup>2</sup>	0,00 m <sup>2</sup>
Art.-No.	N164.001.0150	N164.003.0050	N164.005.0150	N164.006.0000



Description:	NeoR panel 90x90 cm	NeoR panel 75x90 cm	NeoR panel 60x90 cm	NeoR panel 45x90 cm	NeoR panel 30x90 cm
Quantity:	<b>6 pieces</b>	<b>2 pieces</b>	<b>2 pieces</b>	<b>6 pieces</b>	<b>2 pieces</b>
Size:	4,86 m <sup>2</sup>	1,35 m <sup>2</sup>	1,08 m <sup>2</sup>	2,43 m <sup>2</sup>	0,54 m <sup>2</sup>
Art.-No.	N162.001.0900	N162.001.0750	N162.001.0600	N162.001.0450	N162.001.0300



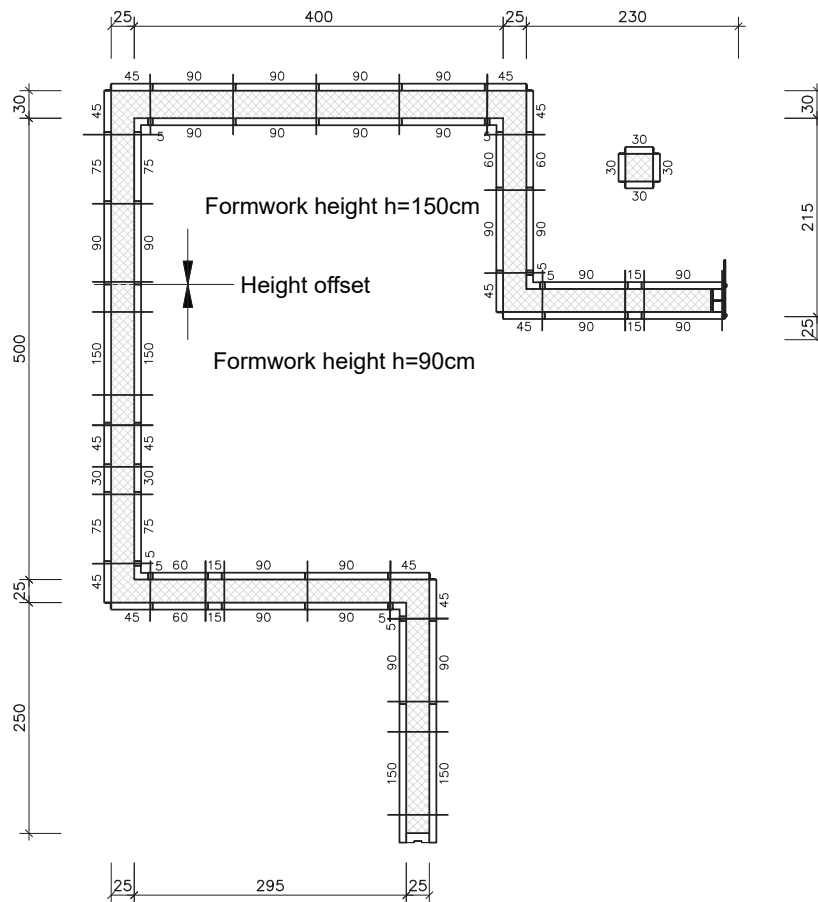
Description:	NeoR panel 15x90 cm	Filler post 5x90 cm	Inside corner 15x15x90 cm	Outside corner 90 cm
Quantity:	<b>2 pieces</b>	<b>4 pieces</b>	<b>2 pieces</b>	<b>4 pieces</b>
Size:	0,27 m <sup>2</sup>	0,18 m <sup>2</sup>	0,54 m <sup>2</sup>	0,00 m <sup>2</sup>
Art.-No.	N162.001.0150	N162.003.0050	N162.005.0150	N162.006.0000



### Configuration example

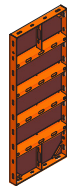


### Formwork plan example



# Starter kit 2

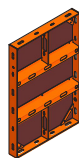
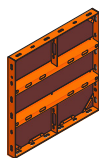
Recommended combination for 100m<sup>2</sup>



Description:	NeoR panel 90x150 cm	NeoR panel 75x150 cm	NeoR panel 60x150 cm	NeoR panel 45x150 cm	NeoR panel 30x150 cm	NeoR panel 15x150 cm
Quantity:	<b>42 pieces</b>	<b>6 pieces</b>	<b>6 pieces</b>	<b>8 pieces</b>	<b>4 pieces</b>	<b>4 pieces</b>
Size:	56,70 m <sup>2</sup>	6,75 m <sup>2</sup>	5,40 m <sup>2</sup>	5,40 m <sup>2</sup>	1,80 m <sup>2</sup>	0,90 m <sup>2</sup>
Art.-No.	N164.001.0900	N164.001.0750	N164.001.0600	N164.001.0450	N164.001.0300	N164.001.0150



Description:	Filler post 10x150 cm	Filler post 6x150 cm	Filler post 5x150 cm	Inside corner 15x15x150 cm	Outside corner 150 cm
Quantity:	<b>2 pieces</b>	<b>6 pieces</b>	<b>6 pieces</b>	<b>6 pieces</b>	<b>10 pieces</b>
Size:	0,30 m <sup>2</sup>	0,54 m <sup>2</sup>	0,45 m <sup>2</sup>	2,70 m <sup>2</sup>	0,00 m <sup>2</sup>
Art.-No.	N164.003.0100	N164.003.0060	N164.003.0050	N164.005.0150	N164.006.0000



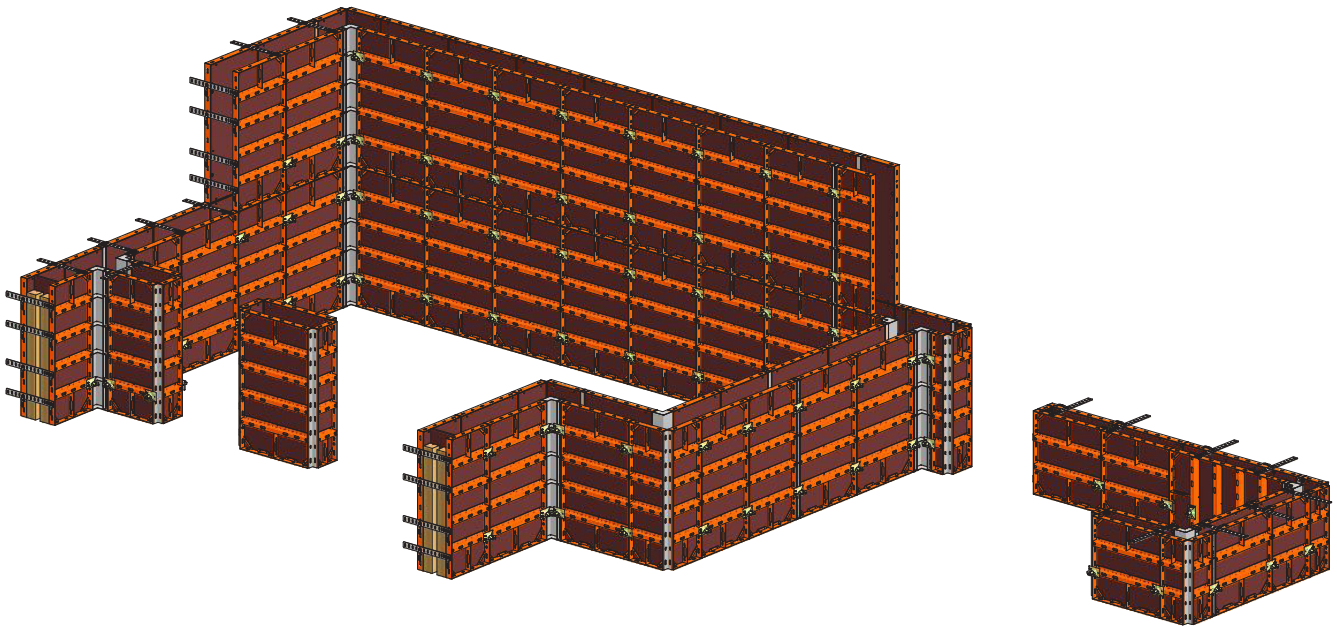
Description:	NeoR panel 90x90 cm	NeoR panel 75x90 cm	NeoR panel 60x90 cm	NeoR panel 45x90 cm	NeoR panel 30x90 cm
Quantity:	<b>12 pieces</b>	<b>4 pieces</b>	<b>4 pieces</b>	<b>4 pieces</b>	<b>4 pieces</b>
Size:	9,72 m <sup>2</sup>	2,70 m <sup>2</sup>	2,16 m <sup>2</sup>	1,62 m <sup>2</sup>	1,08 m <sup>2</sup>
Art.-No.	N162.001.0900	N162.001.0750	N162.001.0600	N162.001.0450	N162.001.0300



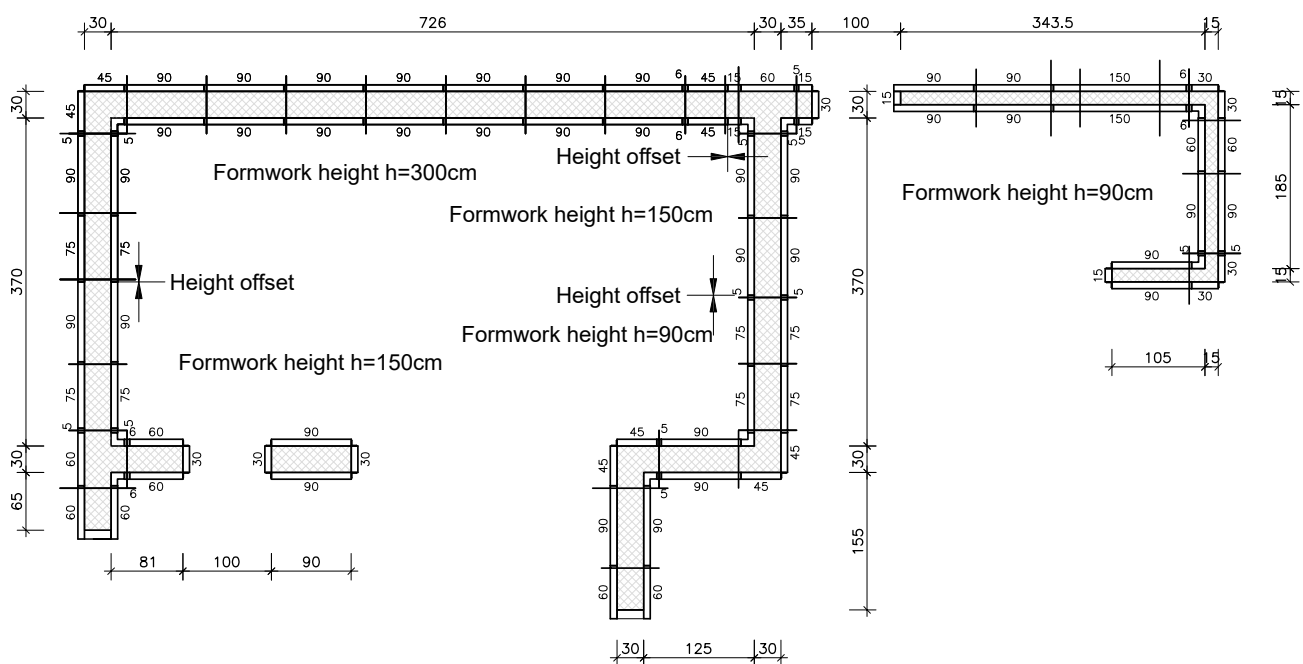
Description:	NeoR panel 15x90 cm	Filler post 6x90 cm	Filler post 5x90 cm	Inside corner 15x15x90 cm	Outside corner 90 cm
Quantity:	<b>2 pieces</b>	<b>2 pieces</b>	<b>6 pieces</b>	<b>4 pieces</b>	<b>6 pieces</b>
Size:	0,27 m <sup>2</sup>	0,11 m <sup>2</sup>	0,27 m <sup>2</sup>	1,08 m <sup>2</sup>	0,00 m <sup>2</sup>
Art.-No.	N162.001.0150	N162.003.0060	N162.003.0050	N162.005.0150	N162.006.0000



## Configuration example



## Formwork plan example



# Starter kit 3

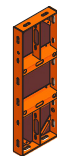
Recommended combination for 200m<sup>2</sup>



Description:	NeoR panel 180x300 cm	NeoR panel 90x150 cm	NeoR panel 75x150 cm	NeoR panel 60x150 cm	NeoR panel 45x150 cm	NeoR panel 30x150 cm
Quantity:	<b>16 pieces</b>	<b>46 pieces</b>	<b>8 pieces</b>	<b>8 pieces</b>	<b>10 pieces</b>	<b>8 pieces</b>
Size:	86,40 m <sup>2</sup>	62,10 m <sup>2</sup>	9,00 m <sup>2</sup>	7,20 m <sup>2</sup>	6,75 m <sup>2</sup>	3,60 m <sup>2</sup>
Art.-No.	N167.001.1800	N164.001.0900	N164.001.0750	N164.001.0600	N164.001.0450	N164.001.0300



Description:	NeoR panel 15x150 cm	NeoR panel 10x150 cm	NeoR panel 6x150 cm	NeoR panel 5x150 cm	Inside corner 15x15x150 cm	Outside corner 150 cm
Quantity:	<b>8 pieces</b>	<b>2 pieces</b>	<b>10 pieces</b>	<b>6 pieces</b>	<b>6 pieces</b>	<b>12 pieces</b>
Size:	1,80 m <sup>2</sup>	0,30 m <sup>2</sup>	0,90 m <sup>2</sup>	0,45 m <sup>2</sup>	2,70 m <sup>2</sup>	0,00 m <sup>2</sup>
Art.-No.	N164.001.0150	N164.003.0100	N164.003.0060	N164.003.0050	N164.005.0150	N164.006.0000



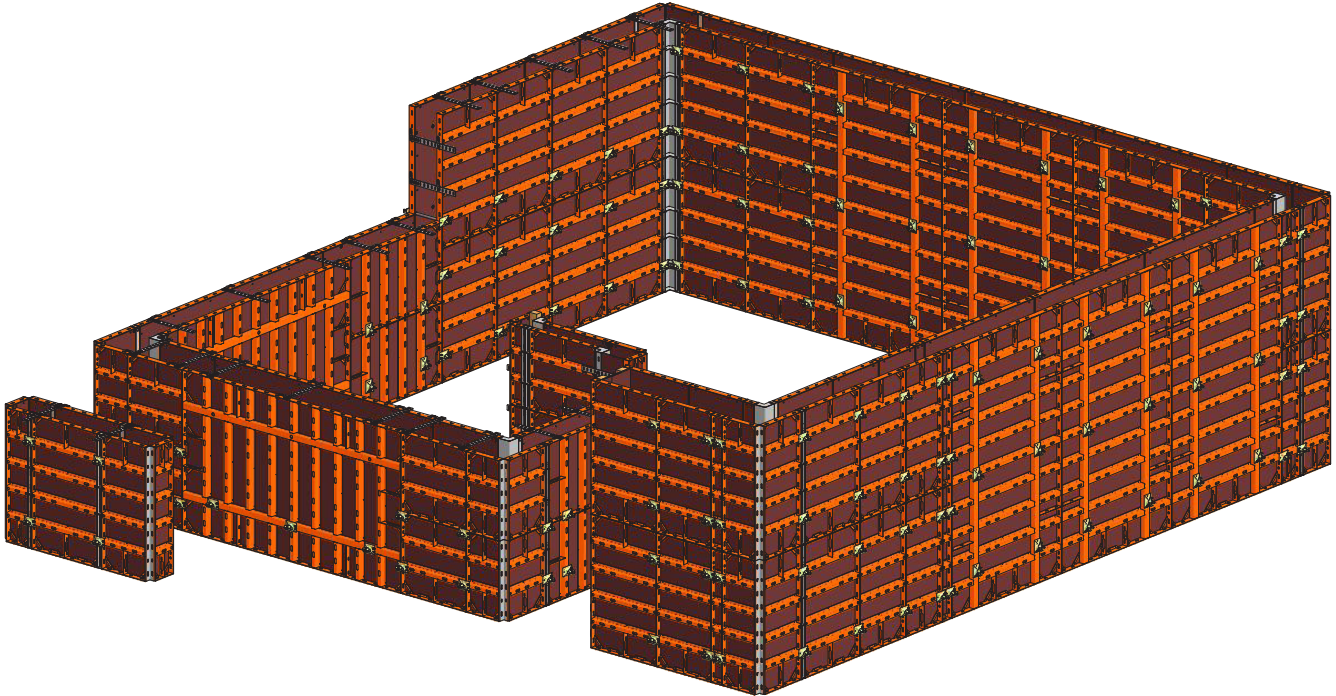
Description:	NeoR panel 90x90 cm	NeoR panel 75x90 cm	NeoR panel 60x90 cm	NeoR panel 45x90 cm	NeoR panel 30x90 cm	NeoR panel 15x90 cm
Quantity:	<b>8 pieces</b>	<b>4 pieces</b>	<b>4 pieces</b>	<b>6 pieces</b>	<b>4 pieces</b>	<b>4 pieces</b>
Size:	6,48 m <sup>2</sup>	2,70 m <sup>2</sup>	2,16 m <sup>2</sup>	2,43 m <sup>2</sup>	1,08 m <sup>2</sup>	0,54 m <sup>2</sup>
Art.-No.	N162.001.0900	N162.001.0750	N162.001.0600	N162.001.0450	N162.001.0300	N162.001.0150



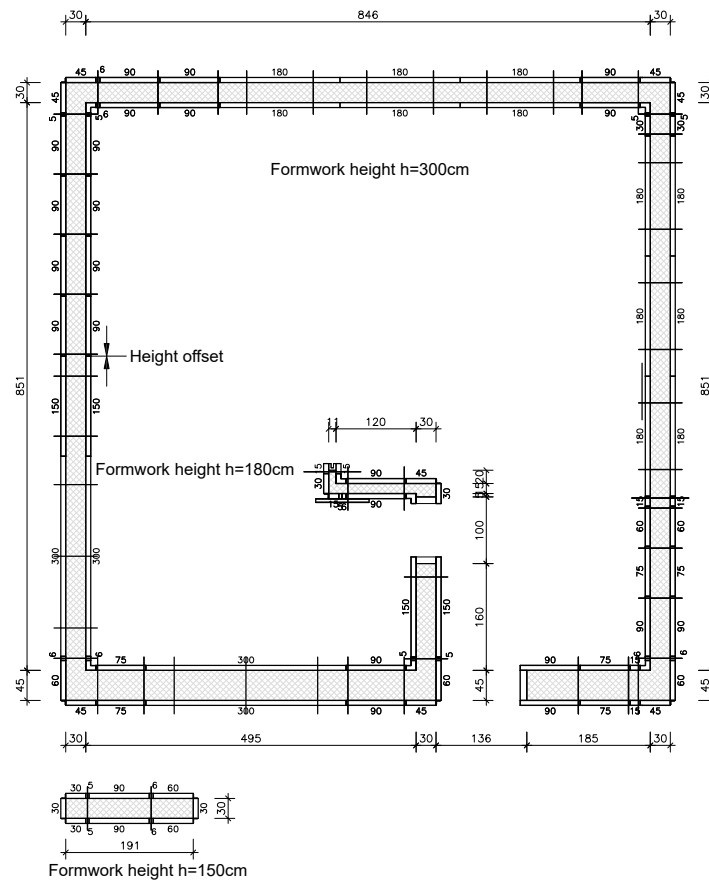
Description:	NeoR panel 10x90 cm	NeoR panel 6x90 cm	NeoR panel 5x90 cm	Inside corner 15x15x90 cm	Outside corner 90 cm
Quantity:	<b>2 pieces</b>	<b>6 pieces</b>	<b>2 pieces</b>	<b>8 pieces</b>	<b>8 pieces</b>
Size:	0,18 m <sup>2</sup>	0,324 m <sup>2</sup>	0,09 m <sup>2</sup>	2,16 m <sup>2</sup>	0,00 m <sup>2</sup>
Art.-No.	N162.003.0100	N162.003.0060	N162.003.0050	N162.005.0150	N162.006.0000



## Configuration example



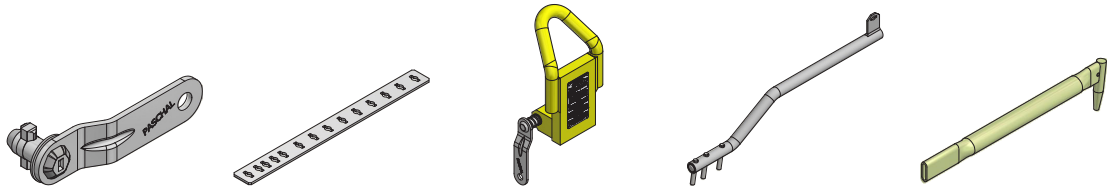
## Formwork plan example



# Starter kit accessories

Recommended accessories for 100m<sup>2</sup>

## Basic equipment



Description:	Keybolt	Spacer strap 6-50cm	Crane lifting clamp KA cap. 600kg	Assembly tool	Centering tool
Quantity:	<b>500 pieces</b>	<b>40 pieces</b>	<b>2 pieces</b>	<b>1 piece</b>	<b>1 piece</b>
Art.-No.	N189.001.0100	N189.001.0020	N189.002.0008	N189.003.0000	N182.000.0179



Description:	Transportation box	Cover transportation box	Loading auxiliary
Quantity:	<b>1 piece</b>	<b>1 piece</b>	<b>4 pieces</b>
Art.-No.	N189.002.0003	N940.009.0019	N180.500.0004

## Filler pieces



Description:	Plastic filler 1x90cm	Plastic filler 2x90cm	Plastic filler 3x90cm	Plastic filler 4x90cm	5-pin keybolt
Quantity:	<b>2 pieces</b>	<b>2 pieces</b>	<b>2 pieces</b>	<b>2 pieces</b>	<b>60 pieces</b>
Art.-No.	N162.011.1010	N162.011.1020	N162.011.1030	N162.011.1040	N189.001.0105



Description:	Plastic filler 1x150cm	Plastic filler 2x150cm	Plastic filler 3x150cm	Plastic filler 4x150cm	Fixing bracket for 21mm plywood
Quantity:	<b>4 pieces</b>	<b>4 pieces</b>	<b>4 pieces</b>	<b>4 pieces</b>	<b>16 pieces</b>
Art.-No.	N164.011.1010	N164.011.1020	N164.011.1030	N164.011.1040	N189.001.0017

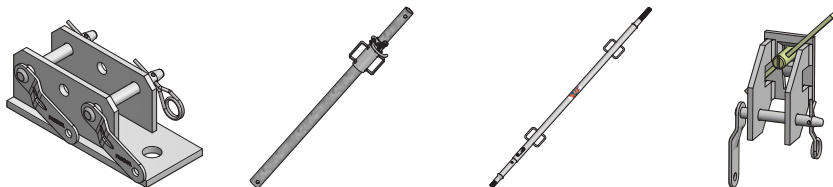


## Tension material



Description:	Plate with ball-and-socket joint	Tie rod DW15x65 cm	Waling clamp 10-20 cm	Support for walers 6-24 cm
Quantity:	<b>240 pieces</b>	<b>120 pieces</b>	<b>10 pieces</b>	<b>10 pieces</b>
Art.-No.	N189.001.0059	N189.006.0650	N180.500.0002	N180.500.0005

## Supports / props



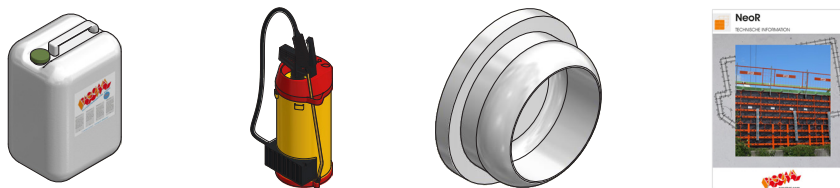
Description:	Foot plate 3 holes	Support variable 105-150 cm	Adjustable prop 175-285 cm	Suspending piece for props
Quantity:	<b>6 pieces</b>	<b>6 pieces</b>	<b>6 pieces</b>	<b>12 pieces</b>
Art.-No.	N189.005.0023	N189.005.0001	N189.005.0014	N187.500.0003

## Lateral protection



Description:	NeoR bracket Secuset	Railing post 120cm Secuset	Support for toe board Secuset	Support NeoR Secuset
Quantity:	<b>10 pieces</b>	<b>20 pieces</b>	<b>10 pieces</b>	<b>10 pieces</b>
Art.-No.	N189.000.0040	N189.000.1001	N189.000.1010	N189.000.0041

## Consumption material



Description:	Parting compound P 2000 (30 litres)	Parting compound pistol 5 litres	Plug D.21	Technical Information NeoR
Quantity:	<b>1 piece</b>	<b>1 piece</b>	<b>100 pieces</b>	<b>1 piece</b>
Art.-No.	N189.003.0019	N189.003.0009	N680.000.0150	N953.002.0074

