Tips & Techniques

edited and illustrated by Charles Miller

Tips & Techniques is a forum for readers to exchange information about methods, tools and jigs they've devised. We'll pay for any we publish. Send details to Tips, Fine Homebuilding, *P. O. Box 5506, Newtown, CT 06470-5506.*

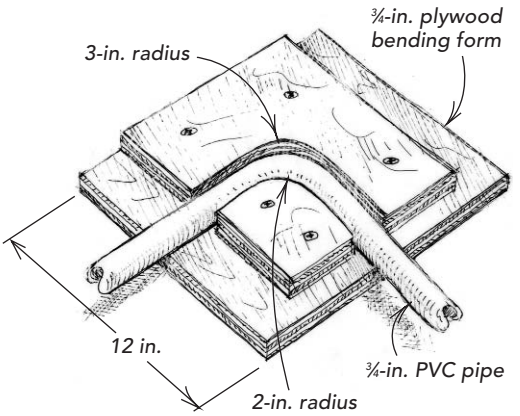
Bend PVC pipe without kinks

Andy Beasley's tip on bending PVC pipe (*FHB* #140, p. 32) seems to work fine, but I would like to offer an alternative method. Years ago I worked in a mock-up shop, and we bent a lot of PVC pipe of all diameters using heat and a bending form.

As shown in the drawing below, the form is pretty simple, and its overall size depends on the diameter of the pipe that you're bending. For the ¾-in. pipe shown in this example, I use ¾-in. plywood parts and a 1-ft. sq. base.

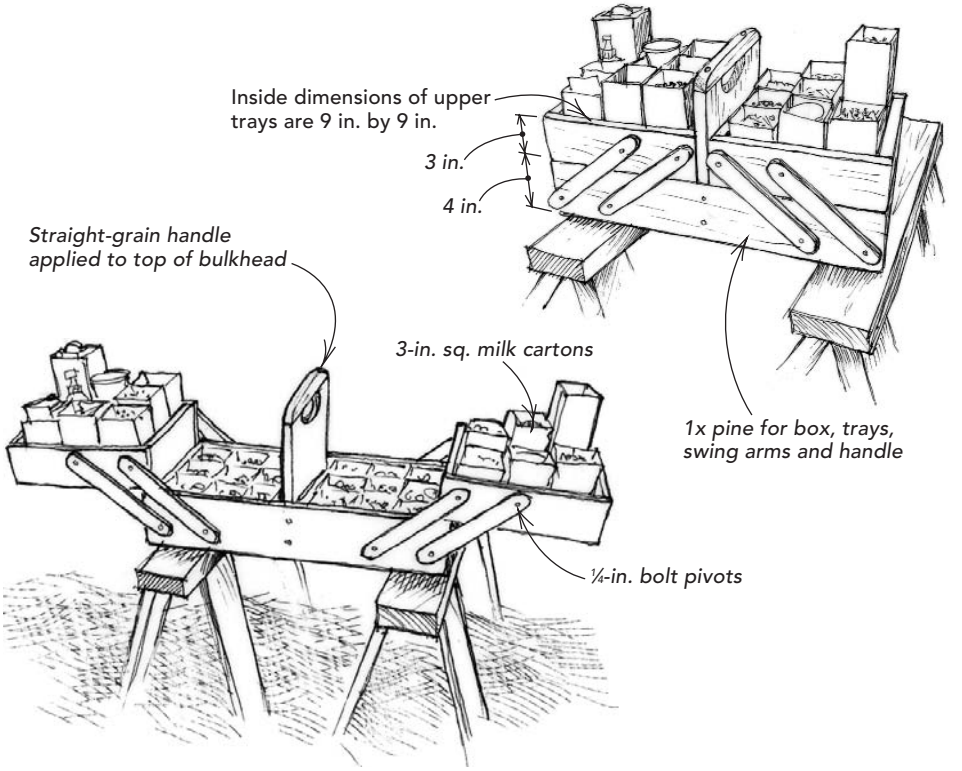
To find the minimum outside radius of the bend, figure 3 times the outside diameter (O.D.) of the pipe. In this case, ¾-in. PVC has an O.D. of 1 in. So the outside portion of the form has a 3-in. radius. Subtract the O.D. of the pipe from the outside radius to get the inside radius. In this example, 3 in. minus 1 in. equals 2 in. for the inside radius.

Draw the two radii on plywood stock, and cut it with a bandsaw or a jigsaw. Then screw the two pieces to the base. When using larger diameter pipe, the radius of the bends will increase, and you will have to double or triple the plywood to accommodate the larger pipe.



Jig ready, fill the pipe with sand. Any type will work, from masonry to beach sand. Now all you need to do is carefully heat the pipe with a heat gun or a torch. If the pipe is small enough, you can heat it in the oven. Once the pipe becomes pliable, put on a pair of heavy, heat-resistant gloves, and work the pipe into the curved cavity in the form. The sand will keep the pipe from kinking. Once it has cooled, the pipe is ready to use.

—Peter Doherty, Waterford, CT



Job-site hardware store

When I'm on a punch-list job, I need a prodigious number of fasteners and related paraphernalia to keep gofer runs to a minimum. The drawing above illustrates my solution to the problem. This double-decker tray for carrying assorted screws and nails holds almost every kind of fastener in one compact, organized (and sometimes heavy) unit.

The rig is made from garden-variety 1x pine, with an upright member in the center that acts as a bulkhead and as a carrying handle. The dimensions are based on a standard unit of measure: a cardboard milk container. These containers are 3 in. sq. Consequently, the inside dimensions of the upper trays measure 9 in. by 9 in., and the inside dimensions of the lower trays are 9 in. by 9¾ in. That extra ¾ in. allows for the inboard sides of the upper trays, and the extra room provides space for some staples on one side and some precut sandpaper strips to be used for my sanding block on the other side.

Because each container lifts out, I never have to dig my fingers into the sharp points of the fasteners. I can just pour a few into my hand or onto my workbench.

I try to keep only a handful of each type of screw in each container to get me through the day. I can refill low supplies when I get home. Many containers hold assortments of similar things, so instead of having just 36 choices, I have 72 or more. But the key to having this box be useful is keeping it organized. Every type of fastener has its own spot so that I know just where to find it.

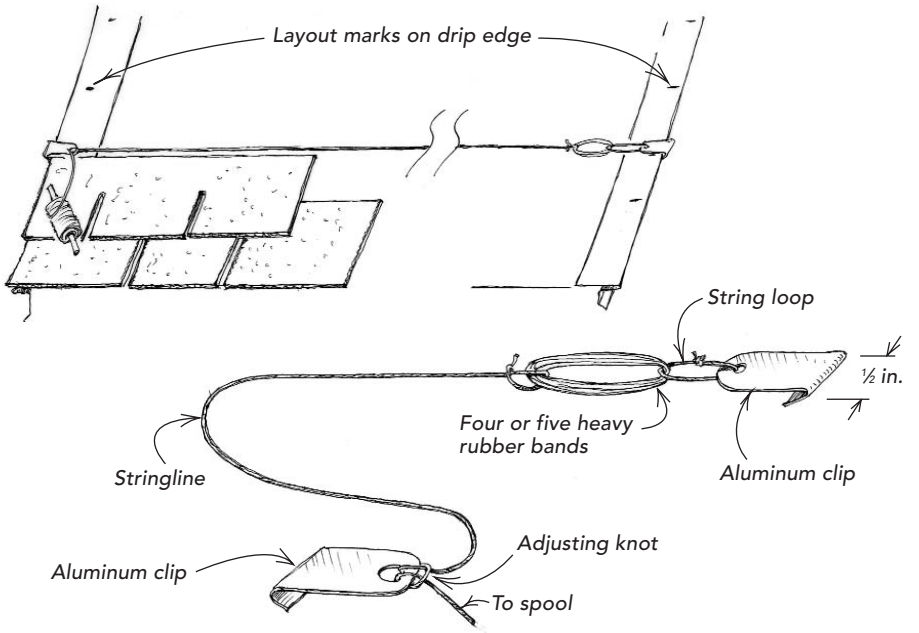
—Phil Miller, Medina, NY

Blow-dryers on the job

A common blow-dryer (1875w), which costs about $20, can be a useful tool on winter job sites. I'm not talking about preventing bad-hair days, but providing an instant source of forced hot air.

Placed under a tent of plastic or plywood, a blow-dryer can keep a considerable area of fresh concrete or stonework frost-free. Or if your crew is standing around a mixer or dozer that won't start, a minute or two with the dryer can zap the moisture off the engine and get everybody back to work.

—Bob Ritchie, Timonium, MD



Chalkless shingle layout

The drawing above shows the rig I use to keep shingle courses aligned when shingling a simple (no hips or valleys) roof. Instead of snapping chalklines, I scribe layout marks on the drip edge and use them to guide a stringline. The stringline has clips made of scrap aluminum at each end. On one end, the clip connects to the string by way of a loop of four or five heavy rubber bands. They supply enough tension to keep the string taut over the length of the roof.

With the bottom edge of the clip set on the mark, the string is ¼ in. above the course I am putting down. When I finish a course, I slide the clip on that end up to the next mark, go back to the outer end of the roof, slide the other clip up and carry on.

—Peter E. Rosenfeld, Charlotte, VT

A better way to grease screws

For lubricating screws before driving them home, I've used them all: bar soap, liquid soap, wax, even sweat. I've also sheared and stripped the heads off more than my fair share of screws.

Recently, I was installing some oak face-frame kitchen cabinets, and when it came time to screw the cabinets together, I looked in my drill case for the bar of Ivory soap. It wasn't there. Rummaging around, I spied a roll of Teflon plumbers' tape, and on a whim, I wrapped the tip of a #8, 2½-in. coarse-thread screw with two or three twists of tape. I inserted it into a 1¼-in. deep countersunk hole and ran it into the adjacent cabinet. It went into that oak like Sherman through Atlanta. When it came time to mount the cabinets to the wall, I wrapped the factory-supplied #10, 2½-in. pan heads the same way.

I prebored the back of the cabinets and screwed them to the framing—rock-hard Douglas-fir studs—without any pilot holes. I didn't shear one shaft or strip one screw head. It took several minutes to prepare the screws, but the aggravation avoided is worth at least a couple of cups of coffee on the other end.

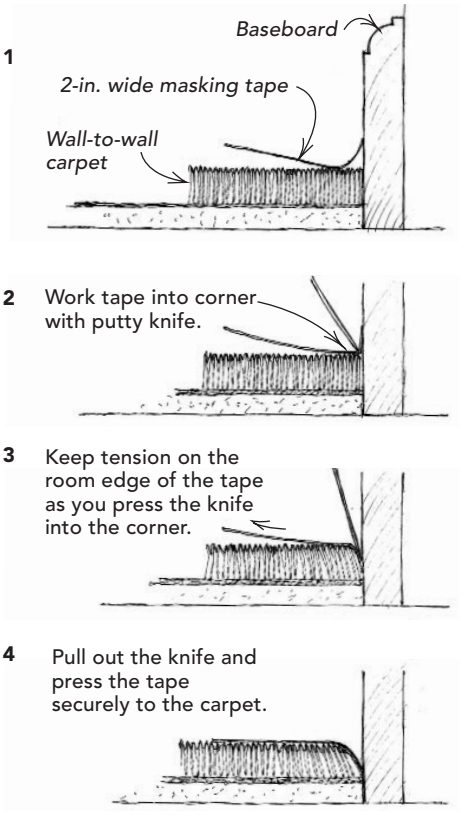
—Peter Klebaur, Mountainside, NJ

Painting next to carpet

Painting baseboards next to carpets can be frustrating. Loose fibers at the edge of the carpet interfere with the brush, and any excess paint on either the baseboard or the carpet is hard to remove without making a mess. The drawing to the right shows how I deal with the situation.

I use 2-in. wide masking tape to protect the carpet and to hold the carpet tufts away from the baseboard so that the paint can be applied below the top of the carpet line. For this purpose, Scotch-brand Long-Mask Masking Tape seems to work well. It has just the right amount of stickiness to adhere to the carpet, but does not stick strongly to the baseboard.

The tricky part is putting down the tape. First, I lay the tape so that it runs about ⅜ in. up the baseboard (figure 1). I take care not to press the tape against the baseboard because I don't want it to stick there. Next, I press the tape onto the carpet about 1 in. away from the baseboard, and I use a putty knife to work the folded side of the tape into the corner where the carpet and baseboard meet (figure 2). This makes the tape stick to all the tufts right up to the edge of the baseboard. Now when I tug the tape toward the middle of the room, the attached carpet tufts are pulled away from the baseboard, and the baseboard side of the tape can be worked down (figure 3). This wraps the edge of the carpet and protects it from the paint that will be applied. Pulling the tape more from the room edge exposes more of the baseboard for painting, and then pressing the room edge of the tape to the top of the carpet attaches the tape so



that the gap between the carpet and baseboard remains held open (figure 4). A final inspection reveals missed carpet tufts in the gap, which can be corrected with a second layer of tape, using the same technique.

—Al Lemke, Hopewell Junction, NY