

# The Evolution of GeoShield

The evolution of GeoShield is a story of drive, passion, determination, focus and teamwork. Our teams of Engineers and Verification Officers are headed by a management team with decades worth of experience in the Validation, Verification & Integrity Testing and on-site Quality Assurance Programs.

**THE founding team members of GeoShield came together in 2015, from their varied projects throughout the UK and around the globe.**

Independent 3rd Party Validation & Verification was established in 2015 in 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. This was a major leap forward in reducing human error in design, material choice, application & Quality Management record reporting.

Other Design Guidance focused on protecting new builds against other hazardous ground gases, ground & rainwater ingress and stormwater containment soon followed suit. Many major warranty providers now insist on 3rd party validation, verification & integrity testing before issuing their insurances & guarantees.

GeoShield are founder members of The British Verification Council, individuals from our team, with decades worth of experience, have implemented some of the largest and most complex on-site hazardous ground gas & waterproofing protection Quality Assurance Programs across the globe.

GeoShield are ISO accredited 9001 & 14001, Constructionline Gold Members, a supporter member of CL:AIRE and Premium Partners of Environment Analyst's Brownfield & Regeneration Network.

## **New Build: 3rd Party Assessment ELD Green Roof/Blue Roof/Buried & Podium Decks – Latent Defects Policy Support**

Where a new building is to be insured under a Latent Defects Policy, Developers and Builders will also need to comply with the functional requirements of the Warranty Providers Technical Manual.

The Warranty Functional Requirements are intended to minimise the risk of specified defects and damage to the building to be able to provide a Latent Defects Warranty cover.

Companies such as LABC, Premier,



NHBC and many others insist on 3rd party independent assessment of the waterproofing layer of green roofs, blue roofs & buried decks prior to the issuing of any cover.

## **Integrity testing of the waterproofing layer**

‘The waterproofing layer should be inspected for defects after installation. Any defects are to be repaired and retested and left in a satisfactory condition.’

‘Guidance on electronic test methods and their application can be found on the ‘Roofing and Waterproofing Test Association’ website.’

A test report containing the test results and photographic record of the roof should be made available to NHBC.

Chapter 7.1 page 21 (NHBC Standards effective 2023) Blue Roofs

‘Blue roofs should: include waterproofing layer suitable for use in the blue roof system and subject to independent third-party assessment’

## **Chapter 7.1.13 Blue Roofs page 24 (NHBC Standards effective 2023)**

GeoShield are proud members of the Confederation of Roofing Contractors and the Roofing and Waterproofing Association (as referred to in sectioned in NHBC section

7.1 for guidance) and Associate Members of the renowned Green Roof Organization.

## **Existing Structures ELD Integrity Testing for Existing Flat Roofs**

Independent Visual Inspections, Electronic Integrity Testing, Pressure Vacuum Testing & Drone Surveys

GeoShield are members of both the Roofing and Waterproofing Test Association (RAWTA) and the Confederation of Roofing Contractors (CORC).

The NHBC Standards advise that guidance can be sought on electronic test methods by visiting the RAWTA website (NHBC page 21 Chapter 7.1).

GeoShield use the latest innovations by Buckleys UVRAL, the world leaders in flat roof electronic leak detection (ELD) apparatus on all our roof deck health surveys and assessments, to pinpoint the exact point of water ingress and track how the destructive water is penetrating through your existing waterproofing roof protection.

Where ELD testing is deemed inappropriate non-destructive differential pressure vacuum testing will be employed. Comprehensive roof condition surveys are completed by the GeoShield Drone Survey team of pilots to provide an accurate plan of where your roof has been compromised, which can be further enhanced via thermal imaging technology.