

Setting Up an Efficient

A veteran trim carpenter shares his strategies for improving productivity, precision, and security

Before a house is dried in, each carpenter on a crew works fairly independently, moving from one task to the next with a tool bag, a circular saw, a nail gun, and a few hand tools. There's room to move, even if a lot is going on. But after the drywall is up and the HVAC system is turned on, trim carpenters show up with hundreds of feet of trim to run, cabinets to install, and doors to hang. I've built enough houses over the past 30 years to appreciate how crazy things can get once the trim crew arrives.

To cope with this congestion and to promote as much efficiency as possible, I've developed a systematic approach to setting up a shop on a job site. My strategy focuses on separate workstations for common tasks, ample access to light and power, and features that enhance safety as well as security. Depending on the scale of the project, you might not need the full complement of equipment that my crew and I bring to a major finish-carpentry job. But with a setup like ours, you can tackle just



WORKSTATIONS MAXIMIZE PRODUCTIVITY

It's smart to set up shop in a large room not too far from the garage or other staging area where molding, sheet goods, and other materials are located. Managing workflow for a team of carpenters is tricky. Workstations revolve around specific tools, and large lanes between them allow everyone to move freely through the shop. Dedicated storage areas help to keep tools and materials organized and secure.

1. Mount the fire extinguisher in an accessible location.

2. Use a dust collector for the table saw and planer, and for general cleanup.

3. Locate the table saw to maximize infeed and outfeed space.

4. Use site-made tables for workstations (see pp. 62-63).

5. Mount the portable planer on a wheeled folding stand.

Job-Site Shop

BY GARY STRIEGLER



A POWER POLE CONTROLS LIGHTS WITH A SINGLE SWITCH

All shop lights are turned on and off at a single switch mounted on a power pole assembled from 2x4 stock. The switch controls a receptacle fastened to the top of the pole, where the string lights plug in. Use conduit and surface-mount outlet boxes on the pole. The radio platform is optional.

6. Secure portable power tools in a heavy-duty **lockbox**.

7. Locate the **miter saw** along a wall, with a trash can for offcuts close by.

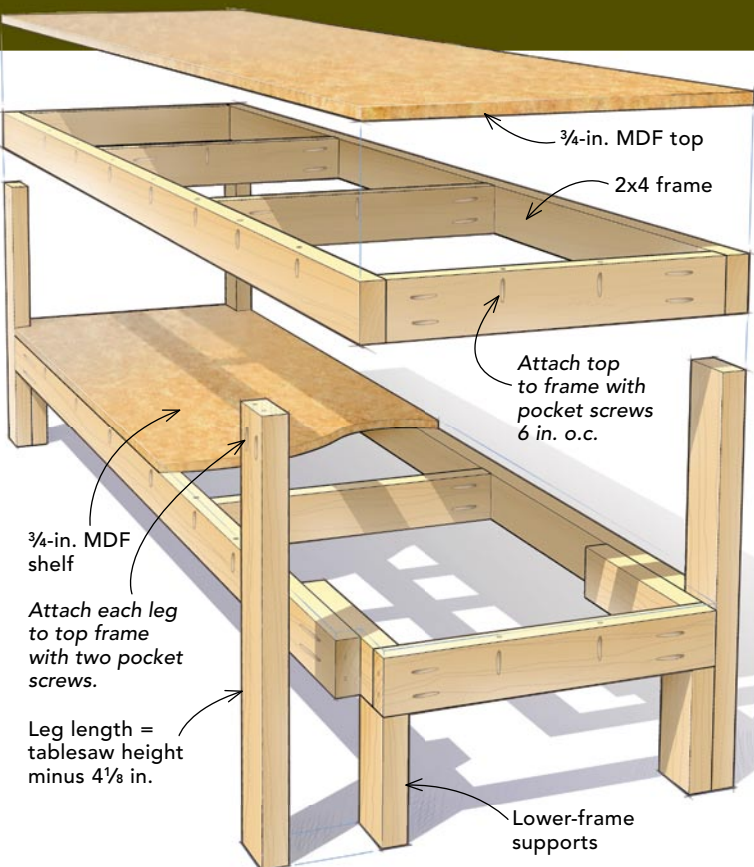
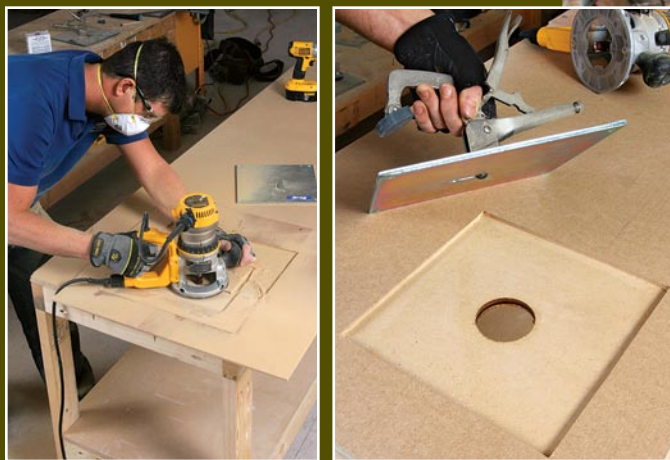
8. Run **string lights** along the ceiling. Inexpensive plastic lightbulb sockets with terminal pins clamp directly to the insulated wire in a heavy-duty 14-ga. extension cord. Steel loops simplify hanging.

9. Use **10/2 rubber-coated wire** to plug in the pole.

SITE-MADE WORKTABLES OFFER VERSATILITY WITH HOLD-DOWN HARDWARE

Our job-site worktable can be assembled and taken apart easily. I have at least two tables on site at all times. One provides outfeed support for the tablesaw; the other is our major workstation for assembling panel frames, cabinets, and other finish elements. Thanks to hold-down plates and channels and the clamps designed to work with them, these tables excel as assembly stations. As shown in the drawing below, the tables are made from 2x4s and 3/4-in. MDF. A single 4x8 sheet of MDF yields the top and shelf for the outfeed table. The other table has a two-layer top (inset photo, facing page).

1. The square steel plates designed to work with our Kreg clamps need to be mounted flush with the table surface. I rout a 1/4-in.-deep recess for the plate, square the corners with a chisel, and drill a 2 1/2-in.-dia. hole in the center to provide clearance for the plate's keyhole slot. Four 1-in.-long drywall screws run through the plate into 1x4 cleats below.

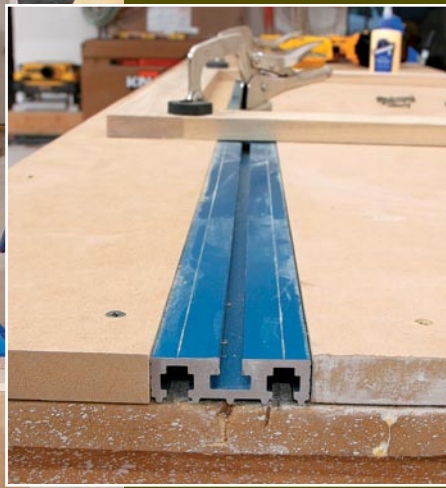


about anything, as we often do, including cabinet construction, custom closets, built-ins, and site-made wainscot paneling.

Power and light come first

Trim carpentry requires precise measuring and cutting. For that reason, the first thing we do when we arrive on a job site is string lots of temporary lights throughout the house. I'm a big believer in having plenty of light. It helps us to work safely and also enables us to do better work. To keep the floors clear and to prevent lights from being knocked over or damaged, we hang lights from the ceiling where possible as opposed to setting them up on stands.

We have two categories of job-site lighting: general and task lighting. General lighting combines with sunlight coming through windows and doors to provide a workable level of ambient light. For general lighting, the least-expensive system acceptable by OSHA standards consists of string lights that come with protective plastic cages over the bulbs. The lights I use, while not OSHA-compliant, have proven to be safe as well as inexpensive and easy to set up (see item No. 8, p. 61). At Lowe's, you can buy all of the ingredients for a typical shop-light system for about \$60: 10 plastic light sockets, 100 ft. of 14-ga. extension cord, and rubber-coated 60w bulbs (for extra safety).



2. Klamp Trak aluminum channels run the full length of one table. This makes it possible to position locking clamps anywhere along the length of the table. The Klamp Trak comes in 34-in. lengths, is just under $\frac{3}{4}$ in. thick, and mounts using 1/4-20 nuts and bolts (www.kregtools.com; \$45 per track).

2

My shop is set up around the tablesaw

It could be argued that the most-indispensable tool for a trim carpenter is the miter saw, but the tablesaw is usually my top priority when setting up to trim a house. It's the first tool we bring in and the last one we bring out.

I often line up the saw between two doorways so that the infeed and outfeed clearances extend beyond the borders of the room. I like to have 16 ft. or more at the front and back of the saw. I also like to have at least 4 ft. on each side of the saw as well. We rip a lot of 4x8 sheets of MDF, so we need the room.

Once the tablesaw is in place, we add the other parts of the shop around it. I always add an 8-ft.-long site-built table on the outfeed end of the saw. In addition to providing outfeed support, the table gives me a large workbench with a full-length shelf below for storage (photo left).

The tablesaw also shelters our air compressor. By tucking it beneath one of the saw's extension wings, we keep it out of the way and protected. If the compressor isn't moved around the site often, then it's less likely to damage walls, corners, and other finished surfaces accidentally, or to leave an oily trail throughout the house. We like to put the compressor in one spot, then run multiple hoses off it.

Mobile stands make a difference

Our sliding compound-miter saw is probably the most-used saw on the job. We always like to have a pretty good miter-saw stand to support long runs of molding, and we put the saw at a comfortable height. We set up one saw in our shop room, but in a big house, we save time by having others available as well. I've found that it's most efficient to have a saw right where we're working. We like stands that set up and break down easily.

My portable planer also has a mobile base. Although there are plenty of trim jobs where a planer isn't needed, I almost always bring along mine. I use a lot of poplar trim stock, and the planer lets me flatten a crowned board, fine-tune board thickness, and run stile and rail stock to remove saw marks. The Ridgid stand I use is designed to hold a portable tablesaw, but it and similar stands can be customized to work with a

I've tried plenty of different task-lighting setups over the years. Although halogen lights mounted on metal stands have their place on the site, we use them sparingly. They require a lot of electricity, the stands can be tipped over, and the halogen bulbs produce an unpleasant amount of heat. As an alternative, I prefer inexpensive, dome-shaped clip-on lights. Most of the time, we hang them directly above the tablesaw, the miter saw, and the workbench.

The most-important thing to me, however, is to have the lights controlled from a single source. The sun is rarely up by the time we arrive on the job site, especially in the winter, and it's often setting by the time we leave. I want to be able to flip a single switch and light up the house. At the end of the day, the single-switch rule means that I don't have to worry about a light left on in a remote room after I leave.

A simple power pole built from scrap lumber and electrical parts provides me with single-switch power control. Multiple extension cords can be plugged in to the quadplex receptacle mounted on the "trunk," and there's room to add a clip-on light at the top of the pole. I connect the power pole to the temporary-service panel or have the electrician wire an outlet directly under the panel box in the house. My power-pole design has evolved over the years. These days, it includes a small platform for our job-site radio and pencil sharpener. (The right music can have a positive effect on morale and productivity.)

Find nails with ease. Adjustable shelves on one end of the worktable hold nails and screws. With this system, we're able to locate the nail type and size we need quickly. I build the shelving as a single unit, then screw it to the table legs so that it's easy to remove. A utility-knife dispenser mounted to the end cap is also incredibly convenient.



A LOCKBOX AND A LONG CHAIN PROVIDE AN EFFECTIVE, LOW-TECH SECURITY SYSTEM

All portable tools and tool bags are stored on site in large job boxes. Each box comes with handles and a lid that secures with a heavy-duty padlock. Just about every portable power tool we need fits into two boxes. Larger tools such as thickness planers and miter saws are anchored to the tablesaw and to each other with a steel chain.



Close to the wall. This lockbox location makes it hard for a thief to get at the hinges, a vulnerable point on many boxes. I lag-screw the box through the subfloor and into the floor framing.

Inventory at a glance. Made out of MDF, these customized cubbies give portable tools like nail guns a specific home. I store the tools without their cases so that they're easier to find. With this system, the last person to leave the work site can quickly determine if a tool is missing and locate it before locking up for the day.



Locked up and ready to go. At the end of the day, we stack all miter saws on the outfeed table. A $\frac{5}{16}$ -in.-thick chain running through the tablesaw and each miter saw is locked with a heavy-duty padlock.

thickness planer. Because this tablesaw stand folds flat, the planer doesn't take up much space when we are not using it.

Collect dust and debris right where they're made

When I started out as a trim carpenter, I remember watching guys drop their offcuts on the floor. After a while, a pile would form, which they would kick or step on. Eventually, they'd become frustrated enough to pick up the debris and dump it in a barrel. This setup baffled me. My approach is simple. We keep trash cans near where we're creating the mess and get rid of the cutoffs.

I like to have at least one trash can near the miter-saw station and another near the tablesaw. Longer cutoffs stay neatly stacked beneath or behind the miter-saw stand or under one of the worktables so that they're out of the way of foot traffic.

I also equip my job-site shop with a small dust collector, along with a generous run of 4-in.-dia. plastic hose. The collector captures all the shavings from my thickness planer. It also helps to minimize the aggravating cloud of fine dust that results from cutting lots of medium-density fiberboard (MDF) on the tablesaw. At quitting time, a quick run of the vacuum sucks up a day's worth of sawdust at the miter-saw station.

For portable tools that generate a good amount of dust, we make sure their dust bags are on and functional. As an added precaution, especially when using a router, we try to remember to use dust masks. I leave this last part up to my employees, but I make sure that dust masks are available for them.

Safety and security are part of shop setup

I demand a responsible, safe approach to using power tools. Still, accidents can happen. I always have a first-aid kit, safety glasses, and earplugs stored on the shelf of one of the worktables. I keep a fire extinguisher in a visible, easily accessible location. On job sites larger than 3000 sq. ft., I have two on hand.

Although it's impossible to prevent all theft, I do everything in my power to make it extremely difficult to take anything from the job site once we leave for the day. Sometimes taking tools home every night makes sense, but most of the time, it proves to be inefficient. One of the first things I do before leaving any tools on a job is have keypads installed for the garage doors. I keep careful tabs on who has access to the code.

I have one large lockbox in the main shop area and another on the second floor. Each box holds portable tools on site. I attach the boxes directly to the floor and use heavy-duty padlocks to keep tools secure. The last point of security I employ is to thread a heavy-duty steel chain through all tools that don't stow in lockboxes. Once the lockboxes and the chain are locked, I take a final look around to see if I've forgotten anything. If not, with the flip of a switch, I'm out the door and ready to head home for the night. □

Gary Striegler is a partner in Striegler & Associates, a custom-home building and remodeling company in Fayetteville, Ark. Photos by Chris Ermides, except where noted.