



SPECIFICATIONS

LOA	7' – 6 ½"	2.31 m
Max Beam	3' – 8"	1.13 m
Hull Weight	77 lbs.	35 kg

TABLE OF CONTENTS

Specifications 1

Description 3

Will my Club Racer be Official? 4

Plans..... 4

Kits 4

Building Methods..... 4

Required Skills 4

Labor 4

Bill of Materials 5

More 5

 License 5

 Building Standards..... 5

DESCRIPTION



Clark Mills designed the original Optimist Pram in 1947. His intention was to offer a simple boat that children could use to learn to sail and build themselves. We chose to name our version of the Optimist the "**Club Racer**" to reflect the original idea behind the design. The **Club Racer** is 99% the same as the epoxy/wood version of the Optimist as described by the IODA standards, however it differs in that it is much easier to build and will be more durable, and last longer.

In 2009 we were approached by a group of local volunteers who were starting a youth sailing club. Part of their idea was to have the young sailors build their own boats. We agreed to help them with the boat building portion. The Optimist was the natural choice as they wanted to compete against other clubs.

After building an Optimist to the IODA standards in our shop, we realized it would be extremely difficult for an amateur (old or young) to build a boat which would comply with the hundreds of specs/standards. Some of these specs had to be accurate within 2 mm. We joked that if the idea was to design a set of rules that made building a "compliant boat" impossible, we could not have done a better job. Why put the local kids (and their parents) through the agony of all the specs if we knew they would probably miss out on a technicality? Why not offer them a boat that could be built in half the time for half the money, but that would meet 99% of the rules. It seemed to us this was the original spirit of the idea of the Optimist! We used our experience in designing amateur friendly boats and boat kits to produce our version of the Optimist; the **Club Racer**. The **Club Racer** will comply with almost every Optimist standard. The **Club Racer** hull shape is exactly the same as the Optimist. It is based on an accurate 3D computer model constructed from the IODA standards. We changed a few things that were (for anyone but a skilled woodworker) too difficult to build. Compared to a wood epoxy Optimist, the **Club Racer** has a lot fewer parts, thicknesses are standardized, and it is built to be more durable.

The **Club Racer** is also more economical to build: the IODA specification requires 4 different plywood thicknesses and 5 different cleat sizes.

WILL MY CLUB RACER BE OFFICIAL?

Your **Club Racer** will likely never be measured unless until the child reaches a very high level of competition. Almost all optimist racing is inter-club sometimes between regional clubs.

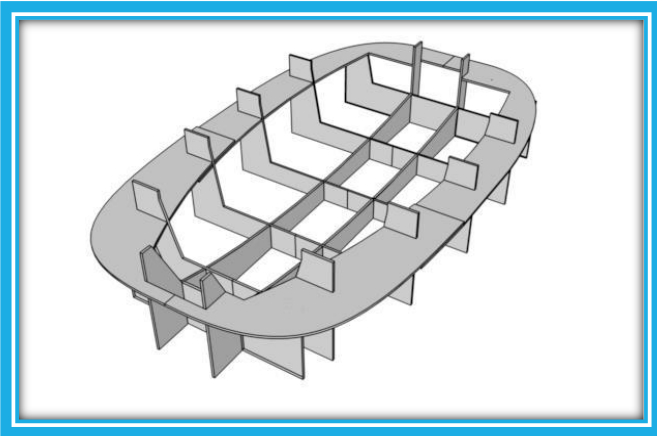
PLANS

There are no plans for the **Club Racer**, only a kit which includes detailed building notes. Clark Mills did not copyright his design of the Optimist. Both Mr. Mills' design and the new version of the IODA wood/epoxy boat are available on line, [http://en.wikipedia.org/wiki/Optimist_\(dinghy\)](http://en.wikipedia.org/wiki/Optimist_(dinghy)). It should be noted that an original Opti built to Mr. Mills specs would no longer "qualify".

KITS

The CNC plywood kit is available [here](#) , for orders of 10 or more kits we will give either a 10% discount or a free basket mold set. The epoxy/fiberglass kit is not included with the CNC kit, [but is sold here](#).

BUILDING METHODS



The **Club Racer** can be built two ways. The first is with the use of a basket mold system. A basket mold has the advantage of tighter tolerances and much faster production of multiple hulls. The basket mold system for the **Club Racer** is sold separately [and can be found here](#), it is a great solution for a club or organization that would like to build a number of boats. The design of our basket mold is copyrighted.

The **Club Racer** can also be built in our classic "stitch and glue" method. The Optimist kit can be assembled without a mold but to stay as close as possible to the IODA rules, the builder must pay attention to symmetry and use two temporary molds. If you deviate from the very exact rule measurements, your boat will sail just as well and be a perfect trainer or club racer, but it may not qualify to compete at the national level.

REQUIRED SKILLS

The **Club Racer** is easy to build, much easier than any other Optimist kit. No woodworking skills or special tools are required.

LABOR

A reasonable construction time for the hull is 60 hours or less. As with all boats a "yacht" level of finish will require more time.

BILL OF MATERIALS

Plywood (4x8' – 122x244cm)		
6 mm (1/4")	2	
12 mm (1/2")	1	
Mold material	1	
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 6 oz., no mat, 6 in.	50 yards	45 m
Woven Fabric, 9oz., 50 in. wide	2 yards	2 m
Resin		
Epoxy	1.5 gallons	6 L
Also see our MarinEpoxy kit which includes 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.