

A 12' touring and fishing kayak with self draining cockpit.

Builder threads on our forum:

[Aripeka Angler](#)
[Dienster](#)

Specifications:		
LOA:	12' 4"	3,75 m
Max. Beam:	33"	0.84 m
Displacement/draft	350 lbs/6"	160l/ 15cm
Weight	38 to 50 lbs	17 to 23 kg

* hull weight vary in function of options and materials

This design was in gestation for years but after repeated demands for a fishing kayak, we finally completed her. Our focus was on simplicity of building and this was achieved with a symmetrical hull (for and aft), a 4 panel construction around frames and a simple skeg.



The boat is not only easy to build but also easy to use. While it does not offer the same performance and capability than the Eskimo kayaks designed by Evan Gatehouse (see the Orca's design from 16 to 21'), this kayak is perfect for touring and fishing.

It is very safe thanks to its self draining cockpit and unsinkable with the addition of some buoyancy foam. While not a Sit On Top (SOT) or a traditional sit in kayak, the PY12 has the advantage of both types: unsinkable and easy to enter like a SOT, low center of gravity and capacity of a sit-in kayak.

The PY12 has a higher freeboard than a SOT but the deck height above the sole and the deck angle guarantee easy paddling with not interference between the paddle and side deck.

The large cockpit is easy to enter and exit, an important feature for the fisherman or anybody who wants to easily get in and out of the boat.

The displacement at designed water line is 350 lbs, this means more than 300 lbs capacity: the kayak will accept a large person and their gear.

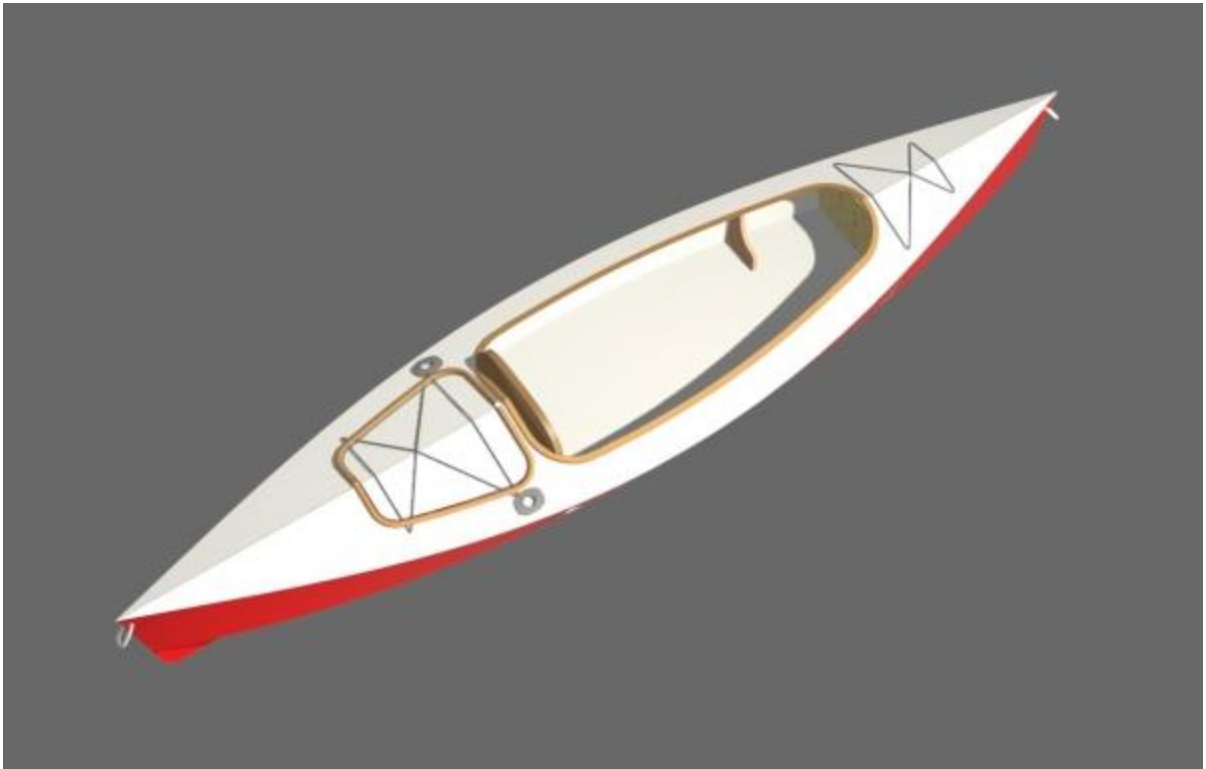
The hull is a simple vee with a skeg.

The deck can be customized to the builder's preference.

At around 40 lbs, this kayak is easy to load on a roof rack or in the back of a truck.



The PY12 is named after a free plan available at BoatPlans-Online.com. The design started as a modern version of the free plan listed under the name Plyak. The Plyak is a design for plywood from the 50's. It was a plank on frame kayak. With the lines entered in our 3D modeler, it showed a displacement of 250 lbs, clearly insufficient for a fishing kayak able to take a large fisherman. After some tweaking of the lines (and some serious fairing of the inaccurate dimensions), we ended up with a slightly larger boat that could still be built from only 4 sheets of plywood and perform well but with a displacement of 350 lbs.



Options:

There are two choices of building materials: a core of 6 mm plywood with limited fiberglass or a core of 3 or 4 mm with more fiberglass.

The thin core hull is a little bit lighter but will cost a little more.

The openings in the deck and storage compartments are to the builder's preference. Most will have the aft compartment, with or without hatch and some will add a recess in the foredeck for extra storage.

The aft compartment is large enough to take one of those milk crate type fishing boxes.

Paddle straps, bungee cords, handles and rod holders are all easy to install. All those accessories are available from kayak stores or online.

In the cockpit, the plans show a fixed foot brace but the builder can also install after market pedal type braces or use an inflatable one.

We show two drain holes in the sides. Those are optional and the builder can omit them or install a large plug.

The seat and backrests can be as simple floatation cushion or you can install a kayak seat. Those seats and backrests are available online. They are removable and have adjustable straps.

The plans show how to install backing plates for the straps.

Building method:

The PY12 is built the same way than our other small boat designs, see the Cheap Canoe free plans. The hull panels are bent around 3 frames and one mold, stitched and taped.

Out of all our designs, this boat is one of the easiest to build. All hull panels are symmetrical fore and aft: less measurements. There are 4 molds/frames but they are cut in pairs, they too are symmetrical. One of the frames is called a mold because it is removed after the hull is fiberglassed.

The deck has no curvature, it is made from 2 flat panels. The framing is very simple: besides the 3 frames, there is a cockpit sole and a small batten used as a sheer clamp. The cockpit sole and the foam under the cockpit are part of the structure.

Required Skills:

The PY12 can easily be build by a first time builder.

BOM:

The plywood layout was calculated to minimize waste: we show the nesting of all parts on the plans.

Epoxy resin usage is based on a 45% glass content, "your mileage may vary".

Marine Plywood 48x98.375" (122 x 255 cm)		
3/16 or 1/8" (3 or 4 mm)	3	
1/4" (6mm)	1	
Fiberglass (Totals)		
Biaxial Tape	50 yards	45 m
Wide Fabric 30 to 50" wide	8 yards	8 m
Resin		
Epoxy, total	1.5 gallons	12 kg

Not included: fillers, some small cleats (battens) and paint.

The BOM is based on the 3 or 4 mm hull version.

For the 6 mm version, replace the thin plywood with 6 mm and divide the wide fabric quantity by two (4 yards). The amount of epoxy and tape does not change significantly, you must still purchase a 1.5 gallon kit of resin and one roll of tape.

More:

Visit our message board, help pages, tutorial pages and read our FAQ: most questions are answered there.

Plans Package List:

Detailed drawings with all dimensions required to cut **all parts from flat plywood sheets**: no lofting, no templates required. The plans include a complete lines drawings for those who choose a different assembly method or want to customize the design.

Drawings list:

- B296_1 Plan and Profile
- B296_2 Nesting on plywood sheets
- B296_3 Dimensions for all hull panels, deck and frames.
- B294_4 Construction details and lamination schedule
- Specific building notes for this boat.