

What is Marine Plywood?

Marine Plywood is a type of construction plywood made from moderately durable hardwood veneers and bonded using a water-resistant glue. The veneers are defect-free, resulting in a product that has no internal voids or surface blemishes. This ensures the plywood is of consistent weight, strength and balance, which are particularly important properties when building boats. Hence the name "Marine".

Is Marine Plywood waterproof?

No... it is a common misconception that marine plywood is capable of being submerged in water or exposed to outdoor weather conditions without affecting its performance. Not true. Like any timber product, marine plywood will absorb moisture when it becomes wet. As it dries, it may distort, and the timber fibres are likely to tear or be prone to rotting faster than desired. To avoid this, marine plywood must be fully sealed to prevent moisture penetration prior to being exposed to water and outdoor conditions.

What type of glue is used in the manufacture of Marine Plywood?

The glue used is a water boil-proof glue (WBP), meaning it will not delaminate when exposed to intermittent moisture.

Is the timber in Marine Plywood durable?

There are limited species that meet the requirements of BS1088 Marine Plywood. Those species are considered to be "moderately" durable, meaning they are more durable than most other plywood species in resisting rot and decay. However, marine plywood will still rot if it is not completely sealed from moisture penetration.

What is the best way to seal Marine Plywood?

The best sealant to use is an epoxy-based sealant which will penetrate deep into the timber and provide longer lasting protection from moisture. You should apply multiple coats of sealant. The rule-of-thumb is one coat for every layer of veneer the plywood has. These are the steps to follow to get the best results:

Step 1: Clean the plywood with a spirit-based cleaner, (eg. acetone or methylated spirits) to remove any dirt, debris or contaminants.

Step 2: Sand all the surfaces with a fine grit sandpaper and then remove all dust. A smooth surface will ensure the applied sealant has the best possible chance to bond to the plywood.

Step 3: Apply the first coat of sealant evenly and follow the sealant manufacturer's instructions. Ensure every part of the plywood is coated. Ensure the sealant is dry before moving onto the next step.

Step 4: Gently sand the coated surfaces and remove dust before re-coating as per Step 3. Apply as many coats of sealant as required to completely seal the entire sheet. Remember, the more coats of sealant, the better the seal and the more likely the plywood will last well into the future.

Step 5: Regular maintenance of the sealed coating will be required to ensure the plywood remains protected from the elements and moisture penetration in order to maximise the product life.

What does AA-grade mean in Marine Plywood?

All plywood veneers are graded A, B, C or D, with A being the best, through to D being the worst. A-grade veneers are free of defects or blemishes. In plywood, AA signifies both the face and back are A grade. In fact marine plywood uses A grade veneers throughout the core also.

Why is balance so important in Marine Plywood?

Marine Plywood requires very precise and accurate consistency of weight, density and strength properties in each and every sheet. This ensures that marine vessels float evenly in the water when constructed using marine plywood.

Does more veneer layers per sheet equal better Marine Plywood?

No. What really matters is consistency of veneer thickness to ensure marine plywood sheets have consistent strength, weight and density properties in every sheet.

What does BS1088 mean in Marine Plywood?

BS1088 is the internationally recognised British Standard specification for Marine Plywood that applies to plywood produced with untreated tropical hardwood veneers that have a set level of resistance to fungal attack. The plies are bonded with water boil-proof (WBP) glue. Although this is a British Standard, the finished product does not have to be made in Britain, just manufactured to meet the standard. The standard is associated with Lloyd's Register since it performs testing of products to this standard. It does not follow that it is a structural plywood.