

## R-Values

Used to rate the insulation of building materials and assembled walls, windows, floors and roofs. The higher the R-Value the better the insulation provided.

Technically speaking, the 'R' in R-Value means the resistance to heat flow, including conduction, convection and radiation. If you're comparing products, make sure it's tested to New Zealand standards as overseas R-Values are not comparable.

The minimum R-Values for NZ homes are listed in the table below. These show the overall R-Values for each part of the building, and are different to the R-Value of the insulation that is actually installed. For example, a timber-framed wall may need insulation with an R-Value of 2.2 to achieve an overall R-Value of 2.0 depending on the actual construction (the higher insulation R-Value offsets the lower R-Value of the timber framing).

We support the use of higher insulation levels in homes, and here's what we recommend:

Application	NZBC Minimum	"Better"	"Best Practice" Recommended
<b>Area 1 - North Island (excluding Central Plateau area)</b>			
Ceilings	R2.9	GreenStuf® R1.8 + R1.8 Double-Layer	GreenStuf® R2.2 + R2.2 Double-Layer
External Walls	R1.9	GreenStuf® R2.2 Wall	GreenStuf® R2.5 Wall
Under Floors	Foil Barrier	GreenStuf® R1.5 Underfloor	GreenStuf® R1.8 Underfloor
Internal Walls	Nil	GreenStuf® Sound Solution	GreenStuf® Sound Solution
Between Floors	Nil	GreenStuf® Sound Solution	GreenStuf® Sound Solution
<b>Area 2 - South Island and Central Plateau area</b>			
Ceilings	R3.3	GreenStuf® R2.2 + R1.8 Double-Layer	GreenStuf® R3.2 + R2.2 Double-Layer
External Walls	R2.0	GreenStuf® R2.2 Wall	GreenStuf® R2.5 Wall
Under Floors	Foil Barrier	GreenStuf® R1.5 Underfloor	GreenStuf® R1.8 Underfloor
Internal Walls	Nil	GreenStuf® Sound Solution	GreenStuf® Sound Solution
Between Floors	Nil	GreenStuf® Sound Solution	GreenStuf® Sound Solution

