



(BS) EN 14272: 2011

Plywood - Calculation method for some mechanical properties

This is relevant to plywood, of any composition, symmetrical or not, providing a calculation method for deriving some mechanical properties and density from the wood making up the layers. Mechanical properties refers to strength and stiffness in bending, tension, compression, panel and planar shear.

Provided that structural characteristic values are taken for the layers, the resulting values for the panels can be used as characteristic values as required by EN 1995-1-1 (Eurocode 5).

Annex A (normative) defines the procedures to derive the veneer properties in bending, tension and compression, either from testing panels according to EN 789 and EN 1058 or from timber testing according to EN 408 or from imposed values defined in EN 338.

Using the mechanical properties of the wood species making up the layers, it consists in deriving by calculation the mechanical properties of a panel. For bending, tension and compression, each layer property value, along and across the length of the panel, is weighted by a geometrical factor related to its weight in the panel cross section.