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## HOME ENERGY MANAGEMENT

# Weatherstripping Your Windows

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Don't let cool air escape from your home in the summer and don't let those north winds invade your home in the winter. You can keep your home more comfortable and save money too by weatherstripping your windows. The biggest energy-wasters in any home are the windows and doors (46 percent of annual heat loss is through and around glazed areas in windows and doors).

Weatherstripping around windows and doors is essential to stopping air infiltration. While window units used in today's homes generally come with factory-installed weatherstripping, door units and windows in homes that are 10 to 15 years old may not have this feature.

## Wood casement windows

The first step to weatherproofing your home is to check the windows. If you have double-hung windows, begin by looking at the sash lock. Make sure each lock is fastened securely to the sash (wooden frame around the glass) and is in working order. Adjust locks so that the upper and lower sash draw together as you tighten the lock.

If you still detect infiltration at the top or bottom of the window unit after locking the sash, use one of the following

methods to stop the air movement:

- Apply a strip of **closed-cell vinyl foam tape** to the bottom or top edge of the appropriate sash.
- Use **transparent weather stripping tape** to seal cracks around window sash. After cleaning all surfaces with a cloth dampened in lacquer thinner or denatured alcohol, cover all cracks with the weather stripping tape.

- Use **caulking cord or rope caulk**. This product has many uses and is highly effective at stopping unwanted air from entering the home. Rope caulk will remain flexible for years, never shrinks, works and removes easily.

A bonus of both rope caulk and weatherstripping tape is that you can install them from inside the house.

## Exterior cracks

Caulking compound is the most commonly recommended and used sealant for exterior cracks around windows and doors. Manufacturers today supply a variety of caulking compounds each possessing distinctive working characteristics and price.

For general caulking of windows and doors, **acrylic latex caulk** is probably the best buy.

## Steel casement and basement windows

Forty years ago, the steel casement window was popular with builders. Thousands of these windows were installed, but experience has shown them to be very poor insulators.

When weatherproofing a steel casement window, again, begin with the lock. Make sure it is tight (if adjustable) and in working order. The easiest and best method of weatherstripping steel casement windows is closed-cell pressure sensitive foam tape. Clean the flanges around the edge of the sash and press on a thin strip of the tape.

A relative of the steel casement window is the metal basement window. Most newer homes with basements have several of these units (of either steel or aluminum) that are cast in place when the basement wall is poured. Though small in size, infiltration and heat loss through windows of this type can be severe. Closed-cell pressure-sensitive foam tape or transparent weatherstripping tape works well as a method of weatherproofing these windows.

## Jalousie windows

Another "big spender" of fuel dollars is the jalousie window. Frequently found in the walls of breeze ways and sun porches, this window is an excel-

lent ventilator throughout the year. Perhaps the best "cure" for a jalousie window is to cover the whole unit with a polyethylene sheet held in place on all sides with weatherstripping tape.

## Storm windows

Studies show that tightly fitting storm windows will cut conduction and infiltration losses by 50 percent. Self-storing, double- or triple-track aluminum storm windows have traditionally been used, but you can use inexpensive plastic window and door kits with comparable results. These kits, usually made of thin plastic sheeting, are practical for temporary use.

To increase the stability of a plastic sheet storm window, substitute strips of thin plywood, paneling or even yardsticks for the cardboard strips usually supplied with the kit.

Cut the plastic a little larger than the actual window size. Wrap the top edge of the plastic once or twice around the nailing strip (the plywood, paneling, etc.) and fasten the strip to the top exterior of the window casing. Next, wrap the plastic around a second nailing strip, stretch tightly, and nail to the window sill. Follow the same procedure for attaching the

sheet to each side of the window.

Polyethylene sheeting is difficult to see through. When clarity is required, you may want to use a clear acetate or vinyl material also on the market.

Sometimes it is difficult to install the sheeting on the outside of the window. In this case, the easiest method is to secure the plastic to an interior window casing using transparent weatherstripping tape. Before installing the sheeting, seal the window joints with tape or rope caulk.

One of the newer items on the market is a plastic storm window unit designed for installation on the inside of the dwelling. It is cut to size, made of clear sheet vinyl and consists of a system of interlocking plastic side strips (not unlike the plastic freezer bag).

This storm window installs in minutes and is easily removed from the inside for cleaning or ventilation. This window works particularly well when used over casement, basement or jalousie windows.

You can also make your own interior storm windows. For more information, read MU publication [GH 5261](#), *Interior Storm Windows for Energy Control*.

## Stopping infiltration around window air conditioners

Throughout the year, window model air conditioners are notorious fuel consumers. To eliminate infiltration around your unit, properly caulk and seal all exterior case and window joints.

When autumn arrives, wrap the unit with a manufactured air conditioner cover, or make your own using polyethylene plastic.

If your window unit is in a hard-to-reach window, weather proof from the inside. Use polyethylene and transparent weather stripping tape to cover the front of the unit. Tape the plastic to the inside window casing.

To slow air infiltration from the crack between the raised sash of a double-hung window and the air conditioner, use ordinary fiberglass insulation. For a more attractive solution, use a strip of urethane foam.

*For more information, please visit the MU Extension web site at:*  
[muextension.missouri.edu/xplor/](http://muextension.missouri.edu/xplor/)