

Flat roof insulation

Many purpose built blocks of flats, extensions and some houses, have flat roofs. Many of these have no insulation or minimal amounts, and flat roofs can lose more heat than a pitched roof.

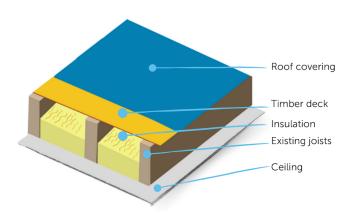
This type of work is relatively expensive to carry out and the insulation is best considered when the roof or roof covering is being replaced. It is now a requirement for insulation to be added when a flat roof is being replaced under modern building regulations.

Typically, a phenolic insulation board like Kingspan or Celotex is used to lay in between the roof timbers (cold deck), or alternatively the insulation board is laid straight on top of the existing flat roof (warm deck) and a whole roof covering is fitted over the top of the system.

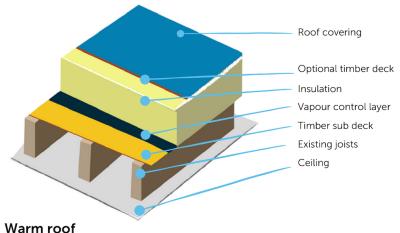
The warm deck is the better more energy efficient system, as you are covering the entire roof with insulation and the heat loss that you would get through the joists on a cold deck system is eliminated.

There are different flat roof coverings from EDPM rubber to fibreglass to conventional felt systems, and more. Selecting one of these will be influenced by the cost, the size of the roof, its suitability, and maybe even on the advice and competencies of the contractor.





Conventional cold roofThe flat roof insulation is located between the joists



The flat roof insulation is located above the joists