

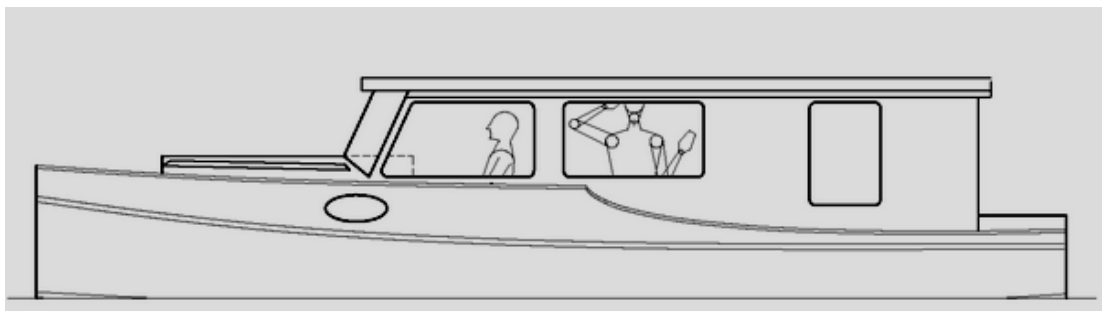
General Assembly Venice Lagoon Boat

Length - 8.2m

Beam - 1.977m

Disp - 1000kg

Power - 10/15hp (Short Shaft)



DESIGNER

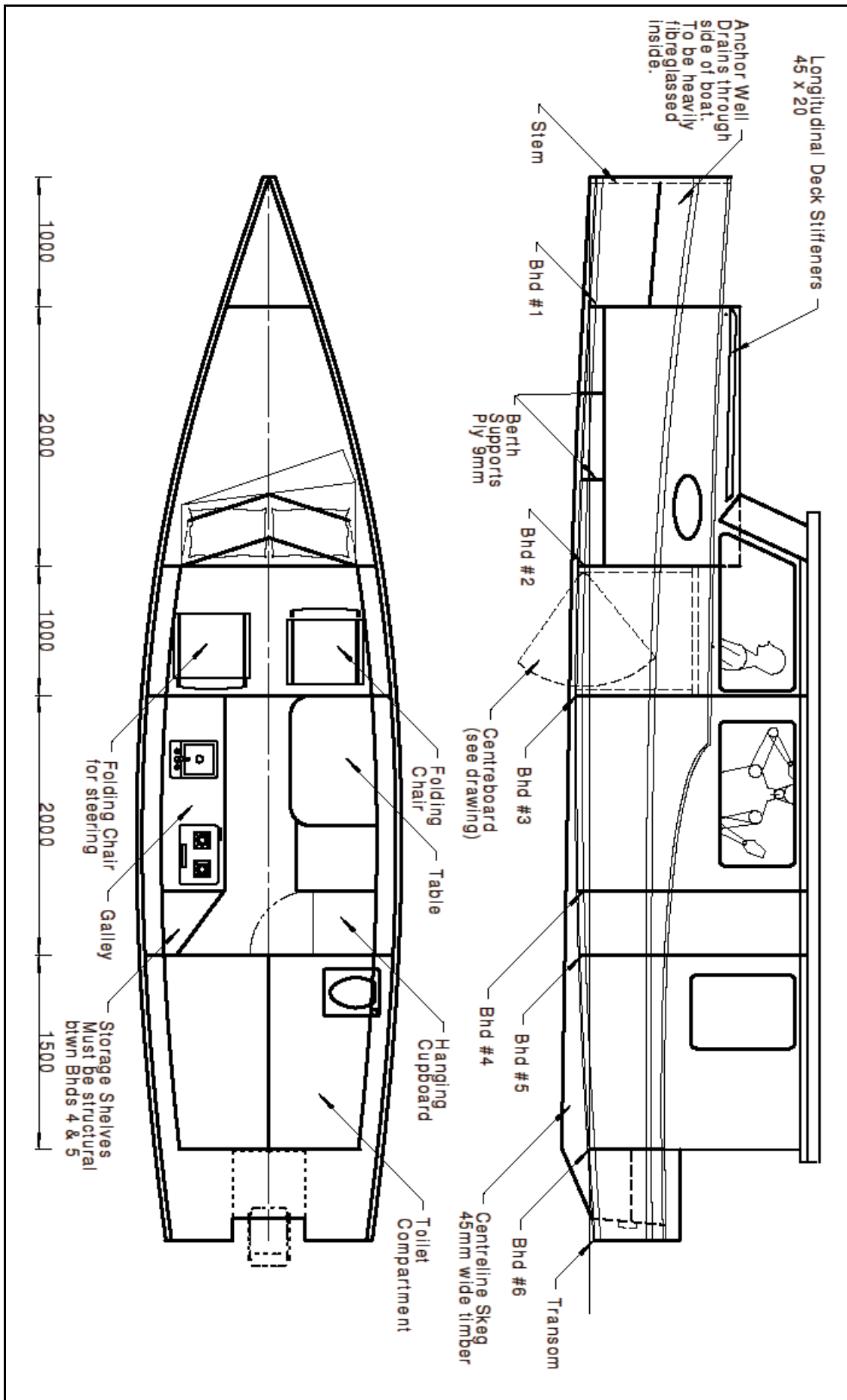
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LICENCE

The purchase of this plan entitles the purchaser to build one boat only. The rights to build an additional boat are by the paying of a further license fee (amount to be negotiated with the designer).

It is usual for plans to be non-returnable and non-refundable as it is too easy for them to be copied, then returned. If you want to ask, do so, but I will usually refuse.

The purchaser must decide whether the craft will fit their purposes. I have offered a description of the craft and its building which is offered in good faith.

As there is no control over quality of materials or construction it is impossible to guarantee performance in any way.

Remember it is the skipper that decides the use of the boat on a given day. Use the boat in conditions you are comfortable with and gradually, as you get to know her, push that envelope.

Of course, wear appropriate clothing, carry the appropriate safety gear and be clear on its correct use.

Comments on Changes

The original boat was for commercial hire to the public which necessitated the skeg with ballast – this was to accommodate the survey requirement that the boat be stable with all six of the hire crew standing on the edge of the boat. It is probably overdoing it for normal use and sensible people.

Some builders have replaced the skeg with a similar bottom runner to the skids on either side (45 x 45mm) for shallower draft and some saving in materials.

If changing the interior substantially simply make up some temporary bulkheads out of chipboard (approx 20mm thick) to go in the positions of the seat webs or other structure that you want to eliminate. After the hull is together you can measure out the actual size of the parts you wish to add.

I would suggest the approach of using temporary bulkheads for the assembly in the back part of the boat (Bulkheads 4 & 5) to make sure the furniture positions are OK for the intended use – the version here is to suit a particular client and others may wish to cut down the size of the toilet/shower compartment considerably.

In general there are three rules with this little boat.

1/ You cannot add weight up high. So if adding cabin sides it is recommended that you do it in 6mm plywood.

2/ You should be careful about adding weight to the back of the boat – otherwise the stern will start to drag and the performance and fuel economy will suffer.

3/ The simplicity of construction is largely possible because the hull sides and bottom are supported by the furniture. There needs to be furniture effectively glued to the inside of both side panels as well as the bottom panel (the original function was carried out by the seats and seat webs). It is particularly good if the furniture extends far enough in from the hull sides to meet the location of the bottom skids under the boat.

DAYBOAT LAUNCH MATERIALS

Comments on Methods

Please read the appendices before starting the building process. They contain important information that will save you time and money.

Comments on Materials

The Venice Lagoon Boat is best built of **Gaboon (Okoume) Marine Plywood**. Gaboon is about 2/3 the weight of the usual marine ply and finishes to a rich, mid brown colour. It will significantly reduce the trailer weight of the boat and improve performance under power. However the boat can be built quite successfully of higher density ply such as Hoop Pine or Pacific Maple.

Some ply sheets in Australia are a smaller size than elsewhere in the world (2400 x 1200 vs 2440 x 1220). This boat has been designed around the larger sheets so using smaller ones may require some moving of sheets to allow components to fit.

The boat should be glued with a high solids epoxy system such as Bote Cote, WEST, System 3, or other quality marine resin system. To minimise maintenance it is recommended that the plywood and all timber be epoxy coated. This will reduce maintenance severalfold so that the boat is similar or less maintenance to a fibreglass boat.

PLYWOOD

Part	Thickness	Sheets
Foredeck (2 layers)	4mm 3ply	3
Bottom	6mm 5ply	15 (two layers for total of 12mm)
Cabin Roof	6mm 5ply	6
Interior (Approx)	6mm 5ply	7
Side Panels	9mm	7
Aft deck	9mm	1
Outboard well	9mm	2
Bulkheads	9mm	6
Transom	12mm	1
Cabin Sides	9mm	4

TIMBER

Materials list - all dimensions are finished sizes and are in mm unless stated otherwise. This list is not comprehensive as the amounts will vary.

WRC - Western Red Cedar (Australia) or other light, stable, straight grained timber with good gluing properties. No loose or large knots. Alternative – Hoop pine or other medium density softwood with straight grain and good gluing properties.

Fir - Douglas Fir (Fir), select dry stock. Fine grain, no knots. Or any medium density softwood with straight grain, good gluing properties and good appearance.

Hardwood - Straight grained hardwood of medium density with good machining and gluing properties. For example Brazilian Cedar, Pacific Ash, Tasmanian Oak (be aware that many European and American Oaks have poor gluing properties).

Part	Size	Length	Number	Species
Fairing batten	15 x 15	5000+	1	Fir
Chine logs	37 x 25	8400	2	Fir
Chine log caps	12 x 50	8400	2	Hardwood
Sheer Strake	37 x 37	8400	2	Fir
Deck Clamps (front)	37 x 37	4800	2	Fir or WRC
Deck clamps (rear)	37 x 19	3900	4	WRC
Bottom Runners	45 x 37	7200	2	Fir
Skeg*	45 x 45	18000	/	Fir
Skeg (grounding layer)*	45 x 20	7800	1	Hardwood
Cabin Posts (80mm dimension fore and aft recommended if fitting roll down side curtains)	45 x 45	2000	8	Fir
Roof Beams	9 x 30	2500	35	Fir or WRC
Cabin Rails	45 x 19	5800	2	Fir
Bhd edge clamps	45 x 30	25000	/	WRC or Fir
Transom edge clamps	45 x 45	2800	/	Fir
Engine well clamps	45 x 30	5700	/	Fir
Misc. furniture clamps	45 x 19	30000	/	Fir
Hatch Runners	45 x 30	2100	2	Fir or HW
Engine Board	45 x 145	700	1	Fir
Stem	45 x 45	1200	1	Fir

* See notes above

EPOXY STUFF

Epoxy	90 litres (approx)
Fortifier gluing powder	15 kg (must be suitable for high strength gluing)
Epoxy Solvent	1 litre - Brushes are sat in it overnight to use next day.
Fibreglass woven fabric	330gsm - 15 sq metres (for bottom) 200gsm - 22 sq metres (for sides) 1.2m width is best 200gsm – 8 sq metres (for decks – optional/recommended) 200gsm (or lighter) – 8 sq metres (for roof - optional)
Barrier creme for hands	If you use it religiously the epoxy will come off with soap and water. <u>DO NOT USE SOLVENTS FOR CLEANING SKIN.</u>

Bag of disposable gloves

Disposable Brushes

Foam rollers They have a thin layer of foam on the cardboard roller. If you can get a short roller cage handle (ask your epoxy supplier or included in kit) it means the rollers can be cut in three - a good economy

Note - all these materials are included in kits supplied by me or Duck Flat Wooden Boats.

SOME ODD MATERIALS

Bugle headed gyprock/drywall/plasterboard screws - about 200 of 37mm (1 ½" x 10 guage) - 200 of 50mm all phillips head. (see Appendix.)

Masking tape 19mm (3/4") wide

Roll of plastic packaging tape 37mm or 50mm wide (1 1/2 or 2").

Small bag of panel pins. (small nails)

Some plastic sheeting would be useful.

A box of "snap lock" plastic bags

Heaps of clean, empty tin cans

Stirring sticks made of scrap timber 200 x 20 x 6mm approx.