

# Comparing Quotes: Insulation, Windows and Doors

*A well sealed, insulated and properly ventilated home reduces the amount of energy your home uses - saving you money and making your home more healthy and comfortable.*

A well-insulated house is a bit like dressing for the weather; a wool sweater will keep you warm on a cold day but if it's windy or rainy, adding a nylon shell over your sweater helps to keep you drier and warmer. Your house is similar. The insulation acts like your sweater and underneath the brick or siding, an air barrier does the same thing as the nylon shell — it keeps the wind from blowing through. A vapor barrier helps keep damaging moisture away from the structure of your house.

When choosing an insulation system, keep in mind that installation costs (including changes to the framing, cladding, and finishes) are usually the most expensive part of an insulation project. The local climate has an impact on the cost-effectiveness of any insulating project. Check the cost, heat loss and heat gain of all available options. Review all details to ensure that moisture movement is handled correctly. You can then select the right insulating system.

## How to use this form

Once you have received some quotes from your contractors, complete the relevant table below to compare your quotes. Fill in as much information as is available on your quotes. This will help you make your decision. If you need help comparing your quotes contact us at **1 877 999 6035**; we are here to help. Before you call, write down both the inside and outside model numbers for all equipment so we can best assist you.

Insulation	Quote A	Quote B	Quote C
<b>Type of Insulation<sup>1</sup></b> Fibreglass / Blown-in / Spray Foam / Rigid Foam			
<b>Thickness of Insulation (Inches)</b> The depth or thickness of insulation to be installed in inches.			
<b>Product R-Value per Inch<sup>2</sup></b> Look for the R-value per inch of the material on its own, not of the system <sup>3</sup> in which it will be installed.			
<b>Total R-Value Added</b> Refer to your Home Energy Assessment Report for the total level of insulation that you need to install to be eligible for a rebate. You can use the thickness of insulation together with the R Value per inch to calculate the total R value for yourself. Simply multiply the two values together e.g. R5 per inch x 2 inches = R10 total insulation added.			
<b>Total Estimated Cost (\$)</b>			

Windows	Quote A	Quote B	Quote C
<p><b>Double Pane or Triple Pane<sup>3</sup></b> Additional panes allow for better temperature control, outside noise reduction, and may potentially improve security.</p>			
<p><b>Low-E Coated<sup>4</sup></b> To check if your windows have a low-E coating, hold a lit flame (from a match, lighter or candle) next to the glass when it is dark. A window without low-E coating will reflect one flame per pane of glass. Low-E coated windows will reflect an extra flame per pane of glass. For example a double pane window with low-E coating will reflect three flames. You can also look for this specification on the label affixed to the window.</p>			
<p><b>Argon Gas Filled</b> This gas filling reduces heat transfer across the window panes. Look for this specification on the label affixed to the window. You may also be able to see a visible plug between the panes of glass where the gas was injected in the factory.</p>			
<p><b>Spacer Material<sup>5</sup></b> Metal or Foam</p>			
<p><b>ENERGY STAR<sup>®</sup> Qualified</b> ENERGY STAR<sup>®</sup> qualified windows are eligible for Home Energy Assessment Rebates. Keep the ENERGY STAR<sup>®</sup> stickers on your windows until your final assessment is complete.</p>			
<p><b>Total Estimated Cost (\$)</b></p>			
<p><b>Installation Standards</b> What is covered in your quote? Caulking / Sealing / Painting / Frame Adjustment</p>			

Doors	Quote A	Quote B	Quote C
<p><b>Material<sup>6</sup></b> Steel / Fibreglass / Wood</p>			
<p><b>Number of Windows (Lights)</b> Some doors contain decorative windows (lights). They can be positioned in the door or around the door (sidelights). The more lights that are placed in the door, the lower the overall efficiency of the door.</p>			
<p><b>ENERGY STAR<sup>®</sup> Qualified</b> ENERGY STAR<sup>®</sup> qualified doors are eligible for Home Energy Assessment Rebates. Keep the ENERGY STAR<sup>®</sup> stickers on your doors after installation until your final assessment is complete.</p>			
<p><b>Total Estimated Cost (\$)</b></p>			

## Additional Information

1. The table below shows which insulation types could be used for each area of your home.

Insulation Type		R-Value per Inch	Area						
			Walls	Attic	Sloped Ceiling	Basement	Crawlspace	Exposed Floor	Floor Slab
Batts	Fibreglass	3.2	x	x	x	x	x	x	
	Rock	3.7	x	x	x	x	x	x	
	Slag Wool	3.7	x	x	x	x	x	x	
Rigid Insulation (Styrofoam)	Extruded Polystyrene (XTPS)	5.0	x		x	x	x	x	x
	Expanded Polystyrene (EPS)	4.0	x		x	x	x	x	x
	Polyisocyanurate	7.0	x		x	x	x	x	x
Blown In	Cellulose	3.6	x	x					
	Fibreglass	3.2	x	x					
Spray Foam	Open Cell Polyurethane	3.6	x	x	x		x	x	
	Closed Cell Polyurethane	5.5	x	x	x	x	x	x	x

The environmental characteristics of insulation are complex and often not well understood. For this reason, deciding on one material over another can be difficult. Even when choices seem obvious today, factors may change, so those decisions should be re-evaluated periodically. We offer the following recommendations relating to insulation selection and use:

- Choose insulation materials with a high-recycled content like cavity-fill insulation, cellulose and mineral wool.
- Chemically sensitive individuals may want to request an insulation material that does not give off-gas such as cellulose or fibreglass.
- Choose a contractor who recycles scrap insulation.

2. R-values and their metric equivalent, RSI values, are a way of labeling the effectiveness of insulating materials. The higher the R-value or RSI value, the more resistance the material has to the movement of heat. Insulation products sold in Canada are labeled with R and RSI values. Provincial building codes specify minimum R (or RSI) values for new construction, with different values for different applications. It is important to know what your local building code requires when planning new construction.

Insulation is just one component of a larger system that envelops your home. Effective insulation systems slow the movement of heat and deal with the movement of moisture at a reasonable cost. To do this, they have the following (from inside to outside):

- A vapour retarder, such as polyethylene sheeting, that prevents moisture from moving from the warm living space into the colder wall assembly where it could condense and cause damage.
- Carefully filled wall cavities, with no gaps in or around the insulation, ensuring the insulation is not compressed.
- An air barrier that prevents the movement of interior or exterior air through the system.

**Please note that only the R-value of the insulation material is considered for rebates, not the R-value of the system in which it is installed.**

3. Even triple-paned windows won't save energy if they're not properly insulated. There should be only a minimum of space between the window frame and the house framing for shimming and insulating. Once the window is installed, every crevice should be filled with fibreglass or expanding foam insulation. Check for drafts by holding a candle up to the window to see if it flickers before replacing the trim work. Make sure the existing trim work is secure and big enough to fit your replacement windows.
4. Low-E Coating reflects radiant heat, keeping the heat on the same side of the glass from which it originated, while letting light pass. This keeps heat from your heating system in during the winter but heat from the sun out on sunny days.
5. A spacer is the piece that separates the two panes of glass, and seals the space between them. Historically, spacers are metal (silver in colour) but to reduce heat transfer and increase overall thermal performance, manufacturers may make the spacer out of a less-conductive material such as foam (black in colour).
6. Steel doors have foam core insulation and are fully weather stripped by the manufacturer. They're highly resistant to shrinking, swelling and warping. Their tough construction will withstand years of extreme weather conditions with minimum maintenance. These doors can be purchased with pre-drilled door knob and lockset holes, making installation even easier. Steel doors come pre-primed and ready to paint.

Fibreglass doors offer the same energy-saving and easy installation qualities as steel doors. Fibreglass doors have wood-grain texture molded into the door so they give the appearance of real wood when painted or stained. Their high-quality composite construction makes these doors resistant to all sorts of weather as well as scratches and dents. They are an excellent choice for extreme climates and high-traffic entrances.

Wood doors offer the most traditional look. The substantial weight of a wooden door adds a sense of security and sturdiness to your home. These doors may be painted or stained for a natural, warm appearance. Wooden doors are usually made using frame and panel construction to counteract the effects of climatic or seasonal changes.