

Slat Bed



1

Start by routing a 20mm wide x 12mm deep groove along the length of both 190mm x 45mm x 1515mm rails. (This will be where the vertical slats fit into the bottom of the bed head and bed end).

2

Next, rout a 20mm wide x 12mm deep groove on one of the 70mm faces of both 70mm x 35mm rails. (This is for the top rails of the bed head and bed end.)

3

Drill three 10mm diameter dowel holes to a depth of 40mm in each end of the bed end rails. These will be attached to the upright posts of the bed head and the bed end.

4

In the tops of the bed ends, drill two more dowel holes 15mm in from each side of the vertical post and in the middle of the wood. The long side rails need only two dowels in each end. (These will not be glued.)

5

Grab the vertical slats (140mm x 20mm x 735mm and x 435mm) and line them up against the posts (90mm x 90mm x 1195mm and x 895mm) to see where they should be attached. They should start 50mm from the top of each post and end 400mm from the bottom. Then use the dowel holes in the rails as a guide to mark the positions for corresponding holes on the posts.

6

You are now ready to put the two bed ends together. First, slide in the vertical slats (six for each end) between the top and bottom rails. Slide all the slats hard up against each other and then measure the remaining distance. Divide this by seven, and cut seven spaces from the 19mm x 12mm timber. Then attach the rail dowels to the posts, glue, and hold the frame together with pipe clamps.

7

Place and glue the spacers in the grooves between the slats (both bed ends are made in exactly the same way).

8

Locate the long rails (without grooves) and line up with the bottom rails of the bed ends. Drill dowel holes into the posts and attach the long rails to the posts. Do not use glue in the dowel joints as the bed will be held together with the Maxilocks.

9

Maxilocks come in packs of four, with an allen key to lock everything into place. Screw each Maxilock to the internal corners of the rails and posts to connect them together.

10

Now the bed frame should be complete, so it's time for the runners and horizontal slats. Using the 40mm x 40mm x 1950mm pieces (runners), glue and screw onto the inside of the long rails, 110mm up from the bottom and 45mm in from each end. They should fit just inside the Maxilocks.

11

Now it's time to add the supporting rib (90mm x 35mm x 2080mm) down the middle. Carve a 35mm groove out of an offcut block of wood, and screw it to the end rails underneath the slats, which are level with the runners. The middle rib will then sit snugly in the groove and can be removed easily in case you ever need to take the bed apart.

12

Finally, space all 12 slats (90mm x 35mm x 1555mm) evenly down the runner. Screw the two end slats onto the rails and one somewhere in the middle. This will stop the slats moving around too much from mattress movement. It will also stop the slats from bunching. Then grab the nylon string and run it over the slats and staple on top of each slat. These need to be done on both sides of the bed.

13

Varnish and stain as desired. We used Cabots Baltic Finish.

The cost of the bed is around \$300.

Materials

Wood cut to size:

2 x 190mm x 45mm x 2035mm (long rails - sides of bed)

2 x 190mm x 45mm x 1515mm (short rails - bottom rails of both bed ends)

2 x 90mm x 90mm x 1195mm (posts - bed head)

2 x 90mm x 90mm x 895mm (posts - bed end)

2 x 70mm x 35mm x 1515mm (top rails of both bed ends)

2 x 40mm x 40mm x 1950mm (slat runners)

12 x 90mm x 35mm x 1555mm (slats)
1 x 90mm x 35mm x 2080mm (middle rib)
6 x 140mm x 20mm x 435mm (vertical slats " bed end)
6 x 140mm x 20mm x 735mm (vertical slats " bed head)
20 x 19mm x 12mm (evenly spaced slats with spacers cut between)

1 set Maxilock brackets
1 pack 65mm chipboard screws
1 pack 40mm chipboard screws (for Maxilocks into side rails)
2.1m of 10mm dowel
6m x 5mm nylon string
PVA glue
Sandpaper

TOOLS

Drill and 10mm drill bit
Phillips head bit
Power saw
Router and straight bit
Hammer
2 pipe clamps