# Radon Gas

Radon in Galway

The Radiological Protection Institute of Ireland (RPII) estimate that 20%, or one in five homes in parts of Galway City and County have radon gas in excess of the acceptable level of 200Bq/m3. Following a recent survey of 398 homes in Galway by the RPII between 1st January and 30th August, 98 homes were found to contain radon gas above the acceptable level. A summary of the findings of this survey was published in the Galway Advertiser on 23rd September 2010.

What is Radon?

Radon is a radioactive gas which cannot be detected by sight, smell or taste and is naturally produced in the ground from the uranium present in rocks and soils. Radon can enter a building through cracks in floors and walls or around pipes and cable penetrations. The reason for concern about radon is its association with an increased risk of developing lung cancer. Radon is classified as a Group 1 carcinogen by the International Agency for Research on Cancer, a part of the World Health Organisation. It indicates that there is direct evidence from human studies to support the link between exposure to radon gas and the induction of lung cancer. International estimates suggest that between 5% and 10% of lung cancer deaths may be caused by indoor radon gas exposure. Nationally, the RPII estimate that radon gas exposure accounts for up to 200 deaths in Ireland each year.

Are You Protected?

The 1997 Building Regulations which came into effect on 1st July 1998 require that measures should be taken during construction to protect homes from radon gas exposure. These measures typically include the provision of radon barriers and radon sumps during construction.

If your home is 13 years or older, it is unlikely to have been provided with measures to protect the building from radon gas exposure, and depending upon its location may have radon gas in excess of the acceptable level of 200Bq/m3 which could have serious health implications.

If your home has been constructed within the last 13 years, radon gas protection measures are likely to have been provided during construction as required by the Building Regulations 1997, however, this does not mean that radon gas levels within your home will be below the acceptable level of 200Bq/m3.

How Can I Protect My Family from Radon?

The first step is to determine the level of radon gas within your home. This is done by placing radon gas detection units within your home for a period of approximately three months. The units are then sent to a laboratory and the radon gas levels are determined. If the radon gas levels are found to be less than the acceptable level of 200Bq/m3, no remedial works are necessary and you can rest assured that your family are protected. If the levels are found to be in excess of 200Bq/m3, there are various remedial works that can be undertaken to reduce the concentration of radon gas to below the acceptable level of 200Bq/m3. Depending upon the house type, these remedial works can generally be undertaken externally so that disruption and costs are minimised.

What Is The Cost?

If testing confirms that the radon gas levels are below 200Bq/m3, no remedial works are required and the only cost to you, the homeowner is â‚¬100 plus vat for the testing process. Alternatively, you can order the testing kits from the RPII directly at a cost of â‚¬56.00 and carry out the testing process yourself.

If testing confirms that the radon gas levels are above 200Bq/m3, the costs for remedial works to reduce radon levels to within acceptable limits varies depending upon the levels of radon detected, the house type/construction, the location and other site specific factors. Typical remedial work costs to reduce radon levels to within acceptable limits range from approx. â‚¬1,000 to â‚¬3,500 plus Vat.

How Can We Help?

â€¢Â We can provide radon gas detection units to homeowners together with instructions for use, arrange to collect the units after three months and send them to a laboratory for testing to determine the radon gas concentration level.
â€¢Â If levels are found to be in excess of 200Bq/m3, we can carry out a survey of the property to determine the appropriate remedial works required.
â€¢Â We can prepare drawings and/or specifications identifying the remedial works required.

â€¢Â We can engage a specialist contractor on your behalf to carry out the remedial works to our specifications.
â€¢Â We can supervise and sign off to ensure that the works are carried out to the highest possible standards.
â€¢Â We can advise you as to the grants available for radon remedial works and assist you with the grant application process.
â€¢Â We can conduct flue gas spillage tests in accordance with BRE GBG 25 to ensure that the air quality of the home is not compromised as a result of the radon remedial work measures.

Who We Are

F. Bradley & Co. are Chartered Building Surveyors and offer a specialized service in all matters relating to property, construction, building defects analysis and remedial work specifications. We are members of the Society of Chartered Surveyors of Ireland, the Royal Institute of Chartered Surveyors and the Association of Building Engineers.

For Further Information

For further information in relation to the above, do not hesitate to contact us.