

# PROJECT 4:

## BUILDING A GRP DINGHY

using a GRP mould

### Preparing the Mould

1) Prepare the GRP mould by applying up to six coats of Release Agent (Wax), allowing each coat to harden for an hour



before buffing it thoroughly then applying the next. The final coat should be covered with Wax Release Agent. Leave to dry for about 15 minutes before laminating.

2) If the laminate is to be self coloured, pigment all the resin at the same time to ensure consistent colour throughout - you can pigment the gelcoat only, but, for best results, you should pigment both gelcoat and lay up resin.

3) Decant some of the pigmented gelcoat into a mixing bucket and add catalyst. Stir thoroughly, then use a brush to cover the mould surface evenly with gelcoat. Wait until the gelcoat becomes tacky, which will normally take an hour. Check for "puddles" of wet, uncured resin, where the gelcoat has drained down and accumulated (the keel line is a typical

example). Once you are sure the gelcoat surface is no longer wet, and is consistently tacky, you can proceed to the lay up.



4) Mix catalyst into a working quantity of the pigmented lay up resin (Resin A). Paint the Resin A over the gelcoat.

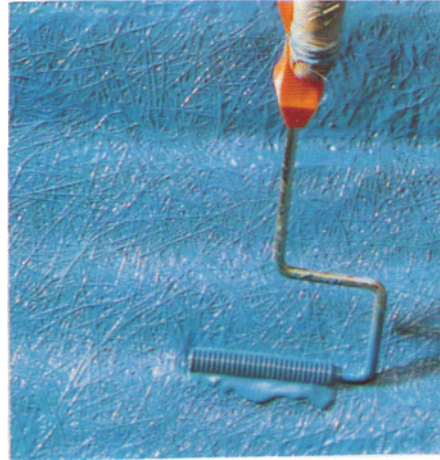




5) Lay down a strip of chopped strand mat along the keel line. Stipple it into the wet resin with a brush. Remember-do NOT "paint" to and fro. A resin applicator roller can be used instead of a brush. Put down



more glassfibre until the mould surface is covered. Prevent the resin on the brushes and tools from beginning to solidify -leave them to soak in Brush Cleaner whilst you continue working with fresh brushes.  
6) Make sure all the glassfibre is thoroughly impregnated with resin ("wetted out"), then use a metal laminating roller to consolidate the layer.



7) Repeat steps 5 and 6 so that further layers of glassfibre are added, wetted out and consolidated. Four layers will be needed.

8) The exposed, rough surface of the laminate, if desired, can be covered with a layer of surface tissue, applied whilst the laminate is still wet.

9) Leave the laminate to cure. At "green stage", you can trim off rough edges with a Stanley knife (once the laminate is fully hardened, it can only be trimmed with a power tool or a hacksaw with a metal cutting blade).

10) Once cured, the laminated hull can be removed from the mould. It should be left to cure totally for about four weeks, before it is launched and checked for leaks.

