



# PADDLEBOARD FAQ

## Lake Explorer 10 ft. 6 in.

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- **Is it easy to build?**
  - Patience and attention to detail is required.
  - However, the building process has been broken down into small manageable steps.
  - There are about 200 steps.
  - The manual is illustrated and has step by step instructions.
- **How long does it take?**
  - About 85 hours total. Most steps are 15-30 minutes. Fiberglassing takes a whole day (2 times).
  - It can be built in as little as about 27 sessions.
  - This is a project for those who enjoy building things.
    - If this is too long, consider buying a fully finished board from us instead.
- **Do I need to be a woodworker?**
  - No, woodworking experience would be helpful but is not required.
  - You should however, enjoy working with your hands.
  - There is no need for heavy blows or strikes or great strength in building the paddleboard.
  - Moderate effort may be required for steps in which drilling or cutting is involved.
- **How much does the board weigh?**
  - The board weighs 35 lbs. (15.8 kg) bare – that is without varnish, pads and accessories.
  - This is an excellent weight for a wood board as many retail boards weigh of the order of 50 lbs.
  - Some boards using high tech materials are lighter. It is not possible to match these weights in a wooden board without making compromises, which we will not do in our design.
  - If weight is your primary concern, this board is not for you.
- **Can I use this paddleboard for racing?**
  - This board was designed for stability and excels at activities such as fishing, yoga and recreational paddling.
  - It was not designed for racing but you can race it if you wish.
- **Can I use this paddleboard for surfing?**
  - This paddleboard will handle the small wakes of passing motorboats and shore waves,
  - This paddleboard is not a surfboard. It is not designed for surfing large, active water or for sustained motion riding on its sidewalls.
  - This paddleboard cannot be rolled like a kayak.
  - That being said, it is well behaved and controllable by a skilled paddler with the either nose or tail buried under water and the other end up in the air, in flat water conditions.
- **Do I need tools?**
  - You will need some small tools. See the full list on the web page.

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- A small, fine tooth saw is needed to trim the ends of the cedar strips and cut some other small pieces.
- A block plane or spokeshave is used to shape the nose and tail. If you don't have one, you can do the shaping by cutting small sections with a saw and sanding with a hard block and sandpaper but of course it will take two to three times longer doing it this way.
- A power sander is recommended but not absolutely required. You can sand manually but be prepared for several extra hours of work.
  - The fiberglass exterior has to be sanded three times on the hull and three times on the deck.
  - Depending on the varnish you use, it may need also to sand between coats of varnish on both hull and deck.
- An advantage of manual sanding is that it can be therapeutic: it is a gentle, repetitive muscular action that can be started and stopped as you wish.
- DO NOT under any circumstances use a belt sander or a sander larger than 5 inches in diameter. These machines are too powerful and can cause significant damage to the board (and you) in an instant.
- **What is the hot glue gun for?**
  - The internal frames need to be held tightly in position while being installed. Temporary, hot melt glue spots are used to do this.
    - Can I just use instant glue instead?
      - Possibly. We have tried various consumer glues but not found one that both sets up quickly, and actually holds the wood without detaching or flexing. If you find one, please let us know.
- **Why does it need a vent and a drain plug?**
  - The vent works to balance pressure inside the board with temperature changes in the board and surrounding environment. It operates continuously and responds best to gradual changes.
  - The drain plug is primarily provided in case the board gets damaged and water gets in it. Open the plug, drain the board and bring it in for repair.
  - When you take the board off the roof of a hot car or hot beach, we recommend you open the drain plug for a just a second and reclose it before putting it in the water.
    - The reason for this is that the change in temperature and pressure inside the board, is rapid and huge and may overwhelm the vent.

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- **How much space do I need?**
  - A workspace of 7 x 14 ft. or larger is suggested. Adequate ventilation, lighting and heating are essential.
  - The support box and cradles are bulky and heavy (50 lbs. or more) once setup.
  - Get help if you need to move the structure after setup. Do not attempt to move it alone.
- **Can I build it outdoors?**
  - Yes. Protection from rain and a minimum temperature of 15 deg C. is required.
  - High temperatures (above 23 deg. C) will require you to work at an accelerated pace in the fiberglassing step because mixed epoxy solutions are temperature sensitive.
  - During fiberglassing and varnishing, the board must be protected from rain, dust and insects.
- **Can I build it indoors?**
  - If built indoors, a separate, warm, ventilated space is best.
  - Do not build in a living space. Volatile organic compounds (VOCs) may be released from epoxy and varnish during use and diffuse through the air. Release may continue until these materials are fully cured.
  - At 10 ½ ft. long, it is not likely to go up a staircase that has a turn in it. Make sure you can walk the board out of your workspace.
  - Sanding dust from fiberglass is toxic until the epoxy resin is fully cured so your workspace needs to be kept clean.
  - Sanding dust from wood, particularly cedar, can trigger reactions in some people. Again, keep your workspace clean.
- **Is this suitable as a classroom project?**
  - Yes. The paddleboard can be built as a team project. It is suitable as an introduction to woodworking class or general upper level (grade 11-12) project.
  - The work schedule can be modified to minimize the number of sessions required – contact Dempster Boats.
  - There are many opportunities for supplemental material from physical and health education, history, art, material science, math and physics to be incorporated into the building activities so it is not limited to being just a woodworking project.
- **Do I need the support box?**
  - Yes. The support box (and cradles) eliminates what would otherwise be a series of complex measurements and cutting of pieces needed to create the curve along the length of the paddleboard (the rocker).

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- **Can I make my own support box?**
  - Yes. You must have a large table saw (e.g. cabinet saw) and be able to cut 4 x 8 sheets of plywood accurately to dimension and angle.
  - You will also need a jigsaw for smaller parts as the sheet layout cannot be cut using only a table saw.
  - The support box is 11 ft. long. A center line needs to be made down the full length of the box within a tolerance 1/16 in. over that distance. Multiple markings at 90 deg. to this center line are also needed.
  - A cross-line laser is recommended as you can use the vertical beam to mark out the center line. However, a cross-line laser is quite expensive to purchase.
  - A chalk line can be used to mark the center line and is much less expensive but it can be challenging to draw a truly straight line using this method.
  - A drill with a countersink or counterbore bit is needed to set screws flush to the surface of the box.
  - The Dempster Boats version of the box is precision cut by computerized machinery (CNC). All lines are pe-scored and all holes are pre-drilled, which takes care of the issues listed above.
- **Can I use my canoe strongback as a building platform instead of the support box?**
  - Yes. However, you will have to figure out how to attach the cradles to your strongback.
  - Cradles must be installed in the exact position specified in the instruction manual.
  - The instruction manual is only available with a kit. It is not sold separately.
  - NO TECHNICAL SUPPORT will be provided in regard to user made boxes or strongbacks.
- **I have my own fiberglass and epoxy. Can I use my supplies instead?**
  - Yes. You will need a pliable, 4 oz. fiberglass cloth to allow for wrapping around the complex curved shapes in the paddleboard. 6 oz. cloth is NOT suitable.
  - Choice of epoxy resin is up to you but use epoxy resin only, not other types of resin.
- **I have cedar strips for a canoe. Can I use those strips?**
  - No. The paddleboard requires 5/8 and 3/8 inch wide strips. Use of other sizes will cause problems.

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