



WEB BASED CORE APPLICATION SPECIFIC INSTALLATION INFORMATION AND METHODS



Proper Tools and Hardware

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Tools

Good tools can make the precision job of installing windows easier and more successful. Included are many of the basic tools window and door installation would need, and a couple of useful tools that may not be necessary, but can simplify many of the complex tasks a window installer can face.

1. CAULK GUN -The caulk gun is a basic tool. What can help immensely is a caulk gun with an easy way to relieve the pressure once you reach the end of the bead, to avoid the over application and mess too much caulk can cause.

2.CIRCULAR HAND SAW and RECIPROCAL SAW - Plug-in or battery operated, circular saws are great for cutting wood mucks, cutting back siding, and even cutting new trim. The reciprocal is the go-to saw to remove old frames from wood, aluminum and steel. Cuts buried nails keeping opening cleaner.

3. DRILL AND DRILL BITS - An electric, variable speed drill for drilling mounting holes; even into block, though a hammer drill would be better. Have a variety of drill bits, but as a rule of thumb, the diameter of the drill bit should be the same as the shaft of the screw. Variable speed allows the drill to be a power screwdriver.

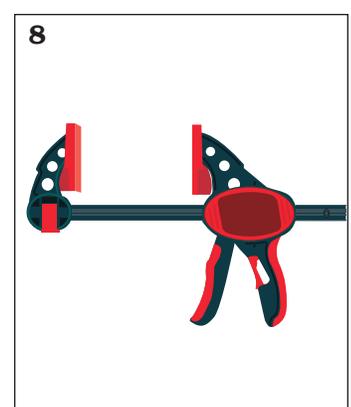
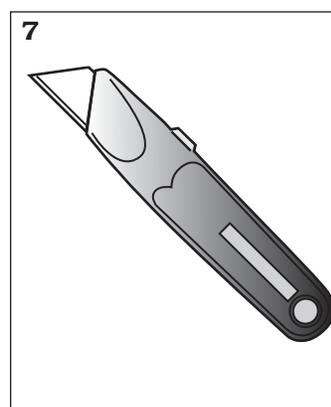
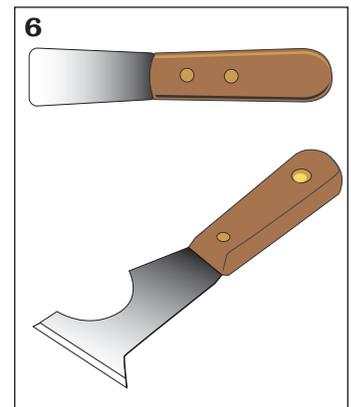
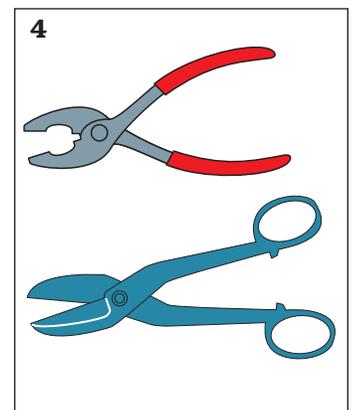
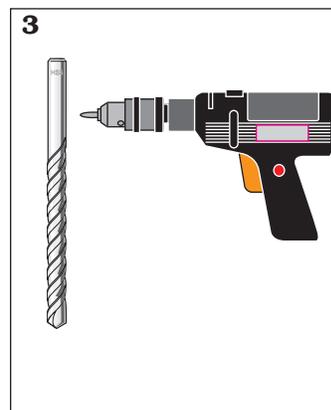
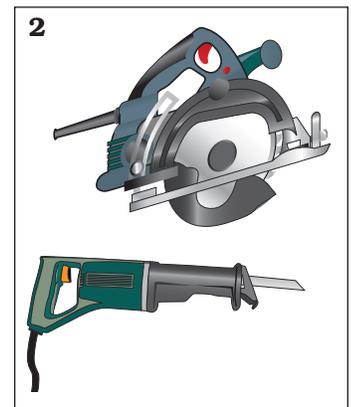
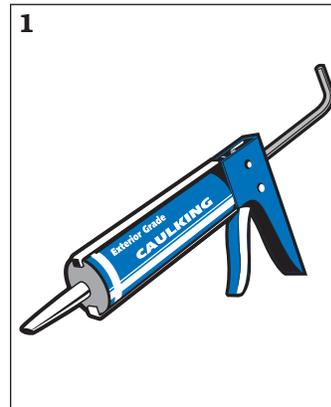
4. PLYERS AND SNIPS - Pliers can help pry parting stops out of the jambs and header, and help remove staples holding aluminum or vinyl tracks in place from old sash windows. Locking pliers are a good addition to the tool box, as well. Tin snips help trim coil stock and cut sheet metal from behind old windows.

5. HAMMER AND PRYBAR - Though nails are seldom used except for finned or flanged windows, hammer claws can help remove old frames. The best bet is the prybar to get the leverage to remove old frames, and help pull the fin out from between the siding and wall when removing old aluminum windows.

6. PAINTERS TOOL, SCRAPER AND BRUSH - The various cut-outs in a "Painters Tool" are extremely useful for removing old nails, prying out small window pieces, etc. Scrapers can clean the old frame, and a good brush is indispensable for cleaning the old tracks.

7. RAZOR KNIFE - Simple and indispensable, razor knives cut everything from wood trim, to insulation, flashing and even scoring coil stock for bending.

8. BAR CLAMP - Perfect tool to "lock" new window in place when it's been plumbed, leveled and squared until it has been anchored.

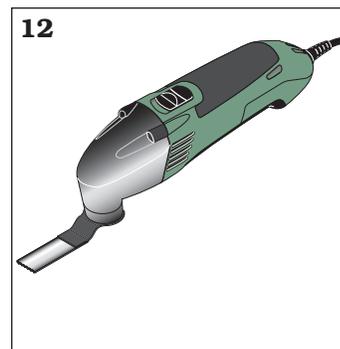
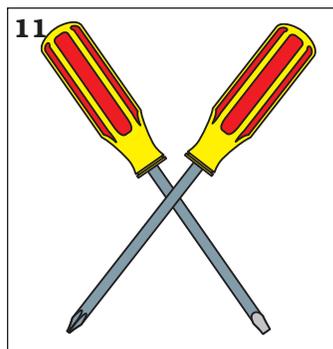
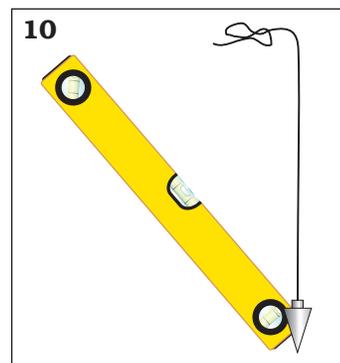
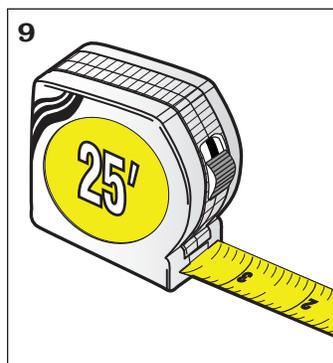


9. MEASURING TAPE Everything needs to be measured twice and cut once. Make sure you have a good one.

10. BULB LEVEL AND PLUMB LINE - Windows and Doors work best when they are plumb and square. A good bulb level makes sure your work is on the level. The “plumb bob” lets gravity make your work perpendicular.

11. SCREWDRIVERS - Philips head and flat head, in various lengths and sizes make installation and adjustment of the new window or door better and offers 100% bug-free, and draft-free ventilation.

12. OSCILLATING MULTI-TOOL - Many top-end installers wouldn't be without their oscillating multi-function tool. Developed in Europe, it can cut glazing putty, clean out between frame and old glass for re-glazing. It can even cut flush into stucco to expose old windows in stucco walls with minimum damage, to enable better sealing of the new window.



Hardware

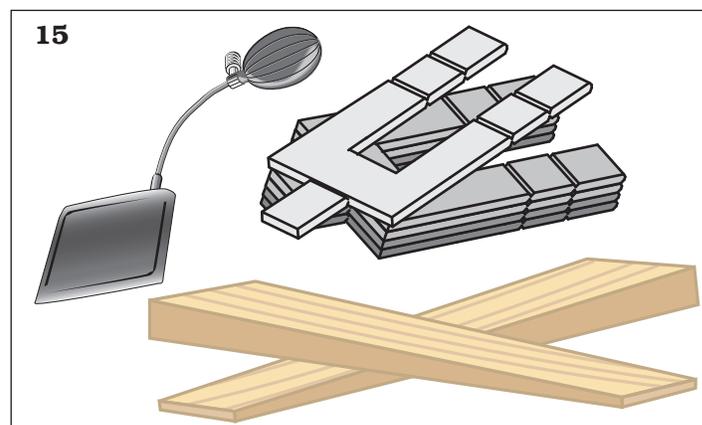
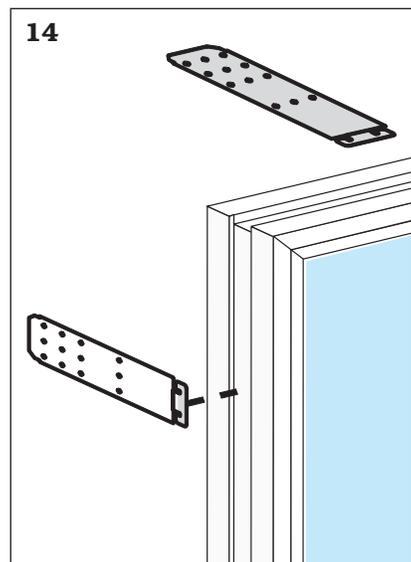
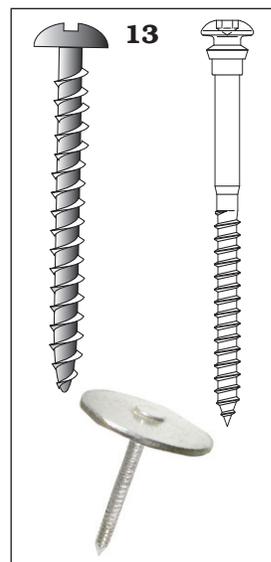
While most tools necessary for window and door installation are brought by the installer, mounting hardware is often supplied with the windows themselves.

13. SCREWS whether self-shimming or regular, are the most often supplied accessory with the window or door. The important thing is that they be quality stainless steel. There are different grades of stainless, and the last thing you want besides deteriorating anchors, is rust stains bleeding through wall board.

14. JAMB CLIPS are used with wood windows to avoid penetrating the jamb all the way through with a screw. These clips are screwed to the jamb, and then the tab is anchored to the rough opening and eventually covered with trim or other finish materials. For uPVC windows, clips are made to “snap-in” to a groove in the frame. “Simplex” style nails are useful for installing pvc windows with fins.

15. SHIMS are now being included with many windows and doors because of the importance of proper shimming. Each installer should have a ready supply of shims because each installation situation can be different and too few shims would not be advisable.

Other hardware may or may not be required, and/or supplied. Check with the brand you want to buy and/or install for their complete list.



Caulk/Sealant, Insulation, Water and Air Barriers

16. CAULK SEALANT- Quality Sealants enable provision of a water and air-tight barrier between two surfaces. Be sure the adhesion properties match the two surfaces to be sealed.

17. SPRAY PU FOAM - Slow expansion Polyurethane foam is injected between the rough opening and the new window or door to establish a thermal, air and water barrier around the perimeter of the newly installed product.

18. WEATHER RESISTANT AIR BARRIER, BUILDERS TAPE & PLASTIC VAPOR BARRIER - Weather Resistant Barriers, Air Barriers and Water Resistant Barriers are used on exterior walls. Vapor Barriers and Builder's Tape are used on warm side interior walls. They need to integrate with new windows and doors to work in concert with them.

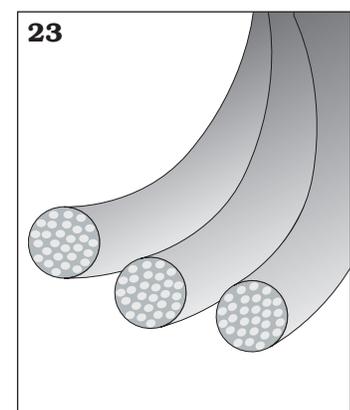
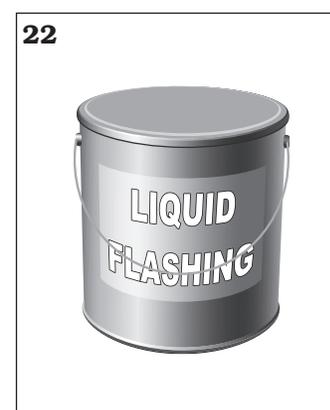
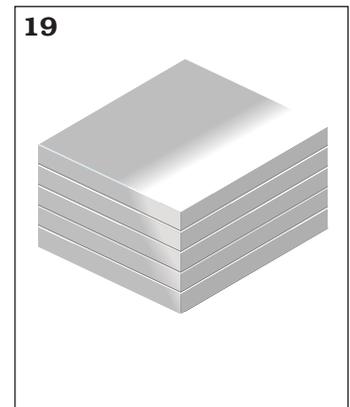
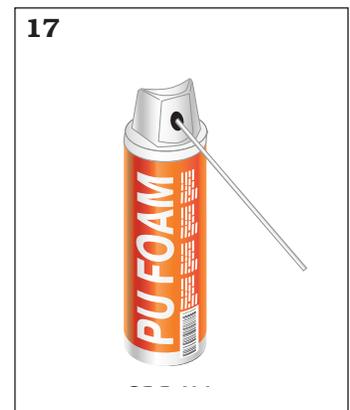
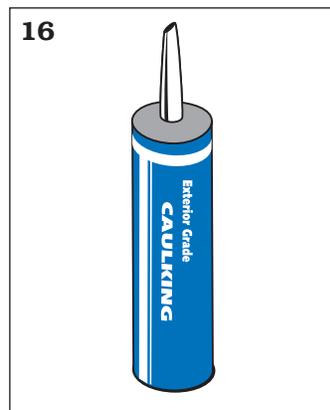
19. FOAM INSULATION BOARD - Sometimes called styro-foam (brand) or foam core (another brand), these rigid boards and others like them are used as a sheathing product underneath stucco or other applied exterior finishes. They provide air and moisture and water resistance and a good substrate for the applied finish.

20. BATTE INSULATION - Standard wall insulation can be used to insulate between the new window or door product and the rough opening. Take care not to compress the fiberglass material as it will diminish the insulation value. Water will also diminish its effectiveness.

21. COMPRESSED FOAM SEALANT TAPE - A European developed product, this sealant tape slowly expands and fits the contours of both surfaces of the rough opening and the door or window frame and makes a complete seal with minimal pressure.

22. LIQUID FLASHING - When old frames remain in place, liquid flashing is the ideal brush applied material to flash the opening and create an effective sill drainage pan alternative.

23. BACKER ROD - Applying caulk to seal an open space between two surfaces, it is unwise to fill a gap greater than 1/8 inch without using backer rod placed in the gap. In this way, the sealant sticks to the two surfaces and the backer rod as a buffer to allow expansion, contraction and movement without breaking the bond.



Note: This list of tools and hardware and application materials is typical but may not reflect the exact tools and hardware provided by the manufacturer or needed to install all of the window products. The list is for guidance and to be sure that when the products are ready to be installed, all necessary materials are on hand or readily available.