

THE BOATCRAFT HOW TO DO IT PAGE

STRIP PLANKING

BEYOND THE BASICS

from BoatCraft Pacific

A recent edition of *Australian Amateur Boatbuilder* contained an article 'Composite Strip Planking Basics'. There are a number of difficulties involved in the conventional strip planking described, which are generally ignored and left to the unfortunate boat builder to discover the hard way. Since BoatCraft Pacific have been involved in developing techniques to alleviate these difficulties, we will explain these more modern and labour saving methods of strip planking.

The difficulties builders encounter with conventional strip planking are:

1. As you plank around the bilge of the boat, differential twist between each plank and the next causes them to spring sideways. This can produce steps between each plank. These steps can be reduced, but rarely eliminated, by (tediously) fixing lots of transverse plywood strips over the planks to try to force them down, or you will just have to sand them away to create a smooth surface for the fibreglass lamination. Either way, there's hours of sanding, which is not much fun especially inside a small

craft like a canoe. This problem applies whether you are using simple square sawn strips or bead and cove strips (see diagram).

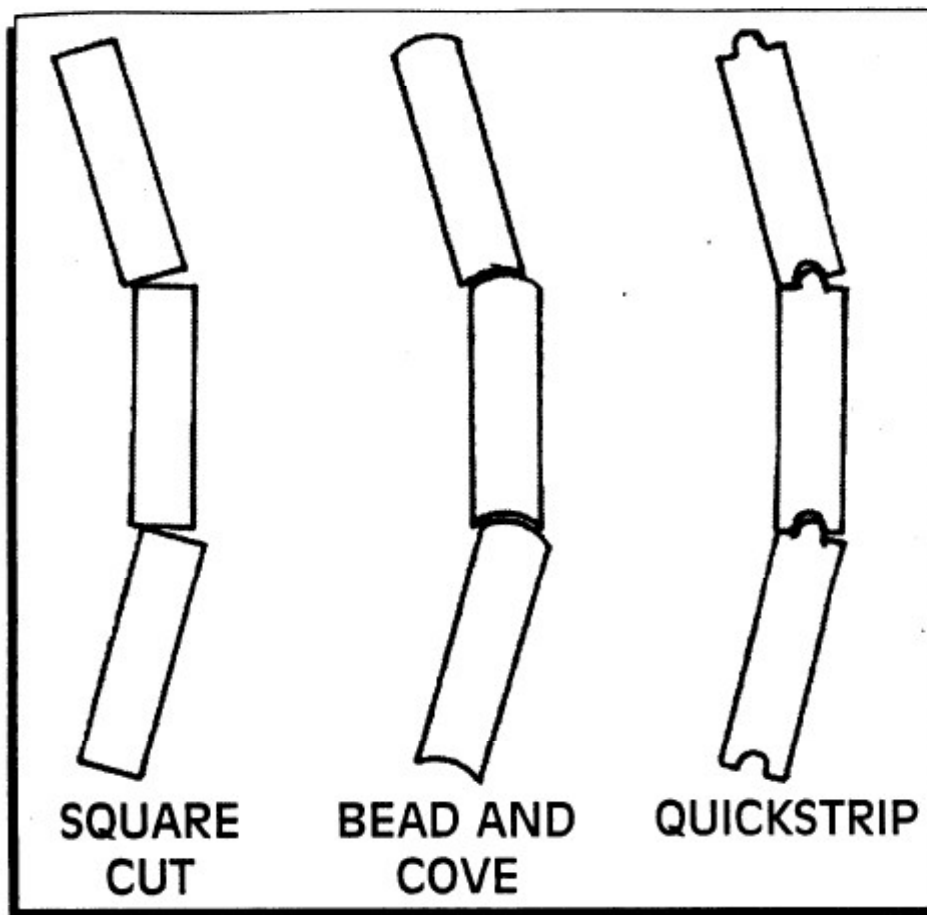
- (ii) As was pointed out previously, one of the more time consuming jobs is applying epoxy glue to the strip edges.
- (ii) If your boat is longer than 5m (16ft) it will be absolutely necessary to scarf join every plank (other than few shorter ones near the keel) before you start planking. Unfortunately, Western Red Cedar is no longer available in lengths longer than 5.4 or 5.7m, which is about the length around the hull of a 5m boat.

Enter QUICKSTRIP strip planking profiles.

Quickstrip is a modified tongue and groove profile, designed by Brisbane boat builder Christopher Tuck, and manufactured exclusively by Oregon Sales. It has been engineered to allow adjacent planks to rotate relative to each other by more than 15 degrees **without losing register and slipping sideways**. So Quickstrip eliminates the steps on the surface and reduces sanding to a mere smoothing job before fibreglassing. Of course, as with square cut planks, the gaps between planks around the outside of the hull must be filled with an epoxy sanding compound all over the surface, and wiping clean. Only a light sand is required before glassing.

The second benefit of Quickstrip is that scarfing the planks is no longer necessary. The planks are simply butted up to each other and glued. The butt joints can be cut at 90 or preferably at 45 degrees. The tongue and groove each side of the plank holds the butt ends in perfect alignment without any need to align and scarf join them beforehand.

The final improvement is the use of BoatCraft's Purbond adhesive. This is a single pack moisture curing polyurethane adhesive, which expands slightly as it sets so fills the small gaps between the Quickstrip (or any other) profiles. A very small bead of Purbond is simply squeezed along each groove, spread with a scrap of plank, and the plank is then ready to be fixed. It is much easier and more time saving than mixing and spreading



epoxy, even when spreading onto several planks at once in a glueing fixture. Purbond is also easier to clean up, since it does not blunt edge tools like epoxy does. So you can plane down the exterior of the hull to fair it, instead of creating vast clouds of sanding dust.

Purbond is also much more economical. We have had builders strip planking the hulls of large boats at a fraction of the cost of epoxy - a 9m strip planked catamaran needs as little as 10 litres of Purbond, costing a mere \$180!

Finally a word of caution. Of course, there are cheaper copies of Quickstrip around. Router cutters can be purchased to mill your own profiles. So far, we have not seen one which has been properly designed and engineered to the accuracy standards produced by Oregon Sales. The result is that you, the long suffering boat builder, simply get to do more sanding, just like the (bad) old days. Buyer Beware! You get just what you pay for!

Quickstrip profiles are stocked and distributed by BoatCraft Pacific. For further information on Quickstrip techniques, Purbond adhesive, or Bote-Cote epoxy products call BoatCraft Pacific on (07) 3806 1944 or (03) 9546 0311 or any BoatCraft distributor.