

Insulation

Air Sealing, Wrap Barriers & Weatherproofing

Insulation can be installed from the inside, outside and from the basement/attic of your home. Each type of insulation has its own place to perform best for maximum efficiency. The main purpose of insulation is to control the heat flow from in and out of your home by restricting and resisting heat transfer through conduction, convection and radiation. The proper insulation in the right place will then reduce the amount of heat your home loses or gains.

How It Works

Adding insulation (including all types) from the roof to the foundation will be critical in improving your home's energy efficiency. Important areas to consider when insulating your home are: **attic/ceiling, exterior wall, exposed floor, basement, crawl space, air sealing drafts, windows and doors.** By investing in your home's insulation you can be guaranteed lower energy bills each month and experience the lowest life cycle costs for the building (attics can account for up to 30% of heat loss).

Things to Remember

- An efficient building envelope depends on proper exterior insulation, circulation, ventilation and draft proofing
- Insulation is only one component in transforming your home into a high performance building
- Benefits of basement insulation will be felt throughout your home and, if you live in Canada, throughout the year



First Step

Properly installing the **correct materials** will ensure your insulation retrofits perform as expected over their lifetime. **Comparing the quality** of different products will be important to understand where and how to install them to be most effective. A Registered Home Energy Advisor is able to guide you.

Types

Batt or Blanket
Loose Fill (cellulose, glass, mineral)
Rigid Board
Spray Foam
Cementitious Foam
Reflective Bubble Foil and Radiant Barriers

Resources

[NRCan: Keep the Heat In](#)
[GNI: Insulation 101](#)
[Green Energy: Insulation is the Key.](#)