Whole House – Apartment – Residence Sealing:

The following information is offered to assist taxpayers with properly obtaining energy tax credits and is for educational purposes only. This information does not replace the assistance of a professional tax preparation specialist, professional accountant or attorney.

The graphic show below indicates many of the areas that should be sealed in a normal residence. Some of these areas need to have weather-stripping installed, such as the attic hatch, doors, certain operable windows and other access items such as hatch openings into side attics or knee wall areas.



Graphic Courtesy of: EnergyStar.gov

The proper use of caulking can also reduce or eliminate air infiltration into a home. You can use clear caulk around interior window and door frames, where the fireplace meets the wall and where any dissimilar materials meet.

In residences with basements and/or crawl spaces, plumbing and electrical chases often penetrate the main floor and can allow air to pass directly from the basement or crawl space directly into the attic. These extra large openings are called 'bypasses' and are common in most homes. They can be fixed by placing a properly cut piece of foam board in place and then using expansive canned foam to adhere the foam board to the floor. The canned foam should be able to expand and fill any gaps or other openings.

Many homes, apartments and other residential structures have recessed (canned) lights. There is a version of

canned lights called 'builder's grade' that allows air to pass through the recessed fixture so that the incandescent bulb installed in the fixture will not get dangerously hot. There are ways to seal these can light fixtures so that air will not pass through. However, if you do seal these lights, we highly recommend that you place a bright orange, red or yellow sticker inside the fixture that reads, "Caution – Use Only Compact Fluorescent Bulbs in This Fixture!" If you make a recessed light fixture airtight and then install an incandescent bulb, the bulb/fixture can become very hot and potentially cause a fire. If you want to seal a recessed light fixture you can purchase a kit designed for this purpose. An online source for these recessed light kits is: www.HighEnergyBills.com

Air leaks around basement windows, especially the ones with metal frames, can be corrected using 'rope' caulk. Rope caulk tends to stay soft over time so that you can remove it at a later date if you decide to open the window. Otherwise, use the rope caulk around the opening cracks and other crevices to make the window tighter. Rope caulk can be used on other windows as well; however, it may leave a stain on wood-framed windows so use caution. There is a weather-stripping product known as 'V-Seal' that has an adhesive edge to adhere to window and door frames. Be sure to clean the frame with soap and water to remove dirt and residue before the v-seal is adhered to the intended surface. Otherwise, it probably will not stick. Follow the instructions on the package for best results.

Repair or replace all damaged or missing weather-stripping on doors. Most homes with basements leak air at the sill plate, which is the board that lies upon the foundation. Clean this area with an old paint brush and apply a caulk or foam product to seal the air out. Then, insulate this area with foam board cut to size or with pieces of fiberglass insulation. Wear gloves, eye protection and a high-quality filtration mask when handling insulation. An informative guide on air sealing a home is on the www.EnergyStar.gov website at: http://www.energystar.gov/ia/home_improvement/home_sealing/DIY_COLOR_100_dpi.pdf