

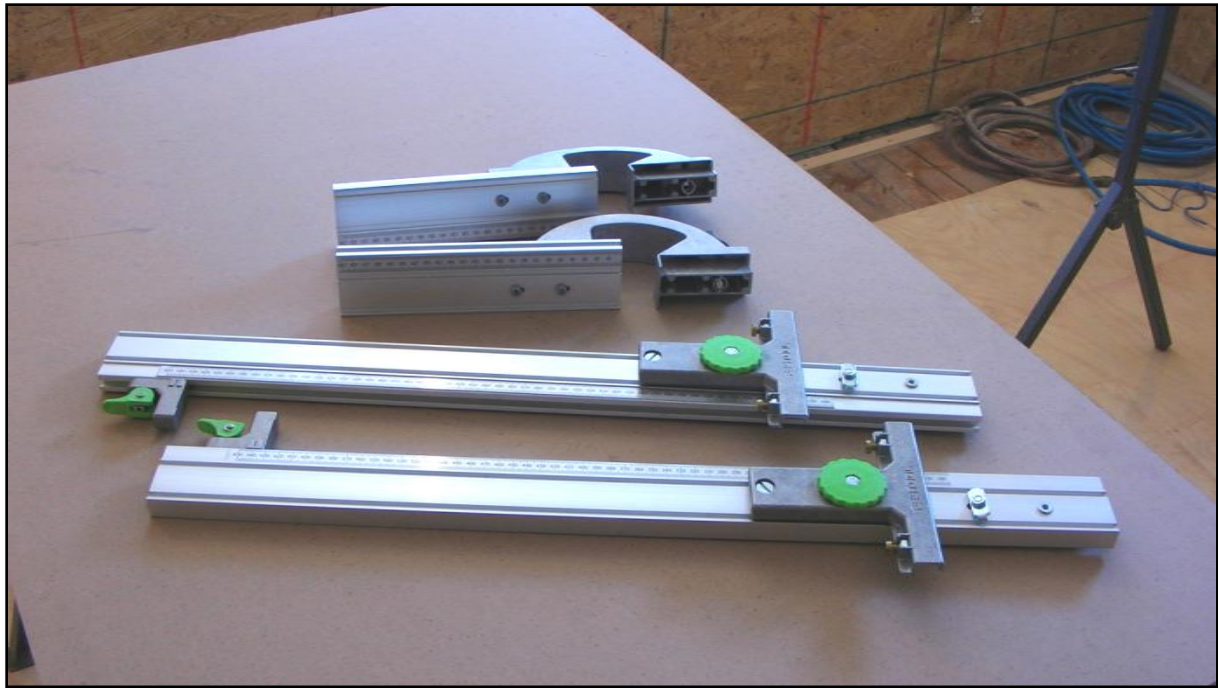
Review of the Festool Parallel Guides

by *Brice Burrell*



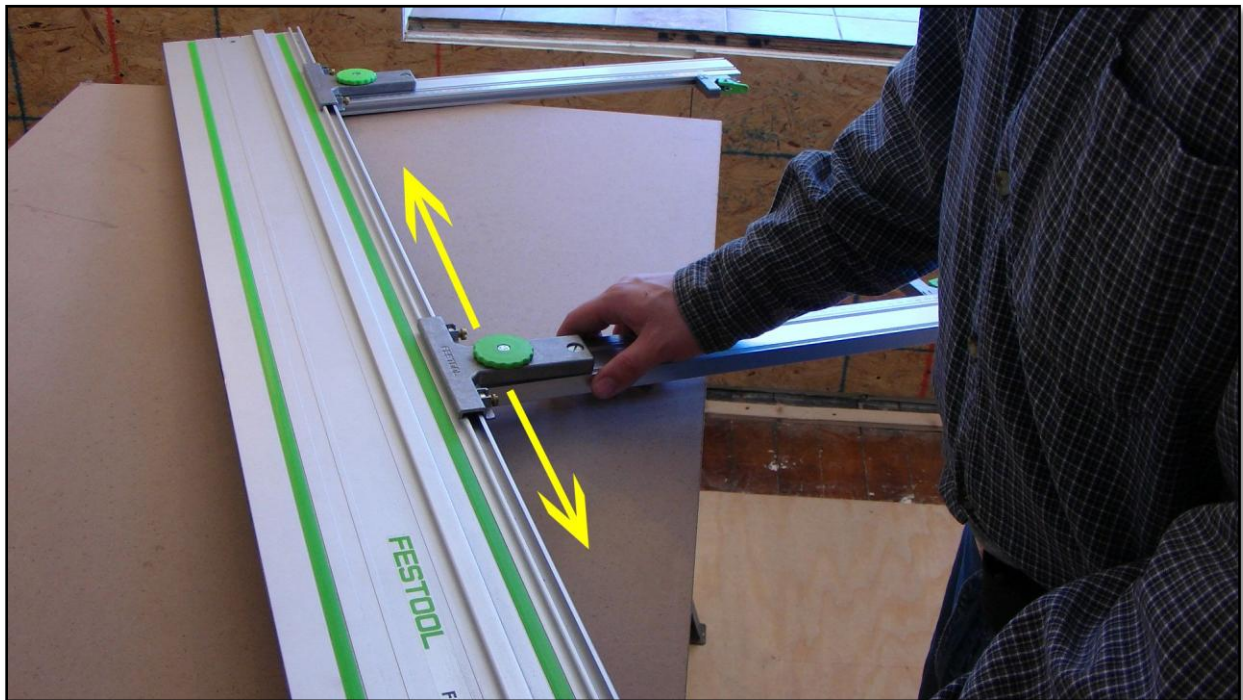
I've recently acquired the new Festool parallel guide set, this set allows me to make accurate rips and crosscuts ranging from 1/16" to 25 1/2" with my Festool guide rail and TS plunge cut saw. The parallel guides have movable stops that reference the guide rail parallel to edge of your material for fast, accurate and repeatable cuts. Imagine adjustable extruded aluminum story sticks and you'll have a pretty good idea of what the new parallel guides are.

The guides can be purchased separately or as a [set](#), I picked up the set. The parts are [FS-PA \(495717\)](#) cuts from 5 1/2" to 25 1/2", [FS-PA-VL \(495718\)](#) cuts from 1/16" to 7 5/8".



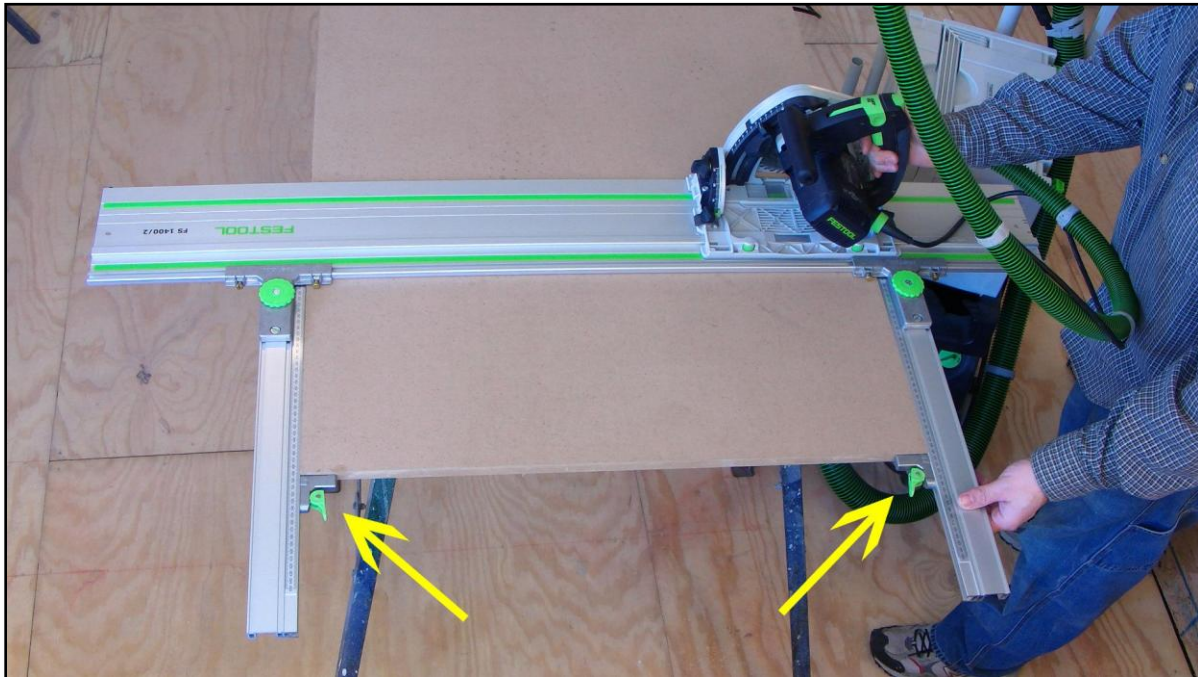
The FS-PA-VL are shown at the top of the photo and the FS-PA at the bottom.

I'll start off with a quick overview of how the guides work and then go into more detail and share my thoughts on their use later in this review. The guide mount easily to the FS style guide rails, the guides can be mounted anywhere along the length of the rail.



The guides attach in the channels of the rail, the green circular knob and a locking lever under the guide (not seen in this photo) lock the guide in place.

With the guides locked on the rail the stops can be set to the desired size using the (metric) scale. The rail can now be positioned to make the cut. With the stops butted against the edge of the material the rail will be perfectly parallel to the edge. This process can be quickly repeated for as many cuts as needed.



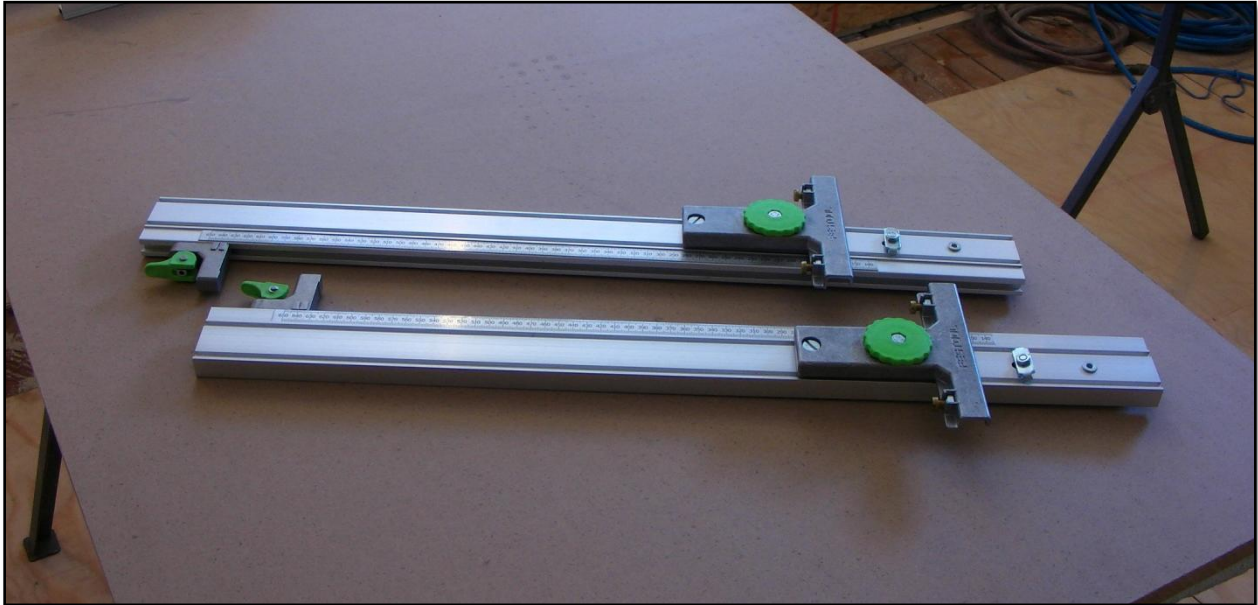
The arrows point to the adjustable stops. (Shown in this photo are the FS-PA guides.)

The FS-PA-VL guides work much the same way, however, they attach to the FS-PA guides instead of the rail and the piece we want is on the off cut side.

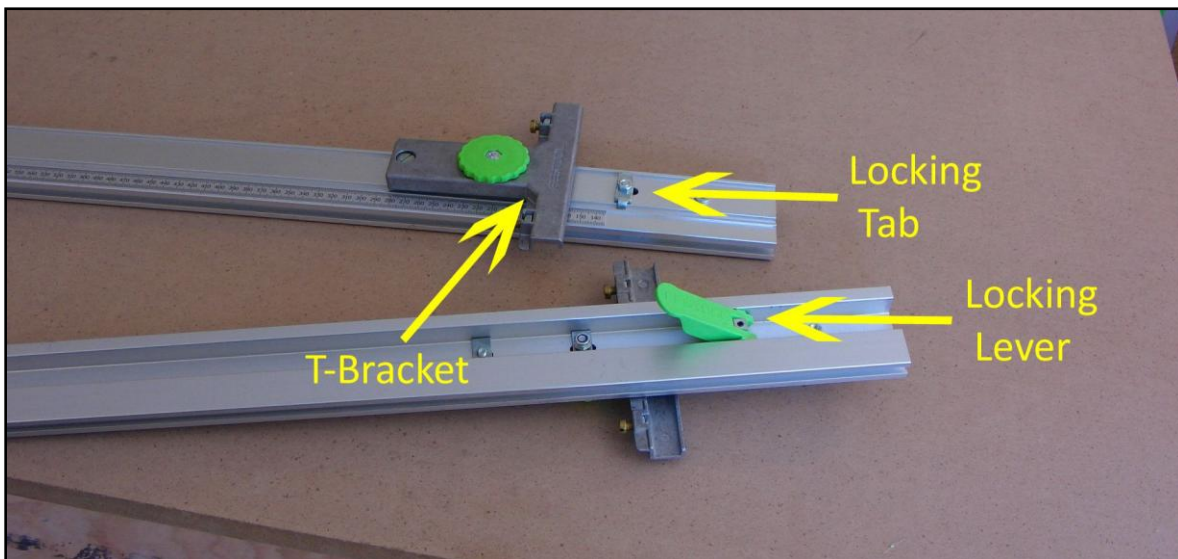


Notice the stop and the thin piece I want is on the right side of the saw when using the FS-PA-VL.

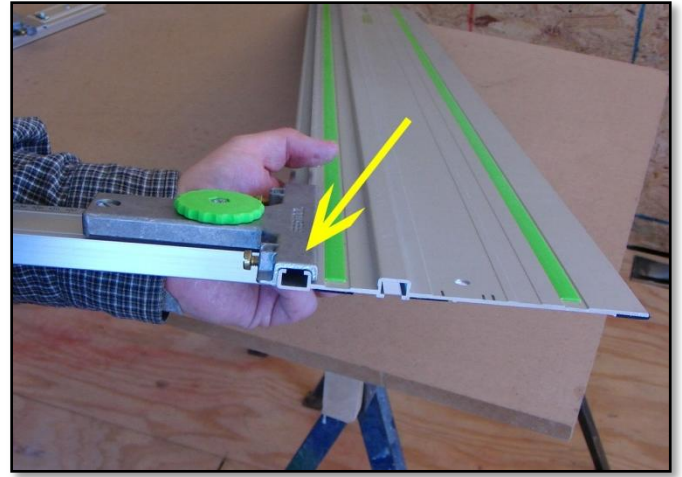
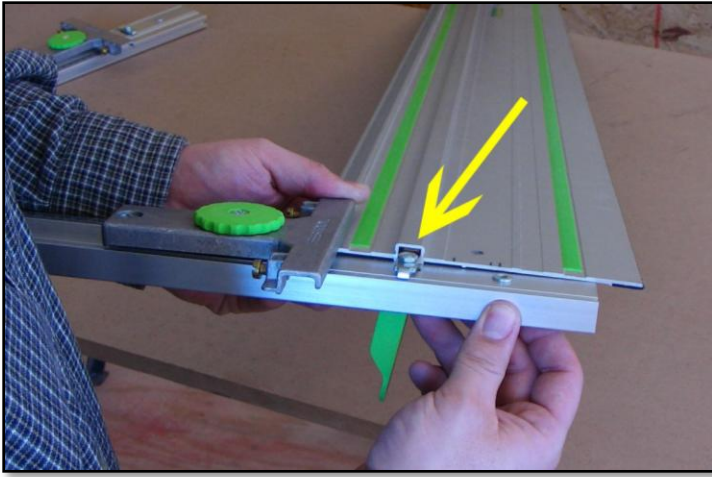
Now with a basic understanding of how the parallel guides work let's take a closer look at each component starting with the FS-PA. The FS-PA is made up of numerous parts; the body, mounting bracket/tab with locking lever and the adjustable stops/scale. The body of the guide is a stout piece of extruded aluminum and each part is attached to it.



The next parts are the mounting T-bracket and locking tab/lever. The T-bracket is a cast alloy, this bracket holds the parallel guides square to the rail.

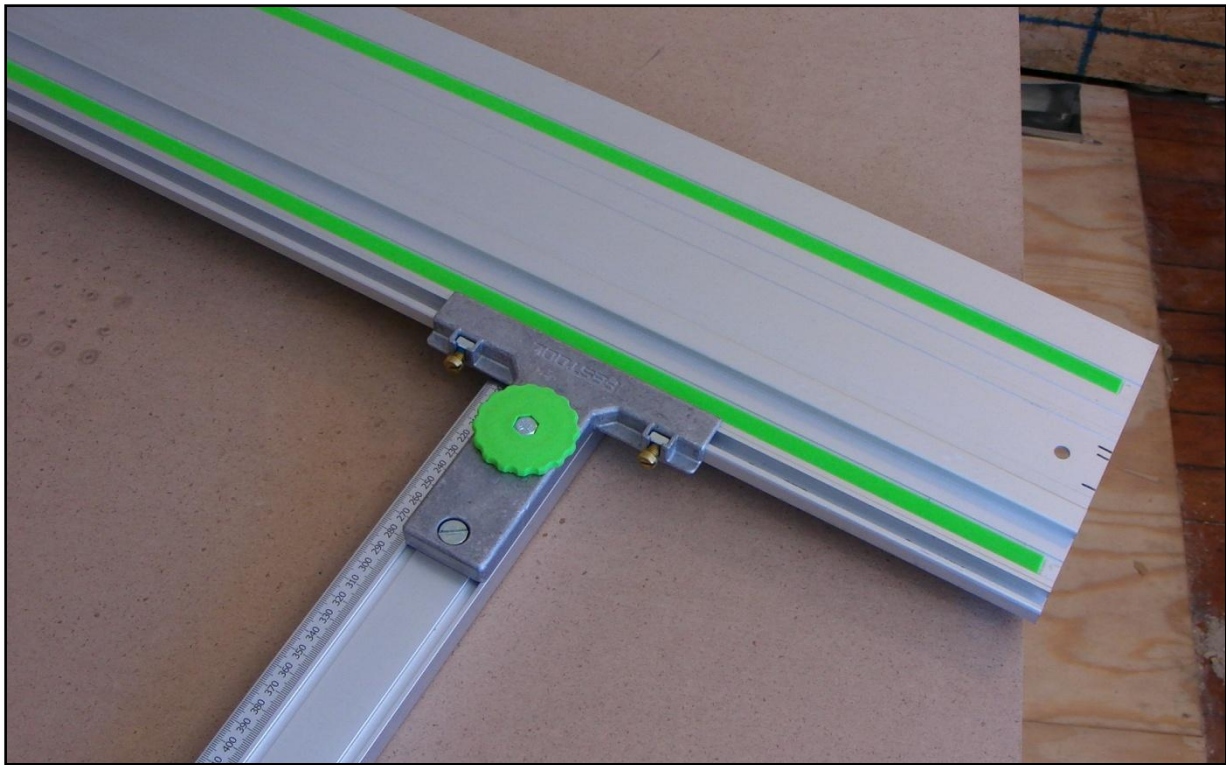


The green circular knob on the T-bracket is used to lock the bracket down the rail. The locking tab, on the top of the guide body, slides into the lower (clamp) channel in the rail. The green locking lever is on the bottom of the body, its cam action locks the tab in rail.



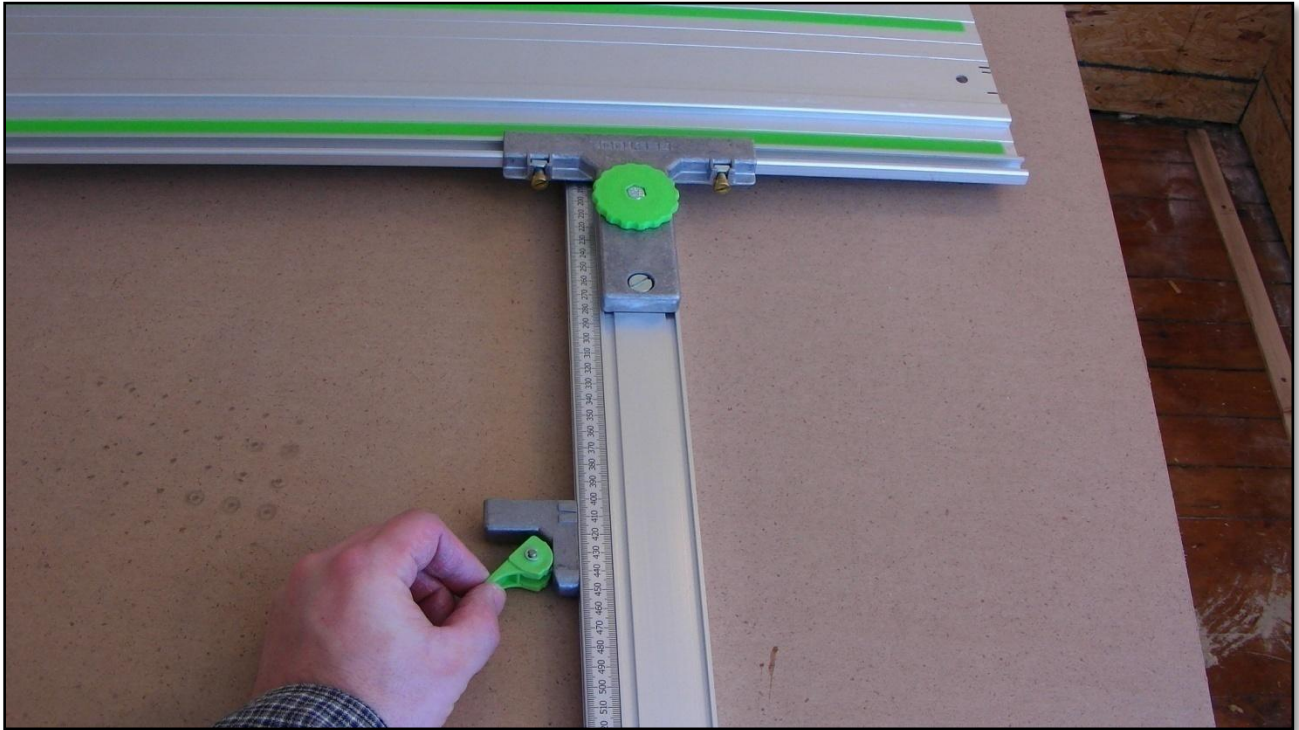
In the photo on the left I'm inserting the locking tab into the bottom channel in the rail, note the angled gap between the body and the T-bracket and green locking lever are in the unlocked position. On the right is the T-bracket on the upper channel, the guide is locked on to the rail, small gap under the T-bracket and the locking lever is folded up.

The T-bracket has two brass screws to adjust the fit between the guide and the rail. These screws do two things, they hold the guide square to the rail and remove any slop in the fit. With the guides locking rigidly to the rail at two points and being able to adjust the guides to be square to rail I'll be able to take advantage of this to make 90° cuts, I'll discuss how later in the review.



The two brass screws to adjust the fit to the rail are shown in this photo.

The last two parts that make up the FS-PA are the adjustable stop and metric scale. The stop travels in a channel in the side of the guide body. Using the scale on the body the stops can be set to position the guide rail to make cuts with the Festool TS plunge cut saws, the jigsaws or even for use with the routers.



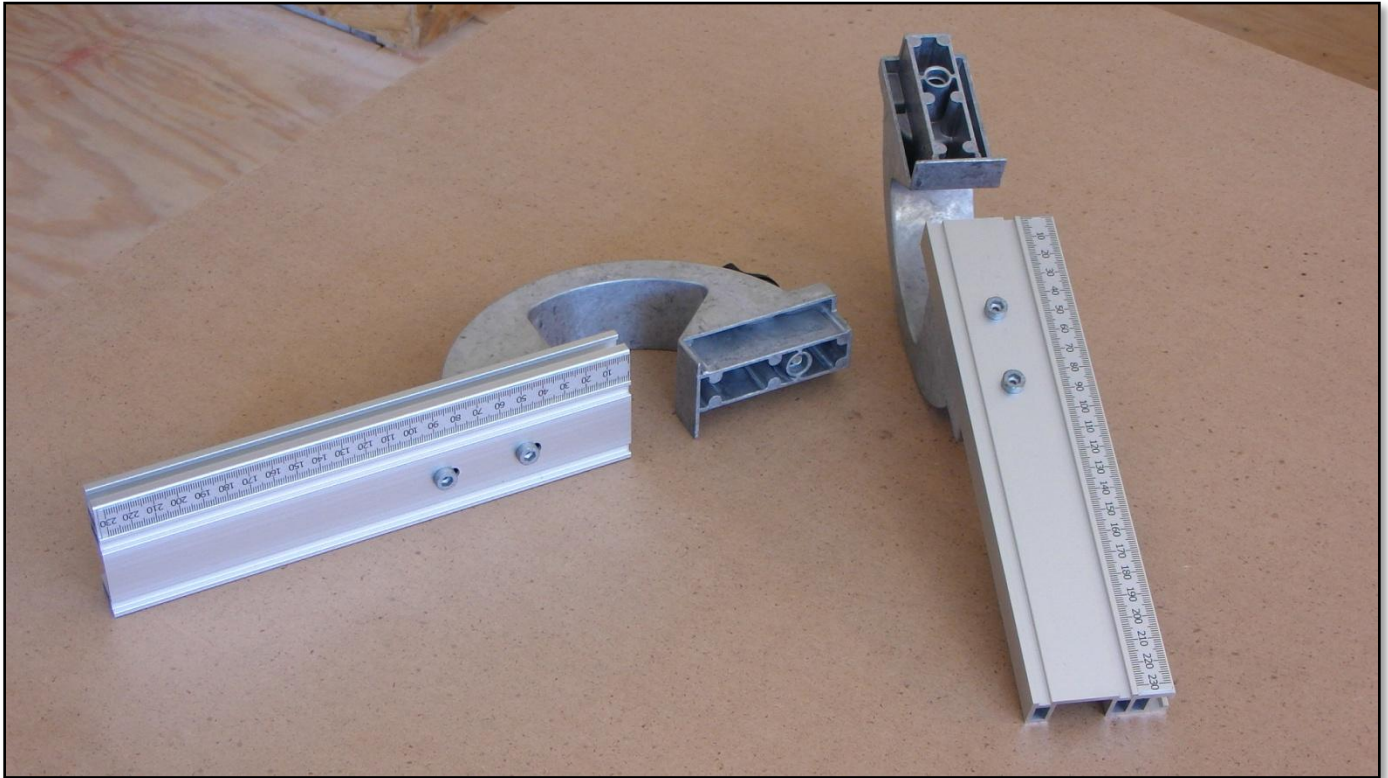
Here I'm locking the stop with the green lever.

I don't mind the scale being in metric but I have a small gripe about its location on the guide body. As you can see in the picture below there is a small gap between the scale and the stop this introduces a little guess work in setting the stop.



The gap between the scale and the stop is about a 1/16".

Since the scale is held on with self adhesive tape I assume the offset is to help prevent the scale from being peeled off if it was right on the edge of the guide. The stop can be set to within a half a millimeter without much trouble, for greater accuracy more care needs to be taken in setting the stop.



The FS-PA-VL guide extensions.

The FS-PA-VL attaches to the end of the FS-PA (the end that goes under the rail) with a thumb screw. This allows you to make the smaller cuts that the FS-PA can't do by its self.



Here I'm attaching the FS-PA-VL with its thumb screw.

The FS-PA-VL is made up of a short piece of the same aluminum extrusion. It uses a U shaped mounting bracket to attach to the FS-PA. The FS-PA-VL is on the right side of the guide rail and the piece that's the keeper is on the off cut (right) side of the saw. The VL also has a metric scale and shares the stops with the FS-PA.

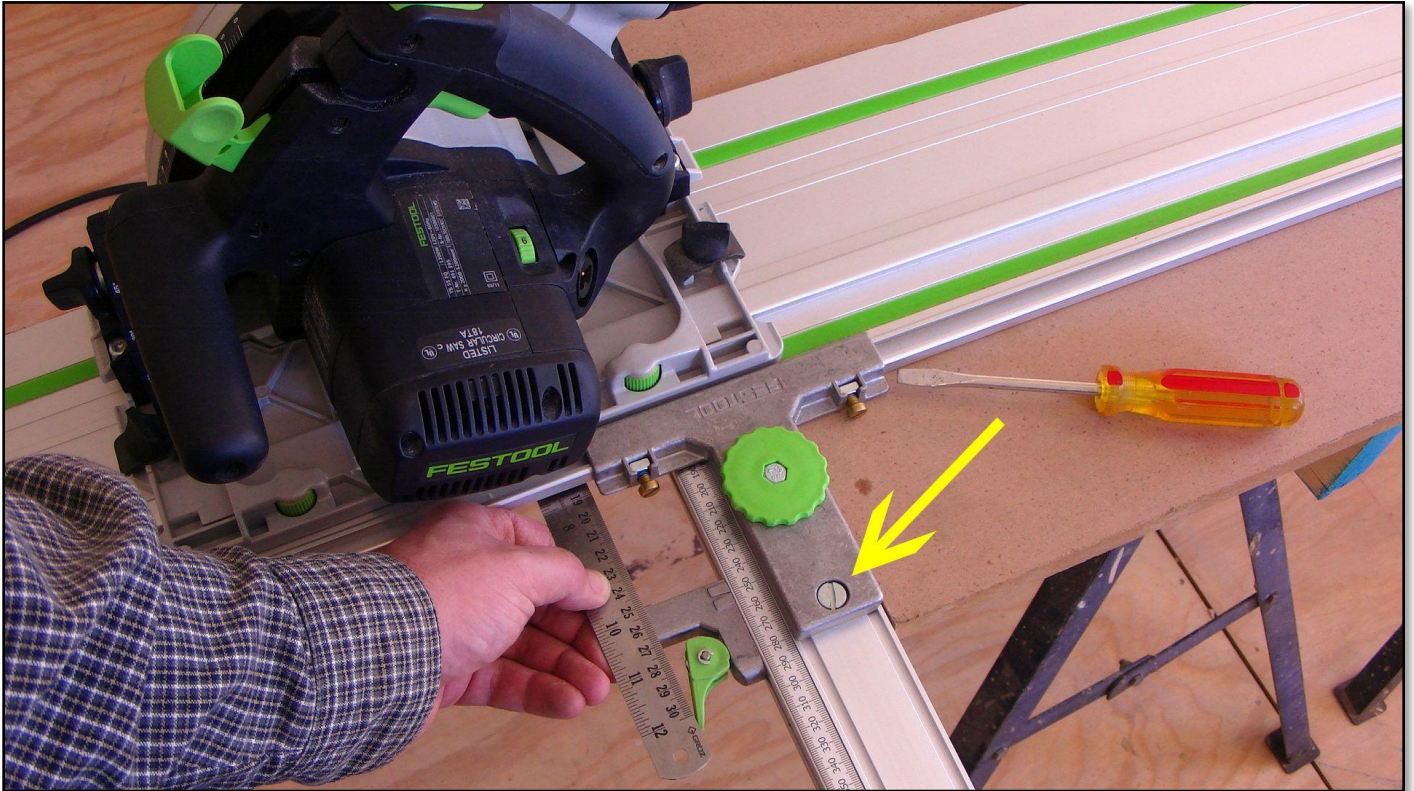


The U shaped mounting bracket allows the saw blade to pass safely through the opening in the bracket. Maximum depth of cut is 70 mm, which allows the TS 75 to cut to its max depth.



Here's another angle of my using the FS-PA-VL.

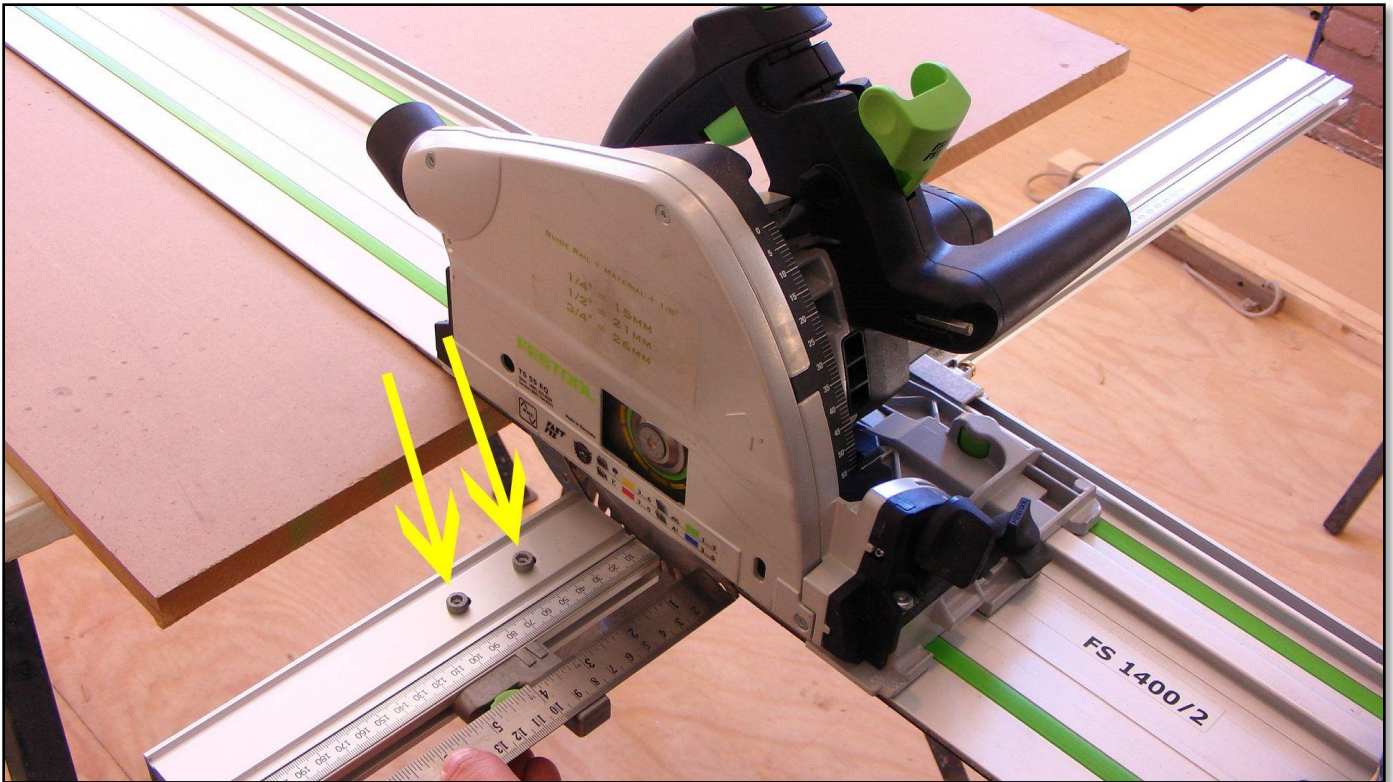
Before you can use the guide the scales need to be calibrated to your saw. The process is straight forward and only takes a minute or two per guide. (The guides will also need to be calibrated when you want to use a different blade in your saw.) First I'll cover the process for calibrating the FS-PA. Lock your saw in the "Fast Fix" blade changing position (the saw should also be unplugged), then placed it on the rail near the guide. Set the stop to where it's easy to measure from it, under the rail, to one of saw blade's teeth (I used 250 mm). If the scale and the ruler aren't the same measurement the guide needs to be adjusted.



The arrow points to the screw that you need to loosen to calibrate the guide to your saw.

To make the adjustment loosen the slotted screw and green circular knob on the T-bracket then the locking lever under the guide. Now align the guide to the correct measurement, tighten everything up and recheck the measurement. When you're satisfied repeat the process on the other guide.

The process is pretty much the same for the FS-PA-VL except you loosen two machine screws and measure to the off cut side of the blade. (The FS-PA-VL must be mounted to the FS-PA and be sure the saw is unplugged.)



This picture shows the two screws to adjust the FS-PA-VL, the allen wrench from the saw fits these screws.

The parallel guides in use.

With the calibration out of the way let's make a few cuts. The first job I had for the parallel guides was to cut OSB as a backing for wainscoting. The OSB needed to be ripped to 36". Since the FS-PA can't make that large of a rip I set the guides to cut a little less than a foot off a full sheet to account for the thickness of the saw blade's kerf, this left me the 36" I needed. I checked the guide's setup against my 36" measurement on the first sheet and I was good to go. With a couple saw horse brackets and a few 2X4s I stacked three sheets at a time to gang cut the 7/16" OSB. In less than fifteen minutes my twelve sheets were cut and stacked ready to be installed. Most of that time was spent managing the sheets, aligning the guides and making the cuts was the easy part. It really is as simple as butting the stops to the edge of my sheets to place the rail. I checked several of the sheets and the cuts varied less than 1/16". Cutting full sheet goods to the same dimension is where the parallel guides really shine.

On this job there is a shop in the basement with a cabinet table saw, however, I chose to use the Festool guides/plunge cut saw over the table saw for a couple of reasons. The first reason was it would have meant moving the sheets farther and

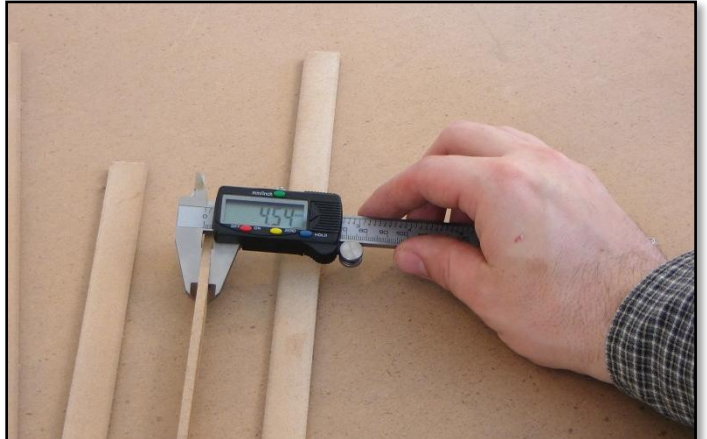
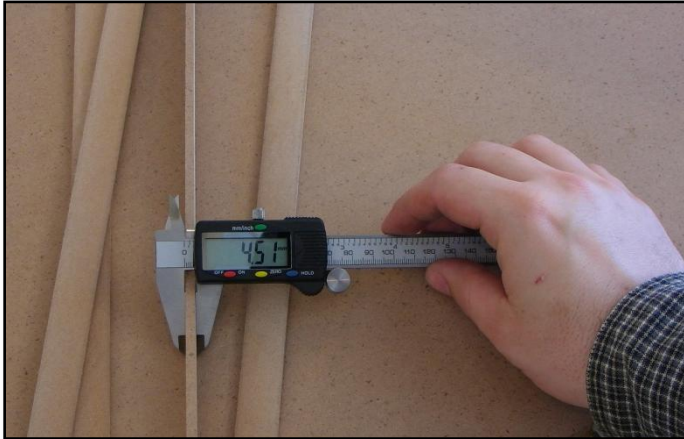
more times using the table saw. Being able to bring the sheets to where I'm going to use them and cutting with TS 55/guides means I have to move them fewer times. The second reason was the table saw only has a small out feed table and no in feed table. I would have had a hard time running these sheets through the table saw by myself. With the Festool setup I was able to do the job easily and safely without any help.



Here I'm making a rips on a sheet of OSB for a backing to wainscoting.

Anyone that has ever tried to make accurate narrow pieces repeatedly with your Festool guide rail and saw knows this is somewhat of a weakness in the system. While there are ways around this problem I believe the FS-PA-VL guides are the best solution so far. So when I needed some small rips to use as shims I thought I'd test the accuracy and repeatability of the VL guides. The pieces I needed were only 4.5 mm (around 3/32") wide. The table saw can make narrow rips accurately but at a certain point the pieces are too small to cut safely. The FS-PA-VL makes the job of cutting rips this small safe. I needed the shims to be pretty much right on so this was going to be a test of the guide's accuracy. With careful setup my first attempt was off by 0.13 mm on one end and 0.22 mm on the other. Not bad for the first try, but can I do better?

After a couple of minutes and some very fine adjustments to the stops I tried again. This time the results were as close to right on as I could expect.



The best cut varied by 0.03 mm from one end to the other.

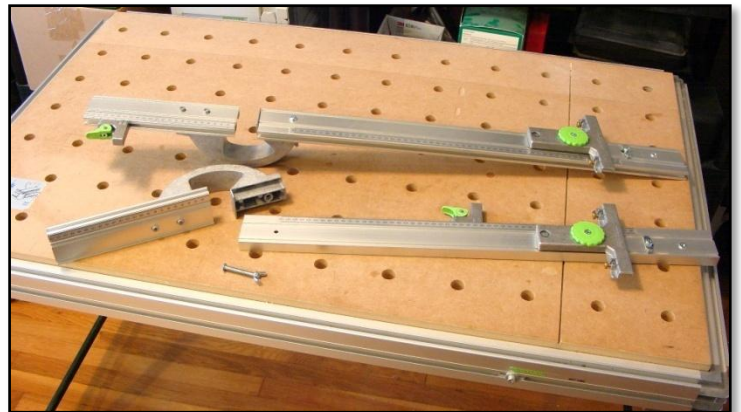
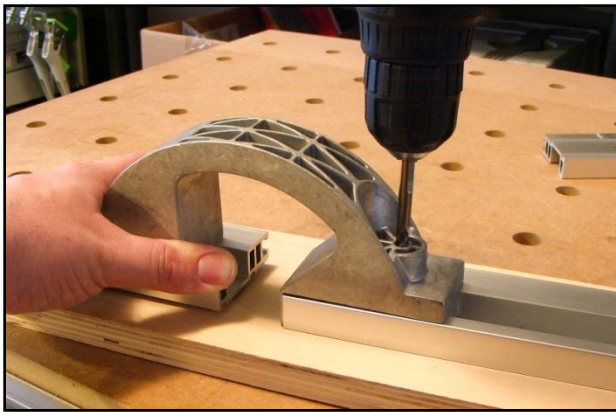
Now that I've got the guides dialed in it's time to check the repeatability. I made three more cuts and measured the pieces. I was unable to match my best results but the accuracy was still very good with an average of ± 0.09 mm.



I can't say it was a fast process to setup these cuts but the results were good and at no time was this operation unsafe. I do feel I should point out these cuts were safely done because the stock I cut them from was a large piece of MDF. There is a

limit to size of stock that you can safely make small rips from. Smaller stock should be clamped down to prevent it from moving during the cut. Too small of a piece can't be clamped and still have use of the parallel guides.

The next step for the wainscoting is for pre-finished 1/4" oak plywood to be cut. To get the best yield from material I want to crosscut the 8' sheets to 31 15/16", this would give my three pieces per sheet. The problem is the parallel guides don't extend that far so a small modification was in order. I drilled a 1/4" hole in the end of the FS-PA's body to mount the FS-PA-VL (to the opposite end that is normally mounts to.) This gives me 11" more reach with a total cutting capacity of almost 37".



The picture on the left is of me drilling the 1/4" hole in the body of the FS-PA. On the right shows one of the guides with the FS-PA-VL mounted to extend the FS-PA's range to just under 37".

To drill the hole in the right location I held the VL guide on the end of the FS-PA. I used the hole for the thumb screw in the VL guide to drill the hole in the correct location. Then I used a 1/4" X 2" bolt and wing nut to attach the two guides together. You can't use the scale on the VL guide, no big deal given this modification only costs a few minutes of your time. Now I was able to gang cut the 1/4" sheets as I did with the sheets of OSB.

Another use for the guides is to make right angle cuts. Since the guides can be adjusted to be a perfect 90° to the rail you can butt the guide to an edge of your material to make square cuts, I use just one of the guides on my rail to quickly line up 90° cuts. You can use the stop on the guide or just measure then slide the rail to you mark, then make your cut and you'll have a perfectly square (or very close to it) cut. You can use both guides (this might give you a little more accuracy), although I've gotten pretty good results with just one guide.



The FS-PA can be used to make 90° cuts, here I'm using just one of the guides.

While the main use for the parallel guides is for cutting with the TS plunge cut saws you can also use them for routing applications. I could image using the guides to align a series of dados or sliding dovetails for a cabinet or bookshelf.



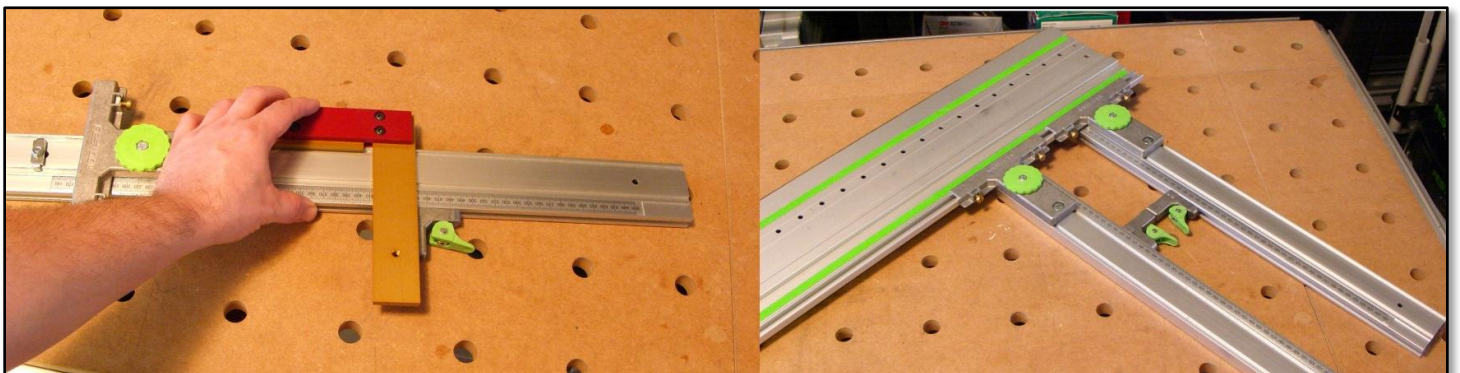
The guides can also be used to set the rail to precise measurements for routing applications.

One of things that I'm pretty excited about trying the guides for is use with the Festool LR 32 hole drilling system. The LR 32 is great for drilling shelf pin hole however, the system has one drawback, its limited distance you can drill holes from the edge of your panels (around 110 mm). With the parallel guides I hope to be able to extend that distance so I can easily drill all the holes needed across the panel for drawer slides. I haven't fully explored this yet although I did briefly test the concept out and it seems like it should work just fine.



Here I'm exploring the idea of using the guides with the LR 32 hole drilling system.

After using the guides for a few weeks I was able to come up with a new way of setting the stops to improve the accuracy (and it's much faster too). I use a square to bridge the gap between the stop and scale to set the stop on one of the guides. Then with both guides on the rail close together I'm able to set the second stop very accurately to match the other by aligning the two by feel with my finger (thanks to Greg Mann for the idea).



The guides are about 3/4" thick so when cutting thin stock on a cutting table there a gap between the guide rail and the stock.



This gap doesn't allow the rail to sit on the stock as it should to be able to make the cut so I use scraps of plywood to shim to stock up.



Final thoughts.

As we in North America waited for the parallel guides to be released for sale discussions on the message boards seemed to ask the same question, "can these new guides replace the need for a table saw?" The answer for me is no, as a

renovation contractor I still have need of a table saw (or two in my case) for certain tasks. I will say that need is now reduced, I might even go as far as to say that need is reduced considerably.

As I see it the table saw excels at cutting relatively small and/or pieces with a profile (like window trim) where the guide rail won't sit flat. The table saw also has the advantage over the parallel guides when it comes making numerous cuts to different dimensions. Table saws have two major down sides, they require a lot space and the potential for dangerous kickback.

On the other hand the Festool parallel guide and TS plunge cut saw requires much less space to set up. With the table saw you need between 18 and 20 feet to rip sheet goods where as the Festool setup only requires half that much space. On the jobsite the only place to find twenty feet of uninterrupted space is outside in the driveway or on the lawn. Outside is the best place for my portable table saw because it doesn't collect dust very well, that's fine on a warm sunny day. It's nice to be able to take the sheets inside the house or small garage when it's cold, raining or snowing to make the cuts. The parallel guides and the dust collection of the TS 55/vac allows me to do that.

Where the guides will make the biggest difference for me is I'll be able to make cuts on full sheet goods in my small basement work shop without rearranging the entire space. To cut sheets goods at home on my table saw meant moving almost every stationary tool to make room for this operation. Now I'll only need to move the table saw out of the way, set up a cutting table and go to work with the guides and TS 55. This will save me a good 20 minutes every time.

The best part of having the guides is that I can safely (and accurately) cut sheet goods by myself. With a good cutting table and a TS plunge cut saw there is very little risk of kickback.

For the guy with a small shop that doesn't have the space and/or want for a table saw the parallel guides can, for the most part, eliminate the need for one. On the jobsite the guides will likely only reduce that need. For me, I'm already invested in both table saws and the Festool guide rail system so I will continue to use both choosing the tool(s) that best suits the job at hand.

So what don't I like about the guides, well, two things. The first is the small gap between the scale and the stop that makes it a little harder to precisely set the guides. The other thing is that it can be a bit slow if you need to keep resetting the stops for different measurements (compared to the speed of resetting a table saw.) The guides really excel when cutting numerous pieces at the same measurement. These two things are easily out weighted by the advantages the guides offer.

The parallel guides fit nicely into the Festool system and have met the expectations I have for a Festool product. The guides are well engineered and manufactured, they're portable and can be used for cutting or routing applications. I think these guides filled one of the few voids in Festool's rail system. I've found the guides to be an asset to my Festool collection and I'm well pleased with this purchase.

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