

Radon

Radon is a naturally occurring radioactive colourless and odourless gas, which is found in small quantities by radioactive decay whenever uranium and radium is found.

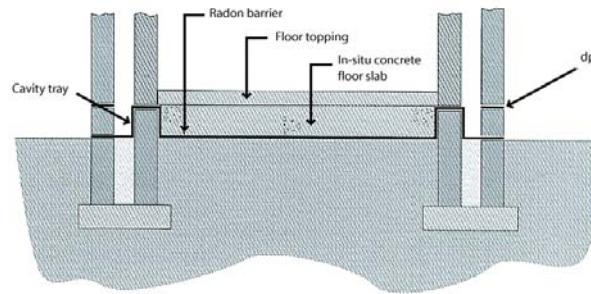
The Building Regulations may require measures to be incorporated into new building work to protect the occupiers from the possible harmful effects of excessive exposure to radon.

The areas where such measures should be taken are given in the Building Research Establishment publication 'Radon: guidance on protective measures for new dwellings' (BR211). This can be viewed at any of our offices although your local building control surveyor may be able to provide more detailed information and guidance of requirements. If your property appears within the defined areas it will be necessary for radon protection barriers to be incorporated in your construction design.

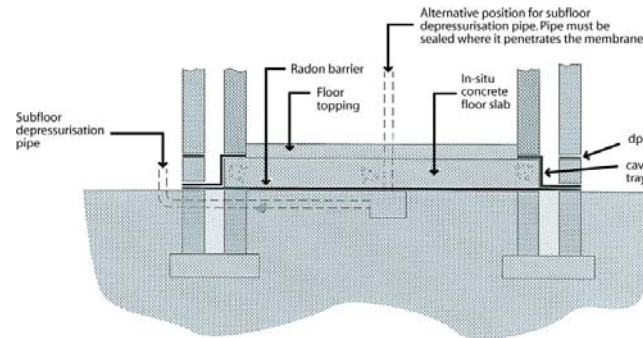
You can obtain more detailed survey results from the British Geological Survey (details below). If the results are negative you will not need to provide the radon protection but you will need to give us a copy of the survey. There is a cost for the survey which, at the time of printing, was £30 + VAT each.

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham NG12 5GG
Tel: 0115 936 3100
Fax: 0115 936 3200
Email: ngrc@bgs.ac.uk
Web: www.bgs.ac.uk

Typical example of radon protection are given in the diagrams below



(a) Enhanced damp-proof membrane providing basic radon protection.



(b) Full radon protection for an in-situ or ground-supported concrete floor (barrier under slab)

Ground Contamination Advice

Information & Guidance



Working together to provide the Best in Building Control

Wiltshire Council

Northern Office

Tel: 01249 706535

Fax: 01249 460810

Southern Office

Tel: 01722 434519

Fax: 01722 434247

Eastern Office

Tel: 01380 734777

Fax: 01380 734775

Western Office

Tel: 01225 770321

Fax: 01225 770337

Contaminants in the ground can present a risk to health and safety as well as to buildings and materials.

Some contaminants are naturally occurring, such as radioactive gas, others occur through previous uses of land and from landfill sites.

The contamination of some sites can be obvious or may be identified at an early stage from historical records or local knowledge.

Table 1 lists some sites likely to contain contaminants. There may be occasions however when the presence of contaminants is only suspected later.

Some signs of possible contaminants and relevant actions to be taken are given in Table 2

If any of the signs are present or you have knowledge or suspicion of contamination, the Environmental Health Officer at your local authority should be informed immediately.

<p>Table 1. Sites likely to contain contaminants</p>
<p>Asbestos works Chemical works Gas works, coal carbonisation plants & by-product works Industries making/using wood preservatives Landfill & other waste disposal sites Metal mines, smelters, foundaries, steel works & metal finishing works. Munitions production & testing sites Nuclear installations Oil storage & distribution sites Paper & printing works Railway land, especially sidings & depots Scrap yards Sewage works/farms & sludge disposal sites Tanneries</p>

POSSIBLE CONTAMINANTS AND RELEVANT ACTIONS		
Signs of possible contaminants	Possible Contaminants	Relevant Action*
Vegetation (absence, poor or unnatural growth)	Metals Metal Compounds*	None
	Organic Compounds Gases	Removal
Surface Materials (unusual colours and contours may indicate wastes and residues)	Metals Metal compounds*	None
	Oily and tarry wastes	Removal, filling or sealing
	Asbestos (loose)	Filling or sealing
	Other mineral fibres	None
	Organic compounds including Phenois	Removal or filling
	Combustible material including coal and coke dust	Removal or filling
	Refuse and waste	Total removal
Fumes and odours (may indicate organic chemicals at very low concentrations)	Flammable explosive and asphyxiating gases including methane and carbon dioxide	Removal
	Corrosive liquids	Removal, filling or sealing
	Faecal animal and vegetable matter (biologically active)	Removal or filling
Drums and containers (whether full or empty)	Various	Removal with all contaminated ground

* Special cement may be needed with sulphates.

The actions noted in the table assume that the ground to be covered by the building will have at least 100mm thick of insitu concrete laid over it.

If any of the above signs are present or you have knowledge or suspicion of contamination the Environmental Health Officer at your local authority should be informed immediately.