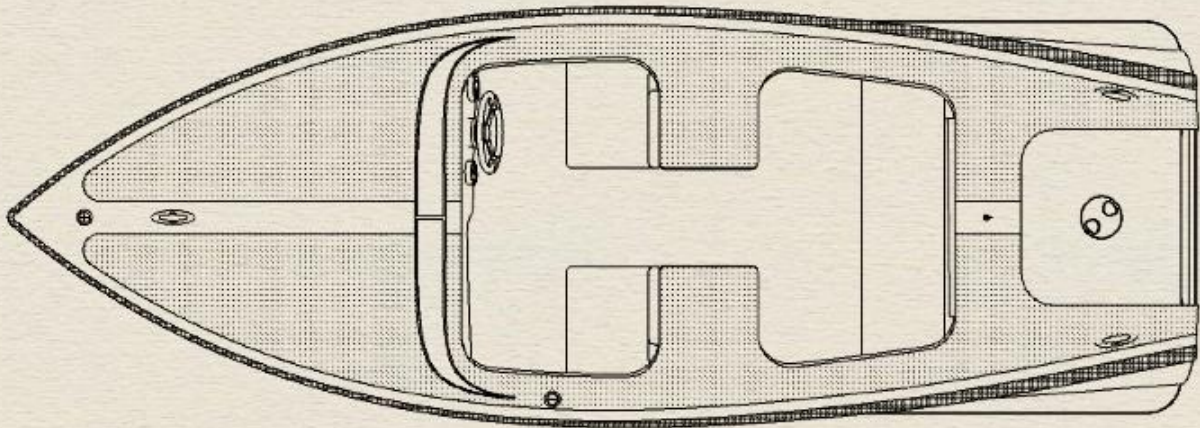


RB18 - bateau.com



<b>Specifications:</b>		
<b>LOA:</b>	18'	5.50 m
<b>Max. Beam:</b>	6' 2"	1.88 m
<b>Hull draft (2000 lb):</b>	6"	0.15 m
<b>Displacement at DWL:</b>	1,500 lbs	680 liters
<b>PPI at DWL:</b>	389 lbs	69 kg/cm
<b>Fuel:</b>	20 gallons	80 liters
<b>Recommended engine</b>	90	70 kw
<b>Material:</b>	epoxy-fiberglass-plywood composite	

Dimensions are nominal. The rubrail is not included in the beam and will add 1 to 3" total depending on the type of rail.



The Runabout 18 is an outboard powered runabout with classic looks built with modern materials.

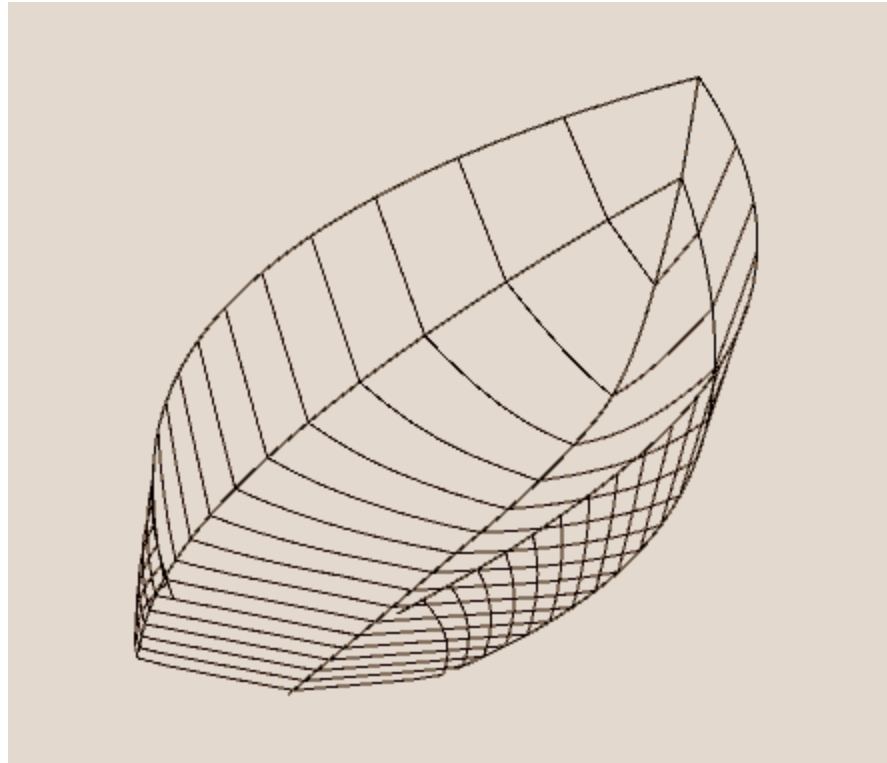


This boat plan also exist as an inboard jet drive boat. The jet version has a closed transom and side fenders extending as a swim platform. A prototype was built and performance exceeded expectations. The boat accelerates like a sports car and keeps a nice trim at all speeds with no porpoising.

The jet drive version is named JetAbout 17 (JA17) while the outboard version is named Runabout 18 (RB18). The RB18 and the JetAbout share the exact same lines, only the transom differs. The JA17 is featured in Boating magazine of September 2014.

Compared to our RB12/14/16 series , this hull has a deeper vee. The RB18 shows a finer entry than our RB12/14/16 and has more deadrise at the transom: about 8 degrees. The vee is still moderate enough to give good fuel economy.

This is a larger boat and we expect her to be used on more open waters than our small runabouts.



Calculated hull weight is 600 lbs for a complete hull, all plywood, glass, epoxy, paint ready to be rigged with an outboard. That weight can be reduced if the builder uses foam sandwich or honeycomb for some parts like the sole and some frames.



Another difference with the RB12/14/16 is the self bailing feature. The sole is at the DWL. This means that at normal trim and at a displacement of 1,500 lbs, the cockpit(s) will drain. Above that displacement, the drains must, just as in many small boats, be fitted with plugs but she will always be self draining at the dock.

As any of our designs, the RB18 can be made unsinkable with the addition of buoyancy foam.



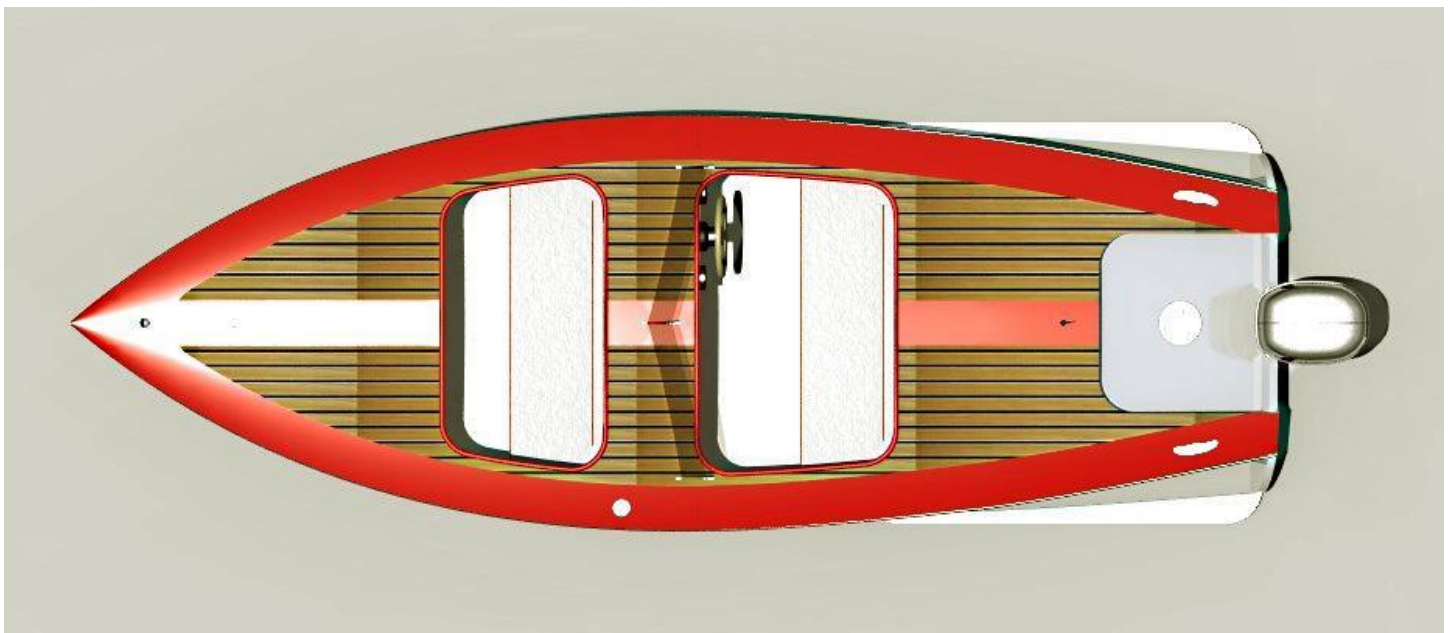
The plans show two layouts: a double cockpit and a larger single walk through cockpit.

### **Building Method:**

The material is a plywood core between skins of fiberglass in epoxy. The assembly is done the stitch and glue way like all our designs for boats of that size. See our "Building on a Jig" tutorial (link).

MDF molds are set on a pair of strongbacks and stringers are used to space the molds. The molds are then planked with plywood panels and the outside fiberglass skin is applied. The hull is turned over, jig removed and the inside fiberglass is applied producing a complete fiberglass hull. The interior framing is installed, with the sole, followed by the other components like frames, seats, consoles or pilothouse, decks etc. As for all our boats, there are no fasteners: it is built as a fiberglass boat but on a plywood core.

The deck of the RB18 is developable. This means that it can be built from sheet plywood. It can also be planked with teak or mahogany if the builder prefers. Disregard the description of the deck building that we show on our [bateau2.com](http://bateau2.com) forum. Since the building of the prototype, we modified the deck. The new deck is made from 5 parts: a central king plank, a pair of coaming pieces 8' wide along the sheer and the planking in between. There is a seam between those parts but it fits most paint patterns for that type of boat: painted sides and king plank with visible planking in between. The planking seen in the pictures can be natural plywood with pinstripes.

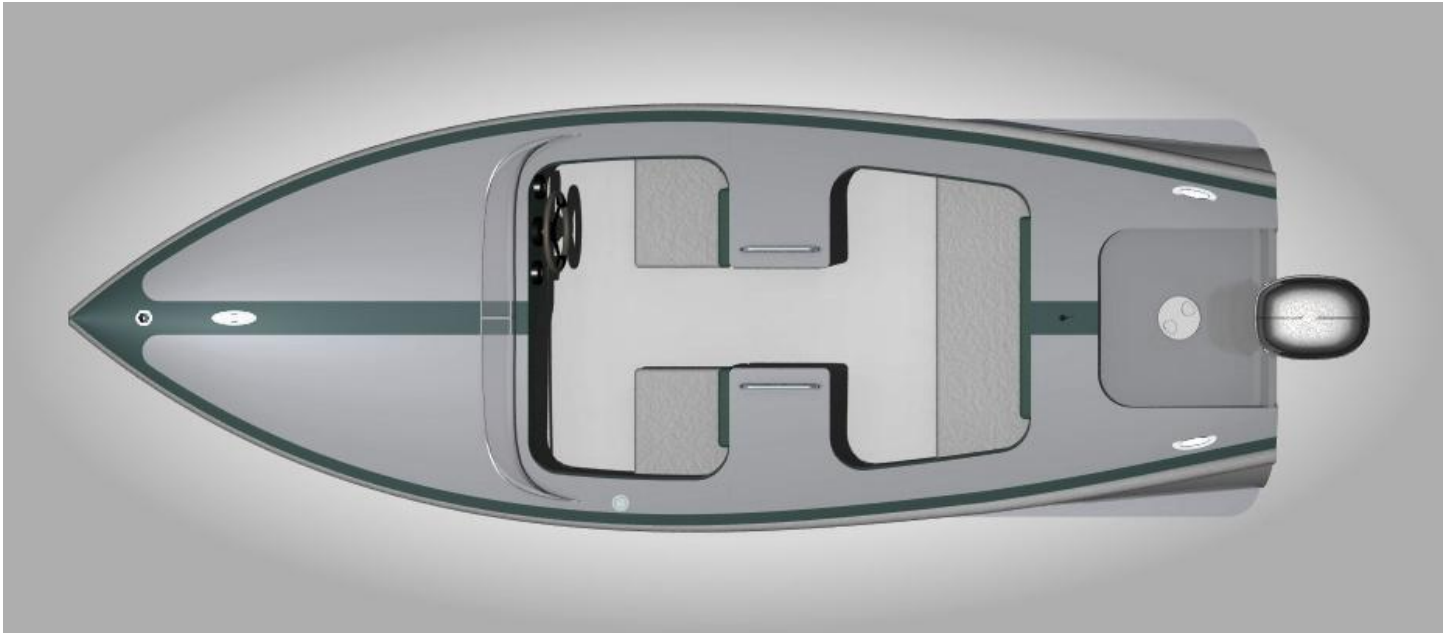


**Skill Level:**

The building method is simple and does not require wood working skills. If you can cut plywood with a circular saw and handle a grinder, you can build this boat. No tricky bevels, no fancy routing but if you have those skills and tools, you can use them to finish the boat to a high standard. Basic understanding of resin and fiberglass is needed.

Those skills can be learned by building a small canoe from our free plans ([link](#)). While there is nothing difficult in building this boat, it is a moderately large project that will take some time. A builder with the experience gained on a smaller boat will progress much faster, save on materials and not run the risk of running out of steam. We do not recommend this boat as a first time project.

Some wood working skills are required if the builder wants a traditional planked deck instead of the plywood deck.

**Options:**

Two layout options are described in the plans: the double cockpit or the walk through cockpit. They use different frames and exact dimensions for those frames are shown for each option. Using different combinations of those frames, the builder can , if he wants, customize the cockpit.

**Bill Of Materials:**

To assemble the base hull, ready to fair and paint, an experienced builder will need about 90 hours:

Cut molds: 5 hours  
Jig set up: 4 hours  
Cut hull panels and transom: 4 hours  
Plank hull: 5 hours  
Outside seams: 5 hours  
Outside fiberglass: 5 hours  
Outside rough fairing and primer: 10 hours.  
Roll the hull: 1 hour  
Remove molds and inside seams: 4 hours  
Inside wide fabric: 5 hours  
Install and tab stringers, floor frames: 8 hours  
Motorwell and bow frame: 5 hours.  
Cleats on stringers: 4 hours  
Sole installation with tabbing: 5 hours.  
Deck framing: 3 hours  
Cut deck and install: 8 hours  
Deck/coaming glass: 4 hours  
Deck fairing: 4 hours.

This is for the shell only.

A first time builder will need about twice that time. This total is for real work hours and does not include the time spent hesitating about options, dreaming or admiring your work while the epoxy cures!

The rigging is not included: hanging engine, running harness, installing fuel tank with fittings, lights, batteries, drill scuppers etc.

Often much more time is spent on details like hardware, rails, windshield etc.

<b>Plywood standard sheets 4x8' (122x244cm)</b>		
6 mm (1/4")	12	
9 mm (3/8")	8	
<b>Fillers and Fairing</b>		
Wood Flour	5 lb	
Fairing Compound	3 qt	
<b>Fiberglass fabric 50" wide (125 cm) or tape 6" wide ( 15 cm) (totals)</b>		
Biaxial tape 45/45 12 oz. (400 gr)	400 yards	366 m
Biaxial fabric 12 oz. 45/45 (400 gr)	80 yards	74 m
<b>Resin</b>		
Epoxy, total	15 gal	56 Kg
<b>Foam</b>		
Foam (optional)	6 gal	(3 2 gallon kits)

This BOM covers the hull ready to paint: hull with structural framing, motorwell, full sole. It does not include any option. For options, see the plans specific to that version. Not included are battens for cleats (2x2), those are cheap and available everywhere.

The supplies for the jig are not included. Plan for a pair of strongbacks about 20' long and between 6 and 10 sheets of MDF for the molds.

Small variations in fiberglass specifications are acceptable, consult us for substitutions.

#### **Cost:**

The cost of materials varies depending on your location, your choice of epoxy brand, core type and options. Use our Bill Of Materials with the local cost of materials.

All materials are available for purchase online from the web sites below:

Epoxy, fiberglass, foam, paint and more: [BoatBuilderCentral.com](http://BoatBuilderCentral.com)

Despite the cost of shipping, those materials may cost less online than purchased locally.

#### **Labor:**

The hull shell can be built in 90 hours but a finished boat will require 190 to 800 hours depending on the level of detail and the skills of the builder.

#### **More:**

Visit our message board, 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.

### **Plans Packing List:**

Plans are available in metric or US units.

- 
- B310/1. Specifications. Hull dimensions and specs.
- B310/2. Jig Shows how to draw a mold
- B310/3. Stations. This is also the lines plan.
- B310/4. Nesting 6 mm
- B310/5. Nesting 10 mm
- B310/6. Hull plates Deck plates included
- B310/7. Frames Double cockpit
- B310/8. Frames Walk Through cockpit
- B310/9. Construction with sole framing
- B310/10 Inside Plates
- B310/11. Deck with framing details and plank layout.
- B310/12 Details
- B310/13 Foam
- B310/14 Fiberglass lamination schedule