

Ultimate Miter-Saw Stand

You designed it and we built it,
with the help of some great
accessories

BY JUSTIN FINK

These days, there's no shortage of factory-made miter-saw stands on the market. At my last count, there were more than a dozen different models, from simple table setups to complex folding rigs with wheels, priced from \$70 to \$550. With all these options, why would anybody decide to build one instead? One word: custom.

A shop-built miter-saw stand may not be as lightweight, compact, or collapsible as a store-bought version, but why should the two-minute trip from the truck to the job site outweigh the eight hours of using the stand once it's set up? Just like a custom built-in project, a saw stand can benefit from a thoughtful design that begins with a single question: "What do I want in a stand?"

Start with a set of goals

To start this project, we asked for your help. Baited with the chance to win a Bosch 12-in. dual-bevel axial-glide miter saw (GCM12SD, \$800), we launched a massive online campaign of blogs, gallery entries, and newsletters to collect feedback. We asked what our readers liked and disliked about their current stands, what they wanted in an ultimate setup, and what they'd incorporated into their own designs. We found that the likes and dislikes, budgets, and criteria

IF YOU WORK SOLO, YOU'LL WANT

WHEELS, so we added urethane wheels, a good balance of cost and utility, to help make the stand more mobile.

MAKE IT YOUR OWN

Steel or plastic wheels are decent, but only for smooth floors. Solid rubber is easy to source, but can be soft and unstable under heavy loads. Inflatable rubber tubes are still a popular choice if you don't mind the risk of a flat.



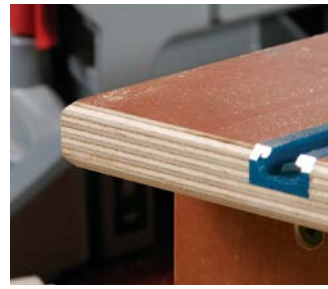
“OVERHEARD ONLINE
Never, except in a home shop, is the ground

THIS TALL FENCE is handy when cutting base-board in the upright position or crown in the nested position.

MAKE IT YOUR OWN If you prefer to make cuts on the flat, a shorter fence can be substituted.

PHENOLIC PLYWOOD offers a slick, durable surface for the stand, but this high-quality material costs between \$120 and \$150 per sheet.

MAKE IT YOUR OWN For a more economical stand, consider MDO (medium-density overlay) plywood, or seal ordinary plywood with a protective finish.



AN ONBOARD POWER STRIP makes it easy to run a trim router or sander, or to plug in a battery charger.

MAKE IT YOUR OWN For those who prefer a less cluttered stand, the back can be left open, or the drawers can be made deeper.



TWO-IN.-SQ. EXTRUDED ALUMINUM OUTFEED ARMS offer excellent support for long stock and are sturdy enough that they eliminate the need for support legs, even when extended 5 ft. to each side of the saw stand.

MAKE IT YOUR OWN If you don't frequently work with long, heavy materials like hardwood or pressure-treated framing lumber, consider 1½-in.- or 1-in.-sq. arms.

DRAWERS ADD CONVENIENT STORAGE for items that normally clutter the worktable of a miter-saw stand.

MAKE IT YOUR OWN If weight is a concern, consider leaving them as cubbyholes instead.



IT'S HARD TO DESIGN A PAIR OF FOLDING LEGS that are strong, stable, and lightweight, so we chose to use sawhorses on the job site and a permanent cabinet base in our shop.

MAKE IT YOUR OWN Build folding legs, or see "Building Skills" (pp. 88, 90) for more sawhorse options.

smooth or level. The wheels must be large enough to handle the terrain. ”
—Dannyfixit

for *ultimate* varied widely from person to person, but there were a few trends. Many people complained that their current stand fell short in sturdy outfeed support, compatibility with jigs, hold-downs, and stops. Some also complained about the lack of working area on the stand, especially for activities commonly done in combination with many cutting tasks. Armed with a list of criteria and some excellent design inspiration from other people's creations, we started designing.

There will always be trade-offs

Throughout the design process for this saw stand, we were faced with dozens of difficult choices. Should the stand have folding legs and wheels, or is a pair of sawhorses a better solution? Which type of plywood offers the best combination of cost, weight, strength, and durability? Should we design this hold-down or material stop, or just buy an aftermarket version and integrate it into our design?

Ultimate is a good objective, but at the end of the day, there will always be trade-offs. It's nice to have extralong outfeed support when cutting 16-ft. stock, but if that's a rare job for you, the extra weight, cost, and hassle may be unnecessary.

After building several versions, we snuck up on a design that suited our needs, answered many of the most common reader complaints and wishes, but had room for customization to suit users with different preferences and work habits.

To help with your stand, we highlighted several areas—the ones we most heavily debated during design—with suggestions on potential changes to suit your needs.

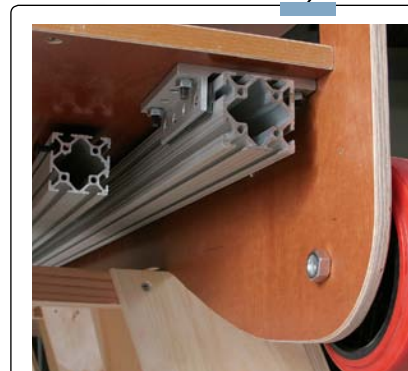
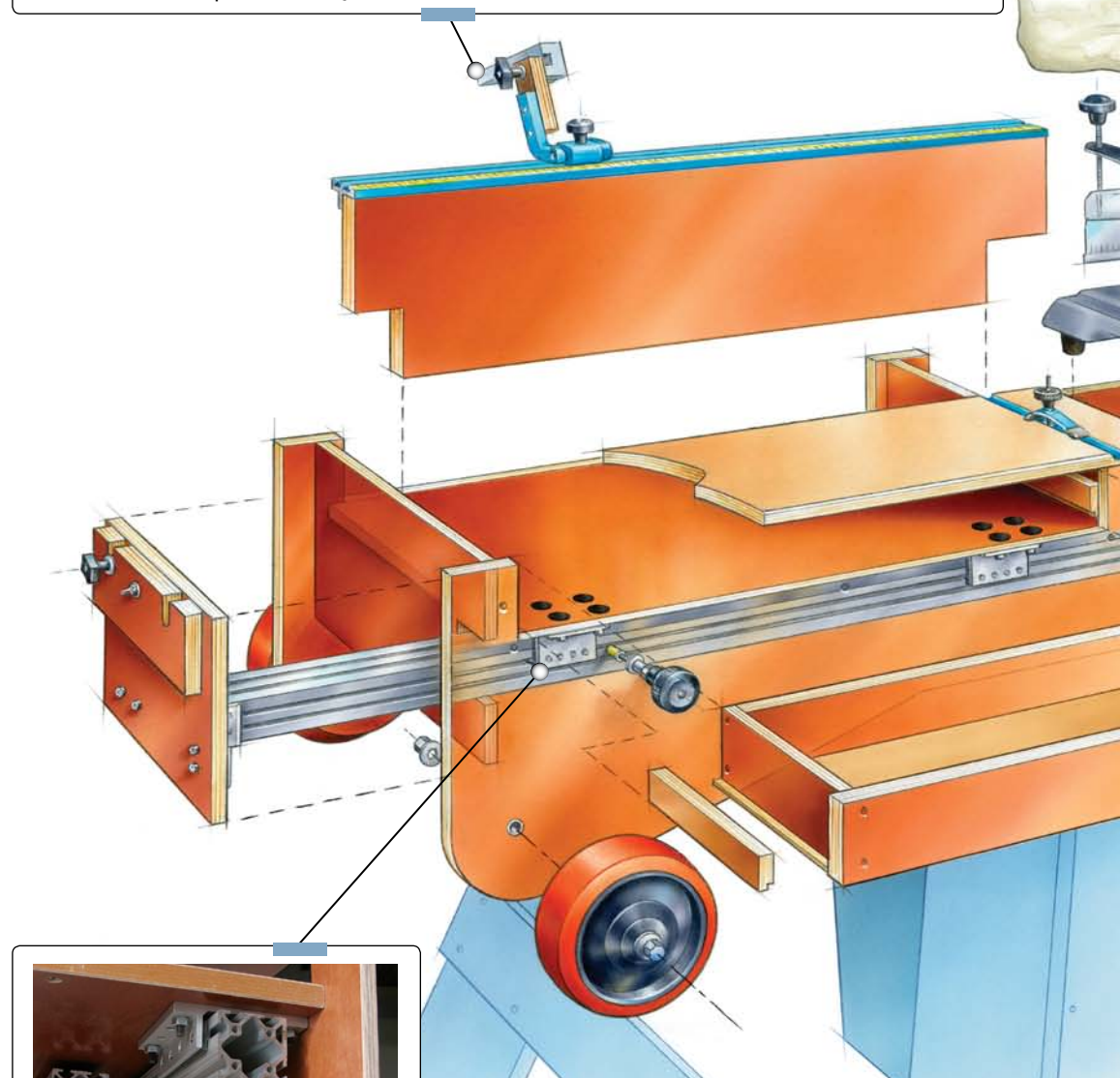
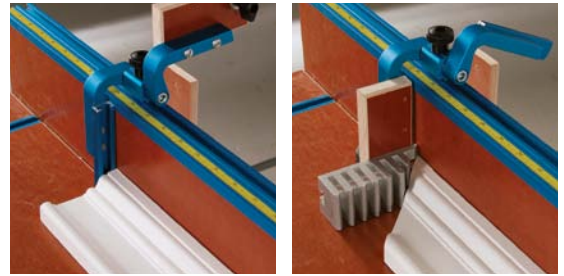
Combine these ideas with the downloadable SketchUp plans available at FineHomebuilding.com/extras, and you'll be well on your way to building your own custom miter-saw stand. □

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Photos by Rodney Diaz.

OUR STAND, IN DETAIL

Our saw stand is decked out with job-site conveniences: some shop-made, some store-bought, and some modified to fit our needs. Internet purchases and deep dives in the bins at the hardware store were invaluable to our project, and are highly encouraged for yours.

SPIN, FLIP, STOP One side of our modified flip stop (Rockler, \$16) has a flat extension for repetitive 90° cuts. On the other side, we retrofitted a miter accessory (Kreg, \$23), this one for making repetitive angled cuts on door and window trim. A fence with tape-measure inserts (Rockler, \$26 and \$10) is the heart of the repetitive-cut system.



ÜBER OUTFEED ARMS Two-in.-sq. extruded aluminum outfeed arms are admittedly expensive and heavy (about \$10 and 1½ lb. per ft.; www.8020.net), but they are far sturdier, in all directions, than wood or typical aluminum-bar stock. With the help of a pair of brackets on each side of the stand, these arms resist sagging even when they are extended 5 ft. out.



EXTRA HANDS

T-track (Rockler, \$5 per ft.) in the table accepts aluminum hold-downs (Rockler, \$10), which are incredibly useful. We use ours to hold stock for scribing, routing, coping, and as crown stops, among other things.

LOCK KNOBS To hold the outfeed arms at any desired position, we use a jig knob (Rockler, \$2), some threaded rod with locknuts, and a T-bolt insert. A screw protector keeps the aluminum arms from being damaged by the screw threads.



POSITIVE PLACEMENT

Tapered rubber stoppers, a common find at any hardware store, are a quick, accurate way to secure the saw to the stand. To avoid a tippy saw, tighten the bolts to expand the rubber stoppers for a snug fit.



“OVERHEARD ONLINE An ideal stand should make tool swaps really easy, and be as light as possible. **”**
—doble3