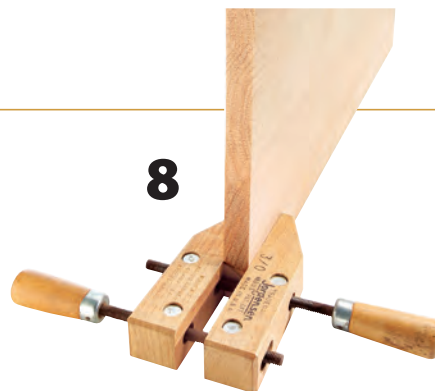


30 Tips for Gluing & Clamping





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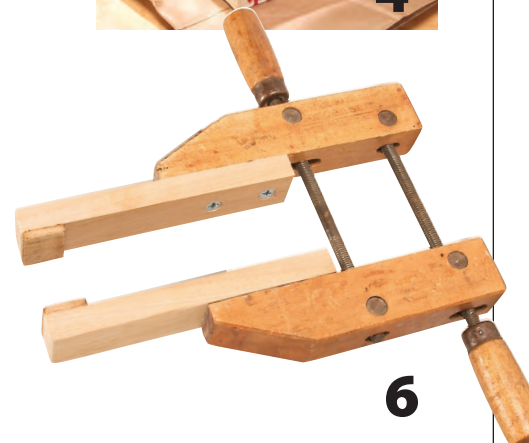
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1285 Corporate Center Drive, Suite 180, Eagan, MN 55121

Brian Ziff, bziff@AmericanWoodworker.com
office (860) 417-2275, cell (203) 509-0125

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Tim Henning, thenning@AmericanWoodworker.com
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Contact the editors

Email: aweditor@AmericanWoodworker.com

Phone: (952) 948-5890, Fax (952) 948-5895

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1 Snap-On Soft Jaws

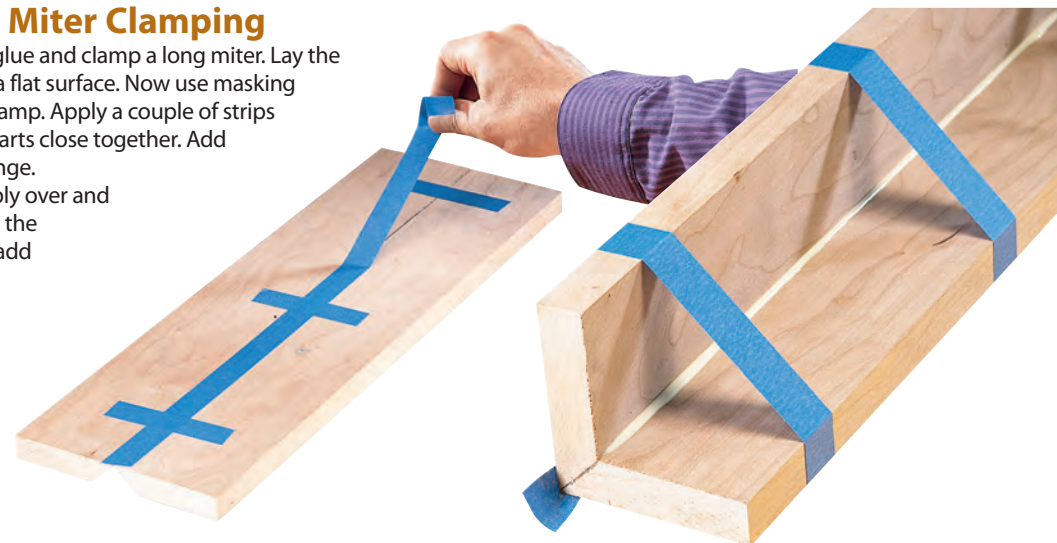
I've been using an old metalworking vise in my shop for years. Occasionally I really do need it for metal, but most often I use it to hold drawer sides up high when cutting dovetails. Unfortunately, the vise's metal jaws will mar the surface of the wood and can be a hazard to edge tools.

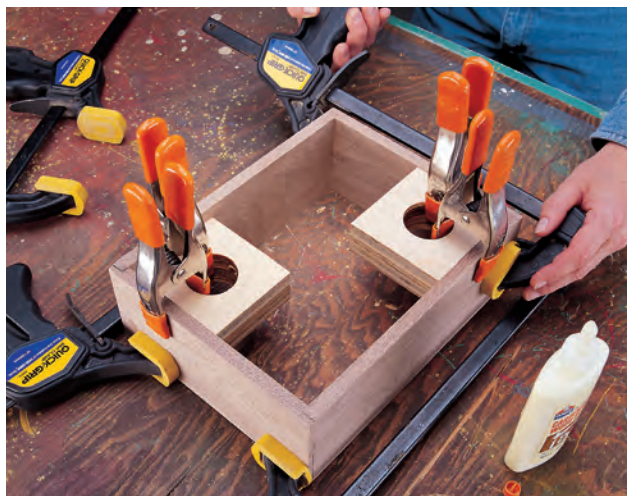
I solved these problems by adding a pair of soft jaws to the vise. These jaws are just two pieces of pine with a couple holes for recessed rare earth magnets. The soft jaws literally snap in place to provide a non-marring clamp surface for my stock plus a non-threatening surface for my edge tools.

2 Masking Tape Miter Clamping

This is the simplest way to glue and clamp a long miter. Lay the parts mitered-side down on a flat surface. Now use masking tape as both a hinge and a clamp. Apply a couple of strips of masking tape to pull the parts close together. Add a long strip of tape for the hinge.

Carefully turn the assembly over and spread a thin layer of glue on the miters. Fold up one half and add some more masking tape to hold all the parts together.





3 Squaring Blocks for Precise Corners

Here's a surefire way to keep drawers and boxes square during clamping. Cut some perfectly square blocks of solid wood (or glued-up layers of plywood) about 4" square by 1-1/2" thick. Drill a 2" hole in the middle of each block with a holesaw.

Use spring clamps to hold the squaring blocks in place. Add bar clamps, but leave the squaring blocks attached until the glue is set.



4 Grit-Free Weights

I keep a few landscape pavers handy in my workshop to use as hold-downs and weights when clamping is inconvenient. The only problem is that they leave grit behind with every use, and grit and woodworking don't mix.

I solved this problem by encasing my pavers in rubberized plastic, the same stuff you dip tool handles in. To knock off all the loose grit and round the sharp corners, I rubbed the pavers together. Then I dipped them into a shop-made box containing a 1/4" deep layer of rubberized plastic. After the plastic dried, I dipped the pavers' other sides. I sealed four pavers with one bottle of rubberized plastic; a 14.5-oz. bottle cost \$7 at the home center.



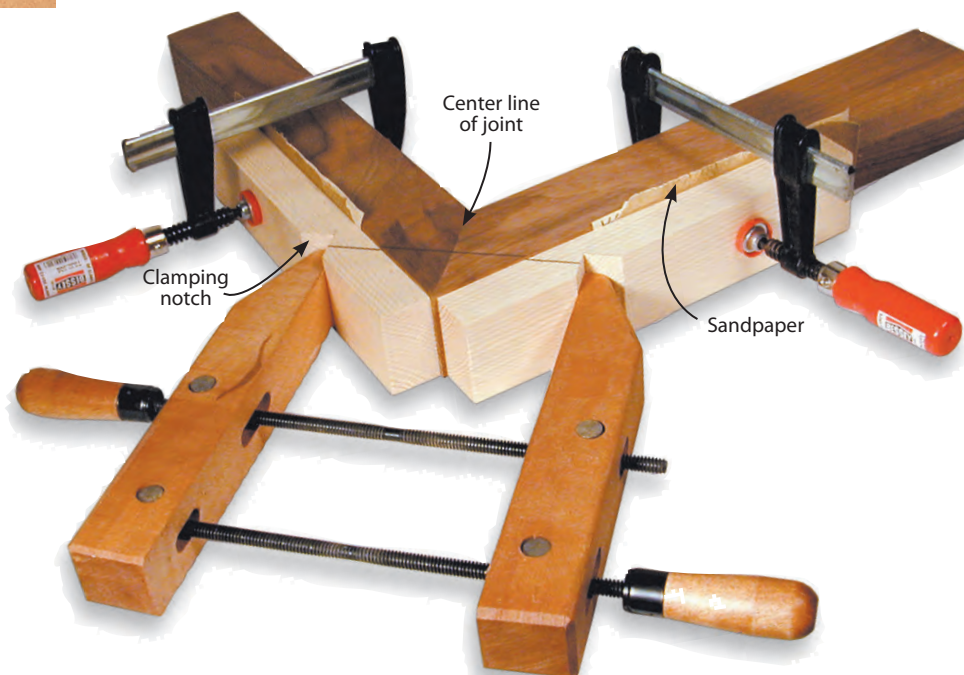
5 Save Those Laminate Samples

Old laminate samples never die, they just live on as handy helpers in the shop. They're great for spreading glue, setting the gap around doors, as clamping guards and nailing shields. You can pick up a few samples at a home center. Ask for discontinued samples—a handful will last forever.

6 Corner Clamp for Thick Stock

Thick stock is no problem with this quick clamping setup. Cut the notches so they line up with the center of the miter.

This helps the joint come together evenly and reduces joint slippage when the handscrew is tightened. A piece of folded sandpaper (180 or 220 grit) placed between the clamping boards and workpieces also helps.



7 Deep-Reach Handscrew

Recently, a friend asked me to reglue the buckled veneer on a tabletop. The problem area was located too far from the edge to clamp with my longest handscrew, so I added wooden fingers to nearly double its reach.

I made the fingers of 3/4" hickory, though you could use any hard, stiff wood. I fastened them with 1-1/2" long #14 screws. The fingers reduced the jaw capacity by 1-1/2", down to 3", on my 8" handscrew. Longer fingers on a larger handscrew should be thicker to minimize deflection. To screw on the fingers, I opened the jaws as wide as they go, like a yawning cartoon alligator.



8 Spring Clamp Supports

Gluing up a cabinet in a one-person shop can be stressful. Thankfully, I found a simple cure. A pair of large 3" spring clamps make sturdy tripod supports on the ends of cabinet parts. They hold everything up while you fit the parts together.

Now I don't break out in a cold sweat when it comes time to dry fit or glue up a cabinet. After all, woodworking is supposed to be relaxing, right?

9 Double-Decker Mini Clamp

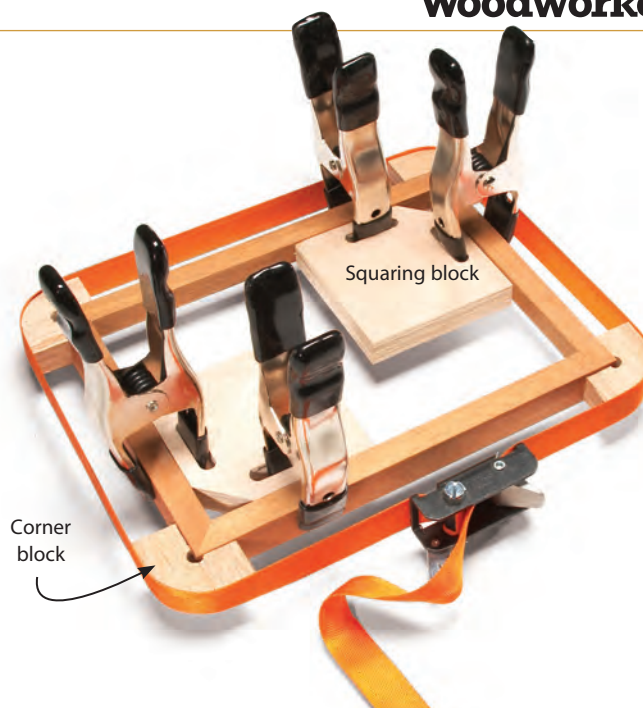
Here's a great little clamp for those light-duty jobs. Start with two ordinary clothespins, then modify and combine them as shown below. You now have a clamp with triple the capacity of a single clothespin.



10 Eliminate Pipe Stains

Pipe clamps can leave ugly black stains during glue-ups wherever they contact wet wood. Those stains are hard to sand out! Here's an inexpensive solution that'll help keep all your glue-ups pristine.

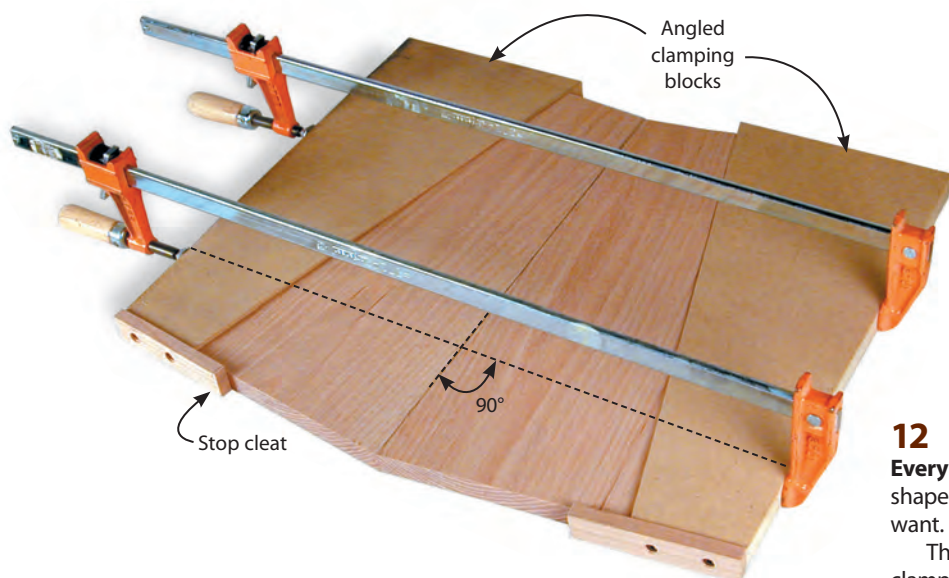
For a couple dollars at the home center, buy a shower curtain rod cover, which is a 5' long flexible plastic tube that's slotted along its length. Coincidentally, it's the perfect diameter to slip over 1" pipe clamps. Cut the tube into 3" long sections and outfit all of your clamps. Before you tighten the clamps, simply slide the tube sections into position over squeezed-out glue or any other damp spot.



11 Inside/Outside Frame Clamping

Keeping small picture frames square while clamping can be a real hassle. You can solve this problem by making a pair of squaring blocks that clamp on inside the frame before the band clamp is added.

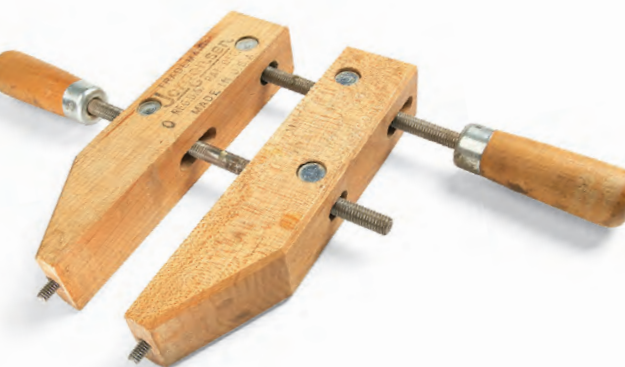
Use outside corner blocks as well, which will keep the band clamp away from the spring clamps and focus the clamping pressure at the corners, where it's most needed.



12 No-Slip Taper Clamps

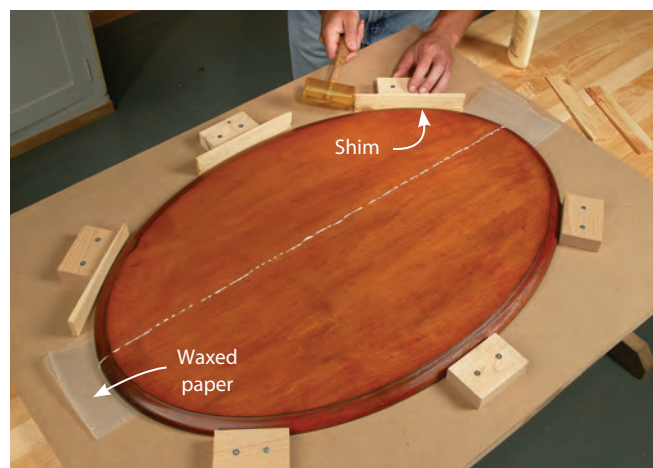
Every woodworker eventually comes across an angled or tapered clamping task. Wedge-shaped clamping blocks place the clamps at a right angle to the joint, which is what you want. But the wedged parts are still likely to slip and slide when pressure is applied.

The real secret to keeping things from moving around is to add a stop cleat to each clamping block. Now the parts will stay put.



13 Pulling Clamp

Pull together odd-shaped parts with handscrews. Screw hanger bolts—which are half screw, half bolt—into the ends of handscrew clamps. Then drill holes in the back side of the piece to accept the hanger-bolt tips.



15 Use Wedges on Curved Tops

Squeeze together curved tops and other rounded shapes with blocks and wedges. Just screw the blocks to a sheet of plywood or MDF and drive in the wedge-shape shims to apply uniform pressure.

14 Short of Hands? Use Feet

To hold a workpiece on its edge for mounting hinges, gluing on edge banding and similar tasks, simply clamp handscrews to the bottom.





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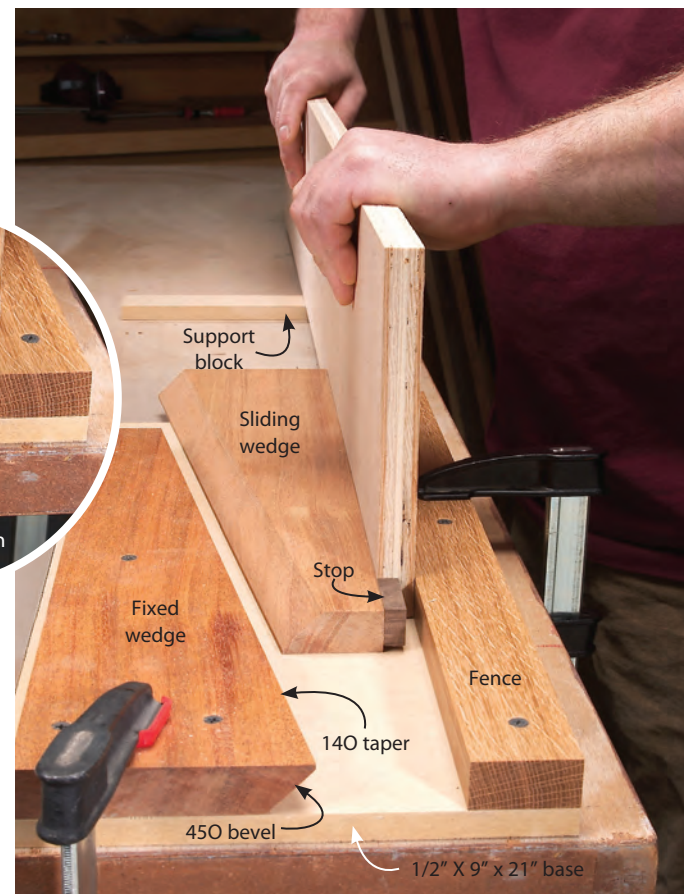
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16 Support Unwieldy Clamps

Without help, it's tough to hold a long, heavy pipe clamp level while you draw it tight. By supporting one end, a spring clamp eliminates the need for help from extra hands.



17 Benchtop Board Clamp

if your workbench doesn't have a face vise, use this "bird's mouth" jig to securely clamp 1/4" to 3" thick boards on edge. You can mount the jig permanently, but if you prefer an uncluttered space, it's a snap to clamp on and remove.

To hold a board for planing or edge banding, simply engage one end on the sliding wedge. Slide the board and wedge forward until they lock between the fixed wedge and the fence (inset photo). Support the back end of the board with a block the same thickness as the base.

You can cut both wedges from a single board on the tablesaw, using a tapering jig and the blade tilted 45°. Mount the fence on the base and glue a stop on the sliding wedge. Position the two wedges by using a 3/4" thick spacer between the sliding wedge and the fence. Then fasten the fixed wedge to the base.



18 Permanent Clamp Pads

If you've lost the rubber pads that came with your clamps, make your own. After a couple dips in liquid plastic (\$12 at a hardware store), your clamps will have cushy pads that work great and won't slip off.



19 Clamp Leash

Spring clamps always seem to be out of reach or scattered around the shop. To keep your clamps close at hand, suspend a worn out dog's leash over your workbench. The leash also makes clamps easy to transport around the shop—and unlike a dog, they'll never stray.



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20 Glue Squeegee

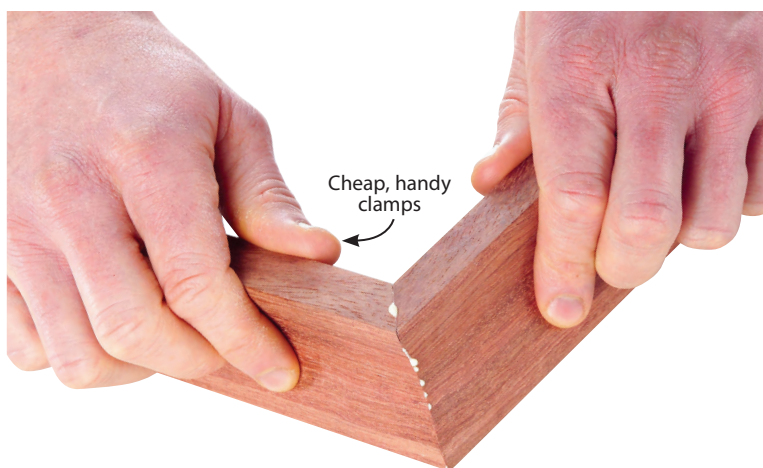
When gluing stacked laminations (to make turning blanks and bending forms, for example) use a squeegee designed for silk screening. You can buy one at an art supply store for about \$7. (A regular window cleaning squeegee from the hardware store would also work.)

After squeezing glue onto the surface, spread it with the squeegee. The amount of pressure you put on the squeegee determines how much glue remains on the surface. It's best to leave an even semi-transparent layer. You'll find it easy to transfer excess glue to a glue-starved area or to the next piece, and cleaning the plastic squeegee is a snap.

21 The 60-Second Squeeze

When you're dealing with small or hard-to-clamp parts, the best clamping tools might be your hands. Simply apply glue to the parts and then rub them together to distribute and tack-set the glue.

Hold the parts together on a flat surface for 30 to 60 seconds (although it may seem like 5 minutes). Watch the joint as you release pressure; if anything moves, squeeze and hold for a few more seconds. Let the assembly sit undisturbed for a half hour before you handle it again.



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22 Two-Part Forms Apply Even Pressure

Use a two-part form whenever possible to clamp bent laminations together. Two-part forms are the best choice for gentle curves under 180°. The two parts apply even clamping pressure along the lamination's entire length.

Using glued-up sheet stock is a quick, easy way to make a form blank. Waxed paper protects the form from glue squeeze-out.

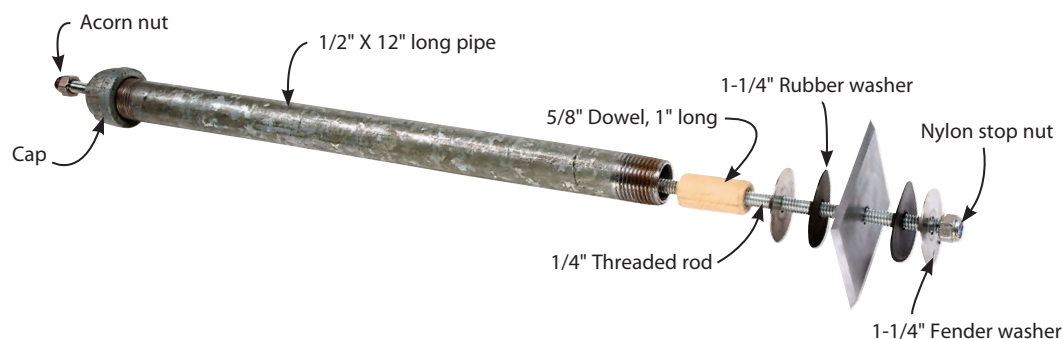


23 Heavy-Duty Glue Scraper

It's best to remove glue before it hardens, but sometimes that's not possible. This robust scraper allows you to bull right through hardened glue. The blade is 1/8" thick tempered steel, as tough as a chisel. There's no chatter, because the tool's long body is made from heavy iron pipe. Extra weight and leverage really count!

Order the blade through a catalog for about \$22 and buy the rest of the parts from the hardware store. The pipe is a pre-threaded nipple. The blade comes with a pre-drilled 1/4" hole; you'll have to drill holes through a dowel and the end cap for the threaded rod. The rubber washers dampen vibration. To remove old, dried glue from the blade, scrape it with a chisel or soak it in hot water.

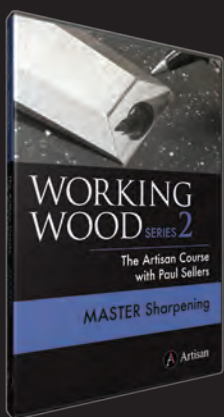
SOURCE: Woodworker's Supply, woodworker.com, (800) 645-9292, Scraper Replacement Blade, #511-004, \$21.99.





24 Saw Kerf Stops Glue Squeeze-Out

When gluing trim or other surface-applied pieces of wood, cut a shallow saw kerf near the edge of the piece being glued down. The glue will get trapped in the groove instead of squeezing out onto the other piece of wood.



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25 Knock-Off Glue Blocks

Long miters are a nightmare to glue, but adding temporary clamping blocks makes it a snap.

The key is to use paper from a grocery bag between the blocks and the workpiece. Dab some wood glue on both sides of the paper, stick the blocks wherever you need them and let the glue set overnight. When you're done clamping, remove each block with a hammer blow. The paper creates a weak glue bond, so the blocks break away without damaging the wood. Use hot water to soften any paper or glue left on the wood, then scrape it away and sand as usual.





26 Eliminate Clogged Caps

Is your glue bottle half empty or half full? Either way, you're sure to become an optimist after trying this glue bottle storage block. By storing the bottle upside down, you eliminate the half-dried glue that's forever plugging up the nozzle. Plus, there's no more waiting for the glue to run down the sides and into the tip.

Here's what to do: Take a block of wood about 3" x 3" and drill a 1-1/4" dia. hole for the cap of the bottle, followed by a 5/8" dia. hole for the neck. Make this hole just deep enough to hold the cap onto the upside down glue bottle. Store the glue bottle in the block and your glue is ready to run right when you need it. And because there's no air in the cap, there's never any crusty buildup to clean out.



27 End Gluing Time Trials

Yellow wood glues typically have about five minutes of open time (that's how long you have to assemble the joint after you've applied glue). Five minutes is sufficient for simple glue-ups, but this short window puts a real squeeze on when you face an assembly with numerous joints.

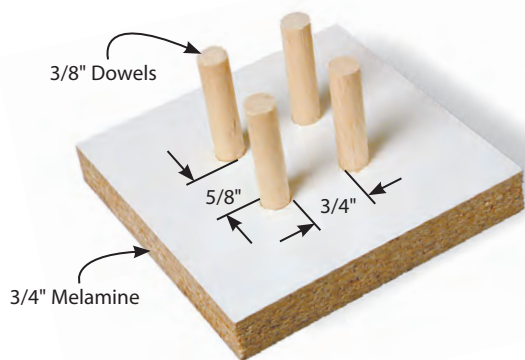
One way to beat the clock is to spread glue with a trim roller. It's amazingly fast and the roller leaves a nice even layer of glue. Trim rollers, packaged in a small plastic tray, cost about \$4 in a home center's paint department. The rollers are reusable; just rinse them out. Short-nap rollers produce the best results.

Another clock-beating method is to buy wood glue with a longer open time (from a couple extra minutes to half an hour, depending on the formulation). The only drawback is longer clamp time, because these slow-setting formulations take longer to dry.

Source Rockler Woodworking, rockler.com, (800) 279-4441, Titebond Extend Wood Glue (7- to 8-minute open time), #24623, \$7.49/ pint.

28 Parts Stands for Easy Assembly

Biscuit joinery is great, but without an octopus for a shop assistant, how do you hold all the parts? These simple little stands can help. Made of 3/4" melamine and some 3/8" dowels, they hold your parts and allow you to easily add the clamps. The dowel spacing allows for either 3/4" or 5/8" material. As a bonus, the glue won't stick to the melamine.



29 One-Part Forms Handle Sharp Curves

Use a one-part form for bent laminations in excess of 180° or for complex shapes. A one-part form is easier to make than a two-part form, but it does require numerous clamps and that can make glue-up more challenging.

Because pressure is applied only where the clamps are located, using a one-part form can result in some crushed wood fibers, an uneven surface and gaps in the glue lines. Most of these problems can be avoided by simply not overtightening the clamps. Use clamp blocks and plenty of clamps to help spread the clamp pressure evenly.



30 Glue Complex Assemblies in Stages

There's no rule that says you have to glue together a tabletop or a cabinet all in one shot. When you work alone, it's easier—and a lot smarter—to glue in stages, tackling only as many joints as you can safely manage. (Here, for example, the cabinet's left side joints are being glued first.) Then you won't risk having the glue dry before you can assemble and clamp the joints.

To ensure everything stays square and properly aligned when you use this method, always clamp the entire assembly together, even though you're only gluing a portion of it.