

BS 1088 British Standard Specification for Marine Plywood manufactured from selected untreated Tropical Hardwoods

This is how several people have interpreted this standard and may differ to others, please make your own conclusion.

Specification.

This British Standard applies to plywood made with untreated tropical hardwood veneers having a suitable prescribed level of resistance to fungal attack with a bond of WBP glue quality between the plies. It does not need to be 'British made material'

Bonding WBP Glue line

Bonding meeting the test requirements of this British Standard and using an adhesive of the type which by systematic tests and by records in service of the product over many years has been proved highly resistant to weather, micro-organisms, cold and boiling water, steam and dry heat.

Species of Timber

If so specified by the purchaser, Gaboon or Okoume (*Aucoumea klaineana*), which is classed as non-durable, may be used provided that the name of the timber is included in the mark on the boards produced.

Quality of Veneers

Veneers may be rotary cut or sliced. The method of cutting is at the option of the manufacturer unless it is specified by the purchaser at the time of ordering. Veneers shall be smoothly cut.

Face Veneers

These shall present a solid surface, free from open defects. They shall be free from knots, other than sound pin knots, of which there shall be no more than 6 in any area 30cm square (1ft²), and not more than an average of 2 per 30cm square (1ft²) over the whole area of the board. The veneers shall be reasonably free from irregular grain, due note being taken to the characteristics of the species being used. Isolated pinholes not along the plane of the veneers, and occasional closed splits are permissible. Veneers showing compression failure shall be excluded. Occasional minor discoloration is permissible.

There shall be not more than one edge joint in any 30cm (1ft2) width of the board, and the veneers shall, when jointed, be matched for color. There shall be no end joints.

Core Veneers.

The requirements for core veneers shall be the same as those for face veneers, with the following exceptions. Small splits are permitted, and there is no limitation on the number of pin knots or edge joints. Discoloration is permissible, provided this is free from dote. Veneers need not be matched for color. There shall be no end joints.

Limits of Manufacturing Defects in Plywood

Defective Bonding Not Permitted

Pleats and overlaps Not Permitted

Gaps In faces. Not permitted. Occasional gaps that occur during manufacture may be repaired by means of well-fitted veneer inserts bonded with a complying adhesive. In Cores... In any edge of a board, not more than one gap, which shall be not wider than 0.5mm. Obviously the presence of defects in cores can only be judged by the appearance of the edges.

Moisture Content.

At the time of leaving the factory, finished boards shall have moisture content from 6 to 14%

Finishing.

Boards will be sanded on both sides equally

Length & Width

The length or width of a board produced as a standard size shall not be less than the specified size nor more than 6.3mm (0.25") greater than the specified size

Squareness

The lengths of the diagonals of a board shall not differ by more than 0.25% of the length of the diagonal

Thickness:

Tolerances vary as follows.

4mm +.02/-0.6 6mm +.04/-0.65 9mm +.06/-0.75 12mm +.09/-0.82

15mm +.1/-0.9 18mm +.12/-0.98 22mm +.16/-1.08 25mm +1.8/-1.16

From the above we can assume that 6mm material will arrive at thickness' between 6.04mm and 5.35mm.

Face Veneer thickness

For any three-ply construction, which applies to 3 and 4mm material, each face veneer shall be not thinner than 1/8" of the total thickness of veneers assembled dry.

Since the dry thicknesses of the boards are 3.6 and 4.6 respectively, we can assume that for these thicknesses only the face veneers will be as follows

3.6mm dry x 12.5% (1/8) = 0.45mm 4.6mm dry x 12.5% (1/8) = 0.575mm

Multi-Ply Construction.

This applies to boards thicker than 4.8mm (3/16")

Each face veneer shall be a minimum of 1.3mm and not thicker than 3.8mm. Each core veneer shall be no thicker than 4.8mm