

Designed by Engineers *(but not installed by engineers)*

In theory this roof achieves a very low u-value

In practice it's a potential disaster waiting to happen, why?

Solarcrest
COMPLETE ECO-RETROFIT



Warm, damp air can squeeze through a gap less than 1mm wide, so no problems squeezing through these gaps (which will soon be hidden from view). Condensation forms when the warm, moisture laden air hits a cold surface, in this case the OSB board above the insulation. In this roof the space between the insulation and the OSB board is unvented, so when the moisture builds up it'll begin to rot the OSB boards, which eventually will affect the rafters too. The heating and cooling of the OSB boards during the summer will aggravate the problem rather than alleviating it. What's needed here is a breathable, hygrophobic (moisture repelling), flexible foam insulation, tightly packed to fill the whole void space, to eliminate the gaps and the space below the cold surface..