

From wood to wonders.

A MEMBER of HASSLACHER group

### Formwork panels

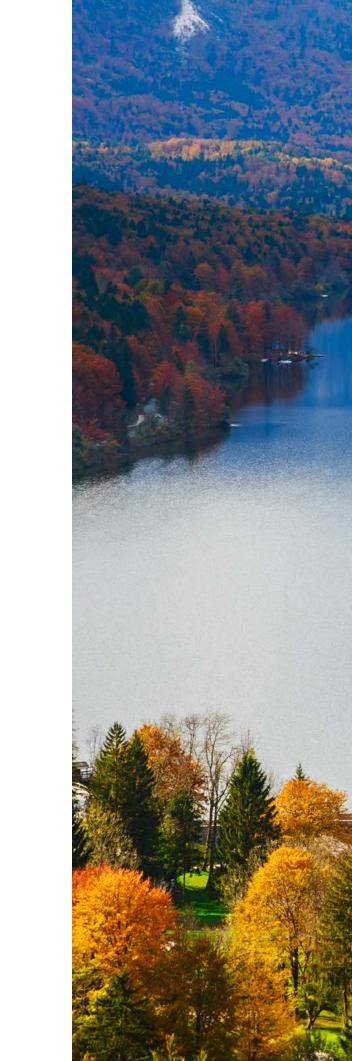
IP FORINIERK FRINKISSISSI

The ecological, dimensionally stable solution for concrete surfaces.

# 01 LIP Bohinj – about the company

LIP Bohinj is located near the imposing mountain scenery of the Triglav National Park, surrounded by green forests and crystal clear lakes. The company has been embodying sustainable management for many decades, because the forest provides us with the necessary raw materials for our quality products. Our wood is sourced from sustainably managed forests in the region and provides the basis for our ecologically long-lasning and dimensionally stable formwork panels.

We comply with the highest EU standards regarding environmental protection and nature conservation and actively contribute to reducing environmental impact with our efficient manufacturing process and the use of environmentally friendly materials. In addition, the harmful greenhouse gas CO<sub>2</sub> is bound in our wood products in the long term and thus has a strong emission-reducing effect. We are a member of HASSLACHER group.



### Sustainability

The HASSLACHER Group stands for a careful use of wood as a resource. Our raw materials come from sustainable and controlled forestry. Our locations are certified according to the strict PEFC standards.





# 02 At a glance

#### **Applications**

- Concrete formwork systems
- Wall formwork
- Ceiling formwork
- Formwork for civil engineered structures
- (Bridge construction, foundations)
- Tunnel formwork

#### **Benefits**

- Dimensionally stable due to plywood-type construction
- Almost crack-free
- High bending strength and stiffness
- Sanded surfaces for perfect results
- Low cost due to high number of uses
- Long service life

# 03 Overview

### Product standard

ÖNORM B 3023

#### Thicknesses

21 mm 27 mm

#### Sizes

Widths:

500 mm Lengths: 1,000 to 3,000 mm at 500 mm intervals

#### Surface

sanded and sealed with melamine resin

### Edges

The edges are framed with side and head battens and protected with an acrylic coating

-LIF FOR

LAP FOR

-LIF FORMHORK PANELS-287

The FORMATORK PANELSY -LIP FORM

#### Wood species

Top layer: Spruce/fir Middle layer: Spruce, fir, pine

# <sup>04</sup> Technical data

#### Bonding

Alkali, water- and weather-resistant adhesive

#### Wood humidity

15 %  $\pm$  3 % at dispatch

#### Mass in kg/m<sup>2</sup>

21 mm thickness: 10.0 kg/m<sup>2</sup> 27 mm thickness: 12.5 kg/m<sup>2</sup>

#### Density

approx. 400 kg/m<sup>3</sup> to 500 kg/m<sup>3</sup>

#### Shrinking and swelling behaviour

Normal to panel plane  $\alpha_{_{\text{U},90}}$  = 0,24 % every 1 % wood humidity difference

At panel plane  $\alpha_{_{\rm U,0}}$  = 0,01 % for every 1 % wood humidity difference

#### Surface

- SELECT quality
- STANDARD quality
- Sanded surface
- With hardy melamine resin sealing

#### Size tolerances

EN 13353 applies.

Length, width: Panel thickness:	Limit deviation $\pm$ 2 mm 0.5 mm within a single panel Limit deviation $\pm$ 1 mm
Edge straightness: Perpendicularity:	



# 05 Innovative, premium panel structure

The panels are coated with melamine resin applied in a high temperature process. This prevents concrete from sticking to the panel and guarantees easy cleaning. Three cross-laminated layers ensure high dimensional stability. The outer layers are additionally edge-bonded with a moisture-resistant adhesive system (load group D4 according to EN 204). The edges are framed with side and head battens. This reduces presence of the cross sectioned wood surfaces of the middle layer, reduces moisture absorption and prolongs the life of the product. Water-repellent edge.

The panels are produced on the basis of the internationally accepted ÖN B 3023 standard.

The two outer layers consist of longitudinal lamellas that are bonded to the middle layer. The latter is composed of small slats running crosswise, framed with side and head and battens.

## 06 Product range

#### Panel sizes

Thickness21 mm, 27 mmSizes500 x 1,000 mm, 500 x 1,500 mm, 500 x 2,000 mm, 500 x 2,500 mm, 500 x 3,000 mm

#### Packaging units

- Every package is wrapped in a plastic hood (with UV filter).
- Other packaging units can be supplied upon request.

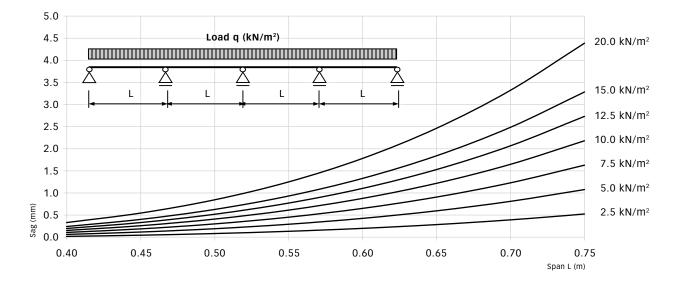
Thickness	Size (mm)	Units per package	m² per package
21 mm	500 x 1,000	2 x 50 units	50 m <sup>2</sup>
	500 x 1,500	2 x 50 units	75 m <sup>2</sup>
	500 x 2,000	2 x 50 units	100 m²
	500 x 2,500	2 x 50 units	125 m²
	500 x 3,000	2 x 50 units	150 m²
27 mm	500 x 1,000	40 units	20 m <sup>2</sup>
	500 x 1,500	40 units	30 m <sup>2</sup>
	500 x 2,000	40 units	40 m <sup>2</sup>
	500 x 2,500	40 units	50 m <sup>2</sup>
	500 x 3,000	40 units	60 m <sup>2</sup>

#### Truck transport

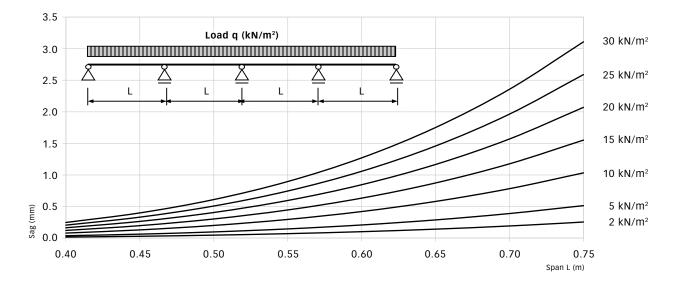
- Thickness 27 mm: 1,900 m<sup>2</sup> / truck (13.6 m)
- Thickness 21 mm: 2,300 m<sup>2</sup> / truck (13.6 m)

### <sup>07</sup> Pre-measurement tables

#### Formwork panel sag LIP Bohinj, d.o.o. 3-layer, thickness 21 mm



### Formwork panel sag LIP Bohinj, d.o.o. 3-layer, thickness 27 mm



8

### 08 Long-lasting Care, storage, cleaning and treatment notes

### Recommendations for use

For the highest possible number of uses and a long service life of the formwork panels, these recommendations for use must be followed.

- The panels should be treated with suitable formwork oil and sprayed with sufficient water immediately before concreting.
- After stripping the formwork, the panels should be cleaned as soon as possible and stored on a level surface.
- For maintenance, suitable formwork oils are recommended, which are to be used according to the manufacturer's instructions.
- Formwork panels should be nailed, drilled or screwed through as little as possible, otherwise the protective coating and thus the service life will be impaired.



# 09 HASSLACHER group product range





Sawn timber

Surfaced timber



Structural finger jointed solid timber & GLT®



Glued solid timber Duo/Trio



Glued laminated timber



Glulam ceiling systems





Cross laminated timber

Glued laminated timber special components



Solid wood boards



Pellets



Formwork panels



Pallets & packaging solutions

#### A MEMBER of HASSLACHER group

#### LIP Bohinj, d.o.o.,

Ulica Tomaža Godca 5 | 4264 Bohinjska Bistrica | Slovenia T +386 4 5795 800 | F +386 4 5795 867 info@lipbohinj.si | lipbohinj.si