

The Formwork Experts.

# Doka formwork sheet 3-S plus

## Data Sheet



96403-800

The Doka formwork sheet 3-S plus is a high-grade three-ply solid-wood sheet with urea-melamine resin coating on both sides to Austrian standard ÖNORM B 3023 and an extra varnish sealant on one side for increased abrasion resistance and reduced texturing and cracking.

## Sheet structure

- Three-ply solid-wood sheet, spruce.
- The layers are crosswise glue-bonded.
- With/without all-round edge strip.

## Glue-bonding

- Boil-resistant, alkali-resistant, water-resistant and weather-resistant.
- The glue-bonding is compliant with the requirements of Austrian standard ÖNORM B 3023.

## Surfaces

- Both sides urea-melamine resin coating with approx. 130 g per m<sup>2</sup> and side.
- The side facing the concrete has an extra varnish sealant coating sanded with corundum particles.
- Edge sealing: Emulsion coating.

## Technical data

### Note:

All values in the tables are based on a sheet moisture content of 12 ± 3% on delivery. Changes in the wood's moisture content can have effects on the weight, dimensions and mechanical properties of the sheet.

The grain of the outside layers of this formwork sheet runs parallel to the longitudinal direction of the sheet.

### Thickness and weight:

Nominal thickness [mm]	Layers	Weight [kg/m <sup>2</sup> ]
21	3	9.7
27		12.1

### Formats:

Length [cm]	Width [cm]
200	9.7
	20
250	40
	50

### Format tolerances:

	Tolerance
Length/Width	±1.0 mm
Perpendicularity	±1.0 mm/m
Straightness of sheet edge	±0.2 mm/m

### Mechanical properties (to ÖNORM B 3023):

Nominal thickness [mm]	E <sub>m</sub> [N/mm <sup>2</sup> ]		f <sub>m</sub> [N/mm <sup>2</sup> ]		EI [kNm <sup>2</sup> /m]	
		⊥		⊥		⊥
21	10000	-	22	-	7.82	-
27	10000	-	22	-	15.40	-

E<sub>m</sub> ... mean flexural modulus of elasticity

f<sub>m</sub> ... characteristic flexural stiffness

EI ... Flexural strength

|| ... parallel to the grain

⊥ ... at right angles to the grain

- **Fire behaviour:** D - s2, d0
- **Thermal conductivity:** 0.13 W/mK
- **Formaldehyde class:** E1

## Number of cycles

Possible frequency of use depends on many factors acting on the formwork sheet. Given optimum conditions of use and correct handling, **15 - 40 use cycles** (guide value) can be achieved.

## Type of application and concreting results

The sheet has a 'low-absorbency' surface. The varnish sealant applied onto the urea melamine resin adhesive provides an additional protective layer. This greatly reduces both moisture pick-up and texturing/cracking, and increases abrasion resistance. The slightly rough surface caused by the projecting corundum particles results in a 'velvety' frosting effect on the concrete.

This sheet is used in slab formwork systems.

## Notes on use

Ensure that the formwork sheets are treated correctly whenever they are used.

Formwork sheets are subject to the natural swelling and shrinkage of wood associated with moisture absorption and loss in the corresponding climatic conditions.

- ▶ Prior to use, always make sure that the wood moisture content of the formwork sheets is matched to that of the surroundings.
- ▶ Cover sheets to protect them from extreme climatic influences such as exposure to sunlight or moisture. This reduces cracking.
- ▶ Seal cut edges, and around holes, with edge varnish.
- ▶ Use a high-quality release agent (e.g. Doka-Trenn or Doka-OptiX).
- ▶ Immediately after stripping the formwork, remove concrete residues from the surfaces that were in contact with the concrete.



### NOTICE

Do not use pointed or sharp objects, wire brushes, abrasive disks or cup brushes.  
Do not use high-pressure spray cleaners.

## General information

The data stated here are guide values.

### Note:

Follow the directions in the 'Formwork sheets' User Information booklet!

You can download it here:



[www.doka.com/three-ply-sheets](http://www.doka.com/three-ply-sheets)



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This product uses materials from sustainably managed forests and controlled sources.