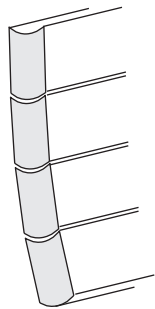


First Layer of Hull Planking ~ Bead and Cove Strips



Most boats will require strip planks between 12 mm and 25 mm thick, depending on the length and width of the boat, the spacing between the frames, the ability of the planking to bend around the most pronounced curves of the hull, and the most efficient use of the timber.



Soft timbers (preferably without knots) are preferred as they are less subject to expansion and can absorb more compression. The bead and cove strips have several advantages: they fit into each other well, even if the angle of the curve is tight. Therefore, there is no gaps to fill with epoxy which can be unsightly and adds weight; except of course in the region of the midship beam which requires more attention.

The bead and cove strips are machined with a convex and a concave edge, the glue is applied to the concave edge of each strip and the next strip is added. As you progress, each strip is glued and nailed to the previous one and also glued and nailed to the frames. Discard any strip that may be twisted or split.

For the Jonquinettes, the strips should be long enough to cover the whole length of the hull, which will make the latter stronger. But for the larger JDPS, it will be necessary to scarf the strips and to space out these scarf joints (i.e. they should not all fall on the same frame).

Planking begins at the sheer / deck line:

There is only one layer of planking on the Jonquinettes and starting at the sheer will give a better appearance: planking is more beautiful when it is parallel to that line, especially if the finished hull is to be varnished.

The main advantage of this method is that the first strips are much easier to lay, planking progresses more rapidly because the necessary spiling is less in this region. This is not the case in the midship beam areas where the curves are more pronounced and spiling is indispensable.

The first strip is fixed overlapping the sheer line by a few millimetres, this excess portion will be removed when the bulwark is added.

Midship beam / bilge area:

Larger strips will be needed in the bilge area and are somewhat trickier to fit, but any small irregularities will not be obvious as the epoxy will fill these. It is nevertheless very important to make sure all joints are fitted as tightly as possible and thoroughly impregnated with epoxy, as this is a guarantee of water tightness and hull strength.

Determine the number of strips you will need, trace and mill these carefully to bead and cove profile so that planking can resume normally afterwards.

Also check that the strips run smoothly over the frames and allow their extremities to extend past the ends of the hull; their butts will be subsequently closed by the stem and transom.



Nails:

The purpose of the nails is to hold the strips in place until the epoxy does. They also reduce the number of clamps needed. Galvanized bullet heads have been suitable for the majority of the jonques de plaisance, provided that the wood used for the planking is not too light.

Nails should be long enough to penetrate the previous strip vertically, and they should be staggered. Do not use too many, say every 600 mm. This interval will be reduced where the curves are more pronounced .

Take care that the nails do not pierce through the outer or inner surfaces of the planking, pre-drilling helps reducing this risk. Use a nail punch to drive the nails into the wood, the epoxy will fill those small indentations. You can use matching coloured wood putty if the dints are more pronounced.

You could use corrugated nails to fix a strip to the previous one, if you insist, but be careful that they do not split the strips. Likewise, it is not necessary to use screws to fix the strips to the frames.

Epoxy:

The West System epoxy glues are recommended, always follow the manufacturer's instructions depending on their applications and the various stages of your project.

For the first layer of planking, each strip must be thoroughly coated with epoxy on both convex and concave faces as well as where they will meet with the frames.

It is difficult to minimise excess glue, so its consistency should be thick enough to reduce the amount of sanding to be done later on.