

PLYWOOD PANEL TECHNICAL DATA SHEET

DEFINITION

The plywood panel which we produce is obtained by sticking fine wood layers together. These fine wood layers are unrolled from the trunk, so that the grain of the successive layers forms a right angle to equilibrate the plywood panel.

The length of the panel is measured using the dimension of the grain of the external layers. The width of the panel is measured in a perpendicular angle to the length.

The plywood panel is defined by the following concepts:

- The type of wood used for the fine layers: POPLAR, PINE or BIRCH.
- The quality of the fine layers used.
- The thickness of the layers.
- The different types of gluing.

APPLICATIONS

- Carpentry and furniture.
- Structures.
- Mechanics.
- Packaging/packing.
- Crates and boxes used for transport.
- The toy industry.

The plywood panel is a very good material because of its strong resistance, homogeneity and lightness.

CONSTITUENTS

The materials used to make the plywood panel are wood layers and adhesives.

Wood layers:

The thin wood sheets, with a thickness not exceeding 5 mm, are obtained by unrolling. The layers are classified according to: the presence of defects (mainly knots) and their frequency, and the aspect of the grain.

Adhesives:

Urea-Formaldehyde (UF), Melamine-Urea-Formaldehyde (MUF), Phenol-Formaldehyde (PF) adhesives are used.



TECHNICAL CHARACTERISTICS

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|-----------------------------|---|
| Maximum dimension: | 1250 x 1250 mm |
| Thickness: | 2.5 ÷ 50 mm |
| Quantity of layers: | 3 ÷ 35 |
| Quality of faces : | quality of front side/ quality of back side B; BB; CP; C (EN 635-2) |
| Surface finishes: | No sanded (SL); 1 face sanded (L1); 2 faces sanded (L2). |
| Gluing: | Class 1 (C1) for use in dry conditions (EN 314-1; DIN-IF20; BS-INT) Class 2 (C2) for use in humid conditions (EN 314-1; DIN-A 100; BS-BR) Class 3 (C3) use in exterior conditions (EN 314-1; DIN-W 100; BS-WBP) |
| Formaldehyde emission: | Class E1 (EN 12460-3) Class E0,5 (EN 16516) |
| Density: | 420 ÷ 490 kg/m ³ (EN 323: Measured according to 20 ± 2°C y 65% ± 5 HR.) |
| Moisture content: | 6% ÷ 14 % with HR = 30% ÷ 65% |
| Dimensional stability: | Very stable. |
| Bending resistance: | 22÷55 MPa (F15 a F35) |
| Modulus of elasticity: | 2200÷6500 MPa (E25 a E70) |
| Thermal conductivity: | Similar to the wood it is made of (0.12 W/mK). |
| Electrical conductivity: | Similar to the wood it is made of. |
| Sound absorption: | Depending on its weight. |
| Resistance to water vapour: | Similar to the wood it is made of. The adhesive layer adds more resistance. |
| Reaction to fire: | D-s2, d0. |





INTERNAL MANUFACTURE CONTROL

- Accepted dimensions: EN 324.
- Tolerances for dimensions: EN 315.
- Resistance to bending: EN 310.
- Elasticity while being bent lengthwise and crosswise: EN 310.
- Density: EN 323.
- Gluing quality: EN 314.
- Emissions of Formaldehyde: EN 12460-3.

CERTIFICATIONS

Our products conform with the following certifications:

- **PEFC ST 2002:2020 – “Chain of Custody of Forest Based Products”.**
- **GROW: Group recycling of wood.**

