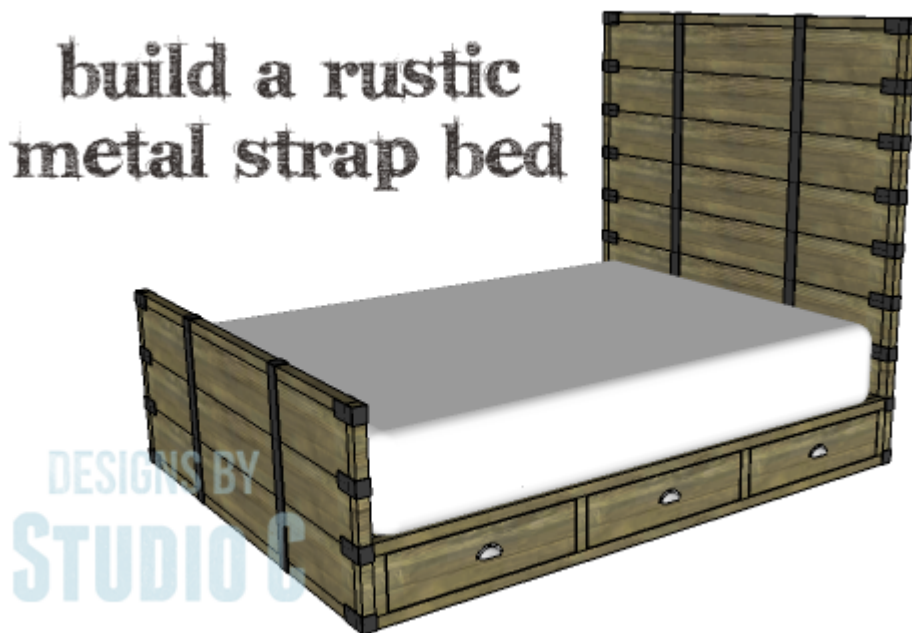


# Build a Beautiful Rustic Bed with Metal Details

## DIY Plans to Build a Rustic Metal Strap Queen Bed

Designed to resemble an old trunk, this bed looks much more complicated than it really is... The DIY plans to build a Rustic Metal Strap Queen Bed feature a total of six drawers (three on each side) as well as metal strap details. The straps are actually pieces of 2" wide aluminum bar that can be spray painted prior to installation. The drawers span almost half of the width of the bed for plenty of extra storage and little wasted space!

build a rustic  
metal strap bed



The drawers are drawn to use 30" drawer slides. They can be a bit pricey so do a quick Google search or visit eBay for the

best deal! If the 30" slides are out of the budget, the drawers can be shortened and shorter drawer slides can be used.

The plan is also drawn to use slats, assuming the user is using a foundation under the mattress. Three pieces of plywood can be placed along the width of the bed (with ventilation holes drilled in them) for a platform style bed.

The drawer framing is attached to the lower edge of the headboard and footboard. Large metal L-brackets attached to the headboard or footboard and the top edge of the drawer framing will offer additional support.

The aluminum bar can be cut with a jigsaw and a metal blade or a bandsaw with a metal blade. Use a file to smooth the edges of each piece!

## **Materials:**

- 1-1/4" pocket hole screws
- 2-1/2" pocket hole screws
- 1-1/2" screws
- 2-1/2" screws
- 4 large metal L-brackets
- 6 – 8' pieces of 1/8" x 2" aluminum bar
- 3/4" screws to secure the metal detail
- 6 sets of 30" drawer slides
- Cabinet pulls
- Wood glue
- Sandpaper (100, 150, 220 grits)
- Finishing supplies (primer & paint, or stain, sealer)

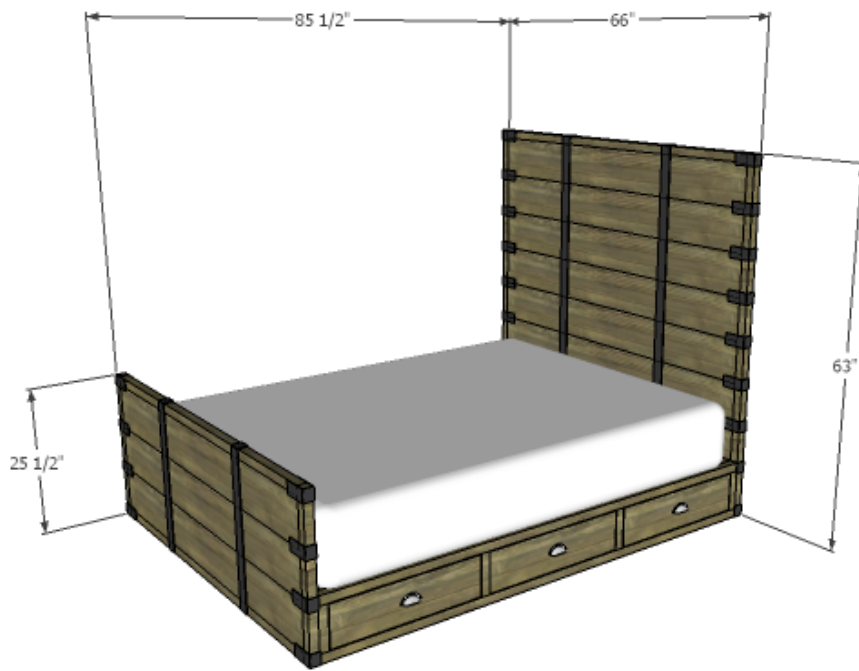
## **Lumber:**

- 1 – 1x2 at 8'
- 13 – 1x3 at 6' (or 3 – 4' x 8' sheets of 3/4" plywood for a platform style)

- 8 – 1×6 at 8′
- 2 – 1×8 at 8′
- 11 – 2×2 at 8′
- 2 – 2×4 at 6′
- 11 – 2×8 at 6′
- 1 – 4′ x 8′ sheet of 3/4″ plywood

## Cut List:

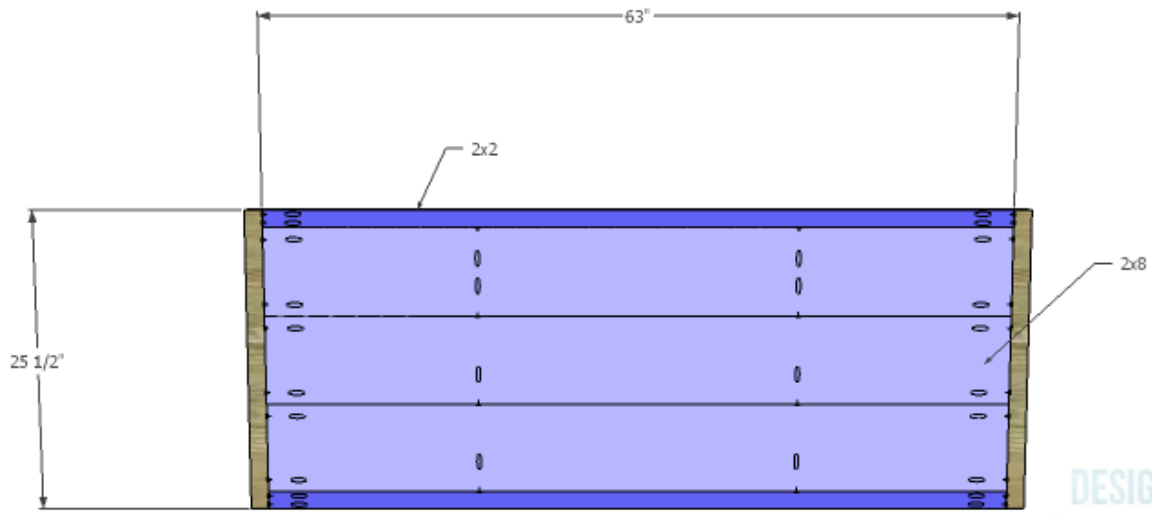
- 4 – 2×2 at 63″ – Headboard Framing
- 8 – 2×8 at 63″ – Headboard Planks
- 2 – 2×2 at 63″ – Footboard Framing
- 2 – 2×2 at 25-1/2″ – Footboard Framing
- 3 – 2×8 at 63″ – Footboard Planks
- 5 – 2×2 at 82-1/2″ – Drawer Framing
- 12 – 2×2 at 7″ – Drawer Framing
- 2 – 1x material ripped to 3/4″ wide (wide enough that two 3/4″ pieces can be safely ripped away on the table saw) at 82-1/2″ – Slat Support
- 13 – 1×3 at 63″ – Slats
- 4 – aluminum bar at 25-1/2″ – Metal Detail (Footboard)
- 16 – aluminum bar at 4″ – Metal Detail (Footboard)
- 10 – aluminum bar at 1-3/4″ – Metal Detail (Footboard)
- 4 – aluminum bar at 63″ – Metal Detail (Headboard)
- 28 – aluminum bar at 4″ – Metal Detail (Headboard)
- 16 – aluminum bar at 1-3/4″ – Metal Detail (Headboard)
- 1 – 1×2 at 82-1/2″ – Drawer Framing
- 8 – 2×4 at 30-3/4″ – Drawer Slide Spacers
- 6 – 3/4″ plywood at 23″ x 28-1/2″ – Drawer Box Bottoms
- 12 – 1×6 at 28-1/2″ – Drawer Box Sides
- 12 – 1×6 at 24-1/2″ – Drawer Box Front & Back
- 6 – 1×8 (ripped to 6-3/4″ wide) at 25-1/4″ – Drawer Fronts



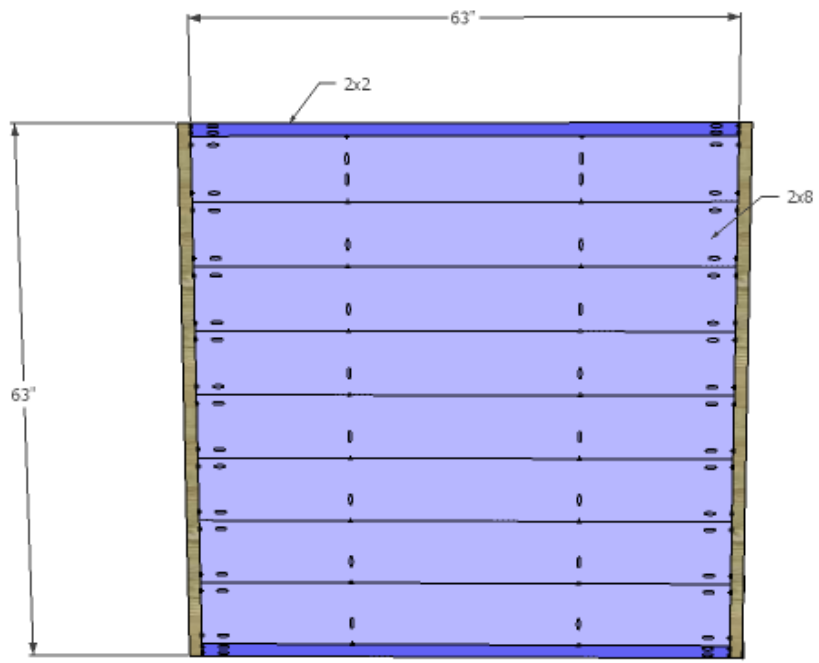
*Click on the drawings for a larger view!*

## **Step One**

Cut the pieces for the headboard and the footboard. With the pocket hole jig set for 1-1/2" material, drill pocket holes in each end of the framing pieces (the top and bottom pieces) as well as the planks as shown. Assemble the headboard and footboard using glue and 2-1/2" pocket hole screws. Drill the pocket holes in the planks so they line up – the goal is to position the aluminum over the pocket holes so they won't have to be filled so be strategic in drilling the pocket holes!



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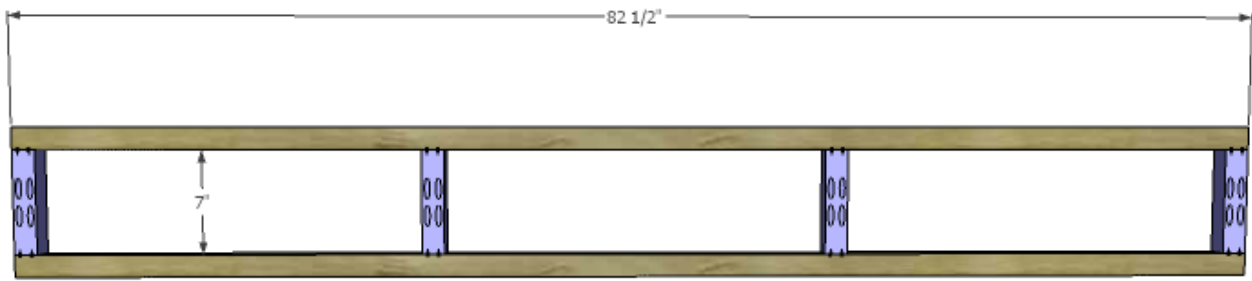
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## Step Two

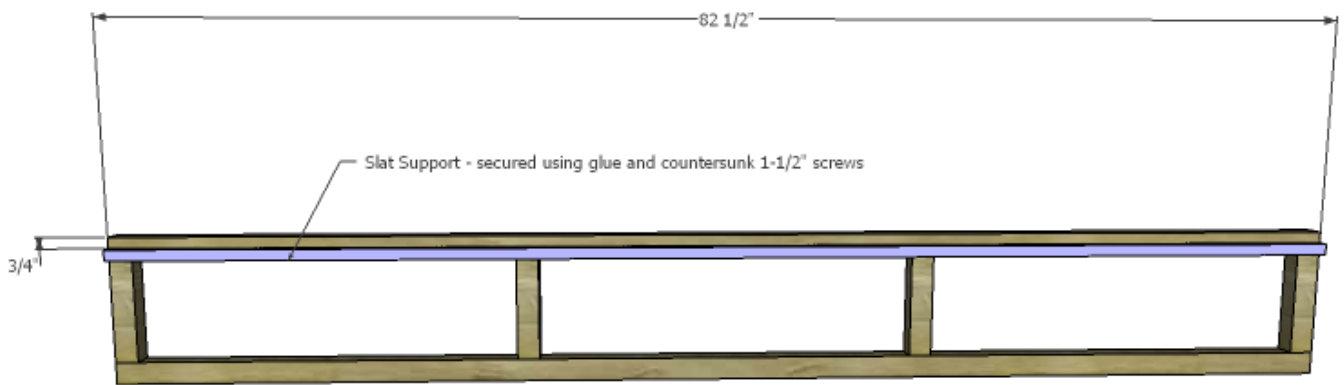
Cut the pieces for the drawer framing. The center section of the drawer framing will have a 1x2 at the top instead of a 2x2

to allow for the slats or plywood platform. Drill pocket holes in each end of eight of the shorter 2x2 pieces. Assemble the outer drawer frames using glue and 2-1/2" pocket hole screws.

Cut the pieces for the slat supports. Rip these pieces from a board wide enough to do it safely on a table saw (multiple 3/4" square dowels can also be used). Pre-drill the holes for the screws, then secure the supports to the upper 2x2 on the framing, locating the supports 3/4" down from the top face, using glue and 1-1/2" screws.



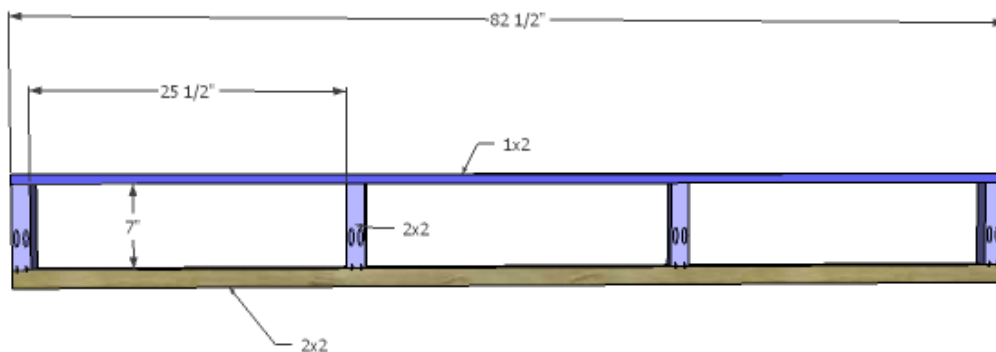
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## Step Three

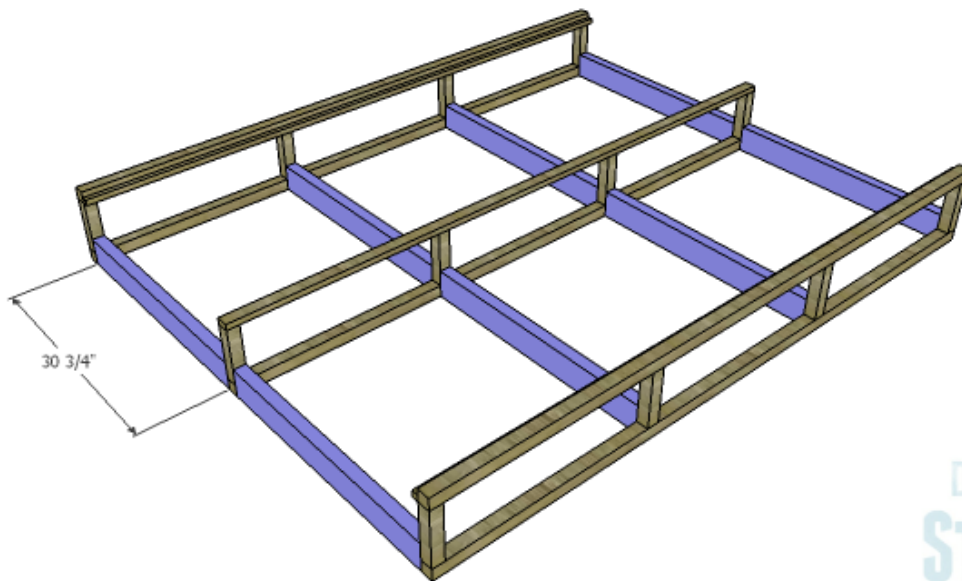
Drill pocket holes in one end only of the remaining four shorter 2x2 framing pieces. Secure these pieces to the remaining 2x2 using glue and 2-1/2" pocket hole screws. Secure the 1x2 to the top using glue and countersunk 1-1/2" screws through the 1x2 into the ends of the 2x2s.



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## Step Four

Cut the 2×4 pieces for the drawer slide spacers and drill pocket holes in each end. Secure the 2×4 pieces to the drawer framing pieces using 2-1/2" pocket hole screws. Glue is optional – if the drawer framing will need to be taken apart in the future, do not use it!



## Step Five

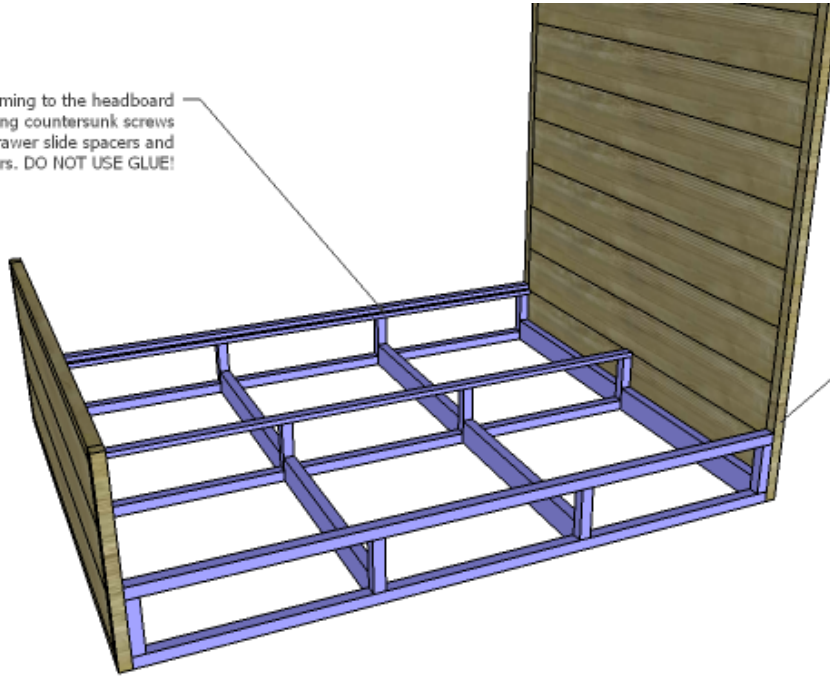
Secure the drawer framing to the headboard and the footboard using 2-1/2" screws through the 2×4 spacers and the outer (shorter) 2×2 framing pieces. DO NOT USE GLUE!

Large L-Brackets can be used to further secure the headboard and the footboard to the drawer framing.

Cut the pieces for the slats and secure them to the slat supports and center framing with screws. If using plywood as a platform, cut three pieces at 27-1/2" x 63". Use a hole saw to cut ventilation holes in each panel. The panels will rest on the side slat supports and the center framing.

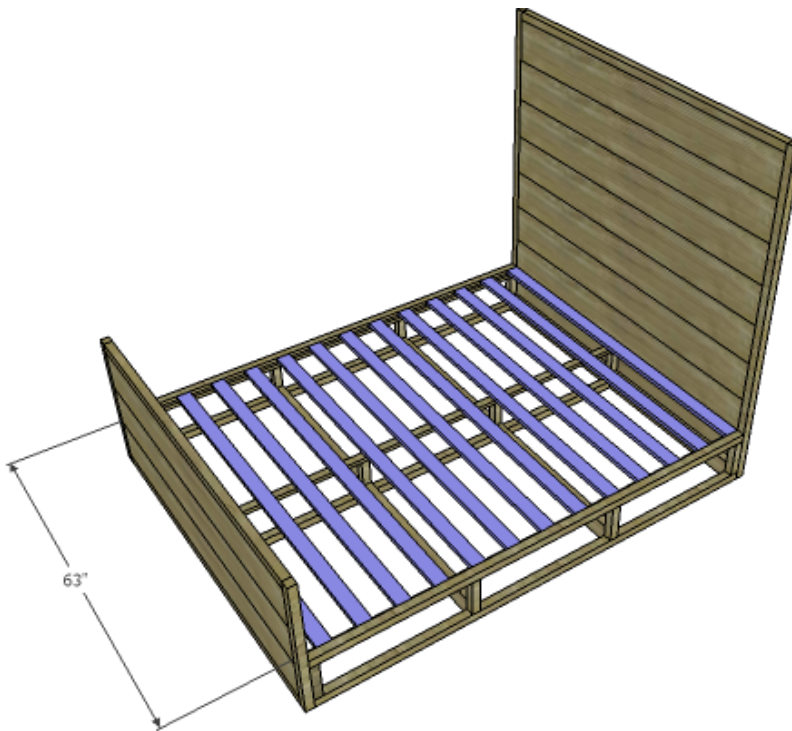


Secure the drawer framing to the headboard and footboard using countersunk screws through the 2x4 drawer slide spacers and the 2x2 dividers. DO NOT USE GLUE!



Add metal L-Brackets for additional support

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63"

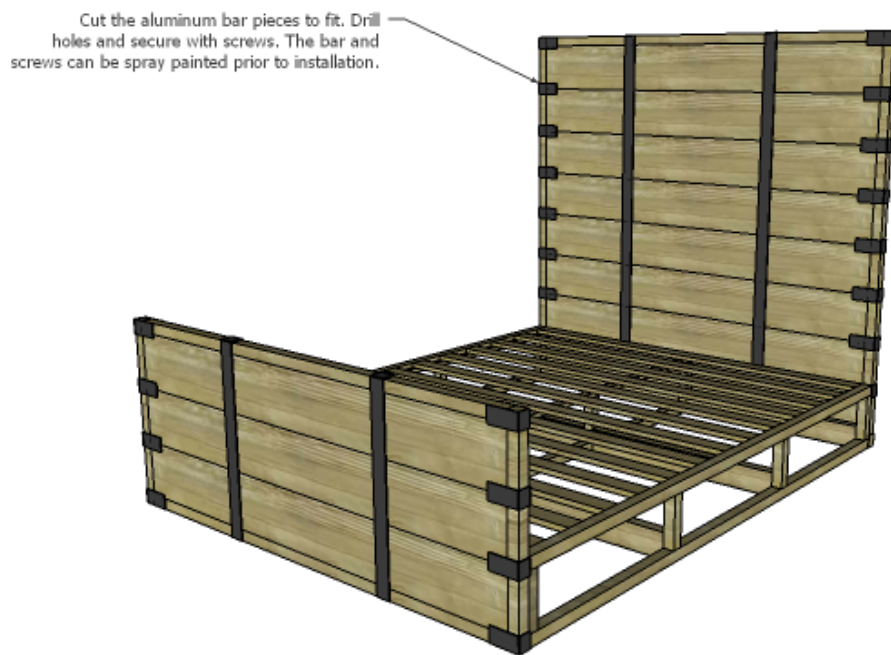
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## Step Six

Cut the pieces of aluminum bar for the metal detail. Use a file to smooth the edges of the aluminum. Drill holes in the aluminum to secure the pieces to the headboard and footboard. The pieces are positioned to cover the pocket holes so they won't have to be filled. Also, the smallest pieces (1-3/4")

are to be positioned on the top and side edges of the headboard and footboard. This is so the metal looks as if it wrapping around the wood.

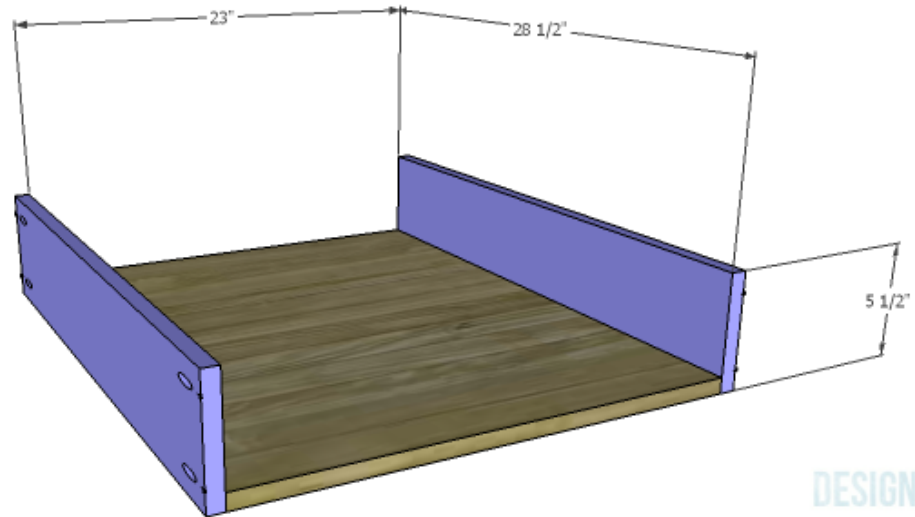
The aluminum pieces and screws can be primed and spray painted. I recommend using red oxide primer as it helps the paint stick to the metal much better than without primer!



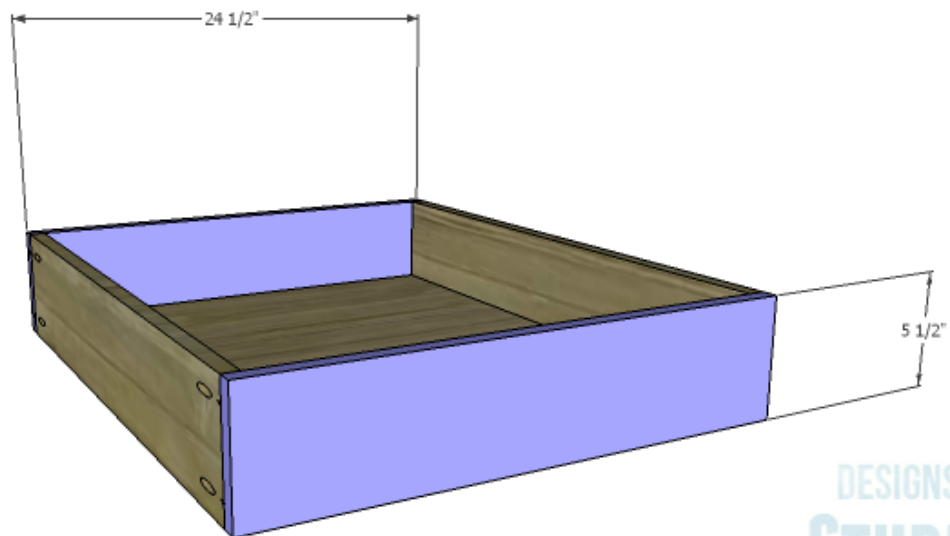
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## Step Seven

Cut the pieces for the drawer boxes. Drill pocket holes in all four edges of the bottom as well as each end of the sides. Assemble the drawer boxes as shown using glue and 1-1/4" pocket hole screws. Install the drawer slides according to the manufacturer's installation instructions, locating them  $\frac{3}{4}$ " back from the front edge of the sides. For an easy tutorial, [click here](#). Make any necessary adjustments.



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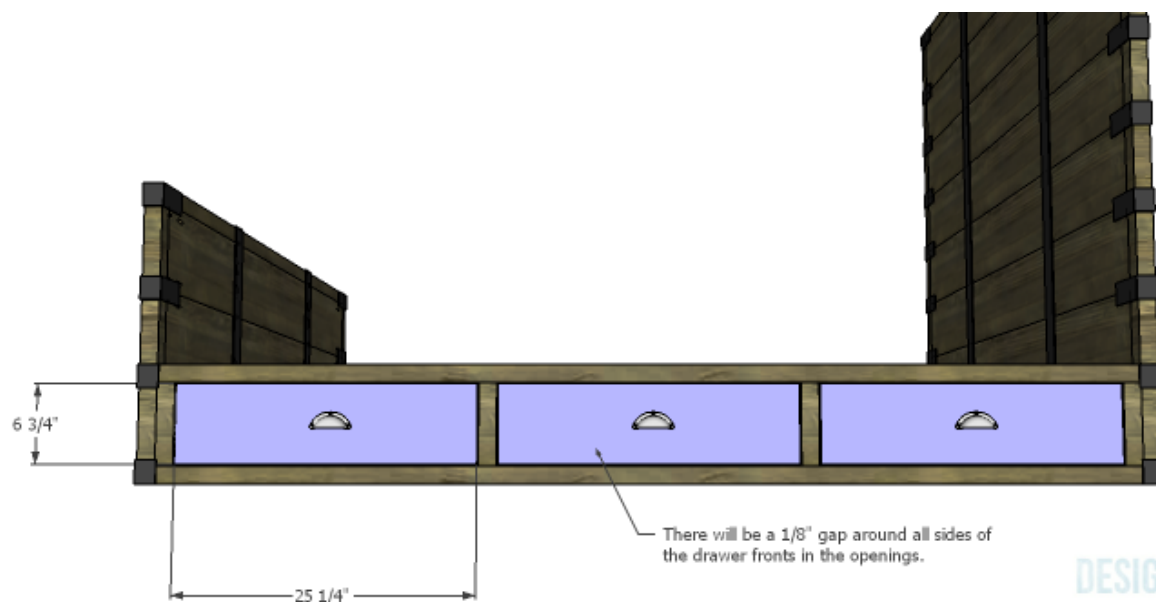


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## Step Eight

Cut the pieces for the drawer fronts. Mark the position for the drawer pulls and drill the holes. Shim the drawer front in the opening – there will be a 1/8" gap around all sides – then drive screws through the holes for the drawer pulls into the drawer box. Open the drawer, and secure the drawer front using

countersunk 1-1/4" screws from the inside. Remove the screws from the holes for the drawer pull then finish drilling the holes. Install the drawer pulls. For an easy tutorial on installing drawer fronts, [click here](#).



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Finish the bed as desired!

For even further security, the headboard can be secured to the wall with smaller metal L-Brackets. Have any questions about the DIY plans to build a Rustic Metal Strap Queen Bed? Leave a comment below!