

Birch Ply

Birch
Birch L



Metsä Wood Birch is a high-quality Finnish plywood product sanded on both sides. Birch plywood can be used for a wide range of applications. Metsä Wood Birch is available in various sizes: standard, L, XL and KingSize.

Applications

Metsä Wood Birch is a multipurpose panel for different uses where a strong and rigid panel is needed.

- **Transport industry:** road transport and railway transport vehicle floors and walls, LNG carriers, container floors, flight cases etc.
- **Building applications:** floor and roof structures, interior cladding, sports hall floors, scaffolding, doors and door surfaces etc.
- **Other applications:** packing applications, furniture, toys etc.

Major advantages

- **Strong and rigid**
- **Excellent strength-to-weight ratio**
- **Dimensionally stable**
- **Smooth, hard and durable surface**
- **High quality visual surface**
- **Easy to machine and fasten using conventional woodworking tools and fasteners**
- **Environmentally friendly**
- **Weather- and boil-proof bonding**

Base plywood

Metsä Wood Birch plywood is made of cross-bonded 1.4 mm thick birch veneers bonded with weather- and boil-resistant phenol formaldehyde adhesive.

Designed and tailor-made to serve in demanding applications, birch plywood can be ordered with special oriented veneer structures to provide even higher strength and stiffness properties.

Surface properties

Metsä Wood Birch plywood panels are sanded on both sides and their surface is smooth, hard and durable. The surface can be treated with standard paints, lacquers, varnishes and protection treatments applicable on wood products. Confirm the compatibility of surface treatment from the supplier.

The surface grades are determined by the grade of the sanded surface veneers as follows:

Birch plywood surfaces	Typical properties
S (II)	– painting grade
BB (III)	– standard grade (patched)
WG (IV)	– reverse grade

Classification of Metsä Wood Birch surface grade meets EN 635 requirements.

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Panel sizes

	LENGTH (mm)	WIDTH (mm)						
		2,400	2,440	2,500	3,000	3,050	3,660	4,110
Birch	1,200*	■	■	■	■	■	■	
	1,220*	■	■	■	■	■	■	
	1,250*	■	■	■	■	■	■	
	1,500*	■	■	■	■	■	■	■
	1,525*	■	■	■	■	■	■	■
Birch L	1,870*	■	■	■	■	■	■	■
	2,020*	■	■	■	■	■	■	■

* The measurement indicates the orientation of the surface veneer grain.

■ = standard panel size

Larger size scarf-jointed XL and KingSize panels are also available by special order.

Size tolerances

Measured in accordance with standard EN 324, the plywood size and squareness tolerances meet EN 315 requirements.

PANEL TOLERANCES

LENGTH / WIDTH	TOLERANCE
< 1,000 mm	±1 mm
1,000-2,000 mm	±2 mm
> 2,000 mm	±3 mm
Squareness	±0.1 % or ±1 mm/m
Edge straightness	±0.1 % or ±1 mm/m

Thickness, structures and thickness tolerances

The thickness tolerances fulfil the requirements of standard EN 315 and are in part more stringent than the official requirements.

THICKNESSES, STRUCTURES AND THICKNESS TOLERANCES OF THE PANELS*

NOMINAL THICKNESS (mm)	NUMBER OF PLYS (pcs)	THICKNESS TOLERANCE		WEIGHT kg/m ²
		min. (mm)	max. (mm)	
6.5	5	6.1	6.9	4.4
9	7	8.8	9.5	6.1
12	9	11.5	12.5	8.2
15	11	14.3	15.3	10.2
18	13	17.1	18.1	12.2
21	15	20.0	20.9	14.3
24	17	22.9	23.7	16.3
27	19	25.2	26.8	18.4
30	21	28.1	29.9	20.4
35	25	33.5	35.5	23.8
40	29	38.8	41.2	27.2
45	32	43.6	46.4	30.6
50	35	48.5	51.5	34.0

* Moisture content of the product affects its dimensions

* Average density of Metsä Wood birch plywood is 680 kg/m³ (at relative humidity of RH 65 %)

* Special structures and thicknesses are available on request

* Customised tolerances are possible but must be agreed separately

* Birch L is available up to thickness of 30 mm

Bonding classes

Metsä Wood plywood panels are bonded with a weather- and boil-resistant phenol formaldehyde adhesive. The gluing meets the requirements of the standard EN 314-2 / Class 3 (exterior).

Formaldehyde emissions

Determined according to EN 717-1, the formaldehyde emitted by Metsä Wood Birch falls far below the Class E1 requirement of ≤ 0.100 ppm and fulfils also the most stringent requirements in the world (≤ 0.030 ppm). The formaldehyde emission of Metsä Wood Birch is approximately 0.013 ppm.

Panel strength properties

Metsä Wood Birch is a CE marked product. The strength and elasticity properties are specified according to standards EN 789 and EN 1058 and can be found in the Metsä Wood Birch Declaration of Performance (DoP). DoP documents can be downloaded from www.metsawood.com/dop.

Machining

Metsä Wood Birch plywood panels can be machined according to customer specification on request.

Packing

Metsä Wood Birch panels are packed in moisture-resistant plastic wrapping.

PACKING QUANTITIES

PANEL SIZE (mm)	NUMBER OF PANELS PER PALLET BY THICKNESS								
	6.5	9	12	15	18	21	24	27	30
1,500 / 1,525 x 2,400 – 3,660									
1,200/1,220/1,250 x 2,850 – 3,660	90	65	50	40	35	30	25	25	20
1,500/1,525 x 1,500 – 2,135									
1,200/1,220/1,250 x 1,200 – 2,800	140	100	75	60	50	45	40	35	30
1,500/1,525 x 3,670 – 4,110									
1,870/2,020 x 1,870 – 4,110	70	50	35	30	25	20	15	15	15
1,870 / 2,020 x 1,870 / 2,020	140	100	70	60	50	40	30	30	30

Further information

- Metsä Wood Birch Declaration of Performance (www.metsawood.com/dop)
- Metsä Wood Birch XL Product Data Sheet
- Metsä Wood KingSize Product Data Sheet

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