

## Internal Wall Insulation Information

**I have not noticed any problems as of 2022**

**Below is a helpful reply I received in 2013 from a fellow eco home-owner. It was in response to my concerns about internal wall insulation and problems with condensation**

**I did go ahead with installing Kingspan K17 but also installed an extractor fan from the ceiling to the outside which operates for one hour twice a day.**

I've never personally used Kingspan K17 but the manufacturer's website says that it is designed for internal wall insulation and that it has a vapour barrier built into it. So it should be OK.

My primary question whenever it comes to internal wall insulation is 'what about the water vapour?' As you may know, the humidity in a house is usually pretty high (what with people breathing, cooking, washing etc) and when you insulate a wall on the inside you do need to think about managing moist air so that it doesn't cause visible wetness on surfaces and/or invisible build-up of condensation within the structure of the insulated wall.

You may need to fit a fan. Or, if you already have one, consider running it a bit more often. Ventilation will solve most condensation problems.

Beyond that, the main thing is to get the insulation boards to fit as snugly as possible. With rigid boards like Kingspan K17 it will be difficult to cut the material accurately to match the (inevitable) curves and bumps in the wall. Some people recommend cutting the boards deliberately small (5-10mm gap all the way round) and then filling that gap afterwards with expanding foam. The expanding foam has to be trimmed off when set. It is more work to do it this way than just bunging the boards up but it will give you a snugger finish.

If you or your carpenter want some expert advice, I suggest you look at the on-line forum of the AECB.

<http://www.aecb.net/forum/>

If your carpenter is experienced with wall insulation, that is ideal. Alternatively, is he/she open to trying a few new techniques and checking with the experts in the AECB for details? If so, you should be fine.