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.

**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:

<table>
<thead>
<tr>
<th>Birch plywood surfaces</th>
<th>Typical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>S (II)</td>
<td>– painting grade</td>
</tr>
<tr>
<td>BB (III)</td>
<td>– standard grade (patched)</td>
</tr>
<tr>
<td>WG (IV)</td>
<td>– reverse grade</td>
</tr>
</tbody>
</table>

Classification of Metsä Wood Birch surface grade meets EN 635 requirements. For more specific grade data, see Handbook of Finnish Plywood.

**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
**PANEL SIZES**
Metsä Wood Birch is available in sizes:
- 1200 / 1220 / 1250 mm x 2400 / 2440 / 2500 / 3000 / 3050 / 3660 mm
- 1500 / 1525 mm x 2500 / 3000 / 3050 / 3660 / 4110 mm

Metsä Wood Birch L is available in sizes:
- 2020 x 4110 mm
- 1870 x 4110 mm
- 1870 x 1870 mm, 2020 x 2020 mm

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

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.

**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 fulfill the requirements of standard EN 315 and are in part more stringent than the official requirements.

**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 6666 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 ≤ 0.1 ppm and fulfills also the most stringent requirements in the world (≤ 0.030 ppm). The formaldehyde emission of Metsä Wood Birch is approximately 0.013 ppm.

**THICKNESSES, STRUCTURES AND THICKNESS TOLERANCES OF THE PANELS**

<table>
<thead>
<tr>
<th>NOMINAL THICKNESS (mm)</th>
<th>NUMBER OF PLYS (pcs)</th>
<th>THICKNESS TOLERANCE</th>
<th>WEIGHT kg/m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>3.5 – 4.1</td>
<td>2.7</td>
</tr>
<tr>
<td>6.5</td>
<td>5</td>
<td>6.1 – 6.9</td>
<td>4.4</td>
</tr>
<tr>
<td>9</td>
<td>7</td>
<td>8.6 – 9.5</td>
<td>6.1</td>
</tr>
<tr>
<td>12</td>
<td>9</td>
<td>11.5 – 12.5</td>
<td>8.2</td>
</tr>
<tr>
<td>15</td>
<td>11</td>
<td>14.3 – 15.3</td>
<td>10.2</td>
</tr>
<tr>
<td>18</td>
<td>13</td>
<td>17.1 – 18.1</td>
<td>12.2</td>
</tr>
<tr>
<td>21</td>
<td>15</td>
<td>20.0 – 20.9</td>
<td>14.3</td>
</tr>
<tr>
<td>24</td>
<td>17</td>
<td>22.9 – 23.7</td>
<td>16.3</td>
</tr>
<tr>
<td>27</td>
<td>19</td>
<td>25.2 – 26.8</td>
<td>18.4</td>
</tr>
<tr>
<td>30</td>
<td>21</td>
<td>28.1 – 29.9</td>
<td>20.4</td>
</tr>
<tr>
<td>35</td>
<td>25</td>
<td>33.5 – 35.5</td>
<td>23.8</td>
</tr>
<tr>
<td>40</td>
<td>29</td>
<td>39.8 – 41.2</td>
<td>27.2</td>
</tr>
<tr>
<td>45</td>
<td>32</td>
<td>43.6 – 46.4</td>
<td>30.6</td>
</tr>
<tr>
<td>50</td>
<td>35</td>
<td>48.5 – 51.5</td>
<td>34.0</td>
</tr>
</tbody>
</table>

* 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

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

**PACKING QUANTITIES**

<table>
<thead>
<tr>
<th>PANEL SIZE mm</th>
<th>NUMBER OF PANELS PER PALLET BY THICKNESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500 / 1525 x 2400 – 3660</td>
<td>6.5, 9, 12, 15, 18, 21, 24, 27, 30</td>
</tr>
<tr>
<td>1500 / 1525 x 1500 – 2135</td>
<td>140, 100, 75, 50, 45, 40, 35, 30</td>
</tr>
<tr>
<td>1870 / 2020 x 1870 / 4110</td>
<td>1870 / 2020 x 1870 / 4110</td>
</tr>
</tbody>
</table>

**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