

B.S. 1088 : 1966 (abridged)

BRITISH STANDARD SPECIFICATION FOR MARINE PLYWOOD MANUFACTURED FROM SELECTED  
UNTREATED TROPICAL HARDWOODS

SPECIFICATION

Origin of Timber

Only those species, the heartwood of which is classed as Moderately Durable, Durable, or Very Durable, shall be used, and from these heart that is brittle, soft, or containing dote, shall be entirely excluded. Although the most desirable veneer would consist of heartwood only, the total exclusion of sapwood is economically unpractical. Okoume (*Aucoumea Klaineana*), while classified as non-durable, may be used provided it is marked as B.S.1088 WBP.

Quality of Veneers

Veneers may be rotary cut or sliced. The method of cutting is at the options of the manufacturer unless it is specified by the purchaser at the time of order. Veneers shall be smoothly cut. Face veneers shall present solid surface, free from open knots, of which there shall not be more than 6 in any area 30cm square and not more than an average of 2 per 30cm square over the entire area of the board. The veneer shall be reasonably free from irregular grain, depending on the characteristics of the species being used. Pin-holes not along the plane of the veneer, and occasional close splits are permissible.

Veneer showing compression failure shall not be excluded. Occasional minor discoloration is permissible, provided this is free from dote. There shall be not more than one edge joint in any 20cm width of the board, unless otherwise agreed between the purchaser and supplier, and veneers shall, when jointed, be matched for color. There shall be no end joints. Gaps in faces are not permitted. Occasional gaps that occur during manufacture may be repaired by means of well-fitted veneer inserts bonded with a WBP adhesive.

Edge Joints in Veneers

Edge joints shall be glued in an adhesive complying with the requirements of WBP, BR, or MR of B.S.1203. It is permitted to use non-ferrous metal clips or staples to hold the core veneers together.\*\*

Lay-up of Ply's Before Pressing

The direction of the grain of the veneer shall be at right angles in adjacent ply's except in boards comprising an even number of veneers, when the grain of the center pair shall follow the same direction. The veneers forming any one ply and the corresponding ply on the opposite side of the central plane of the board shall be of the same thickness and species or of species known to be similar to one another in physical characteristics, and shall be cut by the same method, i.e., either all rotary-cut or all sliced.

Tapes shall not be used internally. When used for repairing splits in the face veneers they shall be removed subsequently.

The thickness of the dry veneers shall be related to the specified thickness as marked on the board, each face veneer shall not be thinner than 1.3mm (prior to sanding) and not thicker than 3.8mm and each core veneer shall not be thicker than 4.8mm.

#### Number of Ply's

Multi-ply construction may be used in any thickness; three-ply construction shall not be used in assemblies exceeding 8mm (0.315 in.) thick when bonded but before sanding

#### Bonding

Bonding between the veneers shall be bonded using WBP (water & boil proof) resin, continuous over the entire area of the board

#### Moisture Content

At the time of leaving the factory, finished boards shall have moisture content, as tested at by the producer of 6% to 14%

#### Finishing

Boards shall be sanded on both sides equally. When critical, the limits of the thickness of the face veneers shall be agreed between the supplier and the purchaser. Un-sanded boards may be supplied if agreed between the supplier and the purchaser.

*\*\* plywood mills today, no longer use metal clips or staples to manufacture edge joints in veneers. Edge joints in core veneers are, more commonly, sewn together.*