



GeoShield Verification Plan



APPLICATOR'S DETAILS

APPLICATOR NAME:

COMPANY:

APPLICATOR TEL:

APPLICATOR EMAIL:

APPLICATOR NAME:

COMPANY:

APPLICATOR TEL:

APPLICATOR EMAIL:

NOTES:



GeoShield Verification Plan



APPLICATOR'S DETAILS

TRAINING LEVEL:

SPECIALIST CONTRACTOR:	YES	☐	NO	☒
NVQ LEVEL 2:	YES	☐	NO	☒
NVQ LEVEL 4:	YES	☐	NO	☒
COMPETENT APPLICATOR :	YES	☒	NO	☐

REASON FOR VISIT:

DURING INSTALLATION:	☒	UNDERSLAB VENTILATION	☐
PRE - POUR:	☒	DPC MEMBRANE CONNECTION	☐
TESTING:	☒	OTHER (PLEASE SPECIFY):	☐

NOTES: See method statement for breakdown of site visits.

NOTES: These applicators will be deemed to be at an appropriate skill level

For the job of installing the ground gas protection measures

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HEALTH AND SAFETY

INDUCTION:

YES



NO:



INDUCTION TIME:

CSCS CARD:

YES



NO:



CSCS CARD NUMBER:

5369294

METHOD STATEMENT:

YES



NO:



RISK ASSESSMENT:

YES



NO:



COSHH:

YES



NO:



SITE SPECIFIC HAZARDS:

Materials falling from height

Slips, trips and falls

Excavations

Confined spaces

Plant



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In accordance with guidance from
CIRIA 735 & CIRIA C748.

Radon gas protection measures
specify to the guidance from the
BR 211 document:

VOC/Hydrocarbons

☐

RADON BASIC

☐

RADON FULL

☐

Characteristic Specification (CS) Rating

CS2

Building Type:

TYPE A

POINTS REQUIRED UNDER BS8485:2019

3.5 POINTS

POINTS GAINED FROM BS8485:2019

Score for Structural Barrier:

1.5 POINTS

Grade 2 Basement:

N/A

Grade 3 Basement:

N/A

Score for Venting:

N/A

Car Park:

N/A

Score for Membrane:

2.0 POINTS

POINTS ACHIEVED UNDER BS8485 2019:

3.5 POINTS



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TESTING

VISUAL: PICK & PROBE/MECHANICAL POINT STRESS TEST:



NON-DESTRUCTIVE COMPRESSED AIR LANCE TEST:



NON-DESTRUCTIVE SMOKE TEST:



DESTRUCTIVE JOINT TESTING:



NON-DESTRUCTIVE TRACER GAS TESTING:



DIELECTRIC POROSITY TEST:



PUMP TEST FOR "Twinny" WELD



NOTES: From the risk assessment GeoShield will initially conduct a visual

NOTES: and pick and probe testing regime for this project.

NOTES: Air lance testing will be conducted to test the installed membrane in

NOTES: accordance with CIRIA 735.

NOTES:

NOTES: Only if the application falls below the accepted standard will other testing

NOTES: be used.

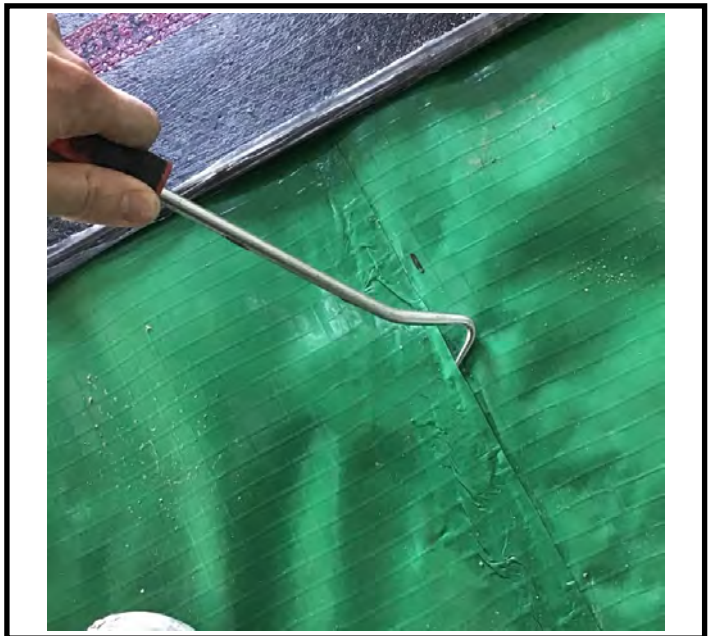
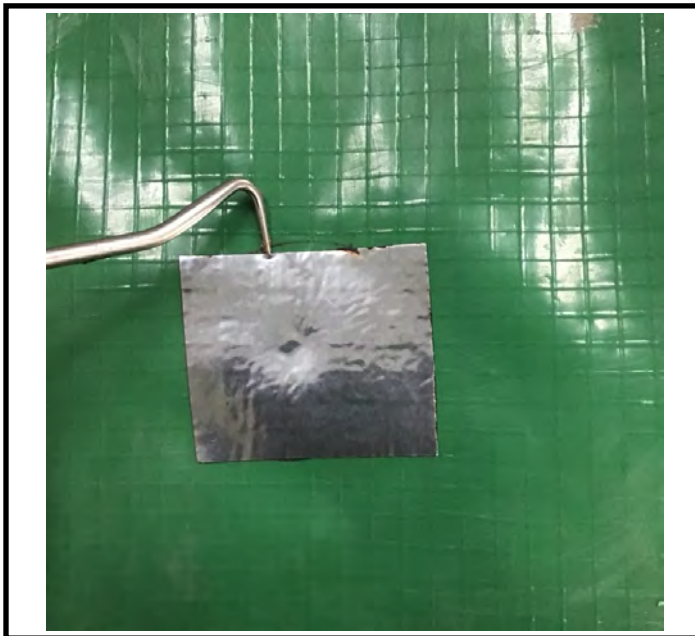


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SPECIFICATION

Mechanical Point Stress/ 'Pick and Probe' Testing



CIRIA 735

4.3.2 - Mechanical point stress tests involve running a blunt instrument (e.g. a screwdriver) along the edge of a seam to identify any unbonded seams. This method is not as effective as air lancing but it can be especially useful in hard to reach areas where it is not possible to air lance.

The instrument used should not puncture the gas membrane. This method is less appropriate for materials that are easily punctured where an air lance test is more suitable (although if a gas membrane can be easily punctured its suitability as a membrane is open to question).

SPECIFICATION

Air Lance Testing



CIRIA 735

4.3.3 - Air lance testing identifies unbonded areas of seam by directing a high pressure jet of air at the seam. The air is at a minimum pressure of 345kPa via a 4.8mm nozzle and is located no more than 50mm from the seam being tested.

In order to achieve the requirements of ASTM D4437-08:2013 bespoke specialist equipment is required to maintain the required pressure.



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RISK ASSESSMENT

SITE SPECIFIC CIRCUMSTANCES	1	2	3	4	5
Complexity of Design	1	2 ✓	3	4	5
Repetition of design	1 ✓	2	3	4	5
Experience of workforce	1	2 ✓	3	4	5
Gas regime	1 ✓	2	3	4	5
Project management experience	1 ✓	2	3	4	5
Installation conditions (exposed?)	1	2 ✓	3	4	5
Robust Project specific gas design	1	2 ✓	3	4	5

TYPE OF RISK	RANGE	RISK
High Risk	23 - 30	
Medium High Risk	19 - 22	
Medium Risk	15 - 18	18
Medium Low Risk	11 - 14	
Low Risk	0 - 10	

GeoShield have classed this project as a medium risk.

GeoShield will lay all perimeters down for standards at the pre-verification meeting to assist both the installer and the main contractor.



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VERIFICATION REPORT

These items will be included in the report

- NUMBER 1 GAS MEMBRANE SPECIFICATION
- NUMBER 2 ELEMENTS OF THE GAS MEMBRANE
- NUMBER 3 DATE, TIME and WEATHER CONDITIONS
- NUMBER 4 PLANS and DETAILS ISSUED
- NUMBER 5 INSTALLATION PHOTO's RELATING TO GRID LINES
- NUMBER 6 REPORTING DEFECTS AND LOGGING IN REMEDIATION LOG
- NUMBER 7 AREAS OF LIMITATION (areas unable to inspect)
- NUMBER 8 LOGGING AND REPORTING RESULTS OF TESTING

VERIFICATION REPORT ISSUE

HARD COPY:	☐ YES	☒	☐ NO	☐	EMAIL:	☐ YES	☒	☐ NO	☐
DROP BOX LINK:	☐ YES	☒	☐ NO	☐	FLASH DRIVE:	☐ YES	☐	☐ NO	☒



GeoShield Verification Plan



GEOSHIELD COMPETENCE

>GeoShield was founded in 2015

>GeoShield solely verifies, they are fully independent of installers, manufacturers and geotechnical companies.

>GeoShield follow guidance in CIRIA 735 (sufficient experience, membership of relevant professional organisations) GeoShield are members of the BVC, BGA, ERA The RADON Council, and UKRA

>Currently GeoShield hold the Chairmanship of the British Verification Council

>Two employees are NSAC Level 3 assessors for the NVQ 2 Gas Membrane install

>GeoShield were key in forming the NVQ 4 Verification qualification in which 2 Verification officers are undertaking this qualification

>GeoShield have the only qualified assessor for the NVQ 4 Verification qualification

>GeoShield Verification officers currently keep up to date CPD's

>All GeoShield Verification Officers have a full understanding of gas membrane install including 3 experienced (NVQ 2) installers in the GeoShield team

>GeoShield Verification Officers are all independent carrying there own air compressors. Other testing equipment GeoShield have access to are 2 x Buckley Dielectric Testing machines and also inert gas testing equipment



GeoShield Verification Plan



METHOD STATEMENT - Page 1

EXPECTED VISITS:- 12 site visits are expected in line with the proposed build

programme, additional visits may be considered (if required) to achieve sign off.

TESTING:- Mechanical Point Stress (Pick & Probe) testing on welded areas.

Air lance testing will be carried out (as per CIRIA C735 Annex 1, Table A3).

Only if the application falls below the accepted standard will other testing be used.

This project will NOT achieve sign off for gas membrane installation unless independent verification is carried out.

PURPOSE:- Geoshield are 3rd party gas membrane verifiers in accordance with

CIRIA 735 and for this project to be compliant with BS8485:2019, the gas system

must meet certain criteria from Tables 5, 6 & 7 to achieve mitigation of score for

verification. The chosen membrane must be verified by Geoshield to ensure the

materials have been installed in accordance with the manufacturer's specification.

REPORTING:- Each site visit be accompanied with a written and electronic report.

Any remediations either completed on the visit or outstanding will be recorded

and logged, sign off will not be achieved for each section area until all

remediations have been completed. This will be fully recorded at all times.



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METHOD STATEMENT - Page 2

GROUND GAS RISK:- From Contamination Investigation and Remediation MS

this project has been classified as a Type A building and a CS2 gas regime rating in accordance with BS8485:2015+A1 2019, so this project will require a minimum score of 3.5 points for mitigation.

This will be achieved by 3rd party verification of the gas membrane, reinforced cast in situ floor slab, where applicable to the site specific design.

A combination of which will achieve the necessary requirements.

GAS MEMBRANE PROTECTION:- It is advised that the substrate should be prepared by removal of loose stone and debris. Other forms of protection could be in the form of either a protection board, geotextile fleece and insulation. In addition labels will be issued by Geoshield to restrict access to the installed area by follow on trades and help raise awareness to encourage a better duty of care. This will help to reduce the risk of potential damage caused to the gas membrane system.

FINAL:- Geoshield will liaise with the projects site supervision and all relevant parties prior to the installation start. This plan will be presented and reviewed, all points made clear as previously stated. Any alterations will be listed at the end of this plan as an all party agreed way forward.

BGA
British Geomembrane Association

GeoShield Verification Plan



TESTING PROCEDURE

Method Statement - Pipe Penetrations and Service Entries Notice Signs



Geoshield Notice Signs -

During testing on site, notice signs will be tied to all pipe penetrations and a service entries which have not passed inspection.

Areas cannot be passed unless verification stickers have been applied to the Notice Signs, once remediations have been successfully carried out.



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TESTING PROCEDURE

Method Statement - Membrane Sticker Notice Signs



Geoshield Notice Signs -

During testing on site, areas cannot be passed unless verification stickers have been applied, once remediations have been successfully carried out.



GeoShield Verification Plan



SUBSTRATE METHOD STATEMENT

SUBSTRATE TYPE:

Block and Beam Construction	Yes	☐	No	☒
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Minimum Preparation	Swept Clear	Yes	☐	No	☒
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Minimum Preparation	Vacuuming	Yes	☐	No	☒
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Minimum Preparation	Compressed air to remove	Yes	☐	No	☒
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Minimum Preparation	Remove Mortar Droppings	Yes	☐	No	☒
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Stone Substrate	Yes	☒	No	☐
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Minimum Preparation	Minimum 25mm Sand Blinding	Yes	☐	No	☒
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Minimum Preparation	Limestone Dust	Yes	☐	No	☒
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Minimum Preparation	Compacted Substrate	Yes	☒	No	☐
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Minimum Preparation	No large stones	Yes	☒	No	☐
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Concrete Substrate	Yes	☒	No	☐
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Minimum Preparation	No Hollows	Yes	☒	No	☐
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Minimum Preparation	Troweled Surface	Yes	☒	No	☐
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Remarks:	
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GeoShield Verification Plan



PRE-CONTRACT MEETING

Items for discussion at the Pre-Contract meeting	☐
>Induction Procedure	☐
>Identification of installation team and point of contact	☐
>Identification of Project management team	☐
>Identification of Sub-Contractors associated with membrane installation	☐
>Validation of Membrane and design specification	☐
>Verification procedure	☐
>Notifications for Verification	☐
>Preparation of substrate	☐
>Program of works	☐
>Utility entry	☐
>Protection of Membrane	☐
>Remediation Procedure	☐
>Testing Procedures	☐
>Sign off Procedure	☐
>Installer PI	☐

All information is assumed correct at time of issue.

DATE:



GeoShield Verification Plan



PRE-CONTRACT MEETING SUMMARY

A pro-forma quality assurance document will be discussed during the Pre-Verification meeting and training undertaken with the management team for non verified areas.

The Pre-Verification meeting will be led by Geoshield and should include all relevant parties who have an impact on the installation and future protection. Geoshield will provide guidance and strategy for all parties.

The site specific checklist will be covered as well as the risk assessment.

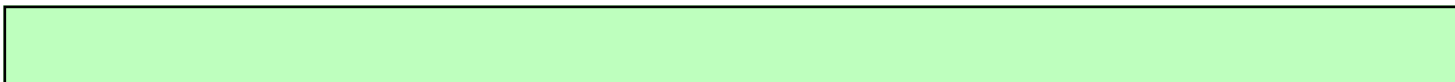
This site has been classified as a CS2 gas regime rating.

Any design alterations will be discussed and included in a revised Pre-Verification Plan.

Any specification changes must also be included in a revised Pre-Verification Plan.

All items will be minuted by the Geoshield representative.

This Pre-Verification plan follows all current guidance and the aim is to make all parties aware of the ramifications of poor installation and their responsibilities if they damage the membrane.





Appendix 04 – Soil Import Receipts

Delivery Note



GROUP

Vehicle Reg EX74HZE
Truck type 8-Wheeler
Haulier SRC
Driver name Gary Lara
Date 28/08/2025
Ticket number 1875693
W/C Number CBDU202785
Customer name Konform UK LTD
SICCode 43999

Customer Address

Cranwood House, Woodside Avenue

Post code N10 3JA

Site contact

Arzen

Contact Number 07480 515912

Customer O/N 070/1522

Collection Point SRC Crown

Material

0-15mm Screened Topsoil BS EN 3882

Loads 1

Time on site 15:03

Time off site 15:03

Signature name Florin

By signing the above I confirm that i have
fulfilled my duty to apply the waste hierarchy as
required by regulation 12 of the waste
(England & Wales) Regulations 2011

Any Recycled materials supplied are produced
in compliance with the WRAP quality protocol
for the production of aggregates from inert
waste

Delivery Note



GROUP

Vehicle Reg EX74HZC
Truck type 8-Wheeler
Haulier SRC
Driver name Mark Morhall
Date 28/08/2025
Ticket number 1875696
W/C Number CBDU202785
Customer name Konform UK LTD
SICCode 43999

Customer Address

Cranwood House , Woodside Avenue

Post code N10 3JA

Site contact

Arzen

Contact Number 07480 515912

Customer O/N 070/1522

Collection Point SRC Crown

Material

0-15mm Screened Topsoil BS EN 3882

Loads 1

Time on site 14:41

Time off site 15:18

Signature name Arzen

By signing the above I confirm that i have fulfilled my duty to apply the waste hierarchy as required by regulation 12 of the waste (England & Wales) Regulations 2011

Any Recycled materials supplied are produced in compliance with the WRAP quality protocol for the production of aggregates from inert waste