

Insulation R-values per inch

Material	(R/inch)
Batt or blanket type insulation	
Glass fibre <ul style="list-style-type: none"> Composed of long fibres of spun glass loosely woven together and bonded with resin. 	(3.4)
Rock (stone) wool <ul style="list-style-type: none"> Made from natural rock which is melted, made into fibres and bonded. 	(3.8)
Loose fill insulation	
Cellulose fibre <ul style="list-style-type: none"> Manufactured from finely shredded newsprint with chemicals mixed in to resist fire and fungal growth. 	(3.6)
Glass fibre <ul style="list-style-type: none"> Similar material to glass fibre batts but chopped up for blowing purposes. 	(2.9)
Vermiculite <ul style="list-style-type: none"> 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. <p>Note: Existing vermiculite should be handled with care.</p> <p>*For more details on vermiculite insulation, check out the Safe Manitoba bulletin available from Manitoba Workplace Safety and Health or online at safemanitoba.com/bulletins.aspx</p>	(2.3)
Wood shavings <ul style="list-style-type: none"> By-product of wood industries, shavings are often mixed with lime and other chemicals. 	(2.5)

Continued on reverse

Insulation R-values per inch (cont'd)

Material	(R/inch)
Rigid board insulation	
Expanded polystyrene (“beadboard”) Type 1 & 2 <ul style="list-style-type: none"> Produced by a process that results in beads containing air, bonded together into rigid, foam plastic boards. 	Low density (3.6) High density (4.0)
Extruded polystyrene Type 3 & 4 <ul style="list-style-type: none"> A foam plastic board composed of fine, closed cells containing a mixture of air and refrigerant gases (fluorocarbons). 	(5.0)
Polyisocyanurate boards 4.2 (6.0) <ul style="list-style-type: none"> 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. 	(6.0)
Spray/blow in place insulation	
Spray polyurethane foam <ul style="list-style-type: none"> 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. 	Low density (3.7) Medium density (6.0)
Cellulose <ul style="list-style-type: none"> 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. 	(3.8)
Glass fibre <ul style="list-style-type: none"> Loose, glass fibre insulation, incorporating a water-activated adhesive; The dry insulation is misted with water and installed using a blowing machine. 	(3.9)

For more information, visit hydro.mb.ca/hip

Available in accessible formats upon request.