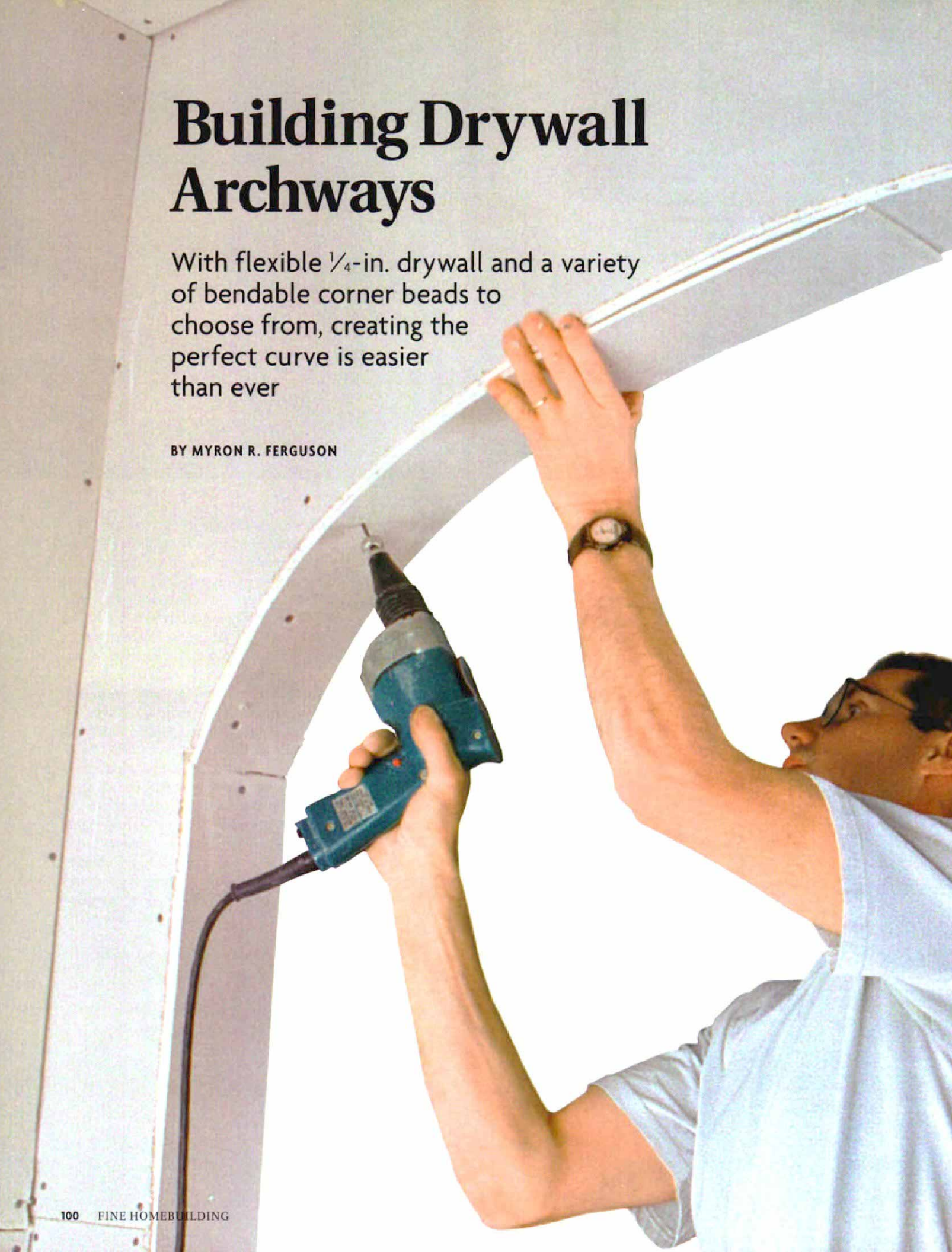


Building Drywall Archways

With flexible 1/4-in. drywall and a variety of bendable corner beads to choose from, creating the perfect curve is easier than ever

BY MYRON R. FERGUSON



When my brother Kevin was framing his new home a few years ago, I suggested that an arched passageway might accent the transition from kitchen to dining room. His wife, Mandy, was so taken with my idea that she asked for another archway between the dining room and the living room. I knew I'd created a monster when she made the fireplace mason change the shape of his firebox from a square to an arch. Working with flexible drywall and bendable corner beads made my job a cinch. The mason had to create the same effect using split fieldstone. To this day, he still hasn't forgiven me for opening my big mouth,

2x10s and scrap make up the frame

Even on a new house, I prefer to frame the archway myself to ensure flat sidewalls and a smooth curve to which my drywall can easily conform. If the archway is to be built within a bearing wall, I coordinate with the framers ahead of time to ensure that the height of their header will allow enough space for my decorative arch framing to fit underneath.

To give the homeowners a chance to argue about the shape of the arch and make their adjustments before I start cutting and hammering, I always make a template from a scrap of cardboard or drywall (top photo). Once they've agreed on the shape, I use the template to trace the curve onto the framing.

The arch frame is built up from dimensional lumber. I measure the width of the arch and cut two 2x10s to length. I widen the ends of each 2x10 by screwing short scraps of whatever is available (2x6, 2x8) to the bottom edges. I cut out the pattern with a sabersaw and smooth out the rough spots with a belt sander. To install the arches, I hold each one flush with the framing on one side of the wall and toenail it in place with 3-in. drywall screws (center photo).

Flexible ¼-in. drywall follows a curve like butter

After the framing is done, I cover the sidewalls of the arch with ½-in. drywall. I let the edges hang over the curve and trim off the excess with a drywall router (bottom photo).

I apply ½-in. drywall to the side jambs of the archway but stop at the point where the curve begins. I prefer to build up the curve with two layers of flexible ¼-in. drywall because it bends much easier than either standard ¼-in. drywall or the ½-in. variety. Flexible drywall is significantly more flexible when bent widthwise rather than lengthwise, so I crosscut the drywall to match the thickness of the arch rather than rip it.

I apply the first layer by working my way from one end to the other, gently bending the board along the curve and pinning it with screws as I go. For the first layer, I use only enough screws as it takes for the drywall to follow the curve smoothly. When I apply the second layer (photo facing page), I run out the screws about 6 in. o. c. (or closer on tighter radii), alternating them between the two sides of the framing. I also stagger any seams between the two layers. Quarter-



Layout begins with a cardboard template.

After the homeowners have signed off on the shape, the template, representing one-half of the archway, will be traced onto the framing material.



Framing is built up from dimensional lumber.

To minimize waste, the author added scrap 2x6 blocks to the edges of 2x10s before cutting out the curves.



No need to measure the curve.

The ½-in. drywall that covers the sidewalls of the arch is left long and trimmed afterward with a cordless drywall router (Roto Zip; 800-521-1817).



Like a rolltop desk. Scoring the backside gives $\frac{1}{2}$ -in. drywall the flexibility to follow a curve. Screws must be placed carefully to avoid tearout.



The old-fashioned way. As with $\frac{1}{2}$ -in. drywall, a series of cuts on one side gives metal corner bead the flexibility to follow a curve.



Nail bottom leg first. With the cut leg facing upward, the author presses the bottom leg tight against the drywall before nailing.



Tape and finish are applied the same way they are for regular corner bead. After taping the joints in the drywall, the author applies a heavy coat of joint compound with a 6-in. knife, then feathers it out with a 14-in. trowel.

in. drywall (regular as well as flexible) isn't always easy to come by, so I occasionally have to build an archway entirely with $\frac{1}{2}$ -in. To make $\frac{1}{2}$ -in. drywall flexible enough to conform to the typical radius, I score the backside from one end to the other at 1-in. intervals using a utility knife alongside a combination square.

Until it's securely fastened, drywall that has been scored this way has the flexibility of a rolltop desk but the stability of a roll of toilet paper, so I apply it carefully. Working my way from the bottom of the arch upward, I gently roll out the drywall and fasten with screws driven into the meat of the drywall midway between the knife cuts (top photo). I use as many screws as it takes to hold the drywall tight against the arch.

No matter how careful I've been, $\frac{1}{2}$ -in. drywall never looks as smooth as $\frac{3}{4}$ in. does at this point. But I know that the corner bead will smooth out any of the rough spots. Before I begin to put the bead on the archway, I like to apply the straight metal corner beads that go on the side jambs first. To assure that the arch is uniform and level, I cut all four pieces the same length and set all the tops to the same height.

So many beads, so little time

It's important to remember that the nose of the corner bead functions as the screed that guides the finisher's trowel, so the quality of the arch is only as good as the bead. For the better part of my drywall career, everything I've done up to this point would have been the easy work. For years, we had no other options than to use the same corner beads we used on straight walls to form the archway. Creating a flawless curve from straight metal and maintaining that curve while nailing it up is a challenge.

Thankfully, in the past few years, a number of manufacturers have introduced flexible corner beads that are specifically intended for curves and arches. The installation process is different for each of these beads, but they're all much easier to install correctly than straight bead (sidebar facing page). The only downside is that, like $\frac{1}{4}$ -in. drywall, I don't always have one of these beads on the job site when I need it. So every now and then, I still have to make do the old-fashioned way.

To bend straight corner bead, I use tin snips to make a series of cuts at 1-in. intervals through one of the edges (photo center left). Then, with the cut edge facing up, I gently push the bead into place and nail upward through the bottom edge, working my way from one end to the other (photo center right). When the entire bottom is fastened, I work my way backward, nailing the top side. Every foot or so, I use my 6-in. tapping knife as a straightedge to confirm that the nose of the bead stands proud of both surfaces.

I have built many arches this way, and they all came out fine—after a bit of trial and error along with a few well-placed hammer blows—but in terms of simplicity and quality, the newfangled material wins hands down.

Tape and finish the same as always

Despite improvements in drywall and corner beads, not much has changed with the taping-and-finishing process. Before I start slinging mud, I cover all the seams or gaps in the drywall—especially where the straight angle meets the archway bead—with self-adhesive, fiberglass-mesh tape. I apply the joint compound in three coats, the same as I do with regular corner beads (bottom photo). □

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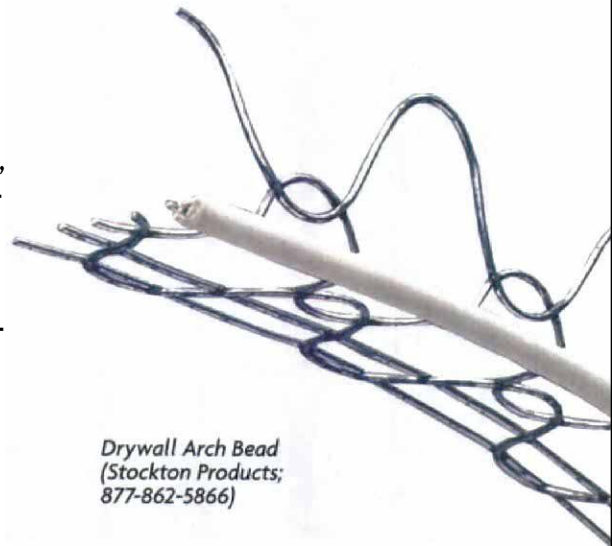
Three types of flexible corner beads



Flexible wire bead is nailed on the same as metal corner bead. After the bottom is nailed, slight adjustments to the arch can be made as nails are run out along the upper leg of the bead.

WIRE BEAD

The first flexible corner bead arrived on the market about seven or eight years ago. Still available, although its popularity has been eclipsed somewhat by newer products, Drywall Arch Bead is made of welded galvanized wires with a plastic nose. The wires are reinforced so that the bead flexes in one direction while remaining rigid in the other. It bends more easily and more consistently than straight metal corner bead, but it's attached roughly the same way. I apply this bead with the wavy (unreinforced) leg facing up, then fasten it with drywall nails spaced 1 in. to 2 in. along the arch bottom as I press the bead into place.



*Drywall Arch Bead
(Stockton Products;
877-862-5866)*



Vinyl bead is glued in place. A generous coating of adhesive is sprayed on the drywall and on the bead to fasten the bead securely.

VINYL BEAD

Archway L Bead resembles a plastic version of a presnipped metal bead, although it's much more flexible. This bead can be nailed up, but it's intended to be glued in place with the manufacturer's proprietary spray adhesive (Trim-Tex 847 Spray Adhesive). Installation requires coating both the bead and the wall with a liberal but not runny dose of adhesive. When the adhesive has begun to tack up but before it dries, I press the bead into place and smooth it out, working from one end to the other. Because this material is so flexible, I leave the far end long and cut it to length after the rest of the bead is secure.



*Archway L Bead
(Trim-Tex Inc.; 800-874-2333)*



Composite bead is installed like corner tape. After a length slightly longer than the arch is cut, the bead is folded in half, and the tear strip is removed, enabling the bead to bend easily around the arch.

COMPOSITE BEAD

Arch-Flex has a rigid-PVC core with a paper surface that allows it to be fastened with joint compound. Similar to corner tape, Arch-Flex comes in a convenient 100-ft. roll that can be cut to any desired length with the remainder easily stored until the next job. After cutting and folding the bead, I apply a layer of joint compound to both sides of the corner. Working from one side to the other, I press the bead into the joint compound with my fingers, then use a 6-in. taping knife to embed the bead firmly. Finally, I trim off any excess length with a pair of scissors or a utility knife.



*Arch-Flex
(Con-Form International;
888-747-0220)*