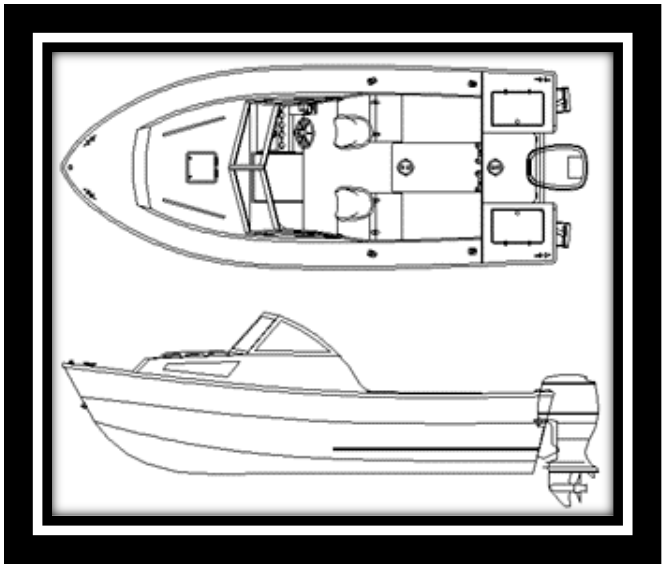


SPECIFICATIONS

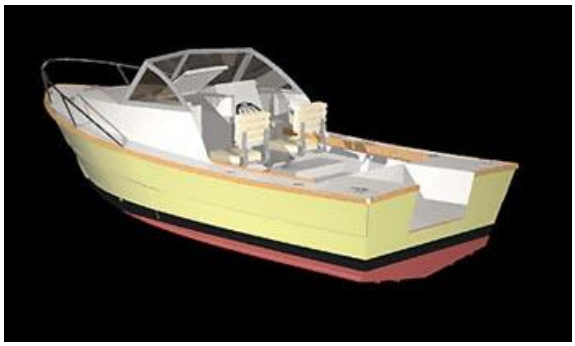
LOA	19'-2"	5,85 m
Max Beam	8'	2,44 m
Hull weight*	1350 lbs.	540 kg
Hull Draft at DWL	8"	20 cm
Displacement DWL	1900 lbs.	760 kg
PPI at DWL	425 lbs.	170 kg
Fuel Capacity	60 gallons	240 liters
HP	90	Max 150
Material	Plywood Cored Epoxy Composite	
Building Method	Stitch and Glue	

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

TABLE OF CONTENTS

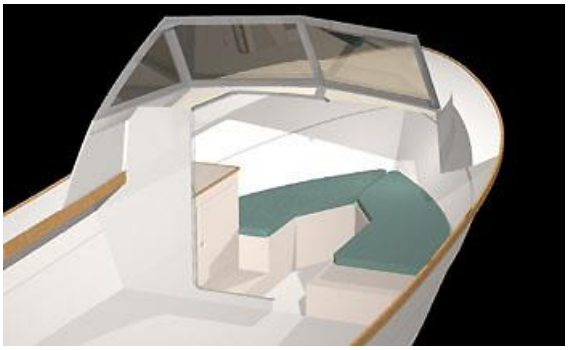
Top of the Document

DESCRIPTION



The CX19 is a true offshore boat with just the right hull shape for fishing or family outings. The proven hull shape with a typical 12 degrees moderate vee has sufficient deadrise to run smoothly in bad weather but the vee is moderate enough to provide good stability at slow speed without the wild roll typical of deeper hulls.

The generous freeboard and the classic sheer are also tried and true features contributing to seaworthiness. This boat will negotiate both head and following seas with ease. The self-bailing cockpit depth is minimum 26" with 12" wide gunwales. Thanks to the freeboard and transom design, she can be rated to a max. capacity of eight persons (USCG), and we recommend engines in the 70- to 115 HP range. While stronger than the typical production fiberglass boat of that size, she is also lighter and does not require as much HP (or fuel) to cruise at the same speed: a 70 HP will get her on plane. This boats transom is designed for a standard 20" shaft. The transom can easily be modified to accept other shaft lengths. The small cabin sleeps two, has comfortable sitting room and ample storage.



The main bulkhead is removed in the picture.

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 build 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. The bottom panels are more than 3/8" thick: thicker and stronger than the typical production fiberglass boat in that size. 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.

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.

Top of the Document

BUILDER THREADS ON OUR FORUM

CX19 progress updates Perth WA - gerry - Western Australia

APJaK CX19 Coastal eXplorer in Kelowna, BC - APJaK - Canada

REQUIRED SKILLS

As all our stitch and glue boats, the CX19 is easier to build than other plywood or fiberglass boats. 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.

LABOR

The hull can be built in 80 hours, but a finished boat will require 250 hours or more depending on the level of detail and the skills of the builder.

OPTIONS

The first option to consider 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. For family outings, we may want more seating. Some of our pictures show optional quarter seats but a fixed or removable bench can also be installed all across the boat, in front of the motor well. An outboard bracket can be used to free even more space for storage in the stern. Some details can be changed or added. Standard bow pulpits and Bimini tops are easy to fit.

BILL OF MATERIALS

Plywood (4x8' – 122x244cm)		
6 mm (1/4")	8	
9 mm (3/8")	17	
12 mm (1/2")	2	
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		
Fiberglass Biaxial Tape 45/45 12 oz., no mat, 6 in.	200 yards	183 m
Glass Tape, 6 oz., 4 in.	50 yards	46 m
Glass Cloth, 6oz., 50 in. wide	10 yards	9 m
Biaxial Cloth, 12oz., 50 in. wide	50 yards	46 m
Resin		
Epoxy	15 gallons	57 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

Top of the Document

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.

Top of the Document