

The Mini Maia 21 MM21 is the small sister of our Maia24 (MM21).

Specifications:		
LOA:	21' 2 "	6,45 m
Max. Beam:	8' 3 "	2,49 m
Hull draft:	15.5"	.39 m
Trailer weight:	1,300 lbs.	589 kg
Ballast	200 lbs	90 kg
Displacement at DWL:	1,800 lbs.	820 kg
Recommended. HP	6-8 HP 4stroke	4-6 kW 4stroke
Material:	Stitch & Glue	

We recommend a long or better, an extra long shaft: 25" or more (635 mm+) .
 Headroom under the pilothouse is a generous 80" (2,03m) and 38 (0.96 m) in the cabin (measured in the middle).

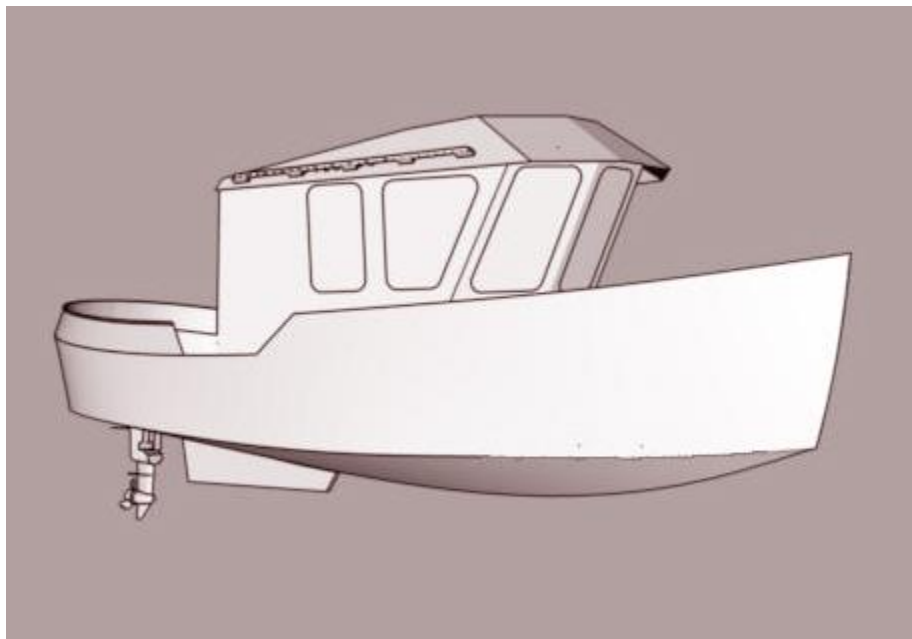
There is room for a PortaPotti and a 13 gallon (52 l) fresh water tank under the vee berth.

The cockpit is huge and uncluttered. The rear bench covers the motor and the fuel tank. The cockpit sole itself is 63" long and 99" wide (160 x 251 cm).

The dinette converts to a bunk 70" long and 28" wide (178 x 71 cm). The vee berth is 73" long by 68" wide (185 x 173 cm), 84" long along the diagonal (213 cm).

There is anchor locker accessible from the deck, separate from the accommodations.

This boat is perfect for exploring the Intracoastal Waterway, "The Great Loop" route, the Chesapeake Bay or the Florida Keys. She has a large skeg to protect her from grounding when gunkholing in quiet harbors.



Building method:

The boat is built in stitch and glue fashion but most of the hull, the bottom especially, is true composite sandwich. The plywood bottom is sandwiched between layers of directional glass and it is the fiberglass that supplies most of the strength, not the plywood. The framing and interior furniture are all structural elements, making for a stiff and strong boat.

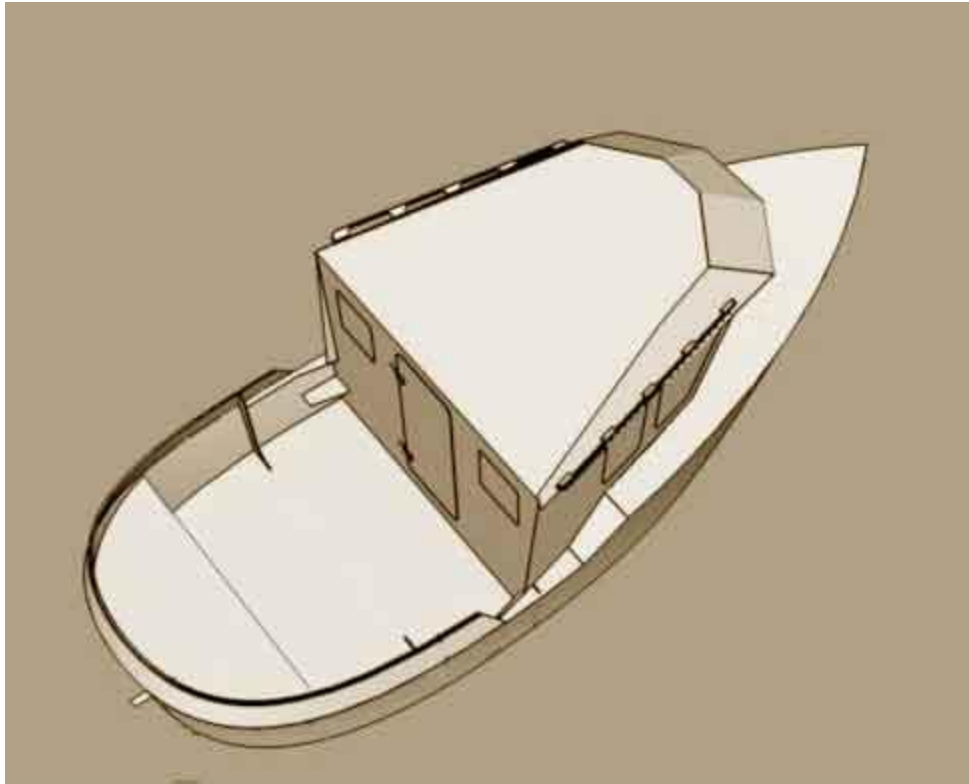
The boat is built in a basket mold, similar to our larger sailboat designs, which aids in accurate assembly when dealing with larger hull panels. It is always possible to build those boats upside down on a jig if the builder prefers.

The rounded transom should take shape easily made with Okoume plywood but if the builder uses Meranti or any stiffer plywood, the building notes explain how to kerf the panels to obtain that nice stern camber.

Required Skills:

As all our stitch and glue boats, the MM21 is easier to build than plywood on frame or most other stitch and glue boats. However we think that this should not be your first stitch and glue boat - build one of our small boats first to learn the skills required, and you will have a great tender for the Maia when you build her.

All the plywood parts 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.



Options:

Some options are shown on the plans or in the construction notes.

Bill Of Materials:

(Excerpts from our BOM)

The BOM list materials based on our standard layout and includes a 15% waste factor for fiberglass. For plywood, we use standard sheets 4' x 8' (122 x 244 cm) marine plywood Okoume or Meranti. Please read the building notes and see the plans for detailed specifications. If cost is a major concern, use marine plywood for the hull parts and for the inside, quality exterior is acceptable if it has **no voids**.

Plywood 4x8' (122x244cm)		
1/4" (6mm)	12	
3/8" (10 mm)	14	
1/2" (12mm)	3.5	
Fiberglass (totals)		
Biaxial tape	250	230 m
Woven tape (or 6 oz. bias)	100 yards	90 m
Biaxial fabric	32 yards	29 m
Woven fabric	50 yards	46 m
Resin		
Epoxy, total	15 gallons	60 liters

A careful builder will complete the boat with less resin but we allow good size fillets and moderate glass content for the taping and fabric in our estimates.

Cost:

See our kits and add the cost of plywood.

Labor:

The hull can be build in 200 hours but a finished boat will require 400 hours or more 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.

Plans Packing List:

10 detailed drawings with all dimensions required to cut the side panels, bottom panels, bulkheads, seats and all parts from flat plywood sheets: no lofting, no templates required.

Nesting drawings for the best plywood layout, all parts nested.

Drawings list:

- MM21/1: Plan and Profile, Structural Arrangement, BOM and materials specifications.
- MM21/2: Basket Mold & Hull Panels
- MM21/3: Frames and assembly details
- MM21/4: Motorwell, anchor locker, soles.
- MM21/5: Seats, Table, Bulwark, Deck panels
- MM21/6: Cabin, fashion plates (cabinetry)
- MM21/7: Details: seacock, tank, cleat, plumbing, portholes, railing, door.
- MM21/8: Plywood nesting
- MM21/9: More plywood nesting
- A68_1 Typical stitch and glue principle drawing
- Specific building notes for this boat with Bill Of Materials
- Help files reference list and more
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