

Working with mouldings

We've been trying to 'frame' the Editor for ages – now he's given us the perfect excuse!

RouterCentric

I decided it was high time to look at creating and using mouldings, with particular reference to making picture frames – both simple and built-up types. However, mouldings can be used for embellishing furniture or even domestic interior joinery. In this age of upcycling, it is often handy to create frames for 'objet d'art' to hang on the wall. I have used standard plain softwood sections, plus various bits and pieces from the offcut bin and also ready-made mouldings to show how easy it is to be a bit creative with the right cutters. Modern frames are often quite plain in profile but sometimes you need something rather more imposing to show off a piece of artwork. It doesn't have to be some hugely expensive oil painting, just something that takes your fancy and deserves showing off properly. It could also be given as a present and could double as a photo frame with a difference.

1 Here are a number of different examples. You can use router cutters to create your own frame designs or alternatively, adapt ready-made mouldings. In addition to that, you can use 'off the shelf' ready-made

mouldings in creative ways, too. Adding a suitable finish whether it is a wood dye, milk paint or an antique gold effect will make quite a difference to the final result and will leave you with a professional looking result.

Moulding a batten

2 Let's start with a flat section and see what some of the options are. A standard 50 × 25mm PAR section can be moulded on the edges or more correctly, the corners or arrises as they are known, using cutters from a standard starter set. The obvious place to start is using cove and roundover cutters, although there are also roman ogee and bevel cutters. From an aesthetic point of view, the latter two don't belong together and indeed the bevel works well if it is used on both the inner and outer arrises of a frame. The ogee is a very traditional form that can be allied with either cove and roundover profiles, although either of these can also work well as a more modern style. It is understanding the correct aesthetic use of mouldings and creating a particular style that will make something look either right or wrong.



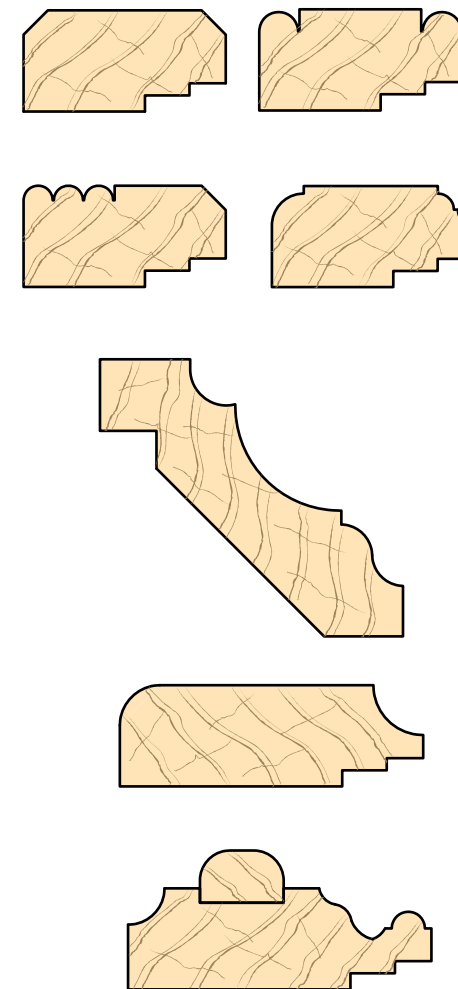
3-5 Before applying a moulding effect you need to allow for glass and a back panel if you want them to both be rebated in. Once you have machined these, you can then do the mouldings. Rebates can be made with a wide diameter straight cutter although I prefer to use a Wealden tenoning cutter, which is designed for this kind of operation. You can use a large rebating cutter but the limitation when creating the wider of the two rebates is the bearing getting in the way although it could be removed. When moving on to the moulding work, part of the workpiece has already been removed making the rebates. In addition, each time a moulding profile is machined, another section of the workpiece is taken away, thus making it more unstable and awkward to continue machining and risking uneven results and reduced safety too. It is vital that you add extra support and control so machining is safe and results predictably good.

6 Often it is enough to have either a side or top board to hold the workpiece squarely and firmly.

"It is vital that you add extra support and control so machining is safe"

7 If that isn't enough, for example, when rounding over a small square section, then you can have supports at both side and top creating a 'virtual' tunnel. This can act against the faces that are still square.

8 If you machine a face back, you will also need a fence outfeed face support, which can be a very thin fillet of wood or one or two layers of veneer double-sided taped to the fence. You can use one workpiece to push the one in front through safely. Obviously all workpiece blanks need to be prepared to the same size cross section before starting the process. To create larger frame mouldings, it obviously helps to have a big 1/2in router because you can use much bigger cutters. However, a small router can be used to create built-up mouldings.



9-14 A flat section of 75 × 25mm PAR softwood can have a shallow slot machined in one face that is wide enough to accept a small square section. The flat section can then be moulded ready to accept the smaller piece. This is moulded separately and then glued and clamped in the slot. Using a slot means easy and accurate glued assembly. This allows you to create a profile that is only achievable otherwise using a spindle moulder.

15-16 Unfortunately a lot of chippings and dust can be generated, which is not only unhealthy but can clog the area around the cutter. Clamping a board over most of the opening, possibly also acting as a hold down, can increase suction and allow the extraction to be more efficient.

17-18 Ready-made mouldings can also be used to make frames and create new profiles by adding them to other prepared stock. A cornice moulding, for example, can be cut to create a deep picture frame that really shows



off an artwork. You can buy some of the simpler profiles, but these may be difficult to emulate on the router table. They can also be added to an existing moulding or flat prepared section to give added visual detail. Cutting and fitting mitre joints together always poses problems. You can use a hand mitre saw, such as the Nobex, which is designed for accurate mitre cutting or a chopsaw/compound mitre saw with a jig.

19 Many sections can be successfully and accurately cut using a Japanese mitre pull saw kit.

20 However, creating a frame with four mitre joints by any means can be problematic, as it is often difficult to get them all to meet properly. A plane shooting board like the one in WPP 81 'Plans For You', can be adapted by fitting a 45° triangular piece of ply so you can shoot the joints cleanly. Any slight angular adjustment can be made by packing one end or the other of the workpiece with a slip of veneer or thin cardboard. Lay the frame out to check that all meets nicely.

21-23 Fixing a frame together is another matter. Butt gluing may be enough but end grain joints don't work very well. Glue up using either mitre clamps or a band or strap clamp. You may be able to use large industrial staples across the rear face of each joint. However, if the mouldings are large enough, then you can use a biscuit joiner or biscuit cutter in the router table, with the aid of a through fence. Done with care, you can create neat invisible joints. Always mark the mitres across the back face so you know which components belong together.

24 Square or rectangular boxes can benefit greatly from having simple or fancy mouldings added to alter the 'look' dramatically, especially when teamed with a complete 'finish' makeover.

25 So, you can see that the intelligent use of moulding cutters, singly or with others, can create visually pleasing results. Maybe it is time to consider adding a few more cutters to the collection? ■

