

Replace a wood window (phase 2)

In the last issue of *Fine Homebuilding* (#208) and online at FineHomebuilding.com/videos, I discussed phase 1 of replacing a wood window, including how to measure for the new window, remove the old window, adjust the rough-opening size, and flash the opening. Here, in phase 2, I cover setting the new window, weatherizing it, and applying the interior and exterior trim.

Remodeling, repairing, and upgrading older homes often presents challenging circumstances. Rough openings are often out of square or out of plane. Weatherizing is like trying to make a Wiffle ball airtight, and plumb and straight are often less important than parallel and perpendicular. In other words, the success of a project like the window replacement shown here often lies in the compromises.

For example, if this had been a new home or a remodel that entailed stripping the siding, I would have lapped housewrap into the rough opening first. I also may have used a flanged window, which would have allowed me to lay flexible flashings over the housewrap and onto the window. To learn how to flash windows under more optimal conditions, I suggest that you read "Window Installation Done Right" (*FHB* #197, pp. 54-59, and online). To see a video of this installation as well as to discuss it, visit FineHomebuilding.com.

Scott Grice, a carpenter in Portland, Ore., also holds a degree in philosophy. Photos by John Ross, except where noted.

STEP BY STEP

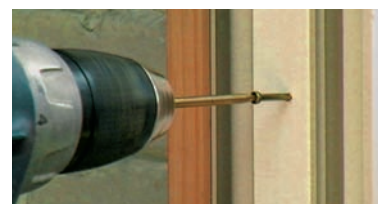
SET AND SECURE THE WINDOW



1 Set the window in the opening. Stop blocks help to align the window flush with the sheathing. Insert shims between the side of the window and the framing at the top and bottom to hold the window in place temporarily.



2 Center the window to the siding. Adjust the shims to center the window. Use a level to ensure that the window is plumb, then cross-measure and square the window to within $\frac{1}{8}$ in. This should closely match the center of the rough opening. If the existing edge of the siding is out of plumb by more than $\frac{1}{4}$ in., you may have to taper the trim or cut the siding to make up the difference.



3 Secure the window. Shim the window every 2 ft. or so along the sides (but do not shim or use fasteners above the window), and drive trim-head screws through the jamb into the framing at the shim locations. With a level, ensure that the window frame is straight. If necessary, back out the screws, and adjust them. As a final check, make sure that the sashes move up and down smoothly.

Back in the dark ages, it was acceptable to stuff fiberglass insulation between a window jamb and the surrounding framing members and call that weatherization. Not anymore. Builders have learned that without air-sealing, fiberglass insulation is all but useless.

Today, builders use expanding polyurethane foam to seal gaps around windows and doors. With

It really is
great
stuff



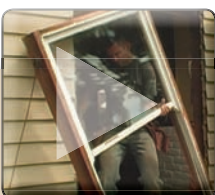
only a handful of brands and fewer types of foam to choose from, it's important to use the right one.

Products labeled "insulating" or "expanding" foam sealant can expand considerably and powerfully. This is great when you need to seal a large gap, but it can distort a jamb to the point that the window sash or door will bind. For the small gaps found between jambs and rough openings,

use a minimally expanding product labeled for windows and doors.

At \$4 to \$5 each, cans of expanding foam can seem pricey, but they are worth the expense. A note of caution: The foam is difficult to clean up, so protect all surfaces before you begin, and have a can of mineral spirits on hand.

John Ross, Web producer



Want to see it happen? Watch the video at

FineHomebuilding.com

STEP BY STEP

APPLY EXTERIOR TRIM



4 **Install the head casing.** For wooden windows without a plastic flange, the trim helps secure the window in place and acts as a weather barrier. Back-caulk all exterior trim (applying a fat bead of caulk around the perimeter of the trim's back face). Use 15-ga. nails to attach the trim to the window jamb and to the framing. Once the head trim is installed, apply metal cap flashing. (Go to FineHomebuilding.com for more on installing window cap flashing.) If necessary, replace the one piece of siding above the window to aid in the cap-flashing installation.



5 **Install the side casing.** Size the window trim to leave a 1/4-in. to 3/8-in. jamb reveal and to abut tightly against the existing siding. As with the head casing, prime the side casing on all sides and back-caulk it during installation. Bevel the bottom of the casing leg if it rests on a sloped windowsill. Last, keep a uniform nailing pattern for an ordered and pleasing final look.

INSULATE AND TRIM THE INTERIOR



6 **Fill the cracks.** Use low-volume expanding foam to fill the void between the window jamb and the framing.



7 **Apply the interior trim.** Like the outside trim, the interior trim helps to secure the window in place. Use 18-ga. fasteners for the trim-to-window connection and 16-ga. fasteners for the trim-to-framing connection. As shown in the photo below, you can use a reveal gauge to maintain a consistent reveal between the edge of the trim and the edge of the window jamb.

