## Recycling Sorting Bin

Difficulty
Easy

Make it easy to keep your recyclables separated with this recycling bin. It holds three 23-gallon plastic trash bins that can easily be removed, and houses them in a handsome wood cabinet. The center is made from $1 \times 4,7 \times 6$, and $2 \times 2$ boards, and it goes together with pocket-hole screws and nails.


## Tools

Kreg Tools

Kreg® Pocket-Hole Jig 720

## Other Tools

Miter Saw

Square
Tape Measure
Drill (cordless)

Nail Gun

Sander

Air Compressor

## Materials

Wood Products
3 Board, $1 \times 4,96$
1 Board, $7 \times 4,48^{\prime \prime}$
9 Board, 1x6,96"
5 Board, $2 \times 2,96$ "

## Hardware \& Supplies

3 23-Gallon Plastic Trash Can
40 21/2" Coarse-thread Pocket-hole Screws
46 11/4" Coarse-thread Pocket-hole Screws
116 7-7/4" Brad Nails
1 Wood Glue

## Cut List \& Parts

4 Leg, 11/2" $\times 1$ 1/2" $\times 33$ 1/4"
4 Long Frame Rail , $11 / 2^{\prime \prime} \times 11 / 2^{\prime \prime} \times 371 / 4^{\prime \prime}$

4 Short Frame Rail , $11 / 2^{\prime \prime} \times 11 / 2^{\prime \prime} \times 223 / 4^{\prime \prime}$
2 Divider Rail, $17 / 2^{\prime \prime} \times 11 / 2^{\prime \prime} \times 223 / 4^{\prime \prime}$
6 Base Slats, 3/4" $\times 5$ 1/2" $\times 25$ 3/4"
6 Short Side Slats, 3/4" $\times 5$ 1/2" $\times 25$ 3/4"
4 Long Side Slats, $3 / 4^{\prime \prime} \times 51 / 2^{\prime \prime} \times 271 / 4^{\prime \prime}$
4 Short Front/Back Slats, 3/4" $\times 5$ 1/2" $\times 40$ 1/4"
6 Long Front/Back Slats, 3/4" $\times 5$ 1/2" $\times 41$ 3/4"
2 Long Lid Rail, 3/4" $\times 3$ 1/2" $\times 42^{\prime \prime}$
4 Short Lid Rail , 3/4" $\times 3$ 1/2" $\times 20$ 1/2"
2 Lid Front/Back Rail, 3/4" $\times 3$ 1/2" $\times 42^{\prime \prime}$
2 Lid Side Rail, 3/4" $\times 3$ 1/2" $\times 26^{\prime \prime}$



## Directions

## Make the Base Frame Parts

Cut four Legs, Four Long Frame Rails, four Short Frame Rails, and two Divider Rails to length from $2 \times 2$ pine boards, as shown as shown in the cutting diagram. Set your pocket-hole jig for 1 1/2" material and drill holes into the Long Frame Rails, the Short Frame Rails, and the Divider Rails at the locations shown.


## Assemble the Front and Back Frames

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Lay out two Long Frame Rails with two Legs, as shown, so that the upper Long Frame Rail is flush with the upper ends of the Legs, and the lower Long Frame Rail is positioned 1 1/4" up from the lower ends of the Legs. Make sure pocket screws are facing downward. Spread glue on the ends of the Long Frame Rails, and then attach them to the Legs using $21 / 2^{\prime \prime}$ coarsethread pocket-hole screws. Repeat this process to put together the second frame assembly.


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## Connect the Front and Back Frames

Connect the four Frame Short Rails to the first side assembly, aligning them with the Long Frame Rails, and attach the Short Frame Rails using glue and $27 / 2^{\prime \prime}$ coarse-thread pocket-hole screws. Then set the second side assembly in place and secure it to the Short Frame Rails in the same manner


## Attach the Divider Rails

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You can now add the two Divider Rails to strengthen the base assembly, and to help keep the trash bins separated in the recycling center. Position the Divider Rails between the upper Long Frame Rails, as shown, so that they are spaced evenly. Then attach the Divider Rails using glue and 2 1/2" coarse-thread pocket-hole screws, as shown


## Cut and Attach Base Slats

Cut six Base Slats to length from $1 \times 6$ pine boards, as shown in the cutting diagram. Notice that the boards are placed in pairs, and that the gaps between the pairs are larger. Attach the Base Slats using glue and 1 1/2" brad nails-about three brads per board end. You can use a hammer and nails for this, but a brad nailer works best. If you don't have one, you have a couple choices: You can rent an 18-gauge brad nailer and a compressor at a local tool rental shop, or you can buy a nailer. Prices are pretty low these days, and it's a very handy tool to have around. You'll find nailer/compressor combos, and even cordless, battery-operated nailers.


## Attach the First Side Slats

Cut six Short Side Slats, four Long Side Slats, four Short Front/Back Slats and six Long Front/Back Slats, as shown in the cutting diagram. Using scrap $2 \times 2$ pieces as spacers, set the first Short Side Slats on the spacers, and position the Slat so the ends are flush with the outsides of the Legs. Next, using wood glue and 11/2" brad nails attach the first two Short Side Slats to the Frame Legs-we used four nails at each end to attach these Slats.


## Attach the First Front/Back Slats

Using the same $2 \times 2$ spacers, set the first Long Front/Back Slats in position so that the ends are flush with the Short Side Slats. Secure these Long Front/Back Slats to the Legs using wood glue and 1 1/2" brad nails, as shown


## Attach the Remaining Base Slats

Now you can attach the remaining slats to the base. Use 1/4"-thick spacers, as shown, to space the slats properly.


## Make the Lid Parts

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Note: the Lid for the recycling center is sized slightly larger than the base so it will slide on and off the frame easily. Cut two Long Lid Rails, four Short Lid Rails, two Lid Front/Back Rails, and two Lid End Rails to length from $1 \times 4$ boards, as shown in the cutting diagram. Set your pocket-hole jig for 3/4"-thick material, and then drill pocket holes in the parts at the locations shown. Note that the Long Lid Rails don't get any pocket holes.


## Assemble the Lid Frame

Attach one Long Lid Rail to four Short Lid Rails using glue and 17/4"coarse-thread pocket-hole screws, as shown. Next, set the second Long Lid Rail in position and secure it to the Short Lid Rails in the same way.


## Complete the Lid

Attach the one Lid Front/Back Rail to the lid frame assembly using glue and $11 / 4^{\prime \prime}$ coarse-thread pocket-hole screws, as shown. Then add the Lid End Rails, and then the final Lid Front/Back Rail


## Add a Protective Finish

With assembly done, you could slip your trash bins into the recycling center and put it to work without any stain or finish. Over time, though, the wood will get dirty and dingy looking. So, we decided to dress ours up a bit. First, we gave the exterior a light sanding with 120-grit sandpaper. Then we brushed a quick coat of polyurethane onto the outside of the base assembly. For the lid, we used a dark stain, and then painted three panels using chalkboard paint. Once dry, we wrote the items that get placed in each bin onto the chalkboard panels. Then we slipped the trash bins into place and put the recycling center to work in the garage.

