



# BAILEY'S ROUTER CLASS

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# Routed lettering



**Anthony Bailey's** method for sign-writing with your router



## THE PROJECT

I needed a new name sign for our house and so I thought I would try making my own. Now, we already have a large No.59 on the wall, and previously the house was called Sportsview as the house overlooks the village sports ground, but all the utilities keep sending us mail with the original name, Roseland - so that was what we decided to put on the house sign, as we have roses in the garden.

**T**he router is still the most versatile power tool there is. Along with a vast range of cutters, jigs and gadgets – many of which you can also make for yourself – it can help produce high-quality woodwork. This series is intended to show you what the router can do, while assuming the reader has a general level of woodworking knowledge. We hope to show you the aspects of each project that specifically involve the router and how this great bit of kit can expand your woodworking skills.

Each month we will highlight the jigs, cutters and gadgets you will need to help you get more from this incredible machine. Feel free to send us pictures of your routing endeavours, or post them on the WPP forum at: [www.woodworkersinstitute.com](http://www.woodworkersinstitute.com)

PHOTOGRAPHS BY GMC/ANTHONY BAILEY



## THE JIG



1

On your PC, choose a simple font shape, blow it up and print, if necessary, across two sheets of A4 paper. I chose an outline setting which uses less ink and makes it easier when marking out the guidebush allowance. Spraymount it to 6mm MDF



3

Fit a straight cutter that matches the guidebush – fortunately, a 16mm cutter will exactly match the size. In 6mm stock you will need two passes to break through into a sacrificial board placed underneath. Start with the trickiest curved shapes, so if it goes wrong you haven't wasted lots of effort making the whole template! Proceed with care, following the pencil lines and avoid moving from side to side as it will widen the guidebush slots



5

The lengthwise slots are made using a batten as a fence. Short straight sections of letters are also done at the same time, linking up with the previous freehand curves. You will probably notice that some letters such as O and A may be taller than other squarer letters – this is because it is intended to look more visually pleasing



2

Mark down the centre of each letter form and then mark outwards each side half the guidebush diameter, in this case 8mm, as it was a 16mm guidebush. Most lines can be ruled but curved shapes require a bit of careful hand finesse in drawing them out



4

The vertical legs of each letter are done using a router T-square clamped on the board. Note how the slots are not only wider than the original letter profiles but also overrun to meet the top and bottom guidebush pencil lines



6

Use a sharp chisel to help lift the paper off and clean away any sticky residue with white spirit. Check the shapes are smooth and use a half round file to correct any obvious defects in the shaping



7

The house name template ready for use. It is only going to be used once but as you proceed in setting out and machining it, the process gets easier. The tricky shapes are, of course, any curves as they will be formed freehand. Once made and the shapes cleaned up, the actual name sign isn't difficult to make

# THE CUTTERS

Top row: 16mm straight cutter to match guidebush size; 45° V-point used with the 16mm guidebush; combined drill/countersink for the nameplate fixing holes; and a bearing guided 45° bevel cutter used to chamfer the edges of the board.

Bottom row – alternative cutters: tiny Milescraft V-point; larger 45° V-point; Trend CraftPro 60° two and three blade V-point; and a Wealden three blade V-point. These latter ones give a cleaner cut and the 60° angle cut often looks better.



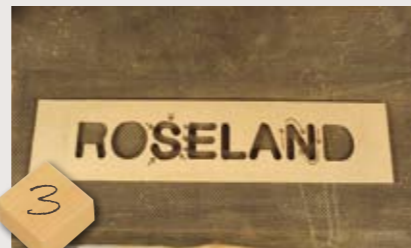
# MAKING IT...



The first thing is to make a test piece and then machine all of it out. This takes only five minutes or so and reveals any problems before you commit to decent timber. I used a piece of birch ply because, as the layers are revealed, any errors in the shaping of the template are shown up. Fit the correct guidebush and a V-point cutter of the most suitable diameter. The cuts are done in one plunge and unplunged immediately each cut is done, to avoid creating burning and divots. If you look carefully the R, O, S in particular have problems, looking distinctly uneven



More filing of the template was required so the curves are smoother still. If the guidebush becomes stuck anywhere, relieve those slots a fraction so the router can move easily



As a result of the trial cut, I determined that the S needed the guidebush pushed against the outside of the template shape and down halfway from the top and halfway from the bottom to meet in the middle, so there was less strain on the thin peninsula sections in the middle. The E's vertical leg needed the cut to be on the outside so it didn't wander where the crosspieces are. The N needed a clean slotting motion in two halves, again from top and from the bottom, so it would avoid the damage that occurred on the test piece. The felt-tip marking is a reminder for when I was machining



The template needs to be pinned carefully on to a pre-sized timber blank. Mark the limits of the lettering height and length accurately on the blank and the position of the intended wall screw fixing holes. Now, sit the template over the blank, siting the pencil lines previously drawn, and then pin through the template where the screw holes will be. Thus the template is correctly centred and once the machining is done, the pin holes will be drilled through anyway, so no unsightly filler is needed



When freehand shaping the template, a base grip gives better control, but once the template is fitted on the timber blank, you can revert to the more usual knob grip. Plunge to depth and machine in one smooth action and avoid stopping, as this will result in burns. Follow your own advice arrows so you end up with the neatest possible result. Each time you lift the router off, tip the chippings out of the template so the guidebush can move right to the end of each shape



The whole name board machined. There were a several places where the guidebush hadn't quite reached properly – a couple of careful passes ensured the letter shapes were complete



The nearly finished result, just a little tidying required with a sharp chisel to smooth the transition between slots where they meet



A combined drill and countersink designed for routing makes fast work of the screw fixing holes. The original template pin holes have vanished in the process



The nameboard needs a bevelled edge to look more finished and to help water run off. Do this on the router table using a 45° bevel cutter and a through-fence, so you can easily and safely bevel the ends of the board before doing the lengthwise bevels to help prevent breakout



To emphasise the letters and hide any burn marks, you can always infill them with paint, either by brush or my lazy method – laying the template on top as a crude mask and spraying them black. Once the paint is dry, the top is sanded smooth, removing all overspray or surplus brush paint completely before applying an all-weather varnish finish. The sign's now ready to hang

## Router torque

**Q** Tool manufacturers seem to fall over each other to bring out new and better cordless tools – but no cordless router? Wouldn't that be really useful, being able to work wire-free on site or in the workshop? Is it really so hard to make one?

**A** A good point, it would make our lives a lot easier not having to fight with cables or find a convenient socket outlet. Unfortunately, I don't think the present situation is about to change. Some years ago,

Porter Cable from the USA did have a 192 volt model that could handle reasonably sized cutters and was a fixed base type, where you would the motor up and down inside the body. However, it got dropped from their range so one must suppose the demand wasn't that great – although it was quite well regarded. I think the technological problems of creating enough power and prolonged battery life in a machine that operates at such high speeds defeats power tool manufacturers, or at least isn't worth the investment, so just hitch that cable from the ceiling out of your way and keep an extension lead handy. ■



Porter Cable's discontinued cordless fixed-base router

Email your router questions to: [anthonyb@thegmcgroup.com](mailto:anthonyb@thegmcgroup.com)