



Insulated From Reality? Siding Layer Doesn't Add Much

If you're looking at ways to make your home more energy-efficient, you should be wary of insulated siding. Insulated siding has been around, but last year it was added to International Code Council's International Energy Conservation Code. That standard is a guideline for many local building codes that guide additions or renovations. In other words, insulated siding now is seen as a quick way to improve your home's energy-efficiency. But experts tell Consumers Digest that insulated siding adds little *R-value*, which is the measure of how much heat that a product, such as siding, retains.

Insulated siding has a layer of polystyrene foam that's laminated on the back of the vinyl siding, which makes it handle more like a solid board (instead of a wet noodle) and adds an insulating value of R-2 or R-3 to the siding. Handling advantages aside, before you shell out twice as much for insulated siding compared with regular vinyl siding, you should know that energy experts tell us that adding R-2 or R-3 insulation over standard wall insulation is like slipping on a T-shirt over a down jacket. In other words, it doesn't add much.

"If it's going on a new structure, or any that's done to current Department of Energy standards for that matter, then R-2 to R-3 isn't going to make that big of a difference," says Kirk Lindstrom of Building Energy Experts, which is a Crystal Lake, Ill., company that performs home energy audits. And, he says, if the siding were to go over a wall that has no insulation to begin with, "it's just a drop in the bucket in terms of what you need."

A more effective route, he says, would be to replace your current interior wall insulation with a product that carries a high R-value rating. For instance, he says, standard fiberglass batt insulation, which is the type that's used most commonly, provides about an R-11 value. Siding manufacturers with which we spoke agree that insulated siding is intended to supplement, not supplant, typical wall insulation.

And as for the polystyrene insulation itself, we aren't concerned about any potential health risks of insulated siding. Department of Health and Human Services (HHS) released in June 2011 a report about carcinogens that classified styrene as "reasonably anticipated to be a human carcinogen." (Other substances that have that same classification include certain glass wool fibers and fungicide chemicals.)

Siding manufacturers typically use polystyrene for their insulation, from which styrene can leach, but because the polystyrene isn't incorporated into interior air space, we doubt whether this development will mean any health risks, and thus, it likely won't affect siding products. We couldn't find any manufacturers that say they will change their products as a result of the HHS report.

