



Kalamazoo Little Free Library Plans



## Building your own Kalamazoo Little Free Library

*These instructions provide step by step instructions for constructing a little free library (LFL). This project requires a moderate degree of experience working with wood and associated power tools. The design shown is modified from plans on the Little Free Library web site (<http://www.littlefreelibrary.org/plans-and-tips-for-builders.html>). We encourage you to check out this site.*

### Required materials and tools:

- Most LFLs are constructed from 3/4" plywood.
- The face frame and doors are constructed from solid lumber (mostly 3/4" x 1.5")
- Plexi-glass for door (if desired)
- Self closing hinges.
- Screws or nails for assembly
- Table saw (a hand-held circular saw can be substituted)
- Miter saw (power or hand)
- Power drill (if using screws) or hammer
- Post hole digger
- Level





**Cut list for plywood.** Be sure to wear appropriate protective gear when working with tools (see Hannah's good example above).

The structure of the LFL is made from 6 pieces (base, back, 2 sides and 2 roof panels) of 3/4" plywood.

- Base: 20.75" x 11.75"
- Back 20.75" x 20"
- Sides: 12.5" x 26.25" (2 pieces)
- Roof: 26" x 11.5" (2 pieces)

**Cut list for face frame and door.**

The door and face frame are made from 3/4" stock.

Face frame:

- Lower horizontal: 1.5" x 22.75"
- Upper horizontal: 2.5" x 22.75". This piece must be ripped at a 45 degree angle to enable it to fit snugly under the front roof section.

- Verticals: 1.5" x 16.5" (2 pieces).

Door:

- Horizontals: 1.5" x 21.5" (2 pieces)
- Verticals: 1.5" x 17" (2 pieces). This length assumes mortise and tenon construction of the door and allows for a 1" tenon on each end leaving an exposed length of 15". If you are using a butt technique (such as pocket screws or corner brackets for the door the length of the verticals should be 15")
- We recommend cutting the plexiglass for the door after all the cuts for the door have been made and dry fit together.



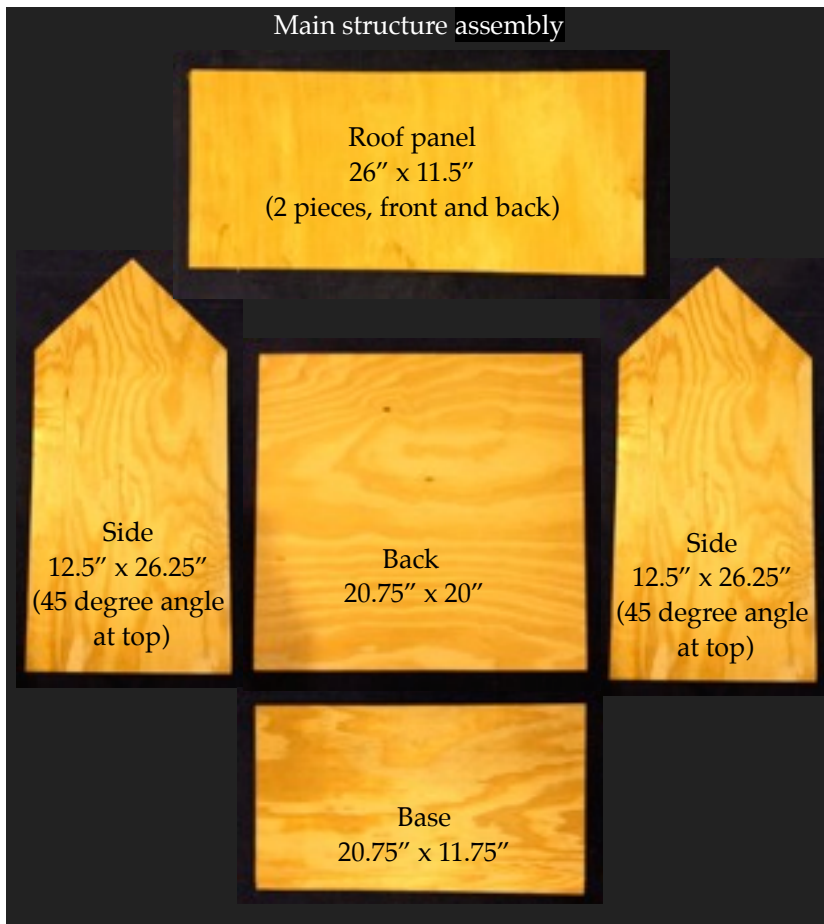
**Cut list for shelves:** Constructed from 3 pieces of 3/4" plywood or solid wood.

- Vertical: 9" x 15"
- Left horizontal: 9" x 9"
- Right horizontal: 9" x approximately 12" (when cutting the plywood leave this a little long. Cut to the exact length at the time of final assembly).



### Assembly of the main structure

- Attach the base to the back.
- Attach both sides
- Attach roof panels. The front roof panel should be attached first to provide slightly more overhang in the front.





### Face frame assembly

- Assemble components with pocket screws on the back of the frame. Photo to left.
- Attach face frame to the main assembly. The frame can be face nailed or attached with pocket screws from the main assembly.

### Shelf installation

- Assemble the left shelf and the vertical support. Affix to body of the LFL.
- With the left shelf in place, mark the right shelf and cut to size. Install left self. A small piece of ply used as a spacer will help ensure the right self is level.
- Apply facing to self if desired



### Roofing

- Possible materials include- Cedar shakes, metal roofing, tin, copper flashing. Pick a material that compliments the other materials you have used.
- Be sure to use some sort of ridge cap to ensure weather tightness.

### Doors

- A variety of door styles can be used. We generally incorporate a piece of Plexi-glass, but solid doors are another option.
- Spring loaded/self closing hinges will help keep the door closed. A latch is also a good idea.



### Mounting Post

- A 4x4, 5 ft. long is a good length.
- Angled supports attached to a scrape of plywood provide a good mounting surface.
- The post is set in a hole 24-30" deep. Concrete is generally not needed.