

Common planes for cabinet making

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To a beginner, listening to talk about planes, there are lots of numbers thrown about as well as terms such as fore, jack, block, rebate, fillister, etc. This is a quick introduction to the more common hand planes – what they are called and what they are used for.

When people talk about a general-purpose plane, most picture a Number 3 or 4 plane. This will perform a number of different duties – it can true up faces and edges of boards, finish plane a surface, trim end grain and make chamfers. It does a reasonable job of each. Modern, iron bodied planes can be adjusted for fine work as well as coarse roughing out and material removal. Specialised planes can be had that will do a better job in each category, but not that much better. (To be pedantic, I would prefer a No. 5 to true up a face, a No. 7 to true an edge and No. 60 ½ for end grain. A properly tuned No. 4 will finish plane most woods as well as you would like – I'll explain all the numbers below.) I think a No. 3 is little small, but some people like them.



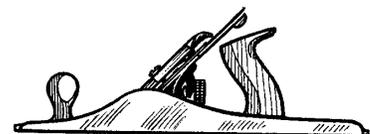
If I were allowed only one plane, I would choose a No. 5. It is small enough for most tasks, but long enough to flatten a face or true an edge. If you adjust the mouth and set the cap iron and blade accordingly, you can perform a number of tasks with it. This is the plane that is recommended for the beginner's course.

A No. 4 is also a good start. However, you may want to add something longer such as a No. 6 or No. 7 for more accuracy.

To digress - what makes and models? Stanley and Record are the most common ones around. All will need work to tune them up. The Stanley Bailey planes are good, as are the Records. I can't recommend the Stanley Handyman range – the bodies are too light – I find they tend to chatter with really hard woods. The best bodies are the Stanley Bedrock range – they can be distinguished by a 60 prefix to the number – a No. 4 will be a No. 604 – these are more rigid than the Bailey bodies, but are no longer made. The new Stanley and Record models we find here are made in Sheffield in the UK. Older Stanleys and all the pre-1948 models were made in the USA. There are other excellent makes such as Millers Falls, and Sargent (sic) as well. I can't comment on the cheap eastern imports – they are much cheaper, but you get what you pay for.

Most people tend to use iron planes these days – some people love wooden planes and they can work as well. However, they do go out of adjustment more readily, so you need more skill to use them. Most of the ones that you will find second-hand will need re-mouthing – the sole has worn down and the mouth is too big for anything except cutting biltong. Adjusting a wooden plane requires some skill, but there is a knack, that I can show you if you are interested.

When starting with a rough board, a scrub plane is used to hog off most of the unwanted wood. This is usually a plane like a No. 4 with a wide set mouth and a coarse set blade. Once the board is mostly flat, then a jack or fore plane (No. 5) is used to true up the face of a board. A No. 5 is longer than a No. 4 so it will bridge hollows. It also has more weight, which helps to plane smoothly



on hard wood. A No. 4 ½ and No. 5 ½ are the same length as the No. 4 and No. 5 respectively, but they have wider cutters – 60 mm instead of 50mm.

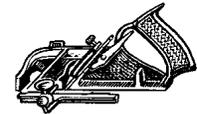
To joint faces, a jointer or trying plane is used. This is often a No. 7, although a No. 6 or a No. 8 will do as well. A No. 8 is rather heavy for constant use – it serves more as a statement of manliness than conveying any real benefit.

Once the face of a board is flat and true, you may want to finish up the surface. No – don't reach for the belt sander! Take a well-tuned No. 4 with a really sharp blade, a finely set mouth and iron. This is called a smoothing plane. Shave off whisper-thin shavings to get a transparent finish that you will not get with sandpaper. For difficult woods, with reversing grain where tear-out is a problem, it is tempting to reach for the sandpaper. However, the purists say that you need to set the mouth even finer, close up the cap-iron, sharpen the blade to pass the hairy arm test, set it for a really fine cut and try again.

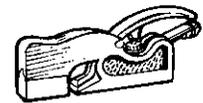
To trim end grain and for small work, a block plane is useful. The main benefit of a block plane is the lower angle of the blade, which is good for working end grain. A simpler model is the Stanley No. 220 with a non-adjustable mouth. Adjustable mouths are fitted to the No. 9 ½ and No. 60 ½ (see right), which have 21° and 13.5° bedding angles respectively.



To make rebates, or rabbets as the Americans call them, the Stanley No. 78 (see right) and the Record No. 778 are the most widely used. Fillister planes are rabbet planes with a fence and depth stop attached. The Stanley and Record are similar, although I think the Record is slightly better as the fence is attached with two rods – the single rod used on the Stanley is not quite solid enough. Both have detachable fences, depth stops, and nickers for cross-grain work.



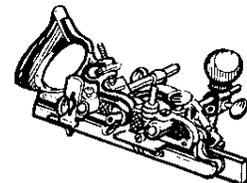
Another useful plane is the shoulder plane, such as the Stanley No. 90, 92, 93 or 94. They are used for fine trimming inside rebates and around tenons. New, they are very expensive, and I haven't found one second hand yet, which is why I don't have one.



A selection of the above types will meet most of your needs. If I were to start from scratch, then I would get a No. 5, then a No. 4; followed by a No. 7, a No. 60 ½ block plane and a No. 778 rebate plane. None of these will be perfect, even out of the box, so they will need some fettling.

If you know what you are doing, second hand planes are excellent buys – carefully inspect the plane – make sure it is complete and undamaged. Many parts are still available, but they do tend to use funny threads, so don't think you can source a missing bit at the local Bolt & Tool! Tune your planes up, keep them sharp and you will use them more and more.

You may want to try other specialised planes - No. 71 Router plane, spokeshaves (No. 151 and No. 152), No. 80 Scraper plane, shoulder planes like the No. 92 or No. 93, side rebate plane No. 79, combination planes such as the No. 45 (see right), or No. 55 with dozens of blade profiles for making mouldings, a No. 10 bench rebate plane, wooden moulding planes, etc, etc.



When you have all these planes, you may find that you still want to get more planes. At this stage you may want to try counselling or you can just accept that you will end up owning more planes that you can really use! There are lots of planes out there looking for good homes.

There are literally hundreds of models of planes that have been created over the years and many books have been written about them. An excellent book for tool addicts is *The Plane Book* by Garrett Hack from the Taunton Press (try Hardware Centre). There are also some excellent web sites on the Internet – look on the club web page for some links to start with.