

# EZ FIFO Can Rack



While not really a full-fledged prepper, I have worked in the emergency management and disaster recovery field for 25 years and I understand how important it is to be prepared for the unexpected. One way to do so is to have a little extra food on hand (among other crucial preparations). Problems that come with stockpiling canned goods include the space it can take in your pantry and how to be sure that you are using the first bought (oldest) food first so that your supply is constantly rotated.

The way to cure both of these problems is to make use of a rack that optimizes the space available and insures that you adhere to the FIFO (first in, first out) rule. The hitch is that most of the commercial racks are expensive and some of them sacrifice space in order to organize the cans for FIFO. Further, most commercial racks will hold only one diameter or height of can.

I am obviously not a wood worker! My dad taught me to weld when I was 7 and I never needed wood much after that, but I knew I could build something simple. A quick scan of available build ideas revealed that most required a lot of work, expensive materials, and had complicated designs. Most also still had the problems of commercial units: size-specific racks and wasted space.

## Step 1: My Design



I decided to pare the design down to the very basics. Most racks use a series of slanted shelves that allow cans be loaded into the top and then roll down to the point where they get selected for use. This design wastes considerable space between the slanted shelves as each shelf slants the opposite direction from the one above and the one below it..

I decided that the lower shelf would definitely need to be slanted, but after a little experimentation, discovered that by eliminating the other shelves, the cans could be loaded from the top and they STILL worked their way to the bottom row in the correct order with only a rare transposition of a couple of cans. The good news is that, without shelves, many more cans can be fit into the same space!

Many of the designs I saw were complicated designs that had separators between each row of cans. This limited each space to a specific height of can and, again, took up valuable space. I tried stacking a few cans and discovered that the separations were unnecessary and could be eliminated, simplifying construction, allowing more space for cans, and allowing virtually any height can to be stored.

All of the designs I found were free standing so they needed sides a back, and in some cases, a top, but in my case, the shelves in my pantry already had three sides, lacking only a front, so I decided to use the shelf as the 'box' and just made the slanted shelf, selection rack, and loading slot. If you require a free-standing shelf, it would be an easy addition to add the back and top to my design.

## Step 2: Materials I Used



I did some measurements and discovered that my pantry shelves were 12" deep and 12" high. I had picked up a broken bookshelf to salvage for the wood, and luckily it was 12" deep! I found two scraps of 1" X 4" about 18" long each ( Not a critical length... you just need enough material to cut two pieces the height of your shelf). I headed to the lumber yard and grabbed a 12' piece of 1" X 2" pine for just over 3 bucks. A rummage in my MISC drawer located a few wood .crews. I had everything that I needed. Time to start building!

### **Step 3: Build the Slanted Shelf**



I measured the width of the pantry shelf space that I wanted to use. It was 34" wide. Yours may be different. I cut a piece of the 12" wide bookshelf to 34" minus the width of the two 1X4's making it 32 1/2" wide. I then cut a piece of the 1X2 to the same width as the shelf board and screwed it to the underside of the back of the 12" shelf board so that it would hold the rear of the shelf to slant it toward the front when set in the pantry. Another piece of 1X2 was cut to the width of the shelf board PLUS the thickness of the two 1X4 boards (34" in my case). I screwed it to the front of the slanted shelf with the bottom of the 1X2 flush with the bottom of the 1X12 shelf board to make a stop for the cans on the slanted board.

### **Step 4: Add the Uprights and Crossbars**



I then took the 1X4's and marked their length to the exact height of my pantry shelf (the distance between the top of one shelf to the bottom of the next shelf up). I attached these boards as uprights to the sides of the slanted board, flush with the front of the shelf but vertical. See the pics to understand how they are oriented.

Next I cut a piece of the 1X2 to the overall width of the shelf AND the side boards. Measure and mark each side 1X4 board so that you can screw on the cross board (1X2's) to allow a space that will let you retrieve the largest can you expect to load. I used 4  $\frac{3}{4}$ " to allow me to use virtually any normal size can from small diameter cans like condensed milk up to the large size cans some vegetables come in. Be sure to allow the same space distance from the underside of the top shelf to the top of

the upper crosspiece. This will allow the same size can to be loaded as can be retrieved from the lower opening. The gap retains the cans but allows you to see when stock is getting low.

## Step 5: Test Fit and Load!



Now slide your new can organizer into your pantry shelf and check it for fit. Load it with the size cans you intend to use and when you are satisfied, take it out and give it a good paint job and add can-identifying tags if you desire. Total time for assembly: 30 minutes, total cost: only a few bucks. Works great. I call it a success. I hope you find this quick little project as useful and easy as I did. Thanks for reading!