

GOING GREEN

A warm way to ring in the holidays

As the first snows of the season arrive on our doorstep and the chill air seeps inside, it's time to look at simple ways to improve the energy-efficiency and thermal comfort of our homes. There are two ways to do this; "winterizing," such as replacing the filters on the furnace or putting plastic over single pane windows, and the more permanent and substantial changes called "weatherization," which would include replacing that inefficient furnace or old leaky windows.

According to Scott Rodwin, president of Skycastle Homes (skycastlehomes.com, a local remodeling contractor who specializes in helping owners to "greenmodel" their homes affordably, "When you are remodeling or adding to your home, it's the perfect time to also improve its energy performance. On most houses, for between \$5,000-\$10,000, we can reduce the owner's utility bills by half." Skycastle recommends starting by getting an energy audit so you understand where you can get the most bang for your remodeling buck.

Of all the remodeling you can do to reduce your utility bills, weatherization is generally the best value. The following ideas can immediately improve the comfort of your home and lower your utility bills. Start with caulking, sealing and weather-stripping, then add extra insulation. Focus on the hard-to-reach places like the crawl-space and the lowest part of the eave in the attic. Upgrade your windows, especially if they are single pane with metal frames. Uncontrolled air infiltration typically accounts for 25 to 40 percent of the heating and cooling costs of a



Ron Flax, project manager of Skycastle Homes, a remodeling contractor that "greenmodels" homes affordably, installs caulking to a window frame to prevent air infiltration. Air leaks can account for between 25 to 40 percent of the heating and cooling cost of a home.

Photo: Irene Flax.

home. Fortunately remedies are relatively quick and inexpensive. Begin by looking at the gaps around doors and window sashes. Apply weather stripping to doorframes and use caulking to seal gaps between the window framing and the windows. Include all outlets and light switch plates located on the outside of your home. Using a Latex, Silicon or Silicon-Latex blend caulk can offer the best insulation for the lowest cost.

Ron Flax, project manager at Skycastle Homes, is applying low-cost, energy-efficient upgrades to his own 1956 home.

"We focus first on the building envelope. Using an infrared camera, we are able to identify where heat was escaping from the home," said Flax. Skycastle's solution was to blow cellulose insulation into wall cavities and install a high-quality vapor barrier in the crawl space. In the attic, they used spray foam to create an insulating barrier to prevent outside air from entering the area. This step is not only useful in the winter, it will also help keep the attic space cool in the summer.

After upgrading the home's envelope, improvements to the mechanical system generally yield the best payback. Installing a "set-back" thermostat, sealing the ducts, and replacing old furnaces and water heaters are common upgrades in this category. Skycastle encourages people to look at the long-term comfort and cost savings of energy improvements. If a new high-efficiency water heater costs around \$2,000 and saves \$200 a year, many people calculate that as a 10-year payback. However, if you also factor in escalating energy costs and the added value to your home, weatherization becomes one of the best investments you can make with your money. Additionally, many of these ideas can dramatically improve the comfort and enjoyment of our home – a perfect way to start the beginning of winter.

~ Neshama Abraham

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