

How to... make your own bunk beds

Planning.

- Make sure you know the size of the mattress you intend to use.
- Decide on a space where the bunk bed will be positioned.
- Consider the age of the child, and what you want to do with the space under the bed (another bed, or a desk/study area)
- Sketch out the size, the height, and how you want to make the corner connections, and the connection to the corner post.

Materials.

- I have used macrocarpa (because it's a great timber, lovely scent, great grain, sustainable) but you can use any other timber.
- The base of the bed is made from ex150x50 timber, the post is 100x100. I made the ladder and rails from 90x19 timber.
- Slats form the base of the bed, and these rest on a length of 25x25 angle iron fixed to the inside edge of each side of the bunk.

Instructions.

- Set out the size of the mattress, adding 2-3cm so that you have space to tuck the sheets in.
- I wanted to create a "half-housed" joint in the corners, so that the connection is strong but the fixings are less obvious.
- Trim the end of the 150x50 so that half projects 25mm beyond the other section, and then create a similar sized notch in the joining piece. When fixed together with 100mm screws, this join will be very strong.
- Notch out a slot (150mm long) at the height you want the bed to be. This bed will be set at 1650mm high.
- Make the frame for the bed base (essentially a rectangle)
- We opted to fix 2 sides of the frame of the bed to the wall, using the corner of the room for support.
- With the post ready to hold the corner of the bed, fix the frame to the wall (I used 100mm Purlin screws, very strong), then fix the post to the outside corner.
- The post needs to be securely fastened to the floor, and use 100mm screws to fasten the frame to the post.
- The ladder is made from 90x19 timber.
- I set the angle of the ladder at 15deg from perpendicular (plumb)
- Using some trigonometry, I work out the length of the ladder rails.
- The spacing of the ladder rungs must be equal, and the step from rung to rung about 200mm.

-Mark out the rungs on the rails, clamp them together, and drill a pilot hole for the screws. The rungs can be 430mm wide.

-Screw through the rails, onto the rungs.

-The plumb cuts on the ladder can be done when the bed is in place to ensure a good fit.

-The rails around the bed are made from 90x19 timber, with 2 or 3 uprights fixed to the 150x50 base, and then 90x19 rails fixed to the uprights.

For more information and guidance, check out this useful link:

<https://www.consumerprotection.govt.nz/tradingstandards/product-safety/keeping-kids-safe/bunk-beds/>