



RouterCentric

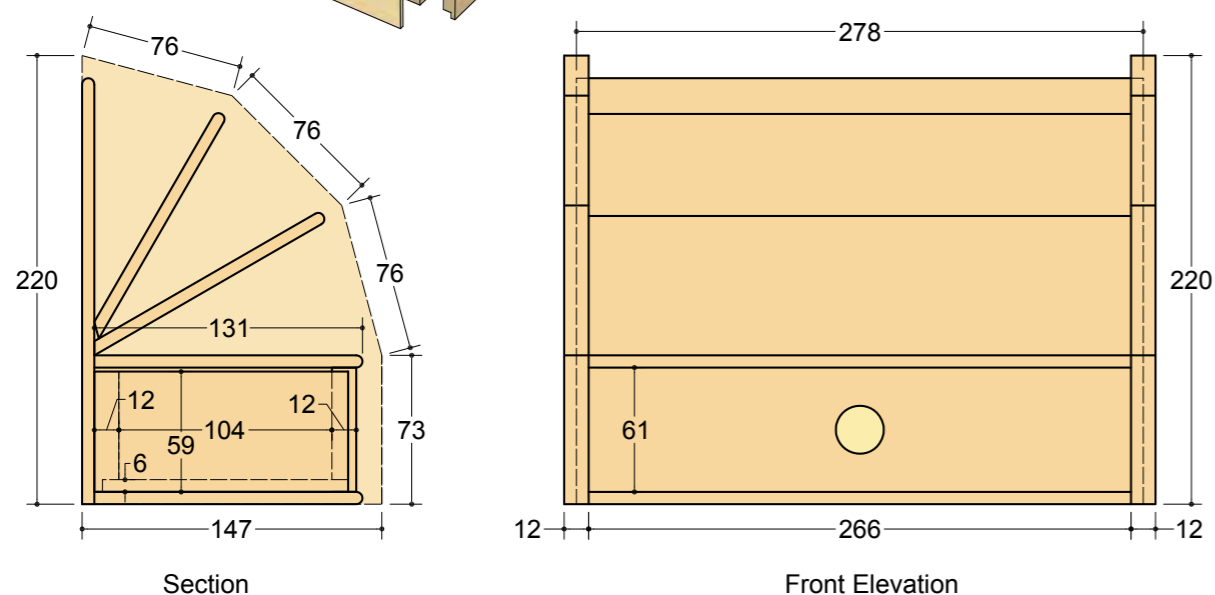
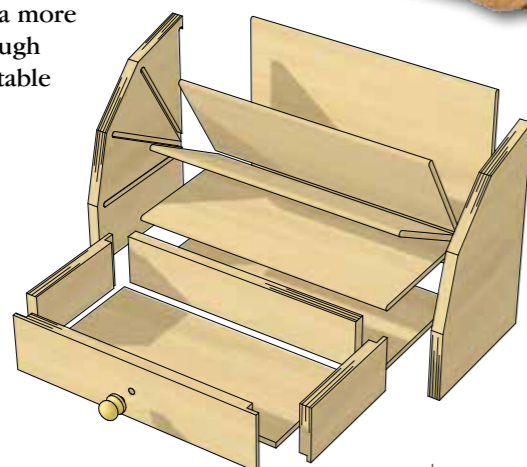
Letter rack

The Editor has a bit of a thing about racks of all kinds... timber racks, tool racks, magazine racks and now his latest creation, a letter rack!

This project uses 12mm and 6mm veneered ply or MDF with edges left raw as they can be stained down to a more acceptable colour. Although this letter rack sits on a table surface it could be wall mounted instead.



PHOTOGRAPHS BY GMCANTHONY BAILEY



1 The first step is to make a template of the end profile. Once drawn it will then be used to machine the slots needed. Use 6mm MDF as it should be thick enough for most guidebushes without them protruding.

2 The template is temporarily spray mounted to a suitable sacrificial board. I use offcuts of polyurethane insulation board as it offers minimal resistance to cutters. A fillet is then pinned on as a fence for the router which has a 12mm straight cutter fitted. Each slot is then machined right through the MDF.

"The length of the slots is important as they must not run right to the front edges of the rack ends"

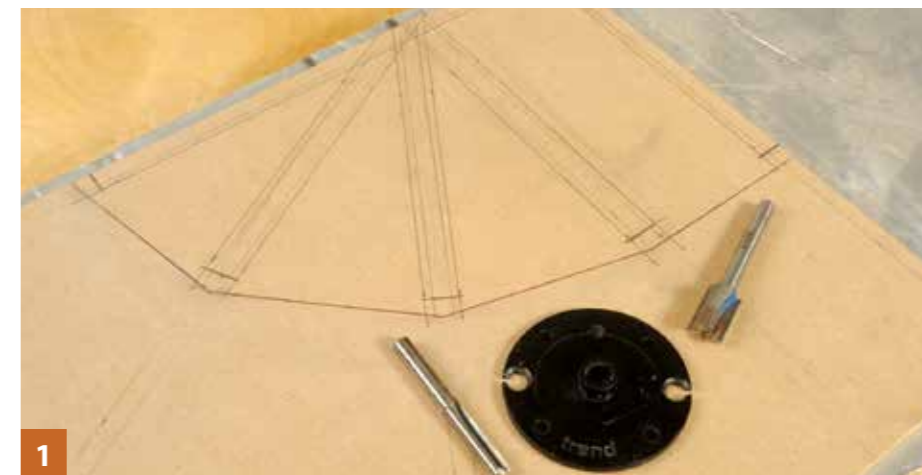
3 Note how the fillet position changes in order to create each slot; you may need to change where the pins are so they always fix into the MDF. Care is needed to create even slots that meet together nicely.

4 The outer slots are effectively not slots as they are open sided. This is because it is easier to line the template up with the workpiece if both uncut sections of edge meet. A waste piece of MDF acts as 'land' for the other side of the router to rest on.

5 Now use carpet tape or special Trend narrow jig tape to stick the template to the workpiece. Note that the length of the slots is important as they must not run right to the front edges of the rack ends.

TOP TIP

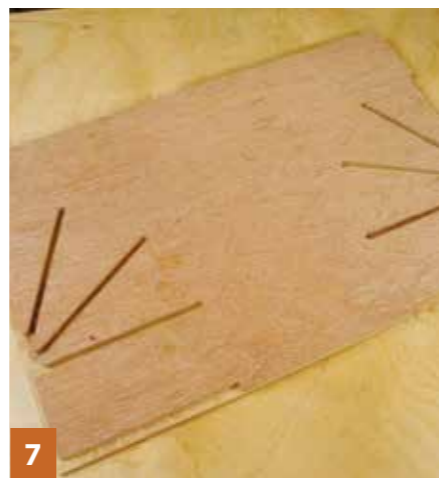
● Do not use a larger diameter guide bush as the large cutter needed to create the slots will ruin the template.



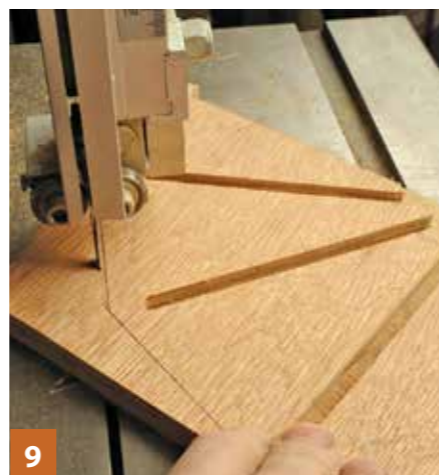
6 A 12mm guidebush combined with a 6.4mm straight cutter is used to machine the divider slots in one rack end. The template is then removed and turned over to create the other slotted rack end.



7 The 12mm ply showing both lots of end slotting. The next job is to cut out the shapes.



8 Cut out the front edge shape on the template and clean the edges to the drawn line. I used a disc sander to do this but you can use a block plane instead. Then draw around the template on the already slotted workpieces.



“In order to remove any grain tearing and get rid of sharp edges, use a block plane to bevel the edges on both faces of the rack ends”

9 Fix both rack ends together with carpet tape and bandsaw out close to the drawn line. Clean the shapes up to the line as you did for the template.



10 In order to remove any grain tearing and get rid of sharp edges use a block plane to bevel the edges on both faces of the rack ends.

11 Cut all the dividers to length with the veneer grain running from end to end. It doesn't matter if the dividers are overwidth. What I did was to sit the components in the slots of one rack end to check they all fitted together correctly. Do the back and base first. Then round over the front edges as seen here, I used a **small Wealden multiprofile cutter**.



12 Sand all faces with an orbital sander. Run glue in all the slots and carefully assemble the whole rack on end. Make sure the back and bottom meet with glue in place. Tug the shelves forward so there is no visible gapping in the slots. Use a handy weight on the top to hold everything together.



13 Any minor projection underneath a rack end should be sanded off in situ by rubbing on an abrasive sheet so that the rack is not susceptible to rocking.



14 An abrasive 'bat' is a great way to sand edges and still keep them flat. Use it on the bevels as well so the whole thing is ready for to take a finish.

*“The drawer front is rebated using a **small Wealden tenon cutter** so the sides sit in just a fraction”*

15 Cut out all the drawer components except the base. The drawer front should be a 'plug' fit. The drawer sides and rear can be 2mm lower on top. The drawer front is rebated using a **small Wealden tenon cutter** so the sides sit in just a fraction or the drawer will not run. The sides have rebates for the drawer back. Make sure the assembled width is correct at the rear of the drawer. For both this and the next step, make sure you use a push block which is truly square.



16 The base rebates are now complete, wide enough so that the 6mm base sits in by about 1mm. Use X marks so that you create a perfectly matched opposite pair and avoid any error.



17 The drawer box is glued and pinned using veneer pins which are punched in and filled over. Check for square and once set, cut, glue and fit the base, weighting it in place until dry.



18 Now for the mucky bit. I used spirit dye and wore rubber gloves to keep the dye off my fingers. Apply repeatedly for an even effect. Lay the rags outside to dry, thus avoiding any possible accidental rapid oxidation which can cause fire. Light coats of spray lacquer rubbed down between coats with a final waxing completes the job. Now let's hope the postman doesn't just bring bills! ■

