

Considering Joining Equipment

by Laura Caiaccia

Is there anything more basic to the craft of framing than joining a frame? Not only does it bring four sticks of moulding together into a unified frame, the act of joining a frame determines the strength and physical integrity of the piece for the future.

It's no wonder, then, that framer consider their joining methods so carefully. While some assert that nothing is so certain as the trusty hammer and nail, others rely on an underpinner or plastic insert joiner.

While most experienced framers have a method they consider their favorite for various reasons, often-times what is used in the shop comes down to just two factors: time and money. How to evaluate which method really saves you the most time, and which allows you to make the most money, is not so simple.

Most experts agree, for example, that to join a frame with a hammer and nail takes about six to ten minutes. You can shorten that time a bit if you use a plastic insert machine, which takes roughly five to eight minutes. An underpinner joins the average frame in just two to three minutes.

Does one have to sacrifice quality for speed? Not necessarily. Is faster always better? Of course not. When deciding what's best, it helps to know what your goals and priorities are.

First you have to assess your current needs. How many frames, on average, do you join a day? In a week? In a month? What are the size and style of the mouldings you sell most often? Ask yourself these same questions when considering your future goals as well: in three years, how many frames do you hope to be selling in a day? A week? A month?

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What type of moulding profile do you hope to be selling in three years? How about in five years?

While it's important to buy a piece of equipment that will meet your current needs, be sure not to sell yourself short. Don't be tempted by a less expensive model just because of its price. A new piece of joining equipment is an investment,

and should allow your business to grow and expand, not limit it. Spending less now may simply delay a more expensive purchase you will still need to make down the road.

Framers looking to upgrade the quality of the joining and increase the speed of their production, but who don't have high-speed production as their main concern, often opt for a plastic insert machine. (While these machines are commonly known as "thumbnailers," that term is a registered trademark of Nielsen&Bainbridge used to describe their particular machine. Other equipment manufacturers also product plastic insert machines.)

A plastic insert machine will efficiently produce a clean, professional corner. It can be used with a variety of profile shapes and sizes. The machine's router can be set to different depths and angles to accommodate different mouldings and multi-angle frames, and the plastic inserts themselves come in a range of sizes to accommodate moulding depths, which makes the machine very flexible. The assembly process, while not as forgiving of a poor cut as a hammer, nail, and vise might be, still affords some "play" for the framer to line up the edges of the moulding after the plastic insert has been entered in.

Common wisdom also holds that a plastic insert machine is easier

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to learn to use than an underpinner, so framers concerned with training time may be attracted to the shorter learning curve of this type of machine.

A plastic insert machine is also smaller than an underpinner, which is important to frame shops with limited space in their backroom. Keep in mind, however, that the machine will generate some sawdust, and that fact should also be considered.

No one would argue that the underpinner doesn't offer the most speed to the framer. It takes only seconds to fire a nail into the back of a corner, and experienced users can set up their mouldings just as quickly.

Framers looking to buy an underpinner must be careful, however, to buy one that meets their needs. There can often be significant differences between underpinner models, even those offered by the same manufacturer, and framers should make sure their final decision will not limit their future growth.

It may seem redundant to say that the join happens quickly on a machine that is used specifically for speed, but that fact is an important one. Once the nail is fired into the back of the frame, the corner is joined for better or worse, and if it wasn't lined up carefully before the nail was fired there is little that can be done afterwards.

For this reason, most underpinners have fences and clamps that can be adjusted to accommodate differences in profile shapes, moulding sizes, and cut quality as well as multi-angle frames. There are also jigs and plungers to hold the moulding in position as it is joined. These features can vary considerably, and some offer more flexibility than others.

Also consider the hardness of the moulding you usually join: a switch from hardwood to softwood mouldings usually requires a change in nail type. How easy is it to change the nails in your underpinner? How quickly can this be done?

Be certain that they underpinner you are considering can handle the types of profiles you join most commonly. Also consider they types of mouldings you hope to sell more of in the next few years. Your underpinner should still be going strong in five years—make sure it can handle the more ornate, larger profiles you have upgraded your customers to.

The best way to make sure is to have some sample corners ready to try out on the machine you are considering. Bring some samples of your best selling mouldings, and give the machine a test run.

Other operation considerations include the foot pedal system used by the machine. There are two types of pedals: single (which engages the clamp only, and fires the nail with a

separate function, such as a button) and dual (which engages the clamp when depressed halfway, then fires the nail when depressed further). While many consider the dual-function pedal faster, it takes an experienced operator to work it well.

Finally, remember that most underpinners require an air compressor. This is an additional purchase which you should keep in mind. Compressors vary in price, and some underpinners require a certain amount of pressure to function. Check with your manufacturer to be certain you know what you need.

As with any piece of equipment, consider how well the plastic insert machine or underpinner you are buying is made. Will it withstand years of wear? Are there many parts that might need to be replaced? How expensive are the replacement parts and the supplies (like nails or plastic wedges) that you'll need for the machine?

Also consider the company you are buying from. What is their reputation in the industry? Is there a service agreement? Technical support? Will they train you and your staff? Is there a warrantee?

Remember, there is no single machine that is best at joining all types of mouldings. It's more important to buy a machine that fits the needs of your business and is best for you. ■