

'm in the drywall business — admittedly not the most glamorous line of work. When I first started out 20 years ago, not only was drywall considered unglamorous, it didn't even require many tools. And, in the building business, it's "no tools, no glory." I always had a decent but dusty truck with some scaffolding

by Myron Ferguson

and a few planks in the bed. The rest of the tools I needed to hang, tape, and sand, I could pretty much carry in my arms.

I'm proud to say that in the last 10 years or so, all that has changed. A lot of new labor-saving tools, as well as tools that improve quality, have become available. I don't hesitate to buy the tools I need, either. Nowadays, I make four or five trips to the truck to haul my tools, just like the framers and finish carpenters do. For any of you builders who occasionally find yourself doing some drywall work now and then, here's a rundown of the tools I take to the job. Many of these are standard tools, but you may not have heard of some of them.

Measuring and Marking

A good-quality tape measure is important. I use a 25-foot tape to figure materials for large rooms and, along with my utility knife, to scribe short, straight measurements

Whether you're taping a little or a lot, specialized tools will help you deliver a superior finish





Figure 1. This pro-duty T-square from Warner has a ¹/4-inch-thick tongue (left); most lumberyard varieties have only ¹/8-inch-thick tongues. Graduated notches on the Johnson 24-inch ripping square guide make it easy to use a utility knife for long cuts (above).

along the edge of a sheet of drywall. The wider blade of a 25-foot tape allows you to extend it farther before it sags or buckles.

T-square. A 4-foot aluminum T-square is a must for any drywalling job, large or small (see Figure 1). On larger jobs, I have three or four squares on site so I don't have to go searching as I move from room to room working different stacks of drywall. You can pick up a 4-foot-long square for about \$12 at

most discount lumber stores, but the tongues are only ¹/8 inch thick and their construction is somewhat flimsy. I buy a better-grade square with a ¹/4-inch-thick tongue from Warner Tools (see "Sources of Supply," page 9) for about \$20. The thicker, stiffer metal gives more accurate cuts and lasts longer.

Scribing square. I also use a 24-inchlong Rock-Ripper Scoring Square from Johnson for scribing long, narrow strips of drywall. Graduated notches along the square's blade guide your utility knife as you slide the square along the edge of the panel. The scribing square provides a more precise alternative to the tape-measure-andutility-knife approach to scribing.

Specialized Cutting Tools

Accurate, clean cuts are important because they keep the amount of taping and repairs to a minimum.



Each type of cut requires a different cutting tool. My cutting tools are laid out in Figure 2.

The most common tool is, of course, the utility knife, which is used to score and snap straight cuts. I always keep a sharp blade in the knife for clean cuts and to prevent tearing the paper. For smoothing rough edges, I use a Procut Rasp-n-Knife from Warner with a serrated handle that works great as a drywall rasp. I have both a keyhole saw and a larger, more rigid drywall saw that makes short work of large cutouts at doors and windows.

The RotoZip drywall router is one of my favorite tools. The pilot-tipped spiral cutter follows the outline of an electrical box or window opening when guided in a counter-clockwise direction. A special attachment is available for making circular cuts and is ideal for retrofitting recessed lights.

A circle cutting tool scores drywall in a perfect circle by pivoting a sharp blade around a point stuck into the drywall at the hole's center. Hole diameters are calibrated right on the pivot-arm. The scored drywall is removed by tapping it inward and cutting the paper backing with a utility knife.

Lifting Tools

All drywall panels have to be lifted into place, some to the top of a cathedral ceiling, some only $^{1}/_{2}$ inch off the floor to butt against the upper panel on an 8-foot-high wall.

The drywall lift makes one-man hanging possible and two-man hanging a breeze. Just place the finish-face of the panel against the tool's cradle, wheel the lift into position, and crank the sheet skyward. The crank locks into place to hold the sheet firmly against the framing. The lift works great

on walls and flat or sloped ceilings up to 16 feet high. If you're not ready to make a \$550 to \$800 investment, drywall lifts are available at most tool rental shops.





aluminum drywall bench provides enough elevation to hang ceilings up to 10 feet high. At the highest adjustment, a detachable "Mack's Step" accessory adds an intermediate step and more stability.

Figure 4. A baker's scaffold rolls easily through doorways to provide a mobile platform for ceiling work up to 12 feet high.

Drywall bench. If you have extra help and you're working low to average ceiling heights (10 feet or less), a drywall bench is a must — don't risk your neck on inverted mud-buckets and makeshift rigs. These stable aluminum benches are about 4 feet long and 10 inches wide and can be adjusted in height from 18 to 48 inches. A low siderail acts as a step to assist climbing up with a piece of drywall. When the bench is set for higher ceilings, the rail step is a little harder to use. A special attachment, called Mack's Step, can be ordered to fit the bench you're using. It hooks onto the side of the bench, adding an extra step and more stability (Figure 3, previous page).

Baker's scaffold. For ceilings that are too high for a drywall bench, the so-called baker's scaffold may give you just the boost you need. It's narrow enough to fit through a door opening, is available in 6-, 8-, and 10-foot lengths, and it can be adjusted to up to 6 feet high in roughly 4-inch increments. The baker's scaffold provides a nice stable platform for working on ceilings up to 12 feet high (Figure 4, previous page).

Hanging or taping drywall on higher ceilings also requires a stable work platform. I use metal scaffolding with a minimum 4x10-foot platform that can be adjusted in 15-inch height increments.

Deadman. A lot of us have used a sim-

ple site-made T-support, or deadman, to help hold a sheet of drywall tight against the ceiling while it's being attached. A new version of

this device, the Stiff Arm from Falcon, adjusts for different ceiling heights and locks into place. The extra support frees up a live person to attach the panel (Figure 5).

Wall-panel lifters. As I mentioned before, sometimes a panel needs to be lifted only 1/2 inch or so off the floor. It sounds simple, but without the right tool it can actually be difficult to accomplish. A foot lift is a small, metal wedge that works like a see-saw lever. Jammed under the bottom edge of the panel, all you do is step on it to raise the panel into place. Both hands remain free to attach the panel (Figure 6).

Stilts. I use stilts primarily for taping and sanding. Stilts eliminate the need for benches and ladders when finishing ceilings and walls up to 10 feet high. Stilts allow for a lot of mobility and, as a result, improve productivity and the quality of the work.

Figure 5. The adjustable, locking Stiff Arm deadman provides temporary overhead support when hanging ceiling panels.

Figure 6. A foot lift works like a small lever to boost lower wall panels into position, leaving both hands free for fastening.



Figure 7. Unlike a carpenter's hammer, the convex face on a drywall hammer makes a dimple in the panel without tearing the paper facing. The hatchet-like blade is used mostly for prying.





Figure 8. Although he often uses a standard electric drywall screwgun, the author also likes the convenience of the Senco cordless self-feeding screwgun.



Figure 9. The author's main taping knife has a 6-inch-wide blade, but he keeps other sizes and shapes handy for tight corners and spaces. Stiffer blades are best for the first, tape-embedding coat, while more flexible blades are best for smoothing finish coats.

Fastening Tools

Occasionally, I use nails to attach the perimeter of a drywall panel. A drywall hammer looks like a hatchet, but it isn't sharp. I use the blade end for prying and lifting and, sometimes, if a panel doesn't quite fit, I'll chop at the high spot to coax the panel into place. Unlike a common framing hammer with a flat striking face, the convex face of a drywall hammer leaves a proper shallow dimple without tearing the paper facing (Figure 7).

Screwguns. Drywall screws are the best fasteners for drywall. A drywall screwgun with a magnetized Phillips bit is the best way to set the screws, because the panel is pushed tight against the framing while the gun zips the screw in to the proper depth. When you apply pressure to the screw, the tool's positive clutch engages; it disengages when the screw reaches its proper depth. This feature enables the user to lock the trigger in the "on" position for efficient use. Look for a well-balanced tool with a comfortable grip, ease of use overhead, and the ability to set a screw close along the inside edge of a corner. I use a Grabber 6.3-amp 4,000-rpm Rocker 4063. I also love my Senco Dura Spin cordless self-feeding screwgun because I don't have to drag a lead cord around or constantly reach into my toolbelt for a screw (Figure 8).

Taping Tools

Taping knives are available in widths from 1 to 24 inches. I use a 6-inch-wide knife the most, for embedding the tape, for applying and smoothing finish coats of compound, and for covering the fasteners. For the tape-embedding coat, I prefer a stiffer knife; for smoothing compound on finish coats, I like a knife with a little more flex. I even have a pointed knife that's real handy for hard-to-get-at corners (Figure 9). I use a wide knife only to apply and smooth the compound on the second (filler) and third (finish) coats. Taping knives, 10 to 24 inches wide, are great for blending intersecting seams and for skim-coating larger areas.

The curved-blade trowel has a concave curve in the blade approximately $^{5}/_{32}$ inch deep. It's available 10 to 14 inches long and 4 or $4^{1}/_{2}$ inches wide. The curved blade puts a perfect crown on finished joints, and is great for feathering and finishing beveled-edge seams (Figure 10).

Hawk. I use a hawk in conjunction with my taping knives when I need to



Figure 10. A curved-blade trowel puts a perfect crown on finished joints and creates great feather edges.

hold a ready supply of joint compound. Hawks are available in sizes from 8 to 14 inches square.

Mud pan. I never used a mud pan until I started thinning my compound down for finish coats and skim coating. Thinned compound will drip off a hawk, so a pan becomes necessary (Figure 11). My 12-inch stainless-steel mud pan accommodates my widest taping knife. The stainless steel doesn't rust and is easy to clean.

Tape holder. The drywall tape reel, or tape holder, attaches to your belt and

holds up to a 500-foot roll of paper tape. A tape reel is a fundamental tool for any size taping job. It's always at your side so you never have to go searching for a misplaced roll, and the tape spools out for quick and easy tear-offs (Figure 12).



Figure 11. Thinned compound will slide off a hawk (left), but stays contained in a mud pan (below).

Mixing Tools

Whenever I open up a pail of joint compound, I like to loosen it up a bit and make sure it's consistent. I give the compound a quick stir, using a hand mixer that looks like a big potato masher. After use, I drop the mixer into a bucket of water to keep the compound from drying on the tool.

A mixing paddle chucked in a ¹/2-inch drill takes the drudgery out of mixing. I use a paddle when thinning compounds and for mixing dry setting-type compounds (Figure 13).

Sanding Tools

Sanding is an unpleasant but important part of a quality taping job. A number of tools make the task go a little faster, but keep in mind that a quality hanging and taping job greatly reduces the amount of sanding necessary. Sanding may not be fun, but it sure is good exercise.

Pole sander. I use a pole sander on most areas that require sanding. The pole sander has a rectangular or triangular pivoting head and a 4-foot handle that gives you plenty of reach and leverage. Heads are available for hand use, too. I like Warner's triangle-shaped hand sander for touch-ups. I can point it right into a corner or glide it along an inside edge without marking up the adjacent side.

The abrasives used on pole and hand sanders are available in a variety of grits. The best choice for finish sanding is 150 grit. You can use a sanding screen or sandpaper, but I prefer the screen because it doesn't plug up with dust. And when the abrasive gets worn, you can



Figure 12. A tape roll keeps up to 500 feet of paper tape handy on a belt-mounted dispenser.





Figure 13. A hand mixer loosens up readymix, while a drill-mounted paddle mixer takes the drudgery out of mixing dry setting-type compounds.





Figure 14. A sanding screen or 150-grit sandpaper is the best choice for finish sanding (left). Screens can be flipped over when the abrasive is worn. The author uses a variety of pole-mounted and hand-held sanders (right). Triangular sanding heads are particularly useful in corners.

flip the screen over to expose a fresh surface (Figure 14). However, as far as I know, pre-cut sanding screens aren't available for the triangular sanding pad yet.

The dry sanding sponge (from Warner Tool or Trim-Tex) is made of a dense, flexible material that is covered with grit. Sizes vary from 3x4 inches to 4x8 inches. Sponges are available in different grits; some have beveled edges for getting into tight corners. A fine-grit sanding sponge is great for small touchups after you've treated the field with a pole or hand sander.

Dust Control

The dust-free sanding tools that I have tried work quite well. Sand&Kleen makes a sanding attachment for a shop vacuum that draws the dust into a water reservoir (Figure 15). The kit costs about \$40 and includes the reservoir bucket, 20 feet of hose, and a hand sander (available from Amerashop). I use a Wilco dust-free pole sander — with a sealed pivoting head, an extendable handle, and a vacuum hose — that costs about \$250. Some sanders have an oscillating sanding head, others are manual, but all involve a vacuum and hose to draw the dust directly from the sanding head into a filter.

A certain amount of touch-up sanding will always be necessary, so you'll have to take other precautions when there's a strict emphasis on dust control. To seal off the work area, I use plastic sheeting and Curtain Wall's adjustable

aluminum poles and clamps to put up an effective temporary dust barrier.

Dust mask. Speaking of dust, to prevent joint compound from reconstituting inside your nose, don't forget to use a disposable mask with a good seal that's approved for protection against nontoxic dust and mist.

Mechanical Taping Tools

After years of traditional drywall finishing, I decided to give mechanical taping tools a



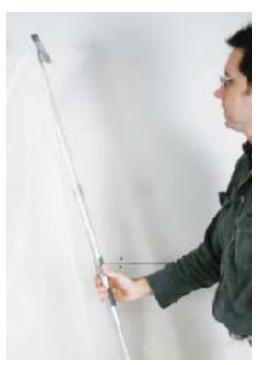


Figure 15. This dustless attachment for a shop vacuum captures nearly all of the sanding dust in a water filter (left). A temporary dust curtain is useful on remodeling sites (above).

Figure 16. An automatic taper applies paper tape and compound simultaneously to seams and corners.





try. I'd heard mixed reports about them but hadn't seen them in use. Ames Taping Tools conducts a one-day class on using mechanical taping tools in Leola, Pa., so I made the trip, assuring my wife as I left that I was only going to gather information. The training from the Ames crew was excellent, and I was really impressed with the tools. Needless to say, I came home with a complete set and a very con-

vincing argument in my defense (at least from my perspective) for renting them. (Although the tools are expensive to purchase — ranging from \$3,000 to \$5,000 for a complete set — Ames doesn't sell their mechanical tools; they only rent them.)

I rented the tools for about a year, and then finally decided to purchase a similar set from Wilco Drywall Tool for about \$3,500. Now, whenever I tape a large job, I use the mechanical tools.

The automatic taper applies paper tape and the proper amount of joint compound simultaneously as the tool head is rolled along a seam or inside corner (Figure 16).

Loading pump. Many of the mechanical tools have to be filled with joint compound. The loading pump comes with different attachments for the various tools (Figure 17). It's lightweight, stable, and easy to clean, and it has a reversible handle for left- or right-hand pumping.

A corner roller embeds the tape into the compound, following the automatic taper in inside corners.

The 3-inch adjustable corner finisher wipes down and feathers the compound after the corner roller embeds the



Figure 17. Mechanical taping tools must be loaded with compound using a special pump (left). Attachments adapt the pump to various finishing tools.





Figure 18. A corner roller embeds tape in the compound following its application by the automatic taper (far left). An angle applicator attaches to the corner finisher to deliver compound to the surface for tooling. The 3-inch adjustable corner finisher smooths and feathers the compound after the tape is embedded by the corner roller (left).



Figure 19. A flat box dispenses second and third coats to the taped joints. An adjustable curve in the blade ensures a precise, feathered crown on flat seams.

tape. The 3-inch corner finisher can also be used to apply and smooth the finish coat on inside corners, but to do this, joint compound has to flow into the finisher, then onto the corner (Figure 18).

An angle applicator is essentially a box filled with joint compound that attaches to the corner finisher. Joint compound is forced out of the box and through the corner finisher, which in turn smooths and feathers the joint compound.

Flat boxes, or mud boxes, apply and smooth the joint compound for the filler and finish coats over taped joints. These boxes come in different widths: 7, 10, and 12 inches. I use the 10- and 12-inch models (Figure 19). I like the uniform results that I get with the flat boxes. The width of the seam is determined by the box, but the box's trowel edge can be adjusted to match the precise crown of the compound previously deposited on the seam.

Myron Ferguson is a drywall contractor in Broadalbin, N.Y., and the author of Drywall: Professional Techniques for Walls and Ceilings. Ask the author any follow-up questions at www.jlconline.com/forums by clicking on Drywall and Finishes.

Sources of Supply

Amerashop

P.O. Box 2219 Lower Burrell, PA 15068 877/465-4039 www.drywall-tools.com

Ames Taping Tools

3305 Breckinridge Blvd., Suite 122 Duluth, GA 30096 800/241-2771 www.amestools.com

Curtain Wall

490 Wellington Ave. Cranston, RI 02910 800/424-8251 www.curtain-wall.com

Falcon Ladder & Scaffold

222 Adams Rd. Kelowna, BC VIX 7R2 Canada 800/522-3313 www.falconladder.com

Grabber Construction Products

205 Mason Circle Concord, CA 94520 800/477-8876 www.grabberman.com

Hard Industries

P.O. Box 1259 Windsor, CA 95492 800/867-8273 www.hard-industries.com

Johnson Level & Tool

6333 W. Donges Bay Rd. Mequon, WI 53092 262/242-1161 www.johnsonlevel.com

Mack's Step

4686 Eagle Circle N.W. N. Canton, OH 44720 888/586-8650 www.macksstep.com

RotoZip

1861 Ludden Dr. Cross Plains, WI 53528 877/768-6947 www.rotozip.com

Senco Products

8485 Broadwell Rd. Cincinnati, OH 45244 800/543-4596 www.senco.com

Trim-Tex

3700 Pratt Ave. Lincolnwood, IL 60712 800/874-2333 www.trim-tex.com

Warner Tool

1345 Industrial Park Blvd. Minneapolis, MN 55441-3899 877/927-6378 www.warnertool.com

Wilco Drywall Tools

1120 Siddonsburg Rd. Mechanicsburg, PA 17055 717/766-4594