## Lockwood Exterior Wall Insulation

To ensure New Zealand homes are fit for purpose, they must have adequate insulation for their location. The requirements vary for different parts of the country, more insulation is needed for houses in colder climates.

One way the level of insulation in any building material is measured or rated is in terms of its thermal resistance, or R-Value. Thermal mass is another important factor in ensuring your home stays warm and dry. Thermal mass is the ability to absorb and store heat energy, meaning homes built with materials with high thermal mass require less energy to heat, cool and ventilate the home.

Solid timber homes have higher thermal mass than conventional timber framed homes. Traditionally, brick and concrete were thought to outperform solid timber for insulation and passive solar heating properties, but studies conducted at Lincoln University in 2007 have shown solid wood to provide up to 2.5 times the thermal mass of concrete per kilo. Unlike concrete or plasterboard, timber also has the ability to "breathe", absorbing moisture and regulating temperature making your home more comfortable and more energy efficient. Superior thermal mass also means solid timber homes, such as Lockwood, have lower R-Value requirements than conventional construction.

New Zealand is divided into three climate zones with minimum R-values for each zone based on different construction types. This illustration shows how the exterior wall of a Lockwood home exceeds the required R-Value for all zones.



Talk to your local Lockwood Contractor about the benefits of building with Lockwood today Ph 0508 562 596 www.lockwood.co.nz

