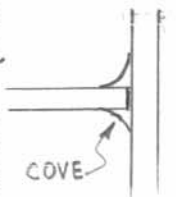


EPOXY RESIN AND ITS USE IN BUILDING A SEWN PLYWOOD DINGHY

THE ADVENT OF EPOXY RESIN BROUGHT A NEW DIMENSION TO SEWN DINGHIES. THE SEAMS COULD NOW BE MADE BOTH WATER-TIGHT AND RIGID. AND FIBREGLASS CLOTH AND CHOPPED STRAND MAT COULD BE EMBODIED TO PROVIDE STRENGTH. ANOTHER VALUABLE ATTRIBUTE OF EPOXY RESIN IN ADDITION TO ITS USE AS GLUE FOR JOINING COMPONENTS WAS THE EASE WITH WHICH COVES COULD BE INCORPORATED AT THESE JOINS. THESE COVES GIVE EXTRA STRENGTH, MAKE FOR EASIER CLEANING AND THE VISUAL APPEARANCE IS ATTRACTIVE.



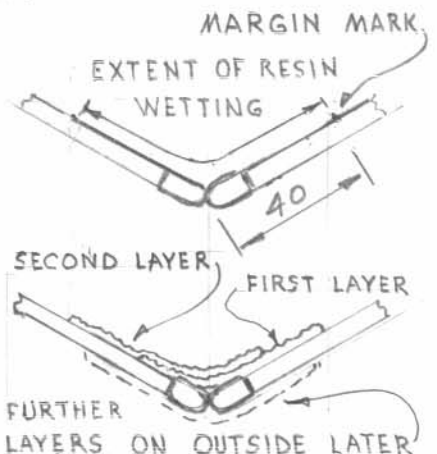
EPOXY GLUE HAS TO BE MIXED IN THE CORRECT PROPORTIONS. THIS CAN BE BY EITHER WEIGHT OR VOLUME. THE LATTER IS THE MOST LIKELY TO BE USED AND THE MOST CONVENIENT ARRANGEMENT IS TO USE THE DISPENSER PUMPS THAT ARE SOLD WHERE EPOXY IS RETAILED. THE CORRECT PROPORTIONS ARE CONTROLLED BY THE PUMPS WHICH HAVE DIFFERING LENGTH STROKES 1:4 1:3 ETC. DEPENDING ON THE MAKE OF EPOXY. SLOPPY MIXING WITH INCORRECT PROPORTIONS CAN RESULT IN FAILURE IN HARDENING AND WEAK JOINTS. SO IT PAYS TO TAKE EXTRA CARE EVEN WHEN USING THE DISPENSER PUMPS.

EPOXY GLUES CAN BE USED IN SEVERAL GUISES -

1. WITH GLASS CLOTH AS A COVERING APPLICATION TO PROVIDE EXTRA STRENGTH.
 2. WITH CHOPPED STRAND GLASS MAT AS A REINFORCING APPLICATION.
 3. WITH THICKENER AS A GLUE.
 4. WITH MICROBALLOONS ETC. FOR FILLING, COVING ETC.
 5. WITH THINNER AS A PRIMER AND SEALER ON WOODEN COMPONENTS.
- WITH SEWN PLYWOOD DINGHIES THE FORGOING PLAY A IMPORTANT PART.

THE FIRST EXAMPLE IS THE ZIG-ZAG SPLICE USING THICKENED EPOXY. THIS IS STRAIGHT-FORWARD AND EXCEPT FOR A CAUTIONARY NOTE TO ENSURE THE MATING SURFACES ARE WELL 'WETTED'.

NEXT COME THE SEWN SEAMS. CHOPPED STRAND MAT IS USED HERE AND TO GET IT LOOKING NEAT AND TIDY THE PLY SHOULD BE MARKED WITH A LINE 40mm FROM THE EDGE OF THE PLY - BEST DONE BEFORE THE SEWING.



A SHORT SECTION OF SEAM (500mm) IS COATED WITH STRAIGHT EPOXY RESIN WORKED WELL INTO THE SEAM USING A BRUSH. THE BRUSH CAN BE A CHEAP THROWAWAY TYPE WITH THE BRISTLES SHORTENED BACK 50%. SHORTENING IS IMPORTANT AS IN THE NEXT PART OF THE JOB THE BRUSH IS TO BE USED IN A STIPPLING



FASHION. THE CHOPPED STRAND STRIP IS LAID ONTO THE WET RESIN, CAREFULLY ALIGNED WITH THE BORDER-LINES. THEN THE LOADED BRUSH IS USED TO PUSH THE MAT INTO THE SEAM USING A VERTICAL STABBING MOTION. THE MAT MAY APPEAR TO RESIST THIS BUT BY PERSEVERING WITH THE STIPPLING TOGETHER WITH MORE RESIN THE MAT WILL BECOME IMMERSSED IN THE RESIN. AS THE AIR IN THE MAT IS EXPELLED, A CLARITY WILL DEVELOP AND ONE CAN THE GO ON WITH THE NEXT STRIP. USING STRIPS 10mm WIDE BY ONLY 500 LONG WITH 'TORN' ENDS (TO MAKE FOR BETTER OVER-LAPPING JOINS) MAKE THE JOB MANAGEABLE. AND WITH PRACTICE THE WHOLE

OPERATION SPEEDS UP. FOR INSTANCE HAVING THE PRE-COATED PORTION OF THE SEAM STICKY (I.E. HALF AN HOUR OR SO OLD) HELPS AS THE MAT DOESNT SLIDE AROUND AND STRANDS STAY STUCK DOWN.

LATER, WHEN THE DINGHY IS TURNED OVER THERE WILL BE A SIMILAR EXERCISE TO APPLY STRIPS OF CHOPPED STRAND ON THE OUTSIDE.

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