

# Wessex's Guide to Plywood

## Structural Plywood:

Structural requirements conform to CE2+ with appropriate test data.  
CE4 is non structural.

## CE Marking:

This is a “fit for purpose” mark rather than a quality mark. The CE mark, together with supporting documentation allows manufacturers to demonstrate that their products conform to a harmonised technical specification and therefore the CPD (Construction Products Directive).



The technical specification to permit CE marking of plywood is EN13986- Wood based panels for use in construction.

## CE2+:

The standard for the structural testing of panel products, applicable only to the test undertaken. If used for flooring, roofing or wall sheathing, the test data applicable to these specific end uses should be available on request.

It is the manufacturers responsibility to provide the structural test data to support their CE2+ claim.

## Bs5268 Part 2: (Withdrawn - superseded by CE2+):

A comprehensive test as far as structurally tested plywood is concerned.

## **Combi Plywood:**

This may include a veneer mixture of Poplar and other hardwood veneers such as Eucalyptus.



## **FSC: (Forestry Stewardship Council):**

Certified scheme to ensure that all certified wood products are sourced from well managed forests and/or verified and recycled sources.

## **PEFC: (Programme for the Endorsement of Forest Certification):**

Third party certification ensuring that the certified wood contained in the product is sourced from responsibly, sustainably managed forests, helping to protect the world's forests.

## **COC (Chain of Custody):**

The traceable route of the product from the forest to the customer.

## **CPD (Construction Products Directive)**

## **EUTR (European Union Timber Regulations)**

## **PTS (Plugged and Touch Sanded)**

## **MDF (Medium Density Fireboard)**

High quality fibre board engineered with internal bond strength. Conforms to E1 emission standard.

## **MDF MR:**

Moisture resistant board, designed for interior applications in humid conditions (Bathroom, kitchen.)



## **OSB 3 (Oriented Strand Board):**

FSC Certified, CE marked and conforms to the appropriate European standards. Class E1 Structural use in load bearing humid conditions. Moisture resistant

## **BS EN 300:**

Applies to OSB and is the British standard applicable for dimensional tolerances, humidity, moisture, swelling, thickness, strength of materials bending, modulus of elasticity, tensile strength.

## **Chipboard:**

Particleboard engineered, certified FSC. P5 - Flooring grade tongue and moisture resistant – also referred to as V313.

## **Marine Plywood:**

Specialist exterior plywood manufactured from high quality durable hardwood species with exterior glue

## **Hardwood:**

Manufactured with wood fibres and water. Normally smooth one face, other face meshed.

Most common used is Standard, also available are perforated, oil tempered, fire resistant, white faced.

## **Class E1:**

The quantity of formaldehyde released by the glue line. A substantial portion of the cost of manufacturing plywood is the glue. A reduction of this cost is often sought by using a higher percentage of formaldehyde in the glue, thus increasing the formaldehyde released by the panel.



The phrases “Non-Interior” and “External Use Only” are commonly an indication that the panel has a Class E2 or higher formaldehyde rating. Class E1 panels can be used both internally and externally. This will have a less chance of the panel causing any irritation. This is governed by The World Health Organisation.

## **WBP: (Weather and Boil Proof)**

The term strictly speaking no longer exists. Now referred to by EN numbers. EN314 & EN636

### **EN314: Glue Bond, divided into 3 sections**

**EN314-1:** Dry conditions, interior use. Replacing MR plywood.

**EN314-2:** Humid conditions, suitable for protected external applications, capable of resisting weather exposure for short periods of time. Suitable for interior use

**EN314-3:** Exterior conditions, able to withstand weathering conditions and liquid water over sustained periods of time. Suitable for interior use. Replacing WBP (weather and boil proof)

### **EN636: Panel species must comply with 1 of 3 performance classes as follows:**

**EN636-1:** Class 1, plywood will not break up in interior conditions. (Warm roofs, intermediate floors, timber frame and partition walls).

**EN636-2:** Class 2, plywood will not break up in humid conditions or if it is to be used externally. Plywood should be treated or covered. (Cold roofs, ground floors, timber frame external walls).

**EN636-3:** Class 3, plywood will not break up in exterior weather conditions (fully exposed service conditions)