

PLAN UPDATES FOR SMALL BOATS

CONTENTS

V12 Update	2
PY12 Update	2
Side deck knee:	2
Sealed compartment venting:.....	2
N7 Update	2
Hiawatha Update	3
Side Panel.....	3
Mold locations	3
Chenoa 14 - side panel.....	4
FL14.....	5
Otter 16 - Errata.....	5
New and better fiberglass tape.....	6

V12 UPDATE

Dagger board trunk - Jan. 2017

Removed redundant dimensions from daggerboard trunk.

Edited building notes to show better trunk installation method.

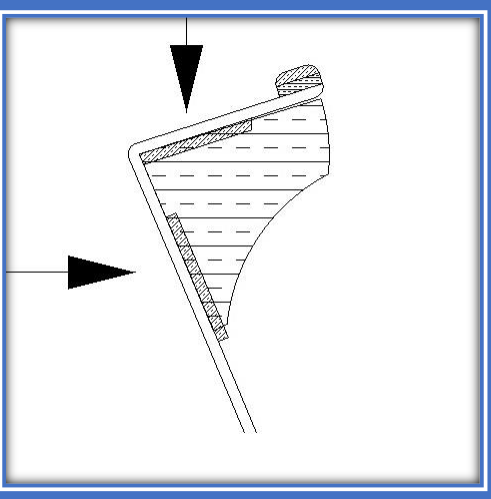
PY12 UPDATE

PY12 plans updates:

Plans shipped before September 15 2012 show wrong dimensions for the bottom panel. All builders should have received a PDF file with the correct dimensions. How to check: on drawing B296/3, the last dimension for the bottom half should read 23" (584 mm).

The updates below are optional but recommended.

SIDE DECK KNEE:



We recommend adding a knee under the side deck, in the middle of the cockpit. If a heavy person sits on that side while entering or exiting the boat, that side may fail. No failures were reported but it is a small addition, easy to install. The knee should be about halfway between the cockpit frames: 28-3/8" (720 mm) from each frame. The outline of the knee is identical to the center frame and the knee is about 6' along the side. Exact shape is TBP.

SEALED COMPARTMENT VENTING:

If some of your compartments are completely sealed, for example the volume between the cockpit frames and the ends, strong sudden temperature variations may cause the panels to oil can or even some seams to fail. A simple small 1/4" hole at the top is sufficient as a vent but to drain that same compartment, you can use either a standard boat drain plug or use an inspection plate. The inspection plate has the advantage of providing access to the compartment for dry storage. An excellent vent is a Gore Tex plug. Gore Tex keeps the water out but breathes. You can make your own but for \$ 12.00, you can get the Greenlight vented leash plug. It doubles as a leash attachment. See Greenlightsurfsupply.com.

N7 UPDATE

How to use a baseline to draw the panels.

The dimensions for the base line are as follows:

The right side: 13 3/8" [340mm]

The left side: 34 7/8" [886mm]

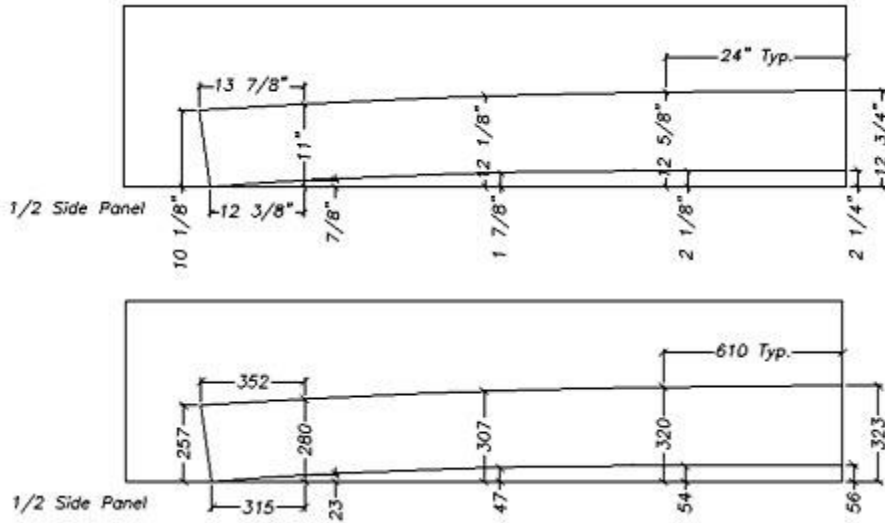
All dimensions based on a standard sheet of 4' X 8" [122 X 244] plywood.

HIAWATHA UPDATE

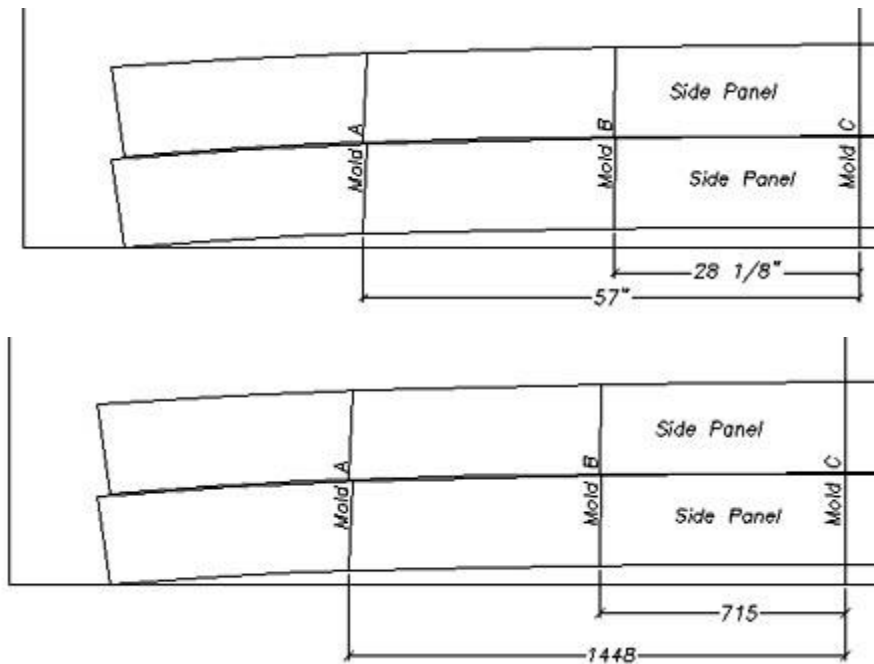
Update November 8, 2005: We have updated the plans to show less rocker and slightly lowered the lower chine. The redesigned Hiawatha's are now more general-purpose canoes with better stability and better tracking.

SIDE PANEL

The side panel got shifted on the nesting and expanded plate drawing. Here are the new dimensions:

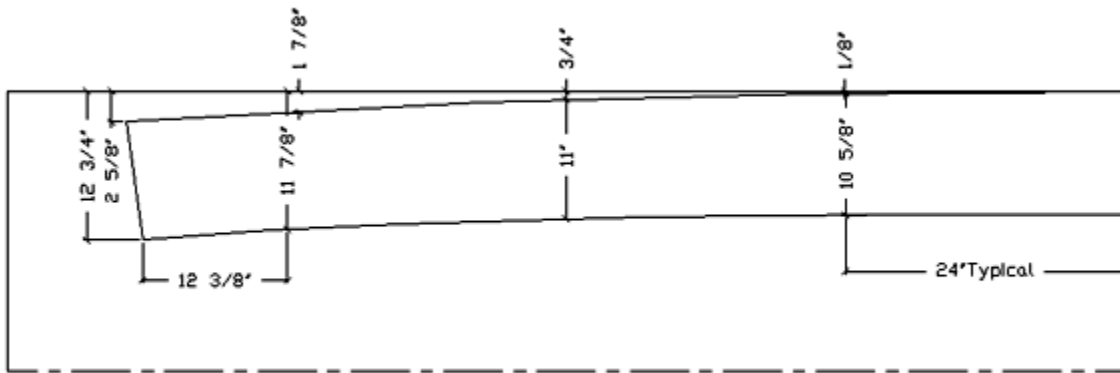


MOLD LOCATIONS

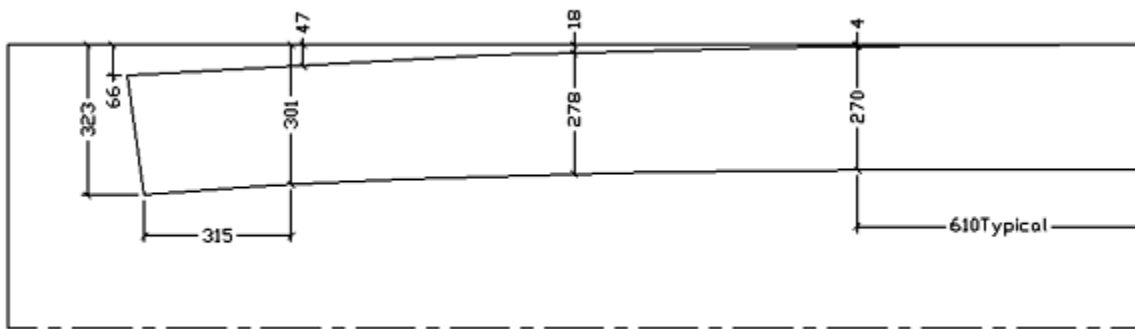


CHENOA 14 - SIDE PANEL

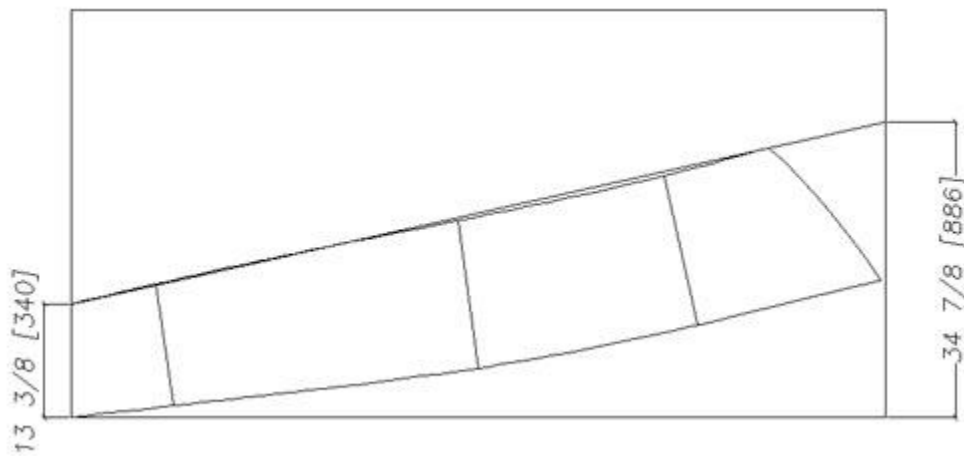
The dimensions for the Chenoa 14 are wrong on some plans. Here are the correct dimensions. The wrong dimensions produce a larger panel. If the boat is not assembled, cut the panel down please. Note that it is possible to assemble the boat with the wrong panel but it looks better if cut as below.



Side Panel

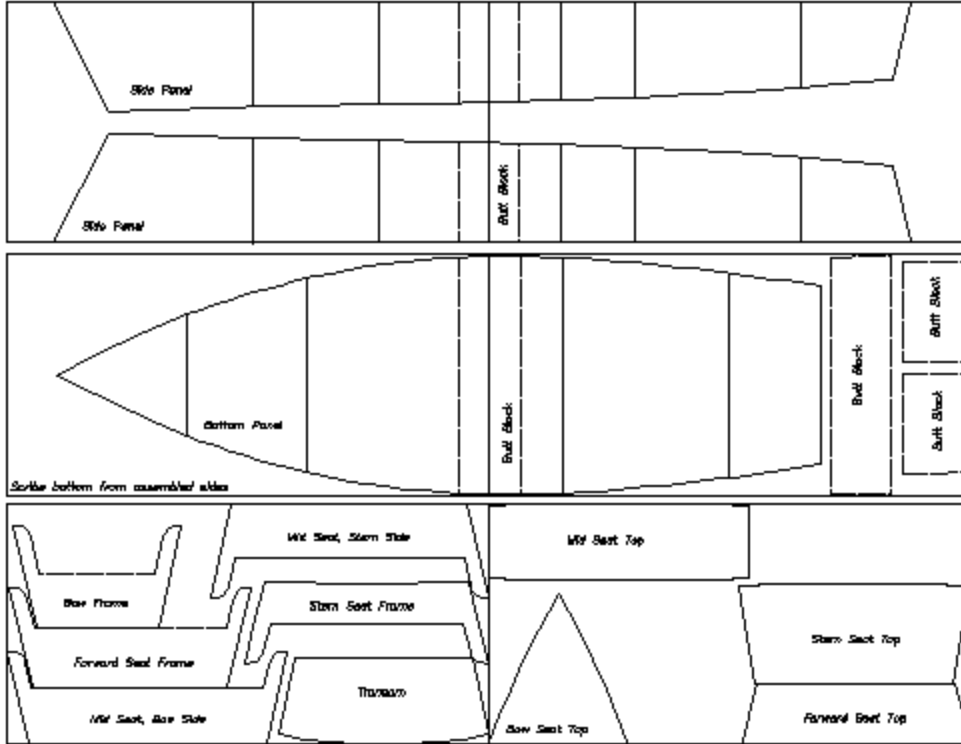


Side Panel



There has been a change in the BOM for the FL14.

We have eliminated the 1/4" option for the bottom panel.
 Here is the nesting of the parts on 1/4" and 3/8".
 It requires 2 sheets of 1/4" and 4 sheets of 3/8"



OTTER 16 - ERRATA

There is a panel label mistake and confusing dimensions on the Otter plans.

For all plans shipped before September 26th, 2006.

On the hull panels drawing, the labels "chine panel" and "topside panel" are inverted. The panel at the top is the topside panel. It was impossible to make an assembly mistake because the panels would not fit but it confused at least one builder. The dimensions for the bottom panel were shown in a weird way. The bottom panel is symmetrical and instead of measuring from a center line, dimensions were given for the two sides! Plus, the 2nd last point towards the bow on the upper side was off by 1/2". The dimension for the same point on the lower side was correct.

All this has been revised.

NEW AND BETTER FIBERGLASS TAPE

Biaxial tape 6 oz. is now available in our small boat kits and online store (www.boatbuildercentral.com). It is stronger than the 9 oz. woven tape, easier to apply, and solves the problem of the protruding edges.

We introduced the concept of structural taped seams more than 10 years ago and from the start, we recommended the use of biaxial tape for those seams.

There are two advantages to the use of biaxial tape: stronger and easier to apply.

The superior strength is easy to understand. If one uses plain woven glass tape with fibers running at 0 and 90 degrees, half of the fibers run parallel to the seam and don't do much while the fibers perpendicular to the seam are at the worse angle to resist shear loads. Biaxial tape does a much better job: all fibers are put to work and resistance to shear is optimum. There are other advantages:

- ☞ At equal weight, biaxial fabric is stronger than woven tape. In biaxial, all the fibers run straight but woven fibers are intertwined. This produces a difference of around 20% in tensile strength along the fibers.
- ☞ The radius taken by the fibers is much larger. This means easier application, no air bubbles, no fighting to get the tape down in the resin.
- ☞ Woven tape is sold with stitched edges. Those edges create a ridge, and this means more fairing work. Biaxial tape has loose edges that blend smoothly in to the adjacent surface.

In all our designs, wherever possible, we specify biaxial tape for structural seams, but this was a problem for small boats. Ideally, we need a biaxial tape of around 6 oz. Until now, the lightest biaxial tape easily available was 12 oz. This was unnecessarily heavy, and we specified woven tape 9 oz. instead. While not perfect, the 9 oz. woven tape was the closest in performance to our requirements and that is what we show in our BOM's for small boats. Stitch and glue is not a big market for fiberglass mills and for years, they did not offer this tape but after some research and negotiations, we found a supplier that accepted to produce our ideal biaxial tape for small boats. Biaxial tape 6 oz. is now available in our small boat kits and online store (www.boatbuildercentral.com) 6 oz. Biaxial tape is stronger than the 9 oz. woven tape, easier to apply, and solves the problem of the protruding edges. The first shipment arrived yesterday and starting next week, we will update all BOM's and kits in which we specified the 9 oz. tape. For those who can't order their supplies from us, we recommend to keep using the 9 oz. woven tape. Our specs will show the biaxial tape 6 oz. as the specified material with the 9 oz. woven listed as an acceptable substitute.