

# Build diy Your Own Cat Tree

Cost of materials is about \$75, not including tools. Ask around, you may be able to borrow tools from friends or coworkers.

## Tools

- Drill, drill bit, countersink bit
- clamps, helpful
- saw, or have wood precut at the store
- ratchet wrench
- heavy duty stapler (or use hammer & small nails)
- work gloves, nice if you are wrapping rope.
- hammer
- measuring tape
- friend to help with the heavy stuff

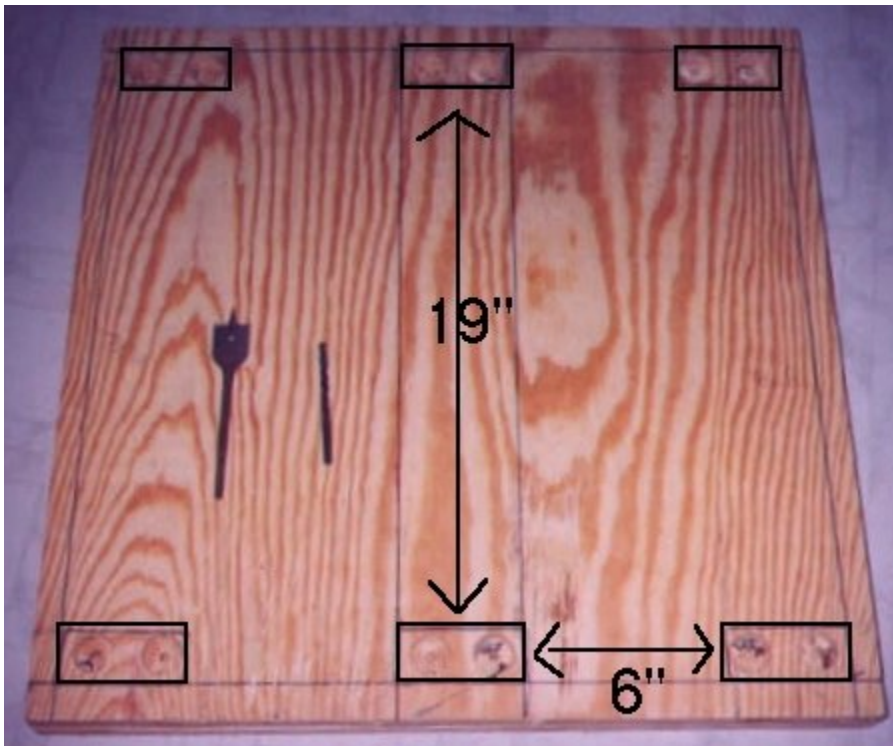
## Building Materials

- two pieces of  $\frac{3}{4}$  inch thick plywood, 2 feet by 2 feet
- 2" x 4" x 8' cut into the following sizes
  - two 19 inch pieces
  - two 4 feet 6 inch pieces
  - two 9 inch pieces
  - there will be a 1 inch piece left over for whatever use you want.
- 2 concrete pouring forms, each 4 feet in length and 12 inches in diameter (they come in plain cardboard or a waxy coated cardboard, and occasionally in plastic)
- one 6 foot long 5  $\frac{1}{2}$ " wide and  $\frac{3}{4}$ " thick piece of wood
  - usually sold in the picket fence section
  - cut in three pieces, each 23 inches
- 1 melamine support perch cut to approximately 12" x 19",
  - measure this yourself after you have the post up and before cutting the shelf
  - usually found in the shelving section, often sold in 12" x 24 x  $\frac{3}{4}$ "
- twelve  $\frac{1}{4}$ " x 3  $\frac{1}{2}$ " lag bolts and twelve washers
- 22 wood screws, about 1  $\frac{1}{2}$  inch each
- heavy duty staples or about 100 small nails
- wood glue
- 500' of sisal rope 5/16" wide or enough fabric to cover the posts
- 30" square carpeting/fabric for the base
- three 28" squares of fabric for the perches
- fabric glue, or double sided tape, or something else that will allow you to attach the fabric to the cardboard tubes

You want to use a drill bit that is one size smaller than your lag bolt. If you use anything much smaller, it will require more effort. If you use a drill bit that is the same size or larger, there will not be enough wood left for the bolt to grip. This will lessen stability. If you don't have the ideal drill bit and don't want to buy a new one, opt for the smaller one rather than a larger one. The countersinking bit is the exact opposite, opt for the larger one rather than the smaller one. You need enough space for the washer to lay flat in the recess

### Step I: Assembling the base

Glue the two pieces of plywood together. Use clamps to hold them together or lay flat on the floor and pile some heavy books on top. Wipe off any glue that oozed out and let dry over night.



Using the photo as a guide, take one of the smaller post and trace its outline right on to the plywood base. In each rectangle you are going to want two holes for the bolts to go through. Precise measurement of the bolt holes is not essential, but be sure to read step III before continuing.

I have given some suggested

dimensions for the base and support perch locations. Please measure carefully and make adjustments as necessary. Wood products do not always conform to their advertised specifications. For example, the 2' by 2' piece of plywood I purchased was actually 23.5" by 24" inches. And the actual size of a "finished" 2 x 4, as you would buy in the store is actually 1 ½" x 3 ½"

Cover the side that you did not draw on with fabric or carpeting. Secure it to the bottom of the plywood base with either a heavy duty stapler or small nails.

Drill the holes as indicated through your outline. Go all the way through both layers of plywood and the fabric.

Switch drill bits. I used a 1 1/8 inch countersinking drill bit in this photo. That's why the hole looks so big. A smaller bit will work just as well, and probably better. But improvisation is not a bad thing.

## **Step II: Wrapping The Posts**

If you decide to cover all the posts with sisal rope, you will need about 500 feet. Really, that much. Instead of rope covered posts you can also use tree trunks with the bark still attached. Make sure the wood is dry and not inhabited by crawling creatures. You can also use fabric or carpeting instead of the rope. I used burlap on one post, 3/4 inch sisal rope of one post, 5/8 inch sisal rope on one piece, upholstery fabric on one post, and fabric on the remaining post. My cats favorite has turned out to be the burlap.

If you are using carpeting or fabric, simply wrap it around the post and secure it with heavy duty staples or small nails. Avoid using long nails, especially near the base, as they may interfere with the bolts you will insert later.

Because the rope adds a certain thickness to the posts, this will affect your measurements for adding the support shelf. If you are using rope do the following measurements:

Measure 22 inches from the end of the longest post and mark a straight line. Measure the width of your support shelf and then measure that same distance from your 22 inch line. Extend the line all the way around. Repeat this step for the four largest posts.

*Example: I used a 3/4 inch support shelf, so on the post I drew a line at 22 inches and another one at 22 3/4*

If you have some work gloves, put them on. Cover the tip of the rope with some tape. Starting at the bottom of the post, staple or nail the end of the sisal rope piece. I used about 6 small nails, going all the way around to do this. Keep wrapping tightly along the post. Periodically, tap down the rope with a hammer, and pull it down to eliminate any gaps between each wrap. When you get to the line you drew, stop wrapping and secure the rope with a staple or nail. Cut the end of the rope, and start the process again above the line.

## **Step III: Attaching the posts to the base**

For these steps, it's helpful to have a friend assist.

Have one person hold the plywood on edge. Place a washer and bolt through the plywood. The other person should press a post against the protruding bolt. Naturally it won't go through, but it should make a slight indentation in the wood. Use this indentation as a guide and drill some "starter holes", about 1 inch deep. The bigger and deeper your hole, the easier it will be to put in the bolt. However, the less stable the cat tree will be.

However, if in Step I you precisely measured the location of the bolt holes in the base, you can also measure where the starter holes should go.

Place a washer and bolt through two adjacent holes and line it up with one of the posts with the pre drilled holes. With a ratchet wrench, or just your hand, secure it in most of the way but do not tighten completely. Repeat the process for all six posts.

This project does become heavy. If you are working by yourself be very careful when straightening it.

#### **Step IV: Attaching the shelf**

If you used plywood or some other type of wood instead of melamine, it will probably be necessary to cover the shelf in fabric. Otherwise the smooth melamine surface can be used as is.

Measure the distance between the post before cutting your melamine shelf. It will probably be around 12" x 19", but the placement of your posts may make it necessary to adjust the size. As long as it fits snugly between the posts it does not matter if the shelf is actually a bit longer or shorter than the space between the posts.

If you wrapped the posts in rope as indicated in the previous section, you will have gaps which the shelf will fit into snugly. The gaps will hold the shelf temporarily while you use a wood screw to attach it firmly. Use one screw in the center of each post to attach the shelf.

If you used fabric, or did not cover the posts yet you will need someone to hold the shelf in place while you insert the screws. On each post, draw a line 22 inches from the bottom. Have someone hold the shelf against these lines, while you put in the screws.

After securing the support shelf, tighten all the bolts at the bottom of the base.

#### **Step V: Preparing the Kitty Perches**

Cut each tube in half so you have four 24 inches long tubes.

Cut lengthwise (24") a one inch strip from one tube. Once this tip has been cut out you will be able to slightly compress the tube. Place the compressed tube inside another tube and slide it all the way in. If you like you can cut out a "kitty skylight" in the middle as an alternative exit or just a peep hole, depending on size. This will be the bottom piece.

Take one of the remaining 24" tubes and slit it in half lengthwise, so you have two 24 inch length pieces. Glue or tape these together to form a heavy duty perch.

Repeat with the remaining 24 inch tube.

You may cover the perches in fabric, carpeting, or just leave as is. If you use carpeting, a staple gun would probably be the easiest way to attach the material. If you are use a lightweight fabric it can be easily glued on. If you are planning to use glue, make sure you buy uncoated concrete forms. Home Depot sells concrete forms that have a waxy coating that most glues will not adhere too. Lowes sells plain cardboard tubing. If you are using staples it doesn't matter much.



### **Step VI: Attaching the perch support**

Cut the picket fence into three pieces that spans the distance between the perches. Each should be about 22", but measure first. They should be long enough to lay on top of the posts. It's not necessary, but it looks nicer if you paint the pieces, cover them pieces in fabric, or use some patterned self adhesive paper. Check out the dollar stores for some cheap decorative ideas.

Lay the support bar on top of the two post. Secure with one wood screw in the center of each end. Repeat for the remaining two posts.

### **Step VII: Attaching the perches**

Use two wood screws, each slightly off center at the end of each perch, to attach to the top of the post. Remember, in the previous step you put a screw down the center of the perch support into the post. Do this at each end, for all three pieces, using a total of 12 wood screws.

Place the tube on the shortest set of post. Secure with two wood screws on each end. If you have a large screw driver, that is difficult to maneuver in the tube, just use nails.

Attach the remaining two perches in the same fashion.