

UNiplex HW

Data Sheet

UNiplex HW is a plywood sheet made from plantation-grown Vietnamese acacia hardwood, with film coating on both sides.

Sheet structure

- Film-coated plywood sheet made from Vietnamese acacia, A/A grade throughout.
- The arrangement of the veneers is crosswise.

Glue-bonding

- Melamine-resin glue-bonding, with a minimum melamine content of 15 %.
- The glue-bonding meets the requirements of EN 314-2 Service Class 2.
- Suitable for exterior use.

Surfaces

- Both sides coated with a dark brown AICA phenolic-resin film, 130 g/m² per side.
- Painted with acrylic resin.

Technical data

Note:

All values in the tables are based on a sheet moisture content of $10 \pm 2\%$ on delivery. Changes in the wood's moisture content can have effects on the weight, dimensions and mechanical properties of the sheet.

Thicknesses, weights and formats:

Nominal thickness [mm]	Layers	Weight [kg/m ²]	Formats [cm]
9	5	5.67	62.5 x 250 125 x 250
12	7	7.56	62.5 x 250 125 x 250
15	9	9.45	62.5 x 250 125 x 250
18	11	11.34	62.5 x 250 125 x 250
21	13	13.23	62.5 x 250 125 x 250

Format tolerances:

	Tolerance
Length/Width	± 1.0 mm/m
Thickness	$\pm (0.2 + 0.03 t)$ mm

Mechanical properties:

Nominal thickness [mm]	E _m [N/mm ²]		f _m [N/mm ²]		EI [kNm ² /m]	
		⊥		⊥		⊥
12	5500	4000	40	30	0.79	0.58
15	5500	4000	35	25	1.55	1.13
18	5000	4000	35	25	2.43	1.94
21	5000	3800	35	25	3.86	2.93

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

- Formaldehyde class for exterior use: E2

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 **10 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.



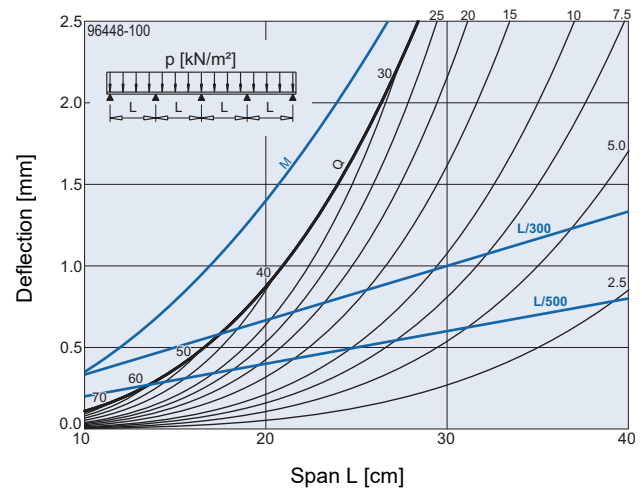
NOTICE

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

Deflection diagrams

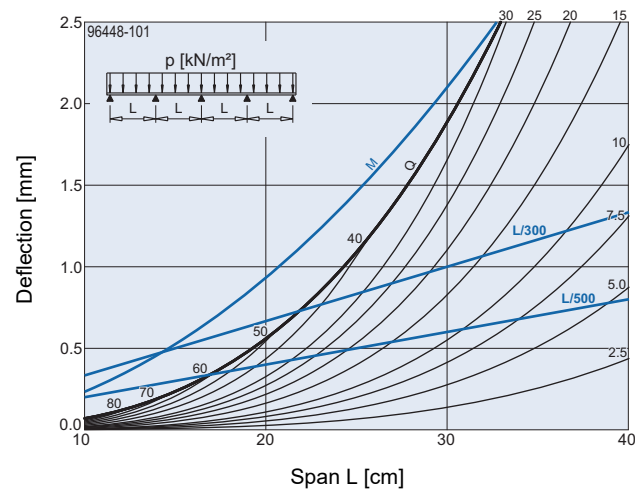
All values in the diagrams are based on a wood moisture content of 20%. If the moisture levels are higher than this, two effects will occur: The modulus of elasticity will greatly decrease (i.e. deformation will increase), and the strength values will be lower. This leads to a reduction in the load-bearing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

12 mm

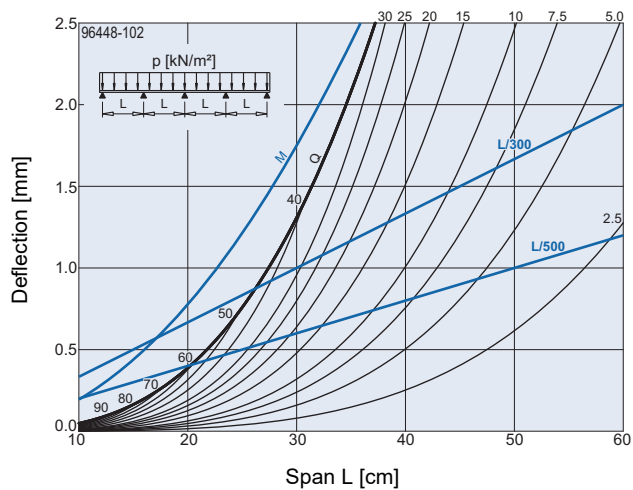


M ... permissible bending moment
Q ... permissible shear force

15 mm

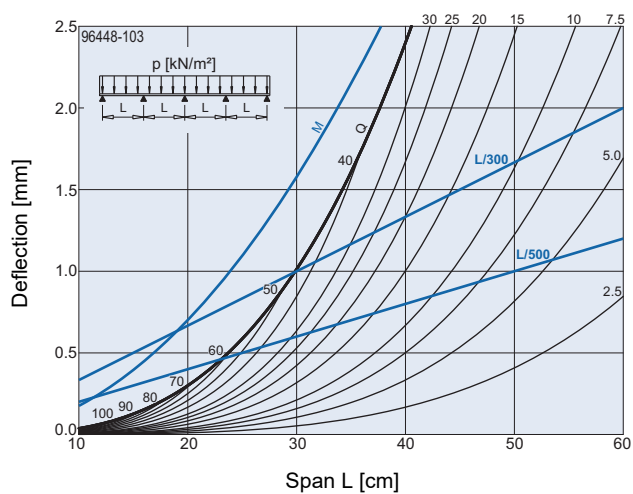


M ... permissible bending moment
Q ... permissible shear force

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 and PEFC materials available on request.

For further information, please contact Doka.