

BUILDING *LUTRA LAKER*

Tools for *LUTRA LAKER*

Tools needed:

1. saber saw
2. block plane (can be adapted for bevel jig)
3. drill and drill bits
4. small hammer
5. hand saw (Japanese pull saw is best)
6. $\frac{3}{4}$ inch chisel
7. orbital sander (5 inch is best)
8. tape measure (16 ft minimum)
9. spring clamps (5)
10. bar clamps (5)
11. mat knife or razor blades
12. safety glasses
13. dust mask
14. square
15. string snap line or string

Helpful tools

1. table saw
2. cordless drill
3. 8 inch jack plane (bevel jig)
4. belt sander and frame (for scarfing)
5. circle saw (for scarfing alternative)
6. router (for scarfing alternative)
7. # 6,8,10 counter sinks and bits
8. set of chisels

Plywood: It's best to use marine grade plywood manufactured to British Standard 1088 or BS1088. Look for the BS1088 stamp on each sheet. *WoodenBoat* has two articles on marine plywood that are very good sources of information.

- o 4 4X8 sheets of 4mm
- o 4 4X8 sheets of 6mm
- o 4 4X8 sheets of 9mm
- o 1 4X8 sheet of 6mm – It will be a good idea to order this sheet if you have to have the ply shipped. This will allow for some mistakes to be made and the figuring will not have to be so close because the shipping in many cases can be as much or more than the ply itself.

Bottom, decks, and seats - 9mm

Garboard, knees, bulkheads and braces - 6mm

Mid-plank, sheer plank – 4mm

Inwales and Outwales

Approximately 80 linear feet of 1½ X ¾ fir, mahogany, Liptus, or builder's choice

Material for cleats

Approximately 100 linear feet of ¾ X 5/8 fir, clear pine, basswood

Epoxy: *LUTRA LAKER* will require **2 gallons** of resin and the appropriate amount of hardener. I've used System Three Epoxy for over 10 years and I've found it to be excellent. I

really like the two to one mixing ratio...Which ever epoxy you use...and there are least three major brands...I highly recommend **The Epoxy Book** (enclosed)....reading it carefully will save you mistakes that will cost time as well as money....in addition you'll need:

- o 2 5 quart tubs of cab-o-sil
- o 1 quart wood flour
- o measuring cups (I like the plastic 1 oz cups)
- o approx 100 #6 X 3/4 screws (silicone bronze or stainless)
- o approx 100 #6 X 1 screws (silicone bronze or stainless)
- o approx 100 #8 X 1 1/4 screws (silicone bronze or stainless)
(square drive, Frearson or Phillips wood screws)
(a small box of fine finish nails 1 1/2 long)

Fiberglass cloth:

- o 25 yards of 4 inch wide 6 ounce tape
- o 6 1/2 yards of 6 ounce 60 inch wide fiber glass cloth (use 4 ounce if you want to keep things very light or 9 ounce for heavy abrasion like oysters)

3 sheets 5/8 or 3/4 inch particle board or MDF for molds. Each blank should be cut just slightly wider than the maximum beam at that station. Rip the sheet so each blank is the height the base line is above the strongback, I used 30 inches on my boats.

Also, you need masking or plastic tape for the edges of the molds. **Be sure to tape the edges of the molds or they will become a permanent but unwanted part of the boat!!!!**

1 sheet of 3/4 inch plywood for the strong back ripped into 6 inch wide strips.