

Replacing your windows can feel like a daunting task. Not sure what all is involved? Are you concerned how long it will take? Whether you are a do-it-yourself or prefer the red-carpet treatment or anywhere in between, we hope this information will help you make better informed decisions when you plan your window replacement project.

Installation plays a huge factor in the ultimate efficiency of your new windows. A quality installation will ensure your new windows will perform as expected, while poor installation can erase any of the benefits that caused you to replace your windows in the first place. Water is one of the biggest concerns when it comes to window installation.

Installation Methods

The installer should follow the manufacturer's recommended installation procedures for their product. In general though, there are three methods used to replace old windows. The first method involves completely tearing out the old window frame. The second method covers your existing window frames. Ask your dealer or installer how they plan to install your new windows. Be sure that you are comfortable with their preferred installation method before you purchase your new replacement windows.

Full Tear Out (Brick to Brick)

During a full tear out, the glass is removed from the old window frame. Next, the exterior material of the home around the window and the house wrap, or weather barrier, is removed or pulled back to expose the nail fin of the window frame. The type of exterior material your home is made of – siding, stucco, brick or wood – will determine how much is removed. The old frame is removed and the new window is installed using the nail fin. The house wrap, or weather barrier, is reapplied following building code guidelines and the siding of the home is replaced or repaired. While a new window can be installed in the opening and secured in about 2-3 hours, it depends on the exterior façade material as to how long the entire replacement process will take.

The benefits to a full tear out are that the new window is secured behind the weather barrier providing the best protection against water infiltration and the home exterior looks as if the new window was the original.

Covering the Existing Window Frame (Retrofit)

When the installation method uses the existing frame, the glass is first removed from the old window. At this point, the old window frame may be trimmed down with a reciprocating saw by removing the lips and tracks that held the existing sash or the frame may be left alone. In either case, the new window is set into place over the existing frame, sealed and secured to the home. This method would use a flush fin window frame that covers the old frame to provide a finished look from the exterior.

The benefits to this method are that the home's weather barrier is left intact as well as the exterior façade of the home. The installation process is typically shorter than with a full tear out with the average window taking about 2-3 hours to install.

The Day of Installation

When the day arrives for your new windows it can be very exciting. Yet it can also be one filled with anxiety. Will they ruin my floors or walls? Will I freeze if they are installing my windows in the middle of winter? Will they damage my landscaping? What kind of mess will they leave me to clean up? All of these are valid concerns, but easily overcome with a little bit of knowledge.

Preparing Your Home

On the day of installation, the installers will arrive and set up their work space. Most dealers will ask that you remove all window coverings including curtain rods and brackets. You should also remove any items on walls adjacent to the windows to be replaced to avoid them falling during installation. Clear all furnishings away from the windows to allow ample space for the installers to work. Some sections of your home will become a temporary construction site. Be sure to keep children and pets away from the work areas to prevent any accidents.

If you have an alarm system, you should notify your alarm company of your installation date. You will need to make arrangements with them to reconnect any sensors. Installers are not trained in alarm systems and will not make any reconnections.

Installers Arrive

Once the installers arrive, they will set up a work area either in the yard or driveway. The installers should use a tarp inside and outside the home to minimize any damage to the area during installation. Installers should take precautions when entering your home.

Removing Your Old Window

Installation will be focused on one or two windows at a time. This helps to minimize the extent of heating or cooling loss during the installation. The window is then removed using one of the installation methods outlined above. Once the old window is removed, the opening is cleaned out and prepared to accept the new window.

Installing Your New Window

The new window is inserted into the opening, sealed and secured to the home. The window is finished off by caulking the interior and adding trim as necessary. The exterior façade of the home is replaced if it was removed during the installation. The new window may also be finished off with brickmould or other trim accessories if necessary. A flush fin frame would not require any trim.

Clean Up

After all of the windows are installed for the day, the areas inside and outside the home are cleaned up removing all construction debris. Your old windows will be loaded up and ready to be hauled away to the installer's facility for recycling and disposal. At this point, your installer should provide you with the option to review and inspect their work and have you sign a customer satisfaction form prior to leaving your home.

Shimming and Fastening:

Position and shim window in the opening, plumb, level and square. Shim every 16 inches on the sill and every 24 inches on the jambs. Fasten through jambs at shim locations (see shimming diagrams) with round head rust protected screws.

No shims go at the head due to possible deflection of header. No fasteners go through a sill because they could compromise drainage. Wide windows (> 65") may require a fastener placed at the mid-point of the sill through the accessory groove to prevent bowing.

Shim placement is very important and varies depending on style of window (see shimming diagrams).

Note: Brick mould or nailing flange: These window components cover the outside of the space around the window and they assist in alignment (plumb) of the window. Fasteners placed through the nailing flange hold the window in place while shimming and fastening through the jambs is carried out. Nailing flange fasteners does not replace jamb fasteners.

Caulk the ends of shims.

Insulation: Use polyurethane foam. Apply two beads of foam about one inch in depth on all four sides of the window frame. One bead goes along the outside edge of the window frame directly behind the brick mould (nailing flange). The other bead of foam goes near the inside edge of the window frame. If jamb extensions are not sealed to the frame be sure that the bead of foam covers the joint between the jamb extension and the window frame on all four sides of the window.

Shedding of Rain Water: The space around a window must be covered on the outside with a brick mould (nail flange) or with flashing. Caulk where brick mould meets adjacent siding or masonry finish. In new construction the window is placed before the exterior finish so caulking of the joint between these two components is done after the exterior finish is installed.

Drip Cap: The building code requires a drip cap be placed above the head of a window. This is a very important flashing for effective shedding of rain water.

The back leg of a drip cap extends at least 2 inches up behind the building paper / exterior air barrier. If siding j-channel is placed above a drip cap it must have drainage holes.

Sub-Sill Drainage: Flashing of the sub-sill before installing a window creates a secondary drainage path for any rain water that may enter the window opening. If the window drains as it should and if the window is installed as per these instructions no water will enter the window opening.