

Edition: May 11, 2012

# W17 Estuary Sailing Trimaran

designed by  
mike waters n.a.  
2010

## STUDY PROFILE



[www.smalltrimarandesign.com](http://www.smalltrimarandesign.com)

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## Study Profile of the W17 Sailing Trimaran

Many sailors are intrigued or already bitten by the multihull bug, but not everyone is ready to put thousands of hours into building, or dollars into buying boats now on the market. So for those seeking to experience the pleasures of sailing flat and fast, getting on a beach cat has commonly been the way to go. But though exciting, they do tend to be very wet, have almost no storage, are often uncomfortable and with a tendency to flip with little warning.

Today, from racing around the globe to the prestigious America's Cup, winning boats are commonly trimarans, so a small trimaran is clearly an attractive alternative way-to-go and the W17 has been designed not only for home construction at relatively low cost, but also to improve significantly on the attributes of a beach cat without many of the disadvantages.

With all my designs, I am personally looking for Overall Performance and by that I mean a blend of attributes that makes my boats a real pleasure to own and sail. First of all, I want them to feel and perform efficiently. I also want them cost effective, comfortable and drier than their competitors and to provide a sailing satisfaction that brings the lucky owners home with undeniable smiles on their faces—and I am confident that the W17 is such a boat.

This boat readily folds to only 7'-3" (2.2 m)—less than most day catamarans and can be trailed on a flat-bed trailer or sat on the sand. She is stable and roomy yet still moves with the ease and fine feel of a thoroughbred. She is designed with a rotating wingmast in mind; one that can be homebuilt with plans available as a free bonus to those who build the W17. And I'd wager that the W17 Plans and Build Manual are more detailed than any previous 17-footer out there on the market! So take a read through the other articles noted on this Study Profile and take a serious thought about giving a small trimaran a try. There is something extremely satisfying about building your own boat as many in the past have learned. But there are not many new designs out there that still use familiar material like plywood that's available almost the world over. Its combination with epoxy and glass now goes a long way to prolonging its life too if used as recommended. With space for 3-4 to daysail or by enjoying some fast sailing for 1-2, this boat will change the way you think about sailing.

Enjoy!!

**Designed by:** mike waters n.a.

LOA: 5.20 m (17'-1")  
LWL: 5.14 m (16'-10")  
Beam sailing: 4.25 m (13'-11")  
Beam folded: 2.2 m (7'-2")

**SAIL AREA:**

Main: 11.1 m<sup>2</sup> (120 ft<sup>2</sup>)  
Jib: 4.4 m<sup>2</sup> (47 ft<sup>2</sup>)  
Total upwind: 15.5 m<sup>2</sup> (167 ft<sup>2</sup>)  
Wing Mast: 7.35 m (24 ft)

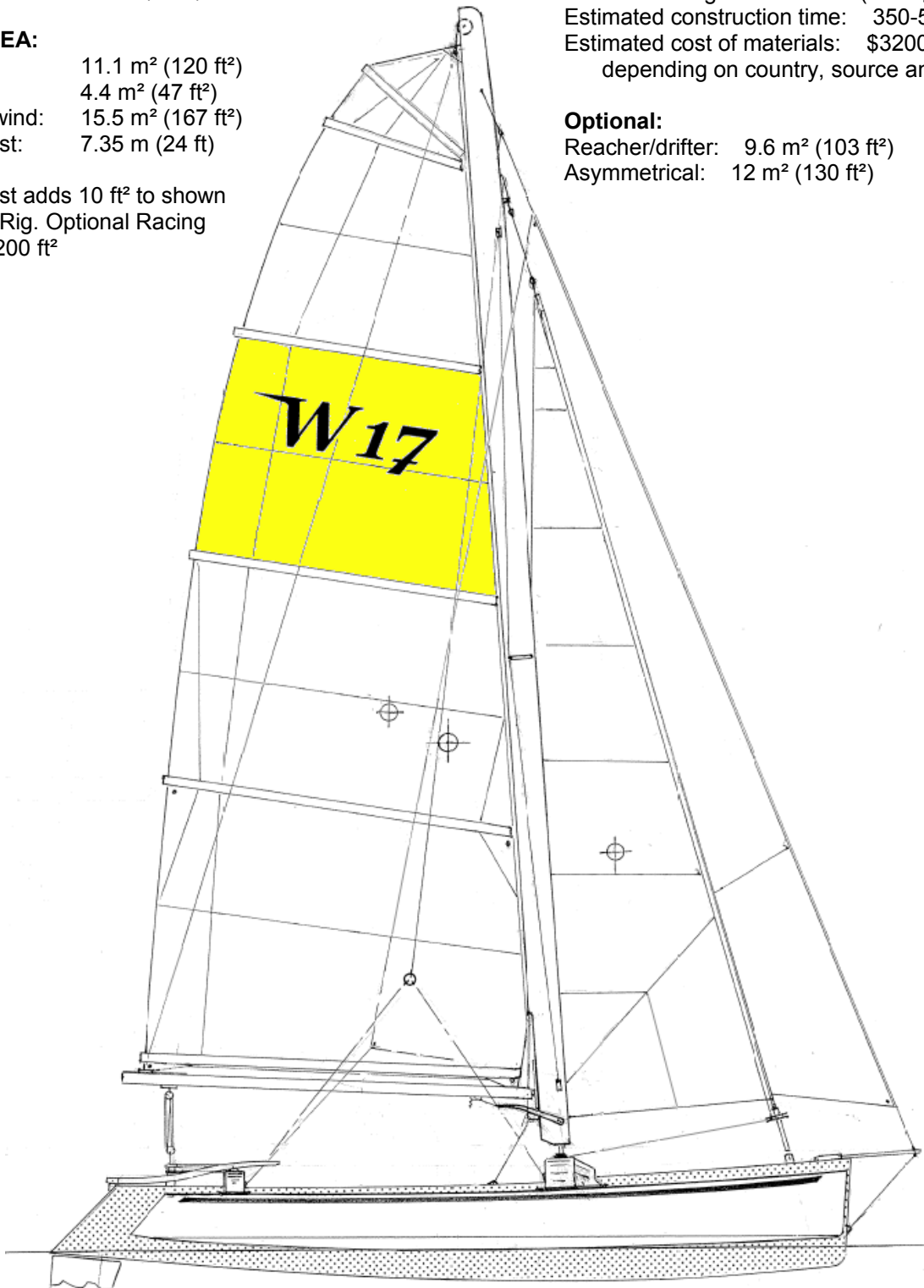
Wing Mast adds 10 ft<sup>2</sup> to shown  
Cruising Rig. Optional Racing  
Rig has 200 ft<sup>2</sup>

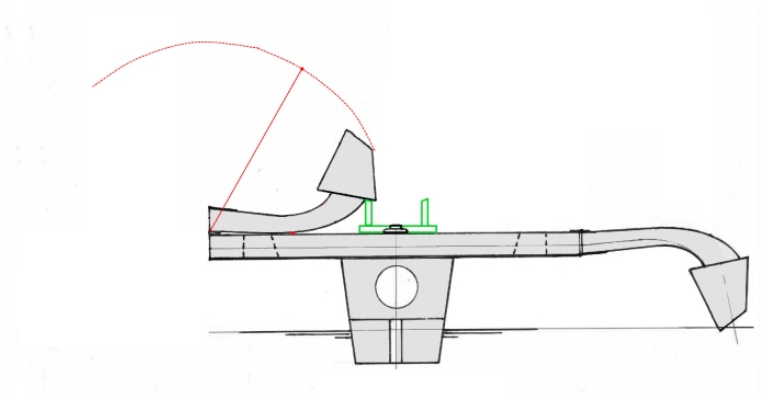
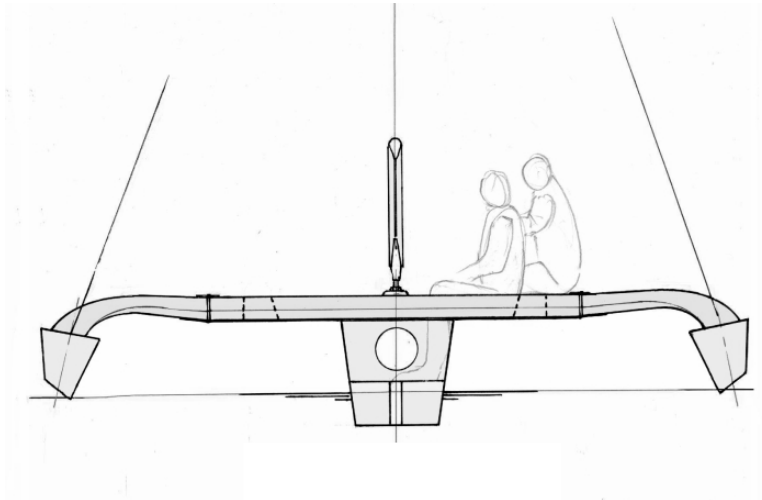
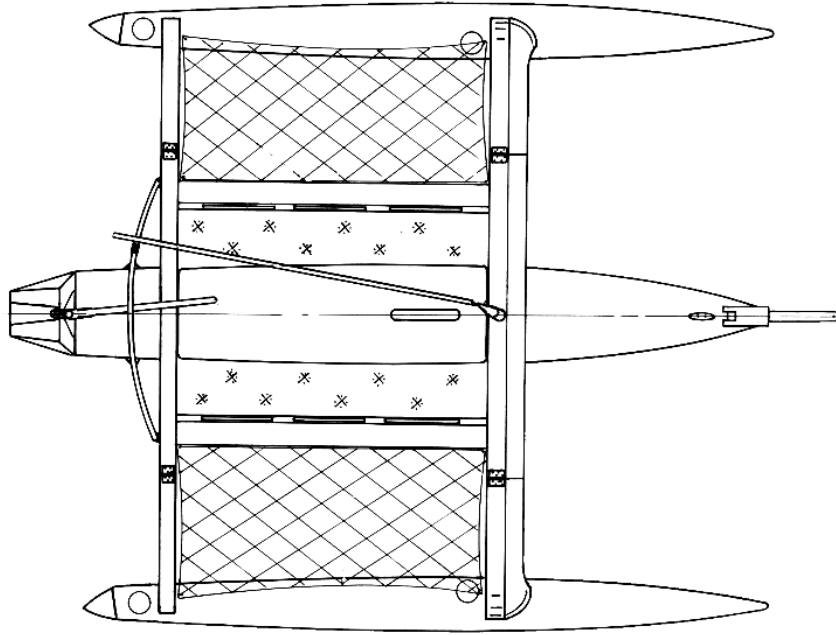
**Basic DESIGN DATA:**

Displacement at DWL: 780 lbs  
Maximum displacement: ~1000 ls  
Buoyancy of Ama: 700 lbs  
Estimated weight: ~410 lbs (185 kg)  
Estimated construction time: 350-500 hrs  
Estimated cost of materials: \$3200-\$4900  
depending on country, source and quality

**Optional:**

Reacher/drifter: 9.6 m<sup>2</sup> (103 ft<sup>2</sup>)  
Asymmetrical: 12 m<sup>2</sup> (130 ft<sup>2</sup>)





## LIST of PRINCIPAL MATERIALS

Description	Quantity (main items only)
Plywood 4' x 8' (1.22 m x 2.44 m) x 4.5 mm	9 sheets
Plywood 4' x 8' (1.22 m x 2.44 m) x 6 mm	7 sheets
Plywood 4' x 8' (1.22 m x 2.44 m) x 3 mm	1.25 sheets
Spruce/Pine/Cedar (stringers)	30 bd-ft (2.5 cu.ft, 0.07 cu.m)
Hardwood - mahogany	6 bd-ft (0.5 cu.ft, 0.01 cu.m)
Epoxy resin & hardener, fillers	4-6 gallons - depending on sheathing
Fibreglass cloth (6-oz)	40-70 sq-yd - depending on sheathing
Fibreglass - 45/45 Bias and Unidirectional cloth	small quantities
Paint - Varnish to finish	

## LIST of PLANS

- W17 - 01 SailPlan
- W17 - 02 Main Hull (vaka)
- W17 - 03 Main Stempiece
- W17 - 04 Deck structures
- W17 - 05 Amas
- W17 - 06 Ama stempiece
- W17 - 07 Building Platform
- W17 - 08 Daggerboard Case
- W17 - 09 Deck Plan
- W17 - 10 Aft Beam (aka)
- W17 - 11 Forward Beam
- W17 - 12 Curved beam ends
- W17 - 13 Daggerboard, boom, rudder arrgt. & tiller
- W17 - 14 Spade Rudder
- W17 - 15 Fwd beam fairings

