

## The Formwork Experts.

# Formwork sheet 3S top

## **Data Sheet**



The Formwork sheet 3S top is a high-grade threeply solid-wood sheet with urea-melamine resin coating on both sides to Austrian standard ÖNORM B 3023 and an extra varnish sealant for increased abrasion resistance and reduced texturing and cracking.

## **Sheet structure**

- Three-ply solid-wood sheet, spruce.
- The layers are crosswise glue-bonded.
- With 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 pro per m<sup>2</sup> and side and 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  $12 \pm 3\%$  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 thick-<br>ness [mm] | Layers | Weight [kg/m²] |
|-----------------------------|--------|----------------|
| 21                          | - 3 -  | 9.7            |
| 27                          |        | 12.1           |

#### Formats:

| Nominal thickness 21 mm |            | Nominal thickness 27 mm |            |  |  |  |  |  |
|-------------------------|------------|-------------------------|------------|--|--|--|--|--|
| Length [cm]             | Width [cm] | Length [cm]             | Width [cm] |  |  |  |  |  |
| 200                     | 40         | 200                     | 40         |  |  |  |  |  |
| 250                     | 40         | 250                     | 40         |  |  |  |  |  |
| 200                     | 50         | 150                     |            |  |  |  |  |  |
| 250                     | 50         | 200                     | 50         |  |  |  |  |  |
| <b></b>                 |            | 250                     | 50         |  |  |  |  |  |
|                         |            | 300                     |            |  |  |  |  |  |
|                         |            | 300                     | 100        |  |  |  |  |  |

#### 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           |       |   | f <sub>m</sub> [N/mm <sup>2</sup> ] |   | EI [kNm²/m] |   |
|-------------------|-------|---|-------------------------------------|---|-------------|---|
| thickness<br>[mm] | II    | T | II                                  | 1 | Ш           | T |
| 21                | 10000 | - | 22                                  | - | 7.82        | - |
| 27                | 10000 | - | 22                                  | - | 15.40       | - |

Em ... mean flexural modulus of elasticity

 $f_m \ldots characteristic flexural stiffness$ 

El ... Flexural strength

II ... parallel to the grain

 $\perp$  ... 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, up to **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 high-grade formwork sheet fulfils the requirements for fair-faced concrete and can be used in wall and floor-slab formwork, and 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

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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



**www.pefc.org** This product uses materials from sustainably managed forests and controlled sources.