DIY WOOD BED FRAME

BUILDING PLANS

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DIY BED FRAME

Sturdy, well-built wood bed frames are expensive to buy.

But with just a few basic tools and some lumber from your local hardware store, you can make a beautiful, solid wood bed that will last for generations.

This PDF includes the building plans, lumber cut list, and building instructions.

For our video tutorial and more detailed information, including what type of lumber is best to use, please visit:

5MinutesforMom.com/DIYBedFrame

BED FRAME SIZE

These plans are for a Double/Full size bed frame, designed to fit a standard full-size 54″ x 75″ mattress.

The bed frame is 18½″ tall, from the floor to the top of the "apron" on the frame. With the mattress, the bed height is about 26″ with 11″ clearance at the bottom of the apron for items to slide under the bed.

When designing the bed, we wanted the frame to be high enough for ample room under the bed storage, but still low enough for a modern feel.

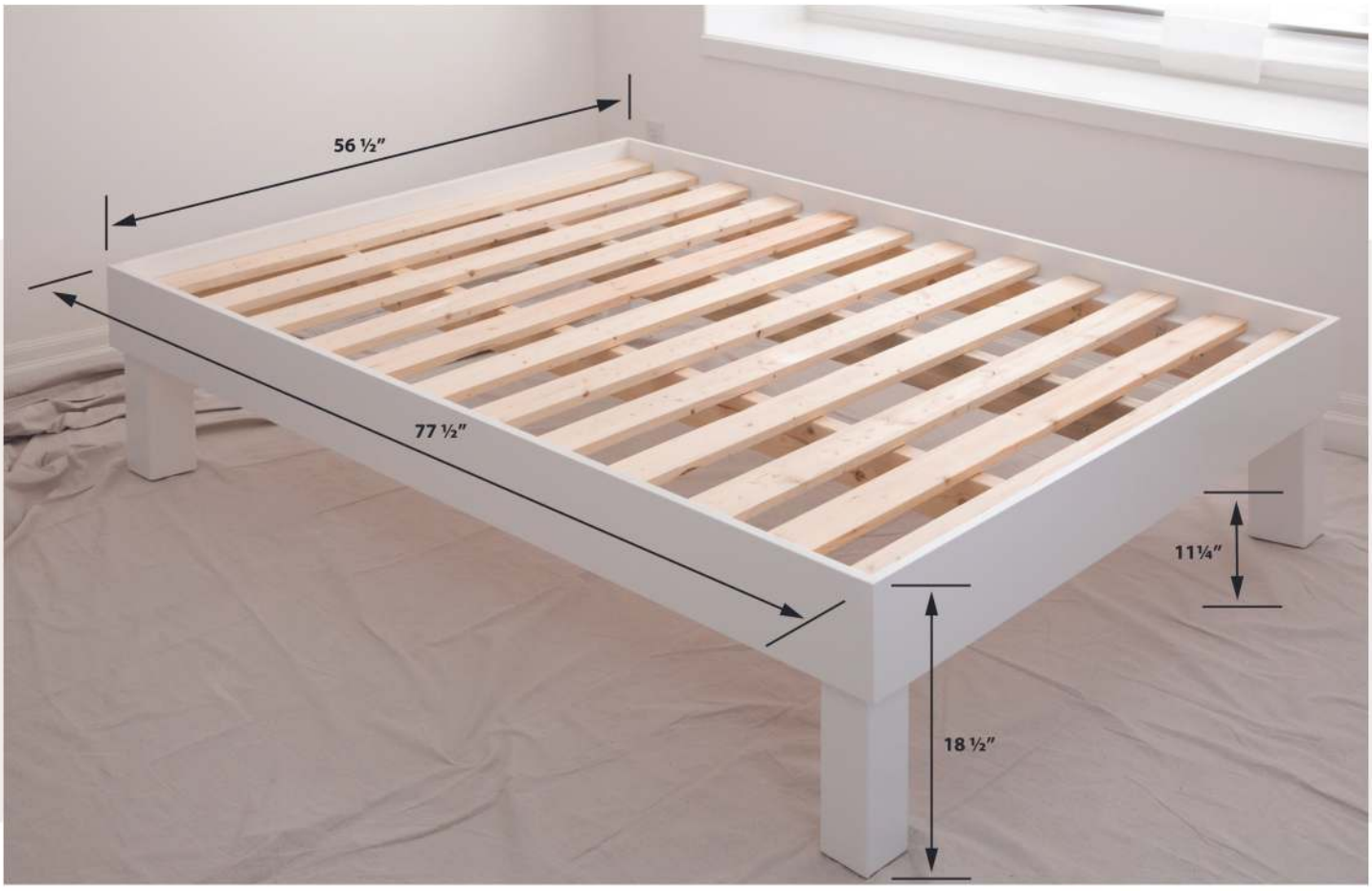
Also, please note that these plans are for the bed without a headboard, as we plan to make an upholstered headboard.

You can easily adjust the plans below to add a headboard.

You could make a headboard using a panel of 1×8″s at the head of the bed. (Using the 1×8″s would match the apron around the bed.)

IMPORTANT: If you are building a queen or larger bed frame, you will have to alter the plans we have here for our double/full bed frame.

A bed frame that is larger than a twin or double will need additional center support beams to accommodate the increased width.



TOOLS AND MATERIALS

Tools and Materials

- handheld drill
- handheld sander
- hammer
- pocket Kregg jig
- circular saw or jigsaw (optional but very helpful)
- wood glue
- 2½" pocket hole screws
- 2" wood screws
- finishing nails
- sandpaper
- sandable wood filler
- primer
- paint or stain
- paintbrushes, rags, etc.
- clamps
- square
- level
- Safety equipment - goggles, dust mask

LUMBER CUT LIST

PLEASE NOTE: if you do not have a circular saw (or a table saw or a jigsaw) you can have your wood cut at your home center, such as Home Depot. However, please go over all of your measurements carefully for the size of the bed frame/mattress you are making.

It is best to wait to cut the lumber for the apron (the 1×8″s) and the 2×4″s for the center support beams until AFTER your OUTER FRAME is built so you can measure to ensure you cut the exact sizes for the apron pieces and center support beams.

Lumber Cut List for Double/Full Size Bed Frame

- (one) 4″ x 4″ x 8ft Premium Cedar post: CUT four 15¾″ long posts *(NOTE: NEVER use pressure-treated wood for indoor projects)*
- (two) 2″ x 4″ x 10ft SPF Dimension Lumber: CUT one 69″ (frame sides) and one 48″ (frame head and foot) from each 2″x4″x10ft piece of wood.
- (one) 2″ x 4″ x 14ft SPF Dimension Lumber: CUT two 73″ pieces (frame center support beams) NOTE: Cut this AFTER building the outer frame to ensure correct measurements.
- (two) 1″ x 8″ x 6ft Knotty Pine boards: CUT two 56½″ long boards (apron head and foot) NOTE: Cut this AFTER building the outer frame to ensure correct measurements.
- (two) 1″ x 8″ x 8ft Knotty Pine boards: CUT two 76″ long boards (apron sides) NOTE: Cut this AFTER building the outer frame to ensure correct measurements.
- (twelve) 1″ x 4″ x 6ft Knotty Pine boards: CUT twelve 54½″ long boards (center slats) *OR (six) 1″ x 4″ x 12ft SPF KD boards: CUT twelve 54½″ long boards (center slats) OR rip 3/4″ plywood into twelve 3″ x 54½″ slats*

STEP 1

CUT and SAND 2×4″s and 4×4″ posts

CUT and SAND the 2×4″s for the outer part of the frame and the 4×4″ post for the bed frame legs/posts.

(We suggest you wait to cut the lumber for the apron (the 1×8″s) and the 2×4″s for the center support beams until AFTER your OUTER FRAME is built so you can measure to ensure you cut the exact sizes for the apron pieces and center support beams.)

From each of the TWO pieces of 2×4″ x 10ft SPF Dimension Lumber CUT one 69″ (frame sides) and one 48″ (frame head and foot).

From the 4″ x 4″ x 8ft Western Red Cedar post CUT four 15¾″ long posts.

So, after cutting you will have TWO 2×4″s that are 69″ long and TWO 2×4″s that are 48″ long. You will also have FOUR 4x4"s that are 15¾″ long.

SAND the 2×4″ pieces and the 4×4″ bed legs/posts.

Since the 2×4″s are part of the bed frame and will not be seen or painted, they don't have to be sanded thoroughly – or even at all. That is your preference.

Sand the 4×4″ leg posts well as they will be visible and painted/stained.

STEP 2

DRILL Pocket Holes

Before securing the frame together, DRILL pocket holes with the Kregg Jig into the outside ends of the 2×4″s.

Please refer to our video tutorial at 5MinutesforMom.com/DIYBedFrame to see how we used the Kregg Jig.

If you have never used a Kregg Jig and want to learn more about using pocket holes, I found this video by Steve Ramsey on pocket hole joinery to be very helpful.

STEP 3

CREATE Bed Frame

In a large workspace, or in the room you will be housing the bed, lay out the 2×4″s and the 4×4″ posts. You may wish to use a large drop cloth to protect your work area.

ASSEMBLE the frame, using a power drill with 2½″ Course Kregg Pocket Hole screws to secure 2×4″s to the posts in the holes you drilled with the pocket jig.

Optional - we used a shim to keep the 2×4″s in place when assembling the frame. As well, we applied wood glue before screwing in the jig holes. You could use clamps to secure instead of a shim.

Ensure that the frame is SQUARE before attaching the final post and before tightening the screws.

IF you need to DISASSEMBLE the bed later, you can use Bed Rail Brackets to attach the frame sides to the head/foot 4×4″ posts. ALSO, note that if you are planning to disassemble the bed, you do not want to use wood glue as we do in the video and photos. Our bed is permanently secured and cannot be disassembled.

STEP 4

ATTACH Center Support Beams to Frame

Once the outer frame is squared and secure, MEASURE the length from the inside of the head 2×4″ to the inside of the foot 2×4″ to ensure the length of your center support 2×4″s should indeed be 73″.

CUT and SAND the center support 2×4″s to fit.

DRILL pocket holes in the two center support 2×4″s.

ADD wood glue to the end of the 2x4"s and SCREW the center support beams to the frame using 2½″ Course Kregg Pocket Hole screws.

IF you need the option to disassemble the bed frame later, you can purchase center support beam brackets instead of joining with pocket holes.

STEP 5

CUT and SAND Aprons and Bed Slats

Once your frame is complete, MEASURE the distance of the sides of the frame and the head/foot of the frame to ensure your measurements for the apron is correct.

From the 1×8″s, CUT two pieces 76″ long for the side aprons and CUT two pieces 56½″ for the head and foot of the bed.

From the 1×4″s, CUT twelve pieces 54½″ for the bed slats.

SAND all of the pieces, paying the most attention to the 1×8″ apron pieces.

STEP 6

ATTACH Aprons

Before attaching apron pieces to the bed frame, DRILL holes in the outer 2×4″s.

Along the side 2×4″s, MARK and DRILL holes at approximately 5″, 17″, 35″, 52″, and 64″, offsetting the holes so that they are not running along the same grainline.

MARK and DRILL holes on the head/foot 2×4″s in the center of the spaces where the support beams join the 2×4″, offsetting the holes so they are not on the same line.

APPLY glue to the outside of the 2×4″s and then, using a power drill, SCREW the 1×8″ to the 2×4″.

We used 2″ wood screws and screwed from the inside of the 2×4″ into the 1×8″ so that the screw did not pierce through the 1×8.

NOTE: if you are using brackets so that you can disassemble the bed later, do not use glue on the post that faces the side aprons.

Also, one of our boards was slightly warped and it did not fit flush in one corner. So to fix the problem, we screwed the corner in as much as we could and then sanded it down. We filled in the screw hole so that it was not visible after painting.

STEP 7

PREP for Painting

FILL any areas, including knots, that need fixing and smoothing. We used Varathane, a water based, sandable wood filler.

SAND and WIPE down to prepare for priming.

STEP 8

PRIME and PAINT

APPLY primer before painting your bed frame.

We applied BIN primer on knots and on the cedar legs to make sure that we didn't have any yellow seeping through our paint in the future.

Next, we applied Bulls Eye 123 primer on all the visible parts of the bed frame that will be painting.

Once your primer is dry, SAND and WIPE down well to remove all dust.

You may wish to CAULK the space between the 2×4″s and the 1×8″s as we did.

When your primer and caulking are all dry and your bed frame is sanded and wiped down, APPLY one to two coats of your topcoat paint.

STEP 9

ATTACH Felt Pads and Bed Slats

Once your paint is dry, you may want to ATTACH felt pads to the bottom of the bed frame legs to protect your floor surface.

Finally, place the bed slats, spaced out on the bed frame with equal distance between each slat, leaving around 2¾″ to 3″ for airflow between the bed slats to keep the mattress from getting moldy.

SECURE the bed slats by nailing them in place with finishing nails.

If you need the option of disassembling the bed later, you could use spacers to hold the bed slats in place. Alternatively, you could screw the slats in place and remove the screws later, or you could just remove the finishing nails.

STEP 10

ADD Mattress and Celebrate

You have done it! You built a BED!

ADD your mattress and celebrate !

We topped our homemade bed frame with a fabulous memory foam mattress from Nectar

If you make your own bed frame, please share and tag us @5minutesformom in your social channels.
We would be thrilled to see your work!