EFFICIENCY MANITOBA

Home Insulation Rebate
Insulation R-values per inch

When the specific insulation material make and manufacturer is unknown, Efficiency Manitoba will use these generic R per inch values to determine starting R-values for a project.

Material	(R/inch)
Batt or blanket type insulation	
Glass fibre • Composed of long fibres of spun glass loosely woven together and bonded with resin. • Batts 3.5" thick = R12 • Batts 5.5" - 6" thick = R20	
Rock (stone) wool • Made from natural rock which is melted, made into fibres and bonded. • Batts 3.5" thick = R12 • Batts 5.5" - 6" thick = R20	
Loose fill insulation	
Cellulose fibre • Manufactured from finely shredded newsprint with chemicals mixed in to resist fire and fungal growth.	(3.6)
Glass fibre • Similar material to glass fibre batts but chopped up for blowing purposes.	(2.7)
Vermiculite • Mica material that has been expanded by a high temperature steam process; • Light brown/grey/gold in colour and is a pebble-like material ranging in size from 2 to 10 millimeters in diameter; • Vermiculite installed prior to 1990 is likely to contain asbestos. Note: Existing vermiculite should be handled with care*. *For more details on vermiculite insulation, check out the Safe Manitoba bulletin available from Manitoba Workplace Safety and Health or online at **safemanitoba.com/Resources/Pages/bulletin-245.aspx**	(2.2)
Wood shavings • By-product of wood industries, shavings are often mixed with lime and other chemicals.	(2.2)
Rigid board insulation	
Expanded polystyrene ("beadboard") Type 1 & 2 • Produced by a process that results in beads containing air, bonded together into rigid, foam plastic boards.	Low density (3.75) High density (4.1)
Extruded polystyrene Type 3 & 4 • A foam plastic board composed of fine, closed cells containing a mixture of air and refrigerant gases (fluorocarbons).	(5.08)
Polyisocyanurate boards 4.2 (6.0) • A foam plastic board with primarily closed cells filled with refrigerant gases (fluorocarbons). • Usually foil-faced on both sides to strengthen the board and retain the gases which give it a high RSI-value.	(5.7)
Spray/blow in place insulation	
Spray polyurethane foam • A semi-flexible plastic foam manufactured on site using two liquid components; • Liquids are pumped through a hose and sprayed in place where they cure through a chemical reaction.	Medium density (5.19)
Cellulose • Made from paper or paper board stock with chemical additives for fire and fungal resistance; • Sprayed with water into a cavity to form a cohesive mat.	(3.5)
Glass fibre • Loose, glass fibre insulation, incorporating a water-activated adhesive; • The dry insulation is misted with water and installed using a blowing machine.	(3.6)

To learn more, visit efficiencyMB.ca/homeinsulation

Available in accessible formats upon request.