

# Birch Ply



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.

## 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
- Light and 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 and 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. For more specific grade data, see Handbook of Finnish Plywood.

## PANEL SIZES

Metsä Wood Birch is available in sizes:

- 1200 / 1220 / 1250 mm x 2400 / 2440 / 2500 / 3000 / 3050 / 3600 / 3660 mm
  - 1500 / 1525 mm x 2500 / 3000 / 3050 / 3600 / 3660 mm
- The first measurement indicates the orientation of the surface veneer grain.

Other sizes are available on request. 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
< 1000 mm	±1 mm
1000-2000 mm	±2 mm
> 2000 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 <sup>2</sup>
		min. (mm)	max. (mm)	
4	3	3.5	4.1	2.7
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/m<sup>3</sup> (at relative humidity of RH 65%)

\* Special structures and thicknesses are available on request

\* Customised tolerances are possible but must be agreed separately

## BONDING CLASSES

Metsä Wood plywood panels are bonded with a weather and boil-resistant phenol formaldehyde adhesive (WBP, BFU, AW, exterior).

The gluing meets the requirements of the following international standards:

- EN 314-2 / Class 3 (exterior)
- DIN 68705-3 / BFU 100
- BS 6566 Part 8 / WBP

## 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](http://www.metsawood.com/dop).

## MACHINING

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

## PACKING

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

### PACKING QUANTITIES

PANEL SIZE	NUMBER OF PANELS PER PALLET BY THICKNESS														
	mm	4	6.5	9	12	15	18	21	24	27	30	35	40	45	50
1500/1525 x 2400-3660		150	90	65	50	40	35	30	25	25	20	15	10	10	10
1200/1220/1250 x 3000-3660															
1500/1525 x 1500-2135		240	140	100	75	60	50	45	40	35	30	25	20	20	20
1200/1220/1250 x 1200-2750															

## FURTHER INFORMATION

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

## METSÄ WOOD

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