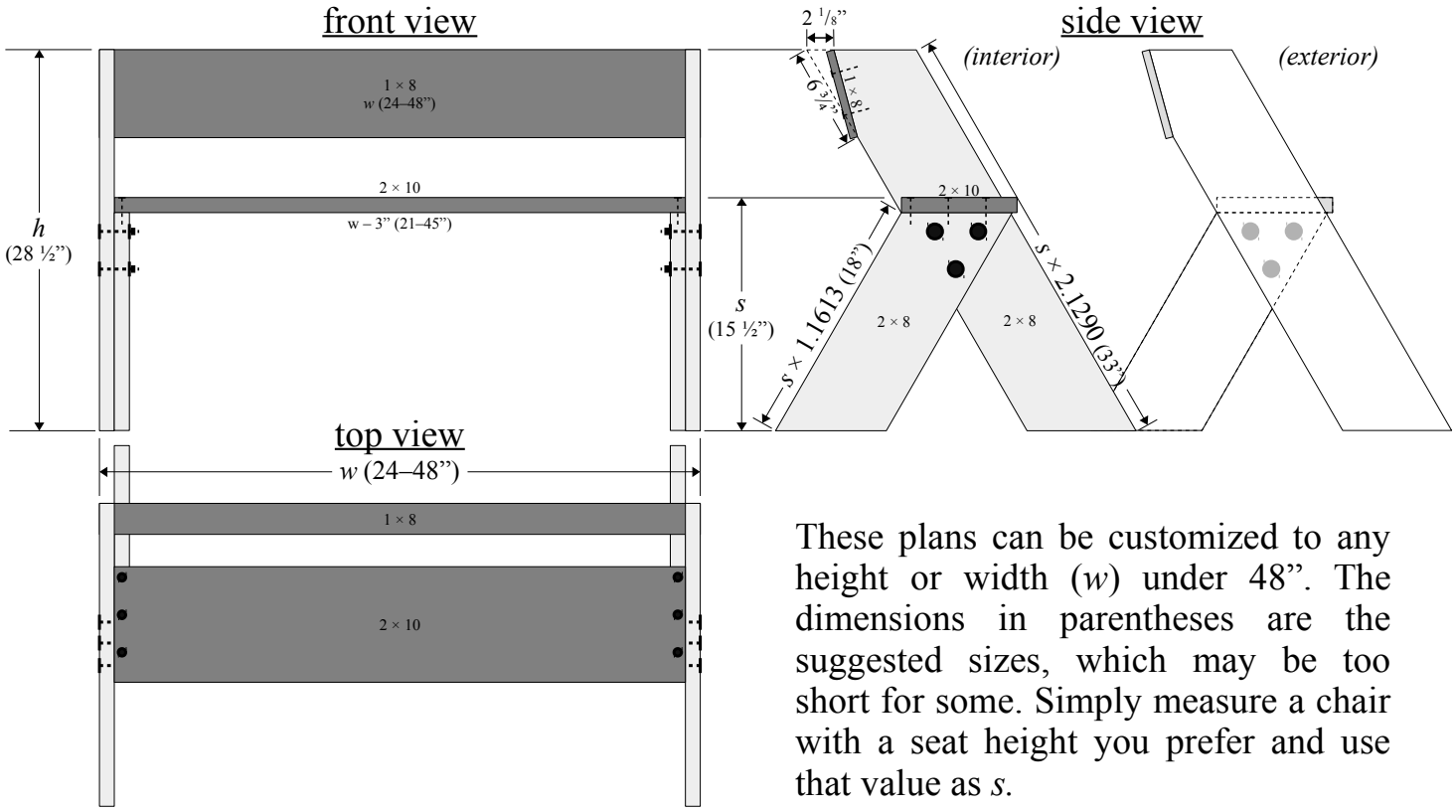
THE LOW TECHNOLOGY INSTITUTE
11927 WEST STATE ROAD 59
EVANSVILLE, WISCONSIN 53536 U.S.A.
located in the historic village of Cooksville

TEL.: 608 . 886 . 9584
EMAIL: LOWTECHINSTITUTE@GMAIL.COM
WEB:LOWTECHINSTITUTE.ORG

Aldo Leopold Chair or Bench – 1.0

The ecologist Aldo Leopold designed an iconic bench. It is a simple design and can be tackled by a beginning carpenter. The details can be varied according to the builder's needs: seat width, backrest configuration, seat height, materials, finish, and so on. The materials are commonly available, too. This design is widespread, but some specific details came from the following plans: https://www.rodalesorganiclife.com/garden/leopold-bench and http://www.wildones.org/wp-content/uploads/2012/02/buildbench.pdf.



These plans can be customized to any height or width (*w*) under 48". The dimensions in parentheses are the suggested sizes, which may be too short for some. Simply measure a chair with a seat height you prefer and use that value as *s*.

Materials

s × 6.5806	(10')	– 2-×-8" nominal lumber*
w	(24–48")	– 2-×-10" nominal lumber*
w – 3"	(21–45")	– 1-×-8" nominal lumber*
6		– ¼-×-3 ½" carriage bolts with washers
10		– 3 ½" screws

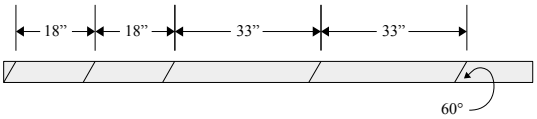
*Some like treated, but I avoid it and instead prefer cedar, but pine will work. Coat the wood with linseed oil.

Optional: Tite-Bond III waterproof wood glue

Tools

Saw Measuring Tape Drill Screwdriver Wrench Square

Cut List



2-×-8” Board

2 – *s* × 1.1613 (18”) with 60° parallel ends

2 – *s* × 2.1290 (33”) with 60° parallel ends

cut off triangle from top, acute angle, 2 1/8” by 6 ¾”, as shown on first page.

2-×-10” Board

1 – *w* – 3” (21–45”)

1-×-8” Board

1 – *w* (24–48”)

Instructions

Predrill all screws. Refer to schematic for measurements. Insure junctions are square.

1) Cut all pieces on cut list. Cut precisely.
2) Position short leg over long leg and draw line across top – fig. 1.
3) Flip the short leg, aligning the top up with the line, place a spacer 2 × 4 under the leg to hold it up, insure bottom ends are flat. Bear down and drill three ¼” holes in a triangle pattern – fig. 2.
4) Tap bolts through the holes from the long-leg side to the short, add washers and nut, tighten down. Repeat on second side.
5) Lay long legs down along what will be the front edge (the right side in fig. 2; the short legs will be up in the air away from you and the cut-off triangle on the long legs will be facing up towards you). Square the legs so they are parallel (solid-line arrows) and the corner-to-corner measurements are equal (dotted-line arrows). Glue and attach the 1 × 8” board with two screws – fig. 3.
6) Stand the chair on a flat surface. Add glue on top of the short legs and then screw down the 1 × 10” seat with three screws – fig. 4. [Tip: you may need a clamp or friends to push the two leg ends together to insure things are square and tight.]
7) Sand the edges and coat the wood in boiled linseed oil.

fig. 1

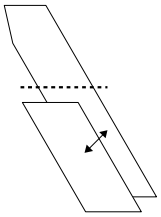


fig. 2

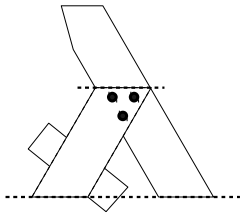


fig. 3

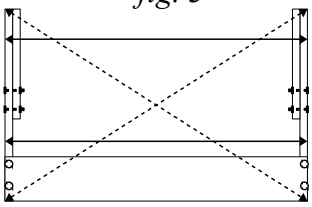


fig. 4