

The hull form has been an evolution of the GV11, with a slightly modified bow shape to make bending easier. Beam has remained nearly the same because the GV11 was as beamy as you could go on a small boat - the GV13 will be a little more comfortable in a chop because it is proportionally thinner. (For those interested in the history of the Boston Whaler™, please visit <u>this page</u>).

SPECIFICATIONS				
LOA	13'	3,97 m		
Max Beam	5'-2"	1,58 m		
Hull weight *	170 lbs.	48 kg		
HP	25			

* All specifications are approximate and subject to changes in function of the mood of the designer and the skills of the builder.



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Garvey/JonBoat 13 – Study Plans

BUILDING METHOD

The construction is epoxy-fiberglass-plywood composite, a second-generation stitch and glue system designed for efficient and fast building. This building method combines the ease of stitch and glue (plywood-epoxy) with the strength, lightweight, longevity and low maintenance of a high tech composite hull. The hull material is a fiberglass sandwich with a plywood core. The builder assembles the hull as a plywood boat first, then builds the outside and inside fiberglass skins to produce a strong composite hull without all the time consuming woodwork associated with plywood on frame. We specify high performance directional glass and epoxy. While that type of fiberglass cost a little bit more, we save on resin and weight. All planking panels have been precisely calculated: you cut them flat on the floor, no need for templates, no need to take measurements from the hull framing as in the plywood on frame method. The internal framing is characteristic of a fiberglass or composite boat: a monocoque structure made of interlocking bulkheads and stringers, tabbed to the hull and fiberglass chines and keel. The hull can be built without any jig, the sharpie way but we recommend to build her upside down on a simple jig. The plans give all the dimensions for each method including specifications for the jig.



(Excerpt from the plans)

Our jig system is very uncomplicated, self-aligning and economical since we use the internal framing of the hull as molds. Our jig does not require all the precautions, alignments or even a perfectly flat floor that are a must for traditional boat building.

REQUIRED SKILLS

As all our stitch and glue boats, the GV13 is easier to build than other plywood or fiberglass boats. No woodworking skills or special tools are required. The plans include all dimensions to cut all the hull parts flat on the shop floor. No scarfing required. The plans show all the plywood parts, even the smallest ones, with dimensions, including the assembly notches, the outboard clamp etc. The small side console is also shown on the plans.

OPTIONS

There are many options to consider but the first one should be positive and upright buoyancy (unsinkable boat). This can easily be easily achieved with our marine flotation foam. For production boats in that size, the USCG requires upright floatation.

LABOR

The hull can be built in 50 hours, but a finished boat will require 100 hours or more depending on the level of detail and the skills of the builder.

BILL OF MATERIALS

Plywood (4x8' – 122x244cm)				
6 mm (1/4")	4			
9 mm (3/8'')	3			
Also see our <u>CNC Kit</u> , which is a precut plywood kit that includes all the plywood needed to build the boat as designed.				
Fiberglass Fabric and Tape				
Fiberglass Biaxial Tape 45/45 12 oz., no mat, 6 in.	50 yards	45,72 m		
6 oz. – 4" Woven Tape	36	33m		
12 oz – 50" Biaxial Cloth	11 yards	9 m		
Resin				
Ероху	4 1/2 gallons	17 liters		
Also see our MarinEpoxy or Silvertip Epoxy kits which include all of the epoxy and fiberalass listed.				

This BOM covers all the supplies for this boat as designed. Usage of materials will vary in function of several factors. An experienced builder will use less resin. First time builders always use more resin, take that in account. Our resin usage calculations are based on a 50% glass content. Options, customization, and variations in fabric and foam cutting preferences will also affect the Bill of Materials. Our figures show an estimated average. Small variations in fiberglass specifications are acceptable, consult us for substitutions.

MORE

Visit our <u>forum</u>, help pages, tutorial pages and read our FAQ: most questions are answered there.

LICENSE

As with all our plans, you have the right to build one boat from those plans. The designer holds the copyright to the design, and you purchase a license to build one boat. If you plan to build more than one boat, please contact us about licensing fees.

BUILDING STANDARDS

These plans were drafted according to the ABYC rules. The ABYC (American Boat and Yacht Council) defines the boat building standards in collaboration with the USCG. Professional builders may be subject to more requirements. Consult the designer.

The ABYC standards are very close to the ISO norms and CEE requirements but no European certification was applied for since this is not required for amateur boat building in Europe. CEE/ISO certification is available to professional builders for a fee.