

WEATHERIZING WINDOWS

(SEE Interior Window Storms, Panels and Quilts on other side)

Replacing windows is one of the first things most homeowners think about when deciding they want to weatherize their homes. But replacing windows is very expensive and **existing windows can usually be improved to work almost as well as new windows at a fraction of the cost.**

Here are a few tips and resources you can use to tighten up your windows.

Close and latch all windows and storm windows tightly.

If any of the storm windows do not close tightly, leaving a gap in opposing corners when closed, you will need to loosen three sides of the storm window frame from the trim outside, square it up so it closes properly and reattach with caulk and screws.

Caulk the edges of exterior storm windows to the trim with high quality exterior grade acrylic latex caulk with silicone – make sure not to caulk over the round weep holes at the bottom of the storm panel that drain out condensation.

If you can shake the sash and they rattle, you can **tighten the window latches** that pull the sash together by removing the inner portion of the closing mechanism, filling old screw holes with wooden match sticks or slivers of wood, replace the latch, drilling new holes further away from the outer part of the latch so it pulls the two sash tightly together.

Window sash can be sealed at top, bottom, and edges by **installing a v-shaped weatherstrip**. Top and bottom weatherstrip can be installed on the window casing where the top and bottom sash close, with sash in place. To install side weatherstrip, remove the window stops from one side of the sash, remove the sash, install v-shaped weatherstrip on the window jamb with point of weatherstrip pointing in and replace the sash. If sash is too tight to fit with new weatherstrip, you will need to trim off a very small amount from one of the sash edges, leaving sash wide enough that it presses out against and compresses the weatherstrip. Vinyl v-weatherstrip is available from most building supply warehouses. Much longer lasting bronze v-strip is available from Architectural Resource Center: brasswindowhardware.com/weather-strips

If you have old sash with ropes, pulleys and counterweights, remove the inside trim piece covering the counterweight cavity on each side of window. Cut the counterweight cord and remove the counterweights (make sure sash are latched so they do not drop when removing counterweights). Remove window stops from one side and remove sash. (This is a good time to install v-shaped weatherstrip at sides – see above.) Remove cording attached to sash and remove pulleys from window jambs. If you do not need to retain opening capability of outer/upper sash, reinstall it, temporarily screwing sash in place and caulk at edges. If you want to keep both sash openable, replace old counterweigh pulleys with “Pullman Window Counterbalance” (available at: 585-334-1350, www.pullmanmfg.com) and attach counterweight spring to sash and replace. Then fill the counterweight cavity with polyisocyanurate foam insulation board, slightly undercut around the outside and air seal edges of foam board with minimal-expanding spray foam.

INTERIOR WINDOW STORMS & QUILTS

(See Weatherizing Windows on other side)

You can further decrease heat loss through your windows by installing **window storms, panels or quilts** inside. It is important to make sure all of these fit tightly on all sides to the window jambs or trim to prevent warm moist house air from getting behind and contacting the cooler window where it might condense.

Several companies sell **interior plastic window cover** kits that consist of a roll of double sided adhesive tape and thin-film plastic. The tape is secured at edges of window, jamb or trim and the plastic is pulled tightly to tape and then heat shrunk with a hair drier. These work especially well in situations where you do not have to remove them in the spring, but can leave in place for years. If you are very careful in removing the film, it might be used a second season.

“Tyz-All Plastic Interior Storms” and “Advanced Energy Panels” are **reusable, heavier gage plastic film panels** available for purchase at the COVER Home Repair store (coverhomerepair.org, 158 S Main St, White River Junction) or through Energy Federation Inc. (www.efi.org)

You can find detailed instructions and materials list for making reusable double-sided interior wood frame inserts at: <http://www.arttec.net/Thermal-Windows/index.html>.

“Warm Window” and others make multi-layer quilted fabrics for window quilts – Google “window quilts”. Unfortunately, many of these quilted fabrics have sewing penetrations through all layers, resulting in potential points of air and moisture leakage. This may cause condensation problems for you. Incorporating an unbroken air barrier into the quilt might be helpful. Quilts should be securely fastened at all edges using one of several optional methods: magnets, sliding track, or hinged clamps. Custom made quilts can be ordered from Window Quilt in Brattleboro, VT - (802) 246-4500 or www.windowquilt.com

Homeowners can also make rigid window insulation panels from foam board, sealed at the edges with weatherstripping.

This information was compiled by Vital Communities.

Please feel free to contact Vital Communities with any questions: Energy@VitalCommunities.org or 802.291.9100