Smart

BUILD YOUR OWN CABINETS

You'll get a custom assortment of drawers, plus open storage. White's clever arrangement includes a pair of fixed units with space in between for one of two rolling tool carts. An open bay in the nearest cabinet holds a shop vacuum, which can connect to any tool (router table, chopsaw) that rolls alongside.

KEEP MATERIALS ORGANIZED

Your lumber stash can take over the shop if you're not careful. Sturdy, accessible racks let you keep plenty of solid stock on hand without having it in the way. Readers submitted elegantly simple solutions.

PUT THE WALLS TO WORK

For frequently used hand tools, clamps, and hardware, the most efficient storage is in the open, close at hand. A layer of plywood makes custom holders easy to attach.

Photos, this page (main image and top left): Michael Pekovich

Shop Storage

A roomful of ideas for organizing your space

BY JOHN WHITE

By the time you're into woodworking seriously enough to set up your own shop, several things may have already happened, or will happen soon.

You will search catalogs, yard sales, and the Internet for tools large and small that you need, think you need, or just plain want—and you will buy them. You will bring home great-looking lumber because it is beautiful, even though you have no immediate plans for it. And someone, possibly a friend, will tell you that "you can never have too many clamps," and you will believe that person.

Each of these things will happen repeatedly, and your space, no matter how voluminous, will soon be a cluttered mess.

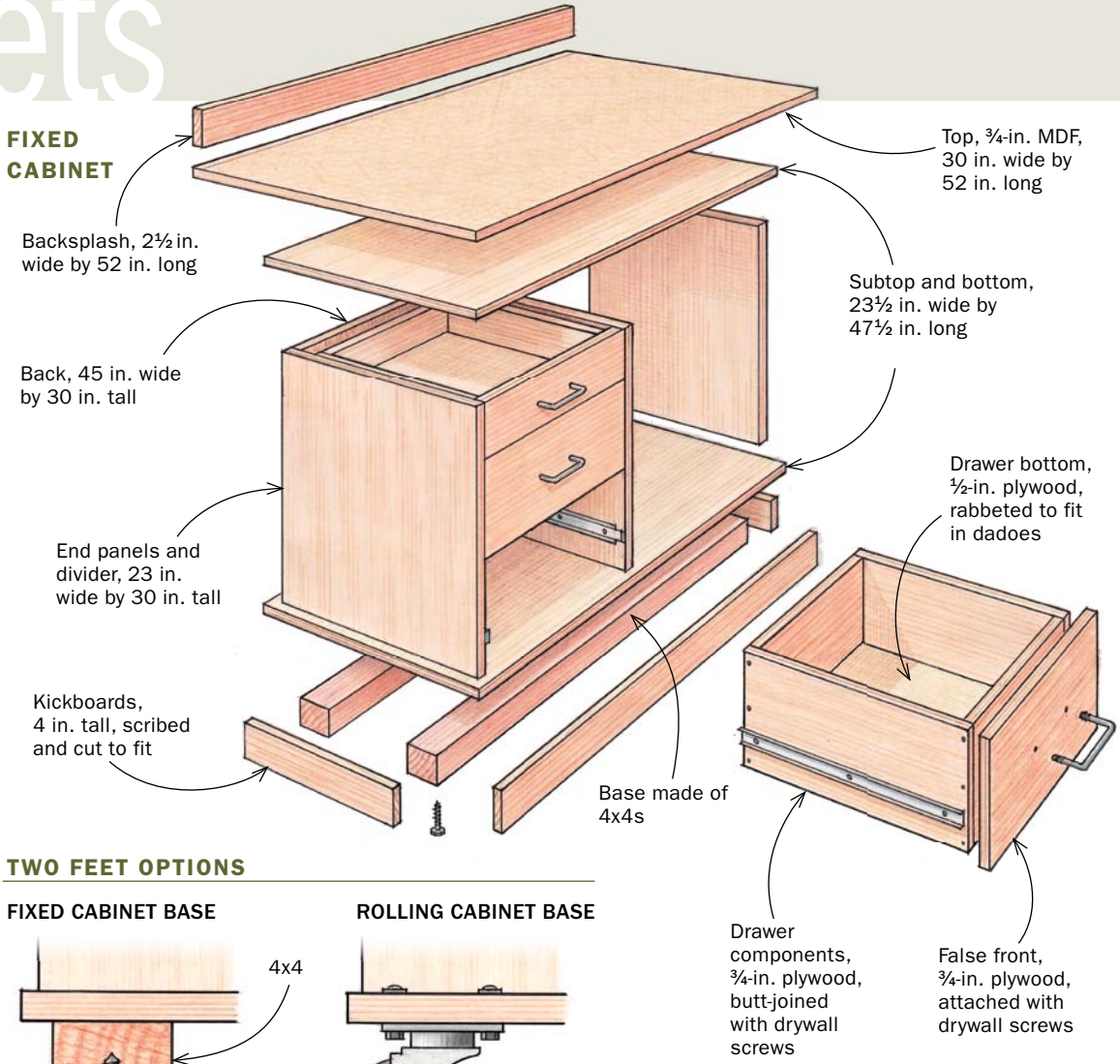
This collection of my favorite storage ideas from shops I've set up, and from *Fine Woodworking*'s readers, will help you keep clutter at bay. To show you how the cabinets, racks, and holders all work together, we built them all into the garage of *Fine Homebuilding*'s Project House, where they will get good use.

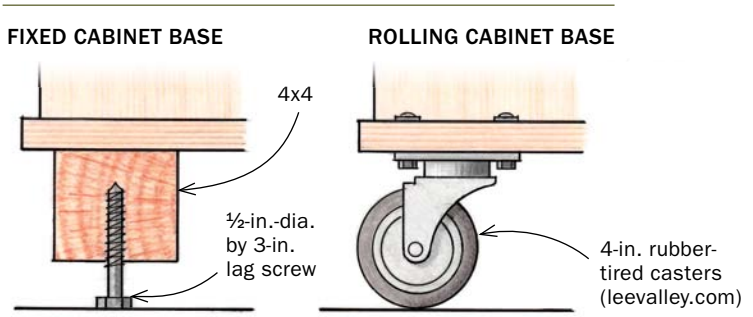
John White, a contractor and furniture maker in Rochester, Vt., is a former shop manager for Fine Woodworking.

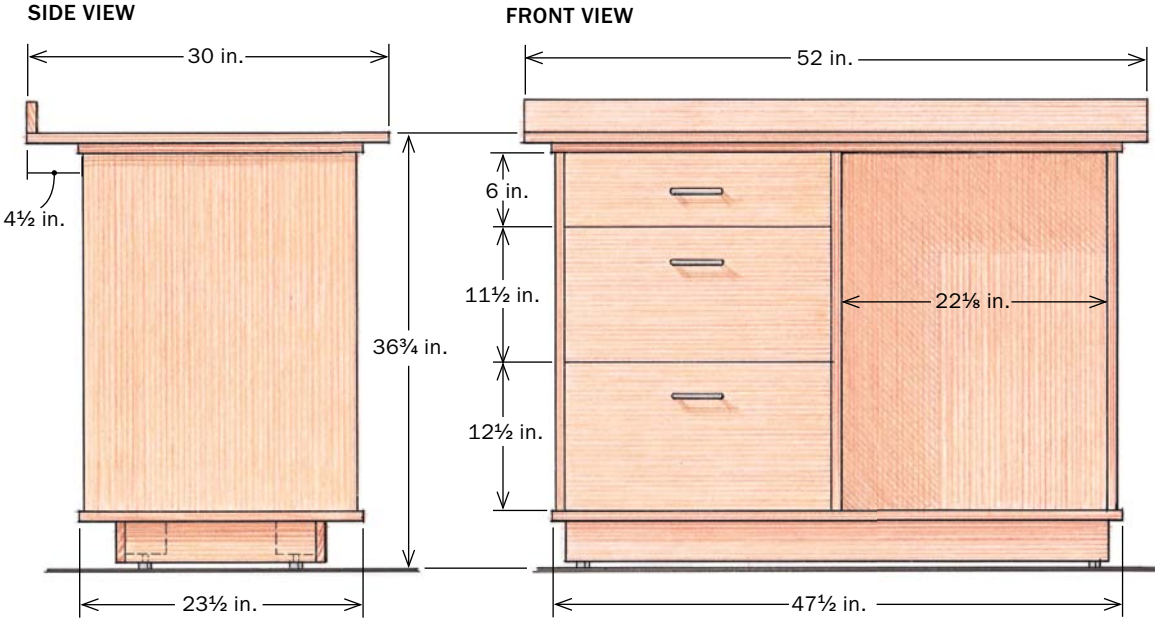
Build to fit

I especially like base cabinets in the shop because they provide horizontal work surfaces along with plenty of storage. For the Project House shop, I made a set of fixed and rolling cabinets (two each) that occupy most of a long wall. The fixed units create 20 square feet of countertop in addition to nearly 50 cubic feet of storage in the spaces underneath. The top rank of shallow drawers works well for smaller items, while the deeper drawers underneath can hold routers, belt sanders, biscuit joiners, and other large tools. One open cabinet provides space for a shop vacuum, and an opening in the MDF top makes it easy to connect to any tool you roll into place. A backsplash prevents anything from falling behind the cabinet.

I build shop furniture like this from ¾-in. Baltic- or Russian-birch multi-ply. You probably won't find this at your local home center, but it's worth seeking out at a plywood or lumber dealer because it is rigid, stable, and without voids. The cabinets are sized to be cut efficiently from standard 4x8 sheets. The boxes can be assembled easily with coarse-thread drywall screws. Be sure to drill pilot and clearance holes for each screw or you'll split the plywood and lose strength. For more tips on assembling cabinetry of this type, see my article, "Best-Ever Outfeed Table," in *FWW* #202.







Drawings: Vince Babak

Simple materials, simple joinery. *With the exception of the MDF top, White built the cabinets entirely from Baltic-birch plywood. Basic butt joints, held with plenty of counter-sunk, coarse-thread drywall screws, make a sturdy box.*

Two ways to meet the floor. *For the fixed cabinets, White mounted the boxes on skids milled from kiln-dried 4x4s, with a ½-in. lag screw at each corner for leveling. The scrap is there to set the initial height. The rolling cabinets ride on heavy-duty casters (fixed in back, swivel in front).*

Topping it off. *To the plywood subtop, White screwed a layer of ¾-in. MDF for a replaceable, low-friction surface. He had to create a large overhang in back to accommodate a protruding foundation wall, but you might not have to.*

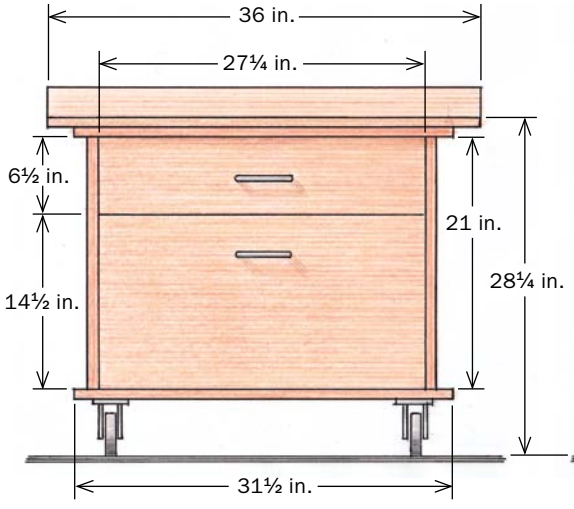
TIP

ACCURATE DRAWER INSTALLATION

White used a measured length of plywood to locate each pair of drawer slides at the correct height. This ensured that the drawer hung level, and in the right place.

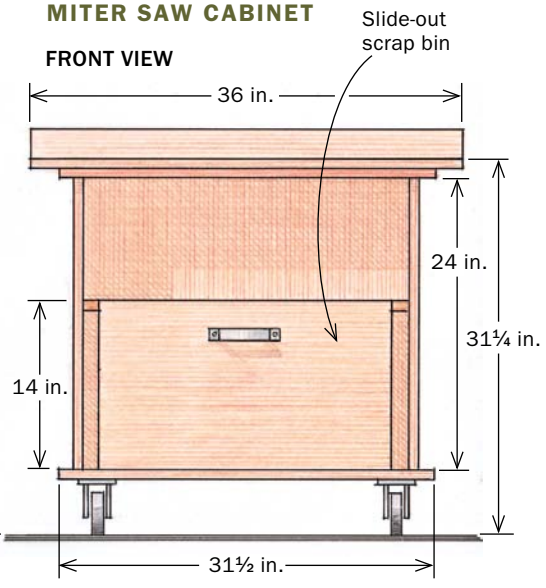
ROUTER TABLE CABINET

FRONT VIEW



MITER SAW CABINET

FRONT VIEW



Photos, except where noted: Steve Scott

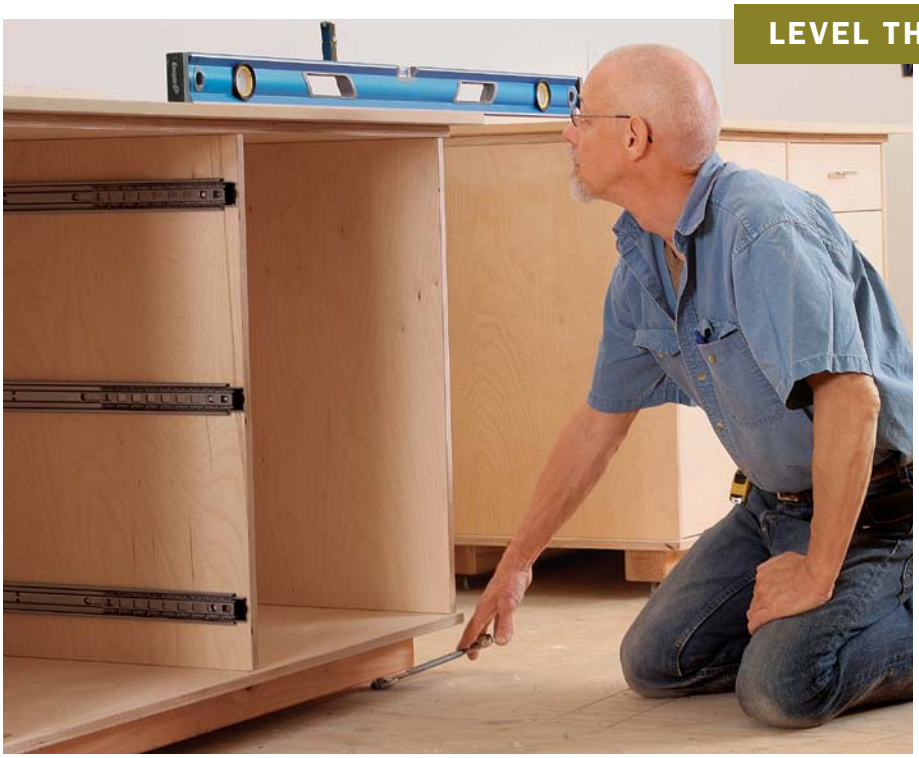
Installation

Whenever possible, I like to position base cabinets on a long stretch of unbroken wall. This makes an ideal location for a chopsaw station, offering plenty of room to orient long stock for cutting, with the countertops working as long support wings.

I leave space between the fixed cabinets to accommodate a rolling tool stand. I built two of those: a low one to hold the compound-miter saw and a second to carry a benchtop router table. A benchtop planer would be another great candidate for a rolling cart. The rolling cabinets swap in and out of a central "parking space" when I'm ready to use them, and hook up in seconds to the shop vacuum that lives just next door (see opposite page).

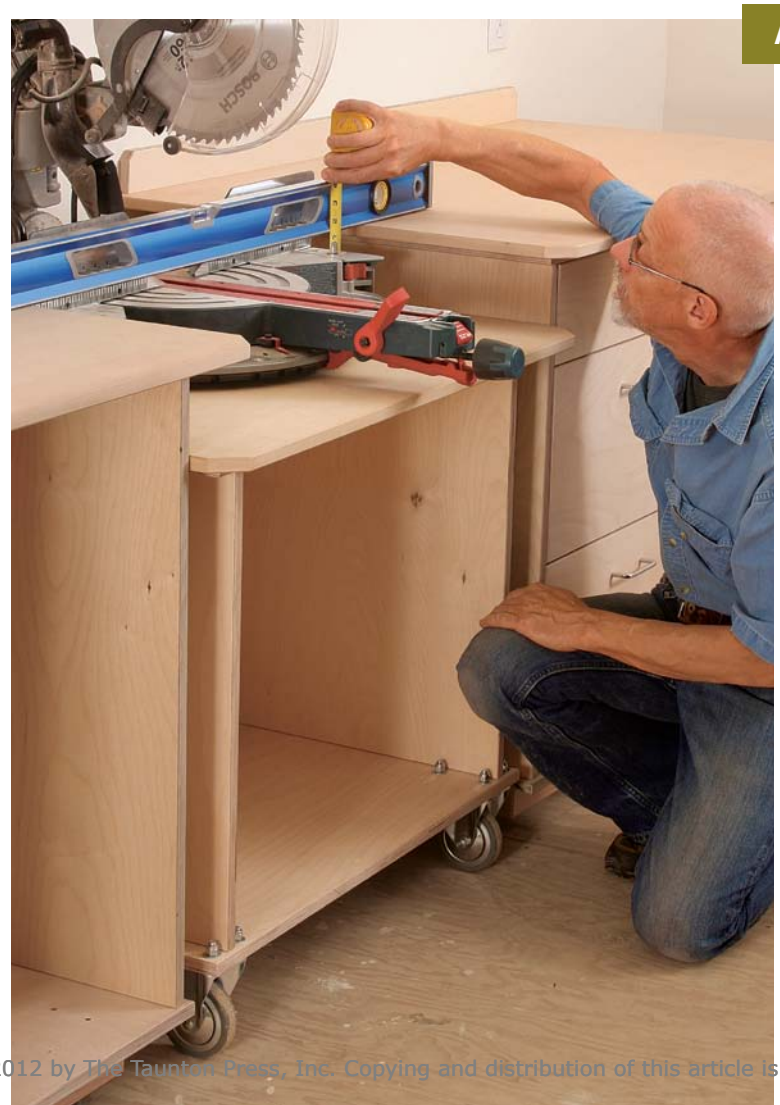
There's no need to anchor the fixed cabinets to the wall; they aren't going anywhere. Once they're in position, adjust the lag-screw feet to make sure they are level and in the same plane. Then roll the chopsaw into place and adjust the saw's height so that its bed is level with the countertops. To do this, I measured the distance between the bed and countertops and then bolted the saw to a pair of riser blocks milled to that thickness.

LEVEL THE TOPS



Just the turn of a wrench. *After moving the fixed cabinets into place, White used a long level to span the gap between them and adjusted the lag-screw feet to make sure the tops were level and coplanar.*

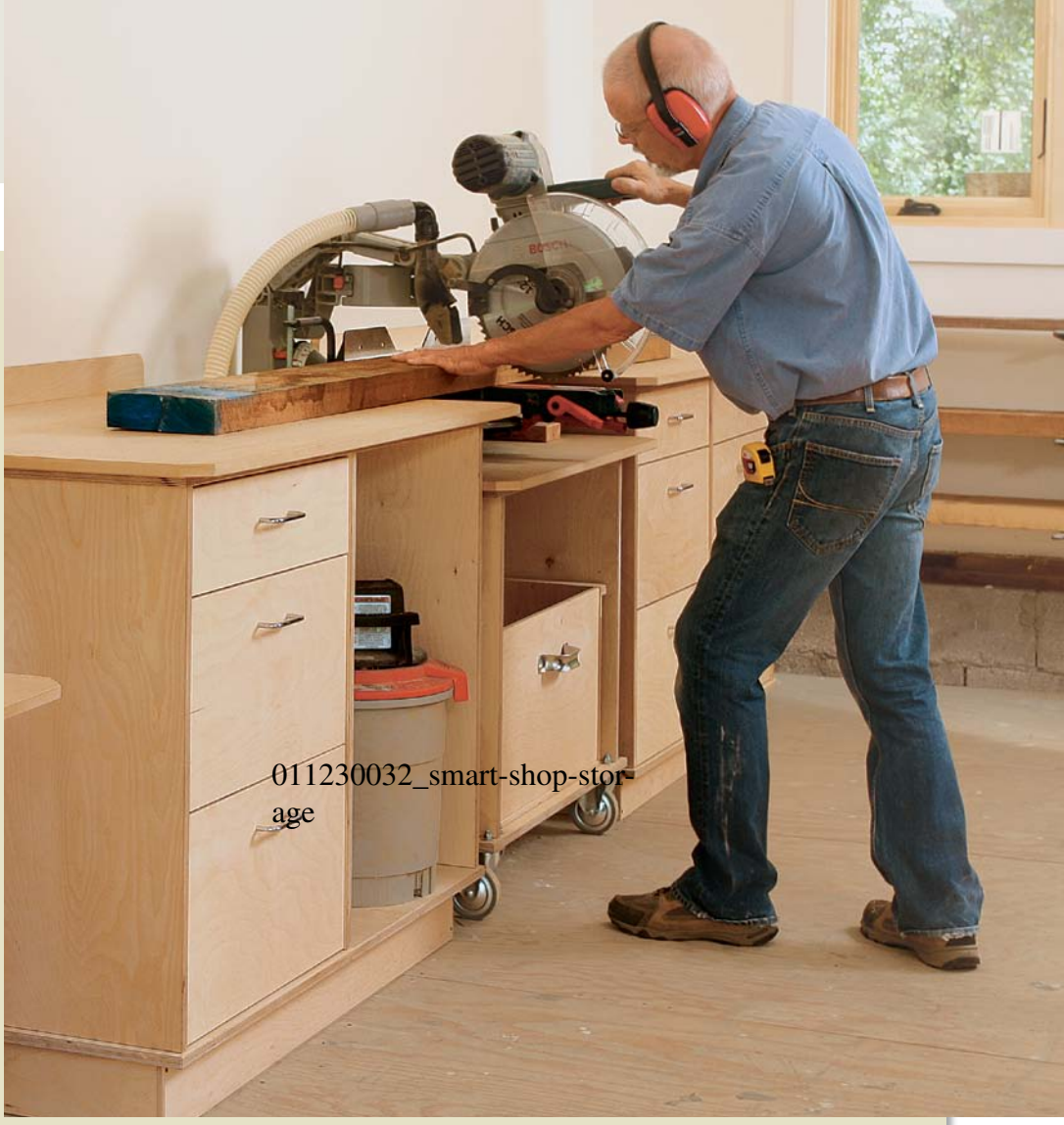
ALIGN THE SAW



Smart riser blocks. *White deliberately built the chopsaw stand low, so the tool's height could be dialed in precisely to match the cabinet height. To do this, he measured from the saw's bed to the countertop height (left), then mounted the saw on blocks milled to the corresponding thickness.*

Change out tools in minutes

Built-in dust collection. *An open cabinet bay holds a shop vacuum. The hose threads through a hole in the cabinet's top for connection to the miter saw and router table, as well as any power tools used on the countertop. A sliding bin underneath the saw collects cutoffs.*



011230032_smart-shop-storage

Ready to rout. *The router-table cabinet is sized to put the tool's work surface at a comfortable working height. After rolling either cart into place, White secures it with two simple screen-door hooks (left).*

Photo, top right: Michael Pekovich

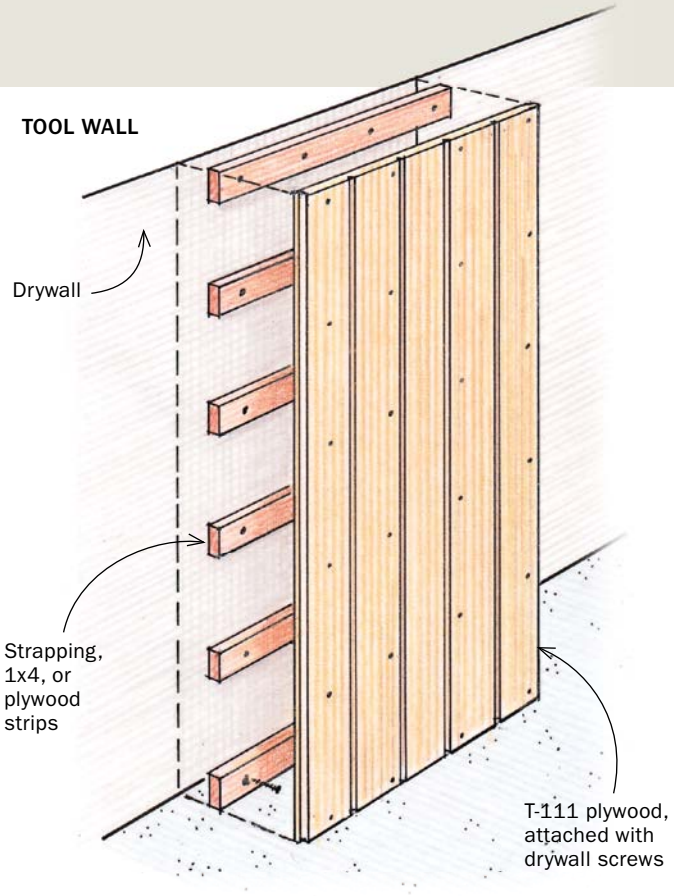
Wall storage

Cabinets are great for stowing tools and supplies that don't see action every day. Tools used all the time should be closer at hand.

This is especially true near the bench, where I keep chisels, saws, and layout tools in open racks on the wall. This makes them easy to find, retrieve, and stow. The same system works terrifically for clamps. A lot of woodworkers stow their clamps on a cart that rolls out of the way when not in use. For a smaller shop, it makes more sense to use open wall space.

A fast and flexible way to create this storage is by covering the studs or wallboard with sheets of T-111 plywood (grooved siding with a roughsawn face). I like T-111 because, like any plywood, its strength means you can install tool racks anywhere, without searching for a wall stud. But I like the roughsawn look of T-111, and its surface disguises abandoned screw holes.

The plywood surface makes it easy to attach an assortment of shelves and custom holders for a wide variety of tools and clamps. And the arrangement is easy to reconfigure as your tools and needs change.



CLAMPS

Start with a sturdy backboard. *White used T-111 plywood, an inexpensive exterior sheathing product, as a base for mounting tools and clamps. Battens screwed to the wall provide more attachment points for the siding and eliminate the worry of aligning seams with stud locations.*

Secure, accessible storage. *The plywood's strength lets you attach clamp-holders wherever you need them without worrying about anchoring them to wall studs.*

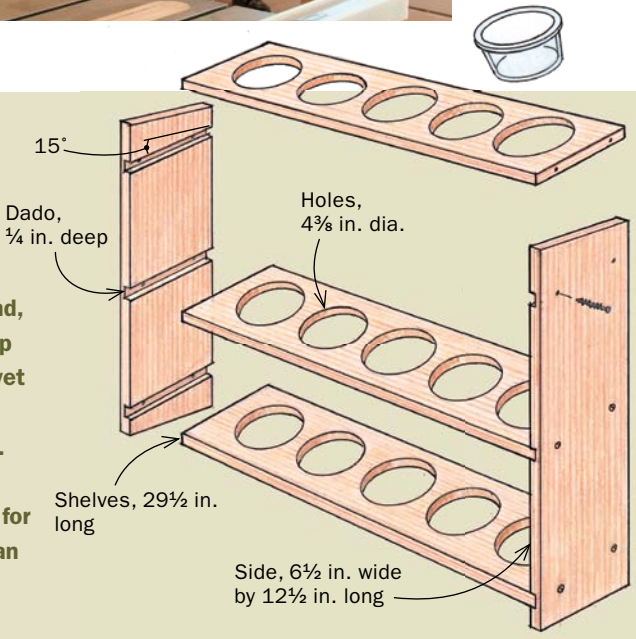
Photo, opposite page (center): Michael Pekovich

Custom holders. *Near the bench, White mounted an array of holders for hand tools of all kinds. For chisels, he routed dadoes of differing widths in a long board, and then added strips on the front side to keep the chisels in place. The tool walls make it easy to find, retrieve, and stow the items you need most often.*

John Hartranft's design inspired this rack.

Reader tip: Handy hardware rack

Woodworkers use all kinds of fasteners and hardware, from carriage bolts to brass wood screws. It makes sense to keep a variety on hand, so you don't have to interrupt your work for a trip to the hardware store. To keep them organized yet handy, *FWW* reader John Hartranft suggested a simple rack like this. His was drilled to hold open-top yogurt containers. I used larger deli containers, which you can buy in bulk at amazon.com. The design puts the contents on display, and the shelves provide space for labeling. Another great thing about this design is that the containers can be lifted out and carried to the work.



Grab and go. *This wall-mounted hardware shelf uses deli containers to hold a variety of wood screws, nails, and dowels. The containers can be lifted out easily.*

A bit for big holes. *With a fly-cutter attachment for the drill press, cutting large-diameter holes is a straightforward process. Make sure the workpiece is firmly anchored to the table.*

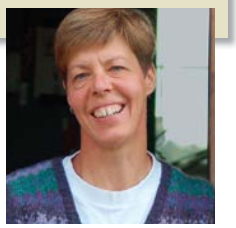
Sheet goods

continued

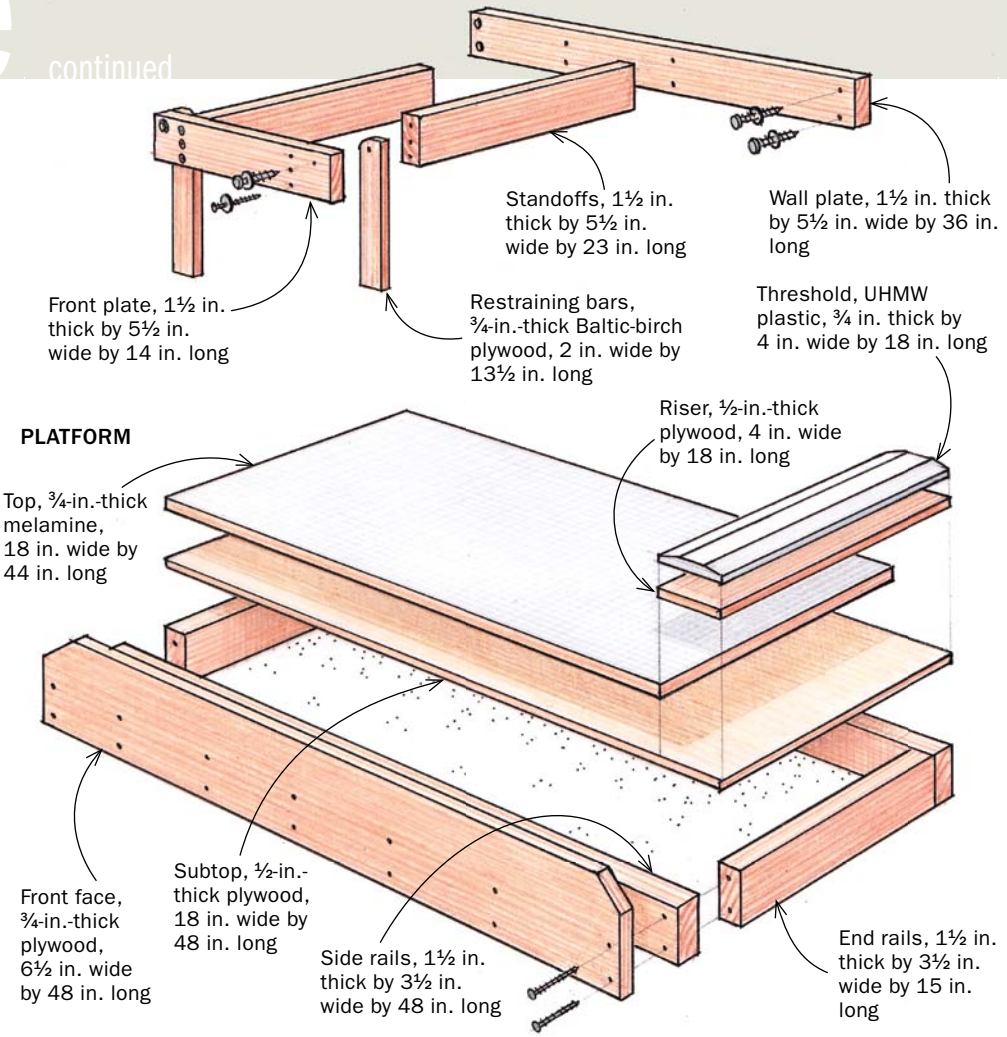
Because they are heavy and hard to handle, the most efficient place to store sheet goods is near the entrance where you bring them into the shop. In this shop, I placed the plywood rack right next to the twin carriage doors. And, because the tablesaw is only a couple of steps away, there won't be any trouble maneuvering through the shop with a cumbersome 4x8 sheet.

The smart vertical design was suggested by reader Karen McBride. The rack holds the sheets between the wall and a support arm that can mount to a wall (as shown) or a ceiling joist. The support arm stops the travel of the sheet tops; this lets the user flip the sheets

Reader tip: Easy-access plywood rack



Karen McBride's plywood rack inspired this design.



Safe storage for sheet goods. *The restraining bars lift out of the way for loading. A lipped platform secures the sheets at the bottom.*

Take your pick. *The restraining bars let you leaf through the stack to find a sheet and remove it easily without removing others.*

Rock-solid rack. *A heavy-gauge steel rack, mounted to the wall studs with lag screws, can hold several hundred pounds of lumber. These brackets and standards are sold individually at leevalley.com.*

forward to view and retrieve a sheet from anywhere in the pile. The bottom ends of the sheets rest on a slightly raised platform covered with melamine particleboard with a UHMW plastic strip on the open end for easy sliding in and out of the rack.

Lastly, some folks say that a shop is only as good as its lumber stash. But how good is that, really, if the stash is disorganized? The solution is to get your lumber up on a good sturdy rack. It's not much more expensive to buy one than build one, so we bought one. I put the rack along the shop's back wall, with long stock below the window and shorter boards higher up, between the back door and the back window.

Organized. *To work around the window, longer boards are stored low, shorter lengths up higher.*