Hanging Drywall on a Gable End

This gypsum job is tougher than most, and not just because of the high ceiling

BOTTOM COURSE

BY MYRON R. FERGUSON

omeowners love large rooms with high cathedral ceilings and lots of windows, but to a drywall contractor like me, tall gable-end walls are a perfect storm of drywall-hanging obstacles. Never mind the 20-ft.- to 30-ft.-tall ceilings—the gable wall alone involves lots of tricky cuts; struc-

tural headers, framing transitions, and solid blocking that create bumps and dips; and an increased chance of structural settling. All these things could lead to drywall cracks, visible seams, and popped fasteners.

Of course, no two rooms are exactly the same, but the project shown here is a textbook illustration of the potential problems. Even if your gable-end wall looks different from this one, my general guidelines can still be applied. Just plan thoughtfully, and focus on the common trouble spots.

Fewer seams, fewer problems

FRAMING TRANSITIONS

Taped seams are more likely to crack than drywall itself.

Reduce the amount and the length of seams, and you reduce the chance of future problems.

ARCHED WINDOWS

One way to reduce the length of the horizontal seams is to rip the bottom course of drywall to a height that minimizes or eliminates seams running uninterrupted from one end of the wall to the other. In this way, the windows and doors



become termination points, and they break up the length of the taped seams.

I got lucky on this job. The distance from the top of the groundlevel windows and doors to the bottom edge of the upper windows was 48 in., just the right width for a sheet of drywall and no need for a long horizontal seam. Even if this center section



IT'S OK TO START AT THE BOTTOM

Unlike working in a room with 8-ft. or 9-ft. ceilings, where the first sheet of drywall can be lifted easily to the top of the wall and fastened, (1) stacking the several courses of drywall necessary to cover a tall gable end wall is easier than holding the panels up and working your way down. Also, when measuring for the angled cuts where the wall meets the cathedral ceiling, it's easier to take measurements from the top edge of a row of panels that is already installed.

The only caution here is to make sure that you leave a space along the floor in case the wall settles. (2) Some scraps of drywall work well to keep the first row of panels off the subfloor.



BE CAREFUL WITH SEAMS AND SCREWS



Along with all the standard headers and blocking, a wall this big will probably have a framing transition halfway up, too. All these things lead to bumps and dips in the wall—bad places to put seams or lots of fasteners.

To minimize the horizontal and vertical (butt) seams and to span all the areas prone to cracking, strategically locate a horizontal seam at the top of the door and window jambs.

Knowing where you can fasten and where you can't can become confusing. (1) Before putting sheets in place and losing sight of all the framing, it is helpful to mark out where and where not to place screws. (2) This way, when the sheet is lifted in place, you can clearly see the now-hidden obstacles behind the drywall.



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ANGLES ARE EASY WITH A T-SQUARE AND TAPE

Start by placing a 48-in. T-square upside down on the previously installed sheet, (1) and slide the T-square toward the corner until the end is just shy of touching the drywall on the ceiling; a V_8 -in. to V_4 -in. gap is perfect. If the T-square is touching the drywall on the ceiling, the angled sheet could end up too tight, and the edges might break during installation.

With the T-square in place, (2) make a pencil line on the drywall at the base of the T-square. (3) Next, measure the distance from this mark to the straight-cut end of the sheet (the window, in this case) for both the top and bottom edges of the piece of drywall to be installed. Finally, measure the distance from the pencil line to the angled corner.

After marking the sheet of drywall to the required overall length—the distance from the angled corner to the window, along the bottom of the sheet—(4) measure and mark the top length. (5) Next, snap a chalkline between these two marks, (6) then score, snap, and install.







had been less than 48 in., I could still rip a sheet to fit the width. If it were more than 48 in., a 54-in.-wide sheet of drywall could be ripped as necessary. Any wider than 54 in., though, and a horizontal seam is a must.

If you are forced to have a long-running horizontal seam, avoid putting it on or near a framing transition or a row of blocking. These spots are more likely to leave you with an obvious bump in the finished wall.

Long sheets reduce butt joints

Vertical (butt) seams are the next thing to consider. They are hard to fasten and hard to hide, and on a big gable wall that is likely to shift and settle over time, they are the most likely place to crack.

Again, use windows, doors, and angled ceilings as termination points wherever possible. In areas where this isn't possible, use the longest sheets of drywall that you can manage, and locate butt seams away from the center of the room, where they will be most obvious. If you can cover from one end of the gable wall to the other without any butt seams, perfect.

Fastening location matters, too

Unfortunately, a successful layout doesn't depend only on seam location. Fastening always seems to be an issue on gable walls. Obviously, each sheet needs to have the appropriate number of fasteners, but with the increased likelihood of settling, lumber shrinkage, and framing transitions not being perfectly flush, I have to be especially careful with screw placement (photos p. 59). Careless fastening will just about guarantee popped fasteners within the first year after the job is complete.

Typically, a thick bead of drywall adhesive lets me get away with using fewer fasteners, and it all but eliminates the chance of popped screws. But if the gable wall is covered with a poly vapor barrier, as it was on this job, using drywall adhesive is not possible. The best option is to use typical 1¼-in. coarse-thread drywall screws (no nails, please) set 16 in. on center vertically in each framing member. Like everything else on gable walls, though, there are exceptions to this rule.

I avoid putting more than one horizontal row of screws into structural headers, and I prefer to avoid fastening the drywall to transitions in framing, such as where the upper wall meets the lower wall. These two areas

CONNECT THE DOTS TO CUT ARCHES





Cutting out rectangular window or door openings in drywall is easy because you can run a utility knife or drywall router along the edge of the rough opening. Arch-top windows, on the other hand, don't have arched rough openings to use as guides. Instead, (1) take several measurements from the ceiling down to the arched window, marking the measurements on the ceiling as you go. The more measuring points you have, the more accurate your arched cut will be, but at the least, you need to know the high and low points.

After the sheet is tacked in place, (2) mark the measurements on the drywall, and connect the dots with a pencil. Then it's as simple as following the pencil line to remove the scrap. You can use a drywall router or a wallboard saw, or you can make several passes with a utility knife. (3) Don't worry if your arched cut isn't perfect; the extension jambs and the window casing will even things out later.



are most likely to move over time, and movement will lead to screw pops. I keep screws about 6 in. down from where the wall meets the ceiling for the same reason.

Work around the room one course at a time

You might think it's easier to hang the entire gable wall first, then butt the ceiling panels to the wall to hide any sloppy gaps at the angles. I actually prefer to hang the ceiling first so that the wall piece is providing support for the ceiling. Trust me, though, getting a tight joint between the gable wall and the angled ceiling looks far more difficult than it is (photos facing page). To make the installation run smoothly, I always hang the first two rows of drywall on all four sides of the room while I'm standing on the floor. From there, I prefer to work from scaffolding, again hanging all four sides of the room before bumping the scaffolding up to the next height. I like to have two people on the scaffolding do the drywall hanging and one person on the floor do the cutting. It's also a huge help to have a drywall lift so that each sheet can be lifted safely to the top of the scaffolding.

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