



A stronger,
bench-built
alternative to
drywall

BY JOSH EDMONDS

MDF Window Returns

may risk alienating some people by saying this, but not every window needs trim. That's kind of a weird thing for a carpenter to say, I know, but there are certain styles and types of houses where trim can detract from, rather than enhance, the overall look of a home.

Hence the drywall return. A lot of people think of drywall returns as a cheap and quick way to finish off a window opening, but the reality is that finishing a window this way can take a lot of time and fuss, even if the materials are less expensive than wood. And I hate to break it to those who work in parts of the country where windows are always trimmed: There are regions where drywall returns are common, if not the norm. That said, I'm not a huge fan of using drywall to achieve the trimless look.

We build a fair number of houses with extrathick walls, including Passive Houses, which often lend themselves to the stripped-down, Northern European aesthetic where they originated. Because drywall returns can be fussy—and because drywall tends not to hold up well to the occasional water that either drips from or blows through a window—we wanted a better solution.

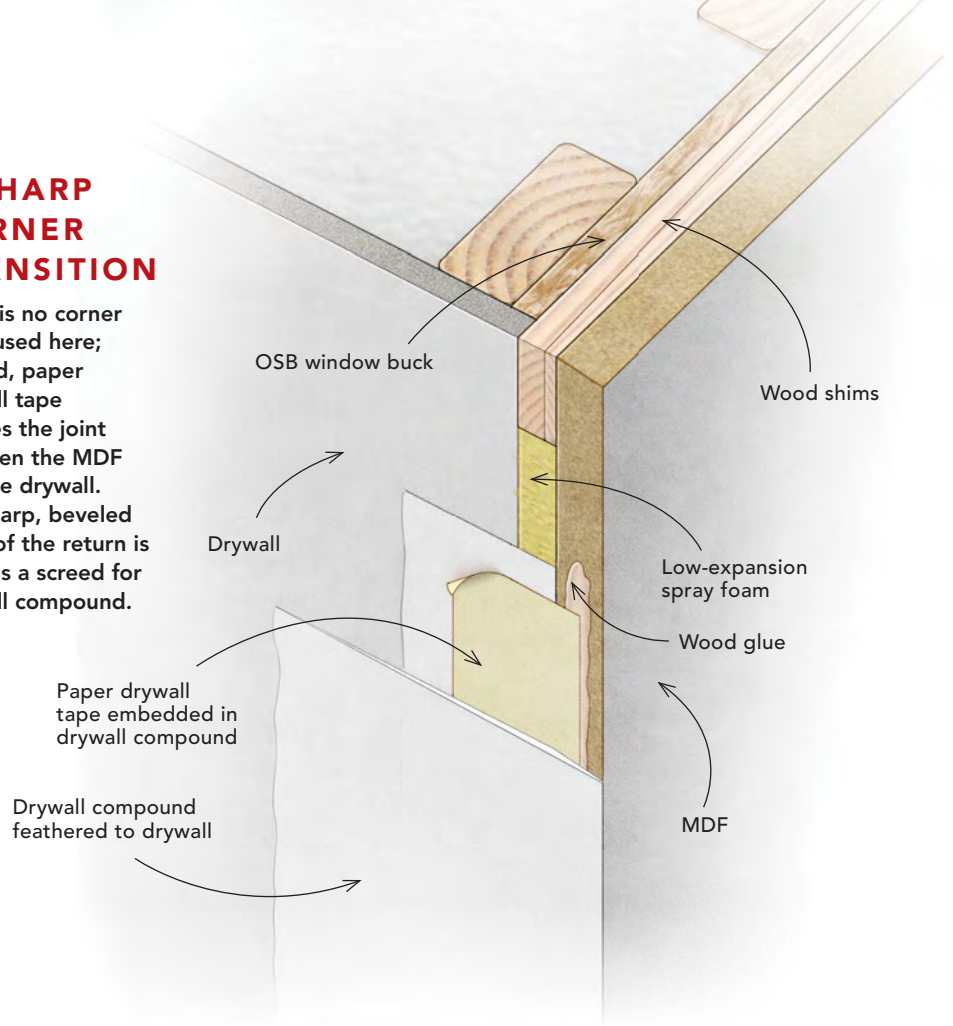
What we came up with are MDF window returns. Preassembled from moisture-resistant 3/4-in. Medex MDF, these returns are easy to install and finish, and they are more durable than drywall while still maintaining gypsum's dimensional stability.

Unlike drywall returns, which are built in place in pieces, we production-build these returns on the bench and install them as units. The lengthiest part of the process is finishing the four sides of the opening to the drywall. Because MDF cuts cleanly, the seam between the return and the window is usually tight enough that it doesn't need caulk. And because we prefinish the returns with primer and a finish coat, we generally don't have to cut in against the window frame. We've used this method on a number of projects now, and everyone's pleased with the crisp, crack-free results. □

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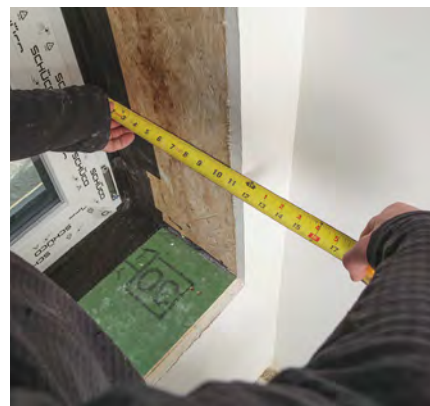
A SHARP CORNER TRANSITION

There is no corner bead used here; instead, paper drywall tape bridges the joint between the MDF and the drywall. The sharp, beveled edge of the return is used as a screed for drywall compound.



ESTABLISH A REVEAL

Dialing in reveals with drywall returns can be painstaking. Unless the framing and window installation are absolutely perfect, each piece has to be adjusted individually so the window looks centered in the opening. Our MDF returns are installed as units, making it far easier to achieve consistent reveals. On this project, a gap was required between the return and the window hinges to allow the window to open, so we decided to use a 3/4-in. reveal around all windows. We set the windows at the same depth in all openings so that our MDF ribs would be all the same widths.



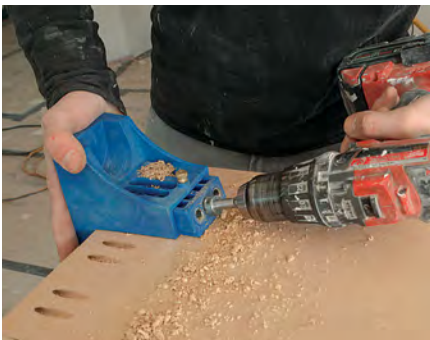
Find the depth. Measure the distance from the window frame to the face of the drywall, then add 1/8 in. to that to establish the width of the MDF rip cuts.



Bevel and rip. Cut the MDF into strips with a 15° bevel on either side. The width of the strips is measured long point to long point. Cut them to the required lengths on a miter saw.

BUILD THE BOX

The bulk of the efficiency in this process comes from the fact that the returns are assembled on the bench and installed as units. Building them this way helps ensure that the assemblies are square and the corners tight. It's more like building a cabinet box than a drywall return, which is traditionally installed in pieces. To further drive efficiency, we assemble the returns in batches for all openings of a particular size. After each return is assembled, it gets whisked off for a coat of primer and a coat of finish before it's installed.



Drill the legs. Drill pocket holes in the legs of the return, orienting the pieces so the screws will be hidden in the final assembly.



Arrange and glue. Orient the pieces' long points toward the inside, and run a bead of glue (we use Titebond III) along the joints before assembly.



Fit and fixture. To stabilize pieces during assembly, we use Kreg 90° corner clamps to hold the joint together, a pair of cleats on the table to hold the end vertical, and screw clamps to do the same for the legs.



Screw it. Use 1 1/4-in. coarse-thread pocket screws to fill all the holes you can before removing the corner clamp to drive the last few. Clean up squeezeout with a damp cloth and toothbrush.



Clean up the corners. Use an oscillating multitool to nip back the overhanging bevels at the corners of the return, then carefully sand the corners to leave a clean beveled edge around the face.

SEAT THE ASSEMBLY

While drywall returns are usually screwed to the underlying framing, our MDF returns are installed more like a typical new-construction window. We use inflatable shims (see photo below) to adjust the returns in the opening, then install wood shims for permanent support. Before nailing anything off, check to ensure the beveled edges of the jambs are tight against the window frames and $\frac{1}{8}$ in. proud of the walls.

Set the return. Place a pair of inflatable shims on the rough sill and set the return in the opening, sliding it back in contact with the window frame.



Winbag inflatable shim, \$20



Pump up the jamb. Adjust the reveals using the inflatable shims. Additional shims can be placed along the sides to tweak the boxes laterally.

Install shims. Stack and place wood shims between the rough sill and return box, being careful not to bow or tweak the assembly.



Line it up. Using a laser when setting shims along the legs of the return provides a reference line to prevent accidentally bowing the legs.



Fasten in place. Use $2\frac{1}{2}$ -in. finish nails to fasten the return through the shims into the framing or window buck, then cut back the shims.

TAPE THE EDGES

Part of what makes this process faster than drywall returns is prefinishing. We don't use corner bead, which requires feathering out compound into the opening and onto the wall. Instead we use paper tape to bridge the joint between the MDF and the drywall so we only have to feather out on one plane. Low-expansion spray foam around the gap between the jamb and the framing or window buck, combined with the shims and the rigidity of the 3/4-in. MDF, works to prevent cracks.



Cut back the foam. Use an oscillating multitool to cut back the excess spray foam after it cures to provide space for the drywall compound and paper tape.

Compound first. Starting at the top, apply all-purpose joint compound over the foam and onto the drywall, being careful not to get compound on the MDF. In tight spaces, painter's tape keeps the MDF clean.



Bond with glue. Apply a bead of glue (we use Titebond III) on the MDF, close to the outside edge, to bond the paper tape to the return.



Set it back. Embed the paper tape in the glue and compound, centering the edge of the tape on the MDF to prevent it from showing through after the finish coats are applied.

Squeeze it out. While embedding the tape, be careful to squeeze glue out toward the opening, and drywall compound away from it.



Check the gap. Use a taping knife to check the gap between the beveled edge and the wall, verifying that the tape doesn't intrude into the space meant for the finish coats.

FINISH IT OFF

From here on, there's not much difference from finishing corner bead—except that we only have one plane to worry about. After the tape dries, we use a 45-minute setting-type compound for the first coat since it dries quickly and doesn't shrink, and finish with thin coats of all-purpose drying-type compound. The point of the bevel on the MDF serves as a screed line, just like the raised corner of standard corner bead.



Feather it out. Using multiple coats, feather compound out 1 ft. or more beyond the opening.



Fill nail holes. Fill nail holes in the return with drywall compound during taping and finishing.



Caulk gaps. White Phenoseal, a non-yellowing adhesive caulk, works well with white paint. Color-matched caulks are also available to avoid having to cut in against the window frame.



Final finish.

After priming and painting the first coat on the walls, both the walls and returns get a final coat. Because the returns are prefinished with primer and one finish coat, there's generally no need to cut in against the window frame.