

The Micro Flats boat FS14_LS is a decked and low sheer version of our FS14. Light weight, easy to build.

SPECIFICATIONS

LOA	13'- 6"	4,12 m
Max Beam	5'	152 cm
Hull weight *	190 lbs.	86 kg
Hull Draft at DWL	5"	12.5 cm
Displacement at DWL	610 lbs.	276 liters
PPI at DWL	200 lbs./in	35 l/cm
Max HP	15/25 HP	10/18 kW

* Hull draft is without skeg (+3/4"). Cockpit is self-bailing up to 800 lbs. at normal trim. 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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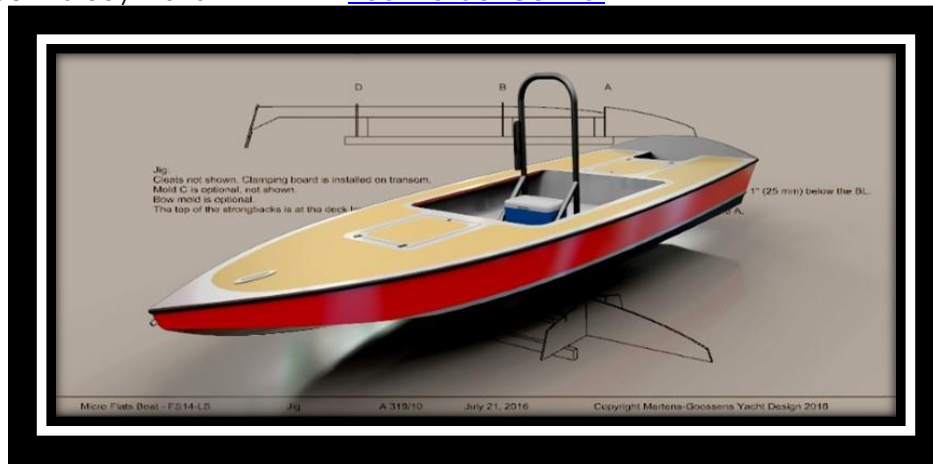
BUILDER’S THREADS ON OUR FORUM

[csotelo - FS14 LS - Brazil](#)

[stickystuff - Soming soon to you FS14LS - Florida, USA](#)

[seaslug - Mike's FS14 LS - Florida, USA](#)

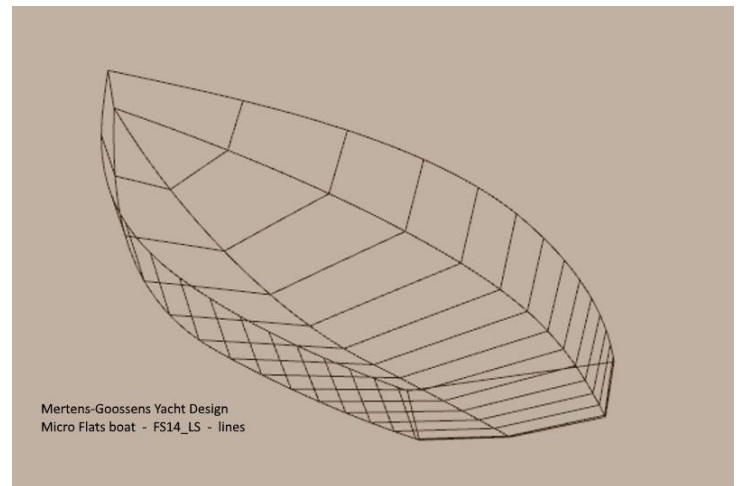
[peejay1023 - FS14 Low Sheer Tampa Bay - Florida, USA](#)



DESCRIPTION

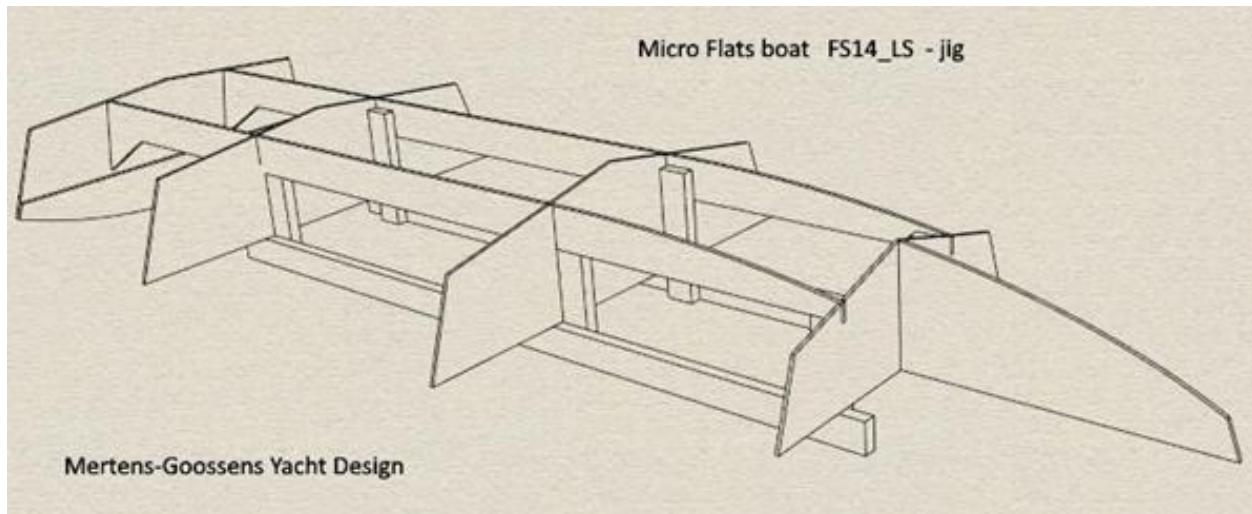
The Micro Flats boat FS14_LS fills a gap between our wide flats boats like the [PH16/PH18](#) and our fishing paddle boards [FS13](#) and [SK14](#). The PH16 and PH18 are full-fledged flats boat that can take a crew of 4 or 5 persons, the paddle boards FS13 and SK14 are boards that can take a small engine. The FS14_LS is a very small and light flats boat that can take a crew of one or two persons and perform well with a small filler outboard. The hull is based on our popular [FS14](#), almost the same hull but cut with a low and straight sheer.

The moderate vee hull will move her reasonably well through a small chop. She is easy and economical to build.

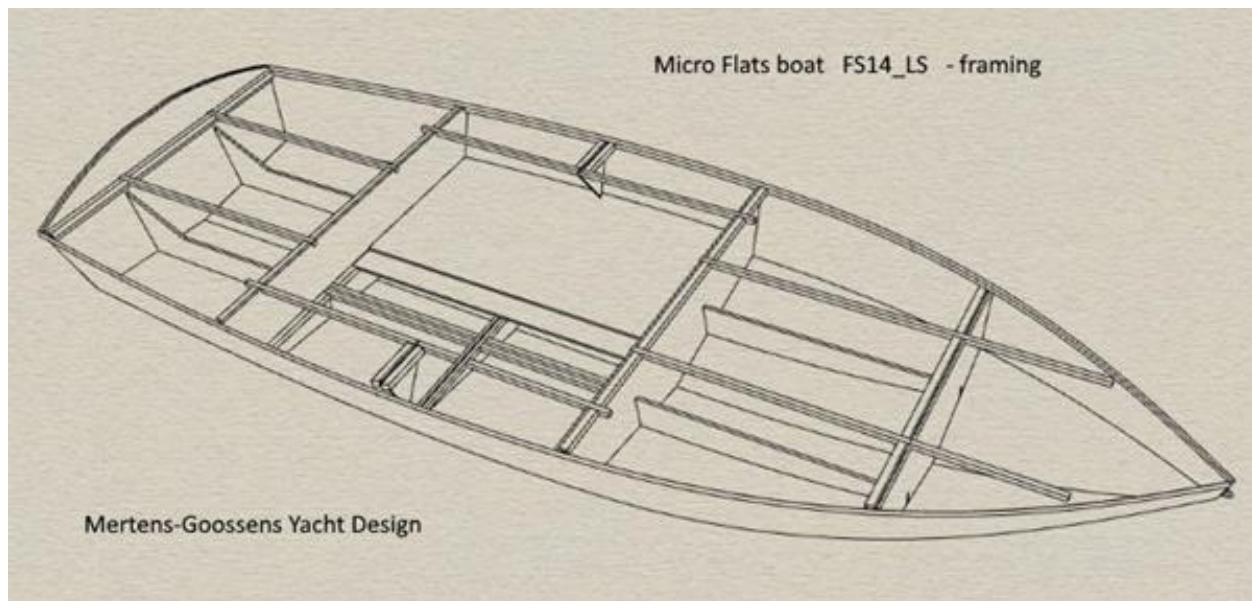


BUILDING METHOD

The hull is made from 6 mm Okoume plywood, epoxy, and fiberglass. The FS14_LS is built upside down, on a simple jig, with the hull panels planked around the frames. After the outside fiberglassing, the hull is turned over, the inside framing, stringers included, is removed and the inside is fiberglassed. The stringers and frames are installed in the fiberglassed hull. Soles and deck cover those parts.



The plans show notches in the frames and stringers: no need to measure the distances on the strongbacks. The long hull panels are assembled with butt blocks or fiberglass splices (puzzle joints in the kit version). The center part of the cockpit sole is reinforced by a butt block and can take a bolted grab rail installed with marine type SS toggle bolts. The hull is unsinkable thanks to foam poured under the sole.

**REQUIRED SKILLS**

The FS14_LS can be built by a first-time builder. The boat is available as a complete kit with all precision cut parts that assemble like a puzzle and all the epoxy and fiberglass, ready to paint. There is nothing to measure with the kit. For those who prefer to cut their own plywood, the plans show dimensions for all the parts, no lofting ever required with our plans.

OPTIONS

Buoyancy foam:

The compartments under the sole can be filled with foam to make the boat unsinkable. It takes about 2 gallons total to provide close to 500lbs buoyancy and make the boat unsinkable.

Transom height:

The plans show a transom for an outboard with a 20" shaft. If you plan to use a 15" shaft, the plans show the 15" transom as an option.

Cockpit and decks:

The size of the cockpit can be customized. If the builder extends the cockpit forward, he must keep at least a small breast hook plate forward. Aft, the part of the stringers shaped like transom knees must be present.

Fiberglass:

As designed, the side are covered with fiberglass up to 6" above the chine. Some builders prefer to completely fiberglass the outside. In that case, use a light cloth like 4 or 6 oz. (100 to 150 gr). The same applies to the decks. If you fiberglass the decks, use a light cloth 4 or 6 oz. Do not increase the thickness of the panels or the amount of fiberglass: this boat is extremely strong as designed.

Foam Version:

A lighter hull can be built by using one less layer of tape for all seams and replacing the 12 oz. biaxial with 6 oz. woven. An ultralight version can be built by replace all framing, decks and sole with foam sandwich: core ½" or ¾" Divinycell H80. Max. HP for the light version is 15 HP. The building notes have more details concerning the lighter versions. Please contact us if you have further questions and we will be happy to assist you.

Console:

Ideally, this boat should be fitted with a tiller motor and a grab rail. The best layout will be tiller with an extension. Some grabrails are sold with or can be fitted with plates for remote steering and controls. A small console can be installed but is not recommended. Remote steering will require to route cables under the deck and sole plus, the aft deck may need cutting to clear the steering and tilt tube.

Outboard:

This is small boat that will plane easily with a 15 HP and fly with a 25 HP. Anything larger is dangerous. A 25 HP requires the transom to be made from 2 layers of 9 mm plywood plus the clamping board. There is sufficient plywood in our nesting.

Graphite:

A graphite bottom is strongly recommended and cost about \$ 8.00 (2016) when added to the last layer of epoxy resin.

LABOR

The average amateur should be able to assemble this hull in less than 40 hours, 80 hours of labor being a maximum for a boat show type finish.

BILL OF MATERIALS

Plywood (4x8' – 122x244cm)			
6 mm (1/4")	4		
9 mm (3/8")	5		
Also see our CNC Kit , which is a precut plywood kit that includes all the plywood needed to build the boat as designed.			
Fiberglass Fabric and Tape			
6 oz – 6" Biaxial Tape	100 yards		91.4 m
Biaxial fabric 12 oz. 50" wide	19 yards		17.4 m
Resin			
MarinEpoxy		SilverTip	
Epoxy total	4.5 gallons (17 liters)	Epoxy total	4.5 gallons (17 liters)
Woodflour	3 lbs. (1.36 kg)	EZ Fillet	3 quarts (2.84 liters)
Blended Filler	16 oz (0.45 kg)	Quick Fair	3 quarts (2.84 liters)
		Gelmagic	3 quarts (2.84 liters)
Also see our MarinEpoxy or Silvertip Epoxy kits which include all of the epoxy and fiberglass 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 [forum](#), 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.