

Canadian heat reflectors effective in older homes

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SPECIAL TO THE STAR

Maureen Armstrong lives in a large, beautiful, older home that's terrific in every way but one: It's hard on heating bills. The house was built in the 1930s, and includes hand-quarried limestone on the outside, cinnamon-brown oak trim and wainscoting on the inside, all nestled onto a lovely tree-covered lot with an east-facing view above the sparkling waters of Lake Huron's North Channel.

This place is gorgeous, except for the heating bills. They're too large to discuss publicly, but that's where an innovative, Canadian heat reflector product can help.

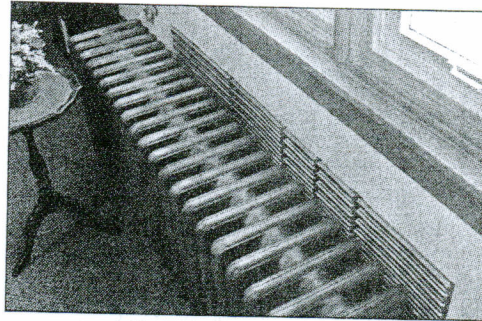
Like many vintage homes in Canada, Armstrong's place is heated by classic hot water radiators. While this system does yield a gentle, comfortable heat, it's also responsible for a tremendous amount of hidden heat loss through the exterior walls the radiators are installed next to. Insulation levels in homes built before the 1980s are low enough that wall surfaces become quite cold to the touch during harsh, winter weather. This literally draws heat away from the rads before it ever gets to the room.

Reducing this large and unnecessary waste is the reason why Novitherm heat reflectors (novitherm.com; 905-815-0977, or 800-871-0079) were invented, and you may be one of the many Canadian homeowners who are currently eligible to receive enough reflectors for your entire house, all for nothing more than a \$25-shipping fee.

Novitherm reflectors are made of lightweight PVC with a shiny, aluminum coating on the outside face. This reflects more than 90 per cent of the radiant energy back into the room and away from the wall, without actually getting hot to the touch at all. The reflectors are one centimetre in depth, and can be installed in spaces as narrow as two centimetres. They nestle together compactly for shipping and are anchored to exterior walls using double-sided tape. That's it.

The reflectors last indefinitely (the oldest ones in use today were installed in the 1980s, and are still going strong), delivering energy savings of at least 10 per cent, according to results from field trials conducted on multi-residential units. Results with single family dwellings may be more or less than this.

Armstrong doesn't consider herself particularly handy, yet she found the Novitherm panels easy to install. They come customized for each particular rad, based on mea-



STEVE MAXWELL PHOTO

Novitherm heat reflectors can save energy in homes built before 1980.

surements you take yourself and submit with your order. If any reflectors need cutting, ordinary scissors work perfectly.

When it comes to installation, the only critical issue is sealing. In order to perform effectively, the perimeter of each reflector needs to be sealed tightly against the wall. The Novitherm system comes with narrow rolls of double-sided tape that make it easy to succeed. The normal price of the 15 reflectors Armstrong needed for her house is \$150, including tape and all taxes. But for the remainder of this year, Enbridge Gas customers with hot water rad-equipped homes built before 1980 are eligible to receive reflectors free, up to a maximum of 39 reflectors per household. All you need to pay is the flat-rate shipping cost. Follow the links on the Novitherm website for an order form, or call Enbridge at 888-GAS-8888.

To realize the greatest energy savings after installing rad reflectors, you need to turn down your boiler thermostat, not your room thermostat. There's no trick to building brand new homes that use less than 25 per cent of the energy required by older structures. Today's best building technologies make this goal easily achievable.

What's more difficult is raising the energy performance of Canada's large stock of existing houses. This requires many different, smaller technical fixes, including heat reflectors behind rads and diligent people willing to take the time to put them in place.

Send homebuilding and renovation questions to www.stevemaxwell.ca. Letter volume sometimes prevents individual response.

Steve Maxwell is the technical editor of *Canadian Home Workshop* magazine. His Expert Advice feature appears Saturdays in *New in Homes*.

