



## **Insulating yourself against energy costs** *Now is the time to upgrade your home insulation*

Another cold Canadian winter is just around the corner. Are you ready? Thanks to two new incentive programs, weather-proofing your home can be even more cost-effective than ever before.

The Home Renovation Tax Credit (HRTC) provides a 15 per cent non-refundable tax credit on eligible home renovation costs up to a maximum of \$1,350. Natural Resources Canada offers the ecoENERGY Retrofit Rebate up to \$750 for attic insulation.

Details about the HRTC are available at [www.insulationtaxcredit.ca](http://www.insulationtaxcredit.ca) and [www.actionplan.gc.ca](http://www.actionplan.gc.ca). More information on other government grants, including the ecoENERGY Retrofit Program, can be found at [www.oeenrcan.gc.ca](http://www.oeenrcan.gc.ca).

A wealth of municipal and provincial matching rebate programs are also available.

By using the federal incentive programs to make your home greener and more energy efficient, you will spend less money on utilities and position yourself in a competitive real estate market. Remember, too, that the Green Energy Act will soon mandate energy efficiency ratings

But how to get the most bang for your federal incentive buck? What energy efficiency action will save you the most energy and money?

The answer is insulation.

Ensuring you have the proper sealing and draft proofing, and the right amount of insulation in your home, remains one of the best things you can do for the environment and your wallet.

Inadequate insulation is why the average home can lose up to 50 percent of its energy. By adding insulation, you lower the amount of energy needed to heat your home, resulting in fewer associated greenhouse gas emissions and a lower monthly heating bill.

To achieve maximum thermal efficiency and comfort, it is important to insulate any space where energy could be lost.

### **1. Attics and ceilings**

The attic is one of the largest sources of potential heat loss and is surprisingly often neglected when it comes to insulation, even in homes that are less than ten years old.

Regardless of whether you use your attic as a living space, insulation is essential. Warm air rises, and if an attic is lacking the proper type and amount of insulation, heat will escape through the roof. Consequently, you will want to add between R-8 and R-30 insulation to the existing insulation (R-value is a measure of thermal resistance).

If your attic is unfinished, you, or a contractor, can install fiber glass, mineral wool or blown-in insulation in the floor joists. If the attic is finished, fiber glass and mineral wool blown-in insulations are the best options.

Up to \$1500 in government rebates are available for attic insulation.

## **2. Don't forget the walls**

The walls between living spaces and unheated garages, storage rooms, dormer walls, and above the ceilings of adjacent lower sections of split-level homes are often overlooked. Insulating these areas, when possible, will save heat and help minimize noise.

If you are able to access the walls when renovating, be sure to upgrade insulation and vapour barriers. For 2 x 4 construction, use the highest R-value, R-12 to R-14. For 2 x 6 construction, use R-19 to R-22.

## **3. Basements and crawlspaces**

In an otherwise well-insulated house, as much as 25% of the total home heat loss can occur through uninsulated foundation walls and floors.

If the basement is an unheated space and isn't used as a living area, insulate between the floor joists for the room above, instead of around the exterior or perimeter walls. This keeps heated air in the living areas where it belongs, and out of the basement. R-25 insulation is recommended.

Conversely, if the basement is going to be heated and used, you need to insulate the basement walls with R-12 to R-22 fiber glass or mineral wool insulation beneath the drywall. Vapor retarders should face heated areas and be covered as soon as possible.

Up to \$2750 in government rebates are available for basement insulation.

## **4. Floors**

R-20 (or higher) insulation is usually cut into small pieces to fit snugly between the floor joists, sills and band joists. Full batt insulation of R-25 can be used on the ceilings above unheated basements, crawlspaces, garages and porches.

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