

DokaPly Birch Top

Data Sheet



DokaPly Birch is a birchwood-veneer plywood sheet, harvested from plantation species, with 405 g hybrid coating on one side and 220 g film coating on the other side, for horizontal and vertical formwork applications.

Sheet structure

- Film-coated plywood sheet made of birchwood.
- The arrangement of the veneers is crosswise.

Glue-bonding

- Boil-resistant, alkali-resistant, water-resistant and weather-resistant phenolic-resin glue-bonding.
- The glue-bonding meets the requirements of EN 314-2 Service Class 3, DIN 68705 BFU 100 or BS 6566 WBP.

Surfaces

- Side facing the concrete: grey hybrid coating with 405 g per m².
- Back: phenolic-resin film coating with 220 g per m².
- Painted with acrylic resin.

Technical data

Note:

All values in the tables are based on a sheet moisture content of 10 ± 2% 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 transverse to the longitudinal direction of the sheet.

Thicknesses, weights and formats:

Nominal thickness [mm]	Layers	Weight [kg/m ²]	Formats [cm]
12	9	8.5	62.5 x 250 125 x 250 150 x 300 215 x 400
15	11	10.6	
18	13	12.7	
21	15	14.8	

Format tolerances:

	Tolerance
Length/Width	± 3.5 mm (as per EN 315)
Thickness (t)	± 0.2 + 0.03t mm

Mechanical properties (as per Handbook of Finnish Plywood):

Nominal thickness [mm]	E _m [N/mm ²]		f _m [N/mm ²]		EI [kNm ² /m]	
		⊥		⊥		⊥
12	10719	6781	42.9	33.2	1.54	0.98
15	10316	7184	41.3	33.8	2.79	1.94
18	10048	7452	40.2	34.1	4.56	3.38
21	9858	7642	39.4	34.3	6.97	5.40

E_m ... mean flexural modulus of elasticity

f_m ... characteristic flexural strength

EI ... flexural rigidity

|| ... parallel to the grain

⊥ ... at right angles to the grain

- **Fire behaviour** (18 mm thick or thicker): D - s2, d0
- **Thermal conductivity:** 0.17 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, with sheets 18 mm thick up to **80 use cycles** (guide value) can be achieved.

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 prevents cracking and deformation.
- 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.
- Isolated matt areas – permissible up to 10% of the surface area.
- Isolated film thickening – maximum permissible width of 20 mm.
- Colour variation in the film is permissible.
- Rippling is permissible.
- Delamination is not permissible.



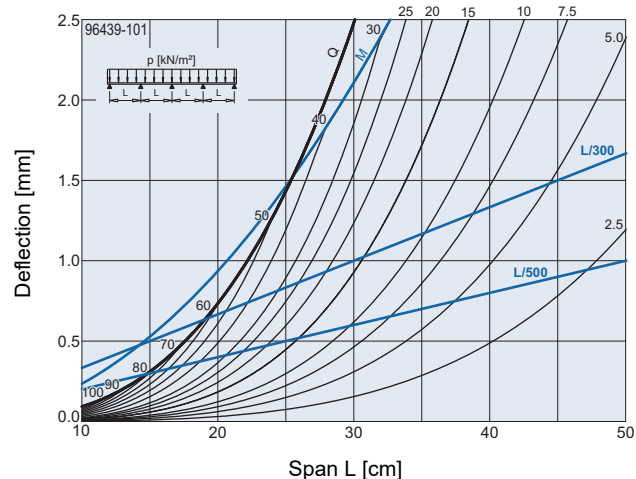
NOTICE

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

Deflection diagrams

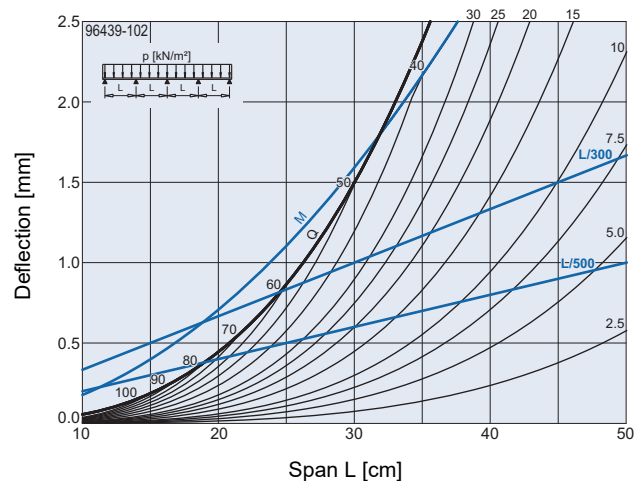
All values in the diagrams are based on a wood moisture content of 20%. If the moisture levels are higher than this, two effects will occur: The modulus of elasticity will greatly decrease (i.e. deformation will increase), and the strength values will be lower. This leads to a reduction in the load-bearing capacity.

12 mm



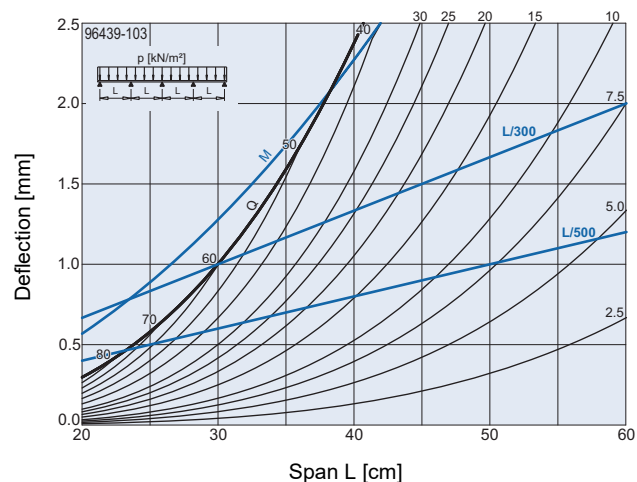
M ... permissible bending moment
Q ... permissible shear force

15 mm



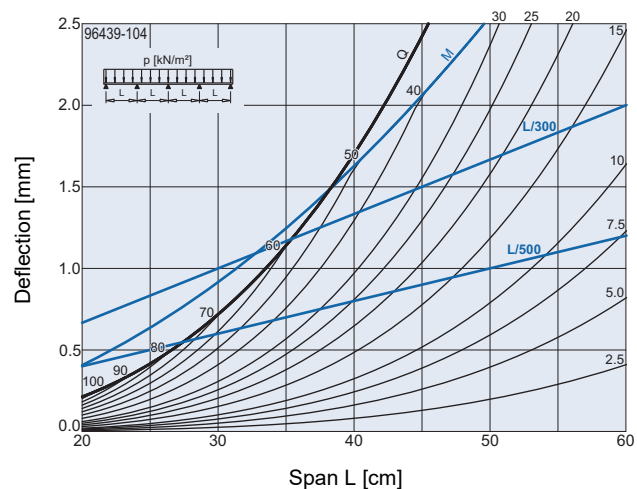
M ... permissible bending moment
Q ... permissible shear force

18 mm



M ... permissible bending moment
Q ... permissible shear force

21 mm



M ... permissible bending moment
Q ... permissible shear force

General information

The data stated here are guide values.

Note:

FSC und PEFC materials available on request.
For further information, please contact Doka.