Photo Essay - How to build an

Albion

Pacific Power Dory

Plans available in Imperial or Metric Dimensions and Materials at:

http://www.spirainternational.com/
The Albion is a popular sized classic Pacific Power Dory. You'd have to look long and far to find a more rugged but light boat able to handle rough water in safety and plane with minimal power, than the Albion.

The Albion, like most Spira International, easy-to-build boats is built on a simple strongback jig. The plans how to build this are included in the boat plans. It can be made from any available construction grade lumber.

The frames are next. These are simply laid out on a work surface, cut from standard dimensional lumber, and glued and screwed together. All frame elements are straight in the Albion.
The frames are notched to receive the keelson timber a little wider than needed to create limber holes for bilge water to flow between, and then set up on the strongback blocked up to prescribed heights above the strongback.

The keelson is then fitted. It is easy to bend into position using the simple steaming method described in the ply-on-frame ebook that comes with the plans.
Next, the frames are notched for the Chine Log (along the intersection of the bottom and sides, and the Sheer Clamp (along the top edge of the frames.) These longitudinal frame members are then bent, glued and fastened into place.

The process of “Fairing” the hull comes next. This is done with a saw, plane, drawknife, angle grinder and/or other tools to smooth the outside surface of the frames and angle then so that the ply covering will lay against the framing with the correct angle so that a good, wide glue joint can be established.
Once the hull is faired, you can begin the plywood planking process. The frame itself is used as a template to cut out the plywood. You simply butt together the ply then later back it up where there is no frame element with a backing plate of plywood in the inside, glued and screwed in-place.

After you complete the ply covering, fill the cracks, holes and screw head holes with an epoxy/filler mixture. You can use microspheres or silica, but it’s just as easy and a lot cheaper to just use sawdust mixed with epoxy resin to make a sort of hardening putty.

Once all the holes are filled, it’s time to sand the hull fully. This gives the epoxy a slightly roughened surface to stick to.
Now it is time to cut out the fiberglass to cover the hull. I recommend two to three layers of either 6 oz. or 10 oz. fiberglass cloth. The cloth comes 50” wide and it is sold by the yard.

You saturate the cloth with epoxy resin by first painting the bare wood with epoxy, then laying the cloth on the wet wood, and applying epoxy to the cloth to fully wet it out. It turns from opaque when dry to transparent when properly saturated. You can lay the second coat over the first while it is still wet and then wet it out as well.
All glassed. Now it’s time to sand, sand, and sand. Not an easy task but unless you want your boat looking like a rough burlap sack, a necessary one.

When you’re done it should look something like this:

Though not detailed in the plans, some builders elect to use bottom strakes to serve as wear strips when you beach the boat, and to improve the turning at low speeds.
While it’s upside down is a good time to paint the hull. After that is done, it’s time to invite all of your friends over for a boat flipping party. Half a dozen should be enough for this boat.

What do you know, it actually is starting to look like a boat:
You can now finish the inside and rail. A simple slatted deck is a good choice, or you can foam fill the spaces between the frames and put a solid plywood deck in.

You may want to add a center console or even go all out with a full cabin – many options are possible.