



# Independent Testing, Validation & Verification

Systems designed to protect against hazardous gas ingress including Radon, Methane, Carbon Dioxide & Volatile Organic Compounds.

Conforming with all relevant guidance and standards  
BS 8485:2015+A1:2019, CIRIA 735 (2014), BR 211



# GeoShield Verification Programme

Since 2015 construction & design standards in the UK had begun to be restructured with the aim of eliminating all possible factors that relate to the failure of systems applied to protect against life threatening ground gas ingress into new constructions. The spearhead of these changes was in the UK with the updated version of the British Standard Code of practice for the design of protective measures for Methane and Carbon Dioxide ground gases for new buildings. BS 8485:2015+A1:2019 - this supersedes all previous guidance.



## Geoshield are Founder Members of The British Verification Council



For projects of CS2 & above (British Standards) / Amber 2 (NHBC) an Independent Testing and Verification program is required as an integral part of the project strategy. The Verification Company is usually required to be employed prior to construction. The GeoShield Verification Package is in accordance with all requirements made by the British Verification Council including £2,000,000 PI Insurance that is specific to Verification.

## Methane / Carbon Dioxide / Volatile Organic Compounds - Hydrocarbons

CIRIA 735 (2014) states that the verification plan (which includes a risk assessment for the correct amount of visits and appropriate integrity testing) becomes an integral part of the validation of the gas protection system.

As each project is unique in terms of size, construction type, ground gas protection design and applicator experience, it is recommended that a Pre-Verification Plan is in place prior to commencement of works. GeoShield offer full validation of design and specification free of charge.

## Geoshield provide

- ✔ £2,000,000 PI Insurance for verification & build-ability design
- ✔ Comprehensive knowledge of the installation requirement including NVQ2 and NVQ 4 qualified personnel
- ✔ A thorough understanding of BS 8485:2015+A1:2019 and how the changes from previous British Standard affect current installations.
- ✔ Extensive experience of BS 8485:2015+A1:2019 gas remediation strategy
- ✔ An in-depth knowledge of CIRIA 735 (2014)
- ✔ A systematic approach to logged reporting
- ✔ GeoShield are fully independent from manufacturers and installers as in accordance with CIRIA 735 (2014)
- ✔ Company owned testing equipment including Inert gas testing, Dielectric testing and Smoke testing.
- ✔ CSSW qualified Verification Officers



## Verification Report:

The GeoShield Verification Report is a user friendly document published in hard copy, cloud link, instant email & flashdrive. The final report is a concise document that relates to the history of the Ground Gas Protection System application process. The final report will have:

- ✔ A description of the inspection regime
- ✔ A description of the element of the ground gas protection system
- ✔ Dates of inspection, inspection staff present, weather conditions & the surrounding trades activity
- ✔ Recognized defects & repairs along sectors & grid lines
- ✔ Areas of limitation: areas unable to be inspected, identified and noted
- ✔ An on-going log of applicator capabilities, professionalism & experience
- ✔ A presentation of the material specifications etc.
- ✔ Installation photos along sectors & grid lines
- ✔ Areas inspected along sectors & grid lines
- ✔ Live documentation to assist in immediate area sign off for assistance in programming of future works
- ✔ Individual area and house plot sign off

## ✔ GSR+ Radon Gas Protection System Validation, Verification & Assurance

**Deaths in Scotland attributed to Radon are estimated at 220 per year (Source PHE).**

A major cause of lung cancer in the UK is the invisible odourless gas RADON. Home builders & Main Contractors need to ensure comprehensive measures have been taken when protecting against RADON gas ingress, to provide evidence of this important activity GeoShield have formulated the GSR+ Quality Assurance Program.

The GSR+ Quality Assurance Program is a comprehensive hand-over document created for house builders and developers to pass to future owners, GSR+ provides new buyers with a historical log of the protection system application, ensuring peace of mind and assists on conveyancing.

The GSR+ comprises:

- ✔ 3 Month RADON monitoring
- ✔ Independent Verification of the installation
- ✔ Independent results
- ✔ Relevent information from BR 211
- ✔ 10 Day RADON monitoring to assist in home selling and buying

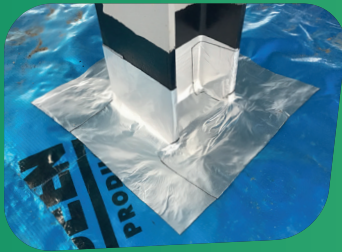


# GEOSHIELD

GeoShield promote a risk based approach to the application of ground gas protection systems, the venting & installation of primary barriers and the verification of barriers in accordance with BS 8485:2015+A1:2019, CIRIA 735 (2014).

Independent Verification Programs are now an industry requirement, to learn more please call:

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