

BAILEY'S ROUTER CLASS

Dolls' house



Anthony Bailey makes this lovely project that kids of any age can enjoy

THE PROJECT

Dolls' houses are very popular with children or with the adult collector. There are plenty of types on the market, but they can be expensive. Making one yourself, however, isn't that difficult. It's largely an exercise in templating, and once the templates are finished, making identical houses is easy... maybe a business opportunity could be presenting itself...



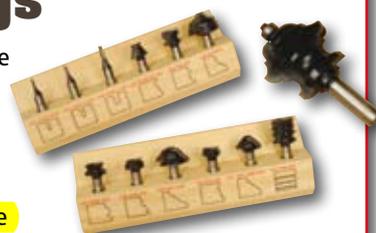
The router is still the most versatile power tool there is. Along with a vast range of cutters, jigs and gadgets – many of which you can also make for yourself – it can help produce high quality woodwork. This series is intended to show you what the router can do, while assuming the reader has a general 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

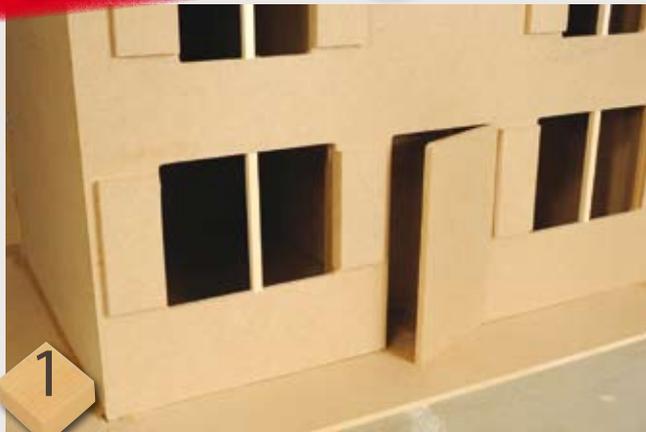
Tiny mouldings

If your dolls' house is intended for the more discerning user, then proper miniature moulded wood sections are required for skirtings, architraves, dado rails and the like. Fortunately, both Trend and Wealden do miniature cutters that can faithfully replicate the full

size thing! The trick when using such tiny cutters is to mould the edge of a wide board and saw it off neatly, and repeat the process as required. You cannot successfully mould a tiny wood section on its own, as it will vibrate badly and shatter. The full-size multiprofile cutter shows the scale difference.



THE JIG



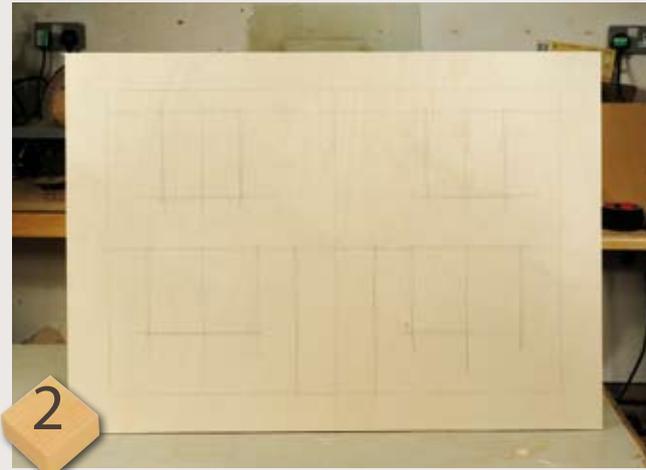
1
The jig is most important for making the front of the dolls' house. We have door and window openings that the router can easily machine. Likewise, you could have a rooflight (window) in one of the roof panels, again routed



3
You need to calculate the difference between the cutter and guidebush diameters, divide it and add this amount to the size of all window and door openings



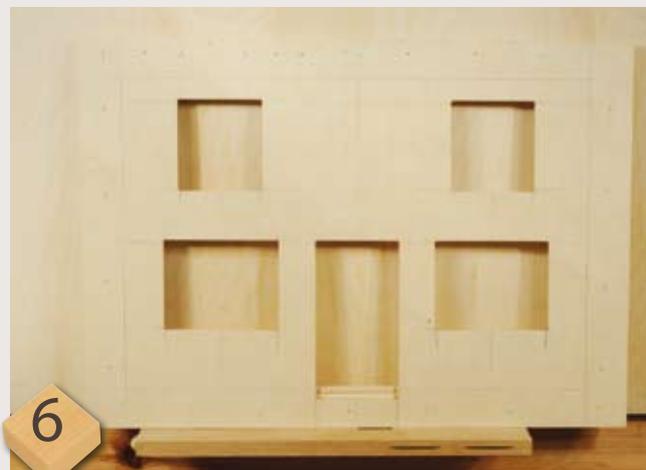
5
Rout out each opening in one or two passes depending on how comfortable the router feels – don't strain the cutter or motor. Use a straightedge or a clamp-on guide for accurate slots. Sit the board being machined on battens so that the cutter can go right through easily



2
Mark out each template with window and door openings. You can have more openings than you finally use – simply ignore the ones you don't want but machine out the others



4
Fit a fillet of wood on each edge underneath the template so the board you are going to machine is trapped in the middle



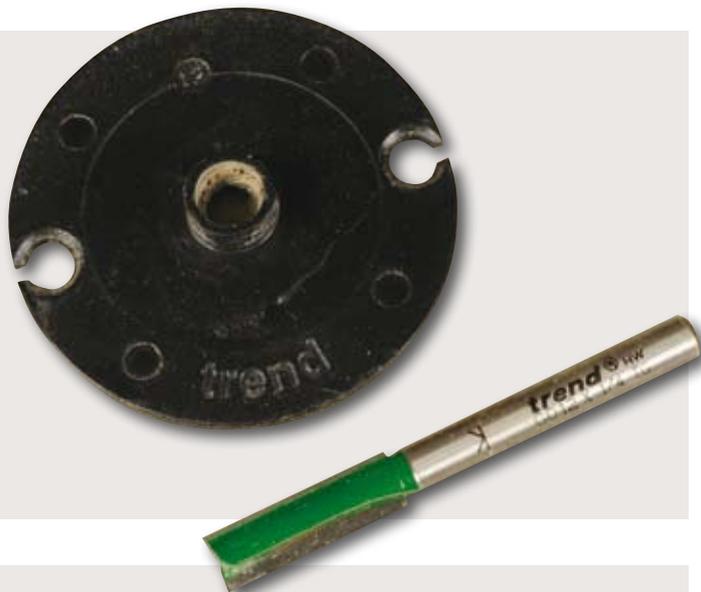
6
The finished template can be used over and over again, and machining the dolls' house front will take just minutes to do, so you make as many as you like very quickly

PHOTOGRAPHS BY GMC/ANTHONY BAILEY

THE CUTTERS



In cutter terms, this is one of the simplest projects because a standard 6.4mm straight cutter will do it all. You need a guidebush as small as possible to use with it, so that the resulting openings don't have heavily rounded corners. It is worth keeping several 6.4mm cutters in stock as they are a universal item. The better grade ones are solid carbide throughout. The cheaper cutters have brazed on TCT blanks, but these are very thin and not practical to resharpen.



MAKING IT...



1

Start by working out the dimensions and style for your dolls' house – you don't need to stick with my design as almost any building style can be replicated. Most dolls' houses are scaled at 1:12th full-size and will suit a vast array of dolls and accessories on the market. The front will need a door and window apertures, known in the window trade as fenestrations – from the Latin with *fenestra* meaning window



2

The baseboard is square, as are the roof panels. The back may also be a plain square, so all these can be cut very neatly with a saw, as can the gable ends of the building. Note that square meeting edges are important because these will simply be butt glued with PVA



3

Use each template with a small guidebush and a 6.4mm straight cutter so you get the squarest corners possible. Use an extractor to clear dust away and allow the guidebush to move tightly into the template corners without dust packing them out and spoiling the line of the cut



4

Once all the components are machined, you have all the basic outer parts you will need. Do a trial dry assembly using duct tape, so you can make sure everything fit together properly



5 Mark the floor and ceiling positions on the inside of the walls, and use a straight cutter and a router T-square to make shallow grooves for the floor and ceiling to slide into. Cut and fit the floor and repeat the grooving operation for the inner walls, ensuring you copy the marks across between components so the grooves will line up correctly. The walls will need door openings and the floors stair access, of course



6 Butt glue the outer walls together, and onto the baseboard as well. Dolls' houses are generally done without more complex joints because of the relative simplicity. Slide the floor, ceiling and walls into place with some glue brushed onto the edges first



7 Cut and glue a chimney stack in place and make a staircase from square section softwood and two thin strips of MDF, then install. Any mouldings can be fitted in the rooms as well. The windows need glazing bars and a front door. The front can be hinged or held on with swing-over clips. The dolls' house is now ready for painting and decorating, and lots of fun! ■

Router torque

Email your router questions to: anthonyb@thegmcgroup.com

Q I've bought a cheap router which works well and has several accessories and a whole set of cutters. I thought this was a good deal but the cutters seem to be all shank and not much at the business end. I'm not complaining as the price was good, i.e. cheap, but I'm disappointed the cutters don't live up to expectation for what I want to do. What do you think?

A It's stating the obvious – you get what you pay for. These will be cheap Far Eastern cutters like the router itself and steel is cheap(ish) while TCT blanks cost more, so you get plenty of shank!

You need to invest in a good quality boxed set of cutters. If they are any good they will cost proper money. The major manufacturers all do starter sets – be warned, even they may have a budget range that aren't as heavily built as the rest, so be discerning and don't make price the most important factor in your choice. You will inevitably duplicate some of the profiles you already have, but in larger sizes. Alternatively, look at what you currently have and pick better examples from the cutter catalogues and make up a custom set of your own.

My selection are the following from top left clockwise:

Straight, Roundover, Ogee, Cove, Corebox, Rebate, Template Trim, Bevel, Vee.



Q I've been trying to apply Danish oil to a newly completed project, but it keeps misbehaving and not going on in an even film with each coat. A friend of mine suggested this could be 'rejection' caused by a silicone spray used when I clean my cutters or lubricate the plunge columns. Is this the cause?

A It may well be the case because any silicone 'dry' lubricant – not including WD40 – or the white powdery stearate coating on finishing papers, can cause rejection. In the case of routers and cutters, use a non-silicone spray, or for the plunge columns use a clear water-free wax such as Liberon Black Bison. Always read the small print on chemical products to ascertain whether silicone is present or not.