Building Voyager - What you need

Materials

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.

- One sheet 6mm plywood (bottom)
- Two sheets of 4mm plywood (Planks)
- One sheet of 3mm plywood (decks)

Wood:

40 to 45 liner feet of 5/8 x 3/4 Basswood, Poplar, or fir
40 to 45 liner feet of 5/8 X 3/4 Cherry, Mahogany, or fir
Fir was used for everything on the boat in the video.
A 4 foot long 2X12 piece of cherry, mahogany, fir or pine will be needed for the false stem. Depending on the layout a piece less than 12 inches wide can be used. The cherry and mahogany will probably come in 4/4, 6/4, or 8/4. 4/4 should work if surfaced to 15/16 +/-. If the thickness of the stem and planks exceeds 1 inch then 6/4 surfaced to the thickness of combined stem and planks will be required. 8/4 would be over-kill and have to be surfaced down. The yard should be able to surface the plank for a charge if you don't have a planer. A standard piece of 2X12 clear pine was used on the boat in the video.

Epoxy:

- 1.5 to 2 gallons of epoxy resin plus appropriate hardener
- 5 quarts Thickening agent cab-o-sil (silica)
- 1 quart wood flour

Fiberglass cloth:

- 1 roll (50 yards) X 3 inch 6 ounce fiberglass tape
- 6 yards of 6 oz fiberglass cloth (4 oz if weight is a factor, use 9 oz for heavy abrasion like oysters)

Miscellaneous:

- 1 box of 100 #6 X ¾ bronze wood screws
- 1 box of 100 #6 X5/8 bronze wood screws
- Disposable rubber gloves
- Disposable brushes
- Measuring cups for epoxy
- Stirring sticks
- 1 box of 1 to 1 ½ inch fine finish nails or brads
- Rags or paper towels for wiping up excess epoxy

Be sure to read The Epoxy Book included with the plans. It will save you time, epoxy and mistakes. I recommend System Three Epoxies. I have used them for about ten years and wouldn't use any other. I like the two to one mixing

ratio….very easy to mix small batches. The smaller the batch the less you'll waste.

2 sheets 5/8 or 3/4 inch particle board or MDF for molds (rip sheets into 24 X 96 inch pieces if the base line is to be 24 inches above the strong back or say 16 X 96 if the base line is to be 16 inches above the strong back. 24 inches will be best) Each blank should be cut just slightly wider than the maximum beam at that station. Also, you need masking or plastic tape for the edges of the molds. Be sure to tape the edges of all the molds or they will become a permanent but unwanted part of the boat!!!!!

1 sheet of ¾ inch plywood for the strong back ripped into 6 inch wide strips.

A soft kayak style seat will allow the cockpit to remain uncluttered and be very comfortable. Blocks with pad eyes screwed to the blocks and epoxied in place will give places to attach bungee cords and seat. A small ice chest behind the soft seat makes a great seat when you don't want to stand.

Tools

Necessary:

1. Saber saw with fine tooth blades
2. Block plane
3. Drill and bits (cordless drill best)
4. ¾ inch chisel
5. Screw drivers
6. Hand saw (Japanese saw best)
7. Clamps (10 – minimum)
8. Hammer (small will be best)
9. Electric sander (5 inch random orbital sander)
10. Tape measure at least 16 feet long
11. 36 to 48 inch rule with straight edge
12. Level
13. Square
14. Dust mask and safety glasses
15. Mat knife or razor blades

Helpful tools

1. Table saw
2. 8 inch Jack plane
3. Belt sander and frame (for scarfing)
4. Circle saw (for scarfing alternative)
5. Router (for scarfing alternative)