

Q-Bot in Heatpunk

A lot of Britain's housing stock is cold and draughty, and we often hear the claim that 'a heat pump wouldn't be suitable for my house'. That's largely nonsense - heat pumps will still work fine in old draughty houses as long as they are big enough and there are sufficiently large heat emitters. But they will be expensive to run. So it will often make a lot of sense to improve the fabric of a building by adding insulation and reducing draughts when a heat pump is being installed.

One very effective intervention is insulating beneath suspended wooden floors. This kills two birds with one stone. Firstly, and obviously, you greatly improve the U-value of the floors. Secondly, suspended wooden floors are often extremely draughty. A carefully-applied layer of insulation can greatly reduce ventilation losses, so overall heat demand for the house can come down significantly. Heat pumps can run at lower flow temperatures, fewer radiators need to be replaced, and running costs are greatly reduced. There are big wins all round!

That's why we are big fans of Q-Bot. Their robotically-applied underfloor insulation is extremely effective, typically improving floor U-values from around 0.7 W/m²K to around 0.19 W/m²K, and reducing overall ventilation losses from properties by an average of 30%. We've teamed up with them to make it easy for installers creating designs in Heatpunk to offer a Q-Bot insulation service to their customers.

Q-Bot insulation will be automatically suggested as an option whenever a project with an uninsulated suspended wooden floor is created in Heat Punk. The user creating the project will also be asked a few questions to make sure that the property is suitable for Q-Bot. The price for the installation will then be calculated automatically based on the area of flooring to be treated and the location of the property. The installer is able to add a margin to this price - and that's pretty much all they have to do! If the customer would like to go ahead, the installer will place the order for the Q-Bot installation with Q-Bot. Q-Bot will arrange a more detailed survey to confirm that the property is suitable, and their contractors will then arrange the visit to fit the insulation.

Q-Bot installations are minimally invasive. Small access hatches need to be created to insert the robots into the underfloor void, but the contractors will make this good during the visit.

Although Q-Bot installations are suitable for most properties, there are a few reasons why Q-Bot might not be able to do an installation, or which might increase the price. These include:

- The underfloor void is too shallow for the robots (less than 20cm)
- Lots of rubble in the underfloor void
- Underfloor void is damp (an additional visit will be needed with drying equipment)
- Insufficient ventilation to the underfloor void (fitting of additional air bricks may be required)
- Rot or other problems with the floor joists (remedial work will be necessary - but at least the homeowner is now aware of the problem)
- Lots of sleeper walls will mean more access hatches for the robots are required.

It's important when offering Q-Bot installations to your customer that you check if any of the above might apply. But the majority of buildings with uninsulated suspended wooden floors are suitable for Q-Bot and it's an easy way for you to offer a service that reduces work for you in replacing radiators and gives the customer a warmer, snuggier property with lower heating costs!

Revision #1

Created 27 November 2024 17:23:44 by Andy

Updated 27 November 2024 17:32:20 by Andy