



Whittle Flooring Company Ltd plywood specification PMWG is a high quality and elastic lining panel for end uses where a good-looking surface material with high resistance is needed. It has been developed for sidewalls of vehicles such as commercial vehicles, horse trailers, interior linings of vans, exterior claddings, shop fittings, sports fencing and playground equipment; making it an ideal decorative material for the varied needs of the transport and construction industries.

Base board

Finnish Birch plywood is constructed from 1.4mm thick veneers (plies) glued in a cross bonded lay-up. The Botanical name for Finnish Birch is Betula Pendula (Silver Birch).

Bonding

Phenolic resin cross banded weather resistant gluing according to EN 314-2 Class 3; Capable of withstanding exposure to weathering conditions and liquid water over sustained periods of time. (Superseding BS 6566: WBP) Gluing of coating EN 204 class D4.

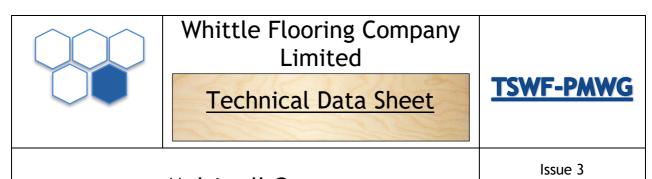
Performance Class

Biological durability; for use as a structural component in exterior conditions including liquid water or water vapour in damp but ventilated locations in accordance with **EN 636-3 S**. This is dependent on all exposed edges being sealed correctly.

Whittle Flooring Company Limited

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Multiwall Grey

<u>Surface</u>

The Birch veneer face grading compliant with **SFS 2413** (EN 635-5) With a 0.2 mm, slightly embossed, polypropylene coating with lacquered surface on both faces.

Colour: Grey (RAL 7001)

Other colours available, subject to a minimum order quantity.

Technical properties of coated surface

Taber abrasion according to DIN 53799: 1800 r Cobb: 7 days < 20 g/m2

Maintenance: easy to clean with water and detergent. UV-resistance: coating supplier's guarantee for colour resistance: colour stability 6-7 according to EN ISO 105-802.

- Easy to attach adhesive tapes
- Taint and odour free
- Elastic, non-cracking coating
- Does not contain any chlorine
- Good chemical resistance (standard ISO 175)

Formaldehyde Emissions

Very low Emission class E1 in accordance with EN 717-2 (gas analysis method). The Formaldehyde emission from uncoated exterior plywood is under $0.4mg/(m^2 x h)$, significantly lower than the Class E1 requirement of $3.5mg/(m^3 x h)$. Release class A in accordance with EN 1084.

This plywood does not contain pentachlorophenol (PCP).

<u>Source</u>

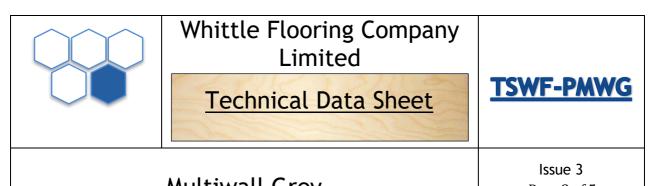
Plywood and veneer come only from legal sources within Europe and conform to all the relevant standards and regulations including European Union Timber Regulation (EUTR). Birch is 70% PEFC certified BMT-PEFC-1510 (Specify requirement on ordering).

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Thicknesses and Weights

Thicknesses and weight of standard plywood tolerances fulfil the EN 315 (Plywood -Tolerances for dimensions) requirements.

Nom. Thickness	No. of Plies	Min. Thickness	Max Thickness	Weight	
mm		mm	mm	Kg/m2	
6.5	5	6.6	7.4	4.8	
9	7	9.3	10	6.5	
12	9	12.0	13.0	8.6	
15	11	14.8	15.6	10.6	

Other thicknesses, increased in increments of 3mm are available on request. Sizes and thicknesses relating to moisture content 8-10%

Panel Sizes

1200/1220/1250/1500/1525x2400/2440/2500/3000/3050 mm Other sizes upon request

Panel Size Tolerances for non-machined sheet material only

Size	Tolerance		
< 1000mm	+/- 1mm		
1000-2000mm	+/- 2mm		
2000-6000mm	+/- 3mm		
> 6000mm	+/- 5mm		

Squareness tolerance +/- 1mm per 1000mm

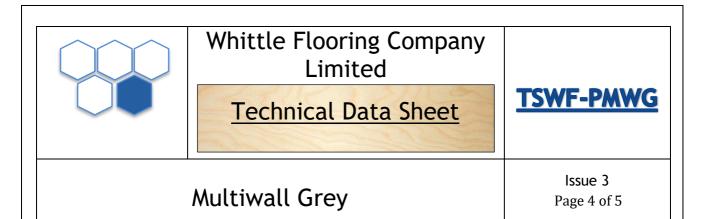
Machining

Full CNC machining service available as well as bonding and assembly work undertaken. CNC machined tolerances to BS EN 22768. Please forward CAD/drawing for guotation

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Strength Characteristics

Finnish Birch Plywood						Characteristic strength		Mean modulus of elasticity	
Section Properties					Bending		Bending		
Nominal thickness	Number of plies	t _{mean} mm	A mm ² /mm	W mm ³ /mm	l mm⁴/mm	f _m N/mm ²	f _{m_l_} N/mm ²	E _m N/mm ²	E _{m_l_} N/mm ²
6.5	5	6.4	6.4	6.83	21.8	50.9	29.0	12737	4763
9	7	8.8	8.8	12.9	56.8	45.6	32.1	11395	6105
12	9	11.6	11.6	22.4	130	42.9	33.2	10719	6781
15	11	15.4	15.4	39.5	304	41.3	33.8	10316	7184

Storing Instructions

Store plywood panels in a dry, covered place away from direct sunlight. Panels should be stored horizontally on a level surface in an atmosphere conducive to the environment intended for its end use.

Other Information

1. **Embodied energy** - Wood has the lowest embodied energy of any mainstream building material; glass requires six times the amount of energy to produce than wood, Steel 24 times and Aluminium 125 times. In Finland, this is further enhanced by harvesting Biomass energy from the by-products to power the production process.

2. **Thermal insulation** - Timber has the best thermal insulation properties of any mainstream building material, for example it is 350 times better than Steel.

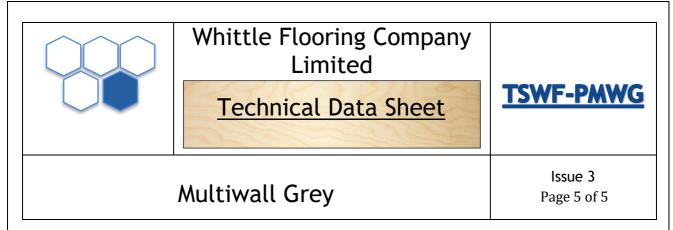
3. **Stable supply** - Finnish forests have annual quotas for felling and replanting trees, the ratio of which is controlled by regulatory authorities. This ensures a long-term supply whilst preserving the environment.

4. **Recyclable** - Plywood and the wood waste from production processes has many recyclable uses, with the latest landfill directives creating even greater demand for such alternative uses.

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5. Sustainable Forestry - All our plywood comes from sustainable managed forests certified by the PEFC with a system of Chain of Custody certification allowing traceability from the forest to the end user. The PEFC provides an assurance mechanism to purchasers of timber products that they are promoting the sustainable management of the forests.

6. Carbon Neutral - Wood from sustainable forests can be better than carbon neutral.



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