# PLANS AND DIMENSIONS

### CAN I BUILD MORE THAN ONE BOAT FROM MY PLANS?

No. You purchase a license to build one boat from the plans. The designer still owns the copyrights to the plans, and except for shop use, you cannot reproduce the plans, resell them, or give them away. This is standard practice and allows us to keep the cost of stock plans low. A custom design costs several thousand dollars! If you want to build the boat professionally, you must pay a license fee per boat.

#### WHAT ARE ALL THOSE NAUTICAL TERMS USED IN YOUR PLANS?

We need to use the proper terms for precision, but they are easy. See this Glossary for the most common terms.

#### ARE ELECTRICAL AND ENGINE INSTALLATION DIAGRAMS INCLUDED?

It depends on the boat. For outboards boats, we sometimes show suggested electrical wiring for accessories on the plans or, for the larger units, we include a separate electrical diagram to use as a starting point. See the plans description. The diagram shows connections to batteries, switches, panels and some basic instruments such as a bilge pump, etc. Outboard engines are sold with an electrical harness and controls. To install an outboard is just a matter of plugging in the harness and connecting the control cables. We show chase tubes if applicable. For inboard engines, at minimum, we show a standard engine with engine beds and sometimes exhaust and cooling. For straight shaft inboard, we show shaft, prop, stuffing box, strut etc. with part numbers. For all power boats and for large sailboats, we show fuel tanks and vents, fills, routing of hoses, etc.

#### CAN I MODIFY THE PLANS?

Yes. One of the major advantages of building your own boat is that you can customize your boat to fit your preferences. To change seats or locker sizes and/or location is easy but beware of hull and structure changes or scaling as they may have unexpected consequences.

Keep some important points in mind when making changes:

- the structures like bulkheads and stringer spacing must be respected
- you cannot change the materials specifications:
- the boats are designed with a safety margin and are strong. –
- if you add or move components, try to keep the center of gravity as designed and the weight within reasonable limits.

We will design some modifications or changes if we feel that other builders may be interested but if you modify one of your plans yourself, you are on your own for all the calculations. If you consider major changes, it is often easier to start with another plan closer to your requirements. Ask for a new plan on our message board and we may respond that we have one in the works.

#### ARE THE DIMENSIONS FOR THE SAILS AND MASTS ON THE PLANS?

Yes. All plans for sail boats include complete sail and rigging drawings. The blueprints show at least one sail plan, in many cases two. Depending on the boat, we specify Aluminum or wooden spars. For many of our small boats, the spars are very easy to make from a couple of boards epoxy glued together, a very inexpensive solution. No hardware is required for those small boats. All sail boat plans include at least one sail plan with dimensions, fabric type, etc. Your sailmaker or you can cut the sails from our plans.

#### HOW DO I TRANSFER LINES FROM THE PATTERNS?

It's easy: we explain that with pictures in the plan's description pages at boatbuildercentral.com. Click on "details" next to the plans order button. Note that we supply not only patterns but also all the dimensions: you choose which method you prefer, and you can also use one method to check the other.

## CAN I HAVE THE CAD FILES (DXF)?

No. If you have a CAD system and access to a plotter, you can plot your own patterns and details from dimensions taken from the plans. If you have access to a CNC router, you can extract router specific files from your files: see your CNC program instructions.

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#### CAN I ENLARGE OR SCALE BOAT XYZ?

Yes, you can scale by 10% maximum, but it is not going to be easy. The first problem is the dimensions of the panels. If you have seen our plans, you know that we show the exact size of all developed panels. When you change one dimension, most of the panels change. You can scale the panels. If you stretch the boat 10% lengthwise, scale all lengths 10%. If you scale the whole boat in 3 dimensions, scale all dimensions. The second problem is one of scantlings and hydrostatics. If you enlarge the boat more than 10%, you must recalculate the framing and the specifications of the panels: thickness, fiberglass layers, etc. A 20% increase in length means a 73% increase in volume and around 50% in weight. Your boat may float too high or too low. The third problem is the most important one: plywood usage. We work hard on optimizing the use of plywood, reducing waste, and locating the splices strategically. If you increase a dimension by only one inch, a panel that was designed to fit on three sheets of plywood will suddenly not fit anymore. You will need four sheets and the splice is going to be in a weird place. This has a chain reaction effect and we have seen cases where a small enlargement of the hull resulted in a plywood increase of 75%!

### IS THIS PARTICULAR TO OUR PLANS? ARE OTHER PLANS NOT EASIER TO SCALE?

Not at all. Most plans from other designers do not give you the dimensions for the developed panels and do not show the nesting on the plywood. There isn't much to change in those plans because the information is not available. If you want, you can use our plans like those less detailed ones, but construction will be more difficult, just as with the other plans. You may choose a design because it is easy to build or economical but wish that it was just a foot longer. Add a foot and the boat is not easy and economical to build anymore. Bottom-line, avoid scaling our plans. If the boat looks too small, choose another design.