



**SPECIFICATIONS**

LOA	23' - 2"	7.07 m
Max Beam	8' -6"	2.59 m
Power - Recommend/Max	250/280 HP	max
Hull weight*	1600 lbs.	725 kg
Fuel	2 x 55 gallons	2 x 220 liters
Deadrise at Cutwater	45 degrees	
Deadrise at Transom	17 degrees	
Material	Plywood Cored Epoxy Composite	
Building Method	Stitch and Glue	

*\*Stripped hull, before rigging, no hardware. Estimated hull weight with tanks and hardware: 1,850 lbs. 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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## DESCRIPTION

The CS23 is an offshore boat based on the Carolina Sport Fishing boats lines.

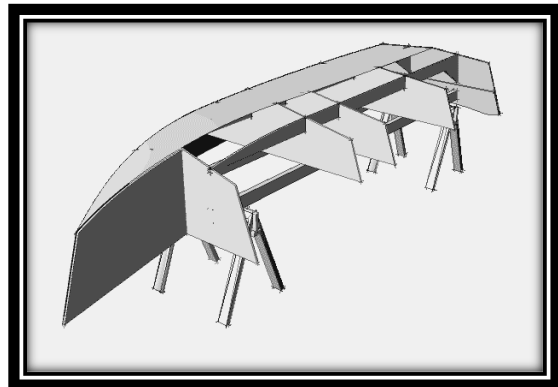
Classic, traditional styling and exceptional performance are the culmination of many years of design and refinements. This particular style of craft excels in performance, functionality and seaworthiness. The wide beam, flared bow with a fine entry and the transom tumblehome are characteristic of the type.



Paraphrasing the words of Buddy Davis, one of the best boat builders in that style, we can say that this boat is designed to cut through head seas, run on rails in following, breaking seas, and lie still while drifting in deep troughs waiting for a strike. With its deep, narrow entry, this type of hull doesn't pound, it slices. Thanks to its skeg, impossible to manufacture in an open mold fiberglass boat, it never wanders, it tracks. The 17-degree deadrise is just right. In offshore sport fishing boat design, almost everybody abandoned the very high deadrise that will rock you to death, it is just too unstable. Its lightweight composite construction allows its bow wave to start amidships, keeping its nose up just enough to keep the crew dry and comfortable. At trolling speeds, the wide beam provides stability and the high flared bow reduces wave taking or sprays. The self-bailing cockpit is more than 28" deep at its lowest point and cockpit depth standing on the casting deck is more than 30", an important safety factor.

## 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 and the final material cost is lower. The bottom panels are more than 1/2" 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. The hull is assembled upside down on a simple jig. 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.

## REQUIRED SKILLS

As all our stitch and glue boats, the CS23 is easier to build than other plywood or fiberglass boats. No woodworking skills or special tools are required. The plans include all dimensions to cut all the hull parts flat on the shop floor. No scarfing required. She should not be built as a first project, some experience with our building methods will save time and materials. If you have never built a boat, try our free canoe plans first. This hull is completely planked with plywood panels, but the bow flare and transom tumblehome require some unusual cuts shown on the plans. There is nothing difficult in the planking, but some basic fiberglass experience is required to produce a fair hull. One of the reasons why our boats are easier to build is the level of detail on the plans. For example, for the fuel system, we show not only the fuel tanks (standard part with part number) and their installation but fuel fill, fuel pick-up and fuel vent with part numbers, all in conformity with the ABYC and ISO regulations. Most other boat plans do not even show a fuel tank! We also show rigging tubes for electricity, controls and engine harness, inspection plates, removable fuel tank hatch, foam location between the stringers, hatches dimensions and part numbers, make and part number for the swing back seat, rod holders in gunwale etc. etc. Dimensions for all the plywood parts, even the smallest ones, are shown on the plans and drawings for the center console are included.

## LABOR

The hull can be built in 120 hours, but a finished boat will require 3 to 400 hours depending on the level of detail and the skills of the builder.

## BILL OF MATERIALS

<b>Plywood (4x8' – 122x244cm)</b>		
6 mm (1/4")	11	
9 mm (3/8")	5	
12 mm (1/2")	17	
18 mm (3/4")	3	
Also see our <a href="#">CNC Kit</a> , which is a precut plywood kit that includes all the plywood needed to build the boat as designed.		
<b>Fiberglass Fabric and Tape</b>		
Fiberglass Biaxial Tape 45/45 12 oz., no mat, 6 in.	550 yards	503 m
Glass Tape, 6 oz., 4 in.	50 yards	45.75 m
Biaxial fabric 12 oz. 50" wide	100 yards	91.5 m
<b>Resin</b>		
Epoxy	34.5 gallons	140 liters
Also see our <a href="#">MarinEpoxy</a> or <a href="#">Silvertip Epoxy</a> 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.

## OPTIONS

There are several layouts available: 3 different deck layouts and 3 types of transom.

**Base Version with Long Deck:** The basic layout is the open center console version with a "long" deck. In that version, the deck always covers the edges of the casting deck. This means that a person standing on the casting deck can lean against the coaming without the risk of losing his balance. There is "toe room" under the gunwale and ample storage room under the foredeck and casting deck.



**Open Version with Short Deck:** The open version with the short deck maximizes the room on the casting deck but it should be fitted with a bow rail for safety.

**Jump Cabin Version:** The jump cabin version has a small and low cabin that covers the casting deck. The cabin hosts two long bunks (more than 7') but has limited headroom. It is however spacious enough to accommodate a Porta-Potti or even a real marine head. A major advantage of that version is the secure storage room for gear in the cabin



There are transom options too: motorwell for single or twin engines or full transom for add-on bracket.

## 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.

## PLANS PACKING LIST

Plans are available in metric or US units.

- [📄](#) B245\_1 Plan and Profile
- [📄](#) D245\_2 Nesting
- [📄](#) E245\_3 Construction
- [📄](#) E245\_4 Stations
- [📄](#) D245\_5 Frames
- [📄](#) E245\_6 Expanded Parts
- [📄](#) E245\_7 Expanded Plates
- [📄](#) B245\_8 Lamination Schedule
- [📄](#) B245\_9 Details
- [📄](#) B245\_10 Console
- [📄](#) B245\_11 T-Top
- [📄](#) B221 Typical Small Boat Electrical
- [📄](#) Specific building notes for this boat.
- [📄](#) Bill of Materials.
- [📄](#) Help files reference list and more.

[📄](#) **Drawings list (Open version, short deck):**

- [📄](#) B245\_1\_OV Plan & Profile
- [📄](#) B245\_2\_OV Construction
- [📄](#) B245\_3\_OV Frames
- [📄](#) B245\_4\_OV Deck

[📄](#) **Drawings list (Jump cabin version):**

- [📄](#) B245\_1\_JC Plan & Profile
- [📄](#) B245\_2\_JC Construction
- [📄](#) B245\_3\_JC Frames
- [📄](#) B245\_4\_JC Deck
- [📄](#) B245\_5\_JC Companionway

[📄](#) **Drawings list (Closed Transom):**

- [📄](#) B245\_1\_CT Plan & Profile
- [📄](#) B245\_2\_CT Expanded Parts