114 115



DIY chair by Max Lamb

PICTURES AND TEXT BY MAX LAMB

The <u>DIY Chair</u> has been designed to be constructed using very cheap and basic building materials readily available from your local DIY (do-it-yourself) or hardware store, using simple hand tools and joinery methods, by you. I would like as many people as possible to have a go at building their own DIY Chair.

The material I have used is called 'Smooth Planed Pine' which is a type of softwood commonly used by the building industry and has a smooth, splinter free surface. The size of the wood is 34mm x 18mm and available in lengths of 2 metres or 2.7 metres. I bought seven lengths of 2.7 metre pine. Hopefully you will be able to buy the same size and type of wood from your local DIY or hardware store. The most important size is the 18mm x 34mm cross-section of the wood as this dictates the width and depth of the DIY Chair and also the spacing between the seat surface and backrest slats. Depending upon the standard dimensions and availability of softwood in your DIY or hardware store, a second option is to call your local timber merchant or saw mill who will definitely be able to offer you wood with the exact dimensions. This can be a surprisingly rewarding option enabling you to select your favourite type of wood from a plethora of soft and hardwood choices.

In England, where I bought my materials from, the wood and the screws required to make one DIY Chair cost just £9.77. Thus it is possible to personally construct a dining setting for eight people for less than £80. Of course the more the merrier. The point is, the DIY Chair is a piece of furniture that you can construct yourself, sit on and be proud of.

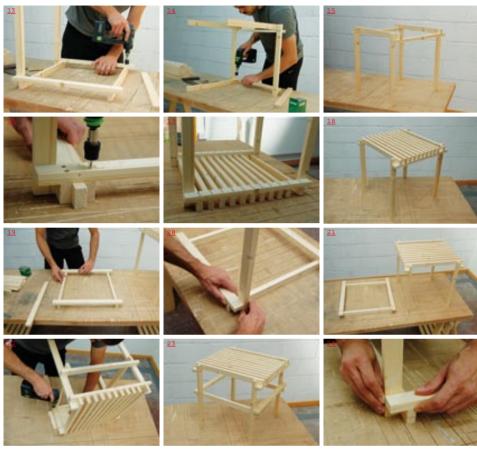


116

- 01. Tool list: tri-square, ruler, sharp pencil, fine tooth tenon or panel saw, sand paper (180 grit is perfect), cordless drill, 3mm drill bit, countersink, cross-head screwdriver, and 124 screws (4 x 7 E mm)
- 02. Using a pencil and ruler mark a line on the first length of wood at 47cm
- 03. Place the tri-square against the edge of the wood in line with the pencil mark and scribe the line across the width of the wood.
- 04. Carefully cut along the pencil line with the edge of the saw to the outside edge of the line, making sure you hold the saw vertically to ensure a square edge.

- 05. Sand the edges clean to remove splinters. Repeat steps 2-5 until you have a pile of 31 identical pieces of wood, all 47cm long.
- 06. Position two pieces of wood at right angles with the wide edge on top of the narrow edge, and use the longest width (34mm) of a third piece as a measuring guide.
- 07. Use the tri-square to check the two pieces are at 90° and ensure the lower piece of wood is still 34mm away from the end of the top piece of wood.
- 08. Hold the two pieces of wood steady and drill two vertical holes next to each other evenly spaced apart, approximately 25mm deep. Then countersink both holes.

- 09. Screw the two pieces of wood together. If possible, set the clutch of your drill so that it automatically stops when the screws
- 10. Rotate the two joined pieces of wood so the lower piece stands vertically. Place a third piece overlapping the other two ensuring its end is flush with the edge of the vertical piece.
- 11. Drill, countersink and screw the third piece of wood, as in steps 8 and 9. Repeat through the face of the vertical piece of wood to form a perfect triangle with 6
- 12. In a similar manner, join a further two pieces of wood to the opposite end of the third piece of wood.



- 13. Drill and screw a sixth piece of wood at the opposite ends of the two parallel horizontals to create a square frame, ensuring a 34mm gap remains at the end.
- 14. Two additional legs can be drilled and screwed to the square frame.
- 15. You should now have a square frame and four legs consisting of eight pieces of wood and twentyfour screws.
- 16. Flip the frame upside-down and using a spare length of wood as a measuring guide, drill and screw another piece of wood parallel to the front edge of the frame at both ends

- leaving the last remaining gap free.
- 18. Stand the frame upright and you should have a total of eleven slats across the top surface of the frame. This is the seat of your DIY Chair.
- 19. Create a new square frame using four pieces of wood. Place the two lower pieces on their thin edge and the other two adjacent on top on their wide edge.
- 20. Use a spare piece of wood as a measuring guide so the two upper pieces overlap by 34mm.

- 17. Repeat step 16 eight more times 21. Using eight screws, join the four pieces of wood together. Remember to check they are at right angles.
 - 22. Slide the frame up the legs of the original frame and use the width of four pieces of wood as a guide before drilling, countersinking and screwing the frame permanently.
 - 23. Sixteen screws should be used to attach the support frame - two screws though every wide edge of the wood - four per corner.
 - 24. Begin the backrest. Repeat steps 6 & 7 to create a right angle with two pieces of wood. The upper piece should overlap the lower by 34mm (the wide edge of the wood).

119



118

- 25. Drill, countersink and then screw the two pieces of wood together. Place another piece of wood on its thin edge at the opposite end of the upper piece of wood.
- 26. Place a second horizontal across the thin edge of the lower pieces of wood and use the narrow width (18mm) of a spare piece of wood as a spacing guide.
- 27. Hold the second slat in position whilst you drill and countersink.
- 28. Screw the second slat in place and then repeat steps 26 & 27 twice more.

- 29. Your backrest should have four horizontal and parallel slats in total.
- 30. Flip the backrest onto its side and add another piece of wood for the right armrest. This should be placed directly beneath the lowest backrest slat and joined using four screws.
- 31. Two screws through the wide edge of the vertical piece into the side of the armrest, and two screws through wide edge of the armrest into the vertical of the backrest.
- 32. Repeat steps 30 & 31 to attach the second armrest. This completes the back and armrest of your DIY Chair.

- 33. Return to the chair frame and legs. Turn the unit onto its side. Place a piece of wood towards the front of the chair parallel with the leg but pointing in the opposite direction.
- 34. See picture for exact position. This piece of wood forms the vertical support for your armrest. Join the vertical piece of wood to the frame using four screws.
- 35. Attach a second armrest support to the opposite side of the chair frame using a further four screws.
- 36. Take the back and armrest section and slide the two vertical pieces of wood through the large gap in the seat slats.









- 37. Lean the backrest backwards as far as it will go and slide it up or down until the front ends of the armrests are in contact with the vertical armrest supports (see image 39).
- 38. Using your final eight screws join the two vertical pieces of wood of the backrest to the inside of the chair frame (image 37), and screw the top edge of the armrest supports to the side edge of the armrests.
- 39. Your DIY Chair is now complete and ready for sitting on.

40. Finally, for the finishing touch, please cut or copy the label and glue it to the underside of your new DIY Chair

Designed by Max Lamb, made by you. Enjoy.

<u>DIY Chair</u> by Max Lamb for Apartamento

<u>DIY Chair</u> by Max Lamb for Apartamento