



A mini cruiser for coastal cruising and occasional short offshore passages.

SPECIFICATIONS

LOA	16'	4.88 m
Max Beam	6'-5"	1.96 m
Draft (CB: up/down)	13" / 35"	33 cm/ 89 cm
Trailer weight	640 lbs.	286 kg
Sail Area	114 ft ²	11 m ²
Material	Plywood Cored Epoxy Composite	
Building Method	Basket Mold	

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DESCRIPTION



The Adelie 16 is the bigger sister of our Adelie 14. She was designed in answer to requests for a longer hull and more interior space. In Europe, the authorities decide how far you can sail your boat :-). The longer hull will allow our European builders to classify her in a navigation category that allows longer passages. The BOM shows more plywood and resin. The increase in length and buoyancy allowed us to increase the amount of ballast by 100 lbs. (45 kg) with only a small increase in hull weight. We kept the exact same sail plan. Besides that, the Adelie 16 is identical to the AD14.

Adelie is a very small but very able coastal cruiser. Some may ask what makes one 14' boat "ocean capable" and the other one a coastal cruiser or a day boat for protected waters? Besides some obvious features like ballast, scantlings and size of openings, it is the skipper that makes a boat offshore capable or not. While it was not our goal to design an offshore boat, Adelie will compare favorably with boats designed for offshore use or labeled as such. With some minor modifications, she could do much more. Adelie has a vee-hull with a small keel shoe and a ballasted CB keel that can be locked in two positions. The 250 lbs. ballast is located half in the CB keel and half inside. She is virtually uncapsizable. Thanks to her high sides, full width cambered deck and 350 lbs. of ballast; she has a positive righting arm up to 135 degrees. Fill the mast with foam and it gets even better. In the very unlikely case of a full roll over, she will recover very fast: her high profile cambered deck makes her very unstable upside down. Those comments about capsizing and stability should not frighten inexperienced sailors. Extreme heel angles are very rare and will never happen under normal sailing conditions, but we prefer to anticipate that typical question. Handling Adelie under sail is easy: the fully battened sail makes her easy to reef, a must for serious cruising. All lines and even the anchor can be handled from the companionway, no need to go on deck. The self-bailing cockpit is well above the waterline and separated from the cabin by a lower bulkhead acting as bridge deck. Sturdy lifelines surround the cockpit: wide straps that support the back of the crew. Better, the boat can be made unsinkable with the addition of buoyancy foam and if you build the foam sandwich version, very little additional foam is required.

SAILING RIGS

We show two catboat rigs, each with the optional retractable pole used as for a jib or spi. The casual sailor will be perfectly happy with the main sail alone, but the boat can carry a headsail on a retractable pole. The retractable pole is simple to build and simple to use. It can be made of carbon fiber from one of our kits or from an aluminum extrusion. We show two types of main sail: standard and Chinese style lugsail, and two types of mast :carbon fiber or aluminum profile.



The standard sail is a traditional but fully battened one. Specifications are given for each mast. The mast is stepped on the keel and supported by a forestay and a pair of shrouds. The plans show an easy to build optional rotating mast system. Lashings are used instead of expensive turnbuckles.

The alternative rig is a Chinese style lugsail. This is not a true junk sail: it uses a traditional boom and main sheet but the Chinese lugsail itself is very to make by an amateur and requires no spar hardware. Its cost is much lower than a traditional rig but there is a small penalty in performance.

It must be noted that a homemade carbon fiber mast assembled from one of our kits cost less than an aluminum mast and performs better. Either mast is stepped on the keel. Rigging is easily done in a few minutes by one person thanks to the light weight of the mast. The carbon fiber mast weighs less than 10 lbs. and can be handled with one hand! For port maneuvers or for when the wind refuses to cooperate, Adelie can be fitted with a small outboard on a bracket. Those brackets are available in every marine store and are simply bolted on the transom next to the rudder.



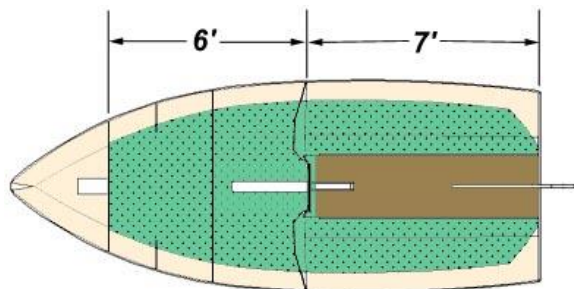
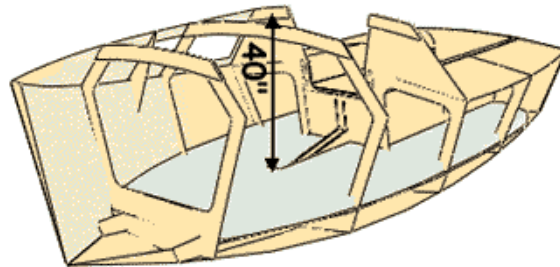
LAYOUT

The cockpit is roomy and deep with comfortable seats. The cockpit sole is sloped towards the stern for drainage. The cockpit bulkhead forms a bridge deck that keeps the cabin dry. To keep things simple, we do not show a main sheet traveler, but one can be added. The sheet goes to a fiddle block with cam cleat at the end of the CB trunk well.



The CB keel is lowered and raised from the cockpit. A small part of the trunk well extends above the cockpit sole and makes a perfect footrest when the boat heels. The cabin side extensions (wings) are cut to act as a grab bar. A drop panel in two parts and a removable hatch closes the companionway. The upper part of the drop panel can be left out to provide ventilation when sleeping aboard. With the hatch open, the crew can reach all control lines. Note the lightening holes in the rudder; they are shaped as footsteps: the rudder makes double use as a boarding ladder.

Down in the cabin, the KISS principle prevailed: simple but comfortable camping style accommodations. To put more in such a small space may look good on paper but is not realistic or practical. A wide, but low cabin sole gives between 36 and 42" sitting headroom inside. Wet storage for anchors lines etc. is provided forward of the mast bulkhead and separated from the sleeping area by a 6" high board. There is easy access to the mast step and optional spinnaker pole. We show some hatches



in the sole, one for access to the CB keel pivot pin. There are several cubic feet available under the sole for fresh water and other stores and there is room under the cockpit to store an outboard. The sole extends under the cockpit seats. Even there, there is enough room sleep and turn around. Clothes and books can be stored in nets hanging along the sides. Boat hook, emergency paddle, and fishing rods will hang from the ceiling.

BUILDING METHOD

Adelie is built like many of our boats by simply assembling the hull panels and stitching them together. No jig is required but our building notes describe a simple basket mold. A basket mold is a very simple set of frames that support the hull panels during the assembly. This method is used for some of our other designs like the Vagabonds. The basket mold allows us to build the boat right side up and roll the hull on its side for fiberglassing.

The standard building material is epoxy-fiberglass-plywood composite. A thin plywood hull is assembled, welded with fiberglass tape and sandwiched between layers of directional fiberglass. See a detailed description of the method here: [Project Just Right](#). Note that this link describes the building of a much larger boat. Adelie is not as complicated but the building method is similar.

It is also possible to build this boat in foam sandwich; specifications for each material are included in the plans. An excellent hybrid boat can be built with an epoxy-fiberglass-plywood composite hull fitted with a foam sandwich deck. Foam sandwich has several important advantages in the case of a cruising boat. It provides extra buoyancy, very little additional foam is required to make the boat unsinkable and above all, it provides excellent insulation. Without insulation and ventilation, small cruising boats can be very damp when sleeping aboard.

REQUIRED SKILLS

Building the hull does not present any difficulty: our materials and method are forgiving but we recommend building a small boat first. You will save many times the effort and money invested in the small boat by avoiding mistakes and material waste. Our building method involves cutting plywood panels flat on the shop floor with moderate precision, from the dimensions give on the plans. Long panels are made of smaller pieces joined with fiberglass splices. We use standard plywood sheets only. No lofting, no calculations, no delicate beveling or scarfing. Panels are stitched together in the basket mold and covered with epoxy and fiberglass. This requires no special tools: a circular saw and a sander are sufficient. The use of fiberglass and epoxy is simple too, see our [HowTo](#) files.

OPTIONS

Most of the options were mentioned above. The first one is the hull material choice: plywood-epoxy-fiberglass sandwich or foam sandwich or a combination of the two. The two rigs are another choice: better performance with the standard sail but cost saving with the Chinese lugsail. Each rig can use an aluminum mast or plain tube or better, a carbon fiber mast. We provide complete kits to make your own carbon fiber masts at a lower cost than an aluminum one.

LABOR

We estimate that you will need around 100 man-hours to assemble the hull and between 100 and 200 hours to finish the boat.

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.

BILL OF MATERIALS

Plywood (4x8' – 122x244cm)		
6 mm (1/4")	10	
9 mm (3/8")	10	
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.	86 yards	77.4 m
Fiberglass Tape 6 oz., 4 in.	98 yards	88 m
Glass Cloth, 4oz., 50 in. wide	7 yards	6.3 m
Fiberglass cloth Biaxial (45/45), 12oz., 50 in. wide	30 yards	27 m
Resin		
Epoxy	14 gallons	53 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 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.

PLANS PACKING LIST

Plans are available in metric or US units.

- [📄](#) B268_1 Plan and Profile
- [📄](#) B268_2 Nesting
- [📄](#) D268_3 Construction
- [📄](#) D268_4 Stations
- [📄](#) D268_5 Frames
- [📄](#) D268_6 Expanded Plates
- [📄](#) B268_7 Lamination Schedule
- [📄](#) B268_8 Appendages
- [📄](#) B268_9 Centerboard Profile
- [📄](#) B268_10 Companionway
- [📄](#) D268_11 Sail Plan - Al. Mast
- [📄](#) D268_12 Sail Plan - Chinese Lug
- [📄](#) B268_13 Sail - Al. Mast
- [📄](#) B268_14 Sail - Chinese Lug Sail
- [📄](#) B268_15 Optional Retractable Pole
- [📄](#) B268_16 Typical Foam Option
- [📄](#) D268_17 Full Size Pattern - Centerboard
- [📄](#) D268_18 Full Size Pattern - Keel Profile
- [📄](#) Specific building notes for this boat
- [📄](#) Help files reference list and more.

REVIEWS

I have launched my boat, she sails and handles better than I could ever have hoped. She is beautifully balanced sails like a charm. My two friends own a 45-footer and have sailed many boats they are extremely impressed with the balance, stability and performance. I was really surprised as to how well she sailed to windward and sailing back home with the wind to our backs she raced along. I am happy I added a jib and she would absolutely fly if she had a small spinnaker.

- Salvatore
Sidney Australia

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