Metsä Wood Spruce WeatherGuard® is a softwood plywood that has a hydrophobic surface. The surface rejects rainwater and therefore reduces the amount of water absorbed by the panel during construction work. At the same time, the surface allows the panel to breathe and water vapour to move freely.

**APPLICATIONS**
Metsä Wood Spruce WeatherGuard is a multi-purpose construction panel that is also suitable for various other applications.
- **Building applications:** floor, wall and roof structures, agricultural structures, pedestrian bridges, construction platforms etc.
- **Renovation:** repairing, improving and renovating buildings
- **Other applications:** packing applications, vehicle industry, fences, hoardings etc.

**MAJOR ADVANTAGES**
- Temporary protection against rain
- Shorter drying period of structures
- Better dimensional stability under changing conditions
- Treatment does not block water vapour movements
- Strong, rigid and lightweight
- Easy to machine and install using conventional woodworking tools and fasteners
  - panel is impact resistant and does not crumble
  - good base for fasteners
- Weather- and boil-proof bonding
- Environmentally friendly
- Available with square edges and tongue-and-groove profiles
BASE PLYWOOD
The base plywood of Metsä Wood Spruce WeatherGuard is Metsä Wood Spruce, which is made of cross-bonded 3 mm thick coniferous veneers and bonded with a weather- and boil-resistant phenol formaldehyde adhesive.

SURFACE PROPERTIES
Metsä Wood Spruce WeatherGuard panels can be unsanded or sanded on both sides. The WeatherGuard treatment is transparent and gives temporary protection against rain.

The surface can be treated with standard paints, lacquers, vanishes and protection treatments applicable to wood products. It is recommended to confirm the compatibility of the surface treatment with the supplier. Also, carpets, linoleum, tiles etc. can be glued to the surface.

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

Spruce plywood surfaces
- Typical properties
  - sound surface, might be repaired with filler, unrepaired defects with Ø max. 5 mm are permitted.
- Primary grade combination is III/III.

Classification of Metsä Wood Spruce surface grade meets the requirements of EN 635.

PANEL SIZES
Metsä Wood Spruce WeatherGuard is available in sizes:

- 2400 / 2440 / 2500 mm x 1200 / 1220 / 1250 mm
- 2400 / 2440 mm x 600 / 610 mm

The first measurement indicates the orientation of the surface veneer grain.
Other sizes are available on request.

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

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.

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 Spruce falls far below the Class E1 requirement of ≤ 0.100 ppm and also fulfils the most stringent requirements in the world (≤ 0.030 ppm). The formaldehyde emission of Metsä Wood Spruce is approximately 0.018 ppm. WeatherGuard treatment does not contain any formaldehyde.

FORMALDEHYDE EMISSIONS
Determined according to EN 717-1, the formaldehyde emitted by Metsä Wood Spruce falls far below the Class E1 requirement of ≤ 0.100 ppm and also fulfils the most stringent requirements in the world (≤ 0.030 ppm). The formaldehyde emission of Metsä Wood Spruce is approximately 0.018 ppm. WeatherGuard treatment does not contain any formaldehyde.

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

MACHINING
Metsä Wood Spruce WeatherGuard plywood can be delivered with tongue- and-groove edge machining on either two sides or four sides. Tongue- and-groove panels are always sanded. Tongue- and-groove machining decreases net panel size by 10 mm. Tongue- and-groove machining is available for panel thicknesses ≥ 12 mm.
PACKING
Metsä Wood Spruce WeatherGuard panels are packed in moisture resistant plastic wrapping.

PACKING QUANTITIES

<table>
<thead>
<tr>
<th>PANEL SIZE</th>
<th>mm</th>
<th>9</th>
<th>12</th>
<th>15</th>
<th>18</th>
<th>21</th>
<th>24</th>
<th>27</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>2400/2440/2500 x 1200/1220/1250</td>
<td></td>
<td>110</td>
<td>85</td>
<td>65</td>
<td>55</td>
<td>45</td>
<td>40</td>
<td>35</td>
<td>30</td>
</tr>
</tbody>
</table>

FURTHER INFORMATION

- Metsä Wood Spruce WeatherGuard Declaration of Performance (www.metsawood.com/dop)
- Metsä Wood Spruce Plywood Manual
- Metsä Wood Spruce Plywood for Construction brochure
- Metsä Wood Concrete Formwork brochure

METSÄ WOOD
P.O Box 50, 02020 Metsä, Finland
Tel. +358 1046 05
www.metsawood.com/spruceplywood