



**INDEPENDENT TESTING  
& VERIFICATION**

**FOR**

**GROUND GAS  
PROTECTION SYSTEMS**

COMPLIANT WITH BS 8485:2015 & CIRIA 735 (2014)  
RADON / METHANE / CARBON DIOXIDE  
VOLATILE ORGANIC COMPOUNDS





In 2015 the British Standard for Good Practice on the Testing and Verification of Protection Systems for Buildings against Hazardous Ground Gases was updated, BS 8485: 2015 supersedes all previous guidance. BS 8485:2015 operating alongside the CIRIA 735 code of practice states Independent Verification & Testing Programs are as important as the design & installation process.

Many Contractors are unaware of the advances put forth by the British Standards & CIRIA and to how projects may fail to meet current requirements; GeoShield Ltd ensure contracts are in accordance with:

- **BS 8485 2015**
- **CIRIA 735 (2014)**
- **CL:AIRE RB17 (2012)**

BS 8485 2015 sets the codes of practice which govern the installation of gas proof membranes. Dependent on the various project risks and criteria independent inspection is mandatory.

GeoShield provides all your verification requirements from inception to completion.

An Independent Testing and Verification program is required as an integral part of the project strategy & back-up documentation will be included in the final completion process and hand-over package.





## GEOSHIELD VERIFICATION PROGRAM

Methane / Carbon Dioxide / Volatile Organic Compounds – Hydrocarbons

CIRIA 735 states that the verification plan (which includes consideration of the need for any integrity testing) becomes an integral part of the design of the gas protection system.

As each project is unique in terms of size, construction type, ground gas protection system and applicator experience it is recommended that a Validation & Verification Program is in place prior to the employment of any specialist application company in order that all risks are correctly assessed.

### GEOSHIELD PROVIDE

- £1,000,000 PI Insurance for verification & build-ability design
- Comprehensive knowledge of the installation requirements
- A thorough understanding of BS 8485:2015 and how the changes from previous British Standard affect current installations
- Extensive experience of BS 8485:2015 gas remediation strategy
- An in-depth knowledge of CIRIA 735
- A systematic approach to logged reporting
- 100% Independence from any installation company
- Company owned testing equipment & rigs
- Comprehensive knowledge of the systems used & their capabilities
- Complete awareness of the BS 8485:2015 points scoring system
- A thorough understanding of the BS 8485:2015 full system evaluation program & how this is placed within Verification Planning
- A Professional Risk Based Assessment Pre-Verification Plan

### VERIFICATION REPORT

The GeoShield Verification Report is a user friendly document published in hard copy, cloud link, instant email & flash drive. 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 elements 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



**GEOSHIELD LTD**

GEOSHIELD GSR+  
RADON GAS PROTECTION SYSTEM VALIDATION,  
VERIFICATION AND ASSURANCE

**DEATHS ATTRIBUTED TO RADON PER YEAR  
ARE ESTIMATED AT 1100 (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, ensures peace of mind and assists in conveyancing. The GSR+ comprises:

- The RADON Protection design & validation
- Independent Verification of the installation
- GeoShield Validation Certificate
- Relevant information from BRE 211
- Test results of RADON monitoring (3 months testing)





## GEOSHIELD LIMITED

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 & CIRIA 735 (2014).

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

**GEOSHIELD HEAD OFFICE 0113 320 8639**

**GEOSHIELD ON-SITE VERIFICATION 0113 320 8828**

alternatively [info@geoshield.co.uk](mailto:info@geoshield.co.uk)



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