



## Radon programme 2018 – recently built homes

### **Q: Why have I recently received a letter from you about radon testing in my home?**

A: PHE is promoting radon awareness in recently built homes. We hope that the information below will help you decide whether you would like to do a radon test.

### **Q: Why have you chosen my house?**

A: If your home was built since 2000, then you may have radon protective measures installed. Your home is in an area where 10% or more of the local homes are expected to have a radon level above the Action Level of 200 Bq m<sup>-3</sup>. The Building Regulations 2010 state that *'Reasonable precautions shall be taken to avoid danger to health and safety caused by contaminants on or in the ground covered, or to be covered by the building and any land associated with the building'*. The Approved Document (part C) provides guidance for compliance and it refers to the BRE report BR211. This report provides maps (based on our PHE Indicative Atlas) and guidance on whether an area is susceptible to radon and if protective measures are required.

### **Q: Why should I check my radon levels if I have radon protection?**

A: It is important to know that your radon protection is working effectively. The protective membrane across the footprint of the building may not be sufficient to reduce radon levels to below the Action Level of 200 Bq m<sup>-3</sup>. A test should be done to find out what the radon levels are in the property. If the radon level in your home is high, you can take further action to reduce it, see [here](#).

### **Q: What is the harm or risk from radon?**

A: There is compelling evidence that long-term exposure to radon can increase the risk of lung cancer. It is estimated that in the UK, around 1,100 lung cancer deaths each year are attributed to residential radon exposure.

Radon gas creates a radioactive dust in the air we breathe. The dust is trapped in our airways and emits radiation that damages the inside of our lungs. This damage, like the damage caused by smoking, increases our risk of lung cancer. Smokers and ex-smokers are at higher risk.

### **Q: How do I find out if I have radon protective measures?**

A: Ask the company that built your home. They may also advise on the locations of the standby sumps and pipe exits, if installed. If you have a provision for a sump, look for a capped off pipe exit from the ground near the house (Figure 1) or for air vents if you have a ventilated subfloor void (Figure 2).



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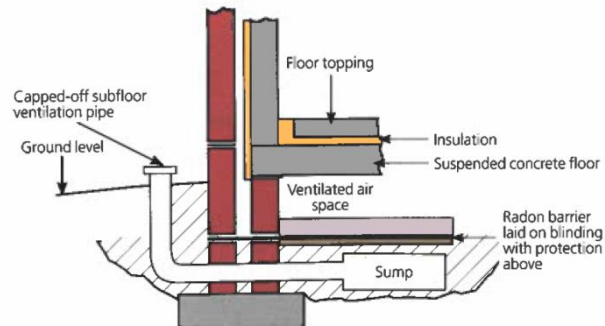


Figure 1 – Example of a pipe exit (on the left) and a schematic drawing (on the right) of a standby sump.

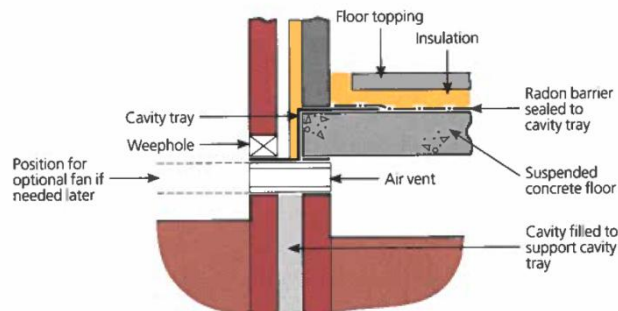


Figure 2 – Example of an air vent (on the left) and a schematic drawing (on the right) of a ventilated subfloor void.

*Search terms: radon protection, radon protective measures, pipe exit, radon sump, standby sump, new build*

**Q: What are basic and full radon protection?**

A: Basic radon protection - this is provided by a damp proof membrane modified and extended to form a radon-proof barrier across the ground floor of the building, reducing the amount of radon entering the property from the ground.

Full radon protection - comprises a radon-proof barrier across the ground floor and provision for subfloor depressurization (a “standby” radon sump) or ventilation (a ventilated subfloor void). These measures (once completed and activated with a fan) provide additional means of reducing the levels of radon in the home.

**Q: Who should do a radon test?**

A: The homeowner. Building regulations do not require a radon test for the new dwelling before occupation so it is important that the homeowner tests the property for radon once they are living in the property.

**Q: If levels are high, does this mean that the radon protection is not working?**

A: No, the radon levels could be much higher without a membrane.



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**Q: If radon levels are high in a home with radon protection, who should fix it?**

A: The homeowner should pay to fix by adding fan(s) to activate the radon reduction system(s). The builder should have complied with regulations and guidance but this does not guarantee a radon level below 200 Bq m<sup>-3</sup>.

**Q: How can radon levels be reduced in homes installed with radon protection?**

A: If you have full radon protection, a fan can be added to the “standby” sump or the sub floor void to activate the system. The installation of the fan is not required by the building regulations. The company that built your home may advise on the location of the sump and where the pipe exits.

See the following guides for more details about the radon reduction systems

[Sump with high level exhaust](#)

[Sump with low level exhaust](#)

[Fan assisted under-floor ventilation](#)

**Q: Should I do another test after adding a fan to my radon reduction system?**

A: Yes, it is important to know that your radon reduction system is working effectively and has reduced the radon level to below the Action Level of 200 Bq m<sup>-3</sup>.

If you have taken steps to reduce your radon level, please [contact us](#) to find out if you are eligible for a free retest from PHE. We will need your name, address and will want to know what you have done to reduce your radon levels.

If you still have questions then please call 01235 822622