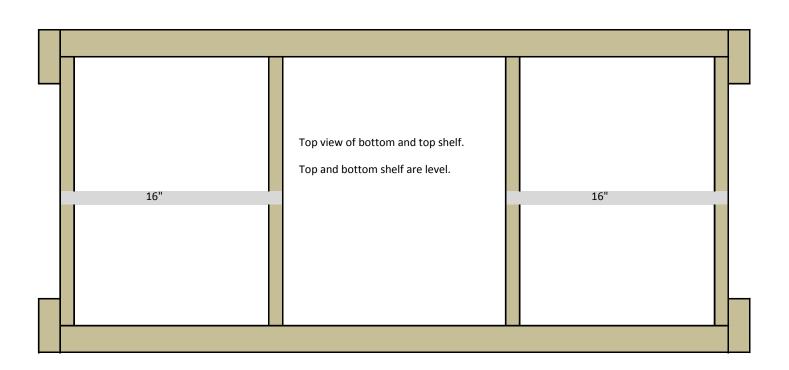


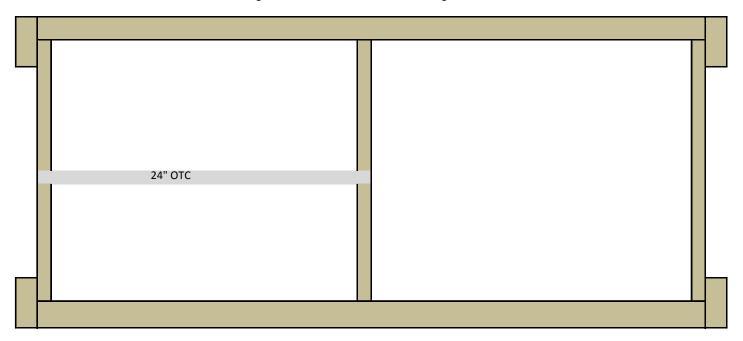
Plywood or 7/16 OSB is cut 24" x 48".

Cut shelf a little short - 47 3/4" to make it easier to install.

7/16 OSB cut 24" x 47 3/4" fits nicely on frame below.

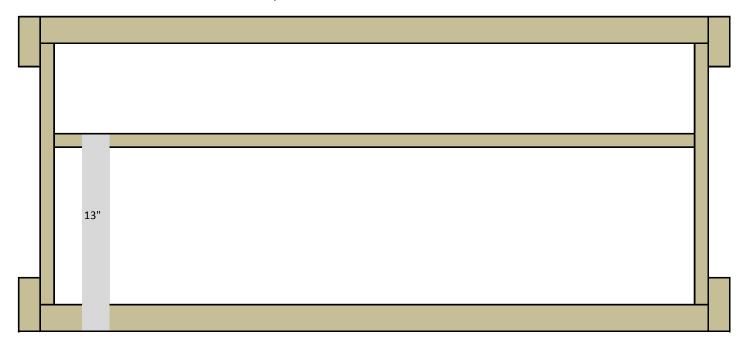


Rotating food shelves slant 1.0". Each rotating unit has two shelves.



The bottom shelf above slants forward 1.0"

and the top shelf below slants backward 1.0".



More Illustrations starting on Page 6.

Rotating shelf unit written instructions.

Shelving system is designed to maximize lumber and produce little waste. *Design can be altered to accommodate your storage preferences. Written directions are for standard 3" wide cans (4.5" tall).*Illustration shows 2 shelves for optional 4" wide cans (4.75" tall).

Precut the following:

- (4) 2x4's to 76".
- (4) 2x3's to 48". (1) 96" length should net (2) 47 15/16" lengths.
- (4) 2x3's to 21". (1) 96" length will net (4) 21" lengths.
- (20) 2x2's to 48". (1) 96" length should net (2) 47 15/16" lengths.
- (4) 2x2's to 21". (1) 96" length will net (4) 21" lengths.

Cut (10) shelves $24" \times 48"$ using 7/16" OSB or 2" plywood. Cut length 1/8-1/4" short for ease of fit. Rip 6" off (4) shelves. Each shelf will net (1) $6" \times 48"$ and (1) $18" \times 48"$. The 6" will be back drop and the 18" will be the top shelf for each rotating unit.

Using a nail gun and 3.5" nails, nail together bottom shelf and the top shelf. Bottom shelf is nailed so that bottom 2x3 is ½" off floor (or from end of 2x4. Top shelf is also nailed ½" from end. Using 3.0" nails, install the 21" 2x3's sides followed by the 21" 2x2's (nail in place 16" from each end). These are the only two shelves that are level. The others will slant forward or backward. Square frame and staple 24"x48" shelf to both top and bottom using 1 ½" staples.

Precut the following:

- (2) 1x2 to 48".
- (40) 1x2's to 21".
- (4) 1x2 to 20 ¾".
- (4) 1x2 to 20 ½".
- (36) 1x2's to 4.0".
- (36) 1x2's to 4.5".
- (4) 2x2's to 21".
- (36) 2x2's to 4.5".

1x2's x 21" will be ripped in two ¾' wide pieces (end product will be approximately ¾" x ¾" x 21". These will be the runners. Each shelf requires 10 runners. They will be nailed into place with ripped side down facing shelf surface using 1 ½" staples.

1x2 x 48" will be the stops for the bottom section of each 48" shelf.

1x2 x 4.0" will be the vertical runners.

1x2 x 4.5" will be the back stops.

2x2 x 4.5" will be the back stop bottom chocks.

Runners can be nailed into place on each 24x48" shelf before installation but it is not recommended. Note that the bottom shelf will slant forward 1.0" and the top shelf will slant backward 1.0". So measure carefully. Start with the bottom revolving unit and work to the top. See illustrations for measurements. Note that written instructions are for standard 3.0" (4.5" tall) cans.

Nail 2x2 x 48" shelf supports into place one shelf at a time. Rear 2x2 x 48" will be 1.0" higher than front for bottom shelf. Nail one 2x2 x 21" support into place at center (at 24"). Staple 1x2 x 20 ¾" side supports into place. Staple 7/16" 24"x48" OSB shelf into place noting that shelf slants forward 1.0". Staple the ¾" x ¾" x 48" can stop onto the leading edge of the shelf. Next, staple first 21" ripped ¾" x ¾" runner into place flush against the 2x4 leg (staple left to right). Make sure ripped side of 1x2 is down. Using (2) 4.5" precut blocks (block should be slight longer than can), place one in front and one in back against the first runner, position the next runner and staple into place. Check with actual can that measurements are correct and that it rolls forward easily. Staple all runners into place using this method. You should have 9 even lanes.

Nail the next shelf supports into place (noting that rear of shelf is 1.0" lower than front). Rest the 6"x48" 7/16 OSB piece vertically (upright) on back of shelf and staple to 2x2. Staple the 1x2 x 20.5" side supports into place. Nail 2x2 x 48" support into place between the 1x2's at 13 inches from front. Place the 18x48" 7/16 OSB shelf into place flush with the front of shelf frame. *Important step* Staple 1x2 x 4.0" vertical runner to horizontal runner ½" from back end as shown in illustration. The first vertical runner must be cut to fit, all others should require a 4" vertical runner. Note that the bottom side of runner does not require nailing. It will be held in place with the next step. As you staple the runners into place (using the 4.5" spacer as before), place the 4.5" 2x2 block flush with back of bottom shelf between runners. This block will hold the vertical runner into place. Be methodical and install top runner assembly, then the 2x2 block, then the next top runner assembly moving from left to right. Now, from the back side of unit, brad nail the 1x2 x 4.5' back stop flat and centered on top of 2x2 block. Nail from backside through the 7/16 OSB. Check function of lanes during process to prevent errors.

This will complete one full rotation unit. Repeat process with remaining shelves. Stores 14 cans per lane.

Note that the illustration shows 6.5" and 7.5" shelf measurements. The illustration depicts two types of can measurements. A standard 13-15 ounce can is 3" wide and 4.5 inches tall. The larger 29-30 ounce cans measure 4" wide and 4.75" tall. You can use the same process as above to install shelves for the larger cans. However, you will need to alter the measurements a bit. First, runners will be spaced 4 ¾" apart and the shelf must be 1.0" taller to accommodate the wider can. Therefore the 1x2 back stops must be 1.0" longer, the 1x2 vertical runners must be 1.0" longer, and the 2x2 blocks must be cut 4 ¾". The last lane will accommodate a 2 ½' can. These cans include chicken, sausages, and two tuna cans together.

Other options include:

Construct bottom unit only and install. Must rotate shelves manually. This works well for storing items that you might not require/want to buy a case of.

Lumber supplies

Nail and staple guns are very handy for this project but not required.

 (4) 2x4
 3.5" nails

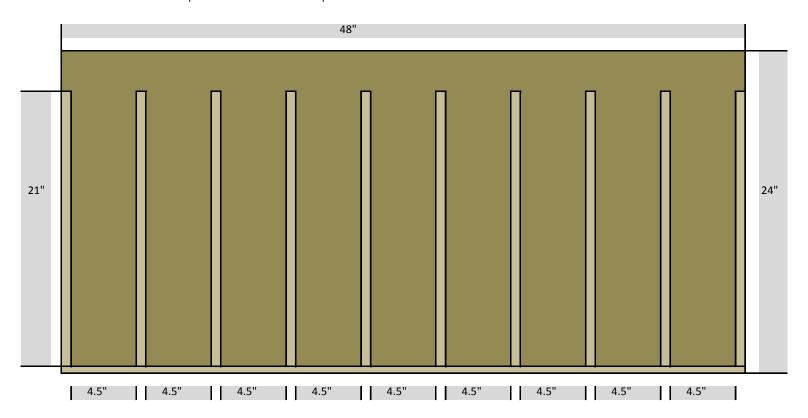
 (3) 2x3
 3.0" nails

 (10) 2x2
 1.5" staples

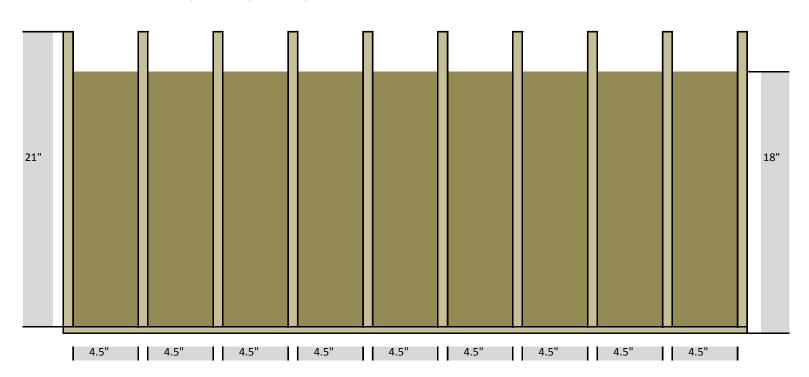
 (18) 1x2
 1.0" brad nails

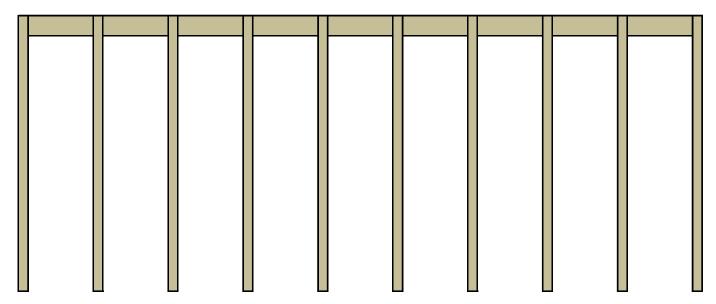
 (3) 7/16 OSB

Top view of bottom shelf component for 3.0" wide 4.5" tall cans.

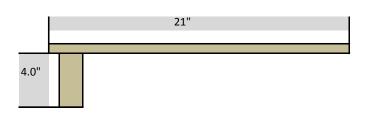


Top view of top shelf component for 3.0" wide 4.5" tall cans.





See side view below.



Attach 4.0" 1x2 to each runner as shown at left.

Each runner is spaced 4.5" with block before nailed into place as diagramed above and below to left.





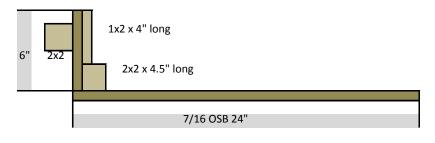
4.5" block (2x2 which is really 1.5 x 1.5)

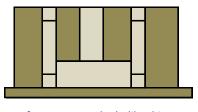
Block is used as a spacer and helps aline cans as they drop.

Starting with the 24" x 48" OSB shelf, cut off 6" x 48". The 6" strip is the back drop to guide cans forward. (1) 2x2 and (1) 1x2 is tacked into place as noted below. The second 2x2 is part of the framing 2x2 x 48".

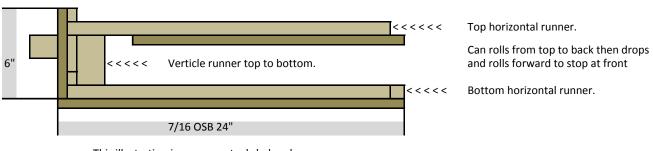
The above runners are stapled into place on each side of guiding block as noted below.

Side view of shelp blocks.





A front cut away looks like this.



This illustration is square, actual shelves have 1" drop. Top drops 1" to back and bottom drops 1" to front.

