Big Energy Saver – Insulated Siding

One thing that is actually good about today's economic turmoil is the way it's forcing all of us to conserve and economize in ways we never thought about before. I know I'm scrutinizing my budget more carefully than ever. So I've been on a quest to look for home products that can help all of us to be more efficient, and in the most dramatic ways possible.

Life-changing moment

I saw an interview on television not too long ago where the discussion turned to how things have gotten out of hand with household consumption. One of the participants said he could remember the day when his family didn't buy a big package of paper towels every week at the grocery store. They had these things called "dish towels", and they *washed them*! It struck me how our habits have become so mindless, and so needlessly expensive.

Where does it hurt?

For most of us, one of the biggest budget items each month is the utility bill. Here are a couple facts that might astound you:

- Energy represents the highest cost of housing outside of the mortgage loan*
- Building energy use represents 70% of U.S. electricity consumption and is the largest source of carbon emissions (39%)*

While I, personally, have gotten better about things like using the new compact fluorescent light bulbs, and just plain turning them off (I was a chronic light-up-the-house kind of guy), I've been looking for something we can *really feel* in our checkbook every month. I've found insulated siding to be one of the most ingenious energy-saving products for the home.

What is insulated siding?

Insulated siding is just like traditional vinyl siding with one important addition: rigid foam insulation is fused behind the surface of the siding panel. Filling this gap with foam delivers an R-value in the range of 2.2 – 5.1, much higher than other common exterior building materials, like fiber cement (R-value of 0.15), brick (R-value of 0.44) and wood (R-value of 0.93). We all shop for higher R-value in our windows and doors, now we can achieve this for the entire exterior siding of the house.

One of my first questions was "doesn't all the insulation I have behind my walls do this"? The answer I found is surprising. Yes, the fluffy pink stuff does work – to a degree. But it's placed *between* the wall studs that frame the home. And the un-insulated wall studs pick up and conduct heat, allowing energy to leak right through the walls, pouring money right out the walls, if you ask me. Since wall studs make up 25% (1/4) of the wall surface of an average home, this is like having one entire wall with no insulation!

By covering up the entire exterior of the home, including wall studs, with rigid foam material, insulated siding reduces heating and cooling energy loss through the walls by up to 20%. Since nearly half of your homes' energy bill is spent on heating and cooling, insulated siding can dramatically reduce your utility costs year-round.

Aesthetic qualities
So, I think I'm onto something here that's just a no-brainer. But there's another important factor in considering insulated siding – how does it look on the house? Since Shari is our ultimate design guru, I asked her to weigh in on this and we've found some interesting benefits.

Because the siding includes rigid foam insulation that fills in the gaps beneath, durability is greatly increased. It can hold up to the stray baseball (that would've previously caused an ugly ding), or to those violent hailstorms or wind storms that frequently cause havoc. The rigid insulation also creates a neater, straighter appearance for the outside walls of the home.

Shari's favorite feature is all the colors and textures you can choose from. Nearly every siding manufacturer in the country now offers a full line of insulated siding, and you can find your local options by using this handy contractor search tool.

The Green Factor
It used to be that only Kermit thought it was good to be green, now we all do. With the energy resources saved by using insulated siding, this is a choice that makes a big difference. The product is an Energy Star®-qualified insulation product, which means it meets the stringent standards of the U.S. Department of Energy and the EPA.

Other things to love about insulated siding
There are lots of other bells and whistles to this product. They've put a lot of engineering into this that I think you'll appreciate:

- Withstands winds as high as 215 mph
- Up to 400% greater impact resistance than conventional siding
- With additional structural integrity added by the rigid foam, gives you the look and feel of solid wood
- Breathable, to protect from rot, mold and mildew
- Safely protects your home with a built-in pest control ingredient that deters termite infestation
- Reduces rattling, and homeowners report it makes their homes quieter

Well, I said it was ingenious, and now you can see why. With all the advanced technology that's gone into insulated siding, I have to say my favorite part of this story is finding a new way to make a dramatic impact on the household budget. The days of turning on the juice without a care in the world are behind us, and it's a product like this that will help our cause - without sacrificing comfort and good looks. I knew good-old American ingenuity was out there somewhere! I'm on a mission to keep you informed about big energy savers like this one.

Matt

*From "Tapping the U.S. First Fuel – Policy initiatives to Improve Residential Energy Efficiency", RESNET (Residential Energy Services Network), 2008