



GeoShield Verification Report 01



PROJECT REFERENCE: GEO104923

PROJECT: Land off Sapcote Road

PROJECT ADDRESS: Sapcote Road,

Burbage, Hinckley,

LE10 2AU

SPECIFICATION: Verified in accordance with CIRIA 735.

Design in accordance with BS8485 2015 + 2019 for Methane and Carbon Dioxide.

Substrate prepared in accordance with manufacturers instructions.

Visqueen gas barrier

Visqueen pro Detailing strip

VisqueenPro Double Sided Jointing Tape

Visqueen Gas Resistant Foil Lap Tape



GeoShield Verification Report



NAME OF SURVEYOR:

Lee Adams

VERIFICATION COMPANY:

GeoShield Limited

Icon Business Centre

4100 Park Approach

Thorpe Park

Leeds

CONTACT NUMBER:

[Redacted]

EMAIL ADDRESS:

[Redacted]

ORDER NUMBER:

To be confirmed

PER VISIT:

YES:

☒

NO:

☐

PROJECT:

YES:

☒

NO:

☐



GeoShield Verification Report



CLIENT DETAILS

CLIENT CONTACT:

CONTACTS ROLE:

MOBILE PHONE:

EMAIL ADDRESS:

CLIENT CONTACT:

CONTACTS ROLE:

MOBILE PHONE:

EMAIL ADDRESS:

NOTES:



GeoShield Verification Report



APPLICATOR'S DETAILS

APPLICATOR NAME:

COMPANY:

APPLICATOR TEL:

APPLICATOR EMAIL:

APPLICATOR NAME:

COMPANY:

APPLICATOR TEL:

APPLICATOR EMAIL:

NOTES:



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AREA SURVEYED:

Plots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 20 & 21
Flats 1, 2, 3 & 4 - Full Line Out

SITE CONDITIONS:

WEATHER:

Sunny

TEMPERATURE:

15°C

RELATIVE HUMIDITY:

N/A

MEMBRANE TEMPERATURE:

N/A

TIME:

12:30 - 13:30

DATE:

29.10.2024

REPORT NUMBER:

001

ACCOMPANIED BY:

Verification Layout



The photograph above shows a plan layout of the site. The area highlighted in blue shows where the verification inspection took place on site today.

OVERVIEW



The photograph above displays an overview of plots 1, 2, 3, 4 & 5 where today's verification inspection took place on site.

OVERVIEW



The photograph above displays an overview of plots 6, 7 and 8 where today's verification inspection took place on site.

OVERVIEW



The photograph above displays an overview of plots 9 & 10 where today's verification inspection took place on site.

OVERVIEW



The photograph above displays an overview of plots 11, 12 & 13 where today's verification inspection took place on site.

OVERVIEW



The photograph above displays an overview of plots 20 and 21 where today's verification inspection took place on site.

OVERVIEW



The photograph above displays an overview of flats 1, 2, 3 and 4 where today's verification inspection took place on site.



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LIMITATIONS

SURVEYED AREA: Plots 1 - 13, 20 & 21 Flats 1 - 4 - Full Line Out

RESTRICTIONS AND LIMITATIONS:

Air Lance testing could not be carried out due to restricted vehicle access to the area requiring verification today. To mitigate this issue, thorough visual inspections supported by mechanical point stress testing were conducted.





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VERIFICATION ITEM ONE

LOCATION/GRID LINE: Plots 1 - 13, 20 & 21 Flats 1 - 4 - Full Line Out

Installation of Visqueen Standard Gas Barrier



NOTES:

A complete line out of the Visqueen Standard Gas Barrier has been installed across the footprint of the plots referenced. The Visqueen Standard Gas Barrier has been lined across the entirety of the plots, including the internal party walls and external cavities to ensure continuity throughout.



NOTES:

All lap joints between the adjacent sheets of Visqueen Standard Gas Barrier have been overlapped a minimum of 100mm and heat welded using a hot air leister and a silicone roller with adequate pressure applied to ensure a continuous weld is achieved. Installed in accordance with manufacturer's specifications.

VERIFICATION ITEM ONE



The above photograph displays a mechanical point stress test, also known as a pick and probe test, being conducted upon a welded lap joint of the Visqueen Standard Gas Barrier. All lap joints were subjected to thorough mechanical point stress testing throughout the installation. Three miswelded lap joints were identified at the time of the inspection, these were successfully remediated.



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VERIFICATION ITEM TWO

LOCATION/GRID LINE: Plots 1 - 13, 20 & 21 Flats 1 - 4 - Full Line Out

Corners and Thresholds



NOTES:

A number of corners and thresholds throughout the referenced plots have been sealed as per manufacturer's specifications and design guidelines. This has been achieved using Visqueen Standard Gas Barrier and Visqueen GR SAM. The Visqueen Standard Gas Barrier has been cut to minimise voided areas and



NOTES:

gaps across the footprint of the referenced plots. Each corner and threshold junction has been reinforced by heating strips of Visqueen GR SAM and placing them into position around each corner, onto the Visqueen Standard Gas Barrier. Firm rolled pressure is applied with a silicone roller to aid in the adhesion ensuring the

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VERIFICATION ITEM TWO



GR SAM has fully bonded. A pick and probe test was conducted upon all edges of Visqueen GR SAM to validate that a gas tight seal had been achieved between the Visqueen Standard Gas Barrier and the Visqueen GR SAM on the corner and threshold detailing.

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VERIFICATION ITEM THREE

LOCATION/GRID LINE: Plots 1 - 13, 20 & 21 Flats 1 - 4 - Full Line Out

Pipe Penetrations



NOTES:

Throughout the installation of the Visqueen Standard Gas Barrier to the referenced area, there were a number of pipe penetrations that have been sealed in accordance with manufacturer's specifications and design guidelines. This has been achieved using Visqueen GR SAM which is a self adhesive membrane.



NOTES:

The installers have first cut the Visqueen Standard Gas Barrier tight around the base of each pipe penetration to minimise voided areas. Next, strips of Visqueen GR SAM are placed intricately in a top hat formation around the pipe penetration and onto the Visqueen Standard Gas Barrier. Heat and rolled pressure is

VERIFICATION ITEM THREE



applied to activate the bitumen backing, creating a secure bond between the pipe penetration and the Visqueen Standard Gas Barrier. All pipe penetrations throughout the referenced area were subjected to thorough mechanical point stress testing where a probe was run along all edges of the Visqueen GR SAM. No faults or defects were identified with the pipe penetrations during these testing procedures.



VERIFICATION ITEM ONE

REMEDIATIONS:



Faults Identified



NOTES:

As mentioned, three miswelded lap joints were identified during the testing procedures conducted today. The faults were brought to the attention of the installers and remediated on site in the presence of GeoShield.



NOTES:

The faults were remediated by applying 150mm patches of Visqueen GR SAM over the affected areas with heat and rolled pressure applied to activate the bitumen backing. No further faults or defects were identified during the testing of the lap joints.



A pick and probe test being conducted upon a welded lap joint.



A probe demonstrating a fault identified.



A patch of Visqueen GR SAM which has been used to seal a fault identified.



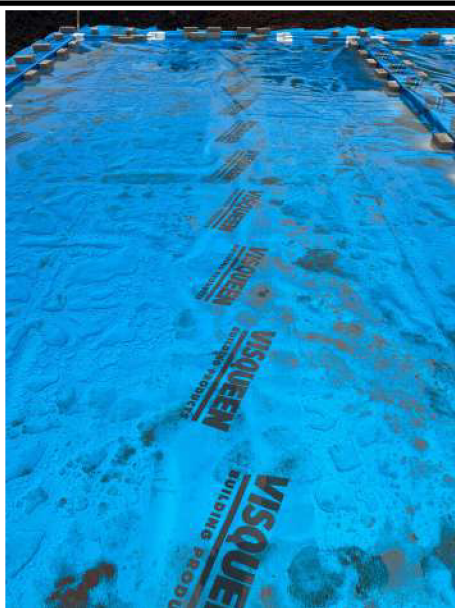
Sealed corner details.



An overview of internal walls and sealed corner details.



An overview of an internal wall and sealed corner and pipe penetrations.



An overview of a welded lap joint.



Sealed corner and perimeter details.



Visqueen Standard Gas Barrier has been installed tightly across two plots.



All corner details were sealed with Visqueen GR SAM.



A pick and probe test being conducted upon a welded lap joint.



Visqueen GR SAM was used to seal corner details.



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VERIFICATION SUMMARY

This was the first visit to the site where verification was required for the installation of the Visqueen Standard Gas Barrier to Plots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 20, 21 and flats 1, 2, 3 & 4.

All overlaps between the adjacent sheets of Juta GP1 Gas Barrier have been successfully welded using a hot air leister and silicone roller creating continuous welded joints throughout.

All details throughout the installation, such as pipe penetrations, corners and thresholds have been successfully sealed using Visqueen GR SAM, heated down to aid in the adherence.

Thorough mechanical point stress testing, as well as visual inspections were conducted throughout the visit today.

A total of three miswelded lap joints were identified, all of which were successfully remediated on site in the presence of GeoShield.

The installation has been conducted to a good NVQ 2 standard and in accordance with manufacturer's specifications.

This was passed and verified in accordance with CIRIA 735 and installed to BS8485:2015+2019.

GEOSHIELD SIGNATURE:

DATE: 29-Oct-2024