bre

Radon

Guidance on protective measures for new buildings

Chris Scivyer

IHS

Radon

Guidance on protective measures for new buildings (including supplementary advice for extensions, conversions and refurbishment projects)

2015 edition

Chris Scivyer

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Front cover images
Left: Prefabricated sumps and pipework being laid in a small commercial building (image courtesy of Glencoe Radon Gas Centre Ltd)
Top right: New homes incorporating radon-protective measures
Bottom right: Radon barrier being laid for a school building (image courtesy of Radon Centres Ltd)

Back cover image
Airbrick

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Image courtesy of Glencoe Radon Gas Centre Ltd.

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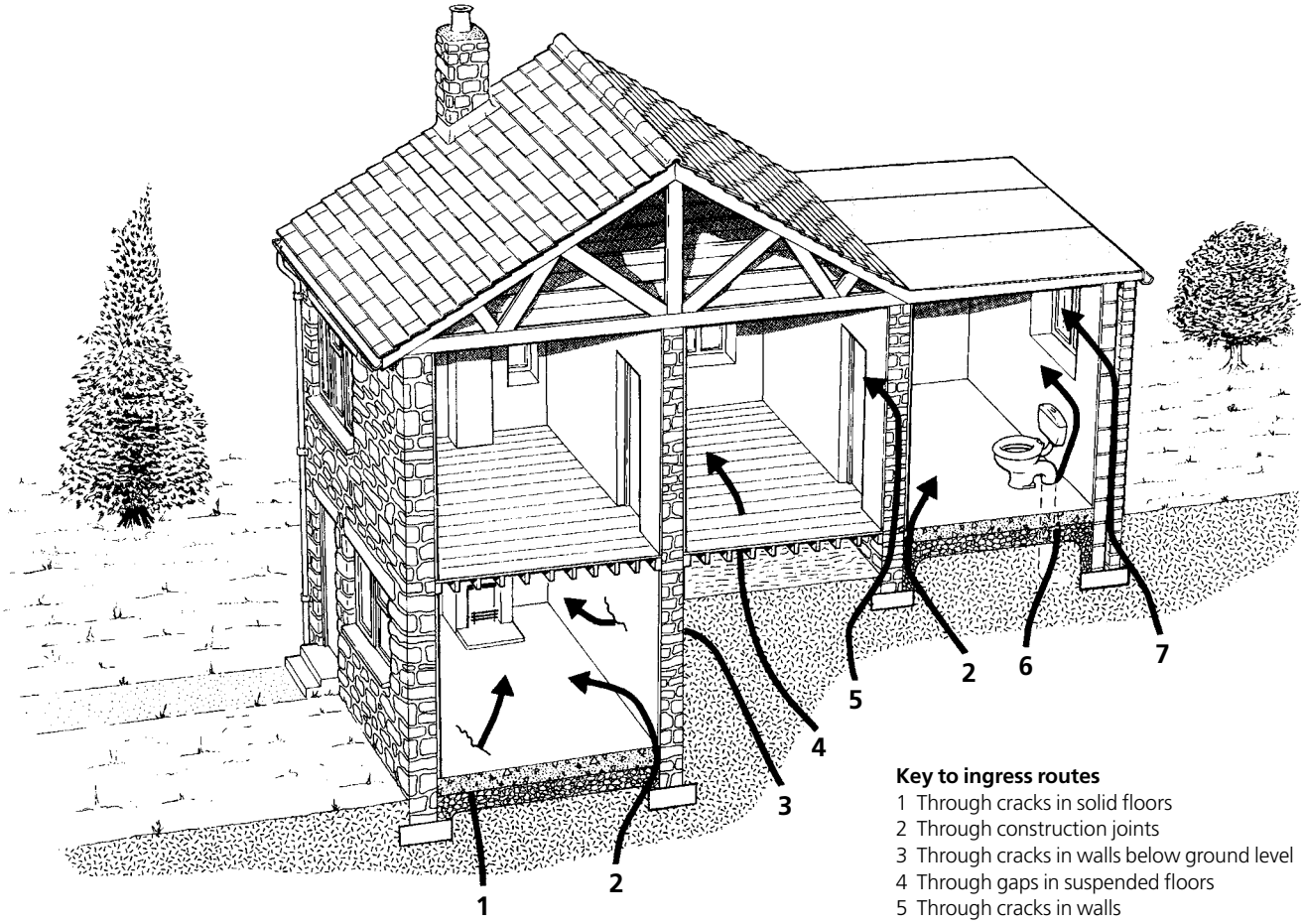

Key to ingress routes
1 Through cracks in solid floors
2 Through construction joints
3 Through cracks in walls below ground level
4 Through gaps in suspended floors
5 Through cracks in walls
6 Through gaps around service pipes
7 Through cavities in walls

Figure 1: Routes by which radon enters a dwelling

This report gives guidance for reducing the concentration of radon in new buildings, extensions, conversions and refurbishment projects in order to reduce the risk to occupants of exposure to radon. It provides practical details on protective measures for both domestic and non-domestic buildings. This guide is intended for use in England, Wales, Scotland and Northern Ireland. It supports building regulations for England, Wales and Northern Ireland, and building standards for Scotland. This guide was originally introduced in 1991 and amended in 1992, 1999 and 2007.

This guide replaces three earlier guidance documents:

- BRE Report BR 211, *Radon: guidance on protective measures for new buildings*, introduced in 1991 and amended in 1992, 1999 and 2007, covering England and Wales.
- BRE Report BR 376, *Radon: guidance on protective measures for new dwellings in Scotland*, introduced in 1999.
- BRE Report BR 413, *Radon: guidance on protective measures for new dwellings in Northern Ireland*, introduced in 2001.

The principal changes over previous editions are:

- combined guidance for England, Wales, Scotland and Northern Ireland
- clearer explanatory guidance on specifying and installing radon-protective measures
- updated guidance to reflect recent amendments to building regulations and building standards
- additional radon management checklist
- updated maps.

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