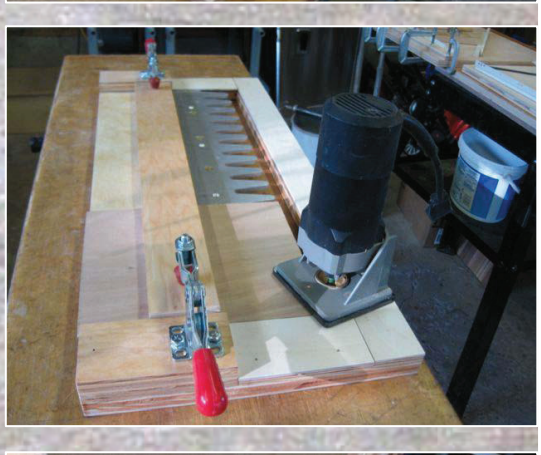
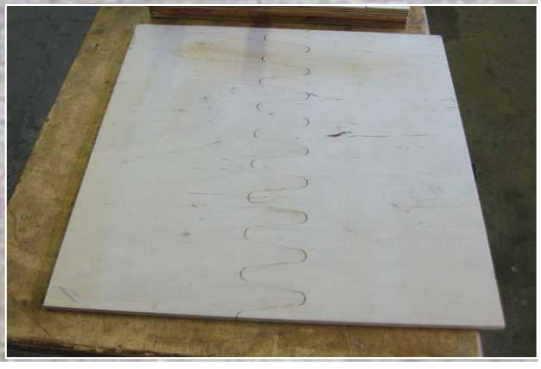
DIY IDEAS

ply splicing

Photos by J. Helps





One of the tricky jobs when building a ply PT is the joining of the sections of plywood hull panel into continuous lengths. There may be another way to achieve this.

The common methods used to join plywood are butt joints and scarf joints. Butt joints, as the term suggests, involves butt gluing the square edges of the ply panels together, then gluing a strip of plywood to the back of the joint to reinforce it. This forms a strong joint and it is easy to align the panels, but it can result in a flat spot at the join when a panel is curved around the building jig.

Scarf joints involve cutting a flat bevel on the edge of each piece to be joined, then aligning and gluing these bevelled surfaces together. Scarf joints are strong, don't require additional reinforcing, and conform smoothly to any curves. However, accurately cutting the bevels without damaging the thin edges, and keeping the panels correctly aligned when gluing, can be tricky.

The alternative method described in this article is being trialled by Canadian Jim Helps who is putting a PT together using the "stitch and glue" method. It is essentially a butt joint but with the load at the joint distributed over a wider area, like a scarf joint. He has had a computer cut, toothed, aluminium template made which he's fitted to the jig shown in the photos. The background image of the template is shown at approximately full size, (50mm deep teeth). The jig accepts panels up to 600mm wide, which are clamped in place and accurately cut with a router using an edge trimmer bit.

The advantages of the system are: ease of aligning the panels, as with butt jointing; consistent thickness at the joint, as with scarfing; load distribution along the panel at the joint, as with scarfing, without the need of a backing piece. The disadvantage is the need for an accurately machined template. The NSWPTCA currently has a template, generously supplied by Jim, which could be made available.

The system has been successfully used in Canada on dinghy classes, but hasn't been trialled on a PT yet. Anyone ready to give it a go?

Ralph