Appearances Can Be Deceiving

Energy audit helps homeowners save money

Last year, KPUD's Energy Services Department received a phone call from a customer whose bill was higher than they expected it would be for a newly built home.

The home was barely 4 years old, had energy-efficient windows and appeared to have proper amounts of insulation.

After talking to Tom and Treasha Reser, it was determined an energy audit of their home was the best solution to find the problem.

Tom took Sharon Ohnstad, KPUD energy services specialist, around his home and she began to list the R-values on insulation, the U-values on windows, lighting and heating sources, and family energy consumption habits.

A blower door test was performed to find leaks in the Resers' home. This is when the energy-loss problem areas were discovered.

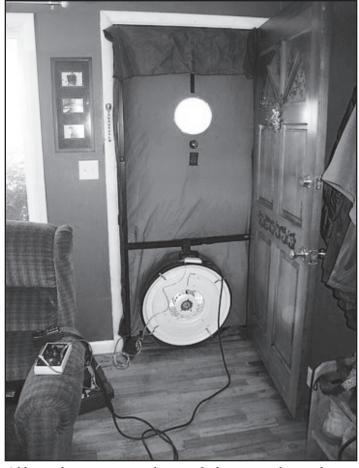
Tom writes:

Appearances can be deceiving. Our new home is beautiful; however, as we went through a few annual seasons, our electric bill in our "all electric home" was very high. So high we contacted the Klickitat County PUD and asked, how can this be? The PUD agreed our kW usage seemed very high for a newly built home that used all the new and best insulation products. The PUD Energy Services Specialist agreed to visit our home and perform an energy audit.

What she found shocked us. Our home has unusual corners in the great room because of the unique timber beam construction. When the blower door test was done, we found that the leakage at each corner was extreme. So extreme that after the audit, I removed the exterior corner trim boards and discovered that the contractor had not insulated the corners at all and in some cases you could even see daylight from inside the home!

By installing blown-in insulation in the empty wall frame pockets in each corner, accessed from the exterior, foaming all small cracks on the corners and using new exterior panel insulation seal tape, we were able to achieve great reductions in the leakage rate.

Klickitat PUD returned and retested the house. Treasha and I are both proud to say that we have greatly



A blower door test is a good way to find areas in a home where cold air is seeping in or warm air is leaking out.

reduced our energy bill and eliminated all drafts. It certainly educated us to the fact that if you do not pay attention to the insulation details during construction of a custom home, you might end up with a very energy-poor home that looks great!

Tom also reduced leakage further by sealing the canned lighting in his ceilings and weather stripping his

doors. The Resers' efforts reduced their home energy loss from 18 percent to a very acceptable 3 percent.

If you heat your home with electricity and want to make a positive difference by locating and fixing leaks, you should consider having an energy audit.

Conservation rebates are available for Energy Star clothes washers, insulation, energy-efficient windows, heat pumps and solar installations.

Before you start a project, call Sharon Ohnstad for rebate specifications at (509) 773-7622 or (800) 548-8357 ext. 622. ■