

PLYWOOD, INSIDE FACE AND OUTSIDE FACE

DEFINITION AND ROLE

Plywood consists of a panel made of veneers obtained by rotary cutting or slicing. The veneers are glued and stacked by crossing the fibre direction of each layer at a 90° angle with respect to the previous one, and then pressed together during the glue polymerisation process. The layers are referred to as such.

The inner and outer layers are always arranged symmetrically on either side of a central layer, so as to obtain an orthotropic panel. The outer layers that make up the apparent surface of the plywood consist of the inside and outside faces. Commercially, plywood is designated by the timber species that constitutes the exterior faces (for example Okoumé-faced plywood).

STRESSES

The exterior layers support the plywood's aesthetics. Their appearance, their ability to receive a finish and their conferred durability are therefore major factors when selecting a species.

REQUIRED PROPERTIES

The performance of the glue-lines when the panels are being manufactured is qualified according to their resistance to moisture. All species that are suitable for veneering and gluing are suitable for the manufacture of plywood. Only certain applications, in which high durability or mechanical strength criteria are sought, require the selection of suitable species. The requirements are defined in standard EN 636. The aspect quality of the faces (exterior layers) is suitable for use. The panels can be classified according to the nature of the species and the presence of defects on the faces. For certain types of technical plywood, the aspects of the faces are defined by standard EN 635.

PRINCIPLES OF IMPLEMENTATION

Panels intended for indoor use do not impose any particular constraints during implementation.

USAGE CLASS

The quality of the bonding and the treatment applied to the veneers make it possible to obtain panels that can be used in the four main usage classes (class 1 to class 4).



Photo: Different plywood compositions© M. Vernay



Photo: Inside and outside faces of plywood© M. Vernay