

Laminate-Trimmer Survey

Portable, versatile and convenient, these small routers will trim more than laminate

by Herrick Kimball

As a remodeling contractor who does a lot of plastic-laminate countertops, I've used a Porter-Cable 7310 laminate trimmer for years, and together, we probably had trimmed miles of countertops. Just the other day, though, I accidentally knocked the trimmer off a countertop. It wasn't the first fall the tool had taken, but it was the worst. When I switched it on, the little beast coughed some sparks and screeched to a grinding halt.

I did some quick exploratory surgery, and if the trimmer wasn't completely dead when I started, it was when I finished. So I tossed the pieces into the dusty recesses under my workbench and set out to review the laminate trimmers currently on the market.

Laminate trimmers (photo facing page) are designed to trim the overhanging edges of glued-down pieces of plastic laminate. But that doesn't mean they can't be used for other things. Trimmers essentially are scaled-down routers, and their convenient, one-hand size makes them ideal for many lightweight-routing operations, such as cutting shallow mortises for cabinet hinges (photo right) or shaping the edges of trim boards with small roundover bits.

Trimmers are also the recommended tools for routing kerfs for weatherstripping or for cutting openings in drywall (left photo, p. 56) for things such as electrical outlets and recessed light fixtures. And because they have such small bases, laminate trimmers can go where grown-up routers won't fit.

Power is not a priority—With laminate trimmers, power is not necessarily a priority because usually all you're cutting is a thin layer of plastic laminate. But power is important if you use the tool for more than trimming laminate. Although a laminate trimmer will drive any 1/4-in. shank-router bit that will fit through the hole in the base (typically 1-in. dia.), bits that hog off a lot of wood will strain the motor.

To do a comparison test, I chucked a 1/4-in. straight-cutting router bit in each trimmer and used it to bully my way through a 3/4-in. pine fur-



Easier to handle than conventional routers. Freehand mortising a cabinet-door edge for hinges is relatively simple with a 1/4-in. straight bit chucked in a laminate trimmer.

ring strip in one pass. All the motors made the cut, but the 4-amp and lower ones really complained (chart facing page). I wouldn't use these tools for anything but trimming laminate. Among the three 5.6-amp big boys, the DeWalt tool cruised through with the least effort, making it the choice trimmer for bigger jobs, such as chamfering trim boards.

Remove the base to change bits—Accessing the collet to change bits in trimmers is easier if the base is removed. But how easy is it to remove the base? The Bosch and Skil bases must be loosened with a screwdriver or a hex wrench respectively. The Porter-Cable 7310 and Hitachi bases come off by removing a hand-tightened knob, but as the knob comes loose, so do a washer, a spring and the base. You have to be careful not to lose any pieces. The bases of the Porter-Cable 310 and the Ryobi slide off by hand-loosening a

base-lock knob. With DeWalt's trimmer, you flip a lever to remove the base. It doesn't get any easier.

All laminate trimmers have a collet nut that secures the bit; to tighten the nut, you have to hold the spindle shaft in place. The PC 310, Hitachi and Ryobi come with a pair of wrenches, one for the shaft and one for the collet nut. The Bosch unit also requires two wrenches, but one fits into a small slot on the top of the trimmer, where it engages the spindle. Bosch's method works without a hitch, but if the necessary wrenches get misplaced, you're up the creek.

Much more to my liking is a spindle-lock button: Grasp the motor with one hand and depress the button, then use a wrench in the other hand to work the collet nut. The DeWalt, PC 7310 and Skil all have spindle-lock buttons.

Porter-Cable's 310 has the best depth adjustment—When trimming laminate with a bevel-cutting bit, you need to adjust the trimmer's base precisely. If the bit's set too high, it leaves overhanging laminate; if set too low, the bit cuts into the front edge of the laminate assembly. Therefore, all manufactur-

ers except Ryobi have some sort of micro-depth-adjustment knob on their trimmers. This knob fine-tunes depth of cut by moving the base up and down. On most units, micro-depth adjustment works by loosening the base-lock knob first, then turning a thumbscrew height adjuster.

The PC 310 deviates from the rest by using a depth-adjusting ring located at the top of the base. The ring is indexed, and I found that it allows for the smoothest and most precise depth adjustment of any trimmer.

Only the Ryobi trimmer lacks any mechanism for fine-tuning the base height. Instead, the base slides up and down freely, and the user must visually index height adjustments with the aid of a built-in scale.

The best bases are cast aluminum and square—Cast-aluminum bases with plastic sub-bases are on the Bosch, DeWalt and Porter-Cable

LAMINATE TRIMMERS: SPECIFICATIONS AND CHARACTERISTICS



Model	Height and Weight*	Amps	Base	Micro-depth-adjustment system	Spindle lock	Edge guide	List price**	Accessory bases
Bosch 1609 (312) 286-7330	7¼ in. 3 lb. 3½ oz.	5.6	Rectangular, cast aluminum	Thumbscrew knob	No	Ball bearing	\$191	Offset base, tilt base, underscribe trimmer; sold separately or in kit.
DeWalt DW 670 (800) 433-9258	8⅞ in. 3 lb. 9½ oz.	5.6	Square, cast aluminum	Thumbscrew knob	Yes	Ball bearing	\$174	Offset base, tilt base, seaming base; sold separately or in kit.
Hitachi TR-6 (404) 925-1774	7⅝ in. 3 lb. 6 oz.	4	Square, stamped steel	Thumbscrew knob	No	Ball bearing	\$196	Tilt base is standard.
Porter-Cable 310 (901) 668-8600	5⅝ in. 3 lb. 5¼ oz.	4	Round, cast aluminum	Threaded depth-adjustment ring	No	Fence	\$250	Square subbase, underscribe trimmer, offset base, miterfold base, tilt base; sold separately.
Porter-Cable 7310 (901) 668-8600	7⅝ in. 3 lb. 7 oz.	5.6	Rectangular, cast aluminum	Thumbscrew knob	Yes	None	\$165	Tilt base, offset base; sold separately or in kit.
Ryobi TR-30U (800) 525-2579	6¼ in. 3 lb. 2½ oz.	3.8	Round, plastic	None	No	Ball bearing	\$174	None
Skil HD1812 (312) 286-7330	8⅝ in. 2 lb. 11 oz.	2.8	Rectangular, plastic	Thumbscrew knob	Yes	Fence	\$125	None

*Height with base fully retracted.

**Retail and mail-order prices are often less than manufacturers' suggested list price.



Any trimmer can be used to cut drywall. Porter-Cable takes the same motor that's on its 7310 laminate trimmer, packages it with some drywall cutout bits and sells it as a 7399 Drywall Cutout Tool.



Tilt base is standard on the Hitachi. When trimming edges that join at angles other than 90°, use a tilt base. Most manufacturers offer them as accessories. Tilt bases also allow the trimmer to reach close to a vertical surface, but you can't use a bearing bit. You'll have to use a self-pilot bit such as the one shown here.

An offset base allows you to get close to vertical surfaces. Handy for such jobs as routing sink openings and trimming the top edge of a backsplash, an offset base is available separately or as part of a trimmer kit from DeWalt, Porter-Cable and Bosch.

trimmers. These bases are heavier and more durable than the Hitachi base, which is stamped steel with a plastic subbase. A heavier base puts more weight at the bottom of the tool, which makes it more stable. At the bottom of the barrel are the all-plastic bases found on the Skil and the Ryobi. In my experience, plastic isn't as durable as metal, and it's lighter, too.

Except for the PC 310 and the Ryobi, all of the trimmer bases are rectangular. As a laminate fabricator, I like a base with flat sides because it makes a true cut when indexing off a straight-edge, something I do when mirror-cutting seams for plastic-laminate countertops.

Edge guides allow for the use of less expensive bits—All laminate trimmers except the PC 7310 come with a standard, detachable edge guide that is used in conjunction with a straight-cutting bit. Most guides employ a ball bearing that you align to ride along, say, the edge of a countertop while the bit trims the overhanging top sheet. The others are fence-style guides. Edge guides promise a couple of advantages. First, they allow the use of less-expensive straight bits, and second, the guide is separate from the cutting bit, which means it won't gum up with glue and seize or rub a burn mark in the laminate as self-pilot bits and bearing-guided bits are prone to do.

Hand-operated knobs on the edge guides make it easy to get the proper settings, but only the Hitachi, DeWalt and Ryobi trimmers have guides that can be attached and adjusted without a screwdriver and/or Allen wrench.

From my perspective, I can't see going to all the trouble of setting up and adjusting an edge guide when I can chuck in a ball-bearing bit or a self-piloted trimmer bit that has close tolerances already built in. (When using self-piloted trimmer bits, I avoid making marks on the laminate by coating it lightly with petroleum jelly before I start routing.) Besides that, guide attachments allow the trimming of only about 1 in. of overhang at once (center photo, facing page), so if you play it safe and cut your laminate pieces plenty oversize, you'll need to make multiple passes to work up to the edge. In comparison, a self-pilot bit will zip through the excess, and it will get right to work.

Still, I used each tool's edge guide. The ones with a bearing allow you to trim inside curves and to get close to corners, whereas the fence-style edge guides don't.

Design quirks make some tools unattractive—Although a tool that feels good to me might not feel good to you, some tools have characteristics worth noting. I like a tool with a little heft, so I didn't like the flyweight Skil. This tool is the

tallest of the bunch, and its plastic base makes it top heavy. In comparison, the DeWalt, the next tallest, is well-balanced and surefooted. Between the shortest models, the Porter-Cable 310 is bigger around than the Ryobi.

Unlike the rest of the tools, the Hitachi has a standard base that tilts (photo above right), so it's more or less half a base; it doesn't completely surround the bit. If you want the biggest part of the base on the work surface, you're forced to put the power cord in front of the tool when running it from left to right along a countertop, as recommended by the manufacturer. The cord is more likely to be in the way and even more likely to be cut accidentally than if it trailed the tool.

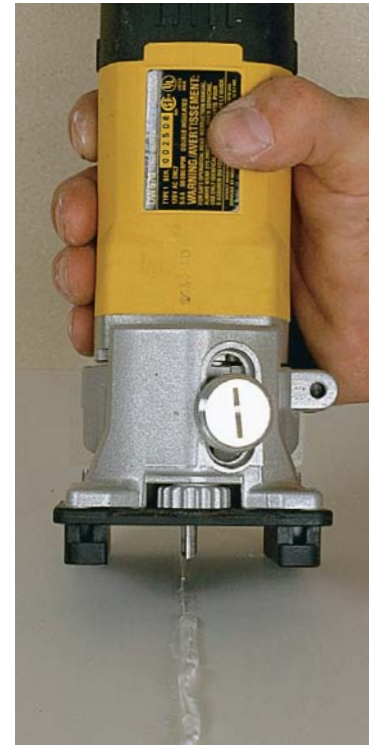
I like portable power tools with long cords; it's downright aggravating to be routing along and to have a short cord get hung up. The PC 7310 has a winning 9-ft. 10-in. cord length, followed closely by DeWalt at 9 ft. 7 in. All other cords except Bosch are 7 ft. to 8 ft. long. Bosch measures in at a pitiful 6 ft. 6 in.

Trimmer kits contain special attachments for working laminate—Some pretty exciting special-purpose bases have been developed for working laminate. DeWalt, Porter-Cable and Bosch offer these bases either individually or in trimmer kits consisting of one motor and several different bases. These trimmer kits present a



Make perfect seams. With an underscribe-trimmer base, you can mirror-cut seams in plastic laminate using the bottom piece's factory edge as a guide. The trimmer bit cuts the top piece only.

An edge guide won't reach if there's a lot of overhang. An edge guide allows trimming with straight bits. But when there's more than an inch or so of overhanging laminate, the bracket prevents the bearing from indexing against the counter's edge.



Skis are a unique DeWalt accessory. Two 3-in. lengths of plastic screwed to the trimmer base allow the bit to straddle the hardened adhesive ooze along a solid-surface countertop seam and rout the adhesive flush to the surface.

much cheaper alternative to purchasing the individual components.

One base, the offset base, has its own collet that's powered via a drive belt that runs around a pulley chucked in the trimmer's collet. An offset base allows you to trim up to about $\frac{3}{4}$ in. from a vertical surface (center photo, facing page), compared with about $1\frac{1}{2}$ in. if you use a standard base. I know a couple of laminate fabricators who do all their trimming with offset bases. These bases are nice but unnecessary. To trim hard-to-reach laminate, I use a carbide-scoring tool that's less expensive than an offset base.

As the name implies, a tilt base tilts to allow trimming of laminate pieces that join at obtuse or acute angles. Porter-Cable, Bosch and DeWalt each offer separate tilt bases; Hitachi is the only make with a standard base that tilts, but it only allows for trimming obtuse angles. I once owned a tilt base for a trimmer, and I never used it. If I were putting together an angular laminate assembly, however, a tilt base would be invaluable.

Underscribe base makes precise surface seams—One of the most challenging aspects of fabricating with plastic laminate is making good-looking surface seams. My technique has been to mirror-cut the seam by guiding the motor along a clamped straightedge while the bit cuts through two abutting pieces of laminate at the same time.

The Bosch and the Porter-Cable 310 offer underscribe bases that simplify seam cutting by using the edge of one piece of laminate as a straightedge (photo above left). (DeWalt now offers a similar device called a seaming base, but it wasn't available at the time I wrote this review.) A guide lip on the underscribe rides along the laminate edge, which must be straight for the underscribe trimmer to work correctly, while a $\frac{1}{8}$ -in. carbide bit routs off the overlapping top piece.

The underscribe is intended to be used after the pieces of laminate are glued down. In theory, no chips from the cutting process will blow under the preglued overlap section, but in practice tests I found some dust does. But more than that, the bit leaves a slightly fuzzy routed edge on the underside of the cut. It's enough to prevent the piece from sticking down level with the adjoining piece of laminate. Although the fuzz can be scraped off, the scrapings then land in the glued surface below, again misaligning the pieces.

I didn't feel comfortable using the underscribe to make seams on preglued pieces, but I did use the underscribe quite a bit for making seams before glue up. I liked it because it saved me the time and trouble of setting up a straightedge for mirror-cutting. In fact, I liked it enough that I intend to get one—either the Porter-Cable or the Bosch, they both worked well—and I'll get it with its own motor so that I don't have to monkey with

changing the base and making adjustments each time I need it. Another specialized base makes it easy to clean up the seams in solid-surface countertops. DeWalt's ski base straddles glue ooze as the bit mills it away (photo above right).

In the end I bought another Porter-Cable—

For this review I was fortunate to get a chance to try out the new DeWalt trimmer before it became available to the general public. I can't help but think that it is the best general-purpose trimmer available. Not only is it well-built and powerful, but the easy-to-use lever-release base and spindle-lock button are pleasant amenities.

As much as I liked the DeWalt trimmer, however, I found myself reaching most often for the PC 310. Its short, compact size was comfortable for me to hold, and for my purposes as a laminate fabricator, the easy-to-use micro-adjustment ring was particularly endearing. The quick-release base was another notable plus. Although I don't like the standard round subbase, I found I could solve that problem with a retrofit square subbase (PC # 698256). Without a spindle-lock button to facilitate bit changes, the 310 falls short of perfect, but it's a nice tool and the one I'll get to replace my dear departed old 7310. □

Herrick Kimball is a carpenter, cabinetmaker and author in Moravia, N. Y. Photos by Rich Ziegner.