## **Technical Note**



## Insulation Installation Under Tiles

There is a NZ Building requirement that the ceiling spaces under roofs are insulated. NSZ 4246:2006 Energy Efficiency - Installing Insulation in Residential Buildings provides details on the level of insulation required and the installation of various insulating materials.

When insulation is installed under a Gerard Roof there is to be a 25 mm gap between the top of the insulation and the roofing underlay. If the insulation comes into contact with the roof underlay before reaching the top plate, then maintaining a 25mm space shall take precedence over insulating to the middle of the top plate.

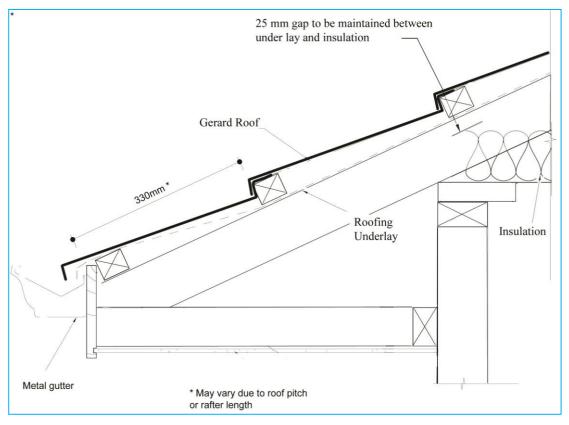


Figure 1 - Roof, roofing underlay and insulation location on a rafter roof

A gap needs to be maintained between the insulation and the underside of the underlay to prevent wicking of water into the insulation. Once the insulation is wet the retention of water can lead to degradation of the roofing underlay and possible corrosion of the roofing material should it push up against the underside of the roofing.