

PRODUCTS IN ACTION

The Schooner Creek 'COVE' System



The 'launching' of the Schooner Creek sloop built with the COVE system.

Schooner Creek Boat Works of Portland Oregon is using a somewhat unique sandwich construction method for its offshore sailing and motor yachts. Instead of fibreglass (FRP) skins, Schooner Creek use wood veneers over a Klegecell core.

They maintain that with their COVE method (Core Over Veneer with Epoxy) it is possible to produce hull and deck panels that rival carbon (graphite) fibre in terms of strength to weight/ratio.

Schooner Creek believe that the ability of wood to absorb shock loads has long been overlooked. With the addition of Klegecell® cores and epoxy laminating systems, it is now possible to eliminate the need for mechanical fastenings and, as result, reduce the thickness of the wooden skins whilst still meeting the required levels of compressive and tensile strength.

Another advantage of the COVE approach is that the density of the wooden skins is lower than water and therefore the skins can be thicker than would be the case with a comparable glass or carbon boat whilst at the same time are inherently buoyant and have an initial stiffness of their own. The net result is an extremely stiff hull that has great strength and is unsinkable due to the low density of both the wood veneer skins and the Klegecell core.

The example pictured here is a Robert Perry design built by Schooner Creek that uses 5 mm thick Port Orford cedar on each side of an R75 Klegecell core. There is a layer of unidirectional glass between the laminates in the opposite direction to the grain in the cedar. The deck is, again, cored with Klegecell® but here the skins are 3 mm Okumee.

