



GeoShield Verification Report 4



PROJECT REFERENCE:

GEO105886

PROJECT ADDRESS:

Kilnwood Vale 3E
Off Illett Way
Faygate
Horsham
RH12 0AJ

SPECIFICATION:

Verified in accordance with CIRIA C735.

Design in accordance with BS 8485:2015:
+A1:2019 for Methane and Carbon Dioxide.

Substrate prepared in accordance with
manufacturer's instructions.

MATERIAL SPECIFICATION:

JUTA GP1
JUTA GP SAM



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NAME OF SURVEYOR:

Mark Chapman

VERIFICATION COMPANY:

GeoShield Limited

COMPANY ADDRESS:

Icon Business Centre

4100 Park Approach, Thorpe Park

Leeds

LS15 8GB

CONTACT NUMBER:

[REDACTED]

EMAIL ADDRESS:

[REDACTED]



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CLIENT DETAILS

CLIENT CONTACT:	John Burgess
CONTACTS ROLE:	Director
MOBILE PHONE:	
EMAIL ADDRESS:	

CLIENT CONTACT:	
CONTACTS ROLE:	
MOBILE PHONE:	
EMAIL ADDRESS:	
NOTES:	



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APPLICATOR'S DETAILS

APPLICATOR NAME: John Burgess

COMPANY: Membrattech Ltd

APPLICATOR TEL:

APPLICATOR EMAIL:

APPLICATOR NAME:

COMPANY: Membrattech Ltd

APPLICATOR TEL:

APPLICATOR EMAIL:

NOTES: All installers are deemed competent and skilled to complete the installation of gas membranes.



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INSPECTION AREA(S)

Plots 588, 589 & 598 - Full Line Out

SITE CONDITIONS

WEATHER:

Sunny

TEMPERATURE:

37°C

TIME:

12:00 - 13:00

DATE:

27.05.2026

REPORT NUMBER:

004

ACCOMPANIED BY:

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VERIFICATION INSPECTION INFORMATION

GEO 105886 Report No: 04

Date: 27. 5. 26

Site: KILNWOOD VALE

Client: MEMBRATECH

Installers: JOHN BURGESS

Weather: 37c HOT

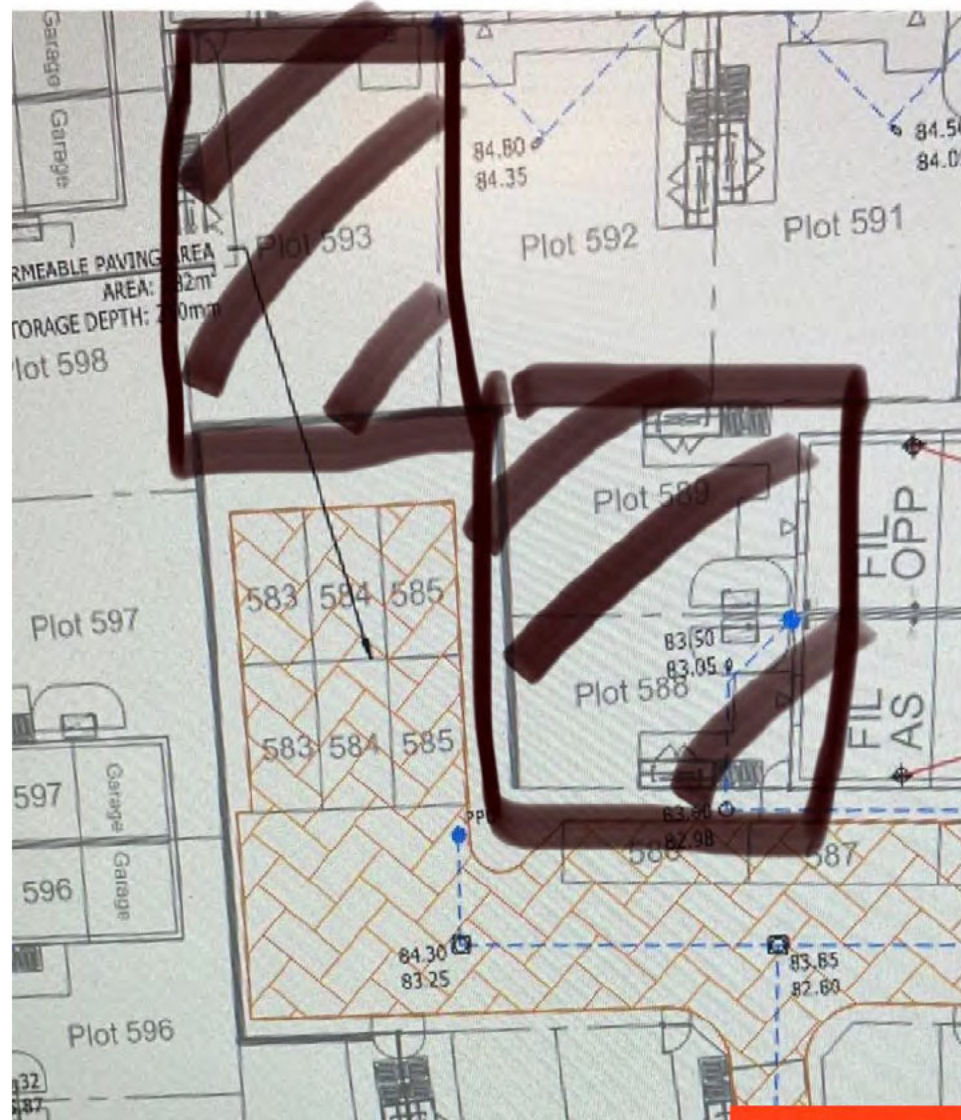
Plot/Area: 588, 589, 598

Membrane JUTA GP1
GP1SAM

594

The image above provides details of today's verification inspection visit to site, including the gas membrane(s) used for the installation.

VERIFICATION LAYOUT



The photograph above shows a plan layout of the site. The areas highlighted show Plots 588, 589 & 598 where the verification inspection of the JUTA GP1 Gas Barrier complete line out installation took place.

OVERVIEW



The photograph above displays an overview of Plots 588 & 589 where today's verification inspection took place on site.

OVERVIEW



The photograph above displays an overview of Plot 598 where today's verification inspection took place on site.



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VERIFICATION ITEM ONE

LOCATION/GRID LINE: Plots 588, 589 & 598 - Full Line Out

Installation of JUTA GP1 Gas Barrier - Lap Joints



NOTES:

A complete line out of JUTA GP1 Gas Barrier has been installed across the footprint of Plots 588, 589 & 598. The JUTA GP1 Gas Barrier has been lined out across the entirety of the plots, including all internal party walls ensuring it bridges the external cavity to the outer leaf brickwork.



NOTES:

All overlaps between the adjacent sheets of JUTA GP1 Gas Barrier have been overlapped a minimum of 100mm, conforming to manufacturer's specifications and heat welded using a hot air tool and silicone roller with adequate pressure applied to ensure a continuous gas resistant seal is achieved.

VERIFICATION ITEM ONE



The above image demonstrates a mechanical point stress test being conducted upon a welded overlap of the JUTA GP1 Gas Barrier. All overlaps were subjected to thorough visual inspections, mechanical point stress testing and non destructive air lance integrity testing throughout the verification process. No faults or defects were identified at the time of the inspection.



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VERIFICATION ITEM TWO

LOCATION/GRID LINE: Plots 588, 589 & 598 - Full Line Out

Pipe Penetrations



NOTES:

Throughout the complete line out installation of the JUTA GP1 Gas Barrier to the referenced plots, there were a number of pipe penetrations that have been sealed in accordance with manufacturer's specifications and guidelines. This has been achieved using JUTA GP1 SAM, which is a gas resistant self adhesive



NOTES:

membrane. The installers have first cut the JUTA GP1 Gas Barrier tight around the base of each pipe penetration to minimise voided areas. Next, patches of JUTA GP1 SAM are placed intricately around the pipe and onto the JUTA GP1 Gas Barrier, with a larger square of JUTA GP1 SAM placed over the top to form a top hat detail.

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VERIFICATION ITEM TWO



Heat and rolled pressure have been applied to activate the bitumen backing, creating a secure bond between the pipe and the JUTA GP1 Gas Barrier. Thorough visual inspections, supported by mechanical point stress testing and non destructive air lance integrity testing conducted upon all pipe penetrations identified no faults or defects. Tested and verified in accordance with CIRIA 735.



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VERIFICATION ITEM THREE

LOCATION/GRID LINE: Plots 588, 589 & 598 - Full Line Out

Corner Detailing



NOTES:

A number of corners throughout the referenced plots have also been sealed as per manufacturer's specifications and design guidelines. This has been achieved using JUTA GP1 SAM. Where the JUTA GP1 Gas Barrier has been folded to minimise voided areas and gaps across the footprint of the plots, each corner



NOTES:

junction has been reinforced by heating strips of JUTA GP1 SAM and placing into position around each corner, onto the JUTA GP1 Gas Barrier. Firm rolled pressure is applied with a silicone roller to aid in the adhesion, ensuring the JUTA GP1 SAM has fully bonded.

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VERIFICATION ITEM THREE



A probe and air lance were run along all edges of the JUTA GP1 SAM corner detailing to validate that a continuous gas resistant seal had been achieved throughout. No faults or defects were identified.

Tested and verified in accordance with CIRIA C735.

AIR LANCE INTEGRITY TESTING

Air Lance Integrity Testing - ASTM D4437-08:2013. This inspects all seams for unbonded areas using a 4.8mm air nozzle held no more than 50mm away. 50 PSI is the minimum requirement. The air nozzle is directed on the upper edge seam, ripples indicate an unbonded seam. Each fault identified is highlighted for remediation to take place.



Air lance test on a welded lap.



Air lance test on a corner.



Air lance test on a pipe penetration.



Air lance test on a welded lap.



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ADDITIONAL PHOTOGRAPHS



A mechanical point stress test being conducted upon a sealed pipe penetration.



A mechanical point stress test being conducted upon a welded lap joint.



An overview of the plots.



A non destructive air lance integrity test being conducted upon a sealed corner.



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VERIFICATION SUMMARY

This was the fourth visit to the site where verification was required for the complete line out installation of the JUTA GP1 Gas Barrier to Plots 588, 589 & 598.

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

All details throughout the installation, such as pipe penetrations, thresholds and corners have been successfully sealed using JUTA GP1 SAM, heated down to aid in the adherence.

Thorough visual inspections, supported by mechanical point stress testing and non destructive air lance integrity testing were conducted throughout the verification today.

No faults or defects were identified at the time of the inspection.

Is the project ready for handover?	No
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This was passed and verified in accordance with CIRIA C735 and installed to BS 8485:2015+A1:2019.

GEOSHIELD SIGNATURE



DATE: 27-May-2026