

he first kitchen I ever built was a modest set of boxes made from hardwood-veneer plywood. To break down the 4x8 sheets into usable cabinet components, I used an equally modest tool setup: my circular saw, a level for a straightedge, and two spring clamps. The level made a respectable straightedge for guiding the saw, and the clamps could hold it in place. But accurately positioning the level and getting clean crosscuts time after time was a little more challenging.

A shopmade shooting board (*FHB* #154, p. 66) is a big improvement, but what I really needed was a system that was reliably straight and long enough to allow 8-ft. rip cuts. I wanted fast and accurate alignment; dependable, convenient clamping; idiotproof saw control; and smooth, tearout-free cuts. Router compatibility would be handy, and—as always—affordability would be a plus. In short, I was looking for the range of features offered by the six edge-guide systems discussed in this article.

For this test, I used models that could handle an 8-ft. rip. Prices are in the \$100 to \$200 range, with one exception: the Festool system that includes a circular saw designed specifically for use with the Festool edge guide. I didn't test router attachments, but for each one, I did note what the cost would be to tool up for a router.

Using any of these guides is a lot easier than wrestling bulky sheet goods onto a portable tablesaw, and you're more likely to get crisp, dead-straight cuts with an edge guide. Also, you won't need the extra space for infeed and outfeed inside your shop.

The fence is more than just a straightedge

Unlike my primitive level-and-saw setup, these edgeguide systems include a carriage that holds the saw (or router) and is designed to ride on or along a fence. Rollers and rib-and-groove design keep the carriage connected to the fence, ensur-

Can a Circular-Saw Edge Guide Replace

Strong, straight, and portable, these systems give you a safe

PRO ft'r

Griset Industries www.trugrip.com 714-662-2888 Price: \$115 Clamping the PRO ft'r is as neat and fleet as it gets. If this method seems familiar, it should. For years, Griset (the maker) has been manufacturing various straightedges, guides, and clamps that

use the same convenient, **speedy sliding jaws**. Although you'll need a few minutes to mount your saw, the carriage plate's slippery "ultra-high molecular weight" plastic means that you'd really have to apply yourself to scratch or scrape a workpiece. The **fence on the PRO ft'r is hefty and well finished**, but if you just buy one 8-ft. fence, regularly walking around the long end when crosscutting could get aggravating. If I were using this guide in a production situation, I'd want to add the 2-ft. and 4-ft. fences for convenience, but that would add substantially to the base price. However, outfitting the PRO ft'r for a router is a reasonable \$28.





Designed for a smooth finish. The clutch-plate clamp bears on the edge of the material instead of on the bottom, so there's no risk of marring expensive sheet goods (top and left). Similarly, the blade plunges through the carriage for zero-clearance splinter-free cuts (above left).

Veritas Power Tool Guide

Lee Valley Tools Ltd. **www.leevalley.com** 800-871-8158 Price: \$118

The Veritas'

lack of bells

and whistles may disap-

point some people, but its simplicity is by no means stingy. **Fit and finish** are excellent, and everything works as it should. The minimalist knurled-brass clamps track smoothly and fasten things down with a twist of the wrist. The two 52-in. fence sections fit cleanly and quickly, the **dovetailed finger connections** being an especially nice touch. It also took about 20 minutes to square the auxiliary plywood plate (a similar effort is required to make a router plate), and another few minutes to make a gauge block. On the whole, none of this bothered me much.



You provide the carriage's ¼-in. piece of plywood and plunge the blade through for a zero-clearance cut.





Knurled knobs are classic Veritas. The clamps (top photo) are easy to grip and function smoothly. The extension connection (above) uses the same knobs. This makes tightening the setscrews for putting two edge guides together a breeze.

Your Tablesaw?

way to cut sheet goods down to size with super-clean results

ing a straight ride. Clamps hold the fence in place on the workpiece.

The fences for all the systems I tested are made of anodized aluminum, in one of three configurations. The EZ Smart, the Festool, and the PRO ft'r use comparatively thin-walled extrusions, with integral ribs for rigidity. Red-Line and Veritas are essentially heavy I-beams, while the Tool Trolley uses angle stock. All these approaches result in stiff, flex-free straightedges.

Most manufacturers make sections (good for 4-ft. cuts) that can be linked together for cuts of 6 ft., 8 ft., or longer. Festool and PRO ft'r offer various dedicated single lengths from just more than 2 ft. to just more than 8 ft. (Festool has even longer fences). While longer fences are simpler and faster for lengthwise rip cuts, dodging their overhang can become tiresome when crosscutting, and they're less convenient to transport and store.

Aligning the EZ Smart and Festool fences couldn't be easier: Set the edge of the fence on the cutline, clamp, and cut. For the other guides in this survey, you need to know the distance from the edge of the fence to the sawblade. Once this offset has been established, the best plan is to make a gauge block. You still need to strike the correct line and mark the setback before you can place and clamp the fence, but it's much quicker and less error-prone than remeasuring with a tape.

All the clamping systems worked well

The clamps need to hold the fence securely, and they all did that. But if you've ever used the leveland-clamps method, you know the clamps also need to clear the saw and be easy to operate with one hand.

Most systems reviewed use a familiar cam or screw clamp to grip the underside of the workpiece. Some manufacturers, though, don't follow suit.

At the far end is Tool Trolley, for which clamping is buyer-supplied. PRO ft'r uses a clutch-plate system that attaches to the side of the workpiece. And Festool has the best clamping system I've ever seen, because there are no clamps. Instead, it uses two high-friction strips on the fence's bottom to secure it for circular-saw work. I was able to wobble the plywood severely on sawhorses without moving the fence off the cutline.

The saw carriages eliminate fussy work

The carriage should do two things. First, it holds the saw securely in place, and second, it needs to move along the fence easily yet without play or runout.

Festool and EZ Smart work in a similar way. The carriage rides on top and has a groove that fits over a raised rib on the fence. The rest carry the saw out to the side. Red-Line and Veritas require a shopmade auxiliary plate—typically, ¹/₄-in. plywood or plastic sheet—that entails additional setup time. PRO ft'r provides a plate of high-density plastic. The Tool Trolley uses a set of rollers

EZ Smart Guide System

EurekaZone Inc. www.eurekazone.com 732-259-9984 Price: \$190

Choosing between Festool and EZ Smart is like choosing between Butch Cassidy and the Sundance Kid: Which one's the star? EZ Smart's zeroclearance antisplintering approach, like Festool's, speeds up fence placement enormously. The supplementary **baseplate inserts** provide zero clearance on both sides of the kerf. I think EZ Smart's antisplintering provision is the best of the lot.

The baseplate can be attached temporarily with the supplied hardware or fas-

tened permanently with the super-tenacious double-sided tape that's also included. That done, the EZ Smart works like the Festool: The slotted baseplate rides smoothly and precisely on the fence's integral rib. The fence itself comes in 50-in. sections that you can connect if you need to make longer cuts.

EZ Smart's large, undermounted wing-nut-style clamps are simple and smooth to operate.

The EZ Smart costs almost double what some of the others do, but if someone told me it's about twice the device, I'm not sure how hard I'd argue. There is a router attachment available for \$125.





Sturdy connection. The edge guide comes in 50-in. lengths that are connected for longer cuts. The connector rods are beefy for a secure, no-slop fit. You'll need to have an Allen wrench handy, but that's the only drawback. Wing-nut clamps slide into position and operate smoothly.



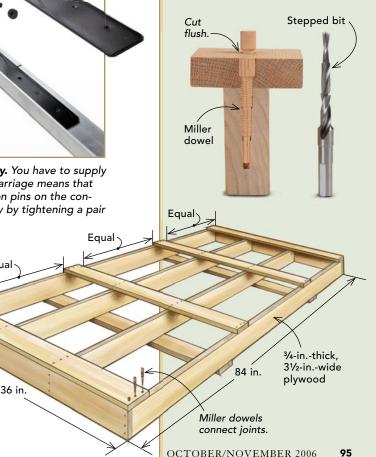


Attached to the saw's baseplate,

a rigid-plastic carriage rides on top of the fence, positioning the blade over a replaceable white plastic strip (red arrow). When you make the first cut, you create a zero-clearance edge (bottom photo). The carriage has a second slot for making bevel cuts. Rectangular plastic inserts fit in the carriage to promote chipfree cuts. The green insert (below) provides zero clearance if you want to use the saw independently of the edge guide.

A CUTTING PLATFORM FOR SHEET GOODS

Supported on a pair of sawhorses, this platform provides flat, stable support for full and partial sheets of plywood and other panels: the perfect complement to an edge guide and circular saw. Made from 31/2-in.wide, ³/₄-in.-thick plywood rips, the platform is strong but light and portable. A 3-ft. by 7-ft. size works great. Join the parts without metal fasteners so that your blade won't be ruined if you kerf the top; instead, use biscuits or regular dowels. I've found tapered Miller dowels to work best. With a big setup like this, there is less fussing with clamping and gluing, and you can drive them in with a few hammer taps (www.millerdowel.com).



Tool Trolley

Tool Trolley, LLC www.tooltrolley.com 800-524-1138 Price: \$90

Ten or fifteen years ago, I'd have been pretty thrilled with the Tool Trolley. For breaking down sheet goods, it's probably more convenient than a job-site table-

saw, at about the same cost as an optional/aftermarket outfeed extension alone. Its fences are rigid and straight, and the roller carriage tracking is smooth and true. Tool attachment is simple and precise; the **baseplate's** multiple holes will accommodate any circular saw I can think of; and the mounting process is slick and easy. Having to pony up for a couple of small bar clamps wouldn't bother me that much because clamps are a good investment anyway. (Am I



Clamps cost extra; fence connections are easy. You have to supply the clamps for the Tool Trolley, but the offset carriage means that they won't get in the way. Thanks to registration pins on the connector plate, fence sections are coupled quickly by tightening a pair of setscrews.

31/2 in.

the only one out here who dislikes spring clamps for their built-in tendency to creep so badly?) But it's a shame that there's no provision for splinter reduction. According to company reps, a redesigned version of the Tool Trolley will be available in early 2007. You can get a **router-conversion kit for \$70**.

Job-site photo: John Ross. Drawing: Chuck Lockhart.

that pinch the vertical leg of its angled aluminum fence. The saw attaches via small eccentric disks fitted through any of two dozen or so holes drilled in the steel baseplate.

After installation, all these carriages operated smoothly and precisely; if the sun was in my eyes or dust obscured the cutline, I didn't worry that the saw might stray.

Zero-clearance cutting is a big benefit

There's an old woodworker's trick of using a sacrificial backing block to reduce tearout, the splintering that occurs where the blade exits the workpiece. Applying the same principle (i.e., backing up the workpiece) to cutting guides eliminates the need for prefinishing stock, applying burnished masking tape on the cutline, or scoring with a knife. Any or all of these methods reduces tearout, but skipping them is a huge convenience. Tearout is not a concern when only one side of a plywood workpiece shows, because the bottom face always is cut pretty cleanly due to the blade geometry. But even when you don't need both sides to be dead crisp, it's better practice to avoid any scratches or gouges (from sawhorses or other workpiece supports) by cutting with the money side face up.

Zero-clearance splinter reduction is used by all the guides I tried, except the Tool Trolley, with predictable results. Because I used a fresh blade for my field tests, even the Tool Trolley's topside crosscuts were surprisingly good; but cuts from the others were near perfect.

Routers work with all the models

One way or another, all these guides can be used with other tools, i.e., routers. At an additional cost, EZ Smart,

> PRO ft'r, and Tool Trolley offer auxiliary bases designed to accommodate routers; Red-Line and Veritas units can be adapted easily enough (with another scrap of ¹/₄-in. plywood and another 20 minutes). Festool's fence works perfectly well with its router, but as with its circular saw, it can be used only with the Festool system.

The bottom line

All these guides were straight, clamped securely to the work, and guided the saw for smooth, exact cuts.

Best Value goes to the Red-Line. It's a solid workhorse that feels sturdy enough for years of use. The color is a little flashy, but other than that, it's just an affordable, straightforward tool with enough thought put into it to make it easy to use.

Best Overall goes to Festool, with EZ Smart a close runner-up. Festool is a man set out to play among the boys; too bad it's priced accordingly. EZ Smart is well-conceived; as with the Festool, someone set down all the questions and tried (quite successfully) to answer them.



Red-Line Cutting Guide

Hartville Tool **www.hartvilletool.com** 800-345-2396 Price: \$110 Red-Line is short money with long value, so it gets the Best Value sticker from me. It does make you work a bit more than the EZ Smart or the Festool, which can add up in production situations. But work it does, and most likely, you won't lose the thing even in the dark.

As with the Veritas, you have to supply your

own **zero-clearance plate** (a ¼-in.-thick piece of 10-in. by 12-in. plywood). To align the guide, you have to measure back from the blade to the fence for each cut. (This is also true of any guide system where the carriage is to the side of the fence.)

The fence is basically an I-beam that comes in two 55-in. lengths, which you can connect for longer cuts. Although it is a little heavy, I felt like I could throw it in the back of my truck and not worry too much about banging it up.

I like the **cam-lever clamp** system. It's easy to adjust and solid. And setting up to use a router won't cost you anything; it's just a matter of fitting another ply-wood insert on the carriage.



Festool Guide Rail and Saw

Festool USA www.festoolusa.com 888-337-8600 Price: \$504 (includes saw) The Festool system stands out because of the **dedicated circular saw** that's integral to the system. It has a large arbor that minimizes blade runout and a built-in dust-collection system. The saw's baseplate doubles as the carriage, riding on a matching rail on the fence, and its configuration allows tilting for a bevel cut without affect-

ing the zero-clearance qualities of the fence, an excellent feature.

The fence itself also has some standout features. The **friction strips** on the underside grip the work like tape, eliminating the need for clamps without collecting dirt or dust. The fence is light and easy to move around. If you're con-

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Quick clamping and a carriage for a plywood platform. The Red-Line clamp (photo top left) is one of the best. The carriage is designed to hold a ¼-in. plywood zero-clearance base for a circular saw or router. Slick plastic inserts promote smooth movement (photo right). Unfortunately, the carriage has to slide on and off the end of the fence. Joining fence sections together involves tightening six setscrews (photo bottom left).



cerned about getting the fence to the job intact, you can buy shorter fences and connect them on site. Boatbuilders will be interested to know about the available one-piece 16-ft. length.

When used to guide a router, **optional mini-bar clamps** slide into the fence to provide extra holding power. You'll also need Festool's guide-rail adapter (\$24 to \$43) and one of the company's routers. Festool is really in the business of selling systems; their fences alone are excellent enough, but they don't

make much sense without their matching, dedicated tools.

Festool's products are thus very expensive on the face of it. If you regularly need to break down sheet goods, though, their proper competition is probably portable tablesaws (see *FHB* #172, pp. 66-71), which—after you've bought the extension and outfeed tables you'll need for cutting sheet goods—can easily cost a lot more.





Everything works together. The unique design of the Festool circular saw allows it to tilt on a bevel and still cut on the same line as a square cut (top photo). Differentlength fences can be connected with rods that slide into channels (photo far left). The channel also provides a place for a clamp to secure the fence to the work (bottom photo). If you are in a hurry or use the router attachment

use the router attachment frequently, you might consider the quick-release clamp that's easy to use with one hand (inset photo).