## Decorative Wall Mirror

## By Kreg Tool

## Difficulty

Easy
With its extended rails, raised squares, and beveled glass, this decorative mirror recreates a classic Arts \& Crafts style. You might think those features would make this project tough to build, but it's actually incredibly easy. All you need are some stock boards, plywood, and a pre-cut mirror.


## Tools <br> Kreg Tools <br>  <br> Kreg® Pocket-Hole Jig 720 <br> 

## Other Tools

## Miter Saw

Tape Measure
Drill (cordless)

## Sander

## Materials

Wood Products
1 Board, $1 \times 3,96$
1 Board, $1 \times 3,48^{\prime \prime}$
2 Board, 1/4" $\times 3^{\prime \prime}$, 24"
1 Plywood, 7/4" Thick, Half Sheet

## Hardware \& Supplies

8 11/4" Fine-thread Pocket Hole Screws
16 \#6 X 3/4" Pan-head Woodscrews
1 Heavy Duty Mirror/Picture Frame Hanging Kit
1 24" X 30" Beveled Mirror
1 Mirror Adhesive

1 Wood Glue

## Cut List \& Parts

2 Rail, 3/4" $\times 2$ 1/2" $\times 30$ 1/8" Oak
2 Stile, 3/4" $\times 2$ 1/2" $\times 311 / 8^{\prime \prime}$ Oak
2 Thin Stile, $1 / 4^{\prime \prime} \times 21 / 2^{\prime \prime} \times 311 / 8^{\prime \prime}$ Oak
4 Rail End, 3/4" $\times 2$ 1/2" $\times 1^{\prime \prime}$ Oak
6 Decorative Square, $1 / 4^{\prime \prime} \times 11 / 2^{\prime \prime} \times 11 / 2^{\prime \prime}$ Oak
1 Back, $1 / 4^{\prime \prime}$ Ply $\times 27^{\prime \prime} \times 33^{\prime \prime}$


1/4" x 48" x 48" plywood

| Back |  |  |
| :---: | :---: | :---: |
|  |  |  |

## Directions

## Make the Rails

Cut two Rails to length from a $1 \times 3$ oak board, as shown in the cutting diagram. Set your pocket hole jig for $3 / 4^{\prime \prime}$ material, and then drill pocket holes in the Rails at the locations shown.


## Cut the Rail Ends and Stiles

Cut four End Rails to length from a $1 \times 3$ oak board, as shown in the cutting diagram. Sand them smooth, and then set them aside for now. These Rail Ends will get glued in place later. Also cut two Stiles from a $1 \times 3$ oak board, as shown in the cutting diagram. Sand the Stiles smooth, too.

3

## Add Thin Stiles

Now cut two Thin Stiles from a $1 / 4^{\prime \prime} \times 3$ oak board, as shown in the cutting diagram. These should match the thicker Stiles you cut from a 1×3. Now glue the Thin Stiles to the Stiles, as shown. Make sure the edges and ends are flush. Then, clamp the assemblies, or wrap them tightly with strips of masking tape, until the glue dries. When the glue dries, sand the edges so they are even and smooth.


Assemble the Frame
Attach the Rails to the two stile assemblies using $11 / 4^{\prime \prime}$ fine-thread pocket hole screws, as shown. Note that the Rails sit flush with the rear face of the thicker stiles.


## Add the Rail Ends

Now you can create the look of extended rails. To do that, glue the Rail Ends to the stiles at the locations shown. Make sure that the Rail Ends are aligned with the Stiles, and that they are flush with the rear face of each stile. Use clamps or tape to hold them in place while the glue dries.


## Cut and Apply Decorative Squares

Cut six Decorative Squares, as shown in the cutting diagram. Dab some glue on the back of each one and set them on the
Rails at the locations shown. An adjustable square is helpful here to get these pieces aligned.


Cut the Back from 1/4" plywood as shown. Drill holes at the locations shown for screws that will be used to attach the Back to the mirror frame.


## Stain and Finish

Sand the mirror assembly, wipe it down to remove the dust, and then apply your favorite stain and top-coat.

## 9

Install the Back
Screw the Back to the frame assembly using \#6 $\times 3 / 4^{\prime \prime}$ pan-head screws, as shown.


## Add the glass

Now you can add the glass mirror. It simply gets adhered to the plywood. For a mirror, though, you need to use the proper type of adhesive. Ordinary glue or construction adhesive can actually pull the silver coating off of the glass. So, make sure you get mirror adhesive. It's widely available. Follow the instructions to apply adhesive to the plywood, and then press the mirror in place. There should be a small gap between the edges of the mirror and the inside edges of the frame. Make sure the adhesive dries per the manufacturer's instructions before you add the hardware and hang the mirror.

## Hang the Competed Mirror

Add a hanging bracket or "D" rings and wire to hang the mirror. Make sure you screw any hanging mechanism into the solid wood part of the frame. Also, make sure any hanging hardware is rated for the appropriate weight of the mirror. Then, hang the mirror on your wall, and enjoy the view.

