

## Do It Yourself

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### Murphy Bed, Part 2 - Building the Bed Box

From "[Weekend Remodeling](#)"

episode WKR-210 -- [More Projects »](#)

Many homes having limited space and homeowners often find themselves using a room for multiple purposes. An idea from the past springs back to life on this episode of Weekend Remodeling: a Murphy Bed. This type of bed is a stylish solution for rooms that do double-duty as home office and guest room. At the end of the day, simply move some furniture and pull down the bed to offer your guests a relaxing place to stay.

Here, on Part 2 of the Murphy Bed project, host Fuad Reveiz demonstrates the construction of the bed frame, securing the bed to the wall, and the finishing touches that will help the Murphy Bed blend into a home office or spare bedroom.

This part of the project rates a 3 on an intermediate remodeling scale.

#### Materials:

1 x 12 poplar

Medium Density Fiberboard (MDF)

Plywood

Trim

2 x 8

Screws, hardware, angle brackets, barrel bolts and casters

Paint (the same as used in part 1 of the project)

Utility knife

Pry bar

Circular saw

Jig saw

Compound miter saw

Drill and bits

T-square

2 ft. and 4 ft. levels

Router

Trim nailer

Clamps



In part 1 of this project, host Fuad Reveiz covered the construction of the bookshelves.



The second part covers the construction of the bed box, footboard the the securing of the bed to the wall.

Brad nailer  
Sandpaper (optional: orbital sander)  
Wood putty  
Wood glue  
Sliding bolts

**Note:** Before beginning this project, a diagram or even a hand-drawn sketch, will help guide you.

1. First, get exact dimensions for the bed box. Although the construction of the bed box is a simple part of the project, a tight fit is essential and there's little room for error.
2. Once you've determined the measurements, it's time to cut the pieces. If using a table saw, set the fence (in this case) and rip the 1 x 12s down to the size needed to allow the mattress to sit slightly above the bed box. Next, cut the shorter boards that will be the top and bottom of the bed box. In this example, the top and bottom boards each measure 54-1/2".
3. With the top and bottom pieces cut, cut the longer boards that will make up the sides. Use a T-square to measure and mark the ends before making the cuts. In this demonstration, Fuad cuts the pieces for the sides to 77-1/2".
4. With the pieces cut, use a router to cut rabbets on all the boards (**figure A**). Here, the depth is set to 3/4" of an inch. On the long boards, Fuad doesn't cut the rabbet to the ends in order to achieve clean-edged corners (**figure B**).
5. Cut the bottom board from MDF, which is a good choice for interior projects such as this. It will paint nicely and provide a smooth appearance when the bed is stored away. Use a level to keep everything straight as you work.
6. Finally, cut a 2 x 8 to create the ledger board that will connect the bed box to the wall. Here, the ledger board is cut to just under 57" long.
7. First assemble the sides and the end boards of the box together. Begin by adding wood glue inside the edges. Use 2" finish nails to



Figure A



Figure B



Figure C



Figure D

hold the pieces together (**figure C**).

8. While the nails hold the pieces together, pre-drill the ends where the boards meet, then secure with 2-1/2" wood screws (**figure D**). Continue adding glue, nails and screws until the sides of the entire box have been joined.
9. Install large brackets in the corners to hold the boards into position and give added strength (**figure E**). Secure the brackets with 1" wood screws. To avoid splitting the boards, don't add screws to the holes closest to the ends.
10. Make sure the frame is turned to exposed the rabbet edges of the boards. Add construction adhesive along the rabbet edges, then set 3/4" MDF into the frame. Check to make sure everything is square, then pre-drill along the edge of the MDF every 6-8". Secure the panel with 2-1/4" trim screws.
11. Flip the frame back over and add smaller 2" brackets to connect the side rails and the bottom surface (**figure F**).
12. To attach the ledger board, first install the 6" gate hinges to the board (**figure G**), then the bed box.
13. Position the bed box upright on temporary blocks that will hold it close to the correct height. Use shims to get the box to the exact height and position needed -- in this case, aligned with the tops of the shelving units created in Part 1 of the project.
14. Attach the ledger board to the wall studs using 3" lag bolts (**figure H**).



Figure E



Figure F



Figure G



Figure H

Next, Fuad will tackle the footboard.

## RESOURCES:

### Murphyrooms.com

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Phone: 800-488-3540

Web site: [www.murphyrooms.com](http://www.murphyrooms.com)

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- **ALSO IN THIS EPISODE:**

[Murphy Bed, Part 2 - Building the Bed Box](#)

[Murphy Bed, Part 2 - Footboard](#)

[Murphy Bed, Part 2 - Trim and Bed Details](#)

[Murphy Bed, Part 2 - Molding and Paint](#)