

BOAT DECKS AND PLANKING

DEFINITION AND ROLE

Planking is the set of parts that make up the hull of a boat, fixed externally on the frame's ribs. The waterproofing of the hull is ensured by caulking. Planking can be divided into four zones: the bridge, the walls, the bottoms and the bilges.

The deck of a ship is a platform that is stiffened by structural elements and that is constructed both to prevent the flooding of water into the ship and to support the loads that are to be transported.

STRESSES

Planking must withstand the forces generated by the sea and internal tensions within the boat related to the presence of rigging, as well as shocks caused when the boat is docked. The deck must be waterproof, withstand loads and allow people to move around.

REQUIRED PROPERTIES

To ensure proper waterproofing, the timber must have a low transversal* shrinkage coefficient. It must also demonstrate low density and elastic modulus, as well as high flexural strength (higher density can be used for bottoms and bilges). The selected species must have straight thread (no counter-threading) and a high level of durability, especially with respect to fungi and marine borers. For boat decks, the timber must be aesthetic, have a fairly fine grain with a medium level of hardness and it must not crack*. Slightly oily timber species are sought in order to minimise the risk of slipperiness. Favourable bonding properties are required for assemblies with "boat deck" joints.

PRINCIPLES OF IMPLEMENTATION

Quarter cuts are preferred for this usage. In certain cases, steam curing timber makes it easier to use boards for unbending operations.

USAGE CLASS

Permanently immersed timber falls under usage class 5. Timber that is above the waterline falls under usage class 4.



Photo : Planking on the Kap Kaval© Y. Le Berre, PAOTRED AR VRO DE PENMARC'H



Photo : Yacht deck© PETTAVINO