



Notes to Builders

From Personal Experience

I would like to communicate to you as a professional woodworker and experienced contractor, but I cannot because I am just a hobbyist who tinkers on his deck with a portable table saw. What a competent carpenter can do in 10 hours I can probably do in about 60, and not as well. I mention my simple skill set as encouragement for anybody who has the desire and elementary woodworking skills-- or the most experienced builder-- to tackle the rewarding task of building a Little Free Library.

The more builders we have, the more funds can go into the Little Free Library Pay it Forward Fund. That's why we encourage you to read and contribute to the Facebook Neighborhood Library Builders Guild group. Ask questions, share tips, tell us all what works and what doesn't, and have fun! New plans will be made available online from our members as soon as we receive them.

Todd Bol
Co-Founder and Director of Building Development

The Basics

Our first Little Libraries were roughly 20" wide by 15" deep by 18" high, mounted on a sturdy post or secure foundation. We're now experimenting with different sizes and shapes, including Libraries that can house two shelves instead of just one. You most certainly can vary the dimensions as you see appropriate. Here are some good general principles:

- **Use recycled, salvaged, and found materials** if you can.
- **Demonstrate green building techniques** whenever possible.
- **Build the Library to last.** Most of these will be outside by a sidewalk, bike or walking path, so they will need protection from rain, wind and snow. The shelves should be strong and the box water-tight. The outside walls, roof or top should be weather-resistant. Screws work better than nails.
- **Make it safe.** Avoid using glass or any other material that may cause harm to curious children or adults. Use Plexiglas on the door(s) so that passers-by can see the books inside. If you use old wood, be sure that it does not have lead paint on it! If you use metal, file off the burrs and rough edges.
- **Make sure the signs on your library are easy to read** from five to ten feet away. Get your signs through Little Free Library.

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- **Don't feel obliged to build your Library exactly like the ones you see** (unless, of course, you are one of our contracted standard builders). We value creativity!
- Always make sure you **register each Library** so it's in the global network and benefits from all the other promotional and technical support. Pay it Forward!

As much as possible I try to incorporate excess building materials, old wood and scraps of metal while trying to repurpose as many parts of the Little Library as possible. My father passed away recently and I have incorporated pieces of our family barn, house, old mail box and other memorabilia into the Library. I see this as a living legacy and it makes me smile to see our family living on in the yards and parks of communities across the country.

To date I have used the following:

- Recycled wood from a barn destroyed by a tornado
- Old garage doors and windows
- Smashed mail boxes and old corrugated metal
- Discarded deck railing and plastic lattice
- Coffee cans, soup cans, old rulers and screw drivers
- Oak barn stalls, dog houses, bells and screw driver handles
- Discarded materials from building sites (ask first)

A finished Little Library 22" wide and 15" deep by 23 " high is a very good size and it fits in my station wagon to haul about the

country. Plywood has been my primary building material. A 4' x 8' sheet of 5/8" plywood can be difficult to manage, but when I mention that I'm building Little Free Libraries, friends at lumber yards often cut the plywood into manageable pieces for me. To get the most from each sheet, I typically ask for pieces 15 7/8" long x 23 7/8 ".

I use exterior glue and 1 5/8"-2 1/2" exterior screws to fasten the plywood panels together. I am careful to use a square to make sure all the sides are at perfect angles. My eyes never seem to see things squarely.

The next thing I do is cover the entire inside and outside of the box with an exterior stain or paint, paying special attention to the exposed ends and joints. These are the spots vulnerable to water damage.

“Dry and open for business”

By this point I have probably figured out what kind of recycled, repurposed or excess building material I can use to cover the Library. In the beginning I just used old barn wood, but water leaked inside. Since then I have used the double wall construction and have not had any problems. This is especially true when I have put a lip of 2" or more above the door to catch rain and keep it from dripping inside the door. Wisconsin winters can be very hard on any building, but I am proud to report that “during last winter's 3-foot snow storms Libraries I built were dry and open for business when all other public buildings were closed.

I attach the wood to the plywood base with screws and/or nails always using exterior glue or liquid nails. I am careful to use nails and screws that do not stick through the other side of the plywood; a prickly problem that can occur and needs to be fixed with great care. I am speaking from experience. We definitely do not want to wound any of our Library patrons with bloody fingers from nail points.

Some general guidelines learned from the first 20 or more Libraries I have built:

- A ¼" 4" x 5" piece of plywood makes a great decorative window for the side walls. I nail and glue the window and often trim with a ¼" piece of contrasting wood trim.
- A 2" wide x 4/5" thick piece of wood makes a great door. This is the size used for decking.
- I make a single door and have found that this is stronger and leaks less than a double door. It's easier to get into and it does not get chipped or nicked as often.
- Use an exterior hinge or paint an interior hinge and paint it with Rustoleum.
- We find the greatest creativity is often reflected in the handle. It can be an old screw driver, an antique knob, spindle chair back, thimble, tinker toy or anything else that is easy to use and safe. This is where the repurposing is easy to see and incorporate.
- I have used many kinds of exterior stains and paints, and like Sikkens products best and Cabot products second best. Whenever we paint a design on a Library, no matter how elaborate, I always use several coats of

exterior clear coat. We don't know yet how various artistic paints will withstand year-round exposure to the sun and weather.

- The mounting post consists of a 2" x 6" piece of wood as wide as the library to use as a platform. I buy a 4" x 4" x 8' post. I prefer cedar tone if I can find it. Most home supply or lumber yards supply them. I cut the 4 by 4, 5 feet long, then cut two 8" 45-degree angled pieces from the remaining 3-foot 4 x 4. I use these angle pieces to mount to the 5' 4 x 4 and attach to the 2" x 6" platform. I use 3" exterior screws to hold it in place and use 3" lag bolts to enhance the holding power.
- Dig a hole about 24" deep and install the post making sure to use a level and tap the dirt hard with the handle of the shovel. I drill six holes through the bottom of the Library that will match up with the post platform. I then put in six 2" lag screws that are attached to the platform of the Library.
- When finished take a picture of you and your friends who helped with the Library and send it to www.littlefreelibrary.org Build another Little Library. It's way too rewarding to stop now!

Got questions or ideas you can share? Remember to check the Neighborhood Library Builders Guild on Facebook. You'll find that you are in great company!